



# **Main Developments in the Postal Sector (2013-2016)**

Study for the European Commission,  
Directorate-General for Internal Market, Industry,  
Entrepreneurship and SMEs

Written by  
Ph.D. Henrik Ballebye Okholm, partner in charge  
Mindaugas Cerpickis, project manager  
Anna Möller Boivie, project manager  
Martina Facino  
Jimmy Gårdebrink  
Mattias Almqvist  
Ph.D. Bruno Basalisco, quality assurer  
Marjolein Geus, legal expert Bird & Bird  
Jochem Apon, legal expert Bird & Bird

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*Contact: Raphaël Goulet*

*E-mail: [GROW-E2@ec.europa.eu](mailto:GROW-E2@ec.europa.eu)*

*European Commission  
B-1049 Brussels*

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## PREFACE

Copenhagen Economics has been commissioned by the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs to conduct a study on the main developments in the European postal sector in the 2013-2016 period.

The main objective of the study is to provide objective elements and evidence to assess the ongoing and future suitability of the current EU legal framework, and to allow a comprehensive assessment of the development in the postal sector. The findings of this study will be used as key input for the obligation under Article 23 of the Postal Services Directive to submit a Report on the Application of the Postal Services Directive to the European Parliament and Council.

The project has included significant data collection work. The team at Copenhagen Economics has contacted all regulatory authorities and national postal operators in 32 countries. In addition, we have surveyed trade unions in 17 countries, interviewed a large number of stakeholders and performed surveys to investigate recipients', mailers' and postal employees' attitudes towards the universal service obligation. Moreover, we have reviewed a large amount of previous research. We are grateful for the support and interest we have received from all the different stakeholders and for constructive discussion with the project team at DG Grow.

The project team at Copenhagen Economics has consisted of partner, Ph.D. Henrik Ballebye Okholm, project manager and managing director Anna Möller Boivie, team leader senior economist Mindaugas Cerpickis, economist Jimmy Gårdebrink, analyst Martina Facino and quality assurer managing economist, Ph.D. Bruno Basalisco. The team has received a great support from Bird & Bird law firm, namely, partner Marjolein Geus and associate Jochem Apon, regarding competition issues in the postal sector. We were also supported by our colleagues at Copenhagen Economics, in particular research assistants, who have helped with the data collection.

Copenhagen, 27 July 2018

Henrik Ballebye Okholm  
Partner, Ph.D.

# TABLE OF CONTENTS

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<b>PREFACE.....</b>	<b>5</b>
<b>TABLE OF CONTENTS .....</b>	<b>6</b>
<b>TERMS AND ABBREVIATIONS.....</b>	<b>21</b>
Country abbreviations and regional classification.....	21
Terms and abbreviations .....	22
Segmentation of postal services .....	24
Standard addressed domestic letter product in countries covered by the study .....	25
<b>EXECUTIVE SUMMARY .....</b>	<b>26</b>
Important market developments .....	26
The competitive landscape in the postal sector .....	28
Employment and environmental developments .....	29
Developments in the universal service .....	31
Potential scenarios for the future provision of the USO.....	32
<b>CHAPTER 1. IMPORTANT MARKET DEVELOPMENTS .....</b>	<b>33</b>
1.1 Structural letter volume decline .....	33
1.1.1 Digitalisation and evolution of e-substitutes for letter post.....	34
1.1.2 Development of domestic letter post volumes .....	38
1.1.3 The size of the letter post market .....	40
1.2 Growing volumes of parcel and express services .....	43
1.2.1 Development of parcel & express volumes .....	43
1.3 Evolution of universal service providers' financial performance .....	47
1.3.1 Letter post and parcel markets in terms of turnover .....	47
1.3.2 Evolution of USPs' profitability .....	49
1.4 Market responses to declining demand for letter post services .....	51
1.4.1 Market responses to stabilise revenue development in the declining letter segment.....	51
1.4.2 Initiatives to improve efficiency in the declining letter segment .....	59
1.5 Developments in the quality of service .....	63
1.5.1 Evolution of quality of domestic letter post services .....	64
1.5.2 Evolution of user complaints .....	66
1.6 Innovations and adoption of new technologies.....	67
1.6.1 Innovations driving more efficient operations .....	68
1.6.2 Innovations in new products and services .....	70
<b>CHAPTER 2. THE COMPETITIVE LANDSCAPE IN THE POSTAL SECTOR .....</b>	<b>73</b>
2.1 Developments in market composition: letters vs. parcels .....	73
2.1.1 National letter markets are still concentrated .....	73

2.1.2	National parcel markets are fragmented and universal service providers have limited market shares .....	81
2.2	New business models affecting competition .....	85
2.2.1	The impact of new business models on different stakeholders .....	87
2.2.2	Letter consolidation activities .....	88
2.3	Regulation of access .....	89
2.3.1	Regulation of access to postal infrastructure .....	89
2.3.2	Regulation of access to downstream services .....	91
2.4	Standardisation of letters and parcels .....	97
2.4.1	Implementation of standards by USPs .....	98
2.4.2	The role of standardisation in the future development of the postal sector ...	100
2.4.3	Future opportunities for further standardisation in the postal sector .....	101
2.5	Protection of postal consumers .....	102
2.5.1	Regulation of user protection procedures .....	102
2.5.2	User protection: remedies and redress .....	104
2.6	Challenges for the regulatory oversight of the postal market .....	107
2.7	Competition and other legal cases .....	114
2.7.1	Financing of USO/SGEI (State aid cases) .....	115
2.7.2	Network access conditions, rebates and other .....	120
2.7.3	Mergers in the postal sector .....	130
2.7.4	VAT exemption .....	131
<b>CHAPTER 3. EMPLOYMENT AND ENVIRONMENTAL DEVELOPMENTS .....</b>		<b>133</b>
3.1	The postal sector's contribution to total employment .....	133
3.1.1	Evolution of postal and courier sector employment .....	133
3.1.2	Evolution of employment at USPs and other postal operators .....	135
3.2	Employment models and conditions .....	144
3.2.1	Evolution of civil servants' employment at USPs .....	145
3.2.2	Employment models in the postal sector .....	148
3.2.3	Employment conditions in the postal sector .....	154
3.3	Investment in new skills and productivity .....	157
3.3.1	Development of USP productivity .....	157
3.3.2	USPs investment in new skills and trainings for employees .....	158
3.4	The role of social partners .....	159
3.4.1	Main drivers of the development of wage-setting mechanisms .....	159
3.4.2	The impact of collective agreements in determining wages and working conditions .....	161
3.4.3	Key issues in the industrial relations .....	166
3.4.4	Successful cases of collaboration .....	168
3.5	Environmental footprint of the postal sector .....	169
3.5.1	Main developments in environmental footprint of USPs .....	169
3.5.2	Measures taken by postal and delivery operators to mitigate the negative impact on the environment .....	176
<b>CHAPTER 4. DEVELOPMENTS IN THE UNIVERSAL SERVICE .....</b>		<b>185</b>
4.1	Developments in USO minimum requirements .....	185
4.1.1	Product scope of the USO .....	186
4.1.2	Minimum delivery frequency requirements .....	190

4.1.3	Mode of delivery: delivery of mail to appropriate installations .....	194
4.1.4	Retail network density .....	196
4.2	Quality of service regulation and monitoring .....	198
4.2.1	Quality of service monitoring .....	199
4.2.2	Product scope of quality measurement .....	203
4.2.3	Regulation of transit time performance against targets .....	205
4.3	Application of tariff principles .....	206
4.3.1	Implementation of tariff principles .....	207
4.3.2	Method of price regulation .....	210
4.3.3	Regulatory constraints on special tariffs .....	212
4.4	Cost accounting and funding of the USO .....	215
4.4.1	Cost of the universal service obligation and method for its calculation .....	215
4.4.2	Legal mechanisms of financing the net cost of universal service .....	222
4.4.3	Regulatory accounting requirements .....	227
4.5	Financial effects of the terminal dues system .....	230
4.5.1	Financial impact of the terminal dues system .....	232
4.6	VAT exemption for postal services .....	236
4.6.1	Postal products with VAT exemption .....	237
4.6.2	VAT exemption may constitute a benefit of the USO for USPs .....	239
<b>CHAPTER 5. POTENTIAL SCENARIOS FOR THE FUTURE PROVISION OF THE</b>		
<b>USO .....</b>		<b>242</b>
5.1	Introduction .....	242
5.1.1	Our approach .....	244
5.2	How to assess the costs and benefits of the USO? .....	244
5.2.1	Analytical framework for the assessment of regulatory options .....	245
5.2.2	Define potential scenarios for the future provision of the USO .....	246
5.2.3	Assess impacts on the net cost of the USO .....	249
5.2.4	Assess impacts on users and other stakeholders .....	251
5.3	Assessment of regulatory options for the future provision of the USO .....	256
5.3.1	Reduced delivery speed and delivery frequency .....	258
5.3.2	Stylised example of reduced delivery speed and frequency .....	263
5.3.3	Delivery to post offices in the most rural areas .....	267
5.3.4	Further services of general economic interest (SGEI) complementary to the traditional postal USO .....	269
5.3.5	Removal of parcels from the scope of the USO .....	272
5.4	Conclusion .....	274
<b>REFERENCES .....</b>		<b>276</b>



## LIST OF TABLES

---

Table 1 Challenges posed by market developments to different postal market stakeholders .....	34
Table 2 Price for 20g domestic single piece letter (FSC) .....	52
Table 3 Price for 20g domestic bulk mail letter .....	53
Table 4 USPs providing adjacent services .....	57
Table 5 Technologies in operations and service offerings .....	69
Table 6 Illustration of main features of mail innovations .....	72
Table 7 New initiatives of shared postal infrastructure .....	91
Table 8 The product scope of network access regulation .....	94
Table 9 Locations of access points for downstream access .....	96
Table 10 Standards used in the postal sector .....	99
Table 11 Regulation of user protection procedures (NRA) .....	103
Table 12 User protection: remedies and redress (NRA) .....	105
Table 13 Regulatory legal cases concerning the scope of the USO in the EU postal sector 2013-2016 .....	110
Table 14 European cases concerning Financing of USO/SGEI (State aid) .....	116
Table 15 Other European state aid cases .....	119
Table 16 European cases concerning network access conditions and rebates .....	121
Table 17 National cases concerning network access conditions and rebates .....	122
Table 18 Other European competition cases involving postal operators .....	124
Table 19 Other national competition cases involving postal operators .....	126
Table 20 European cases concerning mergers in the postal sector .....	130

Table 21 European cases concerning treatment of VAT in the postal sector.....	132
Table 22 Use of non-standard employment models by USPs.....	152
Table 23 Example of national minimum wage regimes.....	156
Table 24 Main influences on changes in different aspects of wage-setting mechanisms .....	160
Table 25 Company collective bargaining coverage and collective bargaining level, 2013 .....	161
Table 26 Elements considered in negotiations between postal operators and trade unions .....	164
Table 27 Letter mail and parcel delivery efficiency 2013 - 2016 .....	170
Table 28 Additional environmentally friendly ways for last-mile delivery.....	178
Table 29 Fastest letter product included in the USO, where delivery speed is lower than D+1 .....	187
Table 30 Product scope of the USO (2016) .....	189
Table 31 Delivery frequency of <u>priority letters</u> specified under USO requirements .....	190
Table 32 Reduced frequency of non-priority letters and bulk products permitted by the USO .....	191
Table 33 Delivery frequency of <u>parcels</u> specified under USO requirements .....	191
Table 34 Exceptions to delivery frequency of priority letters.....	192
Table 35 Exceptions to delivery frequency of <u>parcels</u> under the USO .....	192
Table 36 Share of the population not receiving parcels at standard delivery frequency.....	194
Table 37 Mode of delivery for parcels as per legal requirement imposed on the USP.....	196
Table 38 Quality of service monitoring by NRAs .....	201
Table 39 Product scope of quality measurement by NRAs.....	204
Table 40 How is the principle of cost oriented tariffs defined? .....	208

Table 41 How is the principle of tariff transparency defined? .....	209
Table 42 How is the principle of tariff non-discrimination defined? .....	210
Table 43 Method of price regulation.....	211
Table 44 Regulation of special tariffs, according to NRAs .....	214
Table 45 Latest USO net cost calculations.....	217
Table 46 Legal mechanisms of financing the net cost of the universal service obligation.....	225
Table 47 Regulatory accounting requirements .....	228
Table 48 Cost accounting methods .....	229
Table 49 VAT treatment of postal services .....	238
Table 50 Net benefit from VAT exemption .....	240
Table 51 Postal products within the scope of VAT exemption.....	241
Table 52 Product categories for analysing effects on revenue .....	251
Table 53 Overview of impacts and trade-offs of different policy options .....	258
Table 54 Overview of impact from reduced delivery frequency and speed .....	259
Table 55 Assumptions on cost and revenue impact of the policy scenario .....	265
Table 56 Results of calculations for country A [illustration] .....	266
Table 57 Results of calculations for country B [illustration] .....	267
Table 58 Overview of impact from delivery to post offices in the most rural areas.....	268
Table 59 Overview of impact from inclusion of SGEI to the USO.....	271
Table 60 Overview of impact from removal of parcels from the USO .....	273
Table 61 Cost effect from reduced delivery frequency and speed .....	291
Table 62 Revenue effect from reduced delivery frequency and speed .....	292

Table 63 Impact on users from reduced delivery frequency and speed .....	293
Table 64 Impact on employment from reduced delivery frequency and speed .....	294
Table 65 Cost effect from introducing delivery to post offices in rural areas.....	295
Table 66 Revenue effect from introducing delivery to post offices in rural areas.....	296
Table 67 Impact on users from introducing delivery to post offices in rural areas.....	297
Table 68 Impact on employment from introducing delivery to post offices in rural areas.....	298
Table 69 Cost effect from including services of general economic interest.....	298
Table 70 Revenue effect from including services of general economic interest .....	299
Table 71 Impact on users from including services of general economic interest .....	300
Table 72 Impact on employment from including services of general economic interest .....	300
Table 73 Cost effects from removal of parcels from the scope of the USO .....	301
Table 74 Revenue effect from removal of parcels from the scope of the USO .....	302
Table 75 Potential impact on users of postal service .....	303

## LIST OF FIGURES

---

Figure 1 Service classification .....	24
Figure 2 Electronic communication with public institutions, 2017 ....	35
Figure 3 Electronic communication with public institutions, 2017 .....	36
Figure 4 Domestic letter post volume development, 2013-2016 .....	38
Figure 5 Development of domestic letter post volume by country ..	39
Figure 6 Development of USO volumes .....	40
Figure 7 Letters per capita, 2016 .....	41
Figure 8 The size of letter post sector by country, 2016 .....	42
Figure 9 Evolution of parcel & express services volumes, domestic, 2013-2016 .....	43
Figure 10 Composition of mail volume, 2013 vs 2016 .....	44
Figure 11 Domestic parcels & express items per capita, 2016 .....	44
Figure 12 Demand for parcel & express post by country, 2016 .....	45
Figure 13 Evolution of light-weight goods (between 100 grams to 2 kg) (2013-2016) - DOMESTIC .....	46
Figure 14 Evolution of light-weight goods (between 100 grams to 2 kg), 2013-2016 .....	46
Figure 15 Development of revenue in letter post and parcel & express segments, 2013-2016 .....	47
Figure 16 Development in USPs' parcel & express revenues versus letter post revenues, .....	48
Figure 17 Development of revenues in letter and parcel segments, 2015-2016 .....	49
Figure 18 Development of USPs' profitability in the EU, EEA & CH area, 2013-2016 .....	49
Figure 19 Profitability of USPs (EBIT margin, total business) .....	50
Figure 20 Letter volume development in Denmark, 2012-2016 .....	54

Figure 21 Letter price development in Denmark, 2012-2016 .....	54
Figure 22 USPs' dependence on revenues in the letter post segment .....	55
Figure 23 Diversification of revenue among USPs (2016) .....	56
Figure 24 Number of USPs identifying an adjacent service important to the future sustainability of the USO .....	58
Figure 25 Do you use different networks for letters and parcels at collection, sorting, transportation or delivery levels? .....	60
Figure 26 Examples of co-production of letters and parcels across the postal value chain .....	61
Figure 27 Have you carried out a major reorganization of your logistics network in the 2013-2016 period? .....	62
Figure 28 Socially optimal quality level .....	64
Figure 29 Evolution of domestic transit time performance for priority letters .....	65
Figure 30 Non-priority domestic letters arriving on time .....	66
Figure 31 Evolution of user complaints sent to NRA and USP .....	67
Figure 32 Development of incumbent's market share in the domestic addressed letter market .....	74
Figure 33 Addressed letter volumes and revenues of the USP in 2016 .....	77
Figure 34 Distribution of demand for letter services by type of sender (2016) .....	78
Figure 35 Market entries in the letter segment 2013-2016 .....	79
Figure 36 Market exits in the letter segment 2013-2016 .....	80
Figure 37 Market share of the incumbent in the domestic parcel & express segment, 2016 .....	81
Figure 38 Evolution of the USPs' 3 main competitors' market share in the parcel segment .....	82
Figure 39 Market entries in the parcel segment since 2013 .....	83
Figure 40 Market exits in the parcels segment since 2013 .....	84

Figure 41 Parcel and express volumes and revenues of the USP in 2016 .....	85
Figure 42 Alternative business models in the postal sector .....	86
Figure 43 Price arbitrage caused by aggregate volume discounts.	88
Figure 44 Presence and monitoring by NRA of letter consolidators in the postal market .....	89
Figure 45 Access to postal infrastructure .....	90
Figure 46 Different users of access will receive same conditions .....	93
Figure 47 Access points in the postal value chain .....	95
Figure 48 Access at distribution offices may cause a duplication of resources.....	97
Figure 49 Attitudes towards the effect of standardization for competition in the postal sector .....	101
Figure 50 Attitudes towards the effect of standardization for competition in the postal sector .....	102
Figure 51 Alternative (or out-of-court) dispute resolution in 2016....	106
Figure 52 Evolution of postal and courier sector employment, 2013 vs 2016 .....	133
Figure 53 Overall percentage change of the postal and courier sector's total employment, 2013-2016 .....	134
Figure 54 Postal and courier sector's share of total employment, 2016 .....	135
Figure 55 Total employment by USP and other postal providers, 2008-2015 .....	136
Figure 56 Evolution of USP employment.....	137
Figure 57 Evolution of employment at USPs, annual change, 2013-2016 .....	138
Figure 58 Contribution of USP employment to the overall employment at EU-level .....	139
Figure 59 Overall percentage change of the USP's share of total employment, 2013-2016.....	140
Figure 60 Total employment at USPs, per 10,000 inhabitants, 2016.	141

Figure 61 Share of delivery staff in the USPs' total employment, 2016 .....	142
Figure 62 Share of women in USPs' total employment, 2016 .....	143
Figure 63 Share of employees by age in USPs' total employment, 2018 .....	144
Figure 64 Number of USPs that employ civil servants vs USPs that do not employ them .....	145
Figure 65 Number of civil servants employed at USPs, 2016.....	146
Figure 66 Share of civil servants employed at USPs, 2016 .....	146
Figure 67 Change in the number of civil servants at USPs that employ civil servants .....	147
Figure 68 Information about part time employment .....	150
Figure 69 Development of part-time employment at USPs.....	151
Figure 70 Extent of outsourcing and subcontracted employment at USPs.....	153
Figure 71 Average gross nominal hourly wages at USPs .....	154
Figure 72 Comparison of average hourly wages at USPs, in the transportation and storage sector and at national level .....	155
Figure 73 Development of USP productivity .....	157
Figure 74 Wage setting based on collective agreements on company or sectorial level, at USPs.....	162
Figure 75 Frequency of the wage setting mechanism, at USPs.....	163
Figure 76 Main disputes between trade unions and the postal operator, USPs and non-USPs .....	167
Figure 77 Successful cases of collaboration between trade unions and the postal operator, USPs and non-USPs .....	168
Figure 78 CO2 emissions of the EMMS group from main causes of emissions, including in-house and outsourced activities, 2016 .....	171
Figure 79 Extended postal value chain.....	172
Figure 80 Number of USPs setting environmental targets on their operations .....	176



Figure 81 Environmentally friendly modes of transport for last-mile delivery.....	177
Figure 82 Number of USPs setting environmental targets to subcontractors.....	181
Figure 83 Development of USO volumes .....	185
Figure 84 Approximate share of the population not receiving priority letters at standard frequency .....	193
Figure 85 Density of post office network .....	197
Figure 86 Share of post offices operated by USPs, 2016 .....	198
Figure 87 Transit time performance for domestic priority letters .....	205
Figure 88 Transit time performance for international European priority letter mail .....	206
Figure 89 Compensation mechanisms .....	216
Figure 90 The net cost of the USO is the difference between the actual profit and the counterfactual profit .....	218
Figure 91 Three analytical steps based on the Commercial approach .....	222
Figure 92 Total value of annual financial transfers applying updated system in 2018 .....	233
Figure 93 Country with large effect from E format items .....	234
Figure 94 Country with negative effect from all formats .....	235
Figure 95 Eastern Europe & Central Asia net financial transfer .....	235
Figure 96 Western Europe net financial transfer .....	236
Figure 97 Roadmap to impact assessment .....	245
Figure 98 The optimal level and scope of the USO vary due to countries' unique characteristics .....	248
Figure 99 Scoreboard for how country characteristics affect cost of providing USO .....	249
Figure 100 Illustration of the postal value chain .....	250
Figure 101 Trade-off between financial compensation and increased regulatory flexibility .....	256

Figure 102 Low density route vs. high density route .....261

Figure 103 A conceptual illustration of our stylised modelling  
approach for net cost.....264

## LIST OF BOXES

---

Box 1 Evolution of e-invoices.....	37
Box 2 Case example: Developments in letter volumes and prices in Denmark .....	54
Box 3 The socially optimal level of quality .....	64
Box 4 Innovation in last-mile parcel delivery .....	70
Box 5 Categories of mail innovations .....	71
Box 6 Types of competition in the postal sector .....	75
Box 7 SMP regulation in the Netherlands .....	112
Box 8 Implementing objectives: ensuring economic efficiency .....	113
Box 9 Appeal court case in Sweden confirms the applicability of the bpost judgment logic in other markets.....	129
Box 10 Recent developments in the level of employment in the postal sector in Denmark.....	138
Box 11 Gender diversity and initiatives at Royal Mail .....	143
Box 12 European Union General Court's decision in Germany.....	147
Box 13 PostNord Denmark state compensation.....	148
Box 14 Definitions of types of employment .....	149
Box 15 Changes in the employment model in the Netherlands .....	153
Box 16 Eurofound's results on the main elements influencing the wage-setting mechanisms .....	160
Box 17 Eurofound findings about the collective bargaining coverage in the postal sector (2017) .....	161
Box 18 Example of changes in wage structure in Germany .....	165
Box 19 The agreement between CWU and Royal Mail in the UK.....	166
Box 20 Examples of USP's targets to reduce transport emissions in Germany.....	178

Box 21 Initiatives to reduce environmental footprint in Austria.....	179
Box 22 Initiatives to reduce environmental footprint in the Netherlands.....	179
Box 23 Initiatives to reduce environmental footprint in Portugal.....	180
Box 24 Initiatives to reduce environmental footprint in the UK .....	180
Box 25 Initiatives to reduce environmental footprint in France .....	181
Box 26 bpost's sustainable procurement process.....	182
Box 27 Deutsche Post DHL Supplier Code of Conduct .....	183
Box 28 Correos and Swiss Post's main drivers to reduce their environmental footprint .....	184
Box 29 Introduction of XY delivery model in Italy (2014) .....	193
Box 30 Compensation fund mechanism in Slovakia .....	223
Box 31 Commission approves financing of Polish Post's universal service obligation via a compensation fund.....	224
Box 32 The UPU system for terminal dues .....	232
Box 33 The concept of the USO.....	243
Box 34 Examples of plausible regulatory options for future provision of the USO .....	246
Box 35 Different types of targeted measures for vulnerable user groups .....	255
Box 36 Change in transportation costs in Sweden following changes in the USO .....	260
Box 37 Example: Cost reduction of reduced delivery frequency ...	261
Box 38 Case study: Changes in delivery frequency in Norway .....	262
Box 39 Stylised example of impact from reduced delivery frequency and speed.....	265
Box 40 Example of other SGEI in Belgium.....	270

## TERMS AND ABBREVIATIONS

### Country abbreviations and regional classification

Country	Abbreviation	USP name	EU region <sup>1</sup>
Austria	AT	Osterreichische Post	Western Europe
Belgium	BE	bpost	Western Europe
Bulgaria	BG	Bulgarian Post	Eastern Europe
Croatia	HR	Hrvatske Poste	Southern Europe
Cyprus	CY	Cyprus Post	Southern Europe
Czech Republic	CZ	Czech Post	Eastern Europe
Denmark	DK	PostNord	Northern Europe
Estonia	EE	Omniva	Northern Europe
Finland	FI	Posti	Northern Europe
France	FR	La Poste	Western Europe
Germany	DE	Deutsche Post	Western Europe
Greece	EL	ELTA	Southern Europe
Hungary	HU	Magyar Post	Eastern Europe
Iceland	IS	Íslandspóstur	Northern Europe
Ireland	IE	An Post	Northern Europe
Italy	IT	Poste Italiane	Southern Europe
Latvia	LV	Latvijas Pasts	Northern Europe
Liechtenstein	LI	Liechtensteinische Post	Western Europe
Lithuania	LT	Lietuvos Paštas	Northern Europe
Luxembourg	LU	Post Luxembourg	Western Europe
Malta	MT	Malta Post	Southern Europe
Netherlands	NL	PostNL	Western Europe
Norway	NO	Posten Norge	Northern Europe
Poland	PL	Poczta Polska	Eastern Europe
Portugal	PT	CTT	Southern Europe
Romania	RO	Poșta Română	Eastern Europe
Slovakia	SK	Slovenská Pošta	Eastern Europe
Slovenia	SI	Posta Slovenije	Southern Europe
Spain	ES	Correos	Southern Europe
Sweden	SE	PostNord	Northern Europe
Switzerland	CH	Swiss Post	Western Europe
United Kingdom	UK	Royal Mail	Northern Europe

<sup>1</sup> Regional classification is based on the United Nations country classification.

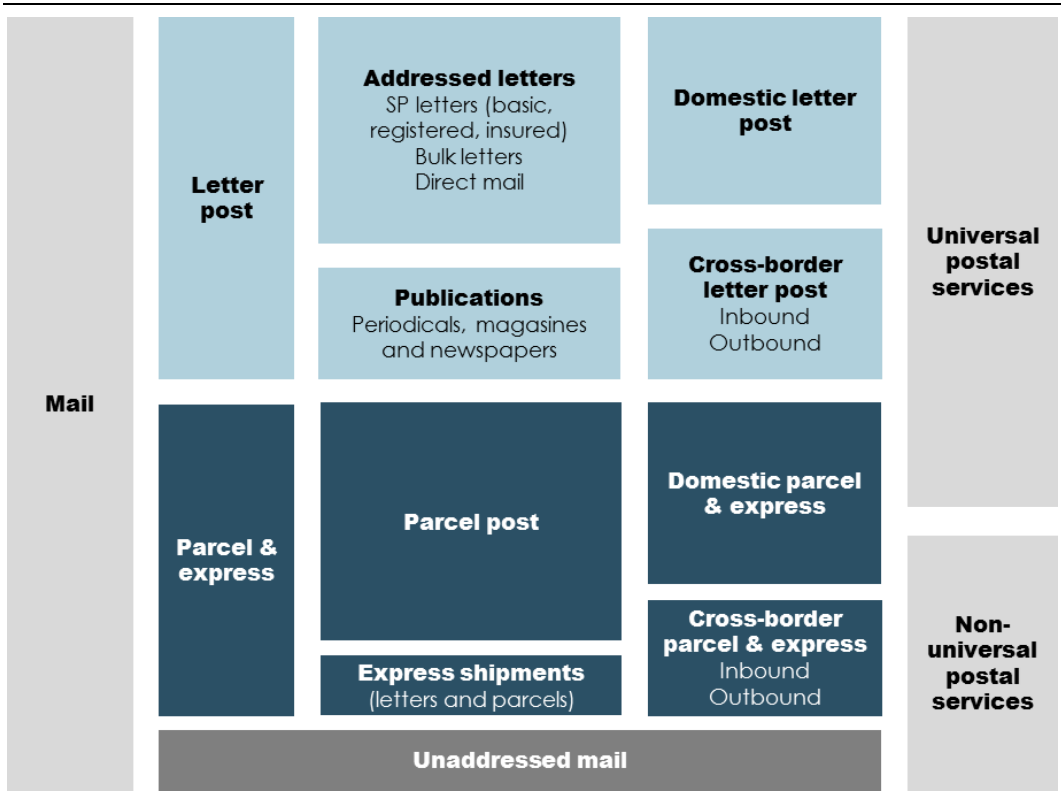
## Terms and abbreviations

Abbreviation	Meaning
B2B	Business-to-business
B2C	Business-to-consumer
B2G	Business-to-government
B2X	Business-to-consumer/business/government
C2B	Consumer-to-business
C2C	Consumer-to-consumer
C2G	Consumer-to-government
C2X	Consumer-to-consumer/business/government
CAGR	Compounded annual growth rate
CE	Copenhagen Economics
CEN	Comité Européen de Normalisation - European Committee for Standardization
CEO	Chief Executive Officer
CERP	Committee for Postal Regulation
COM	Communication from the Commission
D+1	Routing time where mail is delivered the first working day after posting
D+2	Routing time where mail is delivered the second working day after posting
D+3	Routing time where mail is delivered the third working day after posting
D+4	Routing time where mail is delivered the fourth working day after posting
D+5	Routing time where mail is delivered the fifth working day after posting
DA	Deficit Approach
DG	Directorate General (of the European Commission)
DG GROW	Directorate General for Internal Market, Industry, Entrepreneurship and SMEs
DM	Direct mail
EBIT	Earnings before interest and taxes
EC	European Commission
CJEU	European Court of Justice
EEA	European Economic Area
EMS	Express Mail Service, a product line coordinated by a cooperative of the Universal Postal Union
EPMU	Equi-proportional mark-up
ERGP	European Regulators Group for Postal Services
ETOE	Extraterritorial office of exchange
EU	European Union
EU-28	The European Union after 1 July 2013, with 28 member states
EUR	Euro
Eurostat	Statistical Office of the European Communities
FSC	Fastest standard category
FTE	Full-time equivalent
GDP	Gross domestic product
Govt	Government
G2B	Government-to-business
G2C	Government-to-consumer
G2X	Government-to-consumer/business
ICT	Information and communication technology
IPC	International Postal Corporation

Abbreviation	Meaning
IPO	Initial Public Offering
LRIC	Long run (average) incremental costs
MDS 2010	Study 'Main Developments in the Postal Sector (2008–2010)' (2010)
MDS 2013	Study 'Main Developments in the Postal Sector (2010–2013)' (2013)
MS	Member State(s)
n/a	No answer/not available
NAC	Net Avoidable Cost
NCA	National competition authority
NCPA	National consumer protection authority
NGO	Non-governmental organization
NRA	National regulatory authority
OECD	Organisation for Economic Co-operation and Development
PAEA	Postal Enhancement and Accountability Act (USA)
PC	Profitability Cost Approach
PLC	Public limited company
PPP	Purchasing Power Parity
SGEI	Services of general economic interest
SME	Small and medium sized enterprises
SMP	Significant market power
SP letters	Single piece letters
SSC	Second fastest standard category
TEU	Treaty on European Union
TFEU	Treaty on the functioning of the European Union
TOP3	Three most important
UPU	Universal Postal Union
USO	Universal service obligation
USP	Universal service provider
VAT	Value added tax
w.r.t.	With respect to

Segmentation of postal services

**Figure 1**  
**Service classification**



Source: Copenhagen Economics

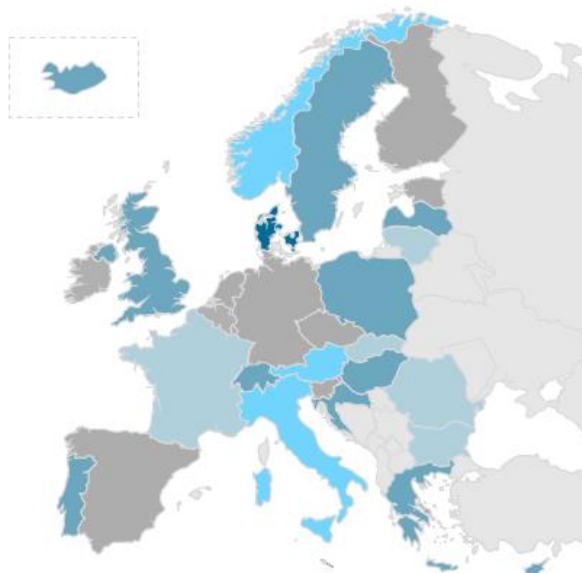


## Standard addressed domestic letter product in countries covered by the study

### Fastest standard category (FSC), January 2018<sup>2</sup>



### Second fastest standard category (SSC), January 2018<sup>3</sup>



<sup>2</sup> In Denmark, D+1 is not part of the USO since 1 July 2016. In Sweden and Norway, the speed of the FSC service changed in January 2018 from D+1 to D+2.

<sup>3</sup> In Sweden, SSC D+3 is offered de facto.

## EXECUTIVE SUMMARY

The years from 2013 to 2016 have been characterized by two major opposing pressures in the postal sector: (i) letter volume decline, and (ii) growth in e-commerce packets/parcels volume. These contrasting pressures underpin different challenges for all stakeholders in the postal sector.

Whereas letter volume decline has shaped the postal market and continues to drive changes, the growing e-commerce industry creates new opportunities and demands for the postal market to respond to and to minimise the negative impact of letter volume decline.

The combination of strong letter volume decline and growth in parcel volumes has important operational and economic implications for postal networks. In several instances, it has also called for substantial changes in postal regulation.

Below, we summarise the main findings and recommendations in our report. The structure follows that of the report.

### Important market developments

The most prominent postal market trend observable in the last four years is the declining demand for addressed letter post products across the EU, EEA & CH area, which in the 2013-2016 period declined by on average 4,2 per cent annually across the surveyed countries. In 2013, addressed letter post volume still amounted to more than 73 billion items, but by 2016 the volume had decreased to around 64 billion items. This means that the average number of addressed letter post items posted per capita per year declined from 141 to 123 across the EU, EEA & CH area in 2013-2016.

In contrast to the declining letter post segment, parcel and express volumes grew by on average 13 per cent annually. There is an increasing parcel and express volume trend in the 2013-2016 period, which becomes steeper towards 2016. Consequently, the product mix of postal operators is changing – the share of parcel and express shipments has increased from seven per cent to eleven per cent in the total mail stream in the 2013-2016 period.

The size of the postal market, including express services, amounted to a total € 90 billion in the EU, EEA & CH area in 2016, compared to € 84 billion in 2013. This equals to 0,52% and 0,55% of the total GDP of all countries covered by the study in 2016 and 2013 respectively.

Letter post still plays an important role in the postal and express market, amounting to 42% of the total revenue generated in the sector in 2016. However, the relative size of the letter segment has declined by 5 percentage points from the 2013 level, when letter post amounted to 47% of the sector's total revenue.

Universal service providers' (USP) profitability is declining, but still varies widely across countries. We find that in the majority of postal markets, the USPs' profitability margin has been declining, going from 4,7 per cent to 3,8 per cent on average (incl. non-USO services) across all investigated countries in 2013-2016.

The growth in parcel & express segment does not outweigh letter revenue decline for most of USPs. In fact, only seven out of 21 USPs have recorded that parcel revenue growth has outweighed letter revenue decline in 2016. There are at least a couple of reasons for such differences. Firstly, in many countries, USPs serve a much smaller share of the parcel & express market than the letter market. Second, in some countries, the parcel & express market is still much smaller than the letter market. In the investigated countries, USPs' revenues in the addressed letter market were up to three times larger than their revenues in the parcel and express market in 2016.

Declining demand for letter delivery drives price increases. We witness letter price increases, implemented to compensate for falling volumes, especially in the USO area; 26 of 32 universal service providers (USPs) increased the price of first class domestic 20g letters by 36 per cent on average in the 2013-2016 period. Four specific examples are provided by Italy, Denmark, the Netherlands, and Ireland where price increases were in the double-digit range and made possible by changes in the price regulatory regimes. In Italy and Denmark, the price increases were part of a fundamental change of the business model with more emphasis on slower letter services.

Many USPs have re-engineered postal networks and processes to cut costs. In order to compensate for lower scale economies, postal operators have made the pursuit of economies of scope as a key target, leading to integration of activities, e.g. merging letter and parcels delivery networks (DK), and using post office networks for financial services (e.g. PT).

Many USPs invest in new operational technologies to reduce costs and environmental footprint. New technologies (e.g. sorting machines, RFID technology, and drones, which in particular are being used or tested in France, Germany and Switzerland) have led to a reduction in the share of manual work in the delivery chain. In addition, new green energy technologies (e.g. the use of electric vehicles) reduce the environmental footprint of postal delivery activities.

Many USPs pursue economies of scope through diversification strategies. Postal operators have been actively pursuing growth opportunities in new business areas, mainly in parcels and express, logistics and freight, postal financial services, postal retail, information services and telecommunications, which are the largest sources of global postal revenues after traditional letter post. The share of total revenues collected outside the letter segment varies from 84 per cent (Deutsche post) to 10 per cent (Poczta Polska). The average share of revenues coming from the letter business is around 54 per cent.

Transit time performance of domestic D+1 letters has declined slightly. There has been a small decline (around -1 percentage points) in the share of D+1 letters delivered on time in the 2013-2016 period. USPs in Northern, Southern and Western Europe have maintained transit time performance at around 92 per cent.

Most countries have seen an increase in user complaints. Eastern European countries experienced on average a 170 per cent increase in user complaints in the 2013-2016 period. The main driver behind the increase in user complaints is a rapid growth of e-commerce packet and parcel volumes. The lion's share of the growth in complaints relate to non-USO products and particularly, e-commerce shipments. There can be different reasons for relatively higher number of complaints stemming from parcels delivery versus letters, such as higher customer expectations regarding parcel delivery as well as more challenging logistical processes to deliver parcels.

## **The competitive landscape in the postal sector**

Based on our analysis, we find that letter markets are still highly concentrated, but universal service providers' market shares have declined in a number of countries. The situation in the parcel segment is different: markets are fragmented, universal service providers' market shares are relatively low and in a number of countries, there have been more market entries than exits.

A number of regulatory, state aid and competition legal cases in the postal sector have taken place in the 2013-2016 period. Whereas most national cases concerned the pricing practices of the USP and merger filings, cases at EU-level primarily concerned the financing of the USO, network access conditions, and to a lesser extent: mergers and treatment of VAT.

With respect to the national cases, USPs' pricing practices in terms of alleged predatory pricing, margin squeeze, or unlawful discounts have been the subject of more than 15 complaints handled by the national competition authorities many of which were dismissed or did not lead to a final decision. The products concerned are often bulk mail, magazines or unaddressed mail, and thus in most instances outside the USO scope. In addition, the terms of access granted by USPs to intermediaries – especially consolidators – have been the focus of several recent cases. In particular, per sender rebate schemes employed by incumbents were a focal point of cases in Belgium, France, Italy, the Netherlands and Sweden. NCA decisions have led to national court cases and a preliminary ruling by the CJEU, which held that the principle of non-discrimination in postal tariffs, laid down in Art. 12 of Dir. 97/67, does not preclude a system of quantity discounts per sender. Some cases are still ongoing (e.g. in the Netherlands).

We also observe a number of merger filings, primarily at national but also at EU level. At EU level, the Commission handled two merger filings related to the postal sector during the investigated period – both concerning the acquisition of TNT (first by UPS and later by FedEx).

As a result of the continuing steep decline in postal volumes, the question of compatibility of national financing of the USO/SGEI with the TFEU has become the more crucial, as highlighted by many recent cases. The majority of USO/SGEI-notifications to the Commission have been held to be compatible (Belgium, France, Greece, Italy, Poland, UK), but in a number of cases, formal investigation procedures have been initiated (e.g. in Greece and in Spain).

At EU level, we also observe a number of cases regarding the treatment of the VAT exemption in the postal sector. The most notable case during the 2013-16 period was in Sweden, where Sweden considered that there since market liberalisation in 1993 no is longer a 'public postal service' within the meaning of Dir. 2006/112, and thus no longer an obligation to exempt any postal service provider from VAT. However, the CJEU's decision reconfirmed that the term 'public postal services' must be interpreted to cover operators, whether they are public or private, who undertake to provide in a Member State all or part of the USO (see C-357/07, par. 40). As a consequence of this ruling, Sweden has now introduced VAT exemption on all products within the USO.

Most USPs think that standardisation has a positive effect on issues such as clarity, competitive conditions, operational efficiency and market structures, there also seems to be a diverging attitude towards further standardisation. Areas where further standardisation is requested (although by a

minority of operators) are primarily those related to cross-border e-commerce, such as data exchange for cross border mail and parcels.

Based on our analysis of demand, competition, labour and regulatory developments in the postal sector, we identify the following key challenges for policymakers and NRAs across Europe:

Firstly, ensuring affordability and sustainability of the USO. Securing an efficient and financially sustainable universal service provision is one of the key challenges of the postal industry. Declining letter volumes risk leading to a trade-off between high service level and a financial sustainability of the USO.

Secondly, defining the role of the USO in light of changing user needs. Defining the role (and scope) of the USO will be of major importance for all stakeholders in the European postal market. The ongoing technological, economic and cultural developments are continuing to change the use of and need for postal services in the future. With this in mind, policymakers at both EU-level and at national level face important responsibilities to ensure that the current USO regulations are not becoming obsolete.

Thirdly, mitigating risks of failure of direct regulatory interventions in a declining letter market. Regulators must take into account that dynamic market forces (e.g. volume reductions and changes in the level and type of competition) can both reverse the effect of regulatory intervention and induce unpredictable outcomes (sometimes even worse compared to the evolution without regulation). To reduce the risk of adverse outcomes, regulators should conduct a strategic review before choosing whether to introduce remedies belonging to the new regulatory regime.

Lastly, adapting regulatory frameworks to ensure efficient cross-border parcel delivery. Development of domestic and international e-commerce markets creates new challenges of adapting existing regulatory frameworks, which have traditionally been focused on letter communication. This implies several important challenges for future regulatory oversight: (i) regulatory interventions in this area will have to build on a comprehensive assessment of user needs (incl. e-retailers and online buyers) and the existence of market failure, (ii) lack of clear definition of key concepts used in both EU and national level regulatory frameworks give rise to regulatory discussions (e.g. the definition of what constitutes a “postal operator”), (iii) small, low value consignments imported into the EU currently fall under the *de minimis* threshold for VAT, but it is set to be removed by 2021. This affects competition between players inside and outside the EU, and (iv) mounting pressure caused by below-cost UPU terminal dues rates may lead to regulatory efforts to establish a more cost-oriented terminal dues system.

## **Employment and environmental developments**

The employment in the postal sector is influenced by the two main market developments discussed in previous chapters: letter volumes decline and parcel volumes growth. Additionally, new technologies and growing competition, driven by increase in parcel volumes and postal market liberalisation, have also an effect on postal employment volume and working conditions.

We find an increase overall postal and courier sector employment in the EU, EEA & CH area. The development is the result of two opposite developments:

On the one hand we see a decrease of employment at USPs – forced by the decline in letter post volumes and growing competition in the parcel segment, majority of USPs have decreased the number of employees. Part-time workers have shown to be more vulnerable to staff reductions than full-time workers, with a total decrease in part-time contracts of four per cent from 2013 to 2016, compared to a decrease of total employment at USPs of two per cent.

On the other hand, we see an increase of employment at other postal operators – growing e-commerce and consequent increase in parcels and packets volumes are driving growth in employment at couriers and other postal operators. This growth offsets the decline at USPs employment, increasing overall postal and courier sector employment in the EU, EEA & CH area.

The decrease in traditional letter post, combined with an increase in parcels and packets volumes and strong competition in the parcel segment has led to two key changes in the labour market.

First, we observe an increase in new and more flexible employment models – the pressure from both letter volumes decline and competition in the parcel segment resulting in new operational models have led to the use of new and more flexible employment models such as on-call work, temporary agency work, performance-related pay contracts as well as outsourced models, such as sub-contracted workers and self-employment. These contracts are used by the majority of USPs to varying degrees.

Second, we observe changes in employment conditions – increased competition has forced national postal operators to modernise their wage structure, e.g. introduce performance pay and other types of more flexible contracts. Such changes were more prominent where collective labour agreements could be redefined to foster more flexibility.

The postal and delivery sector has a negative environmental impact, as most sectors have. The main causes are CO<sub>2</sub>-emissions from the different types of mail transportation, e.g. between sorting centres or in to-the-door delivery. For example, La Poste, the USP in France, reports that 82 per cent of the group's total CO<sub>2</sub>-emissions arise in transportation activities in *transport* and *delivery*.

There is a commitment within the industry to reduce its environmental impact. USPs have increasingly implemented initiatives to reduce it, see section 3.5.2 for a detailed overview. Drivers behind such initiatives are often a mix of cost savings potential, adhering to regulation and satisfying increasing consumer demands for environmentally friendly services. More than half of USPs set environmental targets on their own operations, and slightly less than half of them set environmental targets on their subcontractors.

However, we also notice that changes in the product mix (from letters to parcels) create challenges to postal operators to reduce their environmental footprint. As described in chapter 1, postal operators' product mix is changing – the relative importance of parcel delivery is increasing. This has important implications for postal operators' environmental footprint because parcel delivery requires significantly more logistical and transportation capacity than letters. As a result, the carbon emission per parcel is more than ten times the carbon emission per letter.

## Developments in the universal service

Changes in user preferences, driving a continuous decline of letter volumes create the need for regulatory action. While the extent of letter volume decline varies greatly across countries, the direction of the development is the same across Europe. Sooner or later, falling letter volumes will create a risk for USO sustainability. In addition to the challenges posed on USPs by falling letter volumes, we also observe that the system of terminal dues creates a financial burden for many USPs in Europe (e.g. as shown in net cost calculations in Ireland and Norway). This is primarily the case in countries with a high net import of cross-border letter post and where the costs of delivery (due e.g. to geographical circumstances) is high. Despite recent changes to the UPU system for terminal dues agreed in 2016, the financial transfers between national postal operators worldwide, as a result of the terminal dues system, are expected to grow in the coming years because of the growing number of small packets in the mail stream.

Based on our analysis, we find that governments and regulators across Europe respond to these developments in different ways. Whereas some governments and regulators respond by reducing USO minimum requirements with the ambition to reduce the cost of providing the USO, others respond by compensating the USP for the financial burden implied by the USO.

With respect to the first approach, we observe reductions in required delivery speed for USO letters (taking place e.g. in DK, NO, FI and SE) and required delivery frequency (taking place in FI, IS, IT, and NO). We also observe that postal operators themselves take measures to reduce fixed costs to reduce the negative impact on unit costs stemming from lower mail volumes. One example of such measures is the closing down of post offices where the density of the postal retail network declined in 23 out of 32 countries in the 2013-16 period. Other examples of cost cutting measures are centralization of sorting and changes in the composition of the labour force (discussed in chapter 3).

Although cost reductions normally are beneficial for the users of postal services, there is a risk that USPs' cost cutting exercises hurt the quality of service (this has for example been subject for discussion in Sweden). Quality of postal services is often measured in terms of the share of on-time deliveries – a share which (at European level) has declined in the 2013-16 period. In 2016, for example, only 14 USPs met the transit time targets set for domestic priority letters. Similarly, the share of cross-border items delivered within the target of three working days declined from 90 per cent in 2014 to 82.3 per cent in 2016. This is the lowest performance since the start of measurement in 1997 and below the EU-target of 85 per cent specified by the Postal Services Directive. The reason for this decline is most likely a combination of the cost cutting measures and reduced national delivery speed requirements described above.

In addition to reducing operational requirements on the USPs, we also observe regulators loosening requirements with respect to price regulation (e.g. removal of a price cap in Ireland in 2017). Still, all surveyed countries apply some form of price control for parts or the entirety of the USO, although definitions and regulatory measures applied vary significantly across countries.

With respect to the approach to reduce the financial burden on the USP by providing financial compensation, we find that direct subsidies have become more widespread as a source of funding of the USO. In 2016, almost one third of surveyed USPs received direct subsidies for the USO net cost. In addition, we observe a slight increase in the use of compensation funds with the establishment of such funds in Slovakia and Poland in the 2013-16 period.



## **Potential scenarios for the future provision of the USO**

The future provision of the USO will be of major importance for all stakeholders in the European postal market. The ongoing technological, economic and social developments will continue to change the use of and need for postal services in the future. The same developments will also have implications for the cost of providing universal services. With this in mind, policymakers at both EU-level and at national level face important responsibilities to ensure that the current USO regulations are not becoming obsolete.

The review of potential changes in USO requirements are best achieved using a cost-benefit approach that compares the impact on net cost of the USO to the impact on users and other stakeholders. The cost-benefit analysis gives a sound knowledge base for policy decisions. Such a cost-benefit analysis must take the specific circumstances of the Member States into account and cannot merely be based on generic assumptions. Thus, we expect to see more cases where regulatory options for future national USO will be evaluated at national level.

If the balance between the scope of the USO and user needs is not appraised, there is a risk that specifications of the USO become obsolete. Many Member States currently calculate the net cost of USO. This enables a more informed debate in those Member States regarding the appropriateness of the current scope of the national USO. When the net cost is not known, it becomes a hidden cost, which is not considered and therefore may not induce discussions about the scope of the USO and the balancing of user needs with an efficient supply of services.

Some countries are more likely to require changes to the national USO than others. Important country characteristics that can exacerbate the increase in the net cost are: level of annual letter volume decline, letter volume per household, population density and geographic circumstances. This chapter has presented the mechanisms by which such country characteristics are important drivers of the development of net cost of the USO. Similarly, users of postal services in some countries will be more dependent on the current level of service than in other countries. The dependency and vulnerability will differ dependent on which regulatory option is considered.

There is a wide range of regulatory options available to adjust the national USO. Perhaps most notably, several countries have explored the possibility to reduce the delivery frequency below five days per week. This type of initiatives (as well as other changes in the USO) indicate clearly that, in some circumstances, there is pressure to adjust the national USO and that this may potentially conflict with the minimum requirements set in the Postal Services Directive. At the same time, there is no evidence that this tension applies across all the 28 Member States.

Thus, in order for the Postal Services Directive to remain future-proof, it would be wise to address this by making the Postal Services Directive flexible to these changes when needed. In practice, this can be achieved either by lowering minimum requirements of the Postal Services Directive or by allowing a greater use of exemptions to Member States, if appropriate cost benefit analysis is provided in support of such policy.



## CHAPTER 1

# IMPORTANT MARKET DEVELOPMENTS

The main aim of this chapter is to identify, quantify and assess changes in the postal sector over the 2013-2016 period. We describe market developments within the following areas:

- Letter post and parcel market in terms of volumes, turnover, profitability, market shares and evolution of user segments;
- Quality of service and prices of postal products;
- Operators' responses to digitalisation in terms of distribution channels and operational models;
- Operators' diversification strategies;
- New technologies applied in letter post and parcel markets.

The information collected and presented in this chapter will largely serve to understand better the developments analysed in the other chapters of this report. It is worth noting that some of the most important implications of developments described in this chapter are addressed in other chapters of the study: changes in the competitive landscape (chapter 2), social and environmental sustainability (chapter 3), and current and future sustainability of the universal service (chapters 4 and 5).

## 1.1 STRUCTURAL LETTER VOLUME DECLINE

Based on our analysis, we find that postal markets since 2013 have been characterized by two major opposing pressures: (i) letter volume decline, and (ii) growth in e-commerce packets/parcels volume. These contrasting pressures underpin different challenges for all stakeholders in the postal sector, see Table 1.

Whereas letter volume decline has shaped the postal market and continues to drive changes, the growing e-commerce industry creates new opportunities for postal operators to respond to and to minimise the negative impact of letter volume decline.

**Table 1**  
**Challenges posed by market developments to different postal market stakeholders**

MAIN MARKET DEVELOPMENTS	CHALLENGES FOR...			
	POSTAL OPERATORS	POLICY MAKERS AND REGULATORS	POSTAL USERS	E-COMMERCE INDUSTRY
Structural letter volume decline	<ul style="list-style-type: none"> <li>• Lower economies of scale and higher unit cost of providing postal services;</li> <li>• Declining appetite and capacity for investments;</li> <li>• Pressure to reduce network, save costs, increase prices;</li> <li>• Difficult to maintain the same level and conditions of employment.</li> </ul>	<ul style="list-style-type: none"> <li>• Higher costs per unit leading to higher prices and faster decline in letter volumes;</li> <li>• Difficult to maintain competition (in letter segment);</li> <li>• Costly to safeguard users in rural areas;</li> <li>• New regulatory approaches needed;</li> <li>• Pressure for changes in the postal law.</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing prices for letter post services</li> <li>• Lack of predictability of parcel delivery time</li> <li>• Reduced service levels</li> <li>• Lack of convenient parcel pick-up solutions.</li> </ul>	<ul style="list-style-type: none"> <li>• Meeting increasing users' expectations for quality and affordability of delivery services.</li> </ul>
Growing e-commerce packets and parcels volumes	<ul style="list-style-type: none"> <li>• Pressure to develop a nationwide network fit for parcel delivery;</li> <li>• Increasing losses on international inbound letters compensated based on UPU terminal due rates;</li> <li>• Strong competition;</li> <li>• Pressure to save costs and to reduce environmental impact</li> </ul>			

Source: Copenhagen Economics analysis of questionnaires and interviews with market stakeholders

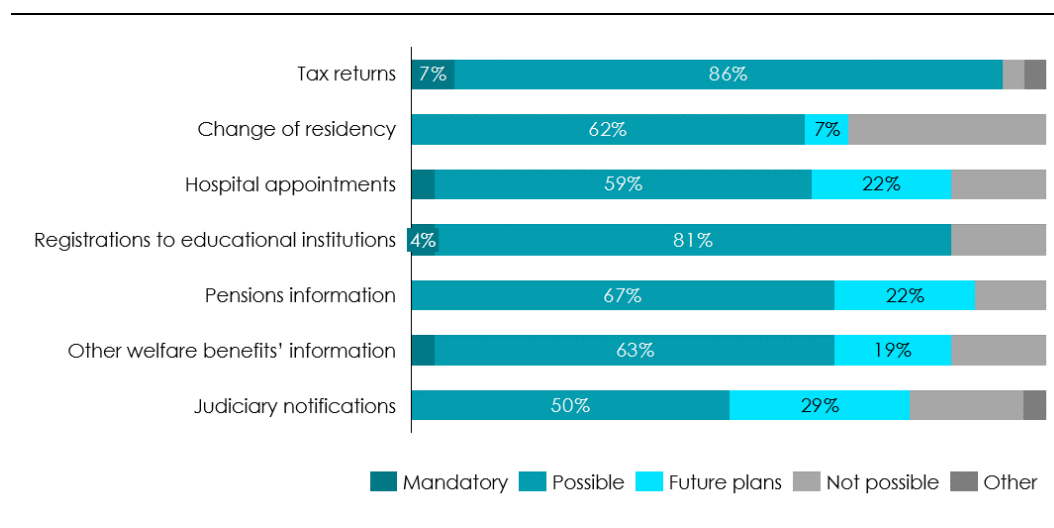
In this section, we describe letter volume developments and main drivers across EU, EEA and CH postal markets in the 2013-2016 period.

### 1.1.1 Digitalisation and evolution of e-substitutes for letter post

E-substitution happens when traditional letter post communication is replaced by electronic means of communication. We find that the possibility for businesses and citizens to electronically communicate with government institutions is quickly becoming commonplace in many countries in the EU, EEA and CH area. However, the willingness to substitute from traditional letter post to electronic communication varies across countries.

Almost all main communications with the public sector can be conducted electronically in the majority of countries, according to the USPs questioned. Notably, tax returns can be communicated in electronic form in all countries surveyed. Similarly, registrations to educational institutions can be done in electronic form in the vast majority of countries. For instance, in Denmark, all the communication with the public sector is mandatory digital since 2014. Change of residency, hospital appointments, pension information and other welfare benefits' information can be communicated electronically in about two thirds of the countries, and future plans exist in a several of the other countries. It is not possible to communicate the change of residency by electronic means in 30 per cent of surveyed countries, which is the highest share compared to other reported communications. Electronic communication of judiciary notifications is possible in less than half of the countries. However, future plans are in place in a majority of the other countries, see Figure 2.

**Figure 2**  
**Electronic communication with public institutions, 2017**  
Share of countries

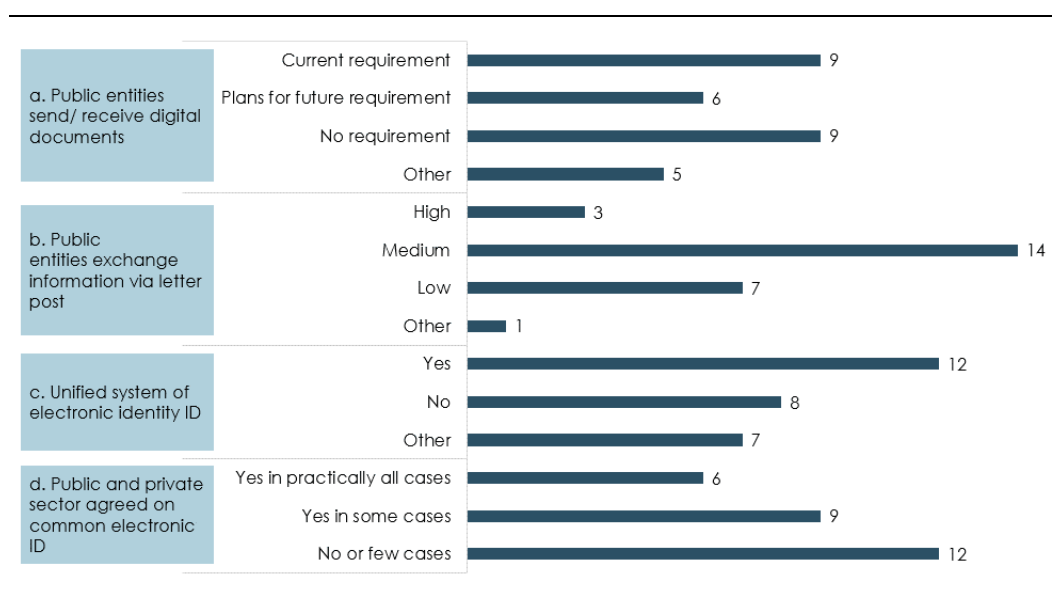


Note: the chart contains data from the following 29 countries: AT, BE, HR, CY, CZ, DK, EE, FI, FR, DE, EL, HU, IS, IE, IT, LV, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH.

Source: Questionnaire to USPs

Convenience of digital communication channels (and ultimately – willingness to e-substitute) in the public sector depends on different technological and policy conditions. Based on our questionnaires sent to USPs we find a mixed landscape of such conditions among investigated countries, see Figure 3. In 15 out of 28 USPs surveyed, there already exists requirements or there are future plans to implement a requirement that the country's public sector entities should send / receive documents between themselves in a digital form. Only three of the USPs participating in our survey stated that the country's public sector entities exchange information between themselves mainly using letter post, while most countries answered that the use of letter post between public institutions has declined. Public sector entities have not only reformed the communication between themselves, their interaction with citizens has also changed. It is now commonplace to have access to the entire public sector communication via a unified system of electronic identification, as 12 of 26 surveyed USPs acknowledged the presence of such a system in their country. In many cases this same identification can also be used when interacting with the private sector. A common electronic ID exists between the public and private sector in 15 of 26 countries, for at least some type of institutions (e.g. to access both online banking and communication with the government). This has particularly become common practice in Austria, Denmark, Iceland, Norway, Poland, and Sweden.

**Figure 3**  
**Electronic communication with public institutions, 2017**  
Number of countries



Note: the chart contains data from the following 29 countries: AT, BE, HR, CY, CZ, DK, EE, FI, FR, DE, HU, IS, IE, IT, LV, LI, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH.

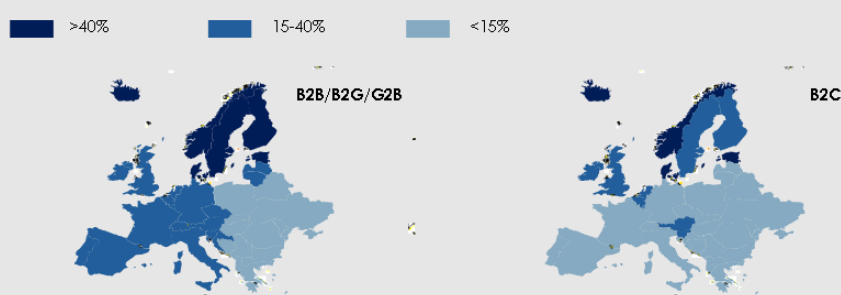
Source: Questionnaire to USPs

Based on our survey and interviews with policy makers and postal operators, the most apparent reasons for switching from paper-based communication to electronic communication include (a) cost saving potential for senders and (b) convenience to access, save and store information for recipients. In terms of governments' communication with private individuals (G2C), the most common reasons for not moving to digital communication are (a) privacy concerns – it is perceived that letter post communication is more secure – (b) technical difficulties to implement a centralised e-government platform, e.g. due to lack of interoperability/ high fragmentation of user information across different independent jurisdictions (for instance, in the case of the federal government system), and (c) cultural preference for the traditional postal service.

In terms of businesses, we find similar patterns regarding reasons to digitalise. The most prominent area in business to customers (B2C) electronic communication is e-invoicing applications, which reduce significant volumes of paper invoices to the benefit of large senders, such as telecom companies, banks, and utility companies, see Box 1.

### Box 1 Evolution of e-invoices

A study prepared by Billentis (2016) shows that out of all invoices sent either between businesses or between businesses and the public sector, the estimated share of e-invoices is above 40 per cent only in Denmark, Norway, Sweden, Finland, Iceland and Estonia. This share drops to between 15 per cent and 40 per cent for much of Europe and even below 15 per cent for a few countries. Focussing solely on invoices sent to consumers (B2C), the statistics are even lower with the estimated share of e-invoices below 15 per cent in most of Europe. The share is between 15 per cent and 40 per cent in Finland, Sweden, France, Ireland, the Netherlands and the United Kingdom. Only in Denmark, Norway, Iceland and Estonia does the share go above 40 per cent, see figure below.



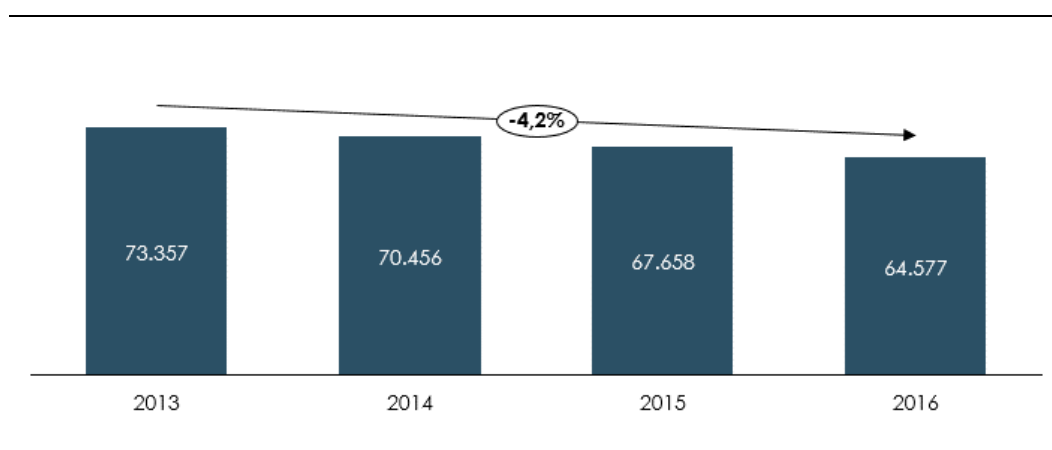
In terms of the evolution of e-invoicing, the European E-invoicing Service Providers Association, based on a set of survey results completed in July 2016 among its members (including e-invoices providers and large issuers such as banks), reported a significant growth of 33 per cent processed e-invoices in 2015 in the B2C segment and a growth of 23 per cent in the B2B and B2G segment. The growth in the B2C segment derives to a large degree from indirect invoices, i.e. electronic invoices delivered to another service destined for their customers (e.g. a music agency invoicing Spotify for streaming its music), which grew 67,6 per cent in 2015. In the B2B and B2G segment, growth was rather driven by direct invoices, which grew by 25.5 per cent.

Source: Copenhagen Economics based on Billentis (2016), E-invoicing Market Report 2016 (see the presentation of summary of findings, link: [http://www.billentis.com/einvoicing\\_ebilling\\_market\\_overview\\_2016.pdf](http://www.billentis.com/einvoicing_ebilling_market_overview_2016.pdf)) (accessed, 11 Dec 2017); Table's source: European Central Bank, E-invoicing: bringing the payment process fully into the digital age; published on [http://www.ecb.europa.eu/paym/intro/news/articles\\_2016/html/mip\\_qr\\_1\\_article\\_4\\_e-invoicing.en.html](http://www.ecb.europa.eu/paym/intro/news/articles_2016/html/mip_qr_1_article_4_e-invoicing.en.html) (accessed, 11 Dec 2017)

### 1.1.2 Development of domestic letter post volumes

The most prominent postal market trend observable in the last four years is the declining demand for addressed letter post products across the EU, EEA & CH area, which in the 2013-2016 period declined by on average 4,2 per cent annually across the 31 surveyed countries. In 2013, addressed letter post volume still amounted to more than 73 billion items, but by 2016 the volume had decreased to around 64 billion items. The trend was continuous through the time period with annual decreases reaching almost three billion each year, see Figure 4.

**Figure 4**  
**Domestic letter post volume development, 2013-2016**  
Million items



Note: the figure includes SP letters, bulk letters, direct mail and publications. The aggregated data includes domestic addressed letters and cross-border inbound letters data from the following 31 countries: AT, BE, BG, HR, CY, CZ, DK, EE, FI, FR, DE, EL, HU, IS, IE, IT, LV, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH, UK.

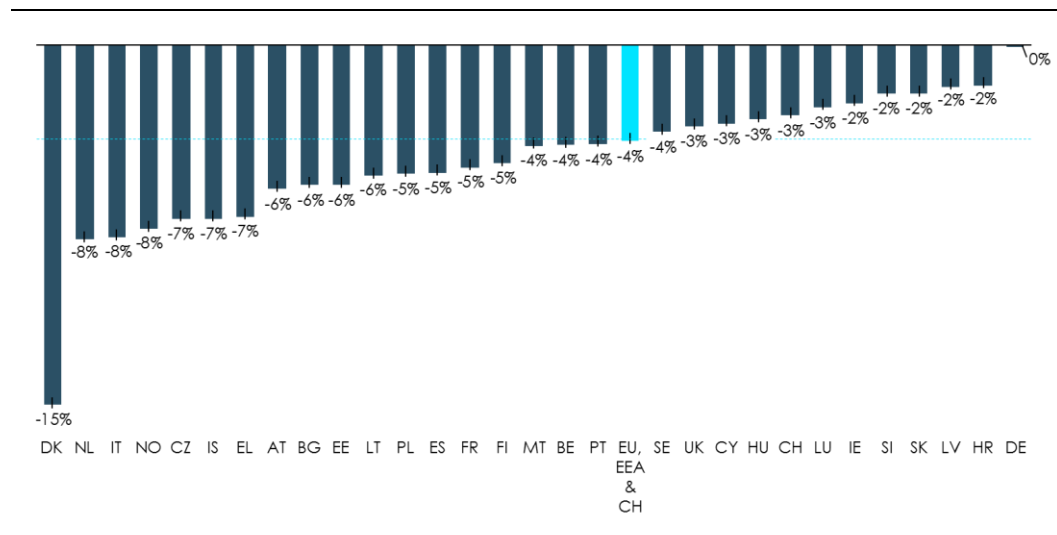
Source: Questionnaire to NRAs

#### *Development of domestic letter post volume on a country level*

Certain countries, notably Denmark, the Netherlands, Italy and Norway, have experienced a steep rate of decline in the 2013-2016 period. The annual percentage decrease was the highest in Denmark, reaching 15 per cent. This is a significant decrease compared to the other countries. On the other side of the spectrum, there was almost no change in the letter post volumes in Germany and only two per cent decline in Croatia, Latvia, Slovakia, Slovenia and Ireland.

To some degree there is also a geographic divide visible. In Northern Europe the letter post volume decline was rather strong, with the exception of Ireland. The rest of Europe does not paint such a clear picture. In Western Europe the decline in letter post volume differed widely between countries, with stark declines in the Netherlands and Austria and small (or no) declines in Germany, Luxembourg and Switzerland. There is a similar divide in Eastern Europe, where letter post volumes declined strongly in the Czech Republic and Bulgaria but only declined modestly in Slovakia and Hungary, and in Southern Europe, where Italy and Greece experienced steep declines, but letter post volumes only fell slightly in Croatia and Slovenia.

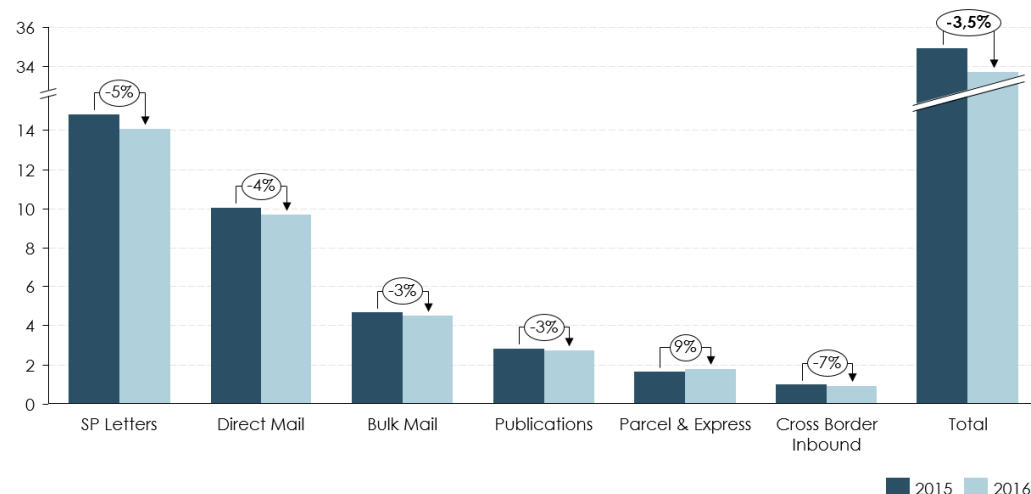
**Figure 5**  
**Development of domestic letter post volume by country**  
Annual change in 2013-2016



Note: the figure includes domestic address letter post volumes. DK - data comes from PostNord annual reports. IT - data includes cross-border letters and excludes direct mail. CH - the sum of SP letters and publications.  
Source: Questionnaire to NRAs; USP annual reports

Decline in USO volumes was primarily driven by declining single piece letter volumes. The total decline in USO volumes (both domestic and inbound cross-border) from 2015 to 2016 can be decomposed in the volume development of the different USO products. Single piece letter – accounting for more than 40 per cent of total USO volume in 2016 – is the product category driving the five per cent decline from 2015 to 2016. Direct mail – the second largest product category within USO – declined by around four per cent from 2015 to 2016. In countries where bulk mail is part of the USO, bulk mail volumes declined by around two per cent in the 2015-2016 period. The only product category that showed an increase in volumes between 2015 and 2016 is parcel & express, which increased by nine per cent, see Figure 6.

**Figure 6**  
**Development of USO volumes**  
Billion items



Note: the figure contains volumes from countries that reported those volumes for both years and where the products indicated are part of the USO. The figure contains data from the following 21 countries: AT, BE, BG, CY, EE, DE, EL, HU, IE, IT, LT, LU, MT, NL, NO, PT, RO, SK, SI, ES, CH. Parcel & express volumes are included when domestic parcels are part of the USO. Cross-border inbound volumes are composed of both letter and parcel volumes and are included when either inbound or outbound mail is part of the USO.

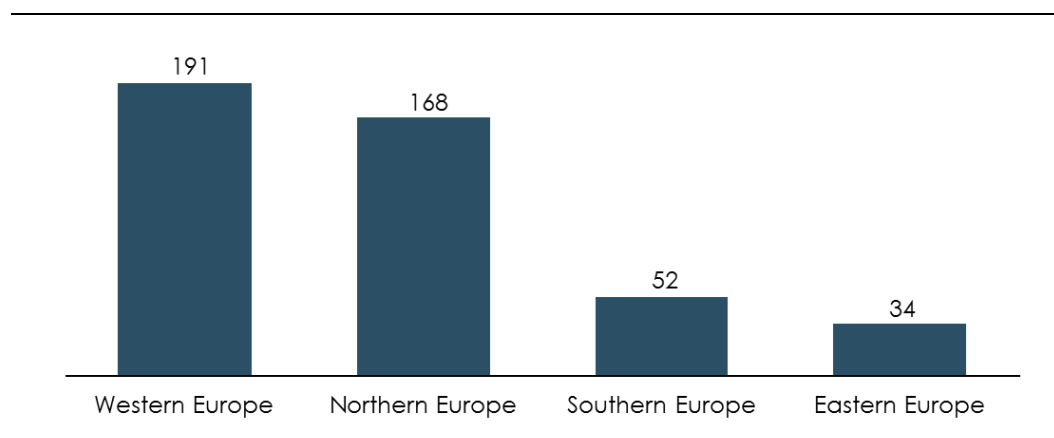
Source: Questionnaire to USPs and NRAs

### 1.1.3 The size of the letter post market

Letter post volumes per capita vary across different regions in Europe. With on average 191 pieces per capita Western Europeans send most letters per capita in Europe. In Northern Europe on average 165 pieces were sent per capita, almost 15 per cent less than in Western Europe. A much greater divide exists between these two regions and Southern Europe and Eastern Europe. In Southern Europe on average 52 letters per capita were sent in 2016, and in Eastern Europe the corresponding figure was 34 letters per capita, see Figure 7.



**Figure 7**  
**Letters per capita, 2016**



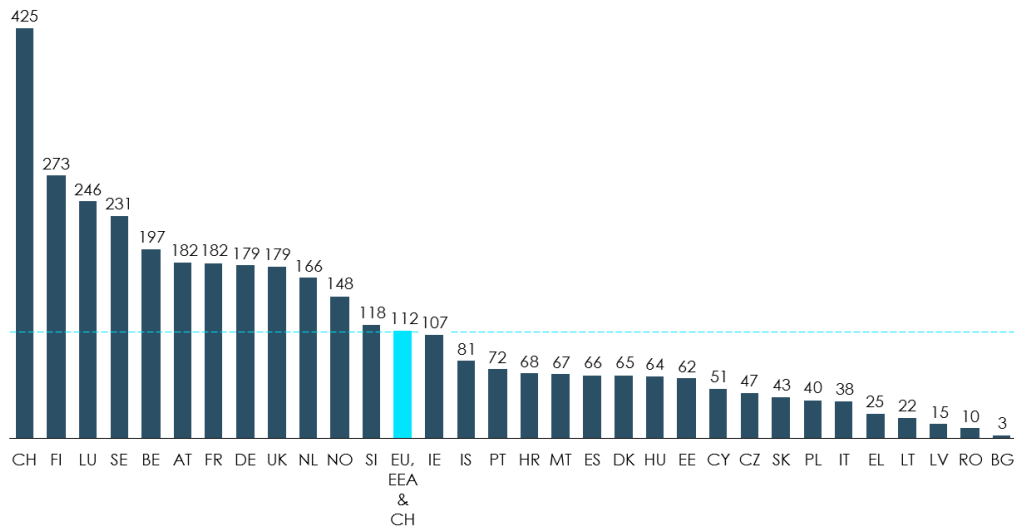
Note: the aggregated data includes domestic addressed letter post data from the following 31 countries: AT, BE, BG, HR, CY, CZ, DK, EE, FI, FR, DE, EL, HU, IS, IE, IT, LV, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH, UK.  
Source: Questionnaire to NRAs; Eurostat [demo\_pjan] (accessed, 15 Jan 2018)

The divide in letters per capita is also evident when observing the variation across countries. Swiss, Luxembourgers and Belgians are the ones in Western Europe that send the most letters per capita, with Switzerland sending the most items per capita (425). Western Europe makes up 59 per cent of the total letter post volume in the EU, EEA & CH area. Northern European countries such as Sweden, Finland and the UK also register high volumes, above the sample average.

The other end of the spectrum contains countries from different regions. Romania and Bulgaria have the lowest number of letters sent per capita, followed by Latvia, Lithuania and Greece. Bulgaria experienced the lowest volume of only three items per capita.

The average letter post per capita across all countries is 112, more or less centred between the extremes of Switzerland and Bulgaria, see Figure 8.

**Figure 8**  
**The size of letter post sector by country, 2016**  
Letter post items per capita



Note: the figure includes domestic addressed letter post volumes. DK - volumes of USP. Data comes from Post-Nord annual reports. IE - data is from 2015. IT - data includes single piece letters, bulk letters, publications and cross-border. It excludes direct mail. CH - volumes of letter post are the sum of SP letters and publications.

Source: Questionnaire to NRAs; USP annual reports; Eurostat [demo\_pjan] (accessed, 15 Jan 2018)

There are multiple reasons that cause the variation in the level of demand for letter post. Letter mail demand is influenced by a variety of different drivers that can be grouped into two categories:

The first group of drivers are so-called underlying, fundamental drivers. These drivers, such as economic growth, changes in demography as well as increasing digital capabilities in the population, are inherent to changing societies. Private individuals' preferences on how to send and receive mail are mostly driven by culture, age and e-skills. In addition, trust in digital mail and privacy concerns can be a major opposing force to the use of electronic substitutes for physical mail, keeping letter mail demand high.<sup>4</sup> However, individuals' preferences only have limited influence on how senders of business mail choose how to communicate.

A second group of strategic drivers are related to decisions of actors on the mail market that make choices on how to respond to their new digitalized market environment. These choices can either accelerate or dampen mail volume decline. For instance, in response to a more and more digitalized society, governments can decide to push forward with digitalization by pursuing an ambitious e-government agenda hence lowering the demand for physical mail. Governments can also continue to rely on paper mail for part of their communication which would translate in a less steep decline of letter mail.

<sup>4</sup> See, for instance, Rodriguez et al. (2016), The Impact of E-substitution on the Demand for Mail: Some Results from the UK, Nikali (2014), Sender-receiver-segment-based demand analysis for letters, European Commission (2007), Breaking Barriers to e-government.

## 1.2 GROWING VOLUMES OF PARCEL AND EXPRESS SERVICES

In this section we describe parcel and express volume developments and main drivers across EU, EEA & CH postal markets in the 2013-2016 period.

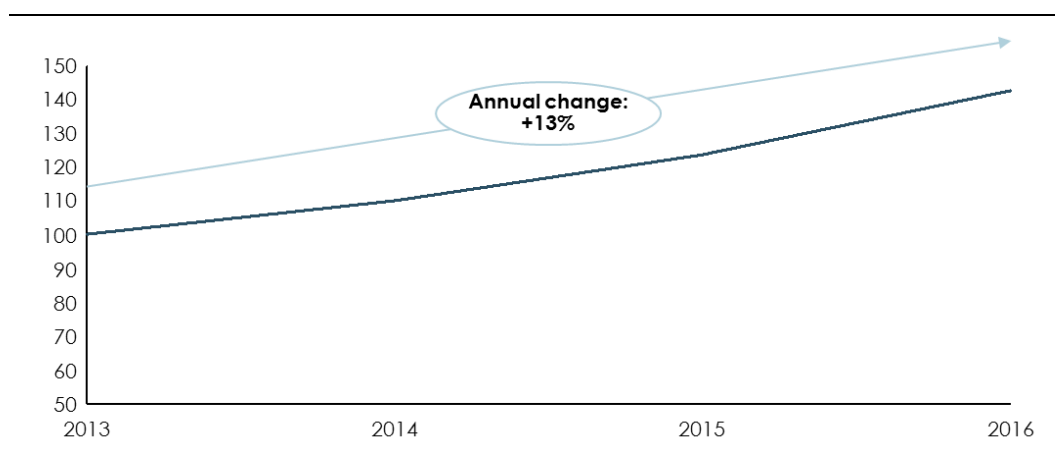
### 1.2.1 Development of parcel & express volumes

In contrast to the declining letter post segment, parcel and express volumes grew by on average 13 per cent annually. There is an increasing parcel and express volume trend in the 2013-2016 period, which becomes steeper towards 2016, see Figure 9.

**Figure 9**

**Evolution of parcel & express services volumes, domestic, 2013-2016**

Index (2013=100)



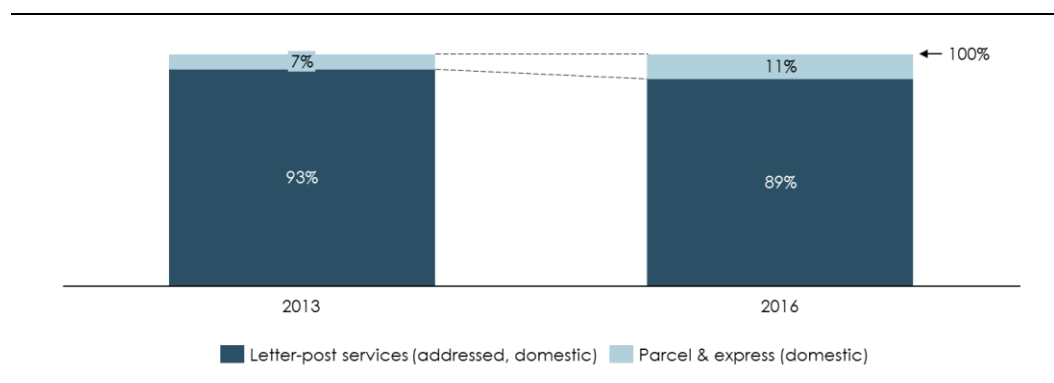
Note: the aggregated data includes data for the following 24 countries: AT, BE, BG, HR, CZ, DK, EE, EL, HU, IS, IT, LV, LT, MT, NL, PL, PT, RO, SK, SI, ES, SE, CH, UK.

Source: Questionnaire to NRAs

### *Postal operators' product mix is changing*

We find that the share of parcel and express shipments has increased from seven per cent to eleven per cent in the total mail stream in the 2013-2016 period, see Figure 10. Whereas letter post volumes used to be more than 13 times the parcel and express volumes in 2013, they are now eight times as high.

**Figure 10**  
**Composition of mail volume, 2013 vs 2016**  
Share of total volume



Note: the aggregated data of the different mail products includes data for the following 24 countries: AT, BE, BG, HR, CZ, DK, EE, EL, HU, IS, IT, LV, LT, MT, NL, PL, PT, RO, SK, SI, ES, SE, CH, UK.

Source: Questionnaire to NRAs

Demand for parcel and express services varies up to four times regionally. With 22 pieces per capita per year, most parcels & express items per capita are sent in Northern Europe. Southern Europe has the lowest number of items per capita with six parcels & express items in 2016, see Figure 11.

**Figure 11**  
**Domestic parcels & express items per capita, 2016**  
Items per capita per year

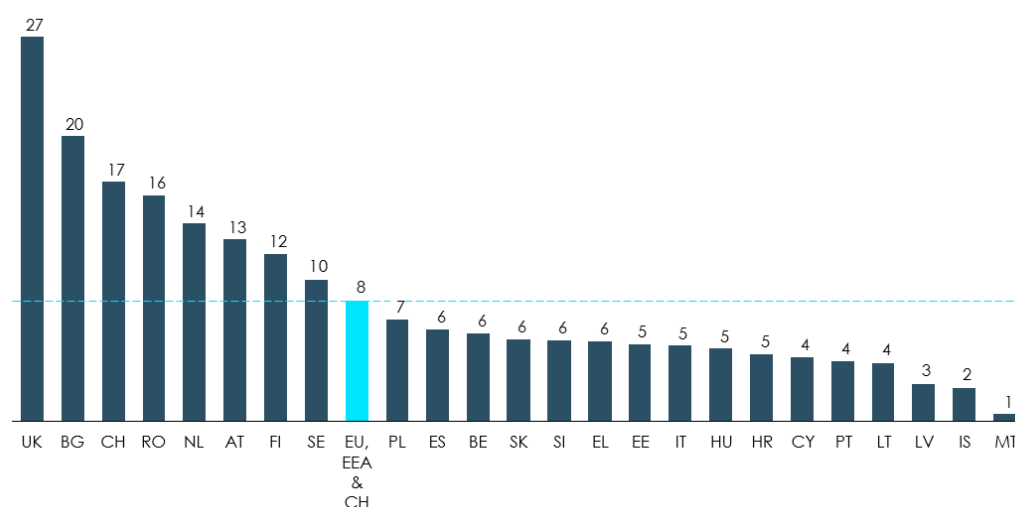


Note: the aggregated data, calculated at the regional level, includes domestic and cross-border inbound parcel and express data from the following 26 countries: AT, BE, BG, HR, CY, CZ, DK, EE, FI, EL, HU, IS, IT, LV, LT, MT, NL, PL, PT, RO, SK, SI, ES, SE, CH, UK.

Source: Questionnaire to NRAs; Eurostat [demo\_pjan] (accessed, 15 Jan 2018)

The level of the demand for parcel & express services differs widely across countries. Volumes per capita were the highest in the United Kingdom, reaching 27 items per capita in 2016. On average, eight items per capita were delivered across the European countries investigated, see Figure 12.

**Figure 12**  
**Demand for parcel & express post by country, 2016**  
Parcel & express items per capita



Note: LT - parcel & express (domestic) include volumes of letter post services provided by courier/express service providers.

Source: Questionnaire to NRAs; Eurostat [demo\_pjan] (accessed, 15 Jan 2018)

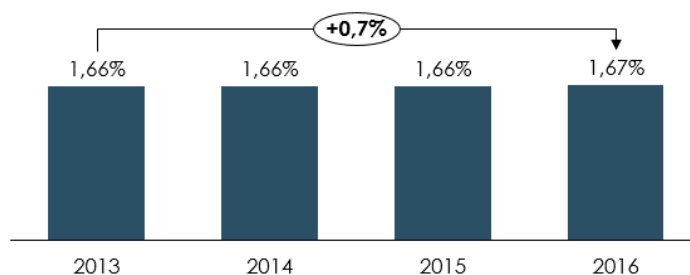
### *The share of light-weight packets in the cross-border letter traffic is growing*

Domestically, the transportation of light-weight packets<sup>5</sup> remains a small and stable business. The share of light-weight goods in total domestic letter post traffic remained consistently at around 1,6 per cent, see Figure 13.

<sup>5</sup> Bulky letters between 100 grams to 2 kg, i.e. category E according to the UPU system.

**Figure 13**

**Evolution of light-weight goods (between 100 grams to 2 kg) (2013-2016) - DOMESTIC**  
Share in total addressed letter post volumes



Note: Average of domestic packets weighted by USP's domestic addressed letter post volumes. The figure contains data from the following 13 countries: AT, CY, FI, DE, IS, IE, LU, MT, NO, PT, SK, SI, SE. When data from one year was missing, the number from the next or previous year was used.

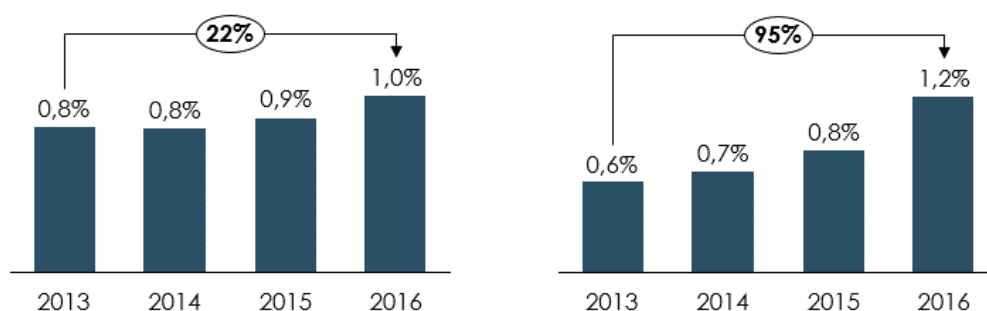
Source: Questionnaire to USPs

In contrast, cross-border flows of inbound and outbound light-weight packets increased by 22 and 95 per cent respectively in the 2013-2016 period. This data refers to a sample representing around a third of the European addressed letter post market. In these countries the level of cross-border packets within the total addressed letter post traffic remained around one per cent in 2016, see Figure 14.

**Figure 14 Evolution of light-weight goods (between 100 grams to 2 kg), 2013-2016**  
**CROSS BORDER INBOUND** **CROSS BORDER OUTBOUND**

Share in total addressed letter post volumes

Share in total addressed letter post volumes



Note: Average of cross-border packets weighted by USP's domestic addressed letter post volumes. Cross-border inbound data from the following 16 countries: AT, BE, CY, FI, HU, IE, IT, LU, MT, NL, NO, PT, SI, ES, SE, CH. Cross-border outbound data from the following 16 countries: AT, BE, CY, FI, IS, IE, IT, LU, MT, NL, NO, PT, SI, ES, SE, CH. When data from one year was missing, the number from the next or previous year was used.

Source: Questionnaire to USPs

In some of the larger European postal markets, we see a relatively higher share of inbound cross border light-weight packets, often due to e-commerce from countries outside Europe.

## 1.3 EVOLUTION OF UNIVERSAL SERVICE PROVIDERS' FINANCIAL PERFORMANCE

The developments in the product mix described above have had ambiguous implications for postal operators' turnover and profitability across the investigated 32 countries.

We find that in the majority of postal markets, the USPs' profitability margin has been declining, going from 4,7 per cent to 3,8 per cent on average (incl. non-USO services) across all investigated countries in 2013-2016. Postal operators' profitability varies widely across countries. Whereas some USPs manage to operate at EBIT margins above ten per cent, for example in Belgium, Portugal, Cyprus and Malta, the vast majority of USPs earn margins between one and five per cent.

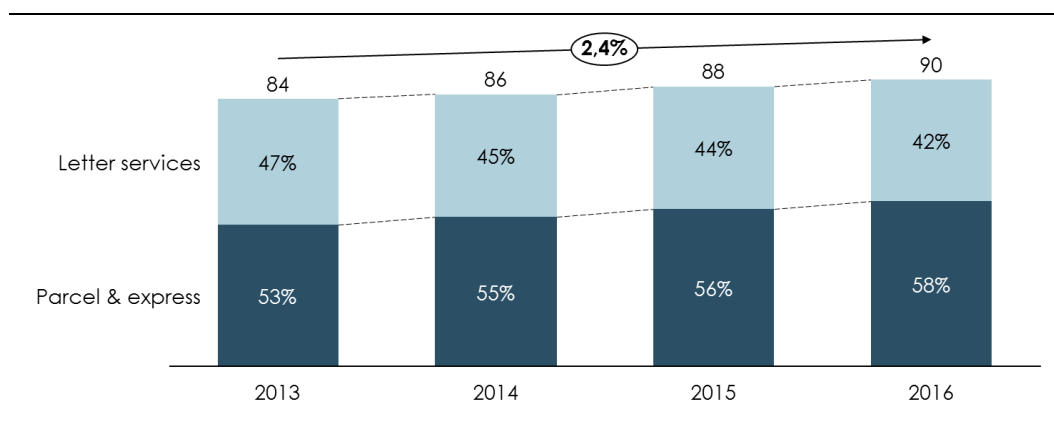
In some countries, however, despite an overall trend of declining letter volumes, USPs have maintained a relatively stable and positive level of profitability throughout the 2013-2016 period. This is a result of multiple revenue enhancing and/or cost reducing measures implemented by USPs, regulators and policy makers. These measures are discussed further in sections 1.4 and 1.6 below.

### 1.3.1 Letter post and parcel markets in terms of turnover

The size of the postal market, including express services, amounted to a total € 90 billion in the EU, EEA & CH area in 2016, compared to € 84 billion in 2013. This equals to 0,52% and 0,55% of the total GDP of all countries covered by the study in 2016 and 2013 respectively.

Letter post still plays an important role in the postal and express market, amounting to 42% of the total revenue generated in the sector in 2016. However, the relative size of the letter segment has declined by 5 percentage points from the 2013 level, when letter post amounted to 47% of the sector's total revenue, see Figure 15. Revenues in the parcel & express business segment grew on average 5,3% annually, whereas in the letter post segment – declined on average by 1,2% annually.

**Figure 15**  
**Development of revenue in letter post and parcel & express segments, 2013-2016**  
Billion euros

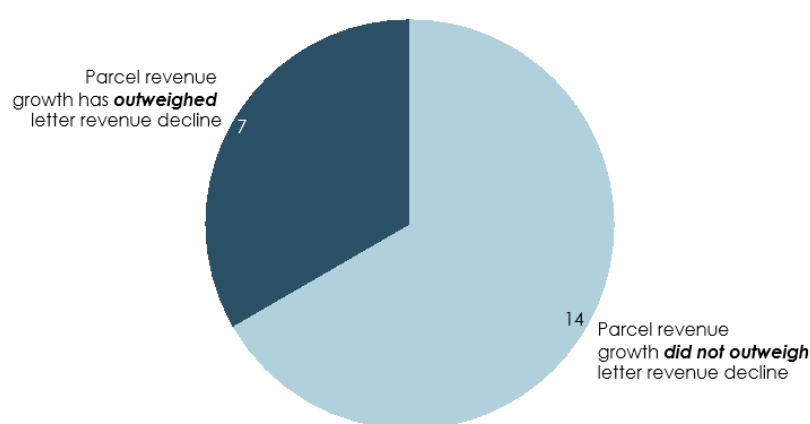


Note: Includes all 32 countries.

Source: Questionnaire to NRAs and our assumptions for CY, FI, NO, and RO.

Importantly, for many USPs', the growth of parcel & express segment does not outweigh letter revenue decline. In fact, based on the detailed country level data (which is confidential), only seven out of 21 USPs have recorded that parcel revenue growth has outweighed letter revenue decline in 2016, see Figure 16.

**Figure 16**  
**Development in USPs' parcel & express revenues versus letter post revenues, 2015-2016**  
Number of USPs



Note: The figure shows the number of USPs where the increase in parcel & express revenues from 2015 to 2016 was higher than the decrease in letter post revenues from 2015 to 2016, and vice versa. The figure contains data from the following 21 countries: AT, BE, BG, CY, FI, FR, DE, EL, HU, IE, IT, LT, NL, NO, PT, RO, SK, SI, ES, CH, UK.

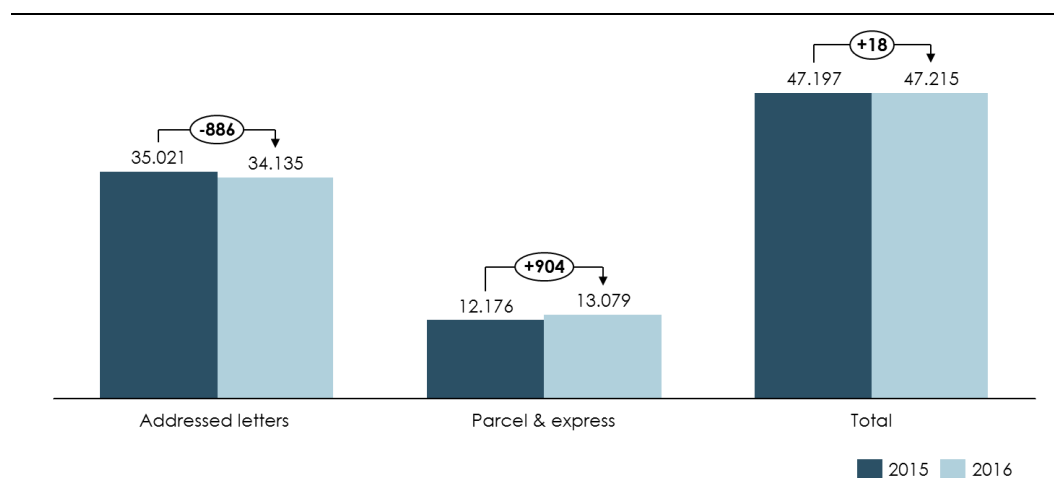
Source: Questionnaire to USPs and NRAs; USP annual reports

There are at least a couple of reasons for such differences. Firstly, in many countries, USPs serve a much smaller share of the parcel & express market than the letter market (discussed further in chapter 2). The implication is that typically USPs experience a full impact of letter volume decline but benefit only marginally from the parcel & express growth. Second, in some countries, the parcel & express market is still much smaller than the letter market, due to, for instance, cultural characteristics of the country where citizens prefer traditional brick and mortar retailers vis-à-vis online retailers. In the investigated countries, USPs' revenues in the addressed letter market were up to three times larger than their revenues in the parcel and express market in 2016.

Based on the analysis of 21 USPs detailed revenue information (incl. the largest postal markets such as DE, FR, and IT), we find that in 2016, parcel & express revenue growth outweighed USO letter revenue decline by a small margin. While the USPs' letter revenues in these countries declined by € 886 million, the parcel and express segments grew significantly by € 904 million, outweighing the decline in letter revenues by € 18 million, see Figure 17.



**Figure 17**  
**Development of USPS' revenues in letter and parcel segments, 2015-2016**  
Million euros



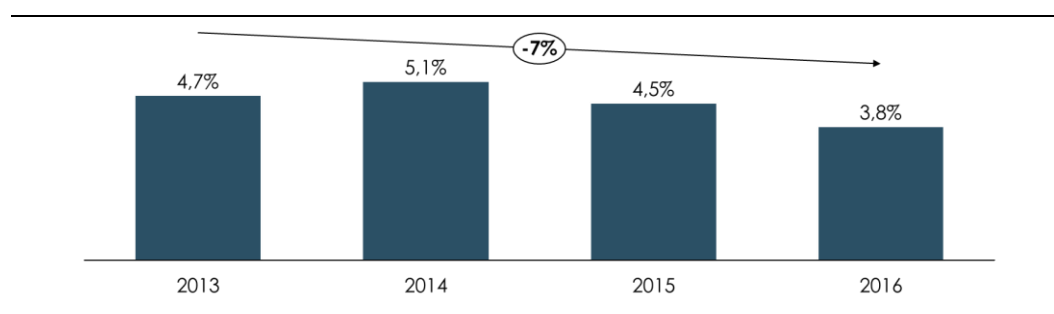
Note: The figure includes data from countries that reported revenues for both years and for both letters and parcels. The figure contains data from the following 21 countries: AT, BE, BG, CY, FI, FR, DE, EL, HU, IE, IT, LT, NL, NO, PT, RO, SK, SI, ES, CH, UK.

Source: Questionnaire to USPS and NRAs

### 1.3.2 Evolution of USPS' profitability

The changing demand behaviour in letter post markets has had a negative impact on the financial situation of postal operators (taking into account all their activities, not only postal services). The unweighted average EBIT margin of USPS in 30 investigated countries has been declining in the 2013-2016 period, going from 4,7 per cent in 2013 to 3,8 per cent in 2016, see Figure 18.

**Figure 18**  
**Development of USPS' profitability in the EU, EEA & CH area, 2013-2016**  
Average EBIT margin

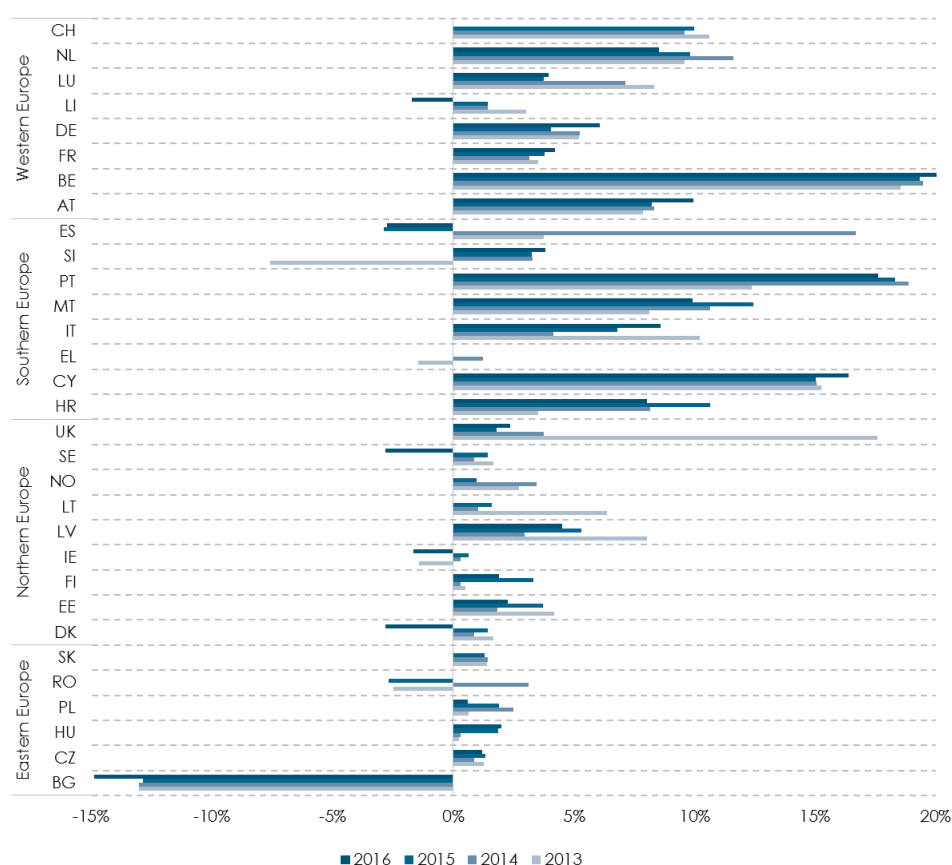


Note: The figure contains data from the following 30 countries: AT, BE, BG, HR, CY, CZ, DK, EE, FI, FR, DE, HU, IE, IT, LV, LI, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH, UK. Copenhagen Economics estimation for missing years in the following countries: LT, NO, RO, SK, CH.

Source: USP annual reports; UPU database (accessed, 11 Dec 2017)

Postal operators' profitability for all activities varies widely across different countries. The vast majority of universal service providers earn margins between one and five per cent, while only some manage to operate at EBIT margins above ten per cent. A few USPs had a negative EBIT margin in 2016, namely those in Bulgaria, Denmark and Sweden, Spain, Liechtenstein and Ireland. In particular, the Bulgarian Post has operated at an EBIT margin below minus ten per cent for the entire 2013-2016 period. The profits earned by these companies also developed differently over time. Countries that had a positive annual trend in USP's profitability were Hungary, Finland, Croatia and Portugal; on the other side of the spectrum, Sweden and Denmark, Spain, Liechtenstein, Slovenia and Lithuania saw the sharpest annual declines, see Figure 19.

**Figure 19**  
**Profitability of USPs (EBIT margin, total business)**  
EBIT margin



Note: Includes both postal and non-postal services provided by USPs. EBIT margin information for SE and DK regards PostNord group and is consequently the same for both countries.

Source: USPs annual reports; UPU database (accessed, 11 Dec 2017)

## **1.4 MARKET RESPONSES TO DECLINING DEMAND FOR LETTER POST SERVICES**

In this section, we report and analyse different revenue enhancing and cost reducing measures taken by postal market stakeholders in the 2013-2016 period.

Our analysis shows that USPs respond to declining letter volumes in multiple ways. The most common sources of additional revenue for USPs include (i) letter price increases, (ii) diversification strategies, (iii) compensation for the net cost of the USO, and (iv) procurement of services of general economic interest. From the cost perspective, declining letter volumes as well as competition in the letter market in some countries have pushed USPs to improve efficiency of their operations. The most common measures taken by the USPs include (i) new more efficient mail delivery models and (ii) automation of mail processing activities. In addition, in some cases, policymakers have also adapted postal regulations to changing user needs that allowed further efficiency improvements. We discuss each of these approaches below.

### **1.4.1 Market responses to stabilise revenue development in the declining letter segment**

In this section, we discuss to what extent each of the four revenue enhancing measures (listed above) were applied in the investigated countries.

#### *Declining demand for letter delivery drives price increases*

Many postal operators have responded to their challenging environment with price increases. Price changes have been most notable in Italy and Denmark, where the price for a 20g single piece priority domestic letter increased by 300 per cent and 138 per cent respectively over the 2013-2016 period. In both countries the price increases have been part of a restructuring of the business model with more emphasis on slower mail products, and the D+1 services in Italy contain value added features, e.g. track and trace. These numbers are significantly higher than in the rest of Europe, however the starting prices in these countries were not the highest, see Table 2.

On the other side of the spectrum, prices decreased by 13 per cent in Romania and did not change in Bulgaria, Lithuania, Liechtenstein and Switzerland. On average, the price for a 20g single piece FSC domestic letter in the 2013-2016 period increased by 27 per cent.

**Table 2**  
**Price for 20g domestic single piece letter (FSC)**

Country	Price in 2013, €	Price in 2016, €	% change 2013-16
<b>Next day delivery (D+1)</b>			
Italy	0,70	2,80	300%
Denmark	1,07	2,55	138%
Estonia	0,45	0,65	44%
Netherlands	0,54	0,73	35%
Iceland	0,96	1,27	33%
Slovenia	0,29	0,37	28%
France	0,63	0,80	27%
Czech Republic	0,50	0,62	23%
Germany	0,58	0,70	21%
Cyprus	0,34	0,41	21%
Ireland	0,60	0,72	20%
Greece	0,62	0,72	16%
Portugal	0,50	0,58	16%
Norway	1,01	1,17	16%
Austria	0,62	0,68	10%
Sweden	0,60	0,65	8%
Slovakia	0,65	0,70	8%
United Kingdom	0,68	0,72	7%
Poland	0,54	0,58	6%
Hungary	0,45	0,47	4%
Belgium	0,77	0,79	3%
Latvia	1,42	1,42	0%
Liechtenstein	0,88	0,88	0%
Switzerland	0,88	0,88	0%
Croatia	0,60	0,60	0%
Lithuania	0,45	0,45	0%
Bulgaria	0,43	0,43	0%
Malta	0,26	0,26	0%
Romania	0,35	0,31	-13%
<b>Slower than D+1</b>			
Spain (D+3)	0,37	0,45	22%
Luxembourg (D+3)	0,60	0,70	17%
Finland (D+4)	0,85	1,20	41%

Note: The prices refer to the fastest standard category (FSC) letter post product a customer can purchase from the USP in the investigated countries. In all countries this is a D+1 product, with the exception of three countries. In Denmark, D+1 is outside of the USO scope.

Source: Questionnaire to USPs; desk research

Besides the significant price changes for single piece letter post, bulk mail prices have increased as well, but less strongly – by up to 48 per cent. Price changes have been most notable in Iceland, Slovenia and Norway. In Slovenia and Norway, the price of a 20g bulk mail letter increased by 28 per cent and 23 per cent respectively over the 2013-2016 time period, and in Iceland by 48 per cent, see Table 3.

On the other side of the spectrum, prices decreased by eight per cent in Cyprus and did not change in six countries, including Italy. On average, the price for a 20g bulk mail letter in the 2013-2016 period increased by ten per cent.

There is also a geographic divide visible. In Northern Europe price increases were rather strong. Finland, Ireland and the United Kingdom all experienced relatively large price increases. On the contrary, the price development in Southern Europe was comparatively small (with the exceptions of Slovenia and Portugal), as there were no changes in prices in Greece and Malta, and even a price decline in Cyprus.

**Table 3**  
**Price for 20g domestic bulk mail letter**

Country	Bulk mail 20g letters. Pre-sorted. 10,000 items per year		
	Price in 2013. €	Price in 2016. €	% Change 2013-16
Iceland	0,70	1,04	48%
Slovenia	0,23	0,29	28%
Norway	0,86	1,07	23%
Ireland	0,50	0,59	18%
Finland	0,51	0,60	17%
Netherlands	0,30	0,34	15%
United Kingdom	0,45	0,50	12%
Portugal	0,33	0,37	12%
Slovakia	0,44	0,49	11%
France	0,47	0,52	10%
Austria	0,29	0,32	10%
Hungary	0,17	0,19	7%
Belgium	0,63	0,67	6%
Sweden	0,44	0,45	3%
Greece	0,57	0,57	0%
Switzerland	0,47	0,47	0%
Liechtenstein	0,47	0,47	0%
Italy	0,43	0,43	0%
Lithuania	0,30	0,30	0%
Malta	0,24	0,24	0%
Cyprus	0,27	0,25	-8%
Denmark	n/a	0,63	n/a
Luxembourg	n/a	0,51	n/a
Spain	n/a	0,50	n/a
Romania	n/a	0,28	n/a

Note: The prices refer to bulk mail composed of 20g letters, pre-sorted, 10.000 items per year. DK, EL, IE, LU, ES - prices for unsorted bulk mail. IT - prices are differentiated according to the final destination of the postal item. The bulk mail price indicated is the one for city provinces (CP). PT - prices differ by zones. Indicated are the highest national prices.

Source: Questionnaire to USPs; Postnord, Business Letters (accessed, 5 Dec 2017); Hellenic Post, Price List (accessed, 5 Dec 2017); AnPost, Postage Calculator (accessed, 5 Dec 2017); Post Luxembourg, Prices (accessed, 5 Dec 2017); Correos, Standard Letter Prices (accessed, 5 Dec 2017)

The increase in prices across different countries of the EU, EEA & CH area has been driven by decline in letter post volumes. The increase of priority letter post prices in Denmark, which led to an

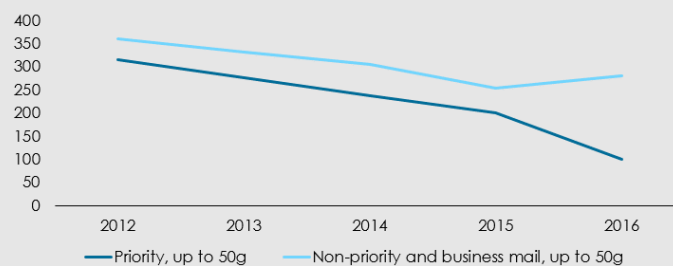
even steeper decline in the volume of this product and a substitution to non-priority mail, is an example of this development, see Box 2.

### Box 2 Case example: Developments in letter volumes and prices in Denmark

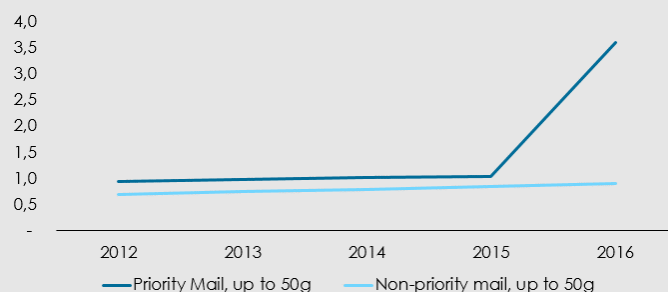
In Denmark – where the letter volume decline triggered by public digitalisation strategies was the highest among the EU, EEA & CH countries in the 2013-2016 period, see Figure 5 – PostNord announced in 2016 a number of price increases, including increasing its price for single piece priority letters (next day delivery) up to 50 grams from around € 1,07 to € 2,55. At the same time, the price for non-priority letter stayed almost constant, increasing solely by a few euro-cent as it had done in previous years, see Figure 21. This required a change in the postal law – excluding priority letters from the USO – which also means that the higher price includes 25% VAT (which the non-priority product does not have).

This change had a direct impact on letter post volumes development, shifting demand from priority to non-priority letters. Prior to this change, the volumes of non-priority letters had gradually decreased, and following the demand shift volumes actually increased, see Figure 20. At the same time, the demand for priority letters declined strongly by circa half its volume and much more than in previous years.

**Figure 20**  
**Letter volume development in Denmark, 2012-2016**  
Million items



**Figure 21**  
**Letter price development in Denmark, 2012-2016**  
€



Source: USP annual reports; price lists

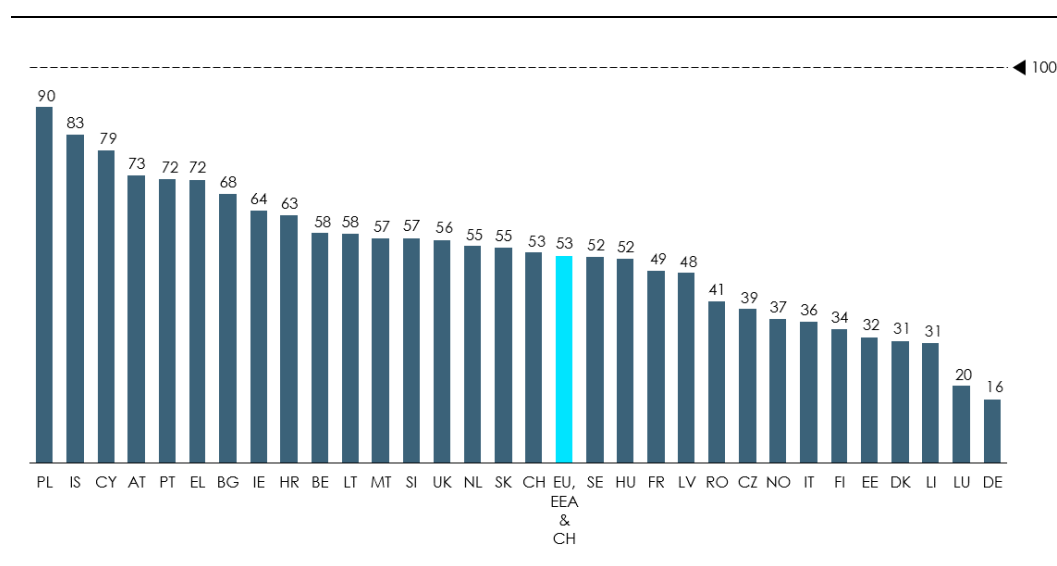
### *Revenue diversification strategies*

We find that declining letter post volumes urge some postal operators to pursue economies of scope, through diversification strategies, in order to sustain the economic viability of their dense postal networks. The share of total revenues collected outside the letter segment varies from 84 per cent (Deutsche post) to 10 per cent (Poczta Polska). The average share of revenues coming from the letter business is around 53 per cent. Half of the surveyed USPs are positioned above this average, however some of them include other mail businesses, e.g. parcels, see Figure 22.

**Figure 22**

#### **USPs' dependence on revenues in the letter post segment**

% of letter post revenues over total domestic revenues across all activities (USO and non-USO)

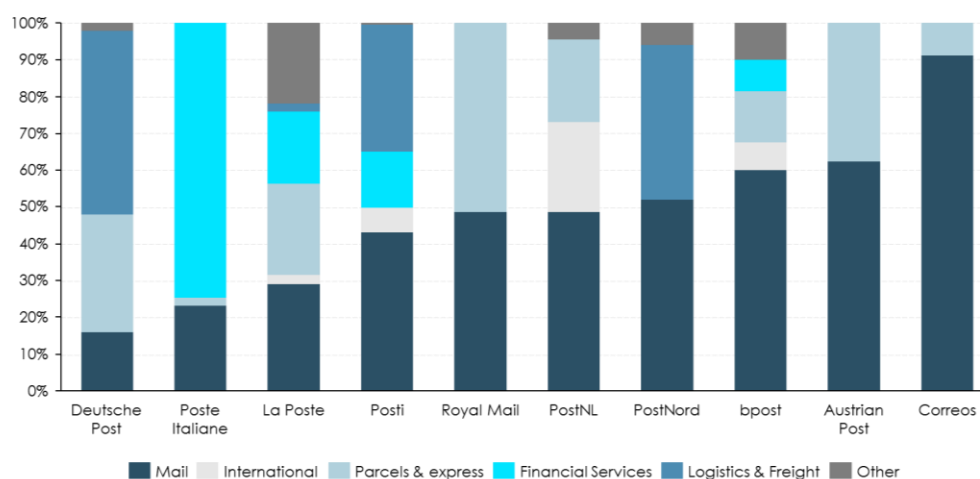


Note: Countries that include other postal services not just letter post: FR, IE, IT - includes letter and parcel service; DE - represents postal business revenues in total Group's revenues; NO - represents the mail segment; HR, IS, LT, LU, MT - include other not specified postal services; PL - include all USO services; SE, CH - revenues for communication services. The EU, EEA & CH average is an unweighted average.

Source: Questionnaire to USPs; USP annual reports; Universal Postal Union, 6.1 Percentage of income linked to letter post (accessed, 4 Jun 2018)

We see that postal operators have been actively pursuing growth opportunities in new business areas, mainly in parcels and express, logistics and freight, postal financial services, postal retail, information services and telecommunications, which are the largest sources of global postal revenues after traditional letter post, see Figure 23.

**Figure 23**  
**Diversification of revenue among USPs (2016)**  
% of total revenue



Note: Mail refers to the letter post segment  
Source: PostNL (2017) European postal markets – 2017 an overview


The most popular diversification strategies at USPs are express services, retail services, printing and mail preparation, financial services, freight and logistics services and hybrid mail<sup>6</sup>. All but one of the responding USPs reported providing express services in addition to their traditional mail services, which makes express services the most popular strategy for diversification among USPs. Retail services, or the sale of merchandise, is present at 83 per cent of the responding USPs. Freight and logistics services, such as cargo and other custom transport services, and financial services, including money transfers and other banking services, are also popular ways to diversify product services among USPs, with 80 per cent and 83 per cent of USPs respectively reporting to diversify their services in this way. Although less popular, e-government services and virtual delivery networks<sup>7</sup> are other important ways of diversifying services at USPs, see Table 4.

<sup>6</sup> Hybrid mail refers to items that are dispatched in electronic form by the sender and are subsequently printed, packed, sorted and delivered by the postal operator to the recipient.

<sup>7</sup> Virtual mail refers to the digitalisation (scanning) by the postal operator of a paper-based item dispatched by the sender and its electronic delivery of the item to the recipient.



**Table 4**  
**USPs providing adjacent services**

Country	Express	Financial	Retail	Mail prep	Logistics	Hybrid mail	E-gov	Virtual networks	Adjacent services
AT, CH	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	 <p>Many</p> <p>Few</p>
CZ, EE, FR IT, LT, PT	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
PL, ES, SI	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
SK	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
DE	Yes		Yes	Yes	Yes	Yes	Yes	Yes	
BE, HU, LU, MT	Yes	Yes	Yes	Yes	Yes	Yes			
HR	Yes	Yes	Yes	Yes			Yes	Yes	
IE	Yes	Yes	Yes	Yes			Yes		
LV	Yes	Yes	Yes	Yes		Yes			
IS	Yes	Yes	Yes		Yes			Yes	
NO	Yes	Yes		Yes	Yes		Yes		
DK, UK	Yes			Yes	Yes	Yes	Yes		
FI	Yes			Yes	Yes	Yes		Yes	
LI	Yes	Yes	Yes		Yes				
EL	Yes	Yes	Yes			Yes			
SE	Yes			Yes	Yes	Yes			
CY	Yes	Yes	Yes						
BG		Yes	Yes			Yes			
<b>Total</b>	<b>29</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>24</b>	<b>23</b>	<b>15</b>	<b>10</b>	

Note: Express stands for "Express services", Mail prep stands for "Printing and mail preparation", Financial stands for "Financial services", Logistics stands for "Freight and logistics services", E-gov stands for "E-government services", Virtual networks stands for "Virtual delivery networks". NL – data is confidential. RO – no answer.

Source: Questionnaire to USPs

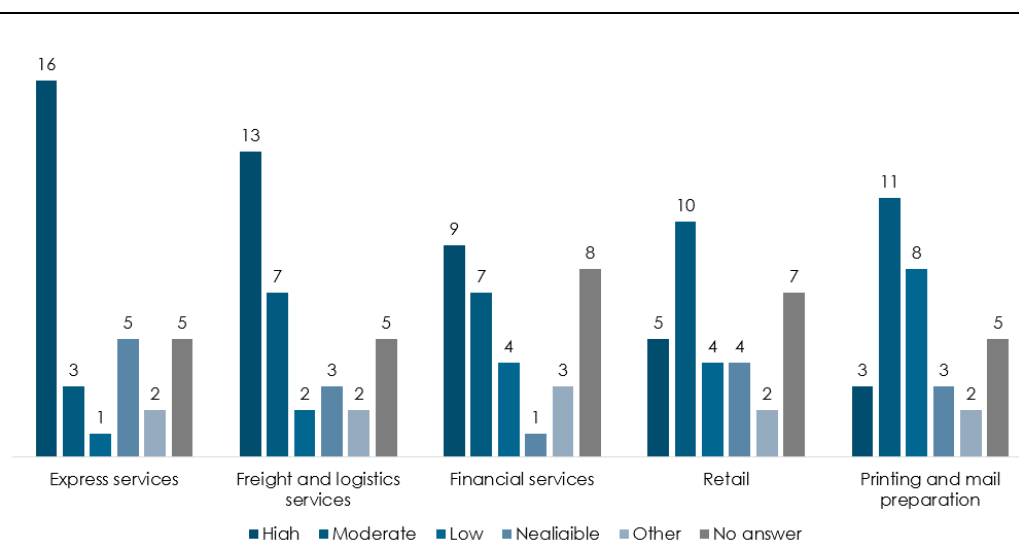
Examples of USPs that diversified their product portfolios include the following:

- *Parcels & express*: 29 of the 30 responding USPs provide express services. Key examples include Deutsche Post (DHL), Posten Norge, Le Groupe La Poste, Eesti Post (Omniva), Posti. This is one of the main diversification strategies by USPs across Europe. We therefore expect to see many operators actively pursuing this strategy domestically, regionally and even globally.
- *Postal financial services*: 25 USPs provide financial services, e.g. bpost, CTT, Poste Italiane, Le Groupe La Poste, Poczta Polska, Posten Norge, and Swiss Post. However, we found varying revenue shares of postal financial services among different USPs. For instance, in some countries financial services have been an important source of revenue (e.g. CTT, La Poste, Poste Italiane and Swiss Post), but not in others.

- *Logistics & freight*: 80 per cent of responding USPs report providing logistics and freight services. Main examples include Deutsche Post (DHL), PostNord, Posten Norge and Posti.
- *Postal retail* is provided by most of the USPs with own post office branches.
- *Information services and telecommunications*: almost half of the USPs provide e-Government services, for instance, PostNord's secure electronic mailbox service, E-Boks. About a third of USPs provide virtual network services. Some USPs went even further into digital space, e.g. Le Groupe La Poste's offers to e-commerce companies services such as website development, social shopping, e-logistics, web marketing and online payments.

In addition to being the most frequently provided adjacent service, express services were also identified by USPs as key to the future sustainability of the USO. More than half, 59 per cent, of responding USPs believe that express services are of high importance to their business, while only five USPs, felt that express services were negligible to the future sustainability of the USO. USPs also identified freight and logistics services and financial services as highly important services, while retail and printing and mail preparation were of moderate importance, see Figure 24.

**Figure 24**  
**Number of USPs identifying an adjacent service important to the future sustainability of the USO**  
Number of USPs



Note: the chart is missing answers from CZ, EL, NO, RO, UK. The chart represents the importance assigned to a service by the USP, but it is not contingent on the USP providing that service.

Source: Questionnaire to USPs

In addition, we find that part of the diversification agenda has been driven by mergers, acquisitions and divestments. For instance, in 2017, PostNL expanded its parcels services with overnight delivery by acquiring PS Nachtdistributie. Same year, bpost acquired Radial – the US based provider of integrated e-commerce logistics. It allows bpost to scale its existing presence in the US market and expand its product offering into value-added activities that cover the entire value chain in e-commerce logistics, including the Benelux and European markets.

### *Compensation of the net cost of the USO*

An alternative reaction of national regulatory authorities and governments to strong letter volume decline, is the funding of USO. Many investigated countries have provided for the possibility of a compensation fund in their postal law, even though this mechanism has for most of them not been used to date. Nevertheless, 15 out of 32 investigated countries have established a compensation mechanism, being in most of the cases direct compensation from public funds. The compensation of the net cost of USO is further discussed in chapter 4.

### *Procurement of services of general economic interest*

The capabilities and competencies of the USPs, e.g. the postal network and human contact with all citizens of the country, can be employed for other socially useful services. These services are called services of general economic interest (SGEI).<sup>8</sup> The revenue-stimulating potential of this policy option for the USP is heavily dependent on finding the match between the social needs and the capabilities and competencies of the USP. However, it must be noted, that SGEI funding is subject to state aid rules.

SGEI can be an important source of funding for the USP, as shown by case studies in Belgium and France. bpost provides SGEI for which it is compensated by the Belgian State, obtaining revenues from €261m in 2016 to €246m in 2020 (including compensation for USO services) and not paying a rent to the State. La Poste has 4 SGEI public services, for which it is compensated by the State, which include (i) ensuring stable universal postal service quality, (ii) having at least 17.000 points of contact throughout France, (iii) distribute the press with privileged postal rates granted to newspaper publishers and (iv) make banking accessible to all. In addition, La Poste provides other public services, such as public administration services (e.g. written driver's licence exam), social services to seniors (regular visits/checks; delivering groceries, medications and meal trays; installing home electronic devices such as satellite TV devices), environmental services (energy renovation, recycling). These services are not considered SGEI and are purely commercial.

## **1.4.2 Initiatives to improve efficiency in the declining letter segment**

Below we discuss the most common practices of postal operators to reduce their costs in the value chain, from the collection to the final delivery of letter post items.

### *Postal operators employ new operational models in order to reduce their costs*

As a result of the general volume decline trend as well as local factors discussed above, we find that the vast majority of postal operators respond by improving efficiency of their operations.

One way to reorganize the network is to merge letters and parcels, but the efficiency gain is not straightforward. Some operators conclude that it is more efficient to integrate individual (or all) steps of the production chain for letters and parcels, while other operators do not. The conclusion depends on multiple market and company specific conditions, e.g. the share of parcel volume in the total mail volume. Hence, we notice that operators across Europe approach the integration of different networks for letters and parcels differently. Every third postal operator uses a single network for both letters and parcels for at least some parts of collection, sorting, transportation or delivery, see Figure 25.

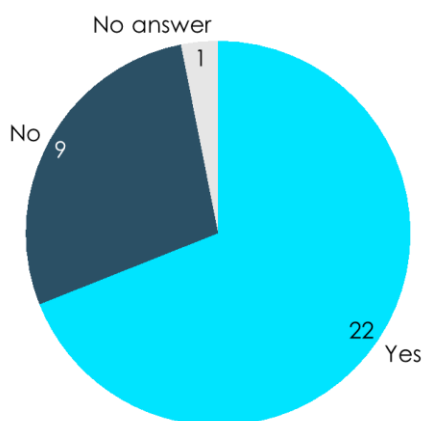
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<sup>8</sup> "Services of general economic interest (SGEI) are economic activities that public authorities identify as being of particular importance to citizens and that would not be supplied (or would be supplied under different conditions) if there were no public intervention.", European Commission definition, [http://ec.europa.eu/competition/state\\_aid/overview/public\\_services\\_en.html](http://ec.europa.eu/competition/state_aid/overview/public_services_en.html), (accessed, 11 Dec, 2017)

**Figure 25**

**Do you use different networks for letters and parcels at collection, sorting, transportation or delivery levels?**

Number of USPs



Note: The figure includes all 32 countries. HR did not provide an answer. Please note that the answers have nuances, e.g. "Yes" can mean only sometimes, in some steps of the value chain.

Source: Questionnaire to USPs

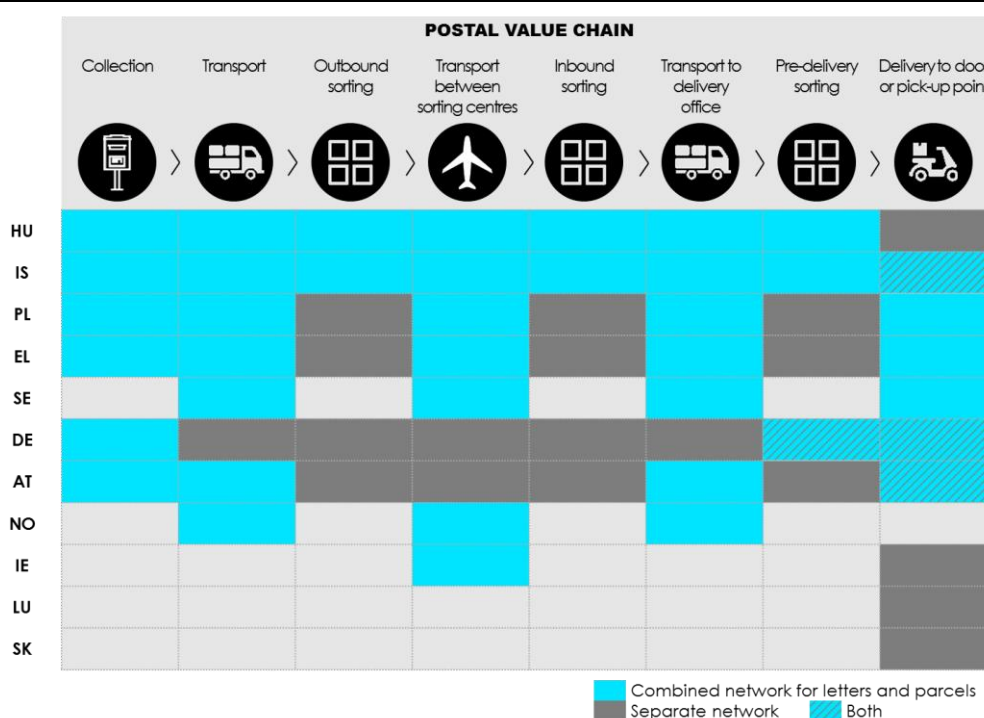
The main reason behind using separate networks comes from the different physical features of letters and parcels (e.g. thickness).

Firstly, letters and parcels need to be processed by appropriate sorting machines in different facilities (e.g. France). Although more advanced machinery can combine letters and parcels, USPs report that such technologies are still costly. Hence, we find that among those USPs that merge letters and parcels in some parts of the value chain, very few integrate sorting of letters and parcels.

Secondly, letters are typically delivered by foot from delivery post offices while parcels – due to their bulkier size and weight – are delivered in a motorised way. For instance, despite having integrated networks for virtually all activities across the production chain, the USPs in Hungary and Iceland use separate operations for letters and parcels in the last mile, see Figure 26.

However, many USPs seem to agree in the use of a combined network at collection, transport to the first sorting centre and line haul, see Figure 26. In addition, in rural areas, where letter and parcel volumes are low, many USPs use the same network to deliver both products. For example, La Poste uses a different delivery network for letters and parcels in urban areas, due to the high volumes of parcels, while in rural areas parcels and letters are delivered together. We also see that some USPs are increasing integration of letter and parcel activities, for instance, in Denmark, Italy and Sweden.

**Figure 26**  
**Examples of co-production of letters and parcels across the postal value chain**



Note: the list of countries is not exhaustive. The table is based on additional answers provided by the USPs. When in the comment it was not clear whether the network is separated or combined in a given postal value chain step, the cell was left light grey. AT - Different networks for delivery in cities. DE - Pre-delivery sorting and last mile delivery partly together, in more remote areas. IS - Different networks for last mile to private households.

Source: Questionnaire to USPs

In addition to co-production, the costs of providing postal services can also be influenced by changes in operational models and distribution channels. In the 2013-2016 period, such changes have proved to be very popular with postal operators: about 60 per cent of the postal operators in EU, EEA & CH have carried out a major reorganization of their logistics network. One third of postal operators have indicated no such reorganization in our survey, see Figure 27. Based on our survey results of 32 USPs, postal operators use different approaches in response to letter volume decline, most notably the following ones:

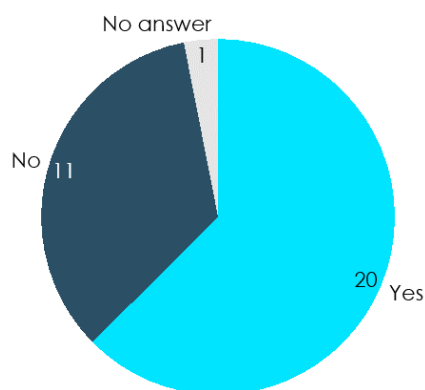
- *Centralization and automation of sorting centres.* For instance, in Belgium, bpost consolidated all parcel sorting activities at a single new sorting centre. Correos in Spain removed manual sorting centres and created big automated parcel sorting centres in Madrid and Barcelona. Additionally, it integrated logistics and technologies with key clients who employ different kinds of mail pre-sorting, in order to increase efficiency. In Germany, Deutsche Post improved the performance of the 34 German parcel centres by the implementation of modern technology. The sorting capacity has been raised to 32.000 shipments per hour, made possible for example by including scanners that can read addresses on all six sides of a parcel, partially automated vehicle unloading and new sorting technology, which minimizes the risk of damage.

- *Centralization of distribution offices.* bpost again increased the centralization and automation of all preparatory mail distribution tasks and rationalized the number of distribution offices from more than 400 to around 60 Mail Centers. Additionally, it tested a new distribution model based on the centralization of preparatory mail delivery tasks. Finally, the Greek USP merged some delivery centres in the last three years and Swiss Post reduced the number of distribution offices in the last 4 years by 40%.
- *Introduction of more efficient operational models for delivery:* for instance, alternate day (XY) delivery, integration of parcels and letters into one delivery stream. For instance, Iceland Post and Poste Italiane use an alternate day delivery model. In Hungary and Slovakia, the universal service providers are in the process of transforming and reorganizing their delivery network, while in Poland the Poczta Polska is going to implement a new logistic network in 2021. In Portugal, CTT reviewed the operations network in 2017 and made consequent changes in the network routing and relocation of network points. Finally, Deutsche Post in Germany has invested approximately €750 million since 2011 in the modernization of its national parcel network, including building and putting into operations about 80 mechanized delivery sites throughout Germany over the last five years.
- *Introduction of more efficient distribution channels:* for instance, parcel lockers, post-in-shop networks, and collaborations between different operators. We find that 24 out of 31 USPs use parcel lockers and pick-up points. In France, La Poste deployed pick-up stations with parcel lockers at post offices and in high traffic areas. In addition, we notice collaborations between different operators that improve efficiency in the value chain. For instance, Dutch PostNL combines logistics flows from other companies to reduce the volume of traffic in city centres.

**Figure 27**

**Have you carried out a major reorganization of your logistics network in the 2013-2016 period?**

Number of USPs



Note: The figure includes all 32 countries. HR did not provide an answer.

Source: Questionnaire to USPs

### *Changes in regulations allowing further cost reductions*

We find that there have been changes to the USO, with consequent positive cost effect, as we explore further in chapter 4. These changes mainly concern the following areas:

- Reduction in the delivery frequency, i.e. allowing USPs to deliver and collect mail less frequently over the week;
- Reduction of delivery speed, i.e. allowing USPs to consolidate and process more mail at once as well as use more efficient means of transportation, e.g. train instead of air freight.
- Changes of the mode of delivery, i.e. allowing USPs to shorten delivery routes by, for instance, delivering to a common street mail box instead of to the door;
- Reduction of postal network density.

## **1.5 DEVELOPMENTS IN THE QUALITY OF SERVICE**

In this section we discuss developments in the quality of postal services.<sup>9</sup> We find that in order to ensure financial sustainability, postal operators respond to market developments by implementing a number of cost-saving measures that may also have implications on the quality of service in the postal sector. This is so, because deciding which level of quality to provide is an important operational (and financial) decision for most firms. The reason for this is that the level of quality affects the firm's costs and revenues, and thereby its profits. From the economic perspective, the level of quality that maximizes the sum of the profit of the firm (so-called producer surplus) and the excess value to consumers (so-called consumer surplus) is the socially optimal level of quality, see Box 3.

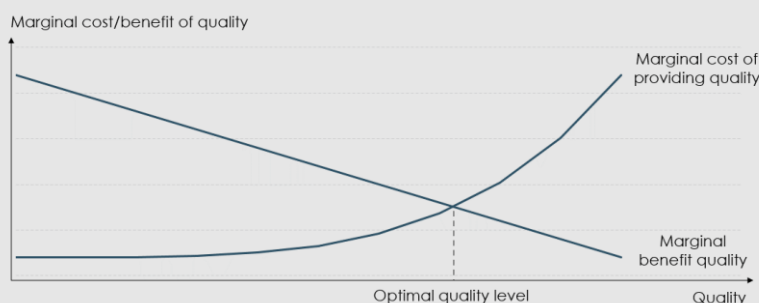
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<sup>9</sup> With quality of service we mean the level of compliance with product specifications. The quality of service mainly refers to the speed of mail products and the level of quality is defined by the number of days a mail product is delivered after posting compared to the expected delivery day as defined by the product specifications.

### Box 3 The socially optimal level of quality

The socially optimal level of quality changes with the changes in the market conditions, for instance changes in the costs of providing quality or changes in the benefit to customers of increased quality. In the context of postal markets, this might mean substitution to electronic communication will lead to a lower willingness to pay for a high quality of service (e.g. next day delivery of transactional mail) on the letter market. Declining letter volumes might simultaneously make quality more costly to provide because of higher unit costs in delivery. Such developments will shift both the marginal benefit and the marginal cost of providing quality and may thus imply a lower socially optimal level of quality.

**Figure 28**  
**Socially optimal quality level**



Source: Copenhagen Economics based on Spence (1975) Monopoly, Quality, and Regulation

When the marginal benefit (i.e. the marginal increase in consumers' willingness to pay) equals the marginal cost of providing the additional quality, this quality level is achieved, see Figure 28 above. This socially optimal level of quality is not necessarily the same as the level that maximises only the producer surplus, especially not in situations when the level of competition is weak.

Reductions in quality levels do not necessarily have to reflect a deviation from the optimal level but may simply signal that the optimal quality level has changed.

Source: Copenhagen Economics

### 1.5.1 Evolution of quality of domestic letter post services

#### *Domestic priority letter service*

There has been a small decline in the share of D+1 letters delivered on time in the 2013-2016 period. USPs in Northern, Southern and Western Europe have maintained transit time performance at around 92 per cent. Switzerland has achieved and maintained the highest performance at 98 per cent delivery of next day priority letters in the 2013-2016 period. The Netherlands and Austria increased slightly their good performances, which, together with Switzerland, minimized the decline of transit time performance in Western Europe overall. France, Germany and Belgium on the other hand reported a decrease in the per cent of priority letters delivered the next day, with Belgium reporting the largest decline, from 96 per cent in 2013 to 91 per cent in 2016, see Figure 29.

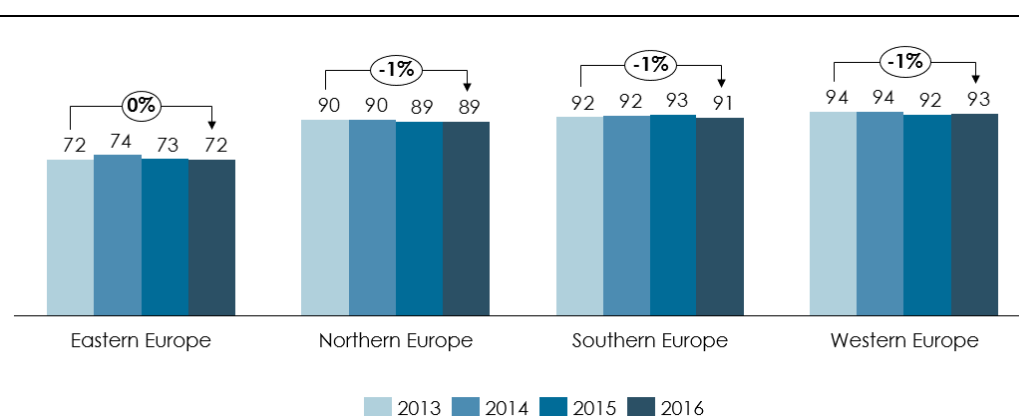


The lower level of transit time performance in Eastern Europe is driven primarily by Romania, which had an average 30 per cent of priority letters delivered the next day, followed by Bulgaria and Poland, where on-time delivery of priority letters was 63 per cent on average in the 2013-2016 period. The low performance in these countries was primarily driven by a rapid growth of e-commerce packets volume going via the letter stream (which creates logistical challenges). In Northern Europe, Denmark and Lithuania saw a decline in transit time performance from 93 to 87 per cent and 90 to 83 per cent respectively. Sweden and Iceland had slight declines, while the other North European countries had positive or close to zero changes in quality of service. Declines in Malta and Greece by three and five per cent respectively contributed to the one per cent decline in Southern Europe, while the increase in quality of service in Cyprus and Portugal by three and one per cent respectively helped avoiding a steeper decline.

**Figure 29**

**Evolution of domestic transit time performance for priority letters**

% of D+1 letters arrived in D+1



Note: The figure includes data from the following 27 countries: AT, BE, BG, HR, CY, CZ, DK, EE, FR, DE, EL, HU, IS, IE, LV, LT, MT, NL, NO, PL, PT, RO, SK, SI, SE, CH, UK. Countries where there is no D+1 are excluded. IT is excluded because of changes in quality standards in 2015. LI did not provide an answer.

Source: Questionnaire to NRAs

**Domestic non-priority letter service**

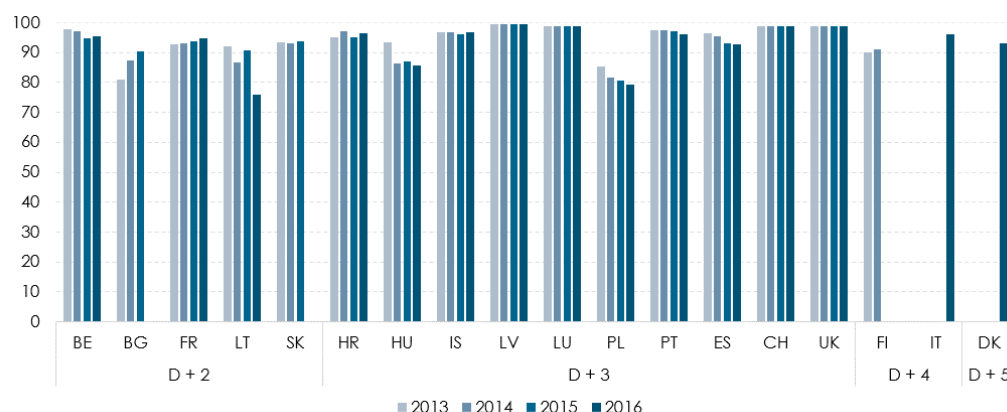
Non-priority letter delivery has also maintained very high transit time performance. Among the countries that have a D+2 non-priority letter type, Bulgaria, France, and Slovakia improved their transit time performance, while both Belgium and Lithuania saw declines. Lithuania in particular was delivering 92 per cent of its D+2 letters on time in 2013 and only 76 per cent of them in 2016. Similarly, Poland's transit time performance declined from 85 per cent in 2013 to 79 per cent in 2016.

Within the D+3 non-priority standard, half of the countries managed to maintain or improve their transit time performance. The declines in Hungary and Poland are most notable, where transit time performance declined from 93 per cent on-time deliveries to 86 per cent and from 85 per cent to 79 per cent respectively, see Figure 30.

**Figure 30**

**Non-priority domestic letters arriving on time**

% letters arrived in D+2, D+3, D+4, D+5, depending on the speed defined by the product type



Note: MT - The years have been adjusted to reflect the financial years as provided from the USP 2012/2013, 2013/2014 etc. Important to note that the figures reflect the performance of the mail service by financial year, that is October (previous year) to September (current year), e.g. FY 2016 - 2017 refers to Oct 16 to Sep 17. SI - no distinction on quality but on machine readability. For Finland no data is available after 2014. For Denmark and Italy no data is available before 2016, because of changes in the USO products.

Source: Questionnaire to NRAs

### 1.5.2 Evolution of user complaints

Most countries have seen an increase in user complaints. Eastern European countries experienced on average a 170 per cent increase in user complaints in the 2013-2016 period, primarily driven by Bulgaria and Poland. In Bulgaria, based on data provided by the NRA, the number of complaints sent to NRA and USP in total rose from 39 in 2013 to 301 complaints per 1 million addressed letters in 2016. In Poland, complaints to the USP increased more than four times from 90 complaints per 1 million addressed letters in 2013 to 381 complaints per 1 million addressed letters in 2016. The largest increases in user complaints in Poland were recorded in 2014 and 2015 when the number of complaints rose by around 60 and 88 per cent respectively. These complaints however relate to both USO and non-USO products. When considering only complaints concerning USO products, these increased by 23 per cent, from 74 complaints per 1 million addressed letters to 109.

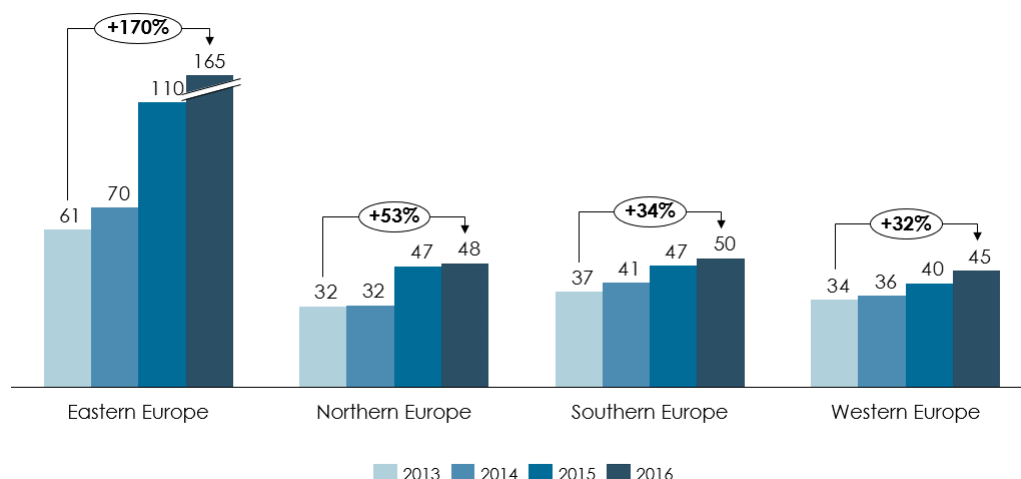
The main driver behind the increase in user complaints and, in particular, the poor performance of BG and PL is a rapid growth of e-commerce parcel volumes. Our interviews with industry experts confirmed that the lion's share of the growth in complaints relate to non-USO products and particularly, e-commerce shipments. There can be different reasons for relatively higher number of complaints stemming from parcels delivery versus letters, such as higher customer expectations regarding parcel delivery as well as more challenging logistical processes to deliver parcels.

The lowest number of user complaints per 1 million addressed letters was recorded in Austria and Germany, with 0,1 and 0,27 user complaints per 1 million addressed letters in 2016, see Figure 31.

**Figure 31**

**Evolution of user complaints sent to NRA and USP**

Average number complaints per 1 million domestic letter post items



Note: unweighted average. The total number of complaints is the sum of complaints sent to USP and to NRA, as indicated by the NRA. The figure includes data from the following 25 countries: AT, BG, HR, CY, CZ, DK, EE, FR, DE, EL, HU, IT, LV, LT, LU, MT, PL, PT, RO, SK, SI, ES, SE, CH, UK.

Source: Questionnaire to NRAs

## 1.6 INNOVATIONS AND ADOPTION OF NEW TECHNOLOGIES

We find that the postal industry has embraced innovation in order to respond to the rapid evolution of consumer needs and to remain competitive in changing markets. In particular, posts have been actively pursuing innovative technologies to reduce costs and increase operational efficiency.

Innovation can take place in the area of product and services, technology, processes and business models. We have seen that innovations are used by postal operators for a number of reasons, which can generally be grouped into three categories:

First, innovations drive more efficient operations. Traditionally, innovation plays an important role in modernising the internal operational infrastructure in order to raise quality, performance and ultimately productivity. This includes optimising processes, refurbishing or opening new sorting facilities, installing automatic mail processing equipment, and improving shipment and logistic processes. The main technologies employed by postal operators are the following:

- Barcoding
- Sensors and machine vision
- Label learning and fingerprinting
- Optical character recognition and video coding
- RFID
- Robotics
- Personal digital assistants and route optimisation

- Automated vehicles
- Drones
- Digital transformation of an enterprise using advanced innovation management practices and cultural change.

Second, innovations may extend the core postal offering. We have observed that, as e-commerce and parcel delivery is growing, innovation is used by postal operators to grow the parcel and package segments of their business and respond to new demands from consumers and businesses for speed and convenience. For instance, in recent years, parcel lockers and pick up points in retail outlets have been largely adopted by a number of postal operators as an alternative to home delivery of parcels.

Third, innovation may result in new products and services combining physical delivery and digital communication. We have seen some postal operators introduce digital products and services as part of their diversification strategies discussed under the previous section, e.g. digital mailboxes, secure electronic communication, document management solutions, including printing and delivering transactional documents.

#### **1.6.1 Innovations driving more efficient operations**

Based on our research, we find that postal operators employ a number of technological solutions that allow automation of core business processes, particularly sorting of mail. However, innovations in the last-mile delivery phase (e.g. drones, automated vehicles) are very scarce, with the exception of parcel lockers and digital route optimisation solutions. Given that last-mile delivery activities constitute the largest cost element for postal operators, industry experts predict that in the next ten years, postal operators' investments will go to autonomous vehicles and other innovative delivery models, particularly for parcel and express services. Some of these developments have already begun, for instance, Deutsche Post is currently testing artificial intelligence, virtual reality, blockchain and eMobility technologies for postal services.

The most commonly used technology, out of the ones identified in our survey, is barcoding technology, which is present at all 32 USPs. Automatic sorting machines and optical character recognition and video coding are also very popular, present at 28 and 26 USPs respectively. 25 USPs use RFID technology for tracking letters and parcels, while 17 use sensors and machine vision and 11 robotics and sensors for machine vision. Concerning last mile delivery, 20 USPs use parcel lockers, i.e. automated pick up locations for parcels, and 19 use personal digital assistants and route optimization. Only 5 operators use automated vehicles and 3 drones, see Table 5. This is also due to the fact that in many countries it is not legally possible to test automated vehicles and drones. Although newer technologies are not prevalent in USPs currently, many companies are testing the technology and therefore they could become an important part of the business in the near future.

**Table 5**  
**Technologies in operations and service offerings**

Country	Mail processing and sorting							Last mile delivery			
	Barcoding technology	Automatic sorting machines	Optical character recognition	RFID technology	Sensors and machine vision	Robotics	Label learning and fingerprint	Parcel shops	Digital assist. And route optimisation	Automated vehicles	Drones
AT	+	+	+	+	+	+	+	+	+	-	-
BE	+	+	+	+	-	-	-	+	+	-	-
BG	+	+	+	-	-	-	-	-	-	-	-
HR	+	+	+	+	-	-	-	-	+	-	-
CY	+	+	+	+	-	-	-	+	-	-	-
CZ	+	+	+	+	+	-	-	-	+	-	-
DK	+	+	+	-	+	+	+	+	-	+	-
EE	+	+	+	-	+	+/-	+	+	+	-	-
FI	+	+	+	+	+	+	+	+	+	+/-	+/-
FR	+	+	+	+	+	+	n/a	+	+	-	+
DE	+	+	+	+	+	+	+	+	+	-	+
EL	+	+	n/a	+	n/a	n/a	n/a	n/a	n/a	n/a	n/a
HU	+	+	+	-	+	-	-	+	+/-	-	-
IS	+	+	+	-	-	-	-	+	+	-	-
IE	+	+	+	+	+	-	+	n/a	+	-	-
IT	+	+	+	+	-	-	-	+	-	-	-
LV	+	-	-	+	-	-	-	-	-	-	-
LI	+	+	-	-	-	-	-	-	-	-	-
LT	+	-	-	+	-	+	-	-	-	-	-
LU	+	+	+	+	+	-	+	+	+	-	-
MT	+	-	-	+	+	-	-	+	+	-	-
NL	+	+	+	+/-	+	+/-	n/a	-	+	-	-
NO	+	+	+	+	-	+	+	+	+	+	-
PL	+	+	+	+	n/a	-	+	+	+	-	-
PT	+	+	+	+	+	+	-	+	+	+	+/-
RO	+	-	-	+	-	-	-	-	-	-	-
SK	+	+	+	+	+	-	+	+	-	-	-
SI	+	+	+	+	-	-	-	+	-	-	-
ES	+	+	+	+	+	-	-	+	-	-	-
SE	+	+	+	+	+	+	+	-	+	+	-
CH	+	+	+	+	+	+	-	+	+	+	+
UK	+	+	+	+	n/a	+	n/a	-	+	-	-
<b>Total</b>	<b>32</b>	<b>28</b>	<b>26</b>	<b>25</b>	<b>17</b>	<b>11</b>	<b>11</b>	<b>20</b>	<b>19</b>	<b>5</b>	<b>3</b>

Note: "+" means technology is used; "-" not used; "+/-" means other similar technologies are used; cells with "n/a" correspond to "No answer", "unknown, no information" or blank.

Source: Questionnaire to USPs

The technologies that will be used for the last mile and more broadly for the postal industry have been the focus of different studies, see Box 4.

#### **Box 4 Innovation in last-mile parcel delivery**

Different authors have tried to predict and forecast the technologies that will dominate the postal industry in the future. Below, we describe two:

First, in 2016, McKinsey & Company published a report reviewing the latest and upcoming technology developments in last-mile delivery. The study concludes that in next ten years, autonomous vehicles will deliver 80 per cent of parcels. Autonomous vehicles including drones will deliver close to 100 per cent of X2C and 80 per cent of all items. Only ~ 2 per cent will be delivered by bike couriers in the relatively small instant delivery segment.

In addition, authors predict that traditional delivery will account for the remaining ~ 20 per cent of all items: big B2B customers with high drop factors (i.e., the number of parcels dropped per stop/recipient) and often special delivery requirements (e.g. hanging goods) will favour mostly human delivery as we know it today. The same is true for e-grocery delivery, as people will still want crates to be carried up to their apartments and returns to be handled directly.

Second, a study prepared by the consultancy company Accenture, finds that the evolution of digital technologies enables new delivery models, where packages are picked up and delivered continuously, and eliminating non-value added activity. For instance, a so-called “continuous delivery” model uses a portfolio labour model of employees, contractors and gig economy to vary capacity. It continually updates and optimizes routes based on predicted demand and delivery capacity. Delivery time and price commitments are also made based on predictive models. However, it must be noted that such delivery models have not been reported by surveyed universal service providers, suggesting that these new models are not deployed yet in practice.

Sources: McKinsey (2016), Parcel delivery – The future of last mile; Accenture (2017) Presentation by Brody Buhler at Post & Parcel conference

### **1.6.2 Innovations in new products and services**

Despite the sharp increase in digital communications in recent years, paper mail still draws a strong connection with recipients. To give consumers of all ages advertising messages that are relevant and interesting, mailers can incorporate a number of innovations into their letter services, see Table 6. These innovations can allow the marketing message to stand out, either by providing additional content in an easily accessible digital space, incorporating handy electronics into the letter service, or using unique materials and design to capture the reader’s attention, see Box 5.

### Box 5 Categories of mail innovations

In 2015, the USPS Office of Inspector General (OIG) published a report, which provides an overview of ten mail innovations. These range from commonly used and well-known tools to some that are still emerging, and even one that is still in the research and development phase, seen in Table 6. The OIG interviewed companies that create and support these innovations to learn more about them and what they can do to strengthen a mail campaign.

These innovations can be more effective engaging customers and garnering a positive response, either in terms of recipient feedback or sales metrics. The paper organizes these innovations in one of the following three categories:



- Connected mail, which through the use of a mobile device or computer, connects recipients to a digital experience that allows users to choose how they would like to engage with the product.
- Electronic mail, which includes an embedded electronic component, like a video screen.
- Dimensional mail, which includes innovations that transform letters, either by using non-traditional ink, materials, or designs.


















Source: OIG (2015), Mail Innovations

Using mail innovations enhances the effectiveness and value of mail for both senders and recipients. These innovations can allow senders to better capture their customers' attention; provide more information than can typically fit in a standard letter; create an instantaneous, easy-to-use buying experience; and receive feedback on how customers are interacting with the letter services. Senders could also benefit from increased brand awareness while building corporate goodwill.

Innovative letter services can also provide value to recipients, as they can give the recipients control of the advertising experience in which they engage. Many of these innovations provide outlets for instantaneous access to more product or brand information. They could also provide coupons, contest entries, real-time directions to the nearest store, games, or exclusive previews of new products. The goal of these innovations is to engage and inform recipients. This could be in the form of bonus content, like an online game, or something to put on their refrigerator or office desk or give to their children. Higher quality letter services can make the recipient feel appreciated by the sender.

**Table 6**  
**Illustration of main features of mail innovations**

Legend =					
	Smart Device	Mobile App	Internet	Computer	Eyes

	QR codes	Augmented reality	Near field communication	Web-keys	Conductive ink	Video in print	Mobile in print	Interesting links	Customized market mail	3D mail
How is it priced?	By Month or By Campaign	By Month or By Campaign	By Campaign	Per Piece	Per Piece	Per Piece	Per Piece	Per Piece	Per Piece	Per Piece
Are past success metrics available?	✓	✓	✓	✓		✓	✓		✓	✓
What do consumers need to use the innovation?	  	  	 		  					
Can it track consumer use of the innovation?	✓	✓	✓	✓	✓	✓	✓			

Note: Illustration of different options of mail innovations.

Source: OIG (2015), Mail Innovations



## CHAPTER 2

# THE COMPETITIVE LANDSCAPE IN THE POSTAL SECTOR

In this chapter we examine and assess the competitive landscape in the postal sector, in particular focusing on how competition has evolved in Europe from 2013-2016.

## 2.1 DEVELOPMENTS IN MARKET COMPOSITION: LETTERS VS. PARCELS

As shown in chapter 1, USPs generally maintain a high market share<sup>10</sup> in terms of letter mail volume. Only four countries reported that the USP's market share in 2016 was below 80% (NL, FI, RO, LT). While competition (either access based or end-to-end) has emerged in some countries, in a significant number of countries there is still little or no competition in the letter segment. Below we start by taking a closer look at developments in market composition. We thereafter continue by discussing the main reasons and factors underpinning such developments.

### 2.1.1 National letter markets are still concentrated

Letter markets are still highly concentrated, and in certain countries, they are still de facto catered by a single operator as of 2016, notably in Cyprus, Hungary, Iceland, and Malta. On the other side of the spectrum, by 2016, the incumbents in Romania and the Netherlands hold approximately 66 per cent and 78 per cent of the addressed letter mail market<sup>11</sup> respectively. On average, the market concentration in terms of the incumbent's market share in EU, EEA & CH was approximately 90 per cent in 2016 and declined by only one per cent on average since 2011, see Figure 32.

The market shares as illustrated in Figure 32 have remained relatively constant over the 2011-2016 period. Italy saw an increase in concentration as Poste Italiane furthered its market share from approximately 90 to 93 per cent. Otherwise, the market shares of postal incumbents have decreased across national letter markets in Europe.

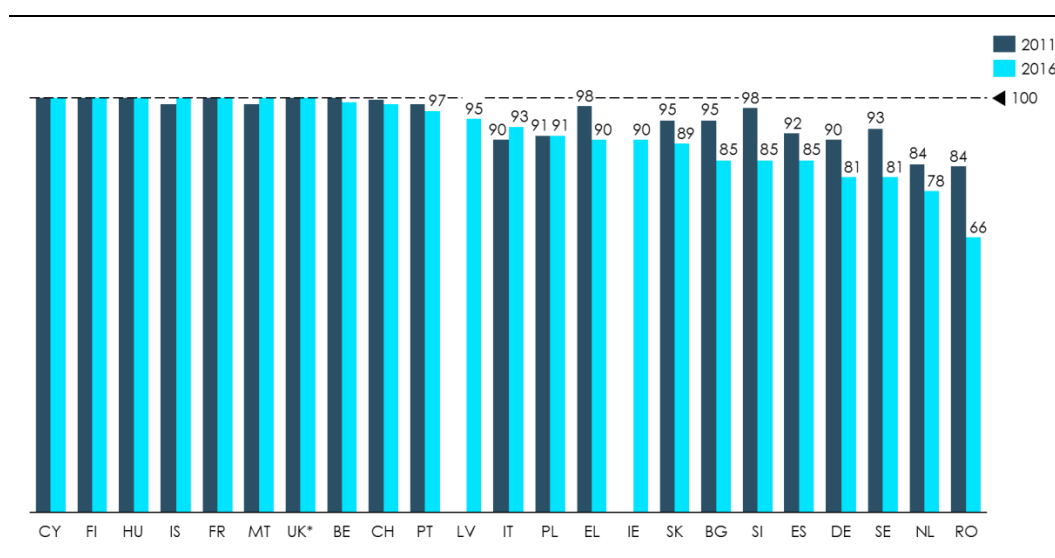
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<sup>10</sup> "Market" and "market shares" does not constitute relevant markets in the sense of competition law. We have not conducted any delineation of relevant markets in this report.

<sup>11</sup> In Romania, direct mail was not included in the NRA's measurement of the incumbent's market share in 2016.

**Figure 32**

**Development of incumbent's market share in the domestic addressed letter market**  
% market share



Note: The market shares are approximations and they refer to different types of competition: end-to-end or up-stream. 2011 market shares based on revenues. EL, RO, ES, UK – 2016 market shares based on volumes. SI - downstream access. UK – downstream access; access operators accounted for 61% addressed letters volumes; due to a change in methodology data prior to 2015 is not comparable. BG, FI, IE, MT, SI - based on market share in SP letters segment. FR, IS - based on market share in SP and bulk mail segments. IT, LV, PT, EL, PL, SK, BG, ES, DE, SE, NL, RO – have end-to-end competition. AT, BE, HR, CZ, DK, EE, LT - confidential information. LI, NO - information not provided. ES - data for addressed items includes addressed and un-addressed.

Source: Questionnaire to NRAs, WIK-Consult (2013), Main Developments in the Postal Sector (2010-2013)

However, the (high) concentration in the addressed letter market is declining. We have seen a decline in USP market shares in the addressed letter market in the 2011-2016 period. In 2016, in eight countries at least 15 per cent of the postal market was comprised by non-USP postal operators. At least six out of these eight countries had end-to-end competition (for definition, see Box 6 below). In comparison, in 2011, there were only three countries with a comparable level of competition, i.e. at least 15 per cent of the market (namely, HR, NL, and RO).<sup>12</sup>

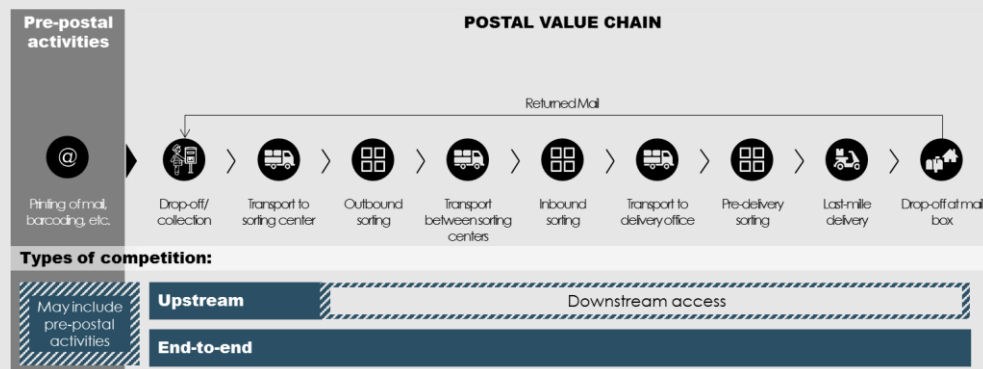
The highest level of USP market share decline – 20 percentage points – between 2011 and 2016 was recorded in Romania (from 84 to 66 per cent). The change is explained by the fact that in 2011 direct mail was included in the NRA's measurement of the incumbent's market share, while in 2016 it was not, because direct mail was removed from the USO. The USP's market share is significant in the direct mail segment, while it is not so strong in the single piece letter segment.

<sup>12</sup> WIK-Consult (2013), Main developments in the postal sector 2010-2013, figure 3-16. Note: the type of competition (upstream, downstream, or end-to-end) is not specified.

### Box 6 Types of competition in the postal sector

There are three main types of competition in the postal sector: upstream competition (also so-called "access competition"), end-to-end competition, and mixed competition using the first two models.

- Access competition (or upstream competition) is where the operator collects mail from the customer, sorts it and then transports it to the USP's access point, where it is handed over to the USP for delivery. Access competition has been the prevalent form of postal competition in the letter post segment in some postal markets (e.g. the UK) where postal competition has emerged.
- End-to-end competition is where operators other than the USP collect, process and deliver mail directly to the recipient, without using the USP's network. This has been the main competitive model in the parcel and express segment.
- Mixed competition (also sometimes referred to as mixed by-pass), whereby operators engage in end-to-end competition in some parts of the country and rely on the incumbent's infrastructure in others. This has been the way competition has developed in, e.g. NL (25h segment), SE, and PT.



Source: Copenhagen Economics

In addition, there are examples where competitors have managed to enter the letter segment successfully in the past few years. For instance, CityPOST in Ireland launched a new national letter collection and delivery service for business customers in 2017. The service is expected to be 21 per cent cheaper than the current service offered by the incumbent postal operator.

The fact that the majority of letter markets remain highly concentrated reflects the uncertain outlook in terms of postal operators' possibilities to cope with letter volume decline.

A concern in highly concentrated markets is that at some point the incumbent operator may charge too high prices. However, based on interviews with market stakeholders, we find that there are a range of factors which discipline the pricing of designated postal service provider (even the ones with significant market shares in the letter mail segment). These are, for example, electronic communication, alternative advertising media, alternative delivery networks, and the universal service

obligation. Amongst these, the competitive pressure from e-substitution is a constraining factor on demand for postal services and the postal operators' conduct.

Moreover, in the postal industry, the share of business customers is very high. This is in contrast to other network industries such as telecoms, where business customers are less and less predominant and residential consumers are a larger share of the market (discussed further below).<sup>13</sup> For example, in the Netherlands, over 90 per cent of mail volumes are sent by business customers. On top of that, the customer structure is heavily concentrated with a small set of customers (1-3 per cent of all registered customers) generating 65-85 per cent of domestic addressed mail revenues.

The associated buyer power held by customers puts pressure on the designated operator. In fact, the customer structure discussed above implies that postal operators often face large differences in price sensitivity from different customer groups. Large customers are more attractive commercial targets for communications providers. The greater degree of choice available to large customers makes them more price sensitive. There is thus often a link between the volumes sent and the price sensitivity. In general, large mailers are more sensitive to higher prices than those mailers who rarely are in need of mail delivery.<sup>14</sup>

Businesses often make their spending decisions – including on postal services – based on cost benefit analyses of the expected outcome of using different services to serve their needs (i.e., contacting clients for marketing or transactional purposes). Nowadays, these cost benefit analyses also include electronic communication options. This cost-benefit rationale puts ongoing pressure on postal operators worldwide, since for many businesses the cost benefit assessment points to the use of e-communications instead of post.

### *Concentration of demand on business senders*

The composition of demand in the letter post industry shows a high degree of concentration, with business customers typically sending close to 90 per cent of total volumes, see Figure 33. In terms of revenues, business customers generated close to 80 per cent of total revenues from addressed letters in the investigated countries in 2016. It follows that private customers generate much more revenues per item, since they have a lower buyer power and consequently a higher willingness to pay.

Typically, less than ten per cent of all registered customers generate more than 50 per cent of (addressed) mail revenues. These customers (utilities, financial institutions, public sector agencies, publishers, charities) play a key role for ensuring volumes and thereby economies of scale in the network. Therefore, we see, e.g. in court cases, that competition in the competitive letter markets is centred around large business mailers, since this segment is more attractive for competitors to enter.

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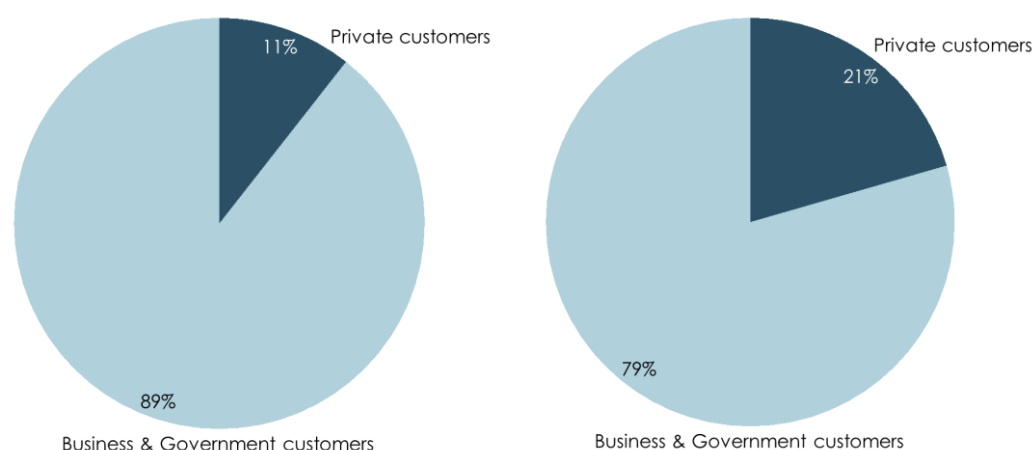
<sup>13</sup> See Ofcom (2013a), Fixed access market reviews: "In contrast to the residential sector, the number of fixed voice lines has been falling in the business sector", para 3.36; "Business customers (16% of the total market)", para 3.109.

<sup>14</sup> Conseil de la Concurrence (2007), Avis n° 07-A-17 du 20 décembre 2007 relatif à une demande d'avis de l'AR-CEP sur le dispositif de remises commerciales de La Poste.

**Figure 33 Addressed letter volumes and revenues of the USP in 2016**

Share of total volumes

Share of total revenues

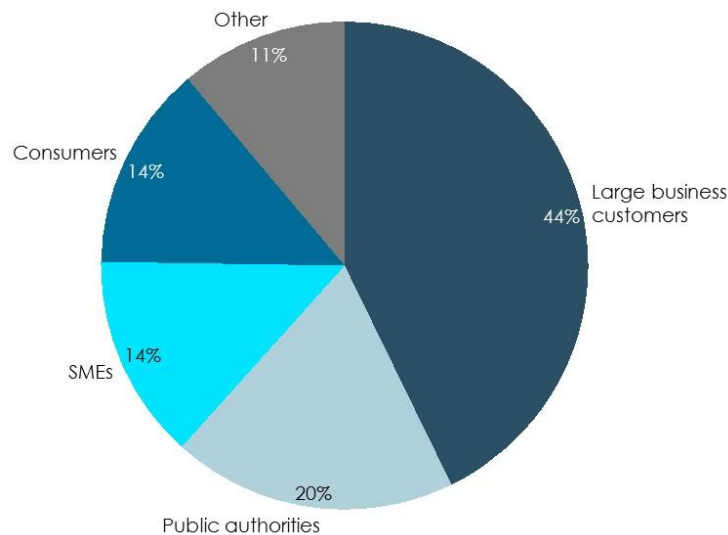


Note: The figure includes data from the following 13 countries: BE, FI, EL, IE, IT, LT, MT, NO, PT, SK, SI, ES, CH. Corresponding to 41% of countries and 23% of total letter volumes in the EU, EEA & CH area. NO - the split is based on estimates.

Source: Questionnaire to USPs

While only a few large customers make up a large share of the letter post volumes sent there is still a large variation in end user preferences and valuation of services due to a large variety of types of mailers, see Figure 34. Large business customers including professional services, financial and banking services, and commercial services send almost 50 per cent of all letters, but public authorities (including local authorities, educational institutions, hospitals) also play a major role.

**Figure 34**  
**Distribution of demand for letter services by type of sender (2016)**  
Share of total volumes



Note: The figure includes data from the following 13 countries: BG, CZ, FI, EL, IS, IT, LT, NO, PT, SK, SI, ES, CH. Other includes international inbound, NGO, mail order sector, newspapers/media. BG - data is only for big clients based on the use of the universal postal service. HU - Consumers include small enterprises with cash payment. IT - Other includes international inbound. ES - Consumers include all volumes collected at post office counters and street mailbox. Other includes all volumes coming from operators and consolidators. CH - Other includes NGO, insurance companies, mail order sector, and media.

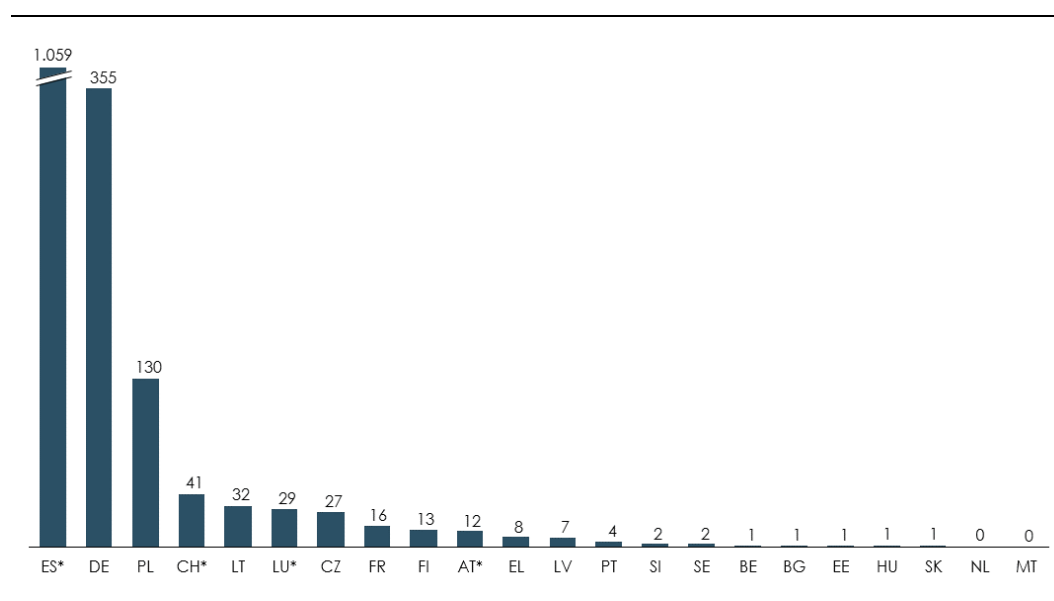
Source: Questionnaire to USPs

### *Market entries and exits*

Despite the high concentration in the letter mail segment shown above, we still observe many market entries and exits. In terms of market entries, Spain, Germany, Poland, Switzerland, Lithuania, and Luxembourg<sup>15</sup> experienced relatively many market entries. Especially Germany stands out, where 355 market entries in the letter post segment alone occurred in the 2013-2016 period, see Figure 35.

<sup>15</sup> The number for Spain, Switzerland and Luxembourg includes parcel & express services providers.

**Figure 35**  
**Market entries in the letter segment 2013-2016**  
Market entries



Note: \* The number includes both letter and parcel & express services providers. IT, LI, NO, UK - no information. CY, DK, IS, IE, RO - no answer. HR - confidential information. CZ - the NRA has information about providers since 2013. Some of the operators provided postal services also before 2013. ES – the information is provided by the USP, based on Ministry of Public Works and CNCM. NL – the USP stated that there have been definitely market entries since 2013.

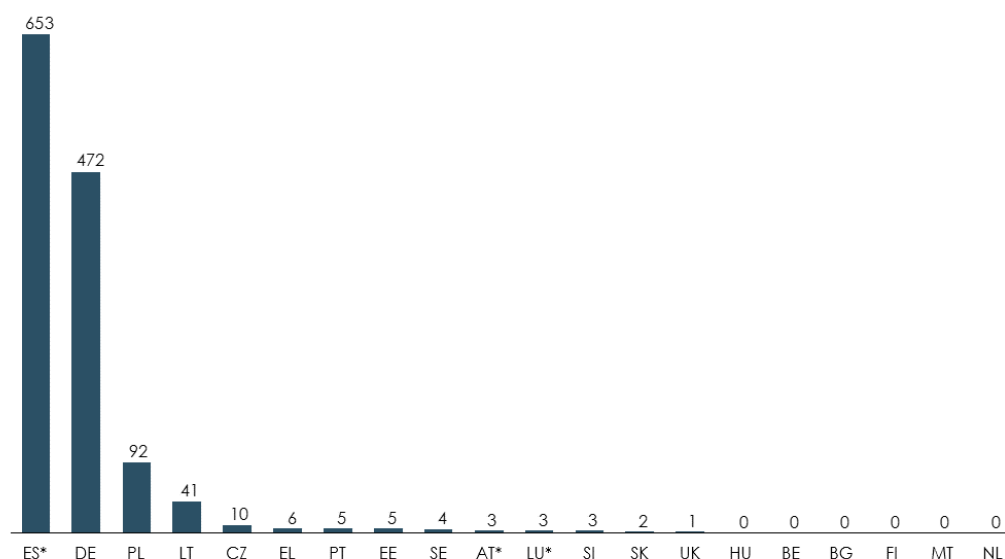
Source: Questionnaire to NRAs

A view of the number of market exits in the 2013-2016 period reveals a similar pattern: Spain<sup>16</sup>, Germany and Poland are again outliers with 653, 472 and 92 exits respectively, see Figure 36.

Germany interestingly shows a higher number of exits from the letter segment compared to entries, by 117 operators, meaning that operators that entered the market prior to 2013 had to leave in the 2013-2016 period.

<sup>16</sup> The number however also includes parcel & express services providers.

**Figure 36**  
**Market exits in the letter segment 2013-2016**  
Market exits



Note: \* The number includes both letter and parcel & express services providers. IT, LV, LI, NO - no information. CY, DK, FR, IS, IE, RO, CH - no answer. HR - confidential information. ES - the information is provided by the USP, based on Ministry of Public Works and CNCM.

Source: Questionnaire to NRAs

The magnitude of market entries and exits seems to be unrelated to the size of the postal market. For instance, Lithuania has seen more than thirty market entries and exits, while there were no market entries or exits in the Netherlands<sup>17</sup>, a postal market almost 45 times larger than Lithuania (in terms of volumes in 2016).

However, based on our interviews with regulators, we note that market entries and exits data available to regulators in some cases does not provide an accurate overview of the true pattern in the postal market. The reason is that in some countries licensing and authorisation procedures outside the universal area are as simple as putting a tick mark on “postal services” in the company registration form. Many companies upon registration select more activities in their registration form than they are actually going to perform. As a result, regulators relying on such registry information (e.g. in Lithuania) do not know whether or not companies registered as postal services providers are actually active in the market.

However, from a competition economics perspective, the high number of market entries does not necessarily mean more competition and better conditions for the users. There can also be a fierce competition with one competitor to the USP.

<sup>17</sup> Based on the information provided by the Dutch NRA.



## 2.1.2 National parcel markets are fragmented and universal service providers have limited market shares

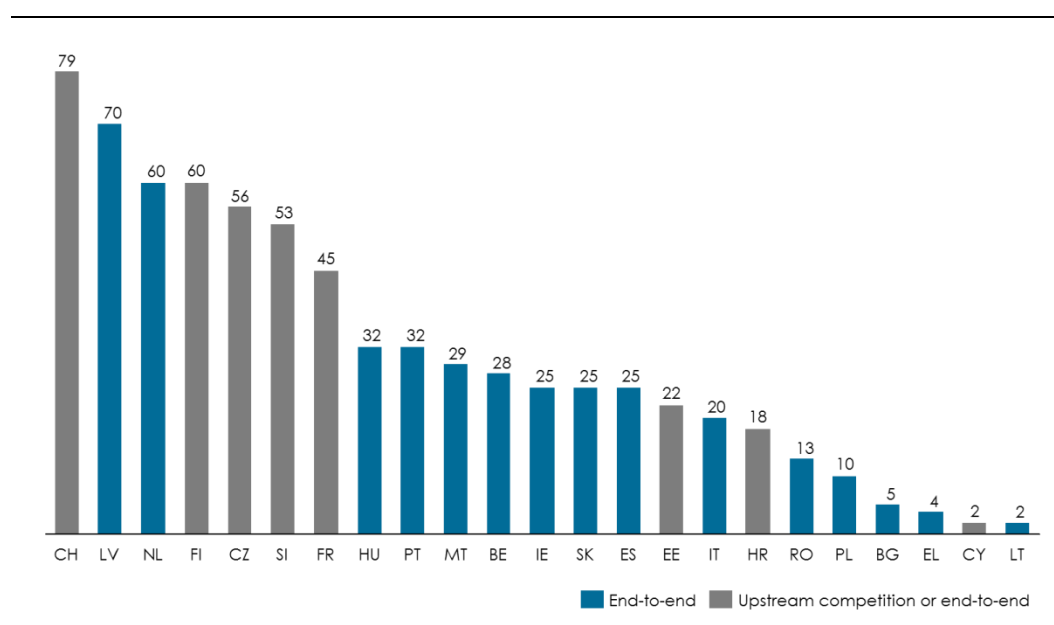
As discussed in chapter 1, in the parcel delivery segment, USPs still have significant, but much lower, market shares than in the letter post segment. USPs' market shares in the parcel segment were on average around 32 per cent in 2016. However, the differences between countries are distinct. The market shares of the incumbents in Switzerland and Latvia are more than 15 times higher than those in Bulgaria, Cyprus, Greece and Lithuania, see Figure 37.

Southern European countries are mostly located at the lower-end of the spectrum: in Cyprus and Greece the incumbent is almost insignificant in the parcel segment and neither Poste Italiane nor Hrvatska Pošta comprise a significant part of the Italian and Croatian parcel segments respectively.

**Figure 37**

### Market share of the incumbent in the domestic parcel & express segment, 2016

%, market share based on volumes



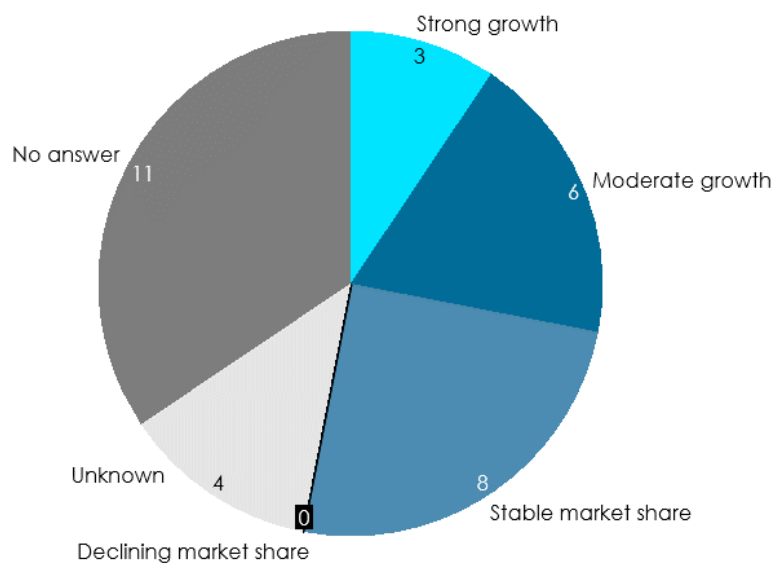
Note: composition of products can vary by country and it is subject to NRA interpretation. The market share (%) represents the approximate market share of the incumbent, based on volumes or revenues. BE, DK, UK - confidential information. DE, IS, LI, NO, SE - information not provided. NL – based on ACM's estimate, the figure does not include express services. HR, CZ, EE - source is ERGP report. EE is based on revenues. FR - according to Xerfi. IT - including own courier SDA, market share based on revenues.

Source: Questionnaire to NRAs; ERGP (2016) 38, Report on core indicators for monitoring the European postal market

Competition in the parcel delivery segment is intensifying, primarily due to the development of e-commerce. A growing and very attractive market will normally spur new entries and acquisitions. Hence, nine out of 17 NRAs replied to our survey that the incumbent's three main competitors' market shares in the national parcel segment are growing at an at least moderate pace, and three classified the growth pace as strong. Eight of the responding NRAs considered the market stable. Not a single market was considered to exhibit declining market shares of the incumbent's competitors,

signalling that markets are dynamic and not consolidated. The market classifications are summarized in Figure 38.

**Figure 38**  
**Evolution of the USPs' 3 main competitors' market share in the parcel segment**  
Number of countries



Note: AT, CY, FI, FR, DE, IS, LU, MT, NO, RO, SE - did not provide an answer. Stable Market Growth: market share of 3 main competitors remains unchanged. Declining Market Share: market share of 3 main competitors' declines. Moderate growth: market share of 3 main competitors grows at 1-10% annually. Strong growth: market share of 3 main competitors grows at higher rate than 10% annually.

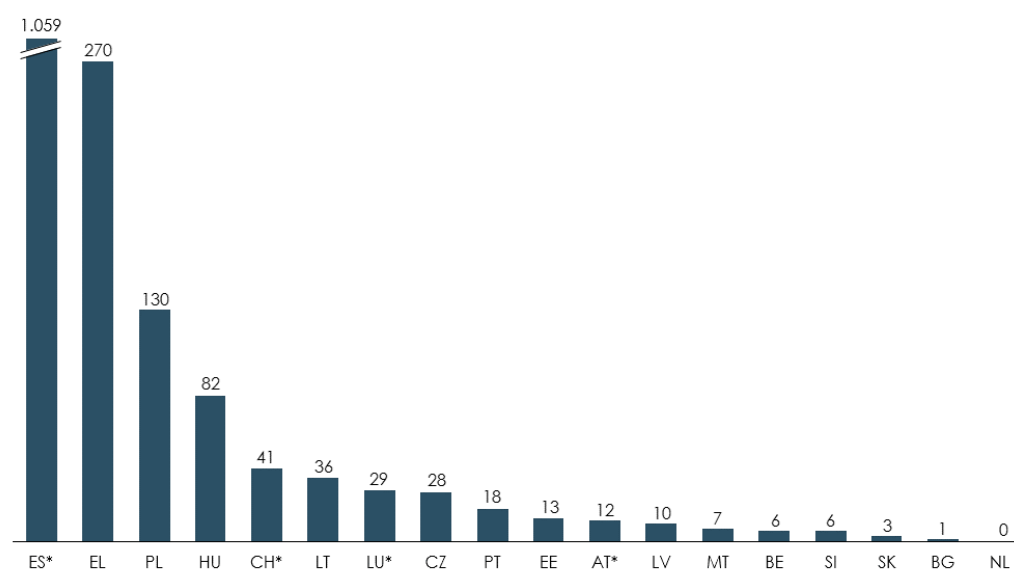
Source: Questionnaire to NRAs

### *Market entries and exits*

National parcel & express markets are less concentrated than national letter post markets. They are also relatively dynamic, as shown by the high numbers of new entries and exits in the 2013-2016 period.

Similar to the letter post market, the number of market entries and exits in the parcel & express segment does not seem to correlate with the size of the postal market. The top two postal market in terms of the number of market entries in the parcel & express segment – namely, Greece (270) is, for instance, up to ten times smaller than Belgium (in terms of volume) which had six market entries in the same period, see Figure 39.

**Figure 39**  
**Market entries in the parcel segment since 2013**  
Market entries



Note: \* The number includes both letter and parcel & express services providers. HR - confidential information. CZ - the NRA has information about providers since 2013. Some of the operators provided postal services also before 2013. FI - parcel & express segment consists of multiple companies, exact number fluctuates constantly. PL - Since 2013 130 new operators has entered the market, majority of them has declared to operate in all segments end-to-end, and they acquired marginal market share. ES - the information is provided by the USP, based on Ministry of Public Works and CNCM. NL - the USP stated that there have been definitely market entries since 2013.

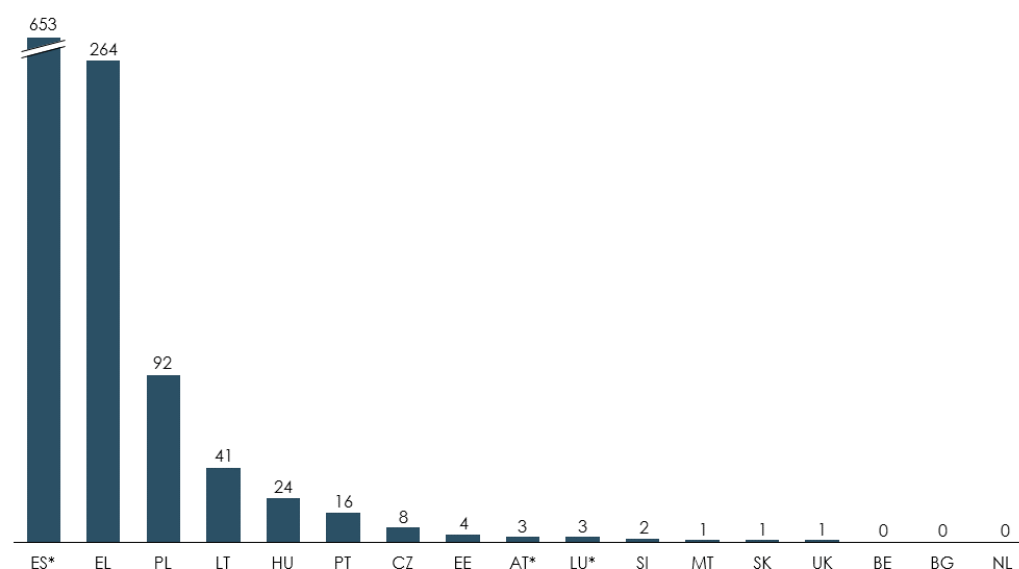
Source: Questionnaire to NRAs

In terms of market exits in the parcel & express segment, Spain, Greece and Poland, which also saw high numbers of market entries, experienced the largest amounts. Especially the 653 market exits in Spain are remarkable<sup>18</sup>, compared to the zero exits in a similar market in terms of parcel & express items per capita as Belgium. Except for these three countries, there were very few exits from the national parcel markets in the 2013-2016 period. For instance, there were no market exits in Belgium, Bulgaria, and the Netherlands, and only one in the United Kingdom, Slovakia and Malta. However, exits were less than entries in majority of countries: in 14 countries out of 15 there were more entries in the parcel & express segment than exits<sup>19</sup>, see Figure 40.

<sup>18</sup> However, they also include parcel & express operators.

<sup>19</sup> With exception of Lithuania. However, the NRA reported lack of reliable data regarding which of these companies have actually performed postal activities and were not merely registered as such.

**Figure 40**  
**Market exits in the parcels segment since 2013**  
Market exits



Note: \* The number includes both letter and parcel & express services providers. HR - confidential information. BG - only ordinary parcels. FI - parcel & express segment consists of multiple companies, exact number fluctuates constantly. LT - competitors in the letter post subgroup usually implemented hybrid operations - end-to-end operations together with upstream operations. PL - since 2013 92 operators has exited the market, majority of them operated in all segments end-to-end. ES - the information is provided by the USP, based on Ministry of Public Works and CNCM.

Source: Questionnaire to NRAs

Generally, countries with more market entries also experienced more exits. This indicates that the high number of market entries does not necessarily lead to a higher competition in the parcel markets but may merely be an indication of high turnover of firms temporarily entering and leaving the market.

#### *Business clients generate the main share of parcel volumes and revenues*

Competition in the parcels market, similarly to the letters market, is centred around large business clients. While private consumers generate more value per item than business clients do, the latter still generate the main share of both volumes and revenues in the parcel segment. On average, according to information provided by 12 USPs, business customers and government customers generate 92 per cent of the USPs' parcel & express volumes, as of 2016. Private customers only contribute to eight per cent of the USPs' volumes. When looking at revenues however, private customers are the ones that contribute relatively more, generating more value per item sent, with a share of total revenues of 14 per cent. Business customers and government customers are responsible for 86 per cent of the USPs' revenues, see Figure 41.

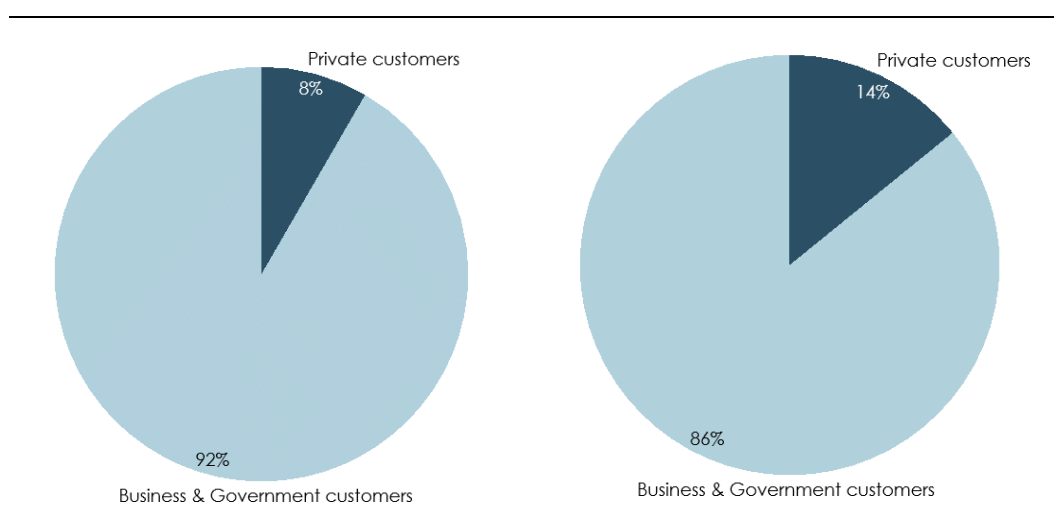
We note that this is a logical finding matching differences in willingness to pay by small private and large business senders. Large business customers (e.g. large e-retailers) send a high number of parcels compared with private consumers who only send e.g. a gift to their relatives, or things that they have sold online C2C. As a result, the buyer power is stronger for business customers (being highly correlated with the volumes sent) and consequently the willingness to pay of business customers is lower, resulting in lower revenues per piece for the postal operator.

The shares of contribution are likely to change in the future, as the two customer types grow at different growth rates. Parcel and express revenues generated by private customers grew by 37 per cent in 2016 compared to the previous year. At the same time business and government customers generated only six per cent more revenues in 2016 compared to the previous year.

**Figure 41 Parcel and express volumes and revenues of the USP in 2016**

Share of total volumes

Share of total revenues



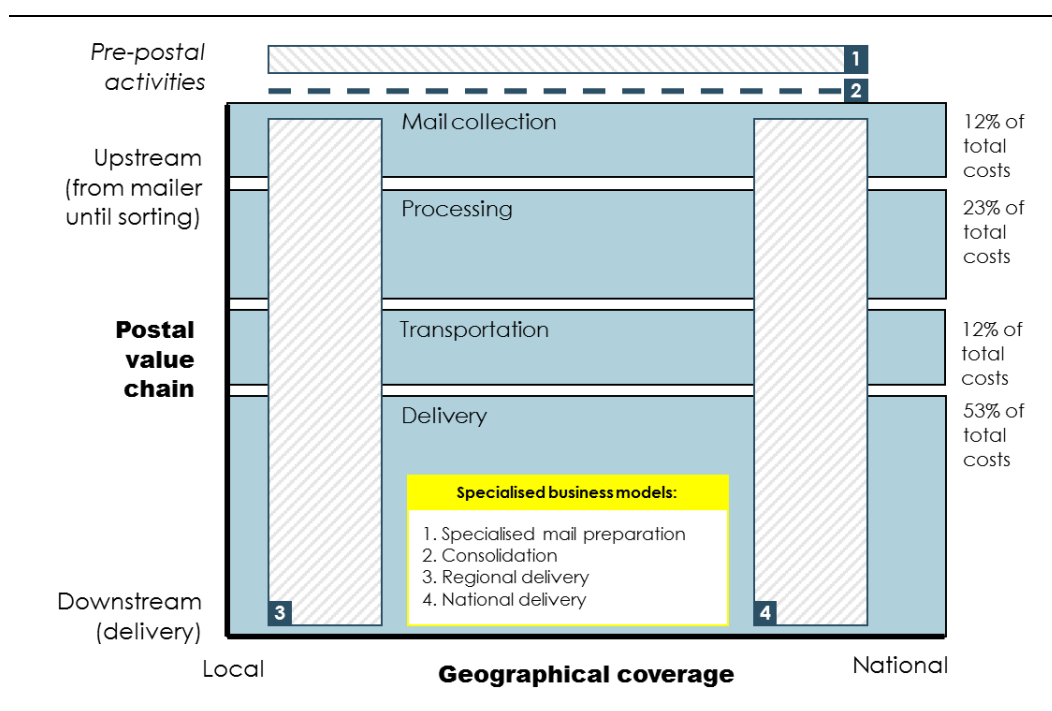
Note: The figure includes data from the following 12 countries: FI, EL, IE, IT, LT, NL, NO, PT, SK, SI, ES, CH.

Source: Questionnaire to USPs

## 2.2 NEW BUSINESS MODELS AFFECTING COMPETITION

Traditionally postal companies focus on the entire value chain from senders to receivers (with nationwide or regional coverage), while some new business models focus on pre-postal activities, i.e. extend their value chain even further towards the business mailers, offering printing, enveloping solutions, etc., see Figure 42. The focus on pre-postal activities has been there for many years now.

**Figure 42**  
**Alternative business models in the postal sector**  
Postal value chain



Note: Illustrative.

Source: Copenhagen Economics, Cost estimates (Europe-wide focus) based on WIK-Consult (2013), Main developments in the postal sector 2010- 2013

While some postal companies embrace simultaneously multiple business models, we can broadly group the postal industry into companies that pursue the following activities:

- Specialised mail preparation – includes operators providing pre-postal activities, e.g. printing and enveloping, warehousing, systems integration, pick-and-pack solutions.
- Consolidation – includes postal operators with no own sorting and delivery capabilities, which engage only in the collection of bulk letter mail from senders and forward it to either national or regional operators for sorting, transportation and final delivery activities;
- Regional delivery – end-to-end postal operators with own delivery network capabilities in some geographic areas of the country, e.g. Bring Citymail in Sweden;
- National delivery – includes the largest postal operators with own national delivery networks, e.g. Sandd in the Netherlands.

Further, we discuss implications of these different business models with a particular focus on letter mail consolidation activities, which historically have been and continue to be a point of discussion between the USPs, regulators, policymakers as well as judicial authorities.

### 2.2.1 The impact of new business models on different stakeholders

New business models and technologies affect postal users, competition, and regulation.

Firstly, new business models often have a positive impact on consumers' surplus. New business models allow timely adaptation to the newest consumer trends in the parcel segment, e.g. more online shopping, more online social communication, and more flexibility with respect to times of use of postal services. In addition, new operational models and automation technologies, e.g. bar-coding, reduce sorting and delivery costs. This, in turn, may reduce business mailers' willingness to substitute to electronic alternatives.

Secondly, the impact on competition is ambiguous. On the one hand, new business models unlock commercial opportunities for new market entries. By answering to unanswered postal users' needs, new market entrants can develop their own networks and compete for both parcel and letter users. For instance, we have seen private companies deploying automated parcel delivery machines (where "traditional" parcel delivery does not work as consumers expect it to) or offering low cost mail services where business mailers have high price elasticities. Thus, new business models can be an important driver for new market entries.

On the other hand, if new business models are based on exploiting arbitrage opportunities created by regulation, this may reduce economic welfare in the market. For instance, based on the CJEU bpost case, it was found that – in a situation with volume discounts available to senders and bulk mail resellers on equal terms – price arbitrage based business models (see Figure 43) may distort competition between mail intermediaries. This is so because without the per sender model<sup>20</sup>, large-scale intermediaries are favoured at the expense of intermediaries with a small scale. The Advocate General's opinion in the CJEU bpost case confirmed that "the 'aggregation' model operates to the advantage of consolidators who aggregate the largest volumes of mail and therefore benefit from the highest levels of discounts. [...] positive discrimination in favour of large consolidators might well fall foul of the fourth indent of Article 12, which requires Member States to ensure that tariffs for postal services do not favour certain (categories of) customers".<sup>21</sup> As a result, arbitrage by consolidators may promote inefficient postal operators by arbitrage rent<sup>22</sup>, see Figure 43. In turn, this would have a negative impact on economic welfare.

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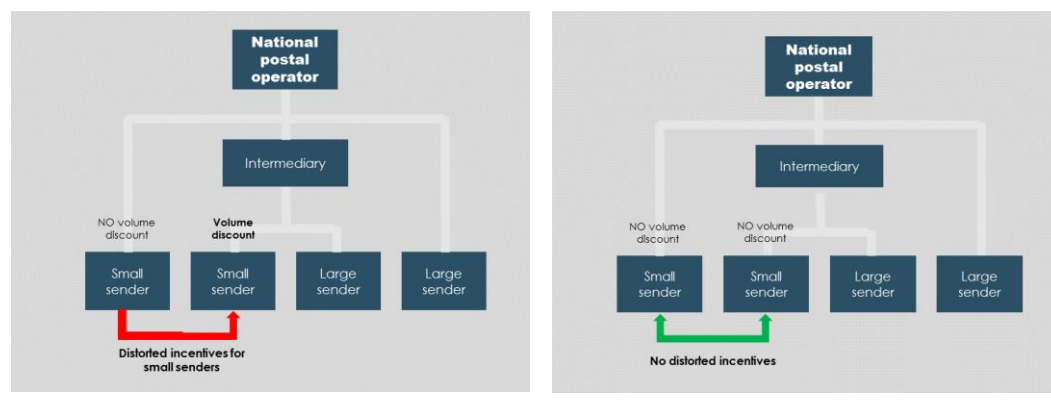
<sup>20</sup> bpost granted mailers and consolidators the same quantity discounts, but for consolidators the amount of the discount was based on the mail quantities of each individual sender from which the consolidator collected mail (a so-called "per sender" model), as opposed to the aggregate mail volume that the consolidator handed over to bpost.

<sup>21</sup> Opinion of Advocate General Sharpston on Case C-340/13 bpost SA, 16 Oct 2014.

<sup>22</sup> With aggregate volume discounts, intermediaries receive volume discounts from the postal operator based on their aggregated volume (collected from several senders). As a result, an intermediary may offer a higher volume discount to a small sender than the volume discount he would receive of the national postal operator. Ultimately, this would lead to national postal operators abandoning volume discounts all together in order to prevent undesired effects of such a discount scheme, i.e. small senders switching to intermediaries.

**Figure 43 Price arbitrage caused by aggregate volume discounts**

**Discounts based on aggregate volumes      Per sender based volume discounts**



Note: Illustration

Source: Copenhagen Economics

Thirdly, new business models affect USPs. The impact is generally positive. More efficient delivery methods, e.g. parcel lockers and pick-up points, and processing methods, e.g. barcoding, laser scanning, used by competing operators force incumbent postal operators to reduce their traditional delivery networks focused on last-mile delivery, reduce labour costs in letters and parcels processing and achieve operational cost savings. This is an important incentive to finance reorganisation of USPs operations and avoid paying state subsidies for the provision of the universal postal services.

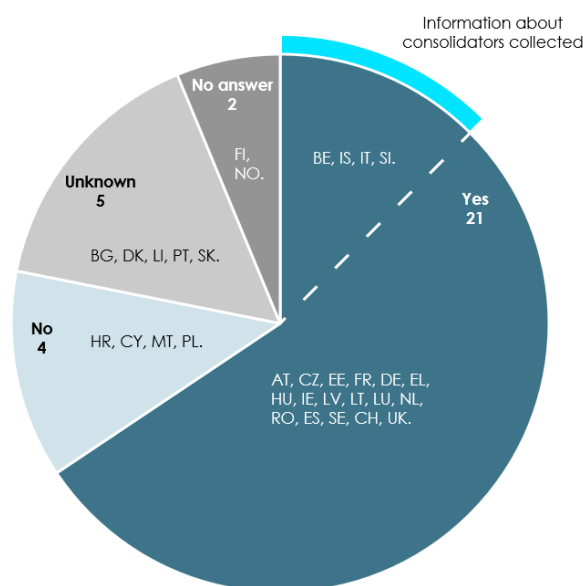
### 2.2.2 Letter consolidation activities

Mail consolidation activities have become a widespread phenomenon in European postal markets. Mail consolidation refers to the gathering together of items from different sources and (in terms of transport) then dispatching the items in bulk. In terms of letters, consolidators collect letters from different customers, bulk them together and then dispatch them to the operator chosen for the next phases (transport and delivery).

21 NRAs (representing 91 per cent of the European postal market) have reported that companies offering letter consolidation services are present in the market, see Figure 44. However, the majority of those NRAs have little or no information about mail consolidators. Only 4 NRAs, in Belgium, Iceland, Italy and Slovenia, reported monitoring activities in the consolidation segment.



**Figure 44**  
**Presence and monitoring by NRA of letter consolidators in the postal market**  
Number of countries



Note: BE - No public information. BG, CZ, HU, LT, PT - Consolidators not considered part of the postal market. FI - consolidation services only available for the company customers.

Source: Questionnaire to NRAs

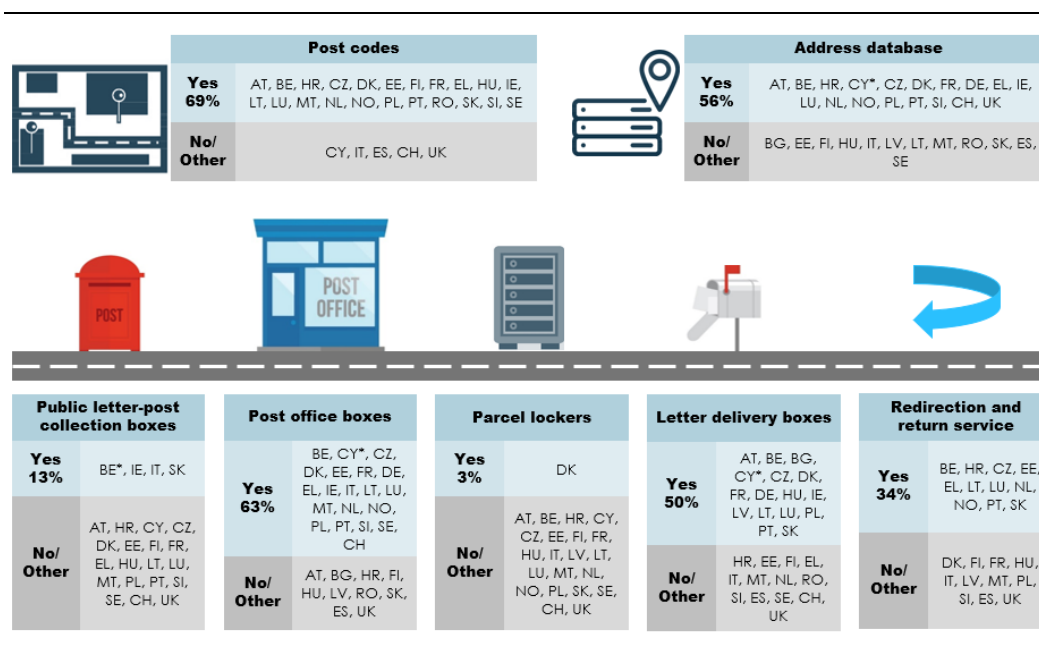
## 2.3 REGULATION OF ACCESS

### 2.3.1 Regulation of access to postal infrastructure

Article 11a of the Postal Services Directive, requires Member States to give all postal operators access to “elements of postal infrastructure” — facilities and information resources used in providing postal services — “[w]henever necessary to protect the interest of users and/or to promote effective competition”.

In this study, we asked both NRAs and USPs whether non-discriminatory access conditions were in fact provided to seven elements of postal infrastructure: postcodes, address database, public letter-post collection boxes, post office boxes, parcel lockers, letter delivery boxes, and redirection and return services. We find that in the majority of countries access to USP’s post codes, address database, and post office boxes is given to competitor operators.

**Figure 45**  
**Access to postal infrastructure**  
Share of countries out of 32 investigated countries



Note: \* The USP disagrees with the answer provided by the NRA. ES – the USP stated that access in practice is happening for the following elements: Post Codes, Addr. Database, Letter delivery boxes. CY – the USP stated that there is no law for access to the postal infrastructure. FI – the USP stated that there is access to the following elements: Post office boxes, Addr. Database.

Source: Questionnaires to NRAs and USPs

### *Cooperation initiatives to develop and/or share part of the postal infrastructure*

Based on our analysis, we find that operators generally do not cooperate in building or sharing infrastructure. In a few cases, however, operators have engaged in cooperation initiatives to develop and/or share part of the postal infrastructure. Apart from the traditional third-party downstream access arrangements, new infrastructure sharing models include the following examples:

- Sharing of parcel lockers among the USP and other postal operators (BE, LU).
- Sharing of delivery network by non-USP postal operators (IT).

Overall, the new initiatives revolve mostly around the delivery of parcels, see Table 7.

**Table 7**  
**New initiatives of shared postal infrastructure**

Country	Segment	Examples of operators' cooperation in building or sharing infrastructure networks
Belgium	Parcels	bpost's Cubee parcel lockers are open to third-party parcel distribution companies.
France	Parcels	Plan to build mutualized infrastructures in urban logistics field. For example, an urban logistics hotel will be built in Bordeaux and will be used by La Poste, DPD and Chronopost. Partnerships have been concluded with several operators to deliver goods in the Metropole of Grenoble.
Italy	Parcels and letters	Poste Italiane's competitors manage very flexible arrangements among themselves for delivery networks in order to adapt their delivery service coverage to each client's needs.
Luxembourg	Parcels	Cooperation model for allowing other operators to access parcel lockers directly; close to implementation.
Sweden	Parcels and letters	Sharing of redirections data. Since 1993 Sweden has had a co-operative system to ensure that data on redirections is shared between delivery operators. A private limited company, called Svensk Adressändring AB, jointly owned by the USP and the largest end-to-end competitor, based on residents registering their temporary address or permanent address change details with just one notification to this company. The information/data obtained by this company is available to all licensed postal operators that sign an agreement with the company.

Source: Questionnaire to USPs

There have also been multiple dispute cases regarding downstream access to the postal network. Such competition cases were conducted by competition authorities and in some instances courts in different European countries. We discuss legal cases regarding access further in this chapter.

### 2.3.2 Regulation of access to downstream services

Access to downstream services (hereafter in this section referred to simply as access) describes a service whereby the incumbent postal operator gives access to other postal service providers and postal users to its network at selected points of the postal supply chain and then delivers the access mail fed into its network. From a postal regulatory point of view, access regulation aims at promoting efficiency and effective competition and, thereby, conferring benefits on the users of postal services.<sup>23</sup>

It is important to distinguish between two different users of access:

- Large postal users (or the intermediaries acting on their behalf) may choose to internalize some services situated “upstream” in the postal chain such as collection, pre-sorting, transport, etc. for which they may be more efficient than the incumbent (“work-sharing”). They are compensated through a discount based on avoided costs. This is called ‘special tariffs’ and is regulated in Article 12, fifth indent of the Postal Services Directive.
- Alternative postal operators may also decide to use the incumbent’s network in order to provide a “full” postal service to the benefit of their customers in competition with the incumbent. The

<sup>23</sup> Ofcom (2012), Securing the Universal Postal Service, p. 142.

tasks that these operators perform may not be materially different from those postal users or intermediaries perform. The only difference is that they provide a postal service under their own brand and for their own account. This is referred to as ‘downstream access’.

In order to review how downstream access can influence competition, it is necessary to distinguish between three main types of business models<sup>24</sup>:

- End-to-end competition, whereby the incumbent’s rivals exclusively rely on their own infrastructure to provide the service.
- Access-based competition, whereby they rely on the postal network of the incumbent to perform some parts of the postal transaction, such as for instance sorting, transport and delivery.
- Mixed competition (also sometimes referred to as mixed by-pass), whereby they engage in end-to-end competition in some parts of the country and rely on the incumbent’s infrastructure in others.

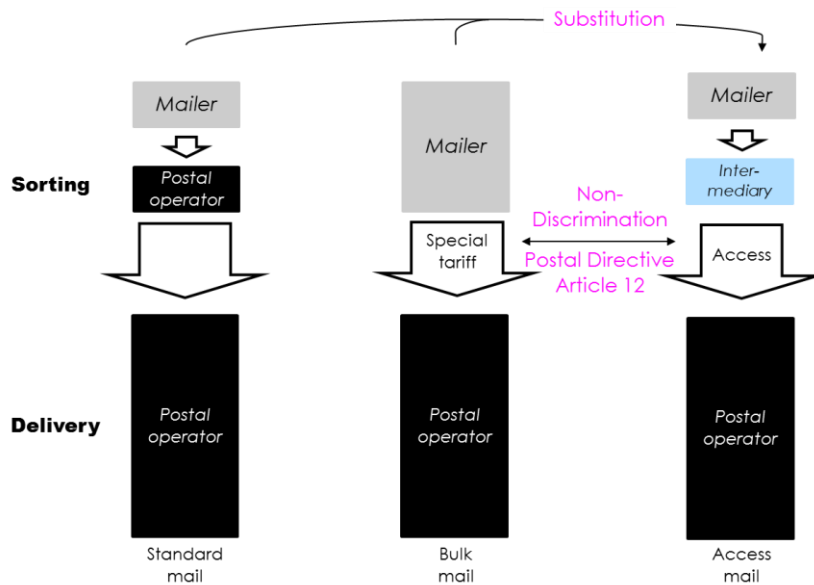
Downstream access can have effects on network competition. On the one hand, downstream access can enable mixed competition where alternative operators compete with the USP without having full geographical coverage. On the other hand, downstream access can also induce alternative operators to shrink their own network and rely more on access-based competition. If the access conditions are set at a wrong level, there is a risk that downstream access will promote less efficient business models.

Moreover, downstream access regulation has strong impact on the pricing of the USP. For instance, if the access price is set below the bulk mail price, then bulk mailers (e.g. business mail senders) find it less expensive to either become access seekers or send mail via intermediaries that use access product, compared to buying the postal operator’s bulk mail products. Thus, the postal operator will be limited in its ability to price its bulk mail product. On the other hand, setting the access price higher than the bulk mail price can amount to a margin squeeze, forcing access seekers or intermediaries to limit what they can charge. Either way, access price regulation affects prices bulk mailers pay for delivery, see Figure 46.

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<sup>24</sup> Geradin D. (2017), Is mandatory access to the postal network desirable and if so at what terms?, <https://www.copenhageneconomics.com/dyn/resources/Filelibrary/file/5/55/1498123634/geradin.pdf> (accessed, 11 Dec 2017).

**Figure 46**  
**Different users of access will receive same conditions**



Note: Illustration

Source: Okholm et al. (2016), The challenge of designing access to the postal network: an economics perspective. In The Changing Postal and Delivery Sector: Towards A Renaissance, pp. 301-319

The link between access regulation and bulk mail services has been discussed in several instances:

- It is part of the SMP regulation discussion in the Netherlands. The question raised there is whether network access is necessary (essential) for competing regional postal operators to deliver mail in areas where they do not have their own delivery network.
- Evidence from various EU countries shows that entrants can sustain viable business models without relying on access, either by limiting the geographical coverage to urban areas with high population density or the product scope of their business while operating all along the postal value chain (for instance, Bring Citymail in Sweden).<sup>25</sup>

#### *Challenges related to the design of access to downstream services*

Once access has been mandated by the NRA or requested by a competitor, both the USP and the NRA may face a host of challenges concerning the design of the access regime. Based on our analysis, these challenges can be grouped into three types of questions that need to be answered when designing an access regime, namely: *scope of access*, *access price*, and *point of access*.

*First, in terms of scope of access:* should access be mandated to USO products only or also to non-USO products? If a decision has been taken to mandate access, the first decision in relation to the design of an access regime is the determination of the scope of products to which access applies. While, in some cases, national postal laws limit access to USO products, the question of whether to

<sup>25</sup> WIK (2010), Netzzugang und Zustellwettbewerb im Briefmarkt.

include only a subset of these products (or other products) still arises. In other cases, the postal law does not determine a clear product scope of access. This raises questions, such as: should access apply to a sub-set or all USO products? Should access apply to USO products as well as non-USO products?

From the NRA's point of view, the product scope of access should be defined such that it allows for efficient access and a competitive postal market. In other words, access should be extended (or limited) to those postal services for which end-to-end competition cannot profitably arise. In turn, the USP aims to maintain a profitable business and to ensure a sustainable USO.

Notwithstanding the goals of the USP, the question of a minimum product scope for access arises if sector regulation does not define it. ERGP states that the essential facilities doctrine may be a useful concept to test and determine the economic fundamentals in this question, even if the legal application of essential facility arguments depends on case law and diverges globally across jurisdictions.<sup>26</sup> In practice, based on ERGP study results, we find that among 20 countries where USPs are obliged to provide access to their postal network, in ten countries such access concerns only universal postal services, in two countries it concerns non-universal postal services and in remaining eight countries – both universal and non-universal postal services, see Table 8.

**Table 8**  
**The product scope of network access regulation**

PRODUCT SCOPE	NUMBER	COUNTRIES
Countries having obligatory access to the postal network	20	BE, BG, HR, CY, CZ, DE, EE, ES, EL, HU, IE, LT, MT, NL, NO, PT, RO, RS, SI, UK
Obligatory network access to universal postal services	10	BE, HR, CY, DE, EE, ES, EL, HU, RS, SI,
Obligatory network access to non – universal postal services	2	LT, NL
Obligatory network access to universal and non-universal postal services	8	BG, CZ, IE, MT, NO, PT, RO, UK

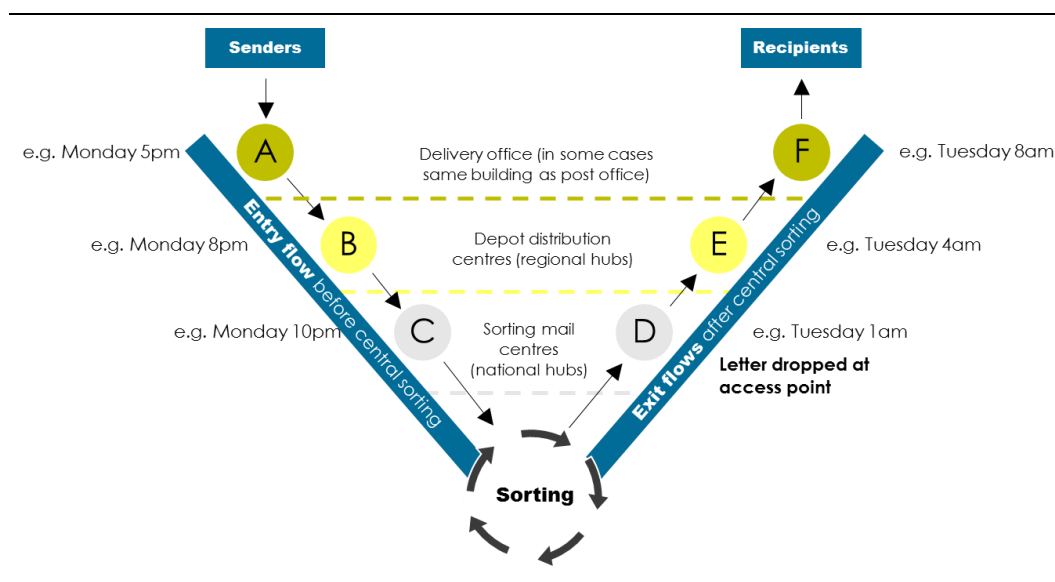
Note: Countries not having obligatory network access: AT, DK, FR, IT, PL, SK, SE.

Source: ERGP PL (2017) 38, Report on recommendations and best practices in regulation for access to the postal network of the incumbent operator (in terms of competition, prices and quality of service)

*Second, access points:* at which point in the delivery chain should access take place, i.e. at which point the access seeker should drop off its mail in order for it to be fed into the delivery network? While both the USP and the NRA have a common goal of efficiency, we have seen in some cases that the NRA might want to facilitate access for different types of access seekers by providing for several access points along the delivery chain, for instance by mandating access not only to sorting centers but also at local distribution offices, see Figure 47.

<sup>26</sup> ERGP (2012), Report on "access" to the postal network and elements of postal infrastructure, p. 5.

**Figure 47**  
**Access points in the postal value chain**



Note: Illustration.

Source: Copenhagen Economics

Traditionally, point of entry for access mail have usually been the inward and outward mail centre.

- Outward mail centres (point c, see Figure 47): Mailings that are consigned at the outward mail centre usually have to be pre-sorted at least basically. The minimum requirements at the outward mail centre for volumes are much easier to fulfil than at the inward mail centre.
- Inward mail centres (point d): Access to the inward mail centre means that users transport mail to the mail centre of destination where it is prepared for delivery. Access to the inward mail centre can involve detailed mail preparation by users, e.g. by: 1) Postal code, 2) Delivery offices, 3) Group of delivery routes, 4) Delivery routes, 5) Delivery sequence.

Access may not be granted to all theoretically available access levels. In some cases, access does not enhance the overall efficiency of the mail sorting process. For example, in 2013, access to a local delivery office did not exist in the survey countries.<sup>27</sup> However, based on the survey conducted by ERGP<sup>28</sup> and our additional market research, we find that more types of access points are being used in practice now than in 2013, see Table 9 below.

<sup>27</sup> WIK-Consult (2013), Main developments in the postal sector 2010-2013, p. 52.

<sup>28</sup> ERGP (2017) 38, Report on recommendations and best practices in regulation for access to the postal network of the incumbent operator (in terms of competition, prices and quality of service)

**Table 9**  
**Locations of access points for downstream access**

	Entry flow			Exit flow		
	Post office or outlet	Distribution centre	Outward mail centres	Inward mail centres	Distribution centres	Post office or outlet
AT	N/A					
BE	N/A					
BG			Yes	Yes		
HR			Yes	Yes		
CY	N/A					
CZ	Yes	Yes	Yes	Yes		
DK	N/A					
EE	N/A					
FR	N/A					
DE			Yes	Yes		
HE			Yes	Yes		
HU				Yes		
IE	N/A					
IT			Yes	Yes		
LT			Yes	Yes		
LU <sup>1</sup>						
MT	N/A					
NL			Yes	Yes		
NO			Yes	Yes	Yes (press only)	
PL	N/A					
PT			Yes			
RO	N/A					
SK			Yes	Yes		
SI	Yes		Yes	Yes		
ES			Yes			
SE	N/A					
UK				Yes		

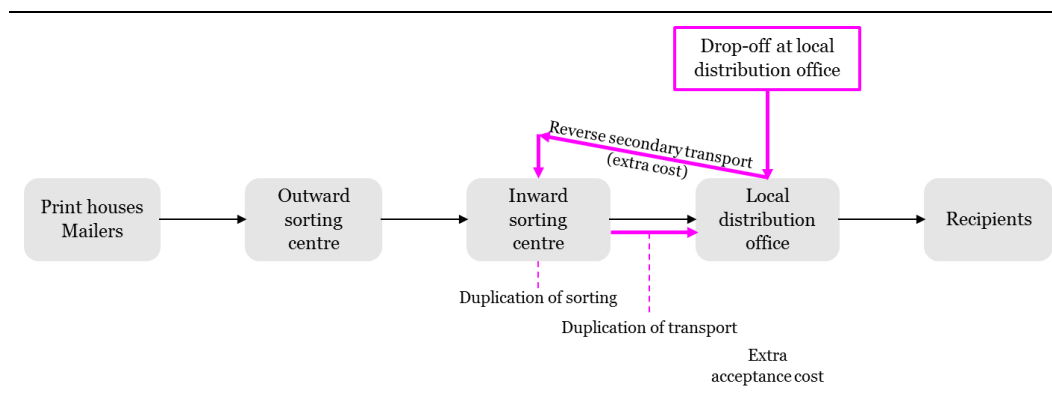
Note: Empty cells mean that there is no access point. N/A means there was no answer provided. Notes: <sup>1</sup>In LU, the USP does not provide downstream access. The only type of access provided by the USP is access to the infrastructure of PO boxes located in postal outlets.

Source: Copenhagen Economics market research ; ERGP (2017) 38, Report on recommendations and best practices in regulation for access to the postal network of the incumbent operator (in terms of competition, prices and quality of service), Table 4

From the economic point of view, any access points further downstream than the inward sorting center are likely both operationally inefficient and incompatible with the cost-orientation requirement for access prices. Access that is provided further downstream, for instance at distribution offices, may lead to a duplication of resources and therefore to an increase in costs. Insofar as mail can only be fed efficiently into the mail stream at sorting centers, the USP would have to redirect the mail from the multiplicity of distribution offices to the sorting center thereby incurring extra transportation costs. Moreover, the USP can also not avoid the sorting and transport activities and costs from the sorting center back to the local distribution office. On top of that, distribution offices might not be equipped to handle the large mail volumes that access usually involves. Thus, access should be allowed only where it is efficient for the USP from an operational point of view, i.e. the inbound and/or outbound sorting centers, see Figure 48.



**Figure 48**  
**Access at distribution offices may cause a duplication of resources**



Note: Illustration

Source: Okholm et al. (2016), The challenge of designing access to the postal network: an economics perspective. In The Changing Postal and Delivery Sector: Towards A Renaissance, pp. 301-319.

Finally, in the situation when access points create additional costs for the USP, any access prices charged would have to reflect these additional costs. This creates a tension between the cost orientation requirement and the requirement for access prices to be lower than the standard end-to-end service price. These elements have been at the basis of the German and Italian NRAs' conclusion not to set out access to local distribution centers.<sup>29</sup>

### *Access-based competition*

In countries with a low level of competition in the addressed mail segment, the largest share of access volumes stems from business customers. Only a minor share comes from consolidators and private postal operators. The exception is the UK where substantial access volumes come from private postal operators and consolidators (e.g. Whistl).

There have been multiple dispute cases regarding downstream access to the postal network. Such competition cases were conducted by competition authorities and in some instances courts in different European countries. We discuss legal cases regarding network access in section 2.7.2.

## **2.4 STANDARDISATION OF LETTERS AND PARCELS**

The European postal standardisation focuses on harmonizing technical methods at the EU level and enabling interoperability of postal operators. We see an increase in postal standards aimed at addressing the structural change towards increasing e-commerce and a digital postal market. Currently, the European Committee for Standardization (CEN) has standards pending regarding parcel interfaces between e-merchant and logistic operator (CEN/TS 17073); recommended procedure of

<sup>29</sup> See AGCOM (2013), Attachment B to Delibera n. 384/13/CONS; AGCOM (2013b), Delibera n. 728/13/CONS; Pohl, M (2010), Der Netzzugang bei Briefdiensten in Deutschland und Großbritannien. Hamburg: Diplomica Verlag, p. 26.

the specifications for applications of digital postage marks (DPMs) (prEN 14615) and international postal address components and template languages (prEN ISO 19160-4). [This is part of the European Commission's 2016 standardisation mandate \(M/548\).](#)

In this section, we provide an overview of USPs' implementation of certain standards. In addition, we discuss what role standardisation plays in the postal sector. In particular, we focus on how standardisation affects new business models, development of competition and adaptation to users' needs.

#### **2.4.1 Implementation of standards by USPs**

We have asked 32 USPs which postal standards they complied with by end of 2017. We find that most of the USPs measure the transit time for priority single piece items in compliance with CEN standard EN 13850 (31 out of 32 USPs), see Table 10. In addition, 63 per cent of USPs reported that the complaint handling procedure at their company complies with CEN standard EN 14012.

However, a number of USPs has still not implemented a handful of standards:

Only 18 USPs measure the transit time for non-priority single piece items according to CEN standard EN 14508. One of the most common reasons for this is a technical one – in four countries (namely, LU, NL, SI, ES) USPs have no non-priority products in the USO.

In addition, 22 USPs reported that they do not provide an interface to e-merchants and 19 USPs reported that they do not process applications of digital postage marks. Most USPs also do not follow standards for providing international postal address components and template languages as only six USPs reported company compliance with ISO standard EN 19150-4.

USPs answers are summarised in Table 10, which depicts replies to the following questions:

1. Do you measure the transit time for priority single-piece items in compliance with the CEN standard EN 13850?
2. Do you measure the transit time for non-priority single-piece items in compliance with the CEN standard EN 14508?
3. Do you provide an inter-face to e-merchants in com-pliance with the CEN standard ts 170373 (standard pending)?
4. Do you process applications of digital postage marks (dpms) in compliance with the CEN standard EN 14615?
5. Do you provide international postal address components and template languages in compliance with the ISO standard EN 19150-4?
6. Is the complaints handling procedure of your company in compliance with the CEN standard EN 14012?

**Table 10**  
**Standards used in the postal sector**

Country	1. CEN standard EN 13850?	2. CEN standard EN 14508?	3. CEN standard TS 170373?	4. CEN standard EN 14615?	5. ISO standard EN 19150-4?	6. CEN standard EN 14012?
AT	Yes	No	No	No	No	Other
BE	Yes	Yes	Unknown	Yes	No	Unknown
BG	Yes	Yes	No	No	No	Yes
HR	Yes	Yes	No	No	No	Yes
CY	Yes	No	No	No	No	Other
CZ	Yes	No	No	Yes	No	Yes
DK	Yes	Yes	No	Yes		Yes
EE	No	No	No	No	Yes	No
FI	Yes	Yes	Unknown	No	Yes	Yes
FR	Yes	Yes	Other	Yes	Other	Yes
DE	Yes	Yes	No	No	No	Other
EL	Yes	Yes	No	No	No	No
HU	Yes	Yes	No	No	No	Yes
IS	Yes	No	Unknown	Unknown	Unknown	Unknown
IE	Yes	No	No	No	No	Other
IT	Yes					
LV	Yes	Yes	Yes	Other	Yes	Yes
LI	Yes	Yes	No	No	No	Yes
LT	Yes	No	No	No	No	Yes
LU	Yes	No	No	Yes	Other	Yes
MT	Yes	No	Other	No	Yes	Yes
NL	Yes	Other	Yes	Unknown	Unknown	Yes
NO	Yes	Yes	No	No	Unknown	Yes
PL	Yes	Yes	No	Yes	Yes	No
PT	Yes	Yes	Yes	No	Yes	Yes
RO	Yes	No	No	No	No	Yes
SK	Yes	Yes	No	No	No	Yes
SI	Yes	No	No	No	No	Yes
ES	Yes	Other	Other	Yes	No	Yes
SE	Yes	Yes	No	Yes	No	Yes
CH	Yes	Yes	No	Yes	No	No
UK	Yes	Yes	No	No	No	

Note: Empty cells mean no answer was provided. LU, NL, SI, ES - have no non-priority product. AT - Austrian Post is not certified according to CEN 14012 but according to EN 15838:2009 (Customer Contact Center). BE - does not apply standard EN 19150-5 but support standard EN 14142. CY - CEN standard EN 14012 is not formally implemented, however most of its provisions are followed. FR - La Poste is not certified according to ISO EN 19150-4 but it promotes senders via discounts using ISO EN 19160-4 (This standard should be used by senders, not by operators). PT - Q6: almost compliant with the CEN standard, minor changes are needed to adopt the current standard.

Source: Questionnaire to USPs

#### **2.4.2 The role of standardisation in the future development of the postal sector**

Most universal service providers reported that standardisation has a positive effect on issues such as clarity, competitive conditions, and market structures in the postal sector.

Firstly, a clarity of offers among operators benefit customers through a higher extent of comparability.

Secondly, most of the investigated USPs report that standards support market-based competition, e.g. by reducing entry barriers, and help ensure the interoperability of complementary products and services. A uniformity between operators enhance competition conditions on factors such as price, time of delivery and quality of service.

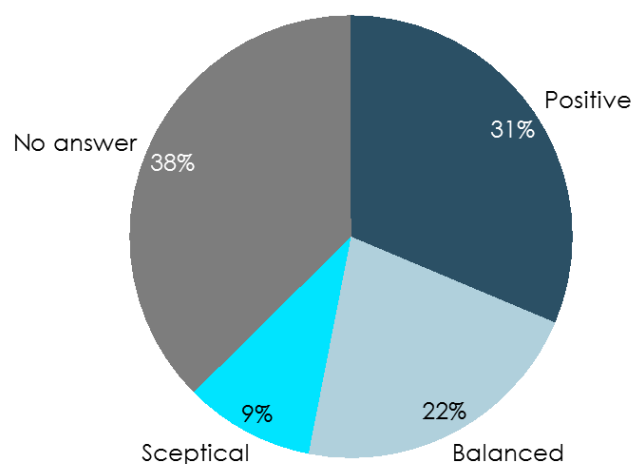
Thirdly, most of the investigated USPs (26) agree that standards play an important role in driving changes or adaptations in their routines and/or business models. According to USPs, postal standards provide uniformity in the operational processes of postal service providers to support international cooperation procedures and enhance quality of services. USPs also remark that standards can improve the operational efficiency. In addition, several USPs remark the importance of standards in international cooperation: it is easier for USPs to act across borders when standardisation is advanced, but any standardisation has to consider national particularities. In addition, some USPs expect even more significant changes to be needed in their business models to accommodate the upcoming standards for parcel delivery, namely EDA.

However, we also find that USPs to some extent are sceptical towards the current level of standardisation and report that standards are only beneficial to the extent that they are widely adopted by operators. Others declare that recent productivity improvements in the postal industry are due to factors other than standardisation e.g. liberalisation and IT technology, see Figure 49.

**Figure 49**

**Attitudes towards the effect of standardization for competition in the postal sector**

Percentage of respondents



Note: Based on Copenhagen Economics analysis of open-ended answers from 20 USPs: AT, BE, BG, CY, FI, FR, DE, EL, HU, IE, LU, NL, NO, PL, PT, SK, ES, SE, CH, UK.

Source: Questionnaire to USPs

### 2.4.3 Future opportunities for further standardisation in the postal sector

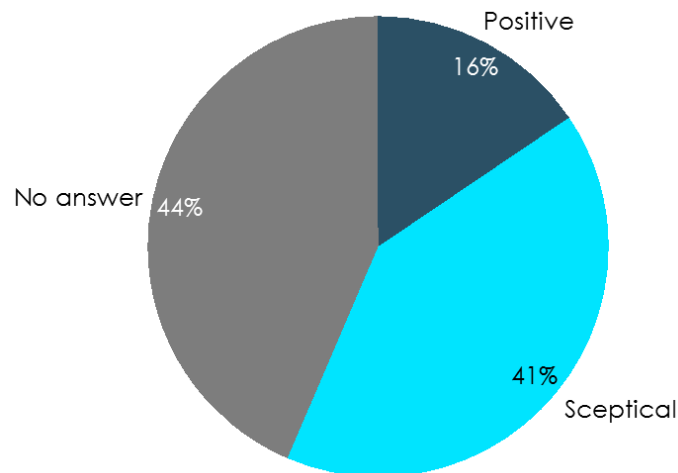
There is a diverging attitude towards further standardisation in the postal sector. USPs that do see a need for further standardisation reported a need in areas such as data exchange for cross border mail and parcels, given that e-commerce continues to grow. Another topic mentioned is the storage of personal data. At the same time, USPs advocating for deeper standardisation report a need for flexibility in the design of existing standards, to cover the rapidly changing needs of stakeholders including customers and regulators. They report that standards should fit into the current frame to avoid imposing administrative costs for the postal service providers.

Other USPs report that new topics for standardisation are required to cover the developments in the postal sector, i.e. a need to broaden the existing framework with further standards, which are in line with the development of new business areas. Their stance is that structural trends, such as increasing e-commerce and digitalisation, must be met by tailored standards to enhance competitive conditions. A broader set of standardisation areas can more effectively be designed to fit future innovation.

However, the majority – three quarters – of surveyed USPs reported that there is no scope or need for further standardisation of the wider postal area as the current range of topics included in the standards is considered adequate, see Figure 50.

**Figure 50**

**Attitudes towards the effect of standardization for competition in the postal sector**  
Percentage of respondents



Note: Based on Copenhagen Economics analysis of open-ended answers from 18 USPs: AT, BE, BU, HR, DK, FR, DE, HU, IE, LU, NL, PL, PT, SI, ES, SE, CH, UK.

Source: Questionnaire to USPs

## 2.5 PROTECTION OF POSTAL CONSUMERS

In this section, we discuss regulation of user protection procedures and what implications do different user protection practices have on postal consumers.

### 2.5.1 Regulation of user protection procedures

The current status of user protection regulation in the EU, EEA & CH area is summarised in Table 11. From this table, it appears that 18 investigated countries authorise both the NRA and National consumer protection authority (NCPA) to enforce user protection in the postal sector. The majority of USPs issue annual reports providing a summary of the development of consumer complaints. In addition, some NRAs also report on consumer complaints in annual reports. These findings overall are in line with the previous main developments study.

**Table 11**  
**Regulation of user protection procedures (NRA)**

Country	Postal or Consumer law	Enforcement by NRA or NCPA	USP issues Annual report	NRA issues Annual report
AT	Postal	NRA	No	Yes
BE	Postal	Both	No	Yes
BG	Both	Both	No	Yes
HR	Postal	NRA	Yes	Yes
CY	Both	Both	Yes	Yes
CZ	Both	NRA	Yes	
DK	Both	Both	Yes	No
EE	Both	Both	Yes	Yes
FI	Both	NCPA	Yes	No
FR	Both	Both	Yes	Yes
DE	Postal	NRA	No	No
EL	Both	Both	Yes	No
HU	Both	Both	Yes	Yes
IS	Both	Both	Yes	
IE	Both	Both	No	No
IT	Both	Both	Yes	
LV	Postal	NRA	Yes	
LI	Postal	Neither	Yes	
LT	Both	Both	Yes	
LU	Postal	NRA	Yes	No
MT	Both	Both	Yes	No
NL	Postal	NRA	No	No
NO	Postal	Other	No	No
PL	Postal	NRA	No	Yes
PT	Both	Both	Yes	Yes
RO	Both	Both	Yes	Yes
SK	Both	NRA	Yes	Yes
SI	Both	Both	Yes	
ES	Both	NRA	Other	Yes
SE	Both	Both	No	Yes
CH	Postal	Both	Yes	
UK	Both	NRA	Yes	

Note: Empty cells mean no answer was provided.

Source: Questionnaire to NRAs

### **2.5.2 User protection: remedies and redress**

Article 19 of the Postal Services Directive provides that Member States shall ‘enable disputes to be settled fairly and promptly with provision, where warranted, for a system of reimbursement and/or compensation’. Member States are obliged to ensure that users who do not get satisfaction from the USP can appeal to a ‘competent national authority’.

In 18 investigated countries, the NRA or NCPA must approve user protection procedures of the USP. The Postal Services Directive requires that USPs provide a system of reimbursement and/or compensation where warranted. Most countries have done so, with exception of six, see Table 12.

As required by the Postal Services Directive, almost all surveyed countries have appointed a ‘competent national authority’ to review users’ complaints that have not been satisfactory resolved by the USP. In most cases, this is the NRA.

These findings overall are in line with the previous main developments study.



**Table 12**  
**User protection: remedies and redress (NRA)**

Country	Complaint procedures approved?	Monetary compensation?	Multi-Operator Protection?	Review of operator decisions	Authority	Appeal from authority to court?
AT	Yes	Yes	No	No		Yes
BE	Yes	No	Unknown	Yes	Gov agency	Yes
BG	Yes	No	No	Yes	NCPA	Yes
HR	Yes	Yes	No	Yes	NRA	Yes
CY	No	Yes		Yes	NRA	Yes
CZ	No	Yes	No	Yes	NRA	Yes
DK	Yes	Yes	No	Yes	NRA	Yes
EE	Yes	Yes	Yes	Yes	NRA	Yes
FI	No	Yes	No	Yes	NRA	Yes
FR	Yes	Yes	No	Yes	Other	Yes
DE	No	No	No	No		Yes
EL	No	Yes	Other	Yes	Other	Yes
HU	Yes	Yes	No	Yes	NRA	Yes
IS	Yes	Yes	No	Yes	NRA	Yes
IE	Yes	Yes	Yes	Yes	NRA	Yes
IT	No	Yes	Yes	Yes	NRA	Yes
LV	Yes	Yes	Yes	Yes	NRA	Yes
LI	No	No	No	No		Yes
LT	No	Yes	No	Yes	NRA	Yes
LU	Other	Unknown		Yes	NRA	Yes
MT	Yes	Yes	No	Yes	NRA	Yes
NL	No	Yes	Unknown	Yes	Gov agency	
NO	Yes	Yes	No	Yes	Gov agency	Yes
PL	Yes	Yes	No	Yes	NRA	Yes
PT	Other	Yes	No	Yes	Other	Yes
RO	Yes	Yes	Yes	Yes	NRA	Yes
SK	No	Yes	No	Yes	NRA	Yes
SI	Yes	Yes	No	Yes	NRA	Yes
ES	Yes	Yes	No	Yes	Other	Yes
SE	Other	No	No	Yes	Other	Yes
CH	Yes	No	No	Yes	Gov agency	Yes
UK	No	Yes	No	Yes	Gov agency	

Note: Empty cells mean no answer was provided.

Source: Questionnaire to NRAs

### *Alternative dispute resolution (ADR) systems*

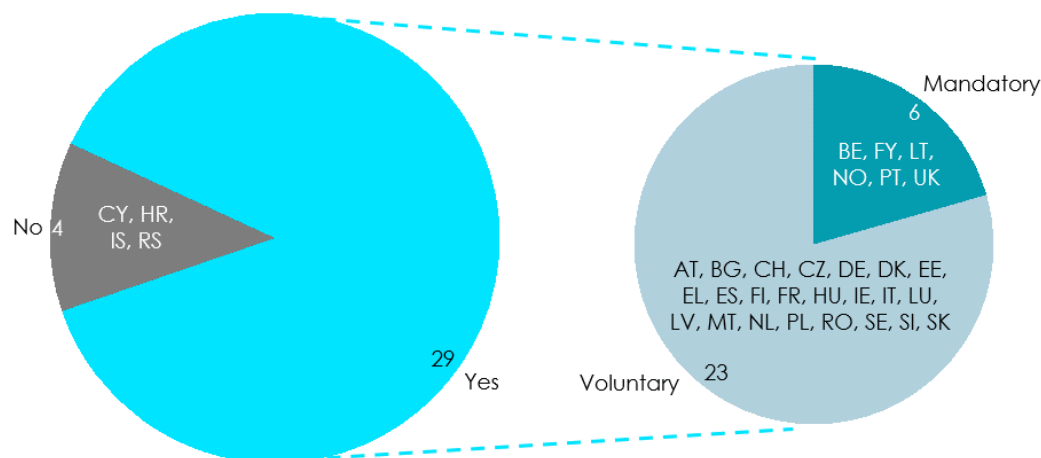
The EU Directive on Consumer Alternative Dispute Resolution and the EU Regulation on Consumer Online Dispute Resolution came into force in July 2013. Alternative dispute resolution (ADR) means settling a complaint out of court with the assistance of an impartial dispute resolution body. Resolving consumer disputes this way is easier, faster and less expensive than going to court.

Industry experts conclude that consumer issues overwhelmingly involve small sums of money, for which ADR systems are highly appropriate.<sup>30</sup> However, there have been no studies conducted yet that would analyse the effectiveness of ADR systems in the postal sector.

In 2016, the majority of countries had obligations in place for postal service providers to publish information regarding complaint procedures, compensation schemes and dispute resolution (usually on the providers' website, access points, general terms and conditions), covering the USP in most situations.

For the last three years, the number of countries where alternative (or out-of-court) dispute resolution mechanisms are available has been increasing – 22 in 2014, 27 in 2015 and 29 in 2016. Six more NRAs are declaring to have voluntary mechanisms instead of mandatory ones, see Figure 51.

**Figure 51**  
**Alternative (or out-of-court) dispute resolution in 2016**  
Number of countries



Source: ERGP (2016) 35, Report on QoS, consumer protection and complaint handling

<sup>30</sup> See the executive summary of Oxford Consumer ADR Conference (2014), [https://www.law.ox.ac.uk/sites/files/oxlaw/conference\\_report.pdf](https://www.law.ox.ac.uk/sites/files/oxlaw/conference_report.pdf) (accessed, 11 Dec 2017)

## 2.6 CHALLENGES FOR THE REGULATORY OVERSIGHT OF THE POSTAL MARKET

Based on our analysis of demand, competition, labour and regulatory developments in the postal sector, we identify the following key challenges for policymakers and NRAs across Europe:

- Ensuring affordability and sustainability of the USO.
- Defining the role of the USO in light of changing user needs.
- Mitigating risks of inappropriate regulatory interventions in a declining letter market.
- Adapting regulatory frameworks to ensure efficient cross-border parcel delivery.

At the outset, it must be noted that national regulatory frameworks applicable to postal markets across Europe vary (see chapter 4 describing the differences among investigated countries in terms of regulation of the USO). There is a rationale for this variation. Regulators take into account that national postal markets are structurally different and adapt – with respect, *inter alia*, to:

- The structure of costs (e.g. manual vs automated work).
- Factors disciplining the operators in the market (see section 2.1).
- The magnitude and structure of entry barriers (see section 2.2).
- The type and composition of customers (see sections 2.2.1 and 2.1.2).
- Declining letter volumes (see section 1.1).

Understanding these characteristics of mail delivery is important to understand how market developments and regulation may affect the sector. It is important to note that the situation and main challenges in letter and parcel segments are markedly distinct.

Key challenges for the regulatory oversight of the *letter segment* of the postal market are driven by e-substitution and competition from alternative means of communication outside the postal industry. All else equal, this development increases the unit cost of delivering universal letter services. This creates three important challenges for the future regulatory oversight. *Firstly*, this may lead to a regulatory trade-off between a broad/less flexible USO and a financially sustainable USO. In order to improve financial sustainability, postal operators will have to increase efficiency and adjust service levels (as discussed further in chapter 5). However, scaling down is a difficult process requiring sometimes substantial layoffs (e.g. PostNord restructuring in Denmark, cf. section 3.1.1). *Secondly*, as the cost of the USO provision rises and users' needs change, policymakers at both EU-level and at national level face important responsibilities to ensure that the current USO regulations are not becoming obsolete. *Thirdly*, the costs of regulation should not become disproportionate. *Lastly*, on top of challenges created by declining letter volumes, inappropriate regulatory interventions may distort efficiency by sending the wrong signals to the market.

The key future challenges for the regulatory oversight in the *parcel delivery segment* are driven by the development of domestic and international e-commerce markets. Parcels are increasingly making up a larger share of the postal and delivery market (see section 1.2.1). As parcel delivery traditionally has not been regulated to the same extent as letter mail, a problem might be that regulators do not have sufficient information about the parcel segment of the market (including the non-USP operators in this field). The new cross-border parcel regulation (coming into force in 2018) will alleviate this problem by allowing NRAs to collect information on a wider scale.

### *Ensuring affordability and sustainability of the USO*

Securing an efficient and financially sustainable universal service provision is one of the key challenges of the postal industry. Declining letter volumes in combination with unchanged regulatory requirements might imply even bigger challenges to ensure the financial sustainability of the USO.

The cost of providing the universal service can increase to unsustainable levels due to (i) volume decline, which increases fixed costs per unit; (ii) network competition, which reduces the number of letters going via the USP's network; (iii) pressure to maintain prices low from electronic alternatives of communication.

On the one hand, some postal operators have already taken steps to reorganise their operations, reduce costs, and improve efficiency and financial sustainability of the USO. Mail delivery is a labour intensive business and every postal operator's main asset is its workforce. The fact that this asset (in contrast to assets in other network industries<sup>31</sup>) can in theory be employed elsewhere has implications. *First*, it implies that postal operators can use different business models (as discussed in section 2.2, e.g. based on different delivery frequency, different geographical coverage, and different types of labour contracts). *Second*, it also implies that postal operators can over time adapt their networks to changing market conditions – for instance adjusting their logistical systems to accommodate reduced service levels for letters (e.g. lower delivery frequency) and higher service levels for parcels (e.g. time certain delivery). *Third*, the prevailing condition in each country's labour markets (unemployment rate, wage levels, collectively-negotiated and minimum requirements) will affect the business conditions in the postal and delivery sector to an extent that is greater than in other network industries. However, adjustments which require reduction in the workforce will often imply significant lay-off costs for the USP.

On the other hand, looking forward, regulatory obligations will affect the choices made by postal operators and mailers and the development of the sustainability and affordability of the USO. For example, regulation of access and access prices may trigger arbitration undermining the sustainability and affordability of the USO. Similarly, price caps may prevent the coverage of increasing unit costs.<sup>32</sup> In this situation, a decision to maintain a certain price level will cause a loss for the regulated operator – a loss that, unless there is a compensation mechanism in place, may distort competition and lead to less efficient provision of postal services. Ultimately, such obligations may endanger the financial sustainability of the universal postal service.

Yet the options available to cover USO net costs are limited to compensations by either other industry players or government funds (i.e. taxpayers' money). This is challenging because (i) market players may not have sufficient financial reserves to compensate USO (and in any event, the compensation often is split by market share, such that the USP itself should cover more than 90 per cent of its losses); (ii) state subsidies, i.e. taxpayers' money, are in theory possible, but often not preferable for policymakers.

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<sup>31</sup> In network industries such as telecom, large fixed costs are often incurred by physical assets such as cable or fibre networks without any alternative use.

<sup>32</sup> Falling letter volumes lead to increasing unit cost of providing letters (due to lower economies of scale). If a price cap fails to incorporate such dynamics, it may lead to a price level which does not sufficiently cover the cost of providing letters, see e.g. Copenhagen Economics (2018) Högt eller lågt i tak? - Ekonomisk analys av pristaksregleringen från 2018.

Hence, declining letter volumes risk leading to a trade-off between high service level and a financial sustainability of the USO which may even become more apparent in a situation where more networks are competing for the same volumes. In the UK, for instance, the regulator, following the national postal law, prioritised the financial sustainability of the USO. Indeed, the UK Postal Services Act 2011 specifies that the regulator “(1) *Ofcom must carry out their functions in relation to postal services in a way that they consider will secure the provision of a universal postal service. (2) Accordingly, the power of Ofcom to impose access or other regulatory conditions is subject to the duty imposed by subsection.*” As a result of this duty set in the law, Ofcom concluded in 2011 that efficient provision of postal services required a less strict price regulation, to provide flexibility to the universal service provider.

The challenges related to the financing of the USO are illustrated by recent legal cases concerning postal market regulation. There were three legal cases taken by the European Court of Justice in the 2013-2016 period. Two of the three cases concerned the scope of the USO and one concerned requirements to operate (closely linked to the financing model of the USO), see Table 13 below.

**Table 13**  
**Regulatory legal cases concerning the scope of the USO in the EU postal sector 2013-2016**

COUNTRY	TYPE OF CASE	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
Bulgaria	Scope of USO	Court of Justice C-185/14 22-10-2015	Closed	Postal money orders	Preliminary ruling – National complainants: Easy-Pay and Finance Engineering  As of 2009, postal money orders are no longer included in the USO in Bulgaria. Balgarski Poshti - the USO provider - was however granted the exclusive right to pay retirement pensions by postal money order.	Re question 1: A money order service by which the sender transfers sums of money to a beneficiary through the USO-provider does not fall within the scope of that Dir. 97/67.	Question 2: Not discussed here as it is not specific to postal services (question concerns whether Art. 107(1) TFEU must be interpreted as precluding a Member State from granting an undertaking the exclusive right to pay retirement pensions by money order).
Finland	Scope of USO and requirements to operate	Court of Justice C-368/15 15-06-2017	Closed	All	Preliminary ruling – national complainant: Ilves Jakelu Oy  i) Uncertainty on the scope of the USO. ii) The license granted to provide postal services relating to the delivery of mail in Finland involved authorizations and requirements.	Re question 1 & 2: Based on Art. 9(1) of Dir. 97/67, a postal items service does not fall within the scope of the USO if it does not involve the permanent provision of a postal service of specified quality at all points in the territory at affordable prices for all users. Re question 1 & 2: The provision of non-USO services may be subjected only to the issuing of a general authorization. Re question 3: The provision of non-USO services may be made subject to requirements such as those referred to in Art.9(2), 2nd subpar., 2nd indent, of the Dir. (quality, availability and performance of the relevant services).	
Austria	Requirements to operate	Court of Justice C-2/15 16-11-2016	Closed	N/A	Preliminary ruling – national complainant: DHL Express (Austria) Based on national regulation, authorization for a postal operator to operate was only granted if it made a financial contribution to the national regulatory authority's operational costs. DHL believed that as it did not provide services within the USO-scope, it was in breach of Art. 9(2), 2nd subpar., 4th indent, of Dir. 97/67 to require it to make such a contribution.	Re question 1: National legislation may impose on all postal service providers the obligation to contribute to the financing of the national regulatory authorities responsible for that sector.	Question 2: Does not need to be answered in view of the answer to question 1.

Source: CJEU decisions

### *Defining the role of the USO in light of changing user needs*

As discussed further in chapter 5, defining the role (and scope) of the USO will be of major importance for all stakeholders in the European postal market. The ongoing technological, economic and cultural developments are continuing to change the use of and need for postal services in the future. Policymakers at national level are increasingly reviewing postal policy to ensure that the current USO regulations are not becoming obsolete (see section 4.1 Developments in USO minimum requirements).

One of the policy approaches – taken by, for instance, Denmark, Finland, Italy, and Norway – is to provide more flexibility to the USP by limiting the scope of the USO and focusing the USO on essential user needs. This could be done by (i) reducing the USO, (ii) simplifying the regulatory implementation of the USO (e.g. accounting requirements), and (iii) increasing flexibility for the USP to adjust prices and services. This could even eventually go as far as removing the present next-day delivery obligation for domestic USO services.

A supplementary approach – taken by, for instance, Belgium and France – brings attention to the potential benefit of including new services in the obligation to the USP. While the importance of paper-based communication may slowly be eroding, new social needs may have evolved during this time. In practice this means that the existing postal network can be utilised to provide other kinds of services of general economic interest (SGEI). One possibility is the inclusion of social services to elderly. However, we draw attention to potential market distortions if the USO is expanded into areas which could be provided by the market, potentially raising concerns for state-aid (cf. chapter 5).

### *Mitigating risks of inappropriate regulatory interventions in a declining letter market*

One way to look at postal policy is as the balance of two main regulatory policy objectives.<sup>33</sup> First, *efficient market development*, which means encouraging innovation, more choice for consumers and reduction of prices. Second, the regulatory framework for post equally strives to *secure the provision of a universal service*, which is especially challenging in light of the current exceptional circumstances facing the postal sector.

Each of the policy objectives can be achieved in different ways, including more or less intrusive regulatory intervention in the postal market. We have seen two divergent approaches across Europe. The first approach involves more regulatory intervention (e.g. the introduction of SMP regulation in the Netherlands, see Box 7). The second approach takes an opposite direction and provides more commercial flexibility to the USP (for instance, Denmark, Finland, Italy, Norway, and the UK).

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<sup>33</sup> See, for instance, Jaag (2014), Postal-sector policy: From monopoly to regulated competition and beyond.

### Box 7 SMP regulation in the Netherlands

In the Netherlands, SMP regulatory powers were introduced on 1 January 2014 along the lines of the SMP regime for the electronic communications sector but without a harmonised EU Regulatory Framework. On 27th July 2017 (after rounds of consultation) ACM issued a decision imposing access regulation on PostNL – specifically for next-day mail services. On the basis of this SMP decision, the access tariffs will be determined in a separate analysis on the basis of regulatory cost accounts. The ACM analysis and decision process took over three years and four rounds of iterations. In the meanwhile, at the end of 2016 the Minister of Economic Affairs issued a policy rule in which it was made clear that in view of the declining volumes in the postal sector the SMP regime in the Postal Act will be evaluated and issuing a guidance clarifying the evidentiary basis for any intervention by the NRA under SMP powers. At the time of writing, appeal proceedings against the SMP decision of 27th July 2017 are pending and the subsequent tariff decision has not yet been published by ACM. The evaluation of the sustainability of the SMP regulation has not yet been completed.

Source: Bird & Bird analysis

Inappropriate regulatory intervention may distort efficiency by sending the wrong signals to the market, leading to three types of distortions in the market: *firstly*, inadequate use of postal services (distortion of allocative efficiency), for example, as discussed further in chapter 4, there remain differences as to the reasons for measuring cost-orientation of prices and the approaches to do so (e.g. at what level of aggregation to measure cost orientation). This results in regulatory uncertainty, meaning that USPs may not know if their prices will be deemed to be cost oriented or not; *secondly*, *inefficient* entry of high-cost operators or exit of efficient competitors (distortion of productive efficiency and higher cost of universal services), and *thirdly*, distorted competition (distortion of dynamic efficiency).

Before any regulatory decisions are made, policy makers should conduct a strategic review – considering the impact of the decision on the different stakeholders in the market. As part of such a strategic review, regulators should turn to economic principles. These are used to define more precisely how best to serve regulatory objectives in the regulator's decision making. As acknowledged by the OECD, regulators should consider allocative, productive, and dynamic efficiency (see Box 8) when evaluating policy initiatives.

Dynamic market forces (e.g., volume reductions and changes in the level and type of competition) can both reverse the effect of regulatory intervention and induce unpredictable outcomes (sometimes even worse compared to the evolution without regulation). The dynamic setting makes regulatory decisions critical. How can the regulator know how to regulate a market with an uncertain future, and who is willing to invest in a market where there is uncertainty about future regulation? To avoid adverse outcomes, the regulator should perform a strategic review before choosing whether to introduce remedies belonging to the new regulatory regime. A strategic review reduces the risk of adverse outcomes.



Strategic reviews have for example been conducted in the UK, where Ofcom has conducted strategic reviews both in telecommunications (2005) and in postal services (2011-2012).<sup>34</sup> A strategic review can assess whether there is any need for regulatory intervention, it can prevent adverse outcomes, and it can increase regulatory predictability for firms' planning.

#### **Box 8 Implementing objectives: ensuring economic efficiency**

OECD recommends that regulators consider a number of welfare criteria in order to make correct decisions. In this respect, the OECD acknowledges that economic theory is useful to assist the assessment of the social welfare impact of policy decisions.

The fundamental theoretical economic starting point for welfare is efficiency. In particular, when evaluating policy initiatives, three types of efficiency should be taken into account: allocative, productive, and dynamic efficiency:

"Allocative efficiency requires that output be at the appropriate level. Productive efficiency requires that such output be produced in the least expensive way given the available set of technologies. Dynamic efficiency refers to the improvement over time of products and production techniques".<sup>35</sup>

Source: Copenhagen Economics

When changes to the USO is considered, there is often a strong focus on reducing USO costs while minimizing the negative impact on USO benefits. However, as the change in itself might induce extra costs on the operator or other stakeholders in the market, the regulator needs to take into account any cost of implementation related to the new regulation.

Implementing the necessary changes to operations in order to make use of increased cost saving potential may also take time. It is therefore necessary that any changes in regulation are announced sufficiently in advance, such that the postal operator has sufficient time to adjust. For example, reducing staff and selling off assets may take time. For large changes to the USO, a longer time period may be needed.

Implementing the necessary changes may also require new investments. For example, if some vulnerable groups of postal users are disproportionately hurt by the reduction in the USO, targeted measures might be needed in order to satisfy the critical needs for these users. The cost of making such investments have to be taken into account in the evaluation of a specific policy option.

Last, but not least, if the change comes too late, this may imply irreversible harm. For example, a late change may make it very difficult for the operator to restructure its business.

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<sup>34</sup> Moreover, in telecoms, the EC Recommendation on relevant markets (revised every 6-7 years) is a strategic review which serves as guidance to future regulatory market reviews, cf. European Commission (2003; 2007); Cave et al. (2006), A review of certain markets included in the Commission's recommendation on relevant markets subject to ex ante regulation. Independent report to the European Commission; ECORYS (2013), Future electronic communications markets subject to ex-ante regulation. Report for the European Commission.

<sup>35</sup> Cabral (2000), Introduction to Industrial organisation, p.28.

### *Adapting regulatory frameworks to ensure efficient parcel delivery*

Development of domestic and international e-commerce markets creates new challenges of adapting existing regulatory frameworks, which have traditionally been focused on letter communication. This implies several important challenges for future regulatory oversight.

Firstly, regulatory interventions in this area will have to build on a comprehensive assessment of user needs (incl. e-retailers and online buyers) and the existence of market failure. It is important to monitor this fast evolving market, changes in citizen's preferences (both e-commerce users and non-users), and changes in the brick and mortar retail footprint (e.g. in rural and semi-rural areas). The Commission is continuing work in this area<sup>36</sup> with further research on *Dynamic development of cross-border e-commerce through efficient parcel delivery*. Moreover, a key focus of research will remain the country level, so to understand country by country what types of needs and market outcomes emerge – and national implications for future USO.

Secondly, lack of clear definition of key concepts used in both EU and national level regulatory frameworks give rise to regulatory discussions. One example is the definition of what constitutes a “postal operator”.

Moreover, with respect to cross-border trade, there is also the issue that small, low value consignments imported into the EU currently fall under the *de minimis* threshold for VAT, but it is set to be removed by 2021. Some USPs have already started collecting handling fee for all items coming outside the EU (e.g. Germany and Sweden). This is very relevant for e-commerce items as it affects competition between players inside and outside the EU.

Lastly, financial transfers and net losses caused by the UPU terminal dues system may increase in magnitude for some USP's (primarily in net exporting countries in Western and Northern Europe). This is also very relevant for e-commerce items as it affects competition between players inside and outside the EU. As a result, mounting pressure caused by below-cost UPU terminal dues rates may lead to regulatory efforts to establish a more cost-oriented terminal dues system.

## **2.7 COMPETITION AND OTHER LEGAL CASES**

In terms of competition law related cases involving postal operators, we find that most of the cases concerned financing of the USO, network access conditions, and to a lesser extent: mergers and treatment of VAT. Below we provide an overview of both national and EU level cases in these areas.

In this section, we list and describe both core European level as well as national level courts' decisions involving postal operators, in the 2013-2016 period. We group these decisions in three categories:

- State aid cases.
- Competition cases (i.e. Article 101 and 102 cases).
- Legal cases regarding treatment of VAT in the postal sector.

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<sup>36</sup> See Copenhagen Economics (2013) E-commerce and delivery. A study for the Commission; WIK (2014) Design and development of initiatives to support the growth of e-commerce via better functioning parcel delivery systems in Europe. A study for the Commission.

### **2.7.1 Financing of USO/SGEI (State aid cases)**

As a result of the continuing steep decline in postal volumes, the question of compatibility of national financing of the USO/SGEI with the TFEU has become the more crucial, as highlighted by many recent cases. The majority of USO/SGEI-notifications to the Commission have been held to be compatible (Belgium, France, Greece, Italy, Poland, UK), but in a number of cases formal investigation procedures have been initiated (Greece, Spain). The annulment by the General Court of incompatibility decisions (Germany), provide further guidance, see Table 14.

**Table 14**  
**European cases concerning Financing of USO/SGEI (State aid)**

COUNTRY	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
Belgium	Commission decision SA.42366 03-06-2016	Closed	newspapers, periodicals, post office network, financial services	State aid granted to: bpost Compensation of bpost for a series of public service obligations (SGEI) over the period 2016-2020 of around €263 million a year.	Compatible on the basis of Art. 106(2) TFEU / SGEI.	The Commission noted that Belgium had confirmed the essential social and economic role of the public services entrusted to bpost and that the compensation is based on a robust methodology, which ensures that it will not exceed the cost of the public service mission. This compensation mechanism also includes incentives for bpost to increase the efficiency and quality of its public services.
Belgium	Commission decision SA.31006 02-05-2013	Closed	newspapers, periodicals, post office network, financial services	State aid granted to: bpost Compensation of bpost for a series of public service obligations (SGEI) over the period 2013-2015 of around €300m a year.	Compatible on the basis of Art. 106(2) TFEU / SGEI.	The Commission noted that the aid does not exceed the net cost for providing the public service mission entrusted to bpost. The decision is also based on the commitment by Belgium to promptly recover €119m overcompensation over the period 2011-2012.
France	Commission decision SA.36512 26-5-2014	Closed	Transport of newspapers and Regional planning	State aid granted to: La Poste (French post office) 1) tax relief granted to La Poste to ensure a high density of postal services over the period 2013-2017 of €850m in total. 2) payment of a grant to fund La Poste's task of transporting and delivering the press over the period 2013-2015 of €597m in total.	Compatible on the basis of Art. 106(2) TFEU / SGEI.	-
Germany	General Court T-143/12 14-7-2016  (Appeal by Germany against Commission decision SA.17653 25-1-2012)	Closed	N/A	State aid granted to: Deutsche Post Commission ordered recovery of incompatible aid (pension subsidies) to Deutsche Post with an estimated value between €500m to €1b for the period from 2003 onwards in 2012. Compensation for the costs of its public service obligations from 1990-1995 held to be compatible by Commission.	General Court annulled the Commission's recovery obligation. Not clear that pension subsidies created an advantage as the pension costs for former civil servant postal workers can be higher than what an undertaking normally incurs.	Related decision in cases T-152/12 dated 17 March 2017, T-421/07 of 18-9-2015 and C-77/12 dated 24-10-2013 not discussed (procedural matter). Related case C-674/13 discussed below.

COUNTRY	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
Germany	Court of Justice C-674/13 6-5-2015  (Follows Commission decision SA.1765325-1-2012)	Closed	All postal products	State aid granted to: Deutsche Post In response to Commission decision SA.17653 (discussed above), Germany recovered a much lower amount than the Commission had estimated as it considered only commercial post-related services - and not also business-to-business parcel services - as non-regulated. The Commission referred Germany to the Court for failing to recover the incompatible aid from Deutsche Post.	Germany breached state aid rules as it should have (better) assessed the services in scope as non-regulated and better informed the Commission.	See General Court Decision Case T-143/13 (discussed above), in which recovery obligation was annulled.
Greece	Commission decisions SA.35608 1. 24-11-2016 2016/C 456/08 2. 01-08-2014 C(2014) 5436	Closed	USO	Hellenic Post (ELTA):  1. received direct subsidies or the delivery of USO during transitory regime 2013-2014 or 2013-2015 of no more than € 15m per year. 2. received compensation fund for net cost of USO for period 2015-2019 that could exceed € 15m per year.	1. Compatible on the basis of art. 106(2) TFEU. 2. Formal investigation procedure based on art. 108(2) TFEU started in relation to the compensation fund, in particular the level of the foreseen financial contributions from postal providers.  Investigation closed in 2016 after Greece withdrew notification.	1. Commission noted that ELTA was only compensated for the extra costs of carrying out USO.
Italy	Commission decision SA.43243 04-12-2015	Closed	USO	State aid granted to: Poste Italiane 1. Public financing of delivery of USO by Poste Italiane over period 2016-2019 of max. €262m per year; 2. Public compensation for delivery of USO over period 2012-2015 of max. € 335m per year; 3. Compensation fund to be activated if public financing is insufficient to cover net cost USO.	1. Compatible on the basis of Art. 106 (2) TFEU. 2. Compatible on the basis of Art. 106 (2) TFEU. 3. OK, as fund will only be activated with prior separate approval from the Commission.	The Commission noted that compensation was based on a robust and conservative methodology, which ensures that the cost of the USO will not be exceeded. Furthermore, the amount of aid granted decreases significantly over time, taking account of significant efficiency gains.

COUNTRY	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
Poland	Commission decision SA.38869 26-11-2015  (Appeal by Inpost to annul decision ongoing: T-282/16 and T-283/16)	Ongoing	USO	State aid granted to: Poczta Polska Compensation granted to Polish Post for the provision of the USO for period 2013-2015 via a compensation fund. For 2013, the amount of compensation was estimated at approximately €23m.	Compatible on the basis of Art. 106(2) TFEU.	Originally proposed period was 2013-2026. The fund will be financed by contributions of a maximum of 2% of the revenues earned by all postal providers in Poland. If necessary, this financing will be complemented by direct grants from the state budget. In particular, the Commission approved the measure because the compensation paid is limited to the additional costs it faces to fulfil the USO. Moreover, the design of the mechanism to finance the compensation does not lead to a significant distortion of competition in the Polish postal market.
Spain	Commission SA.37977 11-02-2016	Ongoing	Unspecified	Correos: 1. received around €1.4b between 2000-2011 in USO compensations, 2. has been exempted from real estate tax (IBI) and the tax on economic activities (IAE) 3. was granted three capital increases granted in 2004, 2005 and 2006 of around €48m in total 4. was granted compensation for the distribution of electoral material	Formal investigation procedure on the basis of Art. 108(2) TFEU in relation to: 1. the USO compensations granted to Correos, 2. the tax exemptions from the IBI and IAE, 3. the three capital increases, and 4. the compensation granted to Correos for the distribution of electoral material.	The Commission considered the social welfare benefits for the civil servants employed by Correos to not constitute aid within the meaning of Art. 107(1) TFEU. Also, the relief from payment of pension contributions granted to Correos for its civil servants qualifies as existing aid within the meaning of Article 1(b) of the Procedural Regulation.
United Kingdom	Commission decision SA.38788 19-03-2015	Closed	Post office services	Compensation for UK Post Office for costs incurred to provide services of general economic interest for the period 2015-2018 of up to £640/€859m in total.	Compatible on the basis of Art. 106(2) TFEU.	The Commission noted: - compensation for Post Office Ltd will not exceed the cost of the public service mission. - annual milestones need to be reached, which will give an incentive to Post Office Ltd to be efficient

Source: Questionnaire to USPs and EC; CJEU decisions

**Table 15**  
**Other European state aid cases**

COUNTRY	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION
France	Court of Justice C-559/12 3-4-2014 (Follows General Court decision T-154/10 20-09-2009 and Commission decision 26-1-2010 C-56/07)	Closed	N/A	Free unlimited State guarantee in favour of La Poste	Commission decision that guarantee was not compatible with Art. 107(2) or (3) or 106(2) TFEU and had to be removed by 31 March 2010 confirmed.
France	Commission decision SA.38545 06-11-2015	Closed	Courier services	France i.a. granted a public loan of €17.5m to Mory-Ducros and its successor, MoryGlobal, in addition to state support for social measures accompanying dismissed employees of Mory-Ducros.	Recovery of incompatible aid paid by France to Mory-Ducros as the measures provided an unfair economic advantage to Mory-Ducros in breach of Art. 107(1) TFEU.
Italy	General Court T-525/08 13-10-2013 (Appeal by Poste Italiane against Commission decision 2009/178/CE 16-7-2008)	Closed	Banking (case concerns Poste Italiane subsidiary BancoPosta)	Italian Treasury paid Post Italiane subsidiary BancoPosta a rather high interest rate for its current accounts.	Court annulled Commission decision finding aid to be incompatible as the Commission had not sufficiently demonstrated that the interest rate was above the market rate.
Poland	Commission decision SA.42843 27-11-2015 C(2015) 8562	Closed	Postal services for the blind and partially sighted persons	Prolongation for period 2016-2021 of existing aid scheme for Polish Post for compensation for the provision of services which are statutorily exempted from postage fees with a new budget of €3.4m in total.	Compatible on the basis of Art. 107(2) or (3) TFEU.
Poland	Commission decision SA.36124 31-05-2013	Closed	Postal services for the blind and partially sighted persons	Prolongation for period 2013-2015 of existing aid scheme for Polish Post for compensation for the provision of services which are statutorily exempted from postage fees with a new budget of €1.56m in total.	Compatible on the basis of Art. 107(2) or (3) TFEU.

Source: Questionnaire to USPs and EC; CJEU decisions

### **2.7.2 Network access conditions, rebates and other**

The terms of access granted by USPs to intermediaries – especially consolidators – have been the focus of several recent cases. In particular, per sender rebate schemes employed by incumbents were at the forefront of cases in Belgium, France, Italy, the Netherlands and Sweden. NCA decisions have led to national court cases and a preliminary ruling by the CJEU, which held that the principle of non-discrimination in postal tariffs, laid down in Art. 12 of Dir. 97/67, does not preclude a system of quantity discounts per sender. Some cases are still ongoing (e.g. in the Netherlands). Some of the network access cases had a scope broader than rebate systems: Portugal and the United Kingdom, see Table 16, Table 17, Table 18, and Box 9 below.



**Table 16**  
**European cases concerning network access conditions and rebates**

COUN- TRY	TYPE OF CASE	CASE	CASE STA- TUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION
Belgium	Rebates	Court of Justice C-340/13 11-2-2015	Closed	non-USO	Preliminary ruling The historical postal service provider in Belgium, bpost, introduced a quantity discount per sender, meaning that the rebate granted to consolidators was not calculated on the basis of the total volume of mailings coming from all senders to which they provided their services, but on the basis of the volume of mailings generated individually by each of their clients.	Re question: Bulk mailers and consolidators are not in comparable situations as regards the objective of quantity discounts per sender (stimulating demand), since only bulk mailers can be encouraged to increase their volume handed on to bpost and, accordingly, the turnover of that operator. Thus, the per sender discount does not constitute discrimination prohibited under Art. 12 of Dir. 97/67
Denmark	Rebates	Court of Justice C-23/14 6-10-2015	Closed	Bulk mail	Preliminary ruling (Post Danmark II) Post Danmark offered i) standardized rebates between 6-16%, ii) that were conditional and applicable to all purchases made during a reference period of one year and iii) retroactive.  The national court referred three questions to have clarified what kind of rebate schemes are capable of having an exclusionary effect contrary to Art. 82 EC.	Re Questions 1 to 3: - As the rebate scheme was neither conditional upon exclusively nor solely based on volume, it was neither a loyalty rebate nor a pure quantity discount, but a third category. Therefore, all the relevant circumstances needed to be considered. In particular, the criteria and rules governing the grant of the rebates, the extent of the dominant position and the particular conditions of competition on the relevant market. It is relevant that the rebate scheme covers the majority of customers, it showed its impact on the market, which may bear out the likelihood of an anticompetitive exclusionary effect. The Court also noted that the design of the rebate created a 'suction effect', competition was already very limited, Post Danmark was an unavoidable business partner and that the rebates had a widespread impact. - It is not always required to conduct an as-efficient-competitor test in order to demonstrate that the rebate scheme is abusive under art. 82 EC. Under specific circumstances it may have no relevance. - The likelihood of an anticompetitive effect needs to be probable, but there is no need to demonstrate the serious or appreciable nature of these effects for a practice to fall within the scope of Art. 102 TFEU.

Source: Questionnaire to USPs and EC; CJEU decisions

**Table 17**  
**National cases concerning network access conditions and rebates**

COUN-TRY	TYPE OF CASE	CASE	CASE STA-TUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
Den-mark	Rebates	Competition Appeal Tribunal, case no 2009-0019768	Closed	Direct mail	Retroactive rebates offered to direct mail customers. The case include a request for a preliminary ruling from the Maritime and Commercial High Court (EU Court, case C-23/14)	The appeal tribunal upheld the Competition Council's decision stating that Post Danmark had abused its dominant position by offering loyalty-enhancing rebates thereby foreclosing competitors in the market for bulk direct mail letters.	
Den-mark	Rebates	Competition Council, case no 16/03595	Closed	Magazine mail	Individual rebates offered to three magazine mail customers.	Post Danmark abused its dominant position by offering individual and loyalty-enhancing rebates thereby foreclosing competitors in the market for magazine mail.	
Ger-many	Rebates	BKartA B9-128/12	Closed	Business mail	Alleged rebates for large customers from the telecommunications sector	Alleged abusive behaviour seized in 2013, no fine issued	
Italy	Rebates	A493	Ongoing	bulk mail	Margin squeeze allegations.	2018 update: On 15 January 2018, the Italian Anti-trust Authority imposed a fine on the Italian postal incumbent Poste Italiane for abusing its dominant position in the wholesale market for business delivery services.	-
Nether-lands	Rebates	CBb 8 November 2016, nr. 16/173, ECLI:NL:CBB:2016:311.	Closed	24h bulk mail	Uniform Sender Address	Per sender rebates permitted	Also, 2018 ruling on related DIVA case (unpublished)
Portugal	Access	PRC 2015/04	Ongoing	Domestic mail		Alleged refusal of access by competing postal operators to the incumbent's postal delivery centers.	Commitments offered

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COUN- TRY	TYPE OF CASE	CASE	CASE STA- TUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
Sweden	Rebates	dnr 638 and 639/2015	Closed	Economy bulk mail	Changes in annual dis- counts re consolidators	Related to the postal case of bpost; no action from the NCA	Stockholm Administrative Court of First Instance and Supreme Administrative court of Sweden decisions (case No. 27651.) Administrative Court of Appeal in Stockholm, 28 December 2016, nr, 4722-16.
Sweden	Rebates	dnr 215/2015	Closed	Unaddressed mail	Pricing of unaddressed mail/magazines	Issue of discrimination; no action from NCA	
Sweden	Rebates	dnr 298/2017	Closed	Hybrid service (eBrev)	Rebate in hybrid service	Complaint from consolidator; investigated by the NCA 7 times before so no action	
Switzer- land	Rebates	Capri	Ongoing	bulk letters, un- addressed mail items	Individual rebates of- fered to business cus- tomers sending ad- dressed bulk mail.	The Swiss Competition Commission (WEKO) claims that Swiss Post's rebate system led to non-transparent price discrimination thereby harming customers and foreclosing competitors. Swiss Post has appealed the case to the Swiss federal court "Bun- desverwaltungsgericht"	

Note: SE: See <http://www.kammarattenistockholm.domstol.se/Domstolar/kammarattenistockholm/Domar/Domar%202016/4722-16.pdf>.

Source: Questionnaire to USPs; CJEU decisions; National courts' decisions

**Table 18**  
**Other European competition cases involving postal operators**

COUNTRY	TYPE OF CASE	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
Italy	Cartel	Court of Justice C-428/14 20-1-2016	Closed	N/A	Postal operators involved: Two Italian DHL entities  Preliminary ruling Leniency/immunity	Re question 1: Based on Art. 101 TFEU and Reg. No 1/2003, the instruments adopted in the context of the European Competition Network ("ECN"), in particular the ECN Model Leniency Programme, are not binding on national competition authorities Re question 2: Based on Art. 101 TFEU and Reg. No 1/2003 there is no a legal link between the application for immunity and the summary application submitted to a NCA in respect of the same cartel. Also, where the summary application submitted to a NCA has a more limited material scope than that to the Commission, that NCA is not required to contact the Commission or the undertaking itself. Re question 3: Art. 101 TFEU and Reg. No 1/2003 do not preclude a NCA from accepting a summary application for immunity from an undertaking which had not submitted an application for full immunity to the Commission, but rather an application for reduction of the fine.	

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COUNTRY	TYPE OF CASE	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
Slovakia	Abuse of dominance	Court of Justice C-293/15 30-06-2016  (Appeal by Slovakia Post against General Court decision T-556/08 25-3-2015, which resulted from appeal by Slovakia Post against Commission decision Case COMP/39.562 — Slovak Postal Law 7-10-2008)	Closed	Hybrid mail	Postal operator involved: Slovenská Pošta As a result of an amendment of the Slovakian Postal Law, the delivery of hybrid mail (electronic communication converted into the physical form of a letter mail item) was reserved to Slovakia Post, the incumbent postal operator.  In its decision, the Commission defined separate markets for traditional and hybrid mail services and concluded that the granting of an exclusive right to distribute hybrid mail to Slovakia Post resulted in abuse of a dominant position.	Both Court's confirmed the Commission decision: granting an exclusive right to distribute hybrid mail to Slovakia Post was in breach of Art. 106(1) jo.102 TFEU.	Slovakia Post i.a. also - unsuccessfully - argued that the Commission's definition of a separate market for hybrid mail services, which includes all levels of the distribution chain is erroneous, since it cannot be reconciled with the Postal Notice: Instead of defining the relevant market by taking into account a market for hybrid mail services, separate from traditional postal services, Slovakia Post claimed that the Commission should have defined a separate market for the traditional delivery of postal items and then assessed whether that market included the physical delivery of postal items generated in the context of hybrid mail.

Source: Questionnaire to USPs; CJEU decisions; National courts' decisions

**Table 19**  
**Other national competition cases involving postal operators**

COUNTRY	TYPE OF CASE	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION
Austria		No cases reported				
Bulgaria		No cases reported				
Croatia	Predation		Closed	letter mail services	Abuse of a dominant position	The Croatian Competition authority issued a decision on 26 November 2015 (No. 580-09/84-2015-068) upon the initiative of the undertaking CITY EX d.o.o., finding that the USP did not distort market competition by abuse of its dominant position on the relevant market. The authority's decision was based on the national competition law. Proceedings on a possible breach of Article 102 TFEU were closed without any conclusion on the side of competition authority.
Cyprus	Predation	Commission for the Protection of Competition 22/2014	Closed	Unaddressed mail		Rejected
Denmark	Abuse of dominance	Bring Citymail Denmark A/S against Post Denmark A/S (now PostNord) - (ordinary national civil lawsuit in Denmark)	Closed			Ordinary national civil lawsuit raised by Bring Citymail Denmark A/S (wholly owned subsidiary of Posten Norge AS) in 2011 against Post Denmark A/S (now PostNord), claiming damages after the cases where the Danish Competition and Consumer Authority concluded that Post Denmark has abused dominance. The lawsuit was settled outside the courts in 2016.
Denmark	Other	Supreme court, case no 2/2008	Closed	Non-addressed mail	Selectively low prices in respect of non-addressed mail	Printed: UfR 2013.1342 H
Finland	Predation	SSM (Suomen suoramarkkinointi)	Ongoing	Unaddressed mail delivery		Posti has won the case in 2 instances, case now in the Supreme Administrative Court

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COUNTRY	TYPE OF CASE	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION
France	Other	Messagerie - décision de l'ADLC n° 15-D-19 du 15 décembre 2015	Ongoing	Express		Appeal
Hungary	Other	Vj-57/2013	Closed	rent of PO Boxes	increase of renting fee of PO Boxes	n/a
Iceland	Other	Decision no. 8/2017	Closed	addressed letters, unaddressed letters, parcels, electronic services	n/a	Settlement without admission of breach of competition law or imposing of fines
Ireland	Zonal pricing	n/a	Closed	Periodicals	Case in 2014	n/a
Italy	Predation	A413	Closed	bulk mail	n/a	€43 million fine cancelled by courts.
Italy	Other	A441	Closed	US products VAT exemption	n/a	Law exemption on special offers cancelled.
Italy	Other	SP/157	Closed	Access to counters	n/a	Non-discrimination principle for technical and economic conditions offered to competitors of PI subsidiaries reinforced.
Latvia	-	No cases reported	-	-	-	-
Liechtenstein	-	No cases reported	-	-	-	-
Lithuania	Predation	n/a	Ongoing	Letter mail services	Abuse of a dominant position	n/a
Luxembourg	-	No cases reported	-	-	-	-
Netherlands	Predation	Court of Rotterdam 26-09-2013, ECLI:NL:RBROT:2013:7337	Closed	non 24h bulk mail	Predatory Pricing	No predatory pricing
Norway	Abuse of dominance	Schenker companies against Posten Norge AS (ordinary national civil lawsuit in Norway)	Closed	n/a	n/a	Ordinary national civil lawsuit raised by Schenker companies against Posten Norge AS in 2010, claiming damages based on the "PiB" (post in shops) ESA and EFTA court case against Posten Norge AS (abuse of dominance). The lawsuit was settled outside of courts in 2015.

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COUNTRY	TYPE OF CASE	CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION
Poland	Excessive pricing	III SK 21/16	Closed	addressed items	n/a	No abuse
Slovakia	-	No cases reported	-	-	-	-
Slovenia	-	No cases reported	-	-	-	-
United Kingdom	Discriminatory pricing	CW/01122/01/14 and CW/01122/01/14	Ongoing	D+2 Access letter delivery services	Complaint from Whistl UK Limited in relation to the prices, terms and conditions on which Royal Mail plc is offering to provide access to certain letter delivery services. CW/01122/01/14 Complaint from Whistl UK Limited in relation to the prices, terms and conditions on which Royal Mail plc is offering to provide access to certain letter delivery services. CW/01122/01/14	-

Source: Questionnaire to USPs; National courts' decisions



**Box 9 Appeal court case in Sweden confirms the applicability of the bpost judgment logic in other markets**

In 2015, PostNord Sweden proposed to introduce conditions on its bulk mail quantity discount scheme (a per-sender condition). Regulator PTS issued an injunction to block the proposed change on the grounds that the competitive situation in Sweden is different than in Belgium.

Then, on 29 June 2016, the Stockholm Administrative Court of First Instance overturned the regulator's decision. The court provided inter alia the following reasoning:

- "According to the Court, in a competitive market, the volume discount is also aimed at inducing senders to send more mail. The fact that the volume discount can also have another function or effect does not deprive it of its main purpose." (p.15)
- "Given that the volume discount is considered to have a demand stimulating effect also in a competitive market, the aggregation model would counteract the purpose of the volume discount, because senders' incentive to send more mail would disappear. Such a situation could lead to the postal operator restricting or even abolishing the system, so to preserve the financial stability of the company. Such a decision would have a negative impact on demand in general (p. 41 bpost-case). Forcing PostNord to offer the same conditions for annual volume discounts to all customers, including the intermediaries, would therefore also bring negative consequences for the Swedish market." (p.16)
- "In light of the above, the Court finds that the main purpose of the volume discount as such, both in a competitive postal market as well as in a monopoly market, is to induce senders to send more mail. In light of this, the Court takes the view that in the Swedish postal market senders and intermediaries are not in a comparable situation relative to the main purpose of the volume discount. PostNord's new terms and conditions for annual volume discounts are therefore consistent with chapter 3 section 2 of the Postal Act, as they cannot be considered discriminatory against intermediaries." (p.16)

Source: Copenhagen Economics based on (i) Swedish Post and Telecom Authority (2017), The Swedish Postal Services Market 2016; (ii) Administrative Court of Stockholm (2016) case no. 27651-15, 29 June 2016. (Copenhagen Economics translation).

### 2.7.3 Mergers in the postal sector

In addition, we have seen several merger cases in the postal sector taken by the Commission, most notably the acquisition of TNT Express by FedEx Corporation, see Table 20.

**Table 20**  
**European cases concerning mergers in the postal sector**

CASE	CASE STATUS	POSTAL PRODUCTS CONCERNED	ISSUE	DECISION	REMARKS
General Court Case T-194/13 7-3-2017  (Appeal against Commission decision COMP/M.6570 — UPS/TNT Express 30-1-2013 Appeal against T-194/13 ongoing (C-265/17))	Ongoing	Small packages	UPS intended to acquire TNT.	Commission decision Prohibition of the proposed acquisition of TNT by UPS. It would restrict competition in 15 Member States for express delivery of small packages to other European countries as it would reduce the number of significant players in that market to only three, or even two.  Court decision The Court annuls, on the ground of a procedural irregularity, as the Commission infringed UPS' rights of defence by relying on an econometric analysis, which had not been discussed in its final form during the administrative procedure.	-
Commission decision COMP/M.8280 – DEUTSCHE POST DHL / UK MAIL 15-12-2016	Closed	Domestic and international postal services	Deutsche Post DHL intended to acquire UK Mail.	Merger not opposed.	simplified procedure followed.
Commission decision COMP/M.8225 — GeoPost/Corfin 14/BRT 24-11-2016	Closed	Parcel and freight delivery	Geopost and Corfin Srl intended to acquire joint control of BRT.	Merger not opposed.	simplified procedure followed.
Commission decision COMP/M.8085 - AEA / Scan Global Logistics 8-7-2016	Closed	Asset light international freight forwarding services (target)	AEA intended to acquire Scan Global Logistics.	Merger not opposed.	simplified procedure followed.
Commission decision COMP/M.7630 — FedEx/TNT Express 8-1-2016	Closed	Integrating service	FedEx intended to acquire TNTGlobal Logistics.	Merger not opposed. 1Transaction was notified on 26-6-2015. In-depth investigation was conducted as the Commission was (initially) concerned that following the transaction, the merged entity would face insufficient competitive constraints from the only two remaining integrators, DHL and UPS.	-
Commission decision COMP/M.7341 - MVD / POSTCON / ADVO 19-9-2014	Closed	Mail delivery services (target)	MVD and Postcon intended to acquire joint control of ADVO.	Merger not opposed.	simplified procedure followed.
Commission decision COMP/M.7052 – Lloyds Development Capital/ PostNL/ TNT Post UK 30-1-2014	Closed	Postal services	LDC and PostNL intended to acquire joint control of TNT Post UK.	Merger not opposed.	simplified procedure followed.

Source: Questionnaire to USPs and EC; CJEU decisions.

#### **2.7.4 VAT exemption**

There were new cases regarding the treatment of the VAT exemption in the postal sector. Most notable case was in Sweden, where Sweden considered that since it ended its historic operator's monopoly in 1993 there is no longer a 'public postal service' within the meaning of Dir. 2006/112, and thus no longer an obligation to exempt any postal service provider from VAT. However, the CJEU's decision reconfirmed that the term 'public postal services' must be interpreted to cover operators, whether they are public or private, who undertake to provide in a Member State all or part of the USO (see C-357/07, par. 40). As VAT exemption may affect competition in the postal & delivery markets, we see more discussions about the advantages and disadvantages of the current treatment of the VAT exemption on postal services, see Table 21.

**Table 21**  
**European cases concerning treatment of VAT in the postal sector**

COUNTRY	CASE	CASE STATUS	ISSUE	DECISION
Italy	Court of Justice C-273/16 4-10-2017	Closed	Prejudicial procedure - national complainant: Federal Express Europe Inc.  The Italian revenue authority issued tax assessment notices against FedEx regarding 'inbound' transport services carried out by it.	Re question: Art. 144 jo. Art. 86(1)(b) VAT Dir. precludes national legislation to require for the application of an exemption from VAT for ancillary services, including transport services, not only that their value is included in the taxable amount, but also that VAT has in fact been charged on those services at the customs stage at the time of importation.
Italy	Court of Justice C-606/12 & C-607/12 6-3-2014	Closed	Prejudicial procedure - national complainant: Dresser-Rand SA  Uncertainty on what concerns a transport to another Member State and related notices of recovery reassessing unpaid VAT.	Re question 2: Art. 17(2)(f) VAT Dir. means that, in order for the dispatch or transport of goods not to be classified as a transfer to another Member State, those goods, after the work on them has been carried out in the Member State in which dispatch or transport of the goods ends, must necessarily be returned to the taxable person in the Member State from which they were initially dispatched or transported.
Poland	Court of Justice C-169/12 16-5-2013	Closed	Prejudicial procedure - national complainant: Federal Express Europe Inc.  Uncertainty concerning the time at which the liability to pay VAT arises.	Re questions: Art. 66 VAT Dir. precludes national legislation to require, in respect of transport and shipping services, that VAT is to become chargeable on the date on which payment is received in full or in part, but no later than 30 days from the date on which those services are supplied, even where the invoice has been issued earlier and specifies a later deadline for payment.
Sweden	Court of Justice C-114/14 21-4-2015	Closed	Commission action for Sweden's failure to fulfil obligations under Article 258 TFEU Sweden considers that since it ended its historic operator's monopoly in 1993 there is no longer a 'public postal service' within the meaning of Dir. 2006/112, and thus no longer an obligation to exempt any postal service provider from VAT. Based on Art. 258 TFEU, the Commission asked the Court to declare that by failing to exempt from VAT, Sweden had failed to fulfil its obligations under Art. 132(1)(a) and 135(1)(h) of Council Directive 2006/112/EC.	The Court has previously held that the term 'public postal services' in an identically worded Art., must be interpreted to cover operators, whether they are public or private, who undertake to provide in a Member State all or part of the USO (see C-357/07, par. 40). As Posten AB had been designated a USP and specific obligations have been imposed on it, it must be exempted from VAT. Also, Member States should exempt from VAT the supply at face value of postage stamps valid for use for postal services within national territory.

Source: National courts' decisions

## CHAPTER 3

# EMPLOYMENT AND ENVIRONMENTAL DEVELOPMENTS

This chapter is comprised of two broad topics: developments in employment and environmental sustainability in the postal sector.

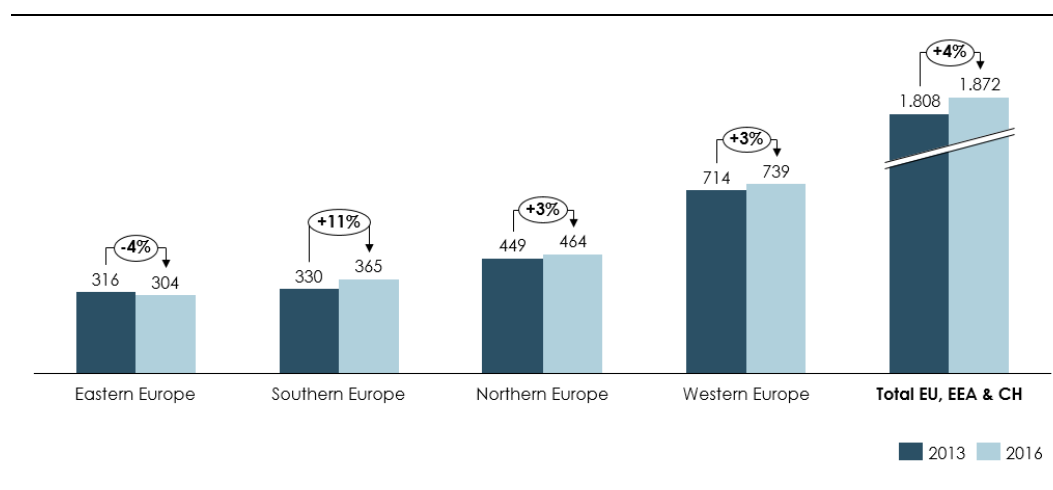
## 3.1 THE POSTAL SECTOR'S CONTRIBUTION TO TOTAL EMPLOYMENT

The postal sector is a very labour intensive sector and national postal operators have traditionally been the largest domestic employers. In this first section, we look at the contribution of the postal sector to the total employment in the countries of our analysis. We analyse both the overall postal and courier sector, which includes companies providing postal and/or courier activities, and the universal service providers in isolation.

### 3.1.1 Evolution of postal and courier sector employment

Based on data from 30 countries, in the 2013-2016 period total employment in the postal and courier sector increased by four per cent. The sharpest increase (11 per cent) was in Southern European countries, while in Eastern Europe total employment declined by four per cent, see Figure 52.

**Figure 52**  
**Evolution of postal and courier sector employment, 2013 vs 2016**  
Headcount, thousands



Note: Postal sector employment includes all postal and courier activities for individuals with age between 15 - 64 years old. The figure includes data from the following 30 countries: AT, BE, BG, HR, CY, CZ, DK, EE, FI, FR, DE, EL, HU, IS, IE, IT, LV, LT, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH, UK.

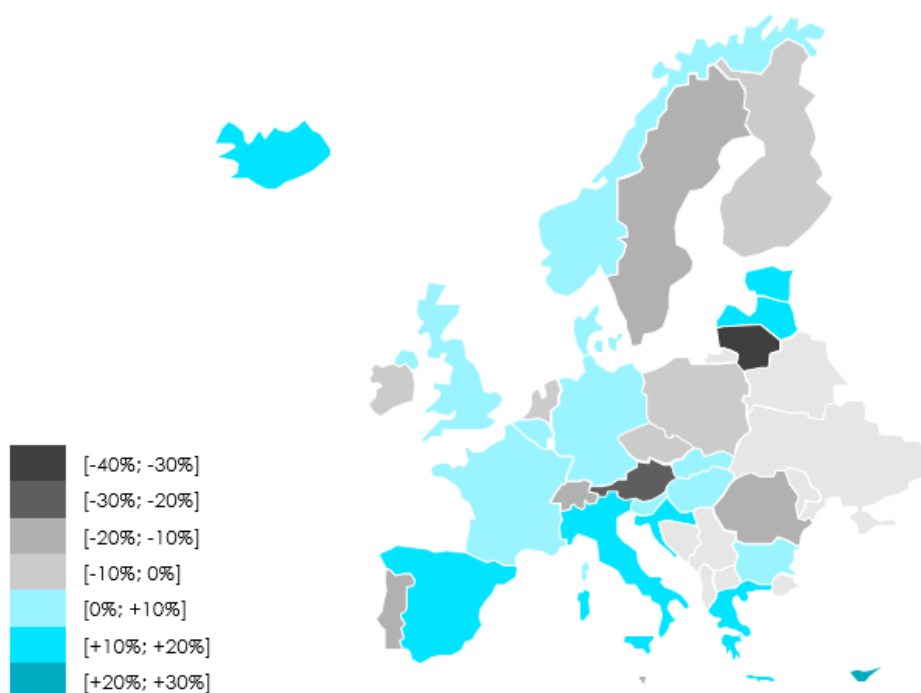
Source: Eurostat [lfsa\_egan22d] Postal and courier activities (accessed, 25 Jan 2018)

In contrast to the frontrunners in staff reductions (e.g. LT, AT, RO, SE), some postal & courier markets have retained a relatively stable number of employees (e.g. BE, DK, FI, NL). In countries with a

high degree of part time workers, it could be that a shift to a larger share of part time work over time has kept the number of employees stable, while at the same time reducing the total employment in terms of FTEs. In some countries (e.g. CY, EL, IS, LV) the number of employees has increased up to 23% over the investigated period, see Figure 53.

**Figure 53**  
**Overall percentage change of the postal and courier sector's total employment, 2013-2016**

Percentage change 2013-2016



Note: Postal sector employment includes all postal and courier activities for individuals with age between 15 - 64 years old.

Source: Eurostat [lfsa\_egan22d] Postal and courier activities (accessed, 25 Jan 2018)

As shown further in this chapter, the increase in the postal and courier sector's total employment in some markets is primarily due to growth of employment at non-universal postal services providers.

#### *Postal and courier sector's share of total employment*

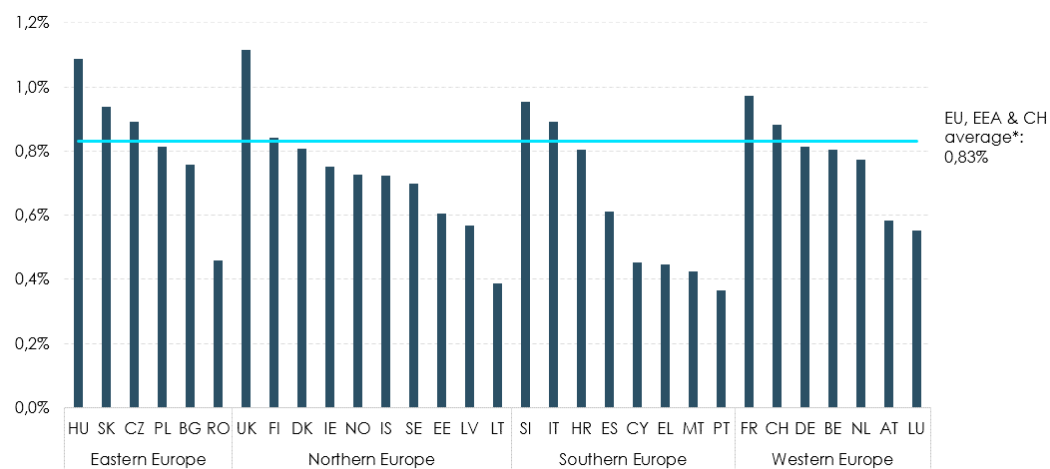
Despite the increase in employment in the postal and courier sector, its importance in the overall employment in the EU, EEA & CH area has decreased. The total employment (in all sectors) at European level has increased on average by 3,6 per cent circa in the 2013-2016 period, while employment in the postal and courier sector has increased by around 3,5 per cent per cent.

The average level of the postal sector's contribution to total employment in the EU, EEA & CH area in 2016 was 0,83 per cent, see Figure 54. A few countries are driving this average up (HU, UK, SI,

and FR). Interestingly, in these countries, the incumbent has a market share close to 100 per cent of total letter post volumes.

It is also worth noting that four countries, namely DE, FR, IT and UK, constitute 60% of all employees in the European postal and courier sector, i.e. including USP and non-USP operators.

**Figure 54**  
**Postal and courier sector's share of total employment, 2016**  
Share of total employment



Note: Postal sector employment includes all postal and courier activities for individuals with age between 15 - 64 years old. LU: 2013 data. \*weighted average of country-level values.

Source: Eurostat [lfsa\_egan22d] Postal and courier activities (accessed, 25 Jan 2018); Eurostat [lfsi\_emp\_a] (accessed, 23 Jan 2018)

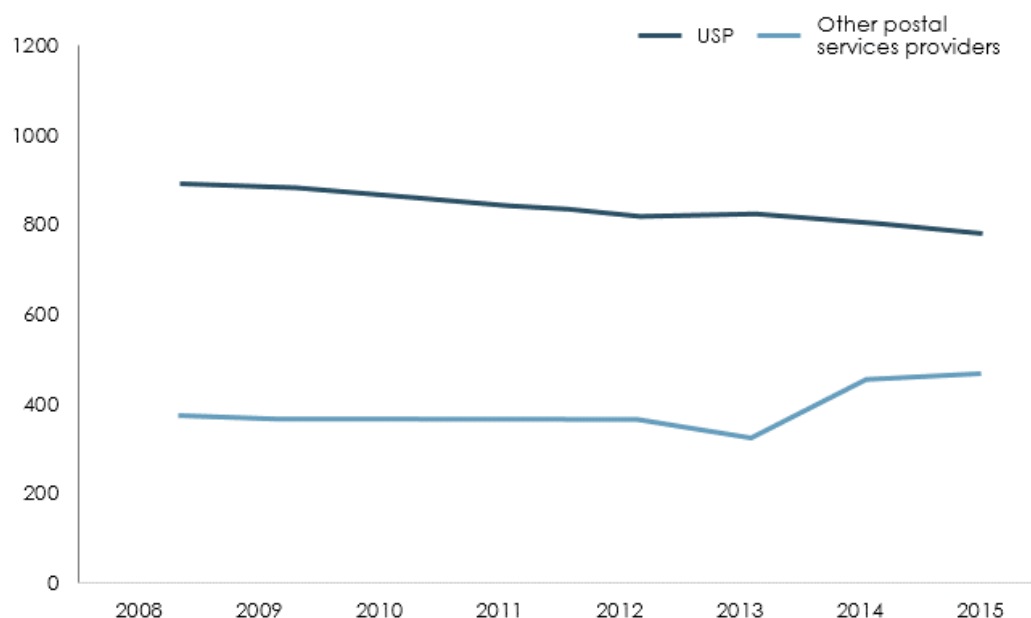
### 3.1.2 Evolution of employment at USPs and other postal operators

The employment at other (non-USP) postal operators has been the driver of the overall increase in the postal sector's employment. Employment at other postal service providers has increased significantly in the 2013-2015 period after remaining relatively flat since 2008. Based on results from a study conducted by the ERGP<sup>37</sup>, in the 2008-2015 period there has been a 29,8% increase in the number of people employed at other postal services providers, see Figure 55.

At the same time, employment at USPs has continued to decline between 2013 and 2015. This is similar to the trend since 2008. USPs' traditional letter business, and employment level therein, has been under pressure for several years now due to technological development and changes in communication behaviour. Based on the ERGP study, the number of people employed by the USP has declined by 13 per cent between 2008 and 2015, see Figure 55.

<sup>37</sup> ERGP (2016) 38, Report on core indicators for monitoring the European postal market.

**Figure 55**  
**Total employment by USP and other postal providers, 2008-2015**  
Headcount, thousands



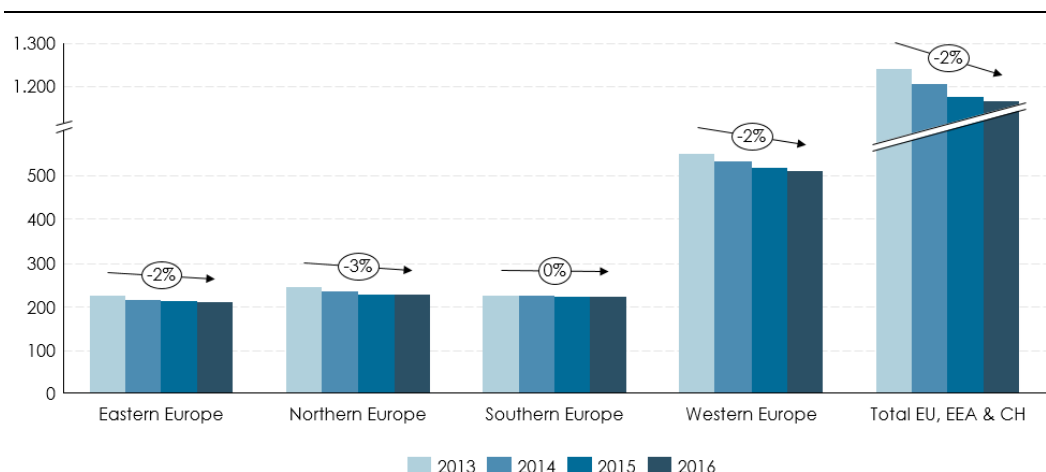
Note: Consistent data for all countries not available for all years. Includes data from the following countries: BE, BG, CH, CY, CZ, DE, EE, EL, ES, FR, FY, HR, HU, IT, LT, LV, LU, MT, PL, PT, RO, SE, SI, SK. Contains some estimates. Figures have been estimated in two ways. In the case where a data point is missing between two years (for example, 2008 and 2010 have data, but 2009 does not, the mid-point between the years is used for the missing data. Where the data is missing for the 2008, 2014 or 2015, the percentage change between the next two complete years is applied to estimate the missing data.

Source: ERGP (2016) 38, Report on core indicators for monitoring the European postal market

In the 2013-2016 period, employment at USPs in the EU, EEA & CH area declined at a two per cent annually. Northern Europe registered the steepest decline (-2,7 per cent average per year), while Southern Europe had a flatter development, with a decrease of only 0,1 per cent per year, see Figure 56.



**Figure 56**  
**Evolution of USP employment**  
Staff employed in the home country, headcount, thousands

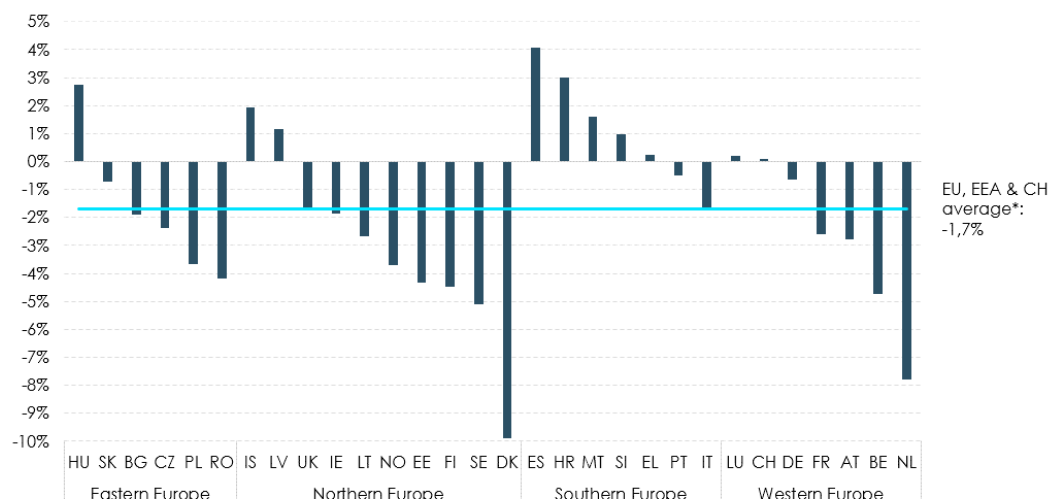


Note: Employment at USPs corresponds to the persons employed by the USPs in order to provide postal services within the economic territory of country of reference. It excludes staff working exclusively in other activities (e.g. financial services). It includes persons absent for a definite period of time (e.g. maternity leave). The figure includes data from the following 31 countries: AT, BE, BG, HR, CY, CZ, DK, EE, FI, FR, DE, EL, HU, IS, IE, IT, LV, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH, UK.

Source: European Commission, Domestic postal services (USP) - employment (accessed, 15 Jan 2018); Questionnaire to USPs

Denmark and the Netherlands registered the steepest decline in USP employment, with an annual decline of 9,8 per cent and 7,8 per cent respectively. Sweden and Belgium follow with annual declines of around five per cent. USPs in ten countries have increased their labour force in the mail segment and in only three of these the increase was above two per cent, namely in Hungary, Croatia and Spain, see Figure 57.

**Figure 57**  
**Evolution of employment at USPs, annual change, 2013-2016**  
Annual change in total USP employment, 2013-2016



Note: Employment at USPs corresponds to the persons employed by the USPs in order to provide postal services within the economic territory of country of reference. It excludes staff working exclusively in other activities (e.g. financial services). It includes persons absent for a definite period of time (e.g. maternity leave). \*un-weighted average of country-level values. CY - excluded because of break in time series.

Source: European Commission, Domestic postal services (USP) - employment (accessed, 15 Jan 2018); Questionnaire to USPs

The strongest pressure to reduce costs due to falling mail volumes can be observed in Denmark, where PostNord has announced that it (due to strong digitalisation) will have to reduce its labour force by 30% over the next 2-3 years, see Box 10.

#### Box 10 Recent developments in the level of employment in the postal sector in Denmark

In March 2017, PostNord announced that it is adapting to digitalisation in accordance with the strategy the company established three years ago. To counter the accelerating digitalisation in Denmark and achieve profitability, PostNord Denmark will introduce a new production model. As a result, the number of employees in Denmark will decrease by 3500-4000 in 2-3 years (from a starting level of 9.000 circa in 2016). In the transition period, the Danish company expects to continue to have an operational deficit, though estimated to be financed with own earnings. In the coming three years to further ensure PostNord's competitiveness in all markets, PostNord plans to reduce its workforce with another 1,200 jobs in Denmark.

Source: PostNord (2017), PostNord styrker omstillingen i Danmark yderligere. Desuden fortsætter arbejdet med at reducere koncernens administrative omkostninger (accessed, 11 Dec 2017); USP questionnaire

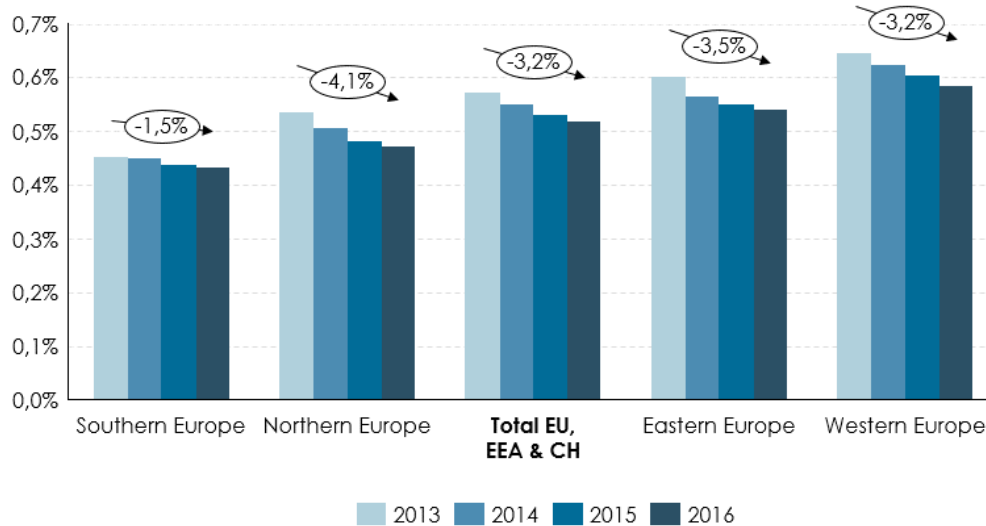
### *USPs' share of total employment declined at varying rates*

The decline in the number of USPs' employees providing postal services has translated into a decline of USPs' employment contribution to total domestic employment. Northern and eastern European countries have shown the highest rate of decline (-4,1% and -3,5% respectively), see Figure 58. In Eastern Europe, the lower share of USP employment may be due to an overall increase in employment levels as economies recover from high unemployment rates caused by the 2008 financial crisis.

**Figure 58**

#### **Contribution of USP employment to the overall employment at EU-level**

Share of total employment, %

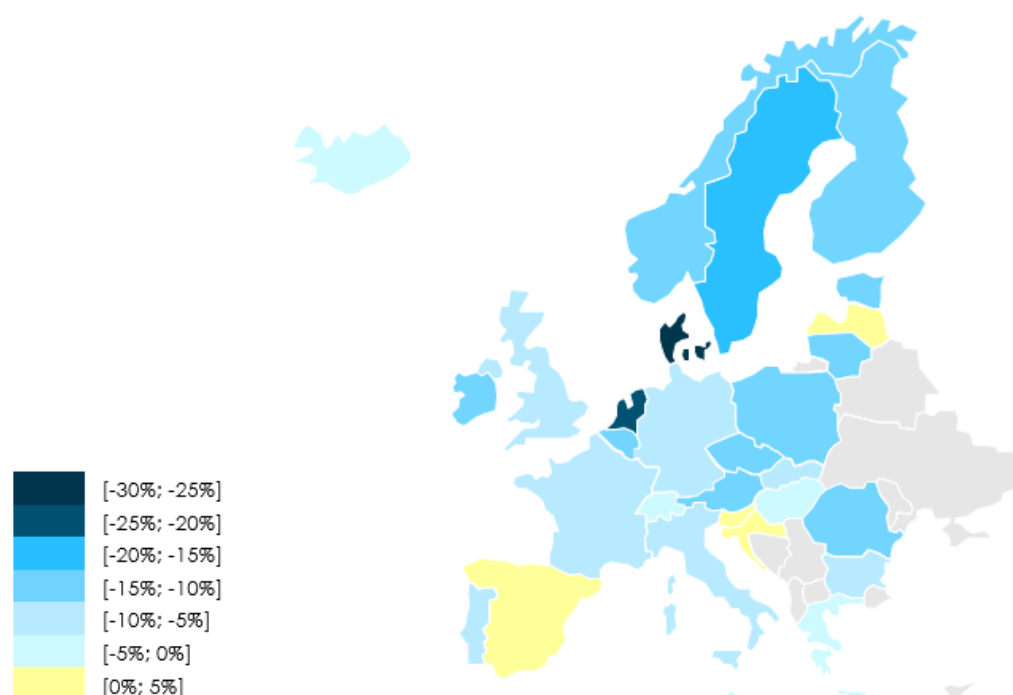


Note: The share of postal sector employment over total is calculated as the ratio of the number of total persons employed by the USPs to provide postal services over the total persons employed in the country. The figure includes data from the following 31 countries: AT, BE, BG, HR, CY, CZ, DK, EE, FI, FR, DE, EL, HU, IS, IE, IT, LV, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH, UK.

Source: European Commission, Domestic postal services (USP) - employment (accessed, 15 Jan 2018); Questionnaire to USPs; Eurostat [lfsi\_emp\_a] (accessed, 23 Jan 2018)

At a country level, Denmark (-30,2%), the Netherlands (-22,8%) and Sweden (-17,8%) saw the steepest declines in USPs' contribution to total domestic employment. In four countries (Spain, Croatia, Latvia and Slovenia), the share of USPs employment in total employment has increased, see Figure 59.

**Figure 59**  
**Overall percentage change of the USP's share of total employment, 2013-2016**  
Total percentage change 2013-2016

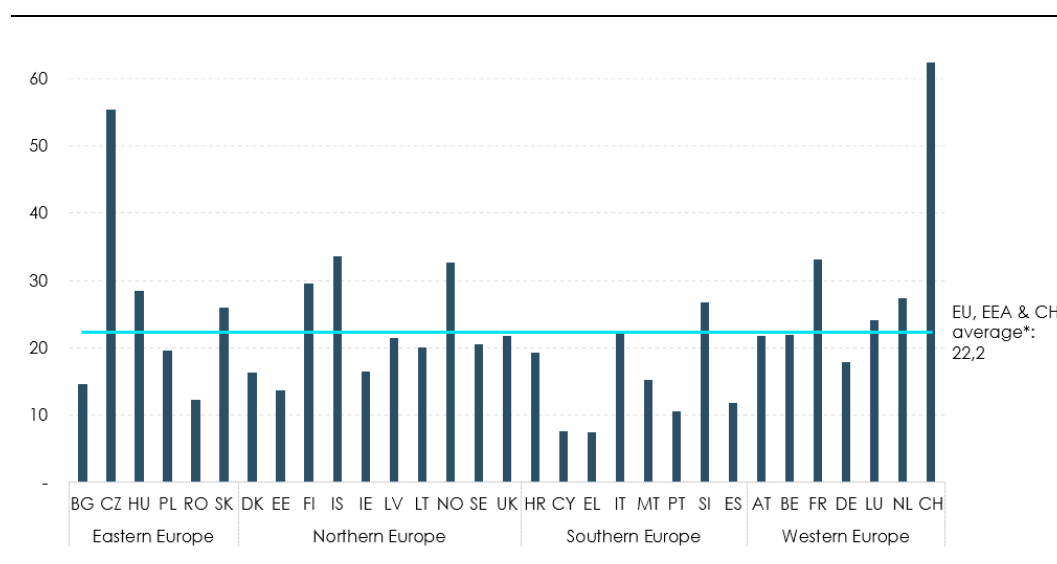


Note: The share of postal sector employment over total is calculated as the ratio of the number of total persons employed by the USPs to provide postal services over the total persons employed in the country.

Source: European Commission, Domestic postal services (USP) - employment (accessed, 15 Jan 2018); Questionnaire to USPs; Eurostat [lfsi\_emp\_a] (accessed, 23 Jan 2018)

Employment levels at the USPs, per capita, vary substantially, reflecting varying market circumstances (e.g. population density) as well as differences in operating models (manual vs automated work). Whereas Switzerland and the Czech Republic stand out as the countries with the most USP employees per capita compared to the other European countries, Greece and Cyprus are the countries with the lowest number of USP employees per capita, see Figure 60.

**Figure 60**  
**Total employment at USPs, per 10,000 inhabitants, 2016**  
USP headcount per 10,000 inhabitants, 2016



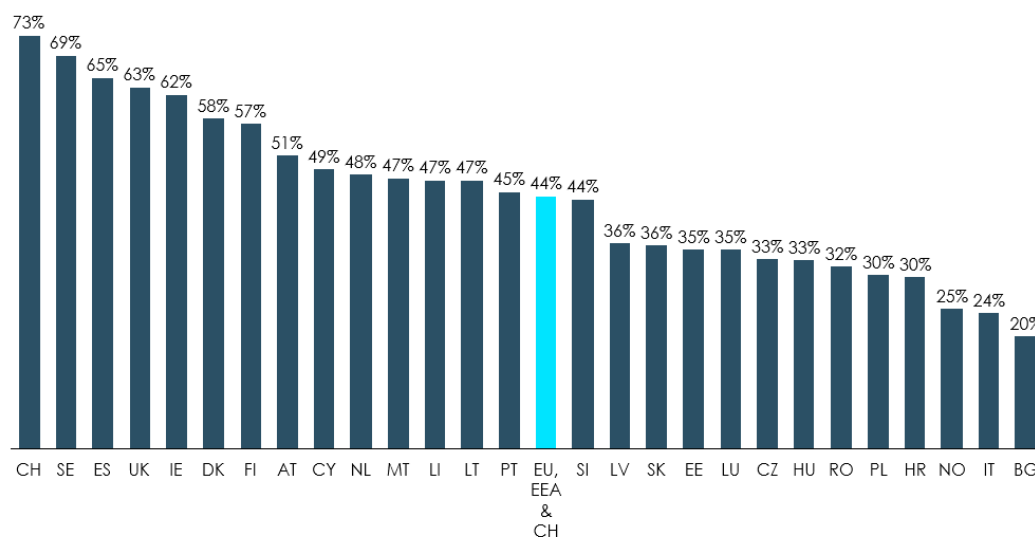
Note: Employment at USPs corresponds to the persons employed by the USPs in order to provide postal services within the economic territory of country of reference. It excludes staff working exclusively in other activities (e.g. financial services). It includes persons absent for a definite period of time (e.g. maternity leave). \*un-weighted average of country-level values.

Source: European Commission, Domestic postal services (USP) - employment (accessed, 15 Jan 2018); Questionnaire to USPs; Eurostat [demo\_pjan] (accessed, 15 Jan 2018)

USPs have widely different profiles in terms of their employment structure. Based on the UPU information, the delivery function makes up between 20% (BG) and 73% (CH) of the total labour force. The average across the investigated countries is 44%, see Figure 61.

The high variance in the share of delivery staff in total USP employment is influenced, *inter alia*, by the level of USP diversification into other businesses. In particular, as discussed in section 1.4.1 in chapter 1, there are stark differences among USPs in terms of the size of non-postal activities. For instance, in Italy, Poste Italiane provides a wide range of banking services across the country resulting in high level of employment in the banking part of their business vs. postal delivery (24 per cent). On the other side of the spectrum, Swiss Post focuses most of its operations on postal services, resulting in a high share of delivery staff in total employment (73 per cent).

**Figure 61**  
**Share of delivery staff in the USPs' total employment, 2016**  
Share of delivery staff in total employment



Note: Data was not available for the following countries: BE, FR, DE, EL, IS. For the following countries different years were used: IE (2015), NL (2015), ES (2013), SE (2014). Delivery staff means postmen/letter carriers. The total number of staff is measured as headcount, i.e., including part-time workers. The number of staff includes established or unestablished staff under contract to the designated operator, i.e. also including other activities (e.g. financial services) provided by the USP. It does not include persons employed by contractors, or temporary staff taken on during holiday periods or for occasional events.

Source: UPU (accessed 24 Jan 2018)

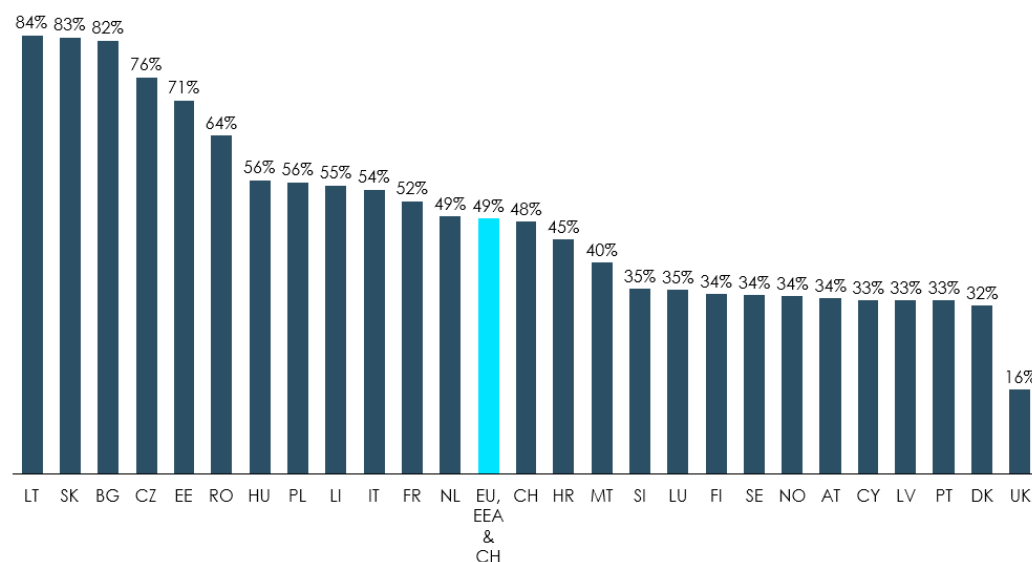
### *Demographic trends and gender aspects in the USPs' labour force*

The demographic situation in postal services – which in this section relates to gender and age aspects – is mainly driven by historical developments.

In many countries, USPs have historically had a predominantly male workforce, based on IPC research results<sup>38</sup>. However, we find that gender employment was more balanced in 2016 in EU, EEA & CH – the average share of women employed was 49%. The share of women employed by USPs varies greatly across the investigated countries, according to UPU data, ranging from 16 per cent female staff in the UK to 84 per cent in Lithuania, as shown in Figure 62.

<sup>38</sup> International Post Cooperation (2015), Global Postal Industry Report, October 2014, International Post Cooperation, Brussels, Belgium. p 54-55.

**Figure 62**  
**Share of women in USPs' total employment, 2016**  
Share of female employees over total employment



Note: The following countries were not available: BE, DE; EL, IS, IE, ES.

Source: UPU (accessed 24 Jan 2018)

National averages however do not always tell the whole story. For instance, Royal Mail in the UK records a low share of female staff on average, but has a higher share of women in top management positions compared to other operators. The company actively engages in initiatives in favour of gender diversity, see Box 11.

#### Box 11 Gender diversity and initiatives at Royal Mail

The share of women employed in Royal Mail's operational positions is 16 per cent, but it raises to 30 per cent at senior management level and 50 per cent at board level.

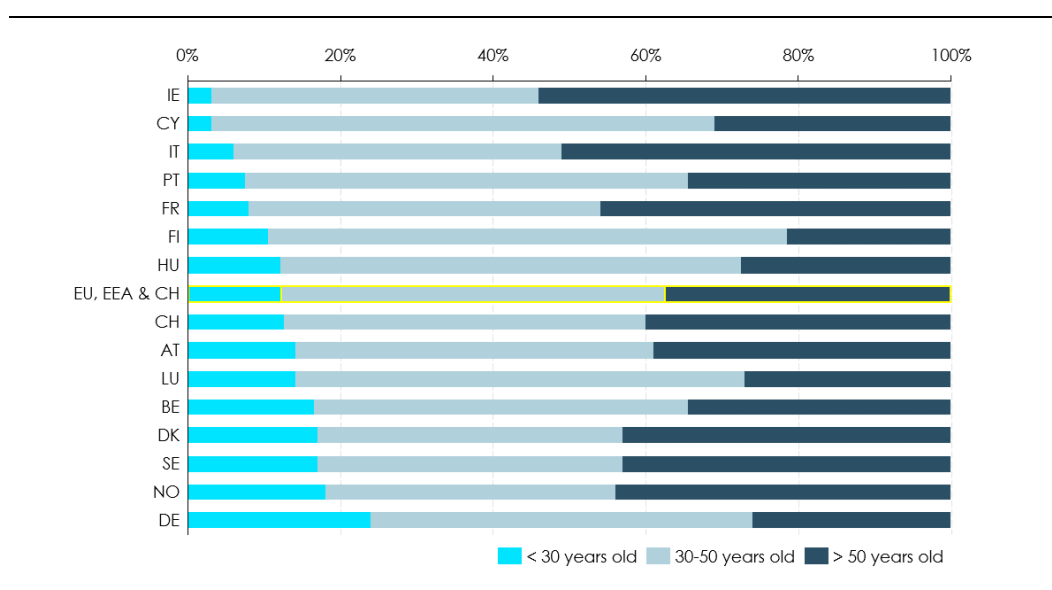
Royal Mail carries out initiatives in favour of gender balance, such as balanced shortlisting, which helped to increase the number of women hired in frontline roles. The company launched a new drive to increase the number of women appointed to Delivery Office Manager positions, offering candidates support through a 12-week development programme before being placed into a role. As a result, it appointed 46 women in Delivery Office Manager roles in the 2016-2017 period, corresponding to 26 per cent of Delivery Office hires of the period.

Royal Mail was named in the Times Top 50 Employers for Women and listed as a top 20 company for senior leader gender diversity in the Hampton-Alexander Review.

Source: Royal Mail (2017), annual report 2016/17; The Times (2016) Top 50 Employers for Women 2016, <https://gender.bitc.org.uk/TTT502016> (accessed, 11 Dec 2017)

In terms of age diversity, the majority of the workforce at USPs is above 30 years old (based on data from IPC carrier intelligence reports from 15 USPs). Employees over 50 comprise over 30 per cent of the workforce at many USPs. Deutsche Post stands out with more than 20 per cent of employees below 30 years old – almost twice the EU, EEA & CH average, see Figure 63.

**Figure 63**  
**Share of employees by age in USPs' total employment, 2018**  
Share of employees



Note: CY, HU, CH – report from 2017. DK and SE both refer to PostNord group.  
Source: IPC carrier intelligence reports 2018, 2017

This age structure – i.e. that the majority of employees of USPs throughout the European Union are over 40 – was already observed in the European Commission's report on the application of the Postal Services Directive (2015).

## 3.2 EMPLOYMENT MODELS AND CONDITIONS

Developments in technology, user needs, and postal business models change employment conditions and the demands on the postal operator workforce.

In addition to the overall decline in employment at USPs, we find that new operational models, such as fewer delivery days than 5 (e.g. 1 delivery day in Denmark), competition in the mail segment (however, only in countries where there is no strong presence of collective agreements), and/or the pressure from strong e-substitution have led to:

- Even more pressure on reducing expensive employment contracts, e.g. civil servants, which have been decreasing in number at a rate of -6,7 per cent annually in average, against a -1,7 per cent average annual rate of decline of overall employment over the entire period of 2013-2016;
- New employment models, such as on-call work, temporary agency work, outsourcing, sub-contracted workers, and self-employment, used by up to 23 USPs;



- More performance-related pay, e.g. pay based on the number of delivered mail items and parcels per day, that have increased by 5% since 2013;

Market opening and increased competition have forced national postal operators to modernise their wage structure. However, such changes were more prominent where collective labour agreements could be redefined and become more flexible.

### 3.2.1 Evolution of civil servants' employment at USPs

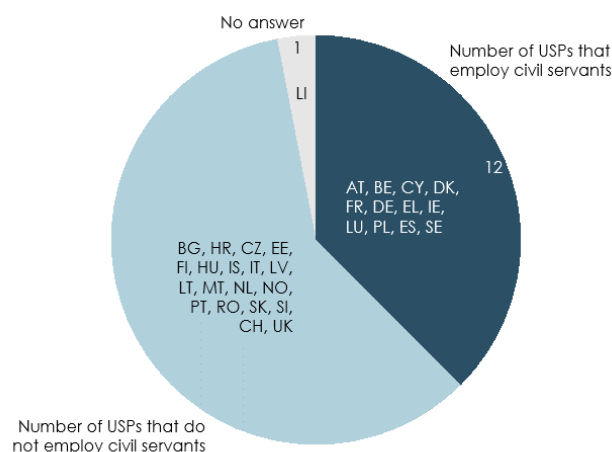
In those countries where USPs still employ civil servants, we have seen a steady decline in the number of civil servants employed for postal services.

In total, twelve USPs out of 32 employ civil servants. This corresponds to 38 per cent of the investigated countries, see Figure 64.

**Figure 64**

#### Number of USPs that employ civil servants vs USPs that do not employ them

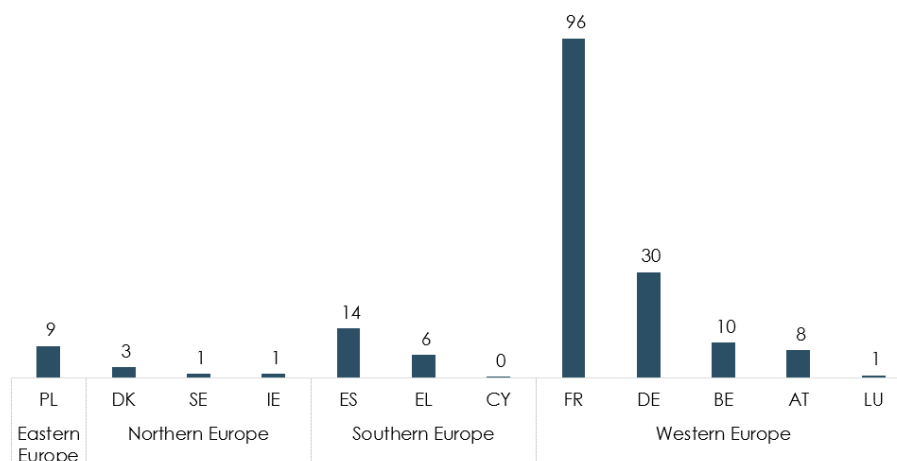
Number of USPs



Source: Questionnaire to USPs

The number of civil servants across these USPs varies, with USPs in Western Europe employing the most civil servants and the French USP having the highest absolute headcount (95.500), see Figure 65. In Eastern Europe, the Polish USP is the only operator to employ civil servants.

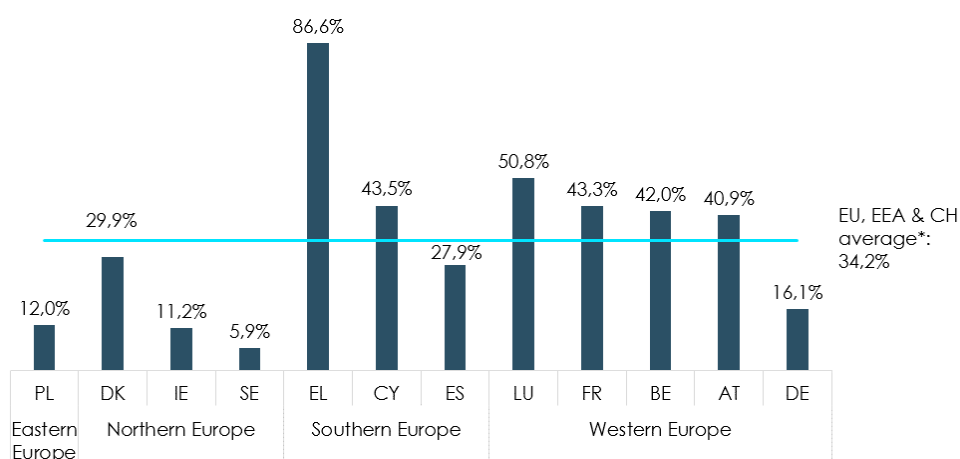
**Figure 65**  
**Number of civil servants employed at USPs, 2016**  
Civil servants, thousands



Source: Questionnaire to USPs

When looking at the number of civil servants relative to the total USP employment, the USP in Greece stands out with the highest share of civil servants in total employment (86,6%). The average across these countries is 34,2%, see Figure 66.

**Figure 66**  
**Share of civil servants employed at USPs, 2016**  
Civil servants, % of total employment at USP



Note: \*unweighted average. IE - civil servants as average employed in mails & parcels combined with service pre 01.01.84 (date An Post was established).

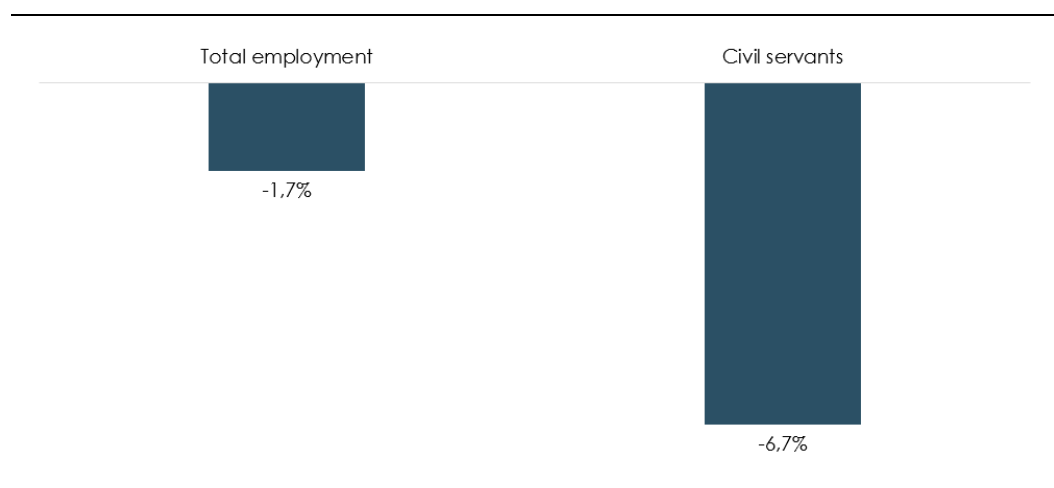
Source: Questionnaire to USPs

The last several years have been characterised by a decrease in the number of civil servants employed by USPs. In these USPs we have seen the number of civil servants decline faster than their overall employment, at a rate of -6,7 per cent, against a -1,7 per cent rate of decline of overall employment, see Figure 67.

**Figure 67**

**Change in the number of civil servants at USPs that employ civil servants**

Annual change, 2013-2016



Note: The comparison is made only between countries that employ civil servants.

Source: Questionnaire to USPs

In countries where postal services employ civil servants, USPs and governments are searching for solutions to meet two sometimes conflicting objectives: (a) ensure legacy social rights and obligations to civil servants and (b) provide USPs a level playing field in the dynamic postal and delivery market. Hence, given the inherently conflicting objectives, legal and dispute actions may arise. For instance, Germany's state aid to Deutsche Post for legacy civil servants' pensions was first deemed illegal, but finally approved by the European Union General Court in 2016, see Box 12.

**Box 12 European Union General Court's decision in Germany**

The European Union General Court has set aside a European Commission decision from 2012, which ordered Germany to recover from Deutsche Post part of the subsidies paid in respect of former civil servant postal workers' pensions. In essence, the General Court concluded that the pension costs of civil servants, who enjoy a privileged and costly status, are not part of the expenses which an undertaking normally incurs. Hence the state subsidy that covers such pensions does not give an advantage to Deutsche Post over its private competitors.

Source: General Court of the European Union (2016), press release No 76/16, <https://curia.europa.eu/jcms/upload/docs/application/pdf/2016-07/cp160076en.pdf> (accessed, 11 Dec 2017)

Similarly, the European Commission authorized Denmark to compensate PostNord, allowing the company to lay off thousands of civil servants, see Box 13.

#### **Box 13 PostNord Denmark state compensation**

In May 2018, the European Commission granted Denmark the ability to assist PostNord Denmark by compensating the company for fulfilling the universal service obligation between 2017 and 2019. The decision allows Denmark to compensate PostNord by up to 1,2 billion DKK in 2019. In practice, this compensation will allow the company to lay off thousands of civil servants, considering that PostNord currently employs almost 3.000 civil servants (2016 data).

Commissioner Margrethe Vestager, in charge of competition policy, said: "Easy access to postal services is vital for all EU citizens. Today's decision enables PostNord to continue performing its fundamental social and economic role and important public service mission, without unduly distorting competition."

Source: European Commission (2018), Press release 28 May 2018, State aid: Commission approves compensation granted by Denmark to Post Danmark for its universal service obligation; Borsen (2018), Vognmænd raser over Vestagers blåstempling af støtte til Postnord (accessed, 28 May 2018)

### **3.2.2 Employment models in the postal sector**

Besides full-time contracts, part-time contracts, fixed-term contracts, performance-related contracts, flexible employment, self-employment contracts and subcontractors are used in the sector. The definitions of these models are presented in Box 14.

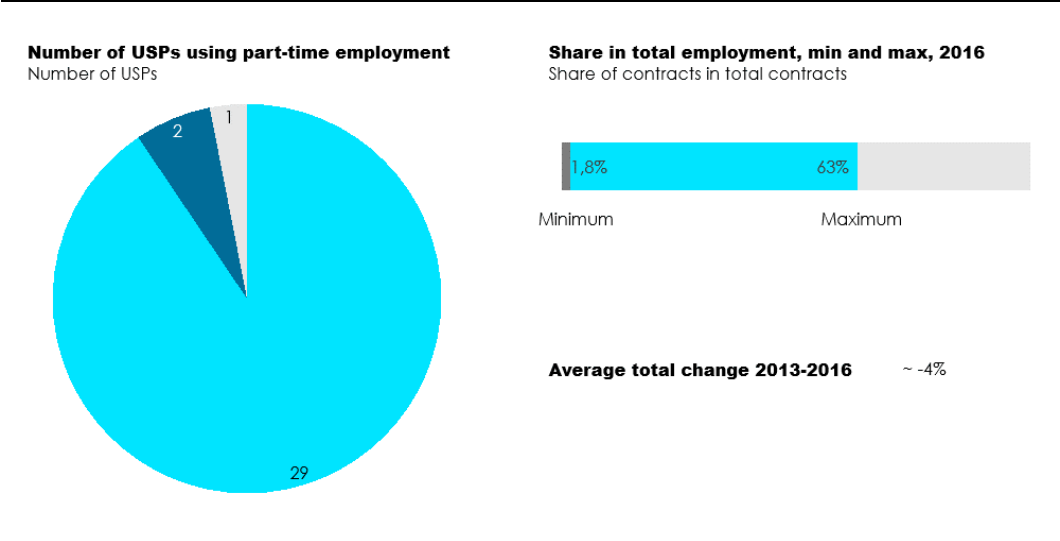
#### Box 14 Definitions of types of employment

- **Part time employment** – refers to an employee whose normal hours of work, calculated on a weekly basis or on average over a period of employment of up to one year, are less than the normal hours of work of a comparable full-time worker (source: Directive 97/81/EC, Annex clause 3).
- **Temporary employment** (Fixed-term) – a person having an employment contract or relationship entered into directly between an employer and a worker where the end of the employment contract or relationship is determined by objective conditions such as reaching a specific date, completing a specific task, or the occurrence of a specific event (source: Directive 1999/70/EC, Annex clause 3).
- **Performance-related pay contracts** – contracts with payment scheme based on items delivered. Such contracts may also include a fixed guaranteed payment, irrespective of quantity of items delivered, but at least 50% of the salary should be performance-related.
- **Flexible employment** (Casual work) – a type of work where the employment is not stable and continuous, and the employer is not obliged to regularly provide the worker with work, but has the flexibility of calling them in on demand, e.g. on-call work (= workers with no guaranteed working hours that can be called-in on a same or next day, if needed); mini contracts (contracts with no guaranteed working hours that can be called-in on an ad hoc basis for a limited period, e.g. during a peak season).
- **Self-employment contracts** – any person on the labour market who cannot be considered as an employee/worker, e.g. contracts with private persons who are registered as freelance workers.
- **Subcontracted workers** (Temporary agency work) – form of work where the worker has a contract of employment or an employment relationship with a temporary-work agency with a view to be assigned to a user undertaking to work temporarily under its supervision and direction (source: Directive 2008/104/EC, Article 3 (1) (c)). (Note the difference with subcontracted or outsourced work (or commonly referred to as a "subcontractor"), which relate to contracts with legal persons for the provision of services, e.g. the clearance, sorting, transport or distribution of parcels for the parcel delivery service provider.).

Source: Sources are indicated next to each contract type

Part-time employment is prevalent in most of the investigated countries. 29 USPs use part-time contracts. In extreme cases, part-time contracts constitute up to 63 per cent of total contracts in the USP. However, the variance in use of part-time contracts is high, with the minimum share of part time employees being around only two per cent in some other USPs. The number of part-time contracts declined by around four per cent from 2013 to 2016 in USPs using such type of contracts, see Figure 68.

**Figure 68**  
**Information about part time employment**



Note: In the questionnaire we asked to indicate the share of part time employment in USP employment.  
Source: Questionnaire to USPs

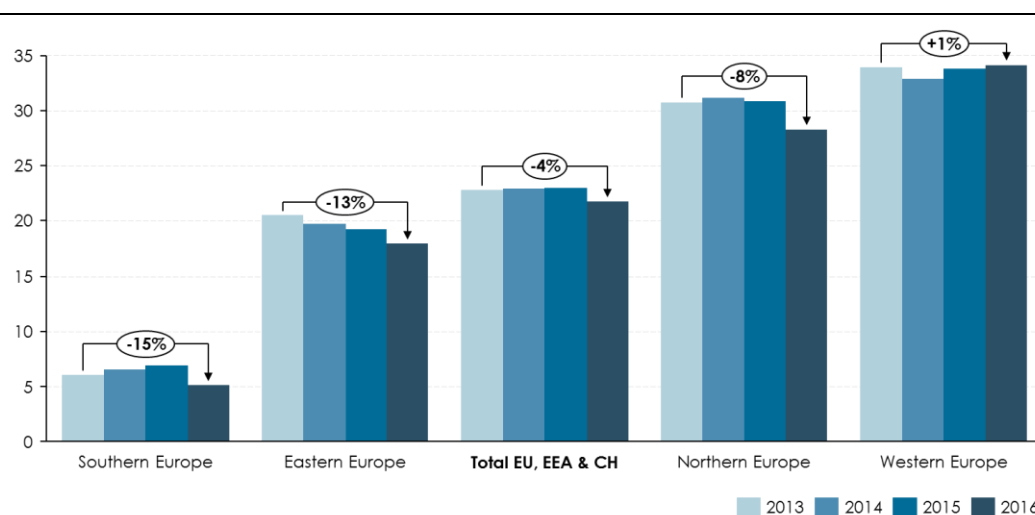
However, in the 2013-2016 period, the share of part-time employees declined in all European regions by four per cent, except for Western Europe, where it increased slightly by one per cent, see Figure 69.

We find that part-time workers are more vulnerable to staff reduction programmes than the full-time workers. Overall the share of part-time employees in relation to total domestic employment declined annually in the investigated countries (29 out of 32). Considering that the total number of employees at USPs declined too, see Figure 56 above, this means that part-time workers were more strongly affected by staff reduction programmes than the full-time workers.

**Figure 69**

**Development of part-time employment at USPs**

%, average\* share of part time employees over total employment at USP



Note: \*unweighted average. The figure includes data from the following 29 countries: AT, BE, BG, CY, CZ, DK, EE, FI, FR, EL, HU, IS, IE, IT, LV, LT, LU, MT, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH, UK.

Source: Questionnaire to USPs

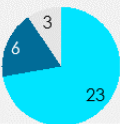
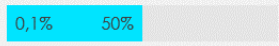
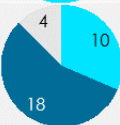
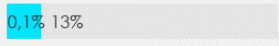
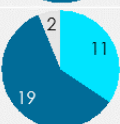
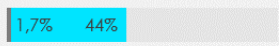
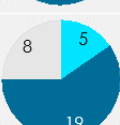
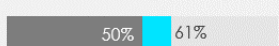
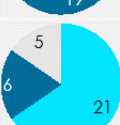
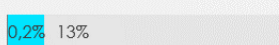
The share of part-time employees varies in the different European regions, with Southern Europe having the smallest share, between five per cent and ten per cent, and Western Europe the highest one, around 35 per cent.

*Use of non-standard employment models*

A number of USPs use different types of non-standard employment models. The most commonly used non-standard employment models are temporary employment (23 USPs) and subcontracted workers (21 USPs). However, the latter model only constitutes up to 13 per cent of total employees at USPs that use such an employment model, whereas the temporary employment model covers up to 50 per cent of employees in investigated USPs. The alternative model that constitutes the highest share in total employment is self-employment, even though it is used only by five USPs.

The highest growth in the number of non-standard employment contracts was seen for subcontracted workers (~36 per cent increase in 2016 from 2013) and self-employment contracts (up by circa 33 per cent in 2016 compared to 2013). Two out of 32 USPs did not provide answers for any of the employment models.

**Table 22**  
**Use of non-standard employment models by USPs**

Employment model	Number of countries	Share in total employment, min and max, 2016*	Average total change 2013-2016*
Temporary employment			~ +10%
Performance-related pay contracts			~ +3%
Flexible employment			~ -21%
Self-employment contracts			~ +33%
Subcontracted workers			~ +36%

■ Use ■ No use ■ n/a

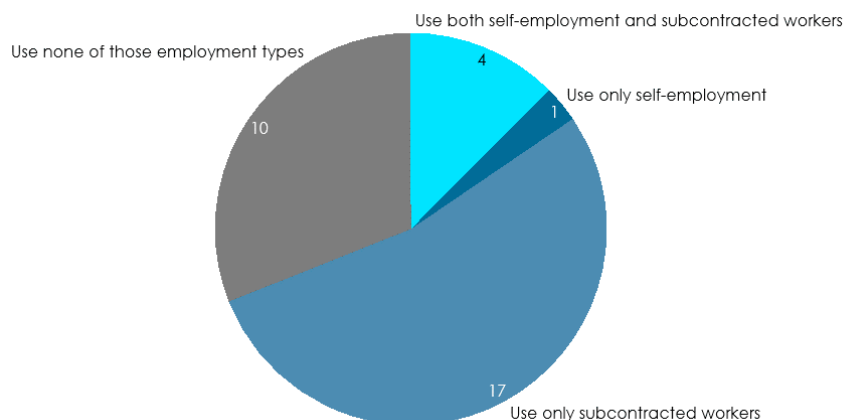
Note: \* from countries that use that type of contract, consequently, the shares of type of contracts are not comparable between them. The figure contains data from 30 countries. HR and LI did not provide an answer to the indicator concerning employment models.

Source: Questionnaire to USPs

More than two thirds of investigated USPs use at least one type of outsourced work, i.e. self-employed or subcontracted workers that are not considered employees of the USP. Four USPs use both, see Figure 70.



**Figure 70**  
**Extent of outsourcing and subcontracted employment at USPs**  
Number of USPs



Source: Questionnaire to USPs

Despite the increase in the use of non-standard employment models, there have been initiatives to try and invert the trend. An example is the attempted shift from independent contractors to full-time employees in the Netherlands, see Box 15.

#### Box 15 Changes in the employment model in the Netherlands

In July 2015 PostNL, in the Netherlands, invited all its independent parcel deliverers to become company employees. The deal, negotiated with the main trade union, implied that self-employed parcel deliverers who chose to join the company would be offered indefinite contracts which conformed to all the employment terms and conditions of the PostNL collective labour agreement. For those who chose to remain independent, remuneration would be increased by about 10 per cent. PostNL estimated the cost of these measures between 15m and 20m euros annually. The offer was presented in three meetings by the trade union to the independent parcel deliverers, who finally rejected it.

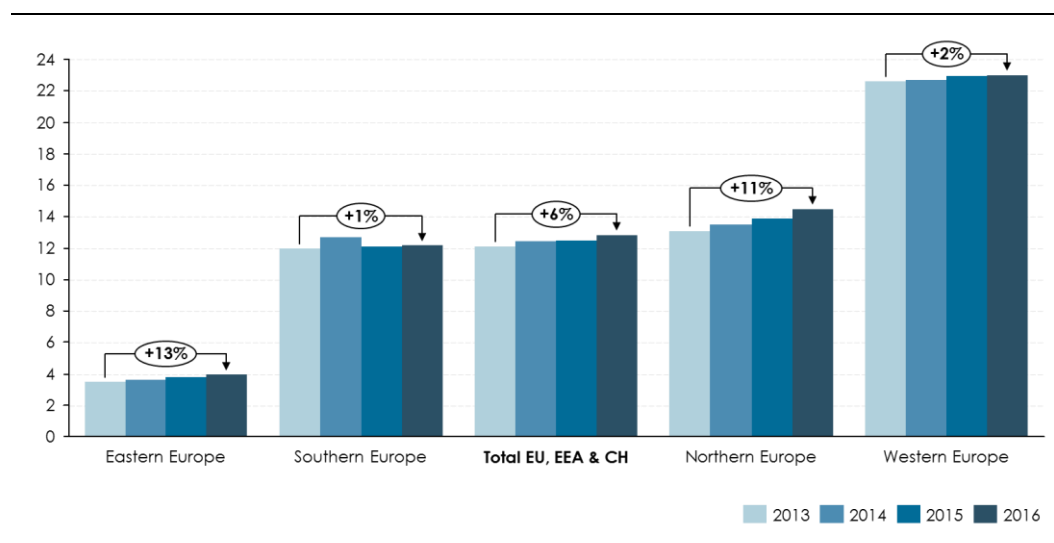
The company's director for packages, Yme Pasma, was quoted saying: "By making this offer, PostNL is taking an important step towards a social and competitive delivery model. The offer is also ground-breaking in the parcels market. And it creates clarity for all our parcel deliverers." However, the freelancers were unsatisfied with PostNL not taking into account the debts the independent parcel deliverers had built up due to allegedly low rates and artificial contract arrangements. As a result, some of PostNL's independent contractors went on strike later in July 2015, causing 15 per cent of all packages not to arrive at customers' homes in time.

Sources: Post and Parcel (2015), POSTNL invites independent parcel to join the company (accessed, 11 Dec 2017); Ecommerce News (2015), Some of PostNL's couriers are on a strike in the Netherlands (accessed, 11 Dec 2017); Post and Parcel (2015), Continuing disruption to POSTNL Services (accessed, 11 Dec 2017)

### 3.2.3 Employment conditions in the postal sector

The average wage in the EU, EEA & CH area's postal sector is around 13 euros per hour and increased by six per cent in the 2013-2016 period. The postal sector wage varies quite a lot though in the European regions, with Eastern Europe having the lowest average wage, around 3,5 euros per hour, and Western Europe the highest one, around 23 euros per hour. Northern and Southern Europe display similar average wages that range between 12 and 14 euros per hour, see Figure 71.

**Figure 71**  
**Average gross nominal hourly wages at USPs**  
EUR/h

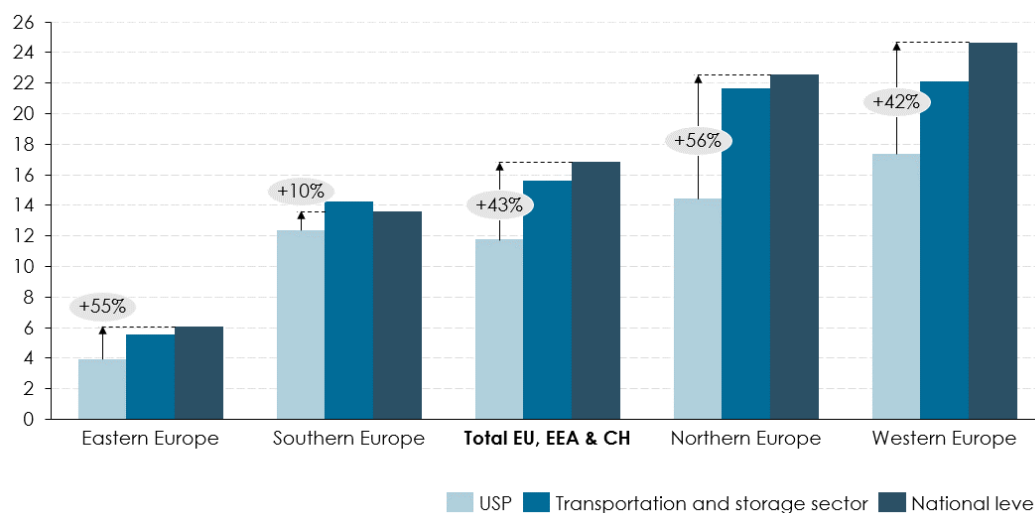


Note: The average salary is calculated as unweighted average across the USPs that provided an answer. The figure includes the following 26 countries: AT, BG, CY, CZ, DK, EE, FI, FR, EL, HU, IS, IE, IT, LV, LT, MT, NL, NO, PL, PT, RO, SK, SI, SE, CH, UK. Corresponding to 4 countries out of 8 for Western Europe, 6 countries out of 6 for Eastern Europe, 6 countries out of 8 for Southern Europe, 10 countries out of 10 for Northern Europe.

Source: Questionnaire to USPs

The average hourly wages at USPs are often below the average wages at national level. In majority of regions, wages in the transportation and storage sector as a whole (which includes postal and courier activities) are also below average wages at national level, with exception of Southern Europe, see Figure 72.

**Figure 72**  
**Comparison of average hourly wages at USPs, in the transportation and storage sector and at national level**  
EUR/h



**Note:** Only countries with data available for all the three indicators were included. Hence, the chart does not include data from the following countries: BE, HR, CY, DE, LI, LU, ES, CH. Wage at USP is an average gross wage based on the questionnaire to USPs. Wages in the transportation and storage sector correspond to average hourly wages and salaries for "transportation and storage" activities. Transportation and storage activities include postal and courier activities. Wages at the national level correspond to average hourly wages and salaries for "Industry, construction and services (except public administration, defense, compulsory social security)", which include transportation and storage. The last two indicators come from Eurostat indicator lc\_lci\_lev.

**Source:** Questionnaire to USPs; Eurostat [lc\_lci\_lev] Transportation and storage (accessed, 10 Jun 2018) and Industry, construction and services (except public administration, defense, compulsory social security) (accessed, 24 Jul 2018).

Based on trade unions data from a sample of four countries from different European regions, entry level wages of full-time contracts at USPs in 2016 was between six euros per hour and 23 euros per hour. Wages increased between one per cent and eight per cent in the 2013-2016 period.

Changes in minimum wages is an important driver for the development of salaries in the postal sector. Minimum wage regimes differ across some of the main European economies. In France, they are indexed to the consumer price index, while in Sweden there is no minimum wage regime. In a number of countries, it is the government to set a minimum wage, which can be based on wages negotiated in the market or on consultations with industry stakeholders, see Table 23.

**Table 23**  
**Example of national minimum wage regimes**

Country	Min wage fixing procedure	Coverage	Level*
FR	The minimum wage is updated every year by the government. There are two ways in which the wage rate may be adjusted. 1. The wage is indexed to the consumer price index (CPI). When the CPI increases by at least 2 per cent, the minimum wage is increased by the same percentage. 2. Independently from the first method, the government sets a new minimum wage in a decree on July 1st each year.	The minimum wage applies to all salaried workers, including those working in both public and private businesses of an industrial or commercial nature.	€1,458 per month
DE	Germany's national minimum wage law (Mindestlohngesetz) came into force on 1 January 2015, introducing Germany's first nationwide legal minimum wage. The wage level will be updated every other year by a minimum wage commission and acceptance by the government. Since a legal minimum wage law is a derogation of the constitutional right of a collective tariff autonomy, it is discussed whether and to what extent the minimum wage is consistent with the constitution.	The minimum wage applies to all salaried workers. Until 2017, it is allowed for already negotiated collective labour agreements to contain lower levels of agreed minimum wages.	€1,473 per month
NL	Minimum wage increases are automatically indexed to estimated increases in average negotiated wage rates in both the public and private sectors in the current year and revised accordingly by the Ministry of Social Affairs and Employment.	Every person employed in the Netherlands who is between 15 and 65 years old shall be entitled to the statutory minimum wage. A specific minimum youth wage is provided for employees from 15 to 23 years old. Piece-rate workers are entitled to the minimum wage rate per hour. Part-time workers are entitled to a pro-rata minimum wage according to the number of hours performed	€1,502 per month for persons 23 and older
ES	The Government annually fixes the minimum wage by Royal Decree following a period of consultation with the most representative trade unions and employers' associations. Wage rates are also fixed through collective agreement.	The minimum wage legislation applies to employees from all occupations. It does not apply to certain workers, including public servants, executive directors, unpaid family workers, and voluntary workers.	€757 per month
SE	Sweden has no national legislation concerning minimum wages. Minimum wage rates are determined in collective agreements.	Collective agreements automatically bind both the members of the trade union and the companies that are members of the employer's organisation concluding the agreement. A person who is not a member of the trade union usually has no rights under the collective agreement. Approximately 90 per cent of all workers are covered by collective agreements.	Minimum wage in CLA: €2285 per month for persons 18 and older**
UK	The Secretary of State determines the national minimum wage following the Low Pay Commission's recommendation on the minimum wage rate. Wages may also be set by collective agreement, but any provision in any agreement is void in so far as it purports to exclude or limit any provision of the National Minimum Wage Act 1998	The standard minimum wage rate applies to workers aged 21 and over. For piece-rate workers, a worker and employer may come to a 'fair estimate' of the number of hours required to complete the work, prior to the work being carried out; or a worker may keep a record of the hours of work carried out, that is supplied to the employer upon completion of the work.	€1,379 per month for persons 21 and older

Note: Eurostat converts currencies based on Purchasing Power Parity rates, i.e. GBP/EUR = 1.075 in 2014. \*Calculation based on an average of 174 working hours per month and for workers over the junior age threshold. \*\*This is based on the collective labour agreement of PostNord Sweden and is at level with the lower wage levels for other low-skilled labour categories (e.g. in the hospitality industry).

Source: International Labour Organization (2015), Conditions of work and employment programme, [http://www.ilo.org/dyn/travail/travmain.sectionChoice?p\\_structure=](http://www.ilo.org/dyn/travail/travmain.sectionChoice?p_structure=); Eurostat, Minimum Wages, <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00155&plugin=1>

### 3.3 INVESTMENT IN NEW SKILLS AND PRODUCTIVITY

In this section we discuss development of USP productivity and USP investments in trainings of employees.

#### 3.3.1 Development of USP productivity

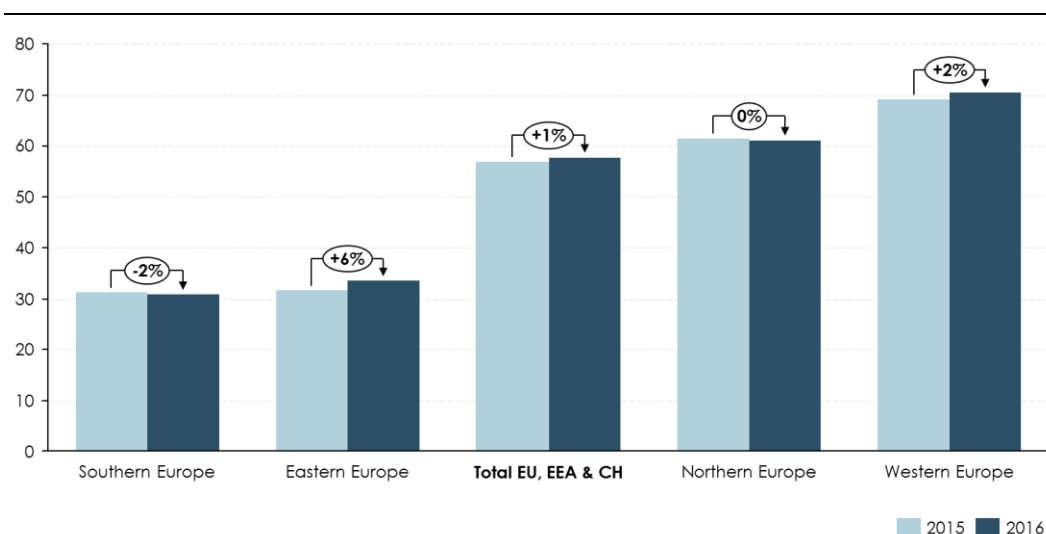
USPs productivity per employee varies across the EU, EEA & CH area. In 2016, USPs in Western Europe produced more than two times higher turnover per employee (€ 70 thousand per employee, PPP-adjusted) than USPs in Southern Europe (€ 30 thousand per employee, PPP-adjusted). Eastern Europe recorded the highest productivity growth in 2016 compared to 2015, at six per cent. At such pace, USPs in Eastern Europe are set to bridge the gap to their counterparts in Northern Europe in around eleven years.

The average productivity per USP employee in the EU, EEA & CH area (based on 21 countries corresponding to 91 per cent of total letter volumes in the area) was € 57 thousand in 2016, increasing by one per cent from 2015, see Figure 73.

**Figure 73**

#### Development of USP productivity

Annual PPP-adjusted revenue per staff employed in the home country (thousand euros)



Note: The figure includes data from the following 21 countries: AT, BE, BG, CY, FI, FR, DE, EL, IE, IT, LT, NL, NO, PT, RO, SK, SI, ES, CH, UK. Corresponding to 4 countries out of 6 for Eastern Europe, 5 countries out of 10 for Northern Europe, 6 countries out of 8 for Southern Europe, 6 countries out of 8 for Western Europe. CZ, RO - staff employed in 2016 is calculated as trend from the previous years.

Source: Questionnaire to USPs

### 3.3.2 USPs investment in new skills and trainings for employees

Many universal service providers acknowledge the need to invest in their employees to successfully adjust to the changes in the postal sector. There is a wide array of training and career development coaching being offered by the operators.

We find that USPs are investing in new skills for employees required for parcels delivery and a subsequent transitioning of employees from letter to parcel delivery. For instance, in the Netherlands, starting in 2015, 280 drivers were transferred from the mail to the parcel segment<sup>39</sup>.

In addition, due to decreasing mail volumes, several USPs have redesigned their operations (see section 1.4.2) and reduced the number of staff. For employees who are affected by restructuring, USPs generally aim at identifying internal employment opportunities. Below we present a few case studies on this matter.

bpost in Belgium supports its employees who have to take on a new role after the restructuring of the organisation by offering help in developing skills for their current jobs or to ease horizontal or vertical switches to other jobs in the future. While in 2013, 90 per cent of vacancies were filled by bpost's internal candidates, in 2015 the internal mobility was at 92,9 per cent. bpost gave between 26.200 and 28.300 days of training or coaching yearly in the period 2013-2015. This included functional trainings, trainings in communication, sales, languages and leadership. Moreover, the "Recognizing Experience Initiative" that gives employees the opportunity to earn a secondary education diploma when they have had no such possibility in the past was launched in 2011. By 2015, 155 employees have successfully received their diploma since the beginning of the course<sup>40</sup>.

In 2015-16, Royal Mail invested £20,5 million in training and delivered almost 90.000 days of training for their UK employees. These numbers decreased and in 2016-17 the investment was at £13,8 million for 25.000 days of training. Also, a Leadership Academy to support the development of Mail Centre leaders were established<sup>41</sup>.

Czech Post trained some 70.000 employees in 2015<sup>42</sup> and Magyar Posta in Hungary offered training to 82.490 participants in 2014<sup>43</sup>. In Lithuania, some 3.200 employees, more than 50 per cent of Lietuvos Pastas' staff, participated in training in 2014, increasing to more than 16.000 employees in 2015 and 8.500 employees in 2016<sup>44</sup>. In Poland, more than 90.000 employees participated in training in 2014 (mainly regarding management and sales competencies). Of these, more than ten per cent were trained online, more than half received internal training and a third used external training systems<sup>45</sup>. Poste Italiane provided 3 million hours of training to around 1,3 million participants in 2016. Management training predominated, but also training to new recruits and younger staff members was offered, for example to ease the interpretation of, and adaption to, new market scenarios<sup>46</sup>. Training at CTT in Portugal amounted to over 300.000 hours in 2016, 1,5 per cent less than in the previous year, and had over 66.000 participations (a 27 per cent increase compared to the year before). Overall, 96 per cent of employees received training with an average of 26 hours per employee. The main area of training was related to bank activity. In addition, the logistics and home delivery teams were trained to adjust to new developments in the automation of mail sorting<sup>47</sup>.

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<sup>39</sup> PostNL (2017), annual report 2016, p.31-39.

<sup>40</sup> bpost, annual report 2013, p.49, annual report 2015, p.41-42.

<sup>41</sup> Royal Mail (2016), annual report 2015/16, p. 45 and 2015, p.39.

<sup>42</sup> Czech Post (2016), annual report 2015, p.34.

<sup>43</sup> Magyar Posta (2015), annual report 2014: p.45.

<sup>44</sup> Lithuanian Post, annual report 2016, p.21; 2015 p. 22; 2014, p.44.

<sup>45</sup> Poczta Polska (2015), annual report 2014 p. 55-56.

<sup>46</sup> Poste Italiane (2017), annual report 2016, p. 60-61.

<sup>47</sup> CTT Portugal (2017) annual report 2016, p.59.

In France, 81 per cent of La Poste's employees were trained in 2015 and 6.600 employees started a qualifying training path in 2015. An increase in the investment in training led to a rise in the number of training hours per person from 27,5 to 33,6 hours on average in 2016. More than three quarters of employees received training in 2016, some 12.500 employees began a new qualifying training path and 93 per cent have attended training over a two years period. In 2015 and 2016, training expenditure were around four per cent of the payroll. La Poste aims among other things at helping employees to transfer skills in line with the company's modernisation, to relocate internally, to find another job in the public sector or to set up a business. In 2016, 31.000 employees found a new position internally and more than 1.600 employees transferred to another business unit (1.300 in 2015). Around 200 employees yearly moved to a post in the civil service in 2015 and 2016. While 175 employees created or purchased a business in 2015, almost 300 did so in 2016<sup>48</sup>.

The Correos Group in Spain aims to ensure that its employees are up-to-date with new skills needed for their job, including more than 400 training activities. The focus is on innovative techniques such as mobile learning and gamification with over 200.000 participants. In 2016, training activities accumulated to 1,6 million training hours. In addition, a pilot test for learning through mobile devices used by delivery employees was initiated<sup>49</sup>.

### **3.4 THE ROLE OF SOCIAL PARTNERS**

Regulations of working conditions and the role of social partners have influenced the development of employment conditions in some postal markets. Social dialogue in the postal sector played an important role in minimizing the negative impact of market changes on employment, for example, through collective labour agreements.

Employers and unions cooperate constructively to manage changes in a socially responsible way. However, we have also seen cases where cooperation between parties was not successful. For example, in 2017, the union GMB launched a legal case against the delivery company Hermes on behalf of eight lead claimant Hermes couriers who alleged they were being denied their "workers' rights". This example shows that the disputes around self-employed workers in the postal and delivery sector that started a few years ago may still be relevant today.

In addition, union and collective bargaining coverage in surveyed countries shows the varying levels of power that trade unions have in the negotiation of wages. In particular, based on the Eurofound's data, the proportion of employees in unions vary widely across countries from around 70 per cent in Finland, Sweden and Denmark to 8 per cent in France.

#### **3.4.1 Main drivers of the development of wage-setting mechanisms**

Wage-setting mechanisms are influenced by various factors, ranging from the general macroeconomic situation of the country to the financial position of the postal operator in question. Political factors also play a role, especially in situations of conflicting policy objectives, e.g. maximising financial returns from state-owned enterprises vs. retaining a stable level of employment, see Box 16.

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<sup>48</sup> La Poste annual report 2015, p.77, and annual report 2016 p.33 and p.126.

<sup>49</sup> Correos (2017), annual report 2016, p.72.

### Box 16 Eurofound's results on the main elements influencing the wage-setting mechanisms

Main bargaining levels are mainly influenced by economic factors, with the dominant decentralizing direction of change reflected in the influence of micro-economic factors being cited for more countries than macroeconomic ones. Micro-economics factors are the prevalent ones in the case of (i) changes to opening and opt-out clauses, also reflecting their decentralising character, and (ii) changes in ordering between levels. In contrast, macro-economic considerations are prevalent in (i) changes in horizontal coordination, which relates to centralisation, (ii) changes in the duration of agreements, and (iii) changes to minimum wage setting and indexation.

Political factors have the greatest influence over (i) changes involving the extension of bargaining competence to non-union representatives, (ii) extension mechanisms and (iii) the continuation of agreements beyond expiry.

On all three aspects, influence stems variously from national governments and from the European and international institutions, see Table 24, based on the survey data presented in a study by Eurofound (2014).

**Table 24**  
**Main influences on changes in different aspects of wage-setting mechanisms**

Factors influencing change in:	Macro-economic	Micro-economic	State policies/recommendations and requirements from the EC/ECB/IMF
Main bargaining levels	X	XX	X
Ordering between levels*		X	X
Opening and opt-out clauses		XX	X
Extending bargaining competence			XX
Horizontal coordination	XX		
Extension mechanisms	X	X	XX
Continuation beyond expiry	X		XX
Minimum wage settings	X		X
Indexation mechanisms	X		X
Duration of agreements	XX	X	

Note: X = influence indicated for at least two countries; XX = prevalent influence. "Ordering between levels" refers to different levels of bargaining over wages and conditions, e.g. whether company agreements have priority over sector and/or provincial ones, and can entail lower standards.

Source: Eurofound (2014), Changes to wage-setting mechanisms in the context of the crisis and the EU's new economic governance regime.

All surveyed countries record some form of collective bargaining in the postal and courier activities sector, with a low degree of centralisation, see Box 17, based on another study by Eurofound (2017).



### Box 17 Eurofound findings about the collective bargaining coverage in the postal sector (2017)

All EU Member States record some form of collective bargaining in the postal and courier activities sector. In general, there is a very low degree of centralisation of collective bargaining; only in 10 Member States do social partners bargain at both multi-employer (MEB) and single-employer (SEB) levels. Even in countries that tend to record a high degree of centralisation, such as Austria, single-employer bargaining coverage is 80%. In the remaining 19 countries, single-employer is the only bargaining level.

In most of the countries, a low degree of centralisation of collective bargaining (e.g. at the single employer level) coexists with high collective bargaining coverage (i.e. a high number of employees covered by the agreement). This situation is relatively uncommon, albeit not exceptional, having also been detected in sectors such as civil aviation and railway infrastructure (Eurofound, 2011). It is likely that the importance of public or semi-public companies with consolidated collective bargaining traditions contributes to explaining this phenomenon, see Table 25.

**Table 25**  
**Company collective bargaining coverage and collective bargaining level, 2013**

COLLECTIVE BARGAINING LEVEL	COLLECTIVE BARGAINING COVERAGE			
	>80%	45-80%	-20%	Not available
MEB				
Both SEB and MEB	AT, DK, FI, IT, NL, SE, SI	CZ, EZ		LU
SEB	BE*, CY (public sector), EL (public sector) FR, HR, MT, PL	BG, DE, EE, HU, IE, LE, LV, PT, RO, SK, UK	CY (private sector), EL (private sector)	

Note: MEB = multi-employer; SEB = single-employer. \*In Belgium, there are only company collective agreements in the sector. The collective bargaining coverage rate of 100% is derived from cross-sectoral collective agreement

Source: Eurofound (2017) Representativeness of the European social partner organizations: Postal and courier activities sector. Author's elaboration according to national contributions prepared by Eurofound's Network of European correspondents, 2015.

### 3.4.2 The impact of collective agreements in determining wages and working conditions

Social dialogue played an important role in minimizing the negative impact of postal market changes on employment<sup>50</sup>. Often this was embodied in collective labour agreements between trade unions and postal operators. In particular, collective agreements are often used to determine wages and working conditions at the USP.

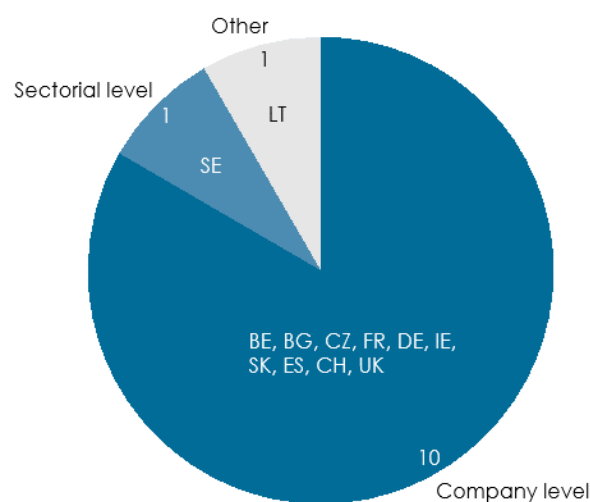
<sup>50</sup> European Social Dialogue Committee for the Postal Sector (2016) Mobilising social partners in a new context.

In most of countries that reported an answer, wages at the USP are set based on collective agreements between the USP and the trade union on a company level. This is the case in Belgium, Bulgaria, Czech Republic, France, Germany, Ireland, Slovakia, Spain, Switzerland and United Kingdom. In Belgium, both wages and holiday pay, end-of-year bonus, meal checks and some fees are determined in collective agreements and negotiated in the Joint Committee. In Ireland, the agreement on pay was reached with the assistance of the Labour Court. In Sweden, wages at the USP are set based on collective agreements between the USP and the trade union on a sectorial level. In Lithuania salaries are not part of collective agreements, where only some index is indicated, see Figure 74.

Concerning non-USP postal operators, in Spain, wages are set based on collective agreements on a sectorial level. There are two different agreements: courier sectorial level agreement and parcel sectorial level agreement. The former is applied to the courier companies whereas the latter is applied to the parcel and logistic companies. In Sweden there are both company-wide and sectorial level collective agreements to set wages<sup>51</sup>.

**Figure 74**

**Wage setting based on collective agreements on company or sectorial level, at USPs**  
Number of countries



Note: BE - Wages are negotiated in the Joint Committee as provided for in the law of 21 March 1991 and subsequently recorded in the monetary statute. The holiday pay, end-of-year bonus, meal checks and some fees are determined in a collective agreement, also negotiated in the Joint Committee. FR - For private workers, others are civil servants. IE - Agreement on pay was reached with the assistance of the Labour Court. LT - In collective agreement (CA) we have just some index, but salaries are not part of CA. ES - III Convenio Colectivo Correos and III Acuerdo Funcionarioal.

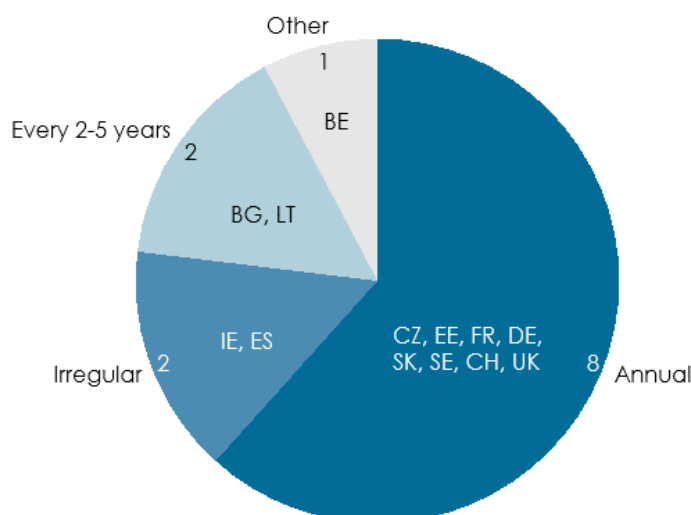
Source: Questionnaire to Trade unions

<sup>51</sup> Source: Questionnaire to trade unions.

In most of countries that reported an answer, the wages at the USP are discussed annually. This is the case in Czech Republic, France, Germany, Slovakia, Sweden Switzerland and United Kingdom. In Bulgaria and Lithuania, the frequency of the wage setting mechanism is between every 2 and every 5 years. In Ireland and Spain, the frequency is irregular. In Spain, the Spanish Government and the Spanish USP have blocked the agreements proposed by trade unions and consequently the collective agreement has not been renewed since 2013<sup>52</sup>. In Belgium, once the agreement is laid down in the monetary statute, the wages are only adjusted to the index<sup>53</sup>, see Figure 75.

Concerning non-USP postal operators, the frequency of the wage setting mechanism is annual in Switzerland, whereas it is irregular in Spain and Sweden.

**Figure 75**  
**Frequency of the wage setting mechanism, at USPs**  
Number of countries



Note: BE - no frequency, once they are laid down in the monetary statute they are only adjusted to the index. ES - the Spanish Government and Correos company have blocked all possible agreements proposed by Union Workers. As a consequence, the collective agreement has not been renewed since 2013.

Source: Questionnaire to Trade unions

In 13 countries wages and working conditions are considered during negotiations between the USP and trade unions and in three countries they are considered during negotiations between non-USP operators and trade unions. Employment types, i.e. types of contracts that can be offered to employees (e.g. part-time contracts, fixed-term contracts), are considered in majority of countries, but not in negotiations between USP and trade union in Estonia, Germany and Switzerland. Trainings and other investments in labour skills are considered in all countries, at exception of Germany, Sweden and Switzerland (concerning negotiations with USP) and Sweden and Switzerland (concerning negotiations with non-USPs), see Table 26.

<sup>52</sup> Source: Questionnaire to trade unions, answers from CCOO.

<sup>53</sup> Source: Questionnaire to trade unions, answers from ACOD – CGSP.

Other elements considered during negotiations include social action, labour relations, health and safety, special social benefits, rest time, new equipment and machinery, gender balance, working time and holidays.

**Table 26**  
**Elements considered in negotiations between postal operators and trade unions**

	<b>Wages</b>	<b>Working conditions</b>	<b>Employment types</b>	<b>Trainings and other investments in labour skills</b>
<b>USP</b>				
BE	X	X	X	X
BG	X	X	X	X
CZ	X	X	X	X
EE	X	X		X
FR	X	X	X	X
DE	X	X		
IE	X	X	X	X
LT	X	X	X	X
SK	X	X	X	X
ES	X	X	X	X
SE	X	X	X	
CH	X	X		
UK	X	X	X	X
<b>Non-USP</b>				
ES	X	X	X	X
SE	X	X	X	
CH	X	X	X	

Note: cells with "x" mean the element is considered in negotiations. Other elements include: social action, labour relations, health & safety, social fund, special social benefits, rest time, new equipment/machinery, gender balance, other social benefits, economic situation, working time, holidays, benefits.

Source: Questionnaire to Trade unions

The Deutsche Post case from 2015 is an example of changes in wage structure in Germany, where Deutsche Post planned to remunerate DHL parcel workforce according to the CLA specific to logistics, instead of the postal CLA, see Box 18.

### **Box 18 Example of changes in wage structure in Germany**

In Germany, many Deutsche Post workers have been remunerated according to a CLA specific to the postal sector. In January 2015, Deutsche Post announced plans to expand the DHL parcel workforce based on securing an agreement declaring that the additional workforce would be remunerated according to the CLA specific to logistics. The CLA for logistics provides lower remuneration than the CLA for post. Deutsche Post had in the past said that personnel costs at its parcel delivery business were about twice as high as those of its competitors. The CLA for logistics is the same that applies to workers at other parcel delivery companies.

The Deutsche Post plans are significant, as they involve 10.000 new jobs to be introduced in the period until 2020. According to the management board member Juergen Gerdes, "Parcel delivery is not sustainable under existing wage agreements, the competitive disadvantage is not viable. [...] If we don't act, the future of the division will be at risk".

This announcement triggered significant opposition by the trade unions, claiming that the move would breach an agreement limiting how much business Deutsche Post can outsource and saying it would only accept it if the company shortened the hours of about 140.000 workers to 36 per week from 38,5.

After a series of strikes in April and May, the union increased its demand on Deutsche Post, demanding a 5,5 per cent pay rise in addition to the reduction in working hours. Throughout the month of June, additional strikes were held (at times involving as much as 32,000 postal workers across Germany). In the beginning of July, the strike came to an end after Deutsche Post and the trade union ver.di managed to agree on a deal. The deal implied that Deutsche Post AG's 140.000 employees had to receive a one-off payment of €400 in 2015, with pro rata payments for part-time employees. On October 1, 2016, salaries were increased by two per cent, and will be increased by a further 1,7 per cent on October 1, 2017. The agreement has a term of 32 months and shall remain in force until January 31, 2018. Weekly working hours remain unchanged at 38,5 hours. In addition to this, employee protection against compulsory redundancies valid until December 31, 2015, will be extended by a further four years to December 31, 2019. Assurances have also been given that mail and joint delivery will remain with Deutsche Post AG until December 31, 2018. For its part, the union conceded ground on the issue of the new parcel division.

Source: Reuters (2015). Update 1 – Deutsche Post to create thousands of jobs on lower pay, <http://www.reuters.com/article/2015/01/22/deutsche-post-workers-idUSL6N0V11G120150122> (accessed, 1 May 2015).

A recent case that concluded with a collective labour agreement was triggered by Royal Mail's decision to close a final retirement fund, see Box 19.

### **Box 19 The agreement between CWU and Royal Mail in the UK**

In March 2018, postal workers in the United Kingdom voted in support of a "four pillars" labour and pay agreement between the Communication Workers Union (CWU) and Royal Mail to improve pay, pensions and working conditions.

The height of the conflict occurred when Royal Mail made the decision to close a final retirement fund in an effort to decrease company costs. The closing of the retirement fund affected 90.000 Royal Mail employees, which prompted CWU to begin talks with Royal Mail. When talks broke down over the summer 2017, CWU members responded by voting to strike in October 2017. The decision to strike ultimately led to the mediation and discussions before action could take place.

The final deal, approved by CWU members in March 2018, includes a five per cent pay raise over an 18-month period from October 2017, followed by an additional two per cent raise in April 2019. The deal also created a collective defined contribution retirement fund for Royal Mail's staff. Finally, the agreement will reduce Royal Mail's working hours from 39 hours per week to 38 hours per week, with a further commitment to establishing a 35-hour week by 2022.

Terry Pullinger, Deputy General Secretary (Postal) of the CWU said that "The support [for the Union's Four Pillars and Pay campaign] has delivered a progressive agenda which confronts the challenges of our time and significantly improves our members' pay, working hours and workplace culture, both for current and the future generation of postal workers. The Agreement also extends the legally binding protections which gives postal workers confidence that the Royal Mail Group will not be broken up and that protecting the six day Universal Service Obligation (USO) remains a priority."

Source: Financial Times (2018), Royal Mail workers back deal over pensions and pay (accessed, 1 April 2018); CWU (2018), CWU votes yes to pay and four pillars agreement (accessed, May 1, 2018); Cityam.com (2018), Royal Mail talks deliver "substantial progress" with hopes raised of Friday breakthrough announcement (accessed, 1 May 2018)

### **3.4.3 Key issues in the industrial relations**

We find that there are four types of main disputes between trade unions and postal operators, both USP and non-USP.

First, based on responses from trade unions, the main reason for dispute is wages, namely the salary level of postal workers. Out of 16 respondents, 14 trade unions across all the European regions agree on wages being an issue. More specifically, the focal point of disputes typically is salaries being below the average wage level in the country.

Second, another common source of dispute is contract types, e.g. the use of temporary, flexible and self-employed workers, and consequent changes in working conditions. The classification of workers as "self-employed" affects their entitlement to benefits such as holiday pay and sick pay. The dispute between the trade union GMB and the courier Hermes in 2017 is an example. GMB claimed that Hermes delivery workers, due to their self-employed status, were earning below the minimum wage when unpaid worktime and other deductions were taken into account, besides working long

hours and up to 21 days consecutively. Another example of the dispute – highlighted by trade unions in Spain and Switzerland – is the increased number of part time, temporary and flexible employment contracts against the decline in full time positions.

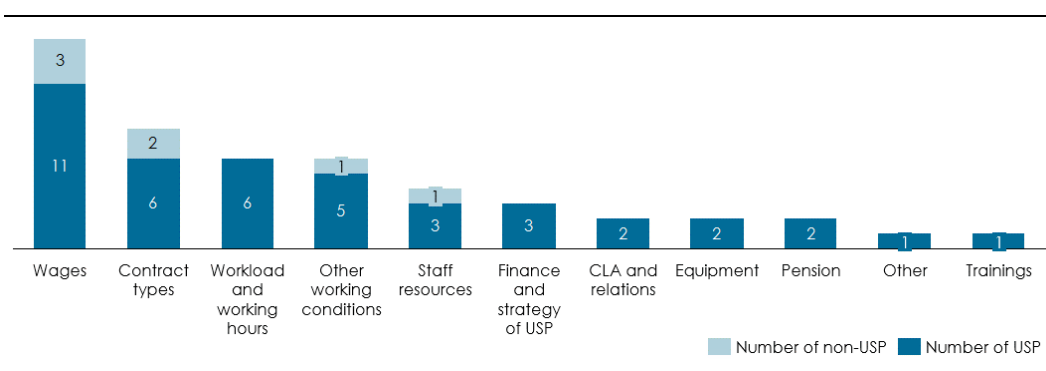
Third, another reason of debate is workload and working hours, i.e. increased work to be completed in the given time frame and long working hours. One of the main discussion points between, for example, Royal Mail and the British Communication Workers Union is centred around the balance between affordability and efficiency on the one side and the stability in employees' pay and hours of work on the other. The measurement method of employees' workload and working hours is an additional issue highlighted by both Czech and Lithuanian trade unions.

Additionally, other working conditions also form part of the disputes between trade unions and postal operators, such as health and safety, the well-being of the staff and psychosocial risks given by too many reorganisation changes.

Fourth, the issue of staff resources and in particular staff shortages is another point of discussion. Trade unions in Belgium, Czech Republic and Spain indicate that there is a shortage in the supply of postal employees compared to the demand.

We also note that there are other reasons for disputes. Some of the disputes reported to us by trade unions concern (i) finances and strategy of the USP, such as the public funds needed to support the USP as mentioned by trade unions in Spain, and the introduction of Saturday and evening deliveries, e-commerce return services and increased use of scanning systems in Ireland; (ii) Collective labour agreements (CLA) and the overall relation between trade unions and postal operators, as mentioned by trade unions in Spain and Estonia; (iii) Proper equipment to carry out the work functions; (iv) pensions and (v) training schemes.

**Figure 76**  
**Main disputes between trade unions and the postal operator, USPs and non-USPs**  
Number of postal operators



Note: The category *other* includes the relations between union and employer and the strategic plan of the USP.  
Source: Questionnaire to Trade unions

### 3.4.4 Successful cases of collaboration

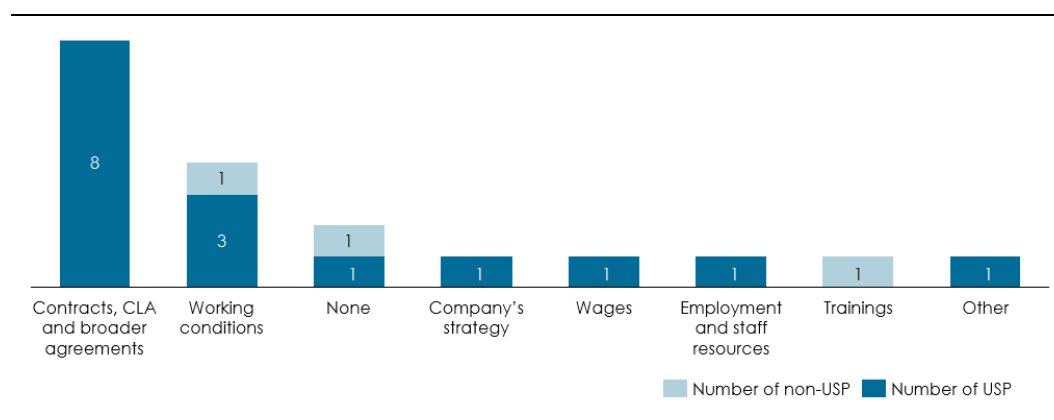
The transformations that the postal sector experienced in recent years often had implications on the collaboration between trade unions and universal service providers across Europe. In some cases, social dialogue has supported and facilitated successful postal transformations. The “Joint Declaration on the role of Social Dialogue in the transformation” is an example of this collaboration<sup>54</sup>.

Most of the successful cases of collaboration between trade unions and USPs, out of the twelve answers received, concern contracts, collective labour agreements and broader agreements between the two institutions. In Sweden, PostNord and Seko signed a new collective agreement that enables more fulltime workers, with an offer to production employees at the age of 58 to adopt an agreement defined “80-90-100”, meaning that the employee gets to work 80% of the working time, get 90% of the wage and 100% of the deposit to occupational pension<sup>55</sup>. In the UK in 2013, Royal Mail and the CWU signed the “Agenda for Growth”, an agreement that for the first time in the UK incorporated unique legal elements into a collective agreement. The Agenda for Growth delivered not only on pay, workplace conditions and legal protections, but also on industrial stability and an ongoing programme of work to enhance Royal Mail’s operations in delivery, processing, network and other business functions<sup>56</sup>. The pricing strategy of the Irish USP formed part of a Labour Court Agreement and is another successful case of collaboration between trade unions and the USP, stated as “company’s strategy” in Figure 77 below.

**Figure 77**

**Successful cases of collaboration between trade unions and the postal operator, USPs and non-USPs**

Number of postal operators



Source: Questionnaire to Trade unions

<sup>54</sup> European Social Dialogue Committee for the postal sector (2016) Joint Declaration on the role of Social Dialogue in the transformation

<sup>55</sup> Questionnaire to trade unions, answers from Seko.

<sup>56</sup> Questionnaire to trade unions, answers from CWU.



### 3.5 ENVIRONMENTAL FOOTPRINT OF THE POSTAL SECTOR

The Paris Climate Agreement – adopted by 195 countries in December 2015 – sets out a global action plan to limit global warming to well below 2°C in order to avoid the most dangerous climate change impacts.<sup>57</sup> In this context, the postal sector is an important stakeholder in driving carbon efficiency and achieving relative carbon reductions across all aspects of the supply chain.

We find that, because of reputational, regulatory and financial reasons, postal operators are integrating climate change and energy considerations into operational policy, strategy, and long term planning. For example, in order to reduce emissions generated by sub-contracted and outsourced activities, postal operators have introduced stringent sustainability requirements within their procurement procedures and through their supply chain management practices.

However, we also notice that changes in the product mix (from letters to parcels) create challenges to postal operators to reduce their environmental footprint. As described in chapter 1, postal operators' product mix is changing – the relative importance of parcel delivery is increasing. This has important implications for postal operators' environmental footprint because parcel delivery requires significantly more logistical and transportation capacity than letters. As a result, based on the IPC study, the carbon emission per parcel is more than ten times the carbon emission per letter.<sup>58</sup>

In this section, we describe major drivers for increasing environmental footprint of the postal sector, e.g. growth of trucks and airfreight transportation in Europe due to the growing e-commerce industry, as well as best practice examples in environmental sustainability carried out by postal operators.

#### 3.5.1 Main developments in environmental footprint of USPs

The postal and delivery sector has a negative environmental impact, as most sectors have. The main causes are CO<sub>2</sub>-emissions from the different types of mail transportation, e.g. between sorting centres or in to-the-door delivery. For example, La Poste, the USP in France, reports that 82 per cent of the group's total CO<sub>2</sub>-emissions arise in transportation activities in *transport* and *delivery*.

There is a commitment within the industry to reduce its environmental impact. USPs have increasingly implemented initiatives to reduce it, see section 3.5.2 for a detailed overview. Drivers behind such initiatives are often a mix of cost savings potential, adhering to regulation and satisfying increasing consumer demands for environmentally friendly services. More than half of USPs set environmental targets on their own operations, and slightly less than half of them set environmental targets on their subcontractors. In addition, IPC set a target in 2014 of reducing CO<sub>2</sub>-emissions by 20 per cent between 2013 and 2025 for participants in the Environmental Measurement and Monitoring System (EMMS)<sup>59</sup>.

Most USPs implement initiatives to reduce their environmental impact in transportation or delivery, which accounts for the largest impact in the value chain. Old vehicles are replaced with new,

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<sup>57</sup> United Nations (2015), Paris Climate Agreement, [http://unfccc.int/files/essential\\_background/convention/application/pdf/english\\_paris\\_agreement.pdf](http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf) (accessed, 11 Dec 2017).

<sup>58</sup> IPC (2017), Postal Sector Sustainability Report 2016. Parcel delivery efficiency in 2015 is reported 439,9 grams CO<sub>2</sub> per item vs 37,2 grams for letter mail.

<sup>59</sup> IPC (2018), Postal Sector Sustainability Report 2017, p. 6-7.

more fuel-efficient, vehicles or replaced with non-fossil fuel vehicles. Many USPs also educate drivers in fuel-efficient driving. USPs have also implemented initiatives to increase energy-efficiency of sorting centres. It has been done by increasing the energy-efficiency of the property or replacing old sorting machines with more energy-efficient ones.

Between 2013 and 2016, CO<sub>2</sub>-emissions per item declined both for letter mail and for parcels. For letter mail, the decline was about 3 per cent between 2013 and 2016, from 36.9 grams of CO<sub>2</sub> per item in 2013 to 35.8 grams in 2016, see Table 27. This means large reductions are still necessary to reach the target. Declining mail volumes are complicating the reductions in CO<sub>2</sub>-emissions, because of economies of scale in the postal sector. For parcels on the other hand, CO<sub>2</sub>-emissions have already declined by almost 14 per cent from 505 grams of CO<sub>2</sub> per item in 2013 to 436 grams in 2016.

Parcels have a much larger environmental footprint *per item* than letters with CO<sub>2</sub>-emissions of about 440 grams per item. The main reason is that the parcel volume is much lower than the letter mail volume. Consequently, the transportation distance between delivery points of parcels is longer than that between delivery points of letter mail items. In addition, parcels are larger and heavier, which means that more vehicles, fuel and storage space is required for a certain number of parcels as for the same number of letter mail items.

The fact that many parcels are delivered to a pick-up point, and not to the door, reduces their environmental impact within the postal value chain. It reduces the need for vehicles and the use of fuel. However, this is only the case if the recipients transport the parcels from the pick-up point to their home in a way that has lower environmental impact than the postal operator's mode of transportation. The 436 grams of CO<sub>2</sub>-emissions per parcel in 2016 do not include the additional emissions caused by recipients transporting parcels from a pick-up point to their home. Thus, 436 grams of CO<sub>2</sub>-emissions per parcel is likely an underestimation of the total emissions in the postal value chain, including delivery to the household door. As letter mail is usually delivered to households' mailboxes, the respective estimate of CO<sub>2</sub>-emissions is likely to be more accurate.

**Table 27**  
**Letter mail and parcel delivery efficiency 2013 - 2016**

<b>Delivery efficiency</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2025 (target)</b>
Letter mail (grams CO <sub>2</sub> per item)	36,9	37,2	35,9	35,8	29,5
Parcel (grams CO <sub>2</sub> per item)	505,0	468,7	449,8	436,0	404,0

Note: The CO<sub>2</sub> emissions include the following; 1) direct greenhouse gas (GHG) emissions from operations, buildings and transport owned or controlled by the company, 2) indirect GHG emissions from energy consumed by the company, 3) indirect GHG emissions from outsourced or subcontracted road and air transportation.

Source: IPC (2018), Postal Sector Sustainability Report 2017, p. 9

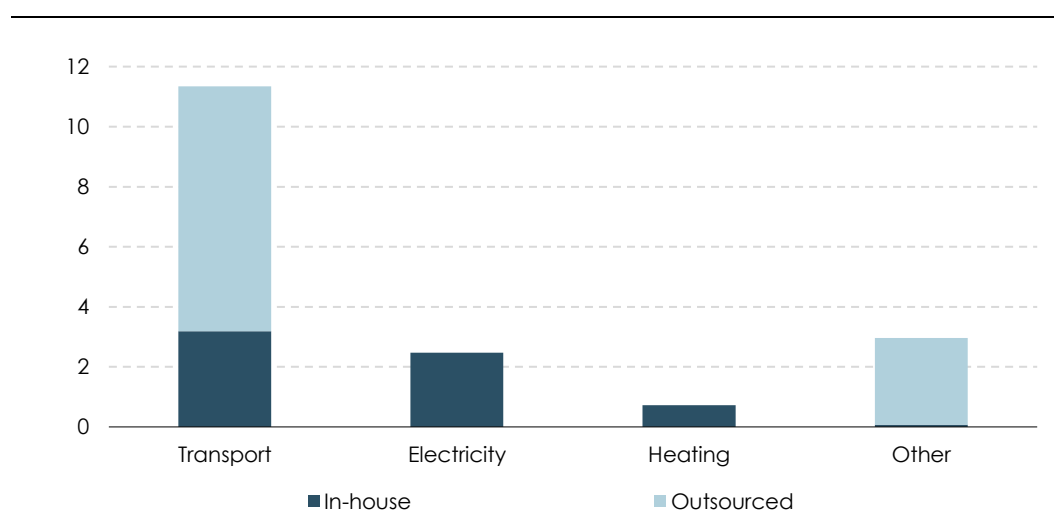
The main source of CO<sub>2</sub>-emissions in the postal sector, both for letter mail and parcels, is different types of transportation. Items are transported in the air, on roads and on rails to, between and from sorting centres, as well as in the last-mile delivery phase. Transportation accounted for 11.3 of the

total 17.5 million tonnes of CO<sub>2</sub>-emissions of the EMMS group<sup>60</sup> in 2016, see Figure 78. This includes emissions from transportation activities within the postal operators as well as outsourced transportation activities.

Another significant source of emissions is the production of electricity consumed within the postal sector. Sorting machines as well as electric vehicles need electricity to run. This causes emissions of about 2.5 million tonnes CO<sub>2</sub>. In addition, heating and other activities, mainly business travel and employee commuting, cause emissions of about 0.7 and 3.0 million tonnes CO<sub>2</sub> respectively.

The relative importance of the different causes of CO<sub>2</sub>-emissions is similar for both letter mail and parcels. However, outsourced road transportation accounts for a slightly larger share of total CO<sub>2</sub>-emissions for parcels than for letter mail.<sup>61</sup>

**Figure 78**  
**CO<sub>2</sub> emissions of the EMMS group from main causes of emissions, including in-house and outsourced activities, 2016**  
Million tonnes CO<sub>2</sub>



Note: The 2.9 million tonnes in the Other - Outsourced category consist of emissions from employee's commuting and business travel. This is excluded in the numbers on emissions per mail item and per parcel in Table 27.

Source: Copenhagen Economics based on data from IPC (2017), Postal Sector Sustainability Report 2017, p. 58.

### *The impact of the USO on environmental footprint of USPs*

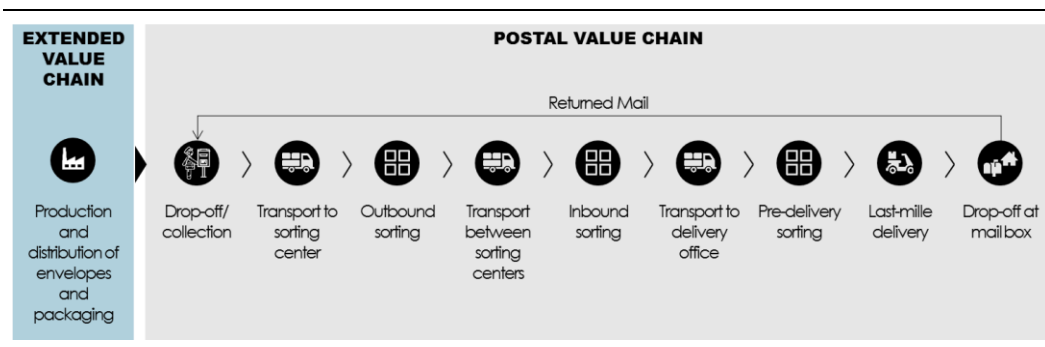
The universal service obligation requires the USP in each country to deliver certain services, at certain quality. This means that the USO can be a driver of environmental impact in the postal sector. More specifically, the USO causes environmental impact if it requires the USP to offer other services or structure its operations differently than it would have done absent the USO.

<sup>60</sup> The EMMS programme run by IPC is a global initiative, consisting of 20 participants from five continents – Africa, Asia-Pacific, Europe, North America, and South America.

<sup>61</sup> IPC (2018), Postal Sector Sustainability Report 2017, p. 48.

To understand the drivers of environmental impact of USPs, and whether the USO affects it, we analyse the individual activities of the postal value chain, see Figure 79. The value chain consists of several activities. Some activities are performed multiple times throughout the value chain, e.g. multiple sorting rounds.

**Figure 79**  
**Extended postal value chain**



Note: Illustration.  
Source: Copenhagen Economics

Different steps in the extended postal value chain can be categorised into the following five main activities:

1. *Production of envelopes and packaging* is part of the *extended postal value chain*. Envelopes and packaging are usually made from wood products and produced in an energy-intensive process. However, in 2015, 58 per cent of the energy consumed by the European pulp and paper industry came from biomass.<sup>62</sup> A large share, 46 per cent<sup>63</sup>, of the raw material used in the European pulp and paper industry came from paper for recycling, and of the new raw material used, a large share is composed of unmarketable waste from the forestry industry, such as wood chips, saw dust and small branches. In addition, almost 73 per cent of all paper consumed in Europe in 2016 was recycled, and paper and board was the most recycled packaging material in Europe with a recycling rate of 82 per cent in 2016.<sup>64</sup>

We note that the environmental impact from production of envelopes and packaging is not mainly driven by the USO, but rather by preferences by senders and recipients for physical communication. This is so, because the USO does not mandate a certain type of communication, but only ensures the provision of the universal service. In addition, in this part of the value chain, the environmental impact is influenced by regulations in the paper and packaging industry, i.e. outside the postal regulation remit.

2. *Collection or drop-off of mail*. A postal operator may collect mail items from mail boxes or pick them up at the premises of large senders. Some large senders prefer to drop off their items at a post office. This reduces the environmental impact of the postal operator, but the sender may

<sup>62</sup> CEPI (2017), Key Statistics 2016, p. 26.

<sup>63</sup> CEPI (2017), Key Statistics 2016, p. 18.

<sup>64</sup> European Declaration on Paper Recycling, Monitoring Report 2016, p. 3 & 5.

have left an environmental footprint in transporting the items to the post office. Irrespective of the deliverer of the items to the post office, transportation is often required, which leaves an environmental footprint due to the need for vehicles and the fuel consumption. However, the impact of collection *per item* is usually relatively low, as the transportation distances are generally short, and the number of items collected is large. The environmental impact of collection is relatively proportional to the transportation distance and the frequency of collection.

In many countries, the USP is required to collect mail every week day. The impact per item is thus likely to increase with falling mail volumes, as long as the USO requirement is kept constant. If the USO would allow for less frequent collection, the impact may be reduced, but only if USPs actually reduced their collection frequency.

3. *Sorting* is done in several steps, often two or three throughout the value chain, e.g. outbound, inbound and pre-delivery sorting. In the outbound sorting, collected mail is prepared for further transportation cross-border or domestically, to the next sorting round, where mail is sorted at a more granular level. In the inbound sorting, all domestic and cross-border mail that is supposed to be delivered domestically is sorted to destination areas (postal codes). Lastly, the pre-delivery sorting is traditionally done in the local delivery office but can also be done in an automated process at a central sorting center. It ensures that the mail items are placed in delivery-order.

Manual sorting causes minimal environmental impact. However, the sorting process is becoming increasingly automated and reliant on machines. This increases the environmental impact of sorting, as the machinery requires electricity. Despite increased automation, the impact of sorting is low compared to transportation and delivery. It is also relatively proportional to the number of items and sorting rounds, as more items and rounds increase the need for machines and electricity consumption. This means that the environmental impact per letter from sorting is likely to stay relatively constant with declining letter mail volumes. However, large volumes may allow for investments in more efficient machines.

The sorting process, is usually not regulated in the USO, but requirements may affect the way the USP organises its operations. For example, from 2018, the Norwegian USP, Posten, is no longer required to offer overnight letter mail services. This enables Posten to centralise its sorting process. This is likely to have reduced the environmental impact in sorting, because Posten needed fewer sorting centers and started using more efficient sorting machines.

4. *Transportation of mail between and from sorting centres* as any type of transportation based on fuels generally has a strong environmental impact. One of the main drivers of the impact of transportation is distance. For this reason, postal operators in densely populated regions have relatively low environmental impact per item, and vice versa. Another important factor is the number of items transported at the same time, which is inversely related to the size of the items. This is one of the reasons for why parcels have a much larger impact than letter mail. This also means that declining mail volumes are likely to increase the impact per mail item. Another important factor is the type of vehicle and fuel used for transportation.

In large countries, where air-based transportation is used to transport mail items quickly, strict USO requirements on delivery speed may cause significant environmental impact. For example,

this was the case in Norway, prior to the reduced requirement on overnight delivery, which enabled Posten to cancel almost all of its air-based transportation and shift to land-based transportation, which is expected to significantly reduce the environmental impact. However, the lower number of sorting centers may have increased the total transportation distance to, from and between the centers.

5. *Last-mile delivery* is the activity with the largest environmental impact. One of the main drivers of the environmental impact of last-mile delivery is distance and frequency of delivery. The more frequent are deliveries, the larger is the total travel distance for last-mile delivery. In some cases, the USO requirement to deliver mail items to each household and business every week day, as is the case in most European countries, may result in having more deliveries than what the USP would choose to do absent the USO. Hence, the USO may have a significant environmental impact resulting from last-mile deliveries.

There are a number of factors that affect the magnitude of the environmental impact caused in last-mile deliveries. First, the travel distance is naturally smaller in densely populated regions than in sparsely populated regions. Secondly, the environmental impact of delivery depends largely on the type of vehicle and fuel used. For instance, delivery using electric vehicles, bicycling or walking significantly reduces the impact. However, in most countries, fossil-fuelled vehicles are still used for a substantial share of the travel distance. In addition, the impact per mail item increases with declining letter mail volumes, as fewer letters are delivered over the same travel distance. The reason is that a mail carrier needs to pass also households that do not receive mail on a particular delivery day to reach the households, for which there is mail, further down the route.

We conclude that the requirements of the USO, and in particular the required delivery frequency, may become an increasingly large driver of environmental impact of USPs in the future. This is likely to occur if letter mail volumes, and consequently letter mail revenues, decline significantly while delivery costs remain relatively unchanged. It is therefore making it commercially optimal for USPs to reduce the delivery frequency. However, with unchanged USO, USPs may not be allowed to reduce it. For example, while Post Danmark (now PostNord), the USP in Denmark was allowed to introduce a *de facto* reduced delivery frequency (XY-delivery) already in 2009<sup>65</sup>, only a few other countries have changed the regulation to allow for reduced delivery frequency in different ways. For instance, in 2014, PostNL, the Dutch USP, was allowed to reduce delivery frequency from six to five days a week.<sup>66</sup> As a result, PostNL immediately seized to deliver on Mondays. Another example is Italy: regulatory and legislative changes in Italy in 2014 and 2015 enabled Poste Italiane, the Italian USP, to implement XY-delivery in the most rural areas.<sup>67</sup> From 2016, the USP in Iceland, Íslandspóstur reduced its delivery frequency in the most rural areas from every day to every other day.<sup>68</sup> In Norway, Posten was allowed to discontinue its Saturday delivery, reducing the frequency from six to five days per week.<sup>69</sup>

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<sup>65</sup> Post Danmark – Postnord (2011), Operations and delivery systems as a short term response to universal service demands, Presentation on 6th December 2011 (accessed, 11 Dec 2017).

<sup>66</sup> Dutch Ministry of Economic Affairs (2014), The Dutch Postal Market and the Postal Directive.

<sup>67</sup> AGCOM (2015), Decision 395/15/CONS, Autorizzazione all'attuazione di un modello di recapito a giorni alterni degli invii postali rientranti nel servizio universale.

<sup>68</sup> Copenhagen Economics (2018), Report on USO Net Costs in Iceland.

<sup>69</sup> Posten Norge (2015), annual report.

In addition, the Norwegian Ministry of Transport and Communication proposed, in early 2018, a change to the delivery frequency required in the Norwegian USO from every week day to every second week day. A study<sup>70</sup> by Copenhagen Economics found that halving the delivery frequency would almost halve the need for vehicles, the time spent and fuel consumed in delivery. In other words, both costs and environmental impact of delivery would be almost halved. Thus, reducing the delivery frequency can have substantial impact on the environmental impact of the postal value chain.

### *Other important drivers of changes in environmental footprint in the postal and delivery sector*

Environmental footprint of USPs is influenced both by postal market developments (namely, changing product mix: less letters, more parcels) as well as general policies, e.g. implementation of “mobility plans”.

First, changes in the demand for postal services with a growth in parcels but a decline in letters imply that the means of transportation and processing have to change affecting the environmental footprint of USPs. As Norway’s Posten Norge and France’s La Poste note, due to the decline in letter volume, vehicles that deliver letters will be fewer. However, they will have extended delivery rounds and be on longer journeys to ensure all addresses are still being served. On the other hand, due to the increase in the relative importance of the delivery of parcels, which are larger and heavier than letters, the use of vehicles with more capacity/payload that generally have higher emissions is necessary.

Additionally, Portugal’s and Spain’s USPs report that parcels require different sorting and storage facilities than letters. The processing equipment for parcels is more energy-intensive than those for letters increasing the emission in the building component. However, Iceland Post and MaltaPost point out that the environmental implications will depend on customer preferences for delivery and whether door delivery or delivery to pick-up stations becomes more important going forward.

Second, the implementation of “mobility plans” by cities which for example impose car-free zones in order to reduce congestion in city centres appear to increase the use of clean pick-up and delivery solutions such as electric vehicles, vehicles using alternative fuels and bicycles as reported by many of the USPs. However, Poste Italiane notes that costs and recharging infrastructure are still big limitations for the use of electric vehicles. bpost in Belgium uses depots in the suburbs (CityDepot) for road haulers to unload their cargo outside the city centre before making combined deliveries to final recipients, which reduces overall carbon emissions.

Nevertheless, Magyar Posta in Hungary points out that the efficiency of especially time-sensitive postal services may be adversely affected by such mobility plans. The customer experience and quality of service as well as delivery costs may be negatively impacted according to MaltaPost.

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<sup>70</sup> Copenhagen Economics (2017), Effects of changing the USO in Norway.

### 3.5.2 Measures taken by postal and delivery operators to mitigate the negative impact on the environment

As discussed in the previous section, postal operators play an important role in reducing environmental footprint of the postal and delivery industry as a whole.

We find that under the investigated 2013-2016 period, USPs undertook several measures to limit the negative environmental impact of postal service provision. Most report that one of the main drivers for implementing those measures are corporate social responsibility and managing stakeholder demands and expectations. USPs want to respond to customers', consumers' and owners' environmental concerns. In addition to reputational gains, many USPs regard measures reducing the environmental impact to be beneficial because they reduce operating costs (with respect to procurement, energy, transport and real estate). Overall, investing in environmental actions can provide a competitive advantage. In addition, reducing the environmental footprint is a response by USPs to existing and upcoming governmental policies and regulations.

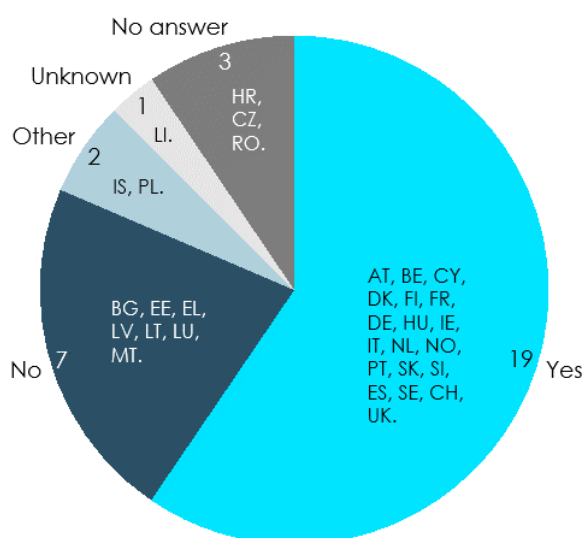
#### *Targets and initiatives to reduce postal operators' environmental footprint*

To limit their environmental impact, many postal operators set environmental targets on their own operations. More than half of USPs (19 USPs) do so, while seven USPs do not, see Figure 80.

**Figure 80**

#### **Number of USPs setting environmental targets on their operations**

Number of USPs



Source: Questionnaire to USPs

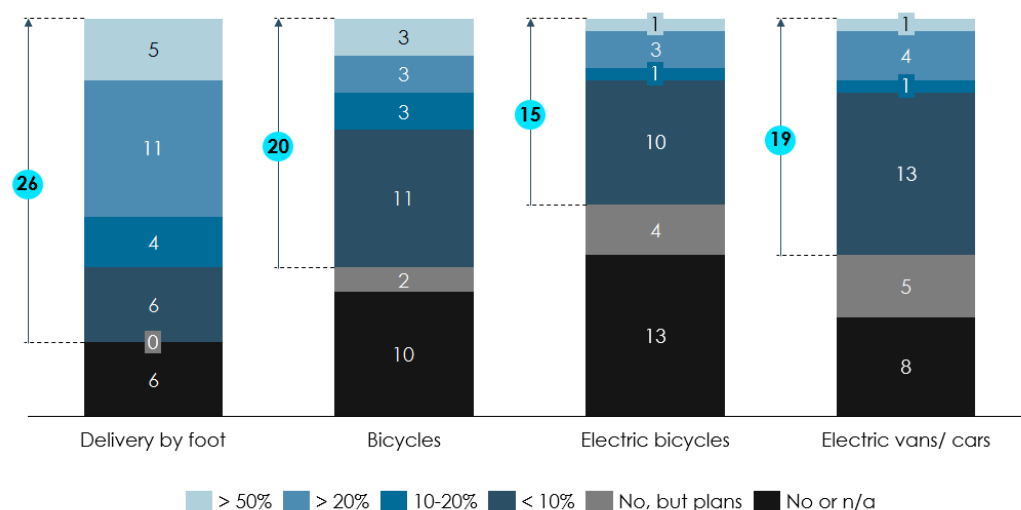
USPs undertake many different initiatives in order to mitigate the environmental impact. Many USPs continue to reduce the energy usage and emissions of their buildings by increasingly relying on renewable electricity use and enhancing building's energy efficiency. They also undertake initiatives to reduce the impact in transportation and last-mile delivery. One of the most common measures is to introduce non-fossil fuel vehicles in addition to the traditional delivery by foot and



bicycle. USPs are employing new electric modes of delivery, such as electric bicycles and electric vans and cars. In total, 15 USPs are currently using electric bicycles for part of their deliveries and 19 are using electric vans and cars, see Figure 81. More USPs complete deliveries by foot (26 USPs) and use bicycles (20 USPs). However, the share of deliveries completed with these modes varies by USP. A few operators do not currently use these environmentally friendly modes for last-mile delivery, but they have plans to do so in the future.

Educating drivers in 'green' driving behaviour is another common measure to reduce environmental impact. Iceland Post also reports that it uses a software to optimise routes and fuel efficiency in cars.

**Figure 81**  
**Environmentally friendly modes of transport for last-mile delivery**  
Number of USPs



Note: The following countries did not provide an answer: FI, RO, SK.  
Source: Questionnaire to USPs

Some USPs indicated which additional environmentally friendly modes of transport they use for last-mile deliveries. These include electric scooters, quadricycles and three-wheeled scooters. Additionally, some USPs utilise technical modifications to conventional fuel vehicles and alternative fuels to reduce emissions, see Table 28.

**Table 28**  
**Additional environmentally friendly ways for last-mile delivery**

Country	Additional ways of delivery	Use
BE	Electric scooters	< 10%
EE	ATV (in rural areas)	< 10%
FR	Pick-up lockers in France's largest cities and urban areas (in order to reduce transport in dense urban area)	n/a
DE	Technical modifications to conventional fuel vehicles; deployment of various types of alternative drive technologies and alternative fuels; electric delivery vehicles StreetScooter (manufactured by Deutsche Post DHL Group)	n/a
IT	Quadricycles	< 10%
MT	Motorcycles	> 50%
NO	Bio fuel	< 10%
CH	Electric two-wheel and three-wheel scooters	> 50%
SE	Train (green electricity)	n/a

Source: Questionnaire to USPs

Deutsche Post in Germany has set targets for reductions in transport-related emissions for 2025 and 2050, see Box 20.

#### **Box 20 Examples of USP's targets to reduce transport emissions in Germany**

In Germany, Deutsche Post sets the goal to reduce all transport-related emissions to net zero by 2050 and formulated four interim targets for 2025:

- Increase the carbon efficiency by 50% compared to 2007 levels;
- Reduce local air pollution emissions by operating 70% of first and last mile services with clean pick-up and delivery solutions, including the use of bicycles and electric vehicles;
- 50% of sales to incorporate Green Solutions;
- Train 80% of employees to become certified GoGreen specialists and actively involve them in environmental and climate protection activities.

Source: Questionnaire to Deutsche Post

Below, we provide examples of different initiatives undertaken by USPs to reduce the environmental impact of their own operations.

### **Box 21 Initiatives to reduce environmental footprint in Austria**

Austria Post's environmental protection measures is the CO<sub>2</sub> NEUTRAL DELIVERY initiative, launched in 2011, consists of three synchronized steps:

- Enhancing efficiency in core processes, e.g. through a modern vehicle fleet and the energetic optimization of buildings,
- Intensified use of alternative technologies, e.g. electricity from renewable energy sources and expansion of the e-vehicle fleet,
- Compensation for unavoidable CO<sub>2</sub> emissions.

Over the past two years Austria Post carried out the following measures: submission and evaluation of the CO<sub>2</sub> reduction target in accordance with the "Science Based Targets Initiative"; expansion of the e-vehicle fleet; Energy efficiency measures in the fields of lighting, room heating, thermal renovation and water heating; Roll out of a project for the optimization of waste management; Implementation of an environmental management system pursuant to ISO 14001 in two major sorting centres in Vienna; purchase of 100% green electricity from Austria.

Source: Questionnaire to Österreichische Post

### **Box 22 Initiatives to reduce environmental footprint in the Netherlands**

In the Netherlands, PostNL increasingly uses energy-efficient means of transport, educates drivers on 'green' driving behaviour, selects routes that enable reduction in mileage and uses electric vehicles for deliveries. By combining logistics flows from other companies, the volume of traffic in city centres is reduced. With the Building Programme, PostNL concentrate the operations as much as possible, thereby reducing the number of sites required. Sorting machines have been replaced with new, more energy-efficient versions and LED lighting at the production sites have been installed. Furthermore, PostNL are reducing energy consumption and aim to generate 40 per cent of the electricity required for parcel sorting centres on a sustainable basis by installing solar panels. Additionally, measures are implemented to improve product collection, reuse and recycling.

Source: Questionnaire to PostNL

### Box 23 Initiatives to reduce environmental footprint in Portugal

CTT in Portugal engage in an environmental program, which includes policy definition (endorsement of the UN Caring for Climate and the UN SDG, part of the We Mean Business Coalition, i.), target-setting (CO<sub>2</sub> emissions reduction target approved by the "Science Based Target initiative"), development of certified environmental management systems in all major operational units, energy certification of all buildings above 1000 square meters, energy audits for the heavy-duty vehicles fleet, fully-renewable electricity procurement, promotion of electric mobility, early renewal of the remainder fossil fuel-based fleet, eco-driving training, participation in domestic and international ratings. CTT also addresses other smaller environmental impacts, such as water and paper consumption, waste management, etc., through a variety of projects.

Source: Questionnaire to CTT

### Box 24 Initiatives to reduce environmental footprint in the UK

In the UK, Royal Mail implemented the following:

- Fleet fuel saving initiative: Air transport has been replaced with road on several routes reducing associated carbon emissions. Drivers have been trained in fuel efficient driving, and telemetry technology has been fitted in 40 per cent of the fleet. In 2017-18, nine electric heavy goods vehicles are in trial at a central London Mail Centre.
- Property energy saving initiatives: Royal Mail changed towards more efficient LED lights at 15 UK sites, and lighting controls at further sites in order to save electricity. Improved Building Energy Management Systems helped to reduce gas consumption by seven per cent in the relevant sites.

Waste and water management activities: In 2016-17, 91 per cent of UK waste was diverted from landfill and the use of water has been reduced by four per cent.

Source: Questionnaire to Royal Mail

### Box 25 Initiatives to reduce environmental footprint in France

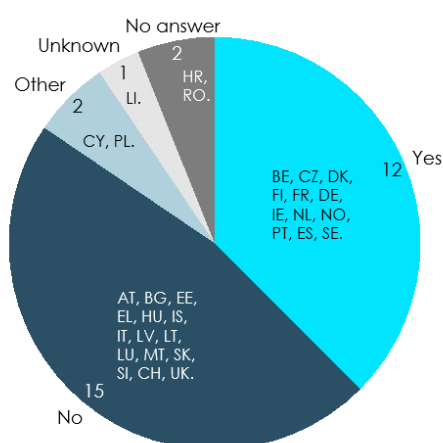
La Poste lists different initiatives, concerning both noise, emissions and energy efficiency. With regards to noise, the Group's entity in charge of buying transport services (Viapost Transport Management) is currently carrying out an experimentation on noise emissions. All trucks have to be PIEK certified, which guarantee a certain maximum level of noise. The trucks are equipped with silent hatchbacks, silent closing systems and soundproofing sides. In order to submit a bid to a tender organized by the Group in the Paris region, the vehicles have to be PIEK certified. At the national level, in consultations, transporters can have bonus points in pre-selection phases if they answer positively to questions on noise emissions. Concerning euro standards, all vehicles have to meet the EURO4 standard at national level. For regional links in Ile-de-France, all vehicles have to meet the EURO5 standard. Random audits on the vehicles take place at least once a year. These audits are carried out by transport managers and cover 80% of the site. Finally, with regards to data centres, the Group has asked its hosts to improve energy efficiency and reduce Power Usage Effectiveness.

Source: Questionnaire to USPs, La Poste's answer

### Targets and initiatives to reduce subcontractors' environmental footprint

Some USPs also set environmental targets on their subcontractors. This section provides a more detailed overview of how USPs work to reduce the environmental impact of their subcontractors. Twelve of the USPs set environmental targets on subcontractors, while 15 do not, see Figure 82.

**Figure 82**  
**Number of USPs setting environmental targets to subcontractors**  
Number of USPs



Note: Includes answers from all investigated 32 USPs.  
Source: Questionnaire to USPs

Belgium's bpost has a sustainable procurement process that assesses both purchased products and services and suppliers' CSR practices, see Box 26.

#### Box 26 bpost's sustainable procurement process

bpost has a sustainable procurement process based on two pillars: the sustainable nature of the purchased products, materials and services (sustainable procurement policy) and the maturity of suppliers with regard to CSR practices within their organization (supplier assessment). bpost's sustainable procurement policy is based on the European Commission's DG Environment for Green Public Procurement (GPP) requirements and social requirements in which multiple product groups can be differentiated. Each product is judged based on its technical aspects, social and environmental performance. Each contract that exceeds a predefined value and has an impact on sustainability, is subjected to a number of sustainability criteria in the evaluation of the offer. This process is monitored by bpost's Head of Procurement and CSR Manager. In order to enforce the sustainable procurement process, an environmental and social clause are included in the execution conditions. The clause obliges the supplier by contract to proactively and innovatively improve the environmental and societal impact of the delivered goods, services or work performed. In case the supplier repeatedly does not comply with the specific requirements of bpost, the contract can, in extreme cases, be terminated.

Next to the procurement policy, bpost is committed to becoming the best in class with regard to responsible paper consumption. bpost's partners PEFC and FSC helped them to achieve this goal. Various measures have already been taken in recent years: 99% of the paper bpost buys is PEFC and/or FSC certified or recycled; 100% of bpost's postage stamps are printed on FSC paper.

bpost partners with Ecovadis to conduct suppliers CSR risk assessments aimed at gaining a better understanding of their vision and results in terms of sustainability. Environmental performance (energy, water, waste, products, etc.) and social performance (health and safety, working conditions, child/forced labor, etc.) are taken into account. Suppliers are rated on a scale of 1 to 100. A discussion between bpost and the supplier is organized in case the score is too low in order to improve their CSR performance.

Source: Questionnaire to USPs, bpost's answer

Czech Post requires subcontractors to have environmentally friendly vehicles and PostNord DK has a supplier code of conduct for subcontractor that includes specific demands regarding systematic environmental work, engines, fuels, tires, energy-efficient driving, maintenance, etc. In the Netherlands PostNL requires subcontractors to have at least EURO4 trucks and in Finland Posti requires them to drive a minimum of EURO5 vehicles.

Norwegian Posten sets environmental standards for its transport suppliers when it comes to Euro class standards, speed limits and training in environmentally-efficient driving. The suppliers must approve the Group's environmental declaration and complete an annual self-assessment questionnaire about their environmental performance<sup>71</sup>.

CTT in Portugal requires suppliers to comply with CTT's Sustainable Procurement Policy. The CO<sub>2</sub> emissions targets for subcontractors are related to a reduction of scope 1, 2 and 3 emissions.

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<sup>71</sup> Source: Questionnaire to USPs, Posten's answer.

Transport subcontractors also face requirements for example related to maximum vehicle age, vehicle maintenance plan, route-specific restrictions (load, time, distance and average speed), specific training according to “Subcontracted Transportation Guidelines”, Eco driving and Awareness training.

Spain’s Correos considers ISO 14001 certification, which sets out the criteria for an environmental management system, as a general requirement in the framework of the supplier assessment in almost every bidding process. Specific requirements for renewable energy in electricity procurements are applied. Vehicles used for the subcontracted routes cannot be older than 5 years and consumptions (L/100km) and emissions (CO<sub>2</sub>, NO<sub>x</sub>) are considered in the vehicles’ selection process.

In Sweden, the supplier code of conduct that the subcontractors of PostNord shall follow, specifies demands regarding environmental work, engines, fuels, tires, energy-efficient driving, maintenance etc. All vehicles must at least comply with Euro Class 5 (Euro Class 6 from 2020/21), heavy vehicles must be less than 8 years and light vehicles less than 6 years old. N1 Class 2 and N1 Class 1 light vehicles must have a maximum certification rating of 225 g CO<sub>2</sub>/km and 150 g CO<sub>2</sub>/km, respectively, for carbon dioxide emissions in mixed driving or must be operated entirely by renewable fuels or electricity. The supplier must use fuels complying with the EN 228 standard and diesel complying with EN 590. In Sweden, fuel of environmental class 1 shall be used and the proportion of renewable fuels used shall amount to no less than 15%. The supplier must ensure that all drivers receive training in the best possible energy-efficient driving (for example eco driving)<sup>72</sup>.

In Germany, Deutsche Post has a Supplier Code of Conduct that subcontractors should comply with, see Box 27.

#### **Box 27 Deutsche Post DHL Supplier Code of Conduct**

The Deutsche Post DHL Supplier Code of Conduct requires that all suppliers and subcontractors comply with all applicable environmental laws, regulations and standards as well as implement an effective system to identify and eliminate potential hazards to the environment. Additionally, Deutsche Post expects their business partners to strive to support DPDHL Group’s climate protection goals through the products and services they deliver. For example, supporting GoGreen, e.g. in providing climate relevant data, in driving efficiently and in providing vehicles with higher EURO-classes in their fleet. Deutsche Post DHL Group is working to minimize the environmental impact from subcontracted road transport. For example, it has identified sustainability criteria for the selection of road transportation subcontractors. The Group is also a founding member of Green Freight Europe and Green Freight Asia which aims at achieving more transparency and efficiency in road transport in Europe and Asia. Finally, Deutsche Post DHL Group participates in industry-wide initiatives such as the United States Environmental Protection Agency (US EPA) SmartWay program.

Source: Questionnaire to USPs, Deutsche Post’s answer

<sup>72</sup> Source: PostNord (2016), PostNord Group’s Code of Conduct for Suppliers of Road Transportation, p. 6-7, <https://www.postnord.com/globalassets/global/english/document/about-us/purchasing/postnord-groups-code-of-conduct-for-suppliers-of-road-transportation.pdf> (accessed, 11 Dec 2017).

### *Main drivers to reduce environmental footprint by operators*

In this section, we provide examples of some USP's drivers behind implementing measures to reduce their environmental footprint.

Spain's Correos and Swiss Post implement measures to mitigate the negative environmental impact in order to address consumers' concerns and change their behaviour, to save cost and to respond to government regulations, see Box 28.

#### **Box 28 Correos and Swiss Post's main drivers to reduce their environmental footprint**

Correos reports the following as their main drivers:

1. Costs savings: Resources are limited, so Correos de Espana selects only those initiatives that will yield a benefit, such as savings in costs or fines, improvements in capacity or knowledge.
2. Consumer environmental concerns: It is increasingly common that big customers include environmental issues in the selection criteria for their service operator (directly or through platforms like Ecovadis). Correos de Espana considers the arising concern regarding air quality that is growing among the citizens and thus their customers.
3. Government regulations: Stricter regulations are critical to set the pace for actions that would otherwise take longer to implement. Some of those restrictions can have a great impact in Correos de Espana's day by day operations (especially in Madrid and Barcelona).

Swiss Post's main drivers are the following:

1. Voluntary agreements: As a participant in the International Postal Corporation Environmental Measuring and Monitoring System, Swiss Post is subject to non-mandatory GHG emissions targets – a 20% reduction in Scope 1, 2, and 3 (where Scope 3 includes outsourced transport only) emissions per letter mail and per parcel by 2025, from a 2013 baseline.
2. Cost savings: Calculations of Total Costs of Ownership of delivery vehicles show that the operation over the life time of electric delivery vans and scooters is cheaper than the operation of delivery vehicles with internal combustion engines.

Changing consumer behaviour: Changes in end consumers' perceptions (e.g. due to increased awareness regarding environmental issues and resource scarcity) lead to reduced demand of existing products, such as unaddressed items as well as addressed mailings (letters, newspapers). With growing consciousness among the population, more and more people are putting "stop advertisement" stickers on their mailboxes, minimize physical mailings (by substituting with e-mail) and switch to online products (e.g. digital newspaper subscription). With the "pro clima"-Shipment service introduced in 2009, Swiss Post customers can also send their parcels and international letters carbon-neutrally for a small surcharge. Since 2012, Swiss Post sends all addressed domestic letters carbon-neutrally and covers the "pro clima" surcharges for off-setting CO2 emissions.

Source: Questionnaire to USPs, Correos and Swiss Post's answers



## CHAPTER 4

# DEVELOPMENTS IN THE UNIVERSAL SERVICE

This chapter provides an overview of the evolution of the Universal Service Obligation (USO) and related regulatory and policy initiatives across surveyed countries in the light of the market developments described in previous chapters.

## 4.1 DEVELOPMENTS IN USO MINIMUM REQUIREMENTS

Changes in the way citizens and businesses communicate inevitably change the role of the postal USO. As discussed in chapter 1, Europe saw a decline in USO mail volumes from 2015 to 2016 by around four per cent driven by a large decline in single piece letter volumes, see Figure 83. Still, single piece letters remain the largest product segment within USO for most postal operators in terms of volumes, compared to bulk mail, direct mail, publications and parcel and express products.

In terms of the USO mail volume decline by region, Eastern Europe presented the smallest decline, possibly due to historically low mail volumes per capita. Other regions had a similar decline in USO mail volumes, namely, between four per cent in Western Europe and eight per cent in Northern Europe.

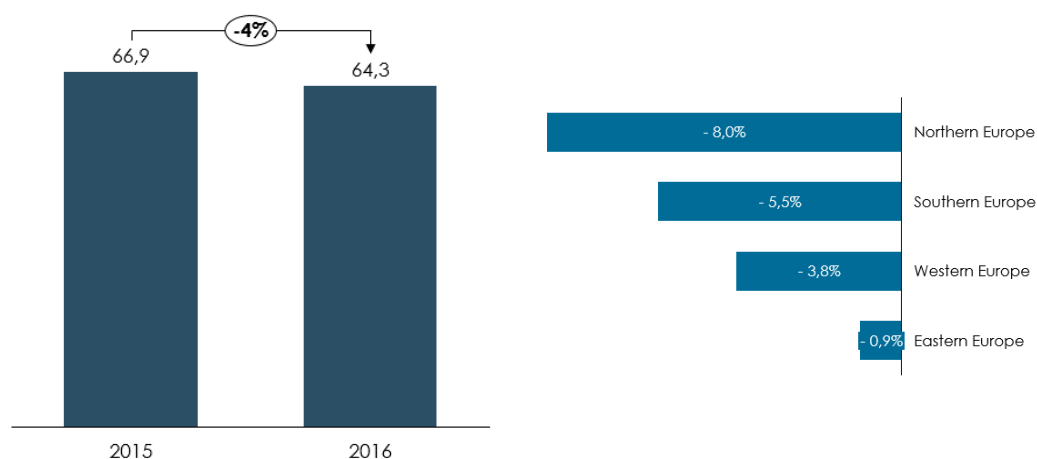
**Figure 83 Development of USO volumes**

**Per capita**

USO mail items per capita

**Annual change**

Percentage change 2015-2016



Note: The figure contains volumes from USPs that reported those volumes for both years and for all their USO products. The figure contains data from the following 22 countries: AT, BE, BG, CY, EE, FR, DE, EL, HU, IE, IT, LT, LU, MT, NL, NO, PT, RO, SK, SI, ES, CH.

Source: Questionnaires to USPs and NRAs

As a result of the continuous decline in letter mail volumes, discussions about the USO requirements in terms of product scope, delivery frequency and mode, and density of the post office network have become more and more prominent. In some countries, this has led to governments and regulators amending or changing the national postal legislation and reducing USO requirements to reflect changing postal user needs (e.g. in Denmark, Finland, Italy, the Netherlands, Norway and Sweden). Some countries are in the process of investigating the possibilities of doing so. In the following, we present the status on USO requirements in the countries covered by our analysis, as well as changes to these requirements made since 2013.

#### **4.1.1 Product scope of the USO**

Article 3 of the Postal Services Directive requires Member States to safeguard the provision of certain basic postal services (the “universal service”). This is key to ensuring reliable and affordable postal services for all users across the EU. As a minimum, Member States must ensure a universal service that provides for the collection, sorting, transport, and distribution at least five working days per week of (i) postal items weighing up to 2 kilograms and (ii) postal packages up to 10 kilograms, as well as services for registered items and insured items in both categories. Within these boundaries Member States have flexibility to decide what exactly constitutes a universal service to fit their domestic circumstances. The universal service covers both national and cross-border services (Article 3, paragraph 7).

The basket of services included in the USO has generally remained unchanged compared to the previous monitoring study: basic domestic letter post, registered mail, insured mail, basic domestic parcel post, and cross border letter post and parcels are most often defined as USO products (in line with results of the previous monitoring study), see Table 30. No more than four countries out of 32 classify any of the abovementioned products as a non-USO product. One of the most apparent divisions in country practices is whether bulk letters are included in the USO or not. 19 countries out of 32 include bulk letters in the USO.

Looking at specifications of individual universal services, however, we find more differences among countries covered in this study. The main difference across countries with respect to product specifications is with regards to (i) the minimum standard speed of letter post delivery, (ii) the speed of a slowest service category, and (iii) the weight limit for letters and parcels.

Firstly, in terms of the fastest letter product included in the USO, the majority of countries (26<sup>73</sup>) requires the USP to deliver letters in one day (D+1). However, in six countries, the fastest letter post product included in the USO has a longer delivery time, see Table 29. The main reason for having slower delivery is optimisation and efficiency – allowing USPs to save costs in transportation, sorting and last-mile delivery (see section 5.3). It is worth noting that in all six countries where the fastest letter product included in the USO has delivery speed lower than D+1, the USPs also provide express services for next day (or even same day) delivery as a non-USO service.

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<sup>73</sup> 26 countries as of 2018, 28 as of 2016, due to recent changes in Norway and Sweden.

**Table 29**  
**Fastest letter product included in the USO, where delivery speed is lower than D+1**

COUNTRY	FASTEST SERVICE CATEGORY LETTER PRODUCT REQUIRED IN THE USO	COMMENT
Denmark	D+5	Since 2016
Finland	D+4	Since 2017
Luxembourg	D+3	
Norway	D+2	Since 2018
Spain	D+3	
Sweden	D+2	Since 2018
Romania	D+2	Intention, not implemented

Note: Information as per May 2018. RO – information from the questionnaire to ANCOM. DK, FI, NO, SE – these cases are described more extensively in appendix A.

Source: Questionnaire to NRAs

In Denmark, in 2016, first class letters were eliminated from the USO and the overall delivery frequency was decreased from six to five days per week. The savings for PostNord from these changes are estimated to be €44 million, reducing the burden of the USO<sup>74</sup>. This was followed by the integration of letter and parcel delivery in 2018.

In Finland, in 2017, Posti discontinued the provision of the D+1 service within the USO and subsequently, merged A and B letters. The new standard letter became a two day delivery time service.<sup>75</sup> The Postal Act was again changed in 2017, lowering the delivery time of the standard letter from D+2 to D+4.<sup>76</sup>

In Norway, A- and B-mail has been merged into a single type of mail with a D+2 standard delivery speed on 1<sup>st</sup> January 2018. Two to four business days is now the standard delivery speed.<sup>77</sup>

In Sweden, the Swedish Government removed overnight delivery and replaced the D+1 requirement with an obligation to deliver standard letters within two working days in effect since 1<sup>st</sup> January 2018. Regardless of the geographical origin of a letter, at least 95 per cent of letters should be with its recipient 2 days after the day of deposit. This and other abovementioned cases are described further in appendix A.

Secondly, in terms of the slowest letter product included in the USO, some countries have introduced products with slower delivery than D+3. For example, in Italy, Poste Italiane, in agreement with the government and the regulator, in 2015 introduced a D+4 letter post service. The new product is to be delivered in four to six days (90 per cent and 98 per cent of the time respectively). The price of this product remained very close to the price of the previous basic letter post service. At the same time, the USP also redefined the price and features of the D+1 letter post product: the price of

<sup>74</sup> PostNord (2017), Annual and Sustainability Report 2016.

<sup>75</sup> Posti (2017) Annual Report 2016.

<sup>76</sup> Finnish Parliament (2017), LiVM 9/2017 vp: 15 §.

<sup>77</sup> Posten (2017) Quarterly report 1<sup>st</sup> Quarter 2018.

this product was increased from €0,8 to €2,8 in 2015<sup>78</sup>, to reflect increased costs, and it was integrated with additional features, e.g. track & trace. In Denmark, the delivery speed for B-letters (i.e. non-priority mail) was decreased from D+3 to D+5 in 2016.

Lastly, the standard weight for USO letter post products throughout the investigated countries is most commonly 2 kg. Basic letter post is a USO product in all responding countries (with differences only in the speed of delivery) and in 29 countries letter post is covered up to 2 kg. In Liechtenstein and Switzerland, the upper weight limit is 1 kg for basic domestic USO letter post products, in UK 750 g and in Ireland 100 g. Basic parcel post is a USO product in all 32 countries. In 18 of the 32 countries, basic parcels up to 20 kg are considered USO products, whereas in eleven of the 32 countries, only parcels up to 10 kg are covered. In Liechtenstein basic parcel post is a USO product up to 30kg and in Lithuania up to 50kg.

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<sup>78</sup> European Commission (2012) State aid SA.33989 (2012/NN) – Italy, [http://ec.europa.eu/competition/state\\_aid/cases/246559/246559\\_1410182\\_58\\_2.pdf](http://ec.europa.eu/competition/state_aid/cases/246559/246559_1410182_58_2.pdf).

**Table 30**  
**Product scope of the USO (2016)**

	Basic letter (FSC, domestic)	Basic letter (SSC, domestic)	Bulk letters	Registered mail	Insured mail	Direct mail	Publications	Basic parcel (domestic)	Bulk parcels	Cross-border letter post	Cross-border parcels	Express ser- vices
AT	2kg	2kg	2kg	n/a	n/a	2kg	2kg	10kg	10kg	2kg	10kg	
BE	2kg	n/a	2kg		2kg	2kg	2kg	10kg		2kg	20kg	
BG	2kg	2kg		2kg	2kg		5kg	20kg		2kg	20kg	
HR	2kg	2kg		2kg	2kg			10kg		2kg	10kg out, 20kg in	
CY	2kg	2kg	2kg	n/a	n/a	n/a	2kg	20kg		2kg	20kg	
CZ	2kg			2kg	10kg			10kg		2kg	10kg out, 20kg in	
DK		2kg		2kg, 20kg	2kg, 20kg		2kg	20kg		2kg	20kg	
EE	2kg	2kg		2kg	2kg			20kg		2kg	20kg	
FI		2kg		2kg, 10kg	2kg, 10kg			10kg		2kg	10kg out, 20kg in	
FR	2kg	250g	2kg	2kg	6kg		2kg	20kg		2kg	20kg	
DE	2kg		2kg	2kg	2kg	2kg	2kg	20kg	20kg	n/a	n/a	n/a
EL	2kg	2kg	2kg	2kg	2kg	2kg	2kg	20kg	20kg	2kg	20kg	
HU	2kg	2kg	2kg	2kg	2kg	2kg		20kg	20kg	2kg	40kg	
IS	2kg	2kg	2kg	2kg		2kg	2kg	20kg		2kg	20kg	20kg
IE	100g		100g	20kg	20kg			20kg		100g	20kg	
IT	2kg	2kg	2kg	2kg	2kg		2kg	20kg		2kg	20kg	
LV	2kg	2kg	2kg	2kg	2kg	2kg	2kg	20kg			20kg	
LI	1kg	1kg		1kg	1kg		1kg	30kg		2kg	20kg	
LT	2kg	2kg		2kg	2kg			50kg		2kg	20kg	
LU	2kg		2kg					10kg	10kg	20kg	20kg	
MT	2kg		2kg	2kg	2kg	2kg	2kg	20kg	20kg	2kg	20kg	
NL	2kg			2kg	2kg			20kg		2kg	20kg	
NO	2kg	2kg		2kg	2kg		2kg	20kg		2kg	20kg	
PL	2kg	2kg		2kg	2kg			10kg		2kg	20kg	
PT	2kg	2kg	2kg	2kg	2kg		2kg	10kg	10kg	n/a	20kg	
RO	2kg	2kg		2kg	2kg		2kg	10kg		10-20kg	10-20kg	
SK	2kg	2kg	2kg	2kg	2kg	2kg		10kg	10kg	2kg	10kg	
SI	2kg			2kg	2kg	2kg	2kg	10kg		2kg	10kg	
ES	2kg		2kg	2kg	2kg			20kg	20kg	2kg	20kg	
SE												
CH	1kg	1kg	1kg	1kg			no limit	20kg	20kg	1kg	20kg	
UK	750g	750g		20kg	20kg			20kg		750g	2kg	n/a

Note: The weight indicated is the upper weight limit. Light grey cells mean the product is defined as US by law. Cells with "n/a" mean no answer was given. Weights separated by comma refer to two possible limits. Weights separated by "-" refer to an interval. Weights with "out" refer to outbound products, "in" to inbound. DK, FI - registered and insured mail handled like a normal letter/parcel. FI - Cross-border parcels obligation only for parcels sent abroad. HU - publications are not a separate item category. Only basic bulk parcel is USO product. LI - basic letter post includes cross-border with CH. LT - upper weight limit for non-EU inbound and outbound parcels is 10kg. MT - direct mail considered part of the bulk mail service. PT - cross-border parcels from EU. ES - bulk letters part of the USO de facto. SE - basic letter SSC domestic and bulk letters part of USO de facto. Direct mail is not explicitly mentioned in the law but falls under the US definition. UK - cross-border parcels may be under USO up to 5kg for certain destinations if the parcel contains printed materials/ books.

Source: Questionnaire to NRAs

#### 4.1.2 Minimum delivery frequency requirements

According to Article 3 of the Postal Services Directive, “Member States shall take steps to ensure that universal service is guaranteed not less than five working days a week, save in circumstances or geographical conditions deemed exceptional”.

In terms of letters, we find that most countries only impose the minimum requirement stipulated in the Directive, i.e. five days per week. 31 NRAs reported that they meet the minimum five days per week frequency of delivery USO requirement set out in the Postal Services Directive, see Table 31.

**Table 31**  
**Delivery frequency of priority letters specified under USO requirements**

As a general rule (i.e., excluding exceptional circumstances), how many days of the week does the NRA or government oblige the USP to deliver priority letter post items?	
5 days per week	AT, BE, BG, HR, CY, CZ, EE, FI, EL, HU, IS, IE, IT, LV, LT, LU, NL, NO, PL, PT, RO, SK, SI, ES, SE, CH
6 days per week	FR, DE, LI, MT, UK
No specific requirement	DK*

Note: CZ, DE, LU, ES - have no differentiation between priority and non-priority. \* DK – priority letter (D+1) is outside the USO. The FSC basic letter post is D+5, which since 2018 has a delivery frequency of once per week, see appendix A. IT – the requirement is five days per week, except for the rural areas affected by the XY delivery model, see appendix A.

Source: Questionnaire to NRAs

In addition, there have been some developments with respect to reduction and/or geographical diversification of delivery frequency. For example, the Netherlands and Norway recently decreased the delivery frequency obligation from six days to five days per week. In Finland, the Finnish Communications Regulatory Authority decreased the USO requirements for delivery frequency in urban areas from five to three days per week, while leaving the requirements unchanged for rural areas, see appendix A.

Moreover, in several countries the universal service obligation permits delivery of some non-priority or bulk products fewer days per week than required for delivery of priority letter post items, see Table 32. We see indications that this trend may continue. For instance, according to the qualitative study commissioned by the Belgian Institute for Postal Services and Telecommunications (BIPT), users would generally agree with a reduction of the delivery frequency for standard letters.<sup>79</sup>

<sup>79</sup> Why5Research (2017) Een kwalitatieve studie naar consumentenperspectieven binnen de Belgische postale markt; commissioned by the Belgian Institute for Postal Services and Telecommunications (BIPT).

**Table 32**  
**Reduced frequency of non-priority letters and bulk products permitted by the USO**

Does the universal service obligation permit delivery of some non-priority or bulk products fewer days per week than required for delivery of priority letter post items?	
Yes	AT, EL, IE, IT, LI
No	BE, BG, HR, CY, CZ*, DK, EE, FI, FR, DE*, HU, IS, LV, LT, LU*, MT, NL, NO, PL, PT, SK, SI, ES, SE, CH, UK

Note: CZ, DE, LU, ES - no differentiation between priority and non-priority. IE - deferred bulk mail delayed by 2 days. IT - According to decision n. 395/15/CONS. LI - 5 days per week for parcels and non-priority letter post

Source: Questionnaire to NRAs

In terms of parcels, almost all NRAs also reported meeting the minimum frequency of delivery USO requirement set out in the Postal Services Directive for parcel deliveries, see Table 33. The USO requirements in France, Germany, and Malta ensure delivery of parcels six days a week. It is worth noting that in some countries, USPs provide higher delivery frequency of parcels than specified in the USO (at least in some geographical areas), e.g. in Austria, since 2015 the USP voluntarily delivers parcels six days a week in 80 per cent of the country's territory. In Finland, there is no obligation for parcel delivery, as there is enough competition in the market. However, parcels are to be delivered within a reasonable time in compliance with quality standards, i.e. at least 50 per cent of the consignments should be delivered within the fourth working day and at least 97 per cent within the fifth day from the date of submission<sup>80</sup>.

**Table 33**  
**Delivery frequency of parcels specified under USO requirements**

As a general rule (i.e., excluding exceptional circumstances), how many days of the week does the NRA or government ensure delivery of parcels in the universal service?	
5 days per week	AT, BE, BG, HR, CZ, DK, EE, EL, HU, IS, IE, IT, LV, LI, LT, LU, NO, PL, PT, RO, SK, SI, ES, SE, CH, UK
6 days per week	FR, DE, MT
No specific requirement	CY, FI, NL

Source: Questionnaire to NRAs

### *Exceptions to the USO minimum delivery frequency requirements*

Whilst the Postal Services Directive defines the minimum requirements to be met in all Member States, in certain exceptional locations and circumstances, legislators or NRAs may allow derogations from these requirements.

Our analysis shows that several countries make use of this possibility and that there are different mechanisms applied to allow derogations from Article 3(3) universal service requirements.

<sup>80</sup> Source: Finnish Government (2016), HE 272/2016, section 19.

The most common reasons for accepting a lower service level relate to accessibility, due to geographical aspects, infrastructure and/or risk of one's health (e.g. due to weather conditions, attack by dogs), see Table 34.

**Table 34**  
**Exceptions to delivery frequency of priority letters**

Applicable exceptions on priority letter frequency of delivery, due to:	
Areas difficult to access, e.g. mountainous areas, islands, poor transport infrastructure	AT, BG, HR, EE, FI, FR, IS, NO, RO, SK, UK
Depopulated areas, dispersed population	HR, EL, IT, SE
USP's employees' health and security endangerment	SK, UK
Holidays (e.g. derogations for collections on 24 December)	EE, IE, MT
None or no answer	BE, CY, CZ, DK, DE, HU, LV, LI, LT, LU, PL, PT, SI, ES

Note: HR - for up to 10% of households. FI - exception may not exceed 1.000 households. IT - through alternate day delivery system (according to decision n. 395/15/CONS). NL - allows for 6 days delivery for mourning mail and medical mail.

Source: Questionnaire to NRAs

In addition, several investigated countries apply exceptions to the frequency of delivery of parcels, though slightly less countries than compared to letter post service exceptions, see Table 35.

**Table 35**  
**Exceptions to delivery frequency of parcels under the USO**

Applicable exceptions on parcels frequency of delivery, due to:	
Geographical conditions (e.g. areas difficult to access, islands, letterbox placement, lack of proper infrastructure)	BG, HR, EL, NO, RO, SK, UK
Low population density areas (e.g. rural areas)	HR, IT, NO, SK, SE
USP's employees' health and security endangerment	SK, UK
Holidays	IE
None or no answer	AT, BE, CY, CZ, DK, EE, FI, FR, DE, HU, IS, LV, LI, LT, LU, MT, NL, PL, PT, SI, ES

Note: HR - for up to 10% of households. IT - through alternate day delivery system.

Source: Questionnaire to NRAs

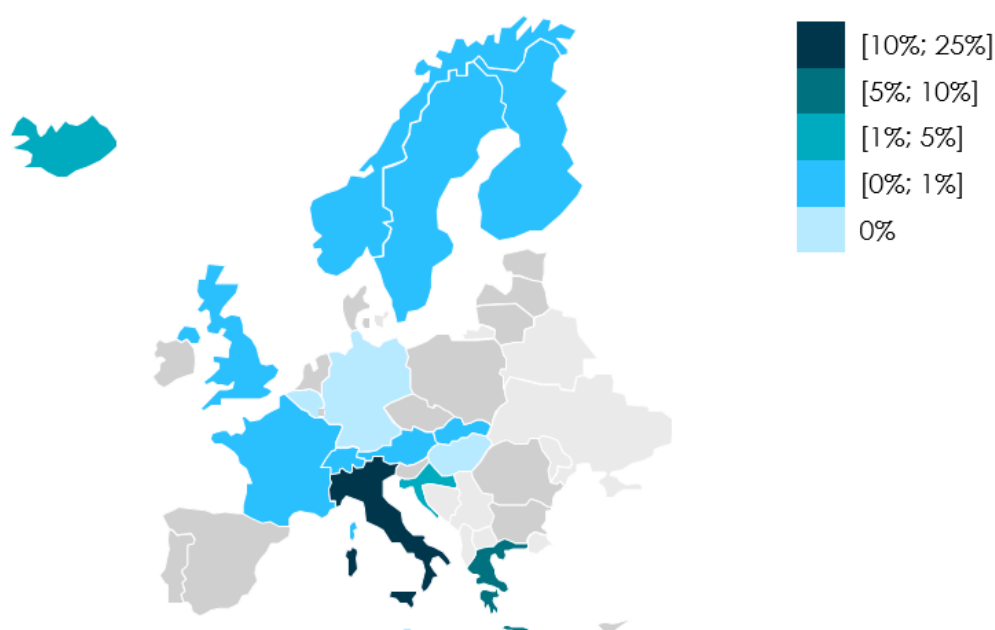
### *The impact of exceptions is generally limited*

We find that the impact of exceptions to the USO minimum requirements is generally limited to 1% of the population, see Figure 84. Only a few countries (mostly those with a significant number of small islands) reported that more than 1% of their population receives priority letters at a lower standard frequency. Italy stands out as the country with the greatest percentage of the population



which may not receive priority letters at the standard delivery frequency, as a result of the legislation enabling the XY delivery model specification adopted in 2014, see Box 29. Greece and Croatia also reported that more than 1% of their population receive priority letters at a lower standard level.

**Figure 84**  
**Approximate share of the population not receiving priority letters at standard frequency**



Source: Questionnaire to NRAs

#### Box 29 Introduction of XY delivery model in Italy (2014)

In 2014-2015, regulatory and legislative changes in Italy set out that alternate day delivery and collection of USO products can apply to up to 25 per cent of the population. Based on this, Poste Italiane has started implementing an XY delivery system in the most rural areas of the country where during the first week, post is delivered on Mondays, Wednesdays and Fridays, and the next week post is delivered on Tuesdays and Thursdays. In remaining areas, the USO requirement is a five day delivery frequency.

Source: Poste Italiane annual reports (2013-2016), AGCOM *DELIBERA N. 395/15/CONS*, Law n.190 of 23 December 2014

Similarly to letters, only a few countries reported that more than 1% of their population receives parcels at a lower standard frequency. An observation is that letter post and parcels are provided on a similar footing, i.e. in the same country, lower standard for letters and parcels is provided to a similar share of population. One of the explanations is that USPs, especially in remote areas, rely on the same postal infrastructure.

**Table 36**  
**Share of the population not receiving parcels at standard delivery frequency**

Approximate percentage of the population that does not receive delivery of parcel items at the standard frequency	
10-25%	IT
5-10%	EL
1-5%	HR
Less than 1%	AT, DK, FR, NO, SK, SI, SE, CH, UK
0%	BE, DE, HU, MT
No answer or not applicable	BG, CY, CZ, EE, FI, IS, IE, LV, LI, LT, LU, NL, PL, PT, RO, ES

Note: IT - due to the alternate day delivery system. NO - 464 households and businesses in 2016. SK - it is an estimate. CH - 0.07% of all houses which are all season inhabited. UK - in 2016-17, there were 2,460 properties which were exceptions from the USO (around 0.008% of properties)

Source: Questionnaire to NRAs

### 4.1.3 Mode of delivery: delivery of mail to appropriate installations

Article 3, par. 3 of the Postal Services Directive, requires as minimum “one clearance [...] (and) one delivery to the home or premises of every natural or legal person or, by way of derogation, under conditions at the discretion of the national regulatory authority, one delivery to appropriate installations.” Delivery to the home or office premises is, in most cases, important for both businesses and residential users as well as for both letter and parcel services and, according to a report by the ERGP<sup>81</sup>, users are satisfied with current national provisions.

#### *Mode of delivery for letters*

In terms of letter post, countries have adapted the requirement in the Postal Services Directive to national circumstances. When asking NRAs about the legal requirement imposed on the USP(s) with respect to mode of delivery of letter post in the universal service, e.g. delivery to the door, to the street or to the communal mailbox, virtually all NRAs responded that the USP is required to deliver USO letters to the door of the addressee. However, based on the answers provided, we find that where the mailbox is located (e.g. in the pigeonhole of the apartment door, on the street, 100 meters from the premises) may differ between countries.

<sup>81</sup> ERGP (2016) 36, Report on Universal Services in light of changing postal end users' needs.

The most costly requirement for the postal operator – delivery to the addressee in person – is common for registered and insured letters. In addition, in Finland, basic letter post is also required to be delivered to building-specific pigeonhole boxes or apartment-specific mail slots (but only for addresses located in apartment buildings). This means that a postman would have to, for example, go to the fifth floor of the apartment building to drop the letter in the pigeon hole in the door of an addressee.

In most of the cases, however, the USP is allowed to deliver letters to communal letter boxes, e.g. at the street level in the apartment building, if such are available.

In addition, some countries (PL, NO, SE) allow USPs to drop letters even further from the address, to groups of letter boxes on the roadside 100-250 meters away from the recipient. However, such exceptions are typically applied only in scarcely populated areas (e.g. only in rural areas in Poland).

As an example of developments outside the EU, EEA & CH area, in Canada the requirement concerning mode of delivery was also changed. In particular, in 2015 door-to-door delivery was replaced in some parts of the country by delivery to community mail boxes, see appendix A.

#### *Mode of delivery for parcels*

In contrast to letter mail delivery, many countries' national requirements for basic parcel delivery are above the minimum requirements set in the Postal Services Directive. While the Postal Services Directive does not state any specific requirement for mode of delivery of parcels, in many countries the national regulation requires parcels to be delivered without additional charge to the final address (i.e. the basic postal service includes parcels delivery to the door), see Table 37.

Overall, there are three general approaches to parcel delivery among the investigated countries:

First approach requires all parcels to be delivered to the door of the addressee.

Second approach requires parcels to be delivered to the door of the addressee, but for an appropriate (additional) charge (e.g. in Croatia and Portugal). In practice, users in Portugal pay an additional charge for delivery of parcels to the home address. If the user does not pay the charge, the parcel is held at the postal outlet closest to the addressee. The only difference compared to the first approach is that the USP may offer a 'basic' (delivery to the outlet) and a 'premium' (delivery to the door) universal service.

Third approach – parcels are only required to be held at the postal outlet closest to the addressee. This is the most flexible option for the USP.

**Table 37**  
**Mode of delivery for parcels as per legal requirement imposed on the USP**

<b>As a general rule, what is the legal requirement imposed on the USP(s) with respect to mode of delivery of parcels in the universal service? E.g. To the door, to the street or communal mailbox, possibility to leave the parcel with neighbour.</b>	
Parcels must be delivered without additional charge to the addressee	AT, BE, CY, CZ, DK, FR, DE, HU, IS, IE, IT, LI, LT, LU, MT, PL, SK, SI, ES, CH, UK
Parcels must be delivered to the door of the addressee for appropriate charge	HR, PT
Parcels are required only to be held at the postal outlet closest to the addressee	BG, EE, FI, EL, LV, NO, RO, SE
No answer	NL

Note: ES - the ordinary parcels ('blue parcels') are delivered by Correos with a certified nature, therefore they are delivered to the addressee's premises (in hand) and returned to the sender if the parcel could not be delivered. SE - the basic parcel services are since long provided at post offices and outlets.

Source: Questionnaire to NRAs

#### 4.1.4 Retail network density

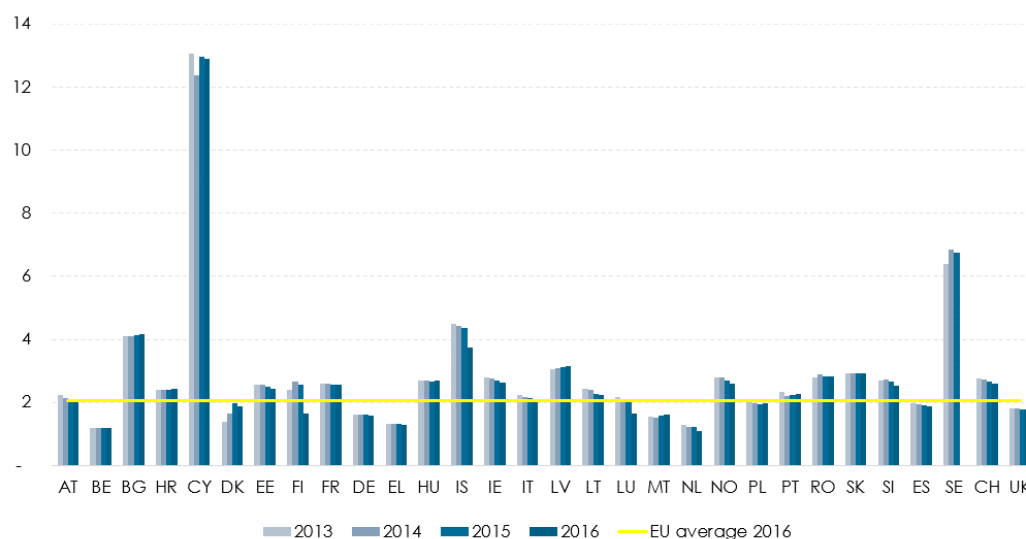
Article 3, par. 2 of the Postal Services Directive requires universal postal services to be provided in an ubiquitous<sup>82</sup> manner: "Member States shall take steps to ensure that the density of the points of contact and of the access points takes account of the needs of users".

The average density of the post office network across the EU is 2,06 post offices per ten thousand inhabitants, see Figure 85. Cyprus stands out as having the most dense post office network with about 13 post offices for every ten thousand inhabitants. Austria, Belgium, Denmark, Finland, Germany, Greece, Luxembourg, Malta, Netherlands, Poland, Spain and the United Kingdom have post office network densities (in 2016) below the EU average of 2,06 post offices per ten thousand inhabitants. In particular, Belgium and the Netherlands have the least dense postal network with up to 1,2 post offices for every ten thousand inhabitants in 2016. It has to be noted, that Belgium and the Netherlands are densely populated and therefore postal offices are considered within acceptable distance for citizens. Moreover, in the Netherlands, in 2015 the government enabled a reduction in postal outlets by 50 per cent, from 2.000 to 1.000, see appendix A.

In the 2013-2016 period, the density of the postal office network declined in 23 of the 32 countries. Of these 23 countries, France was the only country that saw a decline in density because the population was growing faster than new post offices were being opened. In the remaining 22 countries, the reduced density of the post office was caused by a closure of post offices between 2013 and 2016.

<sup>82</sup> i.e., all citizens should have access to universal postal services on more or less the same terms irrespective of their geographical location.

**Figure 85**  
**Density of post office network**  
Number of post offices per ten thousand inhabitants

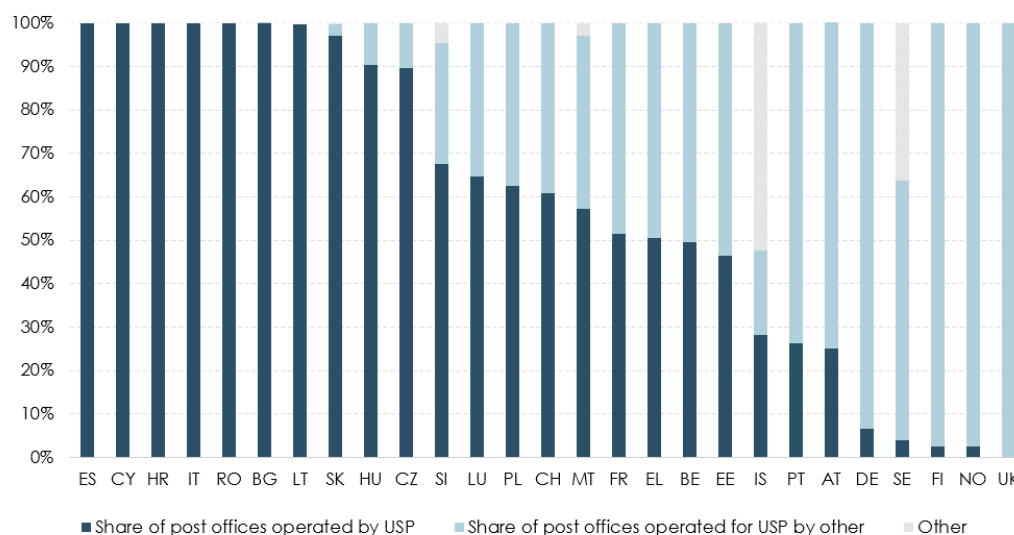


Note: HU - numbers refer only to the designated USP. SE - total postal offices and mobile offices for 2013 had a different organization, consequently the figure for 2013 is not comparable. UK - the USP does not operate post offices. IT, NO, RO, CH - the total number of postal outlets has been calculated as the sum of postal outlets operated by USP and by other, as provided by the respondents. CZ - confidential information.

Source: Questionnaire to NRAs; Eurostat [demo\_pjan] (accessed, 15 Jan 2018)

Another important observation is that most USPs are outsourcing the operation of service points. In 2016, only USPs in Spain, Cyprus, Croatia, Italy, Romania, Bulgaria, and Lithuania operated 100 per cent of the postal outlets in their country, see Figure 86. In Norway, Finland and Sweden the USP operates only two, three and four per cent of all postal outlets respectively. The remaining 98 per cent of postal outlets are operated by others on behalf of the USP. Other providers operated at least half of the postal outlets for the USP in Austria, Belgium, Estonia, Finland, Germany, Norway, Portugal and Sweden.

**Figure 86**  
**Share of post offices operated by USPs, 2016**  
Share of a total number of post offices



Note: FI – the information is provided by the USP.  
Source: Questionnaire to NRAs

Referring to developments outside the countries of focus of this report, in Canada 73 franchise postal offices were open in 2014. One of the reasons to do so is the lower operating cost for the USP, see appendix A.

## 4.2 QUALITY OF SERVICE REGULATION AND MONITORING

For domestic services, Member States may define quality of service standards, in particular as regards transit times, regularity and reliability of services (Article 16 Postal Services Directive). For intra-EU cross-border services, Member States must ensure compliance with standards contained in Annex II of the Postal Services Directive. These requirements also provide some boundaries for the domestic transit times.

We notice several important developments in the quality of universal services and related regulatory practices in 2013-2016:

Firstly, declining mail volumes create a risk of USPs reducing quality of service by cutting costs too much, i.e. when reducing redundancy in the system, such that there are no margins for error anymore. This in turn affects consumers. Moreover, if the mailman passes an address more seldom, it will also take longer before the mailman can fix a problem if a letter by accident was not delivered first time. Hence, regulators face the challenge to reflect these developments in the measures and standards used in service quality monitoring and to consider the regulation of quality of service.

However, drops in quality of service can also occur, as a more temporary phenomenon, as a result of

operational transformation processes by USPs to cut costs in response to letter mail decline. For instance, in some of the Nordic countries.

Secondly, reductions in the national requirements for delivery frequency creates a challenge for upholding the current quality requirements for cross-border items specified by the Postal Services Directive – as well as spillovers on the standard applicable to cross-border items under UPU rules. We find that the quality of service performance for international letter mail in Europe has declined significantly since 2013.

Moreover, with the advent of digitisation and e-commerce, user demands for quality of service and product features has shifted (e.g. delivery time, tracking, flexibility in delivery process etc.). Interviews with market stakeholders (e.g. e-retailers) show that the traditional product features and hence, quality parameters monitored, may become less important as user preferences change (e.g. in terms of e-commerce shipments, users emphasise that time-certain delivery is more important speed for delivery). This suggests that there is a need to revisit and assess the relative importance of current quality parameters and performance of different measurements.

Lastly, most regulators monitor (and, if applicable, regulate) quality of service by measuring the transit time for mail and parcels. However, surveyed countries differ considerably as to the overall number and type of additional dimensions of service quality they measure and at which level of granularity. In Portugal, for instance, the NRA has gradually included more and more service quality dimensions to monitor changes in user demand (e.g. waiting time at post offices).

The case of not only monitoring, but also regulating service quality varies among investigated countries. While the increasing incentives for postal operators to cut costs may spur increased quality regulation (e.g. within price caps or via fines), regulation of quality of service that is too strict may either make the services not affordable or, by increasing the financial burden on USPs, affect the financial sustainability of the USO.

#### **4.2.1 Quality of service monitoring**

Under article 16 of the Postal Services Directive, Member States must ensure that quality of service standards are set for domestic universal services. In addition, Member States must arrange for independent performance monitoring annually and publish the results. Typically, this is conducted by NRAs.

Most NRAs reported setting monitoring standards for delivery at least in terms of transit (routing) time as well as reliability of services (e.g. share of lost items), see Table 38. 16 NRAs are responsible for measuring the quality of service on an annual basis, independently on whether they set monitoring standards. In France and Malta, the USP is responsible for measuring the quality of service, while in Portugal, Slovakia, Slovenia and the United Kingdom the quality of service measurement is carried out by an external third party. The most common form of quality measurement method is a panel with manual reporting although five NRAs use panel reporting with RFID technology and two use both. The results of the quality of service monitoring by the NRA is published annually for 25 (or 78 per cent) of surveyed countries and biannually in Malta. In the case that the USP is not meeting quality standards or other requirements, 26 of the NRAs can impose fines on the USP and 25 of

the NRAs can impose other remedies. NRAs in Iceland, Ireland and Switzerland cannot fine the USP, but can impose other remedies, see Table 38.

In a broader sense, consumer satisfaction is another important measure that may indicate changes in the quality of service. According to ERGP, in 2016, around 39% of the NRAs monitored indicators of consumer satisfaction in their country and almost all of these published the respective results. The results from the 2016 ERGP questionnaire show that 36% of the USPs in Europe conduct studies regarding the level of consumer satisfaction and publish the results.<sup>83</sup>

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<sup>83</sup> ERGP (2016) 35 – Report on QoS, consumer protection and complaint handling.



**Table 38**  
**Quality of service monitoring by NRAs**

Country	The NRA set monitoring standards	Annual measurement of the quality of service by the NRA	Annual publication of results on quality of service monitoring by the NRA	Can the NRA fine the USP(s)?	Can the NRA impose other remedies?	Quality measurement method
AT	No	Yes	Yes	No	No	n/a
BE	Other	Yes	Yes	Yes	Yes	Panel with RFID technology
BG	n/a	n/a	n/a	Yes	No	Other
HR	Yes, quality targets	No	Yes	Yes	Yes	Panel with manual reporting
CY	Yes, quality targets	Yes	Yes	Yes	Yes	Other
CZ	Yes, quality targets and minimum requirements	No	Yes	Yes	Yes	n/a
DK	Yes, quality targets	Yes	Yes	Yes	No	Panel with RFID technology
EE	No	Yes	Yes	Yes	Yes	Panel with manual reporting
FI	Yes, quality targets and minimum requirements	Yes	Yes	Yes	Yes	Panel with manual reporting
FR	Other	Other	Yes	Yes	Yes	Other
DE	No	No	Yes	No	No	Panel with manual reporting
EL	Yes, quality targets	Yes	Yes	Yes	Yes	Panel with manual reporting
HU	No	Yes	No	Yes	Yes	Panel with manual reporting
IS	Yes, quality targets	Yes	Yes	No	Yes	n/a
IE	Yes, quality targets	Yes	Yes	No	Yes	Panel with manual reporting
IT	Yes, quality targets	Yes	Yes	Yes	Yes	Panel with manual reporting
LV	Yes, quality targets	Yes	Yes	Yes	Yes	Panel with manual reporting
LI	No	No	No	No	No	Other
LT	No	No	Yes	Yes	Yes	Panel with manual reporting
LU	Yes, quality targets	Yes	Yes	Yes	Yes	Panel with manual reporting

*Continued in next page.*

Country	The NRA set monitoring standards	Annual measurement of the quality of service by the NRA	Annual publication of results on quality of service monitoring by the NRA	Can the NRA fine the USP(s)?	Can the NRA impose other remedies?	Quality measurement method
MT	Yes, quality targets and minimum requirements	Other	Other	Yes	Yes	Panel with manual reporting
NL	No	No	No	Yes	Yes	n/a
NO	Yes, quality targets	No	No	Yes	Yes	Other
PL	n/a	Yes	Yes	Yes	Yes	Other
PT	Yes, quality targets and minimum requirements	Other	Yes	Yes	Yes	Both manual and RFID
RO	Yes, quality targets and minimum requirements	No	Yes	Yes	Yes	Other
SK	Yes, quality targets	Yes	Yes	Yes	Yes	Other
SI	Yes, quality targets	Other	Yes	Yes	Yes	Panel with RFID technology
ES	Yes, quality targets	Yes	Yes	Yes	n/a	Both manual and RFID
SE	No	No	No	Yes	No	Other
CH	Other	No	Yes	No	Yes	Panel with RFID technology
UK	Yes, quality targets and minimum requirements	Other	Yes	Yes	Yes	Panel with RFID technology

Note: "n/a" appears when an answer was not provided.

Source: Questionnaire to NRAs

#### **4.2.2 Product scope of quality measurement**

Quality standards are in place in every country for both basic letter post products (FSC and SSC, domestic), when these are provided. Cross border letter post also commonly has quality standards specified by law when the product is part of the USO, with a few exceptions, namely Denmark, Estonia, Poland, Slovakia, Spain, Sweden, and Switzerland. Although basic parcel post (domestic) and cross border parcels are defined as a USO product in nearly every country, only 21 and 11 countries respectively have quality standards for the delivery of these products. Very few countries define direct mail and express services as USO products and therefore few countries have monitoring standards associated with the delivery of these products, see Table 39.

**Table 39**

**Product scope of quality measurement by NRAs**

Grey cells mean the product is part of the USO. The content of the cell answers the question "Are quality standard specified by law?"

	Basic Letter Post (FSC, domestic)	Basic Letter Post (SSC, domestic)	Bulk Letters	Registered Mail	Insured Mail	Direct Mail	Publications	Basic Parcel Post (Domestic)	Bulk parcels	Cross-border letter post	Cross-border parcels	Express Services
AT	Yes	Yes	Yes			Yes	No	Yes	Yes	Yes	Yes	
BE	Yes		No	Yes	Yes	No	No	Yes		Yes	No	
BG	Yes	Yes		No	No		No	Yes		Yes	No	
HR	Yes	Yes		n/a	n/a			Yes		Yes	n/a	
CY	Yes	No	Yes				No	No	No	Yes	Yes	
CZ	Yes			Yes	Yes			Yes		Yes	Yes	
DK		Yes		No	No		Yes	No		No	No	
EE	Yes	Yes		No	No			No		No	No	
FI		Yes		n/a	n/a			No		Yes	No	
FR	Yes	Yes	No	Yes	No		Yes	Yes		Yes	n/a	
DE	Yes		No	Yes	Yes	No	Yes	Yes	Yes			
EL	Yes	No	No	No	No	No	No	No	No	Yes	No	
HU	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	No	
IS	Yes	Yes	No	n/a		No	No	n/a		Yes	n/a	n/a
IE	Yes		No	No	No			No		Yes	Yes	
IT	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
LV	Yes	Yes	Yes	Yes	No	No	No	Yes			No	
LI	Yes	Yes		Yes	Yes		No	Yes		Yes	Yes	
LT	Yes	Yes		Yes	Yes			Yes		Yes	No	
LU	Yes		Yes	No	No			No	No	Yes	No	
MT	Yes		Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	
NL	Yes			No	No			No		Yes	Yes	
NO	Yes	Yes	No	n/a	n/a		Yes	Yes		Yes	Yes	
PL	Yes	Yes		Yes	Yes			Yes		No	No	
PT	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes		Yes	
RO	Yes	No		No	No		No	No		Yes	No	
SK	Yes	Yes	No	Other	No	Yes		Yes	No	No	No	
SI	Yes			No	No	No	Yes	Yes		Yes	No	
ES	Yes		Yes	No	No			Yes	No	No	No	
SE	Yes	No	No		No			No		No	No	
CH	Yes	Yes	No	No			No	Yes	No	No	No	
UK	Yes	Yes		Yes	Yes			Yes		Yes	Yes	

Note: "n/a" means no answer.

Source: Questionnaire to NRAs

### 4.2.3 Regulation of transit time performance against targets

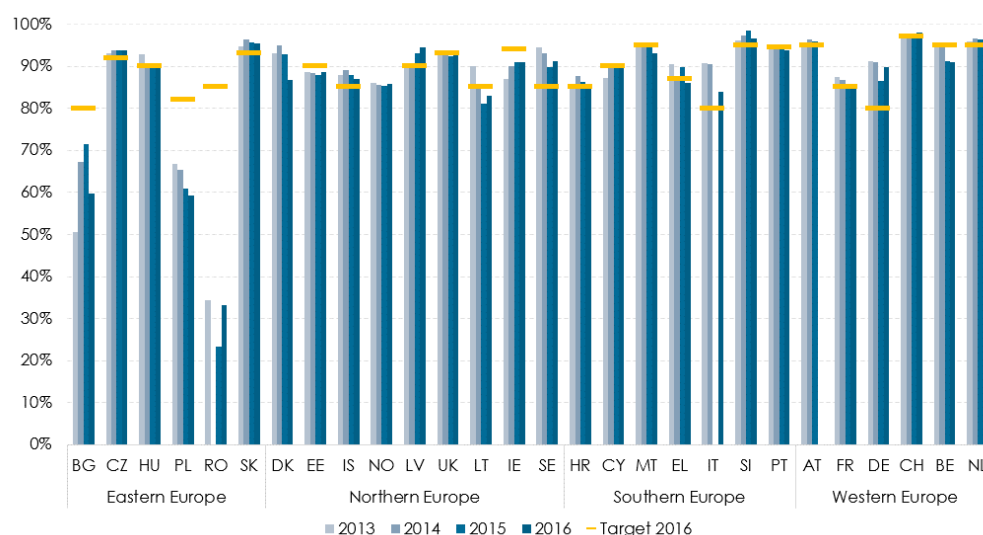
Transit time performance refers to the share of mail that is delivered to the addressee within the specified time benchmark (e.g. D+1 for an overnight delivery product).

#### *Transit time performance for domestic priority letters*

As discussed above, the Postal Services Directive does not impose any targets regarding transit time on domestic letters. Hence, Member States have the flexibility to decide whether to set such targets and at what level. We see that the majority of investigated countries has quality targets in place: 28 NRAs provided information on the target set on basic letter post service performance.

Although the reliability of postal delivery is an important aspect of customer satisfaction, in 2016 only 14 USPs met their transit time target for domestic priority letters. In Eastern Europe, postal operators in Czech Republic, Hungary and Slovakia met their transit time targets in 2016. In Northern Europe, postal operators in Iceland, Latvia, the United Kingdom, and Sweden met their transit time targets, although the transit time target in Iceland and Sweden is 85 per cent which is lower than other countries in the region. Switzerland stands out with the highest transit time target across Europe (97 per cent of domestic priority letters delivered on time), and Swiss Post has met that target every year in the 2013-2016 period, see Figure 87.

**Figure 87**  
**Transit time performance for domestic priority letters**  
% priority letters arriving in D+1



Note: The quality target is the same for the four years for all the countries, except for IT (89% in 2013, 2014), MT (94% in 2013, 2014), PL (92% in 2015). FI, LU and ES are excluded because they don't offer D+1. DK - the result for 2016 is measured on 30 June 2016 for year-to-date. After that date, day-to-day delivery of letters is outside the USO. IT - due to change in quality standards, there is no annual result for the year 2015. DK, LI, NO - did not provide targets

Source: Questionnaire to NRAs

We notice that transit time targets remained unchanged in the 2013-2016 period in almost all countries, from which NRAs provided answers (in total – 27), with the exception of Malta (target increased from 94% to 95%) and Italy (target reduced from 89% to 80%).

#### *Transit time performance for intra-European cross-border priority letter mail*

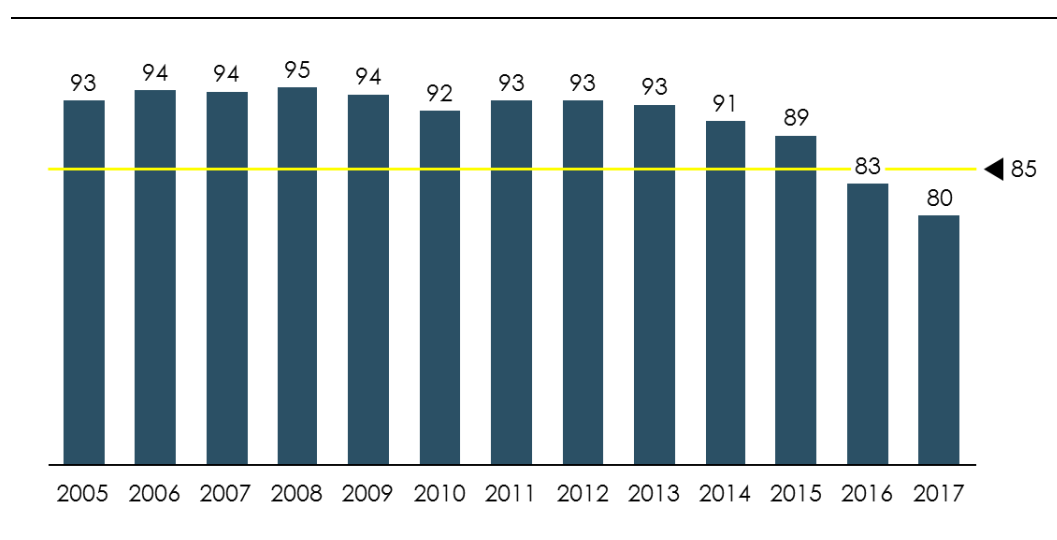
In the past years (2014-2016) quality of service in cross-border mail delivery has declined from an EU average of over 90 per cent delivered within three days for priority mail to 82,3 per cent in 2016, and 79,5 per cent in 2017. The current level represents the lowest performance since the start of measurement in 1997 and is even below the EU target of 85 per cent specified in the Postal Services Directive, see Figure 88.

This development may reflect postal operators' increased incentives to reduce cost in a declining market and the loosening of requirements for delivery speed on a national level that may lead to a reduction in quality of service also for cross-border delivery services<sup>84</sup>.

**Figure 88**

#### **Transit time performance for international European priority letter mail**

Transit time performance, %



Note: the figure shows the yearly averages of proportion of letter mail delivered within three days for European cross-border first-class/priority letter mail delivery times

Source: IPC (2018), International Mail Service Monitoring

### **4.3 APPLICATION OF TARIFF PRINCIPLES**

Article 12 of the Postal Services Directive requires prices for products within the USO to be affordable, cost-oriented, transparent and non-discriminatory. In addition, Article 13 of the Postal Services Directive requires that terminal dues for international mail are set in relation to processing costs and related to quality of service. Member States have a certain margin of discretion as to how the principles of the Postal Services Directive related to universal service tariffs and terminal dues should be interpreted.

<sup>84</sup> \*IPC (2018), International Mail Service Monitoring, page 2.

For all countries included in our analysis and for each principle (affordability, cost-orientation, transparency and non-discrimination), we have investigated how the principle has been:

- defined;
- formally implemented in the law;
- practically applied through regulatory, monitoring or other actions.

We have investigated these principles for both postal tariffs and special tariffs that fall within the remit of Article 12 and Article 13 of the Postal Services Directive.

Based on our analysis, we find that all investigated countries apply some form of price control. Regulators across Europe have implemented three main price regulation regimes. These can be classified as either ex-ante (i.e. forward looking, ex-ante price approval or ex-ante price cap regulation<sup>85</sup>) or ex-post (i.e. backward looking) regulation. And most investigated countries have included the tariff principles of the Postal Services Directive in their national postal legislation. Nevertheless, there is still a substantial heterogeneity across investigated countries.

For instance, we find that regulators ensure the affordability of universal postal services in various ways ranging from ex-ante price approval by regulators and ex-ante price cap regulation to the conduct of affordability tests. Similarly, tests for cost-orientation vary with respect to the type of accounting information delivered by the USP (financial versus regulatory accounts) and the level at which cost-orientation is tested (individual product level versus basket of services level). Some investigated countries do not employ formalised tests for cost orientation.

While the transparency criterion remains undefined in many investigated countries, most of them implement this principle by obliging the USP to publish list prices. A very limited number of countries go beyond that, for instance by requiring the USP to disclose individually negotiated prices to the NRA (e.g. BG, HU, LT).

Most national regulators perform an ex-post measurement or ex-ante control of whether prices abide by the non-discrimination principle.

Our findings show that further regulatory changes are possible in terms of increased flexibility of price regulation for products within the USO. This can be achieved either by reducing the scope of ex-ante price regulated products or by using price-caps regulation which contain an automatic volume adjustment to account for lower economies of scale when volumes drop.

### **4.3.1 Implementation of tariff principles**

#### *Tariff affordability principle*

Article 3 of the Directive requires prices of universal postal services to be “affordable”. The Directive does not specify how affordability is to be measured, leaving this to Member State discretion.

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<sup>85</sup> Whereas ex-ante price approval implies that the regulator must approve all price changes before they enter into force, and ex-ante price cap regime implies that the regulated operator is free to change its prices, as long as the price changes are within the room of the pre-defined price cap formula.

Based on NRA responses to our questionnaire, the principle of affordable tariffs is not formally defined by 24 countries. In five countries (BE, BG, DE, IT, UK), where the principle of affordable tariffs is formally defined, definitions vary. For instance, in Belgium, tariffs that respect the criteria of the price cap are considered affordable. In Italy, affordable tariffs should be fair and reasonable and meet cost-orientation requirements. In the United Kingdom, the definition of the principle of affordable tariffs is set out in Ofcom's 2013 document "The affordability of universal postal services" published on 19 March 2013. The document discussed different approaches to assess affordability and concludes on the following definition: "Universal postal prices may be considered unaffordable for a consumer were the consumer frequently to suffer significant adverse consequences as a result of the cost of sending post (e.g. because this means foregoing spend on other items) or, as a result of not sending post and foregoing the value of the communication".<sup>86</sup>

Only a handful of NRAs reported that they perform some sort of monitoring of tariff affordability. Seven NRAs use a specific set of criteria to monitor tariff affordability, e.g. CZ, IE, and UK. In addition, 14 NRAs consider tariffs that meet the cost-orientation requirement and/or are subject to a price cap affordable.

#### *Tariff cost orientation principle*

The Postal Services Directive requires Member States to ensure that prices are cost-oriented. This principle aims at ensuring that prices are neither excessive, i.e. harmful to customers, nor predatory, i.e. harmful to competition.<sup>87</sup>

The principle of cost-oriented tariffs is not formally defined by 11 countries, while 17 NRAs reported that the principle is defined (formally by 14 NRAs). However, definitions of cost orientation vary. The most common definitions are provided in Table 40.

**Table 40**  
**How is the principle of cost oriented tariffs defined?**

Definition of cost orientation principle	Country
1. Individual tariffs should be equal to FAC, plus a reasonable profit	BG, CY, IE, LT, PT, RO
2. Revenues of individual services should be equal to costs, plus a reasonable profit	IT, SI
3. Revenues of USO as a whole should be equal to total costs	FR, HU
4. Revenues of USO as a whole should be equal to total costs, plus a reasonable profit	MT, NL, SK, CH
5. Other	BE, CZ
6. No answer/ not defined	AT, HR, DK, EE, FI, DE, EL, IS, LV, LI, LU, NO, PL, SE, UK

Note: Copenhagen Economics analysis based on open-ended answers provided by 31 NRAs.

Source: Questionnaire to NRAs

<sup>86</sup> Ofcom (2013), The affordability of universal postal services, p. 11.

<sup>87</sup> See Copenhagen Economics (2012), Pricing behaviour of postal operators, 158-159.



Around half of the surveyed NRAs reported that they perform some sort of monitoring of the cost-orientation principle. Four NRAs consider tariffs under the price cap regime as generally cost-oriented, while six NRAs do not perform any formal test.

### *Tariff transparency principle*

The Postal Services Directive requires tariffs on products within the USO to be transparent. Generally, rebate regimes that are opaque (i.e., have unclear terms and conditions) are more likely to be anti-competitive than transparent rebate schemes.<sup>88</sup>

The principle of tariff transparency is mostly implemented by requiring USPs to publish their tariffs on their website (16 NRAs). In addition, three NRAs require USPs to publicly publish their tariffs and general discounts – i.e. available to everyone that meet defined criteria – applied to business customers, see Table 41. A very limited number of countries go beyond that, for instance by requiring the USP to disclose individually negotiated prices to the NRA (e.g. BG, HU, LT).

**Table 41**  
**How is the principle of tariff transparency defined?**

Definition of tariff transparency principle	Country
1. Requirement to publish tariffs at the website	HR, CZ, EE, FI, FR, EL, IE, IT, LV, LI, LT, MT, RO, SI, CH, UK
2. Requirement to publish tariffs and general discounts publicly	BE, NO, ES
3. Requirement to publish tariffs publicly and publish general discounts to relevant users only	BG
4. Requirement to publish tariffs to NRA	DE
5. No specific formal definition	HU, PL, PT
6. No answer	AT, CY, DK, IS, LU, NL, SK, SE

Note: Copenhagen Economics analysis based on open-ended answers provided by 31 NRAs.  
Source: Questionnaire to NRAs

### *Tariff non-discrimination principle*

The Postal Services Directive requires tariffs on products within the USO to be non-discriminatory. The requirement of non-discrimination implies that similarly situated users of mail cannot be treated differently with respect to prices or other contract conditions, as this might distort the competition between them.

Most of the NRAs define non-discrimination as a requirement that tariffs and applicable discounts should be offered on the same basis to all postal users (16 NRAs). Out of these, three NRAs explicitly mention that volume discounts can be offered on a per-sender basis. Three additional NRAs mention that the principle only applies to postal service users under similar conditions. Four NRAs interpret the non-discrimination principle in terms of geographical uniformity, see Table 42.

<sup>88</sup> See Copenhagen Economics (2012), Pricing behaviour of postal operators, 160.

**Table 42**  
**How is the principle of tariff non-discrimination defined?**

Definition of tariff non-discrimination	Country
1. Tariffs and applicable discounts should be offered on the same basis to all postal users, discounts can be offered on a per-sender basis	BG, EL, LI
2. Tariffs and applicable discounts should be offered on the same basis to all postal service users under similar conditions	HR, MT, NO
3. Tariffs and applicable discounts should be offered on the same basis to all postal users	CZ, DE, IE, IT, LV, LT, RO, SK, SI, ES
4. Price (geographic) uniformity principle	EE, FR, CH, UK
5. No specific formal definition	HU, PL, PT, SE
6. No answer	AT, BE, CY, DK, FI, IS, LU, NL

Note: Copenhagen Economics analysis based on open-ended answers provided by 31 NRAs.  
Source: Questionnaire to NRAs

In terms of monitoring, some NRAs require USPs to provide access to their contracts with business senders (e.g. BE, BG, HU, LT, LV, SE), while other NRAs ensure the principle of non-discrimination on a case-by-case basis, i.e. react to complaints (e.g. CZ, EE, EL, IE, MT, NO, RO).

*Tariff principle that terminal dues should be set in relation to processing costs and related to quality of service*

Article 13 of the Postal Services Directive requires that “terminal dues shall be fixed in relation to the costs of processing and delivering incoming cross-border mail”, that “levels of remuneration shall be related to the quality of service achieved”, and that “terminal dues shall be transparent and non-discriminatory”.

Eight NRAs reported that they do not monitor the principle that terminal dues are set in relation to processing costs and related to quality of service. One of the main reasons mentioned was that NRAs have no influence on the terminal dues rates set by the UPU. The rest of the NRAs did not provide complete answers to this indicator in the questionnaire.

### 4.3.2 Method of price regulation

We find that methods of price regulation according to tariff principles discussed above vary across countries. With respect to basic letter post, ex ante price regulation is the most common form of price regulation among the investigated countries (applied in 13 countries), ten countries apply price caps, seven countries – ex post price regulation, see Table 43. Only two countries, Liechtenstein and the United Kingdom, reported not having price regulation on basic letter post. Transactional bulk letter prices are more often regulated ex post (in nine countries), when price regulation is in place. Majority of countries however have no price regulation on bulk letters (13 countries). Only five countries reported using ex ante regulation for bulk letters and only two apply a price cap on this product. Direct mail and bulk parcels are regulated the least, with 20 and 19 countries respectively reporting that they do not have price regulation on these products. Price cap is the least used type of regulation compared to ex ante and ex post and it is used to regulate prices of universal services in Belgium, Croatia, Estonia, France, Germany, Hungary, Lithuania, the Netherlands, Portugal and Sweden.

**Table 43**  
**Method of price regulation**



Country	Basic Letter Post	Bulk Letters	Direct Mail	Periodicals	Non-Priority Letter Post	Basic Parcel Post	Bulk Parcels
AT							
BE				Other	Other		
BG							
HR							
CY							
CZ							
DK							
EE			Other	Other			
FI							
FR							
DE							
EL							
HU							
IS							
IE							
IT							
LV							
LI							
LT							
LU							
MT							
NL							
NO							
PL							
PT							
RO							
SK		Other					Other
SI							
ES							
SE							
CH			Other				
UK							

Note: Blank cells appear when no answer was provided. AT – ex ante for single piece letter up to 50. BE - periodicals' prices predefined by management contract. HR - price cap for postal letters (to 50g) and registered letters (to 50g). HU - regulation for domestic postal items below 50g. LI, NO - the government approves the tariffs. LU - regulation for the lowest weight category only. MT - Direct mail is part of the bulk mail service. SK - regulation for licensed areas of the segment. Bulk letters and bulk parcels are defined in the scope of USO as standard single piece items. LT - publications are not considered postal services, but prices are regulated (the Government sets them). SE – the price cap applies only to domestic single piece mail FSC (Source: Swedish Parliament (2010), Postförordning (2010:1049), §9). CH – up to 50 g.

Source: Questionnaire to NRAs

The price cap in Lithuania is a fixed price "ceiling" and it does not automatically change with consumer price index (CPI) or any other cost index. For periodicals it is applied only to delivery to subscribers in rural residential areas. In Portugal, the services subject to the price control system are grouped into two different baskets. One basket includes correspondence, newspapers and parcels. A second basket includes the registered mail service used in judicial or administrative procedures, a service whose provision is reserved to the USP. Price-caps are applied for each basket and ex-ante regulation applies for all products individually (where the NRA verifies the compliance with the principles of affordability, cost-orientation in this phase, and transparency and non-discrimination after new prices and conditions are in force). Bulk letters are subject to "special tariffs", ANACOM's intervention is ex-post. In the UK, there is a price cap on second class letters, large letters, and second class small and medium parcels up to 2kg to ensure affordability.

### 4.3.3 Regulatory constraints on special tariffs

The fifth indent of Article 12 of the Postal Services Directive sets down the principles that the universal service provider has to comply with when applying special tariffs. The fifth indent requires that when these special tariffs are offered they together with the associated conditions must be applied in a transparent and non-discriminatory manner<sup>89</sup>.

In practice, special tariffs may include work-sharing discounts (e.g. for senders who sort or transport the mail to the central sorting centre) and/or volume discounts where the special tariffs vary according to the number of items posted.

The first type of special tariffs – work-sharing discounts – has been interpreted by the CJEU in *Vedat Deniz* case. This judgment arose from a preliminary ruling sent by a German court, which asked, in essence, whether Directive 97/67 implies that mail consolidators should also be entitled to rebates for pre-sorting mail on the same conditions as mailers. The CJEU noted that it was clear from Article 12 of Directive 97/67 that work-sharing discounts applied by the universal service provider must, in accordance with the principles of transparency and non-discrimination, be extended equally to third parties.

The second type of special tariffs – volume discounts – has been interpreted by the CJEU in *bpost* case (discussed in section 2.2 above). In this case, particularly due to the volume stimulating property of volume discounts, the CJEU concluded that "that bulk mailers and consolidators are not in comparable situations" and "the system of quantity discounts per sender does not constitute discrimination prohibited under Article 12 of Directive 97/67".

Based on our survey, we find that in the majority of investigated countries – with the exception of Cyprus, Denmark, Luxembourg, Switzerland and the United Kingdom – the NRA has the primary responsibility for reviewing special tariffs. Where special tariffs are in the jurisdiction of the NRA, they are required by law to be transparent and non-discriminatory for bulk letters in 24 countries, for direct mail in 13 countries, and for bulk parcels in 16 countries. In the countries that require transparency and non-discrimination, the NRA also verifies these principles in practice for bulk letters in 16 countries, direct mail in eight countries and bulk parcels in nine countries, see Table 44.

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<sup>89</sup> Individually negotiated prices are outside the scope of the universal service (see Recital 15 to European Commission (1997), Directive 97/67/ and the CJEU decision the TNT UK VAT case (CJEU (2009), C-357/07 - TNT Post UK)) and therefore not subject to regulation by NRAs, except where national legislation requires this.

In 14 countries it is also required by law for the USP to make special tariffs for bulk letters available to consolidators on the same terms as large mailers, and additionally this law is verified in practice in ten of these countries. This law is also applied to bulk parcels in eleven countries and to direct mail in eight countries.

Several countries have also established laws to require that special tariffs are available to competing postal operators on the same terms as to large mailers. For example, the USP in France – in line with the *Vedat Deniz* case mentioned above – is required to give access to the technical discount scheme (according to the level of preparation of mail) on the same terms to consolidators and large mailers, while the volume discount scheme is reserved to large mailers. In Spain, the NRA interprets that the same terms must apply to consolidators compared to any other large mailer. However, the Postal Act in Spain does not mention explicitly in Article 35 the term 'consolidator'. At the European level, 18 countries require this principle by law and eleven countries also verify it in practice for bulk letters. Ten countries have also established a law for direct mail and 15 countries have established a law for bulk parcels.

Lastly, some countries have not defined legal requirements for special tariffs. For instance, Croatia does not define any special tariffs by law, but the NRA and NCA are currently in the process of analysing the application of USO's discount policy and access to the postal network. In Malta, the USP is required to document and file with the NCA any special schemes that it may wish to introduce. However, it is not required to publish these schemes, and users may verify with the NCA whether they are entitled to such schemes, see Table 44.

**Table 44**  
**Regulation of special tariffs, according to NRAs**

 Required by law and verified in practice  
 Required by law but not verified in practice  
 Not required by law but verified in practice  
 Not required by law nor verified in practice

	Primary responsibility	Are special tariffs and associated conditions within the regulatory jurisdiction of the NRA								
		(A) legally required and/or (B) verified by the NRA – to be transparent (publicly available) and non-discriminatory?			(A) legally required and/or (B) verified by the NRA – to be available to consolidators on the same terms as to large mailers?			(A) required by law and/or (B) verified by the NRA – to be available to competing postal operators on the same terms as to large mailers?		
		Bulk letters	Direct Mail	Bulk Parcels	Bulk letters	Direct Mail	Bulk Parcels	Bulk letters	Direct Mail	Bulk Parcels
AT	NRA									
BE	NRA									
BG	NRA									
HR	NRA, NCA									
CY	-									
CZ	NRA									
DK	-									
EE	NRA									
FI	NRA									
FR	NRA									
DE	NRA									
EL	NRA									
HU	NRA									
IS	NRA									
IE	NRA									
IT	NRA									
LV	NRA									
LI	Government									
LT	NRA									
LU	No gov body									
MT	NRA									
NL	NRA									
NO	NRA									
PL	NRA									
PT	NRA									
RO	NRA									
SK	NRA									
SI	NRA									
ES	NRA									
SE	NRA									
CH	NRA, NCA*									
UK	-									

Note: The first column asks, "Which government body has primary responsibility for reviewing special tariffs of the USP and ensuring that they are transparent, non-discriminatory, and take into account avoided costs?". Empty cells mean the answer was "unknown" or not provided. HR - process of analysing USO's discount policy and access to network is in progress now. EL - the verification in practice is conducted upon request. HU - special tariffs and conditions are required by law and verified by practice only in the frame of USO for bulk letters and parcels IT - according to art.4 of decision n. 384/17/CONS 4, the USP's offers of bulk delivery services have to be submitted to an ex-ante margin squeeze tests. PT - Q1, Q2, bulk letters: the per-sender model is applied to operators. RO - bulk letters and bulk parcels: only for the special tariffs related to non-bulk postal items. At the moment, the USP is not offering special tariffs. CH - \*price regulator and competition commission.

Source: Questionnaire to NRAs

## 4.4 COST ACCOUNTING AND FUNDING OF THE USO

In this section, we discuss how the USO is being funded across investigated countries (via state aid, commercial operations, compensation funds etc.) and what methods are used to quantify the net cost of the USO<sup>90</sup>.

We find that direct state subsidies have become much more widespread as a source of funding of the USO across investigated countries over the 2013-2016 period. Most of the countries authorize different forms of compensation by law (either by a public fund or the sharing of net cost among postal service providers) and almost half of them have established such forms in practice. Only one in eight countries have neither established any form of compensation by law nor installed any mechanism in practice.

This has spurred discussions on the impact of USO compensation for competitiveness and the development of the sector, who should contribute to such a fund, and how ‘interchangeability’ of products as a necessary precondition of USO-fund contribution is to be defined. The key concern is that any overcompensation of the USO will lead to financial transfers between postal competitors and therefore distort competition. For instance, in Poland, the European Commission in 2015 approved financing of Poczta Polska's universal service obligation via a compensation fund. Commission's decision was made on the grounds that the design of the mechanism does not lead to a significant distortion of competition in the polish postal market.

Moreover, we notice that USPs differentiate their business more and more (as discussed in chapter 1) and integrate certain parts of their business (e.g. postal branches used in many countries also to provide financial services; varying degrees of integration of letter post and parcel networks). This makes correct regulatory cost accounting more cumbersome.

### 4.4.1 Cost of the universal service obligation and method for its calculation

The Postal Services Directive specifies that the USP can be compensated if the net cost of the USO represents an unfair financial burden. Most of the countries authorize different forms of compensation by law, and almost half of them establishes such forms in practice. Only one in eight countries has neither established any form of compensation by law nor installed any mechanism in practice. Finally, in 40 per cent of the countries, a compensation fund is included in the law, but not established in practice. Out of the countries that have established a compensation mechanism, nine use direct compensation from public funds. Almost twelve per cent of the financial resources come from a compensation fund, and a bit more than five per cent is raised via public procurement, see Figure 89.

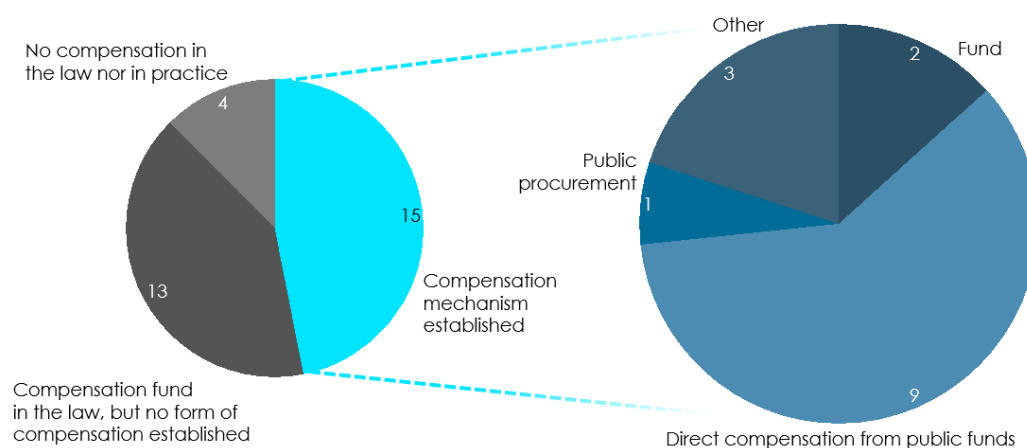
We find that countries have not established a compensation fund for various reasons, but the main reason appears to be a fundamental one – in many markets, there are no competitors present that could contribute to a compensation fund. Given the fact that in most of the investigated countries USPs have a lion's share of the universal postal service market (cf. section 2.1.1 National letter markets are still concentrated), the element of the net cost attributed to other operators would be very low and might well be less than the administrative costs of the sharing mechanism. That is the case,

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<sup>90</sup> The net cost of the USO is the difference in profit for the universal service provider, both with the USO (status quo) and without the USO (counterfactual situation).

for instance, in Austria and Ireland. The Austrian NRA has thus never assessed the net cost of the USO. For the same reason, the Irish USP has not applied for compensation.

**Figure 89**  
**Compensation mechanisms**  
Number of countries



Note: Includes answers for all investigated 32 countries. In some countries more than one compensation mechanism is established.

Source: Questionnaire to NRAs

We also notice discussions among industry experts about the possibility of including international letters coming from outside the EU in the net cost calculations. For instance, in Norway, net cost calculations assessed the benefits of the removal of the UPU terminal dues agreements in the counterfactual scenario.<sup>91</sup> As explained further in this chapter, the terminal dues system creates significant negative financial transfers from some Western European countries to emerging net-exporter economies, who are benefiting from low international mail delivery rates set by the UPU.

Estimates of the share of net cost of USO also vary across countries, but in most cases the estimates were in a range between 5 and 20 per cent of total cost of providing all universal services. The USO elements contributing to the largest part of USO net costs are well-known and commonly agreed upon by most regulators and postal operators: postal network density, delivery frequency, and the scope of universal service, see Table 45.

<sup>91</sup> See Copenhagen Economics (2017), Effects of changing the USO in Norway.



**Table 45**  
**Latest USO net cost calculations**

Country	Year	Share of net cost in % of USO	Method applied	USO elements driving the net cost
AT	-	-	PC*	PND, DF*
BE	-	-	NAC	PND, DF, SUS
BG	2016	25-30%*	PC	PND *
HR	2016*	-	PC	PND, DF, SUS (free of charge services to blind people)
CZ	2016	15-25%*	PC	PND, DF
DK	2016	-	NAC	PND, DF, SUS
EE	2016	5-15%*	Other	PND, DF, SUS
DE	-	-	PC*	PND, DF, SUS
EL	2015	10-15%	NAC	DF, USP: delivery in rural areas, collection from rural post boxes, QoS monitoring mechanism, regulatory cost accounting mechanism
HU	2015	-	PC	PND, DF, SUS
IS	2016*	15-20%*	NAC	PND, DF, SUS, USP: revenue for delivery of international letters (terminal dues), free delivery of shipments to the blind
IE	2015*	10-15%*	PC	Delivery point density; the distance of address points from the main road *
IT	2013	10-15%	PC	PND, DF, SUS
LV	-	-	NAC	PND, DF, SUS
LT	2016	5-15%	NAC	PND, SUS
LU	-	-	n/a	PND, DF, keeping of notified items, access points, delivery speed*
MT	-	-	n/a	SUS, PND and QOS obligations.*
NL	-	-	PC*	PND, SUS, reporting and administrative cost*
NO	2016*	5-15%*	PC*	DF
PL	2013	-	PC	PND, DF, SUS
PT	-	-	PC*	PND, DF, SUS
RO	2016*	0-15%*	PC	PND, DF
SK	2016	5-10%	Other	PND, DF, SUS UPS: additionally, pricing and quality of service
SI	2016*	5-10%*	NAC	PND, DF, delivery quality D + 1 = 95 %, etc.*
ES	-	10-20%	Other	DF, territorial coverage and quality of delivery.*
CH	2016	10-15%	NAC	PND, DF, SUS,
UK	-	-	NAC*	

Note: \* USP data. Legend: PC = Profitability cost approach; NAC = Net Avoidable Cost; PND = Postal network density; DF = Delivery frequency; SUS = Scope of universal services (individual unprofitable services included in the USO). Countries that did not answer any question were excluded. Empty cells appear when the answer to the question was "other", "unknown" or was not provided. Please refer to the following notes for more information.

Source: Questionnaires to NRAs and USPs

### *The concept of the net cost of the USO*

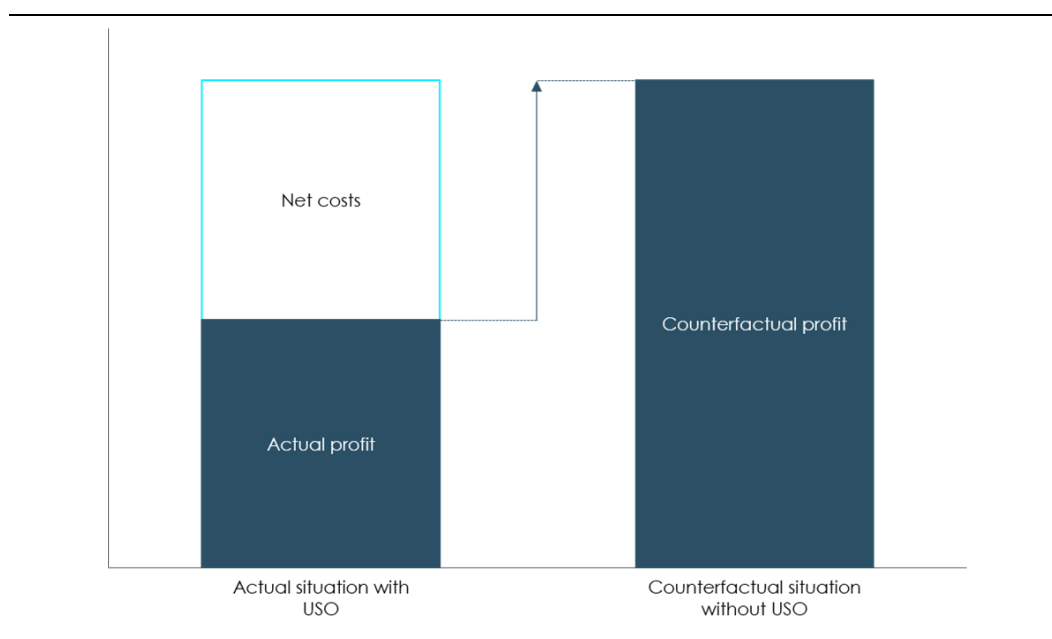
The net cost of the USO emerges in situations where the USO forces postal service providers to structure their business models in a different way than they would have done without the USO. As a result, the profit earned with the USO may be lower than the profit which would have been earned without the USO. The difference in the profit for the regulated operator with and without the USO – the so-called USO net cost – is illustrated in Figure 90.

In Annex I of the Postal Services Directive, the USO net cost is defined as “the difference between the net cost for a designated universal service provider of operating with the universal service obligations and the same postal service provider operating without the universal service obligations”, i.e. the profit forgone due to the obligation.

As discussed above, the current developments in the postal sector have a significant impact on the net cost to the operator as well as on the benefits of the USO to users and other stakeholders. Depending on the specific market characteristics, e.g. the rate of mail volume decline, the magnitude of net costs may vary across Member States.

**Figure 90**

**The net cost of the USO is the difference between the actual profit and the counterfactual profit**



Source: Copenhagen Economics

According to the Postal Services Directive, the USP can ask the government in its country for compensation of the USO net cost. The USP can be entitled to compensation if the net cost is deemed an unfair financial burden for the operator. For this reason, some USPs calculate the net cost of the USO on a regular basis.

The main concern in this context is that the USP is not overcompensated for its obligations. Firstly, such overcompensation would amount to unlawful state aid. Secondly, it would distort competition between the regulated operator and other market players since the regulated operator could use the extra compensation to cross-subsidise its activities in market segments where there is strong competition. If there is no over-compensation, however, the USP is not better off in the situation with a compensated USO than it would be in the situation without the USO. Equally, undercompensating can over time threaten the sustainability of the USO.

#### *Recommended methods to calculate the net cost of the USO*

It is important to calculate the net cost using an appropriate method. Our survey of European USPs, shows that postal operators in Europe use several different methods for developing their own estimates of the USO net cost. The most popular method is the profitability cost approach (PC) (also called the “commercial approach”). The only alternative in line with the Postal Services Directive is the net avoidable cost (NAC) approach, which is the second most common method followed, see Table 45.

We also note the possibility – because some regulators have not provided their answers – that some countries may use other alternative methods to calculate the net cost of the USO. For instance, another approach is the fully allocated cost method (FAC). However, it conflicts with the Postal Services Directive, but historically this method was commonly applied.

We conclude that, from the economic perspective, the profitability cost approach (PC) – compared to the NAC and FAC approaches – provides conceptually the most precise basis to calculate the net cost of the USO, as per the definition set out in the Postal Services Directive. However, it has to be noted that each method has its advantages and weaknesses, for instance, requires more or less resources to implement. We elaborate on our conclusion by comparing each of the three methods below.

#### **Fully allocated cost method**

The fully allocated cost method (FAC) is based on accounting methodology and does not include a counterfactual scenario. Thus, it fails to comply with the definition of USO net costs as the difference in profit between the status quo and the counterfactual scenario without the USO provided in the Postal Services Directive.

Instead of defining the net cost as the difference in costs for the universal service provider operating with and without the USO, the fully allocated cost method calculates the total cost of the USO according to the status quo.

An advantage of the fully allocated cost method is that it allows to calculate all losses that are associated with the USO. However, losses resulting from the USO are not the same as the net costs of the USO. As a direct result, the main disadvantage with the method is that it does not comply with the net cost definition in the Postal Services Directive.

Further, the fully allocated cost method only captures the direct revenue effects and ignores the dynamic indirect demand effects. It also leaves out potential market benefits from being a designated universal service provider.

### **Net avoidable cost method**

The net avoidable cost method calculates the net cost of the USO as the saving that the postal operator could achieve if there was no USO and the operator could discontinue all loss-making activities. The underlying assumption is that a profit maximizing commercial operator without any USO would not serve unprofitable market segments.

The net avoidable cost method leaves out effects on the revenue side, ignoring demand effects and assumes that all services provided at a loss will discontinue in the absence of the USO. This is not reasonable as some of these services might be necessary in order for the universal service provider to maintain profitability in other market segments. Therefore, the reduction in service level in the counterfactual situation will in this case be overestimated and yield net costs that are too high.

A relative advantage of the net avoidable cost method is that it, in contrast to the fully allocated cost method, employs a correct cost perspective by focusing on the avoidable costs. However, a key disadvantage for this (and also the FAC) method is that it does not define the net cost in such a way that would result in a correct estimate of the net cost. The method does not account for interdependence between services on the revenue side and assumes that any service elements that are provided at a loss will be abandoned in the absence of the USO, irrespective of whether they are required to maintain profitability in other market segments or not. Therefore, the method will result in an overestimation of the reduction of services in the counterfactual scenario and yield a net cost that is too high.

Also, the net avoidable cost method focuses on receiver segments instead of sender segments (those who pay the postage fees). As a result, it gives an unrealistic picture of which postal services would be removed in the absence of the USO.

### **Profitability cost method**

The profitability cost method was constructed to tackle the weaknesses of the two previous methods. This method applies the correct net cost definition and calculates the difference in profit with and without the USO, i.e. compares the actual profit under the USO and the profit in the counterfactual situation without the USO.<sup>92</sup>

The profitability cost method is based on two scenarios:

1. the current situation where the universal service provider provides the USO services under the current legal framework, including requirements as well as possible legal benefits, and
2. a counterfactual situation, where the former universal service provider acts on a purely commercial basis, without any USO.

That is, the profitability cost method estimates the total commercial effect of discontinuing a given USO element in form of both cost and revenue effects. It has also been applied in practice, meaning that the method is not merely theoretical.

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<sup>92</sup> The commercial approach is an evolution based upon the "Net avoided cost methodology", see European Commission (2012), European Union framework for State aid in the form of public service compensation, 2012/C 8/03, p.17 par.25-27. The key added feature is that the USO affects both costs and revenues for the operator. The commercial approach is also similar to what Panzar (2000) refers to as the "profitability costs method".

The main advantage of the profitability cost method is that it complies with the criteria of net costs set forth in the Postal Services Directive, thereby tackling the weaknesses of the previous two methods. It applies the correct net cost definition and calculates the difference in profit with and without the USO, i.e. compares the actual profit under the USO and the profit in the counterfactual situation without the USO. Further, it defines the correct customer group of senders of mail as opposed to receivers. The commercial approach also defines three types of revenue effects, including direct price and indirect demand effects. Also, it estimates market- and intangible benefits stemming from the USO.

The disadvantage of the profitability cost method is that it is demanding in terms of resources and requires thorough investigation of a counterfactual scenario.

Conceptually, the profitability cost method is based on the following three steps:

**1. What would the universal service provider do without the USO?**

The counterfactual scenario analysis starts with the postal operator's proposed alternative, which thereafter is tested and challenged by means of cross-checks, benchmarking, and an in-depth analysis of pros and cons of the proposed alternative.

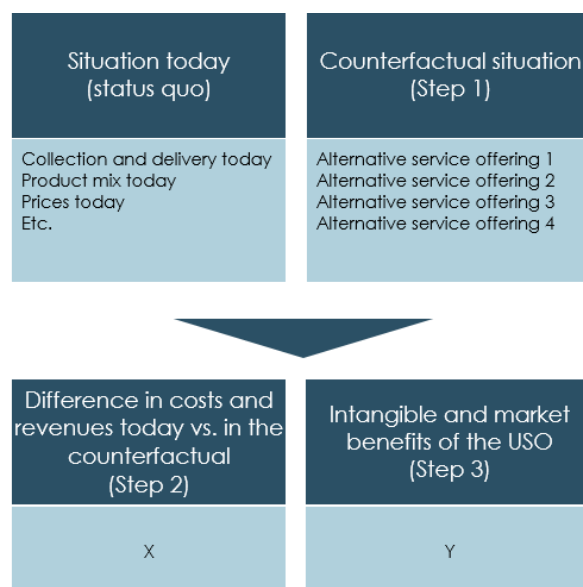
**2. What would the universal service provider save without the USO and what revenues would the universal service provider lose without the USO?**

The assessment of cost savings can preferably be done by means of a "value chain approach" where one would identify what changes are implied by the counterfactual scenario and what cost implications they would have. This also includes any cost changes caused by changes in demand for postal services, stemming from the change in business strategy. Further, direct and indirect revenue effects for each of the alternative commercial offerings are identified and quantified, often based on information from large users of postal services in the domestic market. These revenues effect should factor in the competitive pressure resulting from a potential change in the conditions of provisions of certain services (e.g. a price increase could allow competitors to become competitive on a segment of the market in which they were so far absent).

**3. What are the intangible benefits derived from the USO?**

In addition to cost and revenue effects, the universal service provider may derive intangible and market benefits from being the designated provider of universal postal services. The value of these benefits should be subtracted from the net cost.

**Figure 91**  
**Three analytical steps based on the Commercial approach**



Source: Copenhagen Economics (2011), Manual for calculating the net cost of USO

#### 4.4.2 Legal mechanisms of financing the net cost of universal service

Most of the countries have established legal mechanisms of financing the net cost of the USO. In most of Europe, in about two thirds of the countries, the current legislation (at the time of writing) authorises the establishment of a compensation fund. Normally the decision on the establishment of a fund is made by the respective NRA, who also normally administers it. Two notable exceptions exist: the council of ministers / the prime minister takes on this role in several countries, for example in Greece, Latvia, Liechtenstein, and Spain, and the postal ministry is involved in Italy, Liechtenstein, Poland, Romania, Slovakia and the United Kingdom.

Although the legislation being mostly in place, funds have been established in few Member States, e.g. Estonia (2009) and Slovakia (authorised in 2012, established in 2013), see Box 30.

### Box 30 Compensation fund mechanism in Slovakia

In Slovakia, the law on Postal services sets out that "If the universal service provider incurs net costs of the universal service through provision of the universal service in the calendar year, that represent an excessive financial burden for him, the universal service provider shall be entitled to a compensation for these costs from the compensation fund." (§57, para. 1)

The compensation fund is comprised of contributions from postal companies that were providing interchangeable postal services in the calendar year and from the government. The contribution to the compensation fund is determined by the NRA in an amount corresponding to the percentage of preliminary net costs of the universal service, representing the market share of this postal company, but not more than 3% of turnover of the postal company from provision of interchangeable postal services.

In practice, the main contributor to the compensation fund is the state (around 99,9 %); the share of postal operators providing interchangeable postal services around 0,1%. Based on the assessment of the postal service financing model prepared by the consultancy company PwC for the Slovak government, the currently used financing model allows the transfer of a greater burden of financing the USO to high-income population groups, as they to a greater extent contribute to the state budget. This, in turn, means that the burden on low-income groups is relatively low compared with USO funding through higher prices of postal services.

It is foreseen that the financial burden on the state budget may increase in the future, primarily due to declining letter volumes. To reduce the burden on the state budget, two alternative solutions have been identified: (a) adjustment of prices of universal services, (b) adjustment of service level of universal services, e.g. slower deliveries.

Source: Brichtová (2018), Interview with the Ministry of Transport and Construction of the Slovak Republic; National Council of the Slovak Republic (2011), Act No. 324/2011; PwC (2017), Assessing the current universal postal service financing model and proposing ways to change it

In addition, although compensation mechanisms have been established in three countries (EE, SK, and PL), presently the fund has been approved by the European Commission only in Poland, see Box 31.<sup>93</sup> Similarly as in Slovakia, the key feature of the Polish compensation fund is direct grants from the state budget, supplementing contributions made by all postal services providers in Poland.

<sup>93</sup> European Commission (2015), State aid SA.38869 (2014/N).

**Box 31 Commission approves financing of Polish Post's universal service obligation via a compensation fund**

In June 2014, the Polish authorities notified plans for financing universal postal services carried out by Polish Post from 2013 until 2015. These include basic postal services delivered throughout the country at affordable prices and at certain minimum quality requirements.

To finance this compensation, the Polish authorities have set up a compensation fund. The fund was set to be financed by contributions of a maximum of 2% of the revenues earned by all postal providers in Poland, including Polish Post (around € 20,4 million), on universal postal services as well as other postal services that are equivalent to universal services from a customer's point of view (around € 1 million). If necessary, this financing will be complemented by direct grants from the state budget (around € 1,5 million).

The European Commission has found the compensation granted by Poland to Polish Post for delivering universal postal services from 2013 to 2015 to be in line with EU state aid rules.

In particular, the Commission approved the measure because the compensation paid to Polish Post is limited to the additional costs it faces to fulfil its public service mission (so-called "universal service obligation"). Moreover, the design of the mechanism to finance the compensation does not lead to a significant distortion of competition in the Polish postal market.

Source: European Commission (2015), State aid SA.38869 (2014/N)

Although in 2017 actual funds have only been established in few Member States, the methodology for how to establish such fund – i.e. determining the level of financial contributions to the fund – has already been concluded in many countries. Other than Estonia and Slovakia this has happened in eleven countries. Most commonly the methods require all postal operators providing services within the local USO scope to contribute to the fund, and allocate the contributions based on the per-unit-revenue earned within the respective USO area. Except for Slovakia and Luxembourg, the methodologies require the USP to contribute to the compensation fund on the same basis as other postal operators.

In about half the countries surveyed, the current legislation also authorises the establishment of other means of compensation. In practice this mostly means direct compensation from public funds, although other options exist (for example, public procurement in Norway). The size of these mechanisms varies immensely across countries. For the few NRAs that were able to estimate the compensation size, the figures vary between 1 million euros (Lithuania) and around 300 million euros (Italy), see Table 46.



**Table 46**  
**Legal mechanisms of financing the net cost of the universal service obligation**

COUN- TRY	AUTHORIZA- TION OF COM- PENSATION FUND	RUL- ING BODY	Adminis- tering body	Fund ESTAB- LISHMENT	YEAR AU- THOR- IZED	YEAR ESTAB- LISHED	FIXE D METH OD	CON- TRIBU- TORS	CONTRI- BUTION BASIS	USP CONTRI- BUTION	ALTER- NATIVE COMPEN- SATION	ALTERNA- TIVE TYPES OF COMPEN- SATION	COMPEN- SATION SIZE	UNFAIR BUR- DEN
AT	Yes	NRA	NRA	No			Yes	PO in LA	R in LA	Yes	No			
BE	No			No							Yes	DC PF		Yes
BG	No			No							Yes	DC PF	6,7-9,5 mil euros *	Yes
HR	No			No							Yes	DC PF	10 mil euros	Yes
CY	Yes	NRA	NRA	No			No				No			
CZ	No										Yes	Other	14,5-25,6 mil euros *	Yes
DK	No			No			Other	Other	Other	Other	Yes	Other		
EE	Yes	Other	NRA	Yes	2009	2009	Yes	PO in LA	T in LA	Yes	No			Yes
FI	No			No							No			
FR	Yes	Other	Other	No	2005			PO in LA		Yes	No			
DE	Yes	NRA	NRA	No	1997						Other	Other		No
EL	Yes	CM	CM	No							Yes	DC PF	15 mil euros	
HU	Other		NRA	No			Other	Other	Other	Yes	Yes	DC PF	15 mil euros	Yes
IS	Yes	NRA	NRA	No	2003		Yes	PO in USO, PO out USO	R in USO, R out USO	Yes	No			
IE	Yes	NRA	NRA	No			Yes	PO in USO	R in USO	Yes	No			
IT	Yes	NRA	PM	No	1999		No	Other		Yes	Yes	DC PF	262,4-343 mil euros *	No

*Continued in next page.*

COUN- TRY	AUTHORIZA- TION OF COM- PENSATION FUND	RUL- ING BODY	ADMINIS- TERING BODY	FUND ESTAB- LISHMENT	YEAR AU- THOR- IZED	YEAR ESTAB- LISHED	FIXE D METH OD	CON- TRIBU- TORS	CONTRI- BUTION BASIS	USP CONTRI- BUTION	ALTER- NATIVE COMPEN- SATION	ALTERNA- TIVE TYPES OF COMPEN- SATION	COMPEN- SATION SIZE	UNFAIR BUR- DEN
LV	Yes	CM	Other	No	2013		Yes	PO in USO	Other	Yes	No			No
LI	Yes	CM	PM		1999		Yes	PO in USO	R in USO	Yes	No			
LT	No			No							Yes	DC PF	1 mil euros **	Yes
LU	Yes	NRA	NRA	No	2012		Yes	PO in USO	R in USO	No	No			
MT	Yes	NRA	NRA	No	2010		No				Yes	Other		Yes
NL	No			No							No			No
NO	No			No							Yes	Public pro- curement		Yes
PL	Yes	PM	NRA	Yes		2013	Yes	PO in USO	R in USO	Yes	Yes	DC PF	23 mil. euros	Yes
PT	Yes	Other		No	1999		No				No			Yes
RO	Yes	PM	NRA	No			Yes	PO in USO	R in USO	Yes	Yes	DC PF		Yes
SK	Yes	PM	NRA	Yes	2012	2013	Yes	Other	Other	No	No			Yes
SI	Yes	NRA	NRA	No	2002		Yes	PO in LA	Other	Yes	No			
ES	Yes	CM	NRA	No	2010		Yes	PO in USO	Other		Yes	DC PF		Other
SE	No			No							No			
CH	No			No							Yes	Other		
UK	Yes	PM	NRA	No			No							

Note: Legend: CM = Council of Ministers or Prime Minister; PM = Postal Ministry; PO in LA = Postal operators providing services within a licensed area; PO in USO = Postal operators providing services within the USO scope; PO out USO = Postal operators providing services outside the USO scope; R in LA = Per unit of revenue earned within a licensed area; T in LA = Per item transmitted within a licensed area; R in USO = Per unit of revenue earned within the USO area; R out USO = Per unit of revenue earned outside the USO area; DC PF = Direct compensation from public funds; \* = for the last 4 years; \*\* = based on last time the costs were compensated. Empty cells appear when the answer to the question was "other", "unknown" or was not provided.

Source: Questionnaire to NRAs

#### 4.4.3 Regulatory accounting requirements

In order to enable NRAs to adopt decisions related to universal service, e.g. to check for excessive pricing on a basket of services, NRAs require access to USP cost information. In Article 14, the Postal Services Directive determines cost accounting rules for regulatory purposes (which are to be distinguished from financial and internal cost accounting) for USPs. According to Article 14, USPs shall keep separate accounts for universal services and other services. Recital 41 of the same Directive specifies that Article 14 should “*provide national regulatory authorities, competition authorities and the Commission with the information necessary to adopt decisions related to the universal service and to monitor fair market conditions until competition becomes effective*”.

Due to a broad range of applications of regulatory accounting information<sup>94</sup>, regulatory accounting requirements differ from country to country. Our survey reveals that in most countries the respective NRA approved separate accounts methodologies and calculations suggested by the USPs. Only in Luxembourg, the Netherlands and Sweden did the postal operators not receive an approval by the respective regulators. At the same time, in most cases, accounts were required for non-USO products, and in almost all countries responding to the survey an independent body reviewed the USP’s regulatory accounts. Only in Greece, the review of the regulatory accounts was not conducted by an independent auditor. The last review of the USPs’ regulatory accounts considered in this study occurred in most countries in 2016, see Table 47.

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<sup>94</sup> See WIK-Consult (2013), Main developments in the postal sector 2010-2013, p. 145.

**Table 47**  
**Regulatory accounting requirements**

	<b>NRA APPROVAL</b>	<b># USO PROD- UCT AC- COUNTS</b>	<b>NON-USO PRODUCTS REQUIRED</b>	<b># NON-USO PRODUCT ACCOUNTS</b>	<b>INDEPEND- ENT REVIEW</b>	<b>REVIEW BODY</b>	<b>LAST REVIEW</b>	<b>COMPLIANCE STATEMENT BY NRA</b>	<b>LAST COMPLIANCE</b>	<b>PUBLICATION</b>	<b>AUDIT</b>	<b>LAST PUBLICATION</b>
AT	Yes	7	Yes	7	Yes	NRA	2016	No	-	No	Yes	2016
BE	Other	-	Yes	-	Yes	SB NRA	2015	Yes	2015	Yes	Yes	2016
BG	Yes	9	Yes	5	Yes	IA	2016	No	2016	No	Yes	2016
HR	Yes	-	Yes	-	Yes	-	2016	Yes	2016	No	No	2016
CY	Yes	6	Yes	7	Yes	NRA	2015	-	-	Yes	Yes	-
CZ	Yes	26	Yes	7	Yes	USP	2016	Yes	2016	Other	Yes	2016
DK	Yes	8	Yes	6	Yes	NRA	2016	n/a	-	No	Yes	2016
EE	Yes	23	No	173	Yes	NRA	2016	Yes	2016	No	Yes	2016
FI	n/a	-	n/a	-	n/a	-	-	n/a	-	n/a	n/a	-
FR	Other	17	Yes	7	Other	IB NRA	2016	Yes	2016	Yes	Yes	2016
DE	Yes	-	Yes	-	Yes	NRA	2015	No	-	No	No	-
EL	Yes	600	Yes	40	No	NRA	2016	Yes	2016	Yes	Yes	2016
HU	Yes	108	Yes	22	Yes	IA	2016	No	-	No	Yes	2016
IS	Yes	22	n/a	17	Yes	NRA	2016	Yes	2016	Yes	Yes	2017
IE	Yes	29	Other	-	Yes	IA	2016	No	-	No	Yes	2016
IT	Other	38	Yes	54	Yes	IA USP	2016	No	-	No	Yes	2016
LV	Yes	3	Yes	9	Yes	NRA	2016	No	-	No	No	-
LI	n/a	-	n/a	-	n/a	-	-	n/a	-	n/a	n/a	-
LT	Yes	3	Yes	3	Yes	IA	2016	Yes	2016	No	Yes	2016
LU	No	-	n/a	-	Yes	IA	2016	Yes	2005	No	Yes	2016
MT	Yes	24	Yes	2	Yes	IA	2015/2016	Other	-	Yes	Yes	2015/2016
NL	No	-	No	-	Yes	NRA	2015	No	-	No	Yes	-
NO	Yes	2	Yes	2	Yes	IA	2016	No	2016	No	Yes	2016
PL	Yes	> 150	Yes	3	Yes	IA	2017	Yes	2017	Yes	Yes	2016
PT	Yes	34	No	100	Yes	IA NRA	2014	Yes	2014	Other	Yes	2016
RO	Yes	3	Other	1	Yes	IA	2016	No	-	No	Yes	2016
SK	Yes	22	Yes	176	Yes	NRA, USP	2016	Yes	2016	No	Yes	2016
SI	Yes	22	Yes	40	Yes	IA	2017	Yes	2007	No	Yes	2016
ES	Other	36	Yes	65	Yes	NRA	2013	Yes	2015	No	Yes	-
SE	No	-	No	-	Yes	NRA	2017	No	-	No	Yes	2016
CH	Yes	-	-	-	Yes	IB	2016	Yes	2017	No	Yes	2016
UK	Yes	11	Yes	14	Yes	IA	-	No	-	Yes	Yes	2016/17

Note: Empty cells appear when the answer to the question was "unknown" or was not provided. Legend: IA = Independent auditor; IB = Independent body; SB NRA = Supervisory Board commissioned by NRA; IA = Independent auditor; IB = Independent body (selected by NRA); IB USP = Independent auditor (nominated by USP); IA NRA = Independent auditor (nominated by NRA).

Source: Questionnaire to NRAs

### Cost accounting methods

We find that most of the NRAs require USPs to provide their regulatory accounts based on a fully-allocated cost method. This is comparable to findings in previous studies, meaning that there were no significant changes in the methodologies of how USPs are required to allocate their costs on universal services.

In total, four distinct cost accounting systems are used throughout Europe. The most popular system fully allocates cost based on their activities (FAC–ABC). It is employed by operators in 20 countries. Another five operators use a system of fully allocated costs, but not relying on activity based costs. Iceland is the sole country surveyed where the postal operator uses only a system of long run incremental costs (LRIC). Three countries, France, Germany and the United Kingdom, use both FAC-ABC and LRIC (however, not formally approved in the UK), see Table 48.

**Table 48**  
**Cost accounting methods**

TYPE OF COST ACCOUNTING SYSTEM	
Fully allocated costs (FAC)	BG, FI, LV, MT, CH
FAC - Activity based costs (ABC)	AT, BE, HR, CY, CZ, EE, EL, HU, IE, IT, LT, NL, NO, PL, PT, RO, SK, SI, ES, SE
Long run incremental costs (LRIC)	IS
FAC-ABC and LRIC	FR, DE, UK

Note: DE: depends on the regulation regime; ex ante: FAC-ABC; ex post: LRIC. SE: FAC-ABC with elements of standalone costing. UK: LRIC principle for identifying upstream costs for margin squeeze control.

Source: Questionnaire to NRAs

Our analysis reveals that accounting principles based on FAC method sometimes do not provide NRAs and NCAs with all the information needed to meet the requirements in the Postal Services Directive. As the information needs in relation to net cost calculations and assessments of anti-competitive pricing vary from case to case, these assessments can realistically not rely on data from regulatory accounts. Instead, complementary assessments, such as incremental costs (e.g. LRAIC<sup>95</sup>), are needed to fulfil these obligations.

On the one hand, the scope of regulatory accounts and the application of fully distributed cost standards based on product dimensions seem to provide most NRAs with sufficient information to monitor for cross-subsidisation and ensure compliance with the cost-orientation requirements set out in the Postal Services Directive (at the level of the USO as a whole).

On the other hand, the fact that regulatory accounts often are based on a product dimension only implies that the cost information obtained is unsuitable for decisions in relation to the net cost of the USO. Considering that NRAs might find it difficult to *ex ante* envisage counterfactual scenarios for net cost calculations (and thus relevant cost dimensions for accounting data) there is no easy

<sup>95</sup> Long run incremental costs (LRAIC): the average of all the (variable and fixed) costs that a firm incurs to produce a specific product.

‘one size fits all’ solution for how to make regulatory accounts more suitable for net cost calculations.

For example, to calculate USO net cost according to the requirements set out in the Postal Services Directive, NRAs’ information needs with respect to cost dimensions (weekdays, value chain activities, geographical areas, business segments) depend on the counterfactual scenario envisaged by the USP. The preferred approach should thus be for the NRA to first define the counterfactual scenario and thereafter calculate differences in costs and revenues activity by activity in the postal value chain (a so called commercial approach). This approach is already applied by some NRAs, as discussed in section 4.4.1 above).

Since NCAs have limited experience in ascertaining costs in other ways than by means of analysing financial or regulatory accounts (a so called top down approach), adjustments of regulatory accounts might be necessary. Alternatively, other means of ascertaining costs are needed to enable NRAs and NCAs to fulfil their obligations. Notably, for regulatory accounts to be useful for the assessment of avoided or incremental costs (e.g. LRAIC), an alternative treatment of common costs is needed. In this context, examples of good practice are provided by the few USPs that provide regulatory accounts based on long run incremental costs.

Nevertheless, in order to ensure that the information in regulatory accounts fulfils all requirements envisaged by the Postal Services Directive, the regulatory accounts would often need to produce more than 200,000 cost estimates. This is not realistic. Instead, national authorities need to determine on priorities and what kind of assessments accounting data shall be used for.

## **4.5 FINANCIAL EFFECTS OF THE TERMINAL DUES SYSTEM**

The system of terminal dues is a financial burden for many universal service providers in Europe, although few enjoy financial benefits. The terminal dues system creates financial transfers between national operators worldwide. These transfers, despite recent changes to the system, are expected to grow in the coming years because of the growing number of small packets in the mail stream.

These financial transfers arise because the regulated compensation, i.e. the terminal dues rates, in many cases is much lower than what the operator would charge on commercial terms for the same service. This creates a complex global system of financial transfers where some designated postal operators derive financial benefits, i.e. they get more discounts than they give, while others incur a financial burden, i.e. they give more discounts than they get.

In general, whether a designated postal operator will face a financial burden or not depends on two main features: 1) If, in the domestic market, costs for last-mile handling of mail, and postal prices, are high; and 2) if the country is a net importer or net exporter of international letters. European universal service providers are often those with high costs and high share of inbound letters. Thus, European USPs will, in many cases, face a financial burden from the terminal dues system.

Countries may agree on other terms than the UPU terminal dues rates. These bilateral agreements will in that case determine the actual compensation between those postal operators. Many EU operators are part of the REIMS system or the new IRA agreement (replacing REIMS), however these

will still be affected by the UPU system regarding items that come from outside Europe. Moreover, the UPU rates always work as a fall-back option, meaning that the REIMS or IRA rates might not be completely solving an issue either, see Box 32.

In the future, the growth of e-commerce will exacerbate financial transfers caused by the UPU terminal dues system due to higher volumes of small packets, i.e. goods below 2 kg in the mail stream. These products have a particularly high cost compared to other letter formats (primarily due to larger dimensions, packets take more space of e.g., the mailman's bag, and require special sorting equipment for automated processing) and are therefore associated with high financial transfers. For European USPs, there is also a growing share of these letter products being imported from outside of Europe, particularly from Asia.

Recent changes to the UPU system agreed upon by the Istanbul Congress are expected to have a minor mitigating effect on the development (see discussion further in this section).

Since USPs are obligated to deliver inbound international postal items by the international agreement signed by their government bodies, this will present a substantial financial burden for many USPs that may affect the sustainability of the USO.

In addition to the financial transfers between postal operators, the terminal dues system may also cause competitive distortions for last-mile handling of cross-border letter post items. This is the case when the terminal dues paid to the last-mile designated operator is so low that an as-efficient delivery operator cannot compete with the designated operator for last-mile handling of cross-border items. Terminal dues may also distort competition for first-mile handling of cross-border letter post items. Because terminal dues are only available to designated operators, non-designated operators have a competitive disadvantage (paying a higher price for last-mile activities in the destination country). Moreover, disproportionately low prices for cross-border delivery may incentivize e-shoppers to buy from (e-) retailers cross-border instead of buying from a domestic e-retailer or a local brick and mortar store. This could be a serious concern, if it means that European e-retailers and brick and mortar shops are placed at a competitive disadvantage compared to those in Asia.

### **Box 32 The UPU system for terminal dues**

As an intergovernmental organisation, the Universal Postal Union (UPU) was founded in 1874 to enable the cooperation between governments on topics related to the postal sector and international postal services. Although initially the UPU only consisted of 21 member countries, today 220 countries and territories are part of the organisation. In order to regulate international mail exchanges between the designated postal operators of UPU's member countries, the organisation determines rules of which terminal dues are an essential part.

Terminal dues are the payments between designated postal operators for the transport, sorting, and delivery of cross-border letter post items in the destination country. They concern all products defined as letter items, classified by a set of minimum and maximum dimensions and weights into small letters (P), large letters (G) (sometimes referred to as "flats"), and bulky letters and small packets (E).

All cross-border deliveries of letter mail are affected by terminal dues which serve either directly or indirectly as a fall-back provision in the negotiation of bilateral agreements. Terminal dues are becoming increasingly important for postal operators as this type of post traffic rises due to the e-commerce growth. Cross-border letter post items made up a total of 3,4 billion globally in 2015. Between 2014 and 2020, the global compound annual growth rate (CAGR) for cross-border e-commerce trade is expected to be 29 per cent.

Mainly industrial countries are contributing in high volumes to the flows of cross-border letter post, as data within and between regions on global letter post flows demonstrates. Any changes in the current terminal dues systems is thus likely to affect mainly designated postal operators in these countries. However, the flow of cross-border letter mail from Asia to Western Europe and North America is rising since shopping at Asian online marketplaces is becoming more popular among citizens of Western countries. These countries might therefore also see effects from changes in the current level of terminal dues.

Source: Copenhagen Economics

#### **4.5.1 Financial impact of the terminal dues system**

The UPU terminal dues system creates financial transfers because there is a discrepancy between the actual compensation received by the designated postal operators for delivering inbound cross-border letter mail (i.e., the actual terminal dues) and the compensation they would require if the UPU terminal dues system was not in place (i.e., the counterfactual compensation). The difference between actual and counterfactual compensation is the distortion per letter sent (outbound) or received (inbound).

An analysis by Copenhagen Economics, conducted in 2015 for the Postal Regulatory Commission (PRC), quantifies the size of financial transfers created by the current UPU terminal dues system. The total value of net financial transfers between 154 designated postal operators was estimated to be approximately EUR 1,11 billion in 2014.

The inbound effect captures all inbound (import) letter mail and aggregates the difference between the actual terminal dues rate received and the counterfactual rate. In contrast, the outbound effect



captures all outbound (export) letter mail and aggregates the difference of actual terminal dues rate paid and the counterfactual rate<sup>96</sup>. The net effect is the sum of the inbound and the outbound effect and can constitute either a positive or a negative net financial transfer for the designated postal operator in question.

### *The impact of UPU Istanbul congress*

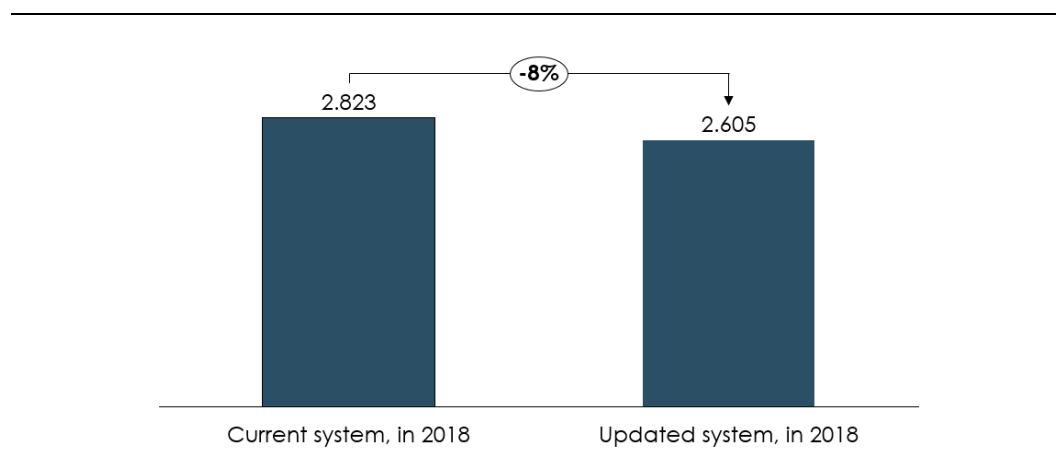
UPU members revise the terminal dues rates every four years in a general congress and changes to the system must be agreed by a majority of UPU members. The last congress took place in Istanbul in September 2016, where the members agreed on changes to the current system to be implemented in 2018.

Some changes agreed in Istanbul were aimed at reducing financial transfers. However, the changes agreed will not bring about large changes to the total value of the financial transfers. One key reason is because cross-border e-commerce continues to grow fast, thus the number of items creating financial transfers is increasing fast. Copenhagen Economics estimations prepared for the U.S. Postal Regulatory Commission show that, compared to continuing with the current system, the updated terminal dues system is expected to result in an eight per cent shift down in financial transfers (appraised on 2018 figures), see Figure 92.

**Figure 92**

**Total value of annual financial transfers applying updated system in 2018**

Million euros



Note: Exchange rate from SDR to EUR of 1,18 from IMF.org on 11-04-2018

Source: Copenhagen Economics (2017), Impact on financial transfers among designated postal operators of the Universal Postal Union 2018-2021 cycle agreements

<sup>96</sup> The counterfactual terminal dues rate used for the analysis corresponds to 70 per cent of the price charged by the postal operator for end-to-end delivery of domestic letter post items. The domestic price for last-mile delivery of a priority, single-piece letter is approximated to 70 per cent since the last-mile is the most costly phase of the delivery.

### *Large industrialised countries experience the largest negative net effect*

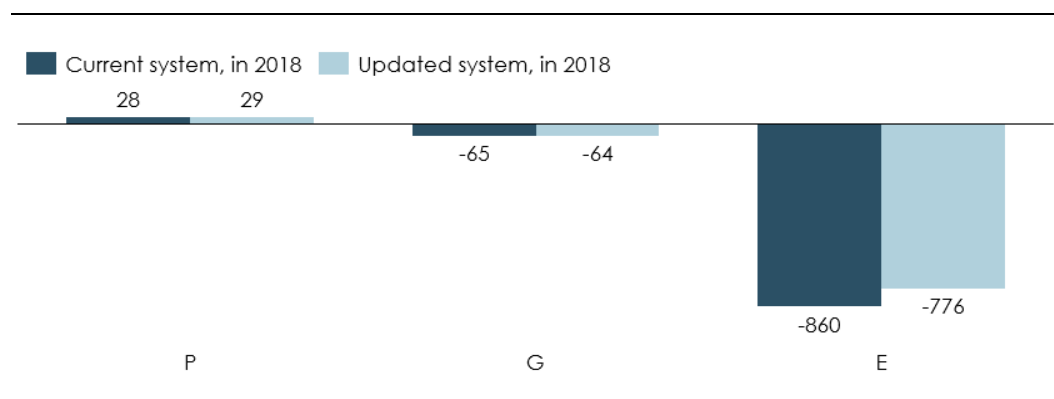
The group of countries that currently experience the largest negative net effect consists, to a large extent, of large industrialised countries with high domestic postal tariffs. Which letter format that creates the largest transfer differs significantly among them. Whereas some countries suffer the greatest loss on small letters, others lose mostly on bulky letters and small packets. A few countries even experience a positive impact from small letters that is outweighed by a large negative impact from bulky letters and small packets. One common feature is that they all experience a negative net impact from bulky letters and small packets.

Two examples are provided in Figure 93 and Figure 94. In the first example, the postal operator suffers significant losses from bulky letters and small packets, which outweigh a small positive effect from small letters. In the second example, the postal operator suffers significant losses on all three letter post formats.

The changes in regulation will overall lead to a smaller negative net effect compared to the current system. However, on a country-by-country basis, the decrease in the negative net effect stemming from small packets and bulky letters varies between 3 and 12 per cent (assuming that volumes are the same for both current and updated systems).

**Figure 93**  
**Country with large effect from E format items**

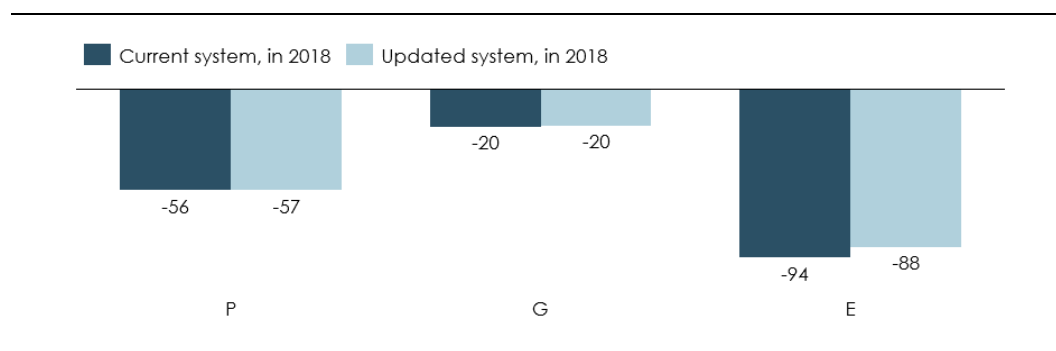
Million euros



Note: Exchange rate from SDR to EUR of 1,18 from IMF.org on 11-04-2018

Source: Copenhagen Economics (2017) Impact on financial transfers among designated postal operators of the Universal Postal Union 2018-2021 cycle agreements

**Figure 94**  
**Country with negative effect from all formats**  
Million euros



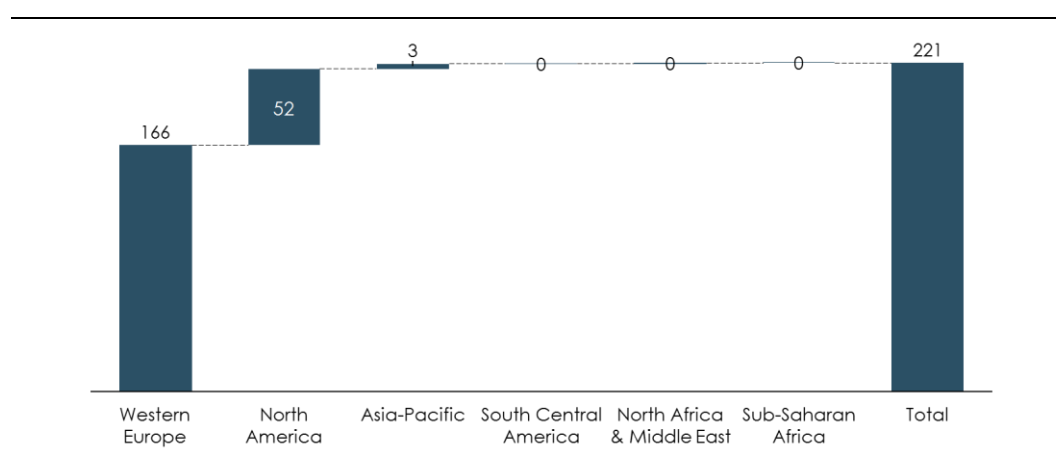
Note: Exchange rate from SDR to EUR of 1,18 from IMF.org on 11-04-2018

Source: Copenhagen Economics (2017) Impact on financial transfers among designated postal operators of the Universal Postal Union 2018-2021 cycle agreements

#### *Eastern European regions receive positive transfers*

The pattern in Eastern Europe & Central Asia<sup>97</sup> shows that the largest positive transfer is emerging from the exchange in cross-border letter mail with Western Europe, see Figure 95. There is also a significant positive transfer from the exchange with North America.

**Figure 95**  
**Eastern Europe & Central Asia net financial transfer**  
Million euros



Note: The group Eastern Europe & Central Asia is comprised of 31 countries, 13 of which are members of the EU. For the flows that goes from this region to Western Europe, 60 per cent of the volumes is from countries within the EU.

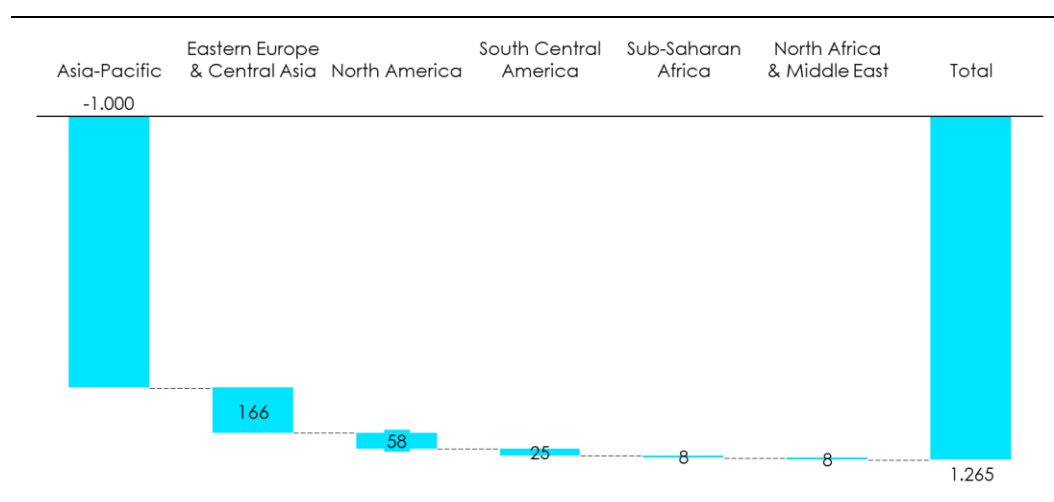
Source: Copenhagen Economics (2017) Impact on financial transfers among designated postal operators of the Universal Postal Union 2018-2021 cycle agreements

<sup>97</sup> The group Eastern Europe & Central Asia is comprised of 31 countries, 13 of which are members of the EU.

*Western Europe experiences the largest negative net transfer overall with negative net transfers from all other regions*

The most significant negative net transfers for Western Europe are coming from exchanges with the Asia-Pacific region and Eastern Europe & Central Asia, see Figure 96.

**Figure 96**  
**Western Europe net financial transfer**  
Million euros



Source: Copenhagen Economics (2017) Impact on financial transfers among designated postal operators of the Universal Postal Union 2018-2021 cycle agreements

## 4.6 VAT EXEMPTION FOR POSTAL SERVICES

The EU VAT Directive states that services supplied by 'public postal services', and the sale of stamps, should be exempt from value-added tax (VAT). The presence of VAT exemption for certain postal services has often been motivated by consumer protection, since the burden of VAT, which is a consumption tax, falls on the end-user. The current system with exemptions for "public postal services" has its roots in times when competition in the postal sector was non-existent. Nowadays, the increasing competition in the postal sector has created a need to align the VAT system with competitive dynamics of the market. In this regard, the CJEU has clarified (Case C-357/07) that the VAT exemption on postal services has to be provided to any "universal service provider", irrespective of whether the provider is a public or private operator. However, it has to be limited to the 'universal service'. Supplies of services for which the terms have been individually negotiated are not allowed to benefit from the VAT exemption.

In this section we discuss VAT exemption for postal services: common practices implemented by surveyed countries and potential distortive effects arising from VAT exemption. Based on our survey results, we find that Member States exempt some or all universal services of the USP from value-added tax (VAT) while applying VAT to similar services provided by private companies.

#### **4.6.1 Postal products with VAT exemption**

In most of the investigated countries the VAT exemption is applied on universal services provided by USPs. Exceptions are Germany and Iceland where non-USO postal operators are also eligible for VAT exemption on services which are interchangeable to the universal services, see Table 49.

There are differences regarding the implementation of VAT exemptions across surveyed countries. Firstly, VAT rates on postal services vary from approximately 8 per cent to 28 per cent. Secondly, some countries have applied the VAT exemption to products outside the scope of the universal service. In fact, in some countries, all products supplied by the USP are exempt. However, changes made in the past decade indicate a tendency to reduce products exempted beyond the universal service.

In addition, we have seen a move towards reducing the scope of the VAT exemption. This change is explained by issues relating to a level-playing field between USPs and their competitors in mail and parcel delivery created by the VAT exemption (see chapter 2 for legal cases related to VAT).

**Table 49**  
**VAT treatment of postal services**

Country	Are the US and/or the USP VAT exempt?	How is the VAT exemption applied?	VAT rate (%)
AT	Yes	On US provided by USP	20%
BE	Yes	On US provided by USP	21%
BG	Yes	On US provided by USP	20%
HR	Yes	On US provided by USP	25%
CY	Yes	On US provided by USP	-
CZ	Yes	On US provided by USP	21%
DK	Yes	On US provided by USP	25%
EE	Yes	On US provided by USP	20%
FI	Yes	On US provided by USP	24%
FR	Yes	On US provided by USP	20%
DE	Yes	On US provided by USP and other operators	19%
EL	Yes	On US provided by USP	24%
HU	Yes	On US provided by USP	27%
IS	Yes	On US provided by USP and other operators	24%
IE	Yes	-	-
IT	Yes	On US provided by USP	22%
LV	Yes	On US provided by USP	21%
LI	No	-	-
LT	Yes	On US provided by USP	21%
LU	Yes	On US provided by USP	17%
MT	Yes	On US provided by USP	18%
NL	Yes	On US provided by USP	21%
NO	No	-	-
PL	Yes	On US provided by USP	23%
PT	Yes	On US provided by USP	-
RO	Yes	On US provided by USP	19%
SK	Yes	On US provided by USP	20%
SI	Yes	On US provided by USP	22%
ES	Yes	On US provided by USP	21%
SE	Yes	On US provided by USP	25%
CH	Yes	On US provided by USP	8%
UK	Yes	On US provided by USP	20%

Note: empty cells appear when the answer to the question was "unknown" or was not provided. DE - VAT exemption is limited to the single piece mail private segment and applies for undertakings providing such services with national coverage. IS - There is an exemption for all basic postal services up to 2 kg. LT - 9% VAT applied on publications. CH - exempt only for reserved area (art. 21 para. 2 item 1 VAT Act).

Source: Questionnaire to NRAs

#### 4.6.2 VAT exemption may constitute a benefit of the USO for USPs

The VAT exemption may have distortive effects on competition leading to a negative effect on postal entrants and postal market users. A distortion of competition occurs if some businesses are obligated to charge VAT while others are exempted. The general concept of competitive distortion points to an advantage for the operator which is exempt, since it can sell its service for a lower price than the competitors that are not exempt. However, the VAT exemption could be both an advantage but also a drawback for the exempted operator. This will depend on several factors, among which the customer portfolio of the operator and the amount of input costs which is VAT-reclaimable are the two main ones. An exempt firm cannot reclaim the VAT paid on inputs and therefore faces higher costs. Therefore, a situation without the VAT exemption can benefit VAT-rated customers, which can be released from the so-called hidden VAT and will instead have the opportunity to deduct the actual VAT paid. The final consumers however, because of the final price increase after the VAT rate application, will be worse off.<sup>98</sup> Thus, the exempt firm has a cost disadvantage on the one hand and a price advantage on the other.

It should be noted, however, that the VAT exemption creates both benefits and costs for USPs. This is also noted by the European Group of Postal Regulators, ERGP (2011, p. 13)<sup>99</sup>, stating that: “The VAT exemption could be an advantage as well as an inconvenience for the exempted operator.”

There are numerous references to the VAT exemption being a benefit for universal postal service providers. For example, according to Copenhagen Economics (2011, p. 144)<sup>100</sup>: “If a VAT exemption is present, the benefit can be classified as a privilege of having the USO, as long as this privilege would be lifted without the USO.”

Several sources, for example ERGP (2012)<sup>101</sup> and Copenhagen Economics (2008)<sup>102</sup>, point to two main effects from lifting the VAT exemption.

The first effect is on the output (or revenue) side. Introducing VAT means that USPs would have to levy VAT onto its customers. The effect on demand depends on whether customers are VAT-exempt or not. The reason is that customers paying VAT only care about the net price (i.e. the price excluding VAT), whilst VAT-exempt customers care about the gross price (i.e. net price plus VAT).<sup>103</sup> For example, if the VAT would be passed on fully to all customers, this would mean that the net price would remain unchanged whilst the gross price would increase. This would reduce demand from VAT-exempt customers (whose gross price would increase) while leaving the postal operator's profitability on units sold intact. If the postal operator instead absorbs the VAT in full (zero pass-on), the net price would decrease whilst the gross price would remain unchanged. While this would increase demand from VAT liable customers, it would come at a cost of decreased profitability for both customer segments.

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<sup>98</sup> ERGP (2012), Report on net Cost of USO – VAT exemption as a benefit or a burden, page 10; Swedish Post and Telecom Authority (2017), The Swedish Postal Service Market 2016, page 9.; Dietl et.al. (2010), Competition and Welfare Effects of VAT Exemptions, page 3.

<sup>99</sup> ERGP (2011), Draft ERGP Report on Net Cost Calculation and Evaluation of a Reference Scenario.

<sup>100</sup> Copenhagen Economics (2011), Manual for calculating the net cost of the USO.

<sup>101</sup> ERGP (2012), Report on net Cost of USO – VAT exemption as a benefit or a burden.

<sup>102</sup> Copenhagen Economics (2008), What is the cost of Post Denmark's universal service obligation?

<sup>103</sup> ERGP (2015), Report on net Cost of USO – VAT exemption as a benefit or a burden.

Whether the output side effect entails a benefit or not depends on the composition of customers (VAT liable or not) as well as how sensitive they are to price changes.

The second effect is on the input (or cost) side. Making USPs VAT liable effectively means that the postal operators' costs decrease as they can now deduct VAT on inputs. In a counterfactual scenario without the USO, USPs can set prices based on the net price (instead of taking into account the higher price including VAT). Further, the introduction of VAT liability may also change USPs' behaviour with respect to outsourcing of activities. The reason for this is that the VAT exemption makes it less attractive to outsource activities than it would be in a counterfactual situation without the USO.

The above implies that the VAT exemption also entails a cost for the USP. The higher share of costs that are subject to VAT, so-called "hidden VAT", the higher are the costs of the VAT exemption. To assess whether the VAT exemption entails a net benefit or a cost for the universal service provider, one therefore needs to assess the share of VAT exempt customers and the share of hidden VAT, see Table 50.

**Table 50**  
**Net benefit from VAT exemption**

	LOW SHARE HIDDEN VAT	HIGH SHARE HIDDEN VAT
High share VAT-exempt customers	Positive	Positive or negative
Low share VAT-exempt customers	Positive or negative	Negative

Most USO products are VAT exempt, see Table 51. Basic letter post (FSC, domestic) is VAT exempt in all the responding countries, with exception of Norway and Liechtenstein, where there is no VAT exemption on USO products, and Denmark, where D+1 service is outside the USO. Registered and Insured mail are also VAT exempt in a significant number of responding countries, 87 per cent. Basic parcel post is VAT exempt in 81 per cent of responding countries. On the other hand, direct mail and bulk parcels are seldom VAT exempt: only 25 per cent and 31 per cent of countries, respectively, reported these products as VAT exempt. Express services are almost never considered VAT exempt, the exemption only applies in Cyprus and Denmark.

Regarding cross-border mail, both letter post and parcels are frequently considered USO products, but more countries consider cross border letter post VAT exempt than cross border parcels. 28 of the responding countries said that cross border letter post is VAT exempt in their country while 27 countries reported cross border parcels to be VAT exempt.



**Table 51**  
**Postal products within the scope of VAT exemption**

Country	Basic Letter Post (FSC, domestic)	Basic Letter Post (SSC, domestic)	Bulk Letters	Registered Mail	Insured Mail	Direct Mail	Publications	Basic Parcel Post (Domestic)	Bulk parcels	Cross-border letter post	Cross-border parcels	Express Services
AT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
BE	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
BG	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
HR	Yes	Yes	n/a	Yes	Yes	No	No	Yes	n/a	Yes	Yes	No
CY	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes
CZ	Yes	n/a	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No
DK	No	Yes	No	No	No	No	No	No	No	No	No	Yes
EE	Yes	Yes	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No
FI	Yes	Yes	No	Yes	Yes	No	No	No	No	Yes	Yes	No
FR	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
DE	Yes	n/a	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No
EL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
HU	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
IS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	No
IE	Yes	n/a	Other	Yes	Yes	n/a	n/a	Yes	n/a	Yes	Yes	n/a
IT	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
LV	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
LI	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LT	Yes	Yes	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No
LU	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
MT	Yes	Other	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
NL	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No
NO	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PL	Yes	Yes	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No
PT	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	n/a
RO	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No
SK	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
SI	Yes	Other	Other	Yes	Yes	No	Yes	Yes	Other	Yes	Yes	No
ES	Yes	n/a	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
SE	Yes	Yes	No	Yes	Yes	No	No	Yes	No	Yes	Yes	No
CH	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No
UK	Yes	Yes	No	Other	Other	No	No	Yes	No	Yes	Yes	n/a

Note: Cells are coloured in grey when the product is part of the USO. DK - bulk letters and bulk parcels are not VAT exempt unless negotiated price. FI - VAT exemption is not applied to basic services listed above if the service is based on a contract and invoiced from the customer. HU - only basic bulk parcels are VAT exempt. IT - basic parcel post (domestic and cross-border) are VAT exempt up to 20kg. SE - basic letter post (FSC, SSC, domestic and cross-border) are VAT exempt only if stamped; registered mail, insured mail, basic parcel post (domestic and cross border) are exempt only if directly paid at the counter. CH - the VAT exemption applies only to the reserved area (domestic letters up to 50g) covered by USP. However, the USP opts for voluntary taxation. UK - registered and insured mail falling under the USO are VAT exempt

Source: Questionnaire to NRAs

## CHAPTER 5

# POTENTIAL SCENARIOS FOR THE FUTURE PROVISION OF THE USO

### 5.1 INTRODUCTION

The Postal Services Directive sets minimum requirements (although subject to certain exceptions) for the elements of the Universal Service Obligation (USO), which have been unchanged since 1997. Each Member State is however free to choose the precise scope and size of the USO at a national level, as long as it fulfils the minimum requirements set out in the Postal Services Directive, see chapter 4 for scope of USO in Member States. The minimum requirements set by the Postal Services Directive are the following:

- One collection per day from appropriate access points,
- One delivery to all addresses or to appropriate installations,
- Every working day and not less than five working days per week,
- According to Annex II of the Postal Services Directive, 85% of intra-community cross-border mail must be delivered within D+3.

The Postal Services Directive also determines a minimum set of postal products/services:

- Postal items up to 2 kilograms,
- Postal parcels up to 10 kilograms,
- Services for registered and insured items.

In this chapter, we analyse how technological, economic and social developments are changing and will continue to change the use of and need for postal services in the future. More specifically, we analyse the future provision of the USO in the context of this changing landscape. Use of letters are declining due to substitution to electronic communication and the use of parcels and packets are increasing due to the growth in e-commerce. This impact the cost and benefits of the national USO in each Member State.

At the outset, we conclude that while policy balances are complex to achieve, clear fundamentals help inform the debate. In particular, one key point is appraising how the above mentioned technological, economic and social developments are embodied in the evolution of user needs. Users of postal services are heterogeneous across and within countries covered by this study. Some users today have a much lower need for postal services than they used to in the past, while certain users are still relying on postal services as an important tool for communication. It is important to acknowledge all groups of postal users, since in some societies the users who are depending on postal services are a smaller group. This group of users are referred to as vulnerable users.

In turn, evolution in the USO according to the changing needs of users (i.e. senders and recipients of mail) is key to avoid mismatches. One effect of a mismatched USO can be disproportionately large costs associated with providing postal services within the scope of the USO relative to the benefit that it brings to users. Another effect of a mismatched USO may be failing to cover new user needs that are not met by the market absent regulation.

We find that the abovementioned developments have started driving changes at the national level. We notice that during the past decade, several Member States have made adjustments (although yet limited) to the national specification of their universal service obligation aimed at:

- ensuring continued financial sustainability of the universal service; while at the same time
- maintaining an affordable service for consumers (in light of increases in unit costs, as demand declines); and
- defining an appropriate service level to balance sustainability and user needs.

Some examples of proposed or applied changes to the USO include:

- The Netherlands reduced the frequency of delivery required from six days to five days in 2014.
- Denmark reduced the frequency of delivery required from six days to five days in 2014.
- In Finland, the new postal act allows delivery 3 days per week in urban since 2017, however it has not yet been implemented by the USP.
- In Italy, the 2014 law and 2015 regulation set out that alternate day delivery and collection of USO products can exceptionally apply to up to 25 per cent of the population.<sup>104</sup>

National circumstances vary, yet it is plausible that policymakers in Member States have proposed these changes for same reasons that the European institutions are interested in potential scenarios for the future provision of the USO: ultimately to consider the technological, economic and social developments that have been shaping the use of and need for postal services, see Box 33.

### **Box 33 The concept of the USO**

A USO is a solution to ensure that social needs that would not be covered by market forces are provided for those who need it. However, if these social needs are changing over time, as described above, the USO may become obsolete in its shape and size. Thus, it is conceptually clear that the regulatory framework should ensure the USO definition according to contemporary needs. Amongst the evolution of needs a key factor to keep into account is the rapid development and wide (yet not complete) adaptation of information technology and the advent of digitised services.

Monitoring and, if appropriate, adjusting the regulatory framework requires clarity about the costs of providing the USO, as well as an analysis of the demand for USO services. The challenge must be handled not just at the EU level but also at a national level. At the national level, Member States should ensure an evaluation of costs and benefits of the USO and implement resulting adjustments within the possibilities given by the minimum requirements in the Postal Services Directive.

Source: Copenhagen Economics

<sup>104</sup> AGCOM DELIBERA N. 395/15/CONS, Law n.190 of 23 December 2014

### 5.1.1 Our approach

In the first part of the chapter, we develop a framework for assessing policy scenarios for future provision of the USO at the national level. In the second part of the chapter, we apply the framework to test a few conceptual policy scenarios. A policy scenario is based on alternative regulatory options, i.e. changes to the national USO. In our framework, we identify potential impacts of such regulatory options and analyse key driving forces behind them. Our approach is sensitive to the variation in market and structural characteristics within Europe. We map out country-specific characteristics that are likely to play a major role in the potential impact of changes to the USO. This is key since variations between countries influence the optimal minimum level and scope of the USO that applies to all European countries.

#### *Stakeholders' engagement and analytical methods*

Our analysis in this chapter is based on numerous discussions with different postal market stakeholders and analysis of previous assessments of regulatory options conducted at national level in Europe and overseas. We note, however, that views expressed by different groups of stakeholders vary and sometimes contradict each other – thus, we present all views in a balanced, neutral way.

We are grateful to different postal market experts for providing their expertise in drafting this chapter. To mention a few, we have conducted expert interviews and broader discussions with the following postal market stakeholders:

- Uni-Europa – the largest association of trade unions in the postal sector in Europe.
- Citizens Advice – we have interviewed experts in the consumer association in the UK.
- Ministries. In addition to a presentation and a discussion at the Postal Directive Committee, we have conducted in-person interviews with government ministries in the Netherlands, Slovakia and Switzerland.
- EMOTA – e-retailers associations and its members.
- Free Fair Post Initiative (FFPI) - association of non-universal postal operators in Europe.
- A number of universal service providers across Europe.
- We have also consulted extensively with national regulatory authorities, both through the questionnaires and a survey conducted in one of the ERGP plenary meetings in Bonn, November 2017.

In addition, we have analysed existing assessments of regulatory options in different Member States, EEA countries and Switzerland. This also includes studies prepared by the European Regulators Group for Postal Services (ERGP). Last but not least, our analysis is based on European wide data collected for other parts of this Study on key factors such as letter and parcel volume development, evolution of e-commerce, development in digitalisation, and labour market conditions.

## 5.2 HOW TO ASSESS THE COSTS AND BENEFITS OF THE USO?

Below we provide a framework for how to assess the cost of providing the USO and the benefits of the USO to users and other stakeholders. The framework builds on a conceptual understanding of costs and benefits of the USO and result in hands-on guidelines on how to assess regulatory options for the USO in practice.

### 5.2.1 Analytical framework for the assessment of regulatory options

In this section, we outline a framework for assessing regulatory options for the provision of the national USO in a given country. The purpose of this framework is to help policy makers in making informed decisions about the future provision of the USO. Future policy scenarios can be formed as a combination of regulatory options (i.e. several changes, which are discussed further in this chapter) and need to be based on information about developments in the market. The analytical approach also accommodates a reiterative process where partial analysis can reveal that a scenario needs to be adjusted and re-assessed.

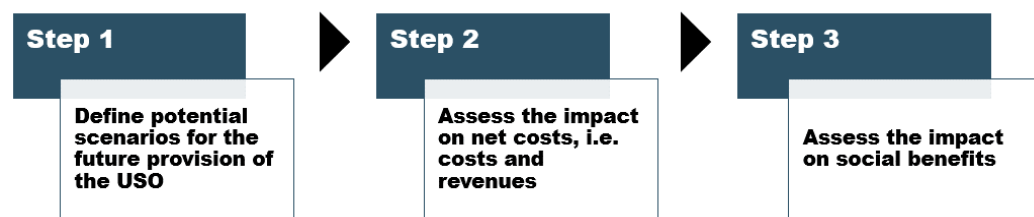
The potential impact of different regulatory options can be assessed in three steps:

The first step involves forming a hypothesis that leads to potential scenarios, i.e. specific regulatory options, to be tested. The number of combinations and nature of regulatory options can vary significantly.

The second step involves an assessment of how regulatory options affect costs and revenues to the USP due to changes of the USO. This involves an analysis of the impact on the net cost of the USO. The assessment of the change in net cost, provides an estimate of the change in cost of providing the USO in monetary terms. This can then be weighed against the value of changed user benefits.

The third step involves an assessment of wider socioeconomic benefits for users of postal services and other stakeholders provided by the USO.<sup>105</sup> This assessment involves both the impact on users in a broader sense as well as specific implication to the stakeholders that are identified as the most vulnerable. This is because it might be that the impact is positive overall, but that some specific groups are affected negatively.

**Figure 97**  
**Roadmap to impact assessment**



Source: Copenhagen Economics (2010), Main developments in the postal sector (2008-2010)

In the following, we discuss each of the three steps of the impact assessment in greater detail.

<sup>105</sup> The methodology for assessing socioeconomic benefits expands upon the methods provided in *Copenhagen Economics (2010) Main developments in the postal sector (2008-2010)*.

## 5.2.2 Define potential scenarios for the future provision of the USO

### *Step 1.1: Define current national USO requirements*

The first step is to define current national USO requirements. This makes it possible to find suitable regulatory options as well as make comparisons for policy evaluation. The understanding of current obligations serves as the natural starting point for identifying regulatory options. It also serves as the status quo scenario that the assessment will be benchmarked against.

### *Step 1.2: Define regulatory options based on the initial screening of costs and benefits*

In order to provide relevant regulatory options in a given context, it is important to know which elements of the current national USO are driving costs and benefits. We consider different elements of the USO separately. In addition, each element can often be changed to a various degree or in different ways, see Box 34.

#### **Box 34 Examples of plausible regulatory options for future provision of the USO**

##### **I. Reduce delivery frequency**

From 6 to 5 days nationwide

From 5 to 2.5 days nationwide (may conflict with current PSD)

From 5 days nationwide to 3 days in rural areas, 5 days in urban areas (may conflict with current PSD)

From 5 days nationwide to 3 days in urban areas, 5 days in rural areas (may conflict with current PSD)

##### **II. Reduce speed of delivery**

From D+1 to D+2

From D+2 to D+5

##### **III. Allow different forms of delivery requirements**

From delivery to the door, to delivery to the street, nation wide

From delivery to the street, to delivery to the post office, nation wide

From delivery to the street, to delivery to the communal centre, nation wide

##### **IV. Remove uniform prices requirement**

Remove the price uniformity requirement, i.e. allow geographic price differentiation for SP and bulk letters

##### **V. Relax ubiquity (accessibility) requirement**

Reduce the required number of post offices in rural areas by 25% to 50%

Reduce the required number of post offices in urban areas by 25% to 50%

Allow alternative models, e.g. mobile post offices, franchise model

##### **VI. Change the product scope**

Exclude bulk mail from the USO

Exclude parcels from the USO (may conflict with current PSD)

Include track & trace in the universal parcel service

Include services of general economic interest, e.g. social services to elderly people

##### **VII. Maintain the status-quo**

Source: Interviews with market stakeholders, developments in investigated countries

There are two questions to answer that can form a hypothesis of relevant regulatory options:

1. Which elements are covering more than the social need? Alternatively, which elements are covering less than the social need?

As users' needs are evolving, shaped by increased digitalisation, some USO requirements may provide services that cover more or less than what is needed by different user groups (e.g. private senders in rural/urban areas, small and medium enterprises, larger senders such as banks, telecoms, government institutions and e-retailers). In the former case, this is a good indication that a reduction in this element can be a relevant regulatory option. In the latter case, if the USO covers less than the social need, expansion and/or inclusion of new elements to the USO can be a relevant regulatory option. In order to define the relevant policy options, it is useful to look at the large patterns of user needs (impacts on specific user groups are assessed at a later stage).

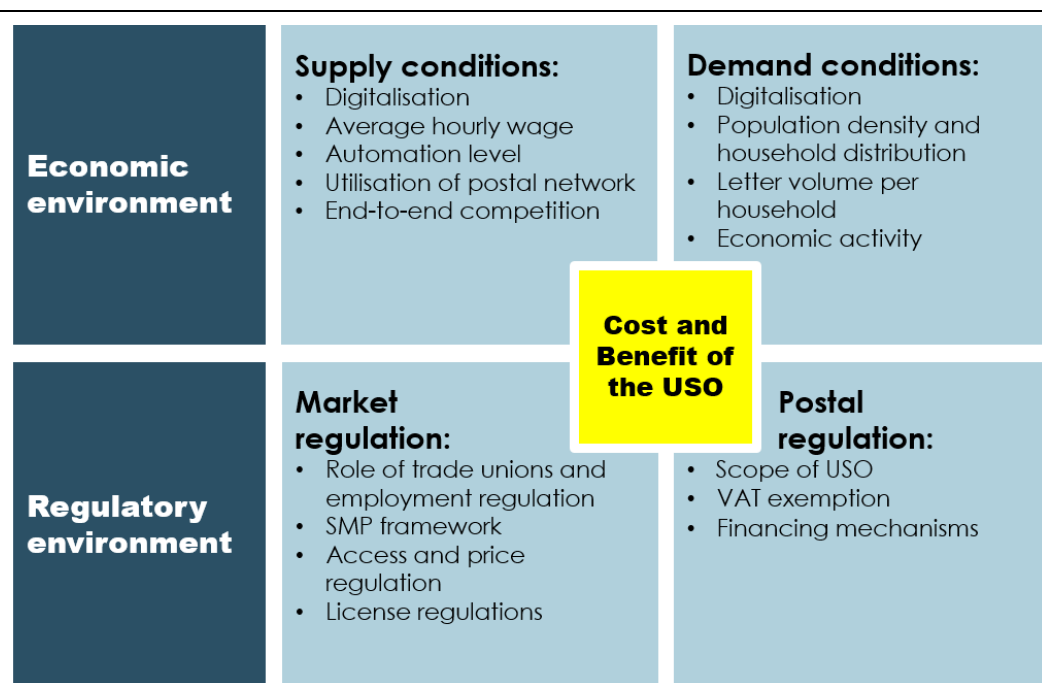
2. Which elements drive the net costs for the operator to provide USO?

As the unit cost increases with lower mail volumes, some elements become increasingly costly to provide for the operator. If the cost is becoming burdensome for either the USP, market players (in case of compensation) or tax payers (in case of direct government subsidy) – which is a political decision - this can be an indication that there is cost saving potential in a regulatory option that reduces the scope of the particular element. One way to get an overview regarding this is to evaluate the net cost calculations (if such calculations exists). If a particular element makes up a significant share of the net cost (e.g. above 40%), it may be considered appropriate to investigate a change in the USO of such element.

### *Multiple factors affect the cost and benefit of the USO*

The net benefit of the USO depends on interaction between supply and demand characteristics (i.e. the economic environment) as well as market and universal service regulation (i.e. the regulatory landscape). These, in turn, depend on a range of factors, which are unique to every country. Country specific features such as geographic and demographic structure and the specific development of digitalisation will determine the cost of providing USO and the social need for such USO. Consequently, there is no one-size optimal level and scope of the USO that applies to all European countries. Rather, the optimal USO may differ from country to country.

**Figure 98**  
**The optimal level and scope of the USO vary due to countries' unique characteristics**



Source: Copenhagen Economics based on Jaag (2014), Postal-sector policy: From monopoly to regulated competition and beyond, p. 268. Utilities Policy (31), pages 266-277.

### *Country characteristics affect the cost of providing USO*

The different circumstances in each national postal market make the cost of providing universal postal service heterogeneous among Member States. In fact, even within the national context, the net cost for a particular obligation (e.g. five days per week delivery) is different for different regions. A good starting point to identify the potential need for changes in the USO is to look at some of the main country characteristics that drives the net cost of the USO.

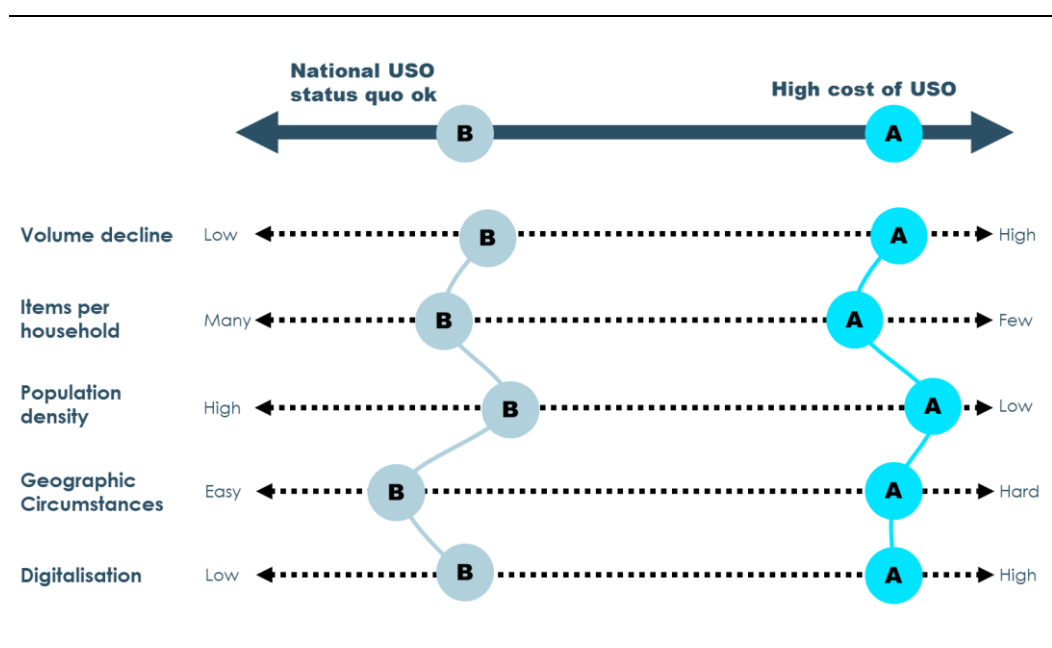
The volumes per capita or household is an important feature for economies of scale that has implications for the unit cost of supplying mail services. Similarly, the rate of volumes decline gives an indication of the development going forward. In relation to that the population density is an important feature. Not only the population density overall, but the share of people living in densely populated areas and scarcely populated areas are important. Geographic circumstances and, more precisely, the accessibility also has implications for the cost of providing an extensive USO. With large distances and difficult terrain (e.g. mountains) the cost of maintaining a large network and providing fast and reliable mail service is high. Finally, an evaluation of the level of digitalisation can provide an indication of the level of dependency on mail and is therefore an important factor.

Figure 99 illustrates how country characteristics can be used to derive a simple scoreboard that indicates whether the need for a reduction in the national USO should be considered. The figure



shows a hypothetical country A, which has characteristics that indicate a more urgent need for review of the USO. We note that these characteristics can be found in those countries where changes have been considered (e.g. Norway, Italy, Finland and Denmark). Country B, by comparison, does not hold the same characteristics. Instead, it holds feature that does not indicate an immediate need for change of the USO.

**Figure 99**  
**Scoreboard for how country characteristics affect cost of providing USO**



Source: Copenhagen Economics

### *Postal markets have different user needs for letters*

Dispersion in the use of postal services indicate that different USOs are optimal. Letter volumes per capita can be one key indicator to identify the level of dependence on postal service. However, letter volume per capita can be different for several reasons (e.g. high or low degree of digitalisation or because of low economic activity historically). High mail volumes, per definition, means that postal services are being widely used. It can therefore be an indication that the social need for postal services is high. The reason why one country has relatively low letter volumes per capita may be that the substitution to digital alternatives has been as significant. In this case, the dependency on postal services may be relatively low. However, another reason why one country has relatively low letter volumes per capita may be because of low economic activity. In this case, those who use postal service may not have less access to good alternative and dependency on postal services may be large.

### **5.2.3 Assess impacts on the net cost of the USO**

In order to assess the impact on changes in cost of providing the USO, we look at the impact from the regulatory option considered on net cost of the USO (see section 4.4.1 for a review of net cost

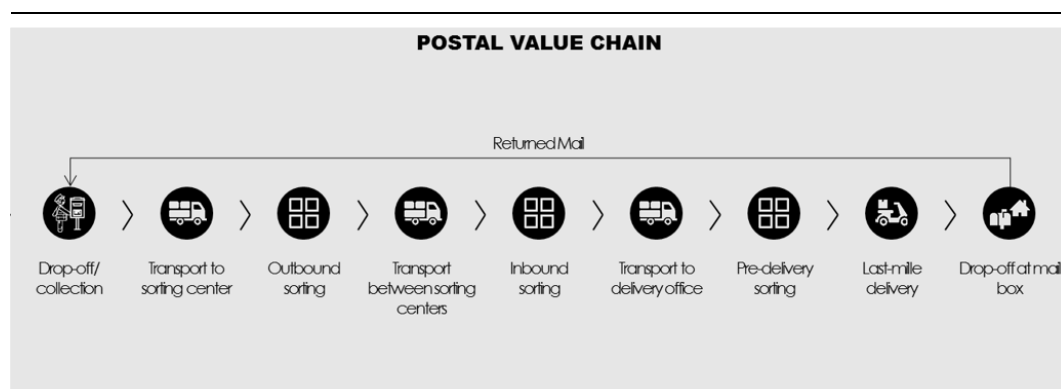
methodology). Note that for this analysis, one does not have to compare to a counterfactual situation without a USO altogether, but a situation with a changed USO. Thus, the impact on net cost is measured as the difference in profit for the USP (i.e. difference in both cost and revenue) with the current USO, compared to a situation with the altered USO.

### *Step 2.1: Assess cost effects in the value chain*

When estimating the positive and negative cost effects of the USO compared to the counterfactual situation, we use the postal value chain to structure our analysis. The postal value chain consists of several steps, carrying mailings from sender to receiver, see Figure 100. For a description of each step, see section 3.5.1. These steps, however, differ between products. For example, parcels may not be transported to the distribution centres before delivery to the post office.

Cost effects can stem from two different sources. Firstly, there are direct cost effects from changes in operations such as e.g. reduced need for night shifts. These effects are direct in the sense that they stem directly from the changes made due to the changes in USO. Each step of the value chain is affected differently by changes in operations implied by the USP's commercial business strategy (i.e. the counterfactual scenario). Often there are no effects at all in some steps, but large effects in others. Secondly, there can be indirect cost effects from changes in volume due to changes in service level provided. A reduction in the service level provided will often lead to lower demand and thus lower volumes. Hence, there are additional indirect cost reductions caused by lower volumes. However, the additional cost saving caused by one additional unit of reduction in volume, will differ between operators. The lower the volumes, the higher the share of fixed cost, and thus, the lower the cost saving from reduced volumes.

**Figure 100**  
**Illustration of the postal value chain**



Note: Illustration  
Source: Copenhagen Economics

### *Step 2.2: Assess revenue effects*

When estimating the positive and negative revenue effects of the obligation to provide the universal service compared to the counterfactual situation, we look at the impact on different postal products

provided by USPs as a starting point, see Table 52.

Each product is affected differently by the changes implied by the USP's commercial business strategy. Often there are no effects at all for some products, but large effects for others.

Revenue increase or decrease can stem from different sources. A reduction in service level might lead to a decreased demand for postal services when postal users may turn to other means of communication or competitors. Alternatively, it can induce substitution to other postal services, e.g. reduced quality for letters can increase demand for parcel services. Similarly, a price increase leads to an increase in revenue per item; however, that positive margin effect on revenue may be countered by lower demand, leaving the net revenue unknown without further analysis.

**Table 52**  
**Product categories for analysing effects on revenue**

CATEGORY	DESCRIPTION
Domestic single piece letters (incl. registered letters)	All domestic letters sent as single piece, not containing goods.
International single piece letters	All international letters sent as a single piece, not containing goods.
Bulk mail	Letters sent in large volumes, bulks, often sent from large senders.
Magazines	Subscriptions, for example delivered once every week, month or six months etc.
Daily newspapers	Daily newspapers distributed by normal mail.
Unaddressed mail	Advertisement from shops such as supermarkets, typically not a part of the USO.
Packets	Small packets, weighing less than 2 kg, handled as letters in the postal value chain.
International packets	All international packets, weighing less than 2kg
Parcels	Weighing more than 2 kg, normally handled separate from letters in the postal value chain.
International parcels	All international parcels, weighing more than 2kg

Source: Copenhagen Economics

### *Step 2.3: Assess intangible benefits that may be affected by regulatory option*

Intangible benefits are part of the net cost calculation. Such intangible benefits can also be linked to the scope or the specifications of the USO, and thus be affected by any changes to it. For example, as we have explained in chapter 4, in many Member States the VAT exemption is only applied to services under the USO which are provided by the USP. If specifications of the USO change, for instance, by reducing the product scope, those items that are excluded from the USO would lose the VAT exemption.

## **5.2.4 Assess impacts on users and other stakeholders**

As described above, the economic intuition for having a USO in the first place is to cover a social need that may not be covered by market forces alone. The fundamental premise is that additional services created by the USO ensure baseline level of socially important services to every resident of

a country, i.e. provide benefits to the end users of postal services. Note that users in this context can be both senders and recipients.

If policies are considered to change the USO in order to reduce the net cost of the USO to the operator, this will have an impact on the benefits to users. One, therefore, has to assess not only the difference in the net cost but also the impact on users and other stakeholders. In the following, we outline how the latter assessment can be undertaken and highlight some practical challenges.

The total benefit of the USO to postal users can in theory be categorised into two types of benefits. Firstly, the direct benefit to those users that enjoy the availability of universal postal services. This is represented by users' willingness to pay for keeping the USO at the current level. Secondly, there is an indirect benefit coming from the value that citizens place on keeping that other people have access to basic postal services. In other words, citizens who are not dependent on postal services themselves may still care about the protection of vulnerable users who are dependent on postal services and they may be willing to pay for the basic services offered to these vulnerable users.

#### *Willingness to pay for maintaining the USO*

One of the ways to measure the benefits to users is therefore to quantify the willingness to pay for keeping the USO, as opposed to the relevant policy option. There are methods for such valuations. This is generally done via survey methods based on users' stated preferences, such as contingent valuation method or discrete choice conjoint analysis.<sup>106</sup> Such methods, which were not planned to be applied for this EU-wide study, are resource-intensive to administer as they involve surveying a large number of respondents per country. Besides, it is important to continue monitoring user preferences as policies evolve, since framing effects may influence some users' stated preferences: as the status quo changes, users may value differently gaining vs losing a service, compared to the status quo.

A thorough investigation of user needs – even without explicitly measuring the willingness to pay for keeping a specific element of the USO – can provide useful insights about the benefits to users provided by the USO and how potential changes in the USO might affect them. User needs studies have been undertaken in several countries around Europe.

Postal users' needs, with special emphasis on the USO, have been studied in different national contexts. Such studies of user needs are useful to indicate the general need and attitudes for changes in the USO among postal users. In addition, they can be useful to identify which groups of postal users that are likely to be the most dependent on the current features of the USO, i.e. vulnerable users.

We have reviewed twelve relevant studies<sup>107</sup> on postal users' needs. Based on our review, we find two fundamental characteristics of user needs across European countries.

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<sup>106</sup> Contingent valuation estimates the value that users place on quality of service for different products by asking the users to report either their willingness to pay (WTP) to obtain a specified quality and/or their willingness to accept (WTA) a quality reduction; Conjoint analysis (also called contingent choice method) infers users' valuation of different products from the hypothetical choices or trade-offs that respondents make in a survey. See Copenhagen Economics (2010) Main developments in the postal sector 2008-2010 for an application of this approach.

<sup>107</sup> PTS (2016), Användares behov av posttjänster; Frontier (2016), Research on postal users' needs; BIPT (2017), Communication by the BIPT council of 13 february 2017 regarding an overall analysis about postal needs in Belgium; TRM (2015), Analyse af danskernes brug af posttjenester; Clark (2014), Legalising Alternate Day Delivery: The Reshaping of the Universal Postal Service in New Zealand; Ofcom (2012), Postal User Needs Qualitative Research;

First, we find that there is large heterogeneity among Member States with regards to the general need for universal postal services. In some Member States, a reduction in certain elements of the USO is considered a major concern amongst users, according to their responses to surveys. However, in some Member States, a large share of users considered it acceptable to have the USO reduced. This further highlights the need to take national differences into account.

Second, we find a pattern among Member States with regards to the groups of postal users who are considered most vulnerable to changes in the USO. In several Member States, where user needs have been studied, residential users in rural areas, and small and medium sized enterprises (primarily in rural areas) are frequently mentioned as being more vulnerable. In addition, elderly citizens are often considered more vulnerable because of their lower use of digital substitutes.

### *Identification of vulnerable users*

A practical alternative to measuring willingness to pay for maintaining the USO is to investigate which types of users will be affected by the proposed policy and assess the number of vulnerable users. Such approach can be conducted in the following steps:

1. Identify services that will be affected by operational changes due to the changes in the USO and as well as the most common users of these services.
2. Analyse specific user groups that dependent on the current service level, i.e. vulnerable users.
3. Investigate targeted measures that can serve the needs of vulnerable user groups instead of universal services in a way that is less costly than maintaining the current USO for all.
4. If available, identify relevant benchmarks of the cost for targeted measures to provide a better comparison to the changes in net cost.

Below we discuss each step in more detail.

### **Step 1 Identify services affected**

This step involves investigating and identifying three elements: (i) services that would be affected by the regulatory change, (ii) the nature of effect, and (iii) user groups that are using the service(s). For example, if the delivery frequency is reduced, the USP would not be able to provide daily delivery of newspapers. It is then important to investigate where the USP delivers newspapers, if there are other operators that may take its place and whether there are alternatives for this particular service, e.g. availability of broadband connection.

### **Step 2 Identify vulnerable user groups**

This step aims to identify users that not only prefer maintaining the USO but also has a critical need for the services in question. For example, users may state that they prefer maintaining next day deliveries of letters, but not all of them necessarily have a need for these services. Other users may have a genuine need for fast delivery, e.g. delivery of prescriptive medicine or samples from laboratories. It is worth noticing that for such users, existing alternatives such as express mail products

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Ofcom (2012a), Universal Service Obligation - Postal User Needs 2012 Quantitative research report; ERGP (2016), Report on Universal Services in light of changing postal end users' needs; ANACOM (2014), Survey on the use of postal services; ANCOM (2015), Qualitative study regarding the needs of postal service users in Romania – people with visual impairments; Boston Consulting Group (2014) Australian and International Postal Services Overview - Background Report; Zurel (2016), A Systematic Review of Postal Consumers' Needs Within the USO Framework

may be a viable alternative, as the willingness to pay may be sufficiently high. It is therefore important to distinguish between real/critical and merely stated needs. In practice, this entails measuring or estimating the number of vulnerable users or the number of units demanded by these users (e.g. number of letters sent per year). In addition, public consultation with consumer representatives could be a useful tool to gather relevant inputs from the market.

### **Step 3 Identify targeted measures, if relevant**

In many cases it can be a better idea to provide targeted measures to only those who need a particular service, rather than maintaining a large and expensive USO to all users. For this reason, it is a good idea to investigate beforehand if there are any valid and feasible targeted measures, see Box 35 below.

### **Step 4 Benchmark alternative solutions**

In order to make sure that the selected measure provides the best value for money, it would be natural to provide cost benchmarks of alternative solutions. For example, if the investigated policy option involves reducing the speed of delivery nationwide, there may be a need for a targeted measure to maintain the fast delivery of some specific products and/or to some specific vulnerable users. This can be achieved through either the traditional postal network or express services network. Hence, both alternative solutions should be assessed to find the most cost-efficient solution.

### Box 35 Different types of targeted measures for vulnerable user groups

Instead of keeping a uniform high (and costly) service level for the entire population by means of a broad USO on postal services, a more favourable option could be to introduce more targeted measures to compensate the vulnerable users. Such measures could be preferred both from a financial and from a social perspective. In fact, if targeted measures leave the users equally well off as with the current USO but cost less than the corresponding reduction in net cost implied by the policy option, it is better for the society to reduce the USO and implement the targeted measures.

Monetary compensation mechanisms could imply that identified vulnerable users can obtain alternative services that satisfy the needs currently satisfied by the postal USO at a lower price or for free. Examples of this type of solution could be reimbursement of more costly express services, or free transportation to the nearest service point or commercial centre in order to limit the inconvenience of travelling to the service point. This approach is for example used in Switzerland where Swiss Post negotiates a compensation to households who do not receive delivery to their house but to a nearby delivery point.

Using alternative and already existing networks might imply giving home care assistants the task to collect and deliver mail (including newspapers) for elderly people who, due to immobility, are unable to visit a postal service point or any other local service point (e.g. a supermarket or a pharmacy). One alternative is to use school busses and morning newspaper distributors to take along ordinary mail in certain areas/to some user groups. However, the rural areas where alternatives are needed are often the areas which other networks do not cover and where it is not commercially attractive to establish a new delivery network.

The promotion of alternative technologies implies that vulnerable users who today are dependent on the universal postal services provided by the USP get assistance to become less dependent on physical delivery. Examples of this type of measures are training of digital skills directed towards elderly or disabled citizens, or towards small and medium sized enterprises, or the provision of equipment, such as mobile devices or mobile broadband. Poste Italiane, for example, considered the option to provide consumers in areas where delivery does not take place every day with tablets so that they despite the lower service level could read newspapers. The initiative was supposed to rely on government funding to promote digital press, financed by the income from a spectrum auction. As the auction never took place, however, the funding never came through and the initiative was therefore never launched.

Alternative forms of market stimuli could be authorities working together with private companies (e.g. banks) to find alternative solutions to specific user needs. This approach has for example been used in Sweden to ensure provision of basic banking services in rural areas.

Irrespective of the targeted measure chosen, it is imperative to design clear eligibility criteria. If this is not the case, those citizens and businesses who are not truly dependent on the service in question may also use the add-on services. This would increase the cost of providing the service and undermine the solution. Criteria can, for example, be related to age, mobility or location. The need for more precise criteria (e.g. a larger number of criteria) will depend on the advantage that the alternative solution brings to people that are not eligible, i.e. the risk of free riding. Whereas the criteria need to be precise enough, such that the right group is identified, too many or too precise criteria will be expensive to administrate and difficult to verify in practice.

Source: Copenhagen Economics (2017), Effects of changing the USO in Norway

### 5.3 ASSESSMENT OF REGULATORY OPTIONS FOR THE FUTURE PROVISION OF THE USO

In this section we formulate and assess a set of plausible regulatory options. We assess the potential impact if the USO (e.g. scope, frequency and ubiquity, other elements) was to be changed. This also includes considerations of how different market characteristics influence the potential impact (outcome) of aforementioned regulatory options on the net cost of the USO. The potential impact on different users and other stakeholders is also assessed, including possible mitigations for any negative effects. We explain economic arguments behind several regulatory options and assess which factors influence the likely impact of implementing such changes.

Each policy scenario is assessed against criteria identified in the previous section:

- Impact on net costs, encompassing cost effects and revenue effects.
- Impact on users and other stakeholders, e.g. employment.

According to the Postal Services Directive, USPs can claim compensation if the USO entails a net cost – considering calculation guidelines provided in Annex I of the Postal Services Directive – and is representing an unfair financial burden on the USP.

If the USP claims compensation and the net cost is deemed an unfair financial burden, the national regulatory authorities and governments have a choice between (i) financially compensating the designated operator for the net cost of the USO, either directly or through compensation funds mechanisms, (ii) making changes to the USO, and (iii) introducing public procurement of universal postal services. Hence, policy decisions typically face a trade-off between financial compensation and flexibility in regulation, particularly in countries where the financial burden of providing the USO became substantial, see Figure 101.

**Figure 101**

**Trade-off between financial compensation and increased regulatory flexibility**



Source: Copenhagen Economics

Based on the inputs from market stakeholders as well as analysis of recent developments in the USO in countries under investigation, including postal markets overseas (namely, Canada and New



Zealand), we identify a list of plausible regulatory options that policymakers may consider in the coming years. In order to identify the most relevant regulatory options, we have used real data (i.e. actual developments in different countries) and expert interviews with USPs, NRAs, ministries, user associations and social partners.

Many of the identified regulatory options are based on the notion that USOs should be provided with increased flexibility in regulation, in order for the USP to be able to adapt sooner and better to changing market circumstances. In addition, we have also identified opportunities where the USO could be expanded in areas of general economic interest. This type of policy scenarios is based on the notion that the postal service and its network could be used to meet new needs of the society that are not catered for by the market.

Lastly, in some cases, where social needs have not changed significantly and due to the risk of regulatory failure in the dynamic postal markets, maintaining the current level and characteristics of the USO could be the best policy option. This can be seen as a default option and each regulatory option should be assessed against the status quo. It is important to note however, that the status quo means that no regulatory changes are made to the USO. It does not mean that costs of providing the USO or the impact on users and other stakeholders remain constant over time.

**Table 53**  
**Overview of impacts and trade-offs of different policy options**

	IMPACT ON USERS	IMPACT ON NET COST
<b>A. REDUCE DELIVERY FREQUENCY AND SPEED*</b> This incorporates changes to the minimum delivery speed requirements, from D+1 to slower alternatives, such as D+3. It also incorporates changes to the delivery frequency requirements from 6 or 5 days of delivery per week to 3 or 2.5 days per week. Note that this may conflict with the current Postal Services Directive.	<ul style="list-style-type: none"> <li>- users who need high frequency of delivery or speed (e.g. SMEs) will lose social welfare, if the postal operator chooses to use the possibility to reduce frequency of delivery.</li> <li>+ users not affected may benefit from lower prices or higher reliability.</li> </ul>	<ul style="list-style-type: none"> <li>+ A reduced obligation allows the postal operator to optimize the network. Cost saving potential can be found in sorting stage, transportation (e.g. change from air- to land transportation) and in the delivery stage (economies of scale).</li> </ul>
<b>B. REDUCE UBIQUITY REQUIREMENT: DELIVERY TO POST OFFICE IN RURAL AREAS</b> Allow USPs not to deliver to the door or street of the recipient, but to the nearest post office	<ul style="list-style-type: none"> <li>- Some users may not get the same service, e.g. no delivery of daily newspapers. May be inconvenient for users in rural areas.</li> <li>+ May lead to lower prices or higher reliability to the users in urban areas.</li> </ul>	<ul style="list-style-type: none"> <li>+ Operator can reduce costs because it does not have to service hard-to-reach users the same way.</li> </ul>
<b>C. INCLUDE SERVICES OF GENERAL ECONOMIC INTEREST TO THE USO</b> This means adding obligations to also provide social services.	<ul style="list-style-type: none"> <li>+ Including SGEI in the USO, which are not provided by the market, may benefit vulnerable users.</li> </ul>	<ul style="list-style-type: none"> <li>- New service obligations added to the USO may increase the cost of providing such service. This will in particular effect the cost in the delivery stage.</li> <li>+ Operator may gain intangible benefits, in particular brand value and trust.</li> </ul>
<b>D. EXCLUDE PARCELS FROM THE USO SCOPE</b> This would mean that all postal items sent as parcels falls outside the scope of the USO. Note that this may conflict with the current Postal Services Directive.	<ul style="list-style-type: none"> <li>- Excluding parcels from the USO may harm some vulnerable users of such services. E.g.: price may be higher or non-uniform if not under USO.</li> <li>+ If the market provides parcel services irrespective of the USO, excluding it from the USO may lead to efficiency gains which will benefit users.</li> </ul>	<ul style="list-style-type: none"> <li>+ Potential benefits to the USP, such as being able to differentiate product offerings may lower net cost.</li> <li>- If the current obligations of parcels are an advantage to the USP, e.g. due to intangible benefits such as VAT exemption, it may lose out on revenue streams.</li> </ul>

Note: \*The minimum number of days per week that the regulated operator has to deliver and requirements on the maximum number of days that it may take for a postal item to be delivered.

Source: Copenhagen Economics

### 5.3.1 Reduced delivery speed and delivery frequency

Currently, under the USO, most USPs in Europe are required to offer a D+1 letter mail service under national law. In addition, quality of service requirements may set specific thresholds on what per cent of letters should be delivered on-time. Reducing delivery speed requirements might in some cases lead the USP to stop offering a D+1 service in order to reduce costs.

It is worth noting that D+1 delivery could still be available, however, as added value service outside the USO. For instance, Denmark and Finland have excluded D+1 delivery from the postal USO.

Postal operators in these countries have already made use of the increased freedom and only provide D+1 delivery as a premium (express) service at a significantly higher price.

The current USO regimes in most Member States also require USPs to deliver five or six days per week throughout the country (except for in exempted areas, where special conditions apply). Five days per week is the minimum requirement set in the Postal Services Directive. However, under certain market circumstances, reduced delivery frequency, e.g. to 2-3 days per week throughout the country, would enable USPs to implement more efficient operational models. In order to reap the cost saving potential of lower delivery frequency this regulatory option often has to be combined with reduced delivery speed. This section therefore evaluates the regulatory option of reducing delivery frequency as well as delivery speed.

If D+1 is not available, some users who depend on fast mail service at an affordable price may be harmed. In addition, some users may depend on daily delivery. For example, home delivery of newspapers may become obsolete if the news does not arrive every day. Further, some companies may have preferences for daily deliveries for organisational reasons (for example, for a more even stream of calls to call centres when invoices are sent every week day). This means that in countries where the need for D+1 delivery or where users have preference for daily delivery, users may be negatively impacted.

**Table 54**  
**Overview of impact from reduced delivery frequency and speed**

	POTENTIAL EFFECT	RATIONALE	MARKET DRIVER
<b>COST</b>	<ul style="list-style-type: none"> <li>Reduction in overnight sorting</li> <li>Consolidation of sorting terminals</li> <li>Changed transportation mode</li> <li>Reduced cost in delivery</li> </ul>	<ul style="list-style-type: none"> <li>Slower mail allows for cost savings in several steps of the value chain</li> <li>Increased economies of scale when delivery frequency is reduced</li> </ul>	<ul style="list-style-type: none"> <li>Geographical circumstances</li> <li>Population density</li> <li>Mail volumes per capita</li> </ul>
<b>REVENUE</b>	<ul style="list-style-type: none"> <li>Users of delivery of newspapers will be negatively affected</li> <li>Other products may also see reduced volumes such as un-addressed letters or packets</li> </ul>	<ul style="list-style-type: none"> <li>News will no longer be relevant is newspapers arrive several days after publication</li> <li>Difficulties planning exact day of delivery might be problematic for senders that want to time the arrival advertisements</li> </ul>	<ul style="list-style-type: none"> <li>Sensitivity of demand</li> <li>USP's dependence on the current frequency and speed of delivery to provide non-regulated services</li> </ul>
<b>NET COST</b>	In countries with vast geographical areas, low population density and low mail volumes per capita and where demand is relatively insensitive to changes in service, there is higher possibility of a positive effect on net cost (i.e. lower net cost)		
<b>USER IMPACT</b>	<ul style="list-style-type: none"> <li>Vulnerable users may include: elderly, SMEs, recipients in rural areas</li> </ul>	<ul style="list-style-type: none"> <li>Vulnerable users will be those dependent on fast delivery service and with few available alternatives</li> </ul>	<ul style="list-style-type: none"> <li>Digitalisation</li> <li>Geographical circumstances</li> </ul>
<b>TOTAL IMPACT</b>	In countries where the effect on net cost is positive and the impact on users, vulnerable users in particular, is sufficiently small, the overall impact will be positive		

Source: Copenhagen Economics

### *Cost effects from reducing delivery speed*

#### Sorting:

In the sorting activity, it may be possible to reduce the need for overnight sorting activities which can reduce costs. This is because when letters are required to be delivered within one day, they sometimes have to be sorted during the night, which leads to higher cost. The overnight sorting often requires more manual labour since it can be faster to sort a smaller number of letters manually rather than with machines.<sup>108</sup> In addition, labour cost for night shifts are often more expensive due to higher salaries. When these letters can be sorted during the day, at a slower pace, this labour cost is removed.

It may also be possible to consolidate the network of sorting terminals (i.e. fewer terminals) when the time from the sorting terminal to final delivery can be increased. When some letters have to be delivered fast, a certain density of the network of sorting terminals are required. This is because the letter will then be located at a certain distance from its final destination after it has been sorted. If requirements of delivery speed are reduced, the possibility to reduce the density of this network increase. This was for example the case in Norway, where the USP, Posten Norge, was able to reduce the number of sorting centres after the requirement of D+1 delivery was abolished<sup>109</sup>.

#### Transportation:

In the transportation activity, the USP may be able to change the transportation mode to a cheaper, but slower, way of transporting letters. In order to arrive on time, some next-day deliveries may for example require air transport while the same item can be transported with cheaper road transport if it arrives later. This type of cost saving would be more likely in countries with long distances for which different modes of transport are necessary, see example in Box 36.

#### **Box 36 Change in transportation costs in Sweden following changes in the USO**

One example of transportation costs savings can be found in Sweden, where the government in October 2017 decided to abandon D+1 as part of the USO from January 2018 and instead make D+2 the standard. One main motivation for the change in Sweden was a reduced need for D+1 delivery in combination with a significant cost savings potential linked to reduced air transportation. The investigation conducted by the Swedish government offices in 2016 as preparation for the regulatory changes stated, for example, that PostNord in Sweden could save 250-300 million SEK per year by replacing air transport of D+1 mail items with rail transport.

Source: Statens Offentliga Utredningar (2016), SOU 2016:27, Som ett brev på posten, Postbefordran och pristak i ett digitaliserat samhälle, p. 17, 126. (In Swedish)

### *Cost effect from reduced delivery frequency*

Under certain circumstances, the cost saving potential from reducing delivery frequency can be very large and have significant impact on the net cost of the USO. The large potential effect on USP cost from reducing delivery frequency comes from the ability to increase drop density. In short, if a mailman can deliver the same amount of mail but go fewer days with more mail items each day, the

<sup>108</sup> Copenhagen Economics (2018), Report on USO net cost in Iceland

<sup>109</sup> Copenhagen Economics (2017), Effects of changing the USO in Norway

postal operator can save cost on the delivery activity, see example in Box 37. This has been the main driver for some recent changes in the USO in countries like Finland, Norway (see Box 38) and New Zealand. It is important to note that when evaluating the actual cost saving potential in practice, one need to review in detail which costs that can be reduced. For example, how many working hours and how many cars are needed in the delivery activity in the counterfactual scenario, compared to the status quo.

### Box 37 Example: Cost reduction of reduced delivery frequency

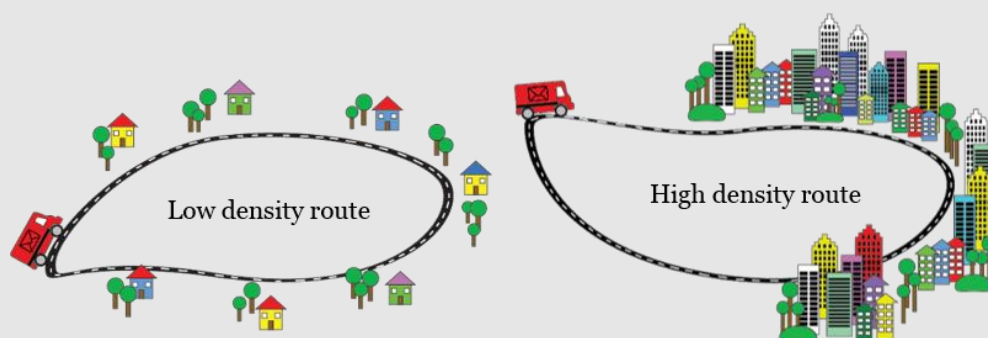
Imagine that there are two delivery routes, one with 10 households (low density route) and one with 100 households (high density route). The routes are equally long and for simplicity we therefore assume that the route cost, i.e. the cost of driving the route is equal (100) for the two routes. We also assume in the base case that every household (irrespective of to which route they belong) receives 10 mail items per week. This implies that the mail carrier serving the low density route should deliver 100 items per week whereas the mail carrier serving the high density route should deliver 1000 items per week.

With five delivery days per week, this implies a route cost of 500 ( $100 \times 5$ ) per route per week. The cost per item for serving the low density route is 5 ( $500/100$ ) whereas the cost per item of serving the high density route is 0,5 ( $500/1000$ ).

Reducing delivery frequency to 2,5 days per week implies a route cost of 250 ( $100 \times 2,5$ ) per route per week. The cost per item for serving the low density route is 2,5 ( $250/100$ ) whereas the cost per item of serving the high density route is 0,25 ( $250/1000$ ). This implies a saving per item of 2,5 for the low density route and of 0,25 for the high density route. This clearly demonstrates that a reduction in delivery frequency creates larger cost savings in areas with low population density compared to areas with high population density.

In order to show the impact of mail volumes per capita on cost savings, we now assume that each household instead of 10 items receive 20 items per week. In this situation, the cost saving per item of reducing delivery frequency to 2,5 days per week is 1,25 for the low density route and 0,125 for the high density route. This demonstrates that a reduction in delivery frequency creates larger cost savings when mail volumes per capita are lower (in this example with 10 items per household per week instead of 20).

**Figure 102**  
**Low density route vs. high density route**



Source: Copenhagen Economics (2017), Effects of changing the USO in Norway

### **Box 38 Case study: Changes in delivery frequency in Norway**

The Norwegian universal service provider, Posten Norge, is compensated for its net cost of the USO. The Norwegian government decided to reduce delivery, merging the previous two mail streams (D+1 and D+4) to require only one mail stream with a standard delivery time of D+2. The new law was passed in 2016 and came into force on January 1<sup>st</sup>, 2018. In a study commissioned by the Norwegian Ministry of Transport and Communications, Copenhagen Economics analysed the effects of reducing the delivery frequency of the USO in Norway. With the current requirements of 5-day delivery, the net cost is still large. The net cost for 2018 was estimated to NOK 650 million (€ 65 mil.) and forecasted to grow to NOK 990 million (€ 99 mil.), absent policy intervention.

By reducing the requirement on delivery frequency to every second day throughout Norway, the net cost could be reduced by ~ NOK 450-650 million (~ € 45-65 mil.) per year during 2018-2025. This is due to large cost savings in labour cost and equipment (e.g. vehicles).

At the same time this regulatory option is expected to have limited negative impact on vulnerable users. Affected users would be subscribers of newspapers in rural areas and elderly/immobile recipients of pharmaceutical deliveries in rural areas. Potential targeted measures for compensating vulnerable users were identified, e.g. subsidised express delivery and monetary compensation, for vulnerable users.

Based on the cost-benefit analysis, the Ministry of Transport and Communications proposed a reduction of the required delivery frequency to every second day.

Source: Copenhagen Economics (2017), Effects of changing the USO in Norway

### *Revenue effects from reduced delivery speed*

Given that reduced delivery speed leads to operational changes to save costs, these changes may also have a significant impact on USP revenues. The impact on revenues can differ significantly depending on the structure of demand for fast mail (the priority product). The changes in service offering (by not offering a D+1 mail product within the USO) may lead to lower volumes because the customers that currently send their mail items with D+1 will now be faced with a different set of choices. The mail items that currently are sent with D+1 mail may be sent by a slower mail product with lower price, some may not be sent at all (e.g. triggered to substitute to electronic communication), some may be sent by another fast mail service either by the USP or by one of its competitors.

### *Revenue effect from reduced delivery frequency*

By not delivering every day, the USP may also affect the revenues because changes in service level can affect demand, and thus cause changes in volumes. Some recipients may be very dependent on receiving their mail daily. One clear example is the daily delivery of newspapers, which will be obsolete if delivery is not performed every day.

### *Impact on users and other stakeholders*

Based on a collection of user needs studies, many European residential users consent to having slower delivery service for non-urgent items with the option of a D+1 express delivery service for urgent, important items. However, there is indications that there is significant heterogeneity between residents' needs in terms of delivery speed. This may be explained by differences in internet usage, geographical differences and other structural indicators. Professional users typically demonstrate a strong need for fast delivery, particularly for parcels.

It is important to identify what the precise change in delivery service is and which user groups that may be at risk if the service level is reduced. It may be that the users with addresses in sparsely populated areas are more heavily dependent on fast delivery of physical letters than is the case in densely populated areas. This may be related to the demographics (e.g. higher share of elderly living in such areas) of such areas or the possibility to use electronic alternatives (e.g. degree of connectivity in such areas).

In addition, operational changes caused by reduced requirements in delivery speed may have an impact on employees. Some of the cost saving potential may come from reduced labour cost, for example reduced use of overnight sorting or increased automatization. Such cost savings may come at the expense of employees in the postal industry.

Based on a collection of studies on users' needs, postal users in many Member States indicate a preference for 5-day delivery frequency. However, not all users show a clear critical need. In some Member States, postal users accepted a lower delivery frequency than the current 5-day. In Ireland, many residential users responded positively to the option of 3-day delivery on fixed days. In the Netherlands, 62% of residential users and 48% of professional users accepted a delivery frequency of 4 days. In Sweden, 33% considers a 3-day delivery frequency or less to be sufficient. There is tendency in Europe towards a diminishing need for five- or six-day delivery from residential consumers.<sup>110</sup>

In those countries where reduced delivery frequency and speed have been allowed, the largest concern have been regarding specific vulnerable users, in particular elderly and people in rural areas. The most debated postal product has been newspaper.<sup>111</sup>

### **5.3.2 Stylised example of reduced delivery speed and frequency**

In this section, we quantify the impact of changing the USO for two hypothetical countries. We quantify the impact on net cost from reducing delivery frequency and speed based on the framework described above. The quantitative model takes given country characteristics as a starting point. These characteristics influence a set of key assumptions which in turn influence the development in cost and revenues both under the status quo and under the counterfactual situation with the regulatory option.

The logic of the stylised model is presented below, see Figure 103. The model is comprised of three steps, in line with the assessment methodology described in section 5.2 above. Firstly, we define the

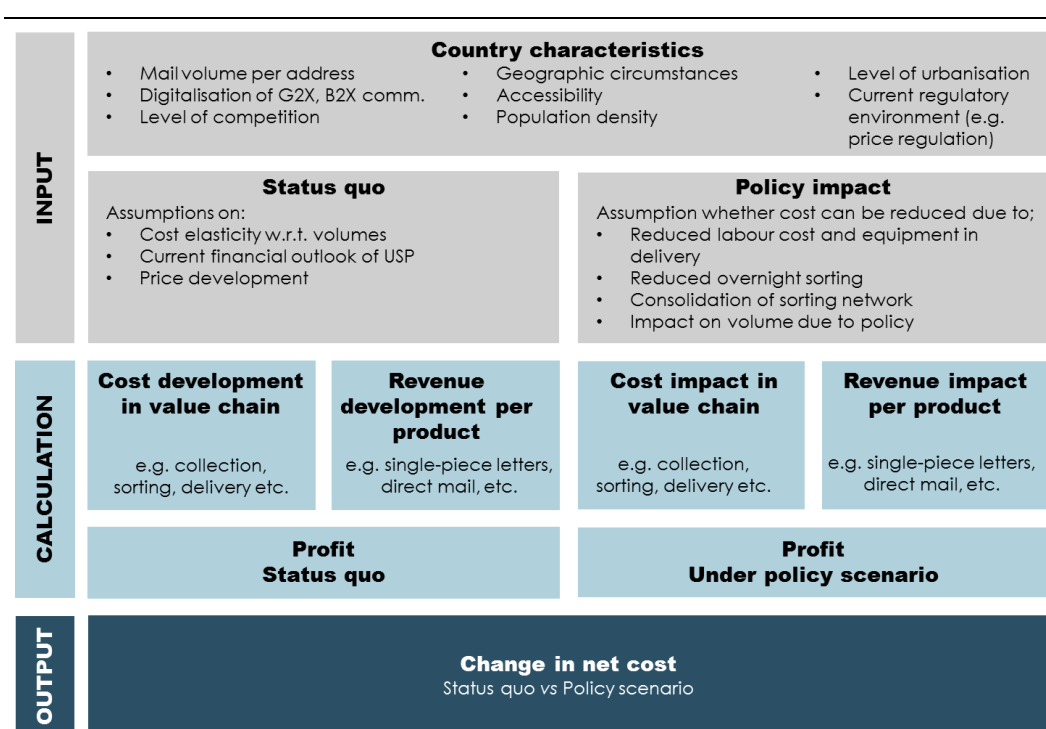
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<sup>110</sup> Zurel (2016), A Systematic Review of Postal Consumers' Needs Within the USO Framework; ERGP (2016) ERGP report Universal Services in light of changing postal end users' needs; Interviews with e-retailers and a consumer association

<sup>111</sup> See for example; Finnish Government (2016), HE 272/2016; Copenhagen Economics (2017), Effects of changing the USO in Norway

given country characteristics for the hypothetical country. Secondly, we set out several assumptions regarding status quo and policy option development. The given situation in the country, e.g. letter volume per capita, influence assumptions about development in cost and revenues. In a third step, we quantify the development in costs and revenues both under the status quo and under the policy option. The model compares the profit for the USP under the status quo with the profit under the regulatory option. This gives the impact on net costs, which would then have to be weighed against any potential impact on users and other stakeholders.

**Figure 103**  
**A conceptual illustration of our stylised modelling approach for net cost**



Source: Copenhagen Economics

An essential part of the model is input assumptions, which drive the result of the model. In practice, one would have to assess each element, e.g. cost saving potential due to reduced speed and frequency of delivery, as described in section 5.2 above. In other words, in practice, the aim should be to not have to rely on assumptions, but to identify the cost savings in each part of the value chain. For example, cost savings for potential working hours saved because of slimmer operational processes (e.g. more efficient sorting, better use of capacity of fleet and drivers), and cost savings in equipment (e.g. reduction in number of vehicles not needed in delivery, etc.). Hence, findings presented below are purely illustrative. However, the result of the model can give additional guidance on the mechanisms at hand, see Box 39.



### Box 39 Stylised example of impact from reduced delivery frequency and speed

#### Policy scenario

In both countries, the current USO obligates the USP to deliver 5 days per week and includes a priority letter with next-day delivery. The government in both countries consider changing the USO in year 2021 by reducing the required delivery frequency to three days and change the requirement of next-day delivery to only require D+3.

#### Cost and revenue assumptions

In country A, operational changes, enabled by the proposed changes in the USO, would lead to high cost savings. Country A is large, has low population density and low volumes per capita. Reducing delivery frequency and speed would enable large cost savings in delivery, transportation and sorting. In addition, since demand of the effected services are not very sensitive to changes in service, the operator would see a moderate effect on revenues.

Country B is small, high population density and high volumes per capita. The potential cost savings are therefore relatively low. At the same time, the impact on revenues are substantial due to the high dependence on mail service, see Table 55.

With different mail volumes per capita, the cost saving per from further reductions in mail volumes differ between the countries, i.e. the two USPs have different cost elasticities. Therefore, mail development in the status quo as well as volume impact from the policy scenarios give different effects on cost in the two countries.

**Table 55**  
**Assumptions on cost and revenue impact of the policy scenario**

	COUNTRY A	COUNTRY B
Area, (thousand km <sup>2</sup> )	400	100
Population density (ppl/km <sup>2</sup> )	50	100
Market volume per capita	55	110
Annual volume change	-7%	-2%
Total cost elasticity (w.r.t volume)	24%	42%
Cost savings in Delivery	-38%	-30%
Cost savings in Transportation	-11%	-3%
Cost savings in Sorting	-10%	-5%
Revenue impact	-4%	-15%

**Table 56**  
**Results of calculations for country A [illustration]**

	2018	2019	2020	2021	2022	2023	2024	2025
<b>Status quo</b>								
Revenue	2.090	1.963	1.844	1.732	1.627	1.528	1.435	1.348
Delivery cost	954	943	932	922	912	903	894	885
Transportation cost	216	209	202	195	189	183	178	173
Sorting cost	414	398	383	369	356	343	332	321
Collection cost	216	212	209	206	203	200	197	195
Total cost	1.800	1.762	1.725	1.692	1.659	1.629	1.600	1.574
<b>Policy option</b>								
Revenue	2.090	1.963	1.844	1.663	1.562	1.467	1.378	1.294
Delivery cost	954	943	932	568	563	557	551	546
Transportation cost	216	209	202	170	165	160	155	151
Sorting cost	414	398	383	325	313	302	292	283
Collection cost	216	212	209	204	201	198	196	193
Total costs	1.800	1.762	1.725	1.268	1.242	1.217	1.194	1.173
<b>Impact</b>								
Change in Revenue	-	-	-	-69	-65	-61	-57	-54
Change in cost	-	-	-	-424	-417	-412	-406	-401
Impact on net cost	-	-	-	<b>354</b>	<b>352</b>	<b>351</b>	<b>349</b>	<b>347</b>

**Table 57**  
**Results of calculations for country B [illustration]**

	2018	2019	2020	2021	2022	2023	2024	2025
<b>Status quo</b>								
Revenue	2.090	2.058	2.027	1.997	1.967	1.937	1.908	1.879
Delivery cost	636	632	628	624	620	616	612	608
Transportation cost	144	142	140	138	136	134	133	131
Sorting cost	276	272	268	264	260	256	252	249
Collection cost	144	143	142	140	139	138	137	136
Total cost	1.200	1.188	1.177	1.166	1.155	1.145	1.134	1.124
<b>Policy option</b>								
Revenue	2.090	2.058	2.027	1.697	1.672	1.646	1.622	1.597
Delivery cost	636	632	628	416	413	411	408	406
Transportation cost	144	142	140	121	119	118	116	115
Sorting cost	276	272	268	223	220	216	213	210
Collection cost	144	143	142	132	131	130	129	128
Total costs	1.200	1.188	1.177	892	883	875	866	858
<b>Impact</b>								
Change in Revenue	-	-	-	-300	-295	-291	-286	-282
Change in cost	-	-	-	-274	-272	-270	-268	-266
Impact on net cost	-	-	-	-25	-23	-21	-18	-16

In conclusion, the policy would trigger operational changes by the USP in country A, which would lead to a reduction in net cost. The policy would not trigger the USP in country B to implement these changes and will thus not have any effect on net cost.

Source: Copenhagen Economics

### 5.3.3 Delivery to post offices in the most rural areas

The current USO requirements in many of the analysed countries require USPs to deliver post to mailboxes or doors, including in the most rural areas. Alternatively, USPs could deliver to the nearest post office for the most rural households. The main reason for this is that the cost savings linked to reduced delivery in very sparsely populated areas are likely to outweigh the loss in revenue from users switching away from the operator due to the reduced service level. The cost-saving potential of this policy option is heavily dependent on the geographical conditions of the country. It may on the other hand have a significant negative effect on the benefit of the USO if the people living on the countryside have to travel far to collect their mail are excluded from extensive postal service.

**Table 58**  
**Overview of impact from delivery to post offices in the most rural areas**

	POTENTIAL EFFECT	RATIONALE	MARKET DRIVER
<b>COST</b>	<ul style="list-style-type: none"> <li>Cost savings in the delivery part of the value chain for those routes that deliver to hard-to-reach areas.</li> </ul>	<ul style="list-style-type: none"> <li>If there are areas that are particularly costly to serve, the USP may be able to reduce the service in those areas and save costs.</li> </ul>	<ul style="list-style-type: none"> <li>Geographical circumstances</li> <li>Population density</li> <li>Volume per capita in different areas</li> </ul>
<b>REVENUE</b>	<ul style="list-style-type: none"> <li>For volumes in affected areas, volumes are likely to decline</li> </ul>	<ul style="list-style-type: none"> <li>If delivery to post office is an inconvenience to end users, they may seek to substitute to alternative solutions.</li> </ul>	<ul style="list-style-type: none"> <li>Sensitivity of demand in rural areas</li> </ul>
<b>NET COST</b>	In countries with large rural areas with particularly low population density and low mail volumes per capita and where demand is relatively insensitive to changes in service, there is higher possibility of a positive effect on net cost (i.e. lower net cost).		
<b>USER IMPACT</b>	<ul style="list-style-type: none"> <li>Negative impacts for users in rural areas.</li> <li>Vulnerable users may include elderly and SMEs in rural areas</li> </ul>	<ul style="list-style-type: none"> <li>Inconvenience for users that have to pick up their mail at a post office.</li> <li>Some users may be more dependent on receiving mail to the door. Those who are particularly hard to reach may also be those with difficulties to reach a post office.</li> </ul>	<ul style="list-style-type: none"> <li>Geographical circumstances</li> <li>Population density</li> <li>Demographic circumstances</li> <li>Digitalisation among rural citizens</li> </ul>
<b>TOTAL IMPACT</b>	In countries where the effect on net cost is positive and the impact on users, vulnerable users in particular, are sufficiently small, the overall impact will be positive.		

Source: Copenhagen Economics

### *Cost effect from introducing delivery to post offices in rural areas*

By reducing the obligation to deliver to the door in the most rural or inaccessible parts of the country, the USP will be able to save cost in the delivery part of the value chain. The USP can leave the most costly part of the production chain, delivery, to work sharing, i.e. let the recipient perform take over. By doing this in the most costly areas, the USP can fulfil its obligation in a more efficient manner. The relevance of this regulatory option highly depends on geographic and demographic circumstances at a national level. Those countries where there are particularly large differences in delivery cost between urban and rural areas are those where the largest potential cost savings will be.

### *Revenue effects from introducing delivery to post offices in rural areas*

For those volumes that are being delivered to the affected areas, this regulatory option may have significant effect on volumes, and thereby revenues. For some products, the experienced quality may be significantly reduced if mail is not delivered to the door. The relative magnitude of the financial impact on the USP depends on the volumes in these areas.

### *Impact on users and other stakeholders*

From studies conducted in the UK, Italy, Ireland, Poland and Sweden both residential and professional users have voiced their preferences for a cohesive service that covers all groups in society. In particular, professional users expressed a preference to be able to send to the entire population.<sup>112</sup>

There is no documented trend, but there seems to be a continued need for delivery to the premises rather than to an external location, even if the latter option would result in lower prices. A comparison of user need studies indicate a large heterogeneity among Member States in terms of need for accessibility of the postal network<sup>113</sup>. In surveys conducted in Sweden and the UK, consumers in rural areas have stated a need for a wider choice of collection points and the need for postal outlets (post offices or post-in-shop) to be located close to other services to combine errands when using postal services<sup>114</sup>. In a study conducted in Belgium, users stated the need for postal services points to be maximum three kilometres from the household, although with a higher willingness to travel for users outside of the capital city<sup>115</sup>.

Introducing delivery to post offices in the rural areas will affect the service level for all users in these areas. Some users may be more dependent on receiving the mail directly to the door and will therefore be more heavily affected.

### **5.3.4 Further services of general economic interest (SGEI) complementary to the traditional postal USO**

While the importance of paper-based communication may slowly be eroding, new social needs may have evolved during this time. This brings attention to the potential benefit of including new services in the obligation to the universal service provider. The existing postal network can be utilised to provide other kinds of services of general economic interest (SGEI).

The revenue-stimulating potential of this policy option is heavily dependent on finding the match between the social needs and the capabilities (e.g. the postal network) and competencies (e.g. human contact with all citizens of the country) of the USP. In addition, this policy option has the potential for strengthening the territorial cohesion of economically disadvantaged territories. This can be achieved through SGEI by providing both social access to private individuals as well as in enabling economic access for small enterprises in remote areas. It may on the other hand create market distortions if the USO is expanded into areas which could be provided by the market. This would also potentially raise concerns for state-aid.

One area of services that have been developed by postal operators are proximity services aiming at adding value in social dimensions, see Box 40. Although the precise specifications of these services can be very diverse, one common denominator is the focus on physical presence and building on trust and relationship with the consumers. One possibility is the inclusion in the USO of social services to elderly and disabled citizens. There can be operational synergies that make the USP particu-

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<sup>112</sup> Zurel (2016). A systematic review of postal consumers' needs within the USO framework

<sup>113</sup> Zurel (2016). A systematic review of postal consumers' needs within the USO framework

<sup>114</sup> MRUK and Why Research (2012), Effective parcel delivery in the online era; Stelacon (2016), Users' needs of postal services

<sup>115</sup> M.A.S. (2015), Quantitative study regarding the preferences, the needs and the WTP of private and professional postal users within Belgium

larly suited to carry out such tasks. For example, the extensive network that many USPs already operate and the trust that it often has as a well-known organisation are useful to set up this kind of proximity services.<sup>116</sup>

#### Box 40 Example of other SGEI in Belgium

The SGEI missions defined by the Belgian State in the 6th Management Contract includes 14 different specific service obligations. They have been categorised into three categories:

1. Retail network SGEI
2. Day to day SGEI
3. Ad hoc SGEI

For example, article 35(a) of the 6th Management Contract assigns to bpost the duty to ensure *the social role of the postman*. This includes services to be provided to persons who live alone and the least privileged, including but not limited to:

- Passing time with them, in terms of simple conversations and contacts;
- Assisting them with electronic transactions and payments (e.g. with the use of handheld payment terminals and electronic ID cards).

Time measurements indicate that this service amounts to 2 minutes on average per postman and per delivery round. This service is provided free of charge to the users. Through this SGEI, the Belgian State aims to improve social cohesion and, in particular, offer protection for the people living alone and underprivileged citizens at their residence.

Source: European Commission (2016), State aid SA.42366

In order to assess the need for the inclusion of new services in the USO, policymakers should ask the following questions:

- Is there an unmet need?
- Who could cater for it, i.e. should these services be commercial or USO services?
- How much would it cost?

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<sup>116</sup> European Social Dialogue Committee for the Postal Sector (2016), Mobilising social partners in a new context, page 30-31

**Table 59**  
**Overview of impact from inclusion of SGEI to the USO**

	POTENTIAL EFFECT	RATIONALE	MARKET DRIVER
<b>COST</b>	<ul style="list-style-type: none"> <li>Cost increase in the delivery part of the value chain.</li> </ul>	<ul style="list-style-type: none"> <li>Most of the additional activities are likely to take place in the delivery part of the value chain.</li> <li>More time spent on route leads to higher labour cost</li> </ul>	<ul style="list-style-type: none"> <li>Demographic circumstances</li> <li>Geographic circumstances</li> </ul>
<b>REVENUE</b>	<ul style="list-style-type: none"> <li>New revenue streams from providing SGEI</li> </ul>	<ul style="list-style-type: none"> <li>Impact on revenue depend on:               <ol style="list-style-type: none"> <li>price constraints for new services and;</li> <li>the take-up of new service</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Demand for new services</li> </ul>
<b>NET COST</b>	Introducing new obligations to provide SGEI is likely to increase the net cost of the USO, since the additional cost of providing the service outweigh the revenues.		
<b>USER IMPACT</b>	<ul style="list-style-type: none"> <li>Benefits to those users that have a social need that the new services cover.</li> <li>Strengthening territorial cohesion of economically disadvantaged territories</li> </ul>	<ul style="list-style-type: none"> <li>Users can get help with services which are enabled through the reach-out possibilities of the postal network</li> </ul>	<ul style="list-style-type: none"> <li>Social cohesion</li> </ul>
<b>TOTAL IMPACT</b>	This regulatory option will have a positive impact in countries where a sufficiently large need for SGEI is identified which is not provided by market forces. Further, it is required that the USP is in a better position than other agents to provide these services.		

Source: Copenhagen Economics

### *Cost effects from including services of general economic interest in the USO*

If SGEI were to be included in the obligation, the cost of the USP would most likely increase in the delivery part of the value chain. This is because the additional activities that this obligation require would be executed by the mailmen. Other parts of the value chain will be left unaffected.

### *Revenue effect from including services of general economic interest in the USO*

The effect on revenue are uncertain, as it would depend on both the uptake of new services and the price flexibility of the new services. Since the motivation for introducing this regulatory option is that these services are not covered by market forces (thus a USO coverage is needed), the revenues would not be likely to cover additional cost for such activities. In the examples we have seen in Europe so far, France and Belgium, the USP have been financially compensated separately for providing these services, see table in appendix B.

### *Impact on users and other stakeholders from including services of general economic interest in the USO*

The impact on users will be positive for those users that have a need for the new services provided. For general users of postal services, the impact depends on whether there is any spill over effects on other activities for the USP. If the new obligations are introduced without compensation to the USP, the USP may be more constraint by its obligations and the quality of services may be reduced.

In addition, the introduction of new services may impact the labour market, since the USP may have to hire more staff to fulfil its obligations. In particular, if post offices are used to provide other services it can imply that more jobs at the post offices can be sustained.

### **5.3.5 Removal of parcels from the scope of the USO**

Parcels are part of the minimum requirements set by the Postal Services Directive. As reported in chapter 4, all EU Member States include basic parcel products in the USO and twelve Member States also include bulk parcels. In contrast to the declining letter segment, the parcel segment is growing overall. This is largely due to the growth of e-commerce, both domestically and cross-border.

When the market is growing, it induces more firms to enter the market, leading to increased competition and expanding market offerings. The increased market participation in the parcel segment is an indication that parcels are provided on commercial grounds. The need for a USO in order to ensure a widespread provision of parcel services may therefore be lower, compared to letters.

However, it is important to notice that while the market offering for parcels is expanding, the need for parcel delivery may be more essential to final consumers because of the increased importance of e-commerce. Any changes in the coherence of supply may therefore have a negative impact on stakeholders, in particular vulnerable users.

Reducing the USO scope by excluding parcels, may have an impact on the business conduct of the USP. Excluding parcels from the USO can for example allow the USP to differentiate between customer groups who are more costly to serve, for instance by giving different service levels or price levels based on geographic locations.

It is important to note that the parcel service is often a close substitute to packets, which is generally labelled as a letter product. The effect and implications of a regulatory option that excludes parcels from the USO will therefore greatly depend on the relationship and the substitution pattern between parcels and packets. Two main factors are important to consider. Firstly, the share of goods that are currently sent as packets and parcels respectively. If most goods are sent in the letter stream, excluding parcels from the USO will naturally have a limited effect. Secondly, a consideration of senders' incentives and capabilities to choose whether goods are sent as packets or parcels. In terms of capabilities, e-commerce retailers typically may choose how they pack the goods, thus whether it is sent as a packet or a parcel. In terms of incentives, senders choose the best available option, based on price and quality. Hence, if parcels are excluded from the USO, the USP may want to take into consideration that the relative level of price and quality between packets and parcels will affect the retailer's choice to send goods as packets or parcels.



**Table 60**  
**Overview of impact from removal of parcels from the USO**

	POTENTIAL EFFECT	RATIONALE	MARKET DRIVER
<b>COST</b>	<ul style="list-style-type: none"> <li>Cost saving potential in unprofitable areas.</li> <li>Positive impact on potential cost disadvantage from VAT exemption (lower costs).</li> </ul>	<ul style="list-style-type: none"> <li>USP is no longer constrained to provide the same service level for all parcels. It can then choose to provide e.g. provide lower quality to certain users.</li> </ul>	<ul style="list-style-type: none"> <li>Geographic circumstances.</li> <li>Population density</li> <li>E-commerce development.</li> </ul>
<b>REVENUE</b>	<ul style="list-style-type: none"> <li>Higher revenues from optimising product portfolio.</li> <li>Negative impact on potential price advantage from VAT exemption (lower revenues).</li> </ul>	<ul style="list-style-type: none"> <li>USP have the option to differentiate prices when parcels are not under the USO.</li> <li>Volumes may be lower for users that receive lower quality and higher for those that receive higher quality.</li> </ul>	<ul style="list-style-type: none"> <li>Differences in demand for parcels between user groups.</li> <li>Separate networks for parcels and USO products.</li> </ul>
<b>NET COST</b>	Excluding parcels from the USO may lead to more product differentiation by the USP, which will have a positive effect on its profit, i.e. lower the net cost. It may however be that the current inclusion of parcels in the USO give intangible benefits (e.g. from VAT exemption or brand value) which have a significant impact on USP profit. It may therefore even be that this regulatory option has a negative effect on net cost (i.e. increase net cost).		
<b>USER IMPACT</b>	<ul style="list-style-type: none"> <li>If service level is lowered for some users, they will be worse off.</li> </ul>	<ul style="list-style-type: none"> <li>The inclusion of parcels in the USO may be needed to ensure a minimum quality level in the most costly areas.</li> </ul>	<ul style="list-style-type: none"> <li>Geographic circumstances.</li> <li>Population density.</li> <li>E-commerce development.</li> </ul>
<b>TOTAL IMPACT</b>	This regulatory option has the possibility to improve market efficiency if the inclusion of parcels is not needed to ensure the provision of such services. However, if there are some users that the market would not serve (or only with low quality or high price), it may have a severe negative impact on those users.		

Source: Copenhagen Economics

### *Cost effects from removing parcels from the scope of the USO*

The operational changes by the USP are uncertain, thus the impact on cost are also uncertain. It will depend on how the current inclusion of parcels effect the USP operations. If parcels are taken out of the USO, the USP may be incentivised to differentiate its product offering to different customers, e.g. based on geographic location. The services in the most rural or inaccessible areas may be reduced in order to save cost. However, this will depend on the degree of overlap between the network for letters and parcels, as the obligations on the letter products may constitute a sunk cost.

### *Revenue effect from removing parcels from the scope of the USO*

Changes in operation, such as reduced service to some customers, can have an effect on revenues. The USP may use the increased flexibility in the parcel segment to both change service levels and prices.

Removing parcels from the USO may also impact the effect of the VAT exemption, because the VAT exemption is linked to the USO definition. Further, it is possible that products with add-on services such as tracking may not be included in the USO (i.e. if the USP provides services on top of its obligations, it is defined as another product and not as part of the USO). One scenario is that – depending on the VAT rules and enforcement applicable to e-commerce sellers in the country – the USP

may enjoy a pricing advantages from a VAT exemption for products within the USO. The competitive situation may be complicated where add-on services on parcels (e.g. tracking) may not be deemed compatible with the USO, thus leaving unclear what the USP's incentives may be if parcels were to be altogether excluded from the USO.

#### *Impact on users and other stakeholders from removing parcels from the scope of the USO*

Over the 2013-2016 period, the parcel market has continued to grow at pace and with a wider differentiation and reach of services. Of course, the dynamics observed is also based on the existing USO provision affecting the (USP's) supply of parcel services. At the same time, there is notable competition in the parcel segment in many Member States. Thus, it would be very unlikely that no parcel services at all would be provided by the market absent USO.

However, the product offering and its reach may change. It may be that the USP chooses to provide different service levels in high volumes, low cost areas on the one hand and low volume, high cost areas on the other. The part of the market that is less profitable may then not get the same level of service if parcels are taken out of the USO. Therefore, the impact of this regulatory option on users may diverge across users and be subject to a complex interplay of product offering, competition (incl. competition of e-commerce vs brick and mortar as retail modes), user needs and broader user preferences.

## **5.4 CONCLUSION**

The future provision of the USO will be of major importance for all stakeholders in the European postal market. The ongoing technological, economic and social developments will continue to change the use of and need for postal services in the future. The same developments will also have implications for the cost of providing universal services. With this in mind, policymakers at both EU-level and at national level face important responsibilities to ensure that the current USO regulations are not becoming obsolete.

The review of potential changes in USO requirements are best achieved using a cost-benefit approach that compares the impact on net cost of the USO to the impact on users and other stakeholders. The cost-benefit analysis gives a sound knowledge base for policy decisions. Such a cost-benefit analysis must take the specific circumstances of the Member States into account and cannot merely be based on generic assumptions. Thus, we expect to see more cases where regulatory options for future national USO will be evaluated at national level.

If the balance between the scope of the USO and user needs is not appraised, there is a risk that specifications of the USO become obsolete. Many Member States currently calculate the net cost of USO. This enables a more informed debate in those Member States regarding the appropriateness of the current scope of the national USO. When the net cost is not known, it becomes a hidden cost, which is not considered and therefore may not induce discussions about the scope of the USO and the balancing of user needs with an efficient supply of services.

To evaluate the potential impact on users' benefits from any regulatory changes considered, we recommend identifying the vulnerable users of postal service and what specific services embed this dependency. The impact on benefits for users and other stakeholders from any changes in the USO is

subject to the level of dependency on postal services and the current service level. This may vary across user types and their location.

Some countries are more likely to require changes to the national USO than others. Important country characteristics that can exacerbate the increase in the net cost are: level of annual letter volume decline, letter volume per household, population density and geographic circumstances. This chapter has presented the mechanisms by which such country characteristics are important drivers of the development of net cost of the USO. Similarly, users of postal services in some countries will be more dependent on the current level of service than in other countries. The dependency and vulnerability will differ dependent on which regulatory option is considered.

There is a wide range of regulatory options available to adjust the national USO. Perhaps most notably, several countries have explored the possibility to reduce the delivery frequency below five days per week. This type of initiatives (as well as other changes in the USO) indicate clearly that, in some circumstances, there is pressure to adjust the national USO and that this may potentially conflict with the minimum requirements set in the Postal Services Directive. At the same time, there is no evidence that this tension applies across all the 28 Member States.

Thus, in order for the Postal Services Directive to remain future-proof, it would be wise to address this by making the Postal Services Directive flexible to these changes when needed. In practice, this can be achieved either by lowering the minimum requirement of the Postal Services Directive or by allowing a greater use of exemptions to Member States, if appropriate cost benefit analysis is provided in support of such policy.

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## APPENDIX A

# DEVELOPMENTS IN USO MINIMUM REQUIREMENTS

In this section, we describe specific cases where governments and regulators have amended or changed the national postal legislation and reduced USO requirements since 2013.

## DENMARK

As a reaction to a 52 per cent decline in letter volumes sent through PostNord since 2011, see Figure A.1, the following actions have been rolled out by the regulator and the operator.

- The C-letter product has been introduced in 2008 which required longer delivery times. It is intended for business senders and slower and less costly than A- and B-letters, however has volume and content restrictions. The C-letter has a lower unit cost for processing and delivery and as more large mailers shifted towards this new product, the burden of the USO has been reduced<sup>117</sup>.
- XY-delivery was introduced in 2009. Since households receive B- and C-letters every second day, the number of letters handed out per household per delivery increases, thereby reducing the cost per delivered item. No regulatory change was necessary to introduce XY delivery, however price increases of A-letters were needed to induce a shift from A-letters to more flexible B- and C-letters<sup>118</sup>.
- Removal of price cap on B-letters, delivery to registered addresses only, and new requirements for private mailboxes (2010). Increased flexibility in pricing, resulting from new postal regulations in 2010, led to further price increases for A- and B-letters. Moreover, PostNord was enabled to reduce delivery costs and lower the burden of the USO following a discontinuation of the obligation to deliver post to all addresses (including summer houses and other non-registered addresses) and new requirements for private mailboxes<sup>119</sup>.
- In 2011, the prices for A-letters increased by 45 per cent and for B-letters by 20 per cent. This generated higher revenues but also led to more product flexibility because A-letters are more often substituted with products that have longer delivery times, resulting in a more flexible delivery structure<sup>120</sup>. However, although successful in this case, a price increase is not necessarily always an effective way to reduce the USO burden especially when the demand decrease coming from a price increase offsets the positive revenue effect.
- In 2016, first class letters were eliminated from the USO, the delivery speed for B-letters was decreased from D+3 to D+5 and the overall delivery frequency was decreased from six to five days per week. The savings for PostNord from these changes are estimated to be €44 million, reducing the burden of the USO<sup>121</sup>.
- In 2018, letter and parcel delivery have been integrated and the delivery frequency of standard letters was set to once per week.

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<sup>117</sup> Post Danmark Annual Report 2008.

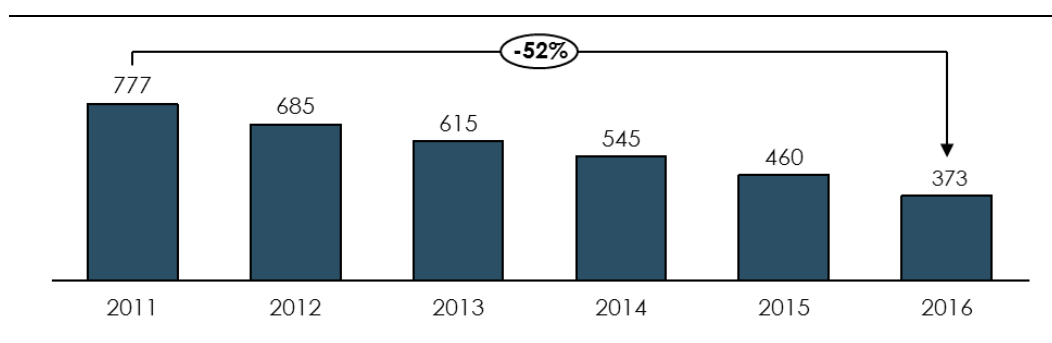
<sup>118</sup> Copenhagen Economics and Post Danmark – PostNord Presentation on 6th December 2011, [http://www.wik.org/fileadmin/Konferenzbeitraege/2011/13th\\_Koenigswinter\\_seminar/S3\\_1\\_Sondrup.pdf](http://www.wik.org/fileadmin/Konferenzbeitraege/2011/13th_Koenigswinter_seminar/S3_1_Sondrup.pdf).

<sup>119</sup> Danish Postal Act, LOV nr 1536 af 21/12/2010.

<sup>120</sup> Copenhagen Economics (2012) Pricing behaviour of postal operators, <https://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/0/210/0/06209%20Pricing%20behaviour%20of%20postal%20operators.pdf>.

<sup>121</sup> PostNord Annual and Sustainability Report 2016.

**Figure A.1**  
**Addressed letters sent via PostNord in Denmark 2011-2016**  
Million items



Note: All letters under 2 kg and with a maximum length of 60 cm are included. For 2017 we have estimated the results based on results of Q1 2017 and Q1 2016 as share of full year 2016.

Source: Annual reports of PostNord.

## FINLAND

The regulator and Posti in Finland have undertaken the following actions in order to respond to the steep decrease in addressed mail volumes sent (minus 30 per cent from 2011 to 2016, see Figure A.2) and to lower the burden of USO.

- In June 2016, the Finnish Communications Regulatory Authority discontinued the universal service obligation for domestic parcels from October 31<sup>st</sup>, 2016 onwards. These changes did not affect outbound international parcels weighing less than 10 kilos.<sup>122</sup>
- In 2017, Posti merged A and B letters and discontinued the provision of the D+1 service within the USO. The new standard letter became a two day delivery time service.<sup>123</sup>
- The Postal Act was again changed in 2017, lowering the delivery time of the standard letter from D+2 to D+4.<sup>124</sup>
- Finally, in July 2017, the Finnish Communications Regulatory Authority decreased the USO requirements for delivery frequency in urban areas due to cost concerns from five to three days per week, taking effect in July 2018.<sup>125</sup> For rural areas, the delivery frequency requirements are unchanged at five days per week.<sup>126</sup>

<sup>122</sup> Posti (2016) Annual Report, page 14.

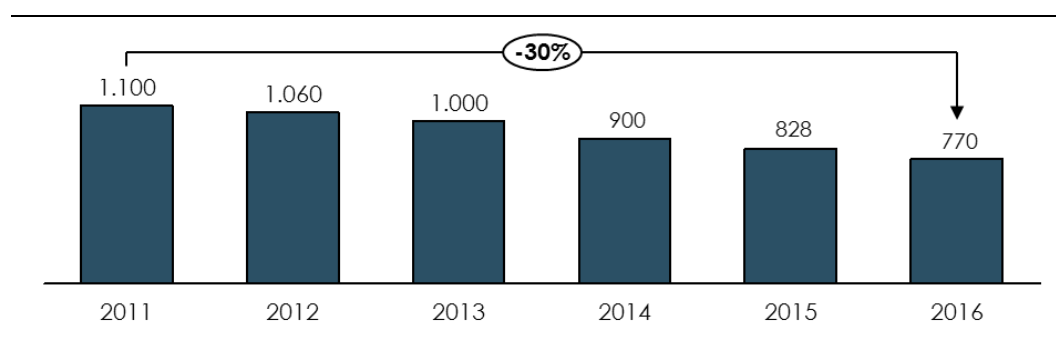
<sup>123</sup> Posti (2016) Annual Report, page 3.

<sup>124</sup> Finlex (2017), Postlag 415/2011: 15 § Postförsändelser som ingår i de samhällsomfattande tjänsterna, 8.9.2017/614.

<sup>125</sup> Posti (2017) Posti's delivery day reform will proceed during the summer – the number of delivery days will not change, [https://www.posti.fi/english/current/2017/20170531\\_postis-delivery-day-reform-will-proceed-during-the-summer.html](https://www.posti.fi/english/current/2017/20170531_postis-delivery-day-reform-will-proceed-during-the-summer.html)

<sup>126</sup> Finlex (2011), Postlag 415/2011: 15 § Postförsändelser som ingår i de samhällsomfattande tjänsterna.

**Figure A.2**  
**Addressed letters sent via Posti in Finland 2011-2016**  
 Million items



Source: PostNL (2017) European Postal Markets & Posti Annual Reports.

## ITALY

From 2011 to 2015, the addressed mail volume delivered by Poste Italiane declined by 38 per cent, see Figure A.4, and the three main actions by the operator in the period 2014-2015 have been the following.

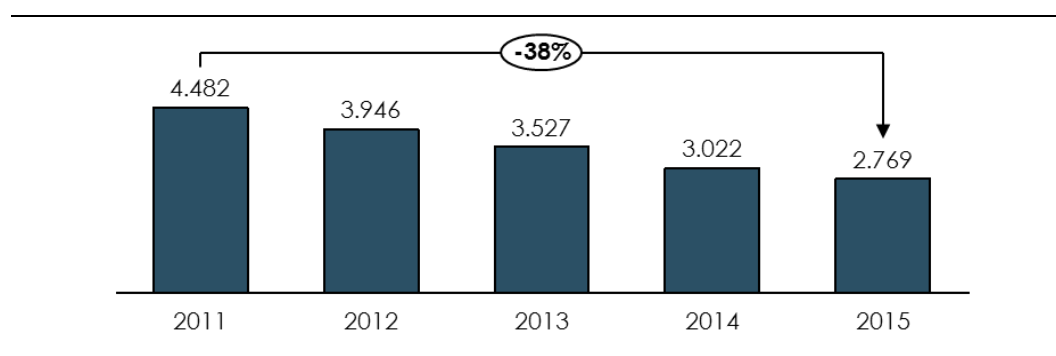
- Poste Italiane implemented an alternate day delivery system in the most rural areas of the country, as made possible by regulatory and legislative changes in 2014 and 2015. Under this XY delivery system, during the first week post is delivered on Mondays, Wednesdays and Fridays, but delivered on Tuesdays and Thursdays in the second week<sup>127</sup>. The remaining areas have a frequency requirement of five day delivery.
- A slower D+4 letter mail product, Posta4, has been introduced in 2015, to address new customer needs. The new product is to be delivered in four to six days (90 per cent and 98 per cent of the time respectively). The price of this product remained very close to the price of the previous basic letter post service.
- The fastest D+1 product, Posta1, was maintained and kept within the USO scope. The price of this product has increased from €0,8 to €2,8 in 2015<sup>128</sup>, to reflect increased costs. At the same time, this priority service was integrated with additional features, e.g. light track & trace<sup>129</sup>.

<sup>127</sup> Italian Law 2014 n. 190; AGCOM Decision 395/15/CONS

<sup>128</sup> European Commission (2012) State aid SA.33989 (2012/NN) – Italy, [http://ec.europa.eu/competition/state\\_aid/cases/246559/246559\\_1410182\\_58\\_2.pdf](http://ec.europa.eu/competition/state_aid/cases/246559/246559_1410182_58_2.pdf).

<sup>129</sup> Interview with Poste Italiane.

**Figure A.3**  
**Addressed letters sent via Poste Italiane in Italy 2011-2015**  
 Million items



Source: PostNL (2017) European Postal Markets.

## THE NETHERLANDS

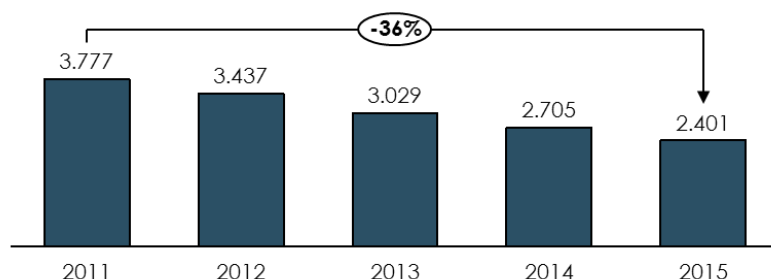
Addressed mail volume delivered by PostNL decreased by 36 per cent from 2011 to 2015, see Figure A.3, and in order to reduce the burden of the USO, PostNL and the regulator undertook the following two actions.

- The required delivery frequency was decreased in January 2014 from six to five days per week, with delivery from Tuesdays to Saturdays<sup>130</sup>. Monday delivery was discontinued immediately.
- The government enabled in 2015 a reduction in postal outlets from 2.000 to 1.000 and in street letter boxes from 19.000 to 8.700<sup>131</sup>.

<sup>130</sup> Ministry of Economic Affairs, (2014). The Dutch Postal Market and the Postal Directive, [http://www.an-com.org.ro/en/uploads/links\\_files/2\\_Jeroen\\_Sas\\_-\\_The\\_Dutch\\_Postal\\_Market\\_and\\_the\\_Postal\\_Directive.pdf](http://www.an-com.org.ro/en/uploads/links_files/2_Jeroen_Sas_-_The_Dutch_Postal_Market_and_the_Postal_Directive.pdf).

<sup>131</sup> WIK (2016) Future scenario developments in the Dutch postal market, p. 73

**Figure A.4**  
**Addressed letters sent via PostNL in the Netherlands 2011-2015**  
 Million items



Source: PostNL (2017) European Postal Markets

## NORWAY

As a response to the observed letter mail volumes decline of 23 per cent from 2011 by Posten in Norway, see Figure A.5, the following two actions have been undertaken among others to limit the burden of the USO.

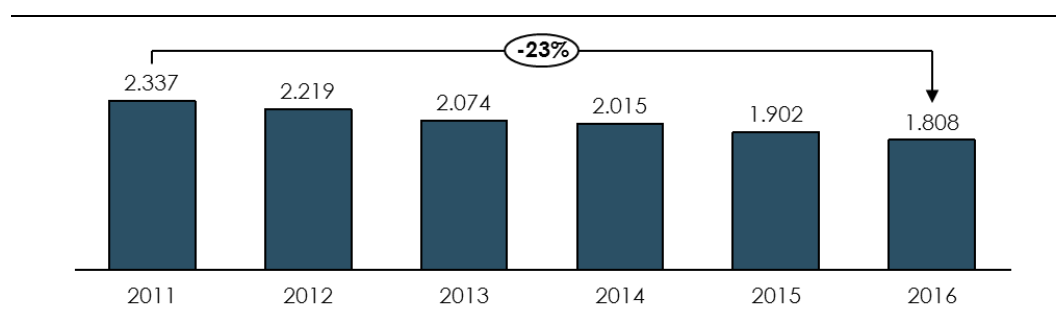
- As made possible by changes in the postal law, mail delivery on Saturdays was discontinued on March 1st, 2016, reducing the delivery frequency required from six to five days per week.<sup>132</sup>
- A- and B-mail has been merged into a single type of mail with a D+2 standard delivery speed on January 1st, 2018. Two to four business days is now the standard delivery speed.<sup>133</sup>

Future changes in the USO in Norway: The Norwegian Ministry of Transport and Communications is currently investigating the costs and benefits of changing the USO requirements in Norway further. Whether this investigation will lead to additional changes in the near future remains to be seen.

<sup>132</sup> Posten (2015) Annual report, [https://www.postennorge.no/en/report-archive/\\_/attachment/inline/5a333407-df84-4fac-aa1f-d6a8560d1d01:0e3f5763f596e24090b89e453b56a955136c5ba2/annual-report-2015%20\(1\).pdf](https://www.postennorge.no/en/report-archive/_/attachment/inline/5a333407-df84-4fac-aa1f-d6a8560d1d01:0e3f5763f596e24090b89e453b56a955136c5ba2/annual-report-2015%20(1).pdf).

<sup>133</sup> Posten (2017) Quarterly report, [https://www.postennorge.no/en/report-archive/\\_/attachment/inline/6d7662d9-8544-4d23-a769-cc6afda1341c:01ca858a88befe49f37650bc84d95f72d2b3e970/Quarterly%20report%20Q1%202017.pdf](https://www.postennorge.no/en/report-archive/_/attachment/inline/6d7662d9-8544-4d23-a769-cc6afda1341c:01ca858a88befe49f37650bc84d95f72d2b3e970/Quarterly%20report%20Q1%202017.pdf)

**Figure A.5**  
**Addressed letters sent via Posten Norge in Norway 2011-2016**  
Million items



Source: Posten Norge Annual Reports.

## SWEDEN

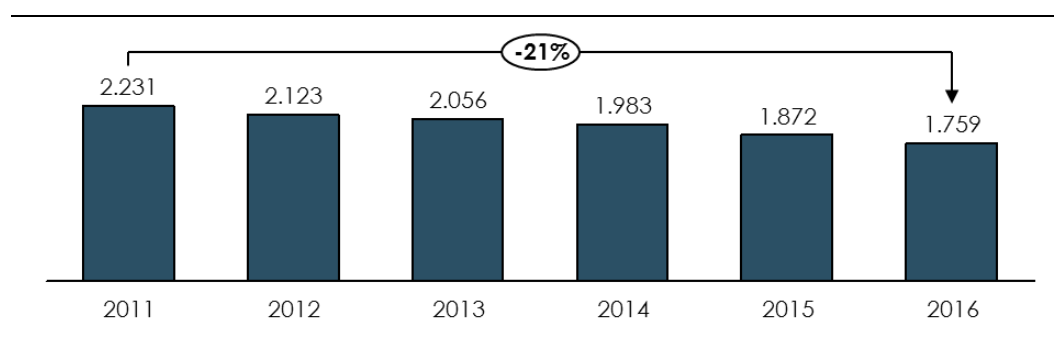
The actions by the government to limit the burden of the USO stemming from a 21 per cent decline in addressed mail volume sent by PostNord since 2011, as depicted in Figure A.6, are as follows.

- The Swedish Government removed overnight delivery and replaced the D+1 requirement with an obligation to deliver standard letters within two working days in effect since January 1st, 2018. Regardless of the geographical origin of a letter, at least 95 per cent of letters should be with its recipient 2 days after the day of deposit.
- Resulting from the above amendment, the price cap previously applied to all single piece D+1 letters up to 500 grams now covers all single piece D+2 letters up to 500 grams.
- The Swedish Post and Telecom Authority (PTS), the regulator monitoring the electronic communications and postal sectors in Sweden, will have more flexibility in the provision of the USO going forward.<sup>134</sup>

<sup>134</sup> Swedish Government (2017) Regeringen moderniserar postlagstiftningen, <http://www.regeringen.se/pressmeddelanden/2017/10/regeringen-moderniserar-postlagstiftningen/>.



**Figure A.6**  
**Addressed letters sent via PostNord in Sweden 2011-2016**  
 Million items



Note: This figure shows the total amount of priority and non-priority mail in Sweden. It does not include un-addressed mail.

Source: Posten Sweden and PostNord annual reports.

## CANADA

Canada Post's volumes for delivered domestic mail decreased by 26 per cent since 2011, see Figure A.7. In an attempt to decrease the burden of the USO, the regulator and the operator made the following transformations.

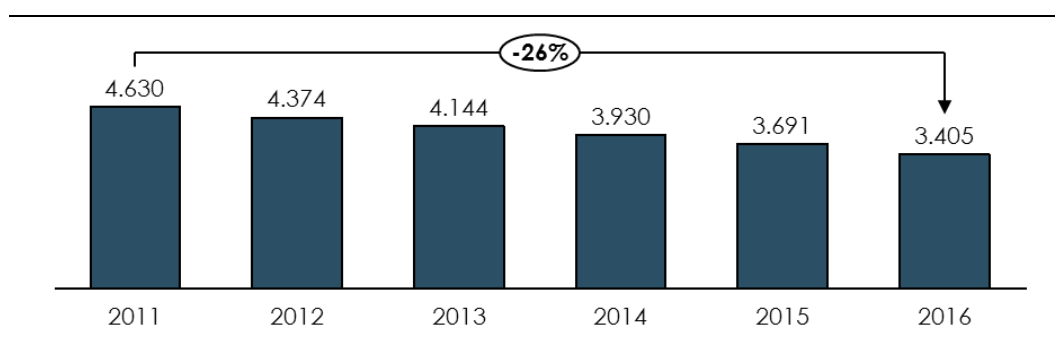
- 73 franchise postal offices were opened in 2014 across Canada. These new post offices offer the same prices and services as the corporate post offices, but typically with a higher service level with greater accessibility and longer opening hours but running them costs only about a third in the urban areas<sup>135</sup>.
- Door-to-door delivery has been replaced in some parts of Canada by delivery to community mail boxes since August 2015. Initially, the purpose was to reduce labour costs. However, Canada Post has not further converted door-to-door customer service to community mailboxes since a moratorium introduced in autumn 2015. Furthermore, the Government recommended in 2016 to return to door-to-door mail delivery for all households<sup>136</sup>, but there has been no decision yet.<sup>137</sup>

<sup>135</sup> Canada Post (2015) Canada Post's Five-point Action Plan: Our progress to date, [https://www.canadapost.ca/cpo/mc/assets/pdf/aboutus/5\\_en.pdf](https://www.canadapost.ca/cpo/mc/assets/pdf/aboutus/5_en.pdf).

<sup>136</sup> House of Commons (2016) The way forward for Canada post, <http://www.ourcommons.ca/Content/Committee/421/OGGO/Reports/RP8673298/oggorp04/oggorp04-e.pdf>.

<sup>137</sup> CBC News (2017) Canada Post 'inventing rules' to bring in community mailboxes, says Milton man, <http://www.cbc.ca/news/canada/toronto/community-mailbox-conversion-suspend-milton-canada-post-door-1.4220358>, retrieved on 2017-11-27.

**Figure A.7**  
**Addressed letters sent via Canada Post 2011-2016**  
Million items



Source: Canada Post Annual Reports.

## APPENDIX B

# ASSESSMENT OF REGULATORY OPTIONS FOR THE FUTURE PROVISION OF THE USO

**Table 61**  
**Cost effect from reduced delivery frequency and speed**

ACTIVITY IN PRODUCTION CHAIN	POTENTIAL COST EFFECTS	ECONOMIC RATIONALE	KEY MARKET DRIVER
<b>Collection</b>	<ul style="list-style-type: none"> <li>No effect on collection</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Outbound Sorting</b>	<ul style="list-style-type: none"> <li>Potential reduction in overnight sorting (-)</li> <li>Potential consolidation of sorting terminals</li> </ul>	<ul style="list-style-type: none"> <li>As the delivery speed is reduced from D+1 to D+3, the need for overnight sorting is reduced.</li> <li>The extra time will allow for efficiencies in production which will in turn lead to increased automation.</li> <li>The extra time may allow for a less dense network of sorting centres.</li> </ul>	<ul style="list-style-type: none"> <li>Geographic circumstances</li> <li>Population density</li> <li>Mail volume per address</li> </ul>
<b>Transport</b>	<ul style="list-style-type: none"> <li>Potential opportunity for change in mode of transportation</li> </ul>	<ul style="list-style-type: none"> <li>If long distances force the operator to use a certain type of transportation, e.g. by air, the extra time may allow for use of cheaper mode of transportation, e.g. by road.</li> </ul>	<ul style="list-style-type: none"> <li>Geographic circumstances</li> <li>Population density</li> </ul>
<b>Inbound sorting</b>	<ul style="list-style-type: none"> <li>Reduction in overnight sorting (-)</li> </ul>	<ul style="list-style-type: none"> <li>As the delivery speed is reduced from D+1 to D+3, the need for overnight sorting is reduced.</li> <li>The extra time will allow for efficiencies in production which will in turn lead to increased automation.</li> </ul>	<ul style="list-style-type: none"> <li>Geographic circumstances</li> <li>Population density</li> <li>Mail volume per address</li> </ul>
<b>Delivery</b>	<ul style="list-style-type: none"> <li>Reduced labour cost (-)</li> <li>Lower volumes (-)</li> <li>Increased work load (+)</li> </ul>	<ul style="list-style-type: none"> <li>When going from five day delivery to for e.g. a X/Y delivery system with delivery every other day, the daily route cover only 50 per cent of the households requiring fewer man hours, a lower number of cars and less fuels.</li> <li>Due to larger volumes per route, the cost savings will not be entirely 50 per cent due to the increased work load but will be less than that. The extra work load depends on how often the mailman makes a stop and how many letters per stop is delivered.</li> </ul>	<ul style="list-style-type: none"> <li>Mail volume per address</li> </ul>

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 62**  
**Revenue effect from reduced delivery frequency and speed**

REVENUE CATEGORY	POTENTIAL NEGATIVE IMPACT ON VOLUME	MOTIVATION
<b>Domestic single piece letters</b>	Small impact (0-5%)	<ul style="list-style-type: none"> <li>Negative price effect from senders switching from priority mail to non-priority mail.</li> <li>Negative volume effect from senders who choose other means of delivery, mainly electronic communications due to longer delivery time (three working days instead of one).</li> </ul>
<b>International single piece letters</b>	Small impact (0-5%)	<ul style="list-style-type: none"> <li>Senders and recipients of cross-border letter post items may substitute away from the USP to faster delivery solutions causing a negative volume effect.</li> <li>A recent study indicate that senders and recipients of international mail are not very sensitive to delivery speed<sup>1</sup>.</li> </ul>
<b>Bulk mail</b>	Small impact (0-10%)	<ul style="list-style-type: none"> <li>Negative price effect from senders switching from priority mail to non-priority mail, if the price difference is small.</li> <li>Negative volume effect from senders who choose other means of delivery, mainly electronic communications.</li> </ul>
<b>Magazines and daily newspapers</b>	Large impact (40-50%)	<ul style="list-style-type: none"> <li>Most of the delivery of monthly and weekly magazines can be planned in advance and therefore is not dependent on overnight delivery or day of delivery as long as subscribers receive magazines before they are available in store.</li> <li>News will no longer be relevant when newspaper arrive several days after publication.</li> </ul>
<b>Unaddressed mail</b>	Medium (30-40%)	<ul style="list-style-type: none"> <li>Difficulties planning exact day of delivery might be problematic for senders that want to time the arrival advertisements.</li> </ul>
<b>Packets</b>	Medium impact (10-15%)	<ul style="list-style-type: none"> <li>Packets will arrive later. Out of the mailers who are dependent on overnight delivery, some are able and willing to pay more for the existing parcel services provided by the operator, if not they may turn to other distributors.</li> </ul>
<b>Parcels</b>	Small impact (+10%)	<ul style="list-style-type: none"> <li>Some users of the USP's small packet service might switch to parcels as price of packets increase (up-trading).</li> </ul>

Source: Copenhagen Economics based on desk research and net cost calculations. <sup>1</sup> International Post Corporation (2017), Cross-border e-commerce shopper survey 2016, p.11.

**Table 63**  
**Impact on users from reduced delivery frequency and speed**

CHANGE IN SERVICE LEVEL	WHICH GROUPS OF USERS ARE LIKELY TO HAVE A HIGH NEED OF A REMAINED SERVICE LEVEL?	WHICH SERVICES ARE AFFECTED?	HOW WILL DEMAND FOR THIS SERVICE DEVELOP IN THE FUTURE?	ARE THERE ANY POTENTIAL ALTERNATIVES AVAILABLE?
<b>Only delivery on certain days and slower delivery service, from D+1 to D+3</b>	Elderly and disabled citizens	Urgent delivery of medicine (this has been raised as a concern in RO, SE, PT and NO)	Stable	<ul style="list-style-type: none"> <li>Pick up at the pharmacy</li> <li>Local delivery companies</li> <li>Delivery with homecare</li> </ul>
	Laboratories and SMEs	Delivery of fresh samples or food (this has been raised as a concern in NO and NZ)	Stable	<ul style="list-style-type: none"> <li>Express service</li> </ul>
		Delivery of components and spare parts (this has been raised as a concern in NO and NZ)	Stable	<ul style="list-style-type: none"> <li>Express service</li> </ul>
	E-commerce consumers and online retailers	Delivery of small packets (this has been raised as a concern in NO and NZ)	Increase	<ul style="list-style-type: none"> <li>Parcel delivery</li> <li>Competing networks</li> </ul>
	SMEs and other frequent senders	Organisational difficulties (this has been raised as a concern in DE, IE, BE and UK)	n/a	n/a
	Private households and businesses	Daily newspapers (this has been raised as a concern in DK, BE, FI, NO and NZ)	Decline	<ul style="list-style-type: none"> <li>Digital newspapers</li> <li>Purchase newspapers in retail store</li> <li>Delivery with competing network</li> </ul>

Source: Zurel (2016) A Systematic Review of Postal Consumers' Needs Within the USO Framework; ERGP (2016) ERGP report Universal Services in light of changing postal end users' needs; Interviews with e-retailers and a consumer association. PTS(2016), Användares behov av posttjänster ; Frontier (2016), Research on postal users' needs; BIPT (2017), Communication by the BIPT council of 13 February 2017 regarding an overall analysis about postal needs in Belgium; TRM (2015), Analyse af danskernes brug af posttjenester; Clark (2014), Legalising Alternate Day Delivery: The Reshaping of the Universal Postal Service in New Zealand ; Ofcom (2012), Postal User Needs Qualitative Research; Ofcom (2012a), Universal Service Obligation - Postal User Needs 2012 Quantitative research report; ERGP (2016), Report on Universal Services in light of changing postal end users' needs; ANACOM (2014), Survey on the use of postal services ; ANCOM (2015), Qualitative study regarding the needs of postal service users in Romania – people with visual impairments

**Table 64**  
**Impact on employment from reduced delivery frequency and speed**

ACTIVITY IN PRODUCTION CHAIN	POTENTIAL COST EFFECTS	ECONOMIC RATIONALE
<b>Collection</b>	<ul style="list-style-type: none"> <li>No impact on collection</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations.</li> </ul>
<b>Outbound Sorting</b>	<ul style="list-style-type: none"> <li>Small potential impact on sorting (-)</li> </ul>	<ul style="list-style-type: none"> <li>As the delivery speed is reduced from D+1 to D+3, the need for overnight sorting is reduced.</li> <li>The extra time will allow for efficiencies in production which will in turn lead to increased automation. This may lead to reduced labour force.</li> <li>The extra time may allow for a less dense network of sorting centres. This may lead to reduced labour force.</li> </ul>
<b>Transport</b>	<ul style="list-style-type: none"> <li>No significant impact</li> </ul>	<ul style="list-style-type: none"> <li>If long distances force the operator to use a certain type of transportation, e.g. by air, the extra time may allow for use of cheaper mode of transportation, e.g. by road. It is ambiguous whether different mode of transportation requires more or less labour.</li> </ul>
<b>Inbound sorting</b>	<ul style="list-style-type: none"> <li>Small potential impact on sorting (-)</li> </ul>	<ul style="list-style-type: none"> <li>As the delivery speed is reduced from D+1 to D+3, the need for overnight sorting is reduced.</li> <li>The extra time will allow for efficiencies in production which will in turn lead to increased automation. This may lead to reduced labour force.</li> </ul>
<b>Delivery</b>	<ul style="list-style-type: none"> <li>Large potential impact (-)</li> </ul>	<ul style="list-style-type: none"> <li>When going from five day delivery to for e.g. a X/Y delivery system with delivery every other day, the daily route cover only 50 per cent of the households requiring fewer man hours. This, in turn means a lower need for labour.</li> </ul>

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 65**  
**Cost effect from introducing delivery to post offices in rural areas**

<b>ACTIVITY IN PRODUCTION CHAIN</b>	<b>POTENTIAL COST EFFECTS</b>	<b>ECONOMIC RATIONALE</b>	<b>KEY MARKET DRIVERS</b>
<b>Collection</b>	<ul style="list-style-type: none"> <li>No effect on collection</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Outbound sorting</b>	<ul style="list-style-type: none"> <li>No effect on sorting</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Transport</b>	<ul style="list-style-type: none"> <li>No effect on transport</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Inbound sorting</b>	<ul style="list-style-type: none"> <li>No effect on local sorting</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Delivery</b>	<ul style="list-style-type: none"> <li>Reduced cost due to shorter delivery routes and aggregated volumes (-)</li> </ul>	<ul style="list-style-type: none"> <li>When the operator is allowed to deliver mail items not to the door, but to the post office, there can be significant cost savings in labour costs and last-mile transportation costs (it is common to use cars for the last-mile delivery to the door in scarcely populated areas).</li> </ul>	<ul style="list-style-type: none"> <li>Geographic circumstances</li> <li>Population density</li> <li>Mail volume per address</li> <li>Accessibility</li> </ul>

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 66**  
**Revenue effect from introducing delivery to post offices in rural areas**

REVENUE CATEGORY	POTENTIAL NEGATIVE IMPACT ON VOLUME	MOTIVATION
<b>Domestic single piece letters</b>	Small impact (0-5%)	<ul style="list-style-type: none"> <li>Negative volume effect from senders who choose other means of delivery, mainly electronic communications due to inconvenient pick-up point.</li> </ul>
<b>International single piece letters</b>	Small impact (0%)	<ul style="list-style-type: none"> <li>Senders and recipients of cross-border letter post items may substitute away from the USP to more convenient delivery solutions causing a negative volume effect.</li> </ul>
<b>Bulk mail</b>	Small impact (5-10%)	<ul style="list-style-type: none"> <li>Negative volume effect from senders who choose other means of delivery, mainly electronic communications. Some bulk mailers, e.g. senders of invoices etc. may be less willing to use postal services if there is a risk that the mail is not picked up.</li> </ul>
<b>Magazines and daily newspapers</b>	Medium to large impact (20-50%)	<ul style="list-style-type: none"> <li>It may be that the postal operator has a large share of the delivery market in the rural areas, if they are only covered due to the USO.</li> <li>Newspapers may no longer be relevant if they arrive to the post office, which may be less convenient than to go to the store and buy it.</li> </ul>
<b>Unaddressed mail</b>	Medium (30-40%)	<ul style="list-style-type: none"> <li>Some senders of unaddressed mail may be less willing to use postal services if there is a risk that the mail is not picked up and read. They may switch to other means of communication.</li> </ul>
<b>Packets</b>	Medium impact (10-15%)	<ul style="list-style-type: none"> <li>Some senders of packets, e.g. e-commerce, mail may be less willing to use postal services if there is a risk that the mail is not picked up and read. They may switch to other delivery solutions that can deliver to the door.</li> </ul>
<b>Parcels</b>	Medium impact (10-15%)	<ul style="list-style-type: none"> <li>Some senders of packets, e.g. e-commerce, mail may be less willing to use postal services if there is a risk that the mail is not picked up and read. They may switch to other delivery solutions that can deliver to the door.</li> </ul>

Source: Copenhagen Economics based on desk research and net cost calculations.



**Table 67**  
**Impact on users from introducing delivery to post offices in rural areas**

CHANGE IN SERVICE LEVEL	WHICH GROUPS OF USERS ARE LIKELY TO HAVE A HIGH NEED OF A RE-MAINED SERVICE LEVEL?	WHICH SERVICES ARE AFFECTED?	HOW WILL DEMAND FOR THIS SERVICE DEVELOP IN THE FUTURE?	ARE THERE ANY POTENTIAL ALTERNATIVES AVAILABLE?
<b>Delivery only to a post office in the most rural areas</b>	Elderly and disabled citizens in rural areas	Urgent delivery of medicine via priority letters up to 2 kg.	Stable	<ul style="list-style-type: none"> <li>• Pick up at the pharmacy</li> <li>• Local delivery companies</li> <li>• Delivery with homecare</li> </ul>
	Laboratories and SMEs in rural areas	Delivery of fresh samples or food via priority letters up to 2 kg.	Stable	<ul style="list-style-type: none"> <li>• Express service</li> </ul>
		Delivery of components and spare parts via priority letters up to 2 kg.	Stable	<ul style="list-style-type: none"> <li>• Express service</li> </ul>
	E-commerce consumers and online retailers in rural areas	Delivery of small packets	Increase	<ul style="list-style-type: none"> <li>• Parcel delivery</li> <li>• Competing networks</li> </ul>
	Private households and businesses in rural areas	Daily newspapers	Decline	<ul style="list-style-type: none"> <li>• Digital newspapers</li> <li>• Purchase newspapers in retail store</li> <li>• Delivery with competing network</li> </ul>

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 68**  
**Impact on employment from introducing delivery to post offices in rural areas**

ACTIVITY IN PRODUCTION CHAIN	POTENTIAL COST EFFECTS	ECONOMIC RATIONALE
<b>Collection</b>	• Small impact (+)	• More employees or new trainings might be needed to accommodate more customers' visits to post offices
<b>Outbound Sorting</b>	• No impact on collection	• No change in operations
<b>Transport</b>	• No impact on collection	• No change in operations
<b>Inbound sorting</b>	• No impact on collection	• No change in operations
<b>Delivery</b>	• Medium impact (-)	• When less time is needed to complete the routes in rural areas, the need for staff in the delivery part of the value chain will be reduced

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 69**  
**Cost effect from including services of general economic interest**

ACTIVITY IN PRODUCTION CHAIN	POTENTIAL COST EFFECTS	ECONOMIC RATIONALE	KEY MARKET DRIVERS
<b>Collection</b>	• No effect on collection	• No change in operations	• n/a
<b>Outbound sorting</b>	• No effect on sorting	• No change in operations	• n/a
<b>Transport</b>	• No effect on transport	• No change in operations	• n/a
<b>Inbound sorting</b>	• No effect on local sorting	• No change in operations	• n/a
<b>Delivery</b>	• Increased cost due to longer time spent at delivery point (-)	• The extra services required will lead to an increase in resources. Specifically, it will take more time for mailmen to go their route.	<ul style="list-style-type: none"> <li>• Geographic circumstances</li> <li>• Population density</li> <li>• Mail volume per address</li> <li>• Accessibility</li> </ul>

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 70**  
**Revenue effect from including services of general economic interest**

REVENUE CATE- GORY	POTEN- TIAL IM- PACT ON USP'S REVENUE	MOTIVATION
New ser- vices of general economic interest	Low to moderate impact (3- 20%)	<p>Based on the case studies of Belgium and France, public services can be an im- portant source of funding for the USP.</p> <p>For instance, bpost provides SGEI for which it is compensated by the Belgian State. This includes the following revenue effects to bpost:</p> <ul style="list-style-type: none"> <li>• Revenues from €261m in 2016 to €246m in 2020.</li> <li>• Not paying a rent to the State (results in higher net profit).</li> </ul> <p>In France, La Poste has four SGEI public services for which it is compensated by the State, as per 5-year contract (contract from 2018-2022 recently signed):</p> <ul style="list-style-type: none"> <li>• Ensuring a stable quality of service for universal postal, where the new con- tract emphasize focus on user satisfaction and tracking domestic and inter- national shipments.</li> <li>• Having at least 17.000 points of contact throughout France, with focus in the new contract on maintaining the points through partnerships, e.g. in tourist info offices, stations (only 52% were post offices in 2016). Compensation: €174m.</li> <li>• Distribution of the press, i.e. print media, with privileged postal rates granted to newspaper publishers.</li> <li>• Making banking accessible to all, through their branch La Banque Postale (Banking services to vulnerable users, e.g. "Livret A" savings accounts). Com- pensation by French State: €210m in 2017.</li> </ul> <p>In addition, La Poste provides other public services, such as</p> <ul style="list-style-type: none"> <li>• Public administration services, e.g. written driver's licence exam.</li> <li>• Social services to seniors (regular visits/checks; delivering groceries, medica- tions and meal trays; installing home electronic devices such as satellite TV devices).</li> <li>• Environmental services, supporting: <ul style="list-style-type: none"> <li>• Energy renovation: raising property owners' awareness regarding energy renovation challenges, conducting energy assessments at private homes.</li> <li>• Recycling, e.g. recovering of paper, electronics, textiles and batter- ies.</li> <li>• Sustainable mobility consulting ("Bemobi").</li> </ul> </li> </ul>

Source: Copenhagen Economics based on La Poste (2017), Annual Report 2016; bpost (2015), 6ème Contrat de Gestion/ 6de Beheerscontract.

**Table 71**  
**Impact on users from including services of general economic interest**

CHANGE IN SERVICE LEVEL	WHICH GROUPS OF USERS ARE LIKELY TO BE AFFECTED?	ARE THERE ANY POTENTIAL ALTERNATIVES AVAILABLE?
New and/or increased service level to stimulate social and territorial cohesion.	Elderly and disabled citizens in rural areas	• Homecare service
	SMEs in rural areas	• Express services

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 72**  
**Impact on employment from including services of general economic interest**

ACTIVITY IN PRODUCTION CHAIN	POTENTIAL COST EFFECTS	ECONOMIC RATIONALE
<b>Collection</b>	• No impact on collection	• No change in operations
<b>Outbound sorting</b>	• No impact on collection	• No change in operations
<b>Transport</b>	• No impact on collection	• No change in operations
<b>Inbound sorting</b>	• No impact on collection	• No change in operations
<b>Delivery</b>	• Increased need for labour (+)	• When mailmen spend more time on the delivery point, it requires more labour for the operator. The magnitude will depend on the uptake of such services.

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 73**  
**Cost effects from removal of parcels from the scope of the USO**

ACTIVITY IN PRODUCTION CHAIN	POTENTIAL COST EFFECTS	ECONOMIC RATIONALE	KEY MARKET DRIVER
<b>Collection</b>	<ul style="list-style-type: none"> <li>No effect on collection</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Outbound Sorting</b>	<ul style="list-style-type: none"> <li>No effect on sorting</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Transport</b>	<ul style="list-style-type: none"> <li>No effect on transport</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Inbound sorting</b>	<ul style="list-style-type: none"> <li>No effect on local sorting</li> </ul>	<ul style="list-style-type: none"> <li>No change in operations</li> </ul>	<ul style="list-style-type: none"> <li>n/a</li> </ul>
<b>Delivery</b>	<ul style="list-style-type: none"> <li>Potential effect on delivery cost.</li> </ul>	<ul style="list-style-type: none"> <li>Potential to save cost by reducing service level to some customers.</li> <li>The USP may have incentives to change their offering to be more market oriented. This may include adding tracking service on basic parcels and/or differentiating service offering between customer segments.</li> </ul>	<ul style="list-style-type: none"> <li>Geographic circumstances.</li> <li>Population density</li> <li>Parcel volume per address</li> <li>Accessibility</li> <li>Whether the USP use the same network for parcels and letters</li> <li>Level and structure of competition in the parcel market</li> <li>Effect of VAT exemption</li> </ul>

Source: Copenhagen Economics

**Table 74**  
**Revenue effect from removal of parcels from the scope of the USO**

REVENUE CATEGORY	POTENTIAL NEGATIVE IMPACT ON VOLUME	MOTIVATION
<b>Domestic single piece letters</b>	No impact	• n/a
<b>International single piece letters</b>	No impact	• n/a
<b>Bulk mail</b>	No impact	• n/a
<b>Magazines and daily newspapers</b>	No impact	• n/a
<b>Unaddressed mail</b>	No impact	• n/a
<b>Packets</b>	Medium impact (10-15%)	• There is uncertainty about the ability and incentive to shift between sending e-commerce products in letters or parcels. If letters are in the USO and parcels are not, there may be significant changes in volumes for goods sent in letter (i.e. packets).
<b>Parcels</b>	Medium impact (+10%)	<ul style="list-style-type: none"> <li>• The volume effect may be different in different segment/geographic areas. Some customers may get lower service when parcels are not covered by the USO, other may get better service.</li> <li>• The effect from potential VAT exemption may change:               <ul style="list-style-type: none"> <li>• If a current VAT exemption incentivise the USP not to add tracking services to parcels because they will then lose the VAT exemption, such additional services may be introduced when parcels are not covered by the USO.</li> <li>• If the main effect from a current VAT exemption on parcels are a price advantage, the revenues from parcels may be negatively impacted by taking parcels out of the USO.</li> </ul> </li> </ul>

Source: Copenhagen Economics based on desk research and net cost calculations.

**Table 75**  
**Potential impact on users of postal service**

<b>CHANGE IN SER- VICE LEVEL</b>	<b>WHICH GROUPS OF USERS ARE LIKELY TO HAVE A HIGH NEED OF A REMAINED SERVICE LEVEL?</b>	<b>WHICH SERVICES ARE AFFECTED?</b>	<b>HOW WILL DE- MAND FOR THIS SERVICE DEVELOP IN THE FUTURE?</b>	<b>ARE THERE ANY POTENTIAL AL- TERNATIVES AVAILABLE?</b>
<b>Lower service</b>	Consumers of e-commerce	Parcels in areas which have high cost (e.g. due to low volumes and low accessibility) and low competition	Increasing due to e-commerce spread	• Express services
<b>In- creased price</b>	Consumers of e-commerce	Parcels in areas which have high cost (e.g. due to low volumes and low accessibility) and low competition	Increasing due to e-commerce spread	• Express services

Source: Copenhagen Economics based on desk research and net cost calculations.

