



EUROPEAN
REGULATORS GROUP
FOR POSTAL SERVICES

ERGP Report on access to the postal network in a context of booming e-commerce

Table of contents

Executive summary	3
1. Introduction	5
1.1 Background and objective of the report	5
1.2 Literature review	6
1.3 Methodology	8
2. Analysis of the answers to the questionnaire	9
2.1 Consideration of access as essential for the delivery of postal items	9
2.2 Current situation of access regulation	11
2.3 Access provided on contractual basis or mandated by regulation	12
2.4 Potential further development of access regime due to e-commerce boom	13
2.5 Comments on the European Commission’s findings in the latest PSD application report	15
2.6 About competition in case of no access regulation	17
2.7 About existence of new access regulations due to e-commerce parcel boom	18
2.8 PDSPs’ access to other PDSPs’ delivery networks or to innovative last-mile delivery solutions	19
2.9 About NRA’s data gathering to evaluate the accessibility of delivery networks for e-commerce items	19
2.10 Differences regarding the PDSP size in terms of accessibility to Third Party Access delivery solutions	20
2.11 Differences regarding the accessibility of delivery networks depending on the origin of the postal item (domestic vs international)	21
2.12 Strategic recommendations for designing access models with positive impact on environmental sustainability in the last mile delivery	22
2.13 Symmetric regulation of network interconnection potentially as an effective way of facilitating access that complements regulated access to the DO’s network	24
2.14 PDSPs’ networks interoperability potentially as an effective way of facilitating access that complements regulated access to the DO’s network	26
2.15 Potential approaches on sustainability features in the context of e-commerce delivery	27
2.16 Potential positive effects on environmental sustainability related to new forms of access regulations within the last mile delivery process	29
3. Conclusions	31
Annexes	34

Executive summary

The European Regulators Group for Postal Services' (ERGP) Medium Term Strategy 2020-2022 sets forward as an objective to further analyse the access to the postal networks and more specifically, as specified in the ERGP Work Programme 2022, the ERGP Access and Interoperability WG was mandated to provide an ERGP Report on access to the postal network in a context of booming e-commerce. The report is structured in three chapters.

The first chapter (Introduction) explains the background, objective and methodology of the report. It provides a brief review on the recent work done previously by ERGP regarding Access. Furthermore, it briefly describes the structure of questionnaire circulated to the National Regulatory Authorities (NRAs) in February 2022.

The second chapter analyses the answers received in the questionnaire circulated to the NRAs. The chapter is structured in 16 sections, i.e. one section per question. Furthermore, each section provides brief preliminary findings on the analysis performed.

Finally, chapter 3 presents the overall conclusions and recommendations of the report.

In general, NRAs deem in a forward-looking approach that access is still necessary in the dwindling letter market. On the other hand, there is not a wide consensus on the parcel market, noting that 2/3 of the NRAs providing a definite answer (almost half of the total answers) considered the access as essential. Whereas access is regulated in the majority of Member States (MS), its scope differs among MS. Postal operators' access to other postal networks is either based on a commercial contract or according to domestic regulatory provisions on access. Provided that access is applied in the majority of MS, NRAs could evaluate the satisfaction of the postal players with the current access scheme to assess if regulatory actions should be considered in a future regulatory framework.

On the other hand, the European Commission's (EC's) report on the application of the Postal Services Directive (PSD), published in November 2021, concluded -based on a backward-looking approach- that the absence of more developed provisions on access to the postal network may have contributed to the low uptake of competition in the letter segment.

Around 2/3 of NRAs did not provide evidence to infer in a forward-looking approach based on recent trends that more developed provisions on access to the postal network in the letter segment could contribute to competition. Furthermore, around half of such NRAs (i.e. around 1/3 of NRAs answering the questionnaire) considered that the main reason for the lack of demand in the letter segment is related to the transition of consumer interest from letter mail to the parcel segment due to the e-commerce growth and digitisation.

Hence, the EC's findings on access in its application report and the NRAs' findings in this ERGP report would not be directly comparable as they apply to different contexts and different time periods.

Additionally, as ERGP already stated in previous reports¹, NRAs should have harmonized powers and tools to monitor the sector including adjacent markets and a minimum level of harmonization of NRAs' powers to promote competition and address market failures, including obligations on providing access to the incumbent's network. Therefore, NRAs need to have the competence to apply pro-competitive regulatory tools like regulated access to postal networks and services if a market failure related to access would occur. More specific and detailed access rules may reduce entry barriers and facilitate market entry for competitors in those cases.

In general, the NRAs have not found additional problems that have urged them to create additional regulation or measures to adapt to the new reality of e-commerce parcels boom in terms of access to postal parcel services. So far, the collection of data to assess the accessibility of e-commerce delivery networks is not a widespread practice within NRAs. Most of the NRAs do not find difference in terms of accessibility neither regarding the Parcel Delivery Service Provider (PDSP) size nor depending on the origin of the postal item.

Some strategic recommendations for designing access models that can have a positive impact on environmental sustainability in last mile delivery have been identified, namely: the introduction of legislative measures to encourage the use of parcel lockers and the possibility of common access to parcel lockers, delivery hubs and pick up/drop off points.

Both the symmetric regulation of network interconnection and the implementation of PDSPs' network interoperability are found by many NRAs as potentially effective ways of facilitating access. However, there is still lack of experience and information in the former and there are discrepancies, especially on the potential adoption of compulsory related standards in the latter.

The variety of NRAs selecting different approaches on sustainability features that could be introduced in the context of e-commerce deliveries – such as commercial agreements, symmetric regulation, interoperability of networks, access regulatory framework and municipal ordinances – demonstrates the importance and diversity of potentially applicable sustainable features. In general, NRAs identify potential positive effects on environmental sustainability related to new forms of access regulations within the last mile delivery process, including new forms suggested by some NRAs (e.g. centralisation of hubs outside the cities and downtown depots, development of open access parcel lockers and pick-up/drop-off points, collaboration agreements with local delivery operators using green fleets or the development of municipal ordinances related to the sustainable use of the built environment).

¹ See Section 1.2.

1 Introduction

1.1 Background and objective of the report

Following the work developed by ERGP in previous years regarding access regulation, the ERGP Work Programme for year 2022 deems important to follow analysing the access to the postal network, going into more detail in some specific areas of delivery networks and complementing the work previously developed.

As indicated in the ERGP Work Programme 2022², access to the postal network is essential for alternative operators³, relying on available solutions for the deliveries in the areas where those alternative operators have not deployed their own networks.

This report explores, due to the development of e-commerce deliveries through postal networks, the accessibility to the last mile delivery network, the emerging last mile distribution solutions and its interdependence with the environmental sustainability in the postal sector.

Some of the outcomes of this report, especially those with environmental sustainability implications, may be a worthy input for the deliverable “ERGP report on environmental sustainability in the postal sector” that will be finalized by the Sustainability WG by ERGP PL II 2022.

This report identifies the existing access models based on the findings of previous ERGP reports. It also re-examines access issues in the context of booming e-commerce. The report evaluates the differences of parcel services as well as between congested urban areas and areas with low accessibility. Furthermore, it explores whether symmetric regulation of network interconnection and/or PDSPs’ networks interoperability is considered as an effective way of facilitating access that complements regulated access to the designated operator’s (DO’s) network.

The EC states in its Report on the application of the PSD, adopted on 8 November 2021, that the absence of more developed provisions on access to the postal network may have contributed to the low uptake of competition in the letter mail segment⁴. As the EC indicates in the executive summary of the evaluation, the EC carried out an “ex-post” evaluation to assess whether the PSD has achieved its objectives, is still fit for purpose and matches the present and future needs of postal users and operators. Therefore, it must be noted that such EC report was written based on a backward-looking approach since the last review of the PSD in 2008 and not with a prospective (forward-looking) approach.

² <https://ec.europa.eu/docsroom/documents/48197>

³ [Alternative operator means any postal service provider, excluding the designated universal service provider of a particular \(MS\).](#)

⁴ The report is available at: https://ec.europa.eu/growth/sectors/postal-services_en

The report is structured in three chapters: Chapter 1 is an introductory chapter describing the background, literature review related to recent ERGP work on access and the methodology followed. Chapter 2 analyses the answers of the questionnaire circulated to ERGP's NRAs in February 2022. Chapter 3 concludes with the main findings of the report and elaborates some recommendations.

1.2 Literature review

This section provides a brief review of the recent work on access by the ERGP that serves a ground for the current report, as some of these previous reports also dealt with aspects related to e-commerce parcel deliveries. All the cited reports can be consulted at the ERGP website⁵.

In 2020, the ERGP produced a report on interconnection models and access to international postal networks⁶. That report identified different types of networks and models for international delivery. In addition to international delivery through USPs'/DOs' networks and express services providers' networks, new players are shaping alternative models and are further developing the postal market. The network elements of infrastructure used for international delivery are mainly those listed in the PSD, while in cases of other than USPs'/DOs' networks, more logistic elements are used, such as hubs, outlets, technical devices, transport facilities, and track and trace solutions. To ensure interconnection between postal networks internationally, the majority of DOs express the necessity of agreements covering exchange points, specific packaging requirements, barcodes or other electronic identifiers for tracking items, electronic data files on shipment and customs procedures and arrangements regarding returns. Open access for operators and e-commerce players to postal networks and agreements was suggested to increase choice and transparency. Other suggested good practices or tools identified were: parcel lockers sharing, creation and improvement of transparency tools and enhancement of their visibility, as well as integration and cooperation of local providers and international operators by ensuring non-discriminatory access to all players across the internal postal market.

In 2021, as a continuation work of the report of 2020, the ERGP produced a report on harmonised measures related to standardised cross border delivery services⁷. According to that report, further standardisation should aim to improving faster customs procedures for international exchange of parcels, the traceability (track and trace) of parcels in the e-commerce supply chain (including delivery) and promote better co-operation among USPs. Possible areas for further standardization were identified e.g. in the harmonization of track and trace events, digitalization of postal transport documents, digital identification of postal operators, innovative solutions to achieve effective and environmental sound delivery (packaging, returns, new delivery and parcel lockers delivery).

Both ERGP reports of 2020 and 2021 are a worthy tool for all those NRAs assessing to consider interoperability of PDSPs' networks as an effective way of facilitating access that complements the regulated access to the DO's network. This particular issue is analysed in Section 2.14 below.

⁵ https://single-market-economy.ec.europa.eu/sectors/postal-services/european-regulators-group-postal-services_en

⁶ ERGP PL II(20)28.

⁷ ERGP(21)26.

In 2019, the ERGP produced a report on the development of postal networks and access practices regarding infrastructure related to the parcel market⁸. The report found that legal provisions are incorporated in national law in order to make possible that postal service providers have access to the network for the delivery in the parcel market. Some countries have specific regulation enabling access to elements of the parcel delivery infrastructure of the USP/incumbent. Alternative operators 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 PDSPs to use pick-up locations and/or parcel lockers of the USP/incumbent or other PDSPs. The majority of the NRAs indicated that they have not observed responses by PDSPs 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 were that the parcel market is competitive enough or that the PDSPs 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. Benefits could be the accessibility and the convenience of parcel lockers. Downsides are possibly more disputes, overregulation, capacity problems and less incentive to invest. Furthermore, 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.

Interestingly, the ERGP report of 2019 was written before the Covid-19 pandemic. Therefore, the current report analyses the access matters related to the e-commerce parcel deliveries considering the consolidated habits of electronic purchases spurred by the pandemic.

On the other hand, the ERGP Position Paper on the EC report on the application of the PSD, adopted on 26 April 2022⁹, identifies some consensus between EC's and ERGP's issues, one of them being precisely the need for a strengthening of the rules on access to the incumbent's network for the letter segment. Furthermore, regarding the letter market, ERGP indicates that, according to the EC (as already mentioned in the Introduction above), the low uptake of competition in the letter mail segment may be explained by the absence of more developed provisions on access to the postal network. The EC notes that in MS where there has been some competition, this has helped stimulate demand (or at least reduced the decline in letter mail volumes) and supply and led to lower prices for letters. The ERGP agrees with the EC that competition in letter mail provision has had a positive effect on outcomes in domestic markets. Furthermore, in a declining market for letter mail, competition remains important to provide customers with choice for high quality and innovative postal services. The ERGP agrees that the development of competition in European MS is lagging behind. In several countries the decline in letter mail in the last years has not been in favour of postal competitors. In general, rules on access to the USP's network have not contributed to increase market entry by new competitors in many MS. Regulated access to postal networks, which is

⁸ ERGP PL I (19) 10.

⁹ ERGP (22) 4.

safeguarded by Articles 11, 11a and 12 of the PSD, is a crucial instrument for promoting competition. However, access obligations, as foreseen in Article 11a of the PSD, are an option that has not been exercised by all MS when transposing the PSD in the national legislation. In addition, the bpost judgement¹⁰ still renders uncertainty about how tariff principles can be applied precisely. In order to establish a level playing field allowing innovative services to emerge and promote a fair and competitive European postal single market, the ERGP considers that NRAs need to have the competence to apply pro-competitive regulatory tools like regulated access to postal networks and services.

For a competitive internal market for postal services specific and more detailed rules are needed to reduce entry barriers and to facilitate market entry for competitors, consequently adding value to the sector while taking in consideration an enduring sustainable provision of the Universal Service (US). The ERGP therefore proposes that the future postal regulatory framework should strengthen and ensure minimum harmonization of NRAs' powers regarding access and interoperability aimed at promoting competition and addressing market failures based on specific obligations and interoperability with the incumbents' network¹¹. Therefore, NRAs need to be equipped with appropriate power and tools to monitor the sector such as data collection in adjacent markets. Moreover, experiences in some MS show that competition law is inadequate in solving structural market problems in a market with large entry barriers and a dominant operator, also in the situation of public service obligations. Ex-ante regulation remains important in those MS to guide markets towards competitive outcomes in the light of shifting markets for letter mail towards parcels and the declining relevance of a basic letter mail service.

Additionally, considering that NRAs data collection competences differ and, in some cases, are limited, the ERGP strongly supports harmonized powers and tools to monitor the sector including adjacent markets and a minimum level of harmonization of NRAs' powers to gather data, monitor and intervene to promote competition and address market failures, including obligations on providing access to the incumbent's network¹².

1.3 Methodology

The report was drafted using a combination of desktop theoretical research, data of previous ERGP reports and the analysis of the answers provided by NRAs.

In order to gather information and to conduct the analysis on access to the postal network in a context of booming e-commerce, a questionnaire was submitted on the 9 of February 2022 to ERGP members and observers (NRAs).

Twenty nine NRAs have answered the questionnaire¹³.

The report references in footnotes the precise sources (NRA's country of origin) of the answers given.

¹⁰ Judgment of 11 February 2015, bpost (C-340/13, EU:C:2015:77). This case and a recent related judgment (ECLI:EU:C:2022:202) can be consulted at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62020CJ0117>

¹¹ See page 8 of ERGP (20) 27 «ERGP Response on the Public Consultation about the PSD».

¹² Recommendation 5 of the 2019 ERGP Opinion (ERGP PL I(19)12).

¹³ NL, IT, SI, PT, RO, FR, BE, DE, TR, ES, IE, BG, CZ, EE, GR, HR, LU, MT, NO, HU, CY, SE, RS, LT, AT, SK, LV, DK and PL.

2 Analysis of the answers to the questionnaire

The following section provides the analysis of the answers to the questionnaire circulated to the NRAs. Each section corresponds to one question in the questionnaire.

2.1 Consideration of access as essential for the delivery of postal items

2.1.1 Letter market

The majority (19) of NRAs¹⁴ considered the possibility of access to the postal network relevant for the promotion of competition and the entry of new market players. This should lead to the benefit of the whole postal sector – on the one hand it brings benefits for the users allowing them a wider variety of services and on the other hand new entrants can start its undertaking without making significant investments that might constitute a barrier to entry in the market. Generally, access can potentially lead also to higher cost efficiency and more sustainable provision of services for preserving the environment.

Three NRAs¹⁵ expressed opinions that replication of the delivery network of the USP in a constantly volume declining market is not economically possible or that the usage of one network in areas with dense infrastructure is in the interest of environmental sustainability.

Only few NRAs¹⁶ (5) answered that they do not consider such access essential.

Regarding mandatory access to the USP's network, the NRAs have in most cases the same opinions as for the access in general. An obligatory access is necessary for alternative operators to enable them to compete with the USP. Seven NRAs¹⁷ stated explicitly that the USP is the only provider covering the whole territory with its own network. Two NRAs¹⁸ mentioned that access is regulated in their countries, but it has not been used in practice yet.

On the other hand, the reasons to consider the mandatory access to the USP network as not essential by some NRAs are the development of end-to-end competition or large decline in letter volumes leading to no quantitative relevance of such access.

Furthermore, the NRAs were not unanimous regarding the voluntary access on a contractual basis. Such access is possible in many MS¹⁹, but two NRAs²⁰ stressed the absence of an obligation to conclude an agreement or the difficulty to achieve such an agreement. Other NRAs²¹ stated that there is low interest in such access or that the obligatory access covers the needs of accessing providers.

¹⁴ AT, BG, CY, CZ, EE, EL, ES, FR, HR, HU, LT, LU, IT, NL, NO, PL, PT, RO and SI.

¹⁵ CZ, HU and LU.

¹⁶ DK, RS, SE, SK and TR.

¹⁷ BE, BG, CZ, EE, ES, IT and LT.

¹⁸ NO and RS.

¹⁹ CY, CZ, EE, EL, ES, FR, HU, LT, LV, MT, NL, NO, PL, PT, RO and SI.

²⁰ CY and NL.

²¹ EE and PL.

2.1.2 Parcel market

In the parcel market, the opinions on essentiality of access in underserved areas is different. Whereas 12 NRAs²² consider such access essential, 6 NRAs²³ consider it as not essential and 8 NRAs²⁴ did not provide a decisive answer.

The expressed reasons for the essentiality of access for the parcel segment are the same as for letter market (namely positive effects on competition or sustainability reasons). One NRA²⁵ specified that the required level of access regulation should be based on results of further analysis of competition in each segment.

The main reasons to not consider the access in underserved areas as essential or not relevant by some NRAs is a strong development of competition, PDSP's preference to offer end-to-end service on the whole territory or absence of underserved areas. But two NRAs²⁶ expressed the opinion that there could be mandatory access to delivery infrastructure (parcel lockers, parcel boxes or alternative delivery points) or that such mutualized infrastructure could be developed.

Regarding the obligatory access to the USP's network, three NRAs²⁷ consider it as essential, because the rural areas or some parts of the territory are served only by the USP's network. Four NRAs²⁸ mentioned existing obligation of the USP to enable the access to its network, but this access is not used in practice.

With regard to the absence of mandatory access, one NRA²⁹ expressed its opinion that it is difficult to establish minimum access requirements for an EU-wide parcel access as national geographical circumstances and market situations in the MS differ substantially. Such conclusion can be derived also from different responses of other NRAs regarding the necessity of access and its use in practice.

The answers of other NRAs³⁰ are based mainly on competitiveness³⁰ in the market or delivery through own networks on the whole territory. One NRA³¹ mentioned that the mandatory access focuses on the letter market only.

Compared to the letter market, some NRAs³² indicated that there could be some cooperation between operators on voluntary basis in the parcel segment mainly in access to parcel lockers.

Conclusion: The consensus on the necessity of access in letter market prevails among NRAs as this market is declining with low competition and the USP is the only provider with delivery

²² BE, CY, EL, ES, HR, HU, LT, LU, NO, PT, RO and TR.

²³ DK, IT, NL, SI, SK and RS.

²⁴ AT, CZ, DE, EE, FR, IE, LV and PL.

²⁵ PT.

²⁶ FR and SI.

²⁷ CY, ES and LT.

²⁸ CZ, EE, ES and RS.

²⁹ NL.

³⁰ AT, CZ, DK, IT and NL.

³¹ PL.

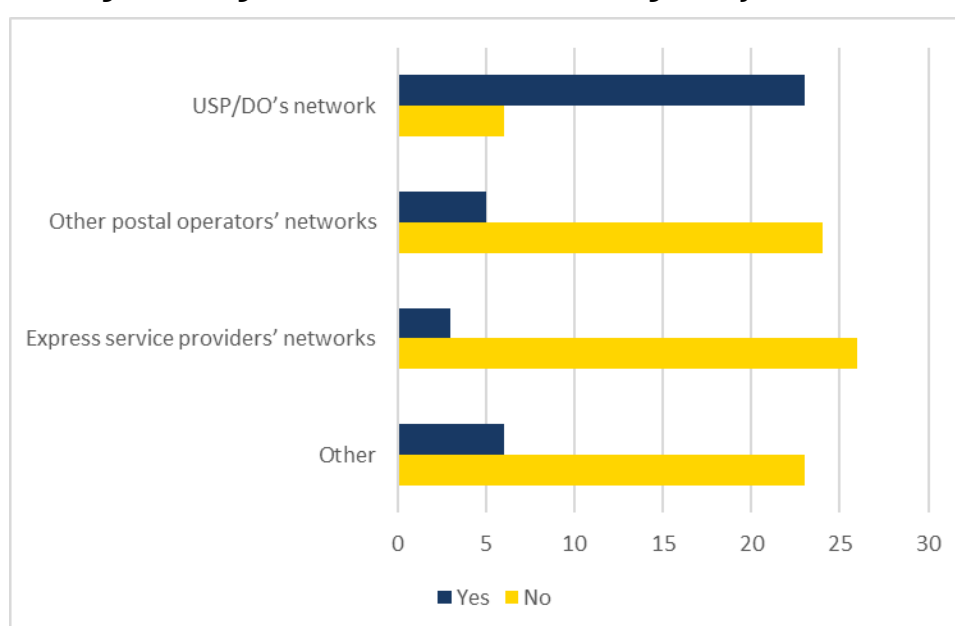
³² BE, CZ and RO.

network on the whole territory in many MS. In the parcel market, there is not a wide consensus, however 2/3 of the NRAs providing a decisive answer (almost half of the total answers) consider the access as essential.

2.2 Current situation of access regulation

On the European level, the access is regulated in Articles 11 and 11a of the PSD. The majority of NRAs³³ answered that the access is also regulated on national level in their countries while only a few NRAs³⁴ answered that it is not regulated.³⁵ On the other hand, the scope of regulated access differs among the MS. The access to the USPs'/DOs' networks is regulated in most of these cases as opposed to access to other postal operators' networks or express service providers' networks which is regulated only in few MS³⁶. Some NRAs³⁷ indicated other answers, mentioning, for example, that the access includes address data or other postal operators' specific infrastructure.

Figure 1 – Regulation of access in national regulatory framework



Source: ERGP Access & Interoperability WG questionnaire 2022

Conclusion: Although the access is regulated in almost all MS, especially regarding the access to the USPs'/DOs' networks, the scope differs.

³³ AT, BE, BG, CZ, CY, DE, DK, EE, EL, ES, FR, HR, HU, IT, LT, LU, LV, MT, NO, PL, PT, RO, RS, SE, SI and SK.

³⁴ IE, NL and TR.

³⁵ In the Netherlands, the access is not regulated, but the obligation for the USP to offer access to other postal operators is based on a decision of the Dutch ministry of economic affairs & climate in which it granted a permit to PostNL to take-over former rival competitor postal operator Sandd. In Ireland, according to national law, access to the postal infrastructure of the USP is by negotiation with a possible role for the NRA where a dispute arises in that negotiation.

³⁶ BE, DK, LT and LV.

³⁷ AT, EE, ES, LU, PT and SE.

2.3 Access provided on contractual basis or mandated by regulation

ERGP also asked whether the access to existing postal network and to certain infrastructures is applied in practice, on which basis and to what extent. According to the information available to NRAs, the access is applied in the majority of the MS, as shown in Table 1 below. Overall, the access on a contractual basis is prevailing over the access forms specified by the domestic regulation, however both possibilities are applied in some MS.

Table 1 – Basis for the application of access

	Yes	No
Access on a contractual basis	AT, BE, BG, CZ, DE, DK, EE, EL, ES, FR, HU, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE	CY, HR, IT, RS, SI, SK, TR
Access mandated by regulation	BE, BG, CZ, DE, ES, HR, IT, LU, NL, NO, PL, PT, RO, RS, SI	AT, CY, DK, EE, EL, FR, HU, LT, LV, MT, SE, SK, TR

Source: ERGP Access & Interoperability WG questionnaire 2022

The access can be applied through a commercial agreement or based on an USP’s standard agreement, the latter based on the corresponding access regulatory provisions. The type of agreements applied in the MS is shown in the following table below.

Table 2 – Type of document on which access is implemented

Commercial agreement	BG, DK, CZ, EL, ES, FR, HU, LT, LU, LV, NL, NO, PL, PT, RO, SE
Standard access agreement to USP’s postal network	BG, CZ, DE, EL, ES, HR, LT, LU, NL, PL, RS, SI

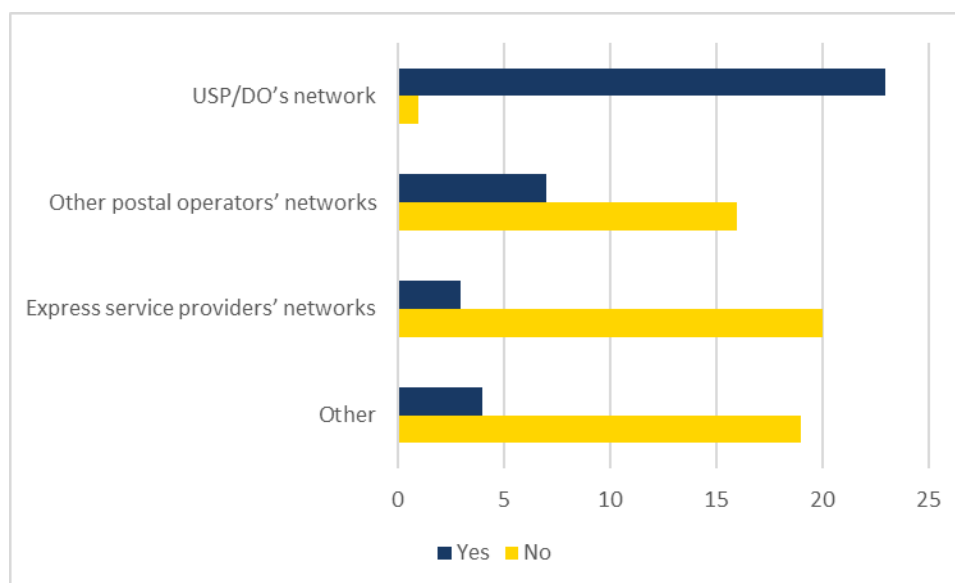
Source: ERGP Access & Interoperability WG questionnaire 2022

As already mentioned in the previous section, the scope of the access applied in practice is also different. Most of the NRAs³⁸ are aware that such access to the USP’s/DO’s network exists. Some NRAs³⁹ mentioned the application of access to other postal operators’ or express service providers’ networks, as shown in Figure 2 below.

³⁸ AT, BE, BG, CZ, DE, EE, EL, ES, FR, HR, HU, IT, LT, LU, LV, NL, NO, PL, PT, RO, RS, SE, SI.

³⁹ BE, BG, DK, FR, LV, LT and NL for other postal operators’ and BG, EL and LV for express service providers’ networks.

Figure 2 – Scope of the access applied in practice



Source: ERGP Access & Interoperability WG questionnaire 2022

ERGP also explored, according to the NRAs' views, if the existing scheme is sufficient to satisfy the alternative operators' accessibility needs. Nearly half of NRAs⁴⁰ answered that the current access scheme is sufficient. From four NRAs⁴¹ point of view, there could be some problems related with current access conditions. As the main risk, these NRAs consider potential risk of market power. One NRA⁴² also mentioned potential risk of negative effects related to environmental sustainability and bottleneck in infrastructure. Some NRAs⁴³ do not have relevant data to evaluate the satisfaction of alternative operators or that the access is not applied in practice.

Conclusion: The access is performed both based on a contract or specified by domestic regulation, but the NRAs are not aware of all cases applied in practice. The NRAs have mostly awareness of access applied to the USP's/DO's network. NRAs could evaluate the satisfaction of the postal players with the current access scheme to assess if regulatory actions should be considered in a future regulatory framework.

2.4 Potential further development of access regime due to e-commerce boom

Regarding the question of whether the access regime should be further developed in the national regulation as a consequence of the e-commerce parcel delivery boom, around half of the NRAs consider that there is no need in this respect⁴⁴. Additionally, some regulators point out that, given the high level of competition currently taking place in the parcel segment, operators have established their own postal networks, and therefore there is no need to further

⁴⁰ BG, EE, EL, ES, FR, HR, LU, LV, NO, PL, RO and SI.

⁴¹ BE, HU, LT and NL.

⁴² HU.

⁴³ CZ, PT and RS.

⁴⁴ AT, BG, DE, DK, EE, ES, HR, IT, LV, MT, NL, RS, SI and SK.

develop access regulation⁴⁵, even in low-density territories⁴⁶. However, RATEL recalls that postal operators already have the possibility to establish bilateral agreements with other operators, so they do not consider it necessary to further develop access regulation.

On the other hand, there are 9 NRAs⁴⁷ that consider that there should be a regulatory change, namely in terms of the powers attributed to the regulators, in order to face the significant growth of e-commerce. In general, NRAs argue that, for the sake of a sustainable provision of postal services (understood either in an environmental⁴⁸ or in a wider⁴⁹ perspective, not only environmental), greater competition⁵⁰ and/or better quality of service⁵¹, regulatory authorities should have more powers to promote or determine access to the postal network between operators, avoiding duplication of investment. ANACOM also adds that the access regime could be changed within the scope of the revision of the PSD, in which the regulatory powers available to the authorities should be clarified, identifying clear, efficient, and transparent mechanisms. Other suggestion, from ANCOM, points to encouraging new operators to enter the market by symmetrical access and, furthermore, to concentrate resources and increase quality and efficiency, both in urban areas and in areas with low population density that face different challenges. EETT also argues that, given the significant growth of e-commerce, differentiation in the type and mode of regulation by postal items (letters vs parcels) or by postal products (e-commerce items) could be considered. CTU refers that it could be considered an obligation to share the postal network based on the Significant Market Power (SMP) concept (mainly in the parcel segment) rather than based on the Universal Service Obligation (USO).

Regarding the development of provisions relating to urban agglomeration, some regulators⁵² mention environmental protection or urban planning because, in an urban context, the level of atmospheric pollution and traffic congestion can be high, justifying a greater regulatory incentive on the part of the authorities to promote the sharing of postal networks between the various operators. UKE said that it is important to clarify the regulation regarding specifically urban areas in order to regulate the location and multiplication of parcel lockers so as not to obstruct public spaces that are already limited and crowded.

Several regulators assume that there should be further development of the regulatory framework, including clear and effective rules at the service of regulators to promote greater sharing of networks, particularly in rural or low-density areas⁵³. Environmental protection⁵⁴, a greater balance in the quality of service between urban and rural regions⁵⁵, greater offer of

⁴⁵ DK.

⁴⁶ SK.

⁴⁷ BE, CY, EL, HU, LT, PT, RO, SE and TR.

⁴⁸ BE and HU.

⁴⁹ RO.

⁵⁰ LT and PT.

⁵¹ CY.

⁵² CZ, EL, PT, RO and SE.

⁵³ CY, LT, PT, RO, SE and TR.

⁵⁴ SE.

⁵⁵ CY.

services⁵⁶ and the promotion of territorial cohesion⁵⁷ are the arguments used by the regulators in favour of a greater definition of the regulatory framework. CTU and EETT state that, although they agree with the development of the access regime, they do not distinguish between urban and rural areas in this matter, as operators provide services throughout the territory.

Conclusion: Around half of the NRAs consider that it is not necessary to make any changes to the access regime, as the current framework already allows for the provision of postal operators' access to the postal network and some operators already have their own postal network, particularly in urban environments, which makes access to other postal networks unnecessary, namely that of the incumbent. On the other hand, half of the NRAs consider that the access regime should be developed to face the growth of e-commerce by avoiding duplication of investment and, thus, promoting greater environmental sustainability practices, greater competition, and better quality of service.

2.5 Comments on the European Commission's findings in the latest PSD application report

The EC's Report on the Application of the PSD (adopted in November 2021 as said before) had stated that the absence of more developed provisions on access to the postal network may have contributed to the low uptake of competition in the letter mail segment. However –as already indicated in the Literature review above–, it should be born in mind that the above conclusion was related to a backward-looking evaluation of the situation and limited to the letter segment only. Based on the market situation as it has developed in the recent past, 5 NRAs⁵⁸ stated that they agree with the evidence reported by the EC, around 2/3 (twenty) NRAs⁵⁹ did not provide evidence to infer the statement in the current situation and 2 NRAs⁶⁰ did not define any position.

Few NRAs⁶¹ stated that the conditions of access in the PSD are too generic, which would result in differences in interpretation between NRAs and postal operators regarding the legal provisions governing access to postal networks and this had been leading to lengthy legal proceedings.

HAKOM supported the need to improve the access regime, citing, in this context, an internal study conducted in the first quarter of 2020 on the access to the USP's postal network, in which they concluded that part of the lack of competitiveness in the letter mail segment was due to obstacles raised by the USP. Based on the findings of that internal study, in September 2021, HAKOM amended the universal service obligations to extend access to USP's postal network to other operators, namely through the increase of access points.

On the other hand, around half (ten) of the NRAs⁶² who didn't find the evidence reported by the EC (i.e. around 1/3 of NRAs answering the questionnaire) argued that, taking into account the

⁵⁶ LT.

⁵⁷ PT.

⁵⁸ AT, CY, HR, HU and NL.

⁵⁹ BE, BG, CZ, DE, DK, EE, EL, ES, LT, LV, MT, NO, PL, PT, RO, RS, SE, SI, SK and TR.

⁶⁰ IE and IT.

⁶¹ NL and HU.

⁶² SE, LV, PL, DK, SK, SI, BE, NO, GR and LT.

reduction in volumes in the correspondence segment and the growth in e-commerce parcel deliveries, there was a shift of the postal operators from the letter segment towards the parcel segment (although their main source of revenues may still come from their traditional letter activity), with this evolution not being related to the access regime but rather to the different needs of consumers due to the e-commerce growth and digitisation. Two NRAs⁶³ stated that there would be competitive dynamism in both segments – letter mail and parcels –, so there is no competitive issue related to access. In Sweden, the market share of competitors has even increased since the 1990s until 2018 despite there has been no access regulation. Since 2018, when digitalisation started to heavily affect the demand for letter mail services in Sweden, the competitors have been slightly more affected by decreasing volumes than the USP, but that is not a result from lack of access, rather a shift in demand for the particular services mainly offered by the competitors (i.e., non-priority bulk mail). ANACOM also agrees that access provisions could benefit from further development and a more harmonised procedure may have a positive impact in the development of access offers throughout MS. However, at the same time a necessary degree of flexibility should be ensured, so that NRAs are able to verify that offer conditions consider domestic specificities and the needs of alternative operators, enabling them to access the market while at the same time ensuring effective competition and the interests of consumers and other users. BIPT added that the current low level of competition in Belgium in the letter mail segment is most likely due to the constraints of employing salaried workers and the fall in the volume of letters. BIPT deemed that clear and developed access rules might have help to overcome the personnel's constraint for the alternative operators. CTU argues that despite the access obligation to the USP's network and postal infrastructure including the publication of the reference offer, the situation on a strongly declining market with low volumes per capita did not lead to an effective competition in the letter market. The main competitor (První novinová společnost) using its own delivery network in areas with dense population and access to USP's network in other areas is merging with the USP⁶⁴ as the provision of two networks with declining volumes and increasing unit costs is not sustainable in the long term.

Conclusion: Around 2/3 of the NRAs did not provide evidence to infer that more developed provisions on access to the postal network in the letter segment could contribute to competition. Furthermore, around half of those NRAs (i.e. around 1/3 of NRAs answering the questionnaire) considered that the main reason for the lack of demand in the letter segment stems from the transition of consumer interest from letter mail to the parcel segment, associated with the growth of e-commerce and the digitisation. It must be taken into account that this conclusion from a part of NRAs is based considering the recent trend of the postal market influenced by e-commerce and digitisation that would serve as a first forecast of the potential evolution of the postal market in the coming years (i.e. the NRAs' conclusion is built on a prospective or forward-looking approach). Hence, this conclusion should not be interpreted as conflicting with the findings of the European Commission in its latest report of November 2021 on the application of the PSD, cited above, as the EC followed a complete different approach for its analysis (in particular, an ex-post assessment since the last review of the PSD in 2008). Therefore, the EC used a backward-looking approach considering a long time period not biased by recent and potential market trends, whereas the NRAs used a shorter and

⁶³ SE and RO.

⁶⁴ This merger is being assessed by the Czech national competition authority: [https://www.uohs.cz/cs/hospodarska-soutez/spojovani-soutezitelu/oznameni-o-pripravovanem-spojени-soutezitelu/3143-oznameni-o-pripravovanem-spojени-soutezitelu-ceska-posta-sp-prvni-novinova-spolecnost-as.html](https://www.uohs.cz/cs/hospodarska-soutez/spojovani-soutezitelu/oznameni-o-pripravovanem-spojeni-soutezitelu/3143-oznameni-o-pripravovanem-spojени-soutezitelu-ceska-posta-sp-prvni-novinova-spolecnost-as.html)

recent time period. As a conclusion, the Commission's findings on access in its application report and the NRAs' findings shown in this ERGP report would not be directly comparable as they apply to different contexts.

2.6 About competition in case of no access regulation

Regarding the question whether there would still exist competition in the market without the introduction of regulation on access to the DO's/USP's network, 17 NRAs responded affirmatively⁶⁵ (although the majority refer specifically to the parcel segment) and 8 NRAs⁶⁶ considered an access regime necessary to maintain a minimum of competition in the sector.

ACM states that its intervention in the access regime led to the reduction of tariffs applied to alternative operators from 2017 onwards, thus encouraging the delivery of letter mail from various operators through the USP's network across the country. However, since 2019, with the acquisition of Sandd by PostNL, the dynamism of competition in this segment has fallen again, with the market share of around 30 alternative postal operators registered at only 5%. Still, postal operators have local or regional delivery networks, and they access the USP's network to offer nationwide services. Two NRAs⁶⁷ also mention that, in the absence of regulation, the incumbent operator would have even less incentive to share access to its network, as most alternative operators do not have their own postal networks.

On the other hand, two NRAs⁶⁸ refer that there is competition both in the correspondence segment and in the parcel segment, even in the absence of access to the DO's network. Some NRAs⁶⁹ report that there is significant competition in the parcel segment that does not depend on the access to other operator's postal network. Some NRAs⁷⁰ also state that, despite the concentration of the letter mail segment, greater access to postal networks would not solve the problem as the low volume of this segment is the responsible for the uncompetitive structure of this segment. Two NRAs⁷¹ also state that access has been extremely limited in their countries and does not seem to impact the current level of competition, which has been increasing in the case of parcel segment.

AGCOM states that, given the high concentration in the letter mail segment, with decision n. 171/22/CONS, it has recently imposed some access obligations on Poste Italiane (identified as operator with significant market power in the letter mail markets) including: wholesale access to the USP delivery network, physical access to post offices for the storage of undelivered registered mail, transparency and non-discrimination obligations. In the parcel delivery segment, however, no network access rules have been defined.

Conclusion: More than half of the NRAs deemed that the competition would exist only in particular segments of the market without the introduction of regulation on access to the DO's/USP's network, though the majority referred specifically to the parcel segment.

⁶⁵ AT, BG, CZ, DE, DK, EE, EL, HU, LT, LV, MT, PL, PT, RO, SE, SI and TR.

⁶⁶ BE, CY, ES, HR, IT, NL, RS and SK.

⁶⁷ SK and BE.

⁶⁸ SE and RO.

⁶⁹ CZ, DK, HU, LT, LV and TR.

⁷⁰ DK, CZ and HU.

⁷¹ PT and PL.

2.7 About the existence of new access regulations due to the e-commerce parcel boom

Regarding the new access national regulations created because of the e-commerce parcel booming on the postal network and other infrastructures and services, the following answers were received:

The majority (25)⁷² of the NRAs answering the questionnaire did not introduce new access regulations because of the e-commerce booming. In this manner, most of the NRAs whose responses were negative considered that their actual regulation and delivery systems in place already carried out the parcel delivery boom without any further specific need of new regulation. In this sense, some NRAs who would support a change in the regulatory framework in relation to access to the postal network (for various reasons, as explained in Section 2.4 before) and that did not change their national rules on access yet, might wait for a renewal of the European regulatory framework to proceed with such national changes.

On the other hand, there are only 3 NRAs⁷³ responding to the questionnaire answered affirmative to envisaged changes in legislation or in the regulatory framework that govern the provision of access to the postal network as a result of the development of e-commerce. In particular, according to EETT, it is planned to have a public consultation in Greece regarding the revision of the regulatory framework on both the Individual and the General Authorization License regime. Based on the results of that public consultation, EETT will assess if there might be a need to differentiate the handling of an ordinary parcel order from an e-commerce order. Furthermore, OCECPR is working to establish regulatory obligation to provide access to the USP's network for postal items with specific characteristics (thickness greater than 20 mm, weight up to 2 kg) from sorting points for delivery to rural areas. On the other hand, in Belgium, due to the e-commerce boom, a draft Royal Decree to regulate the use of private parcel boxes is prepared⁷⁴. In order to reduce the risk of non-distribution in case of absence of the addressee, the project foresees the obligation to deposit the parcel in standardised compliant boxes.

Conclusion: Despite the e-commerce parcels boom, the majority of NRAs have not encountered any additional problems that have urged them to create new regulation or new measures to adapt to the new reality in terms of access regarding postal parcels related to e-commerce purchases.

⁷² NL, ES, SE, AT, LV, BG, PT, IT, PL, MT, RO, DE, CZ, BE, DK, SI, SK, RS, DK, EE, TR, LT, LU, NO and FR.

⁷³ EL, CY and BE.

⁷⁴ <https://www.bipt.be/operators/publication/consultation-concerning-the-introduction-in-the-postal-regulation-of-a-provision-regarding-the-delivery-of-postal-parcels-to-dwellings-equipped-with-an-individual-parcel-box>

2.8 PDSPs' access to other PDSPs' delivery networks or to innovative last-mile delivery solutions

Through the questionnaire, the respondents were requested to answer if they are aware of the access of PDSPs' to other PDSPs' delivery networks or innovative last-mile delivery solutions. In general, 15 NRAs⁷⁵ answered affirmative to the question, providing also information about different PDSPs and their operational differences, including examples of their innovative solutions.

For instance, regarding innovative solutions, CRC argues the production of a biofuel-powered drone to transport cargo of up to 350 kg, with the potential to revolutionize freight transport by cutting costs and delivery times. On their side, UKE explained the benefits of the parcel lockers that allow the customers to match their schedule to the date of receipt of the order. This option shortens the time and increases the flexibility of deliveries and is environmentally friendly. However, the most repetitive solution pointed out by the NRAs is the sharing of delivery and pick up points as a way of cooperation between the PDSPs.

On the other hand, the ones whose responses were negative (11 cases)⁷⁶ explained that the NRAs don't collect this type of information. Some respondents⁷⁷ indicated that the domestic PDSPs have their own established and operational postal networks and there is currently no postal company providing interchangeable parcel postal services.

Conclusion: There is a tendency for PDSPs to commercially collaborate with each other to improve the level of customer satisfaction. Apart from such a cooperation, there is also a clear orientation of innovative delivery solutions relying on the use of information technology (IT) systems and greener delivery options.

2.9 About NRA's data gathering to evaluate the accessibility of delivery networks for e-commerce items

According to the questionnaire results, 15 NRAs⁷⁸ collect and monitor data to evaluate the accessibility of delivery networks for e-commerce items. A narrow majority of those respondents support the collection of data regarding the number of postal establishments.

In particular, BIPT explained that their data gathering is based on a cartography system that is able to show the data of all postal operators' points on the Belgium map. With this system, it is even possible to specify which kind of service (letter, parcels or express) or which postal

⁷⁵ NL, CY, SE, AT, BG, PL, RO, SI, BE, CZ, EL, RS, DK, ES and TR.

⁷⁶ LV, MT, EE, HU, NO, DE, IE, PT, SK, LT and FR.

⁷⁷ CY, HR, TR, RO, SI and, BE.

⁷⁸ NL, SE, HR, IT, MT, RO, SI, BE, CZ, EL, SK, RS, DK, ES and LT.

operator one is looking for⁷⁹. Furthermore, MCA explained that they also carried out surveys to determine their extent of awareness on the delivery networks and infrastructures and their availability. NRAs provide aggregate figures of the USP's and other postal operators' parcel lockers in their countries for the ERGP report on core indicators.

However, three NRAs⁸⁰ only collect data to a large extent, not including the data from the "white label" (i.e. carrier agnostic) parcel lockers.

On the other side, 12 NRAs⁸¹ answered negative about the collection of the data to evaluate the accessibility of delivery networks for e-commerce items, mainly because they considered that this is not within their remit or competencies.

Conclusion: The collection of data to assess the accessibility of e-commerce delivery networks is not a widespread practice within NRAs.

2.10 Differences regarding the PDSP size in terms of accessibility to Third Party Access delivery solutions

When it comes to the question of whether NRAs see a difference between small PDSPs and large PDSPs in terms of accessibility to delivery solutions offered by third parties, we had the following results: 8 NRAs believe there is a difference⁸². On the other hand, 14 NRAs do not believe there is a difference⁸³.

For those NRAs who believe that there is a difference regarding PDSP size in terms of accessibility, we can highlight the following arguments: HAKOM, according to the Postal Services Act rules, collects and monitors data from the postal services market in Croatia, in which it can determine the market share from PDSPs. AGCOM deems that, generally speaking, large clients have a high bargaining power when determining delivery conditions, due to the large amount of volumes that they generate. Furthermore, they notice the presence in the market of a vertically integrated delivery operator (Amazon), which by offering a bundle of services (including delivery services), allows third-party sellers not only to increase sales, but also to obtain more advantageous delivery terms than those they could individually negotiate with smaller delivery operators. UKE states that large companies have greater bargaining power and also have their own distribution channels, so they do not have to make use of accessibility solutions. NMHH understands that small PDSPs can only succeed in a small and closed market. It adds that global express providers and USPs have significant market power in the e-commerce market. EETT deems that PDSPs or customers with larger volumes are offered discounts based on revenue generated or the principle of avoided cost.

For those NRAs who did not believe that there was a difference regarding PDSP size in terms of

⁷⁹<https://www.bipt.be/operators/publication/communication-of-26-october-2021-regarding-the-belgian-postal-services-observatory-for-2020>

⁸⁰ NL, CZ and SK.

⁸¹ CY, AT, LV, BG, PT, PL, DE, IE, EE, HU, TR and FR.

⁸² HR, IT, PL, MT, HU, EL, LT and LU.

⁸³ NL, CY, SE, AT, LV, BG, TR, RO, SK, EE, SI, CZ, RS and NO.

accessibility, the general motivation was that they did not have enough information to say otherwise. However, other NRAs provided further remarks backing up their negative response. For instance, ACM estimates that there are not differences in terms of accessibility depending on the PDSP's size and the differences would come from other reasons. In particular, for letter mail, registered postal operators can use access to the USP's network and they use each other delivery network for letter mail. On the other hand, in parcels, competition is generally on the basis of their own differentiated networks with modest reliance of outsourcing to other PDSPs.

Those NRAs who did not provide an answer indicated that they did not have any data to motivate an answer.

Conclusion: Most NRAs believe that there is no difference regarding PDSP size in terms of accessibility to third party access delivery solutions, against a minority of NRAs who believe that there is such a difference, and a remaining small part did not have enough data to provide an answer.

2.11 Differences regarding the accessibility of delivery networks depending on the origin of the postal item (domestic vs international)

When asked whether NRAs notice any differences in the accessibility of delivery networks depending on the origin of the postal items (domestic or international), we obtained the following results: 8 NRAs believe that there are some differences⁸⁴. On the other hand, 16 NRAs believe that there are not any differences⁸⁵.

For those NRAs who believe that there was a difference regarding the accessibility of delivery networks depending on the origin of the postal item, we can highlight the following arguments: ACM deems that in practice, there is a distinction between domestic letter mail and cross-border letter mail. Access is not regulated for cross-border letter mail. Terms and conditions under which networks are open to access and are interconnected differ between USPs and competitor operators. CRC deems that in the case of international cross-border traffic, the rules are significantly more complicated and there are a number of additional regulators, as much more conditions need to be met and the operator should be able to meet the relevant criteria. On the other hand, AGCOM states that for international parcel deliveries, the most used networks are those of large PDSPs, while for national deliveries the networks of small PDSPs can also be used. UKE understands that international delivery networks are more extensive and designed to serve on a larger scale. Domestic delivery networks are often based on parcel lockers solutions. ANCOM mentions that the alternative providers usually use separate interoperability systems for international parcels. NMHH indicates that most international e-commerce items from third countries enter the country via the universal postal network and are delivered by the USP. More valuable e-commerce items are delivered by other alternative postal operators, also via their own networks, both internationally and domestically. Some subcontractors have started operating, mainly in rural areas where the number of items to be delivered by one provider is insufficient. RATEL states that some global providers, based on a contract, perform the last mile delivery on domestic market through domestic express provider networks.

For those NRAs who did not believe that there was a difference regarding the accessibility of

⁸⁴ NL, BG, IT, PL, RO, BE, HU and RS.

⁸⁵ CY, SE, HR, LT, LV, TR, MT, DK, SK, EE, SI, CZ, NO, EL and LU.

delivery networks depending on the origin of the postal item, the general motivation was that they did not have enough information on this matter. However, we can highlight the following remarks: MCA interprets that delivery is based on an end-to-end basis. TBST indicates that the largest providers of international parcels also have large domestic networks in Denmark. EETT states that accessibility is implemented in specific hubs located outside the big cities and usually are not related to the origin of the postal items.

Those NRAs who did not provide an answer indicated that they did not have any data to motivate an answer.

Conclusion: A majority of NRAs believe that there is no difference regarding the accessibility of delivery networks depending on the origin of the postal item, against a minority of NRAs who believe that there is such a difference, and a remaining small part did not have enough data to provide an answer.

2.12 Strategic recommendations for designing access models with positive impact on environmental sustainability in the last mile delivery

When asked whether they have a strategic recommendation for designing access models that can have a positive impact on environmental sustainability in the last mile delivery, eight NRAs have provided answers⁸⁶. From those answers, we can highlight the following points: AGCOM comments on its Decision n. 117/21/CONS, in which they have formulated a request to the Italian government to introduce some legislative measures to encourage the use of parcel lockers including the following actions: simplify and standardize the procedures for administrative authorizations for the installation of parcel lockers; establish domestic legislation for the installation of “condominium lockers”; introduce economic and/or tax concessions for the installation of parcel lockers; ensure technological neutrality and interoperability of systems. ANCOM suggests common access to the parcel lockers and sharing mutual hubs, using green solutions (i.e. electric cars and bicycles) for delivery and technology (i.e. artificial intelligence and machine learning for network efficiency). As initiatives related to both access and sustainability, ANCOM indicates that on 7th February 2022, the Romanian Post announced an investment in 3,000 parcel lockers to be placed either in their postal offices with 24/7 access or in other postal offices and strategic zones throughout the country and will be opened to use by all customers and courier companies. The solution of having open-access parcel lockers for couriers might have some environmental benefits, coming from, for example, lower greenhouse gas (GHG) emissions due to improvements in the first attempt delivery rate (lower number of trips)⁸⁷. Since 2016, the alternative operator PostaPanduri offers the click and collect system for smart lockers and postal stations in the cities, available for couriers and online sellers. The network of parcel lockers of all the postal providers grew around 131% in 2020 in comparison to 2019 levels.

TBST states that if the receivers of e-commerce goods could always choose their preferred

⁸⁶IT, RO, DK, SK, BE, HU, RS and FR.

⁸⁷ ANCOM provided the following links: <https://www.posta-romana.ro/a1526/stiri/posta-romana-amplaseaza-3000-de-cutii-postale-digitale-in-oficii-si-zone-strategice-de-interes.html>; <https://postapanduri.ro/click-collect-pentru-smartlockers-statii-postale-noul-serviciu-de-gestiune-a-livrarilor-alternative-la-punct-fix-pentru-comenzi-online-dezvoltat-de-livrarionline/>; https://statistica.ancom.ro/sscpds/public/files/229_ro; <https://www.forbes.ro/emag-si-sameday-lanseaza-romania-serviciul-emag-green-delivery-152756>; <https://www.upu.int/en/Blogs/Parcel-lockers-can-contribute-to-the-fight-for-a-sustainable-future>

delivery option, it could help to avoid a large number of unsuccessful delivery attempts. This is not always the case today. In the end this is up to the sending e-commerce company to decide and not the operator. BIPT mentions the successful ecozone pilot project in Mechelen launched in July 2020 in which bpost delivers letters and parcels emission-free. The Ecozone concept will be transferred to more city centres. All diesel vehicles have been replaced by electric cars or electric bikes equipped with an innovative trailer. To encourage addressees to pick up their parcels on foot or by bike, a dense network of 57 pick-up points has been created: 49 sites with parcel locker stations, 7 post points and parcel points, and Mechelen post office. A Microhub completes that hybrid network. The function of this centrally located site is to consolidate flows into and out of the city centre throughout the day. This is where mail carriers load up their bikes with parcels for last-mile delivery on their round and bring their returned parcels, which are picked up by electric vans and taken to Mechelen Mail Center on the outskirts of the city. Getting people to change their behaviour is a central principle of the Ecozone concept.

A bpost survey shows that the use of pick-up points has increased month on month. 85% of Mechelen residents go to pick up their parcels on foot or by bike. 81% of users covered less than 500 m to get to a parcel locker station. All age categories are represented among users, who rate themselves very satisfied, particularly because of the sustainable aspects of the service.

NMHH deems that it would be a step in the direction of sustainability and also beneficial in terms of efficiency if postal networks could be interconnected in a more transparent and simple way, but regulatory incentives are essential. NMHH also suggests that it would be useful to listen to and channel the views of alternative operators both at EU and national level, on the need for access.

RATEL indicates that the Strategic Document of the Serbian Government for the period 2021-25 envisages environmental sustainability as one of the major tasks. Besides this, the Serbian NRA has the obligation to create a Sustainability Study on the postal sector in 2022, and one part of this Study will be dedicated to investigating this topic. Arcep comments that the implementation of shared parcel lockers to mutualize the last mile delivery like, for instance, the white label initiative that have been set up in Vienna (Austria), would have a positive impact on environmental sustainability. Besides, out-of-home delivery options seem to be another important opportunity to reduce the environmental impact of parcel delivery services. Among these options, the pick-up points seem to be the most successful ones in France.

For those NRAs who do not have a strategic recommendation for designing access models that can have a positive impact on environmental sustainability in the last mile delivery, these are the main remarks made by the different NRAs:

According to ACM, there are examples of the emergence of city hubs on the borders of cities, from where on parcels and other goods to be distributed to the inner city are being bundled and delivered by the operators. Terms and conditions have been set by commercial contracts. In practice, the large parcel delivery operators do not participate unless other operators are willing to handover their parcels.

BTK-ICTA suggests the preference for low-emission fuels or using hybrid fuel, electric vehicles in order to reduce emissions caused by fossil fuels. Furthermore, they recommend migration to pick up drop off (PUDO) collection service.

CTU mentions the initiative of city Praha on shared cycle-depots used by more operators for

delivery in the city center⁸⁸. However, this solution is not directly connected with access to network of other operators.

RRT plans to explore the use of standards this year, especially the standard on network interoperability, which is likely to be an effective way of facilitating access.

Those NRAs who did not provide an answer stated that they did not monitor such information and therefore they did not have any data to motivate an answer. We can highlight the following responses: RTR deems that White Label Parcel lockers may be sustainable, but this depends on the density of these networks. Therefore, City Logistics and City Hubs may become an issue in the near future. Furthermore, MCA understands that the focus with respect to access agreements could be widened to encompass the logistics aspects and sustainability issues (such as with transport solutions).

Conclusion: The strategic recommendations for designing access models that can have a positive impact on environmental sustainability in last mile delivery relate to the introduction of legislative measures to encourage the use of parcel lockers (e.g. simplifying the authorisation procedures for their installation and tax concessions), and the possibility of common access to the parcel lockers, delivery hubs and pick up/drop off points. Furthermore, although not related to access provisions, the utilisation of green delivery solutions (e.g. electric cars and electric bicycles), and technology for optimisation of the delivery routes, as well as the facilitation of collection/return of parcels by recipients through walk or bicycle rides may positively impact on the environmental sustainability in the last mile delivery activity.

2.13 Symmetric regulation of network interconnection potentially as an effective way of facilitating access that complements regulated access to the DO's network

Symmetric regulation (or symmetrical access regulation) is a concept used e.g. in the Telecoms sector establishing the obligation for telecoms network operators - irrespective of whether they have significant market power - to allow other companies in that sector to have access to their infrastructure in return for a fee⁸⁹.

Regarding the effectiveness of a symmetric regulation of network interconnection as a way of facilitating access that complements regulated access to the DO's network, we have collected the following answers:

5 NRAs⁹⁰ do not believe that symmetric regulation of network interconnection can be an effective way of facilitating access that complements regulated access to the designated operator's network.

13 NRAs⁹¹ (half of the answers) believe that symmetric regulation of network interconnection

⁸⁸ https://www.praha.eu/jnp/cz/doprava/cyklisticka/aktuality/praha_ma_druhe_cyklodepo_na_andelu.html

⁸⁹ See e.g.:

https://www.cep.eu/fileadmin/user_upload/cep.eu/Analysen/COM_2016_590_2_Regulierung_von_TK_Netzbetreibern/cepPolicyBrief_COM_2016_590_Symmetrical_Access_Regulation.pdf

⁹⁰ LV, DE, EE, CZ and ES.

⁹¹ CY, HR, IT, TR, MT, RO, SK, SI, HU, RS, NO, GR and LT.

can be an effective way of facilitating access that complements regulated access to the designated operator's network. Furthermore, two additional NRAs support that position partially. Whereas RTR considers that symmetric regulation of network interconnection can be an effective way of facilitating access that complements regulated access to the designated operator's network for the letter service, BIPT considers that it is only valid for parcels instead.

On the other hand, the arguments expressed to not consider the symmetric regulation as an effective way of facilitating access are the lack of specific need for further access regulation⁹², it might counteract and undermine investments⁹³ or the imposition of additional regulations access to the networks of alternative operators would not help the development of the market and competition⁹⁴. Hence, its application should be carefully considered, as access on commercial agreements is already applied⁹⁵. Furthermore, symmetric access regulation could be used when a market failure is detected in specific aspects⁹⁶. Due to the specificity and diversity of the postal sector, UKE considers that this type of regulation would not make much sense. Other NRAs express that there are large differences between the telecom and postal sector and the experience from the telecom sector could not always be directly transferred to the postal sector⁹⁷. One NRA added that voluntary agreements can be more beneficial to the healthy development of access practices⁹⁸.

The NRAs expressing that the symmetric regulation is an effective way of facilitating access argue that the experience in telecoms could be of great benefit, even when some adaptations are needed. Additional data should be obtained, and appropriate studies performed⁹⁹ or it would require the introduction of significant market power identification in the postal market¹⁰⁰. It could also be useful for fostering parcel locker networks' growth and enhancing the use of DOH (delivery out of home) solutions by e-commerce sellers and buyers¹⁰¹. A major use of those "out of home" delivery options may result in desirable social effect in terms of ecological footprint reduction (locker delivery reduces pollution and traffic congestion in the cities¹⁰²). Additionally, it would be a useful tool to encourage market entry, efficiency and sustainable provision¹⁰³. In particular, ANCOM considers that symmetric regulation might be implemented according to the provisions regarding the access to the DO's network (i.e. additional provisions regarding the thresholds above which the providers should offer the access, justifications for the request of access, elements and services for which access is requested, etc., might be laid down). Finally, it may decrease the cost of delivery, reduce CO₂ emissions and avoid duplication

⁹² FR, BG, CZ, LV and ES.

⁹³ DE.

⁹⁴ BG.

⁹⁵ ES.

⁹⁶ DE.

⁹⁷ NL and DK.

⁹⁸ PT.

⁹⁹ SI.

¹⁰⁰ HU.

¹⁰¹ IT.

¹⁰² IT.

¹⁰³ RO.

of infrastructure in city centres¹⁰⁴.

Conclusion: The symmetric regulation of network interconnection can be an effective way of facilitating access but there is still a lack of experience and information to decide whether the improvements are sufficient to offset the drawbacks that may result from its implementation.

2.14 PDSPs' networks interoperability potentially as an effective way of facilitating access that complements regulated access to the DO's network

When asked about the potential effectiveness of PDSP's networks interoperability to facilitate access that complements regulated access to the DO's network, the answers received could be classified as follows: 4 NRAs¹⁰⁵ consider that it is not applicable. 5 NRAs¹⁰⁶ do not believe in a potential effectiveness of PDSP's networks interoperability to facilitate access that complements regulated access to the DO's network. On the other hand, 16 NRAs¹⁰⁷ believe that PDSP's networks interoperability is a potentially effective way of facilitating access that complements regulated access to the DO's network.

Furthermore, TBST considers that the USP's parcel lockers are already open for competitors as it is an open infrastructure.

The supporters of the positive answer consider that the widespread adoption of standards regarding interoperability between operators could allow for the provision of a more efficient service to the consumer and a more efficient management of services provided. However, in some cases, the NRAs do not see the necessity to implement such an obligation¹⁰⁸. In any case, this should be preferably industry driven and voluntarily adopted by providers¹⁰⁹, being of particular importance in the case of cross-border solutions, where there are greater differences in technological development across countries¹¹⁰. Other NRAs consider that access regulation should be introduced at Directive level. According to NMHH, standardization, in its current form serves this purpose poorly, because the use of standards is currently not mandatory (and the imposition of mandatory application is doubtful), and standards are typically developed for traditional postal services and mostly for universal postal services and are not used by alternative postal operators. However, as indicated by RATEL, this should be mandatory, especially if it contributes to reducing gas emissions in populated areas. On the other hand, Arcep considers that, in the parcel market, it could enable the availability and the proper functioning of end-to-end track and trace services, the traceability of information in order to improve the complaint handling, and it would have a positive impact on quality of service (QoS).

At international level, the implementation through international agreements and the use of common standards could be a useful tool¹¹¹.

¹⁰⁴ RS.

¹⁰⁵ SE, DE, IE and BE

¹⁰⁶ HR, DK, SK, EE and SI.

¹⁰⁷ CY, AT, PT, IT, PL, TR, MT, RO, CZ, HU, RS, GR, LT, FR, NO and ES.

¹⁰⁸ NL and SK.

¹⁰⁹ PT, MT and CZ.

¹¹⁰ PL.

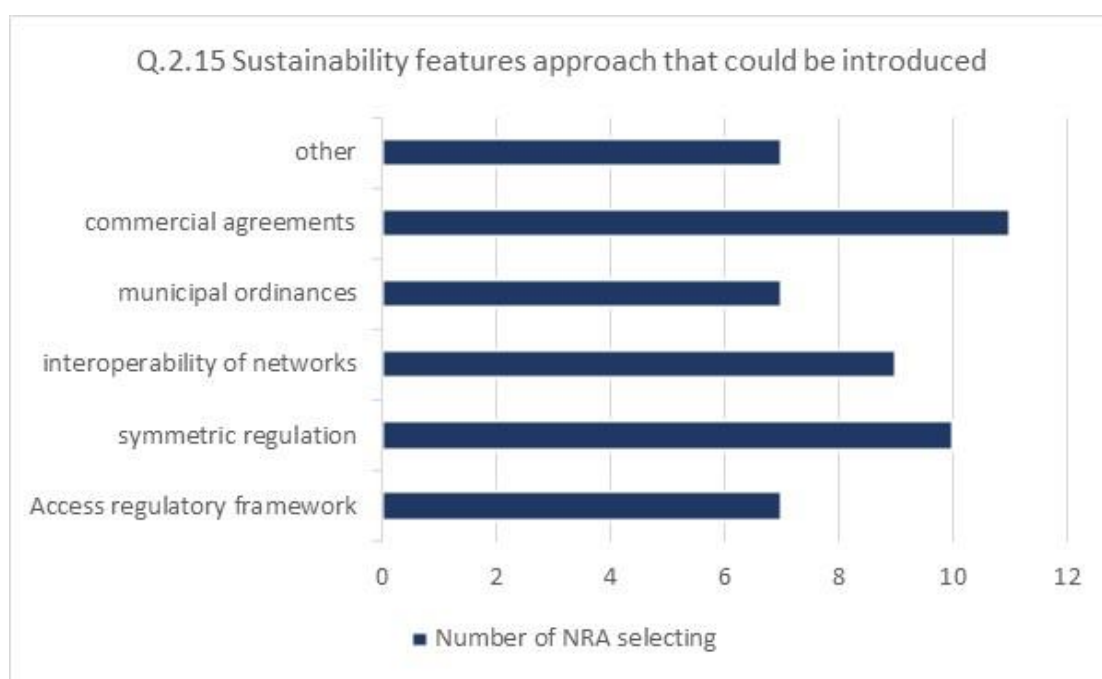
¹¹¹ CY and RO.

Conclusion: The implementation of PDSPs’ networks interoperability is found by most NRAs as a potentially effective way of facilitating access, but some discrepancies appear in the way to implement that interoperability, specially referring to make it mandatory.

2.15 Potential approaches on sustainability features in the context of e-commerce delivery

When asked for the potential approaches on sustainability features that could be introduced in the context of e-commerce delivery, the results obtained are the following: 7 NRAs¹¹² support the access regulatory framework approach. 10 NRAs¹¹³ support the symmetric regulation approach. 9 NRAs¹¹⁴ support the interoperability of networks approach. 7 NRAs¹¹⁵ support the municipal ordinances approach. 11 NRAs¹¹⁶ support the commercial agreements approach. 7 NRAs¹¹⁷ add other approaches.

Figure 3 – Sustainability features approach that could be introduced in the context of e-commerce delivery



Source: ERGP Access & Interoperability WG questionnaire 2022

Those NRAs commenting the selection of the access regulatory framework as a potential approach, consider that an easier and more dynamic access to the postal network through

¹¹² CY, PT, MT, RO, SK, HU and NO.

¹¹³ CY, TR, MT, RO, SK, SI, HU, RS, NO and LT.

¹¹⁴ LV, PT, PL, MT, RO, RS, NO, GR and LT.

¹¹⁵ CY, HR, PL, RO, CZ, HU and ES.

¹¹⁶ BG, ES, LV, MT, RO, DK, SK, SI, CZ, RS and LT.

¹¹⁷ ES, AT, PT, EE, BE, BG and GR.

clearer and more effective regulation may foster a more efficient use of resources and reduce the environmental footprint by avoiding the duplication of networks, resulting in less resources allocated for the development of a new network, higher number of parcels delivered per trip and therefore less CO₂-associated emission. Moreover, access regulation could incentivize competition among providers, stimulating the introduction of innovative, more environmental-friendly delivery services¹¹⁸.

Some of the 10 NRAs that have selected symmetric regulation as a potential approach on sustainability features consider that this approach would be useful to provide sustainable services, avoiding the duplication of networks and encouraging resource sharing among the providers and network efficiency¹¹⁹. NMHH considers that it would also allow the regulation of alternative service providers, with the simultaneous introduction of significant market power identification.

9 NRAs selected the interoperability of networks as an approach, but only 5 of them provided comments on their choice. The benefits of this approach are similar to the ones detected for symmetric regulation¹²⁰. It would facilitate and enhance the postal traffic¹²¹ and give access to the whole national and global market¹²². Furthermore, it would be an excellent tool for practical purposes as it allows the adoption of common technologies across operators within a country and also across countries¹²³.

Those NRAs selecting the municipal ordinances approach consider that local regulations have a very large impact in how the operators are allowed to enter the city centre, because local authorities can regulate the traffic in congested areas, overnight deliveries, control the air pollution levels, etc. Additionally, local authorities can regulate the siting of postal infrastructure and require sharing of such infrastructure with other operators, creating conditions for the establishment of home parcel delivery boxes as an alternative way of delivery¹²⁴.

Regarding the commercial agreements approach, the NRAs that have detailed their answer on it, focus on the capacity of the commercial agreements to facilitate operational synergies, avoid duplication of networks and a larger utilisation of Out Of Home delivery options¹²⁵.

Regarding other approaches, CRC expressed that many operators are committed to developing and implementing innovative green solutions in their development strategies to modernize their organizations and at the same time help protecting the environment. However, in order to achieve this, it is necessary to create an appropriate regulatory framework by the State. It cites as examples the derogations in European acts promoting the use of electric cars and encouraging the use of alternative fuel vehicles

ANACOM signalled that other types of approaches could prove effective on dealing with

¹¹⁸ PT, RO, SK and HU.

¹¹⁹ RO, SK and RS.

¹²⁰ PT and RO.

¹²¹ PL.

¹²² RS.

¹²³ GR.

¹²⁴ NL, ES, HR, PL, RO and HU.

¹²⁵ ES, RO, CZ and SK.

sustainability issues. In any case, the possibility for NRAs to intervene in this regard is not clear, therefore requiring for more clarification of the regulatory framework and NRAs competences in this matter.

BIPT mentioned other travel pollution reduction programmes, such as the ecozone or the reinforcement of the use of nearby collection points.

EETT highlighted that there are two ways to reduce CO₂ emissions in parcel transportation: firstly by making parcel transport more environmentally friendly (electric vehicles, bio-fuels etc.), and by reducing the amount of (unnecessary) traffic.

Conclusion: The variety of NRAs selecting different approaches on sustainability features that could be introduced in the context of e-commerce deliveries (namely: commercial agreements, symmetric regulation, interoperability of networks, access regulatory framework and municipal ordinances) shows the importance and diversity of potentially applicable sustainability features. In addition, other suggested general approaches (e.g. air pollution reduction programmes, electric fleets, etc.) show that the sustainability features are getting a growing relevance.

2.16 Potential positive effects on environmental sustainability related to new forms of access regulations within the last mile delivery process

Regarding the potential positive effects on environmental sustainability related to new forms of access regulation within the last mile delivery process – such as centralization in hubs outside the cities, or mutualization of infrastructures (e.g. parcel lockers) –, we have obtained the following results: 17 NRAs¹²⁶ see potential positive effect while two others do not see positive effects clearly as they prefer such access on voluntary basis or are aware of possible competition distortions or inconsistency with user needs¹²⁷.

Most answers consider that the new forms of access regulation within the last mile delivery process have potential positive effects on environmental sustainability. Some of the NRAs see the potentiality of the new forms of access regulation, but further analysis needs to be conducted, especially on competition point of view¹²⁸.

The centralization of hubs outside cities appears to be positive for some NRAs¹²⁹ especially in relation to the potential positive effects on environmental sustainability. One NRA mentions the report prepared by Accenture “The Sustainable Last Mile. Faster. Cheaper. Greener¹³⁰”. According to that report, there is a potential to lower last-mile emissions between 17 and 26% by 2025 (in comparison with 2020 levels) related to the development of local fulfilment centres. That report estimates that providing access to each other’s networks can eliminate costly redundancies and reduce emissions. PDSPs can adopt greener practices more economically by sharing delivery infrastructure, including fulfilment and open locker and PUDO networks that support interoperability. Furthermore, cities and regulators can encourage asset sharing, e.g. by creating points at the outskirts of cities where deliveries are concentrated for all PDSPs.

¹²⁶ CY, ES, SE, HR, LV, BG, PT, PL, TR, RO, SK, HU, RS, NO, GR, FR and BE.

¹²⁷ SI and CZ.

¹²⁸ NL, SE, PT, PL and BE.

¹²⁹ PL, RO, SK, RS, GR and FR.

¹³⁰ https://www.accenture.com/_acnmedia/PDF-148/Accenture-Sustainable-Mile-POV.pdf#zoom=40

In this point, some NRAs¹³¹ also consider positive the centralization of hubs, but also other aspects should be taken into account – mainly possible distortion of competition and user needs. For Arcep, the development of parcel locker / parcel boxes, may be a good way of reducing the environmental impact of the last mile delivery process, especially if they are mutualized, as well as pick-up point networks. On the other hand, CNMC considers that the optimised use of infrastructure in congested areas (e.g. centralization of hubs outside the cities, collaboration agreements with local operators using non-polluting delivery modes (pedestrian, bikes, electric fleets, etc.)) and the development of municipal ordinances enhancing the sustainability of the urban built environments would have potential positive environmental effects.

TBST states that many regulatory requirements could hinder innovation, so we need to keep in mind the consequences of the regulatory requirements. Moreover, according to ANACOM, the adaptation of the regulatory framework must keep the NRAs' competences clear enough in this regard. Furthermore, BIPT considers that, in order to protect the environment, NRAs should be directly empowered by the PSD to impose mandatory access to the parcel networks of the postal providers at conditions that are not only transparent and non-discriminatory, but also cost based.

Only five NRAs give information about other forms of access regulation within the last mile delivery process that could be considered for the sake of environmental sustainability¹³². For example, creation of conditions for small city-depots which will allow to use in city centres foot or cycle delivery to reduce CO₂ emissions (this solution is applied in Praha since 2020), share parcel machine and car capacities where appropriate or using commercial agreements between PDSPs.

Conclusion: A clear position is expressed by NRAs regarding the potential positive effects on environmental sustainability related to new forms of access regulations within the last mile delivery process, including new forms suggested by some NRAs, for instance, centralisation of hubs outside the cities and downtown depots, development of open access parcel lockers and pick up/drop off points, collaboration agreements with local delivery operators using green fleets or the development of municipal ordinances related to the sustainable use of the built environment.

¹³¹ CZ and HU.

¹³² ES, MT, BE, CZ and HU.

3 Conclusions

This section provides conclusions based on the findings of the NRAs' answers to the questionnaire circulated to them, that were analysed in the previous chapter. Furthermore, some regulatory recommendations are provided. In general, NRAs deem in a forward-looking approach (i.e. based on recent trends and projecting the evolution of such tendencies in the medium term) that access is still necessary in the letter market, as it is a declining market with low competition in which the DO/USP is usually the unique provider covering the whole national territory. Regarding parcels, there is not a wide consensus, as 2/3 of the NRAs providing a decisive answer (almost half of the total answers) considered the access as essential.

Access is regulated in the majority of MS, especially regarding the access to the USPs'/DOs' networks. However, the scope of such access regime differs among MS. It might be an interesting topic of further research to analyse the different scope and approach per country so that good practices are identified and strategic recommendations for further harmonisation may be suggested.

Postal operators access other postal networks either based on a commercial contract or according to domestic regulatory provisions on access (e.g. through a standard access contract). The NRAs have mostly awareness of access applied to the USP's/DO's network but, on the other hand, are not aware of all the cases applied in practice. Therefore, NRAs could evaluate the satisfaction of postal players with the current access scheme to assess if regulatory actions should be considered in a future regulatory framework. The NRAs may handle regulatory tools targeted to the postal operators in their countries for that purpose, for instance, a public consultation and a Working Group with those key stakeholders.

Taking into account the fast development of e-commerce postal deliveries, around half of the NRAs answering the questionnaire do not consider necessary to make any changes to the access regime, as the current regulatory framework already allows for the provision of postal operators' access to the postal network and some operators already deployed their own network, especially in urban areas, not requesting in those deliveries access to the incumbents' network. Nonetheless, another half of NRAs deem necessary to develop the access regime to cater for the e-commerce growth of deliveries with the purpose of avoiding duplication of investment, fostering greater environmental sustainability practices, facilitating greater competition and an enhanced quality of service. As the situation differs per MS, NRA's dialogue with the postal operators is important to assess if access regulatory development is necessary or, to mediate in any access conflict that may arise if the NRA has such mediation competences.

The questionnaire circulated to the NRAs included a question based on the EC's report on the application of the PSD, that was adopted and published in November 2021. That report stated that the absence of more developed provisions on access to the postal network may have contributed to the low uptake of competition in the letter segment. That finding was related to a backward-looking evaluation of the letter segment evolution since the last review of the PSD in 2008 (i.e. a long time period of fourteen years). However, when the NRAs answered the questionnaire they considered a quite shorter time period and with a forward-looking approach instead. Therefore, their conclusions were not aligned with the finding of the EC report. In particular, around 2/3 of the NRAs did not provide evidence to infer that more developed provisions on access to the postal network in the letter segment could contribute to competition. Additionally, around half of those NRAs (i.e. around 1/3 of NRAs answering the

questionnaire) considered that the main reason for the lack of demand in that segment is related to the transition of consumer interest from letter mail to the parcel segment due to the e-commerce growth and digitisation. Hence, the EC's findings on access in its application report and the NRAs' findings in this ERGP report would not be directly comparable as they apply to different contexts.

More than half of the NRAs deemed that the competition would exist only in particular segments of the market without the introduction of regulation on access to the DO's/USP's network, though the majority referred specifically to the parcel segment.

In general, despite the e-commerce parcels boom, the majority of NRAs have not found additional problems that have urged them to create new regulation or new measures to adapt to the new reality in terms of access regarding postal parcels related to e-commerce purchases. One reason behind that general perception may be that commercial agreements for collaboration between parcel delivery service providers could provide flexibility to satisfy the commercial needs of such undertakings. In this sense, there is a tendency to commercially collaborate between operators to improve the level of customer satisfaction. Another trend in the sector is the use of innovative delivery solutions based on IT (e.g. artificial intelligence for optimisation of the last-mile deliveries) and greener delivery options (e.g. electric vans or scooters).

So far, the collection of data to assess the accessibility of e-commerce delivery networks is not a widespread practice within NRAs. In case this issue becomes critical in the future, NRAs would need to enhance their supervisory competences provided that they were not currently allowed to gather that data. The aim of causing minimal administrative burden should also be taken into account.

Most NRAs believe that there is no difference regarding the PDSP size in terms of accessibility to third party access delivery solutions. Likewise, a majority of NRAs deem that there is no difference either regarding the accessibility of delivery networks depending on the origin of the postal item.

The symmetric regulation of network interconnection can be an effective way of facilitating access but there is still a lack of experience and information to decide whether the improvements are sufficient to offset the drawbacks (e.g. if the introduction of such new regulatory measures would jeopardise investments in required infrastructure) that may result from its implementation. Therefore, if some NRA would decide to implement symmetric regulatory provisions in its domestic market, it should perform first a robust impact assessment (e.g. through a quantitative and qualitative cost-benefit analysis) to ensure the success of that regulatory measure.

On the other hand, the implementation of PDSPs' network interoperability is found by most NRAs as a potentially effective way of facilitating access, but some discrepancies appear in the way to implement that interoperability, in particular, about the possibility to make it mandatory. Therefore, in case that some standard would be developed in the future in the field of postal services regarding PDSPs' networks interoperability for the facilitation of access to those networks, it should be clear in advance the compulsory or voluntary nature of such a standard. As that potential standardisation work would supposedly not relate to the provision of the universal postal service, it might be reasonable to consider a non-compulsory nature.

Some strategic recommendations for designing access models that can have a positive impact on environmental sustainability in last mile delivery have been identified, namely: the introduction of legislative measures to encourage the use of parcel lockers (e.g. simplifying the authorisation procedures for their installation and tax concessions), and the possibility of common access to parcel lockers, delivery hubs and pick up/drop off points. Although not related to access provisions, the utilisation of green delivery solutions and technology for

optimisation of the delivery routes as well as the facilitation of collection/return of parcels through walk or bicycle rides may positively impact on such an environmental sustainability.

The variety of NRAs selecting different approaches on sustainability features that could be introduced in the context of e-commerce deliveries (namely: commercial agreements, symmetric regulation, interoperability of networks, access regulatory framework and municipal ordinances) demonstrates the importance and diversity of potentially applicable sustainable features. In addition, other suggested general approaches (e.g. air pollution reduction programmes in urban areas) show that the environmental sustainability features are getting a growing relevance in the postal sector.

In general, a clear position is expressed by NRAs regarding the potential positive effects on environmental sustainability related to new forms of access regulations within the last mile delivery process, including new forms suggested by some NRAs (e.g. centralisation of hubs outside the cities and downtown depots, development of open access parcel lockers and pick-up/drop-off points, collaboration agreements with local delivery operators using green fleets or the development of municipal ordinances related to the sustainable use of the built environment).

Therefore, as a final reflection, NRAs should assess if environmental sustainability features might be introduced (if remit allows and if not done yet) in their postal regulatory frameworks and if access provisions should consider such features or if they would fit better in other sections of the domestic postal regulation.

Annexes

ANNEX 1. Abbreviations

DO	Designated Operator
DOH	Delivery Out of Home
EC	European Commission
ERGP	European Regulators Group for Postal Services
GHG	Greenhouse Gas emissions
IT	Information Technology
MS	Member State
NRA	National Regulatory Authority
PDSP	Parcel Delivery Service Provider
PSD	Postal Services Directive
PUDO	Pick Up Drop Off
QoS	Quality of Service
SMP	Significant Market Power
US	Universal Service
USO	Universal Service Obligation
USP	Universal Service Provider
WG	Working Group

ANNEX 2 – Index of Figures

Figure 1	Regulation of access in national regulatory framework	P 11
Figure 2	Scope of the access applied in practice	P 13
Figure 3	Sustainability features approach that could be introduced in the context of e-commerce delivery	P 27

ANNEX 3 – Index of Tables

Table 1	Basis for the application of access	P 12
Table 2	Type of document on which access is implemented	P 12

ANNEX 4 – List of countries

Country	Acronym	NRA
Austria	AT	RTR
Belgium	BE	BIPT
Bulgaria	BG	CRC
Croatia	HR	HAKOM
Cyprus	CY	OCECPR
Czech Republic	CZ	CTU
Denmark	DK	TBST
Estonia	EE	ECA
France	FR	Arcep
Germany	DE	BNetzA
Greece	EL	EETT
Hungary	HU	NMHH
Ireland	IE	COMREG
Italy	IT	Agcom
Latvia	LV	SPRK
Lithuania	LT	RRT
Luxembourg	LU	ILR
Malta	MT	MCA
Netherlands	NL	ACM
Norway	NO	Nkom
Poland	PL	UKE
Portugal	PT	ANACOM
Romania	RO	ANCOM
Republic of Serbia	RS	RATEL
Slovakia	SK	RU
Slovenia	SI	AKOS
Spain	ES	CNMC
Sweden	SE	PTS
Turkey	TR	BTK-ICTA