

Country fiche

# Territorial patterns and relations in Malta

Smarter Europe

Greener Europe

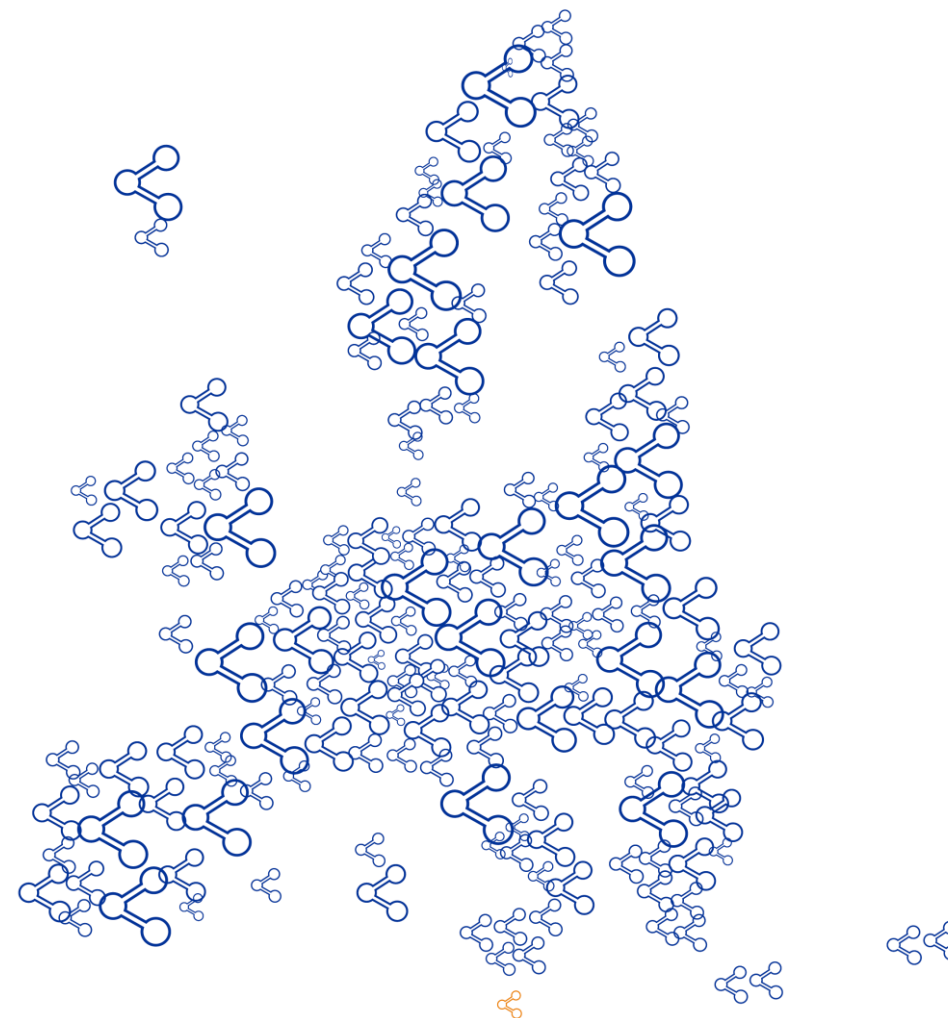
More connected Europe

More social Europe

Europe closer to citizens

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## **Introductory remarks**

The content of the following overview is a summary of research results from different thematic applied research projects under the ESPON 2020 programme. As a consequence, most indicators and analyses are not based on most recent data but represent the data availability at the time when the research was undertaken. Only in a few cases, for some rather basic indicators that could easily be reproduced, more up-to-date information was used.

It is therefore important to note that this overview is mainly a collection of available findings with different time stamps and not an up-to-date, comprehensive analysis. Its main goal is to showcase the wide range of ESPON research and, by zooming-in on a specific country, to raise interest for the scientific results at a more national and even regional scale.



## **Smarter Europe**

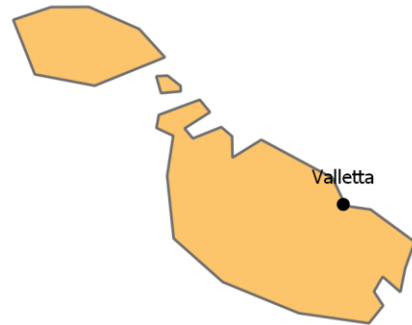
Regional innovation scoreboard (2019)

R&D expenditure (2014)

Employment in Small and Medium size Enterprises (2014)

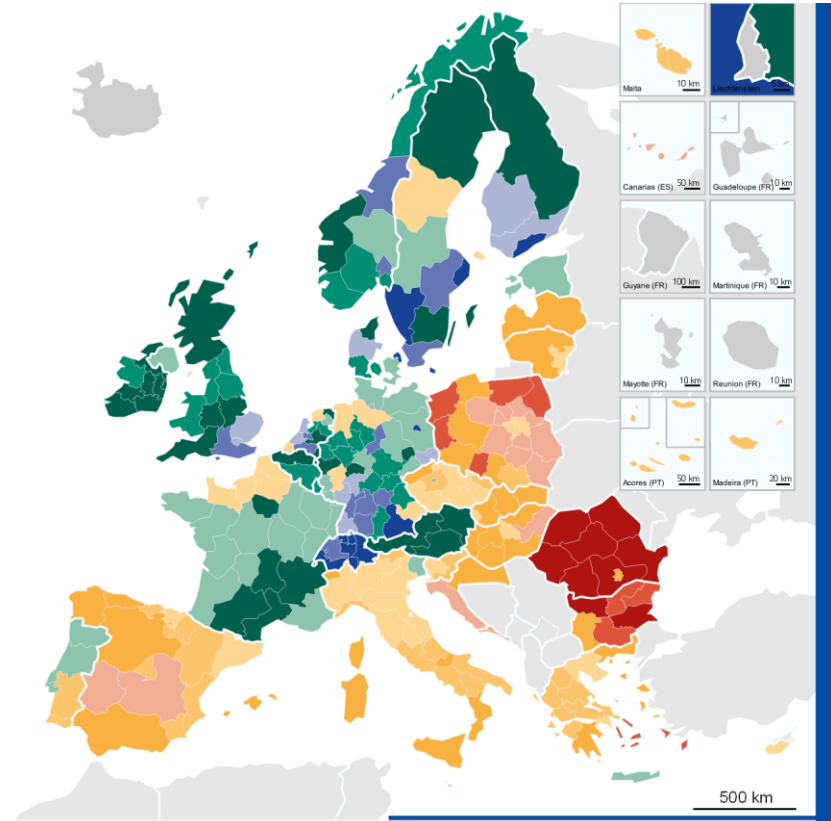
Regional patterns in 4.0 technological transformation (2019)

## Regional Innovation Scoreboard (2019)



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 Regional level: NUTS 1 / 2 / 3 (2016)  
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### RIS Performance groups 2019



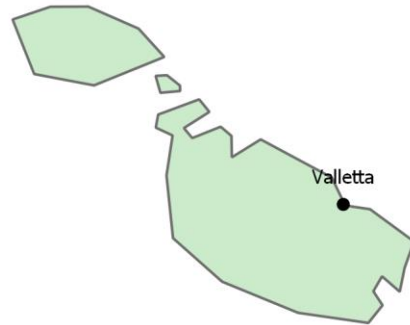
Origin of data: Regional Innovation Scoreboard, 2019  
 Definitions: The RIS 2019 is a comparative assessment of regional innovation based on the European innovation scoreboard methodology, using 18 of the latter's 27 indicators. It provides a more detailed breakdown of performance groups with contextual data that can be used to analyse and compare structural economic, business and socio-demographic structure differences between regions.


## Malta is a moderate innovator with increasing performance

Innovation performance is measured by the European Commission on the basis of the unweighted average of 17 indicators reflecting human resources, research systems, R&D expenditure, innovation in SMEs, cooperation, patents and sales of innovative products. Based on their scores, EU regions fall into four performance groups: innovation leaders, strong innovators, moderate innovators and modest innovators, with three subgroups. At the European level, one observes a concentration of high performances in a European core area running from South-East England to Switzerland, southern Germany, including the southern part of Saxony on the border to the Czech Republic. Values are also high in a number of northern European regions with large cities.

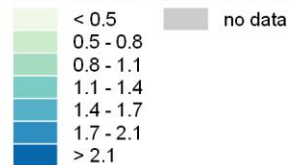
Malta is a moderate innovator with an overall value of 84. However, it has experienced one of the biggest increases in innovation performance since 2012. Malta is also one of the top performing EU countries for the indicator intellectual assets, i.e. different forms of intellectual property rights generated in the innovation process, Patent Cooperation Treaty (PCT) patent applications, trademark and design applications. Employment impact and innovation-friendly environment are other strong innovation dimensions in Malta. Malta also scores high on indicators such as trademark applications, venture capital expenditures, employment in fast-growing enterprises of innovative sectors, and employment in knowledge intensive activities.

## R&D Expenditure (2014)

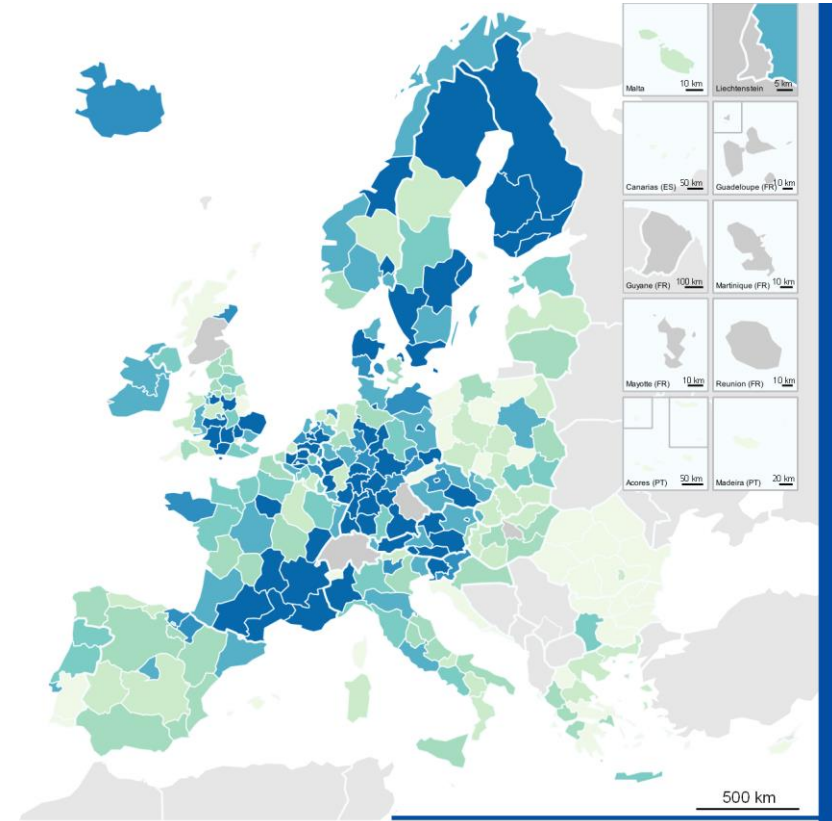


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### R&D Expenditure as percentage of GDP, 2014



10 km



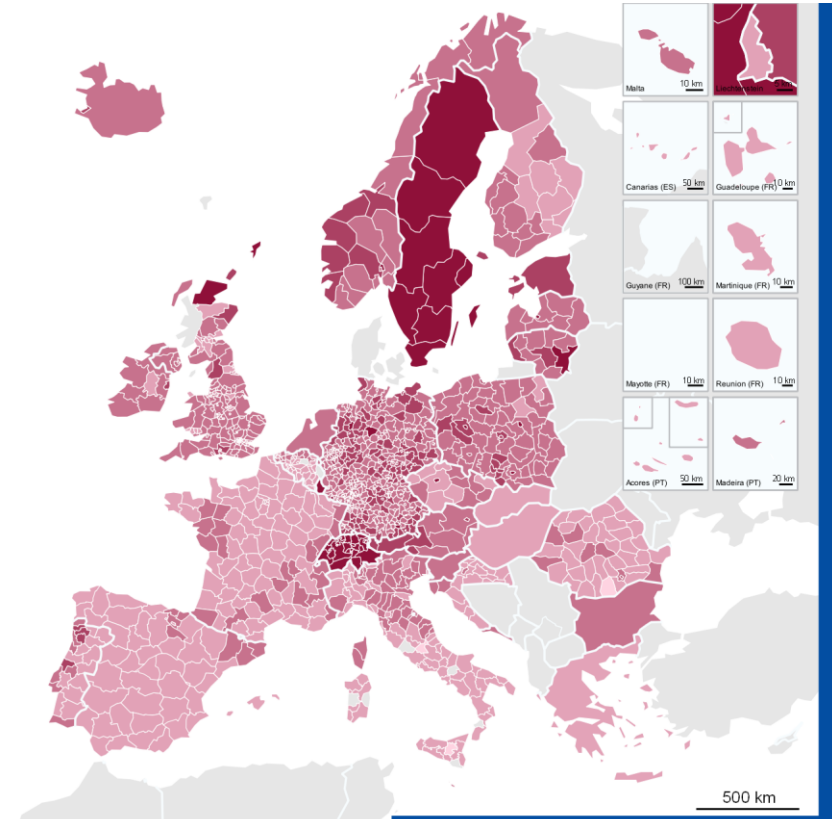
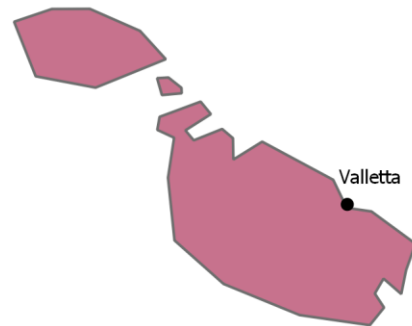
Source: Spatial Foresight, 2020  
 Origin of data: Eurostat, online code: rd\_e\_gerdreg, extracted on 10.07.2020  
 Values for Germany, Greece, Ireland, France, Austria, Finland and Sweden from 2013.

## Low R&D expenditure in Malta compared to EU

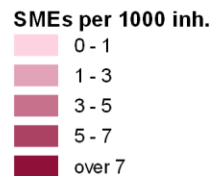
Investments in research and development aim to stimulate innovation and productivity growth and therewith stimulate competitive levels in Europe. The Europe 2020 strategy encouraged EU Member States to attain a 3% R&D expenditure level as percentage of GDP. In 2018 this level which was reached by Denmark, Germany, Sweden and Austria. Regional data illustrates that R&D expenditures are particularly high in capital cities and regions with innovative industries, e.g. the car industry in Southern Germany or southern France. High shares of R&D expenditures in Finland and northern Sweden is mainly driven by the government sector.

Malta has an R&D expenditure of 0.71% (as a percentage of its GDP), which is among the lowest in the EU. The business enterprise sector contributed 0.39%, the higher education contributed 0.25% and the government sector 0,07%. Engineering and technology, natural sciences and medical sciences are among the R&D activities with the highest rates. Other islands in the Mediterranean have higher R&D expenditures than Malta. The island of Crete has the highest rate.

## SMEs per 1000 inhabitants (2014)



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 Regional level: NUTS 0, 2, 3 (2013)  
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10 km

500 km

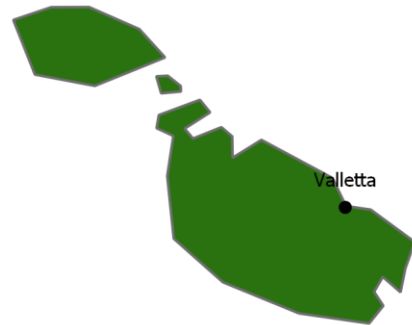
Source: ESPON SME, 2017  
 Origine of data: National statistical offices  
 Data for FI, LU, SI relate to 2010  
 Data for AT, EE, HU, MT, SE relate to NUTS2  
 Data for BG, DK, EL, NL, SI, SK relate to NUTS0 (SBS)  
 Data for EL (2015) corresponds to estimates produced by DIW Econ (2016)

## High share of SMEs in Malta compared to other Mediterranean regions

SMEs represent 99% of all businesses in Europe and play a crucial role in economic growth, innovation, job creation and social integration. Europe's remote areas (Nordic countries) as well as rural and peripheral regions in Germany, Lithuania, Switzerland and Poland tend to employ more people in SMEs than in urban areas. The opposite is the case in Finland, Italy, France and Portugal.

The environment for SMEs has improved significantly in recent years thanks to numerous measures introduced. SMEs play a key role in the Maltese 'non-financial business economy'. In 2018, SMEs generated 81.8% of value added and 77.7% of employment, exceeding the respective EU averages of 56.4% and 66.6%. In 2014-2018, overall SME growth in the Maltese 'non-financial business economy' was remarkably strong: value added increased by 58.1%, exceeding that of large firms, which increased by only 43.2%. Overall SME growth in Malta is forecast to remain very strong, with value added expected to rise by 17.8% in 2018-2020, exceeding the growth of 12.5% projected for large firms.

## Regional patterns of 4.0 technological transformation (2019)

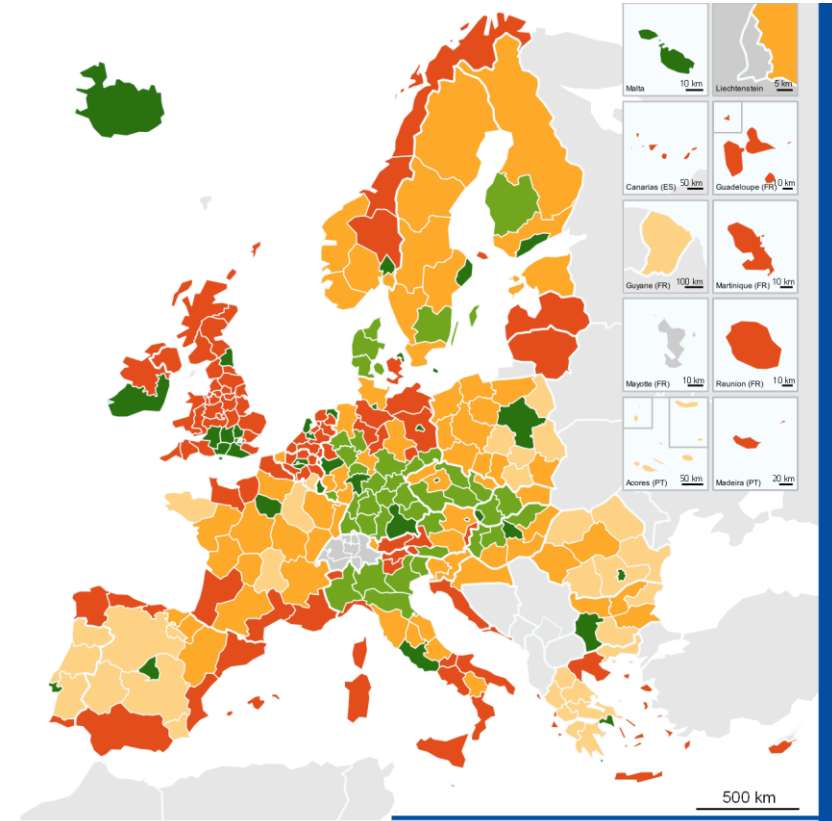


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### Regional patterns of 4.0 technological transformation

- Servitisation
- Industry 4.0
- Digitalisation of traditional services
- Robotisation of traditional manufacturing
- Niches of robotisation
- No data

10 km



Source: ESPON T4, 2020  
 Origin of data: Eurostat, 2019

## Digital markets dominate the industry 4.0 technological transformation in Malta

Five clusters identify regions with specific patterns of technological transformation. Servitisation (specialisation in new technologies and industrial sectors undergoing changes in industrial production and society) found mainly in large urban areas. Industry 4.0 (specialisation in creative manufacturing), located mainly in southern Germany and Northern Italy. Digitalisation of traditional service (specialisation in digitalising traditional services), as in Baltic regions, most of the Netherlands. Robotisation of traditional manufacturing, (adoption of 4.0 technologies) seen in France and Poland. Lastly, niches in robotization (technological transformation only due to industrial niche adopters, found e.g. in Eastern countries, Greece.

Servitisation is the main form of industry 4.0 technological transformation in Malta. A servitisation cluster has developed in the island's urban areas. The technological transformation of servitisation deals with the development of capabilities to provide services and solutions that supplement traditional product offerings. This is done through the adoption of online sales technologies.



## **Greener Europe**

Road Transport Sector, final energy consumption (2012)

Renewable energy in transport (2014)

Electricity from renewable sources (2012)

Funding for energy efficiency and renewable energy projects (2007-2013)

Decoupling Domestic Material Consumption from GDP (2006-2014)

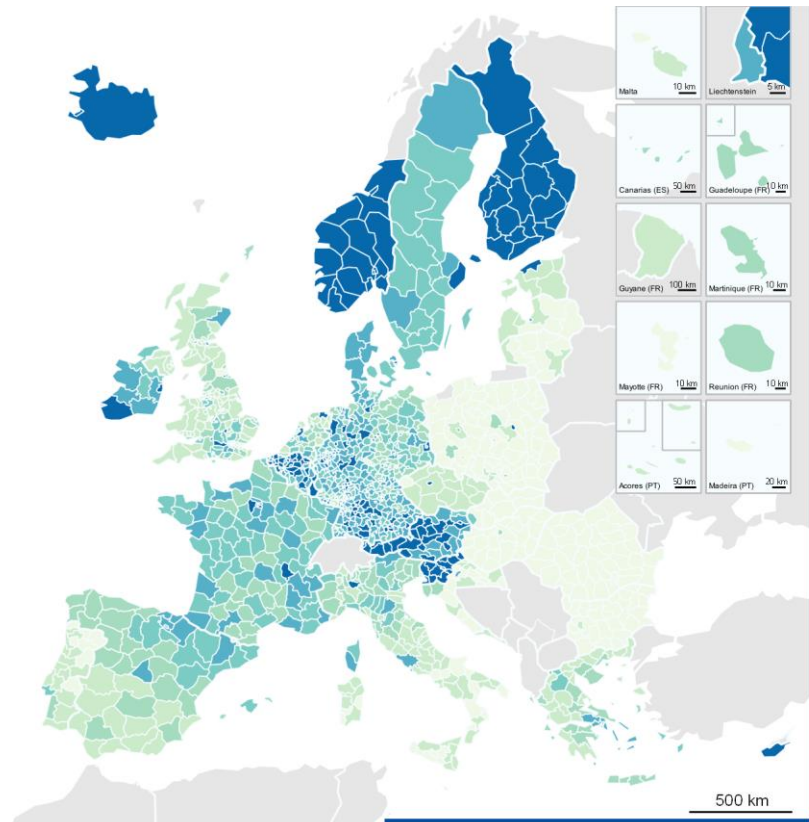
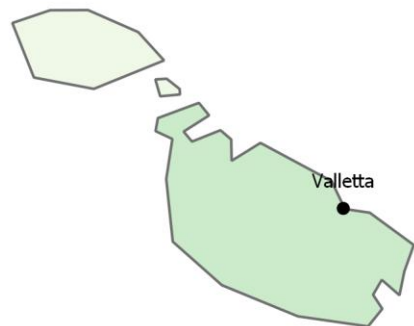
Total waste per capita (2014)

Coverage of potential Green Infrastructure (2012)

Aggregated potential impact of climate change

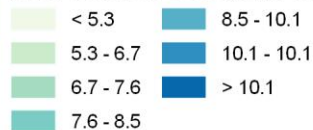


## Road transport sector, final energy consumption (2012)



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### Road transport sector, final energy consumption, 2012 (MWh/cap)



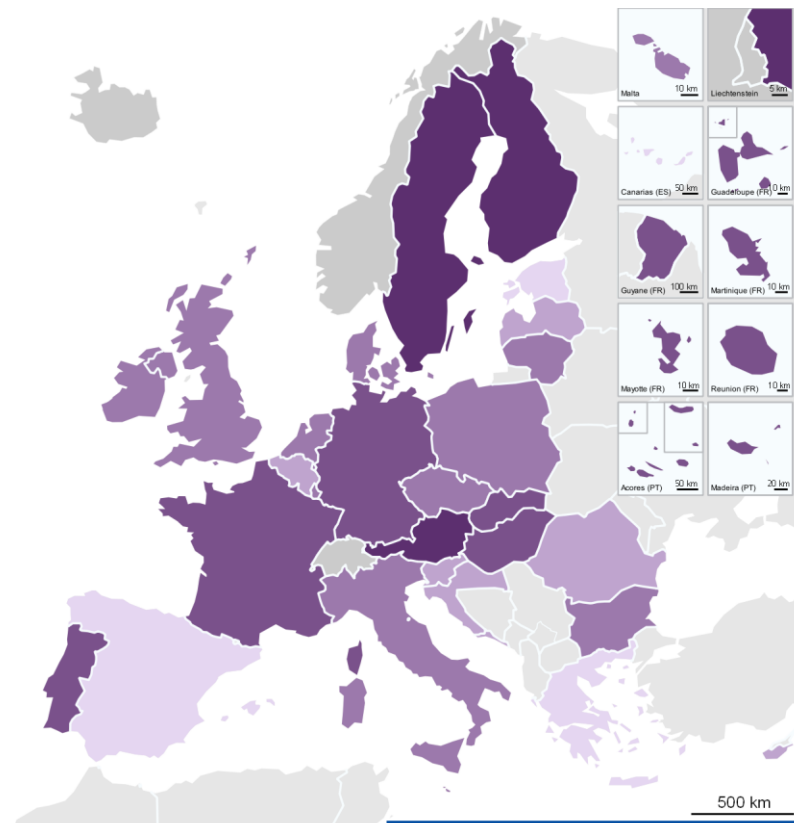
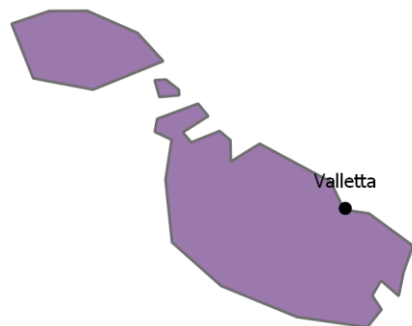
Source: ESPON LOCATE, 2017  
 Origin of data: Eurostat 2016, own calculations

## Energy consumption by road transport in Malta

Road transport is among the main energy consumers in the transport sector. It includes passenger transport by car or bus or transport of goods by trucks. Hence, regional variations of energy consumption follow population, GDP and employment patterns. In addition, areas of fuel tourism can be observed. The energy consumption of road transport is particularly high in Nordic regions as well as in regions in Central Europe. Energy consumption of road transport is considerably lower in most eastern European countries as well some regions in Portugal and southern Italy.

Energy consumption of road transport per capita is lower in Malta than in most European regions. In 2018, road transport accounted for 5.31 MWh per inhabitant in Malta, which ranked third lowest among EU Member States. Nevertheless, Malta's overall share of final energy consumption in the transport sector is at around 55%, which is much higher than the EU average. By virtue of its geographic isolation, 40% of the final energy consumption in the transport sector is attributed to aviation, while more than half of energy consumed in the transport sector can be attributed to road transport, thus making it a relatively high consuming sector. In 2019, 760 vehicles were registered per 1,000 inhabitants of Malta against 1,071 on Gozo and Comino. The road transport sector remains heavily dependent on private cars as the principal means of transportation.

## Renewable energy in transport (2014)

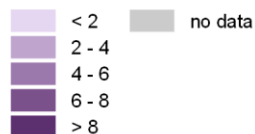


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10 km

500 km

Share of renewable energy in transport, in % of total transport energy consumption



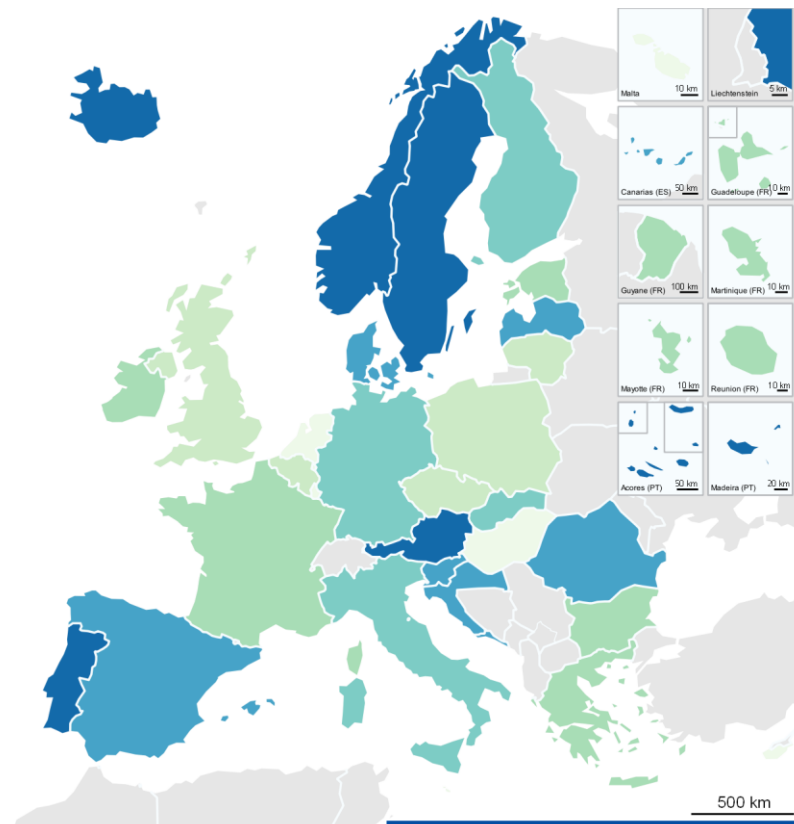
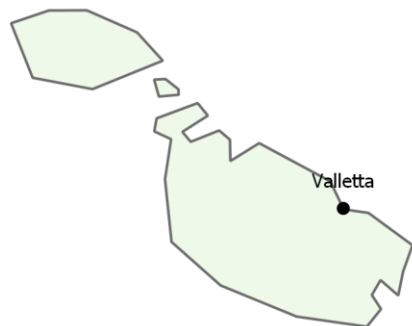
Source: Spiekermann & Wegener Urban and Regional Research (S&W), Territorial Futures, 2017  
 Origin of data: EEA, 2017

## Malta has an average share of total transport energy consumption from renewables

Transport accounts for about one third of Europe's energy consumption, relying heavily on fossil fuels. For the decarbonisation of transport, the use of renewable energy needs to be increased. Alternatives to fossil fuels are biogas, hydrogen for fuel cell and electricity. However, the share of renewable energy in transport is rather low across Europe. Countries with the highest share are Sweden, Finland and Austria, followed by countries in the west and central Europe, such as France, Germany, Slovakia and Hungary. Among the lowest shares are to be found in the south of Europe and Estonia.

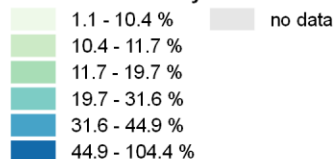
In 2018, Malta reached a 7.98% share of renewable energy in transport. Compared to other islands of similar size in the Mediterranean, Malta's renewable energy share in transport is relatively high. Other measures targeting an increasing share of public transport and, reducing the use of private transport for example are required. The National Transport Action Plan has as main goal to decrease GHG emissions and increase the use of renewable energies in both public and private transport by implementing a policy for the electrification of transport. The objectives pursued will reduce the negative environmental externalities of transport and improve citizens' quality of life, especially in urban centres.

## Electricity from renewable sources (2012)



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### Share of electricity from renewable sources, 2012



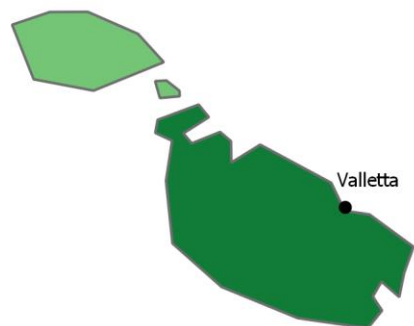
## Malta having of the lowest shared of electricity from renewables

The share of renewable energy sources within the gross final electricity in Europe varies largely across Europe. In 2012, Norway is leading with a renewable energies' share of 104,4%, as it produces more than it consumes and exports the excess to neighbouring countries. In the EU, this is followed by Iceland, Sweden and Austria. Portugal has also shown a positive change and increase to among the countries with the highest shares. In most countries the share is between 10% and 50%. The lowest shares are found in Hungary, Cyprus, Luxembourg and Malta.

Malta is one of the EU member states with the lowest shares in renewable energy sources for electricity. Despite the diversification and modernisation of the electrical grids in the country, Malta had about only 1,1% of renewable energy sources for electricity in 2012. Given the increasing needs for electricity due to tourism, efforts to increase the share in the future need to take place. All other islands in the Mediterranean region have higher shares of electricity from renewables compared to Malta.

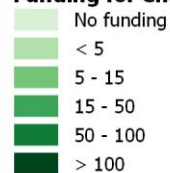
Source: ESPON LOCATE, 2017  
 Origin of data: Eurostat, 2017

## Funding for energy efficiency and renewable energy projects (2007-2013)

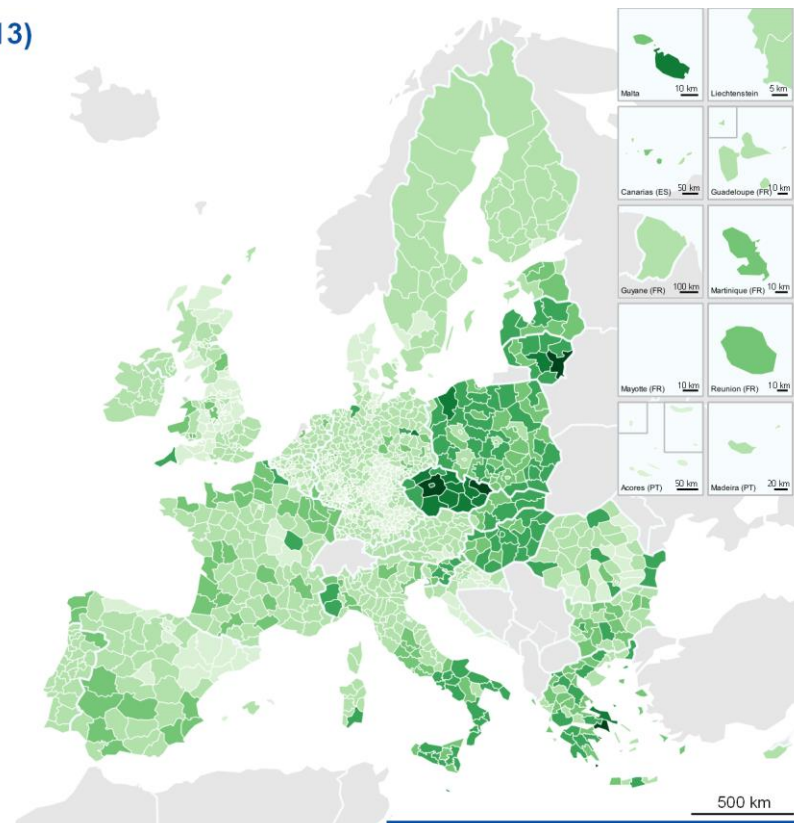


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Regional level: NUTS 3 (2006, 2013)  
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### Funding for energy efficiency and renewable energy projects in Mio EUR (CF, ERDF)



10 km



500 km

Source: ESPON LOCATE, 2017  
Origine of data: EC, Geography of Expenditure, Final Report, WP 13, 2015;  
Eurostat (2011 - NUTS3) for population data

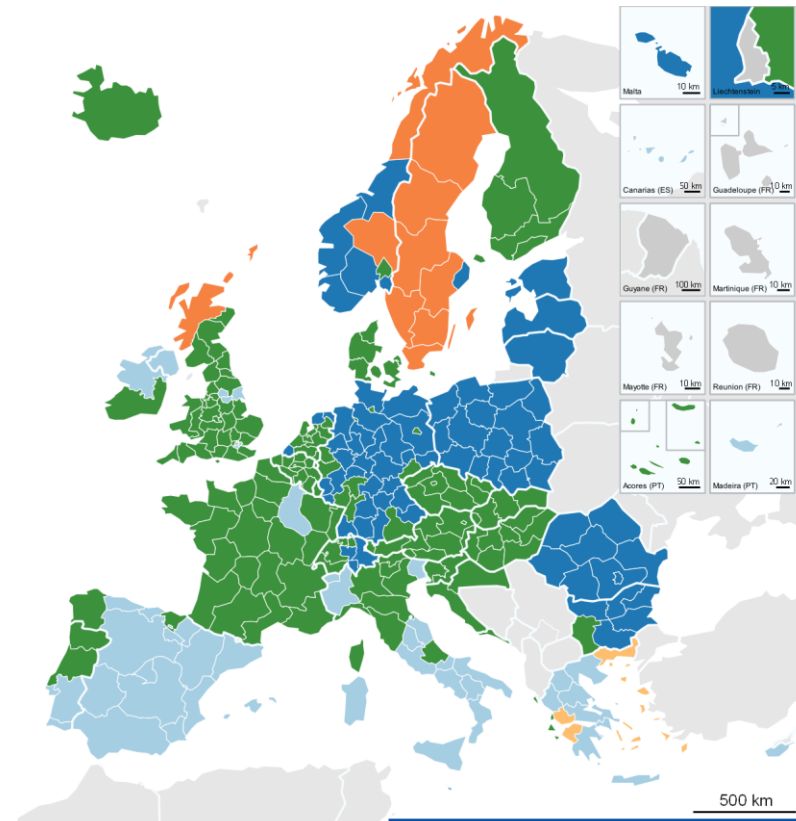
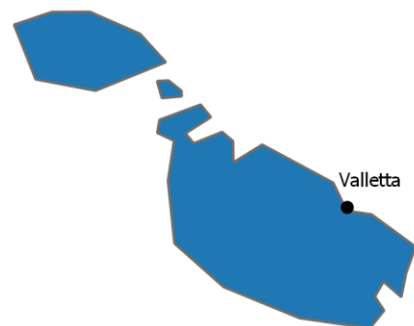
Funding dedicated through European Regional Development Fund and Cohesion Fund during the 2007-2013 programming period.

## 4.1% of EU regional policy funding towards energy efficiency and renewables

Significant amounts of European Regional Development Funds and Cohesion Funds went to activities to encourage energy efficiency and renewable energy production in the programming period 2007-13. Following the allocation of these Structural Funds, most of funds were spent in eastern and southern European regions. The amount of funds spent on energy efficiency and renewable energy was particularly high in Czech regions, mainly in Prague and Ostrava as well as in Vilnius and Athens. In these urban areas, structural funds have among others been used to better insulate buildings encouraging better energy efficiency. Only in Danish and British regions no ERDF or CF funds were used for energy efficiency and renewable energy projects.

During the period 2007-13 34,840,000 EUR of ERDF and CF were spent in energy related projects in Malta, out of which 28,177,600 EUR in energy efficiency and 21,215,400 EUR in renewable energy, representing about 4.1% of the total EU allocation to Malta. This was used primarily in both public and residential buildings to extend and improve insulation of roofs and walls and basements and to install new heating, cooling and ventilation systems. 42 projects were approved as part of priority axis "Climate Change and Resource Efficiency" in the national programme 'Investing in Competitiveness for a Better Quality of Life'.

## Decoupling domestic material consumption from GDP (2006-2014)



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### Decoupling DMC per capita from GDP per capita

- |   |   |
|---|---|
|  0 < Change GDP < Change DMC |  Change DMC < Change GDP < 0 |
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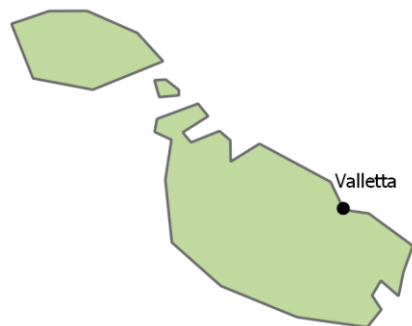
Source: ESPON CIRCTER, 2018  
 Origine of data: CIRCTER, 2018  
 DMC: Domestic Material Consumption  
 GDP: Gross Domestic Product

## Slow transition towards more resource efficient economy in Malta

Decoupling of material consumption from GDP refers to increasing economic growth and decreasing use of resources. Many European regions decreased their domestic material consumption (DMC) and saw an increase of GDP between 2006 and 2014 (green). These regions used resources more efficiently without harming GDP growth. Regions in Spain, southern Italy, Greece and Cyprus decreased their DMC but saw also a decrease in GDP. Resource efficiency has increased but through an economic downturn. Regions in Baltic countries, Germany, Bulgaria and Romania saw an increase in DMC which was lower than the increase in GDP. Regions in orange had greater increase of DMC than GDP. These economies did thus not become more resource efficient between 2006 and 2014.

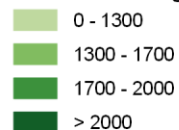
In Malta, the transition towards a more resource efficient economy is a slow process. During the period 2006-2014, Malta's DMC per capita continued to increase, although at a relatively slower pace compared to the increase in GDP per capita. Decreasing DMC per capita while sustaining high level of national income could be an objective for the Maltese economy in the next 10 years.

## Total waste per capita (2014)

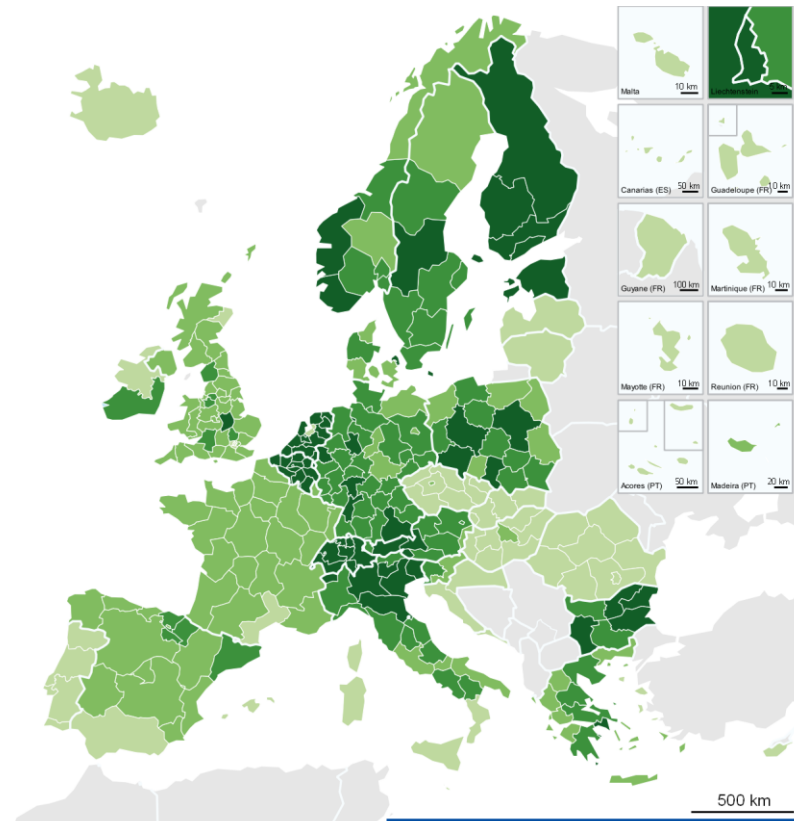


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 Regional level: NUTS 2 (2013)  
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### Total waste in kg per capita (2014)



10 km



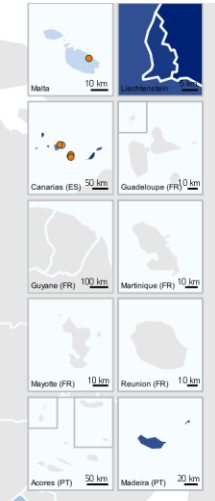
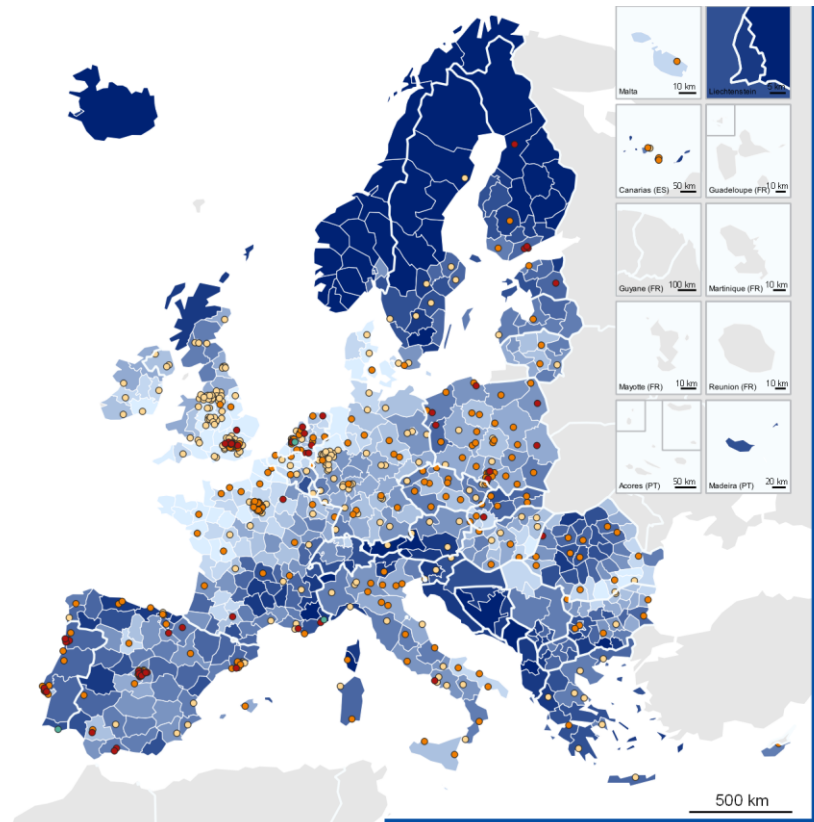
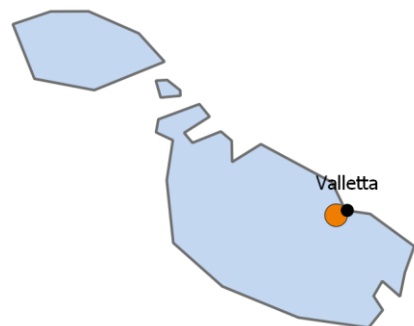
Source: CIRCTER, 2018  
 Origin of data: Eurostat, CIRCTER, 2018

## Waste production below EU average in Malta

The European Commission promotes a transition to a circular economy. This entails an economic model in which waste becomes obsolete and in which materials can be reduced or re-used. In that sense, the share of waste produced per inhabitant in European region provides an indication on the challenges and opportunities for such a transition, keeping in mind that data origins and collections methods differ largely by country. Per capita more waste is produced in Europe's most populous and industrial regions in 2014, among which regions in the Netherlands, Belgium, Switzerland, Finland, Italy, Poland, Norway, Estonia and Bulgaria.

Potential green infrastructure covers about 10% of Malta's landmass and is thus low compared to other parts of Europe. About 30% of Valletta is covered by green spaces, which makes it among Europe's least green cities. Like many other European cities, the share of green space decreased between 2006 and 2012. Most green infrastructures can be found on the southern and more hilly parts of Gozo and Malta islands. These areas include all terrestrial protected areas and connect them. Being an island poses challenges to further integrate or extend green infrastructures mainly due to limited space. Abandoned agricultural areas could support further development of green infrastructures.

## Coverage of potential Green Infrastructure (2012)



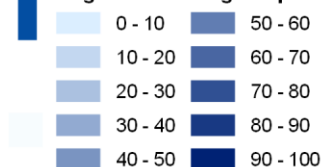
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10 km

500 km

Origin of data: NUTS2/3 (2013)

### Regional coverage of potential GI network



### Change of green areas within cities, 2006 - 2012\*



Definitions: CLC 2012, Copernicus HRL Impervious 2012, OSM 2017, Natura 2000 (EEA 2012), Emerald Network 2012, HNVF (EEA 2015), Ecosystem types map (ETC-SIA 2015)

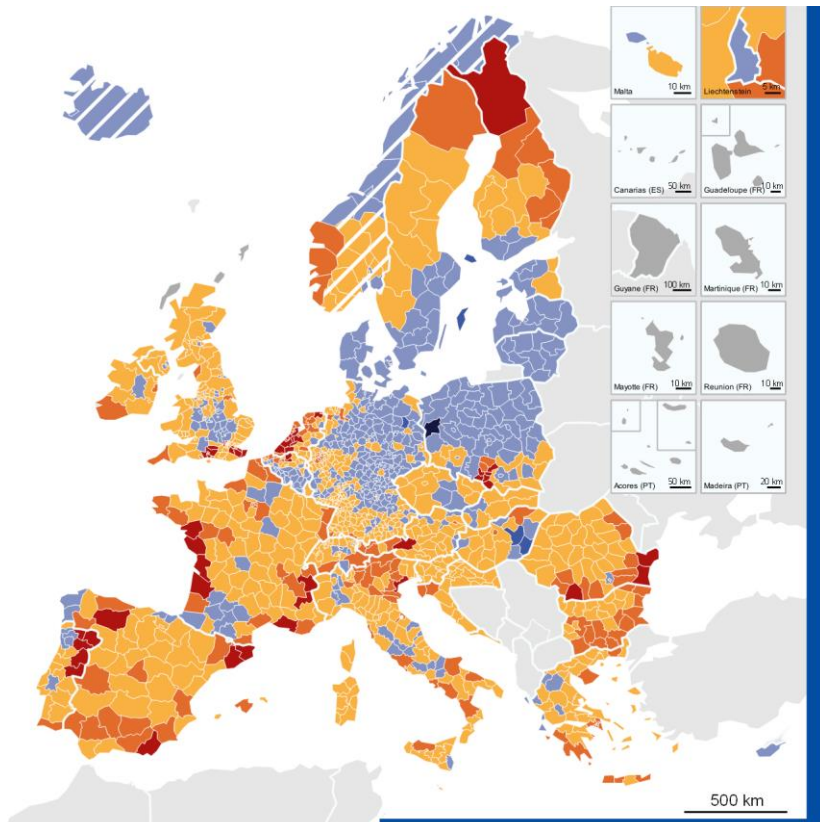
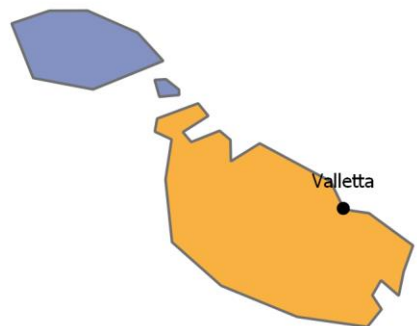
\* Change values are recorded by comparing datasets from the Urban Atlas, version 2006 and 2012. Cities without symbols are not included in the two datasets

## Competition for space limits the potential for green infrastructure on land

Evolutions in proportions of green and blue areas between 2006 and 2012 have been calculated for 524 European “core cities” based on Urban Atlas data. On average, green and blue areas cover about two thirds of the area in European core cities. In a majority of cities, this proportion is decreasing slightly between 2012 and 2016. Significant decreases tend to be found in eastern and southern European countries. This is mainly a result of urbanisation and/or of the development of tourism. Green infrastructures cover a low proportion of the area in an area running from western France and Cornwall to Denmark. They are the highest in northern Scandinavia and the Western Balkans.

Malta considers its terrestrial ecological network as the backbone of green infrastructure potential. Most of the GI is spread along the southern and western parts of the island of Malta and throughout all the island of Gozo. Over time, Malta has seen an increase in population and currently has the highest population density in Europe, and considerable development in the urban areas of its villages, towns and cities has impacted on the availability of green spaces. Like many other European cities, the share of green space which in the Maltese context includes those areas yet undeveloped within the development zone but which are already zoned for development through relevant Plans, decreased between 2006 and 2012.

## Aggregated potential impact of climate change

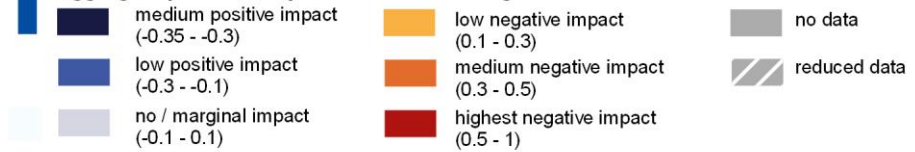


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10 km

500 km

### Aggregate potential impact of Climate Change



Source : ESPON Database, ESPON Climate Update, plan – risk consult, 2014  
Origin of data : EEA, 2013, 2013 (CORIN 2006), 2014 (NATURA 2000), E-PTRT 2012, OSM2014, GISCO 2006, Eurostat 2006, 2011, 2013, 2014, JRC 2006, 2012 (ENSEMBLES), 2013a (Eurosoils), 2013b (LISFLOOD), 2013c, 2014, USGS 2011, DIVA 2004, ATSR 2014, Statistics Iceland 2011, Bundesamt für Statistik 2011, 2014, Amt für Statistik Liechtenstein 2014, 2011, HESTA, 2014.

The indicator puts together expected impact of climate change on environmental assets, economic activities, physical infrastructures, social cohesion and cultural sites. For more information, see ESPON CLIMATE final report

Note : regions with reduced data are missing information related to environmental sensitivity and exposure. For more details, see ESPON Climate Update Annex

## Low impact but high vulnerability to climate change effects

Important factors for the potential environmental impact of climate change are high slopes (e.g. in mountainous regions), exposure to soil erosion (e.g. in river deltas or along coasts) and large protected areas, flood and drought risks. Regions that are the most exposed to the overall negative impact of climate change are primary close to a coastline or to a major river (e.g. Rhone, Po), southern Europe (e.g. mountain areas of northern Portugal, Galicia, Andalucia and Catalonia, Romanian and Bulgarian regions facing the Black Sea) and in the inland to the north and east of Scandinavia. Exposure is more limited around the southern part of the Baltic Sea, in Eastern German and in most of Poland.

Based on the IPCC 4th Assessment report the Mediterranean as well as island states are mostly vulnerable to climate change effects and specifically identifies the Mediterranean basin as a hotspot of vulnerability. Malta's seventh national Communication outlines the issues related to climate and the adaptation efforts towards mitigating those issues. The main concerns relate to the availability of water resources in an already water scarce region. The impact of such is further convoluted by the local energy dependency on foreign imports of fuels which are needed to maintain water supply through desalination. Also specified in the National communication is the impact of climate change on sensitive economic sectors.





## **More connected Europe**

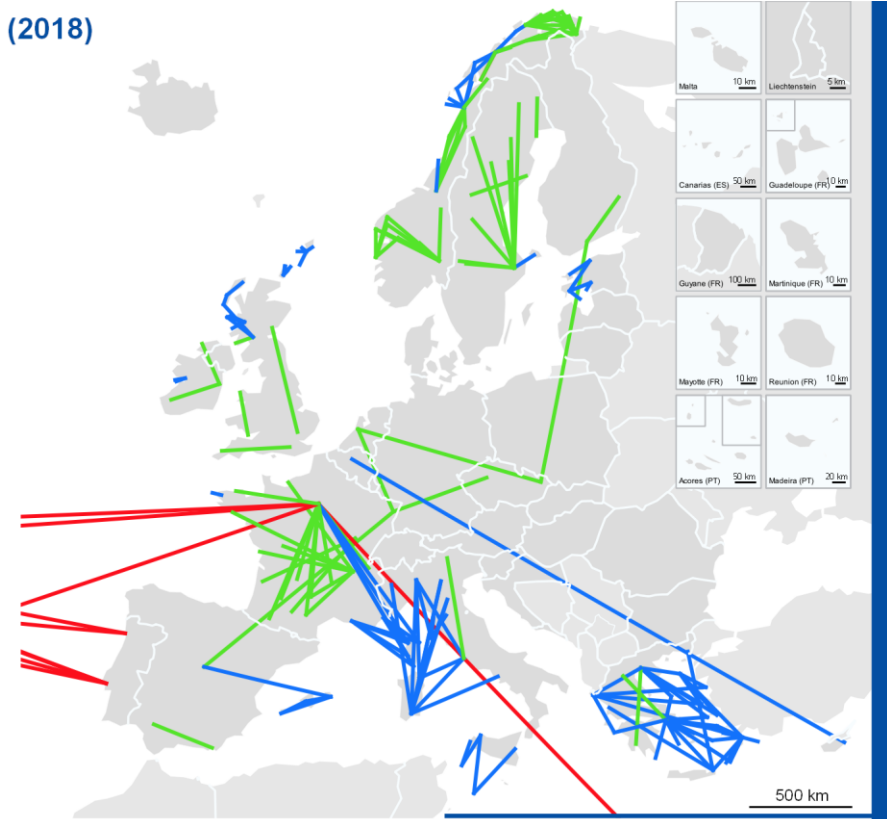
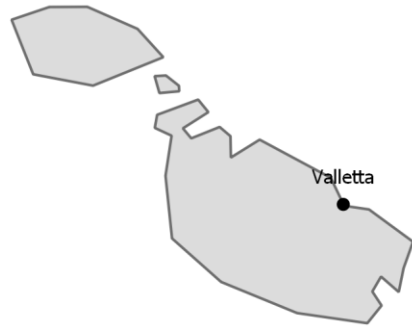
Flight routes operated under Public Service Obligation regulation (2018)

Broadband access (2018)

Status and evolution of eGovernment interactions (2014-2019)

Regional share of population using e-banking services (2008-2016)

## Flight routes operated under Public Service Obligation regulations (2018)



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### PSO flight routes by geography

- Island
- Mainland
- Outermost

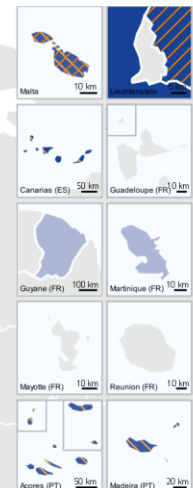
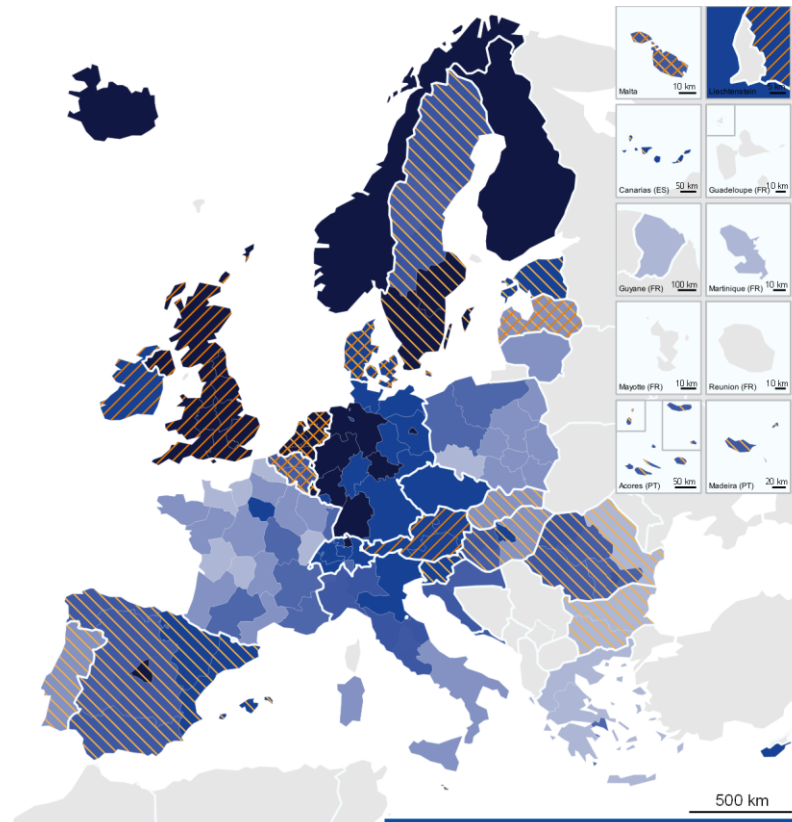
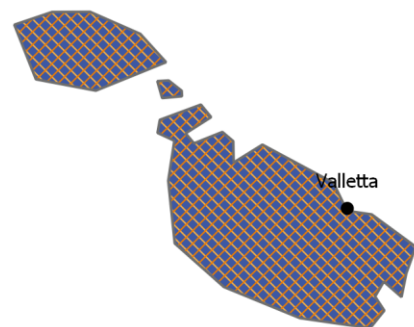
Source: ESPON BRIDGES, 2019  
Origin of data: European Commission, 2018, TCP International, 2018

## Malta lacks flight routes under PSO

Flight transport under Public Service Obligation (PSO) is used as a tool to provide services of general interest to citizens, to support regional development and promote accessibility to isolated areas in the EU such as island regions. Greece, has a large number of PSO flight routes connecting its islands with the mainland. Similarly, Italy has PSO flight routes to Sardinia and Elba and France has routes to Corsica. PSO Flight routes are also found the mainland, as for example in sparsely populated parts of Sweden and Norway, but also in several areas in France, the UK and Ireland. Outermost regions are also connected to the EU mainland through PSO flight connections to Portugal or France.

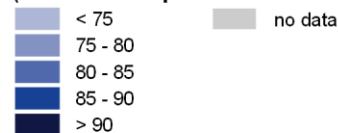
Malta does not have any flight routes that operate under a PSO regulation. Nevertheless, Malta is connected with Gozo through ferry transport supported by a PSO. This ferry service connecting Cirkewwa (Malta) and Mgarr (Gozo) is well-connected to bus services. However, as a result of traffic congestion, there are often long travel times to central areas on Malta. According to the transport master plan 2025, a fast ferry service to Valetta would help to limit traffic congestion and reducing travel times from Gozo to central parts of Malta, including key services such as hospitals and the university.

## Broadband access (2018)

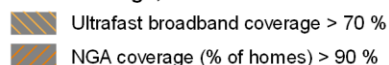


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 Regional level: NUTS 2 / 1 / 0 (2013)  
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### Proportion of households with broadband access, 2018 (% share of all private households)\*



### Countries with high values in ultrafast broadband or NGA coverage, mid 2018



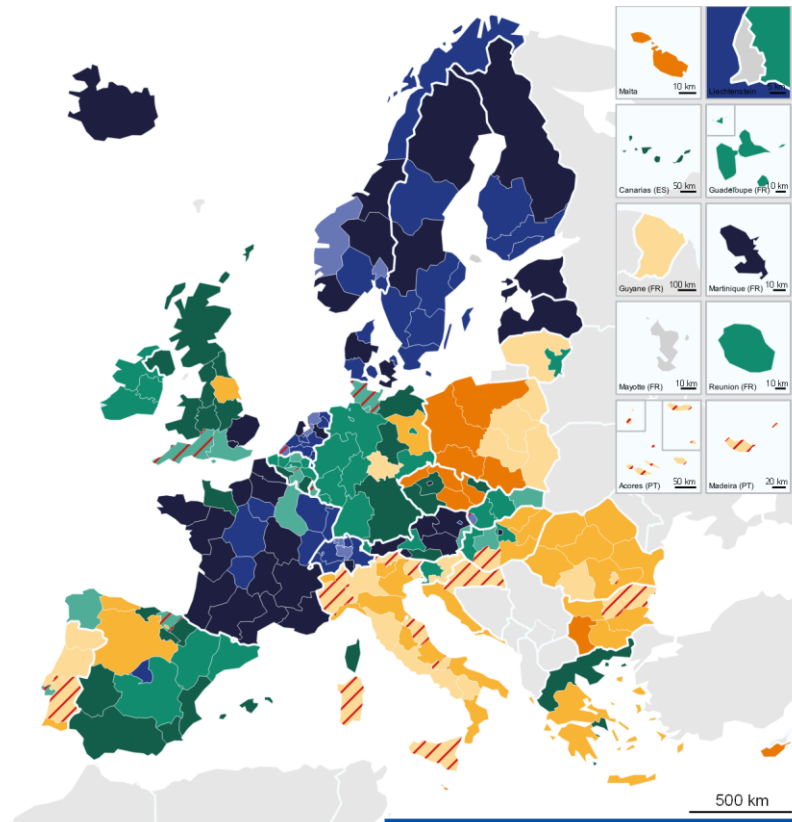
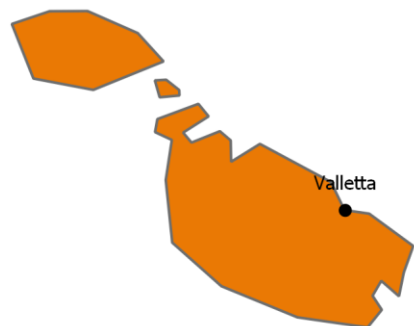
Origin of data: Eurostat, DESI Index 2019  
 Definition: Ultrafast broadband offers at least 100 Mbps download speed, NGA = next-generation access  
 \* The availability of broadband measured by the percentage of households that are connectable and thus refers to coverage.

## Excellent access to broadband and next generation

The Nordic states, the United Kingdom and Western Germany register the highest values in terms of households with basic broadband access. Most regions have more than 75 % of households with at least 30 Mbps broadband access, therefore missing the EU 2020 target of 100 % coverage. Regions in the core of Europe are close to ensuring 100 % 30 Mbps broadband access, while those in southern Europe can cover between 75 % and 85 % of households, or even less. Even though eastern European countries lag behind in terms of broadband access, with values below 75 %, they show high internet performance, having good next-generation access broadband coverage and, in some cases, high scores with regard to access to ultrafast broadband.

Access to high-quality broadband helps reduce the economic and social impacts of physical remoteness on islands. In the Maltese context of double insularity, it provides opportunities to increase accessibility to services by offering them online. In addition, an increasingly broad spectre of economic activities demands access to high-quality broadband. These factors may have contributed to Malta's good coverage of broadband access. 80-85% of the households has broadband access. As such, Malta has better broadband access than most other European island regions including the Balearic Islands, Canary Islands Madeira and Cyprus. Malta is also one of eight European countries that have an excellent coverage of next generation access.

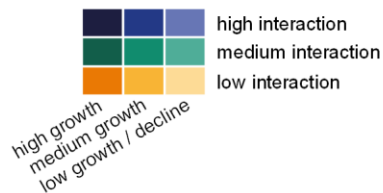
## Status and evolution of eGovernment interactions (2014-2019)



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**Share of people who have interacted with public authorities online (2019) and change (2014 - 2019)**

decline (2014-2019)



10 km

500 km

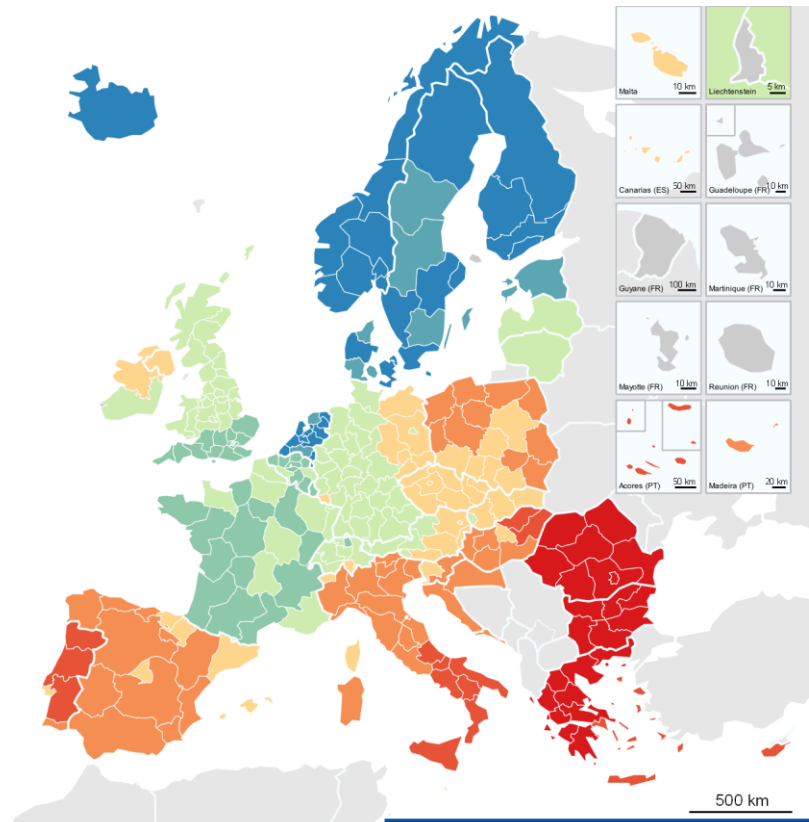
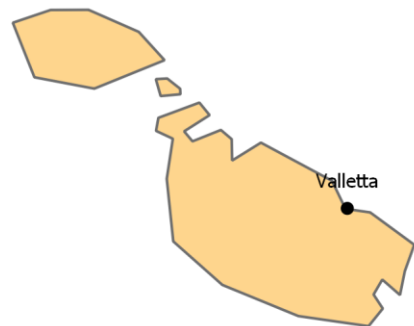
Source: ESPON EGTC, 2019  
 Origin of data: Eurostat, 2020

## High growth of eGovernment interactions in recent years

Digitalisation of public administration and public services allows for more reliable and mutual interactions with citizens. One can observe substantial disparities in the uptake of eGovernment tools depending on the level of the regional offer (number of services with digital interfaces) and of the regional demand (educational and social capacities to make use of these tools). Western European countries display higher level of eGovernment interaction, with peak values in Nordic countries, France, Switzerland and Austria. Central and Eastern European countries have lower levels of interactions, but some regions are catching up, for instance in Romania, Poland and Greece.

The level of online interactions between citizens and public authorities is lower in Malta than in most other European regions and is comparable to level of interaction in most Eastern European countries, Cyprus, Greece, Italy and Portugal. However, compared to the EU average, Maltese public authorities offer more pre-filled forms, online solutions for administrative steps for major life events online (childbirth, new residence), and digital services for businesses. Maltese public authorities therefore provide many online possibilities for eGovernment interaction. This relatively large demand may explain the high growth of eGovernment interactions in Malta between 2014 and 2019.

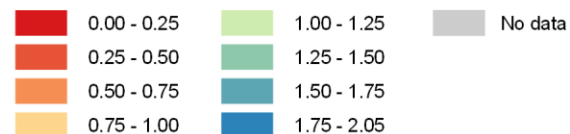
## Population using e-banking services (2008-2016)



Source: ESPON T4  
Origin of data: Eurostat, 2019

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### Share of population using e-banking service (weighted to the European average)



## Population share using e-banking services higher in Malta than other Mediterranean islands

The regional share of the population that use e-banking services is one way to see in how far industry 4.0 technologies have been adopted by the society. The map shows a north-south and east-west divide in Europe when it comes to people using e-banking services. All regions in Norway, Sweden, Finland and Estonia, as well as regions in Denmark and the Netherlands, show a share of population using e-banking services that is way higher than the ESPON average. Similarly, most of France and the UK have also higher share than the ESPON average. The situation is different in the east of Europe, where Romania and Bulgaria have among the lowest population shares using e-banking when compared to ESPON average. Low are the shares also in the EU south.

Malta has a moderate share of population that uses e-banking services. The rate of between 0,75%-1% in 2008-2016 is slightly below EU average. The share of Malta is higher than most other islands in the Mediterranean. Malta has a higher share than Cyprus, the Greek islands, and Sardinia. It has a comparable rate to Corsica and the Balearic Islands.



## **More social Europe**

Net migration (2014)

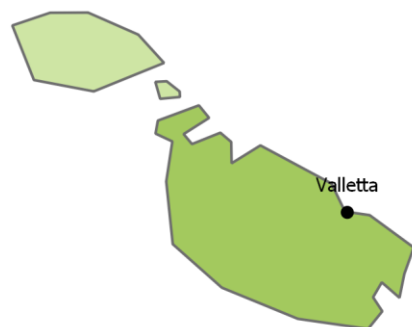
Tertiary educational attainment (2014)

Risk of poverty (2015)

Youth unemployment per 100 Unemployments (2016)

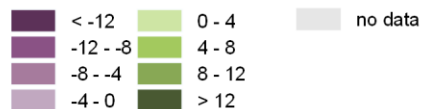
People not in Education, Employment or Training (2016)

## Net migration (2014)

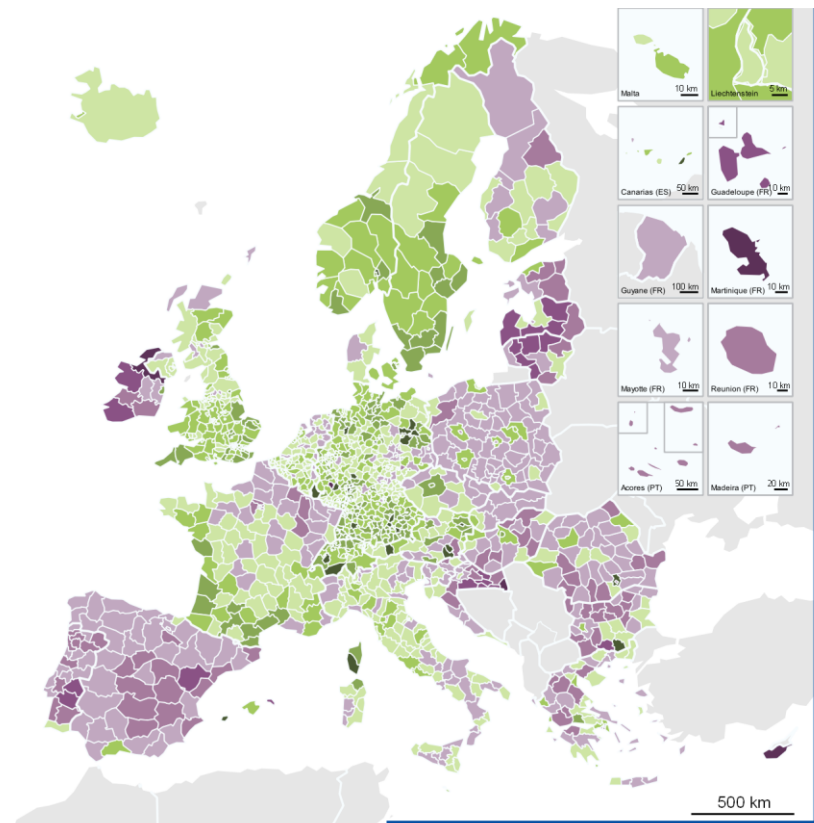


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 Regional level: NUTS 3 (2013)  
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### Crude rate of net migration (%)



10 km



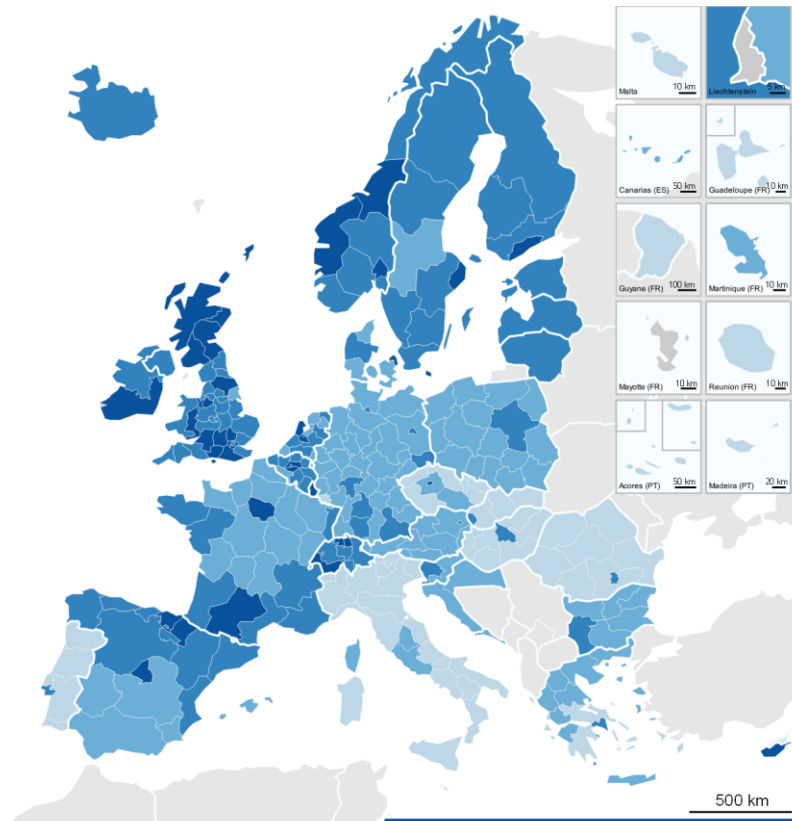
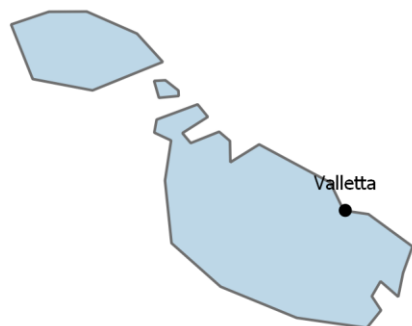
Source: Spiekermann and Wegener Urban and Regional Research (S&W), Territorial Futures, 2017  
 Origin of data: Eurostat (online data code: demo\_r\_gind\_3), 2014

## Malta's economic growth attracts migrants to the country

Migration plays an important role in the population dynamics of cities and regions in Europe. At European level, an east-west and periphery-core divide is visible across the member states. A positive migration balance is seen in the north-west Europe, Sweden and Norway, south of Finland, most of Germany and north of Italy, as well most of the UK and south of France. This is mostly visible around urban areas in these territories. Negative migration balances are observed across the Mediterranean, e.g. in Portugal, Spain, south of Italy, Greece and Cyprus. They are found in eastern parts of Europe, Ireland and north France. These negative balances are particularly strong in predominantly rural regions.

Many Mediterranean islands observe negative net migrations: Cyprus, most of the Greek islands, most parts of Sicily and Sardinia. However, Malta is an exception. The island state experiencing positive net migration. Within the archipelago, Gozo has about 3,6% net migration rate, while Malta has 7,4% net migration rate. Its robust and stable economic growth can be a reason for this.

## Tertiary educational attainment (2014)



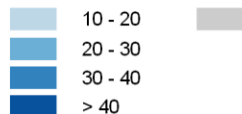
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10 km

500 km

Source: IRS Milano, IRS Erkner (2017)  
 Origin of data: Eurostat (2016)

### People with higher education (as % of active population)



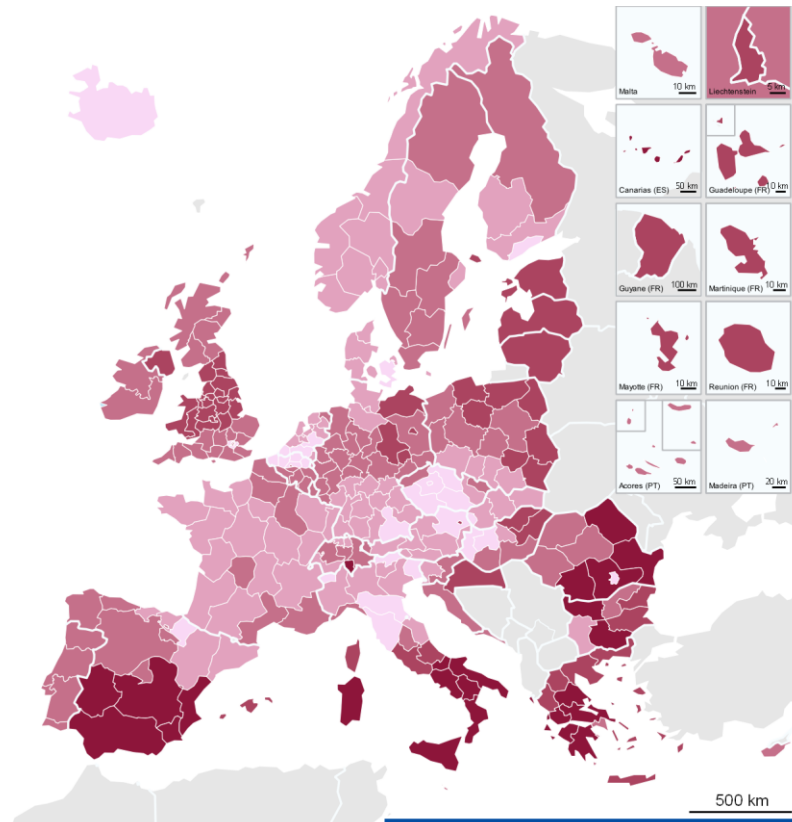
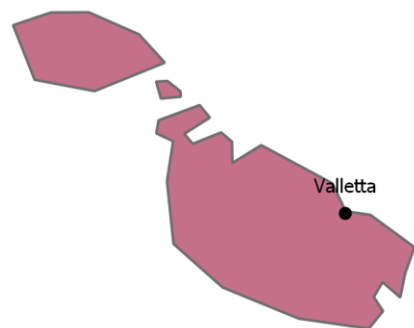
## Increasing share of tertiary education graduates in the workforce in Malta

High proportions of the labour force with high educational attainment levels can predominantly be found in northern and western European regions where knowledge-intensive economic activities are concentrated. Between 2004 and 2014, the proportion of the total population with a tertiary education increased in all European regions, with higher growth rates in northern and western European regions and lower rates in the south. Employment growth rates in research-related and white-collar occupations and increases in R&D expenditures and numbers of personnel working in R&D sectors display similar distribution patterns.

The share of persons aged 25-64 that have a tertiary education degree in Malta is 37.8%. Malta has exceeded its national and Europe 2020 headline target for tertiary educational attainment for those aged 30-34, registering a constant increase for both males and females, rising from 31.1% in 2008 to 41.6% in 2019. In addition, Malta has registered the highest employment rate of recent graduates (aged 20-34) not in employment or training for 2019 for all education levels (93.1% against the EU average of 80.9%), while the employment rate of recent graduates for tertiary education stood at 95% and thus higher than the EU average (85%).



## At-risk-of-poverty rate (2015)



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 Regional level: NUTS 2 (2013)  
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### At-risk-of-poverty rate (%), 2015\*

- < 10
- 10 - 15
- 15 - 20
- 20 - 25
- > 25

\* The persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income.

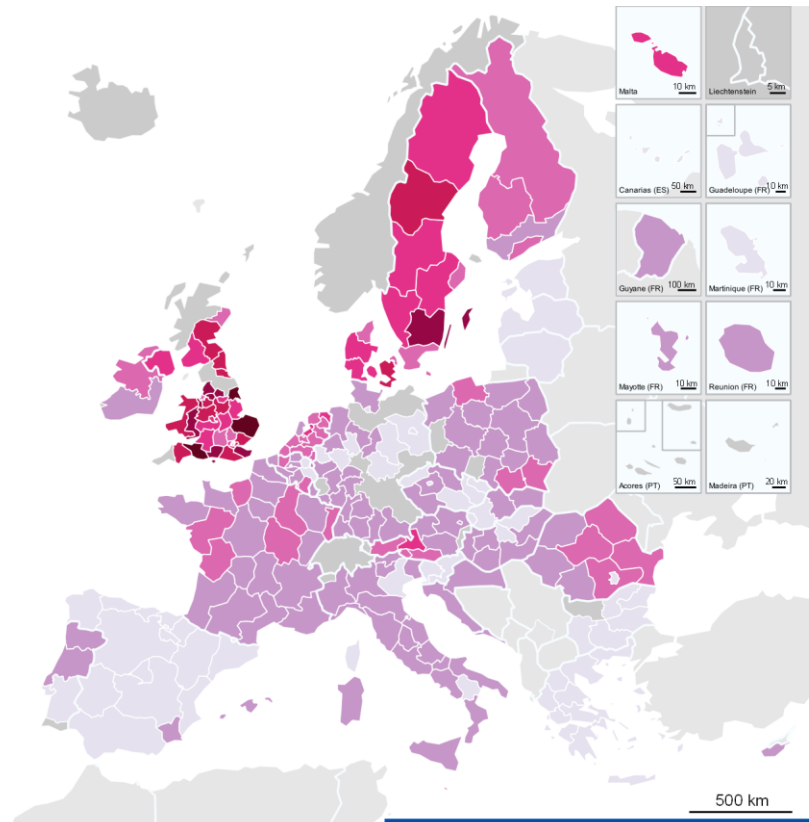
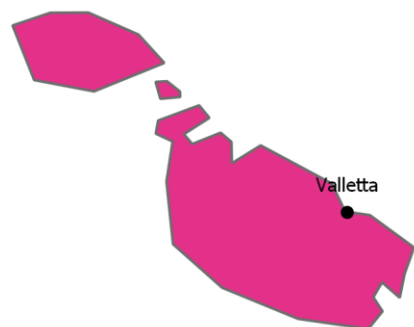
Source: Spatial Foresight, 2020  
 Origin of data: ESPON Database II, 2020 id: 329

## High at-risk-of-poverty rate in Malta

The at-risk-of-poverty rate refers to the share of the population with an equivalised disposable income after social transfers below 60% of the national median equivalised disposable income after social transfers. The indicator therefore doesn't measure poverty directly, but rather income in comparison to others in the country. The highest at-risk-of-poverty rates can be found in Southern and Eastern Europe. There are also large regional differences within countries such as Spain and Italy, with substantially higher at-risk-of-poverty rates found in the southern regions. All the regions in the Nordic countries have at-risk-of-poverty rates below the EU average.

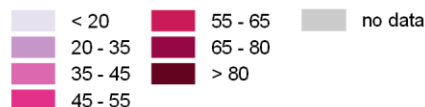
The rate of population at risk of poverty is relatively high in Malta. It ranged between 15%-20% in 2015 for both the island of Malta and the Gozo island. Overall, the 15%-20% of the population in Malta have a disposable income lower than the 60% of the national median disposable income after social transfers. When comparing Malta to other islands in the Mediterranean, a similar situation is observed. The Balearic Islands, Sicily and Sardinia and Crete have even higher rates, while Cyprus is in a slightly better position.

## Ratio of youth unemployment per 100 unemployments (2016)



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Ratio (%) of youth unemployment (15-24 years old) per 100 unemployments (25 years old and over), 2016



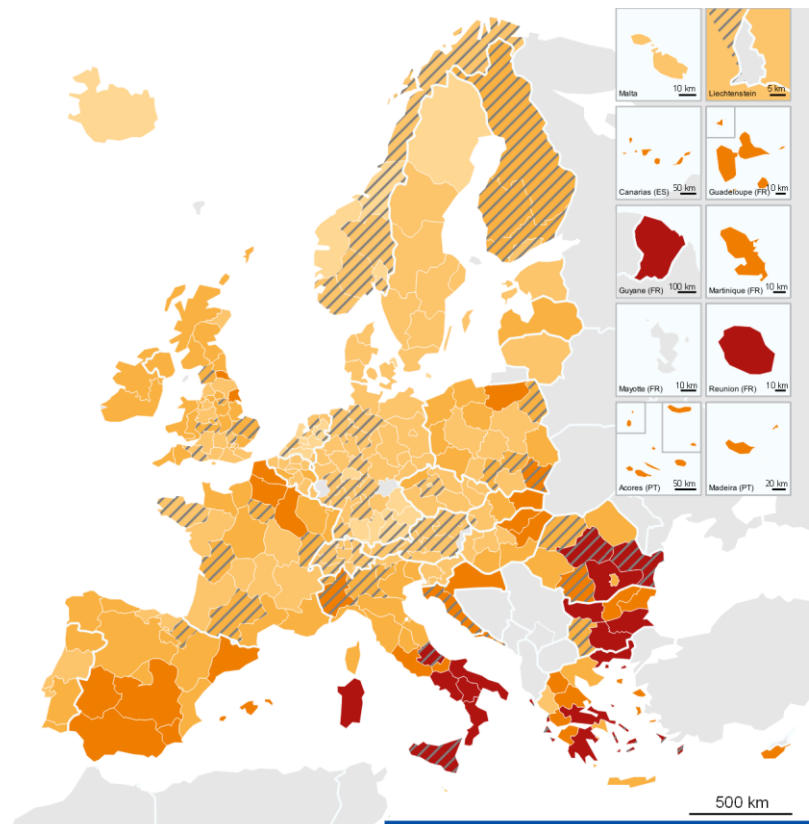
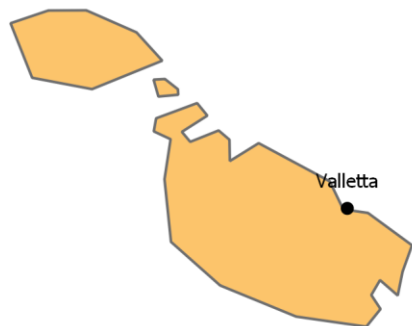
Source: ICON-INSTITUT, own elaboration  
 Origin of data: Eurostat

## Youth unemployment in Malta is below the EU average

The ratio of unemployed youth (people aged 15-24 years old) to the total number of unemployed persons aged 25 years and over expresses the relative importance of youth unemployment. Rates vary considerably across Europe. Highest shares are observed in the UK, particularly the south, Sweden, Denmark and Finland. High rates are also observed in north-west Europe. Lowest rates can be found in the south of Europe, in countries such as Portugal, Spain and Greece. Parts of Germany and eastern and central Europe also experience low rates. High youth unemployment occurs in a large number of European regions. As a result, in countries with very high overall unemployment (e.g. Greece), the present ratio is relatively lower.

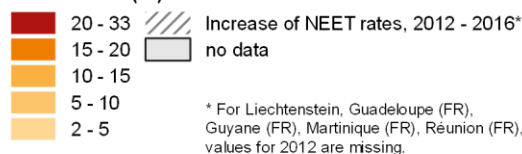
In 2019, Malta had 3.4% of total unemployment, well below the EU average. Reflecting on these overall very low unemployment rates in the country, the ratio of unemployed youth to the total number of unemployment above 25 years old stood at 5.5% in 2016. Taking into account that in 2019, 7.5% of the population aged 15-24 was not in employment, not in education nor following any training the current strategy is to encourage youths to continue into education and acquire the necessary qualifications and skills to find sustainable employment.

## People not in Education, Employment or Training - NEET (2016)



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### NEET rates (%) 2016



Source: ESPON YUTRENDS, 2019  
 Origin of data: Eurostat, 2019

## Decreasing shares of NEETS in Malta

High shares of NEETs illustrate a mismatch between education and labour markets or a lack of job opportunities in general. The share of NEETs is particularly high in regions in Romania, Bulgaria, Greece and southern Italy. Also high shares of NEETs can be observed in Northern France, Southern Spain and Croatia. In only few of these regions the number of NEETs increased between 2012-2016, notably in Romanian and Italian regions. The number of NEETs increased rather in regions with fewer NEETs, notably in Northern and Western European countries, such as Austria, Finland, Norway, Switzerland, Germany, England, and the Netherlands.

In 2019, 7.5% of the population aged 15-24 in Malta was neither in education, employment nor training (NEET). This share has been decreasing since 2012. As such, shares of NEETs in Malta are comparable to those found in many northern and western European regions as well as most urban and capital regions in Europe. The rate of decline in Malta between 2012 and 2016 was similar to that observed in some German and Swedish regions, as well as capital city regions in southern and eastern Europe.

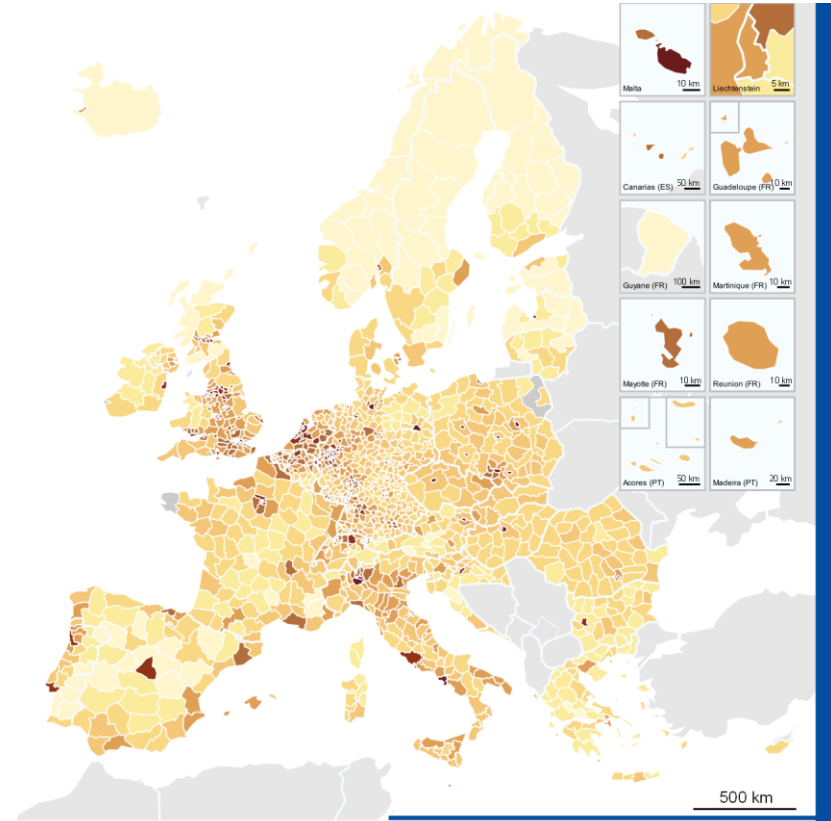
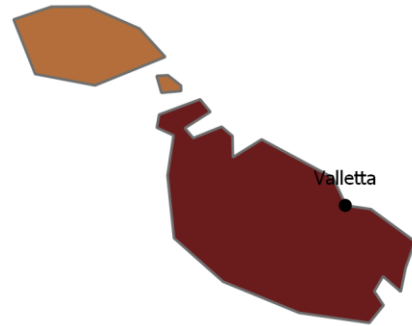


## **Europe closer to citizens**

Population density (2014)

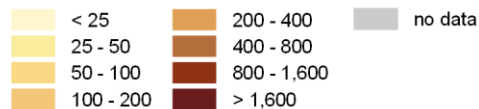
Thematic fields covered by crossborder public services (2018)

## Population density (2014)



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 Regional level: NUTS 3 (2016)  
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### Population/km2



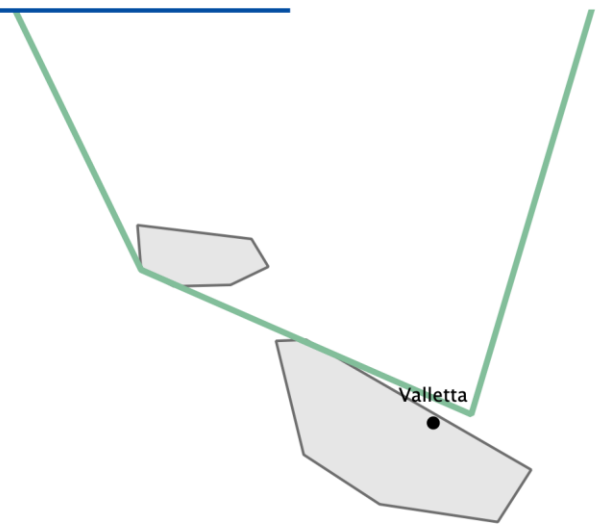
Source: Spiekermann and Wegener Urban and Regional Research (S&W), Territorial Futures, 2017  
 Origin of data: Eurostat (online data code: demo\_r\_d3dens), extracted 07.2020

## Gozo and Comino less densely populated than Malta

Population density varies considerably across the EU. Population density peaks can be found around capital cities and main metropolitan regions. There are also wider continuous high population densities in parts of north west Europe, e.g. in the Netherlands, Belgium, the UK and Western Germany. Population densities tend to decline in northern, southern and, to a lesser extent, western margins of Europe. Values are comparably higher in eastern margins of Europe. The islands in the Mediterranean have intermediate population densities, compared to islands in the north of Europe which are characterised by low population densities.

Malta has the highest population density among European countries. The Island of Malta has a population density of more than 1,600 inhabitants per km<sup>2</sup>, while the island of Gozo is less densely populated with about 458 inhabitants per km<sup>2</sup>. Malta is the most populated islands in the Mediterranean. Its population density is comparable to those of many capital cities and urban areas in the EU, e.g. as cities found in north west Europe, northern Italy, Germany and Poland.

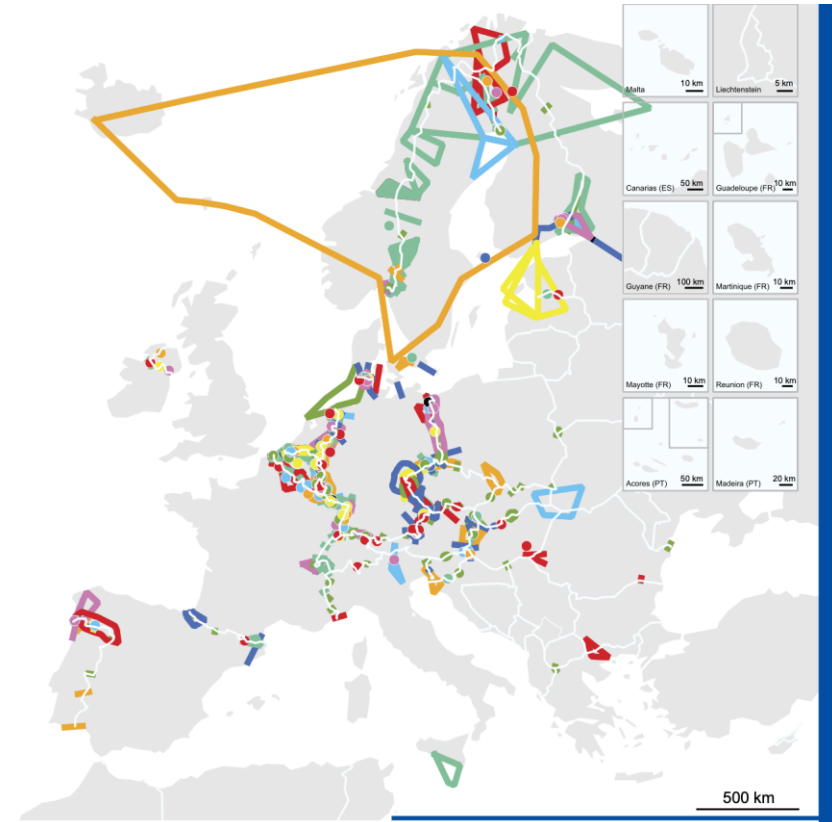
### Thematic fields covered by crossborder public services (2018)



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#### Themes / fields of application of CPS services

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



Origin of data: TCP International, 2018; Euroconsult, 2018; various data sources, 2018  
Delineations: each dot or line represents one individual CPS, provided by two or more partners.

### Possibilities for cross-border public services for islands

Cross-border Public Services allow to address joint problems or development potentials of border regions and to overcome border obstacles in the provision of public services. CPS are found all over Europe, but they are spread in a rather imbalanced way with more CPS provided at borders of “old” EU15 Member States and between Nordic countries. Most CPS deal with one of the following three policy fields: (1) environmental protection, (2) civil protection and disaster management and (3) transport. Highly integrated solutions are found in regions with a long-lasting cross-border tradition.

One cross-border public service (CPS) has been observed covering Malta, namely the Italian-Maltese integrated system for civil protection (SIMIT). This service provides information on emergency management based on similar challenges experienced in Malta and Sicily, for example landslides, forest fires, or rapid changing weather conditions on the sea. This example illustrates the possibilities for CPS for island states. Other examples in Europe illustrate possibilities for other CPS in the field of civil protection (for example coordinated rescue services) or custom services on the sea. CPS in other fields are also possible, e.g. services for coordinated environmental protection or tourist information centres.

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### Disclaimer:

The content of this publication does not necessarily reflect the opinion of the ESPON 2020 Monitoring Committee.

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