



## ERDF and RRF Funding for skills for smart specialisation, industrial transition and entrepreneurship 2021-2027

### HIGHLIGHTS

European Regional Development Fund (ERDF) programming in the 2021-2027 financial period allows for investment in *skills for smart specialisation, industrial transition and entrepreneurship*.

This research analyses ERDF allocations to skills for S3 across the EU-27, alongside similar investments under the temporary Recovery and Resilience Facility (RRF) within the context of the European Semester recommendations.

The RRF created an alternative source of finance for EU Member States (MS) in skills and education and has the potential to impact upon ERDF programming. MS enjoy considerable discretion in determining which instruments finance which investments.

The estimated total value of RRF funding directly relevant to Skills for S3 is EUR 60.55 billion (12.2% of the total RRF funding), which dwarves that available under ERDF (EUR 2.09 billion).

At Member State level, ERDF allocations range from 6.4% of the Swedish ERDF total allocation to no allocation for Austria, Cyprus, Denmark, Ireland, and Luxembourg.

The regional programmes with the highest allocations to Skills for S3 are Puglia, Flanders, Hauts de France and Norte in nominal terms; Flanders and Rheinland Pfalz in relative terms.

Nominal RRF allocations to Skills for S3 are highest in Italy, Spain and France, with Spain allocating the highest relative amount (25.21%). The average amount allocated at MS level is 12.20% of the total RRF allocation.

There tends to be little correlation between skills needs identified in the European Semester country reports and the allocations at national level in terms of amounts and nature of the activity.

Skills development policies and investments are multi-level and cross-sectoral, implying significant governance challenges in relation to coordination, efficiency and complementarity. In many cases, complementarity becomes clear only as actual projects come forward for funding, with approaches reflecting territorial contexts and actors.

## CONTEXT

### ERDF and Smart Specialisation

Since 2010, the Commission has required national and regional governments to develop smart specialisation strategies as the basis for research and innovation investments under the ERDF. In the 2021-2027 programming period, good governance of smart specialisation is among the enabling conditions<sup>1</sup> for ERDF Policy Objective 1.

A new specific objective for the European Regional Development Fund (ERDF) support in the 2021-2027 programming period covers 'Skills for Smart Specialisation, Industrial Transition and Entrepreneurship' (specific objective (SO) 1.4)<sup>2</sup>. This places skills development as an integral part of a territorial smart specialisation strategy and process and a place-based approach to innovation.

A DG REGIO policy paper<sup>3</sup> classifies SO 1.4 activity/ies under the following categories:

- innovation management in SMEs;
- training and reskilling within firms;
- entrepreneurial skills;
- skills development in higher education (HE);
- HE integration into territorial innovation ecosystems.

The basis for negotiation of 2021-2027 cohesion policy proposals was the European Semester country reports in 2019<sup>4</sup>, which included investment guidance for each Member State (MS) on funding priority investment areas.

### Recovery and Resilience Facility (RRF)

The RRF is a temporary instrument introduced in February 2021 to enable the EU to emerge stronger and more resilient from the COVID-19 crisis<sup>5</sup>. It is structured around six pillars<sup>6</sup> representing EU policy or

investment areas that need strengthening to improve EU resilience. Within this framework, EU MS should produce a National Recovery and Resilience Plan (NRRP) to implement ambitious reforms and investments that address the Country Specific Recommendations under the European Semester<sup>7</sup>.

The RRF was referenced alongside the ERDF in the Commission's *Harnessing Talent* communication<sup>8</sup> in relation to funding demand for and supply of talent in regions in, or at risk of falling into, a *talent development trap* and increasing the capacity of regions to build sustainable, competitive and knowledge-based economies.

## METHODOLOGY

The research aims to analyse ERDF allocations to *skills for smart specialisation, industrial transition and entrepreneurship* in the 2021-2027 programming period and to gain an understanding of the level of financing allocated across different regions of the EU, the type of initiative funded and potential beneficiaries. Measures proposed under the RRF were also analysed to determine the extent to which this instrument targeted similar or complementary activity and had the potential to impact ERDF programming.

Under ERDF, allocations to SO1.4 and Category of Expenditure (CoE) 23 (*Skills development for smart specialisation, industrial transition, entrepreneurship and adaptability of enterprises to change*) were analysed, using a dataset received from DG REGIO, extracted from their Open Data Portal<sup>9</sup>.

For the RRF, the research utilised the 'Bruegel RRP' dataset (dated 20 February 2023)<sup>10</sup>, and the 27 Recovery and Resilience Plans (RRP). The analysis looked to identify and classify funding allocations for S3 skills on the basis of activities included in an (internal) DG REGIO

<sup>1</sup> Enabling conditions ensure that the necessary conditions for the effective and efficient use of the Funds are in place and are linked to policy and strategic frameworks.

<sup>2</sup> Article 3, Regulation (EU) 2021/1058 of the European Parliament and of the Council of 24 June 2021 on the European Regional Development Fund and on the Cohesion Fund.

<sup>3</sup> DG Regional and Urban Policy (2021), Policy Objective 1 (internal use only)

<sup>4</sup> [https://commission.europa.eu/publications/2019-european-semester-country-reports\\_en](https://commission.europa.eu/publications/2019-european-semester-country-reports_en)

<sup>5</sup> [https://ec.europa.eu/economy\\_finance/recovery-and-resilience-scoreboard/index.html?lang=en](https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/index.html?lang=en)

<sup>6</sup> The six pillars are: green transition; digital transformation; smart, sustainable and inclusive growth; social and territorial cohesion; health, and economic, social and institutional

resilience; and policies for the next generation, children and the youth.

<sup>7</sup> REGULATION (EU) 2021/241 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 12 February 2021 establishing the Recovery and Resilience Facility

<sup>8</sup> European Commission (2023) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Harnessing talent in Europe's regions*, COM(2023) 32 final

<sup>9</sup> [Open Data Portal for the European Structural Investment Funds - European Commission | Data | European Structural and Investment Funds \(europa.eu\)](https://open-data-portal.ec.europa.eu/dataset/european-union-countries-recovery-and-resilience-plans) at 11.04.2023.

<sup>10</sup> <https://www.bruegel.org/dataset/european-union-countries-recovery-and-resilience-plans>

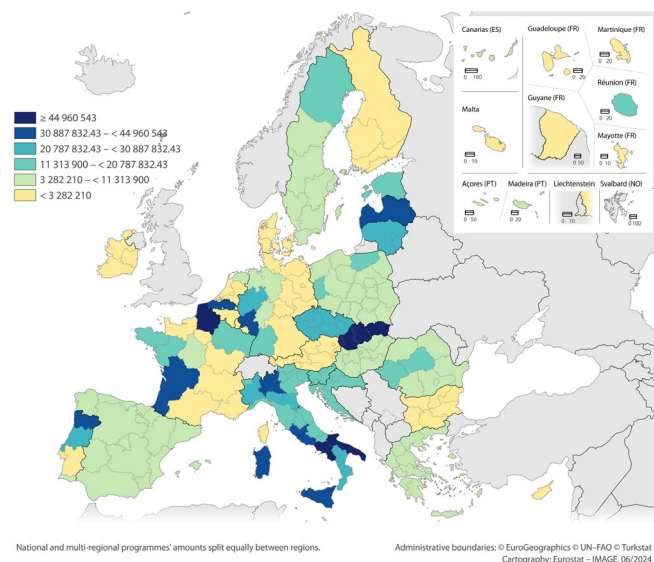
policy paper on Policy Objective 1 (see opposite). However, RRF measures did not easily lend themselves to classification under the ERDF categories, and their classification by experts was ultimately subjective. 242 RRF measures overall were categorised as of *definite* or *possible* relevance to Skills for S3.

Finally, a desk review was undertaken of Annex D of the 2019 European Semester Country Reports to identify strategic focus on skills for S3 and industrial transition and recommendations given to MS in relation to investment in S3 skills.

## SKILLS FOR S3 - ERDF INVESTMENT

Of the 190 ERDF programmes, 68 of them (36%) include a financial allocation for SO1.4 and 94 of them (49%) for CoE23. Of the ERDF allocation for all programmes, 0.73% is allocated to SO1.4, and 0.94% to CoE23. As 0.67% (1.4b EUR) of ERDF is both SO1.4 and CoE23, the total percentage allocated to Skills for S3 overall, avoiding double counting, is 1.01% (a total EU amount of 2.1b EUR). Figures 1 and 2 show regional allocations with national and multi-regional programme amounts divided equally between participating regions.

Figure 1: Map of nominal ERDF allocations to SO1.4 and CoE23 at regional level (EUR bn)



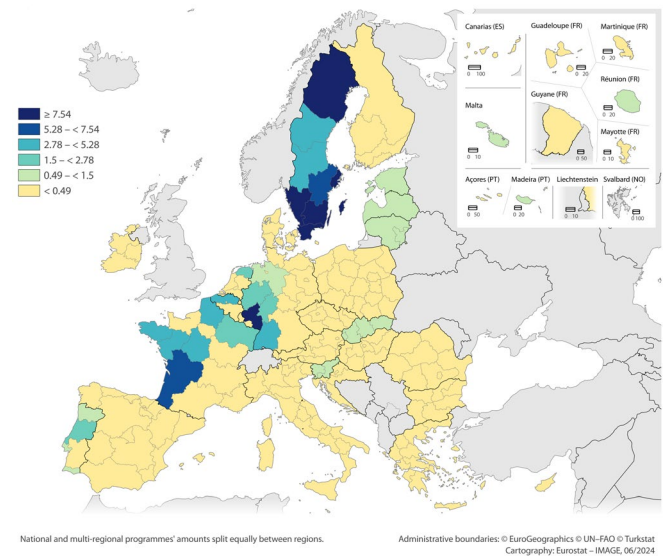
At Member State (MS) level, allocations range from 6.4% of the Swedish ERDF total allocation to no allocation for Austria, Cyprus, Denmark, Ireland, and Luxembourg.

At regional level, 40% of the EU-27's 240 NUTS 2 regions allocate some funding under SO1.4 and 55% under CoE23. All Portuguese, Romanian, and Swedish regions allocate funding to SO1.4, as well as most of

the Italian regions, with Italy and Romania the only MSs with both national and regional programmes with Skills for S3 allocations.

At programme level, allocations tend to be low: only about 10% of the 190 programmes have an allocation above two percent of the total. The highest percentage allocation of any programme to Skills for S3 occurs in the German region of Rheinland-Pfalz (see Table 1).

Figure 2: Map of percentage allocation of ERDF to SO1.4 and CoE23 at regional level



Activity targeted by the allocations covers mostly skills development for firms (training and reskilling related to S3, industrial transition and entrepreneurship) and strengthening the innovation ecosystem through supporting the Entrepreneurial Development Process (EDP). There is notably very little investment in fixed assets for firms or higher education, and instead a focus upon support services, capacity building, networking and technology transfer.

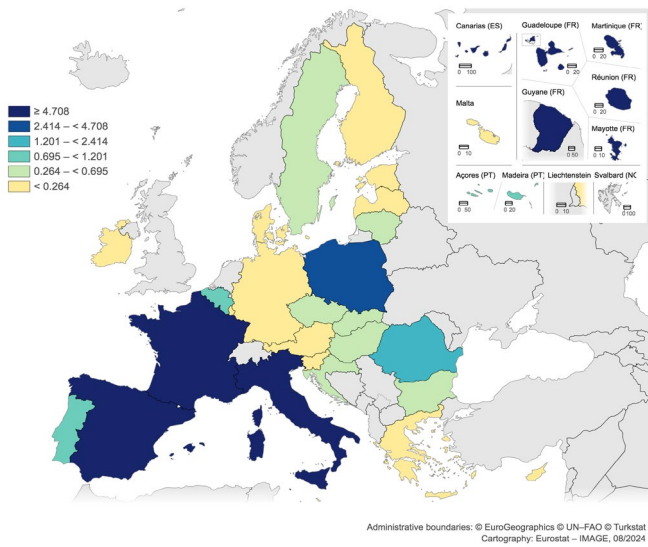
## SKILLS FOR S3 – RRF INVESTMENT

The total value of RRF funding categorised as directly relevant to Skills for S3 is EUR 60.55 billion (12.2%), with a further EUR 28.12 billion (5.72%) allocated to activity that could possibly include or be relevant for S3 skills, suggesting a potential total of up to EUR 88.3 billion (around 18% of the total EUR 491.51 billion).

At MS level, nearly 85% of the total RRF investment in Skills for S3 across the EU-27 RRF was allocated in Italy (EUR 28.85 billion), Spain (EUR 17.53 billion) and France (EUR 4.71 billion). Overall, MS have allocated 12.20% of their RRF to investments relevant to S3 skills. In terms of *definite* Skills for S3 activity, Spain

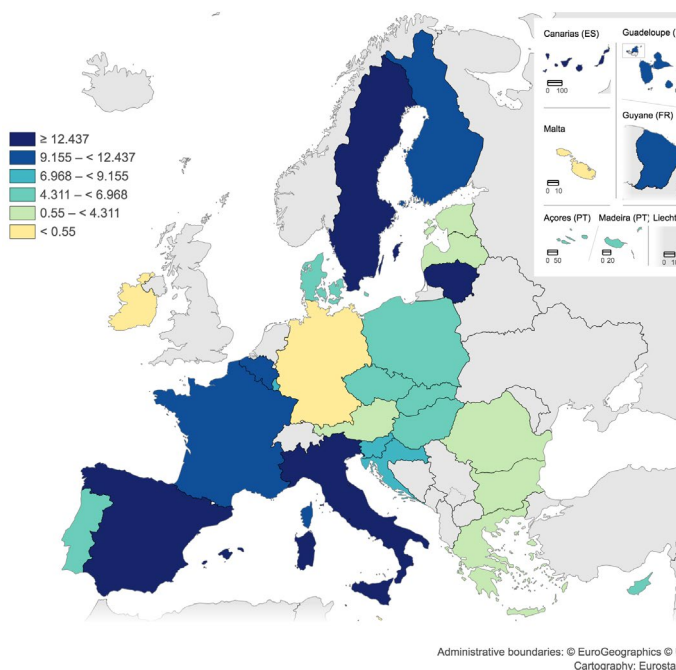
allocates the greatest relative amount (25.21%), followed by Lithuania (16.37%), and Italy (15.07%).

Figure 3: Map of RRF allocations (definite) by MS to Skills for S3 (EUR bn)



The majority of RRF Skills for S3 investment is allocated to innovation support for SMEs, but there is also a strong focus upon skills development for firms, specifically in relation to digital skills and to strengthening the R&I ecosystem. Measures aimed at entrepreneurial skills are few (6 *definite* out of the 242 identified as relevant), with Spain the only EU MS to invest any significant amount.

Figure 4: Map of RRF allocations (definite) by MS to Skills for S3 (%)



## CONCLUSIONS

The amounts allocated under the RRF across the EU-27 to Skills for S3 (EUR 60.55 billion) dwarf those available under ERDF (EUR 2.093 billion). Italy allocates significantly greater funding to Skills for S3 across the two instruments than any other EU MS (EUR 29.42 billion) but in terms of percentage Spain allocates more (19.12%).

Many smaller MS have chosen to use their RRF allocations to address skills for S3 needs, rather than ERDF (e.g. Austria, Cyprus, Denmark). The absence of skills related allocations in five MS' ERDF programming also suggests that the introduction of the RRF did in fact influence and lead to the adaptation of funding priorities under ERDF programming. Under both initiatives a synergist approach to skills development is evident in the design of the plans/programmes, whereby skills provision is often incorporated as a complementary activity or within a broader policy response.

In general, skills development for firms (training and reskilling) alongside innovation support for SMEs are the most likely activities to have funding allocated under both initiatives, whilst entrepreneurial skills tend to be included more to a greater extent under ERDF. Italy, Romania and Croatia, notably, have allocated funding under the RRF and/or ERDF against all of the five skills categories.

In their 2019 Annex D recommendations all EU27 MS received a recommendation related to Skills for S3, industrial transition and entrepreneurship. Skills development for firms is the category against which most MS received recommendations (25 MS), followed by support for SMEs (17 MS). Thirteen MS received recommendations related to entrepreneurial skills and skills development in HEIs, whilst only 10 MS had a recommendation related to strengthening regional innovation ecosystems.

There tends to be little correlation between the number of skills needs identified in the country reports and the allocations at national level. Italy, for example, allocates the highest amount to skills for S3 and across all five skills categories, yet only has relevant recommendations against two. Allocations for skills for S3 related activity at regional level do however demonstrate some correlation with the regions identified as being in or at risk of being in a talent development trap, with high allocations and wide ranges of activity

incorporated across Italian and Romanian ERDF programmes.

The analysis of funding allocations to address place-based skills needs across the EU territory attempts to provide an ex-ante overview of responses and actions across different government levels to the twin transitions and industrial transition in relation to human capital challenges. The introduction of SO 1.4 recognised that prioritising investment on skills relevant to a limited number of smart specialisation domains and the twin transitions would be likely to improve alignment with the needs of territorial labour markets and hence regional resilience in transformation.

These results show varied policy responses reflecting different territorial characteristics and sectoral concentration, and the likely varying impact of the transition, its magnitude and scope, across the EU territory. Territories have allocated funding from different instruments to different types of skills-related activity reflecting their needs and challenges and territory-specific conditions.

Nevertheless, the ultimate achievement of results and impacts in the field of skills for S3 is dependent on factors such as project selection, beneficiaries, policy coordination, absorption and administrative capacities and governance models. The measures require multi-level and cross-sectoral coordination implying significant challenge and complexity in relation to complementarity.

**Table 1.** Regional programmes with the greatest allocations to SO1.4 and CoE23.

<b>Regional programme</b>	<b>MS</b>	<b>SO1.4 amount (m€)</b>	<b>Regional programme</b>	<b>MS</b>	<b>SO1.4 %</b>
Puglia	IT	82.0	Flanders	BE	15.0%
Flanders	BE	40.0	South Sweden	SE	11.5%
Norte Regional	PT	40.0	Småland and the islands	SE	11.2%
Nouvelle-Aquitaine	FR	37.5	West Sweden	SE	10.5%
Centro	PT	28.0	Stockholm	SE	10.0%
Nordrhein-Westfalen	DE	25.1	Upper Norrland	SE	7.5%
Sicilia	IT	19.8	Noord-Nederland	NL	7.0%
Lombardia	IT	17.6	East-Central Sweden	SE	7.0%
Sardegna	IT	15.0	Nouvelle-Aquitaine	FR	5.3%
Upper Norrland	SE	14.3	Baden-Württemberg	DE	5.3%

<b>Regional programme</b>	<b>MS</b>	<b>CoE23 amount (m€)</b>	<b>Regional programme</b>	<b>MS</b>	<b>CoE23 %</b>
Puglia	IT	82.0	Rheinland-Pfalz	DE	16.4%
Hauts de France	FR	45.0	Murcia	ES	12.0%
Norte	PT	40.0	South Sweden	SE	11.5%
Murcia	ES	39.9	Småland and the islands	SE	11.2%
Rheinland-Pfalz	DE	39.5	West Sweden	SE	10.5%
Nouvelle-Aquitaine	FR	37.5	Stockholm	SE	10.0%
Campania	IT	30.3	Noord-Nederland	NL	7.9%
Centro	PT	28.0	Flanders	BE	7.5%
Nordrhein-Westfalen	DE	25.1	East-Central Sweden	SE	7.0%
Flanders	BE	20.0	Nouvelle-Aquitaine	FR	5.3%

Source: authors' elaboration

## REFERENCES

[1] European Commission, Joint Research Centre, Woolford, J. and Lalanne, M., *Skills for Smart Specialisation, Industrial Transition and Entrepreneurship*, Publications Office of the European Union, Luxembourg, 2024, JRC139050.

[2] European Commission, Joint Research Centre, Woolford, J., Bachtrögler-Unger, J., Burton, A., Lalanne, M. and Gulda, K., *Skills for Smart Specialisation*, Publications Office of the European Union, Luxembourg, 2024, <https://data.europa.eu/doi/10.2760/768385>, JRC137083.

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## CONTRIBUTORS

Roland Blomeyer, Kylie Jabjiniak, Lea Ginon (blomeyer & sanz sl)  
Giovanni Familiari, Philip Christian, Michele Alessandrini (t33 Srl)  
Krzysztof Gulda (University of Warsaw, Knowledge and Technology Transfer Centre).

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## CONTACT INFORMATION

[Jayne.Woolford@ec.europa.eu](mailto:Jayne.Woolford@ec.europa.eu)



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