ERGP REPORT

ON THE DEVELOPMENT OF POSTAL NETWORKS AND ACCESS PRACTICES REGARDING INFRASTRUCTURE RELATED TO THE PARCEL MARKET

June 2019
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Executive Summary

Purpose and content of the report

The progressive digitalization of society has changed users’ needs and has a relevant impact on the postal sector, leading to continuously decreasing volumes of traffic in the letter post segment and an increased relevance of the parcel segment. In this sense, it is important that the European Regulators Group for Postal Services (ERGP) continues to analyse aspects associated with access to the postal network, by going more into detail in specific areas while taking into account the developments in the sector and complementing the work previously developed.

The main purpose of this report is to examine how new needs and preferences of postal users, in particular with the increased relevance of parcels, have influenced the development of postal operator’s networks and to identify the innovative ways of postal operators reacting to market developments to address the users’ needs and the growing demand for e-commerce deliveries. The purpose of the work, in essence, is to reflect the evolution of postal networks in the context of a transition from letter mail to parcels, exploring how postal networks were altered and to mainly focus on the delivery infrastructure related to the parcel market, namely parcel lockers, and access practices in this regard.

For this purpose, a questionnaire was submitted in January 2019 to the ERGP members and observers. The questionnaire was answered by 28 National Regulatory Authorities (NRAs) even though complete information was not available in some cases. The basis of the report is formed by desk-top theoretical research and the analysis of the answers provided to the questionnaire.

Development of networks

The development of electronic ways of communication and e-commerce in recent years has had a significant impact on the postal sector. This has led to declining letter mail volumes and increasing volumes in the parcel segment. The structure of the postal sector has therefore been adapting to the developments in social and economic circumstances, and even though the letter mail segment remains relevant for today’s postal sector (in 2017 it represented 93% of total volumes and 61% of total revenues of the postal sector), there is a distinction between the letter mail and parcel segments’ development within the postal sector has been increasingly apparent.

The Universal Service Provider (USP) has, in some countries, upgraded its existing postal network in order to adapt its network for increasing parcel deliveries. In most countries, the USPs have introduced parcel lockers, usually installed in highly frequented areas, providing customers the possibility to collect parcels within flexible schedules.

Further to this evolution, some NRAs were also able to identify some developments, both in terms of infrastructure and in terms of services offered, related with the introduction of new elements in order to improve parcel delivery. Amongst these, some main trends can be identified such as the upgrade of sorting centres, the developments of track and trace systems, and transport optimization.
Regarding the type of network used by the USP and whether there is a joint or separate network for the delivery of letter mail and parcels, it appears that in most countries the USP has opted for a joint network for both services. According to the NRAs some of the main benefits for the USP derived from this choice seem to be cost reduction, the development of economies of scale and scope, as well as increased efficiency and flexibility. These benefits could also be reflected in the users’ experience, with the possibility of smaller increases in prices paid by users and a wider choice of products and service points. Notwithstanding, also in the situations where the USP uses separate networks for letter mail and parcels, some benefits for operators can be identified, usually related to increased efficiency. This could occur, in particular, in the last mile, deriving from the possibility of the USP being able to distinguish between postal items according to their weight and dimensions, and the choice of the most appropriate form of delivery. Possible benefits for users include increased speed and flexibility regarding delivery. Some cases of co-existence of both possibilities are also present in some countries, with the USP using a joint network only in rural areas, while in an urban environment separate networks are used. In this regard, it does not seem possible to conclude that one option has advantages over the other, since both seem to have certain advantages, both for USPs and users.

According to the information collected through the questionnaire, in many countries information on the development of pick-up points and parcel lockers is limited or incomplete since NRAs do not always collect this information or NRAs are not able to collect information from all players in the postal market.

**Access to infrastructure in the parcel market**

Legal provisions are incorporated in national law in order to make it possible that postal service providers have access to the network for the delivery in the parcel market. Some countries even have specific regulation that enables access to elements of the parcel delivery infrastructure of the USP/incumbent.

Alternative service providers make use of the letter network of the USP/incumbent to deliver letters or small packages in almost half of the countries. The tariffs and conditions of this access practice are all established on commercial agreements, with a regulating role of NRAs in some countries. The most common conditions applied concerning access to the infrastructure of the USP/incumbent are transparency, proportionality and non-discrimination.

NRAs have not identified legal restrictions that could limit the access for parcel service providers to use pick-up locations and/or parcel lockers of the USP/incumbent or other parcel service providers.

The majority of the NRAs indicated that they have not observed responses by parcel service providers on policy or regulatory developments on access to the infrastructure for parcel delivery.

A minority of the NRAs from countries that do not have (regulated) access to the parcel infrastructure of the USP/incumbent thinks this would possibly be desirable. Most NRAs do not see the necessity or have not examined this. The most mentioned reasons for this according to these NRAs is that the parcel market is competitive enough or that the parcel delivery service providers can cooperate on a commercial basis. Other reasons are that there is low interest in access to these networks in general and that it causes additional administrative burden.
Most NRAs mention benefits and downsides of access to pick-up locations and/or parcel lockers, a variety of them were identified. Benefits could be the accessibility and the convenience of parcel lockers, some of the mentioned downsides are possibly more disputes, overregulation, capacity problems and less incentive to invest. Finally, NRAs indicated a number of public interests that could be served by access to pick-up locations and/or parcel lockers. Most of them were non-economic public interests that could benefit from access to the parcel infrastructure.

Country cases

Regarding the case study of the German market, the German NRA concluded that following from the high competitiveness of the parcel segments with no indication of market failures, the standard-toolkit of the competition law will be sufficient to monitor the behaviour of the incumbent in the parcel market and thus there is no necessity for implementing mandatory access. The German NRA also concluded that, with regard to promotion of competition and to reach sustainability, it should be given priority to cooperative models between the different parcel delivery service providers on a voluntary basis.

In the Belgian case, the designated universal service provider, bpost, has installed parcel lockers in different parts of the country under the name Cubee. The Cubee network is open and independent, thus Cubee’s parcel lockers can be used by competing providers of postal services.

In Spain, apart from the parcel locker network developed by the USP and used exclusively for its parcels outside the scope of the universal service (the so-called Citypaq), it is relevant to mention a white label (agnostic-carrier) initiative that has recently been developed by the start-up Citibox. Time will tell if both initiatives will act complementarily in a successful way in terms of market competition or if some kind of regulatory action will be needed when market failure is to be detected. Additionally, Amazon has also deployed in Spain its own network of parcel lockers (Amazon Lockers).
1 Introduction

1.1 Background of the project

Recent growth of digitalization has changed users’ needs and has made an impact on the continuously decreasing volumes of traffic in the letter post market\(^1\) and e-commerce has increased the relevance of the parcel market. Parcel volumes are growing\(^2\) as consumers buy more and more online, generating more orders for parcel delivery. This has made an impact on the competition among postal operators, who may seek to improve their networks such as extending capacity to provide parcel delivery services, implementing and optimizing of tracking systems, introducing new delivery options, especially through parcel lockers and pick-up points, and investing in new infrastructure aimed at volumes derived from e-commerce. Promotion of competition in the postal services sector is one of the main goals of the Postal Services Directive (PSD). Access to the postal networks is an instrument for promoting competition, which is safeguarded in Articles 11, 11a\(^3\) and 12 of the PSD.

In this regard, it is important that the European Regulators Group for Postal Services (ERGP) continues to analyse aspects associated with access to the postal network. This report builds further on ERGP reports from previous years, and going more into detail on specific parts of access regulation.

The digital economy is expanding and it has been affecting the business activities of postal operators. In light of declining use of letter services, many Universal Service Providers (USPs) have shifted their business focus to Business to Consumers (B2C) e-commerce deliveries. In some cases, this has resulted in the integration of activities related to both letter and parcel segments. Global e-commerce sales have grown by 20% per year over the last decade\(^4\) and as e-commerce grows worldwide, postal operators are delivering more parcels than ever before. This is also (partially) due to the growth of the share of enterprises with B2C web-sales (see Figure 5). It is therefore relevant to take the impact of the volume changes in segments of postal market and the evolution of users’ needs on the development of postal networks into account. In particular the fact that postal networks have been built to deal with large volumes of traffic in the traditional letter mail market and now have to deal with decreasing letter volumes. The purpose of this report is, in essence, to

\(^1\) Total traffic volume across ERGP countries has fallen, on average, by 3.8% in the period 2013-2017, ERGP (18) 45 Report on core indicators for monitoring the European postal market.

\(^2\) The parcel market grew during the period 2013-2017 with an average rate of 26.8% and of 19.6%, ERGP (18) 45 Report on core indicators for monitoring the European postal market; parcel volume and revenues have grown by one and two-digits growth rates in most countries, WIK-Consult study (2019) on Development of Cross-border E-commerce through Parcel Delivery.

\(^3\) Article 11a of the PSD requires Member States to give all postal operators access to elements of postal infrastructure – facilities and information resources used in providing postal services – whenever necessary to protect the interest of users and or to promote effective competition.

examine how the recent development of the sector, in particular with the increased relevance of parcels, has influenced the development of postal operator’s networks and to identify postal operators’ innovative ways in which they have been responding to market developments in order to address users’ needs and the growing demand for e-commerce deliveries. The implications of these changing practices on the access conditions for alternative operators and on regulation are also analysed in the project.

The report builds further on the work developed in previous years, in which access regulation practices in the Member States were summarized, including rules for price differentiation, the application of special tariffs, the scope of the services to which access to the USPs network is permitted, as well as the application of the principles of transparency, non-discrimination and proportionality.5

This report reflects the evolution of postal networks in the context of a transition from letter mail to parcels and explores how postal networks were altered. In the examination of the increased relevance of the parcel market, the report pays particular attention to how this evolution has affected access by alternative operators to infrastructures used for delivery of parcels to end users.

This report focuses on the delivery infrastructure related to the parcel market, mainly parcel lockers, and access practices in this regard, given its relevance in recent developments in the postal sector. Parcel lockers are increasingly used for deliveries as they reduce last mile costs for postal service providers and can increase convenience for consumers6 and the number of parcel lockers, for the majority of countries, is growing.7 In different countries, the demand for parcel and express services is quite different.8 This holds also for the expansion of parcel locker networks. In Germany, for example, DHL started operations with parcel lockers in 2001 and has expanded its parcel locker network to include more than 3,400 parcel lockers across the country by the end of 2017,9 while in other countries10 parcel lockers were introduced later, e.g. only in 2014-2015, with different results regarding their expansion. The Copenhagen Economics study results11 present new infrastructure sharing models related to parcel lockers, e.g. sharing of parcel lockers among the USP and other postal operators (BE, LU). Consumers value parcel lockers as efficient and flexible distribution channels as parcel lockers are in general available 24/7, without the need to queue in a store. For parcel delivery service providers, using parcel lockers for deliveries has the advantage that multiple parcels can be dropped off at a single stop (which is much more efficient than the typical case of

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5 See ERGP (12) 36, ERGP (13) 38, ERGP (16) 41, ERGP PL (17) 38, ERGP PL (18) 27.
6 WIK-Consult study (2016) on Technology and change in postal services – impacts on consumers, study for Citizens Advice.
8 Demand for parcel and express services varies up to four times regionally, e.g. in Northern Europe – 22 items per capita per year, Western Europe – 12, Eastern Europe – 10, Southern Europe – 6. Main developments in the Postal Sector (2013-2016) done by Copenhagen Economics for the European Commission July 2018.
10 Austria, Belgium, Czech Republic, Cyprus, Hungary, Lithuania, the Netherlands, Spain (see more in Figure 10).
delivering one parcel per stop\textsuperscript{12}), and therefore it lowers the operational costs and moreover, the risk of missed deliveries is avoided which increases the first time delivery.

One of the main aims of this report is also to provide an overview of how this infrastructure related to the parcel market is being developed, used and shared by postal operators and what main benefits to operators (e.g. efficiency gains), and postal users bring. The presentation of country cases in this report gives a broader understanding of the delivery infrastructure developments related to the parcel market and access practices in this regard.

The report consists of five chapters:

1) This chapter presents the purpose and background of the report and describes the research methodology of the study;

2) Chapter 2 provides insights on the development of networks, giving an overview of decreasing volumes of letter market and increasing volumes of parcels, infrastructure in parcel markets key elements;

3) Chapter 3 consists of analyses regarding the access to infrastructure in parcel market, including the main aspects of provision, tariffs and condition of access, legal restrictions;

4) In chapter 4 three national country cases will be discussed, which provide more in-depth information;

5) Finally, the last chapter presents the overall conclusions that are derived from the analysis of the development of postal networks and access practices in parcel market.

**1.2 Working method**

In order to gather information regarding different aspects of the development of postal networks and the existing access practices on infrastructure related to the parcel market, a questionnaire was submitted in January 2019 to ERGP members and observer National Regulatory Authorities (NRAs).

The 28 NRAs that have answered the questionnaire are from the following countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Malta, Moldova, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.\textsuperscript{13}

This report was conducted using a mix of desk-top theoretical research, data of previous ERGP reports and the analysis of the answers provided to the questionnaire. It reflects the situation at the beginning of 2019. To complement the results from the questionnaire, details of cases from three Member States was made. These country cases are Germany, Belgium and Spain.

\textsuperscript{12} WIK-Consult study (2016) on Technology and change in postal services – impacts on consumers, study for Citizens Advice.

\textsuperscript{13} The abbreviations used in this report for these countries are explained in Annex 2.
The data used in the report is already collected by NRAs and is publicly available,\(^\text{14}\) which means that NRAs did not collect data specifically for the purposes of this exercise.

\(^{14}\) Only public data is included in the report, confidential figures are not presented in an individual form.
2 Developments of networks

2.1 Decrease of letter volume, increase of parcel volume

During the last few years the postal sector has experienced significant changes. In particular, the structure of postal services has been adapting to several developments in social and economic circumstances, which have resulted in an increasing demand for parcel delivery services and a reduction in the letter mail volumes.

According to the information collected by ERGP within its member and observers NRAs, the total traffic volume across ERGP countries has decreased by an annual average of 3.8% in the period 2013-2017. This trend, however, is not common to all segments: while an overall decrease in the letter mail segment was observed (-4.70% annual average), there was also, in the same period, a significant increase in parcel volumes, with an annual average increase of 19.6%.

Looking in particular at the more recent period (2016-2017), the reduction in letter mail volumes is common to the majority of the analyzed countries, with only 4 countries having had an increase in the total letter volumes (BG, FI, LT and RS, with increases of 7%, 42%, 0.3%, and 3%, respectively) while, on the other hand, only in Latvia there was a decrease of 7% in parcel volumes.


15 ERGP 18 (45) Report on core indicators for Monitoring the European Postal Market (2018). Whenever reference to this ERGP Report is made, notes referred therein relating to data presented should be considered.

16 Updated letter mail volumes data in LT.
There is an observable trend not only when looking at volumes, but also when analyzing revenues. Taking into account the data available for the period 2013-2017, it is clear that there is a decreasing trend regarding the total letter mail revenues (-1.3%), while the total parcel revenue is increasing (7.8%).

Both trends seem to be triggered by a main common factor, the progressive digitalization of society, which has contributed to more efficient, instant and direct ways of communication and interaction.
while also leading to an increased relevance of parcel delivery due to increased e-commerce practices.

In fact, e-substitution is becoming increasingly relevant, with even the communication between government institutions and businesses and citizens, which traditionally accounted for a significant part of the letter mail volumes, now happening (or at least being possible) through electronic channels in the majority of cases (see figure below). Similarly, business practices also play a significant role in e-substitution, regarding B2C-communication (e.g., invoicing), which increasingly takes place over electronic means.

Figure 4 – Electronic communication with public institutions 2017 (%)

In parallel, e-commerce has been steadily growing over the last years, with enterprises focusing on the development of their online presence, with a more pronounced effort from enterprises active in retail trade. Consumers are increasingly purchasing online, both domestically and cross-border, and even though the level of development of e-commerce may vary across the EU, its relevance for the economy as a whole is unquestionable, with significant effects on the postal sector in particular, since increased e-commerce practices are generally tied with an increase of postal volumes, particularly parcel volumes.

Source: Main Developments in the Postal Sector (2013-2016), Copenhagen Economics. Data from 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.
These changes, which are expected to continue to have a significant impact on the postal sector, are also expected to continue to foster the development of models of postal delivery more directed towards the parcel market. Some of which are already visible, for example through the development of parcel lockers. Notwithstanding, letter mail volumes still remain considerable, and there is a possibility that the overall volume decline that has been observed in the last years will reach a point of stabilization, although it is still too soon to be able to reach a clear conclusion.

As a result of these market trends, the composition of the total postal volumes has changed over the last few years, with an increasing relevance of parcel volumes, which accounted for 7% of the total mail volume in 2017, while in 2013 this was only 3%.

Similarly, the share of revenues deriving from the parcel segment has also been increasing (from an average of 30% during 2013 to an average of 37% during 2017), which also reflects the fact that the letter mail revenue dropped by an annual average of approximately 1%, while parcel revenue kept on growing between 2013 and 2017, with an annual average increase of 8%. This trend has been observed in the majority of ERGP countries, which have witnessed an increase in the share of revenues deriving from parcel delivery in the last few years, as can be observed in the following figure.

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18 Considering the sum of letter mail and parcels volumes.
It is also relevant to note the evolution of the estimated revenue per item, a metric that has been considered by ERGP as a useful indicator of the relative value of a postal item. Despite the evolution in total revenues from each segment as shown on Figure 3, the revenue per letter item increased across the majority of ERGP countries between 2013 and 2017 while the revenue per parcel item evolved in the opposite direction.
It is also worth noting the sector evolution regarding the number of active postal service providers, which also seems to signal a greater attractiveness of the parcel segment to market players when compared to the letter segment. In fact, in the period 2013-2017 a slight increase in the number of active postal service providers has taken place at a European scale, with an increase of 960 providers as compared to 2013 (5%), though the USPs in general have nevertheless maintained a high market share (both in terms of volumes and of revenues) in the letter mail segment. In the parcels segment however, the USPs have significantly lower market shares. From these data, illustrated in the figure below, it seems clear that the letter mail segment and the parcels segment have different characteristics, more specifically there is a significant difference in the level of competition present in each of these segments, which can be considered to reflect market players’ interest.

Figure 9 – USP and other market players market share, in terms of volumes and of revenues 2013 and 2017 (%)


From what has been observed, it seems clear that letter mail has been negatively affected by the development of electronic ways of communication, leading to declining volumes and a reduced level of competition that derive from the low level of attraction of this segment to new players.

Notwithstanding the fact that letter mail is still very relevant for today’s postal sector, representing in 2017, as noted in Figure 1 and Figure 3, 93% of total volumes and 61% of total revenues of the postal sector, parcel delivery has benefited much more significantly from the development in the field of e-commerce. Increasing volumes and revenues seem to have made it more attractive to invest, leading to the development of new services and facilities both by established and new players in the market, thus promoting the development of competition. This evolution, particularly when analyzed in contrast to the development of letter mail, clearly marks a distinction within the postal sector.

2.2 Infrastructure in parcel delivery

The developments in the market referred to in the previous paragraphs have also had an impact in terms of the infrastructure developed by postal operators, in particular regarding infrastructure related with the parcel segment.
According to data collected through the questionnaire, the USP has, in some countries, upgraded its existing postal network with new elements and introduced innovative solutions in order to improve parcel delivery. In most countries, one of the solutions introduced by the USP are parcel lockers, as shown in Figure 10. These are usually installed in highly frequented areas, such as railway stations, shopping centers or large post offices. This provides customers the possibility to collect parcels within flexible schedules, with some cases referring to the availability of parcel lockers all days of the week, 24 hours per day.

Parcel lockers are still one of the more recent evolutions in the market. Even though detailed information is still limited, the available data regarding the evolution of this infrastructure across Europe nevertheless shows its increasing number, with some countries experiencing a very significant growth over the more recent years, as can be observed in the following figure.

Figure 10 – Parcel lockers from the USP and from other providers 2013-2017 (number of lockers)

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According to the data available, USPs have been active in the development of parcel lockers, with an increase in the number of parcel lockers during the period 2013-2017 in most of the countries for which data was available. While data on the number of parcel lockers from other providers also seems to indicate an increase, the observed evolution does not seem to be as significant. ES seems to be a relevant case of investment by the USP in this infrastructure, representing the most
significant increase both in terms of percentage (672%) and of absolute number of lockers, with an increase of 2,707 lockers between 2015 and 2017. In fact, in 2017 the number of parcel lockers of the USP in ES represented 57% of the total number of parcel lockers across ERGP countries, according to the available data. Even though accurate information on other providers’ parcel lockers is not available, this also seems to be a very active segment of the Spanish market, with a white label company,\textsuperscript{20} Citibox, estimated to currently have around 5,000 parcel lockers in Madrid and aiming at developing further infrastructure not only in ES but across other European countries, with the objective of reaching 1.7 million parcel lockers by 2023.\textsuperscript{21}

Other cases of interest are, for example, EE, where the number of parcel lockers has been steadily increasing, with Estonian incumbent Omniva providing the largest parcel locker network in the Baltics and serving as a gateway for Chinese e-commerce items to Europe,\textsuperscript{22} and LT, where the greatest number of parcel lockers of other postal service providers is observed and where one of the highest increases between 2013 and 2017 was observed (97%).\textsuperscript{23} Also, in IT there was a noticeable development during 2018, with Poste Italiane having launched a network of parcel lockers throughout Italy (in April 2019, the total number of parcel lockers was 339,\textsuperscript{24} with the objective of installing a total of 420 lockers by 2020\textsuperscript{25}).

Notwithstanding, the significant development of parcel lockers does not seem to be common to all countries. For example, in HR the USP installed parcel lockers and made this service available during a trial period but eventually the USP reached the conclusion that there was not enough interest from users, and therefore did not proceed with the development of this service.

According to the information collected through the questionnaire, parcel lockers do not have their own postal code in the majority of countries.\textsuperscript{26} In these cases, parcel lockers are usually identified by the address in which they are located, in some cases specifying the place of their location (for example, chain stores, shopping centers). Notwithstanding, in LU and SK parcel lockers have their own postal code, while in EE only the USP parcel lockers do.

Regarding pick-up and service points, the available information regarding the evolution of their number is also limited or, in many cases, incomplete, since not all NRAs are able to collect information from all players in the postal market.

\textsuperscript{20} White label means a company that does not possess a network to collect/sort/transport parcels, but only possesses parcel lockers and/or service points/pick-up locations where parcels from different operators can be picked up by consumers.
\textsuperscript{24} https://www.poste.it/files/1476477685663/locker-puntoposte-orari-ubicazione.pdf.
\textsuperscript{25} https://www.posteitaliane.it/it/comunicati/posteitalianefirm-1476481812233.html.
\textsuperscript{26} The information in this regard is limited as NRAs do not always collect this information.
Report on the development of postal networks

Notwithstanding, the data available regarding whether or not pick-up and service points have their own postal code points to a situation similar to what is observed regarding parcel lockers, even though there is also limited information with the majority of NRAs not having available information regarding this matter. Nevertheless, 6 NRAs\(^\text{27}\) report that these have their own postal code locations, while 2 NRAs\(^\text{28}\) specify that there is a postal code even though this is not a unique postal code used solely for identification of the pick-up or service point, but it is rather the postal code of the post office or small business which acts as pick-up or service point. 5 NRAs\(^\text{29}\) indicate that these locations do not have their own postal code.

Along with the development regarding parcel lockers and pick-up and service points, which seem to be common to most countries, some other developments have been identified by some NRAs in their countries, both in terms of infrastructure and in terms of services offered, related with the introduction of new elements in order to address the changing users’ needs:

- Introduction of new delivery centers;\(^\text{30}\)
- Upgrade of sorting centers (in some cases specifically dedicated to parcels), usually with the introduction of automated processes and/or new equipment;\(^\text{31}\)
- Redesign of the logistics network;\(^\text{32}\)
- Development or improvement of track and trace systems, in some cases with the introduction of notification services;\(^\text{33}\)
- Transport optimization, in some cases with the introduction of new vehicles with greater capacity to accommodate parcels or more environmentally friendly;\(^\text{34}\)
- Receiver-oriented solutions (such as users being able to choose in advance a delivery method that best suits them, including alternative delivery addresses, flexible delivery hours and places).\(^\text{35}\)

Developments in the sector seem to be, in many situations, related to the improvement of parcel delivery. Furthermore, to what seems to be one of the most common developments in this area, the introduction of parcel lockers, as referred before, most of the initiatives identified seem to share some objectives aimed and providing greater flexibility for users while improving efficiency.

In most countries the USP uses a joint network for the delivery of letter mail and parcels instead of separate networks. There are also some cases of the USP using a joint network only in rural areas, while in an urban environment separate networks are used.\(^\text{36}\) Also, in some cases where a joint

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27 BG, EE, LT, LU, MD, and ES  
28 DK and SK.  
29 AT, BE, NL, PL, and SI.  
30 CZ.  
31 AT, EL, IT, NL, PL, RO, SI, and SK.  
32 IT and PL.  
33 CY, DE, EL, ES, HR, HU, LT, NL, MD, NO, PT, PL, RO, and SI.  
34 AT, IT, HR, PL, PT, RO, RS, and SI.  
35 AT, BE, CZ, DK, HR, LT, NL, NO, PT, and SI.  
36 AT, CZ, HR, NO, and RS.
network is used, there are differences regarding delivery in the last mile: while letter mail is delivered at home, parcels usually have to be collected in post offices.

Figure 11: Use of a joint or separate network for the delivery of letter mail and parcels by the USP (%)

When the USP uses a joint network, even if it is only in rural areas, other postal services apart from letter mail and parcels are also usually provided through the same network. Even though there seems to be some diversity regarding the type of products which are provided, with some NRAs referring, for example, that the USP uses the network for non-postal items (RO) and other referring to other services (bulk publishing mail services, UK), in the majority of cases publications (e.g. newspapers, magazines) and unaddressed mail are provided through the same joint network. 4 NRAs\(^\text{37}\) note that the same network is used for all postal items (only within the scope of the US in the case of EL), with the specific case of BE, where newspapers and periodicals are the only items that are distributed separately.\(^\text{38}\)

Even in cases where the USP uses separated networks for letter mail and parcels, the parcel network is usually not exclusive to parcels. This procedure seems to be the norm for both the situations of complete separated networks and also where a separated network is only used in urban areas.

Taking into account the data provided by NRAs which have information on this matter,\(^\text{39}\) the network used for parcel delivery is also used for other services, and in most situations it is related to the delivery of express items (60% of replies), even though there may be some differences regarding delivery in the last mile. In cases where the parcel network is not used for the delivery of express

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\(^{37}\) CY, EL, IT, and PT.

\(^{38}\) This involves acknowledged newspapers and periodicals as defined by the Belgian postal regulation. Their delivery before 7.30 am is currently insured by bpost and its subcontractors.

\(^{39}\) 10 out of the 13 NRAs which reported that the USP uses separate networks (as a whole or in urban areas only).
mail, it is nevertheless used for other services: in NL the parcel network is used for registered mail and Monday delivery of letters, deriving from a Universal Service Obligation (USO),\textsuperscript{40} while in SI, even though there is not detailed information available, the parcel network seems to be used within the logistics framework as well.

In countries where the USP uses a joint network it can be concluded that one of the main benefits for the USP distributing letter mail and parcels with the same network could be cost reduction, with 7 NRAs\textsuperscript{41} referring to this possibility. RO highlighted that using a joint network for transport and delivery simultaneously, which are the largest parts of the cost base, leads to economies of scale and scope. 4 NRAs\textsuperscript{42} further note that a joint network could increase USP efficiency and flexibility, with IT stating that increasing the flexibility through variable staffing and dynamic re-routing could be as a benefit for USP, and ES notices that effectiveness for the USP is reached by reorganizing the delivery units to better meet the users’ needs. PL considers that the investments of USPs in a joint network will on the one hand result in an increase of revenues, improvement of the quality of services and an increase in wages and employment, while on the other hand PL also highlights that without significant investments in logistics infrastructure in the coming years, the USP’s network would be overloaded and the delivery time would have to be extended.

Figure 12: Possible benefits for USP regarding the choice of using a joint network for the delivery of letter mail and parcels


4 NRAs\textsuperscript{43} also mentioned that cost reduction for the operator could have an effect on prices, leading to smaller increases in prices paid by users. According to HU and LT, using a joint network can benefit users as a wider range of products and wider choice of service points can be made available. 3 NRAs\textsuperscript{44} emphasized the importance of network reliability for users. Only CY does not see any

\textsuperscript{40} The Dutch Postal Act 2009 requires PostNL, as the USP, to provide nationwide services and to perform a daily delivery round from Tuesday until Saturday, except on public holidays. There is also a requirement to deliver medical and mourning mail on Mondays.

\textsuperscript{41} BE, BG, DE, HU, IT, LT, and PT.

\textsuperscript{42} IT, LT, PT, and ES.

\textsuperscript{43} BE, HU, PT, and BG.

\textsuperscript{44} ES, PL, and RO.
benefits for users of USP using a joint network, as they need to go the post office to pick up their parcels and have to spend time and money for transportation.

The countries AT, HR and RS, where the USP only uses a joint network for delivery of letter mail and parcels services in rural areas, have mentioned cost savings as a benefit for the USP for such a choice, while for users the benefits could be lower prices due to cost savings (AT) and faster delivery and higher quality of service (HR, NO, RS).

The countries EE, MT, NL and SI, where the USP provides the delivery of letter mail and parcels services with separated networks, indicated that the main benefit for operators occurs in the last mile, since it is more efficient for the USP to distinguish between postal items that fit through the letter box (light and easy for the mailman to deliver door to door) and postal items for which the door has to be opened (larger parcels and registered mail which are being delivered with delivery vans). Moreover, SK referred to the cost efficiency of using separate networks.

The main benefits for users in countries where the USP uses separate networks, as stated by 4 NRAs, are related to better delivery organization:

- EE and SK indicated faster services;
- MT noted users receive both parcels and letters at their doors, as well as increased flexibility around the times that parcels can be delivered;
- NL reported that consumers do not need to stay at home for parcels that fit through the letterbox and the percentage of successful first-time delivery is 100%.

Furthermore, lower costs for USP’s using separate networks is highlighted by NL and SI as another possible benefit.

In this regard, both options of using a joint or separate network for the delivery of letter mail and parcels seem to have certain advantages, both for USPs and users. In fact, the co-existence of both types of networks in some countries, with the USP using a joint network only in rural areas and separate networks in urban environments, could indicate a certain complementarity between them.

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45 EE, MT, NL, and SK.
3 Access to infrastructure in parcel delivery

3.1 Provision of access

3.1.1 Legal measures to ensure access to the postal network under transparent proportional and non-discriminatory conditions

The PSD enables simple access to the networks for all users within the scope of the universal service. In the PSD, the principles of transparency, proportionality and non-discrimination in relation to access regulation are incorporated to ensure that USPs provide access to their postal networks to all users and postal service providers accordingly. In order to do so, Article 11a of the PSD enables Member States to adopt measures to ensure access to the postal network under transparent, proportional and non-discriminatory conditions. How it should be implemented in the national law is to be decided by the Member States themselves.

Regarding the obligation of Article 11a of the PSD to adopt measures to ensure access to the postal network, 27 of the 28 NRAs have stated that Article 11a of the PSD has been implemented in their national laws, which are mostly Postal Acts. Only the Serbian NRA indicated that there is no legal provision that guarantees postal service providers to have access to the network for parcel delivery.46

There are however differences regarding access rights: 8 of the 28 NRAs47 state that the postal acts in their countries are general postal acts that obliges postal service providers to give access to the postal network and do not differentiate between letter mail and parcels. 13 NRAs48 mentioned that they have a role when disputes about the access to the network arise between postal service providers.

According to 8 of the NRAs,49 the national provision to ensure access to the postal network in relation to parcel delivery means that access to elements of the parcel delivery infrastructure of the USP/incumbent, such as the access to the postal code, address databases and the re-direction service, are made available to all postal service providers. However, this access provided to postal service providers does not include access to the physical facilities. BE, EL, MT and RO have mentioned that their country have adopted additional measures in secondary legislation to ensure the conditions for parcel delivery. BE has secondary legislation specifically for parcels stating that access (under conditions) to USP post offices must only allow the handling of parcels, their storage and their delivery to customers in accordance with the organizational and security rules of bpost, the

46 RS is not a member state and therefore has no obligation to transpose the PSD.
47 BE, CZ, DK, IT, PL, PT, RS and SE. According to the Italian NRA, the Italian postal national law does not oblige the operator to give access to its own network, but limits itself to state that the NRA may adopt decision on access.
48 BE, HR, CY, CZ, HU, IE, LT, NO, PT, SI, ES, ROO, and UK.
49 AT, CY, CZ, DK, LU, NL, PL, and SI.
Belgian USP. EL has secondary legislation that describes conditions under which exemptions are applied from the delivery of parcels in the premises of the recipient, or to the development of mailboxes to the residents of rural areas. The legislation of MT has adopted measures enabling the legislator to impose an obligation on the USP to produce a reference offer for access to the postal network when it is deemed necessary. The Romanian NRA, ANCOM, has issued several decisions which ensure the access to the postal network such as obliging the designated USP to provide access. It is also noteworthy to mention that even though ES has not adopted any primary or secondary legislation, the Spanish NRA has published two Decisions in 2018, one related to the procedure for the approval of the standard access contract and a second one approving such a standard access contract.\(^{50}\)

3.1.2 Access to elements of the parcel delivery infrastructure

In 17 countries\(^{51}\) the access to elements of the parcel delivery infrastructure of the USP/incumbent is being regulated either through general legislation or through special regulation for parcel delivery, in which the access mostly concerns delivery infrastructure such as the postal codes, address database and information on the change of addresses.

Figure 14 – Number of countries that have national regulation enabling the access to elements of the parcel delivery infrastructure of the USP/incumbent.


Regulation in EL appears to be the most extensive: the regulation of the access to elements of the parcel delivery infrastructure of the USP/incumbent covers pick-up locations, parcel lockers, track &

\(^{50}\) https://www.cnmc.es/expedientes/stpdtsp00815.

\(^{51}\) AT, BE, HR, CY, CZ, DK, EE, EL, LT, LU, MT, NL, NO, PL, PT, RO and SI.
trace systems, postal codes, address database, post office boxes, information on change of address, re-direction service and return to sender service.

Access to the elements of the parcel delivery infrastructures differs when it concerns other postal service providers and white labels companies: all the questioned NRAs, with one exception of NO, answered that the access to elements of the parcel delivery infrastructure of white labels is not being regulated or that they do not have the information.

Furthermore, specific regulation of access to elements of the parcel delivery infrastructure of the other postal service providers applies in a significant minor percentage when compared to the infrastructure of the USP/incumbent. 22 of the 28 NRAs stated they do not regulate access. According to the countries that do regulate access, such as Lithuania, their regulation is being applied to each postal service provider. In SE and NO regulation applies when the other postal service providers are also owner of post office boxes. While this is also the case in NL, it appears that in practice only the USP is being regulated as other service providers do not have post office boxes, own address or postcode systems and this regulation applies more to letter mail rather than parcels. In EL the pick-up locations and parcel lockers are even considered as part of the network of the postal service provider.

3.1.3 Conditions and requirements

In order to access the infrastructure, conditions or requirements can be applied. According to the collected information, only AT, CZ and SI stated that other postal service providers do not have access to the pick-up locations and/or parcel lockers of the USP. RS mentions that conditions and requirements are being prescribed by the USP and in ES there is no regulatory development yet for other postal infrastructures that are managed by the designated postal service providers. In 16 countries there are no other conditions or requirements apart from the requirements concerning transparency, proportionality and non-discrimination. NO and SK explicitly mention that it is important that the relevant costs are covered for the access. In NO, this is also a condition for the other parcel service providers and white label companies. Apart from NO, NRAs do not have information about white label companies.
3.2 Tariffs and conditions of access

3.2.1 Use of access to the letter mail infrastructure

According to the answers provided by the NRA’s, in 10 of the 28 countries\textsuperscript{56} parcel service providers do not use access to the letter mail infrastructure of the USP/incumbent. According to CZ this is because parcel service providers use their own delivery network. EL states that even though the legislation framework allows alternative service providers to have access to the USP’s network within the scope of the USO, in practice this is through a commercial agreement. In PT, the access of USP’s to the Postal Network Offer does not include a parcel service, although the network can be used for small packages with a maximum weight of 2 kg which are sent as items of correspondence.

![Figure 17 – Number of countries where other parcel service providers use access to the letter network of the USP/incumbent.](image)


In countries where parcel service providers do make use of the letter mail infrastructure of the USP/incumbent, access is primarily used for all the services within the scope of USO, for example to enable the delivery of letters or small packages (in areas where other service providers do not have its own network) or access to databases for administrative notifications such as on change of addresses. In Serbia access only applies to the collection phase. Regarding the tariffs and conditions of the access, these are all established by commercial agreement. In some countries\textsuperscript{57} there is a form of (in)direct regulation of the access tariffs and conditions by for example approving the terms.

\textsuperscript{56} AT, HR, CY, CZ, DK, HU, MD, NL, RS and SK.

\textsuperscript{57} BG, LT, SI, NL and UK.
3.2.2 Principles of access to parcel delivery infrastructure in practice

According to the collected information, it appears that only 6 of the NRAs\(^\text{58}\) have applied in practice the national provisions implementing the principles\(^\text{59}\) applicable to access to parcel delivery infrastructure, as laid down in Article 11a of the PSD.

Figure 18 – Number of countries that applied the national provisions implementing the principles applicable to access to elements of the parcel delivery infrastructure in practice.


In DE there were requests from parcel service providers seeking access to parcel lockers. BNetzA however cannot intervene and rule that the incumbent shall grant access to other undertakings that are being active in the field of parcel logistics.\(^\text{60}\)

In LT the NRA started an investigation on conditions and prices of the USP regarding access to the postal network. It included an analysis of the access offer that has been published by the USP and made a comparison of the conditions and prices that were published by the USP for the access seekers (postal service providers) and business customers. As a result, the NRA has identified three shortcomings. It appears that the publication of information on applicable discounts was not sufficient, the publication of prices for insurance of postal items were different and the publication of prices was not

\(^{58}\) DE, LT, LU, MT, PT and UK. In PT, ANACOM has adopted a draft decision on 16 June 2017 (https://www.anacom.pt/render.jsp?contentid=1413936&languageid=1) on the access points to the postal network of the USP and has continued to monitor the development of the access conditions made available by the USP (including contributing with an opinion on a decision adopted by the Portuguese Competition Authority) but no final decision has been adopted yet.

\(^{59}\) “...the right of Member states to adopt measures to ensure access to the postal network under transparent, proportional and non-discriminatory conditions.”

\(^{60}\) See subchapter 4.1 for Germany case study.
of delivery time of postal items was different as well, as the time for business customers was set in a more favourable delivery time than for the access seekers. The NRA has therefore requested the USP to update the access offers and the USP has honoured the request updating the access offer in order to avoid inconsistencies with the transparency requirements.

The NRA of LU has mainly been informing and following up on the common terms and conditions for access to the parcel infrastructure. MT has requested the USP to publish a reference offer to facilitate access to the infrastructure such as postal codes, post office boxes and sharing the redirection information. In PT, ANACOM has adopted a draft decision on the access points to the postal network of the USP and continues to monitor the development of the access conditions that are made available by the USP, while is also analysing a dispute between the USP and another postal service provider, although these are not specific to parcel infrastructure. In the UK, Ofcom has imposed an access condition on the designated universal service provider, but it has not yet imposed any general access conditions specific to parcel infrastructure.

### 3.2.3 Legal restrictions limiting the access to pick-up locations and/or parcel lockers

Most of the NRAs do not see any legal restrictions that limit the access for parcel service providers to use pick-up locations and/or parcel lockers of the USP/incumbent, other parcel service providers and white label companies.

Figure 19 – Number of countries with legal restrictions that may limit access practices for parcel service providers to use access to.


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61 BE, HR, CY, CZ, DK, EE, EL, HU, LT, MT, MD, NO, PL, PT, SI, SK, ES, SE and UK.
The NRAs of LU, NL, RO and RS do however see legal restrictions that limit the access practices for parcel service providers to make use of the pick-up locations and/or parcel lockers of the USP/incumbent. According to LU this is due to the fact that access is only given to parcel service providers mentioned in legislation, which can prevent access or regulatory supervision from happening.

NL mentioned that the legislation is designed for P.O. boxes in the letter mail network, and not for access to the infrastructure for parcel delivery. When end-to-end operators do not provide access to their infrastructure, postal service providers that want to establish new pick-up locations or parcel lockers have to make a business case on a lower parcel volume. In RO, the designated USP can refuse to grant access to parcel service providers if this means that it will significantly encumber the capacity of the USP/incumbent to provide its own services. Moreover, in RS, the other postal service providers are legally restricted to perform parcel services that go beyond the limit of 10 kg.

Additionally, even though HR stated that they do not see any legal restrictions that limit the access practices, they did mention that their USP does not have pick-up locations and parcel lockers. Moreover, according to the Croatian NRA, the main problem is about the ownership of the infrastructure of other parcel providers and the right of the NRA to regulate access to non-public infrastructure.

As most NRAs have not observed legal restrictions that limit the use by service providers of access to the parcel infrastructure, almost no NRA sees an effect in the market that arises from legal restrictions. Only the NRA from LU, IRL, mentioned that the influence of a legal restriction could eventually result into that no access or no regulatory supervision would be possible.

Besides legal restrictions to access, there may also be legal restrictions for establishing pick-up locations or to place parcel lockers which subsequently may affect access to these elements of the infrastructure. A possible legal restriction may be in the field of heritage such as when a postal service provider is not allowed to place parcel lockers because this would change aspects of a heritage building. Another legal restriction could be when a local government is not allowing parcel service providers to place parcel lockers in the public space due to the use of the public space or the colour of the parcel lockers.

### 3.3 Effects on markets and response by parcel service providers

The majority of the NRAs indicated that no responses by parcel service providers to regulatory developments have been observed. Also, most NRAs think the effect on the market of regulated access to parcel lockers would be limited. However, most NRAs did identify benefits, downsides and other public interests involved in access to the parcel infrastructure.
3.3.1 Regulatory response

According to the collected information, it appears that 20 of the 28 NRAs\textsuperscript{62} indicate that they have not observed responses by parcel service providers on policy or regulatory developments on access to the infrastructure for parcel delivery. The German NRA responded that the response observed by parcel service providers is standardization. In PT, there has been a dispute between the USP and another postal service provider regarding access to the USP’s postal network which is currently being analysed by the ANACOM, although this is not specifically related to parcel infrastructure. In RO, the response on a public consultation of the conditions for access was that the alternative service providers did not show any interest in the access to the network of the USP. In ES, the NRA, CNMC, has formulated an opinion in response to queries regarding Correos’ automatic parcel lockers.

Figure 20 – Number of countries in which a response by parcel service providers on policy or regulatory developments on access to the infrastructure for parcel delivery has been observed.


3.3.2 Benefits and downsides of access

Regarding the benefits and downsides of regulated access, most NRAs did not provide a response for the situation in their country since there is no (regulated) access to pick-up locations and/or parcel lockers.

For the countries that do not have (regulated) access to pick-up locations and/or parcel lockers, most NRAs who provided an answer (13\textsuperscript{63}) do not think this is desirable at this moment of time, while 4 NRAs considered this could be a positive measure. 1 NRA\textsuperscript{64} responded positively and another

\textsuperscript{62} AT, BG, HR, CZ, DK, EE, HU, IT, LT, LU, MT, MD, NL, NO, PL, RS, SI, SK, SE, and UK.

\textsuperscript{63} AT, BE, CZ, DK, EE, DE, LT, PL, RO, RS, SK, SE, and UK.

\textsuperscript{64} MD.
3 NRAs\textsuperscript{65} think this possibly is desirable). 4 NRAs\textsuperscript{66} responded that this has not been examined. The most frequently stated reasons for NRAs to indicate that regulated access is not desirable are that according to these NRAs parcel delivery is competitive enough or that the service providers can cooperate on a commercial basis. Other reasons are that there is low interest in access to the networks in general and that it causes additional administrative burden. Reasons why access to pick-up locations or parcel lockers may possibly be desirable are due to the number of service providers providing parcel delivery locally in the future and because the volume being delivered through a pick-up location or parcel locker becomes higher which can make investments profitable.

As the main benefits of access to pick-up locations and/or parcel lockers for the access provider, access seeker, end users a variety of reasons were mentioned by NRAs. The main benefits that were identified are:

- Alternative parcel service providers could use parcel lockers of the incumbent or other parcel service providers
- Cost sharing between parcel service providers and therefore lower prices
- The parcel service provider providing access would achieve better utilization of its parcel lockers
- Easier for the access provider to earn back investment if he would be able to recover the costs for excess capacity
- The access seeker would be able to provide services without developing an extensive network
- End users would be able to benefit from a wider choice while keeping the comfort of a unique network, so end users could use just one pick-up point for all parcels
- Delivery would always be possible, therefore there would be less returns to sender due to non-accessible pick-up locations or parcel lockers
- Convenient, faster and unlimited time to pick up parcel at closest location for end users
- Benefit for urban logistics in terms of sustainability

The NRAs of PL and DK have indicated that they do not see any benefits of access to pick-up locations and/or parcel lockers.

A number of NRAs also mentioned downsides of access to pick-up locations and/or parcel lockers for the access provider, access seeker, or end users. The main downsides identified by NRAs are:

- More disputes between parcel service providers
- Regulation might create greater resistance than willingness to share

\textsuperscript{65} MT, NL, and SI.
\textsuperscript{66} CY, IT, LU, and ES.
• Problems could arise in peak periods (e.g. Christmas), when the capacity of pick-up points or especially of parcel lockers could be insufficient
• Access provider will encounter more competition which can result in less incentive to invest for other parcel service providers
• Hindrance to development of innovative solutions
• Possible conflicts and faults in delivery
• The need to preserve security and quality of service would be challenging
• End user might get confused who is the actual service provider and to whom complain if something goes wrong
• Overregulation, no regulatory intervention is preferred if market forces can offer by themselves reasonable and convenient solutions
• An excessive administrative burden

Finally, NRAs indicated a number of public interests that could be served by access to pick-up locations and/or parcel lockers. The most important ones are:
• Better usage of public space since there would not be parcel lockers for different parcel service providers next to each other on the street
• Convenience to the users of parcel services since they can choose the closest parcel locker or access point
• Less pollution and sustainable delivery
• Less congestion in cities due to less movements by vans
• Higher efficiency of delivery
• City digitalization prospects
4 Country cases

4.1 Case study from Germany

Legal and/or regulatory framework

Legal framework

In line with the German Postal Act (PA) access obligation is exclusively specified for the licensed letter segment. In concretization of the PSD, the provisions in the German Postal Act relating to the access regime stipulate a mandatory access based on the criteria of transparency, non-discrimination and taking into account the principle of proportionality. The principle of proportionality, as a general principle of the German administrative legal framework, requires each decision of the NRA, with respect to the mandatory access, to be based on a fair assessment and weighing the interests of the alternative operator in the letter segment against the interests of the incumbent.

Contrary to PSD, the provisions of the German PA concerning access are not related to universal services. The national framework does not foresee a mandatory access for any of the parcels and packages regardless whether these items belong to the universal service or not. The justification for the discrepancy in the national legal framework lies in the fact that the parcel logistic systems involving the operational facilities are not seen as “essential facilities”. In line with this doctrine the German legislator does not see the necessity of an access for alternative providers as a prerequisite for workable competition and argues that other parcel operators do not need these infrastructure elements of the incumbent for a profitable engagement.

In contrast to the letter segment with the sophisticated system of access regulation, the NRA cannot intervene and rule that the incumbent shall grant access to other undertakings being active in the field of parcel logistics due to in the absence of an agreement between the incumbent and the access seeker in the parcel segment. As long as there are no market failures or malfunction in one of the parcel segments neither the NRA nor the competition authority sees a justification for any kind of mandatory access.

Market situation

This asymmetry in the legal framework with regard to the access regime is due to the completely different market development in the letter segment on one side and in the parcel segment on the other side. Like in other European countries there is a remarkable distinction in the competition level of the letter and parcel segment. In the letter segment there is a historical USP with an overwhelming market power and otherwise marginalized competition. According to the annual report the market share of the USP as the historical incumbent amounts to 83.5%.

In the parcel segment however, the German NRA sees a vital competition between the different parcel operators. Although the German incumbent possesses significant market power in the
relevant parcel segments, it is currently facing fierce competition by other potent internationally operating logistic undertakings that were previously active in the express segment and operators that were subcontractors of a large retailer. To benefit from the positive and simultaneously profitable e-commerce boom, the alternative parcel operators extended their business activities to the B2C segment targeting private clients.

Like in other European countries and in line with the boundaries of the large parcel operators the market can be differentiated into courier, express and standardized parcel segments. For each of these segments the German NRA sees high competition.

Within the segment of standardized parcels, the German NRA delimitates according to the sender between B2X and C2X sub-segments for regulatory purposes. B2X comprises parcels sent by business mailers, while C2X is related to parcels sent by private clients. In particular for the letter one the German NRA sees the highest degree of monopolization.

The changing consumer behaviour and the different expectations of individualized and tailored delivery options lead to more and more disappearing boundaries resulting in a convergence of the segment express and standardized parcels. These segments are considered to be competitive by the German NRA.

Parcel Logistics

Network topology (Deutsche Post AG)

Deutsche Post AG set up a nationwide postal logistic network with 34 inward and outward freight sorting facilities for tracked parcels and 83 inward and outward sorting facilities for letters (single mail, transactional mail and direct mail) and for untracked small-sized packages.

Parcels and letters are sorted in a two cycle pre-sorting processes followed by a final sortation for last mile activities. In delivery, the incumbent differentiates between the stand-alone delivery processes for letters and parcels in urban regions and urban agglomeration areas on the one side and the joint delivery processes preferably in the suburban and rural areas on the other side. The stand-alone units are solely configured for the requirements for letters respectively parcels.

In 2017 Deutsche Post set up 17,900 stand-alone mail delivery operating units, 4,481 stand-alone parcel delivery operating units and 33,700 joint delivery units, in which approximately 100,000 postmen are employed and deliver annually more than 13.5 billion letters and 2.5 billion parcels to 43 million households 6 days a week. Both, the stand-alone and the joint units, are set up for operational purposes lacking business facilities and special employees and thus cannot be reconfigured as an access point for other alternative operators.

Since the launch in 2001, the German Post has installed around 3,400 parcel lockers (pack stations), meaning there are now 340,000 compartments available to customers in 1,600 cities and municipalities. Because of the network’s density, 90% of the German population can now reach a nearby DHL Packstation in 10 minutes or less. Since 2009, the number of large corporations locating pack stations at their offices has grown, increasing accessibility and convenience for employees.
Regulation of parcel markets

As long as the parcel segment enjoys such a vital competition neither the NRA nor the cartel office sees any need to intervene in the parcel market. In line with the general competition rule and according to the sector specific postal framework the focus of the German authorities lies on supervising and monitoring the market development in the different market segments.

A key element of the regulatory toolkit is the market observation. Given the dynamic of the parcel logistics and the implication for the profitability of the e-commerce activities the German NRA intensified its research efforts. The emphasis of these studies on courier- express- and parcel markets is to understand the trends and the mechanisms.

To gain a more in-depth survey on the different market segments, the German NRA developed a detailed questionnaire for the major part of the parcel operators. As a flanking measure it is foreseen to carry out interviews with the so called “Big Five” of the parcel market. The outcome of this questionnaire in conjunction with the results of the interviews allows the NRA to forecast the development in the parcel developments and to identify potential market failures. A challenge is to deal with the issue of large e-commerce providers. This issue is twofold. On one side these providers run transactional platforms and exercise demand power. On the other side these e-commerce undertakings are also active as parcel providers and thus they compete with the USP and with the other historical parcel providers.

Given the high level of competition the German NRA’s activities aim at preventing abusive as well as anti-competitive behaviour of the incumbent. Therefore, the focus of the NRA lies on supervising the pricing strategies of the incumbent including its discount schemes for large mailers. With regard to the access to the parcel networks the German NRA act as a mediator between the different parcel operators. A crucial issue is to ensure and to improve interoperability between the different network systems. In order to safeguard the interoperability, representatives of the German NRA are members of different committees and working groups that are dealing with national and international standardization including interoperability issues. These issues are related to the use of parcel lockers and data exchange formats in a multi-carrier environment, in particular small and medium sized parcel operators are interested in cooperative models. Via standardized electronical and physical interfaces, sortation and delivery process in a multi-carrier environment can be optimized. Thus parcels can be reliably tracked and traced in the case of handover to other parcel operators.

Furthermore the NRA organized a panel discussion dealing with the urban logistics in the light of sustainability and efficiency. Like in other European countries urban agglomerations suffer from traffic congestions. Among other proposals for ecological logistics the panel participants controversially debated whether and to what extent parcel operators can cooperate by using consolidation points/ parcel depots and scanning potential real estate solutions as available sites to serve last mile deliveries while emphasizing shorter distances in drive time. As a main outcome of the panel, it can be summarized that large parcel operators denied such a consolidation option arguing that the principle “one-face to the costumer” is considered to be essential for the profitability of the offered parcel services.
Conclusion

According to the German NRA, the standard-toolkit of the German competition law will be sufficient to monitor the behaviour of the incumbent in the parcel market as it seems that due to the high competitiveness of the parcel segments there is no indication of market power. Thus there is no necessity for implementing a mandatory access. With regard to promotion of competition and to reach sustainability it should be given priority to cooperative models between the different parcel operators on voluntary basis.

4.2 Case study from Belgium

Since 2014, bpost, the postal incumbent, has installed well-located (train stations, supermarkets, parking lots, etc.) parcel lockers in different parts of the country. By the end of 2014, it had 125 locker locations of which most were accessible 24/7.

In 2016, bpost took a majority interest in De Buren, a Dutch network of independent parcel lockers.

Since 2017, bpost collaborated with De Buren on establishing an open network of parcel lockers in Belgium. These lockers were rebranded to Cubee.

The Cubee network is open. Indeed, Cubee’s parcel lockers can be used by competing providers of postal services. This open network is the main difference with the previous parcel lockers of bpost.

bpost has concluded partnership agreements for the use of the Cubee parcel lockers with the following logistics operators: GLS, DHL, Nox and DPD. By opening the network to other operators, bpost makes them bear some of the costs of the installation and maintenance of parcel lockers.

By the end of 2017, the Cubee network had 152 locker locations. bpost strived to have more than 450 of these Cubee parcel lockers in Belgium by the end of 2018. At the beginning of 2019, however, only 183 lockers of these Cubee lockers were installed in Belgium.

The low use of parcel lockers in Belgium explains the high discrepancy between the aimed and actual number of Cubee parcel lockers. A study on consumer needs, commissioned by BIPT in 2019, will entail the consumer approach to parcel lockers and might shed some light on the low usage of these lockers.

According to bpost, the use of parcel lockers is too low to ensure the profitability of the service. Moreover, bpost withdrew its participation from De Buren abroad. Next to the Cubee parcel lockers, there only exists a very limited parcel locker network exploited by DHL Express. It offers only two locations with parcel lockers in Belgium. Those locations are both in the city of Antwerp. These DHL Express lockers can be used only for sending parcels.
4.3 Case study from Spain

Access legal regime

Article 45.1 of the Spanish Postal Act\(^67\) states that access by postal service providers to the postal network managed by the designated operator is guaranteed, with respect to the services covered by their individual licence, in conformity with the principles of transparency, proportionality and non-discrimination.

As that licence is related to the services under the universal service scope, access is guaranteed for ordinary and registered letters up to 2 kg and for postal parcels up to 20 kg, in both cases domestic and cross-border.

Article 45 Postal Act establishes that the designated postal operator has to offer by default a standard access contract and alternative operators can also negotiate the tariffs and conditions with the designated postal operator.

Furthermore, article 47 of the Spanish Postal Act states that the conditions of access of individual licence holders to other postal infrastructures such as postcode system, address data base, post office boxes, delivery boxes, information on change of address, redirection service or the redirect to sender service, shall be duly determined in a transparent and non-discriminatory manner provided that this is necessary to protect user interests or to promote real competition, according to the technical and pricing arrangements set forth in the agreements signed with the universal service provider for this purpose, all this without prejudice to data protection regulations.

However, no regulatory development has been carried out regarding access to other postal infrastructures.

Though no primary or secondary legislation was adopted, the Spanish NRA has published a Decision on 25 April 2018 approving the standard access contract (according to article 45 Postal Act) based on the Decision on 15 February 2018 on the procedure for the approval of such a contract.\(^68\)

The access regime in the current Postal Act only considers services within the universal service scope. Therefore, alternative operators can deposit at Correos’ mass admission centres domestic parcels (the product name is ‘paquete azul’) and cross-border parcels (the product name is ‘paquete internacional económico’) up to 20 kg.

The network of parcel lockers (Citypaq) developed by the USP

Correos has deployed a network of automatic parcel lockers (CityPaq). They are mainly available at train/underground stations, supermarkets, malls, parking lots, offices and petrol stations. The parcels handled through CityPaq are parcels out of the universal service scope.

\(^{67}\) www.boe.es/buscar/act.php?id=BOE-A-2010-20139
\(^{68}\) www.cnmc.es/expedientes/stpdtsp00815
According to Correos 2017 Integrated Annual Report, at the end of 2017 there were 3,110 CityPaq automatic parcel lockers installed. Those terminals are used for sending parcels and returning online purchases. Additionally, Correos employs its 2,395 post offices as pick-up or drop-off points.

Citypaq automatic parcel lockers are only used by Correos for its express parcels (out of the universal service scope) and the user can find a terminal in Correos’ website introducing the province name and the municipality name (zip code is not requested).

**The carrier-agnostic parcel locker initiative fostered by a white label start-up (Citibox)**

There is a white label (carrier agnostic) parcel locker start-up founded in 2015, Citibox (https://citibox.com) who has already installed around 5,000 parcel lockers and aims around 1.7 million parcel lockers by 2023. The first goal is to deploy 310,000 parcel lockers in Madrid in 14 months. Afterwards, it plans to expand to Barcelona, Paris, London, Frankfurt, Berlin, Hamburg, Amsterdam, Stuttgart and Munich.

The PDSPs using such parcel lockers would save 0.8 euros per parcel delivery. Basically, they save time in the delivery (a classical delivery requests 5 minutes, and the delivery through the parcel locker would require around 40 seconds; no appointment with the receiver is required; 100% of the deliveries are guaranteed against the current rate of delivery failures around 17%). The PDSPs would pay a fee per parcel delivery to Citibox in order to allow the return on the investment to Citibox, and the receivers would not have to pay for the installation and use of the parcel locker. Therefore the initiative would provide benefits for the access provider, the access seekers and the end users.

**Amazon Lockers**

Complementarily to the Citypaq and Citibox parcel locker networks already commented, Amazon has deployed its own network of parcel lockers (the so-called Amazon Lockers) where Amazon consumers can receive their orders.

There would be around 120 Amazon parcel lockers installed in Spain at the end of 2017 mainly located in petrol stations, fast-food restaurants, shopping malls and supermarkets.

**CNMC's opinion on consultation from parcel delivery service providers regarding Correos’ automatic parcel lockers (CityPaq, formerly called HomePaq)**

In the CNMC Agreement of 28 July 2016 responding to the queries from UNO and the integrator...

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70 www.citypaq.es/index.html
71 https://cincodias.elpais.com/cincodias/2019/01/03/companias/1546542059_596579.html
72 www.amazon.es/b?ie=UTF8&node=13350923031
74 UNO is the association of the main PDSPs in Spain: www.unologistica.org
UPS regarding Correos’ HomePaq System (Ref. CNS/DTSP/028/15,) CNMC concluded:\(^{75}\):

- HomePaq is a system enabling users to receive and send Correos’ Paq 48 and Paq 72 parcels (i.e. express parcels) via lockers which are normally installed in the doorway of a block of flats.

- HomePaq is not eligible for funding from any compensation for the unfair financial burden on the designated operator (the State-owned Company) for the provision of the universal postal service (US), given that it is not used for providing the parcel delivery services which fall within the scope of the US.

- The mere fact that Correos may decide to use HomePaq to provide US parcel delivery services does not make it a necessary network element for providing the US, and therefore there would be no justification for its public funding via the unfair financial burden compensation.

- In fact, if HomePaq were used to provide parcel delivery services within the scope of the US, these services would then be differentiated from the basic services of the US, due to the advantages and added value of HomePaq, which would bring their universality into question.

- Should the market develop to the point where a proposal were made for providing US parcel delivery services through HomePaq, this would require an in-depth review of the scope of the US.

- As for the concerns about the financing of the service that the alternative operators state in their queries, CNMC assumes that Correos expects to recover its investments in HomePaq and start making a profit reasonably soon.

- As regards how it would be controlled that the designated operator did not receive undue compensation for HomePaq, the CNMC is responsible for verifying Correos’ analytical accounts; for verifying the net cost of the US and the unfair financial burden on its provider to be compensated, if applicable; and for ensuring favourable conditions for competition in the sector, including making sure that operators compete in equitable market conditions.

For reasons of efficiency, the CNMC encourages operators in the parcel delivery sector to explore the possibility of joint projects to extend the networks of household devices, and to reach voluntary agreements on access to already installed devices.

- In the absence of this type of joint project or voluntary access agreements, depending on the evolution of the parcel delivery market and if circumstances arose which would threaten competition in that market, the CNMC would study the possibility of proposing regulatory measures, consisting of imposing access obligations to installed HomePaq-type devices.

- In particular, if parcel delivery/dispatch via HomePaq-type systems should become essential in order to compete, where restrictions arise (lack of space or refusal by householders) preventing entrant operators from installing devices, the CNMC would propose that the already installed operators grant access to their devices, in reasonable conditions, at a reasonable price.

- The value of Correos’ image and brand is undeniable, and must be taken into account when deciding whether the designated operator should be compensated for the unfair financial burden of

\(^{75}\) Available in Spanish at: www.cnmc.es/expedientes/cnsdtsp02815
providing the US, and the amount of any such compensation, in order to avoid distortion in the conditions of competition. But even so, Correos may enjoy an advantage due to brand recognition when competing with other PDSPs to install its devices in blocks of flats. In these circumstances, access obligations would be even more important.

**Conclusion**

Due to the existing initiatives in the Spanish market, no regulatory intervention is preferred according to the Spanish NRA if market forces can offer by themselves reasonable and convenient solutions.
5 Conclusions

The increase of digital communications and e-commerce is constantly evolving markets and has enabled and pushed postal service providers to create innovative solutions to meet the changing consumers behaviour and needs. In this report, the evolution of postal networks in the context of a transition from letter mail to parcels was analysed and ways in which operators have been reacting to market developments were identified, in terms of how they have been altering their networks with a focus on the delivery infrastructure related to the parcel market. Also, the implications of these changing practices on the access conditions for alternative operators and on regulation were analysed. Additionally, the report provides an overview of how this infrastructure related to parcel market is being developed, used and shared by postal operators and what main benefits to both operators and postal users exist. Finally, the presentation of country cases improves the understanding on the delivery infrastructure developments related to the parcel market and access practices in this regard.

Development of networks

The structure of the postal sector has been adapting to the developments in social and economic circumstances, in particular the development of electronic ways of communication. This has led to declining letter mail volumes and increasing global parcel volumes and revenues, seemingly making the parcel segment an attractive segment to invest in, even though the letter mail segment is still very relevant for today’s postal sector.

In fact, developments observed in the sector aimed at addressing the changing users’ needs are in many situations related to improving parcel delivery, both in terms of infrastructure and in terms of services offered. One of the most common developments in this area has been the introduction of parcel lockers, which adds flexibility to the delivery process, with available data indicating its increasing number and relevance, similarly to what can be observed regarding pick-up and service points.

In most countries, the USP uses a joint network for the delivery of letter mail and parcels, possibly benefiting from cost reduction and the development of economies of scale and scope, as well as an increased efficiency and flexibility. There are also some cases of USPs using separate networks, possibly benefiting, in this case, from increased efficiency, mostly in the last mile. In both situations there seem to be possible benefits for users, for example, smaller increases in prices paid by users and a wider choice of products and service points or increased speed and flexibility of delivery. In this regard, it does not seem possible to conclude that one option has advantages over the other, since both seem to have certain advantages, both for USPs and users. In fact, the co-existence of both types of networks in some countries, with the USP using a joint network only in rural areas and separate networks in urban areas, may indicate that there is a certain complementarity between them.

From the information collected through the questionnaire it appears that in many countries information on the development of pick-up points and parcel lockers is limited or incomplete since
NRAs do not always collect this information or NRAs lack competences to collect information from all relevant market players.

Access to infrastructure in the parcel market

According to the collected information, legal provisions are incorporated in the national legislation in most countries in order to enable postal service providers to have access to the network for delivery in the parcel market. Some countries even have specific regulation that enables the access to elements of the parcel delivery infrastructure of the USP/incumbent. However, access to elements of the parcel delivery of others postal service providers is only being regulated in a few countries.

The most common conditions applied concerning access to the infrastructure of the USP/incumbent are the conditions of transparency, proportionality and non-discrimination.

In almost half of the countries other service providers make use of the letter mail network of the USP/incumbent to deliver letters or small packages. The tariffs and conditions of this access are all established on commercial agreements, with a regulating role of NRAs in some of countries. For example, there are a few NRAs that have been investigating the access offers and conditions.

NRAs have not identified legal restrictions that could limit the access for parcel service providers to use pick-up locations or parcel lockers of the USP/incumbent or other parcel service providers.

The majority of the NRAs indicated that no responses by parcel service providers regarding policy or regulatory developments on access to the infrastructure for parcel delivery have been observed.

Regarding regulated access to the parcel infrastructure, a minority of the NRAs from countries that do not have (regulated) access to the parcel infrastructure think this would possibly be desirable. Most NRAs however, do not see the desirability or have not examined this. The most mentioned reasons for this are that according to these NRAs the parcel market is competitive enough or that the service providers can cooperate on a commercial basis. Other reasons are that there is low interest in access to the networks in general and that it causes additional administrative burden.

Most NRAs do mention benefits and downsides of access to pick-up locations and/or parcel lockers. Finally, NRAs indicated a number of public interests that could be served by access to pick-up locations and/or parcel lockers. Most of them were non-economic public interest that could benefit from access to the parcel infrastructure.

Case studies

According to the German NRA, the standard-toolkit of the German competition law will be sufficient to monitor the behaviour of the incumbent in the parcel market as it seems that due to the high competitiveness of the parcel segments there is no indication of market power. Thus there is no necessity for implementing a mandatory access. With regard to promotion of competition and to reach sustainability it should be given priority to cooperative models between the different parcel operators on voluntary basis.

In Belgium, bpost, the designated universal service provider, has installed parcel lockers in different parts of the country. Since 2017 this is rebranded under the name Cubee. The Cubee network is
open and independent. Cubee’s parcel lockers can be used by competing providers of postal services.

In Spain, apart from the parcel locker network developed by the USP and used exclusively for its parcels out of the scope of the universal service (the so-called Citypaq lockers), the white label (agnostic-carrier) initiative of the start-up Citibox has recently developed a network of parcel lockers. According to the Spanish NRA time will tell if both initiatives shall act complementarily in a successful way in terms of market competition or that some kind of regulatory action will be needed if a market failure is detected. Additionally, Amazon has also deployed its own network of parcel lockers in Spain.
Annexes

Annex 1 - List of abbreviations

B2C – Business to Consumer
ERGP - European Regulators Group for Postal Services
NRA - National Regulatory Authority
UPS – Universal Postal Service
USO – Universal Service Obligation
USP – Universal Service Provider
WG - Working Group
Annex 2 - List of countries

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