



Cross-border public services

CPS inventory analysis and policy recommendations

Contract: 2020CE160AT084



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Table of Contents

Abstract	9
Executive summary	10
Synthèse	16
1 Introduction	23
2 Analysis of the ESPON-REGIO CPS database	25
2.1 Geographical patterns of CPS provision in Europe	25
2.1.1 CPS in Europe	25
2.1.2 CPS density per border segment	27
2.1.3 CPS density by country.....	30
2.1.4 Policy areas	33
2.1.5 Development since 1960	38
2.1.6 Target groups	43
2.1.7 CPS in larger geographical areas	45
2.1.8 Specific geographical patterns	61
2.1.9 Conclusions from geographical patterns	70
2.2 Characterisation of CPS by policy area	71
2.2.1 Transport	71
2.2.2 Spatial planning, economic development, tourism, and culture	76
2.2.3 Healthcare and social inclusion.....	80
2.2.4 Education and training	84
2.2.5 Labour market and employment	87
2.2.6 Communication, broadband and information society.....	89
2.2.7 Environment, natural resources and climate action.....	89
2.2.8 Civil protection and disaster management	94
2.2.9 Citizenship, justice, and public security.....	99
2.2.10 Provisional conclusions.....	101
3 Conclusions and policy recommendations	103
3.1 An updated conceptual framework	103
3.1.1 Additional promotion and monitoring activities	105
3.1.2 Different price levels as opportunity rather than challenge	106
3.2 Consideration of stakeholder needs	106
3.2.1 Aim for better documentation	107
3.2.2 Legal frameworks are important but not necessarily sufficient	108
3.3 Coverage across policy fields	108
3.3.1 The roles of EU policy frameworks vary	109
3.3.2 Future shifts of CPS themes and focus	110
3.3.3 Focus on the effects of CPS	111
3.4 CPS triggers and hurdles.....	111
3.4.1 EU-level guidance may be very valuable	112
3.4.2 Create incentives to support CPS	113

3.5	Conclusions for stakeholders in charge of CPS.....	114
3.5.1	Regional and local authorities	114
3.5.2	Cross-border organisations and EGTCs	115
3.5.3	Interreg authorities.....	116
	Bibliography	118

List of Figures

Figure 1	Location of CPS in Europe	26
Figure 2	Number of CPS per border segment	28
Figure 3	Number and density of CPS per country and border length.....	32
Figure 4	CPS by policy area	37
Figure 5	Factors determining the selection of policy areas	38
Figure 6	Newly established CPS per year 1930-2022.....	39
Figure 7	Temporal development of CPS – newly established services per decade	40
Figure 8	Temporal development of CPS provision (1960-2022)	41
Figure 9	New CPS established 1970-2022.....	42
Figure 10	CPS development 1960-2022: New CPS per year and by policy area	43
Figure 11	CPS addressing public authorities: number of services	45
Figure 12	CPS in West European countries: Place and area of services	47
Figure 13	CPS in West European countries: Policy areas	48
Figure 14	CPS in Nordic countries: Place and area of services	50
Figure 15	CPS in Nordic countries: Policy areas	51
Figure 16	CPS in Central and East European countries: Place and area of services.....	53
Figure 17	CPS in Central and East European countries: Policy areas.....	54
Figure 18	CPS in the Alpine space: Place and area of services	56
Figure 19	CPS in the Alpine space: Policy areas	57
Figure 20	CPS on the Iberian Peninsula: Place and area of services.....	59
Figure 21	CPS on the Iberian Peninsula: Policy areas.....	60
Figure 22	CPS and border areas	62
Figure 23	Main service areas (share of CPS).....	63
Figure 24	Permeability of CPS by public transport	64
Figure 25	CPS by public transport border permeability	65
Figure 26	CPS and geographical specificities	66
Figure 27	CPS and geographical specificities	67
Figure 28	Language similarities - Number of CPS per category	68
Figure 29	Language similarities in a CPS.....	69
Figure 30	Transport CPS	73
Figure 31	CPS for spatial planning, tourism and culture	78
Figure 32	CPS for healthcare and social inclusion	81
Figure 33	CPS for education and training.....	85
Figure 34	CPS for labour market and employment	88
Figure 35	CPS for environmental protection and protected sites in Europe.....	90
Figure 36	CPS for environmental protection.....	91
Figure 37	CPS for civil protection and disaster management.....	95
Figure 38	CPS for citizenship, justice and public security	100

List of Tables

Table 1	Ranking of borders according to share of CPS	29
Table 2	CPS density by country, area and border length.....	30
Table 3	Policy areas and fields of intervention	33
Table 4	Number and share of policy areas addressed by CPS	35
Table 5	CPS target groups	44
Table 6	Further CPS on cross-border tariff cooperation / integration and ticketing	74
Table 7	Elements of the CPS definition	103

Abbreviations

Abbreviation	Text
CBPT	Cross-border public transport services
CJEU	Court of Justice of the European Union
CPS	Cross-border public service(s)
CPSP	Cross-border public service provision
ECBM	European Cross-Border Mechanism
EEIG	European Economic Interest Grouping
EGTC	European Grouping of Territorial Cooperation
EURES	European Employment Services
GDPR	General Data Protection Regulation
SGI	Services of General Interest
ZOAST	Zones Organisées d'Accès aux Soins Transfrontaliers (Organised zones for cross-border access to healthcare)

Abstract

This report presents the final findings of the study on cross-border public services and complements the previous reports. These focused on the conceptual framework, processes to achieve a sustainable CPS database and case studies. The data analysis is divided into two parts, firstly the geographical distribution of services with the resulting spatial-temporal patterns and characteristics. Then, specific features of the individual policy fields are examined, based on the hypothesis that CPS materialise differently in different fields. The report concludes with recommendations on further supporting sustainable data on CPS and achieving the best use of cross-border public services across Europe.

Executive summary

This report presents findings from the ‘Cross-border public services’ (CPS) study which reviews the potential to promote more and better CPS. The study has three specific objectives addressed in different reports, these are to:

- (i) consolidate the conceptual framework used to identify and document CPS in ‘Cross-border public services – The conceptual framework of the CPS inventory’;
- (ii) design a methodology and process for future inventory data input, validation and monitoring in ‘Cross-border public services – Methodology and processes for updating the CPS inventory’;
- (iii) produce a policy analysis and recommendations on cross-border obstacles and future CPS deployment in this report and 30 case studies in ‘Cross-border public services – Case study collection’.

The analysis of the ESPON-REGIO CPS database is based on data as of 25 May 2022, giving a snapshot of CPS development. The analysis covers different dimensions including the geographical distribution of CPS and their spatial-temporal patterns, their characteristics and an analysis of CPS features by policy field.

The analysis covers the 1,551 services in the ESPON-REGIO CPS database. Most CPS are along the borders of the six founding EU Member States and the Nordic countries. Density is the highest at the Belgian-Dutch border, followed by the Austrian-German and French-German borders. CPS are mostly located along borders with a long tradition of cross-border cooperation or with significant pressure for public services in sparsely populated territories.

CPS cover nine policy areas, with very different numbers in the ESPON-REGIO CPS database for each (see table below). The spatial distribution of these nine themes is uneven across Europe. The policy areas reflect territorial specifics due to topography or natural assets, high demand for services, politically grounded urgency or the feasibility of adding value with such services.

Rank	Policy area	Frequency	Share (%)
1	Transport	966	61.5
2	Environment protection	135	8.6
3	Civil protection and disaster management	133	8.5
4	Education and training	81	5.2
5	Healthcare and social inclusion	77	4.9
6	Spatial planning, tourism, and culture	71	4.5
7	Labour market and employment	50	3.2
8	Citizenship, justice and public security	43	2.7

9	Communication, broadband, and information society	10	0.6
10	Other themes	4	0.3
<i>Sum¹</i>		<i>1,570</i>	<i>100.0</i>

The development of CPS has been increasingly dynamic since the 1990s, reflecting changes in the framework conditions and incentives to strengthen cross-border integration. Interreg, the Single Market and the adoption of the EGTC regulation underlie only some of these changes.

There is good reason to assume why some $\frac{3}{4}$ of CPS are close to state borders. However, the service area may go far beyond the immediate border. Particularly in the Nordic countries, but also on the Iberian Peninsula and even in Central Europe many CPS cover up to 50 km and sometimes even more beyond the border area.

Permeability of borders (by public transport) is important in two ways. Firstly, CPS may only be meaningful if border permeability is sufficiently high, such as for labour, education, or healthcare. Secondly, CPS increase border permeability, especially transport and citizen services.

Geographical specificities in border regions may foster or hinder the development of CPS. The analysis differentiates river and maritime borders, mountainous areas, rural/sparsely populated areas and agglomerations/twin cities. 84% of the identified CPS are found evenly on borders with at least one of the four specificities. The type of border is frequently the reason for CPS covering nature conservation or disaster management. In many border regions, geographical specificities are not seen as an obstacle to CPS, but rather an opportunity, or even a necessity.

The development of CPS is easier in border areas with the same or similar languages. With different languages, however, CPS may help to reduce the linguistic barrier, e.g. education and training, labour, culture and tourism. The analysis confirms that nearly half of the identified CPS are on borders with the same language. About $\frac{1}{4}$ are on borders with different languages.

In view of these different features and the concentration of CPS along some EU border areas the analysis provides additional insights for CPS in larger geographical areas. The findings differentiate:

West European countries. Here, cross-border cooperation has a long tradition, at the same time demand for (cross-border and domestic) services is high due to the density of population and businesses along these borders. The entire border from Emden in the North to Basel in the South, and from Zeebrugge in the West to Maastricht and Aachen in the East, and from Veurne to Aubange, as well as further via Schengen to Karlsruhe on the river Rhine is almost comprehensively covered by very diverse CPS. In addition, the diversity of CPS is very high.

Nordic countries. There are some similarities with West European countries but also some differences. While cross-border cooperation also has a long tradition, these border areas have extremely low population densities and thus a generally low demand for services. Establishing CPS in these areas is strategic to maintaining public services, increasing their effectiveness and efficiency by reducing costs. The highest concentration is on the Norwegian-Swedish border. Spatial coverage is not seamless but service areas are extensive due to large administrative units and the large service areas required to achieve

¹ Some CPS are assigned to more than one theme.

critical mass. The focus of CPS in Nordic countries is on civil protection and disaster management.

Central and Eastern Europe. Due to the backlog of demand for cross-border cooperation the number of identified CPS is still comparatively small. Within these countries there is a clear north-south and west-east divide. The further south and east, the fewer CPS could be identified on the borders of the EU13 as well as with neighbouring IPA countries. The focus of these services is clearly on transport and in the south also on civil protection and disaster management.

Alpine Space. The area is diverse with abundant cross-border cooperation. The mountain ranges hamper CPS implementation and at the same time foster diverse services. Consequently, compared to the rest of Europe, the Alpine region has a comparatively high density of CPS. It is much higher in the northern parts than along the southern borders. A strong focus on transport is related to population density and the objective of developing services along the main transport axes. Other areas in the Alpine Space have different types of CPS.

Iberian Peninsula. The area has few state borders where CPS may matter but a rich common cultural heritage. The few identified CPS even decrease from north to south. This may be linked to demand with very low population densities in the southern border regions of Spain and Portugal. The French-Spanish border is clearly dominated by CPS for transport as well as spatial planning, tourism and culture. The Portuguese-Spanish border, on the other hand, is dominated by labour market CPS, healthcare and environmental protection services.

The analysis of each policy area includes a geographical overview, differentiating CPS by fields of intervention, detailing features such as the legal framework, governance and target groups. Case studies illustrations complement the analysis.

Transport CPS. Most transport CPS are on borders between EU14 countries, with a few on borders between EU13 countries. Nearly all provide cross-border public transport, most of which are bus and rail services with some ferries and trams. Another group cover cross-border ticket systems. A few concern joint transport infrastructure maintenance, facilitating transit traffic at cross-border points or other forms of cross-border transport including newer initiatives such as community bike rental systems or carpooling.

Spatial planning, economic development, tourism and cultural CPS. There is a wide variety in this field with about $\frac{3}{4}$ on borders between EU14 countries. Most of the identified CPS focus on culture and cultural heritage or joint tourism development. A few support joint economic development either through business cooperation or joint business and technology parks. Case studies also illustrate the variety of these CPS and show how joint planning and municipal tasks can be provided by joint bodies with their own legal personality.

Healthcare and social inclusion. These CPS aim to overcome difficult access to domestic healthcare, medical emergencies, long-term care or a lack of sufficient general or specialist care. Again, about $\frac{3}{4}$ of these services are between EU14 countries. There are very few between EU13 countries. Most of these CPS have been developed since 2000 to comply with border-crossing service obligations due to EU healthcare legislation. The large majority of these CPS address emergency or general healthcare. CPS supporting hospitals in border regions are rare and hardly any cover long-term care or social assistance.

Education and training. In this policy area there is an even higher concentration of CPS along internal EU14 borders. These CPS cover all phases of education as well as the recognition of degrees. Some $\frac{2}{3}$ relate to tertiary or early childhood education (pre- and primary school). Secondary education and vocational training are far less covered.

Labour market and employment. Many of the identified CPS were set up in the 1990s with support from the ESF-funded programme EURES. Most of these CPS provide information and advice to facilitate cross-border mobility for workers or job seekers, often also including job placement. Nearly all other CPS focus only on job placement. Outside the 4/5 of these CPS along internal EU14 borders, the distribution is relatively even along other borders.

Communication, broadband and information society. This has by far the fewest CPS in the inventory. The reasons for this include some ICT applications being included in a specific policy area rather than in this general cross-thematic area.

Environment, natural resources and climate action. The diverse CPS within this policy area are widely dispersed along all types of EU borders. Here only slightly more than half the identified CPS are on internal EU14 borders. Several are on external EU borders including IPA countries. Among the six fields of intervention more than 40% of the CPS refer to the protection of terrestrial ecosystems and landscapes. Another nearly as important field covers joint sewage water treatment and the provision of drinking water. CPS to produce or distribute renewable energy or establish joint management and/or treatment of solid waste are still very rare. Some case studies illustrate the potential for similar CPS.

Civil protection and disaster management. In contrast to the CPS listed above, these are primarily 'stand-by-services' and only operational for disasters, major incidents or on request for external assistance. These CPS typically rely on agreements between neighbouring countries committing to cross-border assistance. There are different kinds of these CPS on all types of EU borders, though about 2/3 in the database are on EU14 internal borders. The agreements and their implementation, i.e. the actual cross-border assistance for an incident, may be broadly defined and concern civil protection generally or may address specific incidents such as firefighting or flood management. Most of these identified CPS are for large-scale incidents and major disasters while a few deal with joint flood management. Case studies illustrate range from CPS covering the whole border between two countries to local cooperation between two municipalities.

Citizenship, justice and public security. These CPS are also highly concentrated with more than 4/5 along internal EU14 borders. Most borders between EU13 countries do not seem to have such CPS. Many of these CPS are linked to the completion of the Single Market and implementation of the Schengen Area. Half of these CPS provide advice and support to inhabitants in border regions for everyday cross-border activities. The other half involve closer cooperation between national and/or regional police and customs authorities.

Due to the variety of CPS within and across policy areas and their different implementation, cross-thematic conclusions on individual CPS features are not useful. However, the geographical variation of CPS along internal and external borders and for groups of EU Member States matters. Border areas with a strong positive experience of CPS typically have a greater willingness to establish new services to jointly solve problems or address development needs in other policy areas.

Policy fields with strong potential for more and better CPS are in particular 'environment, natural resources and climate change action' as well as 'civil protection and disaster management'. Both fields are highly relevant for all types of EU borders and may benefit from more activity especially from local, district or regional actors.

Conclusions and policy recommendations differentiate five areas of interest that matter for different potential CPS stakeholders:

- **Communication related to the concept of CPS.** The conceptual framework has been updated in the study,² which overcomes most of the previous ambiguities. However, some uncertainties may remain especially for people not familiar with the definition of CPS. These can be tackled with additional promotion and monitoring, in particular to reach stakeholders outside the usual cross-border cooperation community in border regions. Communication is needed not only on the concept of CPS but also to raise awareness for potential CPS, e.g. with different prices and other differences on both sides of a border being frequently understood as hurdles to CPS.
- **Stakeholders involved in CPS development and/or provision have particular needs.** There is a large information gap between cross-border cooperation actors and (potential) CPS providers in other institutions. The same holds true for CPS with different target groups. Generally speaking, documentation of CPS targeting general public tends to be better than for CPS targeting other public authorities. This calls for better and more continuous documentation of CPS to address different needs, including systematic gaps due to limited information contributions from CPS providers.
- **Potential for new and better CPS in different policy areas and different cross-border territories.** CPS have been developed to very different extents across policy areas. By far the most are transport services, whereas labour related CPS are still comparatively rare for example. EU policy matters since incentives and harmonisation vary across the policy areas. Despite the dominance of transport CPS there is further potential due to geographical imbalances and new types of services, including replacing single person car traffic. More attention should be given to energy supply, solid waste and wastewater treatment to address future challenges and risks. The same holds for CPS related to other services-of-general-interest (SGI) such as health and permanent care services to address demographic pressures and scarce public resources. Finally, CPS for disaster management and climate change actions may deserve more attention. In any case, for CPS to be successful, it is important to ensure they 'materialise' in the border region rather than stop at the level of the 'paperwork', which is often necessary but not sufficient.
- **Awareness raising and incentives can trigger CPS development and help overcome hurdles.** Several EU level activities and policy developments in the past 30 years have triggered CPS development. Among them is Interreg, supporting projects to initiate and develop CPS. Also legislative changes have either helped (e.g. EGTC regulation) or could be a new trigger (e.g. ECBM³). EU-level guidance may be very valuable, not least to raise awareness about the added value of CPS. This may include additional incentives to provide information on CPS.

Regional and local authorities, cross-border organisations as well as Interreg authorities can contribute to the recommendations according to their particular roles and responsibilities.

Regional and local authorities, depending on their governance structure can:

- promote CPS to target groups in their region,
- change perspectives, looking at the whole cross-border territory,
- lobby for border region needs,
- prove CPS benefits through pilots,
- use EU policy documents and studies actively.

² See report 'Cross-border public services – The conceptual framework of the CPS inventory'

³ Refers to the proposal of the so-called 'European Cross-Border Mechanism'.

Cross-border organisations and EGTCs have by nature a cross-border perspective which should be strengthened by:

- communicating information from across the EU in their region,
- creating knowledge of CPS,
- reaching out to potential CPS providers,
- contributing to a change of perspective by turning hurdles into opportunities,
- not trying to reinvent the wheel but acting as knowledge broker for CPS,
- starting with low-hanging fruit where there is little or no CPS experience.

In addition to these contributions **EGTCs** may play an outstanding role by:

- implementing pilots for CPS using their legal cross-border entity status,
- taking responsibility for continuous CPS provision on behalf of their members,
- being specifically founded for a CPS with adequate membership and governance.

Interreg authorities should more actively promote CPS by:

- strengthening the expected durability of projects,
- reaching out to unusual suspects,
- offering guidance to their beneficiaries on how to provide CPS,
- including CPS in their socio-economic programme analyses,
- designing future Interreg programmes strategically to support CPS development.

Synthèse

Ce rapport présente les résultats de l'étude sur les services publics transfrontaliers (SPT, CPS en anglais) qui examine dans quelle mesure on pourrait augmenter le nombre de SPT et leur qualité. Les trois dimensions du projet sont abordées dans des rapports distincts:

- (iv) Le rapport « Cross-border public services - The conceptual framework of the CPS inventory » présente le cadre conceptuel utilisé pour identifier et documenter les SPT ;
- (v) Le rapport « Cross-border public services - Methodology and processes for updating the CPS inventory » décrit la méthodologie utilisée, et notamment le processus pour compiler, valider et actualiser les données;
- (vi) Le rapport « Cross-border public services - Case study collection » fournit une analyse politique et des recommandations relatives aux obstacles transfrontaliers et au déploiement futur des SPT. 30 études de cas sont également présentées.

L'analyse de la base de données ESPON-REGIO CPS s'appuie sur les données au 25 mai 2022, soit un instantané de l'offre en matière de SPT. L'analyse couvre différentes dimensions, notamment la répartition géographique des SPT et l'évolution de l'offre au cours des dernières décennies. Leurs caractéristiques sont décrites en distinguant les SPT relevant de différents champs d'action politique.

L'analyse porte sur les 1 551 services de la base de données ESPON-REGIO CPS. La plupart des CPS se trouvent le long des frontières des six États membres fondateurs de l'UE et des pays nordiques. La densité de SPT est la plus élevée à la frontière entre la Belgique et les Pays-Bas, suivie des frontières entre l'Autriche et l'Allemagne et entre la France et l'Allemagne. L'offre en matière de SPT est concentrée le long de frontières qui soit ont une longue tradition de coopération transfrontalière, soit séparent des territoires faiblement peuplés avec des services publics déficients.

Les SPT relèvent de neuf champs d'action politiques. La répartition des SPT par champ politique et par zone géographique est inégale (voir le tableau ci-dessous). L'importance relative de champs d'action politique le long des différentes frontières reflète les spécificités territoriales dues à la topographie ou aux ressources naturelles. L'importance de la demande en matière de services, la nécessité politique de mettre en place rapidement un SPT et la facilité avec laquelle un SPT générant une valeur ajoutée pour les utilisateurs peut être mise en place déterminent également le nombre de SPT identifiés.

Rang	Domaine politique	Fréquence	Part (%)
1	Transport	966	61.5
2	Protection de l'environnement	135	8.6
3	Protection civile et gestion des catastrophes	133	8.5
4	Éducation et formation	81	5.2
5	Soins de santé et inclusion sociale	77	4.9
6	Aménagement du territoire, tourisme et culture	71	4.5

7	Marché du travail et emploi	50	3.2
8	Citoyenneté, justice et sécurité publique	43	2.7
9	Communication, haut débit et société de l'information	10	0.6
10	Autres thèmes	4	0.3
<i>Somme</i> ⁴		1,570	100.0

Le développement des SPT est de plus en plus rapide depuis les années 1990, grâce à l'amélioration des conditions cadres et au nombre plus important d'incitations à renforcer l'intégration transfrontalière. Interreg, le marché unique et l'adoption du règlement GECT n'expliquent qu'en partie cette évolution.

¾ des SPT sont produits et consommés à proximité immédiate frontières entre États membres. Cependant, la zone de chalandise peut s'étendre bien au-delà de cette zone. En particulier dans les pays nordiques, mais aussi dans la péninsule ibérique et même en Europe centrale, de nombreux CPS ont une zone de chalandise qui s'étend jusqu'à 50 km des frontières, et parfois même au-delà.

La perméabilité des frontières (par les transports publics) est importante à deux égards. D'une part, fournir des SPT peut n'avoir de sens que si la perméabilité des frontières est suffisante, notamment en matière de flux domiciles-travail, d'éducation ou d'accès aux soins de santé. D'autre part, les SPT augmentent la perméabilité des frontières, par exemple en facilitant les transports et en fournissant des services aux citoyens.

Les spécificités géographiques des régions frontalières peuvent favoriser ou entraver le développement des SPT. L'analyse distingue les frontières fluviales et maritimes, les zones montagneuses, les zones rurales/peu peuplées et les agglomérations/villes jumelées. 84 % des SPT identifiés sont fournis le long de frontières présentant au moins l'une des quatre spécificités. Les SPT relevant de la conservation de la nature ou de la gestion des catastrophes sont souvent liés à une spécificité géographique. Dans de nombreuses régions frontalières, les spécificités géographiques ne sont pas considérées comme un obstacle aux SPT, mais plutôt comme une opportunité ou même une condition nécessaire à leur développement.

Le développement des SPT est plus facile dans les zones frontalières où les langues pratiquées sont identiques ou similaires. Lorsque les langues pratiquées sont différentes, les SPT peuvent contribuer à réduire la barrière linguistique, par exemple dans les domaines de l'éducation et de la formation, du travail, de la culture et du tourisme. L'analyse confirme que près de la moitié des CPS identifiés sont fournis le long de frontières séparant des territoires où sont parlés la même langue. Environ ¼ sont fournis le long de frontières séparant des territoires où sont parlées des langues différentes.

Compte tenu de ces différentes caractéristiques et de la concentration des SPT le long de certaines zones frontalières de l'UE, l'analyse caractérise les SPT par grandes régions géographiques, et montre les différences entre régions :

Les pays d'Europe occidentale. La coopération transfrontalière y a une longue tradition, tandis que la demande de services (transfrontaliers et nationaux) est élevée en raison de la densité de population, d'entreprises et de sociétés le long de ces frontières. Toute la frontière, d'Emden au nord à Bâle au sud, de Zeebrugge à l'ouest à Maastricht et Aix-la-Chapelle à l'est, et de Veurne à Aubange, ainsi que plus loin via Schengen à Karlsruhe sur

⁴ Certains CPS sont affectés à plus d'un thème.

le Rhin, est presque entièrement couverte par des SPT très divers. En outre, la diversité des SPT est très élevée.

Les pays nordiques. On observe certaines similitudes avec les pays d'Europe occidentale, mais aussi quelques différences. Alors que la coopération transfrontalière a également une longue tradition, ces zones frontalières ont des densités de population extrêmement faibles et donc une demande de services généralement faible. La mise en place de SPT dans ces zones est stratégique pour maintenir les services publics, augmenter leur efficacité et leur efficacité en réduisant les coûts. La concentration de SPT la plus forte est observée le long de la frontière entre la Norvège et la Suède. La couverture spatiale n'est pas homogène mais les zones de chalandise sont étendues en raison des grandes unités administratives et de la nécessité de couvrir un vaste espace pour atteindre une masse critique. Dans les pays nordiques, la protection civile et la gestion des catastrophes sont au centre des préoccupations de la SPT.

Europe centrale et orientale. En raison de l'accumulation de demandes de coopération transfrontalière, le nombre de CPS identifiés est encore relativement faible. Au sein de ces pays, il existe une nette division nord-sud et ouest-est. Plus on va vers le sud et l'est, moins on peut identifier de CPS aux frontières de l'UE13 ainsi qu'avec les pays IPA voisins. Les services transport et, dans le sud, de protection civile et de gestion des catastrophes sont nettement surreprésentés.

Espace alpin. La zone est diversifiée et la coopération transfrontalière y est abondante. Les chaînes de montagnes entravent la mise en œuvre des CPS et favorisent en même temps la diversité des services. Par conséquent, par rapport au reste de l'Europe, la région alpine présente une densité relativement élevée de CPS. Elle est beaucoup plus élevée dans les parties nord que le long des frontières sud. L'accent est mis sur le transport en raison de la densité de population et à la volonté politique de développer des services le long des principaux axes de transport. Les SPT dans les autres parties de l'espace alpin sont de nature différente.

Péninsule ibérique. La région a peu de frontières étatiques où les CPS peuvent avoir de l'importance mais un riche patrimoine culturel commun. Les quelques CPS identifiés sont plus nombreux dans la partie nord que dans la partie sud. Cela peut être lié à la demande, les densités de population étant très faibles dans les régions frontalières du sud de l'Espagne et du Portugal. Les SPT dans les domaines du transport, de l'aménagement du territoire, du tourisme et de la culture sont nettement surreprésentés le long de la frontière franco-espagnole. Les SPT en lien avec le fonctionnement du marché du travail, les soins de santé et les services de protection de l'environnement sont surreprésentés le long de la frontière luso-espagnole.

L'analyse des SPT relevant de chaque champ d'action politique fournit une synthèse de leur répartition géographique, des domaines d'intervention privilégiés. Elle décrit également des caractéristiques telles que le cadre juridique, la gouvernance et les groupes cibles. Des illustrations tirées d'études de cas complètent l'analyse.

SPT de transport. Les SPT de transport sont fournis le long de frontières entre les pays de l'UE14, et dans un faible nombre de cas seulement le long de frontières entre les pays de l'UE13. Presque tous ces SPT fournissent des transports publics transfrontaliers, dont la plupart sont des services de bus et de train, et parfois des ferries et des trams. Les systèmes de billetterie transfrontaliers constituent une autre catégorie de SPT. On observe également quelques exemples d'entretien commun des infrastructures de transport, de facilitation du trafic de transit aux points transfrontaliers ou d'autres formes de transport transfrontalier, y compris des initiatives plus récentes comme les systèmes communautaires de location de vélos ou le covoiturage.

Aménagement du territoire, développement économique, tourisme et SPT culturel. Ces SPT sont particulièrement diversifiés. Environ $\frac{3}{4}$ sont fournis le long de frontières entre les pays de l'UE14. La plupart des SPT identifiés relèvent des secteurs de la culture et de la valorisation du patrimoine culturel ou du développement conjoint du tourisme. Quelques-uns contribuent à promouvoir un développement économique conjoint, soit par la coopération commerciale, soit par des parcs d'affaires et technologiques conjoints. Les études de cas illustrent également la variété de ces SPT et montrent comment la planification conjointe et les services municipaux peuvent être assurés par des organismes communs dotés de leur propre personnalité juridique.

Soins de santé et inclusion sociale. Ces SPT visent à surmonter les difficultés d'accès aux soins de santé au sein de chaque versant de la zone frontalière, aux urgences médicales, aux soins de longue durée ou au nombre insuffisant de médecins généralistes ou spécialisés. Là encore, environ $\frac{3}{4}$ de ces services sont fournis dans les pays de l'UE14. Très peu de SPT sont fournis entre les pays de l'UE13. La plupart de ces SPT ont été développés depuis 2000 pour se conformer aux obligations de services transfrontaliers dues à la législation européenne sur les soins de santé. La grande majorité de ces SPT concernent les soins d'urgence ou les soins de santé généraux. Les SPT soutenant les hôpitaux dans les régions frontalières sont rares et pratiquement aucun ne couvre les soins de longue durée ou l'assistance sociale.

L'éducation et la formation. Dans ce domaine politique, il y a une concentration encore plus élevée de SPT le long des frontières intérieures de l'UE14. Ces SPT couvrent toutes les phases de l'éducation ainsi que la reconnaissance des diplômes. $\frac{2}{3}$ concernent l'enseignement tertiaire ou l'enseignement préscolaire (école maternelle et primaire). On trouve peu de SPT sans les domaines de l'enseignement secondaire et de la formation professionnelle.

Marché du travail et emploi. Un grand nombre des SPT identifiés ont été mis en place dans les années 1990 avec le soutien du programme EURES financé par le FSE. La plupart de ces SPT fournissent des informations et des conseils pour faciliter la mobilité transfrontalière des travailleurs ou des demandeurs d'emploi, ce qui inclut souvent le placement. Presque tous les autres SPT se concentrent uniquement sur le placement. $\frac{4}{5}$ de ces SPT sont fournis le long des frontières intérieures de l'UE14. Les autres SPT sont distribués de manière relativement égale le long des autres frontières.

Communication, haut débit et société de l'information. Ce domaine est de loin celui pour lequel le moins de SPT ont été inventoriés. Cela s'explique par le fait que certaines applications TIC sont répertoriées dans un domaine politique spécifique plutôt que dans ce domaine multithématique.

Environnement, ressources naturelles et action climatique. Les différents SPT de ce domaine politique sont largement dispersés le long de tous les types de frontières de l'UE. Ici, seulement un peu plus de la moitié des SPT identifiés se trouvent aux frontières intérieures de l'UE14. Plusieurs d'entre elles se situent le long des frontières extérieures de l'UE, y compris avec les pays IAP. Parmi les six domaines d'intervention, plus de 40% des SPT font référence à la protection des écosystèmes terrestres et des paysages. Un autre domaine presque aussi important concerne le traitement commun des eaux usées et l'approvisionnement en eau potable. Les SPT visant à produire ou distribuer des énergies renouvelables ou à établir une gestion et/ou un traitement conjoint des déchets solides sont encore très rares. Certaines études de cas illustrent le potentiel de ces SPT.

Protection civile et gestion des catastrophes. Contrairement aux SPT énumérés ci-dessus, il s'agit principalement de services « prêts à intervenir » qui ne sont mobilisés qu'en cas de catastrophe, d'incident majeur ou de demande d'aide extérieure. Ces SPT reposent généralement sur des accords entre pays voisins s'engageant à fournir une assistance transfrontalière. Il existe différents sous-types de SPT relevant de cette catégorie le long de

tous les types de frontières de l'UE. Cependant, environ $\frac{2}{3}$ des SPT inventoriés concernent les frontières intérieures de l'UE14. Les accords et leur mise en œuvre, c'est-à-dire l'assistance transfrontalière effective lors d'un incident, peuvent être définis de manière large et concerner la protection civile en général ou des incidents spécifiques tels que la lutte contre les incendies ou la gestion des inondations. La plupart de ces SPT identifiés concernent les incidents de grande ampleur et les catastrophes majeures, tandis que quelques-uns traitent de la gestion conjointe des inondations. Les études de cas illustrent une gamme de SPT allant de la couverture de l'ensemble de la frontière entre deux pays à la coopération locale entre deux municipalités.

Citoyenneté, justice et sécurité publique. Ces SPT sont également très concentrés avec plus de $\frac{4}{5}$ le long des frontières intérieures de l'UE14. La plupart des frontières entre les pays de l'UE13 ne semblent pas avoir de tels SPT. Beaucoup de ces SPT sont liés à l'achèvement du marché unique et à la mise en œuvre de l'espace Schengen. La moitié de ces SPT fournissent des conseils et un soutien aux habitants des régions frontalières pour les activités transfrontalières quotidiennes. L'autre moitié des SPT implique une coopération plus étroite entre les autorités policières et douanières nationales et/ou régionales.

En raison de la variété des SPT et de leur mise en œuvre différente, il n'a pas semblé pas opportun de formuler des conclusions générales s'appliquant à tous les secteurs analysés. Cependant, la distribution géographique des SPT le long des frontières intérieures et extérieures de l'UE et dans les grandes zones géographiques européennes est inégale. Les zones frontalières ayant développé de nombreux SPT avec succès ont généralement une plus grande volonté d'établir de nouveaux services pour répondre conjointement à des défis ou pour répondre à des besoins de développement dans d'autres domaines politiques.

Les domaines politiques présentant un fort potentiel pour des SPT plus nombreux et de meilleure qualité sont en particulier « l'environnement, les ressources naturelles et l'action contre le changement climatique » ainsi que « la protection civile et la gestion des catastrophes ». Ces deux domaines sont très pertinents pour tous les types de frontières de l'UE et pourraient bénéficier d'une activité accrue, notamment de la part des acteurs locaux, régionaux ou de district.

Les conclusions et les recommandations politiques différencient cinq domaines d'intérêt qui comptent pour différentes parties prenantes potentielles de la SPT :

- **Communication liée au concept de SPT.** Le cadre conceptuel a été mis à jour dans l'étude,⁵, ce qui permet de lever la plupart des ambiguïtés précédentes. Cependant, certaines incertitudes peuvent subsister, notamment pour les personnes qui ne sont pas familières avec la définition des SPT. Ces incertitudes peuvent être levées par une promotion et un suivi supplémentaires, en particulier pour atteindre les parties prenantes qui n'ont pas l'habitude d'être impliquées dans les initiatives de coopération transfrontalière. La communication est nécessaire non seulement sur le concept de SPT mais aussi pour sensibiliser aux bénéfices et écueils potentiels des SPT. Les différences entre versants, notamment en matière de prix des services, sont souvent considérés comme des obstacles au développement des SPT.
- **Les parties prenantes impliquées dans le développement et/ou la fourniture de SPT ont des besoins particuliers.** Les acteurs de la coopération transfrontalière et les fournisseurs (potentiels) de SPT dans d'autres institutions ont un grand besoin d'informations. Il en va de même pour les SPT destinés à différents groupes cibles. De manière générale, la documentation tend à être plus facilement disponible pour les SPT ciblant le grand public que pour les SPT ciblant des autorités publiques. Il est donc nécessaire d'améliorer l'accès à la documentation sur les SPT et de la rendre plus

⁵ Voir le rapport « Cross-border public services - The conceptual framework of the CPS inventory ».

exhaustive afin de répondre aux différents besoins, y compris les lacunes systématiques dues aux informations parcellaires fournies par les prestataires de SPT.

- **Potentiel pour de nouveaux et meilleurs SPT dans différents domaines politiques dans différents territoires transfrontaliers.** Les SPT ont été développés à des degrés très divers selon les domaines politiques. Les services de transport sont de loin les plus nombreux, tandis que les SPT liés au travail sont un exemple de SPT encore relativement rare. C'est un enjeu de politique européenne, puisque les incitations à la coopération et les degrés d'harmonisation réglementaire et administrative varient selon les domaines politiques. Malgré la prédominance des SPT de transport, ils peuvent encore être développés pour répondre aux déséquilibres géographiques et pour fournir de nouveaux types de services, y compris en vue de réduire la part du trafic en voitures individuelles. Une plus grande attention devrait être accordée à l'approvisionnement en énergie, aux déchets solides et au traitement des eaux usées afin de relever les défis et les risques futurs. Il en va de même pour les SPT liés à d'autres services d'intérêt général (SIG) tels que les services de santé et de soins permanents pour faire face aux pressions démographiques et à la rareté des ressources publiques. Enfin, les SPT relatifs à la gestion des catastrophes et aux mesures de lutte contre le changement climatique pourraient mériter une plus grande attention. Dans tous les cas, pour que les SPT soient couronnés de succès, il est important de s'assurer qu'ils se produisent des résultats concrets dans la région frontalière plutôt que de se limiter à des accords formels, ce qui est souvent nécessaire mais pas suffisant.
- **La sensibilisation et les incitations peuvent contribuer au développement des SPT et aider à surmonter les obstacles.** Plusieurs activités et développements politiques au niveau de l'UE au cours des 30 dernières années ont contribué au développement des SPT. Parmi elles, Interreg, qui soutient des projets visant à lancer et à développer des SPT. Les changements législatifs ont également contribué (par exemple, le règlement sur le GECT) ou pourraient constituer un nouveau déclencheur (par exemple, la CEMT⁶). Des orientations au niveau de l'UE pourraient être très utiles, notamment pour sensibiliser à la valeur ajoutée des SPT. Cela pourrait inclure des incitations supplémentaires à fournir des informations sur les SPT.

Les autorités régionales et locales, les organisations transfrontalières ainsi que les autorités Interreg peuvent contribuer aux recommandations en fonction de leurs rôles et responsabilités particuliers.

Les autorités régionales et locales peuvent, en fonction de leur structure de gouvernance:

- promouvoir le SPT auprès de groupes cibles dans leur région ;
- changer de perspective, en considérant l'ensemble du territoire transfrontalier ;
- faire pression pour répondre aux besoins de la région frontalière ;
- démontrer la valeur ajoutée des SPT par le biais d'actions pilotes ;
- utiliser activement les documents politiques et les études de l'UE.

Les organisations transfrontalières et les GECT ont par définition une perspective transfrontalière qu'il convient de renforcer :

- communiquer des informations provenant de toute l'UE dans leur région ;
- diffuser des informations sur les SPT ;

⁶ Fait référence à la proposition de « mécanisme transfrontalier européen ».

- contacter les fournisseurs potentiels de SPT ;
- contribuer à un changement de perspective en transformant les obstacles en opportunités ;
- ne pas essayer de réinventer la roue, mais agir en tant qu'aide à transposer les bonnes pratiques déjà mises en œuvre en matière de SPT ;
- commencer par les zones et domaines d'action où les obstacles à la mise en place de SPT sont les moins importants et les secteurs où il y a peu ou pas d'expérience en matière de SPT.

En plus de ces contributions, **les GECT** peuvent jouer un rôle important :

- mettre en œuvre des actions pilotes en matière SPT en s'appuyant sur leur personnalité juridique transfrontalière ;
- assumer la responsabilité de la fourniture continue de SPT au nom de leurs membres ;
- des GECT peuvent également être mis en place spécifiquement pour fournir un CPS, en veillant à ce que la liste de membres et la gouvernance soit adaptées à cette mission.

Les autorités Interreg devraient promouvoir plus activement les projets SPT:

- permettre aux projets de générer des résultats pérennes;
- intensifier les échanges relatifs aux SPT avec les acteurs déjà activement impliqués dans les programmes ;
- offrir des conseils à leurs bénéficiaires sur la manière de fournir des SPT;
- inclure les SPT dans les analyses de socio-économiques des zones couvertes par les programmes ;
- concevoir les futurs programmes Interreg de manière stratégique pour soutenir le développement des SPT.

1 Introduction

This study reviews the potential of cross-border public services (CPS), with three specific objectives to:

- (i) consolidate the conceptual methodological framework used to identify and document CPS;
- (ii) design a methodology and process enabling future inventory data input, validation and monitoring;
- (iii) produce a policy analysis and recommendations on cross-border obstacles and future CPS deployment.

Based on previous findings on the conceptual methodological framework⁷ and analysis of 30 case studies⁸ and taking into consideration data collection for the ESPON CPS 2.0 study⁹, this report presents the study findings. All these efforts offer different access points, promoting more and better CPS.

The study was conducted in coordination with the ESPON CPS 2.0 project, which focused on data collection and dissemination. The parallel evolution of both studies and building on previous work means the new *ESPON-REGIO CPS database* has benefited from different inputs as detailed in the box below.

The evolution of the CPS inventory

1. The ESPON CPS study (2018) provided the starting point for today's CPS inventory by building the initial database with roughly 20 indicators and by collecting information on about 570 CPS.
2. The new database structure, with about 70 indicators describing CPS and the framework in which they operate, is the result of the present DG Regio CPS study (2021-2022). In addition, new information on CPS was collected when conducting the 30 case studies.
3. The ESPON CPS 2.0 study (2021-2022) focused on data collection for new indicators and newly identified CPS. Apart from data originating from ESPON CPS 2.0 study activities, this drew on other studies. This included the transfer and adaptation of cross-border public transport data collected by another DG Regio study (2020-2021), which yielded about 900 additional CPS data entries.

In view of these joint efforts and to note the complementarity of the two projects, the report will refer to the CPS inventory as the *ESPON-REGIO CPS database*.

The focus is on analysis of the state of the ESPON-REGIO CPS database as of May 2022. For this purpose, **Chapter 2** starts with an analysis of the geographical and resulting spatial-temporal patterns of CPS across the EU, including external borders. For each of the nine

⁷ See report "Cross-border public services – with the conceptual framework of the CPS inventory".

⁸ See report "Cross-border public services – Case study collection".

⁹ See final report ESPON CPS 2.0 – <https://www.espon.eu/cps-2>

policy areas covered in the ESPON-REGIO CPS database the analysis characterises the identified CPS. This includes a policy-specific geographical overview of CPS and an analysis of selected features, such as the legal framework to establish the CPS, governance models for service provision and the main target groups. Thus, the analysis complements the in-depth descriptions of the 30 case studies with an EU-wide analysis.

In **Chapter 3** the report develops findings, conclusions and policy recommendations based on the conceptual work, the in-depth case study analysis and the EU-wide overview. For the recommendations an internal workshop complemented the research and brought together insights from all team members with their different work perspectives. The focus of the chapter is on future CPS deployment. From different angles, recommendations identify access points to enhance CPS development and use as well as further improving information sources and tools for CPS deployment.

2 Analysis of the ESPON-REGIO CPS database

The following evaluation of the CPS Inventory is divided into two parts: First is an analysis of the geographical distribution of services with the resulting spatial-temporal patterns and characteristics (Chapter 2.1). Then, specific features of the individual policy fields are examined, assuming that CPS materialise differently in different fields (Chapter 2.2). This provides inspirational insights into the territories and themes needing new or better CPS.

The inventory as of 25 May 2022 is the basis for these analyses, without claiming to be exhaustive in terms of existing CPS. The analyses therefore refer to the set of CPS identified to date. Since the ESPON-REGIO CPS database will be continuously expanded and updated in future with the help of a web application, the analysis results are a snapshot and individual figures or shares will change. Nevertheless, the large number of CPS already in the inventory enables the analysis results to provide valuable spatial and subject-specific information about the structures of these services.

Some CPS are assigned to several themes, policy areas and target groups and not all information is fully available for all identified CPS, so the respective populations for individual analyses differ.¹⁰ This must be taken into account when interpreting the results.

2.1 Geographical patterns of CPS provision in Europe

2.1.1 CPS in Europe

The ESPON-REGIO CPS database currently includes 1,551 CPS (Figure 1). The European overview shows an imbalanced picture of where these are located.¹¹

The highest share of CPS provision (CPSP) are along the borders of the six founding EU Member States (i.e. the Benelux countries, France and Germany) and Nordic countries. Most of these are on the borders of the Benelux countries, in France, Germany and Switzerland, as well as the Nordic countries. Many CPS are also on the German borders with Czechia, Austria and Denmark.

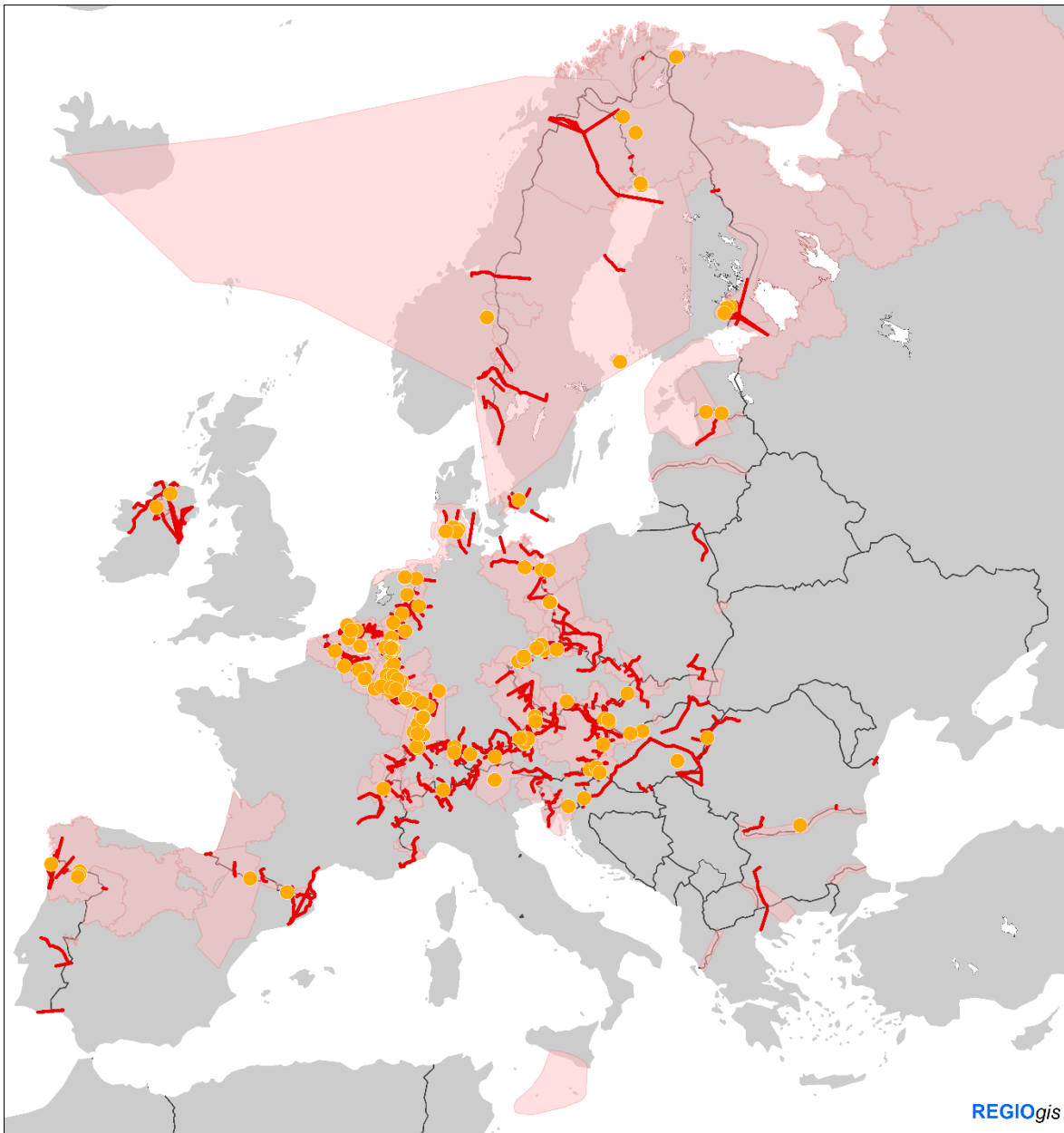
Most of the services included in the ESPON-REGIO CPS database are operational (98.9%), however, some are being planned (soon-to-be CPS, 0.4%), pilots (0.2%) or are temporarily closed (0.3%) or ceased (0.2%)¹².

¹⁰ The respective number of the population on which an analysis is based is therefore always indicated in the individual analyses (n=X).

¹¹ Geographically, the service provision can be punctual (i.e. cross-border school or wastewater treatment plant), linear (i.e. bus service) or areal (i.e. nature park). Therefore, the following maps show a mixture of points, lines and areas when illustrating CPS provision in Europe.

¹² The latter are included in the inventory because they were precursors of other CPS operational today (and thus were replaced by more modern services) or because they generally provide valuable information for CPS development.

Figure 1 Location of CPS in Europe



**Cross-border public services (CPS):
Place and area of service provision**

● — Areas, points and corridors
of service provision

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 500 Km

© EuroGeographics Association for the administrative boundaries

2.1.2 CPS density per border segment

Usually, a CPS service area crosses several sections of a national border, sometimes even two or more national borders. Analysis of the density of CPS at different parts of a national border uses the concept of border segments. Each national border is split into border segments, and each segment assigned a unique ID. This ID is then transferred to all identified CPS that cross this border segment. The number of services per segment can then simply be added up.

Border segments with more than ten CPS are in Western Europe (Benelux countries, France, Germany, Switzerland) and Nordic countries (Norwegian-Swedish, Finnish-Swedish, and Finnish-Norwegian borders as well as the southern Finnish-Russian border), with two exceptions along the Czech-German (Elbe-Labe region) and Austrian-German (Salzburg area) borders (Figure 2). These have the highest CPS density in Europe.¹³ Other borders have very few CPS (for instance, Slovakian borders and the border between Portugal and Spain). For some borders less than three or even no CPS have been identified (for example, Latvia-Lithuania, Hungary-Romania, Bulgaria-Romania and Bulgaria-Greece).

CPS are primarily along borders that

- (i) either have a long tradition of cross-border cooperation in areas with high population densities and rural areas in Western Europe, so high demand for services of any kind;
- (ii) or extremely low population densities and long distances between towns and villages, so areas with difficulties and high pressure for maintaining public services (Nordic countries).

Related to (i), the geographical distribution of CPS implies a negative relationship between the size of a country and the number of CPS, i.e. the smaller a country (like Luxembourg) the higher the need for CPS. Due to the proximity of national borders in small countries, CPS are vital in many policy areas such as water management (both sewage water treatment and the provision of drinking water), natural assets, labour markets, urban development and public transport. Furthermore, CPS provide a good solution to make best use of limited resources for smaller countries.¹⁴

With 8% of all identified CPS, the Belgian-Dutch border has the most CPS, followed by the Austrian-German and French-German borders with 7.5% each (Table 1). The Dutch-German border is ranked fourth with almost 7% of all services. Adding the Belgian-French (6th), German-Luxembourgish (8th), Belgian-German (9th), French-Luxembourgish (11th) and Belgian-Luxembourgish (12th) borders, 32.5% of CPS are on the borders of the Benelux countries and its neighbours France and Germany. The non-EU country border with the highest share of CPS is the French-Swiss border with 5.8%, followed by the German-Swiss border with 5.4% (ranked fourth and fifth, respectively).

¹³ The colour of the national borders in Figure 2 also depends on the length of the border segments. The latter tend to very long especially in sparsely populated areas of Scandinavia. Therefore, it appears that a high density of CPS occurs along very long border segments, while in fact high densities of CPS provision occur on relatively short sections of the border segment only.

¹⁴ Notwithstanding what has been said, the size of a country is only one factor in the existence or non-existence of CPS. Other factors that influence CPS development are historical ties, the tradition in cross-border cooperation, and the degree of autonomy of border regions.

Figure 2 **Number of CPS per border segment**

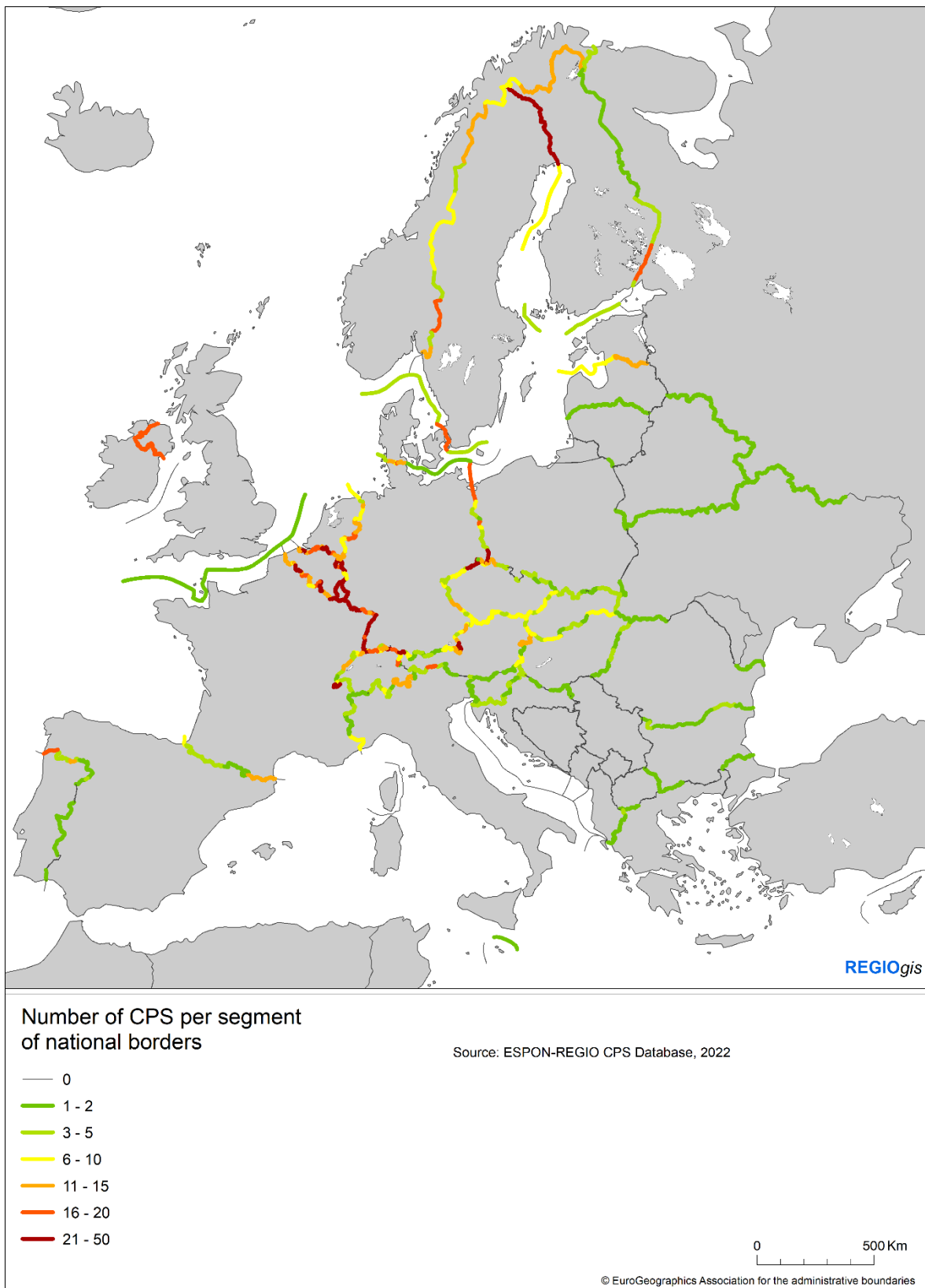


Table 1 Ranking of borders according to share of CPS

Rank	Border between	Share (%)
1	Belgium - Netherlands	8.05
2	Austria - Germany	7.53
	France - Germany	
3	Germany - Netherlands	6.95
4	France - Switzerland	5.84
5	Germany - Switzerland	5.45
6	Belgium - France	5.06
7	Czech Republic - Germany	4.22
8	Germany - Luxembourg	3.51
9	Belgium - Germany	3.44
10	Germany - Poland	2.99
	Norway - Sweden	
11	France - Luxembourg	2.79
12	Belgium - Luxembourg	2.73
13	Italy - Switzerland	2.60
14	Portugal - Spain	1.75
	Ireland - UK	
15	Finland - Sweden	1.69
16	Austria - Czech Republic	1.62
	France - Spain	
17	Austria - Hungary	1.49
18	Germany - Denmark	1.36
19	France - Italy	1.23
20	Austria - Italy	1.17
	Denmark - Sweden	
./.	<i>Other borders</i>	13.44

Source: ESPON-REGIO CPS database, 2022

2.1.3 CPS density by country

Germany, France and Belgium participate in the most CPS, with more than 300 identified CPS each (Table 2 and Figure 3). German authorities participated in 694 CPS, French authorities in 400, and Belgium authorities in 310.

Since the number of CPS is very much determined by the country size and number of neighbouring countries, the density of CPS per area and per border length may provide more relevant information. For the country area and border length, Luxembourg is clearly first with 54 CPS per 1,000 km² and 636 per 1,000 km border length. Next is Belgium with 10 CPS per 1,000 km² and 353 per 1,000 km border. The Netherlands ranks third (6.7 per 1,000 km² and 198 per 1,000 km border), while Germany is fourth with almost two CPS per 1,000 km² and 195 per 1,000 km border. Of the East European countries, Czechia is the highest ranked in 8th place, ahead of Sweden as the highest placed Nordic country for total CPS.

Table 2 CPS density by country, area and border length

Country	Number of CPS ¹⁵		Number of CPS per 1,000 km ² country area		Number of CPS per 1,000 km border length	
	Rank	#	Rank	#	Rank	#
Germany	1	694	4	1.93	4	195.36
France	2	400	13	0.54	10	38.13
Belgium	3	310	2	10.09	2	352.59
Netherlands	4	241	3	6.65	3	198.42
Switzerland	5	238	5	1.65	7	74.90
Austria	6	231	7	1.48	6	75.07
Luxembourg	7	140	1	53.71	1	635.70
Czech Republic	8	130	6	1.63	5	92.51
Sweden	9	91	20	0.20	15	19.61
Italy	10	87	15	0.29	18	15.25
Poland	11	84	17	0.27	12	33.08
Finland	12	64	21	0.19	16	18.43
Hungary	13	62	12	0.67	8	43.59
Spain	14	59	24	0.12	19	11.66
Norway	15	57	22	0.17	21	8.38

¹⁵ Since for each CPS at least two partners from two different countries are involved (sometimes partners from even three or more countries), the sum of CPS in this column is higher than the total number of CPS in the inventory.

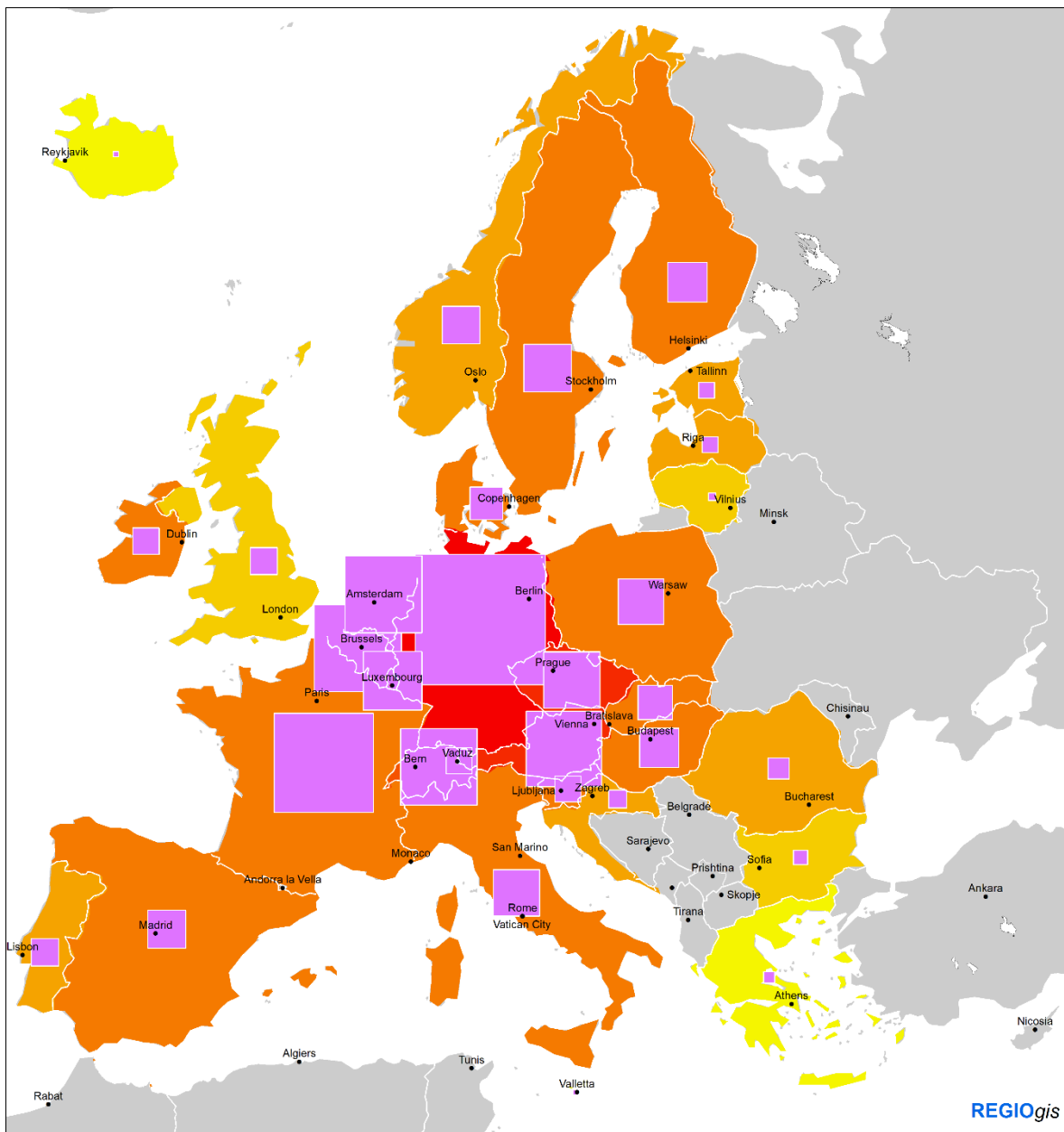
CPS ANALYSIS AND RECOMMENDATIONS

Slovakia	16	48	9	1.00	9	43.11
Denmark	17	43	10	0.97	14	22.24
Portugal	18	31	15	0.29	20	8.76
United Kingdom	19	29	25	0.11	26	4.98
Ireland	20	28	14	0.39	17	17.31
Slovenia	21	27	8	1.25	11	33.83
Lichtenstein	21	27	11	0.81	13	25.40
Romania	23	18	26	0.08	22	8.16
Croatia	24	13	18	0.22	25	6.57
Latvia	25	10	23	0.15	23	7.20
Estonia	25	10	19	0.21	24	7.17
Bulgaria	27	8	27	0.07	27	4.74
Greece	28	5	29	0.04	29	0.79
Malta	29	1	28	0.05	28	0.94
Iceland	29	1	30	0.01	30	0.54

Note: Countries ranked first, second and third in the three distributions are highlighted in red.

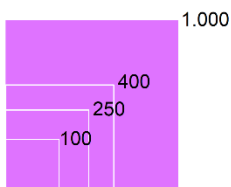
Source: ESPON-REGIO CPS database, 2022

Figure 3 Number and density of CPS per country and border length

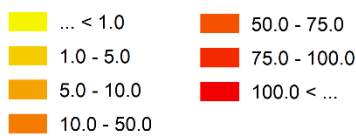


Number and density of CPS per country and border length

Number of CPS (2022)



Number of CPS per 1,000 km border



Source: ESPON-REGIO CPS Database, 2022



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2.1.4 Policy areas

Having understood the spatial distribution and geographical patterns of CPS in Europe, the next step is to analyse the policy areas and fields of intervention addressed by the services. There are cross-border services in practically all the policy fields. The ESPON-REGIO CPS database distinguishes nine policy fields, each subdivided into fields of intervention. The policy areas are (in alphabetical order):

- Citizenship, justice and public security
- Civil protection and disaster management
- Communication, broadband and information society
- Education and training
- Environment protection
- Healthcare and social inclusion
- Labour market and employment
- Spatial planning, tourism and culture
- Transport.

Table 3 summarises the policy areas and fields of interventions. Figure 4 differentiates the CPS by field of intervention.

Table 3 Policy areas and fields of intervention

#	Policy area	Code	Field of intervention
1	Transport	1.1	Public transport service
		1.2	Services for transport infrastructure maintenance
		1.3	Service at border crossing points
		1.4	Other transport service
2	Spatial planning, economic development, tourism and culture	2.1	Spatial planning or sector policy planning
		2.2	Services supporting economic development
		2.3	Services for culture and cultural heritage
		2.4	Services for tourism development
		2.5	Other services for spatial planning, economic development, tourism and culture
3	Healthcare, long-term care and social inclusion	3.1	Primary, secondary and tertiary care
		3.2	Support services for hospitals
		3.3	Services for non-hospital care or ambulatory care
		3.4	Medical emergency care and rescue
		3.5	Long-term care services
		3.6	Social assistance and social integration

CROSS-BORDER PUBLIC SERVICES

		3.7	Other services in healthcare and social inclusion
4	Education and training	4.1	Early childhood education and primary education
		4.2	Secondary education
		4.3	Tertiary education
		4.4	Vocational education and training
		4.5	Services for recognition of diploma or professional qualification certificates
		4.6	Other services for education and training
5	Labour market and employment	5.1	Public information and advice services facilitating mobility of workers
		5.2	Services for job placement
		5.3	Services for further qualification and life-long learning
		5.4	Other services for labour markets and employment
6	Communication, broadcasting and information society	6.1	Mail delivery, telephone or mobile phone services
		6.2	Broadcasting services
		6.3	Digital services
		6.4	Other services for communication, broadcasting and information
7	Environmental protection, natural resources management and climate change action	7.1	Protecting/restoring and managing terrestrial freshwater bodies (blue infrastructures), estuaries and coastal waters
		7.2	Restoring, protecting and managing valuable terrestrial ecosystems or landscapes for developing green infrastructure, including risk prevention and climate change resilience services
		7.3	Improving resource efficiency and promoting low carbon economy or greening of the society
		7.4	Sewage water collection / treatment & drinking water
		7.5	Solid waste
		7.6	Production / distribution of energy from renewable sources
		7.7	Other services for environmental protection, natural resource management and climate change actions
8	Civil protection and disaster management	8.1	Services for firefighting and assistance in accidents
		8.2	Services for flood management
		8.3	Managing large-scale incidents and major disasters
		8.4	Other services for civil protection and disaster management
9		9.1	Advice and support services for citizens

	Citizenship, justice and public security	9.2	Other services for citizenship, justice and public security
10	Other policy areas	10.1	Other services

Source: Service provider, 2022

By a wide margin, most CPS cover transportation services (Table 4) with 966 or 61.5% of all identified CPS. These are followed by CPS in environmental protection and civil protection and disaster management, with 8.6 and 8.5% respectively. The important role of these two policy areas are because many state borders pass through conservation areas or along sensitive water bodies. CPS in education and training are in fourth place with 5%, followed by healthcare and spatial planning/tourism/culture accounting for 4.9 and 4.5%. Although only in 7th place with 50 services, CPS play an important role in the labour market sector on many borders. Close behind are CPS concerning civil society, justice and public security. Finally, cross-border services for communication, broadband and the information society account for less than 1% of all services¹⁶.

Table 4 Number and share of policy areas addressed by CPS

Rank	Policy area	Frequency	Share (%)
1	Transport	966	61.5
2	Environment protection	135	8.6
3	Civil protection and disaster management	133	8.5
4	Education and training	81	5.2
5	Healthcare and social inclusion	77	4.9
6	Spatial planning, tourism, and culture	71	4.5
7	Labour market and employment	50	3.2
8	Citizenship, justice and public security	43	2.7
9	Communication, broadband, and information society	10	0.6
10	Other themes	4	0.3
<i>Sum¹⁷</i>		<i>1,570</i>	<i>100.0</i>

Source: ESPON-REGIO CPS database, 2022

Taking these numbers as a guide, individual policy areas varied widely in importance for regional stakeholders. Given the broad spectrum of the ESPON-REGIO CPS database, these shares probably reflect past and current policy awareness for CPS development along borders in Europe.

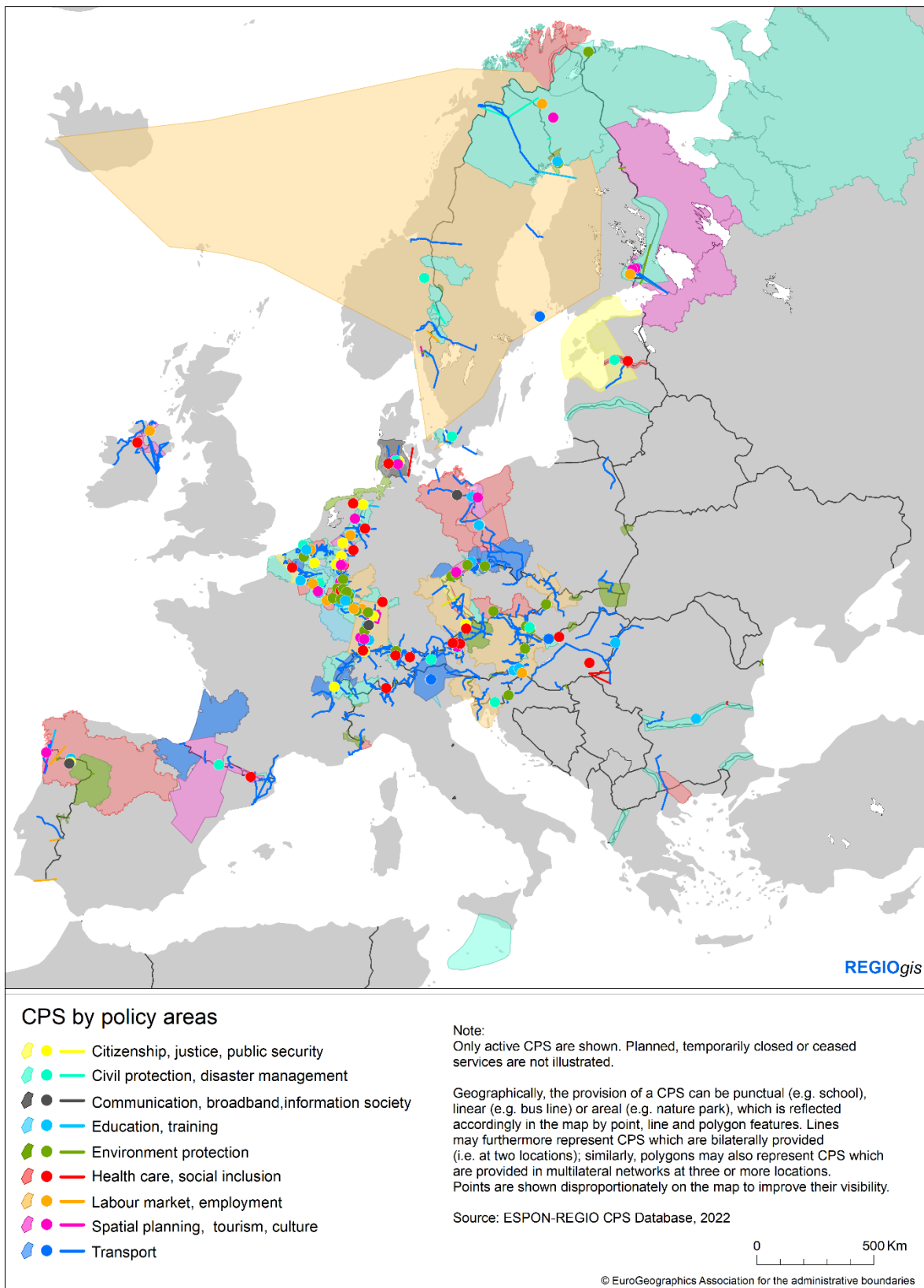
¹⁶ The latter also show a low share because specialised information services are integrated in the other policy areas. The management of cross-border nature parks or education and training services are typical subject areas of CPS. In addition to their core tasks (nature conservation, education), such CPSs also regularly offer information services.

¹⁷ Some CPS are assigned to more than one theme.

The spatial distribution of CPS themes is uneven across Europe (Figure 4). Some borders have a clear focus on one or two policy areas, while others cover a wide array. For example, CPS in the Nordic countries have a strong focus on civil protection and disaster management as well as healthcare. In contrast, CPS in the Baltic States predominantly concern citizenship, justice and public security. CPS along the Czech-German and Austrian-German borders mainly cover environmental protection (including sewage water treatment) or transport.

The Belgian-French border area is, interestingly, a forerunner in healthcare CPS (Figure 4 and Figure 32). Other borders like the British-Irish border or the border between Germany and the Netherlands cover a wide array of fields and interventions, reflecting various policy objectives and public needs.

Figure 4 CPS by policy area



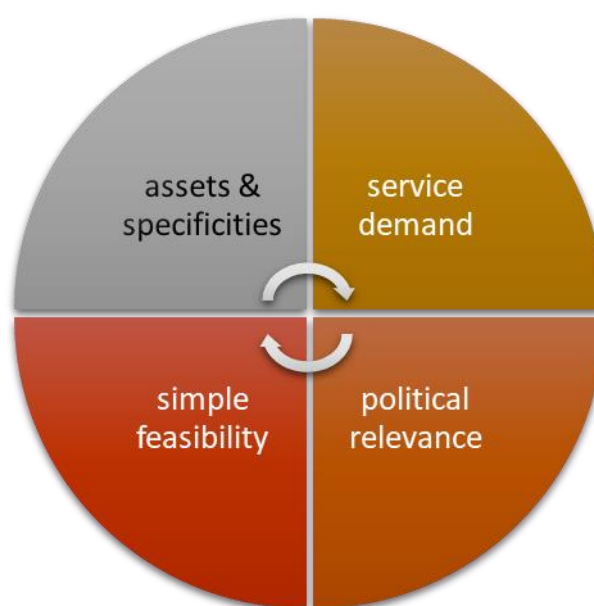
Policy areas addressed in the various CPS reflect:

- regional **topographic and natural assets and specificities** (for example, environment, civil protection and disaster management);

- **high demand** for services (for example, transport, spatial planning, tourism and culture, as well as education and training);
- **high political relevance** at regional or national level at the time of CPS establishment (for example, CPS in healthcare and social inclusion, labour market and employment, citizenship, justice and public security); or
- **relatively simple feasibility** as low hanging fruit in areas with a common understanding will often be implemented first (such as certain CPS in the areas of environment, culture and sports, tourism, or economic support)

or a combination of the four factors. Figure 5 illustrates these for the policy areas addressed by CPS.

Figure 5 Factors determining the selection of policy areas



Source: Service provider, 2022

Chapter 2.2 presents a detailed examination of the nine policy areas.

2.1.5 Development since 1960

An interesting question is when cross-border services opened. Is there a connection with enlargement of the European Union, intensified cross-border cooperation (Interreg) and the associated stronger focus on border areas?

From the 1,551 CPS in the ESPON-REGIO CPS database, information on the establishment year is available for 493, about 1/3 of the identified services.¹⁸ The following analysis is based upon this subset.

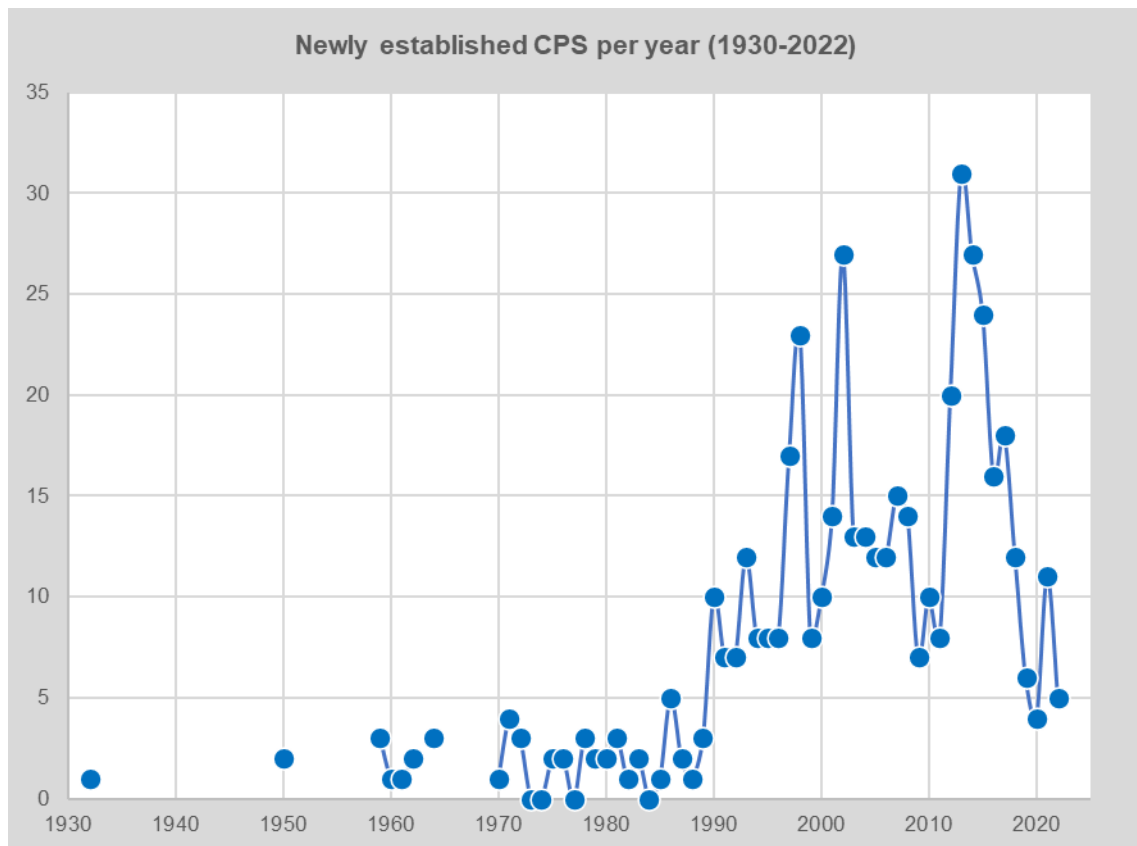
The initial development of CPS until 1990 was moderate. Although some forerunners can be dated back as far as 1932, up to 1990 few initiatives were launched. Some CPS were already established, but often the necessary legal framework was missing, and cross-

¹⁸ For a few additional CPS for which case studies have been conducted, either in this study or in the study on cross-border public transport (CBPT), the corresponding years of foundation are not yet in the database.

border cooperation was not given much political relevance. Before 1950 only one CPS was established across all policy fields (Figure 6 and Figure 7), from 1950 to 1959 there were five, seven between 1960 and 1969, and in the following decades 17 (1970-1979) and 20 (1980-1989), respectively.

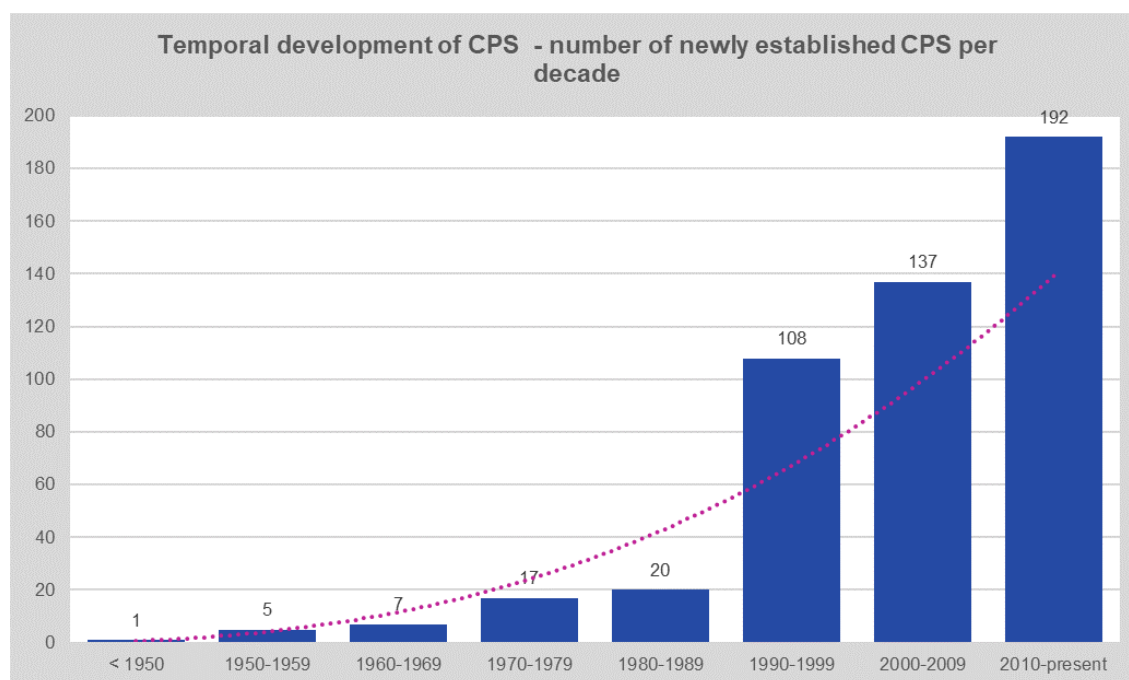
1990 can be considered as a key year with 108 new CPS between 1990 and 1999, another 137 from 2000 to 2009, and 192 since 2010.

Figure 6 Newly established CPS per year 1930-2022



Source: ESPON-REGIO CPS database, 2022

Figure 7 Temporal development of CPS – newly established services per decade



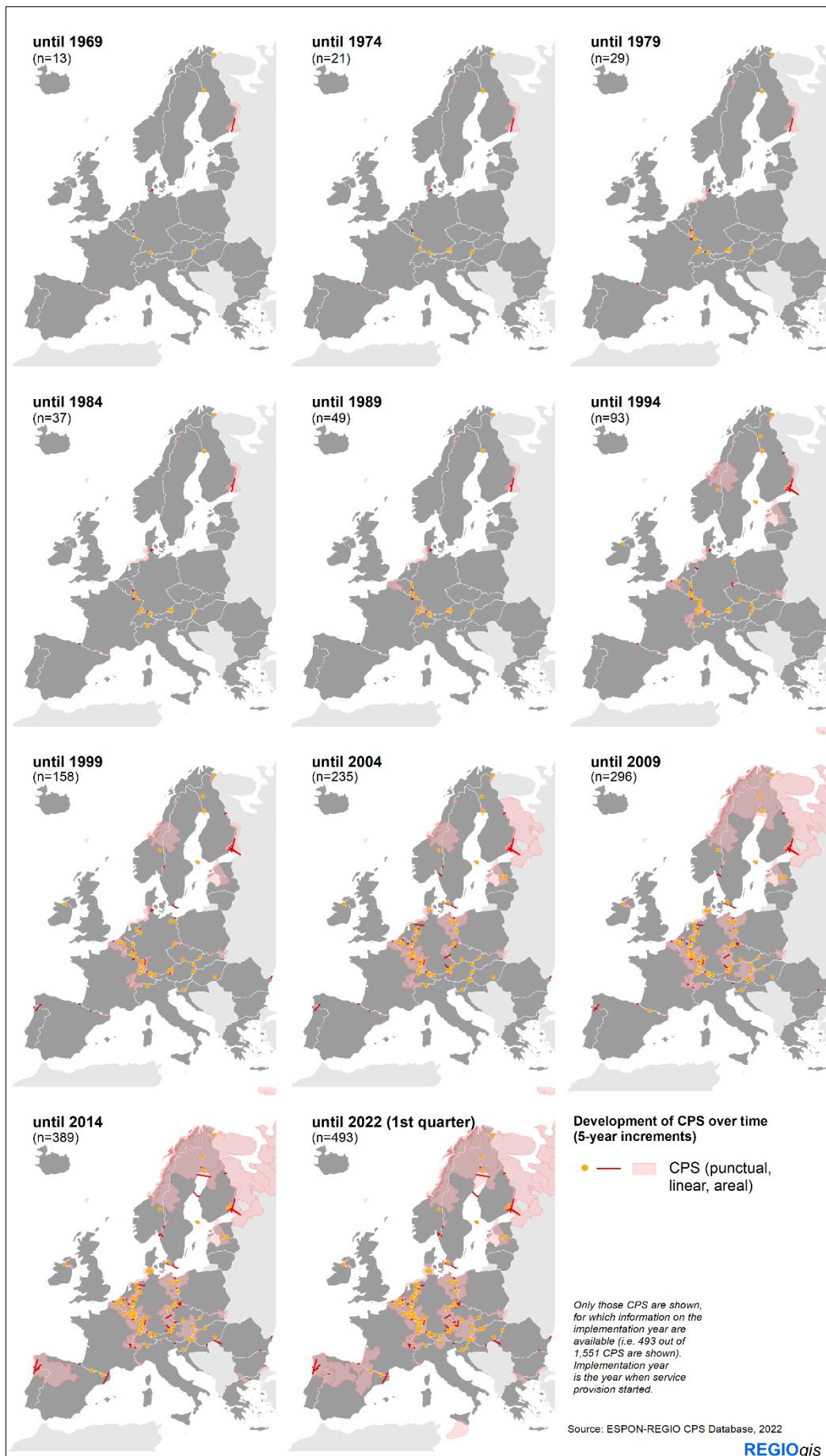
Source: ESPON-REGIO CPS database, 2022

Figure 8 illustrates the spatial-temporal development of CPSP in Europe in 5-year increments. Until 1989 few were implemented each year, this was mainly between France and Germany. Increasing dynamics in the next ten years still focussed on Western Europe. Only after 2000 did Eastern European countries recognise the CPS instrument and start to use it widely. In the first years, German-Czech cooperation was initiated, later came CPS along the Austrian-Hungarian and Slovenian borders.

One reason why few CPS per year were implemented may be difficulties in design and administrative implementation, as well as the (technical) infrastructure that some of the CPS require¹⁹. Subject to the type of service as well as local and regional conditions, implementation may take years. First, actors on either side of the border need to develop a common understanding of the problem, followed by identifying possible solutions, shaping the service in question and implementing the necessary infrastructure.

¹⁹ Pipeline networks, wastewater treatment plants, rail and tram tracks, command and control centres, special purpose vehicles, or office buildings are among typical infrastructures and hardware that often need to be constructed or procured before a service starts operation.

Figure 8 Temporal development of CPS provision (1960-2022)



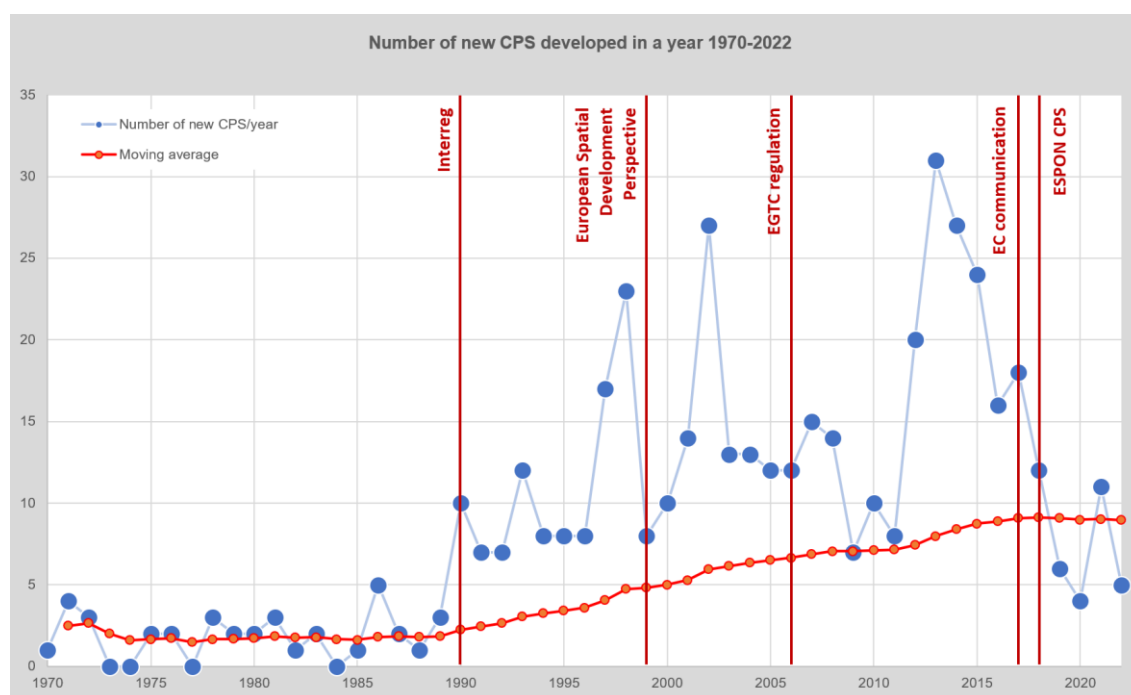
Since 1990 the number of CPS in Europe has slowly and steadily increased, with an average of 5 to 10 new ones per year (Figure 9). The steady increase is also reflected by the moving average. In 1991, this jumped to 2.5, to 3.0 in 1993 and 4.1 in 1997. Since then, the average has increased steadily with further jumps in 2002 (from 5.3 to 5.9) and 2013 (from 7.4 to 8.0). In 2018, the average peaked at 9.1.

This development coincides with important milestones for border regions in the European Union, such as the start of Interreg (1990), publication of the European Spatial Development Perspective (1999), introduction of the regulation on European Groupings of Territorial Cooperation (EGTC, 2006), the EC Communication on 'Boosting Growth and Cohesion in EU Border Regions' (2017) and finalisation of the first ESPON CPS study (2018).

Although it is difficult to directly attribute the implementation of an individual CPS to one of these events, the following conclusions can be drawn:

- In parallel with the further development of new tools at EU level and publication of related reports, the number of new CPSs has increased significantly.
- The introduction of new tools such as Interreg or the EGTC has given border regions and practitioners new opportunities to implement or formalise CPS. Looking at Figure 9, the Interreg programme seems to have had some influence on CPS development.
- EC communications and related reports ('good practice examples') highlight ideas for new CPS, which can be taken up by border regions and transferred to their own region.

Figure 9 New CPS established 1970-2022



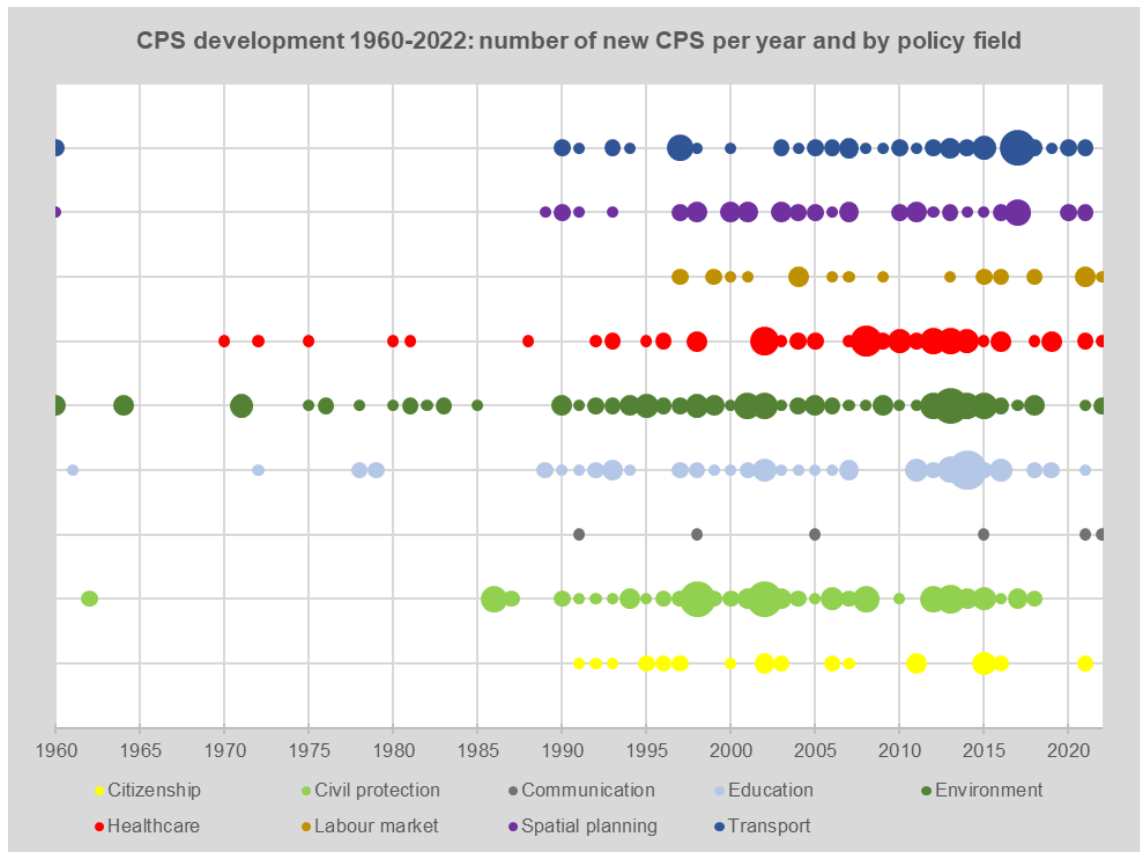
Source: ESPON-REGIO CPS database, 2022

A detailed look by policy area shows that CPS established before 1990 cover healthcare, education, civil protection and especially environmental protection (Figure 10). 9% of the identified healthcare CPS were established before 1990. This increases for civil protection (12.4%), education and training (13.2%) up to 22.6% for environmental protection.

The latter policy area is the only area which saw a continuous and steady establishment of new CPS from 1960 to 1985, with a 5-year interruption until 1990, and continued development from 1990 to today with new CPS every year.

Since 1990, CPS have developed steadily in almost all policy areas with seamless development for civil protection and transport. Spatial planning / tourism / culture and education faced some periods with no new CPS, healthcare gained increasing recognition since 2006, but with several new services each year from then on. In contrast, labour market and communication CPS were only established rarely.

Figure 10 CPS development 1960-2022: New CPS per year and by policy area



Source: ESPON-REGIO CPS database, 2022

2.1.6 Target groups

An important aspect for a CPS is identification of the target group(s): Who should benefit? This is not only an academic question because the services and functions should be aligned to the target group and reflect their wishes and requirements.

By far the largest target group, for more than 40% of CPS, is the general public (Table 5). In other words, services do not target specific groups but attempt to address as broad a spectrum of the population as possible. However, more than half the CPS are aimed at a specific target group. Among these cross-border workers (7.5%), tourists (6.6%), pupils, students and apprentices (6.3%), job seekers (5.6%), and fire brigades and rescue services (5.1%) stand out. In other words, CPS for education and labour account for almost 1/5 of all identified services. Other target groups less frequently addressed are businesses (4.3%), residents (4%), people requiring medical or permanent care (2.9%), or police and customs (2.9%). The remaining 13.5% of identified services address other target groups.

Table 5 CPS target groups

Target group	Frequency ²⁰	Share (%)
General public	998	41.3
Cross-border workers	182	7.5
Tourists	160	6.6
Pupils/students and apprentices of all ages	151	6.3
Job seekers	135	5.6
Fire brigades and rescue services	123	5.1
Economic actors (companies/entrepreneurs)	103	4.3
Residents ²¹	96	4.0
People requiring medical or permanent care	71	2.9
Police and customs	71	2.9
Other target groups ²²	326	13.5
<i>Sum</i>	<i>2,416</i>	<i>100.00</i>

Source: ESPON-REGIO CPS database, 2022

The target group ‘public authorities’ is particularly interesting, since such CPS improve collaboration among public authorities across borders and increase the efficiency or quality of services. Only indirectly do the public benefit from these CPS. The following authorities have been identified as sub-target groups:

- fire brigades and rescue,
- hospitals,
- planning authorities,
- police and customs,
- schools and universities,
- employment agencies,
- other sectoral authorities.

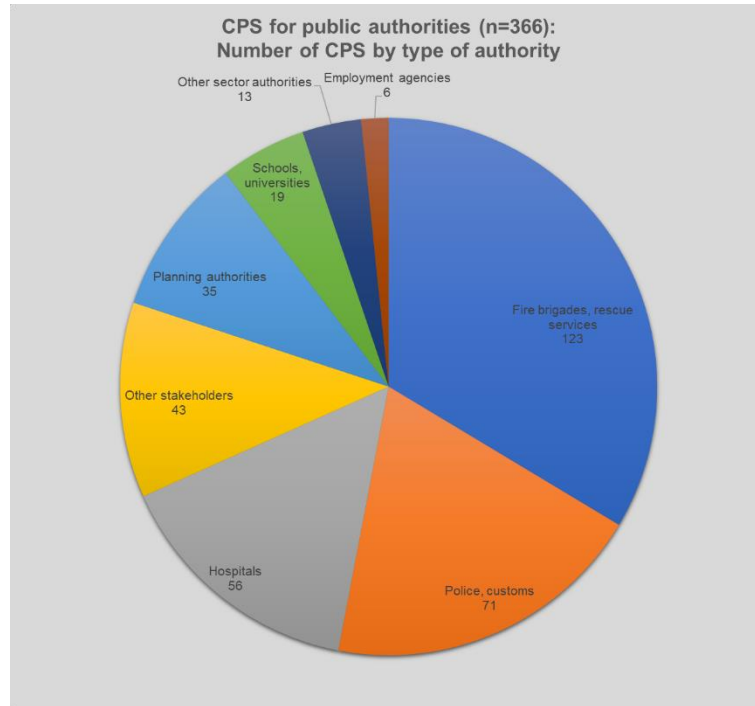
²⁰ Since a CPS can address several target groups, the total in this column is higher than the number of CPS in the inventory.

²¹ Residents are defined as people owning a house, apartment, flat or (agricultural, forest) land in the border region and living in that property. Some CPS specifically target property owners. In contrast, the general public represent all people living, working, crossing, or visiting a border region.

²² Including families with small children, PT users, sector authorities, fire brigades and rescue services, households, schools and universities, elderly people and people with disabilities, employment agencies, athletes, police and customs.

More than 120 CPS target fire brigades and rescue forces (Figure 11), another 71 target police and customs and 56 hospitals, including emergency services and first aid²³. Usually, these CPS provide the legal basis for cross-border operations with clear responsibilities and rules of conduct.

Figure 11 CPS addressing public authorities: number of services



Source: ESPON-REGIO CPS database, 2022

Beyond establishing responsibilities and rules of conduct, CPS in the health sector typically need to define the legal basis for compensation (or co-payments) by health insurers. Other public authorities typically addressed are schools and universities, employment agencies and planning authorities, as well as other stakeholders and sector authorities including:

- cross-border spatial planning,
- statistical and GIS information systems and spatial observatories,
- digital governance,
- public information portals,
- (flood) risk assessment and management systems,
- joint water commissions.

2.1.7 CPS in larger geographical areas

Western European borders have the highest CPS densities. Cross-border cooperation has a long tradition and demand for (cross-border and domestic) services is high with the density of population, enterprises and companies along these borders.

The Nordic borders have the second highest concentration of CPS. Here, cross-border cooperation has a long tradition as well, reflected in the Nordic council activities however, these border areas are challenged by extremely low population densities and thus by low

²³ Note that one CPS may address several public authorities.

demand for services. Establishing CPS in these areas is a strategic way to maintain public services, increasing their effectiveness and efficiency by reducing costs for the service.

Central and Eastern European countries joined the EU later, so there is a backlog of demand for cross-border cooperation (see also Chapter 2.1.4). Nevertheless, there are promising CPS here, although their number is still comparatively low.

The Alpine Space is a central area in Europe with many national borders as well as a diverse and rich culture (also for cross-border cooperation). The mountain ranges mean high physical and sometimes mental barriers for CPS, however this geographical challenge leads to interesting CPS, also beyond nature and disaster protection.

The Iberian Peninsula has few state borders, but a rich common cultural heritage. This has given rise to a variety of services, although their number and density is far less than in other regions of Europe.

This chapter zooms into these areas, illustrating the identified CPS in more detail.

West European countries

The Western Europe zoom-in map shows (Figure 12) that the entire border stretch from Emden in the North all the way down to Basel in the South, as well as the stretch from Zeebrugge in the West towards Maastricht and Aachen in the East, and the stretch from Veurne towards Aubange, and further via Schengen until Karlsruhe (river Rhine) is almost comprehensively covered by CPS.

Despite this coverage, there is a wide diversity in addressed policy areas along these borders (Figure 13). Some border segments focus on particular themes, while others have a very diversified thematic coverage.

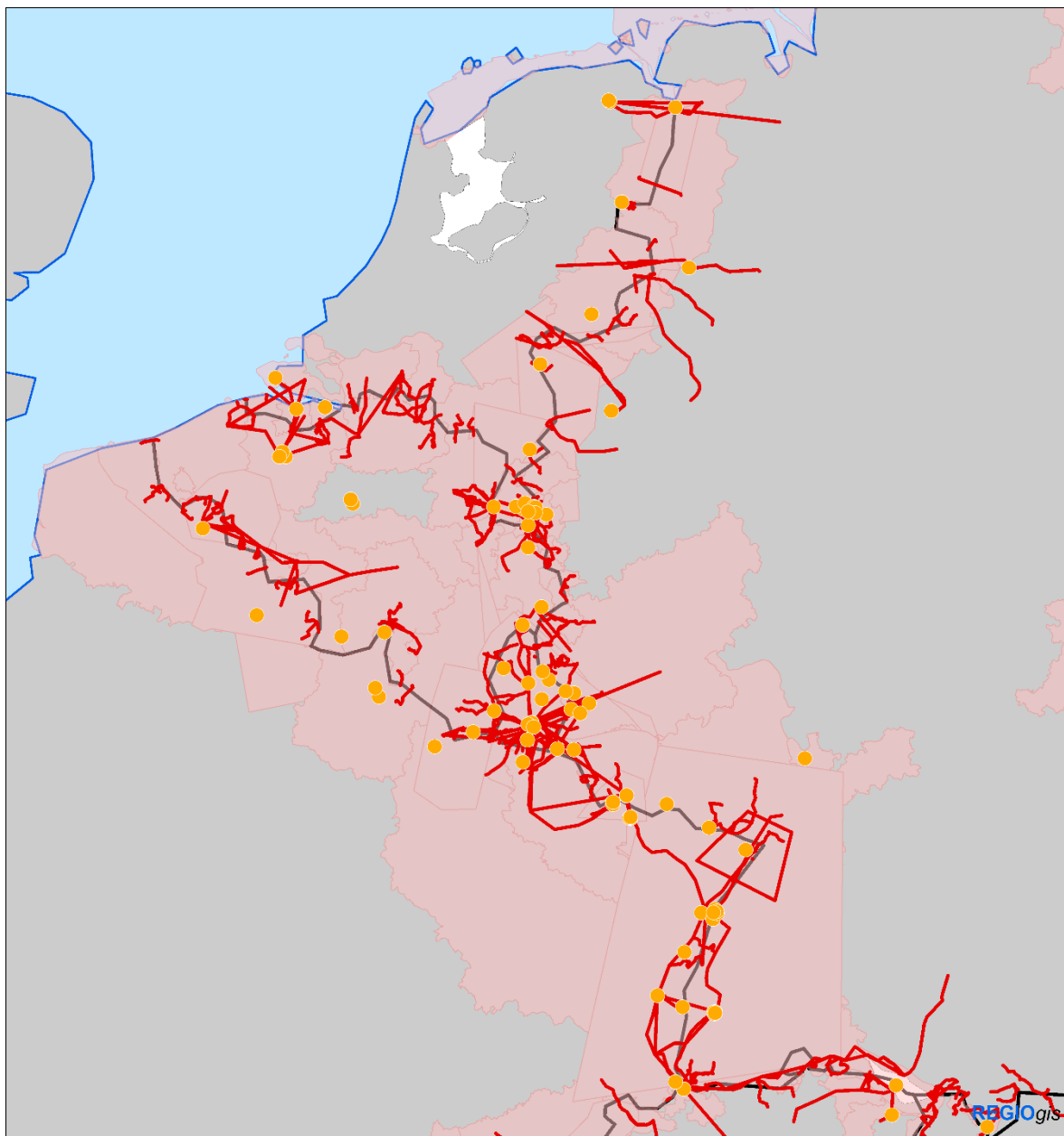
For instance, the Belgian-French border shows a strong focus on healthcare CPS (due to the different ZOAST²⁴). There are transport CPS around Luxembourg and many CPS for civil protection and disaster management (flood prevention) along all these borders, due to many large rivers in the area (Rhine, Maas, Moselle, Saar etc.). The Dutch-German border appears to focus on employment CPS and civil protection. There are also CPS targeting education and training, spatial planning and tourism.

This large number is due to factors such as:

- The long tradition of cross-border cooperation in this region. This means that mutual competences, contacts and rules of conduct are known. The long tradition also means valuable experience and mutual trust, which is essential for the successful implementation of projects and ideas.
- In relatively small countries, such as Belgium, Luxembourg and the Netherlands, many projects, solely on the basis of geography, quickly get a cross-border dimension (e.g. commuters, environmental impacts, technical infrastructure such as drinking water supply and wastewater treatment), where solutions to regional challenges can only be found through cross-border cooperation.
- Language barriers are low.
- Due to the extremely high density of population and businesses in the area, there is high demand for all public services.

²⁴ French abbreviation for 'Organised Zones for Cross-border Health Care Access'.

Figure 12 CPS in West European countries: Place and area of services



**CPS provision in West European Countries:
Place and area of service provision**

● — Areas, points and corridors
of service provision

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

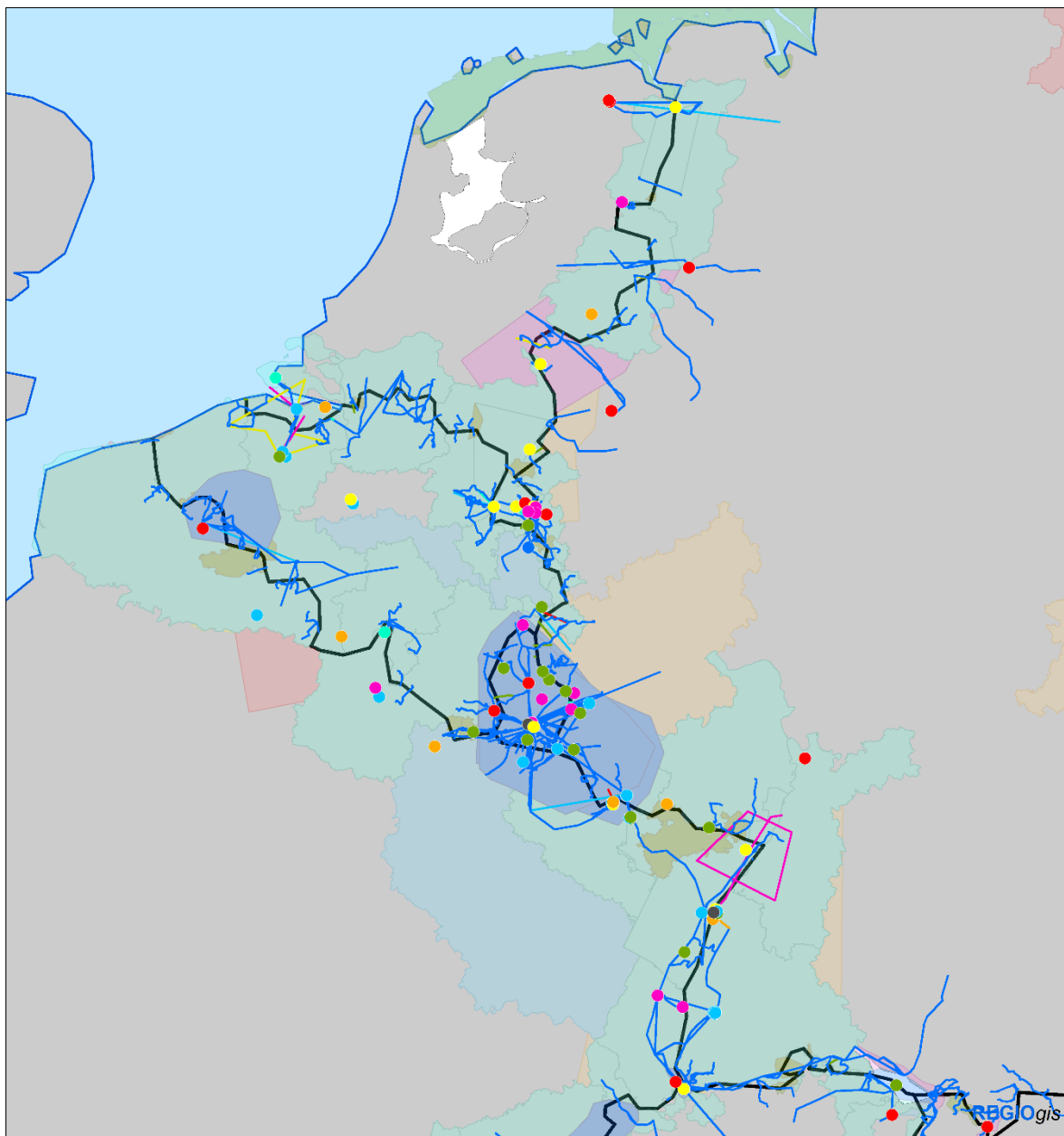
Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 100 Km

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Figure 13 CPS in West European countries: Policy areas



**CPS provision in West European Countries:
Policy areas adressed**

- Citizenship, justice, public security
- Civil protection, disaster management
- Communication, broadband, information society
- Education, training
- Environment protection
- Health care, social inclusion
- Labour market, employment
- Spatial planning, tourism, culture
- Transport

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022



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Nordic countries

The situation in the Nordic countries has some similarities with the West European countries but is yet very different.

The Norwegian-Swedish border has the highest concentration of CPS in Nordic countries, with almost 3% of all identified CPS in Europe (ranked 10th) (Table 1). The Finnish-Swedish border is ranked 15th with 1.7% and a similar concentration. The Finnish-Russian border, ranked 26th, remarkably has 1.1% of CPS in Europe²⁵, which is more than the 1% along the Finnish-Norwegian border. Altogether, including the Danish-Swedish border, Nordic countries account for more than 8% of CPS in Europe.

Geographically, the CPS are distributed along all Nordic borders; however, due to the large distances their spatial coverage appears less seamless and their density not as high as in Western Europe (Figure 14). Farther north concentrations even increase, leading to high densities along the Finnish-Swedish and Finnish-Norwegian borders. Other border sections with high CPS concentration in the north are the Copenhagen-Malmö area, the (Oslo-) Halden-Strömstad area, as well as the Finnish-Russian border in South Karelia.

A special feature of CPS in Nordic countries is that their service areas are, on average, extremely extensive. This reflects the relatively large administrative units and that low population densities mean services require a large area to achieve critical mass.

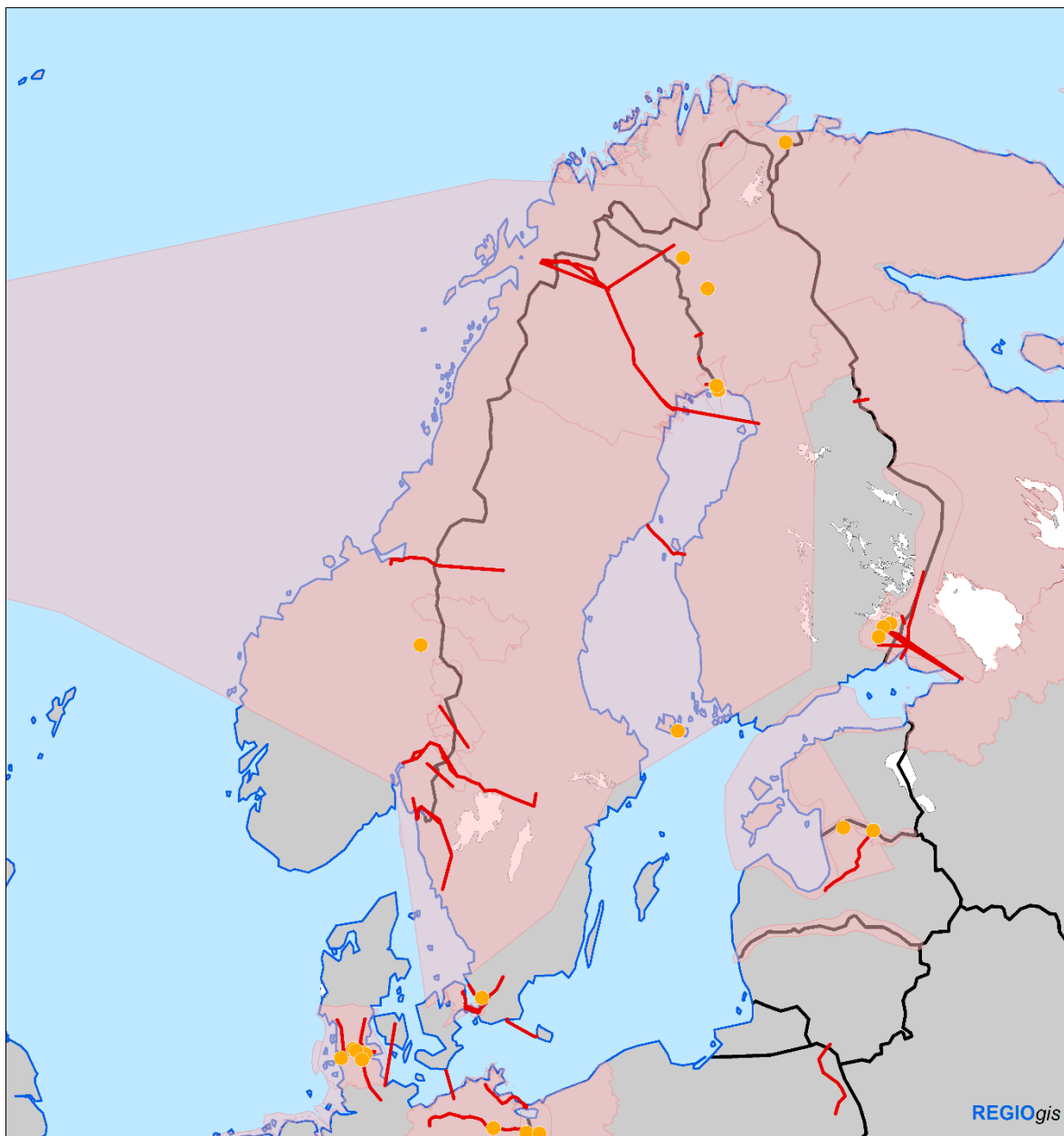
Thematically, the Norwegian-Swedish border has a clear focus on CPS in civil protection and disaster management (Figure 15), Such CPS can also be found along the Finnish borders, but both the Finnish-Swedish and the Finnish-Norwegian border have a stronger focus on healthcare CPS. There are also a few labour market CPS and CPS in spatial planning / tourism / culture, but in terms of numbers they seem to play a minor role. Transport CPS are, compared to the rest of Europe, relatively underrepresented, and can only be found in the southern sections of the Finnish-Russian, the Norwegian-Swedish (Halden-Strömstad) and the Danish-Swedish (Copenhagen-Malmö) border.

This large number of CPS in the Nordic countries is due to several factors, some similar to the Benelux case while others differ:

- There is a long tradition of cross-border cooperation in this region. This means that mutual competence, contacts and rules of conduct are known. The long tradition has also helped establish mutual trust, which is essential for the successful implementation of cross-border services, projects and ideas.
- This long tradition is formalised in the Nordic Cooperation council and interstate government agreements under this.
- Similar to the Benelux countries, there are few language barriers.
- In contrast to the Benelux countries, and due to the extremely low population density, with the geographical distances between homes, work and central places, public authorities face severe difficulties in providing public services efficiently. Cross-border cooperation and joint services help to provide efficient, long-lasting and reliable services.

²⁵ This can be attributed at least partly to the data identified through a case study at the Finnish-Russian border by the ESPON CPS study in 2018 (ESPON, 2018).

Figure 14 CPS in Nordic countries: Place and area of services



**CPS provision in Nordic Countries:
Place and area of service provision**

● — Areas, points and corridors of service provision

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 300 Km

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Figure 15 CPS in Nordic countries: Policy areas



**CPS provision in Nordic Countries:
Policy areas addressed**

- Citizenship, justice, public security
- Civil protection, disaster management
- Communication, broadband, information society
- Education, training
- Environment protection
- Health care, social inclusion
- Labour market, employment
- Spatial planning, tourism, culture
- Transport

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 300 Km

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Central and Eastern Europe

There is a clear north-south and west-east divide in these countries (Figure 16). At the borders to the EU14 states (DE-PL, CZ-DE, AT-CZ, AT-SK, AT-HU), the many CPS today mean a close-meshed network of various services. Further south and east there are fewer identified CPS on the borders of the EU13 states as well with IPA countries.

While the borders between Poland and Slovakia and between Hungary and Romania host some CPS, there are very few between Hungary and Croatia, Romania and Bulgaria, or further south with Greece and Turkey.

The focus of the services is clearly on transport (Figure 17), and in the south also on civil protection and disaster management. Other areas are employment and healthcare. CPS for education and training exist (especially at the DE-PL, AT-SI and HR-SI borders), but are comparatively rare. Services for environmental protection are more common (CZ-DE, PL-SK, AT-DE, AT-CZ, AT-HU, HU-SK).

Figure 16 CPS in Central and East European countries: Place and area of services



CPS provision in Central and East European Countries: Place and area of service provision

● — Areas, points and corridors of service provision

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 200 Km

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Figure 17 CPS in Central and East European countries: Policy areas



CPS provision in Central and East European Countries: Policy areas addressed

- Citizenship, justice, public security
- Civil protection, disaster management
- Communication, broadband, information society
- Education, training
- Environment protection
- Health care, social inclusion
- Labour market, employment
- Spatial planning, tourism, culture
- Transport

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

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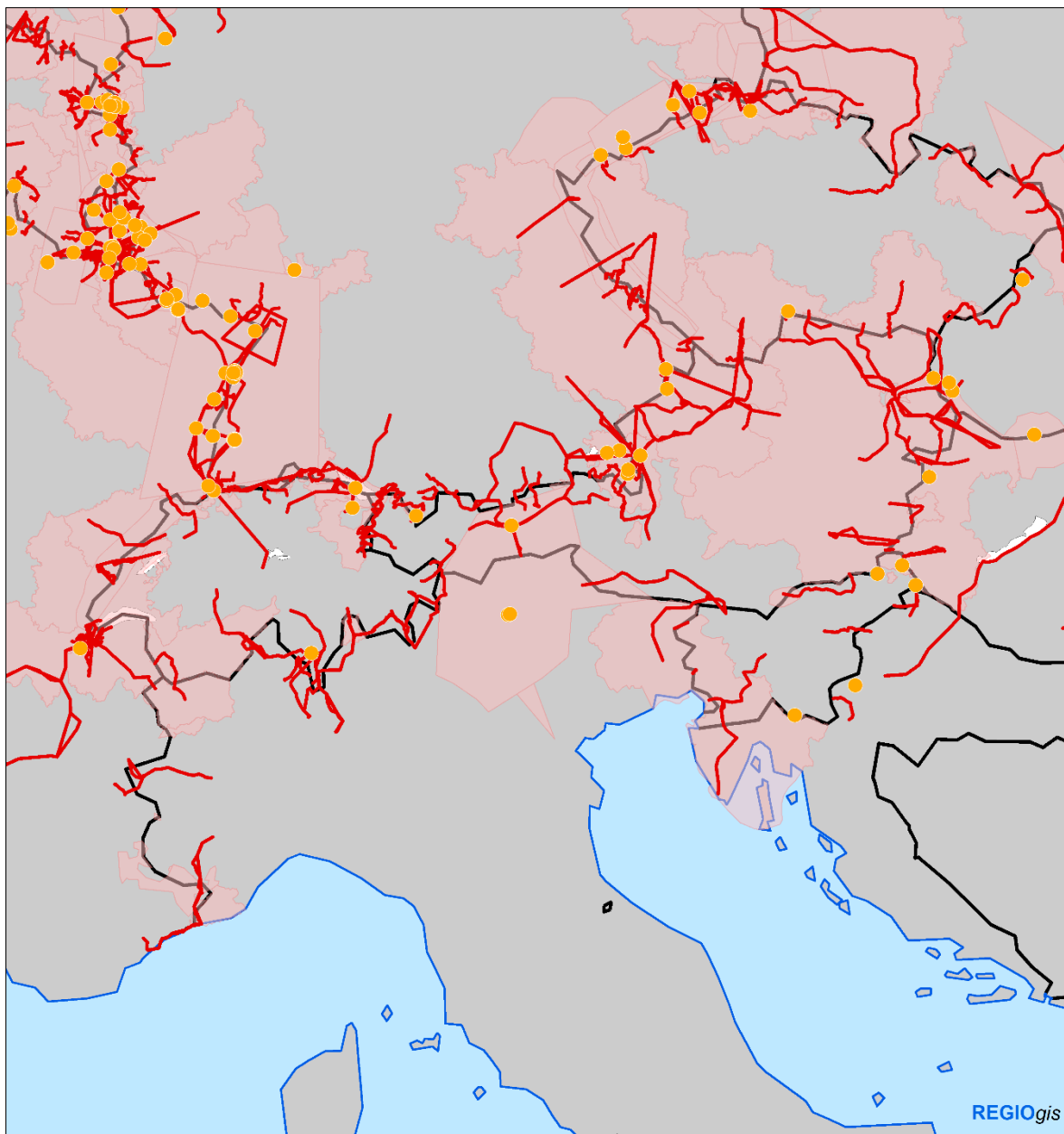
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Alpine Space

Compared to the rest of Europe, the Alpine region has a high density of CPS (Figure 18) – despite the challenging geographical conditions. However, a closer look reveals that the density along the borders in the northern Alpine region (AT-DE, CH-DE, CH-FR, AT-CZ, AT-HU, AT-SK) is much higher than in their southern counterparts (CH-IT, AT-IT, IT-FR, IT-SI, AT-SI). The reason for this could be the higher population and workplace density in the northern Alpine region, resulting in more demand for CPS. More difficult topographical conditions along the southern borders also hinder CPS development there.

The strong focus on CPS for transport (Figure 19) is easily explained by the population density and as a political goal to develop strong public transport services along the main transport axes. However, important policy fields are also healthcare (especially along the Austrian-German and German-Swiss borders) as well as labour market services in the eastern Alpine region as well as civil protection and disaster management in the western Alpine region (especially along Swiss borders). Moreover, there are CPS for environmental protection on almost all borders of the Alpine Space.

Figure 18 CPS in the Alpine space: Place and area of services



**CPS provision in the Alpine space:
Place and area of service provision**

● — Areas, points and corridors
of service provision

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

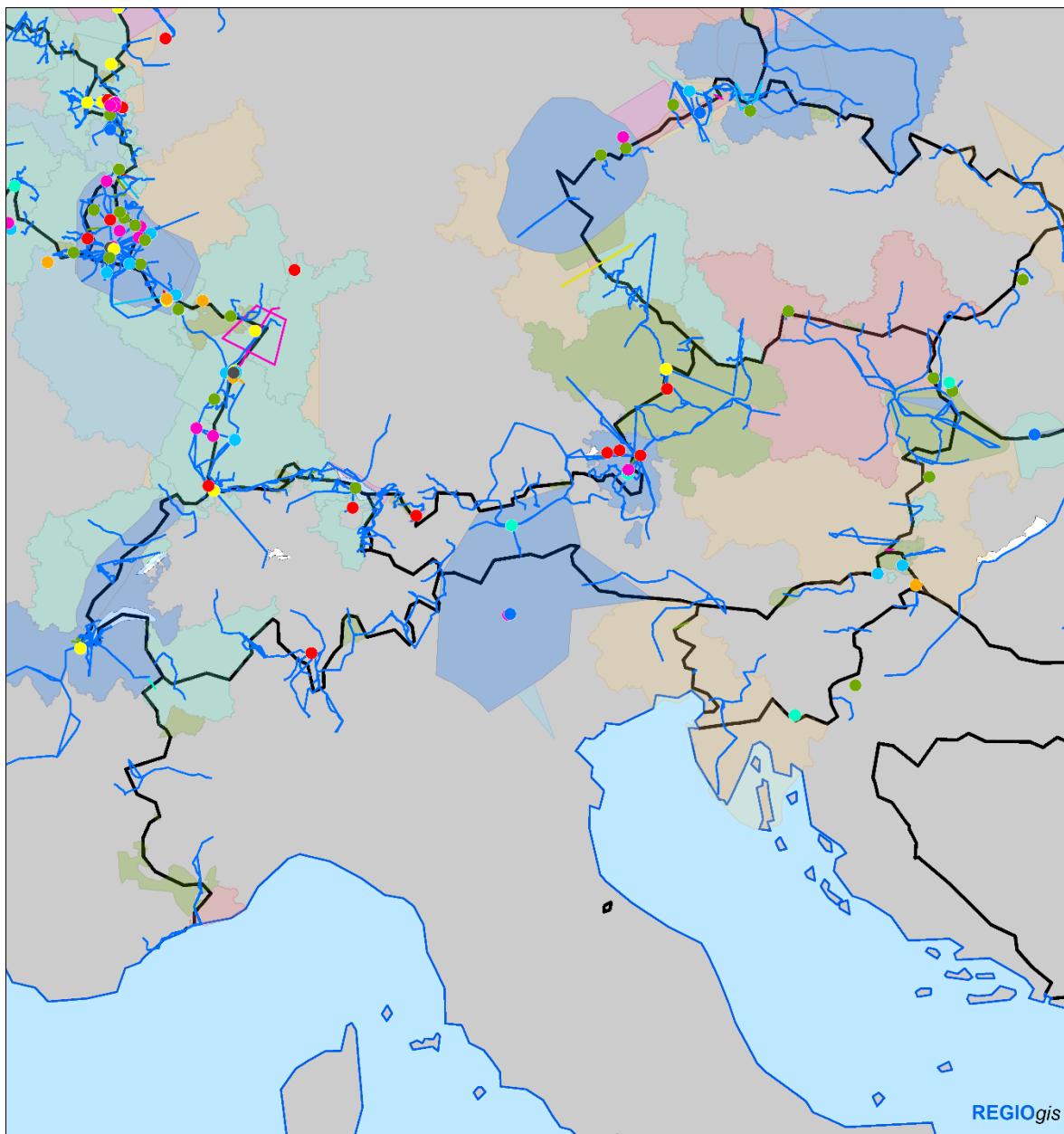
Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 150 Km

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Figure 19 CPS in the Alpine space: Policy areas



**CPS provision in the Alpine space:
Policy areas addressed**

- Citizenship, justice, public security
- Civil protection, disaster management
- Communication, broadband, information society
- Education, training
- Environment protection
- Health care, social inclusion
- Labour market, employment
- Spatial planning, tourism, culture
- Transport

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

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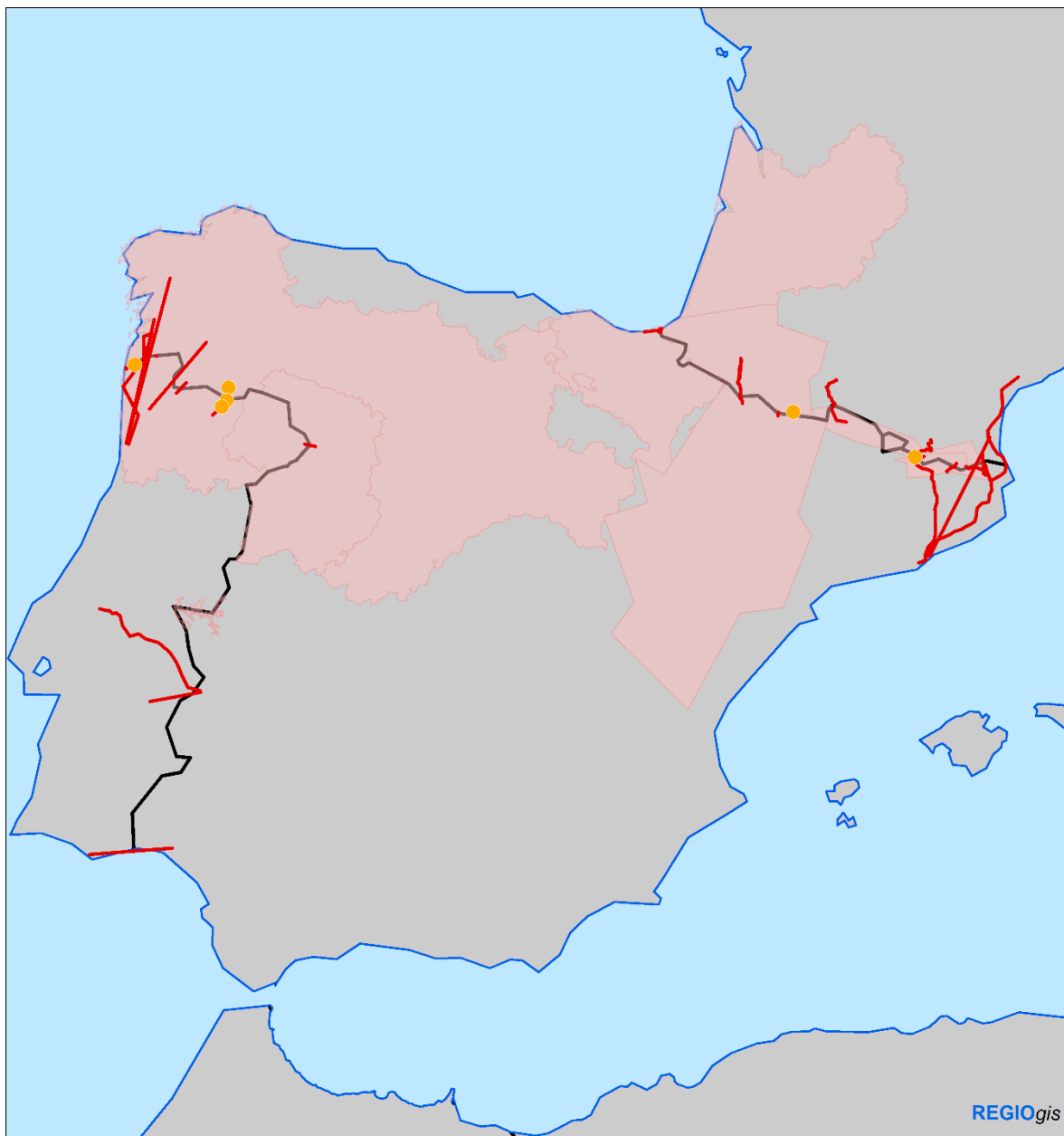
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Iberian Peninsula

Similar to Central and Eastern Europe, the number and density of CPS on the Iberian Peninsula decreases from north to south (Figure 20). While there are many CPS in the Pyrenees between France and Spain, the number is significantly lower along the northern Portuguese-Spanish border. In the south, virtually no services could be identified. The reason is probably not so much a lack of willingness to cooperate, but rather a decline in demand, since the southern parts of Portugal and Spain have very low population densities. However, this is equally true for large areas of the Nordic countries, which, precisely because of low population densities, seek cross-border cooperation to provide public services efficiently.

Interestingly, there are different emphases on the two Spanish borders (Figure 21). The French-Spanish border is clearly dominated by transport CPS and spatial planning, tourism and culture. The Portuguese-Spanish border, on the other hand, is dominated by labour market, healthcare and environmental protection CPS.

Figure 20 CPS on the Iberian Peninsula: Place and area of services



**CPS provision in the Iberian Peninsula:
Place and area of service provision**

● — Areas, points and corridors
of service provision

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

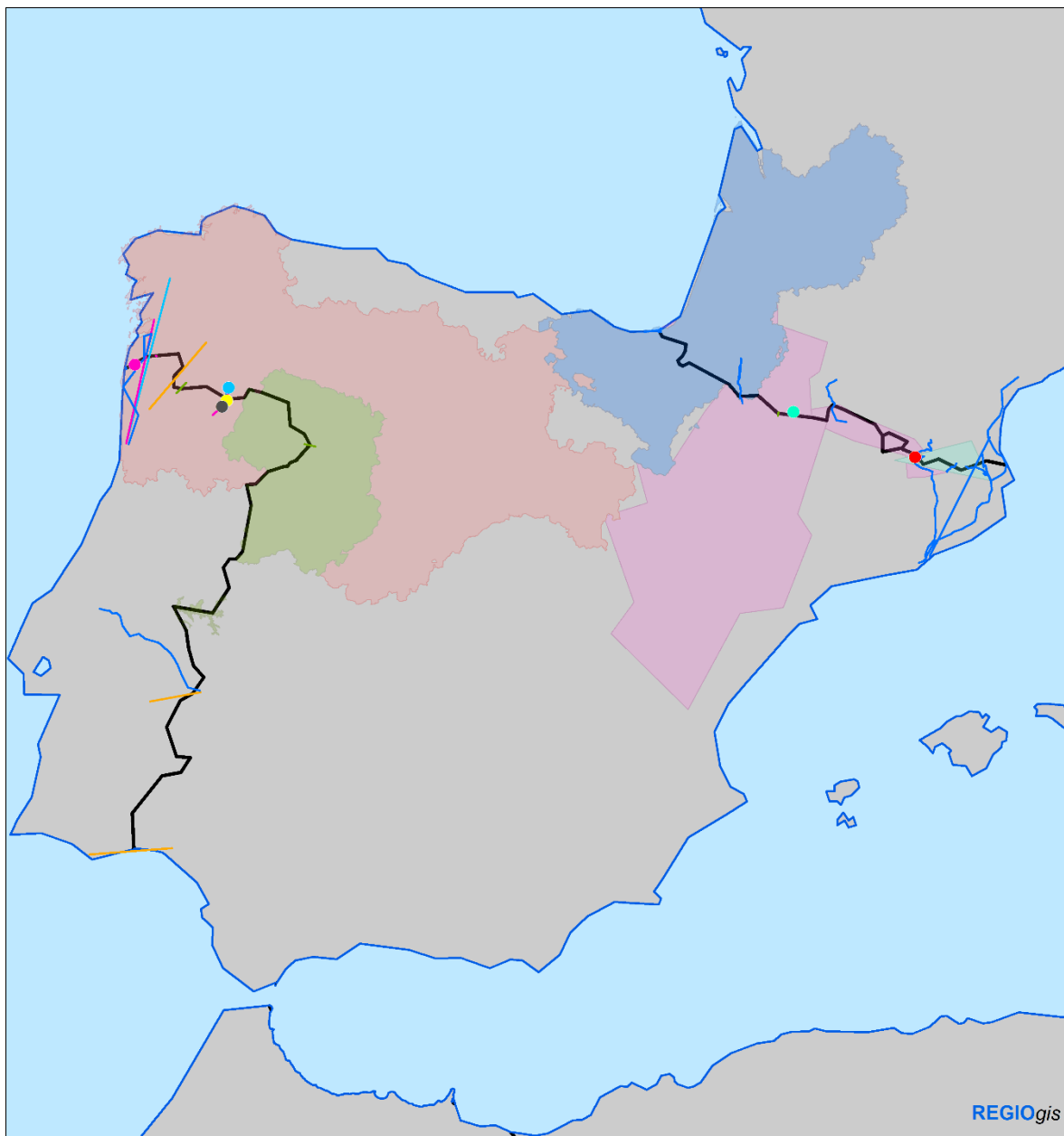
Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 200 Km

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Figure 21 CPS on the Iberian Peninsula: Policy areas



**CPS provision in the Iberian Peninsula:
Policy areas addressed**

- Citizenship, justice, public security
- Civil protection, disaster management
- Communication, broadband, information society
- Education, training
- Environment protection
- Health care, social inclusion
- Labour market, employment
- Spatial planning, tourism, culture
- Transport

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 200 Km

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2.1.8 Specific geographical patterns

Further hypotheses regarding geographical specificities on the spatial distribution of CPS relate to:

- **Border proximity and permeability:** The closer a region is to a national border and the higher the accessibility and permeability of the border, the better the conditions for CPS development. This is tested by analysing the distance of CPS to national borders and the relation of services vis-à-vis border permeability by public transport.
- **Geographical specificities** in border regions such as mountain ranges, border rivers and lakes, but also agglomeration areas and twin cities can influence the development of CPS both negatively and positively. Potential relationships between these factors are investigated.
- **Experience in cooperation:** The experience of actors in border regions with international cooperation may also have a major influence on CPS. Border regions with a long tradition of cooperation often find it easier to implement a CPS compared to those with only recently established cooperation. This qualitative aspect is difficult to grasp, but is analysed on the basis of borders for the EU14, EU13, or with IPA and other non-EU states.
- **Language barriers / language similarities:** On borders with a common language, establishing cooperation is often easier (and cheaper) than in areas where different languages are spoken. It is not only the language skills of the people that matter, but languages often create mental barriers to policy development when looking across the border and offering joint cross-border services is often not thought of.

Distances to national borders

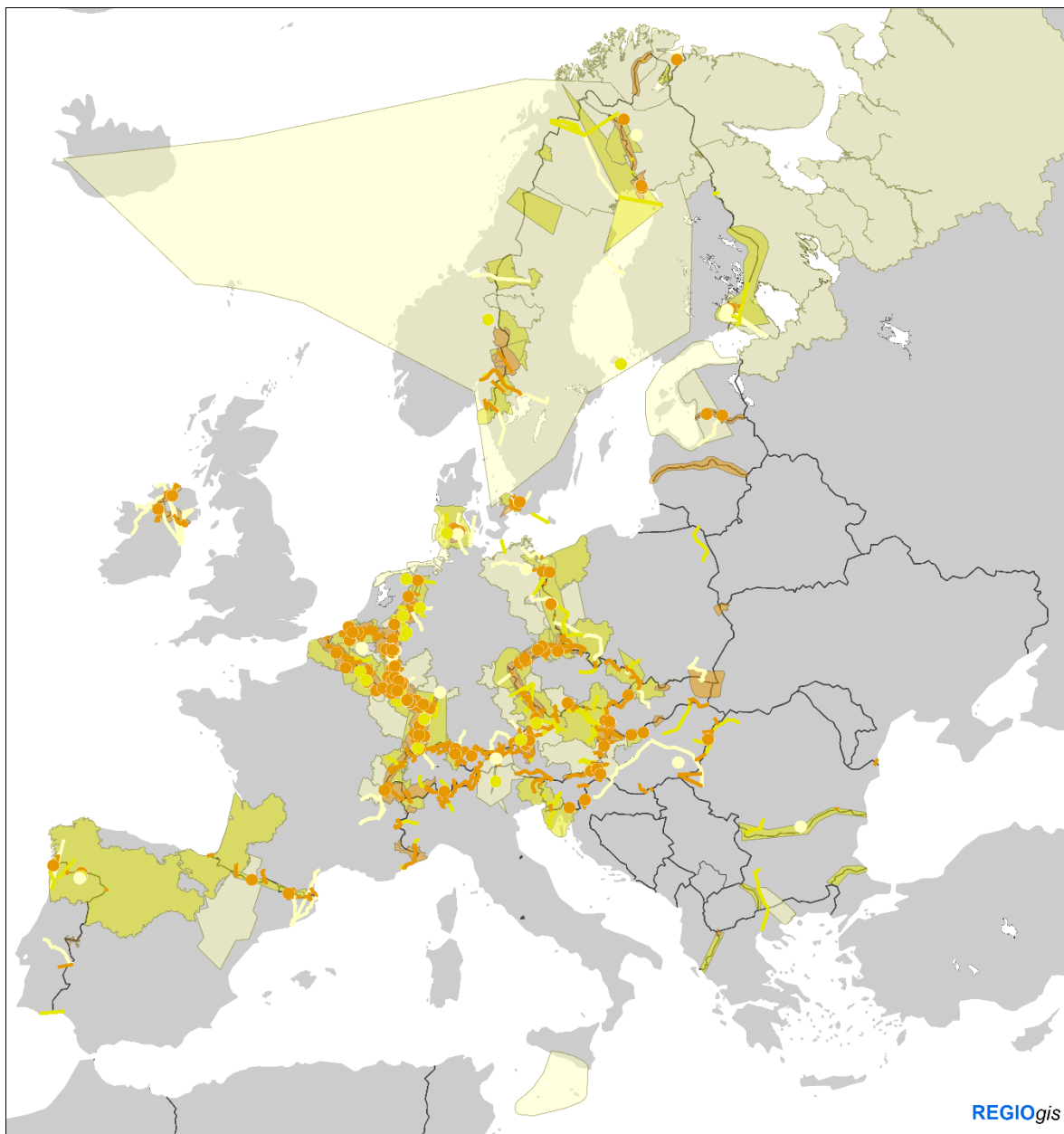
Obviously, most CPS are close to state borders. The closer an area is to the border, the higher the likelihood of a CPS.

What looks like a simple idea turns out to be quite complex in reality: Even if the place where a CPS is provided is close to the border, its service area may be much wider on both sides. Some CPS do not have a location where they are provided but refer to an area from the outset. Sometimes this area is clearly delineated in agreements (e.g., nature parks), but sometimes there is no precise specification.




Figure 22 distinguishes CPS by their relative distance from the border²⁶. As a tendency, point based services are closest to national borders, whereas some linear and many area CPS extend up to 50 km from a border or even beyond. This is particularly true for CPS in the Nordic countries, but also on the Iberian Peninsula and in central Europe.

²⁶ This analysis is based on the assessment of the major parts of the service area of a CPS. Thus, parts of the service area can also lie outside the specified zone.

Figure 22 CPS and border areas



CPS within 25 and 50 km border areas

-  CPS within 25 km border area
-  CPS within 50 km border area
-  CPS beyond 50 km border area

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

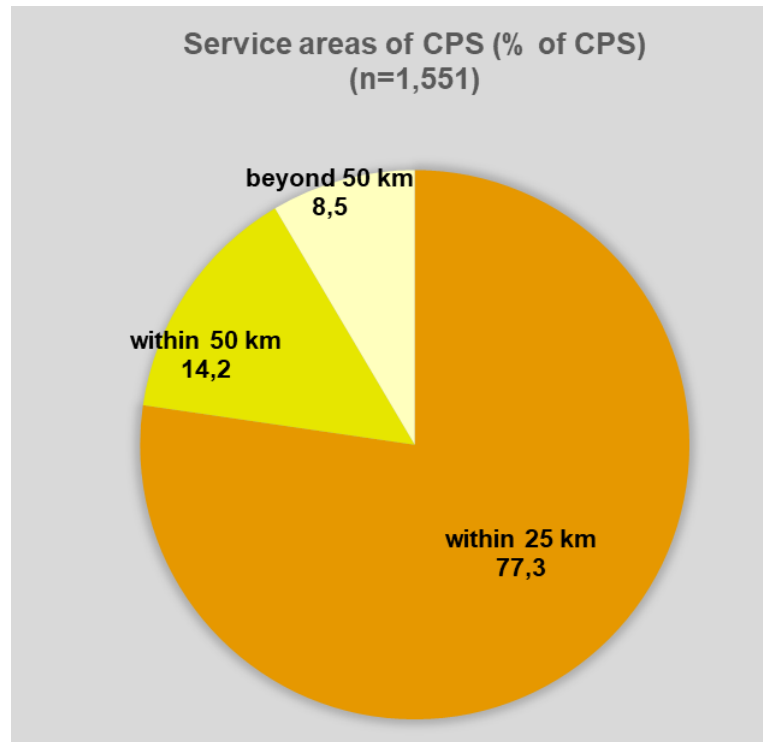
Source: ESPON-REGIO CPS Database, 2022

0 500 Km

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Altogether, 77.3% of identified CPS have service areas that are mainly within 25 km of a national border. Another 14.2% serve mainly an area within 50 km from a national border and finally, a significant share of 8.5% have considerable service areas extending beyond 50 km of the border. These are, mainly transport, tourist and labour market CPS.

Figure 23 Main service areas (share of CPS)



Source: ESPON-REGIO CPS database, 2022

Permeability of borders by public transport

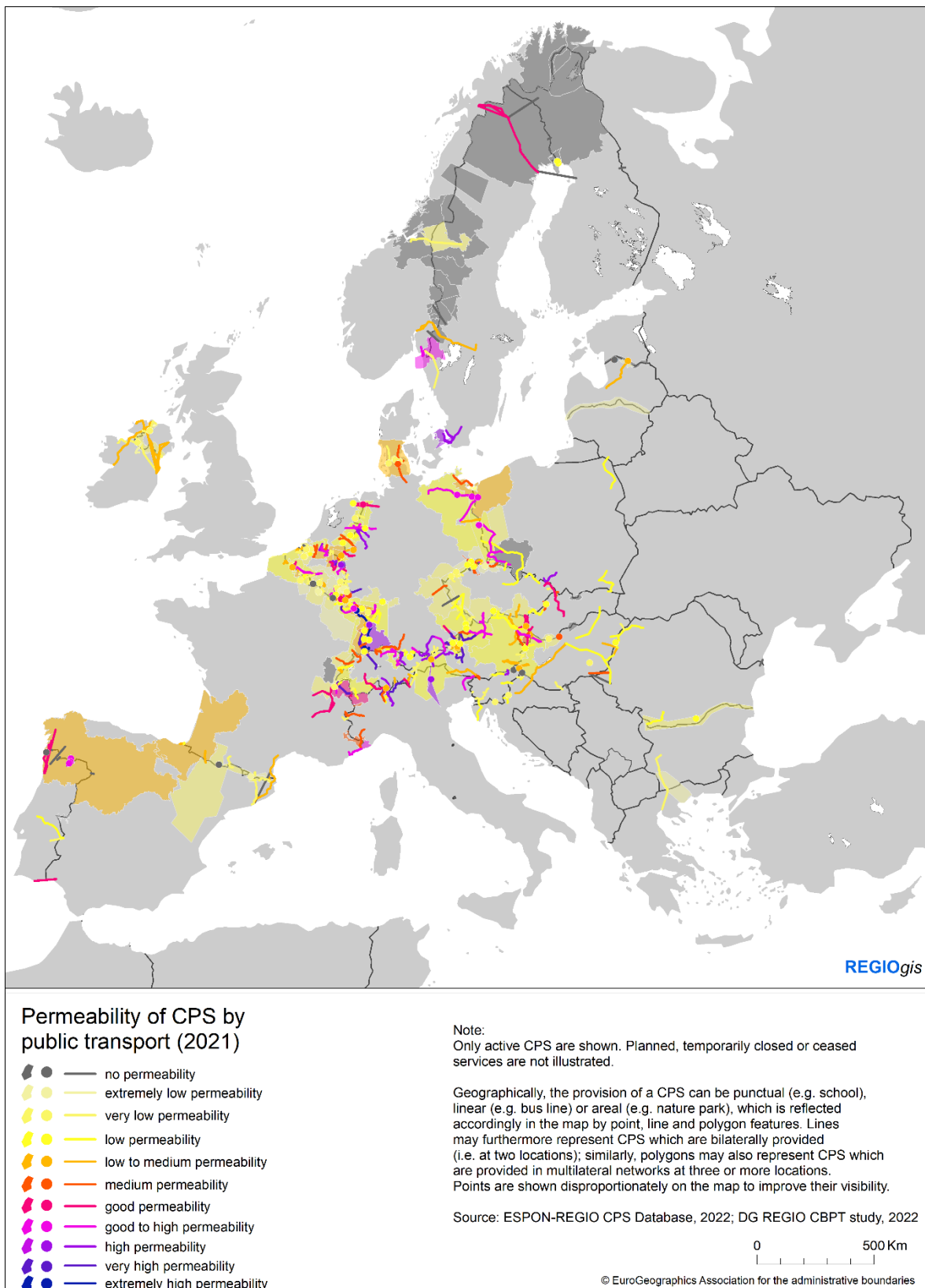
Border permeability is another important factor. CPS play an ambivalent role here. Many services can only be meaningfully offered if there is good border permeability. This is true for CPS in the labour market, education, tourism and the health sectors. However, many CPS ensure or even increase the permeability of a border. These include particularly transport CPS (bus, rail, tram or ferry services), but also services for emergency rescue or citizenship.

In a recently completed study for DG REGIO on cross-border public transport services, an indicator for border permeability by public transport²⁷ was generated for all sections of internal EU Member State borders. Indicator values range from 0 (=not permeable) to 10 (=extremely high permeability). This indicator was assigned to CPS and can be evaluated here (Figure 24)²⁸.

²⁷ Permeability is defined as the ratio of the number of cross-border public transport services (buses, trams, trains, ferries) (numerator) and the population density and population development (denominator).

²⁸ The indicator is not available for borders towards non-EU countries. For CPS that cover three or more countries, indicator values could not be assigned. For CPS that cover several sections of a border, the average permeability was assigned. In total, the indicator is available for 1,435 CPS.

Figure 24 Permeability of CPS by public transport



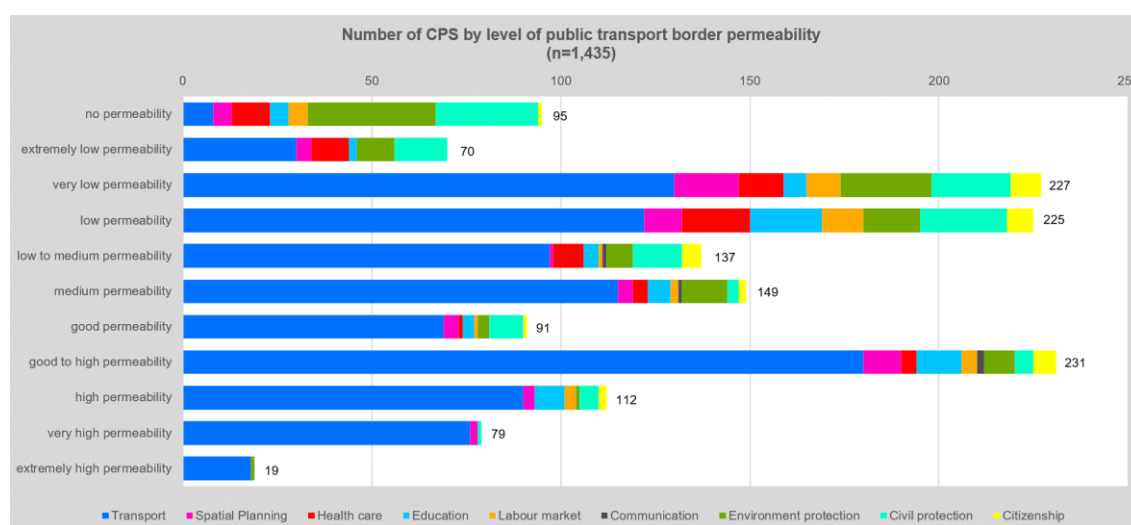
The results depend on the location and size of the CPS service area:

- CPS close to cross-border public transport services tend to benefit from higher permeability compared to CPS farther from public transport services. The more public transport services, the higher the permeability.

- The larger the service area of a CPS, the lower the permeability on average, because the likelihood that border sections with low permeability are included in the service area increases.

Not surprisingly, CPS enjoying high, very high or extremely high permeability predominantly concern transport (Figure 25). Few services addressing other policy areas benefit from such high permeability. A total of 231 CPS for all policy areas have good to high permeability. At the other end of the spectrum, 522 CPS suffer from low, very low or extremely low permeability, a further 95 CPS serve border areas with no permeability at all. Among the services with low permeability are in particular CPS for environmental protection (especially nature parks and nature reserves in border regions that are little crossed by transport axes) and civil protection. Also labour market CPS and those for education and training seem to be predominantly in rural areas with relatively poor cross-border transport services.

Figure 25 CPS by public transport border permeability



Source: ESPON-REGIO CPS database, 2022

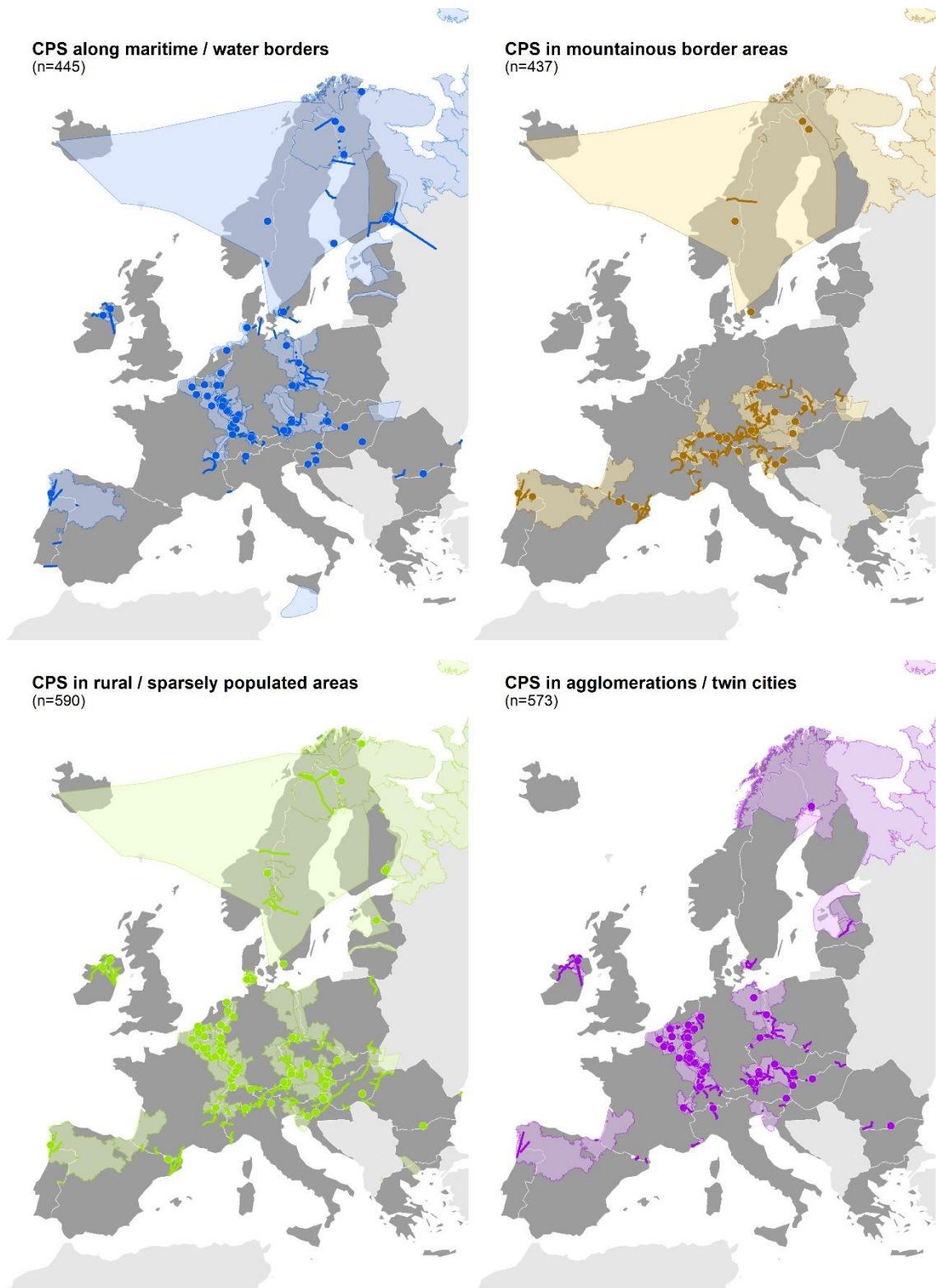
Despite these findings, there is no clear thematic pattern for permeability, nor is there a pattern for the number of CPS by level of permeability. CPS exist in areas with both very good and very poor permeability – although in the former case transport CPS clearly dominate.

CPS and geographical specificities

Geographical specificities in border regions may foster or hinder the development of CPS. If the number of CPS is based on demand, there should be many more CPS in border regions with agglomerations or so-called twin cities. Conversely, in border areas with very low population density, in mountainous areas or along water borders, there should be significantly fewer CPS. Only 16% of CPS are located in areas without any specificity, while the vast majority of 84% have at least one (Figure 26 and Figure 27).²⁹

²⁹ One CPS may be assigned to one or more specificity.

Figure 26 CPS and geographical specificities



CPS and geographical specificities

- — ■ CPS along maritime/water borders (border river/lake)
- — ■ CPS in mountains / mountainous border areas
- — ■ CPS in rural or sparsely populated border areas
- — ■ CPS in agglomerated border areas or in twin cities

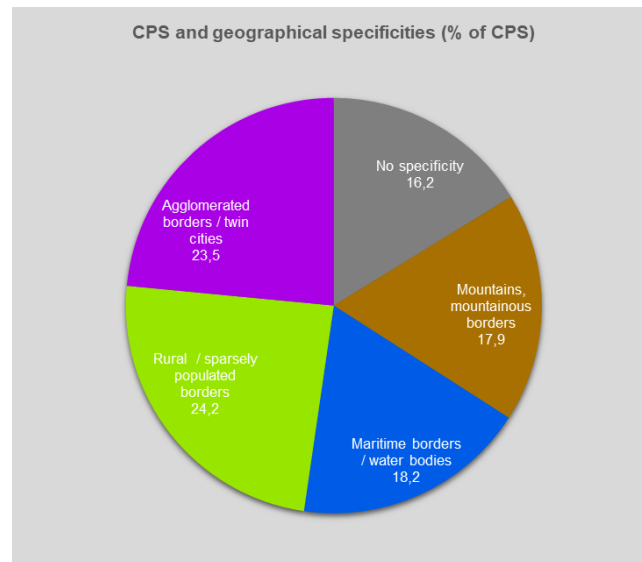
Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

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Source: ESPON-REGIO CPS Database, 2022

The shares of geographical specificities are similar, ranging from 18% for mountain borders up to 24% for rural and sparsely populated border areas. Thus, these specificities do not seem to imply a particular disadvantage or advantage for CPS development.

Figure 27 CPS and geographical specificities



Source: ESPON-REGIO CPS database, 2022

Instead, the results show the ambivalent character of CPS. Of course, border rivers or high mountains hinder the development of services in certain policy areas, such as transportation or education, but they promote or trigger services in other policy areas, such as nature conservation or disaster management. While border rivers impede cross-border tramways, common ferry services or a cross-border drinking water supply can be easily established. The results show that quite obviously, geographical specificities are not seen as an obstacle to the development of CPS, but rather as an opportunity or even a necessity for certain policy areas. This also applies to border areas where demand for services is low due to low population density. Faced with the alternative of ceasing public services altogether or making these more efficient (also economically) through cross-border cooperation, CPS are increasingly coming to the attention of actors in border areas.

Border types

Analysing the location of CPS with respect to border types reveals that 60% of identified CPS are on borders between EU14 countries, 6% on borders between EU13 countries, 12% between EU14 and EU13 countries, nearly 21% along external borders of the EU, and finally 0.6% along borders of non-EU countries. This is not surprising but confirms the analysis in previous chapters (see Chapters 2.1.2).

Between the EU14 states, which joined the European Union earlier and therefore have a longer tradition and more diverse experience of cross-border cooperation, there are more CPS compared to the EU13 states. The latter are catching up, though they still have a long way to go to reach a similar density of CPS as the EU14 countries.

CPS and language similarities

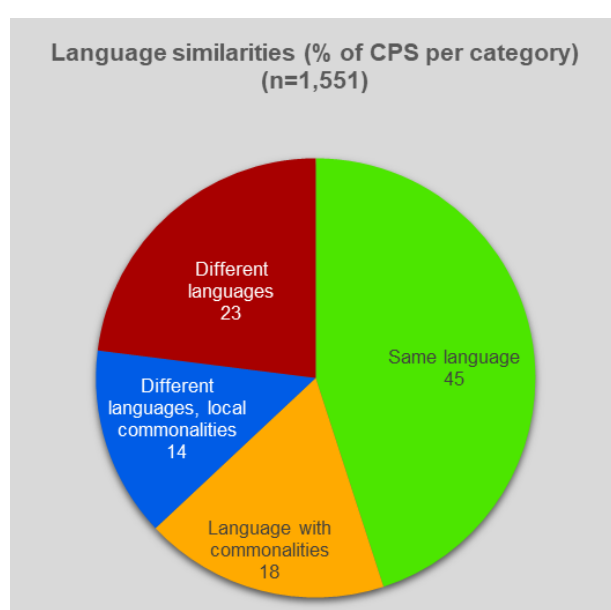
It can be assumed that CPS are easier to develop in border areas with the same or similar languages. If this is true, more CPS should be found on borders without language barriers. On the other hand, many CPS for education and training, labour market, culture and tourism, and communication are set up precisely to help break down the language barrier.

In such cases, the language barrier obstacle is a potential for CPS development. In other words, the CPS turns the obstacle into a solution.

Figure 29 illustrates the complex pattern of language differences and similarities in Europe.³⁰ Borders with the same language (IE-UK, AT-DE, CH-DE, CH-FR) alternate with those with commonalities (ES-PT, DE-NL, NO-SE, CZ-PL) and those where these commonalities are only local (DE-DK, FI-SE, ES-FR, DE-FR). At the end of the spectrum are borders where different languages are spoken (CZ-DE, AT-CZ, LT-LV, FR-IT).

As expected, most CPS (45%) are on borders with the same language and another 18% on borders with language similarities (Figure 28). So, almost $\frac{2}{3}$ of all identified CPS are on borders with no or only minor language problems. On the other hand, almost $\frac{1}{4}$ of all services are on borders where different languages are spoken.

Figure 28 Language similarities - Number of CPS per category

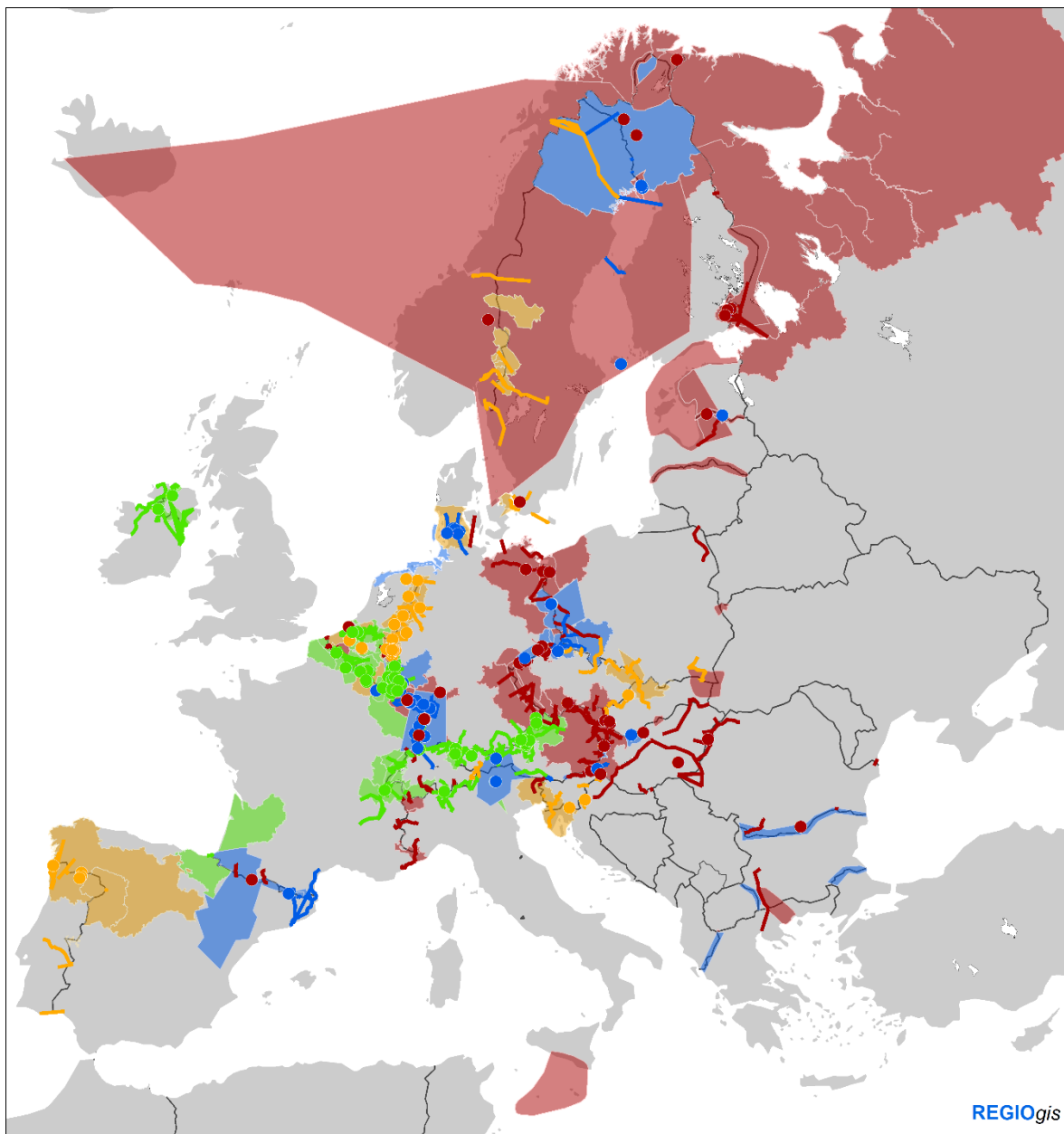


Source: ESPON-REGIO CPS database, 2022

CPS on borders with different languages cover the whole spectrum of policy areas. CPS for transport account for more than half (54%, compared to 61.5% of all CPS), followed by environment protection with nearly 16%, which is significantly higher than its 8.6% share of all identified CPS. The remaining policy areas are similar to their overall share (Table 4).

³⁰ If a CPS crosses three or more national borders, the 'worst' relationship is assigned to the CPS as this relationship probably determines daily work. For example, a CPS covering Austria, Germany and the Czech Republic is assigned "different language" although the Austrian and German partners understand each other perfectly.

Figure 29 Language similarities in a CPS



Language similarities in a CPS

- — Same language
- — Language with commonalities
- — Different languages but local commonalities *
- — Different languages

* locally spoken dialects, frequent knowledge of the neighbouring language, minorities on both sides facilitating exchange

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 500 Km

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2.1.9 Conclusions from geographical patterns

To date, CPS exist along all European borders however, the density is higher in Western and Northern Europe compared to Eastern and Southern Europe. The highest numbers and density are in Benelux countries, accounting for 32% of all identified CPS.

The first CPS were mainly introduced along borders of EU14 Member States, at a slow pace until the 1990s, but then increasingly rapidly. With the EU enlargements, services to and between the new Member States were gradually developed, occasionally even to non-EU states.

There are CPS in a broad spectrum of policy areas, ranging from citizenship, civil protection, education and environmental protection to healthcare, labour market, spatial planning and transport. Although the latter clearly dominate in terms of the number of services, there are also a considerable number of the others. Border specific challenges and opportunities, regional specificities, natural assets, actual demand, political issues and simple feasibility determine in which policy area CPS are established. This is also reflected in the timing, with phases for CPS development in specific policy areas.

There is evidence that the tradition of international cooperation has a positive influence on the development of CPS. Benelux as well as Nordic countries are good examples. Low language barriers seem another positive factor – although there are CPS along borders with different languages. Some of these CPS were explicitly developed to help overcome language barriers.

The assumption that CPS can only be found in border regions with high population density (= supposedly high demand) and high border permeability has been disproved. On the contrary, many services have been established in rural or sparsely populated areas, for instance to make their provision more efficient and effective. In addition, there are many CPS, e.g., in the environmental and civil protection sectors or in emergency rescue, which have been set up specifically in remote or mountainous areas. Excluding transport CPS, which are often found in high-density border areas, the importance of rural, sparsely populated or mountainous areas for CPS development increases significantly. Quite obviously, in many border regions geographical specificities are not seen as obstacles to the development of CPS, but opportunities or are even the reason for services in certain policy areas.

Some 40% of identified CPS do not target a specific audience, but are aimed at the general public, while 60% address specific target groups. These services are designed to meet the needs of specific social groups such as cross-border workers, job seekers, pupils or students, tourists, elderly people, or people requiring medical treatment. A large target group is other public authorities, for example to facilitate simplified information exchange, better coordination and planning of activities, or to enable technical cross-border services such as wastewater treatment or the provision of drinking water. The general public then benefits from these indirectly, for example through greater safety or better supply.

2.2 Characterisation of CPS by policy area

This section looks more closely at each of the nine policy areas presented in Section 2.1.4, under which the identified CPS are grouped within the inventory. The characterisation of policy-specific CPS starts with a geographical overview supported by an EU-wide map, which also differentiates services by field of intervention. Then, selected features where sufficient information is available in the inventory³¹ are described. This description focuses on the legal framework applied to establish the CPS, the importance of the fields of intervention addressed, the governance model and the main target groups. Where possible or helpful, further aspects are highlighted (e.g. year of establishment, role of infrastructure, other actors required to make the service work, etc.). In addition, the assessment also links to the case studies which are part of the wider study.

The following sub-sections present a snapshot of the inventory as of May 2022 (i.e. 1,551 entries). CPS identified since then are not covered by the quantitative analysis. Finally, the analysis also points to further CPS not included in the inventory that were discovered through recent research carried out by the study team.

2.2.1 Transport

CPS in the field of transport is by far the biggest group in the inventory (966 CPS). Most transport-related CPS operate at internal borders between EU14 countries³² (59%), followed by CPS at external EU borders³³ (23%) and internal borders between EU14 and EU13 countries³⁴ (11%). A comparatively smaller group of CPS operates either at internal borders between EU13 countries (6%) or non-EU borders (1%: CH-LI). The geographical distribution of transport-related CPS is shown in the map below (Figure 30).

The 966 transport-related CPS in the inventory address four fields of intervention, ordered by their frequency:

- 99.6% of identified CPS focus on cross-border public transport. A comprehensive analysis of these services was already carried out by another recently completed DG REGIO study project³⁵. In this, only the importance of the mode (i.e. bus, rail, tram and ferry) is described. Most are CPS providing cross-border passenger transport by bus or coach, including both regular and seasonal tourist bus lines (590 CPS). The second most important sub-group is cross-border passenger transport services by rail (351 CPS). This covers scheduled local / regional, interregional and international train services with at least one stop in two contiguous border regions in two countries. There are very few passenger transport services by ferry across rivers, lakes or the sea with a one-way crossing under 60 minutes (10 CPS). These services help overcome the often strong barrier effect of natural obstacles, as shown in the case study on the three free ferry services over the River Rhine along the French-German border (case study 1). There are only 6 CPS by tram. Three of these operate in the trilateral Eurodistrict Basel (CH-DE-FR), from Basel city to Weil am Rhein as well as to Saint-Louis, one line between the cities of Strasbourg and Kehl (DE-FR) and another between the cities of

³¹ In general, only those aspects are analysed on which information is available for 50% or more of the listed CPS. This is to ensure that general statements on thematic CPS groups are derived from reasonably robust data sets.

³² These are internal borders between Member States of the former EU15, now excluding the United Kingdom.

³³ These are external EU borders with the United Kingdom, Switzerland, Liechtenstein, Norway and Russia.

³⁴ EU13 refers to the 13 countries that became EU Member States in 2004 (Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia), in 2007 (Romania, Bulgaria) and in 2013 (Croatia).

³⁵ European Commission, DG REGIO (2021).

Geneva and Annemasse (CH-FR). A specific case is the cross-border tram-train 'Saarbahn', which operates as traditional tram in the city center of Saarbrücken (DE) and outside the city on conventional rail tracks to Sarreguemines (FR). Other transport services included in this field of intervention are cross-border ticket systems facilitating the use of cross-border busses, trains, ferries or trams, with 11 CPS.³⁶

- The remaining 0.4% of these CPS focus on joint transport infrastructure maintenance (1 CPS), facilitating transit traffic at border crossing points (1) or on other forms of cross-border transport (2 CPS). Two examples are the cross-border initiative 'Jura Arc carpooling' that covers the predominantly rural and mountainous local territories on both sides of the Franco-Swiss border (case study 2) and the 'Mária Valéria Bike Community Rental System' established between the Hungarian city of Esztergom and Štúrovo in Slovakia (case study 3).

Since cross-border public transport services are generally accessible to all, it is not surprising that these CPS mainly provide benefits to the general public as well as to more specific target groups such as cross-border workers, job seekers, pupils, students and apprentices and tourists.

The issue of cross-border public transport tariff integration and ticketing is crucial and addressed in several Member States by specific cooperative structures called 'transport associations'. These can have different legal forms (i.e. based on public or private law) and involve different types of public transport actors³⁷. Transport associations aim at joint and coordinated implementation of domestic local public passenger transport in a specific territory, usually by creating a uniform fare system (i.e. the tariff) and tickets that are recognised by all transport companies, as well as coordinated timetables to ensure reliable connections between all transport companies.

Although these complex issues are often difficult to solve in a cross-border context, CPS can improve mobility across borders. Solutions include mutual recognition of tickets and fares, cross-border tickets or rebates for specific groups (e.g. elderly and disabled persons, students, families) and actions (e.g. bicycle transport). They can also aim for unilateral integration of cross-border public transport lines or smaller territories across the border into local / regional tariff systems on the other side, or even a comprehensive and fully integrated cross-border tariff system managed by a joint structure. This can be illustrated by established but not yet registered CPS. These are on the borders of Luxembourg (LU-FR, LU-BE), on several border segments of eastern France (DE-FR, CH-FR) and southwest Germany (CH-DE), but also on the borders between Switzerland, Austria and Liechtenstein as well as the Austrian-Italian border (Table 6).





³⁶ Elbe-Labe Tickets (CZ-DE); Donau-Moldau-Ticket (CZ-DE); Combination ticket (DE-DK); Free bike transport by train (DE-AT); RegioElsassTicket (DE-FR); Moldau-Donau-Ticket+ / Vltava-Dunaj Ticket+ (AT-CZ-DE); EgroNet the regional ticket (DE-CZ); Integrated regional fare system in the trinational cross-border agglomeration Basel, with different versions of the cross-border "triregio ticket" (CH-DE-FR); Scheme for advantageous cross-border rail ticket prices on short distance cross-border trips in the Eurométropole Lille-Kortrijk-Tournai (BE-FR); "Lake Constance Ticket", formerly called Day Ticket Euregio Lake Constance (AT-CH-DE); Coordination and integration of tariffs for cross-border public local transport in the EUREGIO Salzburg-Berchtesgadener Land-Traunstein (DE-AT).

³⁷ Some associations only involve the competent public transport organising authorities (i.e. transport organiser associations), others only transport providers from the relevant area (i.e. transport company associations), and others both public transport organising authorities and the transport providers (mixed transport associations).

Figure 30 Transport CPS



Transport CPS

-  Public transport services (bus, tram, rail, ferry)
-  Border crossing facilities
-  Infrastructure maintenance
-  Other transport service

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 500 Km

© EuroGeographics Association for the administrative boundaries

Table 6 Further CPS on cross-border tariff cooperation / integration and ticketing

Border	Key actors (*)	Features of tariff cooperation or tariff integration	Cross-border tickets
LU-FR LU-BE	LU: Luxembourg government, national railway company CFL	Unilateral integration, as the Luxembourg government in 2020 integrated three stations in France and Belgium into the national free public transport regime.	No ticket is needed, since cross-border rail passenger transport by CFL between Luxembourg and Athus (BE), Audun-le-Tiche (FR) and Volmerange-les-Mines (FR) is free in second class. For first class travel a ticket is needed.
DE-FR	DE: Saarländischer Verkehrsverbund (saarVV)	Unilateral tariff integration, as several border-close destinations in France (Grand Est region) are also covered by the saarVV tariff area.	-
DE-FR	DE: Karlsruher Verkehrsverbund (KVV), Verkehrsverbund Rhein-Neckar (VRN), Zweckverband Schienenpersonennahverkehr Rheinland-Pfalz Süd (ZSPNV), Deutsche Bahn-DB Regio, FR: National railway company (SNCF).	Tariff cooperation, introducing a supplementary day ticket for leisure trips and excursions extending the area of use (2016).	German customers of KVV and VRN can now use the "TICKETPLUS Alsace" for trips to northern Alsace (Département Bas-Rhin), whereas French users can use all interconnected transport in the KVV and VRN networks on weekends and French public holidays with the 'Pass Alsace-VRN/KVV'.
DE-FR	DE: Tarifverbund Ortenau (TGO) FR: Eurométropole de Strasbourg	Tariff cooperation, introducing a cross-border ticket with a joint public transport tariff (1998).	'EUROPASS': There are different versions of the binational ticket (day tickets, family day ticket, monthly subscription), which are valid in the TGO territory and the Strasbourg Eurométropole on all local transport (bus, tram and train).
CH-DE	DE: Waldshuter Tarifverbund (WTV), Landkreis Waldshut CH: Tarifverbund A-Welle (TVA), Kanton Aargau	Tariff cooperation, introducing a cross-border ticket with a joint public transport tariff.	'HochRhein Ticket': This is a joint offer for cross-border journeys between the WTV and TVA tariff areas, based on a joint tariff with specific rules published separately on both sides. The ticket with three zone variants (Mini, Midi, Maxi) is valid for all means of public transport. It is an efficient and flexible offer for domestic and cross-border commuters as well as for all other people on both sides of the Hochrhein-Area.
CH-DE	DE: Verkehrsverbund Hegau-Bodensee (VHB), Landkreis Konstanz CH: Tarifverbund OSTWIND (OTV),	Tariff cooperation, introducing two offers for cross-border journeys with a joint public transport tariff covering specific VHB and OTV tariff zones.	(1) Mutual recognition of tickets in the VHB Constance city zone (OTV designation zone no. 555) and the OTV zone 256 (Kreuzlingen). (2) 'VHB/OTV-Kombi-Tickets': the different versions of the cross-border combi-ticket (single ticket, day ticket, monthly and annual season tickets) can

	Kantone Appenzell Ausserrhoden, Appenzell Innerrhoden, Glarus, Schaffhausen, Schwyz, St. Gallen, Thurgau		be used in the VHB and OTV tariff areas, with a joint tariff on all means of local public transport. This offer can be used if at least one OTV and one VHB zone are purchased for single tickets and one OTV and two VHB zones or the Constance city zone are purchased for season tickets (= monthly and season tickets).
AT-CH	AT: Verkehrsverbund Vorarlberg (VVV), Bundesland Vorarlberg CH: Tarifverbund OSTWIND (OTV), Kantone Appenzell Ausserrhoden, Appenzell Innerrhoden, Glarus, Schaffhausen, Schwyz, St. Gallen, Thurgau	Tariff cooperation, introducing a joint ticket offer for cross-border journeys valid for specific VVV and OTV tariff zones	'Kombitarif OTV-VVV': the combined fare is an offer for special OTV zones and VVV Domino Zones that applies when at least 1 OTV and 1 VVV zone are used. The combined tickets are valid on scheduled public transport services within the designated perimeter. OTV tickets in combination with VVV tickets (and vice versa) also entitle the holder to cross-network journeys between OTV and VVV. For all other journeys, the network or transport company fares apply.
AT-LI	LI: Verkehrsbetrieb LIECHTENSTEINmobil (VLM or LIEmobil) AT: Verkehrsverbund Vorarlberg (VVV), Bundesland Vorarlberg	Tariff cooperation (bus, suburban railway), with a recognition of tickets and application of a combined public transport tariff for cross-border trips.	'VVV-LIEmobil-Kombitarif': combined tariff with specific provisions applies to cross-border journeys by bus or the Vorarlberg suburban railway (S-Bahn Vorarlberg). Tickets to the entire VVV area are available on LIEmobil buses, allowing people to travel across borders with just one ticket. For journeys in a LIEmobil bus within Vorarlberg, the VVV tariff is applied (VVV tariff regulations). LIEmobil season tickets and LIEmobil tickets for all zones are also valid on cross-border bus line 70 and on the Vorarlberg suburban train to Feldkirch station.
LI-CH	LI: Verkehrsbetrieb LIECHTENSTEINmobil (VLM or LIEmobil) CH: Tarifverbund OSTWIND (OTV), Kantone Appenzell Ausserrhoden, Appenzell Innerrhoden, Glarus, Schaffhausen, Schwyz, St. Gallen, Thurgau	Tariff cooperation, making Liechtenstein an integral part of the OTV zone tariff system (i.e. zones 301, 303, 305 and 307), but no joint tickets for cross-border trips by bus (i.e. mutual recognition of LIEmobil and OTV tickets until the end point of cross-border bus lines).	Tickets for the whole of Eastern Switzerland can be purchased on LIEmobil buses. Cross-border zone season tickets are also available at OTV sales points. The LIEmobil fare is valid on specific cross-border bus lines (11, 12, 13 and 24) up to the final stops in Switzerland. For journeys from Liechtenstein to Switzerland beyond the LIEmobil route network, the Ostwind fare applies (Ostwind fare conditions). For journeys within the Ostwind network, the Ostwind tariff applies.
LI-CH	LI: Verkehrsbetrieb LIECHTENSTEINmobil (VLM or LIEmobil) CH: Schweizerischen Bundesbahnen (SBB)	Tariff cooperation (rail only), extended application of SBB rail tickets and recognition of tickets on buses in LI.	On direct rail services with the Swiss Federal Railways (SBB), people can buy tickets from anywhere to Liechtenstein. Most tickets on SBB direct services are also valid in Liechtenstein (e.g. Generalabonnement, HALBTAX, SEVEN25, Junior- / Kindermitfahrkarte etc.).
FR-CH	CH: "Unireso" transport association, including three Swiss public transport operators.	Full cross-border tariff integration for all journeys within the	Since December 2019, a new two-tier system integrates tariffs within the Canton of Geneva (through Unireso) and cross-border within the entire

	CH/FR: “Léman Pass transport association”, including ten Swiss and French public transport companies as members plus eight public transport organising authorities from both sides of the border as partners	Greater Geneva cross-border metropolitan area	Greater Geneva metropolitan area (through the Léman Pass). Léman Pass: individual tickets and subscriptions apply only to cross-border journeys with public transport in the defined perimeter. These allow travel with different public transport operators (i.e. trains, trams, buses, Lake Geneva boats) that are members of the association. Each journey (origin-destination) is subject to a specific fare, based on the departure station or urban area and kilometres travelled.
AT-IT	AT: Verkehrsverbund Tirol (VVT)	Unilateral tariff integration, by including the border station Brenner / Brennero in Italy as a specific tariff zone into the VVT tariff area.	-
AT-IT	EGTC Euroregion Tyrol-South Tyrol-Trentino AT: Federal State of Tyrol IT: Autonomous Province of Bolzano–South Tyrol, Autonomous Province of Trentino	Cooperation on the introduction of two cross-border tickets (2020, 2021), with each applying the same price in all three partner regions of the Euregio.	‘Euregio2Plus’: with this cross-border day ticket, users can explore the entire Euregio Tyrol-South Tyrol-Trentino for one day. Up to five people (including up to two adults and three children under the age of 15) can travel together on local public transport (bus, train) in all three parts of the Euregio. The Euregio2Plus ticket is not a family ticket since users do not have to be related to each other in any way. The ticket has a single price in all three regions (EUR 39, in 2021). ‘Euregio Ticket Students’: an annual pass was introduced on 1 October 2021 as a joint initiative in all three parts off the Euregio. Students can use public transport in the federal state of Tyrol and in the provinces of South Tyrol and Trentino flexibly with this ticket. The ticket has a single annual fee in all three regions (EUR 430, in 2022).

(*) These are often neighbouring transport associations (Verkehrsverbund) or tariff associations (Tarifverbund), established for individual districts, regions or even several regions.

Source: European Commission, DG REGIO (2021b); European Commission, DG REGIO (2021c); European Commission, DG REGIO (2021d); Information available at official websites of different transport associations or tariff associations (<https://saarvv.de/>; <https://www.vrn.de/index.htm>; <https://www.ortenaulinie.de/Startseite.html>; <https://www.a-welle.ch/>; <https://www.ostwind.ch/>; <https://www.vmobil.at/>) and transport providers (<https://liemobil.li/de>).

2.2.2 Spatial planning, economic development, tourism, and culture

This relatively wide policy area is addressed by 71 CPS, most of which operate on internal borders between EU14 countries (76%). The others are either found at other external EU borders (15%: NO-SE, FI-RU, CH-FR, IE-UK) or at internal borders between EU14 and

EU13 countries (9%: DE-PL, AT-HU, CZ-DE). The EU-wide geographical distribution of these CPS is shown in Figure 31.

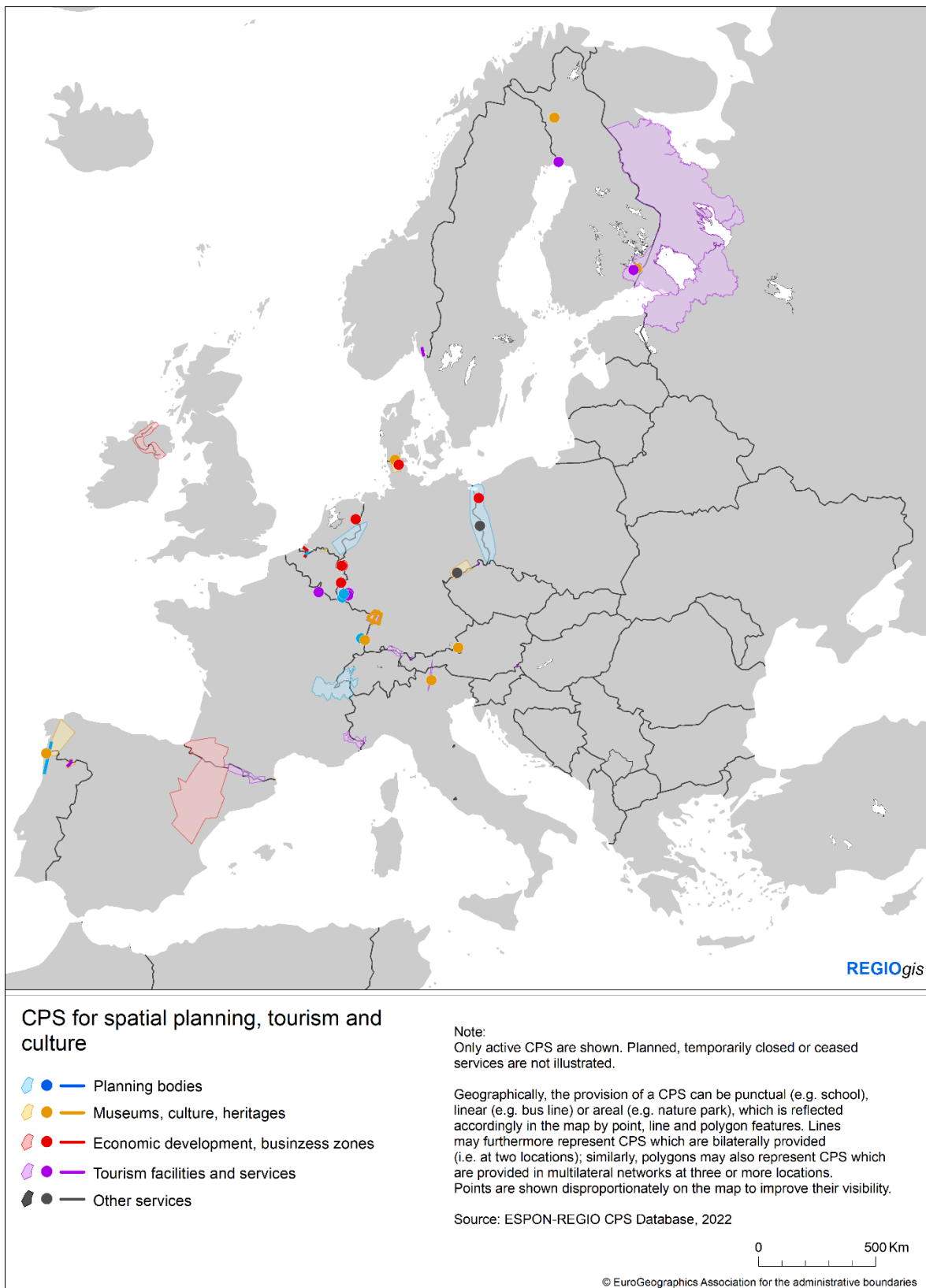
The year of establishment³⁸ shows that several were already set up in the 1990s (9 CPS), but significantly increased in numbers only during the two following decades (30 CPS).

The 71 CPS in the inventory address four fields of intervention as follows:

- One third of these CPS focus on promoting culture and cultural heritage in neighbouring border regions. Many of these CPS aim at preserving and promoting shared cultural heritage assets (e.g. joint museums or museum cooperation, joint libraries, recurrent cultural festivals) or new joint sports facilities and other assets (e.g. music schools, adult education centres) to enhance intercultural exchange and direct personal encounters between residents in border regions. Other CPS establish online platforms with information about regional / local and cross-border cultural events, or use digital applications to encourage joint management of historical and archaeological heritage.
- 29% of the CPS in the inventory focus on joint tourism, taking very different forms. Several CPS establish joint tourism offices and other regional or local cooperation structures for tourism promotion. Some structures were set up by public partners under national private-law (e.g. associations, limited companies), while others are cross-border bodies with their own legal personality based on an interstate agreement. Other CPS promote joint tourism marketing between neighbouring national and nature parks or offer guided cross-border nature tourism excursions in these protected areas. Further CPS establish online information portals or are dedicated to running tourism trains (2 CPS), while others introduce cross-border discount cards for holidaymakers or local residents (2 CPS). A good example is the 'EuregioFamilyPass' for inhabitants of the EGTC European Region Tyrol-South Tyrol-Trentino. This allows them to get discounts on various services and leisure activities in the entire Euregio territory (case study 5).
- Around 24% of identified CPS focus on joint spatial planning or sector policy planning. Most of these CPS aim at generating shared statistical data and other information about the cross-border region. This is either through permanent cooperation between national/regional statistical offices, by establishing 'observatories' for different aspects (e.g. labour market, biodiversity, marine environment, mountain tourism etc.), or a Geographical Information System (GIS). A good example for this type of CPS is the 'Observatory on mountain refuges in the Pyrenees' at the Franco-Spanish border (case study 6). A few other CPS establish joint bodies with their own legal personality, to promote integrated spatial planning in the larger cross-border metropolitan area of the Greater Geneva (FR-CH) or to jointly plan and decide the accomplishment of essential municipal tasks. An example of the latter is the 'Joint Body Baarle' (COB), which was established between the Belgian municipality of Baarle-Hertog and the Dutch municipality of Baarle-Nassau utilising the Benelux agreement on cross-border cooperation (case study 4).

³⁸ There is no information in the inventory for 15 CPS.

Figure 31 CPS for spatial planning, tourism and culture



- Around 14% of the CPS support joint economic development. One half of these provide business support services to enhance cross-border trade and other economic activities (e.g. business cooperation). Other CPS focus on business and technology parks (4 CPS), either providing joint sewage water treatment for two immediately neighbouring business and service centres (LU-BE) or jointly running and promoting close to the

border or cross-border business and technology parks (DE-NL). Particularly interesting are the experiences of three CPS on the Dutch-German border. They show that such initiatives are successful but their set-up can sometimes be hindered by substantial legal or economic problems (see box below).

Close to the border or cross-border business and technology parks at the German-Dutch border

(1) Technology Park Herzogenrath: The technology park in Herzogenrath (DE) was founded in 1989 and is in the centre of a unique and cross-border science and research landscape with universities and universities of applied sciences in the cities of Aachen (DE), Maastricht (NL) and Liège (BE) as well as the Jülich Research Centre (DE). The technology park is one of the largest technology centres in Germany covering some 25,000 m². Currently, about 80 companies with more than 2,500 employees are located there, including various start-ups. The park is run by the 'Technologie-Park Herzogenrath GmbH'. Its shareholders are the urban development company Herzogenrath (Stadtentwicklungsgesellschaft Herzogenrath, SEH) as a 100% subsidiary of the city of Herzogenrath, the Aachen Chamber of Industry and Commerce (IHK), the Aachen savings bank (Sparkasse), the Aachen company for innovation and technology transfer (Aachener Gesellschaft für Innovation und Technologietransfer, AGIT mbH) and the Dutch municipality of Kerkrade.

(2) Europark Coevorden/Emlichheim: As early as 1995, the neighbouring municipalities of Coevorden (NL) and Emlichheim (DE) examined the possibility of establishing a cross-border industrial zone. The aims were to strengthen the socio-economic structure of the Drenthe / Grafschaft Bentheim border region and to create jobs, while taking advantage of the strategic location between the seaports of Hamburg and Rotterdam / Amsterdam as well as proximity to important rail and road connections. In 1997, the two municipalities presented the master plan for the Europark development, which was to be expanded in four phases into a site covering up to 350 ha ($\frac{1}{3}$ on Dutch and $\frac{2}{3}$ on German territory). To develop the cross-border commercial and industrial area, the 'Europark Coevorden-Emlichheim GmbH' was founded, in which representatives of the two municipalities work together. The operational team consists of 5 people, a mix of German and Dutch employees. The core task of the GmbH is to develop and market the cross-border commercial and industrial area. The first company settled in the Europark as early as 2001 (Beton- und Bewehrungscenter Europark, BBE). Today, there are 22 companies in the Europark. Important steps in the development of the Europark were the opening of Euroterminal II in 2007, attaining the status of logistics centre (Güterverkehrszentrum, GVZ) in 2011 and the opening of a track arch for improved rail connections in 2017.

(3) Avantis European Science and Business Park: Avantis is a German-Dutch business park located directly on the border between Aachen (DE) and Heerlen (NL). Back in the late 1990s both cities set up a joint venture for a business park located on both Dutch and German territory. Following the identification of a suitable location, the park allowed from 2001 that companies could start settling there. However, the public promoters of the business park had overlooked that the reciprocal use of more favourable tax advantages within the cross-border business park first required concluding a German-Dutch agreement of understanding based on Article 2 of the former German-Dutch double taxation agreement of 1959 (now repealed by the new German-Dutch double taxation agreement of 2012). The agreement of understanding for Avantis was concluded by the exchange of notes of 26 July/11 August 2006 and put into effect in Germany on 25 May 2007. Almost ten years after construction began, the success of Avantis failed to materialise in a first phase. This was also because of the economic downturn in the information technology sector (as a key target group) and because the joint tax model did not work since EU law had been disregarded. In 2013, a new land-use plan with a broad range of implementation and development options for companies opened new

opportunities. From then on Avantis slowly gained in importance and especially e-commerce enterprises started to settle there. Due to now larger space available, the online mail-order pharmacy DocMorris opened its new logistics and administration centre on 16,000 m² in 2015. Amazon also opened a distribution centre in the business park at the end of 2021. Services provided by the operating company Avantis GOB concentrate on business park management, project management, landscaping, contract handling, managing all planning applications and permits as well as ongoing maintenance of the park. Services jointly provided by the City of Aachen and the Dutch municipality of Heerlen include individual consultancy for companies, assistance in recruiting, the establishment of university and network contacts, relocation management as well as grant and subsidy consulting.

Sources: AVANTIS (2022), GVZ Europark Coevorden Emlichheim (2022), Technologie-Park Herzogenrath GmbH (2022a), Technologie-Park Herzogenrath GmbH (2022b), Wikipedia (2022)

Considering diversity of themes of these CPS, it is not surprising that target groups are also very heterogeneous. These include public authorities with responsibility for spatial or sector planning as well as economic actors from different sectors (companies, entrepreneurs). The general public is also important, as well as more specific groups such as tourists, families with children below school age as well as pupils, students and apprentices of all ages.

2.2.3 Healthcare and social inclusion

Important motives for border regions to set up CPS for healthcare, medical emergency care or long-term care can include complicated access to domestic services, insufficient primary care or hospital-based services or a complete lack of specialist medical services. These weaknesses may emerge from specific geographical features (e.g. isolation or long distances in mountainous, rural or sparsely populated border regions), but also from the closure of hospitals or fewer general practitioners ensuring nearby primary care services in rural or remote border areas.

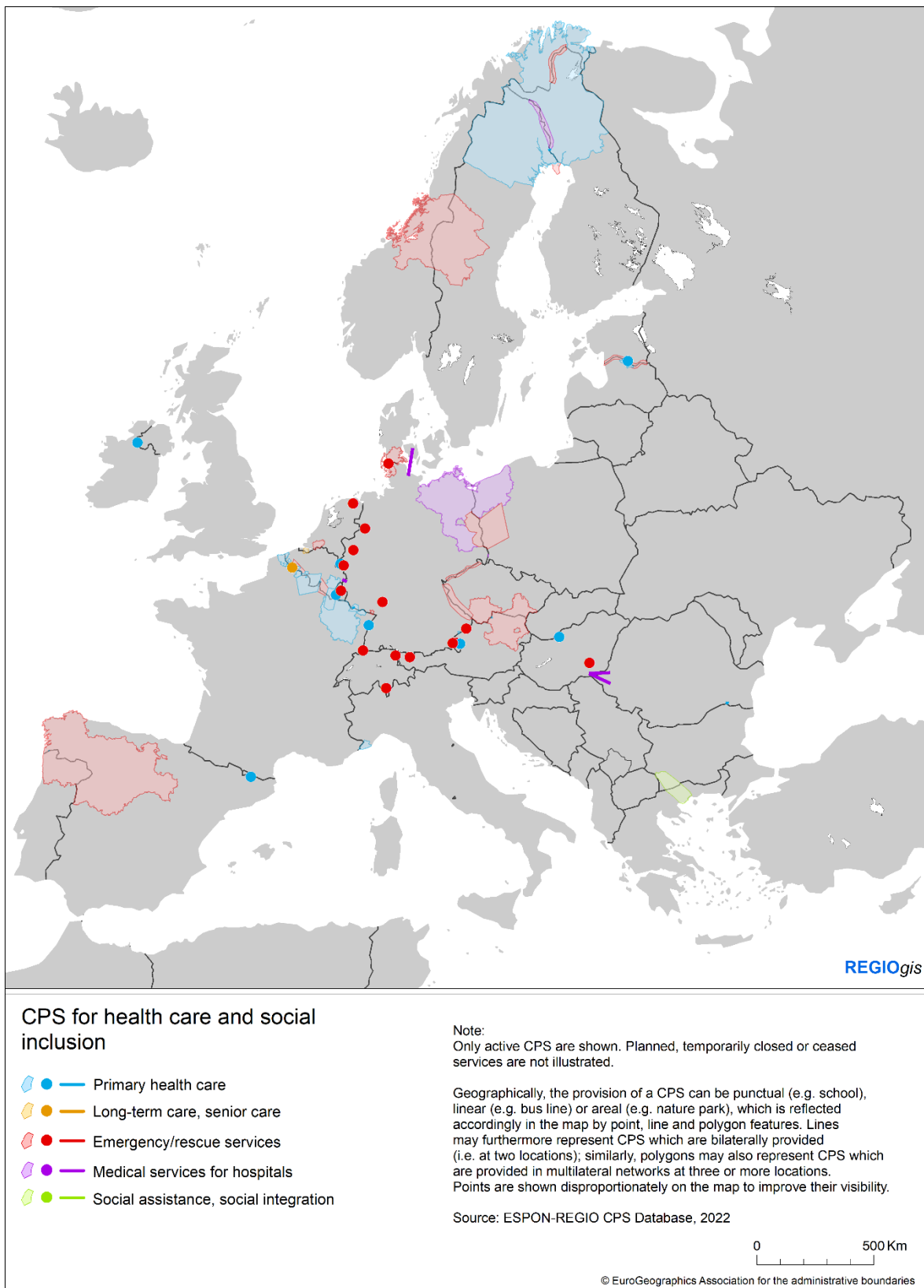
The inventory currently includes 77 CPS for cross-border healthcare and social inclusion, most of which are on the internal borders between EU14 countries (73%). The remaining 27% are either at internal borders between EU14 and EU13 countries (DE-PL, BG-EL, AT-CZ, CZ-DE) or between EU13 countries (HU-RO, BG-RO, EE-LV). There are a few at external EU borders (IE-UK, CH-IT, FI-NO, NO-SE). The current EU-wide geographical distribution of these CPS is shown in the map below.

Information about the year of establishment³⁹ shows that most of these CPS were set up in the past 20 years (42), as only some CPS existed before the year 2000 (15). A factor supporting this strong increase of CPS for general healthcare is compliance with border-crossing service obligations resulting from evolving EU legislation. This legislation is today an integral part of national legislation for public healthcare systems, but EU legislation does not drive emergency medical care and long-term care since Member States retain primary competence on both topics⁴⁰.

³⁹ There is no information in the inventory for 10 CPS.

⁴⁰ Different to general healthcare, emergency medical services are only to some extent affected by EU legislation. The latter considers these services mostly in relation to single market rules on public procurement for service provision (secondary EU legislation) or in the event of failure to comply with these rules (CJEU case law). Although long-term care is an area of social protection according to the EU Treaty, it remains a task of the EU Member States. The latter determine the scope and organisation of long-term care themselves but have agreed on three common objectives under the Open Method of Coordination: (1) ensuring access to appropriate long-term care, (2) promoting its quality and ensuring its affordability, and (3) ensuring its sustainability.

Figure 32 CPS for healthcare and social inclusion



The variable influence of EU legislation is also reflected in the different legal frameworks used to establish the 77 CPS. While the inventory does not include information about the legal framework for 36 CPS, most of the others are based on a theme-specific interstate agreement (22 CPS). The legal framework for the remaining CPS is either a regional / local

cooperation agreement (10 CPS), secondary EU legislation (4 CPS)⁴¹, a multilateral interstate agreement for general decentralised cross-border cooperation (2 CPS) or a regional / local cooperation agreement concluded in connection with a theme-specific interstate agreement (3 CPS). In addition, CPS often also require additional agreements between the respective health insurance institutions on both sides of the border, so patients can benefit from quick handling and problem-free recovery of their treatment costs.

The 77 CPS in the inventory address five fields of intervention as follows:

- Around 44% of the CPS focus on emergency medical care and rescue, with services provided either by on-ground units (e.g. different ambulances) or airborne units (e.g. specifically equipped helicopters or airplanes). On-ground and airborne services may also include medically accompanied as well as normal cross-border patient transport to a nearby hospital across the border. In order to overcome differences between national systems for emergency medical care and rescue services, neighbouring countries have often concluded bilateral interstate agreements that establish an appropriate legal framework for border-crossing interventions. Beyond this, however, good functioning of these CPS also requires close and seamless cooperation / communication along the entire rescue chain (e.g. dispatch centres with their own communication devices, hospitals with highly specialised medical-technical equipment). A good example for this CPS sub-type are the cross-border emergency, mountain rescue and patient transfer services established on the border between Germany and Czechia (case study 9).
- Around 41% of the listed CPS address primary, secondary and tertiary healthcare. Most of these provide patients with access to primary or in-hospital health services across the border, either for all available healthcare treatments or for selected specialist medical services (e.g. cardiology, cancer treatment etc.). This is often through cooperation between neighbouring hospitals providing complementary specialist medical services, or by allowing people from one side of the border to access outpatient and inpatient treatment in a hospital on the other side. Good examples for these approaches are presented in three of our case studies: the possibility for residents from the Latvian county of Valka to receive healthcare treatment in the hospital of Valga in Estonia (case study 10), the reciprocal access of Czech and Austrian patients to the endometriosis centre and radiooncological service of hospitals in Melk and Znaim on the Austrian-Czech border (case study 7), and the access of French and Italian women to a new service for childbirth preparation and detection of high-risk pregnancies in the Hospital Centre La Palmosa in Menton on the Franco-Italian border (case study 8). Other CPS show there is a territorially more extensive and highly integrated approach along the entire French-Belgian border. Here, seven 'Organised zones for cross-border access to healthcare' (ZOAST – Zones Organisées d'Accès aux Soins Transfrontaliers) were established between 2008 and 2015.⁴² According to the agreements concluded for each ZOAST, treatments of French and Belgian insured persons who are habitually and permanently resident within the specified cross-border zones can be reimbursed, without prior medical authorisation and without advance payment, for outpatient and inpatient care in identified care establishments⁴³. Two integrated approaches were also developed more recently at border segments within the Greater Region (see box below). The 'MOSAR health agreement' concluded in June 2019 for a cross-border zone on the German-French border between Saarland and the Grand Est region, and the 'ZOAST

⁴¹ These CPS are established by using the EGTC and EEIG Regulations.

⁴² The "ZOAST Ardennes" was established in 2008. The "ZOAST MRTW URSA" (Mouscron, Roubaix, Tourcoing, Watrelos, Ieper-Armentières, Bailleul, Hazebrouck, Courtrai, Lille) was established in 2008. The "ZOAST LUXLOR" (Belgian province of Luxembourg and the Lorraine part of the French region Grand Est) was established in 2008. The "ZOAST Tournai – Valenciennes" was established in 2010. The "ZOAST Mons – Maubeuge" was established in 2010. The "ZOAST Thiérache" was established in 2012. The "ZOAST Littoral" was established in 2015. See: OFBS (2022)

⁴³ OFBS (2022)

Eifel' at the Belgo-German border launched at the beginning of 2021 (not yet included in the inventory).

New CPS on territorially integrated healthcare cooperation in the Greater Region

(1) The MOSAR health agreement (DE-FR): The legal basis for the conclusion of the MOSAR agreement is the 'Framework Agreement of 22 July 2005 between the Government of the Federal Republic of Germany and the Government of the French Republic on cross-border cooperation in the health sector' and the 'Administrative agreement of 9 March 2006 between the Federal Ministry of Health of the Federal Republic of Germany and the Minister of Health and Solidarity of the French Republic on the implementation modalities of the Framework Agreement of 22 July 2005 on cross-border cooperation in the health sector'. The MOSAR agreement was signed on 12 June 2019 after ten months of joint work between French and German partners from the French Département Moselle and the federal state of Saarland. Signatories of the agreement are the relevant public health authorities and health insurance companies as well as the Eurodistrict SaarMoselle and participating hospitals from both sides of the border. On the French side this is the Centre Hospitalier Intercommunal Unisanté of Forbach-Saint-Avold, the Centre Hospitalier de Sarreguemines and the Hôpital de Freyming Merlebach. On the German side the Klinikum Saarbrücken GmbH and SHG-Kliniken Völklingen. The MOSAR cooperation creates a cross-border zone within which insured patients can receive services in the participating hospitals. In a first step, French patients will be able to receive cardiology and neurosurgery treatment in German hospitals. In addition, patients with multiple injuries will be treated. On the French side, other service areas such as nuclear medicine and rehabilitation are to follow. The MOSAR cooperation includes the municipalities of the Regionalverband Saarbrücken and two municipalities in the Saarpfalz district (Gersheim, Mandelbachtal) on the German side, and in France the municipalities of the Ostmosel-Verbund (Groupement hospitalier territorial 9), including Forbach and Sarreguemines.

(2) The ZOAST EIFEL (DE-BE): The ZOAST Eifel will make it much easier to obtain medical services across the internal EU border without red tape. The bilateral agreement on cross-border healthcare in the Eifel region was signed at the end of January 2021, by the responsible regional authorities and the associations for Rhineland-Palatinate public health insurance funds and the St. Josef Hospital in St. Vith in the German-speaking Community of Belgium. The ZOAST has started as a one-year model project with ongoing monitoring and the possibility of automatic extension. The project provides for: (1) Obstetric services in St. Josef hospital in St. Vith, Belgium by women from the neighbouring districts of Bitburg-Prüm and Vulkaneifel in Rhineland-Palatinate, (2) the state of Rhineland-Palatinate co-paying for births, which is currently around 200 euros, (3) an extension for Belgian patients who wish to receive medical services / treatment at the hospital at Prüm in Rhineland-Palatinate. In this way, there is quality assured and economical medical care provided in the Eifel rural cross-border area.

Sources: AOK Bundesverband (2022); Bundesministerium für Gesundheit (2022); Bürger Kurier Rhein-Westerwald-Sieg (2021); Ministerium für Arbeit, Soziales, Transformation und Digitalisierung des Landes Rheinland-Pfalz (2021); eifelschau.de (2021)

- 12% provide support services for hospitals in border regions (8 CPS). Most of these establish and run different sorts of cross-border telemedicine applications (e.g. transfer of radiological data, a teleradiological network and other telediagnostic services, video consultations, education and training of health professionals). There is also a cross-border network to promote infection prevention and patient safety (DE-NL) and a high technology platform for innovative disease research (DE-DK).
- Two CPS address long-term care. One establishes cooperation among medico-social institutions taking care of elderly people and people with disabilities on the Franco-

Belgian border. The other created a public organisation (Aan-Z) to provide cross-border home-care services for the elderly in the neighbouring municipalities of Assenede and Terneuzen on the Belgian-Dutch border.

- One CPS on the Greek-Bulgarian border addresses social assistance and social integration, protecting children at risk and improving health and social welfare services for children.

The main target group of the 77 CPS are inhabitants of border regions requiring medical or permanent care (including cross-border workers). Other target groups are public authorities with responsibilities for healthcare, emergency medical care or social integration as well as other key actors such as hospitals, public and private health insurers.

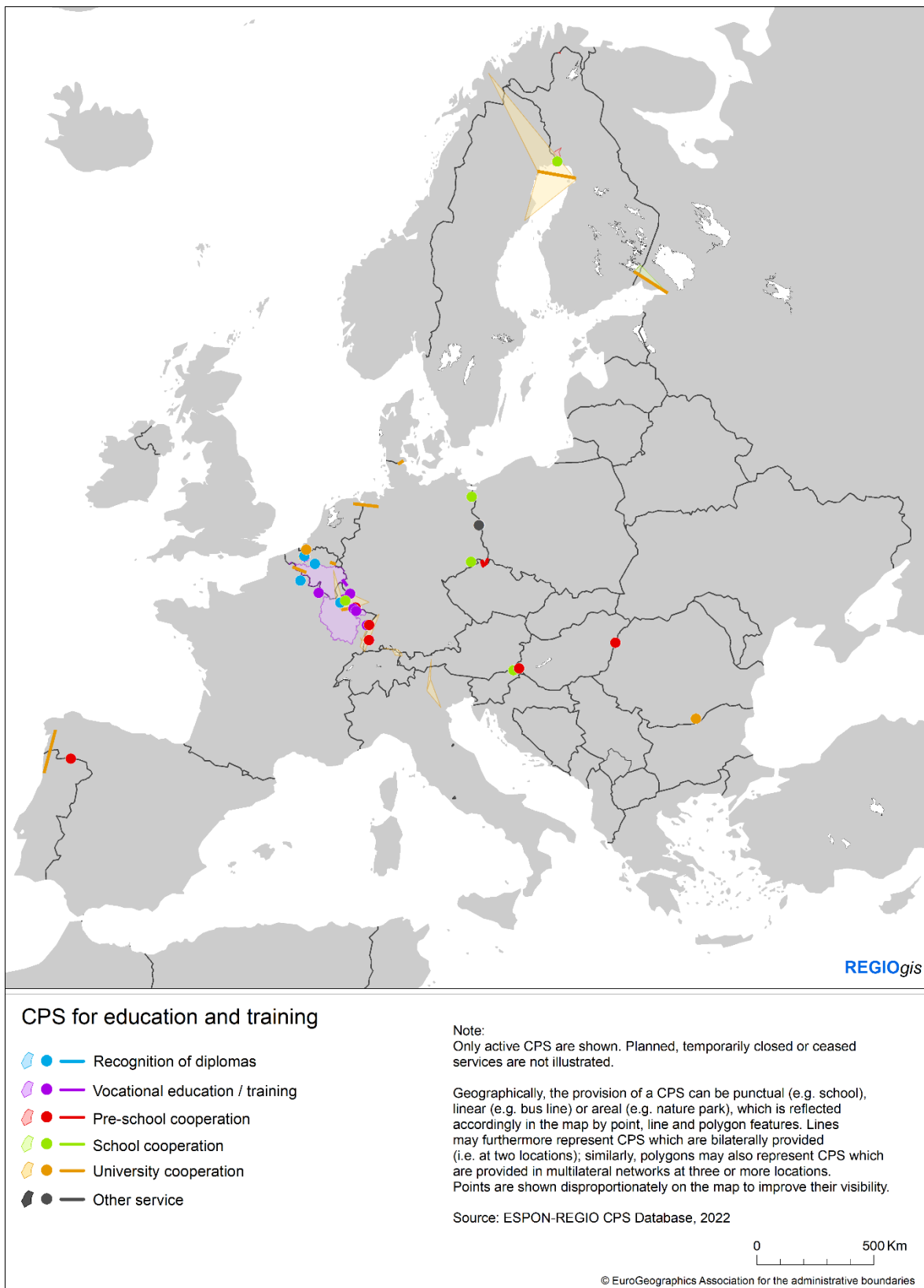
2.2.4 Education and training

The broad field of cross-border education and training is addressed by 73 CPS, most of which are on internal borders between EU14 countries (62 CPS). The few remaining CPS are either on internal borders between EU14 and EU13 countries (5 CPS: DE-PL; CZ-DE; AT-SI), on internal borders between EU13 countries (3 CPS: HU-SI; HU-BG; BG-RO) or external EU borders (3 CPS: FI-RU; AT-CH-DE). The EU-wide geographical distribution of these CPS is shown in Figure 33.

Information from 62 CPS shows that eight services were already established during the 1960s, 1970s and 1980s, however mostly at specific border segments between France and Germany. Their number grew during the 1990s (12 CPS) and for the first time included some of the then external EU borders (e.g. DE-PL, CZ-DE) as well as some of the current external EU borders (DE-CH-AT-LI, FI-RU). The number of CPS has continued to rise sharply since 2000 (42), but especially in the decade 2010-2020 (29).

The set-up of these CPS often required the prior establishment of an appropriate legal framework to overcome differences between the legal systems and / or organisational models governing education and training in the neighbouring countries or regions. Information for 40 CPS shows different solutions in this respect. The most frequent solutions were theme-specific interstate agreements (24 CPS), regional cooperation agreements (13 CPS), or the latter type of agreement in combination with a multilateral or theme-specific inter-state agreement (3 CPS).

Figure 33 CPS for education and training



The 73 CPS address five fields of intervention as follows:

- Around 34% cover tertiary education (25 CPS). Mostly this is cross-border cooperation between universities and joint curricula, but sometimes also cooperation between

specialised higher education institutions (e.g. business or law schools, engineering, mining schools, etc.).

- 32% of CPS identified in this policy field cover cross-border early childhood and primary education (23 CPS). They generally aim to stimulate language learning at a very early age and promote cultural exchange and communication between pupils from neighbouring countries. Most of these CPS operate on the borders of Germany with France and Poland (6) or the borders between Scandinavian countries (4).
- The third most important group covers CPS for secondary education, these account for around 12% (9 CPS). These services are mostly provided by binational and bilingual grammar schools or high schools established on one side of a common border. Also in these cases, the aim is to promote joint learning in a bilingual context as well as cultural exchange and understanding between young people from the border regions.
- Of similar importance are CPS for cross-border vocational education and training⁴⁴, which also account for 12% (9 CPS). Six of these are provided in the Greater Region that covers the borders between Luxembourg, the German federal states of Saarland and Rhineland-Palatinate, the Walloon Region in Belgium and the French region Grand Est. These CPS are based on a multilateral framework agreement for cross-border vocational training, signed between the partners of the Greater Region on 5 November 2014. This framework agreement is implemented by four bilateral agreements that introduce concrete vocational education or training activities at different border segments (i.e. DE-LU, DE-BE, FR-DE, FR-BE).
- Around 5% of the CPS promote cross-border recognition of university degrees, diplomas or professional qualifications (4 CPS). They aim to overcome obstacles for cross-border professional mobility due to persisting legal differences between neighbouring countries.

The main target groups of the 73 CPS addressing education and training are pupils, students and apprentices of all ages as well as researchers (especially CPS for tertiary education), but also companies and entrepreneurs as well as public authorities responsible for education and training. Another target group is families with small children below school age, especially for early childhood education CPS.

Our case studies examined five CPS for education and training more in depth, which cover many of the above aims and operate under very different frameworks: the Tornio-Haparanda school cooperation (case study 11) and the Nordic Mining School (case study 12) that are both on the internal border between Sweden and Finland, the bilingual elementary school Prosenjakovci at the internal border between Slovenia and Hungary (case study 13), the Bulgarian-Romanian Interuniversity Europe Centre (case study 14) and the two German-Polish Kindergartens in the neighbouring cities of Frankfurt/Oder and Słubice (case study 15).

Around half of the CPS for education and training operate under a network approach (16), a central governance model with a legal personality based on domestic law (21) or a central governance model with a legal personality based on an interstate agreement (3). For the other half of the CPS, however, no information on the governance model is available in the inventory.

⁴⁴ This does not include services CPS for further education or training and life-long learning of already employed persons, which are covered by theme 5 on "labour market and employment".

2.2.5 Labour market and employment

The inventory includes 50 CPS that address a joint labour market and cross-border employment. A total of 40 CPS operate on internal borders between EU14 countries. The remainder are either at external EU borders (4 CPS: IE-UK; FI-RU; NO-SE), borders between EU14 and EU13 countries (4 CPS: AT-HU; CZ-DE; HR-IT-SI), or borders between EU13 countries (2 CPS: HU-SI; CZ-PL-SK). The EU-wide geographical distribution of these CPS is shown in Figure 34.

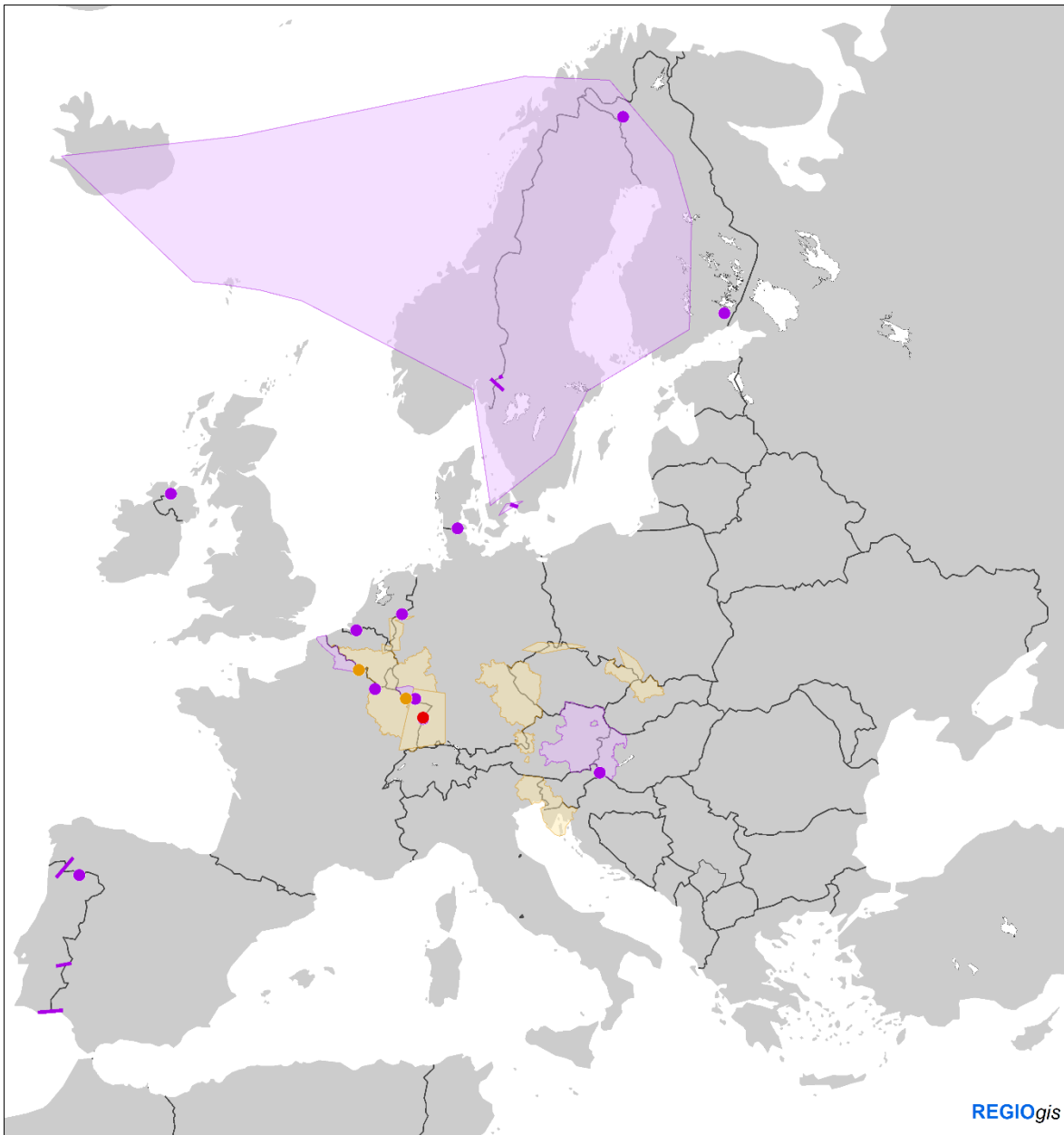
The 50 CPS for joint labour market and cross-border employment development are in general completely new services. Some were already set up in the 1990s with support from the ESF-funded programme EURES (European cooperation network of employment services). This also explains why the legal framework of 18 CPS is directly set by EU legislation, whereas in several other cases it is based on regional cooperation agreements concluded in connection with theme-specific interstate agreements (10 CPS).

Almost all identified CPS provide public information and advice to facilitate the cross-border mobility of workers or job seekers (36 CPS). They often also offer additional job placement services and other services for the joint labour market and cross-border employment. The remainder focus only on cross-border job placement. Accordingly, the main target groups of these CPS are job seekers and businesses as well as cross-border workers from both sides of the border.

Three CPS for labour market and employment development were more closely examined in our case studies. The four Franco-German cross-border job placement services established in the Upper Rhine Area (case study 16), the employment market partnership EURES-TriRegio on the border between Germany, Poland and the Czech Republic (case study 17), and the cross-border employment portal 'Emploi sans frontières' on the Franco-Belgian border (case study 18).




More than half the 50 CPS are either operated by a central governance model with a legal personality based on domestic law (21), are based on interstate agreement (2), or a network approach (6). For the remaining 21 CPS, however, no information on the governance model is available.

Figure 34 CPS for labour market and employment



REGIOgis

CPS for labour market and employment

-  Information / advise services facilitating worker's mobility
-  Digital services
-  Services for job placement

Note:
Only active CPS are shown. Planned, temporarily closed or ceased services are not illustrated.

Geographically, the provision of a CPS can be punctual (e.g. school), linear (e.g. bus line) or areal (e.g. nature park), which is reflected accordingly in the map by point, line and polygon features. Lines may furthermore represent CPS which are bilaterally provided (i.e. at two locations); similarly, polygons may also represent CPS which are provided in multilateral networks at three or more locations. Points are shown disproportionately on the map to improve their visibility.

Source: ESPON-REGIO CPS Database, 2022

0 500 Km

© EuroGeographics Association for the administrative boundaries

2.2.6 Communication, broadband and information society

The inventory contains only seven entries for this policy field, of which one discontinued activities at the end of June 2019 (i.e. the cultural online portal of the Greater Region, Plurio.net). The discontinuation of this online portal was due to low audience use and decreasing entries from cultural practitioners and other national or regional cultural portals, outdated technology and new cultural portals in sub-regions of the Greater Region as well as excessive running costs. However, the data in Plurio.net is still available. In contrast, the 'Grænzenlos' online magazine at the Danish-German border jointly developed by German NDR Schleswig-Holstein and Danish TV Syd went online in May 2022, aiming to be a voice for German and Danish minorities on both sides of the border.

One reason for the apparently small number of such CPS is that many cross-border online applications (e.g. portals with general information on cross-border activities, databases, geographical information systems, etc.) are developed for other policy fields and specific interventions, and have been listed in these groups⁴⁵.

Nevertheless, one case study has reviewed CPS Radio Pomerania, which broadcasts in Western Pomerania with the island of Usedom and eastern Mecklenburg in Germany as well as the Szczecin region (Zachodniopomorskie) in Poland (case study 19).

2.2.7 Environment, natural resources and climate action

This policy field with its very diverse sub-topics is addressed by 135 CPS, which are found on all types of EU borders. Most are on internal borders between EU14 countries (56%), followed by CPS on internal borders between EU14 and EU13 countries (19%) and internal borders between EU13 countries (8%). The remainder are on various external EU borders, with Switzerland, Norway, Russia and Ukraine (15%) or with IPA countries (2%). The EU-wide geographical distribution of these CPS is shown in Figure 35 and Figure 36.

⁴⁵ Many ICT applications can be found in the policy fields (1) transport and especially public transport, (2) spatial planning, economic development, tourism, and culture, (4) labour market and employment, (7) environment protection, natural resources management and climate change action, (8) civil protection and disaster management, and (9) citizenship, justice, and public security.

Figure 35 CPS for environmental protection and protected sites in Europe

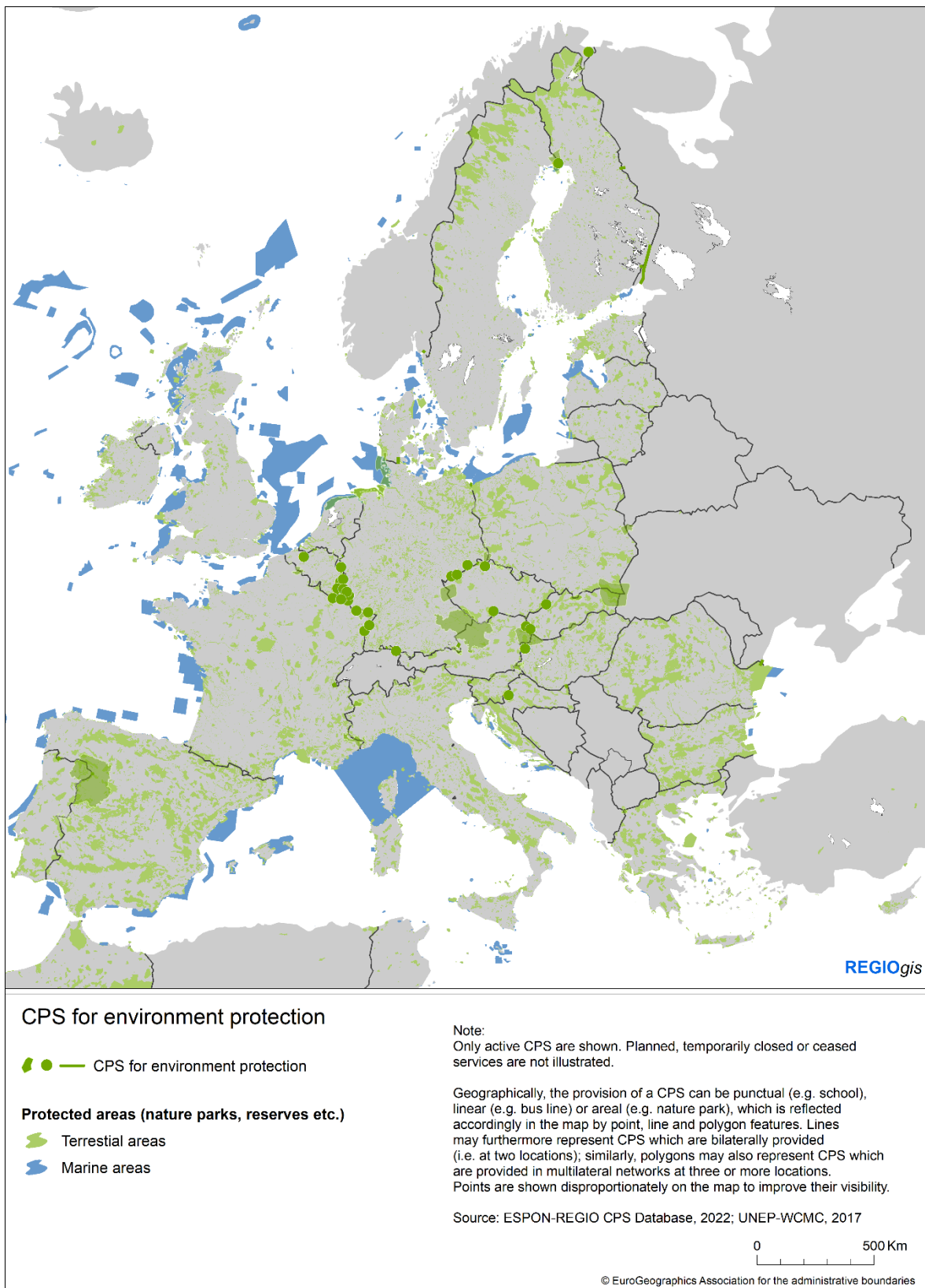
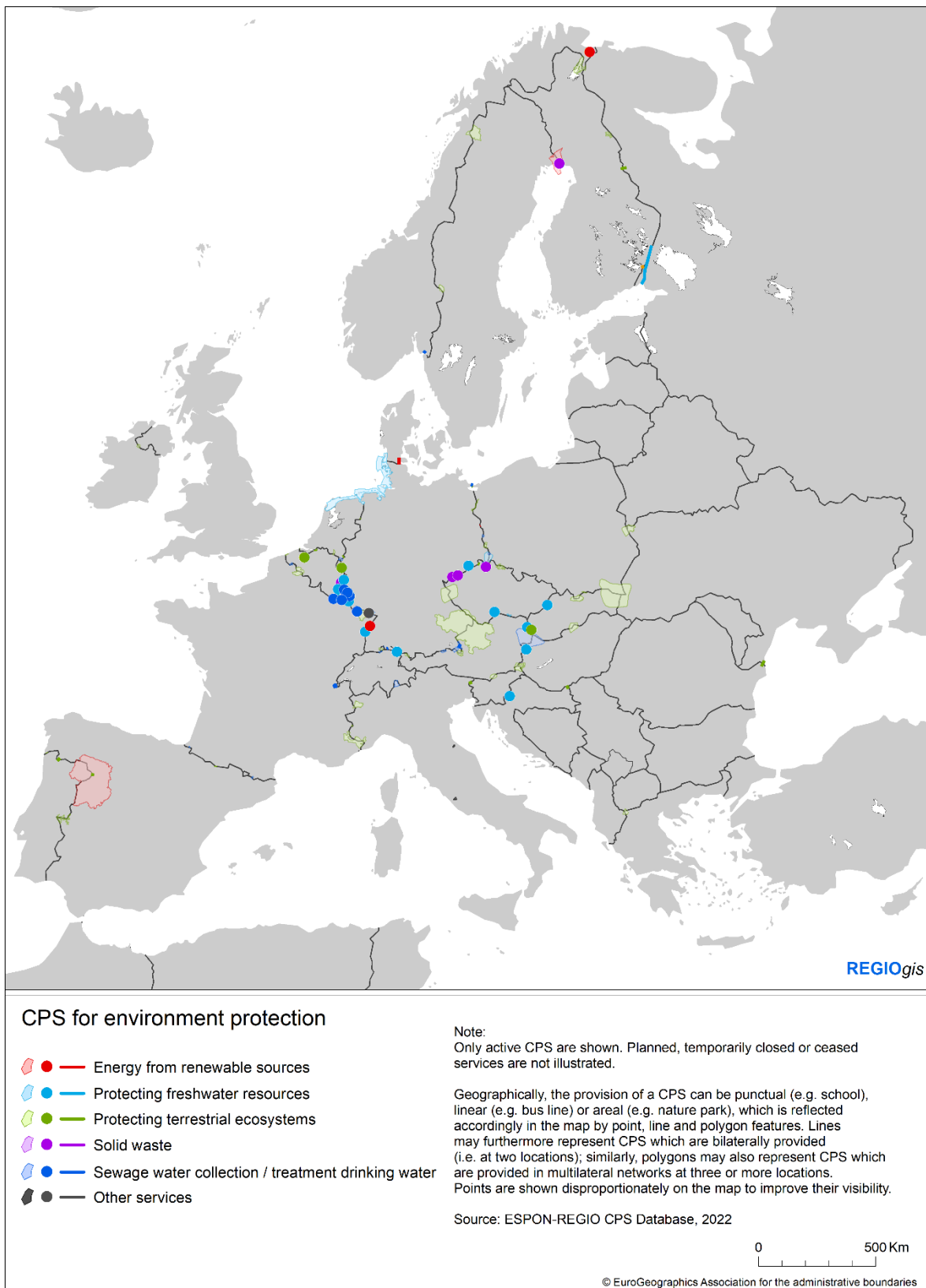


Figure 36 CPS for environmental protection



The 135 CPS address six fields of intervention as follows:

- Around 42% are for restoring, protecting and managing valuable terrestrial ecosystems or landscapes. This includes the development of cross-border green infrastructure as well as the prevention of climate-related risks for natural heritage potential and

strengthening of climate change resilience. This wide range of activities for nature and biodiversity preservation is often carried out by neighbouring national parks, regional / local nature parks and biosphere reserves or geoparks. These different types of protected area are either separately managed by specific domestic structures but have established cooperation initiatives between them, or they are transboundary protected areas with a single binational or trinational management structure that also implements joint actions. Many of these protected areas are listed as UNESCO Natural Heritage Sites or UNESCO Biosphere Reserves and Geoparks, which illustrates their outstanding international value. Good examples are the Tatra Transboundary Biosphere Reserve at the border between Poland and Slovakia (case study 24) as well as the Geopark Karawanken at the Austrian-Slovenian border (case study 25).

- 37% of the CPS are for joint sewage water treatment and the provision of drinking water between border municipalities. Most of these CPS focus on joint collection and treatment of municipal wastewater (35), while the rest ensure drinking water either on a permanent basis or as a precautionary service in the event of water scarcity (11). A particular feature common to both sub-types is that cross-border infrastructure has to be established before the CPS can operate (e.g. sewers or fresh water pipelines and their cross-border connections, pumping stations, reservoirs, etc.). This can sometimes be time consuming and costly (e.g. ongoing maintenance), especially if geological or topographical conditions are difficult (e.g. drilling under a river, construction in mountainous regions). Another striking feature is that 16 CPS are operating in the Greater Region, which is the Interreg programme area with the highest concentration of these types of CPS in the EU. Recent stock-taking for the new Interreg Programme Greater Region 2021-2027 lists even more CPS than those in the inventory⁴⁶. In 2021, there was joint collection / treatment of municipal sewage water in 21 cross-border zones (of which nine are currently listed in the inventory)⁴⁷ and permanent bilateral cooperation for drinking water supply at six border segments (of which one is not yet listed in the inventory)⁴⁸.
- Around 14% of the CPS aim at protecting / restoring and jointly managing terrestrial freshwater bodies as well as estuaries and coastal waters. The relatively low number of CPS for this field of intervention may be surprising, as the European Water Framework

⁴⁶ INTERREG V-A Programm Großregion (2020).

⁴⁷ The 12 missing CPS are the following. (1) The international wastewater treatment plant in Hoesdorf (LU), also cleaning sewage from the German Verbandsgemeinde Südeifel / Ortsgemeinde Ammeldingen in Rhineland-Palatinate. (2) The wastewater treatment plant in Mondorf-les-Bains (LU), also cleaning sewage from the French municipality of Mondorf in the Grand Est region. (3) The wastewater treatment plant in Bettembourg / Peppange (LU), also cleaning sewage from the French municipalities of Escherange, Volmerange-Les-Mines, Tressange / Bure and Ottange in the Grand Est region. (4) The wastewater treatment plant in Huldang-Stackburren (LU), also cleaning sewage from the Belgian municipality Gouvy and the mixed economic zone Z.A.E.M. Deiffelt-Schmiede in Wallonia. (5) The joint wastewater treatment plant Obere Eisch-Steinfort in Wallonia (BE), also cleaning sewage from the Luxembourg municipalities of Fingig, Clémency, Grass, Kahler, Kleinbettingen, Hagen and Steinfort. (6) The wastewater treatment plant in Lexy in the Grand Est region (FR), also cleaning sewage from the Luxembourg municipality Lasauvage. (7) The wastewater treatment plant in Forbach-Marienu in the Grand Est region (FR), also cleaning sewage from various German border municipalities totalling 7.000 inhabitants in Saarland. (8) The wastewater treatment plant in Perl-Besch in Saarland (DE), also cleaning sewage from the Luxembourg municipalities of Remich, Schengen and Wellenstein. (9) The wastewater treatment plant in Ihn in Saarland (DE), also cleaning sewage from the French municipality Leidingen in the Grand Est region. (10) The wastewater treatment plant in Völklingen in Saarland (DE), also cleaning sewage from the French municipality Schoeneck in the Grand Est region. (11) The wastewater treatment plant in Saarbrücken-Burbach in Saarland (DE), also cleaning sewage from the French municipality Stiring-Wendel in the Grand Est region. (12) The wastewater treatment plant in Saarbrücken-Brebach in Saarland (DE), also cleaning sewage from the French municipalities of Alsting and Spichern in the Grand Est region.

⁴⁸ The missing CPS, established with support from the Interreg V-A programme, is the connection of the municipal drinking water supply networks of Musson (BE, Walloon Region) and Gorcy (FR, Grand Est Region). The drinking water supply of Musson (2,810 inhabitants) and Gorcy (2,560 inhabitants) was based on each side of the border on only one drinking water extraction point and the establishment of an emergency supply in the respective domestic context was also not an efficient solution. Therefore, mutual coverage was agreed upon, for which the drinking water supply networks of the relevant Belgian and French operators were interconnected.

Directive 2000/60/EC as well as other pieces of EU legislation⁴⁹ have established a comprehensive regulatory framework for the sustainable management of water resources. This framework also covers waters at internal and external EU borders (i.e. rivers, lakes, estuaries) and often provides for cross-border action. An important explanation for the low number of CPS is the lack of systematic overview for these activities (e.g. EU-wide database) and information on existing CPS can therefore be only tapped selectively. Nevertheless, some long standing CPS should be included in the inventory. These ensure comprehensive cross-border water management for the Mosel and Saar river basin within the Greater Region (BE-DE-FR-LU)⁵⁰ or establish binding rules for fishing in Lake Constance between the riparian states (DE-AT-CH-LI)⁵¹. Another interesting and registered CPS at the external EU border of Greece with Albania and North Macedonia is the Trilateral cross-border management of the protected Prespa Lakes, which has been examined by one of our case studies (case study 20).

- Around 5% of the CPS aim at producing and/or distributing energy from renewable sources (7 CPS). The establishment of such CPS is still relatively rare and often hindered by differences in legal frameworks and structural features of energy production / distribution systems on both sides of a border. However, two case studies show there are possibilities. These are the Efi-Duero Energy Cooperative at the Spanish-Portuguese border (case study 22) and the cross-border heat transport company Calorie Kehl-Strasbourg at the Franco-German border (case study 23).
- Another two CPS ensure joint management and/or treatment of solid waste. One covers cross-border sewage sludge disposal and incineration at the German-Austrian border, and the other joint collection and treatment of municipal waste at the Franco-Spanish border. The latter CPS, covering 158 French and two Spanish municipalities, has been examined in depth (case study 21).
- One CPS improves resource efficiency and promotes low carbon economy or greening of society.

The main target group for these CPS is the general public who benefit from better protected nature and improved environmental conditions. This wide group includes inhabitants of the border regions (residents), but also tourists.

⁴⁹ The revised Groundwater Directive 2006/118/EC and the Directive 2013/39/EU on environmental quality standards in the field of water policy as well as the ongoing recast of the Drinking Water Directive 98/83/EC.

⁵⁰ France, Luxembourg and Germany (Saarland, Rhineland-Palatinate) have been working together on water protection since 1962 within the framework of the "International Commissions for the Protection of the Moselle and the Saar" (IKSMS / CIPMS), which have their headquarters in Trier (DE). Concrete measures for the joint protection of the two rivers are prepared in terms of content by several permanent working groups. Since 2000, the three member countries of the IKSMS / CIPMS ensure together with the Walloon region (Wallonia, however, is not a contracting party to the IKSMS / CIPMS) the sustainable management of the Moselle and Saar in accordance with the requirements of the EU Water Framework Directive. This means that not only surface waters are now part of the IKSMS / CIPMS' remit, but also groundwater. See: INTERREG V-A Programm Großregion (2020).

⁵¹ The establishment of the "International Plenipotentiary Conference for Lake Constance Fisheries" (IBKF) was decided on 5 July 1893 with the Bregenz Agreement concerning the application of similar provisions for fisheries in upper part of Lake Constance (Bodensee-Obersee). To this day, the IBKF is the highest body for fishery matters on Upper Lake Constance. The functioning of the IBKF is regulated in rules of procedure that have been adapted to today's requirements. Delegations to the IBKF comprise in Germany two representatives each from the federal states of Baden-Württemberg and Bavaria, in Austria one representative each from the federal state of Vorarlberg and the federal government, in Switzerland one representative from the Federal Office for the Environment and in Liechtenstein one representative from the Office for the Environment. The IBKF usually meets once a year and chairmanship rotates every three years. Decisions on the exercise of fisheries in upper part of Lake Constance must be taken unanimously in the spirit of the commonality of fisheries. This ensures that the interests of all contracting states are safeguarded in every decision. The decisions of the IBKF must be implemented in national law and there are also specific regulations concerning fisheries control. See: Stumm (2020).

Information on governance models⁵² shows that 44 CPS are provided by a central actor with a legal personality based on domestic law and 33 operate as a network. The latter solution is most often adopted for cooperation between neighbouring national parks, regional / local nature parks and biosphere reserves or geoparks. Operation by a central actor with a legal personality based on an interstate agreement or EU law is less frequent (11 CPS). This option is most often chosen for CPS ensuring joint treatment of municipal sewage and the provision of drinking water at the borders of Luxembourg, but exceptionally also for some CPS on nature protection (e.g. Trilateral protection of the Prespa Lakes between Greece, Albania and North Macedonia, European Park Alpi Marittime – Mercantour between France and Italy, Meseta Ibérica Transboundary Biosphere Reserve between Spain and Portugal).

2.2.8 Civil protection and disaster management

CPS under this policy field are primarily stand-by-services, as they only become operational for major disasters or other serious incidents and upon requests for joint management inputs or external assistance from across the border. Effective functioning of these CPS is very important, since the entire EU territory is affected a variety of disaster risks, many of which have transboundary effects⁵³. Diverse natural risks include earthquakes or volcanic eruptions and especially the predicted increase in climate-related natural risks. Other risks include technological and industrial accidents, terrorist attacks, cyber threats, critical infrastructure disruptions, etc. The Russian military aggression in Ukraine has increased these and war-related risks that did not exist in Europe for decades including the use of nuclear, biological or chemical weapons and damage to nuclear power plants.

An interstate agreement between neighbouring countries on cooperation in civil protection and / or emergency rescue usually establishes a legal framework under which mutual early warnings and joint management as well as direct cross-border aid or relief operations can be launched in the event of a crisis or disaster. Since these agreements create a binding commitment on cross-border assistance based on public law⁵⁴, they directly establish a CPS that may have different functions. Interstate agreements usually define the topics and scope of cooperation as well as ways for providing border-crossing assistance in the event of disasters. Agreements can also foresee other aspects such as an exchange of information on threats and damages or scientific data (including the transfer of established measurements), regular meetings between administrations or experts and joint exercises for relief operations in the respective territories of the signatories. Interstate agreements can cover the entire border area between two states or larger zones on both sides of a border segment where they are often further detailed in specific regional or local cooperation agreements.

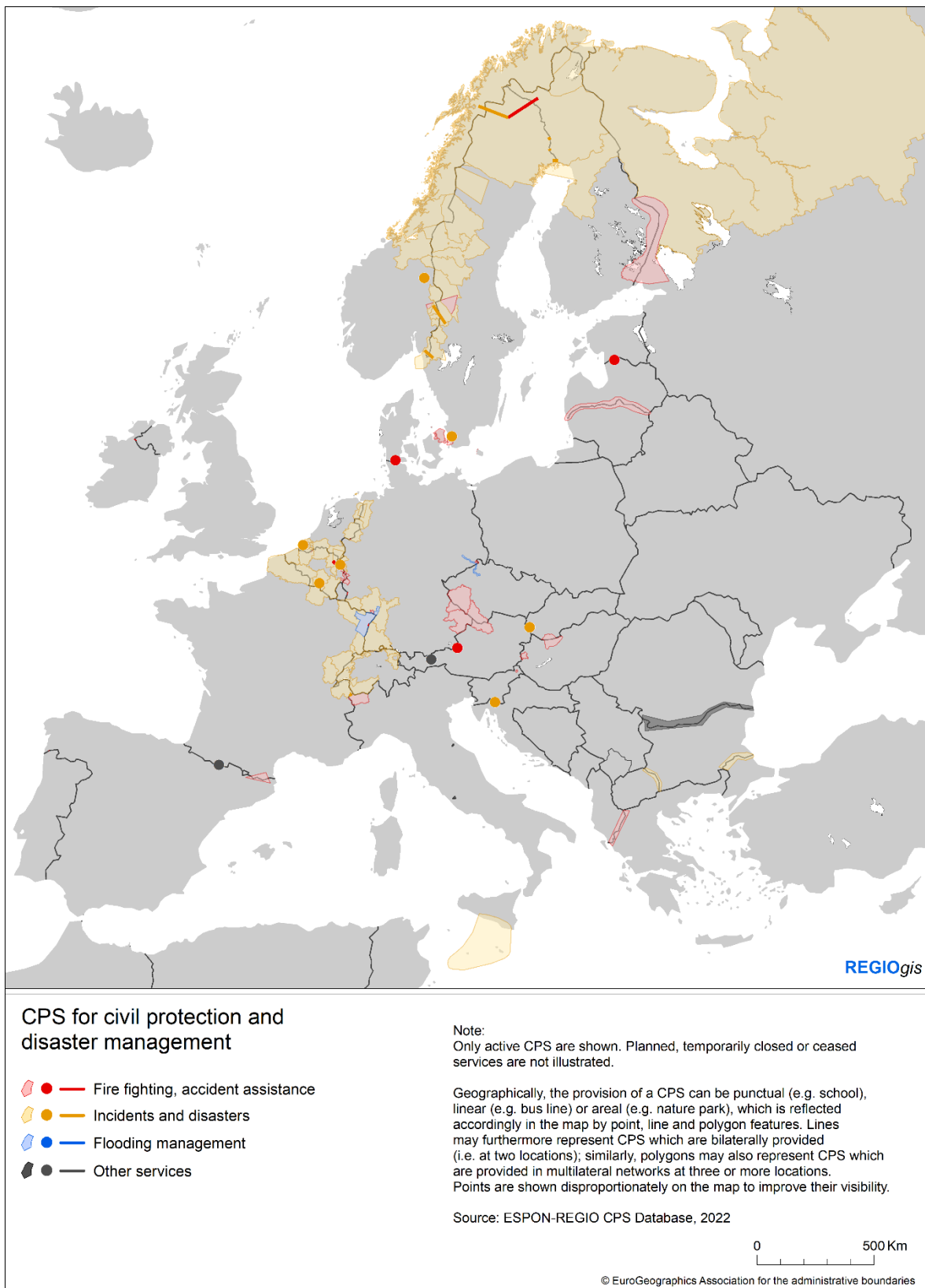
The inventory includes 133 CPS for joint civil protection and disaster management, which exist on all EU border types. Two thirds of these CPS are on internal borders between EU14 countries and another 28% at external EU borders. The remaining CPS are in equal parts (3% each) at internal borders between EU13 countries and borders between EU14 and EU13 countries. The above EU-wide geographical distribution is shown in the map below.

⁵² There is no information in the inventory for 47 CPS.

⁵³ European Commission (2021)

⁵⁴ If no assistance is provided by relevant services from a neighbouring border area in the case of serious disasters with fatalities despite a concrete request for help, this can later lead to serious problems (e.g. diplomatic tensions, compensation claims) and even to criminal prosecution of the persons (and services) being considered responsible for this non-assistance.

Figure 37 CPS for civil protection and disaster management



The current entries in the inventory do not yet depict the full range of potential CPS at internal borders of EU13 countries (i.e. with other EU13 countries or with EU14 countries). EU-wide sources indicate more agreements on bilateral cooperation were concluded (see

box below) or are in the process of consultation and/or finalisation⁵⁵. Nevertheless, documentation with a more detailed description of concrete cross-border activities is still missing.

Cooperation on civil protection and disaster management at internal borders of selected EU13 Member States

Bulgaria has concluded a bilateral agreement with Greece on early notification of a nuclear accident and exchange of information on nuclear facilities (1991) as well as a bilateral agreement with Romania on cooperation in civil protection in peacetime (1996).

Czechia has concluded a bilateral contract with Austria on mutual assistance in case of disasters or serious accidents (signed 1998, entry into force November 2000) as well as bilateral governmental agreements on assistance in emergencies with other neighbouring Member States (i.e. Germany, Poland, Slovakia and Hungary). All these agreements specify joint training and education and mutual exchange of information.

Croatia has concluded a bilateral agreement with Slovenia on cooperation in protection against natural and man-made disasters (1999) as well as a bilateral agreement with Hungary on cooperation in civil protection and rescue (1997).

Hungary has concluded a bilateral agreement with Austria on mutual assistance in case of disasters or serious accidents (signed 1996, entry into force July 1998) as well as other bilateral agreements for civil protection and rescue with Croatia (see above), Slovakia, Slovenia and Romania (see below).

The governments of Estonia, Latvia and Lithuania have concluded a trilateral agreement on mutual assistance and cooperation for disaster prevention, preparedness and response (signed 2017, entry into force December 2018).

Poland has concluded bilateral agreements on civil protection with all its neighbouring EU Member States (i.e. Czechia, Germany, Lithuania and Slovakia).

Romania has concluded bilateral agreements with Bulgaria and Hungary (see above) at governmental level for prevention, preparedness and response to disasters.

Slovakia has concluded a bilateral contract with Austria on cooperation and mutual assistance in case of disasters (signed 1997, entry into force November 1998) and established cross-border cooperation on civil protection with other neighbouring EU Member States (i.e. Poland, Hungary, and Czechia). Cross-border cooperation under these agreements covers all scopes (information exchange, assistance, prevention) and levels.

Slovenia has concluded a bilateral agreement with Austria on cooperation in prevention and mutual assistance in case of disasters or serious accidents (signed 1996, entry into force July 1998) as well as bilateral agreements with Hungary and Croatia (see above).

Source: European Commission (2019)

Also, potential CPS at external EU borders with IPA countries are not yet completely captured by the inventory. EU-wide sources show that many bilateral agreements were concluded between these countries. However, several analyses point to clear weaknesses

⁵⁵ The following agreements between EU Member States are in a process of consultation and/or finalisation. (1) An agreement between the Government of the Republic of Bulgaria and the Government of Romania on cooperation in the field of emergency situations. (2) An agreement between the Ministry of Interior of the Republic of Bulgaria and the Ministry of citizen protection of the Hellenic Republic on cooperation in the field of major emergencies.

affecting both established national and regional / local disaster management systems as well as the relevant cross-border cooperation activities (see box below).

Cooperation on civil protection and disaster management at external borders between EU Member States and IPA countries

There are national arrangements for cooperation on civil protection and disaster management for many external EU land borders with IPA countries, but the scope and intensity of this cooperation depends on the agreed cross-border activities. For the five EU Member States sharing land borders with IPA countries, the situation is as follows:

- Bulgaria has concluded bilateral agreements with Turkey on cooperation in emergency situations (2012) and with North Macedonia on cooperation in case of disasters (2017). Moreover, a memorandum of understanding has been signed between the National Institute for Meteorology and Hydrology of Bulgaria and the North Macedonian Institute of Hydrometeorology. Finally, an agreement with the Government of the Republic of Serbia on cooperation in protection from natural and man-made disasters is in the process of consultation and/or finalisation.
- Croatia has concluded a bilateral agreement on cooperation in protection from natural and civil disasters with Montenegro (2009) as well as a bilateral agreement on cooperation in civil protection and rescue with Bosnia and Herzegovina (2001). With the latter there are also standard operational procedures for cross-border assistance in case of wildfires between the Protection and Rescue Directorate of Croatia and the Ministry of Security of Bosnia and Herzegovina. Since 2014, a bilateral agreement with Serbia on protection against natural and human-made disasters and dealing with their aftermath has been foreseen (no further information on the current status is available).
- Greece has concluded a bilateral agreement with Albania on fire-fighting and signed a Memorandum of Understanding on cooperation in civil protection with the Government of the Republic of North Macedonia (2021). Moreover, the Governments of Greece and Turkey have signed a protocol to establish a Joint Hellenic-Turkish Standby Disaster Response Unit to improve joint cooperation and response to disasters (2001/2002).
- Hungary has not yet concluded a bilateral agreement in civil protection and rescue with Serbia.
- Romania is looking to sign a bilateral agreement on civil protection with Serbia.

In most of these cases, however, there is scope for improving cross-border cooperation in the event of emergencies and disasters. Improvements should involve stronger institutionalisation of the cross-border legal context, cross-country harmonisation of domestic legal contexts, consistent implementation of the cross-border agreements and regional initiatives / strategies, the establishment of joint cross-border or cross-country capacities as well as greater involvement of and collaboration between local authorities and non-governmental organisations on both sides of the common border.

Other aspects where more intense cross-border cooperation would be valuable are improvements for joint decision support in emergencies or disasters. This includes joint vulnerability information (including detailed maps and models charting human settlements and installations exposed to risk), new or updated cross-border monitoring and early-warning systems as well as capacity building for technical and scientific bodies and enhanced communication between scientific bodies and civil protection sectors.

Sources: European Commission (2019), SEEDRMAP (2009), IPA III Multi-Country Programme for 2021-2022

The 133 CPS in the inventory address two main fields of intervention, as follows:

- 56% of the identified CPS ensure joint management of large-scale incidents and major disasters (75). These CPS are at local, district or regional levels and even across large-scale territories, with the latter especially in the Nordic Countries. Information shows⁵⁶ that the legal framework for most these CPS is established by regional or local cooperation agreements that were concluded in connection with a theme-specific interstate agreement (54 CPS). Good examples for this approach are the many local cooperation agreements between border municipalities in Denmark, Finland, Norway and Sweden, which were concluded under the multilateral framework agreement for Nordred cooperation between rescue services in Nordic countries⁵⁷. The other CPS are only implemented under a theme-specific interstate agreement (10), a regional/local agreement (5), or a regional / local cooperation agreement concluded in connection with a multilateral interstate agreement on general decentralised cross-border cooperation (1). A total of 69 CPS operate under a network approach, while for the remaining 6 CPS there is no information in the inventory.
- 38% of the CPS are for joint firefighting and mutual assistance in case of accidents (51 CPS). The large majority of these are at local level for fire brigades or rescue services in neighbouring cities, towns and smaller municipalities (40 CPS). The remainder cover larger districts, Euroregions or even the entire border and are delivered by all firefighting or rescue services there (11 CPS). Information shows⁵⁸ that the legal framework for most of the CPS is established by a regional / local cooperation agreement, concluded either in connection with a multilateral interstate agreement on general decentralised cross-border cooperation (17 CPS) or in connection with a theme-specific interstate agreement (8 CPS). These CPS generally operate under a network approach (30)⁵⁹, but there are two noteworthy exceptions. The cross-border body running and managing the firefighting boat Europa 1 on the River Rhine at the Franco-German border⁶⁰, and the full merger of two municipal fire brigades in Belgian Baarle-Hertog and Dutch Baarle-Nassau under the responsibility of the joint cross-border body established for both municipalities (i.e. Common Organ Baarle, COB)⁶¹.
- Three CPS cover flood management for the River Elbe within the German-Czech Elbe-Labe-Euroregion, the Rhine training center for fluvial risk management (CERF) and disaster protection through joint use of amphibious vehicles by the German-French civil protection forces in the PAMINA area.

The main target groups of these CPS are public authorities, including fire brigades and rescue services or police authorities and hospitals, as well as the general public in the border regions who benefit from increased risk preparedness and rapid assistance in case of disasters and emergencies.

⁵⁶ There is no information in the inventory for 5 CPS.

⁵⁷ Information available on the Nordred website (<https://www.nordred.org/sv/granskommunala-avtal/#1>) lists a total of 26 local agreements: DK-SE (1 agreement), FI-NO (3 agreements), FI-SE (8 agreements), SE-NO (14 agreements). These agreements are covered by the inventory.

⁵⁸ There is no information in the inventory for 18 CPS.

⁵⁹ There is no information in the inventory for 16 CPS.

⁶⁰ The purpose of the "Local Grouping for Cross-border Cooperation" (GLCT) is to ensure the joint operation of the "Europa 1" pump ship on the River Rhine as well as the joint ownership of this ship (i.e. administrative, financial and technical management).

⁶¹ In early 2008, a mixed inter-municipal working group finalised the draft guidelines for a merger of the two municipal fire brigades. On 1 January 2010, the two firefighting services were merged into a single firefighting service. The now mixed Belgian-Dutch fire brigade consists of 22 Dutch and 8 Belgian firefighters, who operate from a joint location at barracks in Baarle-Nassau.

Case studies have examined four CPS at different territorial levels. Two CPS cover the entire border area, namely the civil protection cooperation between Latvia and Lithuania (case study 28) and the Croatian-Slovenian cooperation in civil protection (case study 29). Good examples for local CPS are the cross-border assistance in firefighting and equipment sharing between the cities of Valença do Minho in Portugal and Tui in Spain (case study 26) as well as rescue force cooperation for hazard prevention between the municipalities of Strömstad in Sweden and Halden in Norway (case study 27).

2.2.9 Citizenship, justice, and public security

The 43 CPS promoting citizenship, justice and public security most often operate on borders between EU14 countries (36). The remainder are either on borders between EU14 and EU13 countries (3 CPS: DE-PL, CZ-DE), at EU13 borders (1 CPS: EE-LV) or at external EU borders (3 CPS: CH-DE, IE-UK, CH-FR). The EU-wide geographical distribution of these CPS is shown in Figure 38.

Information from 29 of these CPS shows that the first services were established in the 1990s (9), mostly as a reaction of the envisaged completion of the Single Market and implementation of the Schengen Area leading to a complete abolition of internal border controls. New services have been established since 2000 (20 CPS), also because of more intense cross-border police and judicial cooperation between more Schengen countries following the Prüm Convention⁶². These services were established along EU14 internal borders and at some new EU internal borders (e.g. DE-PL, CZ-DE), but also at the EU external border with Switzerland⁶³.

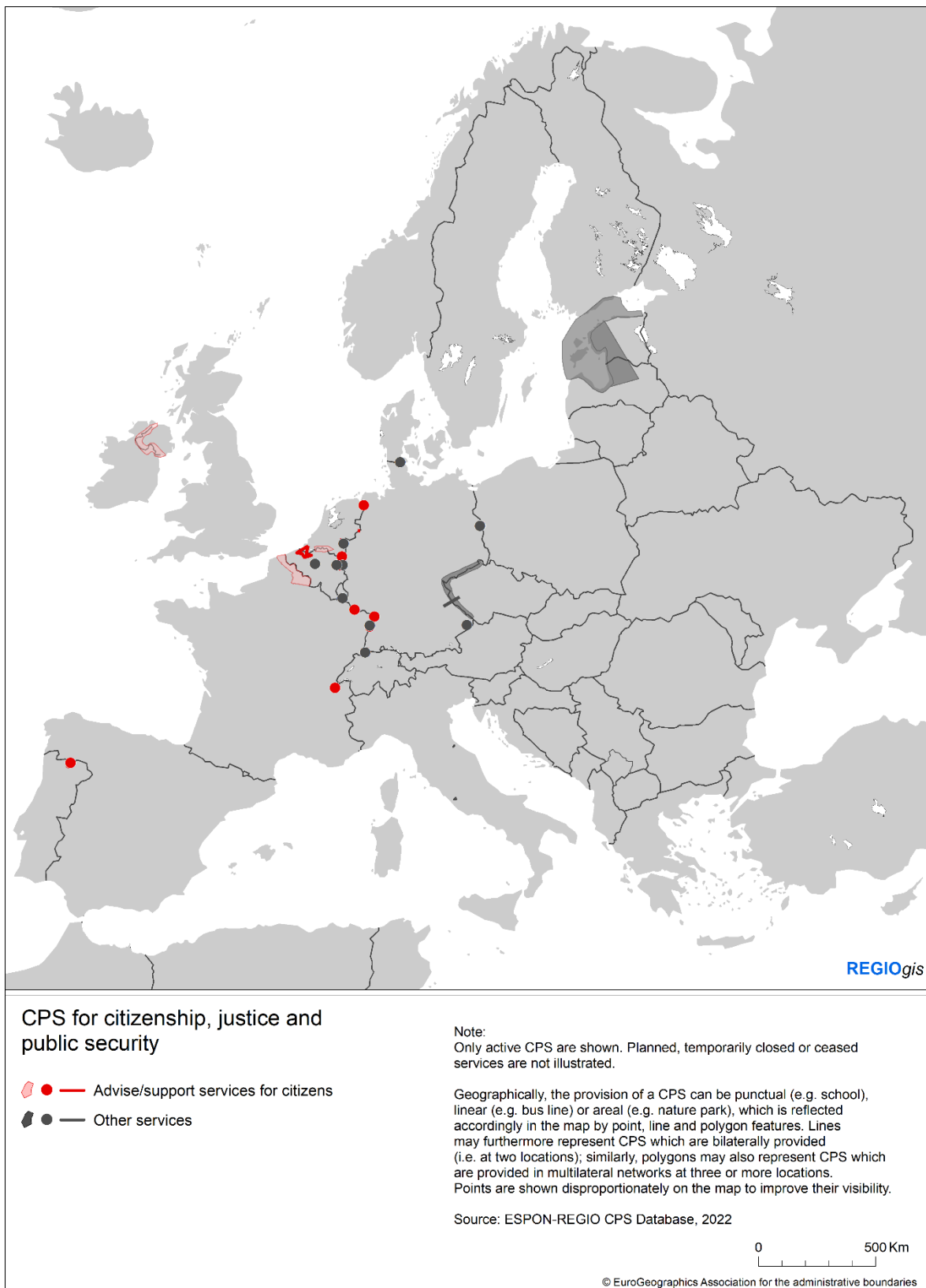
Considering this general background and the overall purpose of the 43 CPS, they can be assigned to two fields of intervention:

- Half of these CPS provide advice and support to inhabitants of border regions for everyday cross-border activities (18 CPS). This includes legal information for cross-border workers (e.g. taxes, health insurance, pensions, child benefits) as well as practical advice for people crossing the border for reasons other than work (e.g. cross-border shopping and consumer protection). People usually receive direct advice and support from experts at border information points, but sometimes also as personalised answers to online requests.
- The other half of the CPS foster closer cooperation between national and/or regional public authorities responsible for justice and public security (25 CPS). These services mostly involve bilateral cooperation between police and customs authorities of neighbouring countries, which often work in binational teams from a single location.

⁶² The Prüm Convention is an international law enforcement treaty that was signed on 27 May 2005 in the German town of Prüm (*Convention between the Kingdom of Belgium, the Federal Republic of Germany, the Kingdom of Spain, the French Republic, the Grand Duchy of Luxembourg, the Kingdom of the Netherlands and the Republic of Austria on the stepping up of cross-border cooperation, particularly in combating terrorism, cross-border crime and illegal migration*). The Convention is open to all EU Member States, 14 of which are currently parties after having completed their national ratification processes between 2006 and 2009 (i.e. Austria, Belgium, Bulgaria, Estonia, Finland, France, Germany, Hungary, Luxembourg, Netherlands, Romania, Slovakia, Slovenia, Spain).

⁶³ Also in response to the supranational agreement on the free movement of persons concluded in 2002 between Switzerland and the European Union.

Figure 38 CPS for citizenship, justice and public security



The different purposes of these CPS also lead to different legal frameworks and governance models as well as to different target groups.

For the 18 CPS providing advice and support for inhabitants of border regions on everyday cross-border activities, information from 13 CPS suggests they either operate under a

central governance model with a legal personality based on domestic law (8), under a central governance model with interstate agreement (3) or a network approach (2). Their main target groups are cross-border workers, companies and entrepreneurs, job seekers as well as pupils, students and apprentices of all ages or other people from the border region.

The set-up of the 25 CPS establishing cooperation between police and customs authorities from neighbouring countries generally required the conclusion of theme-specific bilateral interstate agreements. These usually better define the field of action, the way of working together and procedures to follow. Some interstate agreements also establish multilateral cooperation, as in the cross-border juridical and police cooperation between the three Benelux countries (BE, LU, NL)⁶⁴ or the Quadrilateral Centre for Police and Customs Cooperation (BE, DE, FR, LU)⁶⁵. The latter is a unique European-level instrument involving representatives of the German, French, Belgian and Luxembourg police and customs authorities. The main target group of all these CPS are public authorities, more specifically policy and customs authorities, as well as the general public in border regions who benefit from increased security.

2.2.10 Provisional conclusions

The above description of policy-specific CPS groups shows it is hard to formulate cross-thematic conclusions on individual features characterising the CPS for two main reasons.

Each policy field is very differently implemented at internal EU borders despite harmonisation by EU legislation. CPS addressing the same intervention field are frequently based on very different legal frameworks and governance models. A good example is the cross-border treatment of municipal sewage in a single wastewater treatment plant. Along the German-Luxembourg border, an intergovernmental agreement was concluded between the Grand Duchy and Rhineland-Palatinate in 1974 that led to the establishment of several international wastewater treatment plants or international sewage associations, each of which has statutes regulating joint facility ownership and/or joint management. On the German-Austrian border in the EUREGIO Salzburg Salzburg-Berchtesgadener Land-Traunstein, the same process at three locations has been ongoing for decades without an intergovernmental agreement between the federal states of Bavaria and Salzburg. Instead, there are 'discharge contracts' between the local sewage-sending and sewage-cleaning organisations, the municipalities and the wastewater treatment plant operator. These short documents lay down basic rules on discharge conditions, wastewater volumes and treatment costs. They are from time-to-time adapted to changing conditions without substantial administrative effort. This variable implementation of thematically similar CPS is also seen in many other policy areas and intervention fields, which obviously complicates any meaningful cross-thematic conclusions. An exception to this diversity could be seen in regular cross-border public passenger transport by bus, as EU legislation has created a uniform and directly applicable legal framework at least for awarding line concessions.

In addition, the concentration of CPS is still highly variable along internal and external EU borders. Those imbalances also mean that experience with setting up and running CPS and reaping direct benefits from them are still uneven throughout the Union. Considering this

⁶⁴ "Memorandum of Understanding concerning cooperation in the field of police, justice and immigration between the Ministers of Justice of Belgium, the Netherlands and Luxembourg, the Ministers of the Interior of the Belgium and the Netherlands and the Luxembourg Minister of Public Law", signed on 4 June 1996 in Senningen (i.e. Senningen Memorandum of 4 June 1996). In 2003, the Justice and Home Affairs Ministers of the Benelux countries decided to extend the scope of the Senningen memorandum ("Treaty between Belgium, the Netherlands and Luxembourg on cross-border police interventions").

⁶⁵ "Agreement between the Governments of the Federal Republic of Germany, the Government of the Kingdom of Belgium, the Government of the Grand Duchy of Luxembourg and the Government of the French Republic establishing and operating a Joint Centre of Police and Customs Cooperation in the Common Frontier Area" (24 October 2008).

reality, a strong positive experience with existing CPS tends to bring a greater willingness to establish new CPS for jointly addressing development needs in other policy areas. The same statement may also apply to the awareness among public actors about handling essential aspects to establish and run a CPS. Those are the establishment of an appropriate legal and administrative framework such as interstate agreements or local administrative arrangements as well as the joint mobilisation of human, material and financial resources, to maintain a CPS in the long term or to construct and maintain necessary infrastructure. A general conclusion is that for CPS to be scaled up at all EU borders, there needs to be more targeted awareness-raising. This should be supported by further in-depth research on CPS for specific policy areas, similar to studies the Commission has already conducted on cross-border healthcare and more recently on cross-border public transport. Policy fields with strong potential include (1) environmental protection, natural resources management and climate change action as well as (2) civil protection and disaster management. Both policy fields are highly relevant for all types of EU borders and show that especially local, district and regional actors can (and should) be more active in the future.

The above remarks bring us to a final observation on the internal limitations of the current inventory. This is reflected in the number of CPS identified along different border segments as well as the scope and depth of information available. Work with content-related data in the inventory has shown that some fields of intervention are covered only to a limited extent. This is due to the borders previously considered when CPS cases were collected (i.e. for the ESPON CPS study). The focus then was primarily on internal EU borders and some external EU borders (e.g. with CH, LI, NO, RU) as well as on specific border and cross-border regions (i.e. the corresponding case study regions). This is also why some internal EU borders are less extensively covered by CPS in the inventory and external EU borders with IPA countries are hardly covered at all. In the latter case, however, there are several policy fields where CPS potentially exist (e.g. joint management of EU-IPA border crossing points, joint protection and management of transboundary river basins, joint nature conservation, civil protection and disaster management). On the other hand, the lack of identified CPS along EU internal borders may be due to:

- scarce or extremely scattered information sources (e.g. lack of an EU-wide database on cross-border river and flood management),
- the novelty of certain policy areas for cross-border intervention (e.g. climate mitigation through joint measures in renewable energy production, energy efficiency or low-carbon economy),
- continued legal and administrative obstacles that hamper the establishment of CPS.

For the scope and depth of information in the inventory, most CPS show data gaps for indicators describing service details (e.g. year of establishment, legal framework, governance model, management / delivery mode, financing, etc.). These gaps are mostly due to limited content in literature sources (i.e. not all information is included) and survey information lacks depth (i.e. not all survey participants have sufficient knowledge to provide information on all aspects).

However, eliminating these gaps in terms of CPS numbers and content requires a lot of additional work and only essential thematic clues can be pointed out within the framework of this study project.

3 Conclusions and policy recommendations

The following section differentiates four areas of findings and recommendations. Some are linked and some complement the provisional findings above.

- The conceptual framework of CPS, further developed in the study, has revealed further information needs and challenges.
- Stakeholders involved in CPS development and/or provision, apart from the mentioned information needs, suffer gaps in documentation as well as the potential and limitations of legislative action.
- Complementing the findings from previous sections on the variety of policy fields for CPS. Indeed, the imbalance of identified CPS may hint at potential for future CPS but also indicates that agreements may not always be sufficient to materialise a CPS.
- Other triggers and hurdles affecting CPS development. Here, EU level support beyond awareness raising and further incentives come into play.

Each area starts with a short reflection on the work done or other observations on which the conclusions and recommendations are based. Thereafter, sub-sections develop recommendations addressing one or more of the previous findings.

The chapter closes with an additional section on **recommendations targeting stakeholders** that tend to be most involved in CPS development and can contribute to more and better CPS for better living conditions in border regions. Notwithstanding the aim to promote CPS, **these services are not an end in themselves, but recommendations refer to areas where CPS can provide more benefits or value added than domestic services.**

As with the whole report, the following information and views are those of the authors and do not necessarily reflect the official opinion of the European Commission.

3.1 An updated conceptual framework

Considerable efforts were made to update and further develop the conceptual framework of CPS, referring to the definition (see table below) and indicators used for documentation. The updated inventory contains some 70 fields of information that describe the CPS as well as the framework in which it operates, compared to 19 fields in the previous inventory.

Table 7 Elements of the CPS definition

Characteristics of CPS
1. Service area – A CPS covers a specified area and must have already materialised in the cross-border area.
2. Joint problem or opportunity – A CPS addresses a joint problem or development opportunity in the cross-border area.
3. Target groups – A CPS shall have a target group on both sides of the border, even if it is targeted in quite different ways.

4. Non-discriminatory – Within the target group there is no access restriction for using the CPS.

5. Composition of actors – CPS usually include actors from both sides of the border, as well as border bodies such as EGTCs, that are involved in initiation, establishment/financing and/or provision. However, the degree of involvement can vary. A service delivered by an entity from one side of the border is a CPS if there are users on both sides of the border and all other characteristics of the definition are fulfilled.

6. Public nature of a cross-border public service (organisation and provision) – A CPS is publicly organised and may be directly provided by a public body or a private/ non-profit organisation via a concession, delegation or other contractual / regulatory arrangements.

7. Public nature of a cross-border public service (financing) – A CPS is publicly (co-)financed.

8. Thematic fields – A CPS can be provided in any of the listed policy fields within the inventory. The sub-fields are not exhaustive, and one CPS may be assigned to more than one policy theme or field of intervention if this describes the service and target groups.

9. Service vs infrastructure – A CPS is a service which means that the mere existence of a (hard) infrastructure does not represent a service (e.g., a cross-border bridge, road or pipeline).

10. Timeframe – A CPS offers a long-term service provision, i.e. there is no limited timeframe as with 'one-off projects'. Service provision may differ over time.

Source: Service provider, 2022.

Despite specification of the CPS concept, some ambiguities or uncertainties remain as practical findings indicate:

- The criteria defining CPS still challenge stakeholders who require a clear differentiation between infrastructure, projects and services. The differentiation between project and service is particularly challenging for new CPS (i.e. are they still a project or already a service).
- People are not necessarily familiar with the term and definition of CPS. This often originates from different domestic concepts of public service provision in neighbouring countries. In addition, actors in border regions may not be regularly involved in cross-border EU-policy making processes or may lack experience with CPS.
- Often actors are implementing a cross-border public service (transport, water provision) but are not aware of the concept.
- The criterion that a service across the border may only be a CPS if it has a target group on both sides of the border leads to some ambiguities for services that are not limited to the border area. Indeed, sometimes the service may even be used more frequently by other users, either from other parts of the neighbouring country beyond the targeted border area (e.g. access to a specialised hospital) or may attract international demand from other countries (e.g. tertiary education and research institutions). This challenges the differentiation between a CPS and other international public services (e.g. university cooperation between non-neighbouring regions or countries).

- Since there is no access restriction for using the CPS, the service should be affordable for any user within the target group. Practical examples illustrate two challenges. Firstly, affordability remains difficult to address and map as it may concern living conditions, cross-border differences in service management organisation such as being free of charge on one side and subject to fees on the other, or other costs such as transport costs to reach the other side of the border. Thus, an accessible service may involve restrictions not easily visible. Secondly, there can be different treatment of users on either side of the border. This is sometimes necessary to overcome administrative obstacles (e.g. reimbursement of fees) but may limit accessibility with cost and income differentials. In such cases the CPS is principally accessible but the non-discriminatory access across the border may be hindered for some potential users.

3.1.1 Additional promotion and monitoring activities

Lack of familiarity with the CPS concept is not least due to the focus of information campaigns on cross-border activities, that still focus more or less exclusively on Euregios, EGTCs, or other cross-border structures and actors already involved in Interreg projects or programme implementation. Thus, **activities to reach out to non-usual suspects** for cross-border cooperation in border areas appear necessary to overcome this information gap. Language is important in this respect, since local actors are often not familiar with scientific concepts or technical terms in English, which is frequently necessary to access EU-wide platforms (see below) or studies and other published material on CPS. Examples are water associations or fire fighters that, like other local organisations, are often not involved in Interreg or Euroregional activities. This implies that their potential cross-border service provision is also not known by Euregios. For these actors many aspects of cross-border cooperation may be of interest beyond the concept of CPS. Additional outreach channels and activities could be:

- [Futurium](#) to increase outreach. So far it largely involves the typical suspects of cross-border cooperation. Not least because of the wide thematic variety of CPS, a dedicated area for CPS within the [Border Focal Point Network](#), could trigger interest. This network brings together experts on cross-border issues, which cover many themes and aims to promote easier cross-border interaction, address existing legal and administrative barriers, and encourage the pooling of cross-border services. The bigger the network becomes, the more important dedicated sub-areas could be. In the long-term, linking Futurium postings on CPS with the Web Application could enhance knowledge of CPS.
- **Communication campaigns** may also focus on showcasing existing CPS to provide guidance and help stakeholders who are uncertain how to start such processes. For better targeting, this and other promotions may differentiate between policy areas. A politically very effective and less 'lighthouse-oriented' approach could also be multilingual publication of short thematic fact-sheets with practical examples describing and quantifying how investment and maintenance savings were achieved through CPS. Showcasing such financial benefits can motivate regional or local actors to embark on the 'CPS adventure', especially in times of crisis and tight public budgets.
- **Convincing CPS providers to share knowledge** is important. This requires clear communication of the benefits and added value of CPS for domestic service providers. [The Sail of Papenburg award](#)⁶⁶ and the CoR EGTC Award [Building Europe across](#)

⁶⁶ <https://www.aebr.eu/2022-call-for-sail-of-papenburg-award-now-open/>

[Borders](#)⁶⁷ are examples for creating motivation to sharing information. So far, no similar motivations exist explicitly for CPS.

Apart from these general communication needs, there are also different **needs in different territories**, which may require targeting some border territories more than others and possibly applying different approaches to communication and outreach.

Clarification about the concept of CPS is also important to avoid overloading the validator with inadequate proposals for CPS validation. Experience in the search for new CPS during data collection for the ESPON CPS 2.0 study has illustrated this need, since a considerable share of the survey information was not fulfilling the criteria that qualify for a cross-border activity to be included in the ESPON-REGIO CPS database.

Some CPS criteria and categories of information will also require **continuous monitoring** to consider changes in terms of CPS focus, financing structures, etc.

Last but not least, is **information availability for target groups**. Indeed, the accessibility of cross-border public services is not always widely known by the target groups or parts thereof. To maximise benefits for citizens in the border areas, they may also benefit from additional local and regional communication.

3.1.2 Different price levels as opportunity rather than challenge

The affordability challenges frequently result from different price, cost and income levels on the two sides of a border. Often these price differentials are perceived as an obstacle. At the same time, they can also be interpreted as a chance to develop a CPS. Offering public services across the border may use price differentials. They can also lead to new activities of a service.

3.2 Consideration of stakeholder needs

The lack of understanding of the CPS concept leads to a large information gap between cross-border cooperation actors (Euregios, etc.) and CPS providers, when they are not the same institution. The **large variety of policy areas and different governance levels for CPS provision** means cross-border cooperation actors may lack information about some services. At the same time, CPS providers often lack information about EU activities and support in this field. This imbalance seems to have different roots. Sometimes CPS stakeholders are not consulted or targeted by Interreg programmes, nor do all programmes provide a specific or ad-hoc budget for CPS development but follow the logic of projects.

Communication and promotion needs due to this imbalance were mentioned in the previous section. In addition, data availability and validity about CPS is frequently not sufficient. It not only takes considerable efforts to obtain information, but sometimes hardly any reliable information is available that would allow a meaningful description in the database. Generally speaking, documentation for CPS targeting the general public is usually better than for CPS targeting other public authorities.

⁶⁷<https://portal.cor.europa.eu/eqtc/news/Pages/EGTC%20Award%202022%20%E2%80%93%20Call%20for%20applications.aspx>

Examples of limitations to information collection

- Assessing the demand or even potential demand from another target group within the population may be demanding for CPS providers as they typically focus on real demand evolution. Other challenges may refer to the categorisation of legal and administrative information when the terminology may not always be known to local stakeholders.
- Case study data collection and analysis highlights further challenges e.g. on user and demand data. In particular, an assessment of how well demand is met and user satisfaction is rarely directly available and often requires indirect measurement or other qualitative information that give some indication of these measures.⁶⁸

Another challenge for CPS development and sustainability of services lies sometimes in the **mismatch between geographical (territorial) coverage and governance structure**. CPS provision areas can be very local, e.g. at municipal level or may cover wider areas beyond the cross-border cooperation structure boundaries. Key actors financing public cross-border activities are public authorities at different government levels, Euroregions, EGTCs, ETC programmes and international institutions. However, if the CPS area differs from any of these territories, especially going beyond them, there can be a mismatch between available (public) financial resources and the required funding for service provision in the targeted territory.

In this context, the spending pattern of public resources often matters. National legislations often create hurdles when financing activities across the border is not permitted, i.e. when public money may not cross the border notwithstanding where the benefits arise. This may hamper either taking full advantage of potential CPS benefits or even developing the CPS.

3.2.1 Aim for better documentation

A meaningful sustainable database requires sound information. The lack of information for some CPS limits the usefulness of **available CPS information**. One relatively frequent example concerns agreements on disaster and emergency cooperation and their implementation as illustrated in the box below.

Documentation for each CPS should be in the interest of the initiators and/or service providers showing the benefits of cross-border activities to the population. Similarly, it should be in the interest of providers to share contact information. This may not have to be public but can be stored in the CPS inventory database for authorised use only, respecting the conditions of the General Data Protection Regulation (GDPR). This data is currently frequently lacking, hindering requests for clarification or better documentation.

National authorities are sometimes directly involved in CPS development and provision, especially if bilateral or multilateral agreements are the basis for cross-border services (e.g. disaster management or emergency medical services). Better documentation, at least in these fields, needs to involve these authorities, which may not yet be sufficiently aware of the CPS concept.

The ESPON-REGIO CPS database indicates **some systematic data gaps**, if not for all identified CPS but for many. Frequently, the cross-border dimension of the service is not well documented. Information on the number of users by country is frequently missing and if available, is not always collected systematically over time. Regular monitoring, however,

⁶⁸ See the report on case studies: Cross-border public services – Case studies, 2022.

is crucial to improve and/or adapt the service to changing needs or to assess actual and potential demand for a service.

Experience of several CPS in place for many years show that they are often not perfect or fully developed. This further challenges **continuous documentation**, when the quality of the service or legal or administrative framework changes over time. Furthermore, when CPS are first installed, they may not always solve all obstacles but are subject to improvement. One example is healthcare services, where cross-border access is frequently developed in several steps. Better and transparent documentation would help in different ways. It can illustrate the steps taken to set-up a CPS for their own purpose and to learn from the experience of others. It also shows how challenges may develop once a CPS is in place, since not all challenges occur during CPS development and set-up but may also concern daily provision.

Finally, another valuable resource for collecting CPS data and thus the inventory may be **socio-economic analyses of Interreg programmes**. Sometimes these include information about CPS⁶⁹. A more systematic inclusion of CPS in these analyses, especially of cross-border Interreg programmes could be very valuable.

3.2.2 Legal frameworks are important but not necessarily sufficient

Not least due to the **multilevel character of CPS**, i.e. they may be provided by very different stakeholders at various levels, the adaptation of domestic legislation to overcome all hurdles and obstacles is very demanding. There are ways to overcome hurdles created by national legislation, but these will often take some time. This is also why theme-specific interstate agreements are concluded in various policy fields. Their ratification very often involves a coordinated change or adaptation of domestic legislation. Nevertheless, stakeholders should also be creative in finding (work-around) solutions for new CPS that may not immediately provide a perfect solution but are suitable to highlight the benefits of CPS while still being legally acceptable and avoid losing time.

3.3 Coverage across policy fields

CPS have been developed to very different extents across policy areas. By far the largest number are transport services, whereas labour market and employment related CPS are still comparatively rare (see Section 2.1.4).

Within some policy areas additional uncertainties exist regarding CPS implementation. Especially for disaster and emergency agreements the state of implementation is not always clear. Depending on the focus and related governance structures, an agreement can be sufficient for cross-border disaster management or may require additional regional/local agreements to settle the details and effectively implement arrangements or structures.

Examples of agreements and their impact on CPS implementation

- **Case study Civil protection cooperation between Latvia and Lithuania:** A trilateral cooperation agreement signed in 2021 (also including Estonia) is the main legal framework. The agreement establishes and develops practical cooperation for disaster prevention, preparedness, response, early warning and assistance. Without

⁶⁹ See for example Annex 3 of the socio-economic analysis of the Interreg Alpenrhein-Bodensee-Hochrhein programme 2021-2027 (https://www.interreg.org/interreg-vi/sozio-oekonomische-analyse_update2020_endg-rev1.pdf) or the socio-economic analysis of the Greater Region (http://www.interreg-gr.eu/wp-content/uploads/2021/01/Endbericht_200402.pdf).

further local or regional agreements, it is implemented and coordinated at national level. Every year a trilateral meeting between the Directors-General of the State Fire and Rescue Service of Latvia, the Estonian Rescue Board and the Fire and Rescue Department of the Ministry of the Interior of Lithuania discusses topical issues.

- **Case study Strömstad-Halden cross-border emergency services:** The Nordic interstate agreement on rescue services (NORDRED) provides the regulatory framework for cross-border emergency responses in the Nordic countries. Based on this agreement Nordic countries assist each other as much as possible in the event of an accident or imminent threat. This agreement contains provisions regulating conditions related to cross-border aid payments, such as administrative tasks, removal of import and export barriers, authorisation to use rescue equipment, etc., keeping costs and liability low. To support implementation, agreements at local and regional level can supplement or specify the NORDRED framework agreement. The inter-municipal agreement between Strömstad Kommune, Sweden, and Halden Kommune, Norway, and the relevant emergency services for joint emergency response and joint rescue operations (1992, revised 2004) is one example of such a specification and details the responsibilities and tasks for the two municipalities that ensures the agreement is put into action.

3.3.1 The roles of EU policy frameworks vary

The analysis by policy area shows not only the diversity of CPS but illustrates the diversity of approaches to implement them. This has many reasons, ranging from the nature of the services to their framework and conditions. Similarly diverse are the responsibilities for service provision, both between fields of services and across countries. Finally, EU competences vary. For some policies, there are Union-wide frameworks with shared competences, whereas for others there are no substantial EU competences (e.g. civil protection, disaster management and emergency medical services). This makes it hard to formulate cross-thematic conclusions and recommendations at EU level on individual features of the CPS.

At the same time, this illustrates the potential for EU harmonisation, which may enhance durable cross-border cooperation and lead to more CPS. Still, these frameworks usually cannot overcome border-specific conditions for CPS implementation since this is frequently subject to different national and regional legal frameworks and governance models. However, evidence suggests that EU level harmonisation enhances CPS provision:

- The probably highest degree of CPS harmonisation may be regular cross-border public passenger transport by bus. For this EU legislation provides a uniform and directly applicable legal framework at least for awarding line concessions that facilitate the establishment of services.
- In the field of general healthcare, compliance with border-crossing service obligations resulting from evolving EU legislation has evidently supported CPS development. Today, this legislation is integral to national public healthcare. This does not apply however to the fields of emergency and long-term care, for which primary competence remains with Member States.
- For environmental protection and especially related to water bodies, several EU Directives provide a comprehensive regulatory framework for sustainable water resource management. This framework also covers waters at internal and external EU borders (i.e. rivers, lakes, estuaries) and often provides for cross-border action.

- CPS for citizenship, justice and public security illustrate how the Single Market and implementation of the Schengen Area induced cross-border security services. Following the abolition of internal border controls, the Prüm Convention between many Schengen members further enhanced CPS by promoting more intense cross-border police and judicial cooperation.
- Labour market and employment CPS were driven inter alia by the ESF-funded EURES programme.

In contrast to the above policy areas, CPS for education and training do not have an EU framework. They are completely subject to national and regional legislation and structures. Indeed, these CPS often require the prior establishment of a legal framework to overcome obstacles from different legal systems and / or organisational models governing education and training in neighbouring countries or regions. Thus, the lack of a harmonisation framework may contribute to CPS in this field having a particularly high geographic concentration along few borders. For these CPS experience may be a trigger in the absence of EU harmonisation.

3.3.2 Future shifts of CPS themes and focus

From the varying availability of CPS across policy areas there are several conclusions on CPS development perspectives:

- The bulk of **transport CPS** relate to trains, busses, trams and ferries rather than joint ticketing, border crossing services, infrastructure maintenance or for other transport. Not least for greener transport, accompanying services such as integrated cross-border ticketing can help make existing transport across borders more attractive. Another potential for additional transport services is other transport currently mostly domestic services, i.e. community bike sharing, car sharing & pooling, etc. Thus, for transport there is strong potential for a reorientation towards other fields of intervention. This is notwithstanding the need for more public transport services, where a recent study on cross-border public transport services identified a lack of offers despite existing demand.⁷⁰
- For the environment, natural resources and climate action, more attention should be given to CPS for **energy supply, solid waste and wastewater treatment**. There is much more room for new CPS given the high cost for infrastructure and service provision. Cross-border wastewater treatment and fresh water provision is common along only a few borders (see Section 2.2.7). This indicates the potential for similar CPS on many other borders, especially when old plants need to be replaced or upgraded. Energy supply and solid waste related CPS are even more rare and most of these have been developed only recently. This clearly indicates more CPS development potential across Europe, not least in view of the Green Deal.
- More attention should also be given to CPS related to **other SGI** such as health and permanent care. SGI “serve the fundamental goals of the EU, supporting business, social and territorial cohesion, economic and social solidarity and a better quality of life for all”.⁷¹ SGI are frequently under considerable political and economic pressure due to developments including demographic change and scarce public resources. They risk being closed or merged and becoming less accessible for some people. Due to their

⁷⁰ See e.g. the final report of the study (<https://op.europa.eu/en/publication-detail/-/publication/7c878ab9-728f-11ec-9136-01aa75ed71a1>).

⁷¹ <https://sgieurope.org/about/>

often peripheral location, this is frequently at the cost of citizens in border areas. Thus, for border regions CPS offer a way to continue providing SGI.

- Finally, CPS for **managing natural and other man-made disasters**, including climate change, deserve much more attention. It is widely agreed in the EU that vulnerability and the adverse impacts of such disasters do not stop at national borders.⁷² For the same reason and as a first step towards CPS development, a common understanding of challenges should be created, especially along borders with no or only little CPS experience.

Therefore, the above policy areas/intervention fields may be good starting points to initiate CPS in cross-border regions. At least some of these fields of intervention deserving more attention should use the **Green Deal momentum** to develop CPS:

- The importance of CPS could be highlighted and included in documents related to the Green Deal as a tool supporting implementation of Green Deal objectives. Promoting CPS as a tool may help reach targets of the Green Deal, e.g. tackling climate change from a cross-border perspective.
- Apart from including evidence of CPS in overarching documents, informing and advising stakeholders on the possibilities to team up and exploring options, different sources of European funding to set up a CPS should be encouraged. Indeed, while Interreg has proven to be very useful for CPS development (see also Section 3.4 below), it should not be considered as the sole funding resource.

3.3.3 Focus on the effects of CPS

The above ambiguity of agreements shows it is important that CPS 'materialise' in the border region in terms of 'hardware' infrastructure and the allocation of responsibilities or other requirements. Agreements often provide the legal infrastructure and are thus a precondition, but they are not necessarily sufficient for effective CPS implementation. To achieve change for border areas and citizens, the benefit for people is central. The updated inventory and Web Application include options to collect this information systematically (e.g. fields describing the potential and opportunity of a CPS and demand or evolution of use). However, due to data limitations such information is frequently lacking and may be best visible in the case studies.⁷³ These gaps, in turn contribute to the above-mentioned lack of awareness of the benefits of CPS (see Section 2.2.10).

3.4 CPS triggers and hurdles

The above analysis has indicated various factors that contribute to CPS development and which are subject to regional characteristics. In addition, there are other triggers not inherent in regional characteristics. One important aspect is financing as outlined previously. Many **Interreg projects initiate and support the development of CPS**. These can be newly and jointly set-up across the border with the explicit aim to achieve CPS provision. Also, former domestic services may be extended across the border by means of Interreg support and thereby become a CPS. Not least the frequent use of Interreg illustrates how important dedicated funding at cross-border level is, especially in view of difficulties when using

⁷² See e.g. CoR Opinion on the Cross-border dimension in disaster risk reduction, 2019 (<https://cor.europa.eu/EN/our-work/Pages/OpinionTimeline.aspx?opId=CDR-6135-2018>) or the actions and priorities of Macroregional strategies (https://ec.europa.eu/regional_policy/en/policy/cooperation/macro-regional-strategies/).

⁷³ See the report on case studies: Cross-border public services – Case studies, 2022.

domestic public resources (see Section 3.2). The lack of funding issue and without funding, good ideas may disappear or not be raised at all.

As indicated by above analysis, at EU-level Interreg has been an important but not the only trigger to setting up CPS. Other changes in the framework may have contributed as well, such as the single market and freedom of movement, or the territorial considerations of the European Spatial Development Perspective as well as the EGTC regulation. Further institutional development and settings may change the EU-wide framework for cross-border cooperation, such as the proposed European Cross-border Mechanism (ECBM) which could further trigger more CPS in the future.

However, the **value added of CPS** is not always immediately visible for decision makers. This is not only for decision makers in border areas without CPS experience but especially for those outside the immediate border area. Apart from feasibility studies, which sometimes risk focusing on obstacles and less on solutions, an estimate of the advantages in economic, social and environmental terms of a CPS can provide convincing arguments. Comparing the costs and benefits of a CPS with those of parallel domestic services may create support for pilot actions testing cross-border service provision. This could convince governments at cross-border level to finance CPS to save money and thus contribute to a more efficient use of public resources.

Apart from lacking **political support**, for many actors the biggest hurdle may be to take the **first step towards developing a CPS**. The frequent focus on obstacles and challenges and/or the lack of administrative or legal guidelines hamper actors in putting good ideas into practice. With its practical guide document, the ESPON CPS study developed a first guidance document in 2018 for CPS that aims to reduce mental barriers and encourage actors to develop CPS.⁷⁴

3.4.1 EU-level guidance may be very valuable

In the medium-term the **ESPON-REGIO CPS database validator** may become a first-hand representative and help desk for establishing a CPS. This implies that the validator takes on the role of 'central contact desk' for CPS in Europe. Under this assumption, validation will include several tasks, especially:

- technical validation of fields not accessible by data editors but inserted centrally (e.g. CPS geometries, classification of border area);
- content related validation on the plausibility of data provided by editors;
- communication with data editors for clarification, approval etc. during validation;
- help and advice on information sources, use of the Web Application, etc. to facilitate stakeholder access to more CPS information.

Fulfilling these tasks adequately will require strong **political and financial support** from EU institutions, independently of the main responsibility (e.g. European Commission, CoR or ESPON).

Complementing these tasks, further inputs will be needed to keep the inventory up to date. Despite efforts to enhance the awareness and willingness of stakeholders to provide CPS information voluntarily (see Section 3.1.1), experience shows that **targeted information collection** will be necessary. Stakeholders may also need support to collect data for the

⁷⁴ See ESPON (2019), Cross-border Public Services (CPS) – Final Report. Practical Guide for Developing Cross-border Public Services.

ESPON-REGIO CPS database. As a result, the validator may also have to enter CPS data or help in the data entering process.

Besides these tasks, there is also a need for further **technical improvements and data harmonisation** of the inventory. This requires a full review of all data sets already compiled from different sources and processes, which are not harmonised. One example are the geometries of CPS, since the selection of the type of geography is not always straightforward and unambiguous. But other fields would also benefit from harmonisation such as the descriptions of CPS, details of target groups, fields of intervention, titles of CPS, etc. Summing up, following the first development of the database in 2018 and its notable recent extension simultaneously adding new CPS and significantly widening the number of indicators, a sustainable use of the inventory would highly benefit from further harmonisation. This may need incremental improvement considering that CPS change over time and will thus also need to be regularly revisited and updated.

3.4.2 Create incentives to support CPS

Summing up several of the triggers and hurdles suggests that an **entrepreneurial spirit** is needed where actors ‘just do it’. Creating such a spirit needs parallel activities, including show-casing good examples beyond fact sheets or reports, an award (see Section 3.1.1) as well as the use of different media. A video channel featuring such good practices may be such an approach.

Experience highlights the added value and positive effects of Interreg for CPS, which may benefit from further valorisation:

- There could be an obligation for future **Interreg projects** to submit information and data to the ESPON-REGIO CPS database **after successfully establishing a CPS**. To ensure this is done systematically, Interreg authorities need a better understanding of CPS. Implementing this information provision should however not overburden Interreg projects with administrative tasks and may require simplification at other ends. Although this database is unlikely to ever be complete Interreg could become an important source for a sustainable inventory with continuous updates of new CPS and better documentation.
- CPS could be considered as specific and **separate potential outcomes and results of Interreg** projects to make this output more explicit and put the durability of cross-border cooperation even higher on the agenda of Interreg projects and programmes.⁷⁵
- The European Commission has developed dedicated **policy documents** on cross-border regions⁷⁶ encouraging new CPS. A similar reflection on the potential role of CPS could however not be identified in other policy documents central to the six Commission priorities for 2019-2024. These reflect the need for cross-border cooperation and highlight cross-border threats but do not explicitly mention CPS and their benefits and thus may at best only advocate CPS implicitly.⁷⁷ Clear mentioning of CPS in EU policy

⁷⁵ See also Special Report 14/2021 of the European Court of Auditors, which stresses the need to strengthen the cross-border identity of projects and the measurement of cross-border effects (European Court of Auditors, 2021).

⁷⁶ See European Commission, 2017: Boosting growth and cohesion in EU border regions, COM(2017) 534 final and European Commission, 2021: EU Border Regions: Living labs of European integration, COM(2021) 393 final.

⁷⁷ See https://ec.europa.eu/info/strategy/priorities-2019-2024_en and, for example, the documentation on the promotion of a European Health Union (https://ec.europa.eu/info/strategy/priorities-2019-2024/promoting-our-european-way-life/european-health-union_en), European Commission, 2020: Building a European Health Union: Reinforcing the EU's resilience for cross-border health threats, COM(2020) 724 final.

documents not explicitly and solely dedicated to cross-border regional cooperation would be a sign of stronger political support for CPS.

Last but not least, public cross-border transport may at least partially benefit from additional financial support from the Connecting Europe Facility. Based on this, a similar approach directly supporting new CPS and possibly focusing on particularly important themes such as health, labour market or education, could be considered.

3.5 Conclusions for stakeholders in charge of CPS

The following sub-sections complement the above findings and recommendations by targeting conclusions at stakeholders that are either frequently involved in CPS development or could act as amplifiers for CPS in their regions. As they are derived from above findings, this implies some repetition of recommendations though with a twist towards these stakeholders.

3.5.1 Regional and local authorities

Recommendations for regional and local authorities not only address their elected councils but their sector representatives, departments in the local administration or regional sector policy agencies.

Promote CPS in your region or municipality to target groups. For citizens their local or regional authorities and the local providers of SGI are typically the closest contact points when seeking information about public services. This emerges naturally from their service provision responsibility. Thus, they will usually also be involved in the development and provision of CPS. The availability of CPS is not always widely known by some or all of the target group. To better promote such services these authorities may make information on access to CPS more available for the target groups.

Change perspective. When public services are provided, local and regional authorities primarily focus on the territory for which they are responsible. Looking beyond their own jurisdiction is also very common when it comes to establishing domestic public services through intermunicipal or interregional cooperation across administrative borders. However, a similar approach must be more strongly advocated at many EU borders among neighbouring municipalities or regions. Not least in view of the common market and increasing harmonisation of approaches at EU level, links and connections across (internal) EU borders are becoming ever more important. These links and connections can yield considerable potential for border regions through CPS. Thus, durable cross-border links and cooperation should be as natural as in the domestic territory.

Lobby for your border-specific needs. The change in perspective may also require upward communication of border region needs to overcome existing hurdles. Apart from legislative and administrative obstacles related to different standards or processes of public service provision, the spending rules of public resources often matters. National legislations often create hurdles when activities across the border cannot be financed, i.e. when public money may not cross the border even with benefits for their own region. This may hamper either taking full advantage of potential CPS benefits or even CPS development as such. Such rules may only be reconsidered if the needs of border regions and the benefit of changing these rules is repeatedly communicated upwards in the administrative hierarchy.

Prove the benefits of CPS through piloting. As part of the communication to higher levels of administration it is crucial to prove the financial benefits of CPS compared to domestic service provision. Pilot actions testing CPS or performing cost-benefit analyses comparing a CPS with parallel domestic services on either side of the border may convince

local/regional politicians or governments at higher levels to support a CPS., especially if a CPS saves money or improves public services in the border region and thus contributes to a more efficient use of public resources. In sparsely populated border regions, establishing joint CPS may often be the only way to continue public service provision in an economically rational way (upholding a current domestic public service by a joint service and improving service quality / enlarging service provision through cost savings).

Use EU policy documents and studies. For any of these efforts, local and regional authorities are advised to actively use European documentation strongly supporting such cross-border efforts to improve living conditions in border regions. Apart from many studies (such as this one) and policy sector specific guidance, until now the most relevant and recent policy documents addressing border regions are:

- European Commission, 2017: Boosting growth and cohesion in EU border regions, COM(2017) 534 final,
- European Commission, 2021: EU Border Regions: Living labs of European integration, COM(2021) 393 final.

3.5.2 Cross-border organisations and EGTCs

By their nature cross-border organisations such as Euroregions, Eurodistricts, etc. as well as cross-thematic cross-border EGTCs bring together stakeholders from both sides of a border and consider regional needs from a cross-border perspective. With this, they are in a natural position to complement the local or regional perspective of domestic authorities in border areas, which are typically members of these organisations. Through different activities, these organisations can promote CPS and support their set-up.

Communicate information from across the EU in your region. These organisations have typically the best access to EU-wide information or information from other cross-border organisations, as they are organised in European networks such as AEBR. Members of cross-border organisations can benefit from this access if the organisations not only coordinate cross-border cooperation in their region but actively communicate what happens elsewhere with cross-border cooperation and CPS development that is interesting for their region. So far, there seem to be few cross-border organisations that very actively pursue this for the benefit of their regions and members.

Create knowledge of CPS. The term and definition of CPS is not yet widely known in contrast to domestic terminologies for public services or SGI. This refers in particular to actors in border regions that are not regularly involved in cross-border EU-policy making or lack experience with CPS. With a view to their European wide networks, cross-border institutions are in the best position to communicate CPS knowledge in two ways. Firstly, by informing about CPS in the region in general, and secondly, by communicating CPS information directly or through providers to the ESPON-REGIO CPS database.

Reach out to potential CPS providers. Cross-border organisations are also suitable to reach out to non-usual suspects for cross-border cooperation in their area. They know the local stakeholders that could implement and provide a CPS best and have a good knowledge of needs in their cross-border region. Apart from identifying opportunities for new CPS, they are also needed to promote and close information gaps on existing CPS for the wider public. This could be achieved through a cross-thematic working group on CPS within a cross-border organisation, which involves current and potential CPS providers. This has the advantage of addressing all CPS aspects in a single platform, which allows added value (e.g. synergy effects, sharing information on common legal matters or specific technicalities) and avoids knowledge being spread across different sector policy working groups.

Turn hurdles into opportunities. Many actors feel discouraged by border obstacles (e.g. language barriers) or border specificities (sparse population density, mountain ranges, border rivers) and believe it does not make sense to develop CPS under these circumstances. Practical examples show the opposite. In many border regions, overcoming a hurdle was considered as a starting point for the development of a CPS. One could argue that for any hurdle there may be a CPS that could help to lessen the hurdle's impact. However, this also requires a change in the mindset of actors in border regions: Instead of considering an obstacle as an (insurmountable) problem, it should be strategically examined to see what possibilities (and subsequently which CPS) could reduce it.

Do not reinvent the wheel. Linked to all these points is the recommendation to act as knowledge broker and mediator bringing together all stakeholders for a CPS. When local stakeholders are interested in developing a CPS but lack experience or need guidance on how to get started, cross-border organisations should use their access to EU-wide knowledge and provide insights. This can be good practices from elsewhere, contacts with experienced stakeholders and guidance documents such as the Practical Guide of the ESPON CPS study 2018⁷⁸. Usually, this process needs to involve stakeholders from different levels or sectors, possibly initiated and coordinated by cross-border organisations.

Start with low hanging fruit. Border regions that want to establish CPS for the first time or have little experience should start with services that are easy to implement, i.e. with moderate formal or legal requirements, to quickly develop examples ('just do it'). Also, more experienced regions should not strive for a 'perfect' service from day one but be realistic and identify quick and easy solutions. Later on, every CPS can be expanded and improved, as needs arise.

Among cross-border organisations, **EGTCs may play an outstanding role**. All previously mentioned recommendations are relevant for EGTCs with the same principal tasks as other cross-border organisations. However, EGTCs may contribute even more to CPS due to their legal set-up. In addition to activities to promote and initiate CPS, they may:

- implement **pilot phases of CPS**. Especially if there is no responsible authority with the capacity to implement a CPS, due to their membership structure EGTCs may be in a position to fill such gaps at least for testing or the preliminary set-up of a CPS.
- be **awarded responsibility for continuously providing CPS** as part of their cross-border cooperation tasks, if providing the service is a responsibility of their members. Here, the task description and membership structure of a CPS is crucial.
- be **founded to provide a specific CPS** by explicitly defining CPS tasks and building on a membership structure adequate for the CPS. This also implies that all organisational elements of the EGTC are targeted towards the CPS, e.g. related to the type and extent of the service, liability rules, costs and benefits distribution and the use of tariffs or other income.⁷⁹

3.5.3 Interreg authorities

The findings illustrate that Interreg has been a trigger for CPS. Keeping this in mind, Interreg authorities can further contribute to promoting more and better CPS. Above all, this refers to Managing Authorities and Joint Secretariats but also to contact points and other intermediaries involved in the delivery of Interreg programmes. The recommendations address cross-border cooperation programmes including IPA-CBC programmes.

⁷⁸ Available at: <https://www.espon.eu/sites/default/files/attachments/ESPON%20CPS%2002%20Practical%20guide.pdf>

⁷⁹ For further information see Zillmer, S., Lüer, C., Krzymuski, M. (2020)

Experience shows, however, that transnational cooperation programmes can also contribute to CPS development when projects work on cross-border issues in border regions in the programme territory.

Strengthen the durability of projects. Interreg programmes typically do not provide a specific or ad-hoc budget for CPS development but apply the logic of projects. Nevertheless, the programmes should deliver durable results. CPS are one way to achieve these. They could be considered as specific and separate potential outcomes and results of Interreg projects. This helps to promote CPS and contribute more explicitly to the sustainability of Interreg projects and programmes.

Reach out to unusual suspects. Many Interreg programmes wish to reach out to new beneficiaries for who cross-border cooperation is not well known but may be beneficial. Among these could be potential providers of CPS. Indeed, when seeking durable results from Interreg projects, enhancing this outreach is promising. This may require targeted search and communication with the relevant cross-border institutions.

Offer guidance on how to provide CPS information. As noted above, documentation of CPS can improve. Being a central point for many stakeholders participating in cross-border cooperation, Interreg authorities could help improve documentation. This may refer to the benefits of a CPS or to their documentation. [Keep.eu](https://www.keep.eu) is established for projects and among Interreg authorities. The future CPS Web Application (in Summer 2022 in the final stages of development) will be the means to document CPS and should also be promoted by Interreg programmes, e.g. by encouraging projects to register CPS established as the result of a project or update information on existing CPS which the project helped to improve.

Include CPS in socio-economic programme analyses. Interreg programmes perform socio-economic analyses regularly, at least when preparing a new programme. These differ strongly between programmes and vary in length and depth. Including information about CPS systematically in these analyses, especially of cross-border Interreg programmes, could be very valuable. This refers to existing CPS known by programme authorities and the potential for CPS. The first may draw attention to what has been achieved in the cross-border territory and can also be a way to make programme achievements better known. The second may draw attention to future activities and could provide inspiration for potential beneficiaries.

Design future Interreg programmes strategically with a view to CPS development. The in-depth analysis of many CPS has revealed that Interreg projects played a major role in their development. Often, Interreg projects were used to develop the infrastructure, hardware or technology needed for a service, or they implemented pilots (pilot services) to test a CPS. This is where Interreg can make an important contribution to the development of CPS. Future Interreg programmes should be designed with a strategic view on how CPS could be established in the long-run with short- and medium-term actions to be implemented in an Interreg project.

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