

ESPON



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ESPON 2030 – COOPERATION PROGRAMME //

Stakeholders dialogue

Results of the public consultation
on 4 Thematic Action Plans which took place in
January and February 2023

Consultation Report // March 2023

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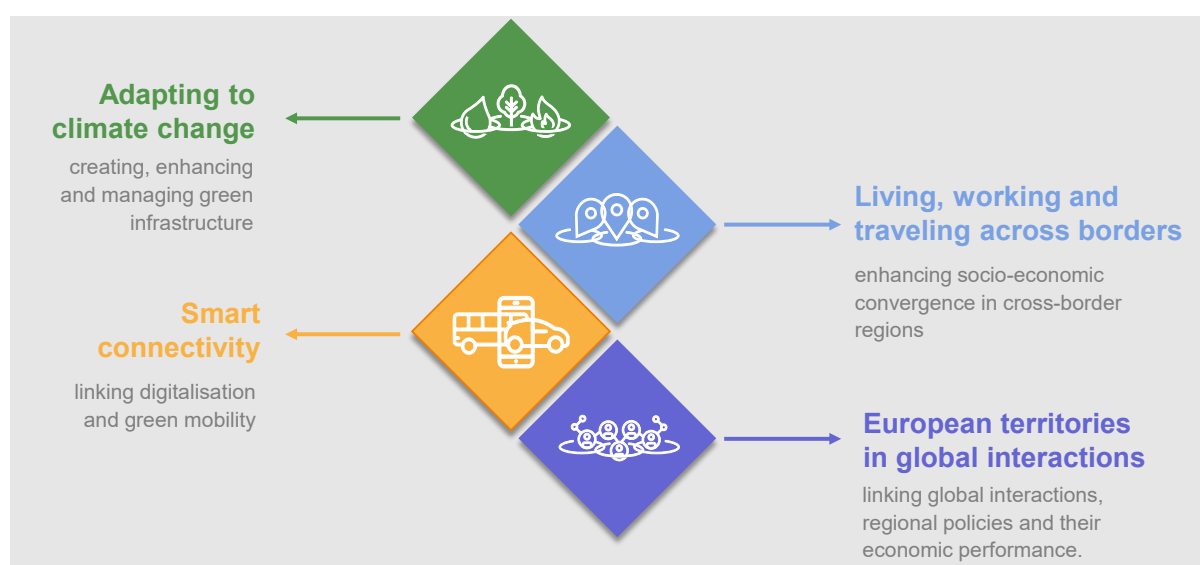
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1. Introduction

1.1 Background

In accordance with the collaborative and participative requirements set out in the Operation Specification for the ESPON 2030 programme, the ESPON EGTC initiated an open public consultation to scope additional four Thematic Action Plans (TAPs) as follows:

- TAP 5: Adaptation to the impacts of Climate Change
- TAP 6: Living, working and travelling across borders
- TAP 7: Smart connectivity
- TAP 8: European territories in global interactions

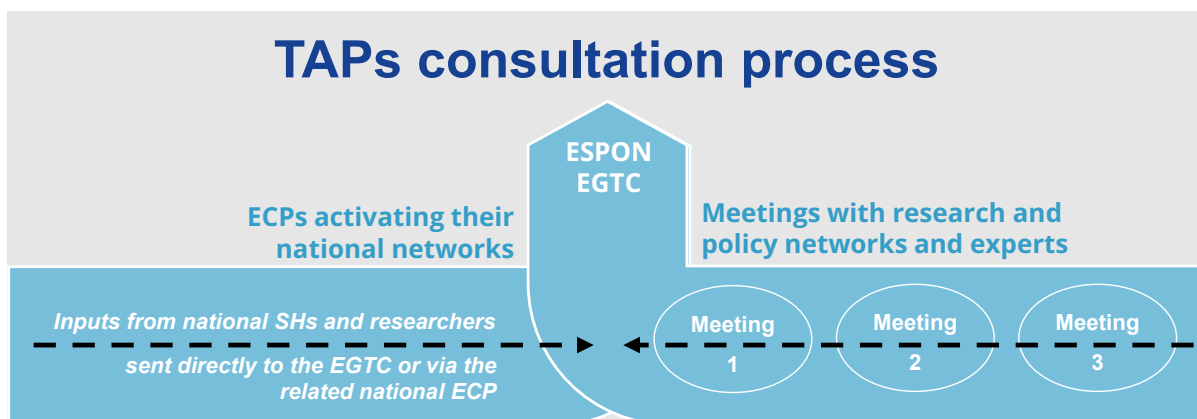


The **objectives** of the consultation process were, as follows:

- To raise the awareness of programme stakeholders about the specific thematic workstreams ESPON will be opening to support policymaking;
- To engage in an exchange with policymakers at all levels on the general policy needs that could be addressed and in which way;
- To engage in an exchange with scientists on the state-of-the-art of the existing territorial research in the related fields of each TAP and to collect a wide range of proposals for programme research activities to ensure the relevance and added value of ESPON evidence production.

The purpose of this short report is to describe the outcome of the consultation process in respect of each TAP, including:

- The number and type of organisations involved in the consultation process, and the country of origin of each of the submissions/proposals received.
- Main research challenges trends for Europe identified during the consultation process.
- Future ideas for research themes identified during the consultation process.



The public consultation process kicked off on 20 January 2023 with the publication of a dedicated [webpage](#) on the ESPON website. Stakeholders had an opportunity to provide online feedback until the 28 February 2023 and all feedback received was catalogued and taken into account. Now that the consultation process has been completed, a proposal for each of the four Thematic Action Plans will be submitted for decision by the ESPON 2030 Monitoring Committee in June 2023. In case these four new TAPs are approved, first research projects may be initiated during the second semester 2023.

1.2 Consultation Material

At the outset of the consultation process, the ESPON EGTC prepared a range of discussion materials to inform consultees on the state of play in respect of each of the four TAPs as well as the aims, expected outcomes and timeframe of the consultation process, including the means by which stakeholders could get involved in the process. All of the consultation material was uploaded to a dedicated TAPs consultation page on the [ESPON website](#) as an online reference library, including advice as to how to get involved.

1.3 Dissemination

Various dissemination channels were used to advertise the consultation process amongst as wide a range of stakeholders as possible. Social media were used to address general audience and potential interested contributors outside our community. The newsletter addressed 3.500 subscribers, but more importantly direct mailing focused to scientific organisations and pan-European associations, inviting them and their members to concretely contribute to the TAPs relevant to their work and interest. In total more than 20 organisations were approached. The aspiration was very much to attract people that have not yet been involved with ESPON but could be future stakeholders and users.

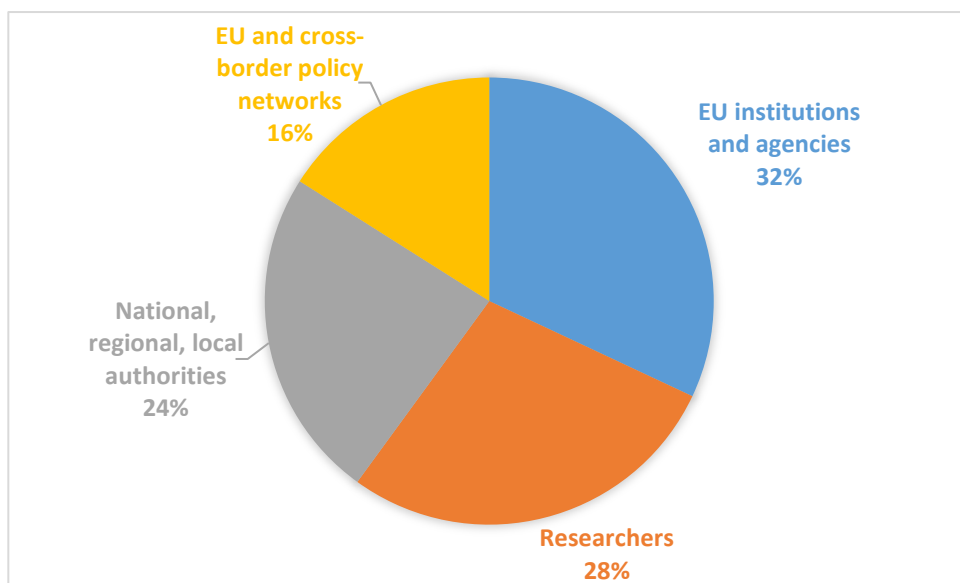
The ESPON Monitoring Committee (MC) members and the ESPON Contact Points (ECPs) were expected to be also part of disseminating and promoting the open consultation process by using their national communication networks. They were requested to approach and activate scientists and policy stakeholders within their countries beyond the usual ESPON community and ask them to help shape the future of European research on territorial development by sending comments or proposing relevant findings.

1.4 Online Feedback

A dedicated email account had been created (consultation@espon.eu) to collect direct reactions.

All over the period January – February 2023, the ESPON EGTC gathered feedback received via emails and meetings and all comments were collated and recorded. A total of ca. **158 ideas** for future research activities were received from **50** different universities, research institutes, public authorities at international, national and regional/local levels, European Institutions and policy and cross-border networks. An overview of all the feedback received is collated in **Annex 1** of this report.

Figure *Origin of the proposals received*



1.5 Meetings

Meetings were organised by the ESPON EGTC with the following institutions, policy and scientific networks:

On 7 February 2023, a meeting took place with multiple members of the Council of European Municipalities and Regions (CEMR). Representatives of CEMR as well as of regional and local member associations from at least 11 different countries participated in the meeting. Policy needs in relation to better inform regional, cross-border and local policy processes were collected.

On 21 February 2023, a meeting took place with representatives of the European Committee of the Regions (CoR). Policy needs were collected as well as ideas on how to direct some future ESPON research activities in order to support regions in their efforts to identify opportunities and implement policies.

On 21 February 2023, a focus group meeting took place with the cross-border networks AEBR, BBSR, CESC and MOT. Some MC and ECP members attended this meeting as well. During this meeting the policy needs and research priorities identified by the networks were discussed.

On 22 February 2023, a meeting took place with representatives of the EEA, ECB and DG RTD (Mission on adaptation to climate change). During this meeting the adaptation to climate change TAP was clarified and discussed. Afterwards, all attending institutions submitted their ideas and suggestions by email.

On 27 and 28 February 2023, two meetings were organised with representatives of ISOCARP (International Society of City and Regional Planners) and RSA (Regional Studies Association). During these meetings potential research and policy gaps were discussed and in addition, possible areas of future cooperation were identified.

On 6, 10, 14, 15, 20 and 24 February 2023, six bilateral meetings were organised with representatives of the following institutions: managing authority of the IPA programmes BG-TR, BG-RS and BG-MK, Territorial Development Unit of JRC, TESIM ENI CBC, input-output analysis team of the Innovation Policies and Economic Impact Unit of JRC, EGTC platform representative of CoR together with Euroinsitute Kehl-Strasbourg and finally United Nations ITU. These meetings aimed at:

- Collecting the various policy needs to better inform regional, cross-border and local policy processes,
- Collecting and discussing their priorities in terms of research activities for the next 2-3 years (territorial studies, pan-European comparisons, data collection, etc.).

1.6 National efforts

During this open consultation process, the ECPs had a key role to play in activating national research and policy networks in order to feed the reflection on the strategic direction of the future TAPs as well as future possible new research activities. The purpose of the larger involvement of the ECPs was to promote the consultation opportunity in their national communities of stakeholders and researchers, communities that the EGTC is not able to reach. They were asked to consider setting-up a more coordinated approach, e.g., via national information sessions, and gather the input received in a consolidated feedback from their country.

The ESPON EGTC had organised two meetings to explain the ECPs, and interested MC members, what would be expected from them and, as well, to present the 4 new themes in more detail. The two meetings took place on 17 and 19 January 2023 and ECP representatives of in total 25 countries participated.

In general, actions undertaken by ECPs and MCs to raise awareness within their countries existed of disseminating the open consultation via publishing press releases, sending the information via their newsletter, mailing lists and social media, direct contact and mailing to national contacts of academics and research centres, translating the TAP input papers before sharing them within their networks, and also by organising specific events such as info days.

1.7 Advisory Panels

The ESPON Monitoring Committee, in its meeting of 5-6 December 2022, decided to set up Advisory Panels for all four TAPs to support the ESPON EGTC in developing draft descriptions of the four prospective TAPs on the basis of the thematic input papers that were published for the open consultation process. Participation of MC members in the Advisory Panels is established on a voluntary basis. As a result, 3 Advisory Panels are now set up (Adaptation to the Impacts of Climate Change; Living, working and travelling across borders; Smart connectivity) and meet on a monthly basis.

2. Thematic Action Plans

This section of the report provides an overview of the outcome of the consultation process in respect of each of the TAPs including a summary of the feedback received, the results of the stakeholder consultation, ideas for future research topics, and emerging proposals for future research projects.

2.1 Nature-Based Adaptation to Climate Change (new proposed title)

General overview

Type of organisations involved in the consultation process:

- Members states (MC members)
- European institutions (EEB, EIB, ECB, DG-ENVE, DG-RTD etc)
- Private organisations (e.g. research centre, universities, etc.)

➞ More than 20 ideas/proposals received

Results of Stakeholder Consultation

This theme generated a very high degree of interest amongst stakeholders. Originally, the TAP was provisionally entitled as the more generic: 'Adaptation to Climate Change'. However, as a result of the stakeholder consultation process, the thematic **focus became more centred on Nature based Solutions (NbS)** and hence the new title: 'Nature-Based Adaptation to Climate Change'.

This change in emphasis from a broader focus on general climate adaptation was due to two main factors; Firstly, ESPON has already launched a TAP on 'Climate Neutral Territories' (CNT) and 'Places Resilient to Crisis' (PRC), both of which intersect with this theme. The challenge was to develop a specific niche which did not overlap with other TAPs. **Nature-Based Solutions, by their very nature, have a very strong territorial dimension with large land take**; including intersection and potential conflict with other sectoral EU policies (e.g. nature, agriculture etc); necessitating an enhanced **cross-sectoral and integrated territorial governance perspective**. The CNT TAP will address the energy/climate intersection while PRC will address wider macrocrisis, including digital, natural (earthquakes, volcanoes etc) and manmade disasters etc. It is acknowledged, however, that some consultees expressed reservations about this narrowing of thematic focus of the TAP.

Secondly, once this focus was suggested as the potential direction for the TAP, it generated a very significant response from very high-level organisations such as the EEA, DG Research & Innovation Climate and Planetary Boundaries (RTD.B3), EIB, Committee of the Regions-ENVE etc. **Arising from this interest it is clear that there is very significant ongoing work on this theme by others** including, for example, EEA/Climate-ADAPT, JRC/Risk Data Hub, Copernicus Climate Change Service (C3S), Destination Earth, etc. HORIZON Europe has also recently launched a call for a €40 million research project on 'Urban greening and re-naturing for urban regeneration, resilience and climate neutrality'. Furthermore, the European Commission Mission on Adaptation to Climate Change also has a goal to support at least 150 regions and local authorities to become climate resilient by 2030. At the moment there are 300 local and regional authorities that are part of the mission and constitute an existing pan-European community of practice.

Despite the significant activity on this topic, there was a general perception amongst consultees that **ESPON could fulfil a specific role**. Specifically, [key barriers](#) that European regions face in adapting to climate change include the **absence of mainstreaming** of adaptation across policies and at all levels of governance; the lack of **administrative capacity** to implement adaptation measures; **inability to access climate finance** for adaptation; and **knowledge gaps** amongst national, regional and local policy makers.

Thus while there is a lot of data and information available at European and national scale, this is **not filtering down to the local and regional authorities who are on the frontline of adaptation efforts**. Given ESPON's unique profile, this was considered a key task that could be fulfilled through this TAP. The European Parliament Research Service and the European Commission are currently undertaking further surveys on 'The Green New Deal' and barriers to adaptation, and the results of these surveys could further inform the TAP once the analysis has been completed. Some consultees suggested that the TAP should also **focus on regions not only being directly affected by climate change, but also indirectly exposed** as this is a key issue for European cohesion and solidarity e.g. migration from areas at risk areas.

However, despite identifying barriers as being crucial to climate adaptation efforts, some consultees also considered that it is equally important to **highlight the solutions being implemented** to overcome these barriers. By focusing on "what is being done" successful strategies and best practices can be identified that can be adopted by other regions. Again, this is something that ESPON is uniquely placed to deliver.

Ideas for Future Research Topics

The ideas and proposal received during the consultation process have been analysed and grouped, leading to the identification of the following research topics:

- **Assessment and monitoring of climate change vulnerability and risks** in relation to future climate scenarios and a local and regional scale, including assessment of critical infrastructure from a multi-threat perspective.
- **Impact modelling** (e.g. floods, landslides, heat waves etc.) with a focus on different sectors (e.g. critical infrastructure, energy, agriculture, forestry, tourism etc.) and on human health in different types of territories.
- Assessment and **monitoring of the effectiveness of NbS adaptation** measures, including Societal Readiness Level (SRL) of adaptation options. At present, there is a lack of reliable indicators to measure the level of adaptation of specific territories and whether adaptation responses are effective.
- **Better quantification** of benefits of NBS and **better communication** to enhance NbS adaptation take-up. This would help overcome main barriers for implementation, including the perception that conventional alternatives are less costly and require only short-term planning and implementation, when NBS requires long-term efforts with less immediate impacts.
- **Climate-proofing decarbonisation strategies** and their effectiveness under climate stress (e.g., renewable energy resource availability scenarios etc.) and **emissions-proofing of adaptation strategies**, i.e. maladaptation which implies an increase in demand for energy or resources.
- Update and expansion of the **ESPON TITAN project** on the distribution and territorial patterns of the impacts of climate hazards and test the typologies developed.
- **Transfer of best-practices and success stories**, specifically through engagement with other projects and networks e.g. [Oppla Network](#), HORIZON/LIFE projects and other Interreg initiatives etc
- **Downscaling of data and indicators** available at European/national levels to the local and regional level.
- Better knowledge of the effectiveness of existing adaptation measures **for the purposes of climate financing**, including via EU funding streams, EIB and private financing, and the integrating of adaptation into macro-fiscal policy (e.g. insurance protection gap etc)
- Contribute to capacity building on **biodiversity monitoring for climate adaptation** e.g. via the concept of ecosystem accounts and how they can be better used to support capacity development or decision-making, e.g. via the Commission's adopted proposal for a [regulation](#) on ecosystem accounting etc.

Emerging Proposals for Research Projects

Considering the scale of ongoing research on this topic currently being undertaken by other players it is considered that **this TAP could usefully take stock and identify a specific niche which could best maximise its impact.**

At this stage, among the abovementioned topics, the following ones could be developed into European Research Projects (ERP).

One of the key challenges identified was that of **combining all of the different funding EU streams available to support the implementation of NbS for climate adaptation on the ground.** The latest [State of Finance for Nature](#) report, for example, states that if we want to reach our climate, biodiversity and land degradation goals, we need to double investments in NbS by 2025. And while private investment needs to rise significantly (currently <17%), **public investment is still very much at the forefront of financing to make our cities, regions and territories more adaptive.** This is an identified key barrier to implementation that could be addressed through a first ERP i.e. by providing **research, data and analyses** which could help streamline access to funding across various EU programmes and funding streams through the development of **integrated approaches from a financial, economic and policy design and implementation perspective** i.e. an integrated territorial approach. One way to do so, would be to **ensure that this ERP project is well connected to the European Commission's adaptation mission**, described above, and other projects and stakeholder networks e.g. [Oppla Network](#) etc.

A second ERP could aim at further assessing and monitoring climate change vulnerability, risks related to natural disasters and territorial cooperation to manage those risks. This would be implemented in relation to future climate scenarios at local and regional scale, including assessment of critical infrastructure from a multi-threat perspective.

In parallel with these ERPs, it is considered that; following more detailed engagement with key actors in this field; **an appropriate strategy would be to progress this TAP with an open call for proposals from policy stakeholders at local and regional scale addressing key barriers for the rollout of NbS for climate adaptation** e.g. Targeted Analysis Projects, On-Demand Services etc.

2.2 Living, working and travelling across borders

General overview

Type of organisations involved in the consultation process:

- Public authorities / members states (e.g. ministries, national or regional public authorities or agencies, etc.)
- European institutions
- Cross border networks (e.g. AEBR, BBSR, CESCO, MOT, etc.)
- Private organisations (e.g. research centre, universities, etc.)

➞ More than 60 ideas/proposals received

Results of Stakeholder Consultation

Cross-border has been the focus of many projects and research studies conducted, with a new high, in the past 3 years, as the Brexit, the Covid-19 pandemic and the war in Ukraine have brought new realities and changed many of the processes and interactions, making the territories less permeable. Still, during the public consultation it was revealed that there is a **strong demand** for continuing the work on these specific territories, **including further understanding and mapping out both specific obstacles and bottlenecks, as well as identifying opportunities for future cooperation.**

Key aspects were mentioned in this context, revealing that **integration across border regions is still high on the agenda and that the cohesion policy plays a determining role** in creating a more holistic project of "ever closer Union". Since 2015, obstacles have been removed in constructing a common understanding around how to deliver better public policies in cross-border regions, and where the new developments highlighted the need to provide 'a more complex toolbox in order to achieve a better integration: this could be composed of economic tools (as the Single Market or dedicated funding/INTERREG), institutional tools (such as the EGTCs); or functional tools'.

Another popular topic which emerged during the consultation is, not surprisingly, linked to **registering the citizen' perception and behaviour**, as the past 3 years brought many disruptions for the people living and working in cross-border regions. Developing more qualitative analyses and datasets will contribute to deepening the understanding on the nature of cross-border interactions, looking at the daily functioning and exchanges and at how flows are directed, better revealing the interdependencies. 'The analysis of the spatial behaviour of the border citizens could be linked to understanding the way people perceive their territories, the otherness or the differences, connecting the integration processes and socio-psychological phenomena'.

The impact of Brexit and Covid-19 on cross-border regions was seen as important in determining actual and future **labour flows and commuting**. Most importantly, the introduction of new national regulations (e.g. new provisions for teleworking) it meant changing **regular commuting patterns**, impacting the migration flows, overlapping and intersecting specific problems in recognising competencies, qualifications and tax regulation, for instance. Understanding these aspects are of great importance as these are defining the socio-economic conditions of border regions, defining the attractiveness factors, as the **'productive economy' is on one side of the border, and the 'residential economy' is on the other side.**

All the issues raised are essentially linked to the governance of functional areas as well as to providing public general services, highly sensitive issues for these territories. Accordingly, there is a need to start **thinking differently about how these functional areas can efficiently operate as well as designing the future public policies, ensuring better and effective vertical and horizontal coordination.** Grasping the real-life conditions of people living, working and travelling in cross-border regions, better tailoring public policies and deploying investment, entails, beyond a place-based approach, bridging the gaps between local and European level, collecting and replicating good practices, facilitating even more the exchanges between practitioners, policymakers and researchers.

The one common denominator of the inputs collected is linked to providing **real and adequate datasets that illustrate the realities of cross-border regions.** On this, ESPON has been indicated as one important potential resource and actor (alongside Eurostat or national statistical offices), that could really help and

facilitate a better access to **integrated, harmonised datasets at the right granularity**, providing new methodologies or datasets from innovative/ unconventional sources. **Building evidence of cross-border interaction to inform decision-making** is one of the European Commission's priorities and further steps are still required to consolidate some pan-European approaches, as the limitations of current practices have been exposed, especially during the Covid-19 pandemic, when the processes, interactions or impacts of the different measures on cross-border mobility and flows remained uncaptured, as no monitoring and observation system was set in place.

Ideas for Future Research Topics

The analysis of the inputs, ideas and proposals received during the consultation process, has led to the following grouping, reinforcing the comprehensive approach of this TAP, and enabling a structured, integrated perspective. These proposals are submitted for the consideration of the ESPON Monitoring Committee as potential activities:

- **Collecting and registering people's perception on their regions:** what are the expectations and needs of people living and working regarding cross-border policies, understanding the drivers in citizens' spatial behaviour, describe cross-border territories from a participatory process, etc.
- As far as evaluating the status of **the cross-border integration**, the proposals revolved around considering all aspects (socio-economic, functional, political, cognitive, etc.) in this process, over a longer period of time; this approach goes hand-in-hand with the more in depth analysis of the **cross-border obstacles and bottlenecks**, alongside identifying the drivers that **enable cross-border cooperation**. This can be extended, as some proposals suggested dedicated research concerning the EU enlargement process, on how to improve knowledge and understanding the socio-economic interactions that take place on the external borders.
- In terms of the impact of **public policies and investments in ensuring the access and provision to public services and of improved conditions for the people living and working in cross-border regions**, it was suggested that further research is needed to better comprehend the dynamics of employment and labour markets, the impact of brain drain and migration of skilled workforce on some regions, or identifying the problems in recognising competencies, qualifications or tax regulation and the solutions to these. The commuting workforce is key determinant in the regional development path of these regions and in creating the socio-economic conditions, and is linked fundamentally to other important aspects like **housing, education or healthcare**.
- **Observing and recording the different flows** that are occurring between these regions came up as well, as these are shaping the cross-border identity and contribute to the feeling of belonging, contributing to the overall cross-border integration. Thus, some suggestions were aimed at recording **commuting, transport or tourism flows**, for example.
- **Governance** was an important recurring topic, as most of the participants indicated the fact that there are still some theoretical and evidence gaps in regards to emerging **functional areas in cross-border regions**; thus, suggestions turned to the need to create commonly approved definitions on **different governance and political frameworks**, promoting partnerships and effectively addressing challenges and opportunities.
- **The need to provide common methodologies for collecting the relevant datasets for cross-border territories and creating a depositary (and regularly updating it)** was revealed as an overarching theme of discussion, alongside **providing the support for the appropriate knowledge transfer, both horizontally and vertically in the policymaking processes and practices:** between European / national / regional / local levels, between researches and policymakers, as well as from a bottom – up perspective - from the citizens towards decision makers (national or European ones).

Emerging Proposals for Research Projects

One of the challenges for this TAP will be to bridge the gap between the (vast, diverse and specific) local knowledge, that is present on the ground in every border region, and the European level (that strives for integration and harmonisation), and to **provide solid, reliable evidence, data and methodologies** on the different types of cross-border regions, feeding the **real needs of policymakers**. This means that the TAP will be approached from a very pragmatic perspective, taking into consideration overarching territorial policy needs and involving constantly the relevant stakeholders in this process.

All the proposals received during the consultation process are fully relevant, welcomed and will feed the discussion around framing and shaping this specific TAP, covering all cross-border regions (internal and external). And based on the inputs received, the following topics are provisionally proposed to be further developed into research projects:

- Propose methodological approaches to a systematic data collection and processing, relevant for cross-border regions, bridging that gap between what is needed and is produced and made available. Creating up-to-date depositaries.
- Analysing and mapping out recurring and persisting obstacles or bottlenecks, as well as identifying untapped opportunities for cooperation in cross-border regions.
- Detangling the notion of functional areas in the context of cross-border regions, going beyond administrative geographies and proposing solutions for establishing appropriate functional governance mechanisms.
- Understanding and recording / observing cross-border flows and interaction, as a tool to inform policymaking.
- Knowledge transfer on existing best practices and bridging the gap on specific evidence production for the cross-border areas that are less covered / address specific cross-border territories.
- Analysing cross border mobility / investments in infrastructure and their impact.
- Analysing environmental issues – and how to efficiently manage these territories in the cross-border context, connecting them to the EU green strategy and objectives.
- Best practices / solutions and further territorial enhanced information for standard healthcare provision in cross-border regions.
- Evaluate cross-border integration, beyond the 7 years cycles of funding.
- Prospective approach for the future of cross-border regions/ presenting alternative development scenarios.

2.3 Smart connectivity

General Overview

Type of organisations involved in the consultation process:

- Public authorities / members states (e.g. ministries, national or regional/local public authorities or agencies, etc.)
- European institutions
- Private organisations (e.g. research centre, universities, etc.)
- United Nation's International Telecommunication Union

➡ More than 50 ideas/proposals received

Results of Stakeholder Consultation

The TAP “Smart connectivity” covers two broad themes of digital transition and transport mobility and accessibility. During the public consultation majority of proposals concentrated on digital transition efforts in general and the ways digital solutions could be used to improve mobility and transport infrastructure (for instance, through electrification, smart road technology). However, despite the focus on digital transition and on exploring digital solutions, there still was a request to properly address physical mobility and accessibility in research, meaning it is relevant to research on indicators of physical mobility and have in place monitoring frameworks to properly understand patterns from a territorial perspective, especially focusing on places which depend on various ways of transport like coastal areas where functioning of maritime transport is essential. In addition, the focus in terms of transport mobility shall be on non-urban areas and areas which lack access to high speed networks. Overall, the message which clearly manifested itself- digitalization should be seen as complementary to rather than as a replacement of physical interactions.

During the open consultation digitalization was portrayed as a double-edged sword. On the one hand, it has a potential to address physical accessibility gaps and divides across Europe and improve people's quality of life at all territorial levels, given the fact that internet access and digital solutions can be delivered in any place. However, one must be also conscious of the socioeconomic impacts of digitalization, it was repeatedly mentioned that in some cases digitalization can worsen already obvious territorial divides between more developed regions and less connected places, for instance, increasing the gap between the “digital forerunners” and lagging behind ones which have lower capabilities to make the most of digitalisation. The potential negative impacts of digitalization can have far reaching consequences, for instance emigration of digitally skilled young people, inability to attract business due to broadband access issues, etc. Thus, in theory digital transition efforts are meant to improve things and work towards improving digital cohesion, but in practice in many cases digital divides can be an unwanted side-effect.

Unsurprisingly, data protection and securing privacy was brought up concerning the digitalization efforts. However, perhaps a novel aspect was a stress on security aspect of digitalization. In a situation when more and more transport (and any for that matter) infrastructure rely on digital solutions, it is crucial to ensure that these solutions and the whole digital ecosystem can also ensure resilience in times of major disruption. Thus it would be paramount to look at the overall state of digital infrastructure, digital skills of the personnel, cyber-security measures implemented etc., especially at territorial level where less digitally developed territories are more vulnerable. One remedy from research perspective would be to work on a composite indicator(s) which can capture readiness of territories to sustain major interruptions as a consequence to cyber attacks, technical glitches, human errors, etc,

The lack of digital skills greatly contribute to the digital divides and less developed regions suffer immensely. Interestingly, this issue was also framed in a wider context, by some pointing out that there is also a lack of digital knowledge and even digital education (in schools, work places, etc).

Thus, while digital skills are important for using the internet efficiently and using/developing digital solutions, the fundamental basis to start with is digital knowledge and education. In this context it must be investigated how to properly organize financial resources, infrastructure planning in order for all places to be able to benefit from the digital technologies.

Another element which was many times singled out as a pre-condition for digital transition was cooperation among different levels of government. Firstly, to ensure that all voices are heard and all contexts understood properly, given the fact that one-fits-all digital solutions are impossible due to territorial diversity. Secondly, to ensure that digital transition does not become an overwhelming burden, for instance, in this sense cooperation between multiple territories might help using the same digital solutions, share the burden of data management and costs of digital infrastructure, etc.

The keyword of this TAP is “smart”, thus in terms of mobility two clear research work streams emerged, firstly, digitalization of transport infrastructure, which in practice means, for instance, research on how to achieve smart roads and railways. Secondly, digital solutions as means to enhance mobility and accessibility, for instance, through demand responsive transport, shared mobility. Here, a lot of emphasis was on ways digital solutions could help to organize public transport services in order to ensure accessibility of basic services like education, employment, healthcare, and other services. Although this framing is logical, it was interesting that “smart” was still understood as a metaphor, meaning that all solutions do not need to be necessarily digital to be “smart”. For instance, sustainable mobility is a good example, where creating safe, convenient, and accessible infrastructure for cycling and walking may be regarded as essential aspect of promoting smart connectivity. Although inherently all the digital solutions mentioned capture in some ways the green transition aspect, it was surprising that there was no explicit emphasis on digital green solutions and twin transition.

From the onset the inherent dilemma for this TAP is to be relevant in a wider research and policy discourse, given the increased attention and many existing efforts from other organizations. In this context, the open consultation overwhelmingly stated that the focus of this TAP lies in non-urban areas. In addition, there is a danger that research in this TAP may become territorially abstract in a sense that any policy recommendations are not territorially and subject targeted, thus it would be important to maintain the local problematic all through. Likewise, an important message emerged that the way to overcome physical disconnectedness is not solely through digital transition, but through also paying a proper attention to physical interactions. Surprisingly, there was no real reflection on the use of foresight studies as a means to develop strategies and solutions.

Ideas for Future Research Topics

The ideas and proposals received during the consultation process have been analysed and grouped, leading to the identification of the following research topics:

- Digital territorial divides are a reality and that has been demonstrated through existing research. However, more can be done in understanding the types of territories affected, by providing classification and typologies of territories, analysing their characteristics and explaining the main reasons behind digital disconnectedness. Such analysis has a potential to facilitate the debate on digital cohesion and provide relevant policy recommendations at EU, (macro)regional level to bridge the gaps. E.g. for programming CEF and other relevant EU funds and instruments for the next EU programming period.
- Security as a backbone of the functioning of transport and digital infrastructure. The essential question here is what makes territories digitally resilient and what role preparedness plays, are less developed territories more at risk when it comes to digital disruptions? This kind of work stream can also address security from the perspective of using digital solutions in order to improve safety, especially of transport infrastructure.
- What are the main obstacles hindering the uptake of digital solutions at territorial level? One can think of obstacles related to legislation, digital skills and digital knowledge deficit, lack of digital infrastructure, funding availability, data privacy issues etc. This type of analysis could typologize digital solutions (focusing on improving e-public services and e-government) and look at the most relevant obstacles per types of territories which stand in the way. What would be the most relevant way to overcome the identified obstacles, can territorial cooperation be a remedy?

- The socio-economic impact of the digital transition and spread of smart technologies. By default one may assume that digital transition is beneficial to any territory. However, the digital boost fuelled by the Covid-19 pandemic has not made all equal. What are the side effects of digitalization? Which territories and how have been undermined by digital transition and what the policy recommendations are to avoid an negative effects.
- Monitoring physical accessibility and connectivity trends across different types of territories. This type of research could explore current physical mobility patterns and also provide data on the current transport and physical connectivity infrastructure by showcasing spatial transport divides. How these could be effectively bridged and responded through smart mobility solutions and infrastructure investments?
- Some of the smart mobility solutions under demand responsive transport, shared assets and shared mobility are well researched and known, even when it comes to rural areas (for instance, through smart villages initiative). How to make them work in specific territorial contexts, what are the main preconditions? This type of research activity could typologize smart and sustainable transport solutions and look into factors which facilitate the uptake in different territorial contexts.

Emerging Proposals for Research Projects

Considering the current developments and fast moving pace of events, and as a result of the discussions held in the framework of the open consultation process, the following topics are proposed to be further developed into European research projects:

- Identify territorial digital divides and provide policy recommendations on how to improve digital cohesion. Part of this exercise would be to typologize isolated and more remote areas, considering the main aspects of digitalization, like broadband access, digital skills, e-government solutions, remote working and public services.
- Carry out comparative analysis to assess and visualize the level of digital maturity of territories and public administrations at local level. This means further exploring LORDI indicators and finding realistic assesement approach for non-urban areas.
- Develop indicators and analysis depicting digital preparedness and digital resilience at territorial level showcasing which territories are digitally vulnerable and what can be done to avoid any potential security disasters.
- Analyse socio-economic impact of digitalization at territorial level showcasing who wins and who loses from digitalization and what is the way forward for all territories in order not to have a zero-sum game.
- Identify and analyse spatial divides in physical connectivity / transport infrastructure disruptions in the European space and how these could be effectively addressed via smart and sustainable mobility solutions.

2.4 European territories in global interactions

General Overview

Type of organisations involved in the consultation process:

- National and regional public authorities including Managing Authorities of IPA programmes
- European Commission and the Joint Research Centre
- TESIM and ISOCARP
- Research organisations

➡ 20 ideas/proposals received

Results of Stakeholder Consultation

The consultation resonated with different stakeholders from policy and research alike. The lower number of expressed needs and ideas for research relative to the other TAPs subject to consultations shall not be misinterpreted as a lower degree of policy and research interest. The TAP pursues an evidence stock that is not only new for the ESPON community but for regional studies and the Cohesion Policy in general. Given the geopolitical paradigm shifts acknowledged by respondents, the TAP enters an unexplored policy domain, considering the global economic shocks and their long-term impact on regional competitiveness. The consultations reaffirm the necessity and topicality of the TAP. Moreover, the scientific committee of ISOCARP declares interest in possible cooperation between this TAP and Chinese efforts to build a Chinese ESPON (C-SPON).

All stakeholders providing feedback exhibit a very good understanding of the TAP input paper and embrace the proposed dimensions, i.e. economic relations of European regions with the rest of the world, including changes in regional income and capital ownership as well as industrial collaboration. In addition, the specific role of collaboration amongst regional and local public authorities with entities globally has been introduced, which well reflects the initial purpose of the TAP to explain the role of and provide advice to regional policymakers in relation to alleviating negative and maximising positive effects of changing global interactions on European regional economies.

The nature of the received inputs can be divided in three groups:

1. Effects of global interactions and paradigm shifts induced by the war that herald in significant changes in global interactions and dependencies. The key questions that concern stakeholders here revolve around the degree of dependence, adaptability and resilience of regional economies amidst concerns over negative de-globalisation and re-industrialisation effects. This is further articulated in interests concerning the effects of EU free trade agreements on European regions, changes in Foreign Direct Investment, economic doctrines and practices that determine the degree of flexibility in economic relations but also the role of SMEs and public collaborations in global value chains. This group also considers the role of sustainable development in the context of the Green Deal on both sides of a global transaction.
2. Interest in specific spatial contexts. These include economic relations, industrial collaboration and value chains of EU regions and IPA as well as ENI regions. Particular interests have been expressed towards value chains between EU regions and Northern Macedonia, Serbia, Turkey, the Mediterranean Region, the Eastern Partnership countries and the new EU candidates, the Republic of Moldova and Ukraine, notably the western regions of Lviv, Volyn and Zakarpattia, which are considered to form a vibrant cross-border community with the EU regions Podkarpackie and Lublin Voivodeships; Kosice County; Szabolcs-Szatmár-Bereg County and Maramures County. Interests in economic interactions of the Outermost Regions have also been expressed.

3. Lack of regional data, crucial to monitor global value chains and explain spatial asymmetries of their effects. In this context, calls from both Tillväxtverket Sweden and the Joint Research Centre for the use of regional input-output tables converged independently from each other during the consultations. Regional Input-Output tables are considered a rarity as it is not clear which statistical offices produce such tables. However, input-output tables are key to obtain reliable results in regional and sectorial input-output analysis related to, for instance, supply chain analysis, strategic dependences, trade in value added (TiVA), foreign and domestic content of employment and value added in exports, carbon footprints, integration of MNEs in the regional value chains, R&D impact on gross value added, ex-ante evaluation of Horizon Europe, and other funding programs, etc. So far, the compilation of a EU27 interregional input-output table has been produced by the JRC (FIGARO-reg) using available regional statistics (macroeconomic aggregates) and trade modelling, but not official regional input-output tables. Stakeholders from the Innovation Policies and Economic Impact Unit of the Joint Research Centre explained that this TAP could add a unique and long-lasting value to EU policymaking by mapping how many regional/national statistical offices compile regional input-output tables in the EU27+EFTA (characteristics, coverage, periods, etc.), collect them and prepare them to be embedded into the FIGARO-reg IO tables of the JRC, hence, leaving a lasting ESPON footprint in regional policy analysis. Even though not all regional statistical offices actually produce supply, use and input-output tables, other more aggregated and specific macroeconomic and trade data (by country of origin and country of destination) could also be available to feed into the FIGARO-reg database. Furthermore, a link to FDI data on the activities of the MNEs by regions, R&D investment by sectors and other sectoral accounts (e.g. income distribution, transfers, remittances, capital accounts, etc.) has also been expressed as a desirable input from this TAP.

Ideas for Future Research Topics

The ideas and proposal received during the consultation process have been analysed, leading to the identification of the following research groups and topics:

Group 1: Internationalisation of regional economies

- Role of global collaboration among public authorities on regional economies;
- Role of SME on regional internationalisation.

Group 2: Exogenous factors influencing regional economies

- Impacts of EU free trade agreements on regional economies;
- Territorial impacts of economic shocks, the war, deglobalisation;
- Role of institutional and policy environment moderating effects of global interactions on regional economic competitiveness.

Group 3: Regional adaptability

- Reindustrialisation of regional economies;
- The role of the Green Deal on both sides of economic transactions;
- New economic realities: investment decisions based on traditional division of labour vs. availability of resources (energy, water, land, etc.), Industry 4.0, 5.0 solutions and prices.

Group 4: Spatial interests:

- Cross-border value chains between Bulgarian border regions and border regions of Serbia, North Macedonia and Turkey;

- Economic relations and industrial collaboration between EU regions and Mediterranean neighbours;
- Economic relations and industrial collaboration between EU regions and Eastern Partnership countries;
- Economic relations and industrial collaboration between EU regions and new candidate countries Moldova and Ukraine;
- Economic relations and industrial collaboration of the EU Outermost Regions;
- Value chains between the Western Ukrainian regions of Lviv, Volyn and Zakarpattya and the EU regions of Podkarpackie and Lublin Voivodeships; Kosice County; Szabolcs-Szatmár-Bereg County and Maramures County.

Group 5: Methodological and empirical needs:

- Mapping availability of regional input-output tables and preparing for integration into FIGARO-reg.
- Use of FIGARO-reg for supply chain analysis, understanding strategic dependences, trade in value added (TiVA), foreign and domestic content of employment and value added in exports, carbon footprints, integration of MNEs in the regional value chains, R&D impact on gross value added, ex-ante evaluation of Horizon Europe, and other funding programs, etc.

Emerging Proposals for Research Projects

Given the diversity of research interests, it is proposed that the TAP embraces three types of activities, European research projects, on-demand activities with a spatial focus and an empirical activity related to the collection of regional input-output tables for further policy analyses. Such TAP architecture is of double-dividend nature, firstly serving topical policy questions and secondly, optimising the future input-output analyses of regional economies, positioning ESPON side by side with the OECD and the JRC and benefitting the member and partner states beyond the TAP lifetime.

Proposed TAP architecture:

1. Potential European research projects: given the topicality, the common interest among stakeholders and the expected policy value, it is proposed to conduct European Research Projects on the below subjects:
 - a. Reindustrialisation of regional economies;
 - b. Role of global collaboration among public authorities on regional economies;
2. Potential on-demand activities: the resulting FIGARO-reg database would be shared with ESPON beneficiaries to run policy analyses that would be of the interest for the Member States and regions. The analyses will be of on-demand nature and can be dedicated to each of the above-mentioned groups, i.e. internationalisation of regional economies, exogenous factors influencing regional economies, regional adaptability and spatial interests. Policy needs may also go across and beyond these research idea groups.
3. Identifying regional/national statistical offices that compile regional input-output tables in the EU27+EFTA (characteristics, coverage, periods, etc.), collect them and prepare them to be embedded into the FIGARO-reg IO tables of the JRC. In case regional statistical offices do not produce supply, use and input-output tables, other more aggregated and specific macroeconomic and trade data (by country of origin and country of destination) could be collected to feed into the FIGARO-reg database. This is a preparatory project from which it is expected that the prospective service provider liaises with regional statistical offices.

3. Annex 1: Overview table on the Proposals Received during the Consultation Process