



**European Committee
of the Regions**

ESPON



Co-funded by
the European Union
Interreg

Territorial Impact Assessment Strategic Technologies for Europe Platform

Staff working document



European Committee of the Regions

Brussels
2 October 2023

COTER
commission

Territorial Impact Assessment Strategic Technologies for Europe Platform

Disclaimer

This territorial impact assessment report is the outcome of an expert workshop held by the European Committee of the Regions and ESPON EGTC on the European Commission's Strategic Technologies for Europe Platform (STEP).

This report was produced by the Secretariat-General of the European Committee of the Regions (CoR), to assist rapporteur José Manuel Ribeiro (PT/PES), Mayor of Valongo, in the follow up of his opinion on the topic. This report will be shared with the EC, the European Parliament and the Council of the European Union.

This report and the maps represent the views and experiences of workshop participants. It is intended solely to support a decision-making process, thus does not necessarily reflect the opinion of CoR members nor that of the ESPON 2030 Monitoring Committee. The findings of this report are not binding on the CoR and do not prejudice the final content of its opinions.

Supported by

ESPON



**Co-funded by
the European Union**
Interreg

Authors

Erich Dallhammer, Roland Gaugitsch, Chien-Hui Hsu (ÖIR GmbH)
Florence Thomé (CoR)

Acknowledgements

Zintis Hermansons, Nicolas Rossignol (ESPON EGTC)

Workshop participants

Speakers and their team:

Alexane Barrouillet	European Commission, DG BUDG
Franck Conrad	European Commission, DG BUDG
José Manuel Ribeiro	CoR COTER rapporteur
Julio Teixeira	Expert of CoR COTER rapporteur

Experts:

Suzana Carp	Cleantech for Europe
Pietro Cesaro	E3G
Francisco De Araújo Vasquez	EuropaBio (European Association for Bioindustries)
Bianca Faragau	EIB
Fausto Gernone	Academia from UCL Institute for Innovation and Public Purpose
Keno Haverkamp	Academia from UCL Institute for Innovation and Public Purpose
Sandra Jeglinskė	Ministry of Environment, Lithuania
Andreea-Raluca Leru	ADR Nord-Est (North-East Regional Development Agency), Romania
Milan Petit	SEER project
Anne Wetzel	Région Hauts de France, France

Facilitators:

Erich Dallhammer	ÖIR
Roland Gaugitsch	ÖIR
Florence Thomé	CoR COTER secretariat






Observers:

Xavier Dutrenit	CoR COTER secretariat
Yianis Koutsikidis	European Commission, SG
Rachel Lancry Beaumont	CoR COTER secretariat
Nicolas Lété	CoR PES secretariat
Bastian Meic	CoR PES secretariat
Nicolas Rossignol	ESPON
Piotr Wolski	CoR ECON secretariat

Acronyms and legend

CoR	European Committee of the Regions
EC	European Commission
EP	European Parliament
ESPON	European Observation Network for Territorial Development and Cohesion
LRA	Local and Regional Authority
MS	Member State(s)
NUTS	Nomenclature of territorial units for statistical purposes
OIR	Austrian Institute for Spatial Planning (ÖIR)
TIA	Territorial Impact Assessment

Effects of the directives – colour code

	Positive effects
	Minor positive effects
	Neutral
	Minor negative effects
	Negative effects

Legend – direction of effects

	Increase
	Decrease

Table of contents

1	Introduction	5
1.1	Context	5
1.2	Political mandate	5
1.3	Past work of the CoR on this topic	6
2	Methodology: ESPON TIA Quick Check	7
2.1	Identifying the potential territorial effects in terms of economic, societal, environmental and governance-related aspects – drafting a conceptual model	8
2.2	Picturing the potential territorial effects through indicators	8
2.3	Judging the intensity of the potential effects	9
2.4	Calculating and mapping the potential “regional impact”	10
3	Debate and qualitative analysis	11
3.1	Introductory remarks	11
3.2	Risks to aggravate regional disparities	13
3.3	Risks to go against multi-level governance	14
3.4	Large companies vs SMEs and scaling	14
3.5	Unclear objectives and targets	15
3.6	Possible consequences on the society and the environment	15
4	Expected economic effects	16
4.1	Economic performance (GDP)	16
4.2	High technology manufacturing and services	19
4.3	Private sector R&D	21
4.4	Public sector R&D	22
4.5	Regional innovativeness	24
4.6	Regional ICT infrastructure	27
5	Expected societal effects	29
5.1	Education participation	29
5.2	Unemployment	31
6	Expected environmental effects	33
6.1	Protected areas (NATURA 2000)	33
6.2	Ratio between emissions of CO ₂ and Gross Value Added (GVA)	34
7	Conclusions and policy recommendations	37
7.1	Compensatory and implementation support measures related to Cohesion Policy	37
7.2	Centrally-managed instruments should be more supportive of economic, social and territorial cohesion objectives	37
7.3	Counter-balancing the "top-down" approach	38
7.4	Clearer STEP objectives and targets and clearer funding focus	38
7.5	Other recommendations	39

1 Introduction

1.1 Context

The EU's current multiannual financial framework (MFF) 2021-2027 was adopted during the COVID pandemic, and before the war in Ukraine and rising inflation and energy costs. Two years in, it is clear that the current framework does not offer a sufficient response to the current crises and to the new political challenges and priorities faced by the EU.

Therefore, on 20 June 2023, the EC presented a mid-term review and a "targeted and limited" revision of the MFF 2021-27 to respond to EU political priorities and its legal obligations.

One important aspect of this revision is the proposal to set up a Strategic Technologies for Europe Platform¹ (hereafter STEP) to accelerate investments in key technologies (deep and digital technologies, clean technologies, biotechnologies), reduce the EU's strategic dependencies and support the EU's competitiveness. The STEP proposal follows various legislative (Net Zero Industry Act, the Critical Raw Materials Act, the European Chips Act...) and non-legislative (Green Deal Industrial Policy, Digital Agenda, Strategic Autonomy Agenda...) initiatives put forward by the Commission in the past months, in response to the US's Inflation Reduction Act (IRA) and other initiatives taken by countries such as China, Japan and India.

1.2 Political mandate

The STEP proposal is designed to respond to key challenges that Europe is currently facing, including a profound evolution of the world economy, with the emergence of strong industrial nations breaking the monopoly held by Western countries for decades and the green and digital transition, that will change European industry forever, and which can only be compared to the transformation brought about by the industrial revolution. These major transitions will have a significant effect on regions and cities all across the EU. Some regions might gain and some might lose, with the resulting effects being potentially the most severe in those regions already coping with industrial decline. LRAs will be at the forefront of managing these challenges and their mitigation.

The EC acknowledges that no impact assessment in general, and no territorial impact assessment in particular, was carried out specifically when presenting STEP. The only impact assessments to which the EC explicitly makes reference are those conducted in the preparation of other related initiatives such as CRMA, NZIA, the European Innovation Agenda, the Fit for 55 package, the European Chips Act and the Digital Decade Compass. Similarly, since STEP would build on existing EU financial programmes 2021-27, which have all been the subject of an impact assessment, the EC did not recognise the need to carry out a new one. The EC makes however specific reference to analytical staff working documents published in 2023², which set out investment need assessments and which have influenced the design of STEP.

¹ See [COM\(2023\) 335 final](#).

² SWD 2023 (161) (COMMISSION STAFF WORKING DOCUMENT Impact assessment report Accompanying the document Proposal for a Regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU)

However, none of the above-mentioned documents specifically addressed the potentially differentiated impact of STEP on EU regions and cities or on economic, social and territorial cohesion. There is a risk that the chosen objectives and funding reinforcements may tend to encourage investments in certain places/regions at the expense of others. Cohesion in the EU may also be harmed by encouraging the use of cohesion policy funds to support centrally-chosen projects; the proposed mechanisms to select "Sovereignty Seal" projects do not involve local and regional authorities in the selection process, which could lead to a centralisation of power and exacerbate competition between EU regions instead of reinforcing the cohesion of the EU as whole.

1.3 Past work of the CoR on this topic

STEP is a new proposal, but the CoR adopted in the recent past the following opinions/resolutions which relate to the policies and funding instruments concerned:

- Net Zero Industry Act, July 2023
- Critical raw materials package, July 2023
- Mid-term review of the Multiannual Financial Framework: The local and regional perspective, May 2023
- Do no harm to cohesion - A cross-cutting principle contributing towards cohesion as an overall objective and value of the EU, May 2023
- Effectively engaging local and regional authorities in the preparation of the Partnership Agreements and Operational Programmes for the 2021-2027 period, October 2021
- Resolution on the Revised Multiannual Financial Framework and European Sustainable Investment Plan, July 2020
- Just Transition Fund, July 2020.

2018/858, 2018/1724 and (EU) 2019/1020) and SWD 2023 (68) (COMMISSION STAFF WORKING DOCUMENT Investment needs assessment and funding availabilities to strengthen EU's Net-Zero technology manufacturing capacity).

2 Methodology: ESPON TIA Quick Check

The concept of territorial impact assessment (TIA) aims to show the regional differentiation of the impact of EU policies. The ESPON TIA Tool³ is an interactive web application that can be used to support policymakers and practitioners in identifying potential ex-ante territorial impacts of new EU legislation and policies. The “ESPON TIA Quick Check” approach combines a workshop setting for identifying systemic relations between a policy and its territorial consequences with a set of indicators describing the sensitivity of European regions.

This approach helps to steer an expert discussion about the potential territorial effects of an EU policy proposal by checking all relevant indicators in a workshop setting. The results of the guided expert discussion are judgements about the potential territorial impact of an EU policy, in different thematic fields (economy, society, environment, governance) for a range of indicators. These results are fed into the ESPON TIA Quick Check web tool.

The web tool translates the combination of the expert judgements on exposure with the different sensitivity of regions into maps showing the potential territorial impact of EU policy at NUTS3 level. These maps serve as a starting point for further discussion of different impacts of a specific EU policy on different regions.

The workshop on STEP was held on 2 October 2023 and brought together 25 people out of which 10 experts from different backgrounds (see page 2: Managing Authorities, business associations, public institutions, research, NGOs).

Two moderators from the OIR, provided by ESPON, prepared and guided the workshop and handled the ESPON TIA tool.

Figure 1: Workshop discussion



Source: Territorial impact assessment expert workshop, 2 October 2023, OIR

³ <https://www.espon.eu/tools-maps/espon-tia-tool>

2.1 Identifying the potential territorial effects in terms of economic, societal, environmental and governance-related aspects – drafting a conceptual model

In the first step of the TIA workshop, the participating experts discussed the potential effects of STEP, using a territorial or place-based approach.

This discussion revealed potential territorial impacts of STEP, using economic, societal, environmental and governance-related indicators. The participants identified potential linkages between implementation of the strategy and the effect on territories, including interdependencies and feedback loops between different effects (see figure below).

Figure 2: Workshop findings: Systemic picture



Source: Territorial impact assessment expert workshop, 2 October 2023, OIR

2.2 Picturing the potential territorial effects through indicators

In order to assess the potential effects pictured in the conceptual model, suitable indicators need to be selected for the parameters that the experts discussed in the fields of the economy, the environment, society and governance. The availability of data for all NUTS 3 regions poses certain limitations on the indicators that can be used. From the available indicators that the ESPON TIA Quick Check web tool offers, the experts chose the following indicators to describe the identified effects.

Picturing potential territorial impacts in terms of economic indicators:

- **Economic performance** – Gross Domestic Product (GDP) at current market prices, measured in terms of purchasing power standards per inhabitant.
- **High technology manufacturing and services** - Share of employment in high-tech manufacturing and knowledge-intensive high-tech services in total employment
- **Private sector R&D** - R&D expenditure in the private sector as a percentage of GDP
- **Public sector R&D** - R&D expenditure in the public sector as a percentage of GDP
- **Regional innovativeness** - Regional Innovation Index calculated as an unweighted average of normalised scores of different indicators of the Regional Innovation Scoreboard 2023 in relevant areas such as innovation activities, human resources or investments
- **Regional ICT infrastructure** - share of households with broadband access

Picturing potential territorial impacts in terms of societal indicators:

- **Education participation** - Proportion of the population aged 25-64 who reported in a survey that they had received education or training in the last four weeks
- **Unemployment** - Ratio between unemployed people and economically active population

Picturing potential territorial impacts in terms of environmental indicators:

- **Protected areas (NATURA 2000)** - Share of NATURA 2000 areas on the total NUTS 3 area
- **Ratio between emissions of CO₂ and Gross Value Added (GVA)** – Ratio between CO₂ emissions (tonnes) and Gross Value Added (GVA) (million euro)

The experts envisaged also two governance-related indicators: "Cohesion funding" and "Quality and accountability of government" but in the end these indicators were not considered relevant. In particular, related to Cohesion funding, given the complexity to assess the level of Cohesion Policy reprogramming and the fact that the total investment amount is reduced if EU Cohesion funding remains the same with STEP while the national financing is reduced (due to the 100% cofinancing rate), it was not possible to establish a meaningful indicator.

Furthermore, the experts agreed that the following indicators, which are not included in the ESPON TIA Quick Check web tool and not yet available via official sources, are also relevant to describe the identified effects:

- Decentralisation index
- Quality of landscape

2.3 Judging the intensity of the potential effects

The workshop participants were asked to estimate the potential effects of STEP. For each exposure field, they judged the potential effect of STEP on the territorial welfare along the following scores:

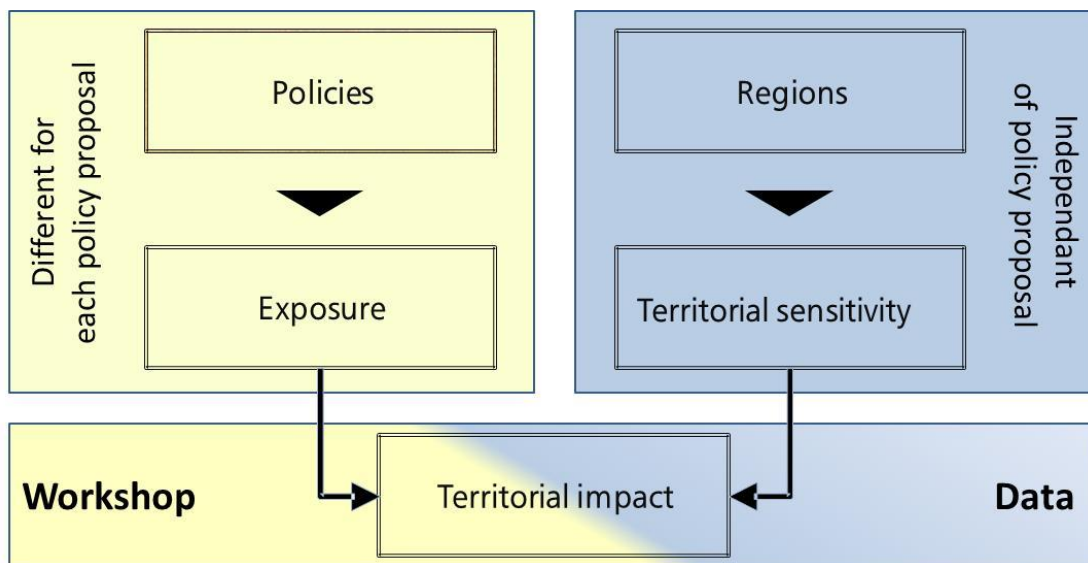
- ++ strong positive effect on territorial welfare (strong increase)
- + weak positive effect on territorial welfare (increase)
- o no effect / unknown effect / effect cannot be specified
- - weak negative effect on territorial welfare (decrease)
- -- strong negative effect on territorial welfare (strong decrease)

In this sense, the vote is about whether the policy proposal is 'beneficial for the region' or 'not beneficial for the region' with regards to the specific exposure field. During the discussion on the systemic picture, experts present their views on what should be considered beneficial (e.g. lower unemployment rates are usually considered beneficial - for other exposure fields, this distinction depends on the concrete policy) and formulate a hypothesis on how the policy works. In the event of significant disagreement that cannot be resolved during the discussion, an indicator is not put to a vote. Some caveat has to be attached to the process in this regard, as different understandings of "beneficial" can lead to a slightly skewed voting result. Nevertheless, the qualitative discussion for each exposure field is covered in the respective section and all voting disagreements are also pointed out clearly for this reason.

2.4 Calculating and mapping the potential “regional impact”

The ESPON TIA Quick Check combines the expert judgement on the potential impact of STEP (**exposure**) with indicators describing the sensitivity of regions, resulting in maps showing a territorially differentiated impact. This approach is based on the **vulnerability concept** developed by the Intergovernmental Panel on Climate Change (IPCC). In this case, the effects deriving from a particular policy measure (exposure) are combined with the characteristics of a region (**territorial sensitivity**) to produce potential territorial impacts (see illustration below).

Figure 3: Exposure x territorial sensitivity = territorial impact



Source: OIR, 2015.

- “Territorial Sensitivity” describes the baseline situation of the region according to its ability to cope with external effects. It is a characteristic of a region that can be described by different indicators regardless of the topic analysed.
- “Exposure” describes the intensity of the potential effect of STEP on a specific indicator. Exposure illustrates the experts’ judgement, i.e. the main findings of the expert discussion at the TIA workshop.

The result of the territorial impact assessment is presented in maps, showing potential territorial impacts based on a **combination of the expert judgement on exposure with the territorial sensitivity of a region**, described by an indicator on NUTS3 level. Whereas the expert judgement is a qualitative judgement, the sensitivity is a quantitative indicator.

3 Debate and qualitative analysis

3.1 Introductory remarks

- a) Presentation of the STEP proposal by the EC representative

The workshop started with a statement by **Franck Conrad**, Head of unit in the EC's DG BUDG, to present the objectives, key features and state of negotiations of the STEP proposed by the EC.

Mr Conrad explained that, following the Versailles Declaration (European Council, March 2022), the EC President put forward the idea of a Sovereignty Fund in her State of the Union speech in September 2022. However, following numerous contacts with Member States ahead of the presentation by the Commission of a formal proposal, it emerged that, while an instrument was needed to support critical technologies in the EU and to respond to various initiatives taken by other countries such as the USA, using existing instruments would allow quicker effect on the ground than creating a new ad hoc instrument.

The STEP platform was therefore proposed to leverage the instruments that already exist within the EU budget, and is part of the mid-term revision of the current Multi-Annual Financial Framework 2021-27. The STEP proposal is to be considered a **pilot for assessing the need to create a fully-fledged Sovereignty Fund in the next MFF post-2027**.

In terms of scope, STEP focuses on **three types of technologies**: clean technologies, deep and digital technologies and biotechnologies, the criteria being cutting-edge technologies that would help the EU reduce its strategic dependency.

The main idea behind STEP is to create a “passerelle” among existing funding programmes via:

- the **Sovereignty Seal (a quality label)** granting the possibility to finance projects through various funds: once a project gets the Seal under one EU programme, it can access funding from another programme;
- the **Sovereignty Portal** to promote and give visibility to investments in cutting-edge technologies.

Mr Conrad then explained how the support to the technologies is to take place:

- **Amendments to rules for Cohesion Policy funds** (shared management):
 - Introduction of new STEP priorities enabling the Managing Authorities to revise their operational programmes to include STEP priorities, with financial incentives: 30% pre-financing 2024 and 100% co-financing (“blanket provision” applying to all regions);
 - For ERDF, CF and JTF: opening up funding to support productive investment by large enterprises in all regions except for those regions in Member States with a GDP per capita above the EU average (2015-17), to act as a re-balancing effect for State Aid in the past years (typically, the more developed Member States are more equipped than others to provide State Aid to big companies).
- **Targeted budget reinforcements for centrally-managed programmes**:
 - Invest EU (offering support to companies through debt and equity instruments);
 - European Innovation Council (also giving support to companies, but mostly those that are non-bankable);
 - European Defence Fund;

- Innovation Fund (“fit for purpose” fund to finance emerging technologies to fight against climate change, using resources from the EU Emissions Trading System; the Commission has however observed that the projects financed through the Innovation Fund usually come from the same Member States and same innovative companies. STEP therefore proposes to top up Innovation Fund resources for only those Member States which have a GDP per capita below EU average).

The STEP proposal is currently being negotiated with the co-legislators, with a possible first evaluation moment in December 2025 with a first overview of selected projects⁴.

Mr Conrad concluded by saying that the Commission has decided to create a **STEP taskforce** in the form of a unit in DG BUDG to help implement STEP by coordinating all financial instruments, ensuring consistency in the definition of the scope of the critical technologies and providing support, for instance to Managing Authorities.

b) Introductory remarks by the CoR rapporteur

José Manuel Ribeiro first underlined the importance of the CoR TIA on the STEP proposal, as the EC did not present any Impact Assessment nor any territorial impact assessment on STEP and as TIA can help check the impacts of EU proposals on territorial, economic and social cohesion.

He then mentioned some elements of his draft opinion, starting by welcoming the intention of the Commission to strengthen the strategic autonomy (and competitiveness) of the EU economy in the global market, together with a number of concerns, particularly about the financing mechanism of the STEP proposal, and questions to be addressed in the workshop:

- Possible asymmetric **territorial impact of the STEP objectives and targeted critical technologies**: Can all regions benefit equally from a targeted support to attract productive investments in deep and digital technologies, clean technologies and biotechnologies, or is it mainly regions that are already strong in these technologies that will benefit?
- Possible asymmetric **territorial impact of the budgetary reinforcement of the four existing funding EU programmes** (InvestEU, European Innovation Council, Innovation Fund and European Defence Fund);
- **Lack of involvement of Local and Regional Authorities (LRAs)** for the selection of projects to be granted the **Sovereignty Seal** while LRAs are encouraged to finance them via the use of cohesion policy funding, possibly at the expense of existing projects defined in partnership with various stakeholders;
- Potential **territorial impact of redirecting Cohesion Policy funding from original programming priorities to STEP priorities**;
- Possible anti-cohesive effect of the other changes to the ERDF, CF, ESF+ and JTF Regulations: **opening up of public funding for productive investments by large companies** in less developed regions, transition regions and those developed regions whose average GDP per capita is below the EU average (2015-2017 figures) as well as **100% co-financing rate** by cohesion policy instruments irrespective of the category of regions where the investment is made;
- Cumulated economic and **territorial impact of the newly established State Aid rules⁵ and STEP**.

⁴ See Article 8.1 of the European Commission 's proposal: "By 31 December 2025, the Commission shall provide the European Parliament and the Council with an evaluation report on the implementation of the Platform".

⁵ Communication from the Commission: Temporary Crisis and Transition Framework for State Aid measures to support the economy following the aggression against Ukraine by Russia – OJCE 17.3.2023, C101, page 3

The workshop proceeded with the experts engaging in a brainstorming exercise on the effects of the STEP proposal on the society, the economy, the environment and the governance at territorial level.

3.2 Risks to aggravate regional disparities

The STEP proposal was considered to have the potential to push the technological frontier and to increase employment in the short-term and in the long-term in the types of technologies targeted (clean, digital and bio technologies) in terms of innovation jobs, manufacturing jobs as well as academia. Within each type of technology, however, there are differences in the current geographical distribution depending on the economic sector concerned. For instance, in biotech, healthcare tends to be concentrated in more developed areas while investments in biomanufacturing tend to occur in regions with rich biomass, meaning mainly in rural areas, and countries which have already developed that sector.

In general, the experts therefore agreed that STEP is expected to lead to differentiated territorial impacts. Many regions have embarked into smart specialisation strategies focusing on economic sectors completely different from the ones identified in STEP (for instance in textile or tourism), therefore they will not benefit from STEP and its extra funding opportunities.

The experts were concerned that STEP risks **deepening the existing Innovation Divide** between Member States and between regions within Member States (with less developed regions investing more in infrastructure than in innovation) and risks **concentrating funding and economic growth** in the already developed areas⁶. From a social viewpoint, this could also mean **migration of skilled workforce** to innovative regions, typically located in more developed parts of the EU, exacerbating the difficulty for some regions to build their own innovative ecosystem.

Referring to some studies showing that concentration of innovation in some geographic areas actually leads to lower competitiveness globally, one expert argued that the STEP proposal would even reduce EU competitiveness vis a vis external competitors.

In addition, the possibility to reallocate money from Cohesion Policy towards STEP priorities (with a strong incentive to reprogramme – through the proposed 100% co-financing – in spite of the administrative burden for Managing Authorities) was perceived as possibly leading to delays in Cohesion Funds implementation and **going against the cohesion objective**. Indeed, it might mean less ERDF, CF, JTF and ESF+ than was originally planned to support other investments in R&D and SMEs (PO1), environment, energy-efficiency and risk adaptation (PO2), connectivity/mobility (PO3), labour market, skills and social inclusion (PO4), local and territorial initiatives (PO5) and economic diversification, re-skilling and up-skilling (JTF), as this funding would be diverted to STEP. It would also mean overall reduced cohesion policy investment in comparison to the original programming, as 100% EU co-financing results in no national component.

The STEP approach is very much "top-down" and lacking a basis in bottom-up needs assessment and strategic planning: LRAs will be triggered to redirect existing cohesion policy funding to attract innovation in certain areas without any guarantees that the public investments made might entail long-

⁶ The [8th Cohesion report](#) provides a very comprehensive picture of the current situation in Europe, notably in its section entitled "Development traps and related risks for European Regions".

term economic and social benefits. Ultimately, this could lead to a negative perception of the EU and exacerbate the ‘geography of discontent’.

Moreover, the Cohesion Policy reprogramming may not be done in a way that is connected to the development needs of a region (see next section).

3.3 Risks to go against multi-level governance

The experts raised the question of **alignment between STEP priorities and local development strategy** as well as national strategies.

If LRAs and Managing Authorities have no say in the selection of Sovereignty Seal projects, there is a risk that projects are selected centrally and then somewhat imposed on them, without any real consideration of how they could fit in the regional development plan (e.g. for a region specialised in tourism or textiles). In that sense again, STEP lacks a differentiated perspective on the importance of innovation and manufacturing (“not all regions need to be cutting-edge regions”).

Cohesion Policy is meant to be implemented in partnership between different levels (European, national and regional). Experts considered that STEP (with the Sovereignty Seal, the selection of STEP projects under centrally-managed programmes and a possible reprogramming of Cohesion Policy) may generate frictions between Ministries, national and regional authorities (at administrative and political level), exacerbate central decision-making and ultimately go against the subsidiarity principle. That might reinforce some worrying trends in terms of cohesion policy implementation where already some Member States are more centralised than others.

Some experts suggested risk of pressure to fund certain projects, or possible corruption, and risk of weakening democratic processes.

3.4 Large companies vs SMEs and scaling

The experts discussed the opening up of Cohesion Policy funds to productive investments in all enterprises (from SMEs to mid- cap companies to large ones without any restriction in terms of the number of persons employed) Some of the experts considered it could be a positive complement to the existing rules under ERDF/CF and JTF (where LRAs cannot generally support productive investments in companies that employ more than 499 people except in some limited cases⁷) to cover a “missing unit” in the value chain. At the same time, the expert pointed out that supporting large enterprises may be perceived differently whether the company has 300 or 30,000 employees – especially if the very large company receiving the funds does not pay taxes in the specific territory of the funding programme.

Overall, the experts highlighted the risk that only large companies may benefit from STEP. There is a risk that the support might be transferred from SMEs to large enterprises in a situation where SMEs already have less (administrative and institutional) capacity to access funding. This was seen as a missed opportunity to help SMEs to scale up unless the STEP Regulation would clearly set some conditions under which large enterprises would receive support (e.g an obligation to contract out to local SMEs...).

⁷ See Art 5.2 of Regulation 2021/1058 of 24 June 2021 on the European Regional Development Fund and on the Cohesion Fund. See also Art 8 of Regulation 2021/1056 of 24 June 2021 establishing the Just Transition Fund.

The issue of **where and how to scale** is not really addressed in STEP. However, the experts insisted that a technology can be *developed* somewhere, *get produced* somewhere else and be *deployed* still in another part of the EU. For instance, it may be worth deploying in Romania a technology that is already existing in France. The employment effect may be different for each stage, but assessing and monitoring this is not included in the STEP proposal.

3.5 Unclear objectives and targets

The Sovereignty Platform was seen in theory as a positive element, offering one website bringing together different funding opportunities available.

However, experts underlined the lack of clarity concerning investments, objectives and targets: what kind of investment is going to be supported? For which technologies and whom? When? How? These unclear conditions do not help attract investors and may rather lead to crowding out of private investment as “private money needs predictability and simplicity”. Some experts expressed strong doubts about the real added value of the STEP platform compared to the existing funding mechanisms under well-known EU funding programmes to private investors. An expert underlined that STEP was presented as a pilot for Sovereignty Fund but the scope is in fact too large for a pilot, with too little “fresh money” for such a wide target of investments.

This expert mentioned that, on the contrary, the Inflation Reduction Act in the U.S. is much clearer and more visible to potential investors with specific targets, including geographic.

3.6 Possible consequences on the society and the environment

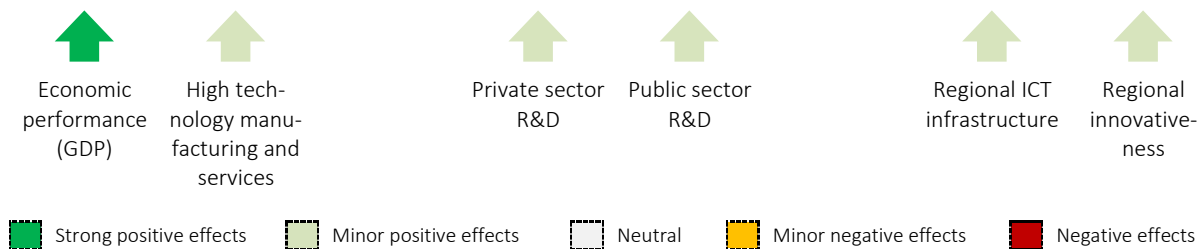
In terms of environment, experts considered that STEP, with its focus on “clean technologies”, could lead to an overall reduction of CO2 emissions. However, next to these positive effects on climate, one expert underlined STEP could raise other environmental concerns notably linked to the protection of nature, the protection of biodiversity, and the diversity of landscape (visual pollution stemming from the infrastructures of clean technologies).

As for impacts on the society, apart from the risks of “brain drain” (both between Member States and between regions within a Member State) and weakening of democratic processes previously mentioned, one expert considered that the development of technologies such as biotechnologies and Artificial Intelligence could lead to health issues and that increased manufacturing puts at risk the quality of life in the localities concerned.

4 Expected economic effects

The majority of expected effects and selected exposure fields were concentrated in the economic dimension, underlining the importance of the STEP proposal in these areas. Key issues discussed included the potential to push the technological frontier and significantly increase the innovation potential of European regions. Assuming effective technology transfer, these effects could in turn lead to increased potential for manufacturing, with spill-over effects across regions in terms of employment and regional income. On the other hand, there is a risk of deepening the innovation gap by supporting already strong regions and concentrating EU funding on their projects, which could be caused by the funding logic of STEP. Complementarities with other funds exist and have the potential to mitigate these effects, but an in-depth assessment would require a sector-specific approach and more detailed information on the mechanisms to be put in place.

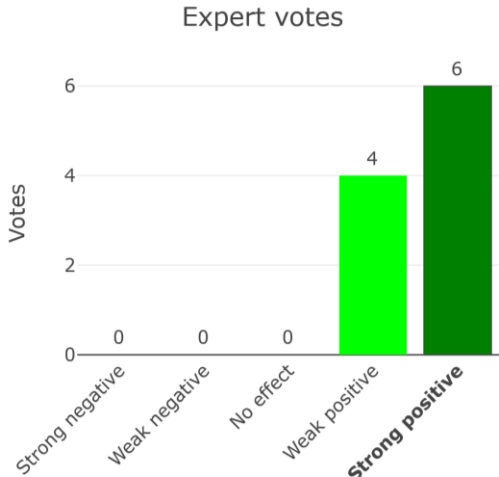
Ultimately, the experts selected seven indicators in the field of economy, all of them are expected to see a positive effect:



4.1 Economic performance (GDP)

The STEP proposal was judged by the experts to have a strong potential to increase the innovative capacity of EU regions. However, due to the design of the measures, this is likely to be uneven across regions, favouring regions that are already economically strong. These regions are more likely to have the research capacity needed for innovative developments, but also the innovative industries that can take up these developments. The experts therefore considered it **likely that overall GDP would be positively affected, but that economically strong regions would be in a much better position to absorb these effects.** As a result, all experts rated the impact as positive (six strong, four weak).

Figure 4: Expert judgement: impact of STEP on territorial welfare with regards to Economic performance (GDP)

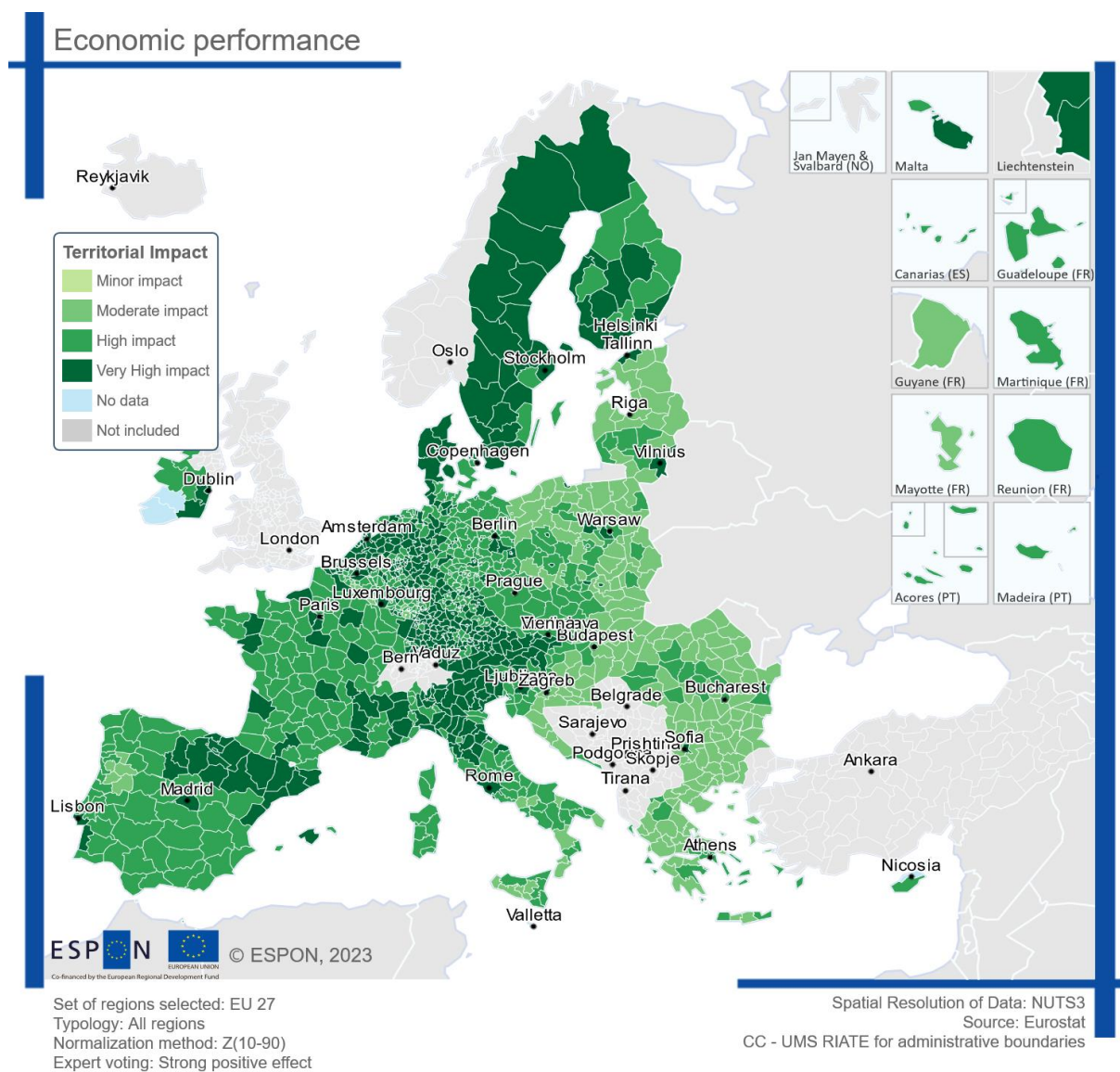


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field “Economic performance” is depicted by the Gross Domestic Product (GDP) at current market prices, measured in terms of purchasing power standards per inhabitant. Regions with high GDP per capita are expected to benefit more from STEP. The sensitivity is therefore directly proportional to GDP per inhabitant.

The following map shows the potential territorial impact of STEP, taking into account economic performance. It combines the experts’ assessment of a strong positive impact with the given sensitivity of the regions.

Map 1: Impact of STEP on territorial welfare with regards to Economic performance (GDP) – expert judgement: strong positive effect



Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

Most of the regions seeing either a very high (41%) or a high positive impact (41%) are located outside Central and Eastern Europe. Larger clusters with the highest impact can be found, for example, in Sweden, the Netherlands, Denmark or Austria. Large urban centres, which are more likely to host a dynamic and strong R&D and industrial sector, would also see a very high positive impact. The remaining 18% of regions are likely to experience only a small positive impact, most of them in Eastern Europe and some in Southern European regions in Greece, Italy and Portugal.

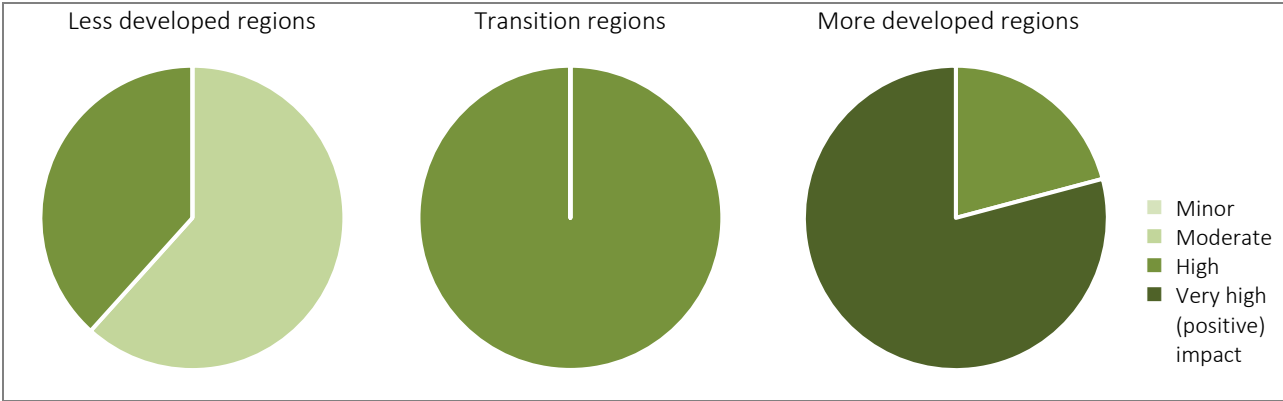
Following the workshop, a further analysis of the territorial patterns identified in the map above was made based on the development stage of regions as defined for Cohesion Policy (“Less developed”, “Transition regions” and “More developed regions”, applied at NUTS3 level).

The below figure shows that, while potentially regions across the three Cohesion Policy categories are likely to benefit from STEP, the distribution of moderate, high and very high impacts varies considerably. For the less developed regions, 62% of regions expect a moderate impact and 38% expect a high impact.

More developed regions on the other hand expect a very high impact in 79% of cases, and a high impact in 21% of cases.

Note: the categorisation of regions into “Less developed”, “Transition regions” and “More developed regions” is based on GDP per capita, and the territorial map above is precisely about the impact on GDP, therefore there is a natural correlation.

Figure 5: Impact of STEP on territorial welfare with regards to Economic performance (GDP) – Positive impact

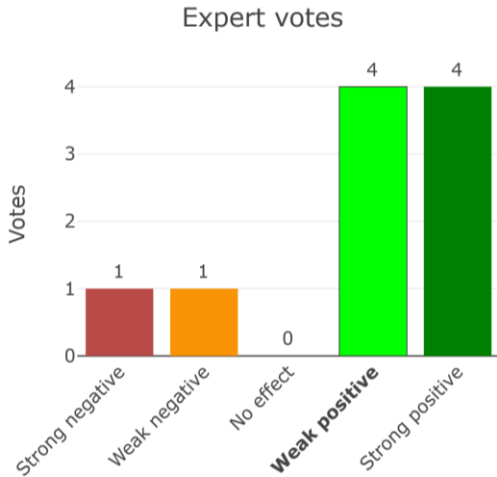


Source: ÖIR GmbH, own calculation based on Eurostat 2023

4.2 High technology manufacturing and services

The experts underlined that a key aspect of innovation capacity is the potential to actually take up the results of research and development and thus realise the potential benefits. As a result, regions that are particularly likely to benefit from the extra funding offered by STEP are the ones which already have a strong high-tech manufacturing and knowledge intensive high technology services sector. These sectors were seen as likely to bring the greatest benefits to the region (both in terms of income and employment potential), but require strong innovation leaders as well as effective technology transfer in order to be realised. Consequently, the majority of the experts voted for positive (four strong, four weak). On the other hand, two experts saw the opposite effect and voted for negative (one strong, one weak).

Figure 6: Expert judgement: impact of STEP on territorial welfare with regards to High technology manufacturing and services

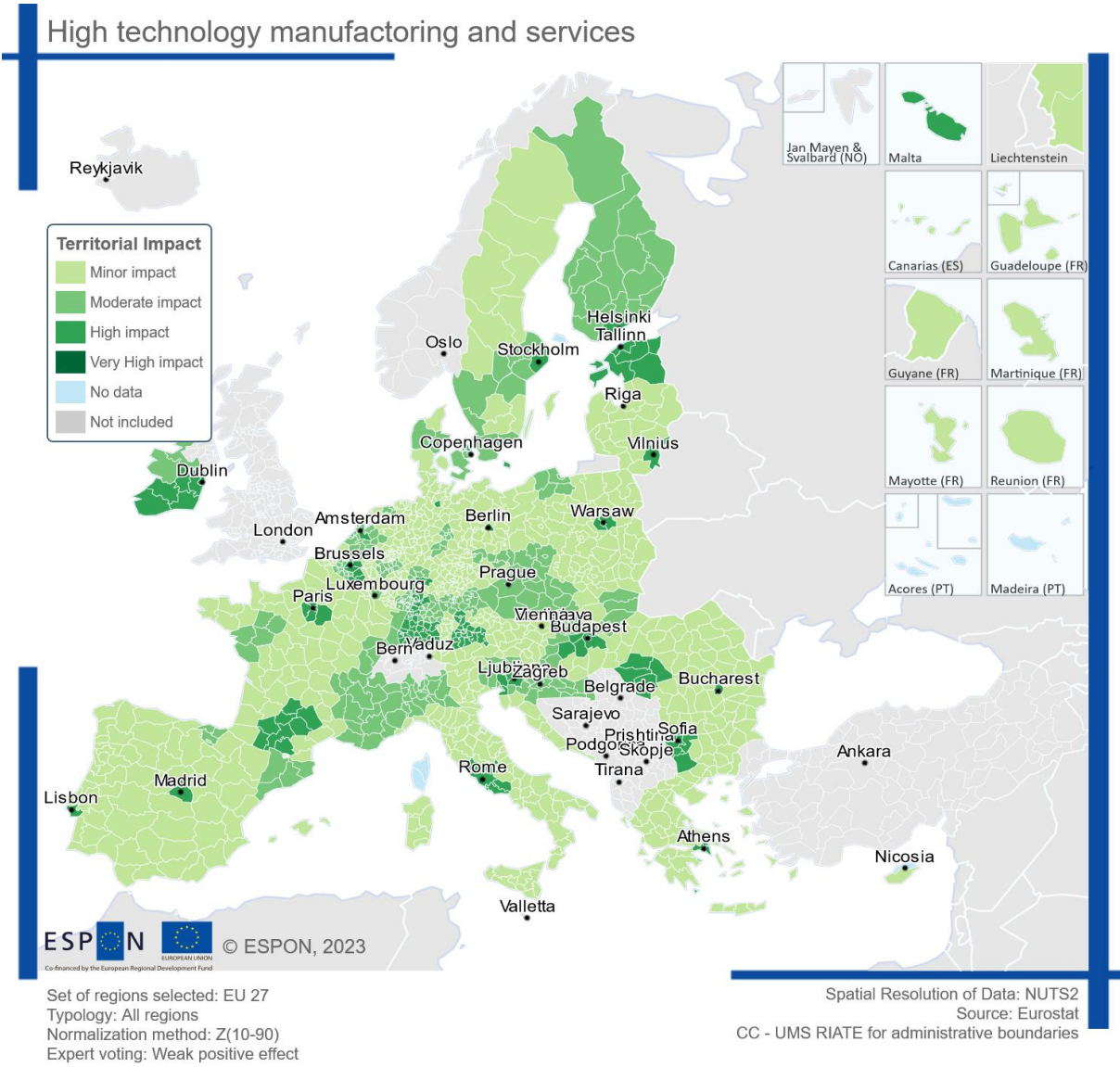


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field “High tech manufacturing and services” is described by the share of employment in high-tech manufacturing and knowledge-intensive high-tech services in total employment. Regions with a higher share of employment in these sectors are expected to benefit more from STEP. The sensitivity is therefore directly proportional to the share of employment in high-tech manufacturing and high-tech services.

The following map shows the potential territorial impact of STEP, taking into account high-tech manufacturing and services. It combines the experts’ assessment of a weak positive impact with the given sensitivity of the regions.

Map 2: Impact of STEP on territorial welfare with regards to High technology manufacturing and services – expert judgement: weak positive effect



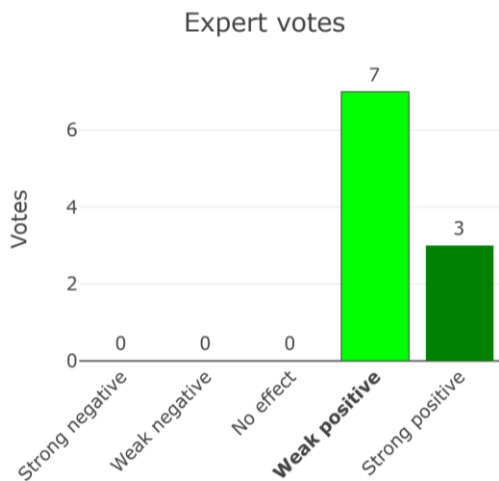
Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

14% of the regions could experience a high positive impact. While several metropolitan areas could potentially experience the highest impacts, some other clusters (e.g. in France, Germany, Romania, Bulgaria) with high impact potential can also be identified. In particular, Ireland and Estonia are likely to benefit in most of their regions. 24% of the regions are expected to have a moderate positive impact and the majority a small positive impact.

4.3 Private sector R&D

Some concerns about the implementation of STEP and its impact on private sector R&D were discussed, with some experts noting the possibility of crowding out private sector funding, in particular to large enterprises. However, the overall potential to stimulate private investment through public investment was considered significant, especially if a strong link between innovation and implementation capacity can be supported. In this context, technology transfer has already been identified in the expert discussion as one of the preconditions for successful implementation. Bearing this caveat in mind, all experts agreed that this effect was positive (three strong, seven weak).

Figure 7: Expert judgement: impact of STEP on territorial welfare with regards to Private sector R&D

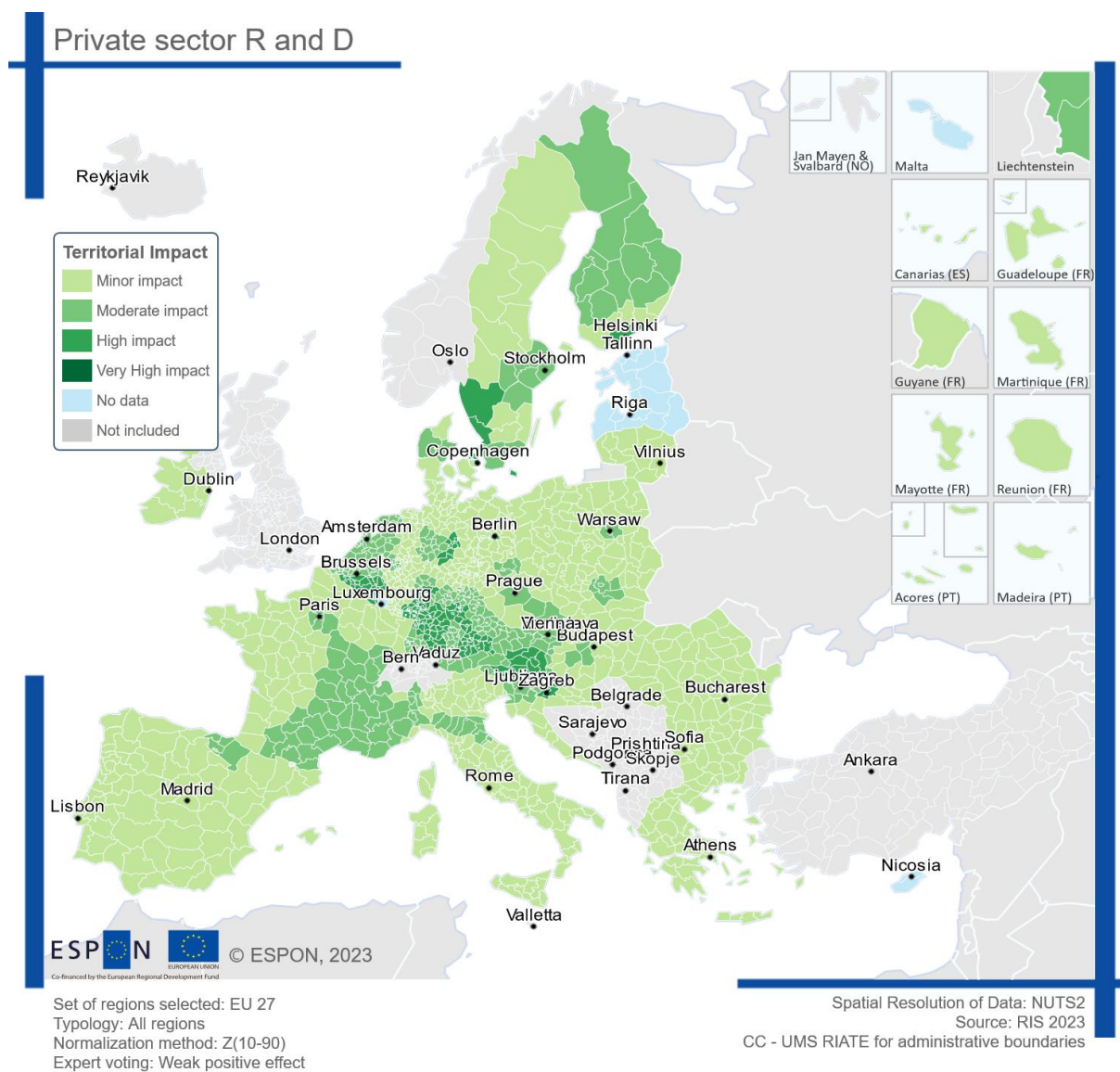


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field “Private sector R&D” is illustrated by R&D expenditure in the private sector as a percentage of GDP. Regions with a comparatively high level of R&D in this sector are expected to benefit more from STEP. The sensitivity is thus directly proportional to the private sector R&D expenditure as a percentage of GDP.

The following map shows the potential territorial impact of STEP, taking into account R&D expenditure in the private sector. It combines the experts’ assessment of a weak positive impact with the given sensitivity of the regions.

Map 3: Impact of STEP on territorial welfare with regards to Private sector R&D – expert judgement: weak positive effect



Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

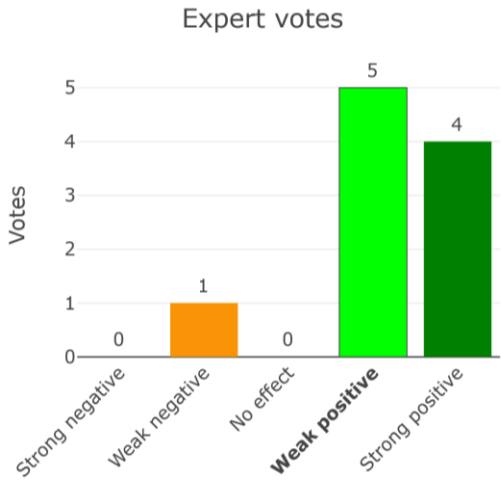
The impact of 13% of the regions would be strongly positive, the vast majority of which are concentrated in a few countries (Sweden, Germany, Austria, Slovenia and Belgium). For the remaining regions, the impact is expected to be moderately positive (28%) or minor positive (59%). Most of Eastern and Southern Europe and large parts of France, Germany and Italy fall into the latter category.

4.4 Public sector R&D

Complementing the assessment of private sector R&D, the experts decided to examine public sector R&D as well. Due to the design of some measures (e.g. increased co-financing rates or the inclusion of large companies as beneficiaries), there was a risk of providing more support to already strong innovators, while bringing only marginal benefits to economically weaker regions. This was seen as a risk of deepening the innovation gap. However, overall public sector expenditure was expected to increase as a result of implementation, also due to the additional resources made available to the

relevant funds. Most experts therefore considered the impact to be positive (four strong, five weak). On the other hand, one expert voted for (weak) negative.

Figure 8: Expert judgement: impact of STEP on territorial welfare with regards to Public sector R&D



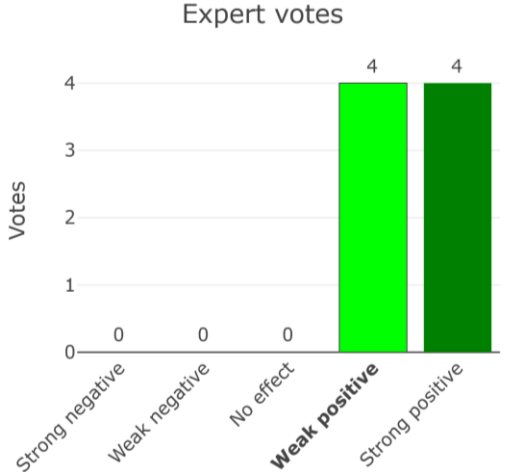
Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field “Public sector R&D” is depicted by the R&D expenditure in the public sector as the share of GDP. Regions with a higher share of R&D expenditure in the public sector are expected to benefit more from STEP. The sensitivity is therefore directly proportional to the share of R&D expenditure in the public sector.

The following map shows the potential territorial impact of STEP, taking into account public sector R&D expenditure. It combines the experts’ assessment of a weak positive impact with the given sensitivity of the regions.

the risks associated with deepening the innovation divide. **The potential impact on regional innovation performance is therefore likely to be driven by the existence of good preconditions at regional level, but in line with the priorities and actions of STEP, the overall impact is likely to be positive.** Consequently, all experts voted for a positive impact (four strong, four weak).

Figure 9: Expert judgement: impact of STEP on territorial welfare with regards to Regional innovativeness

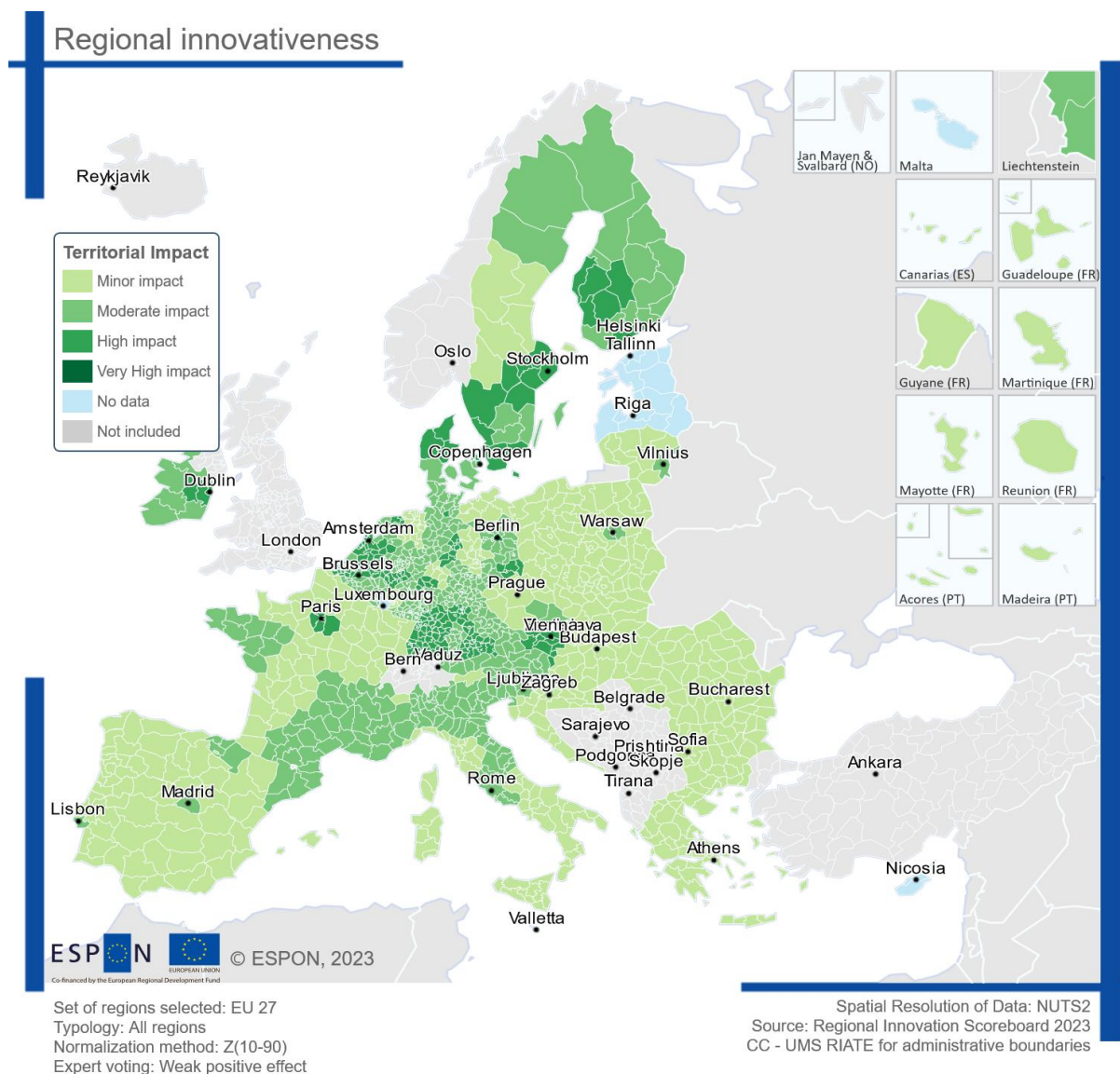


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field “Regional Innovation” is depicted by the Regional Innovation Index calculated as an unweighted average of normalised scores of different indicators of the Regional Innovation Scoreboard 2023 in relevant areas such as innovation activities, human resources or investments. Regions with a higher Regional Innovation Index are expected to be more positively impacted by STEP. The sensitivity is therefore directly proportional to this index.

The following map shows the potential territorial impact of STEP, taking into account the Regional Innovation Index. It combines the expert judgement of a weak positive impact with the given sensitivity of the regions.

Map 5: Regional innovativeness – expert judgement: weak positive effect



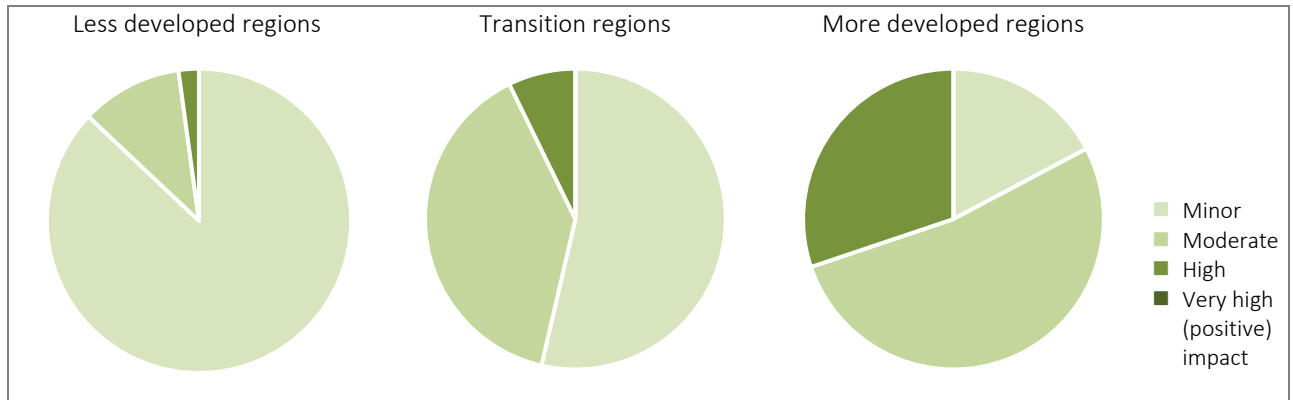
Source: Territorial impact assessment expert workshop, Brussels, 2 October 202

Complementary to other innovation-related exposure fields, regions with a high positive impact are concentrated in a few countries. They account for 18% of regions and are mainly located in Sweden, Germany, Finland, Austria and the Benelux countries. The majority of regions would experience either moderate positive impacts (38%) or minor positive impacts (44%). Potential minor positive impacts are particularly prevalent in Southern and Eastern Europe, where, apart from a few capital regions, all regions would experience small positive impacts.

Following the workshop, a further analysis of the territorial patterns identified in the map above was made based on the development stage of regions as defined for Cohesion Policy (“Less developed”, “Transition regions” and “More developed regions”, applied at NUTS3 level).

While a majority of regions is likely to see only minor or moderate impacts, the distribution varies significantly between the respective categories. For the less developed regions, 84% of regions expect a minor positive impact and only 2% expect a high impact. More developed regions on the other hand expect a high impact in 30% of cases, and a moderate impact in further 52% of cases.

Figure 10: Regional innovation – positive impact

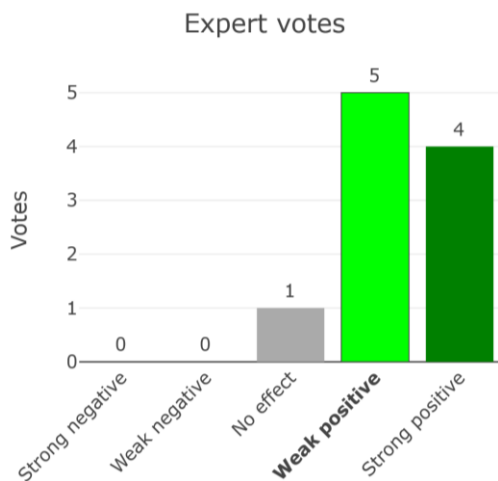


Source : ÖIR GmbH own calculation based on Eurostat 2023

4.6 Regional ICT infrastructure

High-quality ICT infrastructure has been identified as one of the main pre-requisites for an innovative enterprise, which is also reinforced by STEP’s focus on high-tech innovation in several areas. Enterprises with high-quality access to ICT infrastructure are therefore considered to be in a better position to absorb or contribute to innovative developments. The experts underlined that “broadband” alone is not an ideal indicator, as today’s industrial standards expect higher speeds than traditional broadband can provide. Nevertheless, it was considered to be an appropriate indicator to outline general advantages and disadvantages. The majority of experts therefore expected a positive impact (four strong, five weak). One expert considered that there would be no relevant effect.

Figure 11: Expert judgement: impact of STEP on territorial welfare with regards to Regional ICT infrastructure

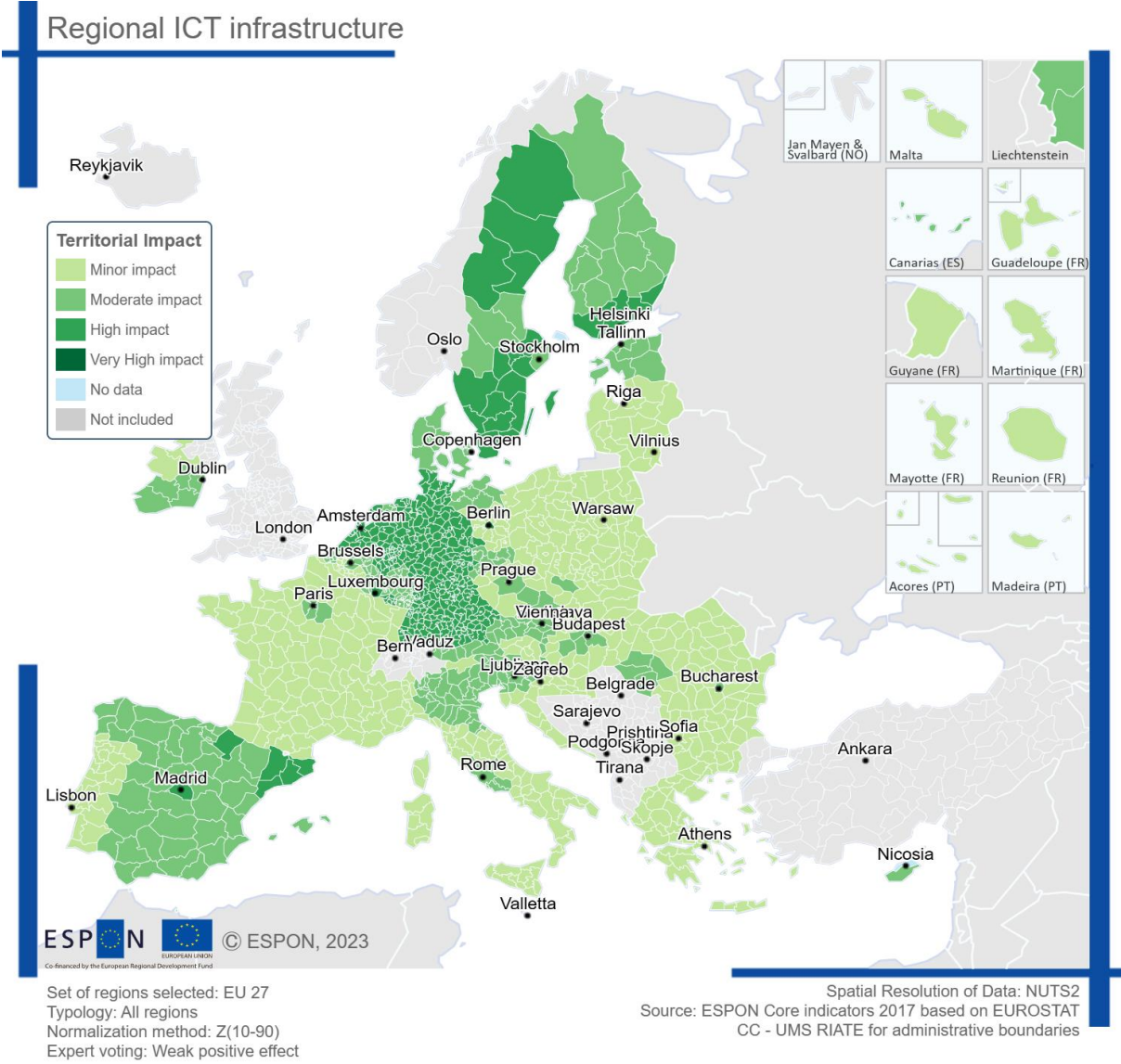


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field “Regional ICT infrastructure” is represented by the share of households with broadband access. Regions with a high percentage of households with broadband access are expected to benefit more from STEP. The sensitivity is therefore directly proportional to the share of these households.

The following map shows the potential territorial impact of STEP based on the regional ICT infrastructure, combining the experts' assessment of a weak positive impact with the given sensitivity of the regions.

Map 6: Impact of STEP on territorial welfare with regards to Regional ICT infrastructure – expert judgement: weak positive effect



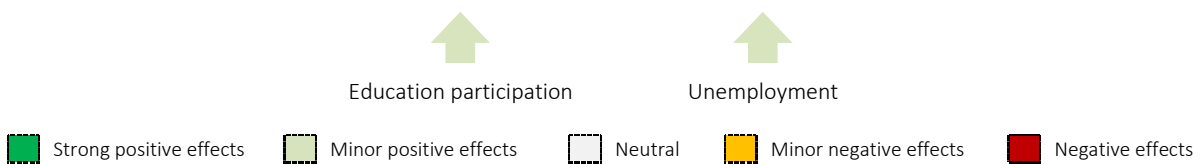
Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The impact on about 34% of the regions is expected to be high positive. These regions are located in Scandinavia, the economic strong regions of the European pentagon in Estonia, the south of Ireland, Cyprus and Spain. Furthermore several regions located near the capital could expect a potential moderate positive impact as e.g. Rome, Vienna, Prague, Budapest or Bucharest. 42% of the regions would face a minor positive impact. Other capital regions as e.g. Athens, Warsaw, Vilnius and Riga would benefit less.

5 Expected societal effects

In the societal dimension, several key impacts were linked to the potential of the population to adapt to innovative developments and changing labour markets. A persistent skills shortage could lead to a problem where the workforce is simply not able to take advantage of the new job opportunities. In turn, this could leave some regions lagging behind and unable to build their own innovative ecosystem. Subsequently, the migration of skilled workers to innovative regions, typically located in more developed parts of the EU, could exacerbate this effect. However, the overall impact on employment is expected to be positive due to the increased competitiveness and innovative capacity of various sectors.

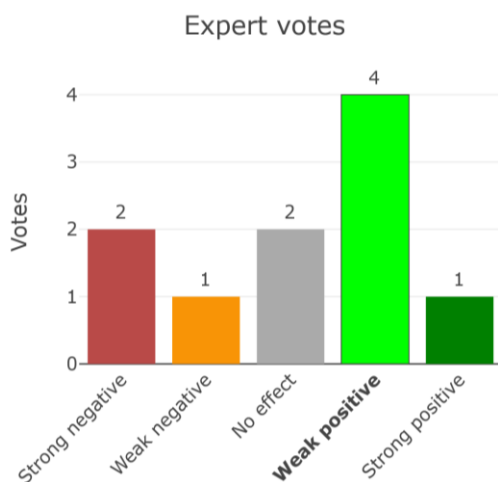
Two societal related indicators were selected by the experts. All of them were judged to have a positive effect:



5.1 Education participation

A key issue currently limiting innovation is related to skills shortages. A significant number of jobs cannot be filled by workers with the appropriate skills, thus holding back the potential of the industries and sectors concerned. This aspect is partly mitigated by migration dynamics, which reduce the existing mismatch, but it is still present in the business environment. While stimulating innovation can have spill-over effects in terms of participation in education and training, the experts also noted that stimulating innovation when a skills mismatch already exists can actually exacerbate the mismatch. The result of the experts' voting was therefore quite ambiguous. While five experts agreed on a positive effect (one strong, four weak), three experts voted for a negative effect (two strong, one weak). Two experts saw no impact.

Figure 12: Expert judgement: impact of STEP on territorial welfare with regards to Education participation

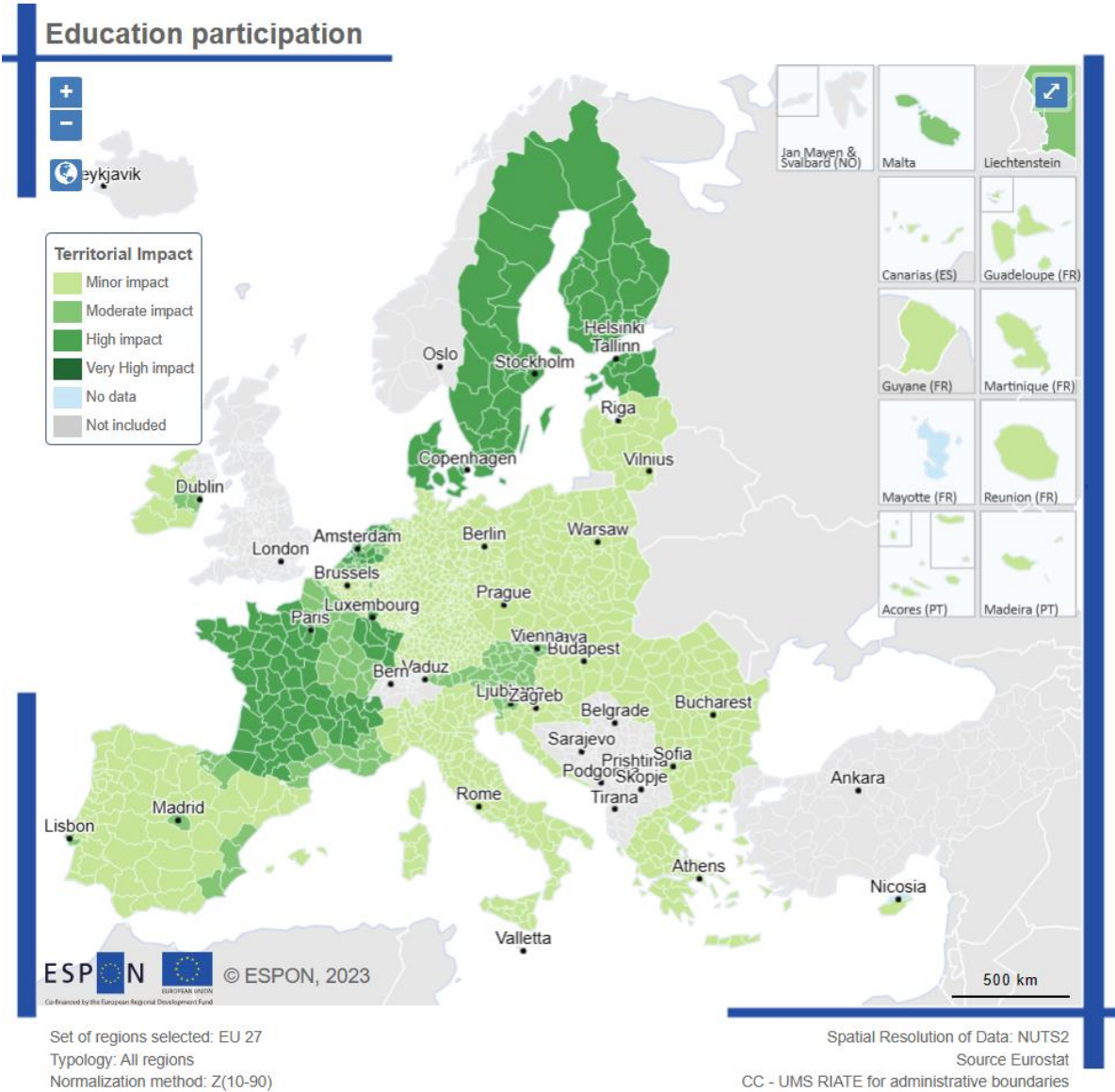


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field “Education participation” shows the proportion of the population aged 25-64 who reported in a survey that they had received education or training in the last four weeks. Regions with a higher percentage of population in education or training are expected to be more sensitive. Sensitivity is thus directly proportional to the share of this population group.

The following map shows the potential territorial impact of STEP, taking into account participation in education. It combines the experts’ assessment of a weak positive impact with the given sensitivity of the regions.

Map 7: Impact of STEP on territorial welfare with regards to Education participation – expert judgement: weak positive effect



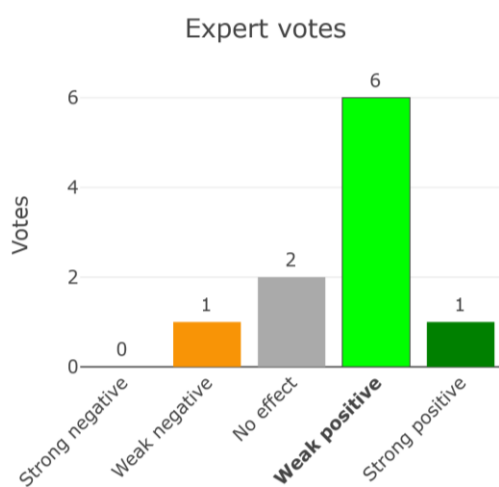
Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The 12% of regions with a high positive impact are all located in the northern part of Europe as well as in France, Germany and the Netherlands, indicating a strong potential of skilled labourers with ongoing education participation. 8% of the regions, mainly located in France and Austria, as well as small parts of Spain, are expecting a moderate impact. The remaining 80% of the regions would only see a minor impact and are spread throughout Europe.

5.2 Unemployment

The effects of the implementation of STEP are likely to create some spin-off effects beyond the immediate beneficiaries. Experts discussed both short-term and long-term effects on unemployment through induced economic growth through increased innovation and positive stimulation of related industrial sectors. In particular, digital technologies and high-tech manufacturing were seen as likely to benefit, but also healthcare, industrial biotechnology, research and a range of other sectors. Concrete effects in specific sectors depend on the implementation and selection of funded activities, but overall positive effects on employment can be expected. Thus, the majority of experts voted positive (one strong, six weak). One expert rated the effect as (weak) negative. Two experts rated the effect as not relevant.

Figure 13: Expert judgement: impact of STEP on territorial welfare with regards to Unemployment

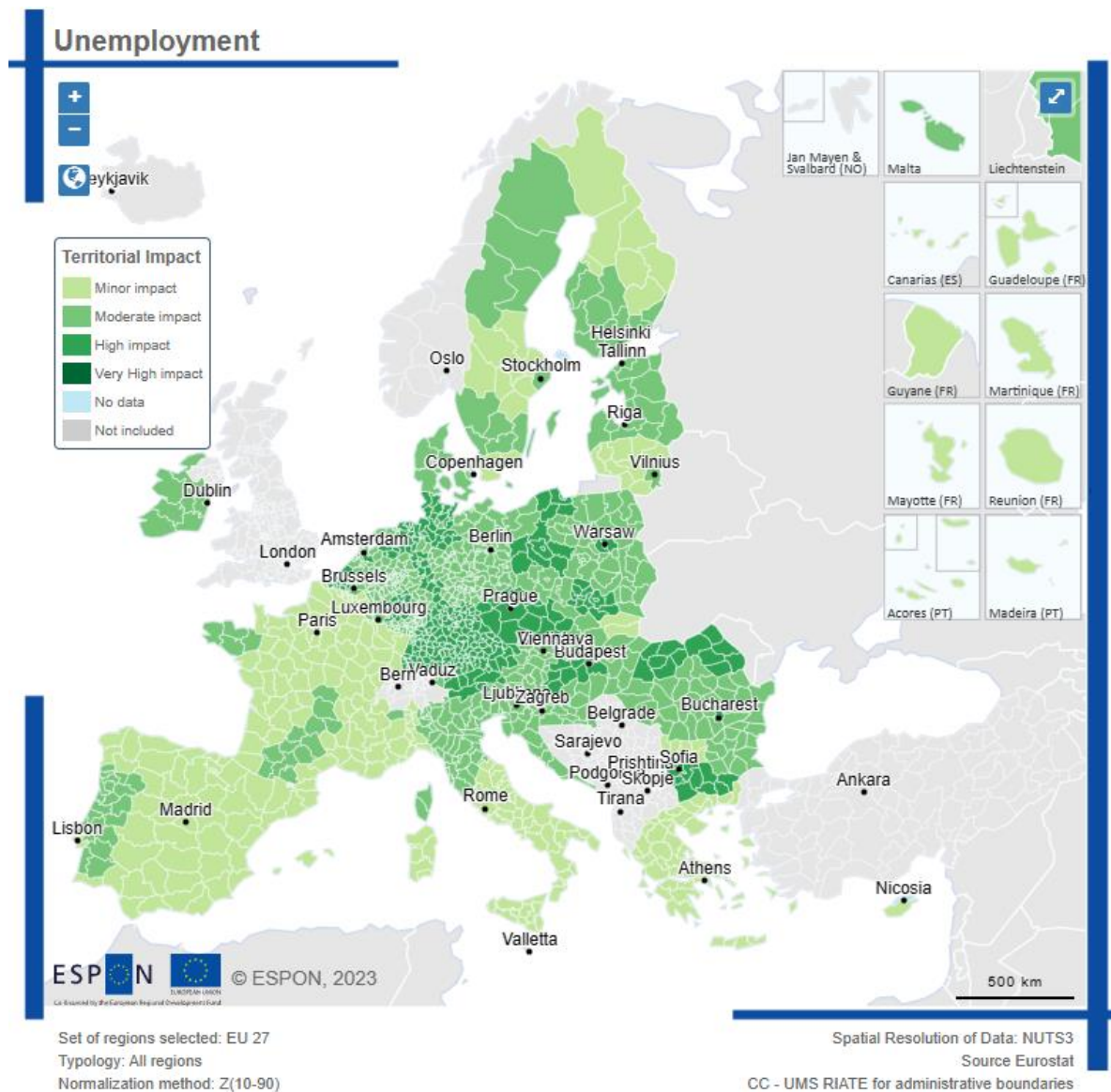


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field “Unemployment” is depicted by the ratio between unemployed people and economically active population. Regions with a low unemployment rate are expected to be influenced stronger by STEP due to their better position and potential absorption rate leading to an even stronger improvement in unemployment. Sensitivity is therefore inversely proportional to the unemployment rate.

The following map shows the potential territorial impact of STEP taking into account unemployment. It combines the expert judgement of a weak positive effect with the given sensitivity of the regions.

Map 8: Impact of STEP on territorial welfare with regards to Unemployment – expert judgement: weak positive effect

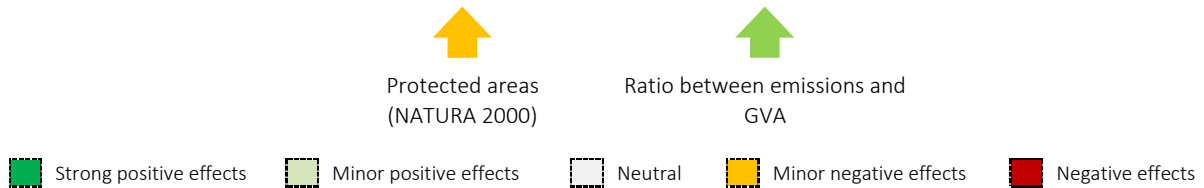


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The potential impact in 28% of the regions would be strongly positive. In particular, Luxembourg and neighbouring regions and other parts of central Europe, as well as some regions throughout Romania, Poland, Hungary, Bulgaria and the majority of Czechia show high potential for strong positive impacts. A further 45% would be moderately positively affected and are scattered throughout Northern, Central and Eastern Europe (as well as Portugal and parts of Italy). The rest of regions would see a low positive effect and are predominantly located in Spain, France, southern Italy, Greece and Cyprus.

6 Expected environmental effects

Some effects of STEP related to the increase of high-tech manufacturing processes in terms of pollution or emissions are possible. On the other hand, the potential positive effects of “clean” technologies are likely to outweigh these negative effects and lead to an overall reduction in emissions and pollution. The direction of development is not yet clear as there is limited information on actual implementation and potential projects. Two indicators were considered relevant by the experts, one with a negative impact and the other with a positive impact:



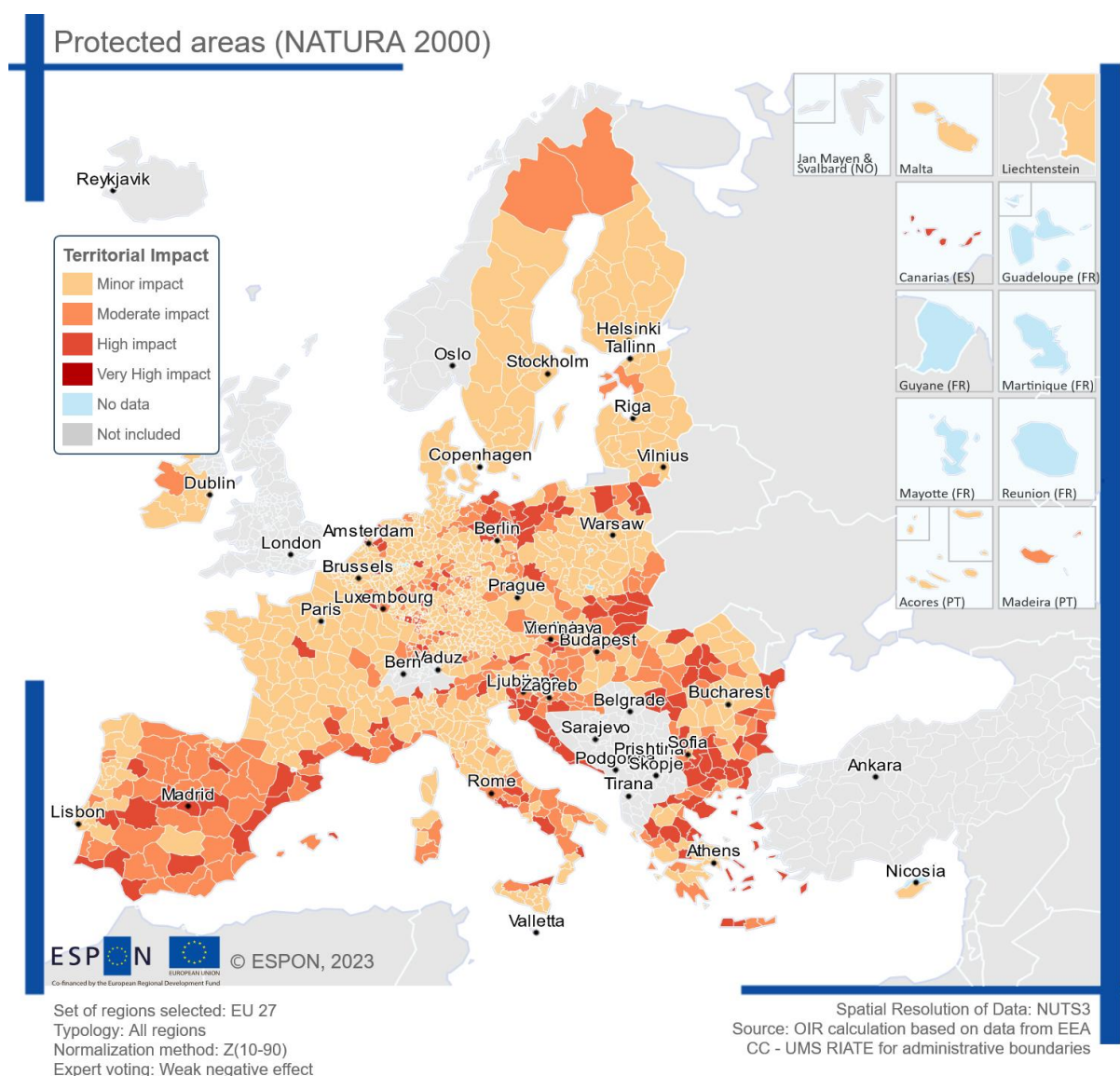
6.1 Protected areas (NATURA 2000)

The exposure field “Protected areas” was selected after the voting was closed due to individual requests from experts. No expert voting was therefore conducted for this exposure area, but an ad hoc discussion revealed a potential minor negative impact on the area due to increased pollution from manufacturing and potential construction activities. However, the key industries targeted are not among the largest potential polluters, so only a minor negative effect was assumed.

The exposure field is presented as the share of NATURA 2000 areas on the total NUTS 3 area. Regions with a high percentage of protected areas are expected to be more affected by STEP. The sensitivity is therefore directly proportional to the share of NATURA 2000 sites.

The following map shows the potential territorial impact of STEP, taking into account protected areas. It combines an assumed low negative impact with the given sensitivity of the regions.

Map 9: Impact of STEP on territorial welfare with regards to Protected areas (NATURA 2000)– expert judgement: weak negative effect



Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

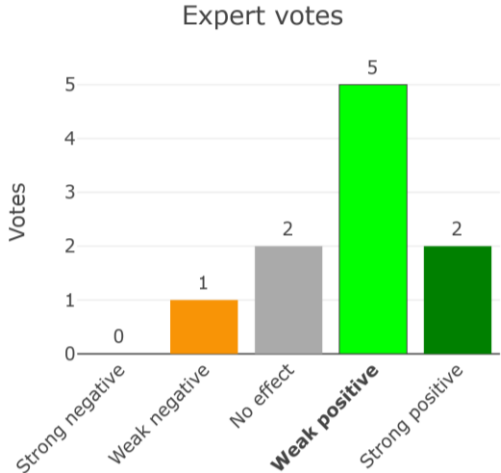
Taking this combination into account, 12% of the regions would face a high negative impact. With the exception of the Scandinavian and Baltic countries as well as Ireland, Malta and Luxembourg, all Member States could be affected by a strong negative impact in some regions. Countries with a higher proportion of regions facing the highest potential negative impact are Spain, Croatia, Poland, Romania, Bulgaria and Greece. Moderate negative impacts are expected for 22% of the regions and a minor negative impact for the majority.

6.2 Ratio between emissions of CO₂ and Gross Value Added (GVA)

In relation to the assumed stimulating effects on industrial production through increased innovation, STEP has the potential to increase emissions through these processes. At the same time, innovative developments could lead to higher efficiency, and the focus on high-tech manufacturing is likely to result in lower emissions than if the focus were on other industrial sectors. In the long term, regions with a higher ratio in this respect could benefit more as a higher relative contribution to reducing their

emissions can be expected. Therefore, most experts agreed that the effect would be positive (two strong, five weak). One expert voted for (weak) negative and two experts did not consider this effect relevant.

Figure 14: Expert judgement: impact of STEP on territorial welfare with regards to Ratio between emissions of CO₂ and GVA

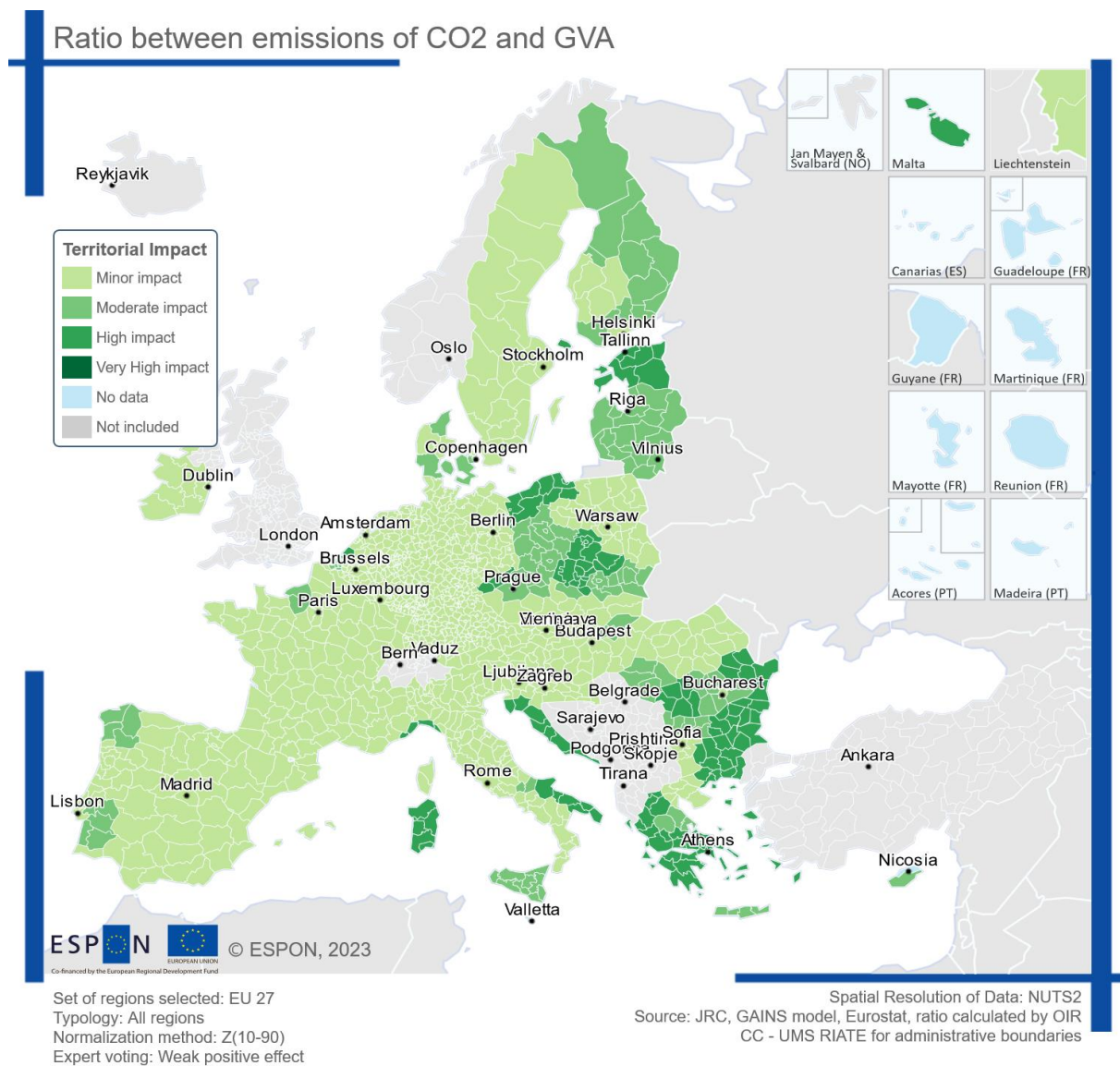


Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

The exposure field "Ratio between CO₂ emissions and GV" is calculated by dividing CO₂ emissions (tonnes) by the Gross Value Added (GVA) (million euro). Regions with a higher ratio of CO₂ emissions to GVA are expected to be more sensitive. Sensitivity is thus directly proportional to the ratio of emissions to GVA.

The following map shows the potential territorial impact of STEP in terms of the ratio between CO₂ emissions and GVA, combining the expert's assessment of a weak positive effect with the given sensitivity of the regions.

Map 10: Impact of STEP on territorial welfare with regards to Ratio between emissions of CO₂ and GVA – expert judgement: weak positive effect



Source: Territorial impact assessment expert workshop, Brussels, 2 October 2023

11% of regions could see a high positive impact. Larger clusters can be identified e.g. in Poland, Bulgaria, Romania, Greece, Croatia and Italy. 10% of regions could expect a moderate positive impact, again mainly in Eastern Europe, Portugal and Finland. Most regions (79%) are expected to see a minor positive impact.

7 Conclusions and policy recommendations

The TIA on STEP showed the need for more data at regional level to reliably measure territorial impact. In particular, in the case of STEP, more indicators would have been appreciated, notably on sectoral employment, on quality of life, on wages and concerning the environment.

Below are the main policy recommendations stemming from the discussion between the experts.

7.1 Compensatory and implementation support measures related to Cohesion Policy

If we want to use Cohesion Policy to support STEP objectives:

- **Additional overall funding** should be made available for Cohesion Policy instead of shifting funding within existing allocations; Cohesion Policy money has already been used in the past for many purposes other than the initial Cohesion objectives. It could be interesting to make use of the well-established structures but without taking money again from what was originally planned and rather by providing fresh money (not just for centrally-managed programmes).
- **Strong support to Managing Authorities** should be provided as there is potential administrative overload and "fatigue" due to changing objectives, with challenges for the implementation and evaluation. Strengthening administrative capacity and capacity building and providing stronger technical assistance might be needed as well, since it is a challenge in itself to manage industrial cutting-edge projects in regions that do not have that experience;
- Innovation and green transition are intertwined objectives; it is therefore important to enable all regions, including less developed regions, to build innovation capacities.

7.2 Centrally-managed instruments should be more supportive of economic, social and territorial cohesion objectives

Centrally-managed instruments should include more elements supporting the economic, social and territorial cohesion objective, and should either balance funding between lagging and leading regions, strong and smaller industry players, or address the fact that not all regions are equal and starting with the same strength and weaknesses.

The EU is not as a fully integrated economic entity (and might never be so); we should strive to consolidate the Single Market in the worldwide competition instead of creating internal competition (between Member States and regions).

- **Facilitate access to centrally-managed instruments for all EU territories.** Currently, these instruments support the already strong. At the same time, private investors are faced with complex procedures, a multiplicity of interlocutors, a whole range of national (or subnational) regulatory environments such as permits procedures. Processes for accessing funding under EU centrally-managed programmes should be streamlined for the benefits of both projects beneficiaries and implementing authorities.
- **Consider measures to strengthen the participation of lagging regions as well as conditionalities for public support in favour of large companies,** picking up on existing approaches (e.g. conditions on the number of MS involved and their development status in

Horizon Europe) and considering 2nd and 3rd tier effects (avoiding to concentrate funding only where R&D takes place but also where production takes place), for instance:

- Give a "bonus" for project proposals involving inter-regional cooperation, where a more developed region would develop a technology with a less developed region for the implementation;
- Introduce conditionality on support to large companies: for example, that the project has to benefit the region as a whole, has to benefit SMEs in the same ecosystem, large companies have to involve SMEs in the coordination of the project (not just as subcontractors) in order for SMEs to build capacity...
- **Encourage networks involving regions with different levels of development**, such as through Interreg Europe and the European Semiconductor Regions Alliance (launched by the European Committee of the Regions in September 2023).

7.3 Counter-balancing the "top-down" approach

Some recommendations were made to counter-balance the current "top-down" approach of STEP:

- Have a more differentiated, region-oriented perspective on what is needed to support high tech development in Europe: there could be built-in flexibility in STEP to review the list of supported technologies in line with regional development strategies;
- Strengthen the involvement of LRAs on some STEP elements, notably the selection of projects for the Sovereignty Seal, as they know what technologies fit in the local context (e.g. by involving regional stakeholders in addition to national contact points);
- For STEP elements where no strong involvement of LRAs is foreseen, ensure transparency and consultation as this is key to a fair and open implementation.

7.4 Clearer STEP objectives and targets and clearer funding focus

Generally, it would help to formulate Article 2 of the proposed regulation establishing STEP to clearly **set the goals and targets expressed in concrete figures**, in particular with regards to skills. It could also be useful to have clear definition of concepts such as "innovation", "competitiveness".

The **conditions for accessing funding should be also made more explicit**. The lack of clarity on objectives and funding focus combined with administrative costs for application and implementation may jeopardise the achievement of intended policy goals.

Maybe a more **focused pilot** should be run, looking into technologies for which there may be a critical window of opportunity now for the EU to keep its competitive advantage (e.g. electrolyser, wind industry).

Synergies and complementarities need to be ensured between policies and funding instruments, in particular as STEP proposes that one STEP project may benefit from multiple sources of EU funding.

However, this raises the question of the goal of each fund. It is therefore important to **clearly distinguish between the funds** to reduce confusion for beneficiaries and for the market and also allow assessing impacts and results of each instrument. Indeed, if the objectives of a policy change, it is difficult to assess whether the goals have been reached when it comes to the evaluation. This is important if conclusions are to be drawn from the STEP pilot in view of the next MFF.

7.5 Other recommendations

Many of the recommendations above are likely to apply beyond STEP for a future Sovereignty Fund in the next MFF.

For the current large scope of technologies under STEP and certainly for the fully-fledged Sovereignty Fund for the next MFF, significant additional money should be made available. One expert referred to a recent investment by Germany of 3 times the STEP amount to retain just one company.

STEP is presented by the EC has a "pilot project"⁸. It might not provide investors with enough predictability and stability to actually use it. They might be tempted to wait for the future fully-fledged sovereignty fund with clearer rules and longer time horizon to actually invest in Europe.

One comment was made on the Innovation Fund, which was created in the first place to develop and scale innovation and which is not sufficient to attract investors. Notably, it was said that the US is reaching out to European investors convince them to invest in the US, while the EU does not allocate resources to do the same in the US. It was not possible to further discuss this in the workshop but this could be something to further examine.

Generally, the EU should not react hastily to what another country has implemented but should rather define its industrial strategy by assessing its own strengths and building on them⁹.

⁸ This is to the extent that the EC shall accompany its evaluation report on the implementation of STEP (by 31 December 2025) by a proposal for amendments of the Regulation.

⁹ It is interesting to see that in its communication COM(2023) 684 final "Report on EU policy initiatives for the promotion of investments in clean technologies" of 24.10.2023, the EC provides a preliminary assessment of the impact of the U.S. Inflation Reduction Act on investments in the EU and recognises that the "macroeconomic effect on Europe has so far been limited".



**European Committee
of the Regions**



**Publications Office
of the European Union**

Web

QG-02-23-159-EN-N

ISBN 978-92-895-3036-1

DOI 10.2863/86350

© European Union, 2023



Created in 1994, the European Committee of the Regions is the EU's political assembly of 329 regional and local representatives such as regional presidents or city-mayors from all 27 Member States, representing over 446 million Europeans.

Brussels, October 2023

Rue Belliard/Belliardstraat 101 | 1040 Bruxelles/Brussel | BELGIQUE/BELGIË

Tel. +32 22822211 | e-mail: visuals@cor.europa.eu | www.cor.europa.eu

@EU_CoR | /european.committee.of.the.regions

/european-committee-of-the-regions | @EU_regions_cities

Unless otherwise noted, the reuse of this document is authorised under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of elements that are not owned by the European Union, permission may need to be sought directly from the respective copyright holders. Accordingly, you are required to clear additional rights if a specific content includes third-party works. Where permission is obtained, such permission shall cancel and replace the above-mentioned general permission and shall clearly indicate any restrictions on use.