

# Strategic Governance Plan for Rural Depopulation in RESOE

*Regional Action Plan*

**GALICIA**



This project is funded by the EU via the Structural Reform Support Programme and implemented by the OECD, in collaboration with the European Commission



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# 1 Setting the scene

## Introduction

The RESOE regions<sup>1</sup> of Asturias, Cantabria, Castilla y León and Galicia in Spain have a high degree of rurality, and are facing challenges associated with population decline and ageing. The project Strategic Governance Plan for Rural Depopulation in RESOE, part of the OECD work-stream *Preparing Regions for Demographic Change*, aims at designing an action plan for each region and a common strategy for the four regions on three relevant topics to OECD rural regions facing depopulation<sup>2</sup>: 1) multi-level governance, 2) entrepreneurship, innovation and digitalisation, and 3) quality service provision.

Galicia is one of Spain's 17 Autonomous Communities (TL2 equivalent) and is part of the RESOE macro-region. The region has four provinces (TL3 regions) – A Coruña, Lugo, Ourense and Pontevedra – and 313 municipalities, including its capital Santiago de Compostela. Most of the population and economic activity of Galicia are concentrated in the Atlantic axis A Coruña - Vigo. While Galicia has a good road network that facilitates regional mobility, many rural communities in mountainous areas remain far away from urban areas.

As in the rest of Spain, the region has experienced reductions in public budgets. These combined with mounting demographic pressures of population decline and ageing have brought strong fiscal pressures to regional and local governments to provide public services effectively and sustainably. This has occurred in tandem with increasing costs of service provision in key areas of social services, such as health and education.

The present document summarises a series of recommendations and actions for the region's consideration. It contains analyses based on secondary data collection, literature survey, a survey sent to each region and a study mission. This chapter sets the scene for the action plan developed in the next three chapters and summarised in Chapter 5. The chapter starts by summarising the most relevant demographic and labour market trends in the first two sections. It then analyses digital connectivity indicators and finally shows trends in public expenditure on public services.

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<sup>1</sup> The Macro-region "Regions of Southwest Europe" (RESOE) was constituted by a Memorandum of Understanding in 2010 signed by Castilla y León, Galicia and Northern Portugal. In 2014 it was extended with the accession of the Principality of Asturias and the Central Region of Portugal. Finally, in 2017 the region of Cantabria joined. This action plan uses the term "RESOE" to refer to the Spanish regions of the macro-region: Castilla y León, Galicia, the Principality of Asturias, and Cantabria.

<sup>2</sup> The Government of Spain uses the concept of demographic challenge (*reto demográfico*) as a general concept to group phenomena such as depopulation of rural areas, low density outside the main cities, a sustained fall in the birth rate, progressive ageing and the effects derived from seasonal overpopulation.

## Demographic profile and trends

Galicia is Spain's fifth largest TL2 region in terms of population, with 2 701 819 inhabitants in 2020, and the seventh in terms of surface area, with 29 574 km<sup>2</sup>. The population density of Galicia (92 inhabitants/km<sup>2</sup>) is near that of Spain (94.2 inhabitants/km<sup>2</sup>) (Table 1.1). The share of Galician population living in metropolitan regions (76.5%) is higher than the average of Spain (75.5%) and EU27+UK countries (51%).

The annual population growth rate between 2001 and 2019 was close to zero. The share of the elderly in the total population (25.4%) is over 5.8 percentage points higher than Spain. Galicia has also a relatively low share of foreigners compared to the rest of the country (6.8%).

**Table 1.1. Summary of demographic trends indicators**

	Pop. density (per km <sup>2</sup> ) (2020)	Annual % pop. growth (2001-2019)	Share of elderly (65+) in total pop. (%) (2020)	Share of foreign-born pop. (%) (2015)
Galicia	92.0	0.005	25.44	6.8
RESOE	48.3	-0.040	24.98	6.7
Spain	94.2	0.857	19.58	11.6
OECD	38.4	0.687	13.13	10.0

Note: The RESOE population density calculation is based on 2019 values. The RESOE and OECD share of elderly calculation is based on 2019 values. The share of foreign-born population for OECD is an average of the values of 295 TL2 regions in 27 OECD countries. The share of foreign-born population for RESOE is an average of the values of the four RESOE TL2 regions.

Source: (OECD, OECD Regional Statistics, 2021).

Of the 313 municipalities in Galicia, 64% have a population of less than 5 000 inhabitants, 72% are below the European Union average, 81% are below the OECD average, and even 11% do not exceed a thousand inhabitants (Table 1.2). While most of the municipalities in the provinces of Pontevedra and La Coruña have populations of more than 5 000 inhabitants, in Lugo and Ourense only 18% and 12%, respectively, of municipalities are in this range. In addition, the share of local governments with less than 1 000 residents in these two provinces is 10% and 29%. Finally, 5% of the municipalities in Ourense have fewer than 500 inhabitants (Figure 1.1).

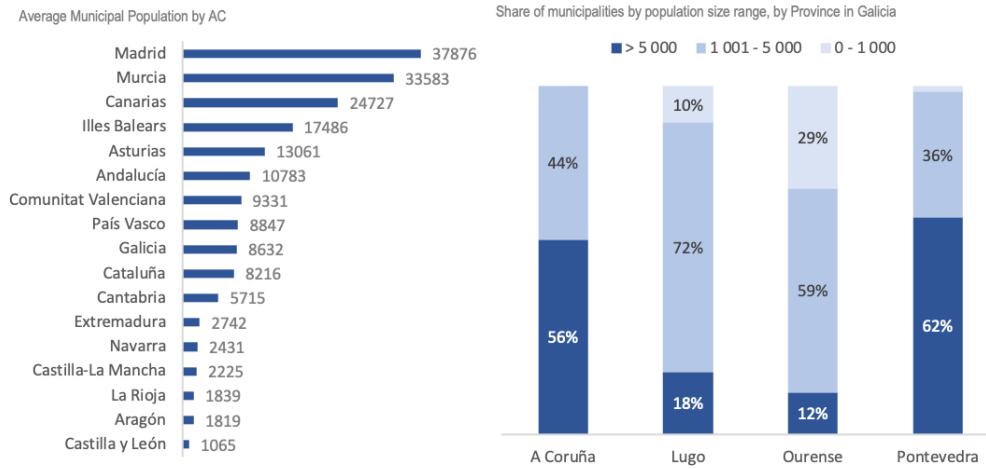
**Table 1.2 Municipal Fragmentation in RESOE and Spain**

Region	Municipalities	Avg. Municipal Pop.	< 1 000 inh.	< 5 000	< 5 900 (EU)*	% < 9 700 (OECD)**
Asturias	78	13 061	23.1%	62.8%	67.9%	74.4%
Cantabria	102	5 714	36.3%	79.4%	82.4%	90.2%
Castilla y León	2 248	1 065	89.3%	97.3%	98.0%	99.0%
Galicia	313	8 632	11.2%	63.9%	71.6%	81.2%
RESOE	2 741	2 444	76.5%	91.8%	93.6%	95.9%
Spain	8 131	5 836	61.5%	84.0%	85.9%	90.4%

Notes: \*The European Union average municipal size is 5 900 inhabitants; \*\*The OECD average municipal size is 9 700 inhabitants.

Source: Author's elaboration based on (INE, 2020) and (SNG-WOFI, 2019)

**Figure 1.1. Infra-municipalism in Spain and Galicia**

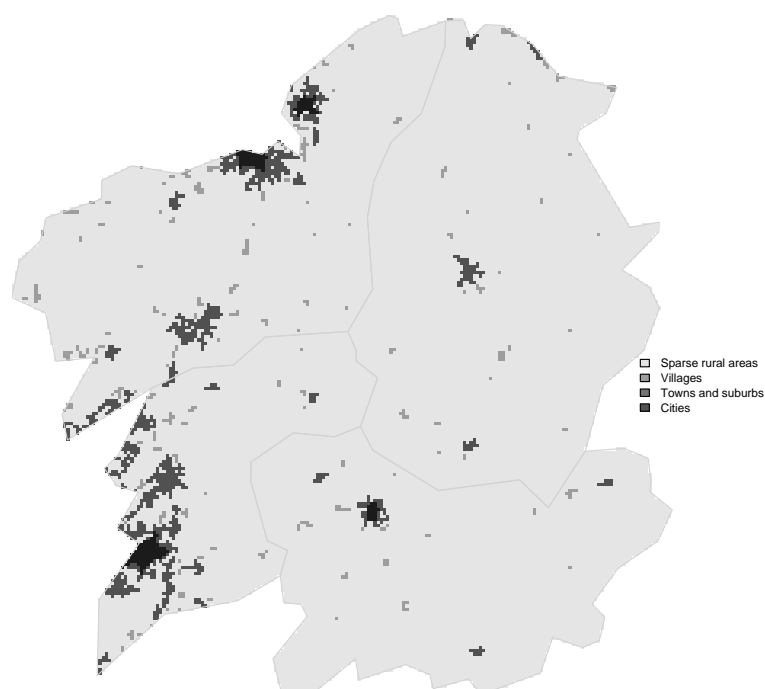


Source: (INE, 2020), Instituto Nacional de Estadísticas (2020), Padrón Población por Municipio, [https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica\\_P&cid=1254734710990](https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica_P&cid=1254734710990)

According to the degree of urbanisation classification (see Annex A), in 2011, 37% of the region's population lived in cities (in line with the EU27+UK average) and another 25% in towns and suburbs (below the EU27+UK average of 33%). The largest share of this population is concentrated in the Atlantic axis A Coruña - Vigo (Figure 1.2). Villages and sparse rural areas, on the other hand, concentrated 15% and 23% of the population respectively (above than the EU27+UK averages of 12% and 18%). Galicia and Castilla y León are the only two RESOE regions where the shares of population in these lower density areas exceed the European average.

**Figure 1.2. Population by degree of urbanisation**

2011 population



Note: See Annex A for a definition of degree of urbanisation areas  
Source: Authors' elaboration based on (European Commission, 2021)

By 2035, the population of Galicia is projected to decrease from 2.6 million to around 2.3 million inhabitants. While all types of areas are projected to experience population decline, cities, towns and suburbs are projected to increase their population share by 2035, to 39% in the case of cities and 26% in the case of towns and suburbs. Sparse rural areas, on the other hand, are projected to shrink at -1.1% annually (or a fall in population of about 139 000 inhabitants) (Table 1.3), lowering their population share to 20%. The expected population decline is linked to higher projected death rates, mostly as a result of ageing.

**Table 1.3. Summary of population projection indicators by degree of urbanisation**

2011-2035

Degree of urbanisation	Population 2011	Share 2011	Population 2035	Share 2035	Annual pop. growth 2011-2035	Birth rate 2011	Birth rate 2035	Death rate 2011	Death rate 2035
Sparse rural	603 988	23%	465 020	20%	-1.1	6.5	14.4	4.7	16.2
Villages	386 658	15%	341 263	15%	-0.5	6.8	12.1	4.9	14.2
Towns and suburbs	638 437	25%	592 046	26%	-0.3	7.6	8.8	5.4	11.5
Cities	963 256	37%	905 278	39%	-0.3	7.1	8.9	4.9	11.8

Note: Annual growth is calculated using compound growth rates.

Source: Authors' elaboration based on (Goujon A., Jacobs-Crisioni C., Natale F., Lavallo C. (Eds), 2021) and (Jacobs-Crisioni, C., C. Perpiña Castillo, J.-P. Aurambout, C. Lavallo, C. Baranzelli, and F. Batista e Silva, (nd)).

## Labour market, rural entrepreneurship and innovation

As a result of the COVID-19 pandemic crisis, the Galician economy contracted by 10.5% in 2020 and will recover by 5.4% in 2021, according to data from the *Fundación de las Cajas de Ahorros* (Funcas, 2021). The unemployment rate is forecast at 13.4% for 2021 (-0.1 point compared to 2020), making Galicia one of the Spanish regions with the lowest increase in unemployment compared to the year before the COVID-19 pandemic. In addition, the pandemic particularly affected sectors whose activity requires high social interaction (e.g. tourism and hospitality, leisure, trade and transport, SMEs). Among neighbouring destinations, Spain registered one of the largest declines (around -77%) in the volume of non-resident tourist arrivals in 2020 (Arce, 2021).

In the labour market, the share of active people in rural areas, including young workers, has decreased in over time faster in Galicia than in other RESOE regions. Between 2008 and 2018, the share of total number of active workers in rural areas decreased from 31.3% (395 700) to 21.3% (261 500) and the share of young workers from 29.2% to 20.4% (Table 1.4). This fall is smaller than the 48% drop at the national level but higher than in RESOE regions such as Cantabria (13%) and Asturias (12%).

In 2018, 22% of entrepreneurs in Galicia were located in rural areas, below the RESOE regions (34.6%), but above Spain (17.8%). Contrary to national trends, community services (which includes tourism and social services) significantly increased their share in employment in rural areas between 2008 and 2018 by over ten percentage points.

**Table 1.4. Share of labour market demographics and entrepreneurship by degree of urbanisation (%)**

	Active labour			Young workers			Entrepreneurs			Community Services		
	2008 (%)	2018 (%)		2008 (%)	2018 (%)		2008 (%)	2018 (%)		2008 (%)	2018 (%)	
<b>Galicia (Total)</b>	<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>	
Cities	35,6	39,8	△	35,6	41,6	△	37,7	46,8	△	54,5	52,5	▽
Towns & Suburbs	33,1	38,9	△	35,2	38,0	△	32,9	31,2	▽	41,1	32,9	▽
Rural areas	31,3	21,3	▽	29,2	20,4	▽	29,4	22,0	▽	4,5	14,6	△
<b>RESOE (Total)</b>	<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>	
Cities	41,5	43,3	△	42,0	43,2	△	33,2	44,0	△	56,8	48,4	▽
Towns & Suburbs	23,8	32,2	△	25,4	33,5	△	24,5	21,5	▽	28,2	27,9	▽
Rural areas	34,7	24,5	▽	32,6	23,3	▽	42,3	34,6	▽	15,0	23,7	△
<b>Spain (Total)</b>	<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>		<b>100,0</b>	<b>100,0</b>	
Cities	53,0	54,3	△	54,2	54,9	△	50,2	56,4	△	56,3	61,3	△
Towns & Suburbs	24,0	33,7	△	24,7	33,8	△	20,6	25,8	△	27,1	30,3	△
Rural areas	23,1	12,1	▽	21,1	11,3	▽	29,3	17,8	▽	16,7	8,4	▽

Note: Active labour = 16-64 year old (inclusive) actively engaged in the labour market (employed & unemployed seeking jobs); Young workers = 27-33 year old (inclusive); Community Services = [NACE code](#) "R - Arts, entertainment and recreation".

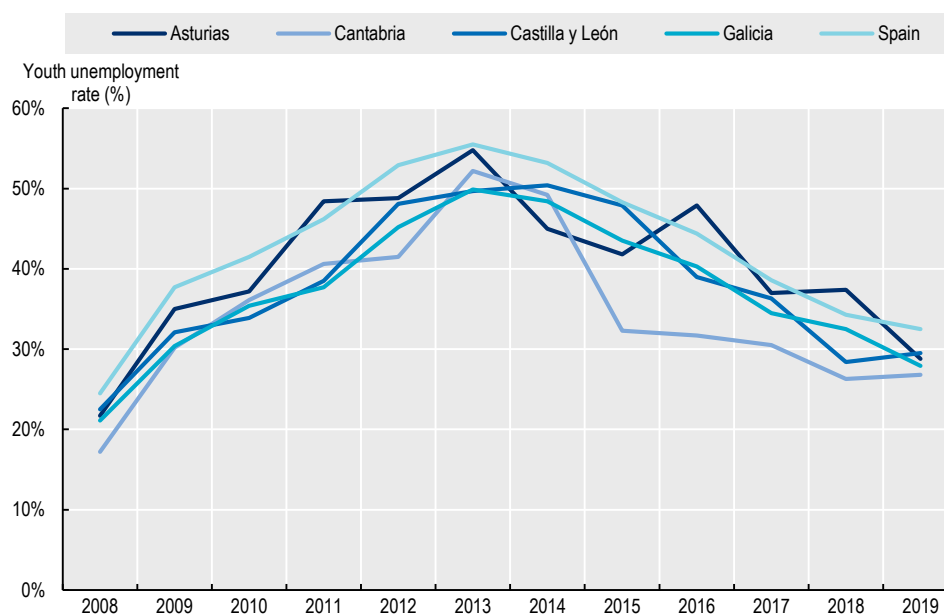
Source: (ILOSTAT, 2020)

In 2019, the youth unemployment rate in Galicia was 27.9%, below the rate in Spain (32.5%) (Figure 1.3). In 2013, at the peak of the 2008 financial crisis, the youth unemployment rate in Galicia reached historical highs, with 49.9% of young people unemployed. The COVID-19 crisis deteriorated youth labour participation levels even further. In the last quarter of 2020, the activity rate of people aged between 16 and 29 in Galicia was 44%, around eight percentage points below the national average (Consejo de la Juventud de España, 2021).



Figure 1.3. Youth unemployment rate (%)

2008-2019

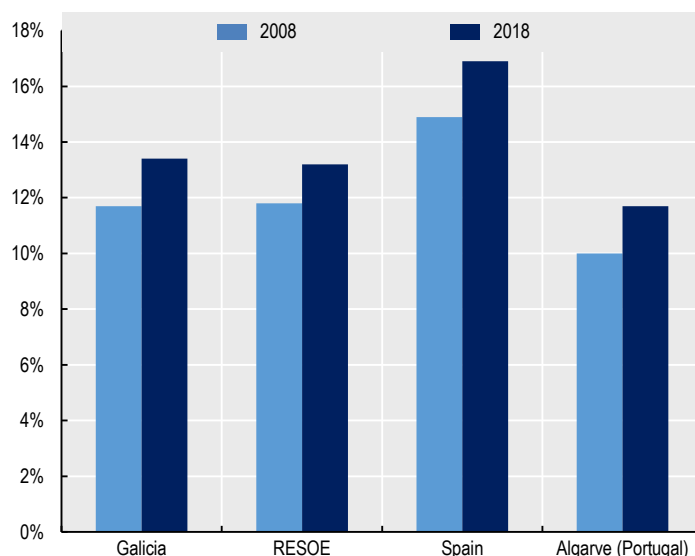


Note: The youth unemployment rate is the percentage of unemployment 15-24 over labour force 15-24.

Source: (OECD, 2020)

Across sectors, Galicia is the RESOE region where the number of jobs in the manufacturing sector fell the most (-28.7%) between 2008 and 2018. Galicia is also the RESOE region, together with Castilla y León, with the greatest weight of the agriculture, forestry and fishing sector in employment (6.5% in 2018 compared to, for example, 2.6% in Cantabria). On the other hand, high-value-added services<sup>3</sup> increased the most between 2008 and 2018 (+1.7 percentage points) (Figure 1.4). The trend is similar in RESOE, Spain and Algarve (Portugal). Galicia was the only RESOE region to have generated employment simultaneously in the sectors "professional, scientific, technological activities, administration, support service activities" (3 700 jobs) and "information and communication" (1 700 jobs).

<sup>3</sup> These include information and communication, financial and insurance activities, and professional, scientific, technical, administrative, support service activities.

**Figure 1.4. Share of high-level value-added services in the total employment rate (%)**

Note: High-level value-added services include the following [ISIC economic sectors \(rev 4\)](#): information and communication, financial and insurance activities, and professional, scientific, technical, administrative, support service activities. For Spain, 2018 values are provisional (data extracted on the 21<sup>st</sup> of July 2021).

Source: (OECD, 2018)

Between 2008 and 2017, the number of active firms in Galicia fell by 2.3%, below the RESOE macro-region (5.1%) and Spain (3.5%), but above the Portuguese region of Algarve<sup>4</sup>, where the number of active firms has slightly increased by 0.3% (Table 1.5). However, Galicia is the RESOE region where the number of active firms fell the least, and is the fifth TL2 region in Spain with the highest evolution between 2008 and 2018.

**Table 1.5. Number of all active firms**

	Number of all active firms		
	2008	2017	Growth rate
<b>Galicia</b>	218 918	213 787	▽ -2,3 %
<b>RESOE</b>	525 126	498 471	▽ -5,1 %
<b>Spain</b>	3 711 835	3 580 770	▽ -3,5 %
<b>Algarve (Portugal)</b>	64 431	64 633	△ +0,3 %

Note: Number of all active firms (incl. non-employers) includes ISIC economic sectors [\(rev 4\)](#) from B to S (industry, construction and services exc. insurance activities of holding companies).

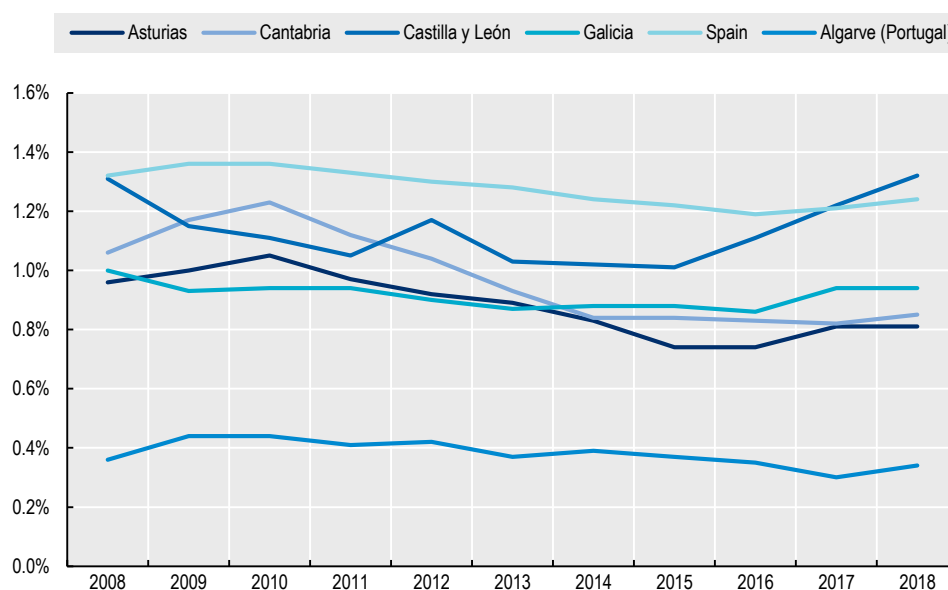
Source: (OECD, 2018)

Regarding innovation, the share of R&D in total expenditure in Galicia fell slightly in the post-crisis years, stabilised from 2013, and increased slightly from 2016 to reach 0.94% of Galician GDP in 2018 (Figure 1.5). Galicia's share is higher than Algarve's (Portugal), Asturias' and Cantabria's, but does not reach the level of Castilla y León (1.32% of GDP) and Spain (1.24% of GDP).

<sup>4</sup> As Algarve is the Portuguese region that most matches Galicia in terms of population density (88.5 inhabitants/km<sup>2</sup> in 2020 compared to 92 inhabitants/km<sup>2</sup> in Galicia), it will serve as a comparative benchmark in the policy plan.

**Figure 1.5. Share of R&D in total expenditure (as % of GDP)**

2008-2018



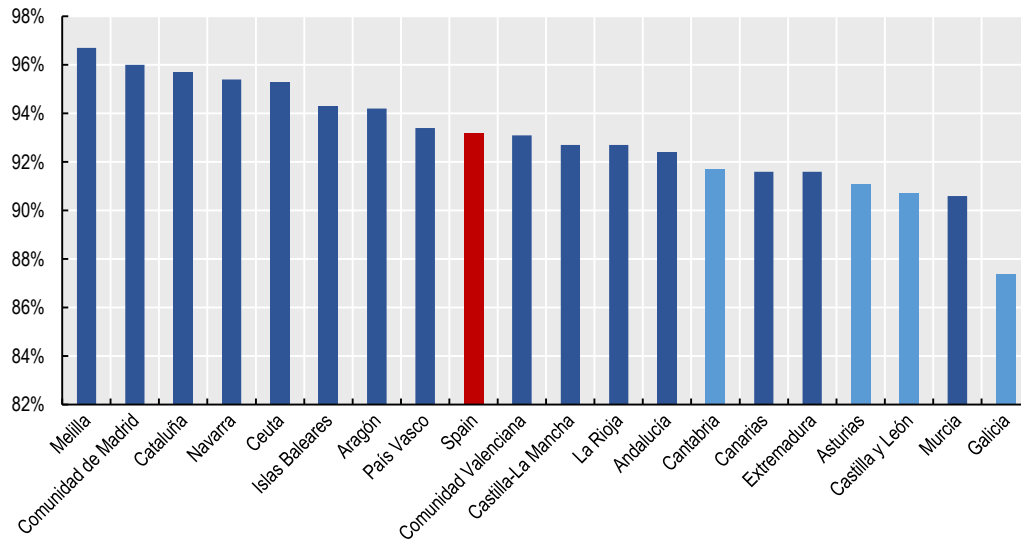
Source: (OECD, 2020)

## Digital connectivity

Available data shows Spain has good overall Internet access throughout its territory. In 2019, 91% of households had broadband Internet access, ahead of countries such as France (83%) and Italy (84%) (OECD, 2021). Households in Galicia also have relatively high broadband Internet access (88%), but below the national average. In 2020, Galicia is the region in Spain with the lowest proportion of people who used the Internet in a three-month period (87.4%), significantly below the other RESOE regions and the national average (93.2%) (Figure 1.6).

Figure 1.6. Share of people (16 to 74 years old) using the Internet in the last three months (%)

2020



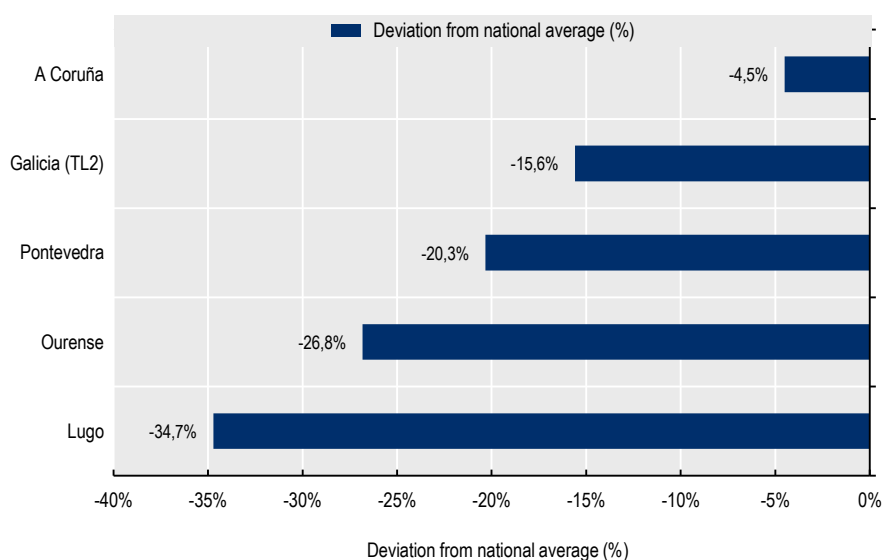
Source: (INE, 2020)

Speed data from Spain shows that actual fixed download speeds experienced by individuals vary substantially across and within Galicia region<sup>5</sup> (Figure 1.7). Galicia is the RESOE region with the highest negative deviation from the national average. Galicia inhabitants experience, on average, fixed download speeds that are under the national average (-15.6%), followed by Asturias (-15%), Cantabria (-7.4%) and Castilla y León (+4.1%). Within the region, data shows large differences in the quality of broadband connections despite sub-regions in Galicia have all negative deviations from the national level. While inhabitants in the province of A Coruña can expect to experience, on average, speeds that are 4.5% under the national average, residents of the province of Lugo experience download speeds 34.7% below the national average.

<sup>5</sup> Data from self-administered speed tests by Ookla is presented as deviations from the national average to highlight within-country differences in the quality of broadband connections.

**Figure 1.7. Gaps in download speeds experienced by users across TL3 regions in Galicia**

Ookla tests on fixed download speed, gaps estimated as percentage deviation from national averages (2020Q4)



Note: Speedtest data corresponds to 2020Q4. The data for average fixed broadband download Speedtests reported by Ookla measures the sustained peak throughput achieved by users of the network. Measurements are based on self-administered tests by users, carried over iOS and mobile devices. The figure presents average peak speed tests, weighted by the number of tests.

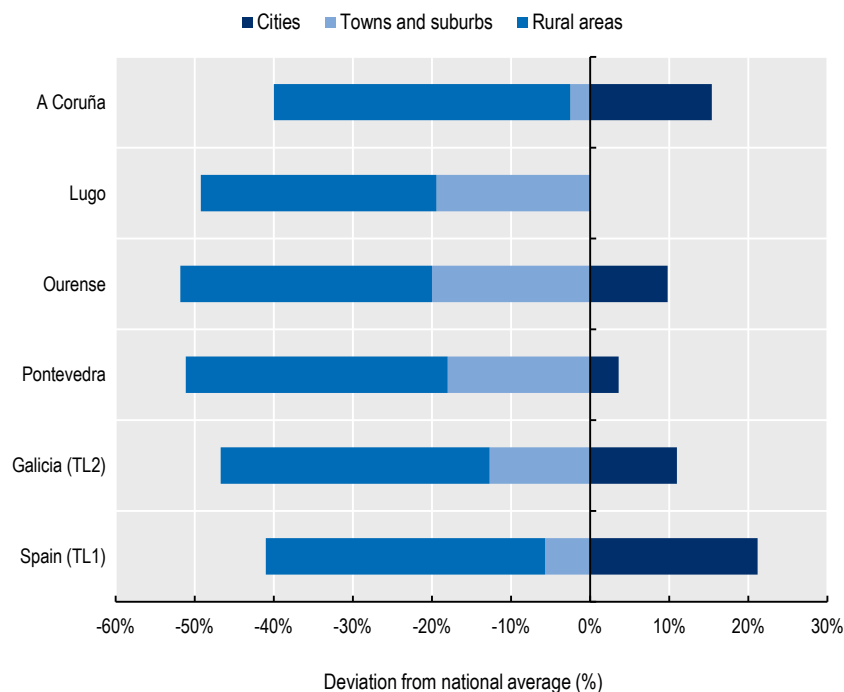
Source: OECD calculations based on Speedtest® by Ookla® Global Fixed and Mobile Network Performance Maps. Based on analysis by Ookla of Speedtest Intelligence® data for 2020Q4. Provided by Ookla and accessed 2021-01-27. Ookla trademarks used under license and reprinted with permission.

Speed data for Spain and Galicia shows that people living in cities experience, on average, better connection speeds than people living outside cities (Figure 1.8). In Galicia, while city inhabitants experience speeds that are 11% above the national average, people outside cities experience speeds that are below the national average (12.7% lower in towns and suburbs and 46.7% lower in rural areas). At the province level, Ourense is the sub-region where rural areas have the highest negative deviation from the national average, as rural inhabitants experience download speeds 51.8% below the national average.

The challenge of improving the long band's level of deployment in the territory has already been addressed in the previous Galician Digital Agenda, obtaining important results such as a significant reduction of the gap at 100Mbps and a near elimination of the gap at 30Mbps. In addition, the support for digital connectivity that will be addressed through the Recovery Plan ensures that 100% of Galicia will have high-speed connectivity by 2025, thus solving the problem of deviations at both the regional and subregional levels.

**Figure 1.8. Gaps in download speeds experienced by users across TL3 regions in Galicia, by degree of urbanisation**

Ookla tests on fixed download speed, gaps estimated as percentage deviation from national averages (2020Q4)



Note: Speedtest data corresponds to 2020Q4. The data for average fixed broadband download Speedtests reported by Ookla measures the sustained peak throughput achieved by users of the network. Measurements are based on self-administered tests by users, carried over iOS and mobile devices. Aggregation according to the degree of urbanisation was based on GHS Settlement Model (GHS-SMOD) layer grids. The figure presents average peak speed tests, weighted by the number of tests. According to Degurba's database on the degree of urbanisation for local administrative units (LAU), Lugo does not have any urban clusters that fall under the "cities" category.

Source: OECD calculations based on Speedtest® by Ookla® Global Fixed and Mobile Network Performance Maps. Based on analysis by Ookla of Speedtest Intelligence® data for 2020Q4. Provided by Ookla and accessed 2021-01-27. Ookla trademarks used under license and reprinted with permission.

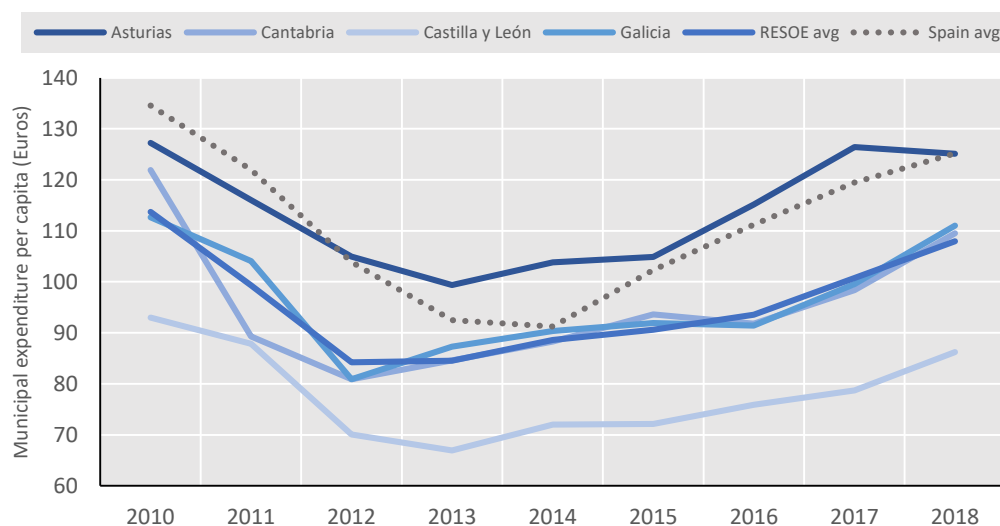
## Public spending in service provision

Municipalities in Galicia registered in some years expenses on social services greater than the national average and lower than the RESOE average. In 2018, municipalities in the region averaged EUR 111 per inhabitant, below the national average (EUR 125) and above the average of RESOE municipalities (EUR 108). Generally, per capita spending among Spanish municipalities is significantly higher in local governments with over one million inhabitants and in small municipalities with fewer than 5 000 inhabitants: in 2018, municipalities with populations between 5 001 and 500 000 residents spent a 15% less than the national average. In 2013, municipalities below 5 000 inhabitants sometimes incurred in costs up to three times higher for the same municipal services compared to those living in municipalities over 10 000 inhabitants (Arenilla, 2014).

After the fall in public spending as a result of the 2008 crisis, spending in Galicia consistently recovered since 2013. In 2013-2018, municipal expenditure on social services in Galicia increased by 27.2% from EUR 87 to EUR 111 per inhabitant, slightly below the increase for RESOE municipalities (27.7%, from EUR 85 to EUR 108 per inhabitant) (Figure 1.9).

**Figure 1.9. Municipal expenditure per capita on social services by TL2 RESOE region and Spain**

In Euros, 2010-2018



Note: \*According to the classification of the Ministry of Finance, the category "Social Protection and Promotion" includes expenses in: social services, pensions, employment promotion, health, education, culture and sports; \*\*Navarra and the Basque Country were excluded in the calculation of the national average, since there is no data for these regions in 2014 and 2015

Source: (Ministerio de Hacienda y Administraciones Públicas, 2020), Ministerio de Hacienda y Función Pública de España (2010-2018), "Finanzas Locales en Cifras", <https://www.hacienda.gob.es/es-ES/CDI/Paginas/SistemasFinanciacionDeuda/InformacionEELs/HaciendasLocalesencifras.aspx>; (INE, 2020), Instituto Nacional de Estadísticas (2020), "Padrón Población por Municipio", [https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica\\_P&cid=1254734710990](https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica_P&cid=1254734710990)

In Galicia, public spending as a share of GDP on health (6.8%) and education (4%) was slightly above the average across Spanish TL2 regions (5.6% and 3.6%) in 2019 (Table 1.6). In the same year, spending on healthcare in Galicia was EUR 1 568 per inhabitant, above the average of Spanish TL2 regions (EUR 1 486) and RESOE (EUR 1 653) (Figure 1.10). Between 2010 and 2019, Galicia's spending on health remained close to the national average with small variations above and below it (Figure 1.11). In that same period, the increase in per capita expenditure on health was 8% across Spanish TL2 regions, 13% in RESOE and 10% in Galicia.

**Table 1.6. Change in regional expenditure on health and education as a share of GDP by TL2 RESOE region and Spain**

2009-2019

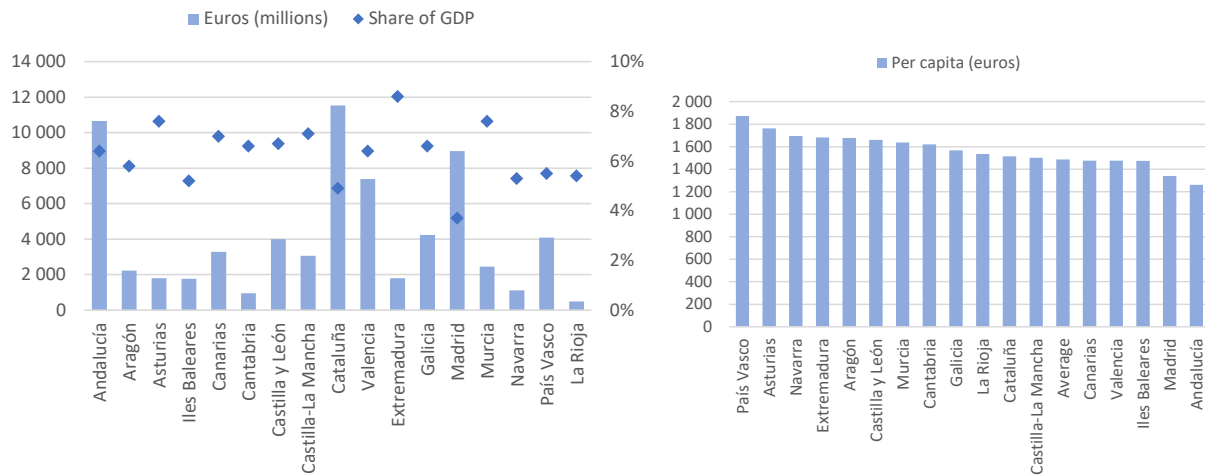
Region	Health			Education		
	2009	2019	Change	2009	2019	Change
	% of GDP	% of GDP		% of GDP	% of GDP	
Asturias	7.8%	7.6%	-0.2	4.5%	3.7%	-0.8
Cantabria	6.4%	6.6%	+0.2	4.6%	4.4%	-0.2
Castilla y León	6.5%	6.7%	+0.2	4.6%	3.8%	-0.8
Galicia	7.2%	6.6%	-0.6	4.9%	4.0%	-0.9

RESOE	6.9%	6.8%	-0.1	4.7%	3.9%	-0.8
ACs All	6.1%	5.6%	-0.5	4.1%	3.6%	-0.5

Source: Author's elaboration based on (Ministerio de Sanidad, 2019), (Ministerio de Educación y Formación Profesional, 2021) and (INE, 2021)

Figure 1.10. Regional expenditure on health by TL2 regions in Spain

Total expenditure and as a share of GDP / Expenditure per capita, 2019



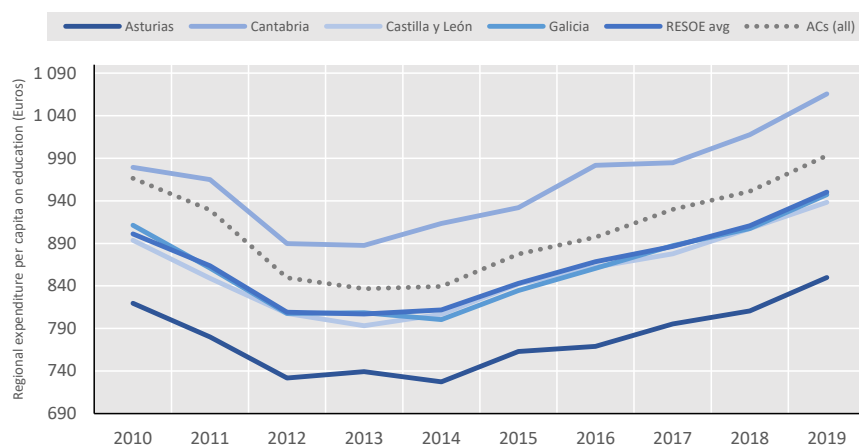
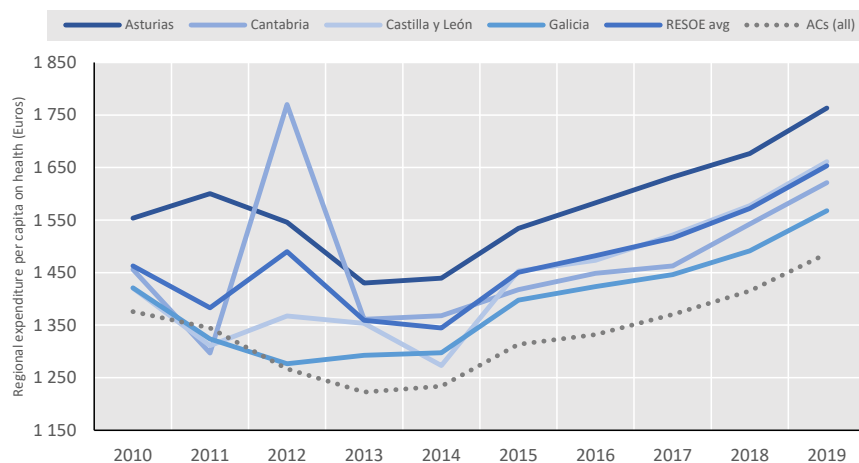
Source: (Ministerio de Sanidad, 2019)

In the area of education, in 2019 Galicia spent EUR 947 per inhabitant, 5% below the average of Spanish TL2 regions and RESOE. The relative increase in education spending over the years in Galicia has been almost the same as in RESOE, but slightly below the average of Spanish TL2 regions. Between 2013 and 2020, per capita spending on education in Galicia increased by 17.2%, while in RESOE and the rest of the country it was 17.7% and 18.7%, respectively (Figure 1.11).



**Figure 1.11. Evolution of regional expenditure per capita on health and education by TL2 RESOE regions and Spain**

In Euros, 2010-2019



Source: (Ministerio de Sanidad, 2019), Ministerio de Sanidad (2019), "Estadística de Gasto Sanitario Público", <https://www.mscbs.gob.es/estadEstudios/estadisticas/docs/EGSP2008/egspPrincipalesResultados.pdf> and (Ministerio de Educación y Formación Profesional, 2020), Ministerio de Educación y Formación Profesional (2020), "Recursos Económicos: Gasto Público en Educación", <https://www.educacionyfp.gob.es/servicios-al-ciudadano/estadisticas/economicas/gasto.html>.

# 2 Governance

## Introduction

Galicia faces increasing costs of service provision in a context of rural depopulation, ageing, high territorial dispersion and varying levels of municipal fragmentation. With 313 municipalities (*concellos*) and four provinces, Galicia is Spain's eighth region with the highest number of sub-regional entities. Many Galician municipalities, specifically those of smaller size, face fiscal pressure and limited administrative capacities. A scenario of high municipal fragmentation requires stronger cooperation between local entities, which can be an alternative to the municipal merger process Galicia initiated in 2013. Since the 2013 local reform (see Box 2.1), cooperation between provinces and municipalities has increased, and some local government functions have been transferred to the intermediate (provincial) level. Yet, the distribution of these cooperation initiatives is irregular across the territory.

More generally, Galicia is advancing in the design and implementation of strategies and public policies to address the demographic challenge. The region is playing a very active role at the national level in the negotiations to approve the new National Strategy facing the Demographic Challenge (Xunta de Galicia, 2021) (Europa Press, 2020). At the regional level, Galicia is resuming the efforts it started in 2013 through the Plan for the Demographic Revitalisation of Galicia 2013-2016, Horizon 2020, which established guiding public policy principles and set objectives and areas of intervention to tackle demographic challenges.

In February 2021, the Xunta de Galicia published the Law for Demographic Boost as a follow up, four years after the end of the implementation period of the Horizon 2020 plan. This Law establishes the foundations for regional development in Galicia within the framework of the demographic challenge, based on the principle of "equal opportunities, non-discrimination and universal accessibility, which favours a sustainable and territorially balanced social, economic and environmental development, so that people consider Galicia as the ideal place to live" (Xunta de Galicia, 2021). The Law aims to serve as a framework and guideline for policies, actions, and programmes in demographic matters, transcending the temporal scope, considering the participation of all the actors involved, favouring the socio-political consensus and the design of sustainable measures. It considers measures in key areas such as employment, support for families, reconciliation of family, work and personal life, support for youth, return and attraction of a new population, territorial balance and active and healthy ageing.

This chapter reviews some of the characteristics of the governance structure in Galicia, as well as the main challenges it faces in terms of multi-level governance to face the demographic challenge. Based on this assessment, the chapter offers a series of recommendations to strengthen the governance setup in the region. First, by improving the structure of governance of the Law for Demographic Boost. Second, by promoting inter-municipal cooperation and assessing the feasibility of resuming municipal mergers. Finally, by strengthening the role of provincial councils.

### Box 2.1. The 2013 Local Reform in Spain (LRSAL)

The Law 27/2013 of Rationalisation and Sustainability of Local Administration (LRSAL), also known as the “local reform”, is one of the most important decentralisation reforms and regulatory frameworks for local governments in Spain. This law modified the legal norms that regulated municipalities since 1985, after the implementation of the Law of the Bases of the Local Regime.

The LRSAL aimed to clarify municipal powers and introduced the principle of “*one Administration, one competence*” in order to avoid duplications among administrative levels. It also tried to rationalise the organisational structure of the local administrations in accordance with the principles of efficiency, financial stability and sustainability, guaranteeing more rigorous financial and budgetary control, and favouring private economic initiative to avoid disproportionate administrative interventions. Among other things, the law attempted to strengthen the role of the provincial councils and establish the conditions for municipal mergers, in order to limit infra-municipalism and promote more efficient public service provision.

To date, there are conflicting opinions about the results of this policy. Some representatives and officials from municipalities and regions agree that this law, although it contributed, today needs a new reform. It is believed that it is necessary to re-clarify the distribution of certain competences that, as a result of the current health and economic crisis, are becoming confusing and sources of conflict.

Source: (Boletín Oficial del Estado, 2013)

## Recommendation 1: Strengthen the governance structure of the Law for Demographic Boost

The Law for Demographic Boost covers the preparation and approval of the next demographic strategy for the all levels of government in Galicia (article 20.e). In doing so, this Law constitutes the general framework for public action, in the present and in the future. To accomplish this, the Law establishes an administrative structure with two relevant bodies: the Commission for Demographic Boost and the Technical Commission for Demographic Boost.

The Commission for Demographic Boost (hereinafter “the Commission”) is responsible for drafting the next regional strategy to face the demographic challenge. It will provide staff and material support to the Xunta de Galicia and function as a space for dialogue and coordination among the regional government, the provinces and the municipalities. The Law is clear in the composition and functions of the Commission. Yet, while it establishes that the Commission will be in charge of preparing its own regulations, it is not entirely clear whether the Commission will have decision-making power (it is only specified that it will approve the demographic strategy). This can generate confusion and misunderstandings between the Commission and the regional government.

The Technical Commission for Demographic Boost (hereinafter “the Technical Commission”) is responsible for coordinating regional policies for demographic boost and ensuring the transversal application and effective incorporation of the demographic perspective in all the actions in the framework of the Law for Demographic Boost. This body will play a key role in preparing inputs for the Commission to carry out its work. The Law establishes that it will be composed only of regional government representatives, leaving aside the possibility that the provinces, municipalities and other competent bodies can contribute with their vision on key issues for its future. The law also includes the Galician Observatory

for Demographic Dynamisation – made up of various stakeholders in the region – as a part of the administrative organisation. The Observatory is responsible for preparing and disseminating reports that are of demographic interest, but the law does not clearly stipulate its participation in informing decision-makers or ways of collaboration with the Technical Commission. This opens the possibility of the Technical Commission producing information more strongly aligned with the interests of the regional government, without a built-in mechanism to balance these with the interests of the provinces, local governments and other stakeholders.

The current design of the Law for Demographic Boost makes it necessary to introduce some modifications to the two aforementioned bodies. These bodies are key players in ensuring the success of the future regional strategy and as such they could benefit from a clear, more inclusive design. In addition, it is necessary to include monitoring and evaluation mechanisms to follow and correct the course of the policies designed. The following three actions detail how this goal could be achieved.

### ***Action 1.1 Provide the Commission for Demographic Boost with decision-making capacity***

Currently, decision-making powers within the framework of the Law for Demographic Boost rest exclusively with the Xunta de Galicia. The law for the demographic impulse establishes that the agreements within it will be taken by "a forced majority of three fifths" of its members. However, nothing is established as to whether these decisions will be binding or not. In order to minimise the possibility of political conflicts, the Commission should have the power to make binding decisions or, at least, consider the entering into a formal agreement with the Xunta de Galicia so that its decisions are binding and are respected by the regional government. This will require a short reform to the Law.

This will improve the administrative conditions to ensure the efficiency of joint work in the area of demographic challenges and the implementation of the future regional strategy on the matter. It will also allow for the development of relationships of trust between levels of governments and enhance the legitimacy of the Commission for future actions.

### ***Action 1.2 Evaluate assigning the Galician Observatory for Demographic Dynamisation with a more active role in informing the Commission for Demographic Boost***

The Law for Demographic Boost has multi-stakeholder collaboration at its core. However, it does not specify how non-governmental stakeholders such as the private sector and civil society organisations will participate in the discussion. It incorporates as part of its administrative structure the Galician Observatory for Demographic Dynamisation – a body that since 2016 works as a forum for permanent dialogue between the governments of the region and other organisations in Galicia – but it only has the task of preparing and disseminating relevant studies for the discussion on the demographic challenge.

The formulation of technical input for the work of the Commission for Demographic Boost should consider the participation of all relevant actors for regional development measures. That is, provincial councils, local governments, supra-municipal entities, private sector and civil society organisations. In this way, it will be possible to take advantage of the wealth of perspectives in the Galician territory to produce policies that are in line with all the needs and interests in the region.

Moreover, the Galician Observatory for Demographic Dynamisation could have a greater impact on the discussion within the Commission for Demographic Boost. Since a great variety of visions and interests from different actors in the region converge in this body, its incorporation in official meetings and discussions could greatly enrich the elaboration of policies to face the demographic challenge and facilitate their implementation at the local level.

### Action 1.3 Establish monitoring and evaluation mechanisms

Although Article 5 of the law establishes that the public administrations of the region carry out "joint monitoring of the development and implementation of public policies in demographic matters to evaluate their effectiveness and efficiency and facilitate decision-making on them" (Xunta de Galicia, 2021), no specific mechanisms or times are established to carry out these tasks.

This action will require a reform to the Law for Demographic Boost or a definition of evaluation and monitoring mechanisms in the normative development of the Law. It is, therefore, important to establish specific mechanisms (e.g. Dashboards or Annual Monitoring Reports) for monitoring and evaluating the policies arising from the Law for Demographic Boost. It is also important that the design of the Regional Strategy against the Demographic Challenge considers these types of instruments. In addition, it would be necessary to clearly establish the actors responsible for data collection and analysis, and to ensure that there are sufficient resources to carry out these tasks.

### Recommendation 2: Rationalise inter-municipal cooperation mechanisms and diversify incentives for municipal mergers

The Galician Local Administration Law of 1997 sought facilitate inter-municipal cooperation through municipal association, including municipal mergers. The Law mentioned the underutilisation of municipal associations and local consortia in Galicia; despite evidence that they managed local powers in a more cost-efficient and effective manner, especially in the case of small municipalities (Boletín Oficial del Estado, 1997).

Various mechanisms of inter-municipal cooperation have emerged in Galicia over the last two decades as a result of the mentioned Law and other normative instruments. Since the publication of the Law, *mancomunidades* (see Box 2.2) have become the main inter-municipal cooperation mechanism in the region. To date, there are 39 *mancomunidades* in Galicia, which bring together 67% of the Galician municipalities and reach 77% of the population (Table 2.1).

**Table 2.1. Mancomunidades in Galicia, by province**

Province	Mancomunidades	Munic. in manc. (n)	Munic. in manc. (%)	Population (n)	Population (%)
A Coruña	11	56	60.2%	934 119	83.2%
Lugo	4	32	47.7%	136 039	41.4%
Ourense	13	69	75.0%	149 151	48.6%
Pontevedra	11	54	88.5%	871 227	92.2%
<b>Total</b>	<b>39</b>	<b>211</b>	<b>67.4%</b>	<b>2 090 536</b>	<b>77.4%</b>

Source: (Ministerio de Asuntos Económicos y Transformación Digital, 2021), Ministerio de Asuntos Económicos y Transformación Digital (2021), "Datos del Registro de Entidades Locales", <https://ssweb.seap.minhap.es/REL/frontend/inicio/eatimes>; (INE, 2020), Instituto Nacional de Estadísticas (2020), "Padrón Población por Municipio", [https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica\\_P&cid=1254734710990](https://www.ine.es/dyngs/INEbase/es/categoria.htm?c=Estadistica_P&cid=1254734710990)

In 1996, the Regional Plan for the Development of *Comarcas* aimed to create a functional territorial order that could improve service provision in the face of "ageing processes and demographic regression". The Regional Plan for the Development of *Comarcas* stated that comarcas are the most convenient level of planning, territorial organization and management, and tried to promote the development and formalisation of this form of organization. However, the *mancomunidades* that flourished in the last decades as the main mechanisms of inter-municipal cooperation, do not coincide with the territorial delimitations of the *comarcas* (Doval, 2009). Since *comarcas* and *mancomunidades* serve different purposes, this is not a problem, but it does show that the process of comarcalización found some difficulties in its implementation.

Galicia is currently working on a process of rationalisation of local entities and revision of the process of *comarcalización*, which promises the achievement of a functional and efficient reordering of both territorial planning and service provision.

Galicia also has consortia and associations. These two cooperation mechanisms follow a similar logic to the *mancomunidades*, but are more flexible in their creation and composition. In some, municipalities and the autonomous administration participate, and in others non-governmental entities are also represented. They also have narrower objectives and/or areas of action, e.g. fire/emergency services, civil protection and, in some cases, provision of municipal services (Doval, 2009).

### Box 2.2. *Mancomunidades*, consortia and *comarcas* in Spain

Together with LEADER projects and Rural Development Groups, *mancomunidades* and consortia (*consorcios*) are the most common and widespread mechanisms of inter-municipal cooperation in Spain. Both of these mechanisms – formalised in the Law of the Bases of the Local Regime – are voluntary and are created for providing public services.

*Mancomunidades* are voluntary and flexible cooperation mechanisms established among municipalities. They are flexible in three ways: 1) constitutive, as the process of creation is quite simple; 2) territorial, as city and town councils do not have to be contiguous; and 3) functional, as they can be created for a wide range of purposes, changing or limiting these as necessary. The main functions of *mancomunidades* are linked to economic development, waste management services, public infrastructure, environment protection, urban planning, and social services provision.

Consortia are more formalised cooperation instruments. These mechanisms allow for economic, technical and administrative cooperation among local governments, provincial councils, autonomous communities and even non-profit private companies, sometimes in the same service areas as *mancomunidades*.

*Comarcas* are territorial divisions that generally coincide with a natural region that shares not only physical (orography, hydrography, climate, vegetation, soils), but also human (demography, economic, rural housing, urban planning) and historical characteristics. After the creation of the Autonomous Communities in 1978, Spain's regions approached the delimitation and functional use of *comarcas* in various ways. In some ACs, *comarcas* only play a historic role, while in others they have powers and responsibilities to provide public services (e.g. Cataluña, Aragón and Castilla y León).

Source: (Feria Toribio, 2013); (Rodríguez, Menendez, & Cadenas, 2005)

The Xunta de Galicia has made notable efforts to promote inter-municipal cooperation. One of these is the agreement of February 28, 2013, which approved the "criteria applicable to aid and subsidies for local entities to prioritise shared management projects and encourage municipal mergers". This agreement established concrete financial incentives for cooperation at the local level, establishing that in all subsidy programmes emanating from the regional government, joint projects presented by *mancomunidades*, associations or municipalities resulting from merger processes will automatically be granted 30% of a possible score and they will receive at least 15% extra funding.

Since the approval of the agreement, in the General Directorate of Local Administration (through the annual municipal infrastructure orders and the Environmental Compensation Fund) 18.3% of the 1 776 grants have been awarded to joint projects between two or more municipalities, which have obtained 27.3% of

the funds distributed. These subsidies were awarded to entities such as *mancomunidades* and other types of municipal associations.

The Xunta de Galicia considers supra-municipal entities as key actors for the implementation of regional development policies. It supports them by publishing annual calls for competitive funding opportunities or aid specifically targeting municipalities, supra-municipal entities and groupings of city councils. Nevertheless, it not always includes explicit mentions to the *mancomunidades*, which are the most used mechanism for inter-municipal cooperation in the region (Xunta de Galicia, 2020). This lack of specificity shows, on the one hand, room to further develop the use of *mancomunidades* as cooperative bodies, and, on the other, a complex and unclear mapping of local entities that can make it difficult to territorialise the measures designed at regional level.

The government of Galicia should work towards rationalising the repertoire of inter-municipal cooperation mechanisms in the region. It could move towards the consolidation of a management map for the provision of services that responds to both the needs of each territory and to established geographic, demographic and cultural boundaries. This may imply undertaking a detailed study of the functioning and impact of all Galician supra-municipal bodies.

Galicia may also need to consider reformulating the Regional Plan for the Development of *Comarcas*, to systematise the use of the *mancomunidades*, and/or better articulate a comprehensive system of municipal consortia and groupings. This activity should be complemented by a process of dialogue and joint deliberation between the regional authority and sub-regional entities to define the appropriate coordination mechanisms and their implementation methods, as well as to create attractive incentives to promote their implementation.

The regional government may also consider diversifying and strengthening actions and incentives to promote municipal mergers, thereby resuming the associative momentum that occurred in 2013 and 2016 with the amalgamations of Oza-Cesuras and Cotobade-Cerdedo, respectively. There is a positive assessment of these processes in the region and, in addition, the Xunta has provided the resulting corporations with significant financial resources. In a context of no new mergers and where municipalities tend to prioritise cooperation arrangements, Galicia could still evaluate incentivising mergers as a way of complementing the benefits of inter-municipal cooperation. This could bring the benefits of mergers to small municipalities affected by financial insolvency. As long as mergers are designed collaboratively with municipalities and provinces, and their implementation is designed with a deep understanding of the socio-historic characteristics of the populations to be amalgamated, this may be a solution to pilot among some critical groups of municipalities.

Success with respect to the measures proposed above will depend on the consolidation of clear financial incentives and an effective communication strategy by the regional government. The alternatives to be promoted in each territory will depend on the needs of each group of local authorities and an adequate evaluation of the conditions for the operation of one or another mechanism. This undertaking must fit within the framework to improve the effectiveness and efficiency of local administration based on the principles of territorial cohesion and equal access to public services throughout the region.

### ***Action 2.1 Identify successful models of inter-municipal cooperation and encourage their reproduction***

The elaboration of a study of the operation and the results of the supra-municipal entities in Galicia will help identify the most appropriate co-operation mechanisms to be promoted in the region and the right opportunities to do so.

The success of the Law for Demographic Boost, as well as an adequate implementation of the future regional strategy in the face of demographic challenges, will be conditioned by the existence of a network of local and supra-municipal entities with the necessary capacities to make the designed measures viable.

Municipalities, *mancomunidades*, consortia or local associations must have the conditions to provide quality public services throughout the Galician territory, within a framework of financial sufficiency, information exchange and effective coordination with other levels of government.

The consolidation of a network of local and supra-municipal entities depends on a regional government that adopts a proactive role in promoting inter-municipal cooperation and in generating attractive financial incentives for this to happen. It will depend, above all, on the capacity of the centre of government<sup>6</sup> to design a rationalised and assimilated system of entities throughout the region that is functional to the objectives of long-term development strategies.

### **Action 2.2 Evaluate the diversification of incentives for municipal mergers**

In a scenario of high municipal fragmentation in certain parts of the region, municipal mergers can be a stronger and more durable alternative to inter-municipal cooperation mechanisms. Mergers can improve the performance of municipalities that lack certain capacities and/or face difficulties in achieving economies of scale for the efficient provision of public services. Amalgamations also allow localities that share common historical and cultural characteristics, physical proximity and needs to institutionalise the relationship with their citizens in a single service provision unit (even when maintaining separate units of political representation) and, when available, access extra financing for their operations.

Galicia already has experience in municipal mergers and has pioneered these processes in Spain. After the approval of the 2013 local reform, which introduced incentives for municipal mergers, there have been only three municipal mergers in Spain. Two of them were carried out in Galicia: Oza and Cesuras in 2013 and Cotobade and Cerdedo in 2016. The Xunta de Galicia own assessment of the two mergers is positive. In the first case, the merger resulted in municipal savings of about EUR 6 000 a year (Obelleiro, 2013). Other accounts have been more critical on the results of the 2013 reform and the resulting mergers (Sánchez, 2018) (Carbonell, 2018).

Given that there have been no further mergers in Galicia after the merger of Cotobade and Cerdedo in 2016, the Xunta is currently preparing a report on the amalgamation processes and the experiences of the four merged municipalities, in order to identify their impact on municipal budgets and the quality of the services provided. Galicia is seeking ways for new mergers to take place in the future, and the understanding of the previous processes – their motivations, difficulties and results – will be key to achieve it.

During OECD missions it was mentioned that the stagnation of mergers in Galicia could be due to a lack of knowledge on the part of local governments of the benefits available to the amalgamated municipalities. In cases where there is resistance to merge due to limited knowledge, improved communication regarding the available benefits could lead to more cases like Oza-Cesuras and Cotobade-Cerdedo. But, an improved communicational strategy must also be accompanied by new and diverse ways to financially encourage municipal mergers. In addition to the efforts already made to prioritise joint projects in the allocation of subsidies, Galicia could also explore strengthening the Local Cooperation Fund. This fund, also known as the “Mergers Fund”, each year allocates around EUR 1.8 millions to municipalities resulting from mergers, and since 2016 it has distributed EUR 10.5 million only between Oza-Cesuras and Cotobade-Cerdedo. Galicia could enhance the resources available in this fund, but also complement these grants with other attractive measures such as overheads on current transfers and/or tax benefits.

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<sup>6</sup> The centre of government is defined as “the administrative structure that serves the executive (president or prime minister, and the cabinet collectively)”. In OECD countries, the centre of government includes entities referred to as: the Chancellery, Cabinet Office, Department of the Prime Minister and Cabinet, Privy Council Office, Office of the President, Executive Office, Casa Civil, Presidencia, etc. At the regional level, in Galicia the centre of government corresponds to the *Presidencia de la Xunta*.



Building a better model for mergers requires building evidence on why the merger process has stalled, and Galicia is doing so. The report on mergers that is being prepared will serve to identify opportunities and technical feasibility of new amalgamations, and should serve as the basis for the development of a new municipal mergers strategy. Any such strategy should consider input from sub-regional authorities, and especially an intensive communication strategy that effectively conveys merger benefits and available financial incentives. This process can take three different approaches: 1) it can follow a top-down logic through a mandatory process controlled by the regional government; 2) it can be a voluntary process promoted with attractive financial incentives for municipalities; 3) it can combine both approaches in different phases. The experience of other OECD countries in implementing these approaches could be useful for Galicia (Box 2.3).

### Box 2.3. Compulsory, voluntary and two-step approaches to municipal mergers

Many OECD countries carried out municipal merger processes during the last decades. Motivated by different reasons and with varied results, these processes followed different approaches: 1) compulsory mergers led by the central government (Denmark, Japan and New Zealand); 2) voluntary processes with strong incentives (France, Iceland and Norway); and 3) mixed or “two-step” processes with mandatory and voluntary phases (Estonia and Finland).

Denmark adopted a **compulsory approach** to reduce its number of municipalities in the early 2000s, maintaining a level of flexibility: local authorities could choose the neighbouring municipalities with which to merge. The central government gave the municipalities six months to prepare their merger plans, with the implicit threat of intervening and imposing mergers from above in cases of non-compliance. Most of the plans were prepared on time and accepted by the national government at the beginning of 2005. The few cases of opposition were resolved within a few months, and the amalgamation plans were finally agreed by mid-2005. By January 2007, the new system was implemented with no disruption to public services for citizens.

In France, the **voluntary approach** brought interesting results. The formula of *commune nouvelle* promoted the status of “associated municipalities”, which allowed the municipalities that merged to retain a delegate mayor, a town hall, an advisory council, etc. Also, it set flexible rules for the creation of these municipalities and for the composition of the new councils. This reform was supported by local representatives throughout the country and was quite effective, as it allowed - as of January 2021 - the creation of 778 new municipalities from the merger of 2 500 former entities. The success of this reform may be due to the aforementioned flexible rules for amalgamations, as well to the financial incentives provided by the state. In the Spanish context, a flexible approach like that of France could make it possible to maintain the space for political representation (*núcleo democrático*), while expanding the scope for the provision of services, an idea that has been discussed in the Spanish academia for almost a decade.

Finally, some countries prefer a **two-step approach** to facilitate amalgamations: voluntary mergers as a first step (with incentives), followed by forced amalgamations (without incentives) for reluctant municipalities. This approach was implemented by Estonia within the framework of the 2015-18 local government reform. Cash incentives were offered to municipalities that decided to merge, and to mayors who left office. After the deadline for this first stage, the state made the decisions to merge without offering any incentives. The country now has 15 municipalities with fewer than 5 000 inhabitants rather than 169, and the total number of municipalities went from 213 to 79.

Source: (OECD, 2017) (Arenilla, 2012)

Whichever approach is chosen, it is essential that the regional government consider establishing dialogue and collaboration instances for the design of the process and, above all and as it was mentioned above, offer attractive economic incentives to the municipalities to be merged. These will be key to mitigating the resistance of authorities and citizens. Among many alternatives, financial incentives can include: 1) implementing a municipal fund to finance the functions of the merged municipalities; 2) creating tax benefits, such as the deduction of taxes quotas or the establishment of reduced rates and bonuses in some of the local taxes; and 3) maintaining the amounts of grants and regular transfers during a period (3-5 years) in areas where mergers could have a negative impact on municipal infrastructure and personnel (closures of schools and healthcare centres), thereby facilitating the repurposing buildings and reallocating or retiring professionals. An example of the last is the case of Estonia, where the national government

offers support to adapt existing infrastructure and support redundant teachers in merged municipalities that consolidated schools (OECD, 2020).

### **Recommendation 3: Strengthen the Provincial Councils**

The success of regional development strategies and the efficiency in the provision of public services is directly related to the system of interactions, communication and cooperation among levels of government (OECD, 2012). In the Spanish Autonomous Communities, there is an hour-glass effect, since the greatest number of responsibilities and expenditure share lies in the regional governments and local authorities, leaving the provincial councils with fewer responsibilities and resources at the intermediate level, and thus with a lower relative weight. However, after the LRSAL, provinces expanded their competences and functions of legal, economic and technical assistance and cooperation with municipalities, especially with smaller municipalities. Yet, they continue to have a minor impact on the provision of public services, despite having the potential to cover a wide territory and generate economies of scale.

Galicia can, based on an effort led by the regional government, promote the scaling-up of municipal functions at the provincial level or the development of collaboration agreements to foster cooperation between municipalities and provinces. This could be especially valuable for areas where the levels of rurality, ageing and fiscal stress generate greater difficulties for municipalities to adequately fulfil their tasks.

There are legal limitations for the transfer of powers between levels of government, especially after the LRSAL's effort to clarify powers and strengthen provincial councils. However, this proposal aims to find a way to exploit the possibility of collaboration agreements to strengthen the capacity of provincial councils to fulfil their role of cooperation with the local level. These collaboration agreements can be especially useful in a context of health and economic crisis, in which the emergence of new needs has shown the lack of clarity in the distribution of powers between levels of government. This approach, complemented with strengthening inter-municipal cooperation, could lift the pressure from local governments, freeing up their field of action for those areas in which they perform best.

#### ***Action 3.1 Identify areas of opportunity in which municipalities and supra-municipal entities can scale-up some of their responsibilities to the provincial level***

Galicia already has examples of municipal-provincial collaboration. Currently, 80% of Galicia's municipalities delegate some or all of their tax collection and management functions to higher tiers of government. In three of the four provinces, the municipalities delegate these responsibilities to the provincial council itself, while in Pontevedra local governments transfer these functions to an Autonomous Provincial Body (OAP) (Belmonte, 2013). In addition, there are examples of such collaboration in other areas, such as cultural and heritage promotion, maintenance of public spaces, inter-provincial transportation, improvement of educational facilities, among others. These examples have successfully alleviated already overwhelmed municipalities, generating economies of scale to make the provision of public services financially sustainable.

Galicia, its provinces and its 313 municipalities could benefit from a joint effort to expand the use of agreements in strategic and sensitive areas for municipalities, and, above all, in rural areas and in small municipalities. The government should identify strategic areas and develop "pilot agreements" to allow the provinces and municipalities to experiment and learn, preventing a very ambitious strategy from generating unmanageable pressures for the provinces (OECD, 2018).

# 3 Entrepreneurship, innovation and digitalisation

## Introduction

Besides access to public services, one of the biggest challenges for rural areas is innovation, job creation, the difficulties entrepreneurs face in accessing information or finance, or rural connectivity gaps (OECD, 2020). Addressing these challenges is key to retaining population, especially the younger ones, and attracting urban population and entrepreneurs motivated by the quality of life in rural areas.

In response to these issues, the RIS3 Smart Specialisation Strategy of Galicia 2021-2027 – one of the conditions for receiving European Union funds and the main instrument for regional economic transformation – represents a major window of opportunity. Galicia also implements innovation strategies and programmes through the Galician Innovation Agency<sup>7</sup>. The R&D investment in Galicia is particularly concentrated in the areas of Vigo and A Coruña, which together account for around 80% of R&D investment in the region. The automotive sector, beyond the construction of automobiles, generates a lot of innovation in Galicia. This also occurs in sectors such as biotechnology, aeronautics, and ICT (important in gamification and audiovisual sectors). In addition to the promotion of digital innovation hubs, after publicly promoting the creation of clusters, Galicia has supported private cluster creation initiatives through the collaboration programmes of the Galician Institute for Economic Promotion (IGAPE). The region also has 24 Rural Development Groups (RDGs), which channel European aids, as well as the Eusumo Network to support and provide services to social entrepreneurship.

This chapter reviews some of the characteristics and challenges of entrepreneurship, employment, innovation and broadband connectivity in Galician rural areas. Based on this assessment, a series of recommendations are then offered 1) to promote entrepreneurship as a strategy to contain rural depopulation, 2) to foster rural innovation and better connect skills with the local needs, and 3) to facilitate the provision of broadband connectivity in rural areas.

## Recommendation 1: Improve access to information and financial resources for rural entrepreneurs

Galicia implements several policies to support entrepreneurs such as the public IFI Innova programme, which provides loans to financially support innovative projects carried out by SMEs. However, most of the beneficiaries of these instruments are urban SMEs and entrepreneurs. In this context, rural entrepreneurs in Galicia still face many difficulties: a lack of relevant information, the multiplication of administrative procedures, the large investment needed to digitalise businesses and digital skills, lower broadband

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<sup>7</sup> The Galician Innovation Agency (GAIN) is a regional public agency in charge of promoting and structuring innovation policies in Galicia through the implementation of innovation strategies and programmes.

connectivity, the limited access to finance and markets and to goods and persons, as well as the territorial dispersion and a less dynamic ecosystem.

Logistics (less access or to goods and persons). In addition, there is little generational turnover in rural businesses after the retirement of their owners and high outmigration flows of young talent have led to brain drain in rural areas. The following actions suggest a path forward to respond to the difficulties encountered by rural entrepreneurs.

### ***Action 1.1 Centralise and improve information available to rural entrepreneurs***

Galicia has 179 Entrepreneur Service Points (*Puntos de Atención al Emprendedor PAE*). However, rural entrepreneurs have limited access to offline sources of information compared to urban entrepreneurs, which can lead to lasting gaps in performance (Koo & Eesley, 2020). Relevant actors also expressed during an OECD study mission that rural entrepreneurs find it difficult to identify and access relevant information.

The creation of a digital platform specific to the rural environment in which all the necessary information for entrepreneurship is centralised would be highly beneficial. The platform would facilitate information to start a business, ease access to markets, provide strategic resources and networks, reduce information asymmetries, connect demand and supply, and connect rural businesses with knowledge partners and support networks. The platform would also inform on the many different lines of funding and subsidies, which are difficult to detect for many rural companies with few personnel, and on the eligibility for each line. The regional government could also, through the platform, provide information on data protection and cybersecurity, as well as SME-tailored digital solutions (OECD, 2019). This action should be complemented by local dissemination and training actions by actors such as the PAE, a key actor to make the platform known throughout the Galician territory.

### ***Action 1.2 Facilitate business start-ups and access to alternative financing in rural areas***

The regional government and entrepreneurship support agencies in Galicia should promote alternative or non-bank sources of finance (e.g. crowdfunding, peer-to-peer lending, business angel networks, venture capital, leasing, hire purchase, credit guarantee volumes, participatory financing instruments, or “open banking” initiatives). They should also support the implementation of financial instruments that facilitate access to credit for rural entrepreneurs. Local incubators, local action groups, municipalities and provincial councils in the sparsely populated areas of Galicia could contribute to meeting the demand for financing from entrepreneurs. This is the case of the Almi<sup>8</sup> business incubator in Sweden, which offers micro-loans to rural entrepreneurs (OECD, 2020).

The regional authorities should speed up licensing procedures for entrepreneurs, which can sometimes take over a year or more as expressed by relevant actors during an OECD study mission. Greater flexibility in administrative procedures and tax incentives in rural areas should target rural entrepreneurs.

## **Recommendation 2: Promote rural innovation through the development of specific sectors**

The RIS3 Smart Specialisation Strategy of Galicia 2021-2027 sets out and reflects on where Galicia wants to direct its future in order to promote sustainable production models, hand in hand with ecological and digital transformation. The new strategy seeks to redesign and resize the structure of the previous strategy

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<sup>8</sup> Almi is a sector independent public venture capital company, financed in part by the European Union, the venture capital fund Almi Företagspartner and regional organisations.

(2014-2020) despite maintaining a strong continuity with the consolidation of emerging sectors (e.g. aeronautic in Lugo, biotechnology or the agroforestry and timber sectors). The renewal of the RIS3 Smart Specialisation Strategy of Galicia could foster emerging sectors, propitious for the development of rural innovation and for the promotion of sustainability, digitalisation and new technologies, such as tourism, the silver economy and the provision of social services.

Moreover, despite having a holistic regional innovation system, Galicia should encourage research centres and universities to generate more business-focused R&D lines and promote investments in innovation throughout the region, especially in rural areas where innovation is key for the development of specific sectors.

### ***Action 2.1 Diversify tourism activities in rural areas***

Galicia should favour the growth of agrotourism, eco-tourism, and cultural and historical tourism. The Galicia Safe Destination 2021-2023 Plan should pay particular attention to developing niche tourism in rural areas. As an example, the French region of Centre-Val de Loire, which has invested heavily in the development of cycle routes with the aim of becoming a European reference region for cycle tourism (Région Centre-Val de Loire, 2017). Galicia should reinforce its specialisation in various niches such as the elderly, families with children, nature-based tourism, sports and hiking, archaeological-cultural tourism, gastronomic tourism, or religious tourism (*Camino de Santiago*). This would also encourage the creation and maintenance of small agencies competing with large operators, benefiting from brand, reputation and price advantages, and with a larger advertising reach.

### ***Action 2.2 Support the development of the silver economy in rural areas***

With the increasing older population in Galicia, there is a growing need of adapted care services, especially in rural areas. The silver economy (markets, activities and economic issues related to the elderly) will benefit from future developments and is set to grow in the coming years. In the framework of its smart specialisation strategy, Galicia should take advantage of the potential of the silver economy and its capacity to generate new business opportunities to provide a wide range of products and services (home personal and smart home services, accessible medical care, mobility, security and autonomy). Entrepreneurship support agencies should increase the awareness of the potential of this market and accompany rural entrepreneurs in identifying and meeting the needs of the rural elderly. They could connect entrepreneurs with European initiatives such as SILVER SMEs, a five-year Interreg Europe project (2018-2023). Regional authorities could contribute to this strategy by granting a favourable tax and social security regime for start-ups spending on autonomous R&D (e.g. through tax exemption and exemption from social security contributions for R&D personnel expenses). They could also encourage the exchange of good practices that could become a source of inspiration for entrepreneurs in the region.

### ***Action 2.3 Promote the development of social economy incubators in rural areas***

Rural entrepreneurship often serves a social purpose and generates activity at the local level. Services that are commonly absent from rural areas and that could be covered by social enterprises include basic health and education, transport, construction, access to bank credit and recreational and tourism activities (OECD, 2021). Galicia should support a greater presence of social economy entities and business incubation programmes in rural areas to support entrepreneurs who wish to set up or develop their project in sparsely populated areas. Through the Eusumo Network and other actors with a consolidated experience in rural areas (local action groups, municipalities, provincial councils, chambers of commerce), entrepreneurs would be provided with a set of services through an individualised itinerary and personalised objectives. The itinerary would provide intensive mentoring to develop the business idea and evaluate its feasibility as well as the existence of a market. A follow-up process would then facilitate access to financial resources and measure the social impact of the project. Incubators could organise open collaborative

workshops and launch a digital platform (e.g. COWOCAT Rural project in Catalonia, Spain) (ENRD, 2018) to foster trust-based relationships and enable creative collaborations between rural entrepreneurs.

### **Recommendation 3: Unblock barriers to provide connectivity to increase digital service provision**

Galicia recently launched its Galicia Digital 30 Strategy (EGD2030) as well as several initiatives in order to accelerate the digitalisation of its public services in the context of broader digitalisation plans in Spain (see Box 3.1). Galicia is the only RESOE region with a consolidated broadband and connectivity strategy. Through the EGD2030, Galicia seeks to boost digital solutions in response to the social, economic and environmental challenges of the current decade, promote the technological specialisation of the region, and launch 20 programmes to digitalise Galicia's economy, administration and key sectors. The development of the strategy has been carried out through a broad participatory process with public institutions, academic experts, the Galician ICT sector and other socio-economic actors. The EGD2030 also contemplates a specific program aiming to empower the rural environment and promoting its economic development through the implementation of advanced technological solutions<sup>9</sup>. In parallel, the region has also launched the Galicia 5G Plan to make Galicia a pioneering European region in the field of 5G networks.

#### **Box 3.1. Plan for Connectivity and Digital Infrastructure in Spain**

The Spanish government's "Plan for Connectivity and Digital Infrastructure" aims to achieve 100% coverage with 100 Mbps networks for the entire population by 2025 (Gobierno de España, 2020). The main objective of the "Strategy to Boost 5G Technology" is to accelerate the deployment of this technology, which enables permanent hyper-connectivity. Both plans are supported by investment funds from the European Union's Resilience and Recovery Mechanism, including EUR 2 billion for extending connectivity and EUR 1.5 billion for 5G deployment. Among the public support policies for network extension, the main instrument is the Next Generation Broadband Extension Programme (PEBA-NGA). In parallel, the national General Telecommunications Law has created a very favourable regulatory framework for investment by removing barriers and administrative requirements for the deployment of new fibre and 5G networks.

Part of the European Recovery Funds should enable greater investment in broadband infrastructure in rural and sparsely populated areas of Galicia with the largest connectivity gaps (e.g. Lugo and Ourense). Fibre optic cable technology is more expensive, complex to maintain and slower to deploy. Therefore, other alternatives should be further promoted to bring broadband connectivity to rural areas, such as satellite, air coverage, 4G/5G, and in particular via radio technology, with lower cost and faster deployment. The following actions suggest ways forward to increase digital connectivity in rural areas.

<sup>9</sup> The RURAL 4.0 initiative seeks to promote the development of technological infrastructures and innovative digital solutions that promote the emergence of new business opportunities and services that, while improving the local quality of life, favor the retention of the population in rural areas. Some specific actions have been developed, including the digitalisation checks, which seek to promote teleworking and the development of business initiatives in rural areas.

**Action 3.1 Ease the implementation of broadband connectivity with greater institutional coordination**

Through the Galicia Digital 30 Strategy, Galician government, provincial councils, rural municipalities, non-profit cooperatives and mutual organisations should coordinate to simplifying and lowering the cost of the process through their oversight of planning permission, construction permits and other regulatory instruments necessary (e.g. to dig trenches for fibre)<sup>10</sup>. The national government could support these efforts through the reduction of regulatory barriers towards small-scale market entry and through extra funding encouraging local control. In parallel, public-private partnership models have been applied successfully to improve connectivity at both the national and subnational levels in OECD countries. These models, which combine public funding with private investment, would contribute to changing the Galician marketplace in a way that delivers long-term improvements in broadband provision and balancing the risks borne by taxpayers, with the potential to share in future revenue streams (OECD, 2021).

**Action 3.2 Build an intelligent software platform to improve the management of rural public services**

Developing smart public services is essential to improve the future of public service management in local administrations. Galician efforts to promote the deployment of high-performance connectivity and sensorisation networks will place special emphasis on rural areas, thus seeking to tackle the digital divide between rural and urban areas. In this context, Galicia has taken a positive step by launching the Intelligent Territorial Management Programme in the framework of the Galicia Digital 30 Strategy (EGD2030). Through this programme, the *Consejería* of Rural Affairs should develop and implement, together with the Galician Agency for Technological Modernisation (AMTEGA), a smart software platform for local public services similar to "Territorio Rural Inteligente" in Castilla y León. The platform would allow the deployment of Internet of Things sensors throughout the territory to manage services such as lighting, water management and waste collection. The potential of the Internet of Things can also improve the management of agricultural and livestock farms, historical and artistic heritage and tourism. For example, sensors can help rural tourism businesses to rationalise their investment and business activity through data on visitor numbers and behaviour. Moreover, the provision of smart services in rural areas can contribute to the dynamisation of the rural economy through increased investment by technology companies.

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<sup>10</sup> Public administrations could also study the possibility of reusing existing infrastructures (e.g. public lighting) to facilitate the extension of these infrastructures.



# 4 Quality education in rural areas

## Introduction

After the analysis for public services in the previous chapters, this chapter focuses on recommendations and actions to improve education provision in rural areas. Specifically, the chapter proposes recommendations to increase cost-efficiency while maintaining adequate access and quality levels across the region. The chapter offers a series of recommendations based on the assessment of secondary data and internationally comparable estimates of present and future access and costs of primary and secondary schools for the region.

The school network of Galicia is extensive and has been slowly shrinking over time. Data provided by the region shows that in 2011, 900 schools tended to 130 107 primary school students. By 2019/2020, the number of primary school students increased to 136 166 while the number of schools decreased to 872. In the secondary level, 516 schools tended to 127 326 secondary students (not including vocational school students) in 2011. By 2019/2020, the number of secondary schools students increased to 129 079 and the number of schools decreased to 449. The decrease in the number of schools despite the increase in the number of pupils reflects Galicia's efficient management of these challenges.

After a section containing the present and future access and cost analysis, the following sections offer three recommendations. The first recommendation proposes ways forward to adapt the school network to lower demand in the next decades. The second suggests actions to improve the efficiency of school resources (especially teachers) and strengthen school networks in rural areas. The final recommendation suggests the use of digital tools to improve the provision of school transport and help close gaps in digital skills.

## Estimates on the costs of and access to education

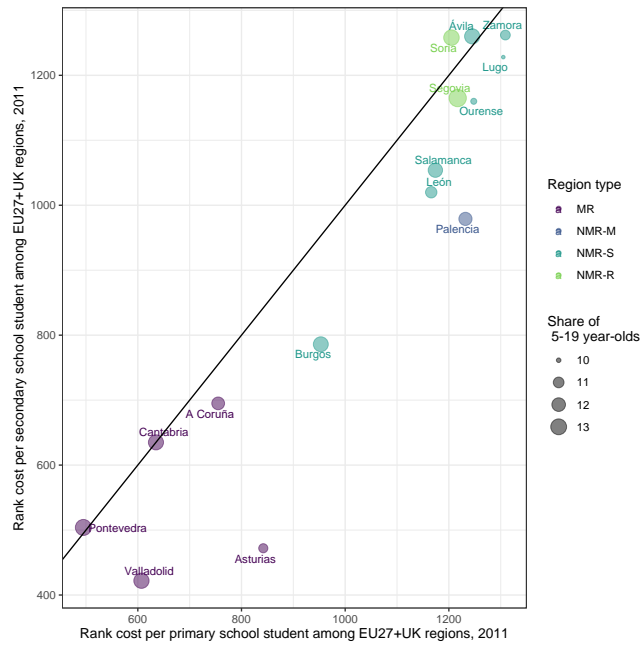
This sub-section reviews evidence on costs and access estimations based on school location simulation and actual demand produced by (OECD/EC-JRC, 2021). "Costs" include running costs such as salaries and ICT equipment, and exclude capital or fixed investments such as school building construction or renovation. The excess of cost in a region results mostly from the presence of small schools in areas with low local demand, and can be interpreted as a measure of the unavoidable costs of smallness and remoteness. Costs are measured at the place of residency of students, so when aggregated they are meant to capture the situation experienced by students living in a municipality regardless of whether they attend school within the municipal borders or not.

The estimations at the TL2 level in 2011 show that annual costs per primary and secondary student in Galicia (EUR 4 089 and EUR 6 619) are above the average for Spain (EUR 3 863 and EUR 6 374) and EU27+UK (EUR 3 933 and EUR 6 467) but below Castilla y León (EUR 4 218 and EUR 6 681). Lugo and Orense rank, together with TL3 regions of Castilla y León, among the top percentile of regions with the highest primary school costs per students across 1 348 EU27+UK regions (Figure 4.1). Besides higher

costs, these regions have much smaller shares of kids and adolescents in age school compared to the metropolitan region of A Coruña and Pontevedra.

**Figure 4.1. RESOE regions rank of cost per primary versus secondary school students among EU27+UK regions**

2011



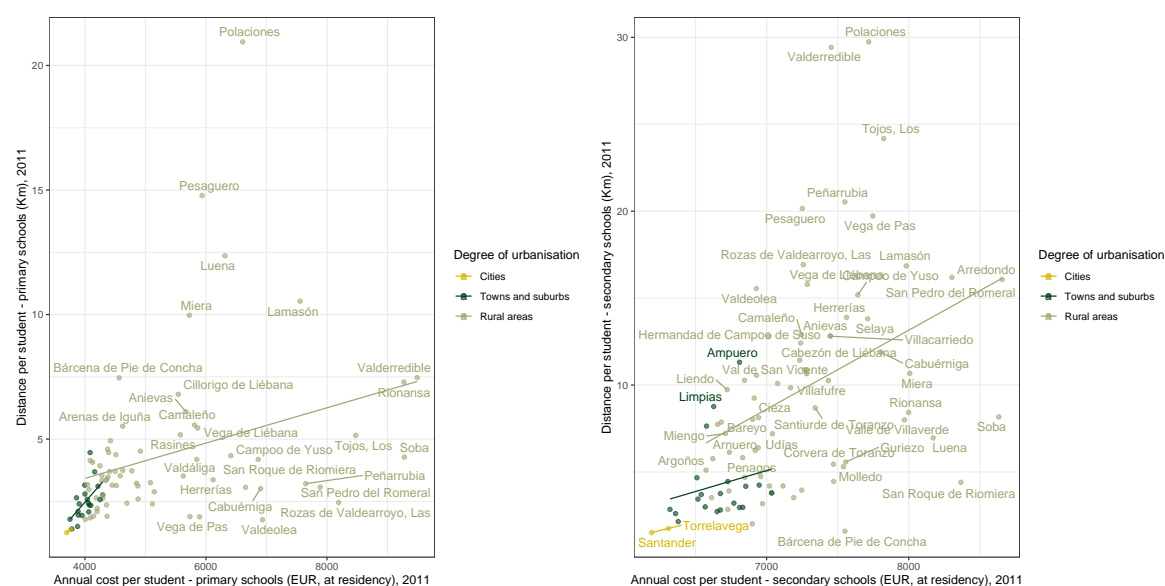
Note: MR=Metropolitan region; NMR-M=Non-metropolitan region close to a metropolitan area; NMR-S= Non-metropolitan region close to a small metropolitan area; NMR-R=Remote non-metropolitan region.

Source: Author's elaboration based on (OECD/EC-JRC, 2021).

Both annual costs per student and distances to school vary considerably across municipalities within Galicia. As Figure 4.2 shows, average costs per primary school student range from under EUR 4 000 in urban municipalities such as Vigo to over EUR 10 000 in rural municipalities such as As Nogais. Other rural municipalities located in mountainous areas such as Folgoso do Courel face not only higher costs but also significantly higher distances to school. The picture for secondary schools makes it clear that municipalities with higher costs also face higher distances.

Figure 4.2. Annual costs and distance per student by municipality

2011



Note: Degree of urbanisation by Local Administrative Unit.

Source: Author's elaboration based on (OECD/EC-JRC, 2021) and (Eurostat, 2021).

Across degrees of urbanisation, annual costs per primary and secondary students in sparse rural areas of Galicia are 38% and 18% above the respective costs in cities. Within RESOE, these excess costs are similar to those in Cantabria and well above Castilla y León (64% and 30%) (Table 4.1).

Students in sparse rural areas in Galicia also have to travel longer distances to get to schools compared to students in more urban areas, with an average difference of 3.4 and 8.1 km for primary and secondary school students, respectively. While these differences are small in the context of RESOE, they can exceed 10 and 15 km for the most remote schools that also face excess costs that be up to double the average costs in the most cost-efficient city schools. In contrast, villages have not only smaller excess costs, but also average travel distances that about half of those in sparse rural areas and do not surpass a maximum of 6 km for primary schools.

Population projections on the number of kids and adolescents in school age show that by 2035, the number of students in the region is expected to decrease by 37 653 primary school students and 21 217 secondary school students. The school placement simulations for 2035 show that this decreased demand can be supplied with 96 and 28 less primary and secondary schools and 2 856 and 1 730 less primary and secondary school teachers. These future simulated school placements increase travelled distances by about 0.5 km in sparse rural areas and villages. Even after fully adapting the school network to future demand to ensure efficiency and access, the decrease in future demand increases excess costs relative to cities to 46% in sparse rural areas for primary schools and to 19% for secondary schools. While the number of students in towns and suburbs is also expected to decrease, the excess costs in these areas stay low at around 7% given that schools in those areas reach a sufficient scale to be as cost-efficient as city schools.

**Table 4.1. Summary of education statistics projections**

2011-2035

		Primary schools									
		Students		Schools		Teachers		Annual cost per student (rel. to cities, %)		Distance per student (Km)	
		2011	2035	2011	2035	2011	2035	2011	2035	2011	2035
Degree urbanisation	of										
Sparse rural		22 520	16 610	386	357	1 833	1 349	38%	46%	4.8	5.2
Villages		16 573	12 301	132	121	1 307	965	17%	20%	2.8	3.0
Towns and suburbs	and	33 420	22 251	125	100	2 539	1 686	6%	7%	1.9	1.9
Cities		48 290	31 988	106	75	3 466	2 288	0%	0%	1.4	1.4
Total		120 804	83 151	749	653	9 145	6 289				
		Secondary schools									
		Students		Schools		Teachers		Annual cost per student (rel. to cities, %)		Distance per student (Km)	
		2011	2035	2011	2035	2011	2035	2011	2035	2011	2035
Degree urbanisation	of										
Sparse rural		11 599	10 240	56	56	1 064	943	18%	19%	10.1	10.6
Villages		17 061	15 826	61	60	1 528	1 414	14%	13%	6.4	7.0
Towns and suburbs	and	40 900	31 290	94	76	3 486	2 671	7%	7%	3.6	3.7
Cities		51 314	42 301	75	66	4 043	3 363	0%	0%	2.0	2.0
Total		120 875	99 657	286	258	10 121	8 391				

Source: Author's elaboration based on (OECD/EC-JRC, 2021).

**Recommendation 1: Adapt the school network to lower demand**

The school network of Galicia is large and ensures adequate access to schools to all students, even those living in the most remote areas of the region. The region spends large resources ensuring that even the smallest schools remain open and that school transport is available and free.

The school network of the region has nevertheless been slow to adapt to lower demand resulting from demographic change. Even after decreases between 2011 and 2019, the number of schools remains much larger than what would be expected based on demand and relatively small thresholds for travel to school distances. In interviews conducted by the OECD during a study mission, relevant government officials did not mention school network adaptation to falling demand as one of their priorities and instead emphasised that adequate access to schools remained their most important goal.

Estimations based on population projections show that the region stands to gain in terms of cost-efficiency by adapting the school network to the new local demand without sacrificing school access and increasing transportation costs. The following actions establish a path forward to accomplish this goal.

### ***Action 1.1. Evaluate the financial situation of the school network against measures of unavoidable costs of smallness and remoteness***

As shown in the analysis, some rural municipalities face unavoidable excess costs of remoteness and smallness compared to other municipalities that have sufficient demand and density to ensure cost-efficiency. A first step toward understanding the geographical differences in costs within the region and with respect to other Spanish regions is to establish whether there is a correlation between actual excess costs and the level of sparsity and demand across municipalities. School level data on the sources of spending by school, such as the one made publicly available for England (OECD/EC-JRC, 2021), is a key source of information for planning a forward-looking cost saving strategy that ensures adequate access and quality to all students.

### ***Action 1.2. Establish a clear path towards school network adaptation based on population projections***

Galicia can move from a passive strategy for school network restructuring to a more active strategy that considers future demand. The region can start by collecting and tracking data on future local schooling needs using different population projections scenarios. Based on this data, the region can identify municipalities or groups of municipalities that will likely face school closures and those that could serve as new educational hubs, especially for secondary education. The region can take stock particularly of the changes that municipalities have undergone on the last decades and identify cases where restructuring is long overdue. Importantly, the region should benchmark interventions to quality indicators to identify cases where there is both excess supply and lower quality.

The Galician education administration carries out school projection analyses and annually adopts decisions on providing greater attention to the school population<sup>11</sup>. The analysis of school restructuring can focus on cases where students can be moved to another school without sacrificing quality or increasing travel times and costs beyond what is reasonable for the students' age. In this sense, the simulated placement data used in the analysis of this plan or similar can help evaluating the current school network against a future one that would satisfy future demand. A forward-looking view of school restructuring is highly desirable with respect to secondary schools where there is room to rip more scale economies and students can travel longer distances.

## **Recommendation 2: Improve the efficiency of school resources and strengthen school networks in rural areas**

The process of adapting the school network will also require a substantial adjustment in school resources, and in the number of school staff in particular. Initiatives such as rural grouped schools go in the right direction of seeking resource sharing between small rural schools and avoiding duplication of administrative fixed costs. While Galicia currently has 27 rural grouped schools tending to about 2 200 students, both the extensive networks of Asturias and Castilla y León and presence of schools with a very small number of students suggest there is room to increase the number of rural grouped schools.

On the other hand, while the region currently does not face scarcity of teachers in rural areas, the region can advance in plans to downscale on the number of teachers in preparation for future lower demand in rural areas. The following actions can contribute towards the goal of ensuring a better alignment between school resources and needs.

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<sup>11</sup> Measures are being taken to incorporate people in training who can settle in the labour market, incentives for families and settle the population in sparsely populated areas in Galicia.

### **Action 2.1 Promote further grouping of rural schools**

The potential of grouped schools in rural areas could be further explored with benefits in terms of both staff post rationing and increased socialisation and diversity. The current situation leaves room for the integration of very small schools (for instance those with 10 students) to ensure the appropriate socialisation of students and improving the diversity of curricula. Moreover, Galicia can consider models such as the innovative rural school network in Castilla y León (*Centros Rurales de Innovación Educativa CRIES*) to promote further curricula improvement and skill upgrading of rural teachers.

### **Action 2.2 Outline a clear plan for teacher downscaling**

Policies to ensure the attraction of new teachers to rural schools in RESOE regions include the qualification of some posts as “difficult performance”, granting double scale points recognisable for eventual post transfer or qualifications for a permanent position in the case of temporary staff. Galicia can continue investing in the development of necessary skills in rural schools, including multi-grade teaching.

Given the large amount of restructuring that future declining number of students will entail in rural areas, the region could consider policies for ensuring appropriate ways to share resources among rural schools, including extending online courses for secondary and vocational school students and increasing distance learning options at higher levels of education.

## **Recommendation 3: Using digital tools to improve the provision of school transport and close gaps in digital skills**

In addition to several initiatives to support the use of digital devices in classrooms and invest in the digital skills of pupils and teachers, Galicia has signed a collaboration agreement with the European Union's Connected Schools Programme (around EUR 17.2 million for 839 school sites and 143 373 pupils). The programme is co-financed by the European Regional Development Fund (ERDF) and aims to provide high-speed broadband of at least 100 megabytes to schools. It is already completed in Galicia and progress has been faster than in other RESOE regions such as Cantabria, where it was only implemented in 24% of schools by April 2021 (Red.es, 2021).

According to government officials, currently more than 99% of educational centres have a powerful connection. Galicia has also launched educational innovation projects specific to rural areas, such as "Schools in the Cloud", targeting Galicia's Rural Grouped Schools and aiming to develop a collaborative and community learning environment, based on cloud services and open software.

Galicia is strengthening efforts to extend digital services and reinforce digital skills in the education sector. Among other objectives, awareness-raising is pursued with a responsible use of technology and the promotion of the adoption of digital skills both by the school-age population and by the teachers. These efforts also seek to awaken STEM (science, technology, engineering, and mathematics) vocations among youth and create innovative spaces for the implementation and experimentation of acquired digital skills.<sup>12</sup>

The reinforcement of training in digital skills is intended to be extended to the entire population, seeking the generation of new employment opportunities, with a focus on the rural population, to continue facing the demographic challenge and pursuing better territorial cohesion. Specific programs will be developed

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<sup>12</sup> Some of the concrete tools to achieve this objective are the extension in the use of the digital book (e-Dixgal program) to the largest possible number of centers and students; the development of interactive and personalised content that addresses diversity and allows individualised monitoring of students; the fight against the gap in access to technological equipment by the school-age population; the increase in the supply of STEM content and spaces equipped with technological equipment and digital tools in schools.

in digital skills for productive sectors traditionally settled in rural areas. In addition, a Galician Framework of Digital Competences will also be defined to allow citizens and public employees to accredit the digital knowledge acquired.

The region also pursues the modernisation and digitalisation of regional public transport services to favour more sustainable and efficient road traffic and to adapt it to the specific needs of the public. In this context, the Mobility Exploitation Assistance System seeks to improve the management of the public transport fleet and the e-Mobility Technological Modernisation Plan aims to launch new digital-based services, including transport on demand services, that facilitate the processes of generation and modification of the transport offer.

Galicia should continue to develop digital services to address challenges such as school transport or the digital skills of professionals, which are particularly challenging in rural areas. The following actions describe more in detail actions towards this recommendation.

### ***Action 3.1 Use digital means to increase the flexibility of school transport***

In view of the significant digitalisation of schools in Galicia, education authorities should combine the promotion of distance learning in rural schools with a transport on demand service for upper secondary and vocational students – with more flexible schedules – in rural areas. Galicia already has a transport on demand service (Bus.gal portal) which can be booked service via a website or an app until 7pm on the day before the day of travel.

Based on this model, Galician authorities could develop a transport on demand service for school transportation in rural areas. Similar initiatives have proven to be effective for school transportation in other countries. In France, “Résa’Tao”, the transport on demand service of Orléans metropolis, and “Icilà”, the transport on demand service of the urban community of Sophia Antipolis, regularly cover school transport. In addition, both of these transport on demand systems use sophisticated software that Galicia could incorporate in its service. The software provides users and drivers with reliable and comprehensive real-time information and the possibility to make last-minute bookings from a mobile application or by phone. The routes, the stops and the timing of the service is flexibly adapted based on users demand. The software also has powerful algorithms that take into account itineraries, times and vehicle occupancy rates to optimise every trip, which has led to an increase in the rate of passenger grouping.

### ***Action 3.2 Develop digital skills through volunteer committees and interdisciplinary cooperation***

To support the implementation in rural areas of the Galicia Digital 30 Strategy (EGD2030), a committee of volunteers could support civil servants from rural areas with the most difficulties in their adaptation and training process. Fostering collaboration between teachers has proven to have a positive impact on the use of ICT in classes and on the teaching of digital technologies to students (OECD, 2020). A similar case is the Estonian Edulabs programme that offers an online platform where teachers help each other or consult each other to use technological resources.

Moreover, together with AMTEGA, the Galician government should continue to encourage networks bringing together digital sectors and teachers in order to improve ICT learning in schools. This interdisciplinary cooperation would better inform students about the broad opportunities offered by digital careers and the digital skills required to access them. This is the case of the Israeli technology incubator MindCET, which promotes collaboration between educational technology developers, schools and teachers to create innovative models for learning with technology. The incubator also offers teachers the opportunity to become edtech entrepreneurs and pilot new innovative pedagogies in their schools (Burns, T. and F. Gottschalk (eds.), 2020).

# 5 Action Plan and Roadmap to Guide Implementation

Preliminary policy recommendation	Action	Timing	Who
<b>Governance</b>			
1. Strengthen the governance structure of the Law for Demographic Boost	Action 1.1 Provide the Commission for Demographic Boost with decision-making capacity	Short-term	Regional Government
	Action 1.2 Evaluate assigning the Galician Observatory for Demographic Dynamisation with a more active role in informing the Commission for Demographic Boost	Short-term	Regional Government, Commission for Demographic Boost
	Action 1.3 Establish monitoring and evaluation mechanisms	Medium-term	Commission for Demographic Boost; Technical Commission for Demographic Boost
2. Rationalize inter-municipal cooperation mechanisms and diversify incentives for municipal mergers	Action 2.1 Identify successful models of inter-municipal cooperation and encourage their reproduction	Short-term/ Medium-term	Regional Government; Municipalities
	Action 2.2 Evaluate the diversification of incentives for municipal mergers	Short-term/ Medium-term	Regional Government (Promotion and conduction); Municipalities
3. Strengthen the Provincial Councils	Action 3.1 Identify areas of opportunity in which municipalities and supra-municipal entities can scale-up some of their responsibilities to the provincial level	Medium-term	Regional Government; Provincial Councils; Municipalities;



			Supra-Municipal Entities
<b>Entrepreneurship, innovation and digitalisation</b>			
1. Improve access to information and financial resources for rural entrepreneurs	Action 1.1 Centralise and improve information available to rural entrepreneurs	Medium-term	Regional government
	Action 1.2 Facilitate business start-ups and access to alternative financing in rural areas	Ongoing/Short-term	Regional government, local incubators, local action groups, municipalities and Provincial Councils
2. Promote rural innovation through the development of specific sectors	Action 2.1 Diversify tourism activities in rural areas	Ongoing/Short-term	Regional government
	Action 2.2 Support the development of the silver economy in rural areas	Medium-term/Long-term	Regional government
	Action 2.3 Promote the development of social economy incubators in rural areas	Medium-term	Regional government, local action groups, municipalities, Provincial Councils, chambers of commerce
3. Unblock barriers to provide connectivity to increase digital service provision	Action 3.1 Ease the implementation of broadband connectivity with greater institutional coordination	Short-term	Regional government, National government
	Action 3.2 Build an intelligent software platform to improve the management of rural public services	Medium-term	Regional government
<b>Quality education in rural areas</b>			
1. Adapt the school network to lower demand	Action 1.1 Evaluate the financial situation of the school network against measures of unavoidable costs of smallness and remoteness	Short-term	Regional government
	Action 1.2 Establish a clear path towards school network adaptation based on population projections	Short-term	Regional government
2. Improve the efficiency of school resources and strengthen school networks in rural areas	Action 2.1 Promote further grouping of rural schools	Ongoing, medium-term	Regional government
	Action 2.2 Outline a clear plan for teacher downscaling	Short-term	Regional government

3. Using digital tools to improve the provision of school transport and close gaps in digital skills	Action 3.1 Use digital means to increase the flexibility of school transport	Ongoing, medium-term	Regional government
	Action 3.2 Develop digital skills through volunteer committees and interdisciplinary cooperation	Short-term	Regional government

## Annex A. Degree of urbanisation classification

The Degree of Urbanisation was designed to create a simple and neutral method that could be applied in every country in the world. It relies primarily on population size and density thresholds applied to a population grid with cells of 1 by 1 km. The different types of grid cells are subsequently used to classify small spatial units, such as municipalities or census enumeration areas (see Figure A.1 for an example). The Degree of Urbanisation was endorsed by the UN Statistical Commission in March 2020.<sup>13</sup>

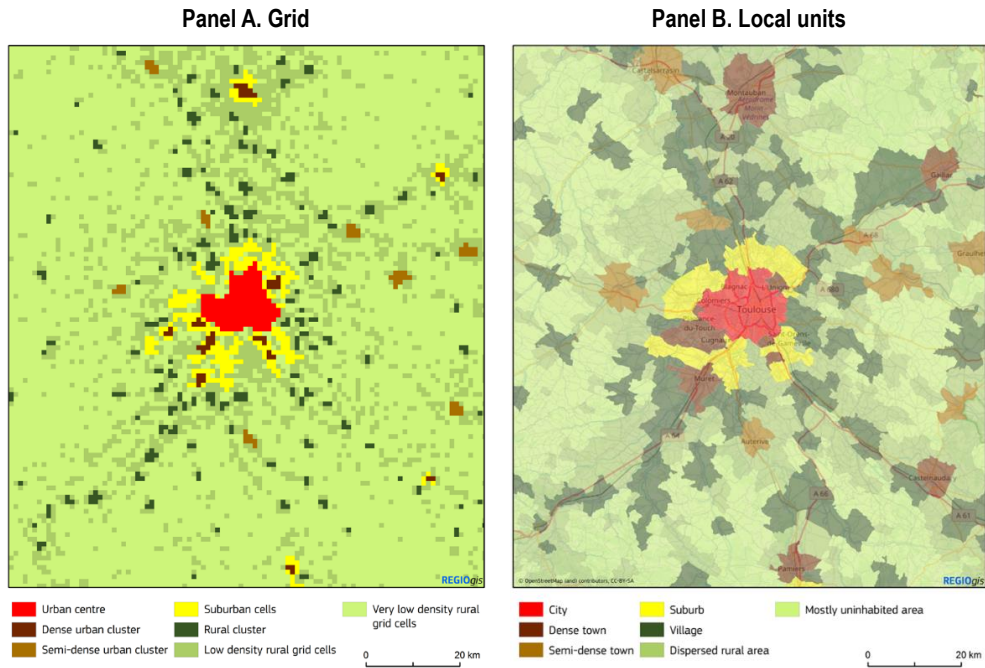
The Degree of Urbanisation classifies the entire territory into:

- Cities, with a population of at least 50 000 in contiguous grid cells with a density of at least 1 500 inhabitants per km<sup>2</sup>.
- Dense towns, with a population between 5 000 and 50 000 in contiguous grid cells with a density of at least 1 500 inhabitants per km<sup>2</sup>.
- Semi-dense towns, with a population of at least 5 000 in contiguous cells with a density of at least 300 inhabitants per km<sup>2</sup> and are at least 2 km away from the edge of a city or dense town.
- Suburbs, with most of their population in contiguous cells with a density of at least 300 inhabitants per km<sup>2</sup> that are part of a cluster with at least 5 000 inhabitants but are not part of a town.
- Villages, with between 500 and 5 000 inhabitants in contiguous cells with a density of at least 300 inhabitants per km<sup>2</sup>.
- Dispersed rural areas, with most of their population in grid cells with a density between 50 and 300 inhabitants per km<sup>2</sup>.
- Mostly uninhabited areas, with most of their population in grid cells with a density of less than 50 inhabitants per km<sup>2</sup>.

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<sup>13</sup> European Commission/ILO/FAO/OECD/UN-Habitat/World Bank (2020), "A recommendation on the method to delineate cities, urban and rural areas for international statistical comparisons", Statistical Commission background document, 51th session, 3-6 March 2020. Items for discussion and decision: demographic statistics. Available at <https://unstats.un.org/unsd/statcom/51st-session/documents/BG-Item3j-Recommendation-E.pdf>

Figure A.1. Degree of urbanisation grid classification around Toulouse, France



For the analysis in this document, these categories are collapsed into four categories: 1) sparse rural areas (composed of mostly uninhabited areas and dispersed rural areas); 2) villages; 3) towns and suburbs; and 4) cities.

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