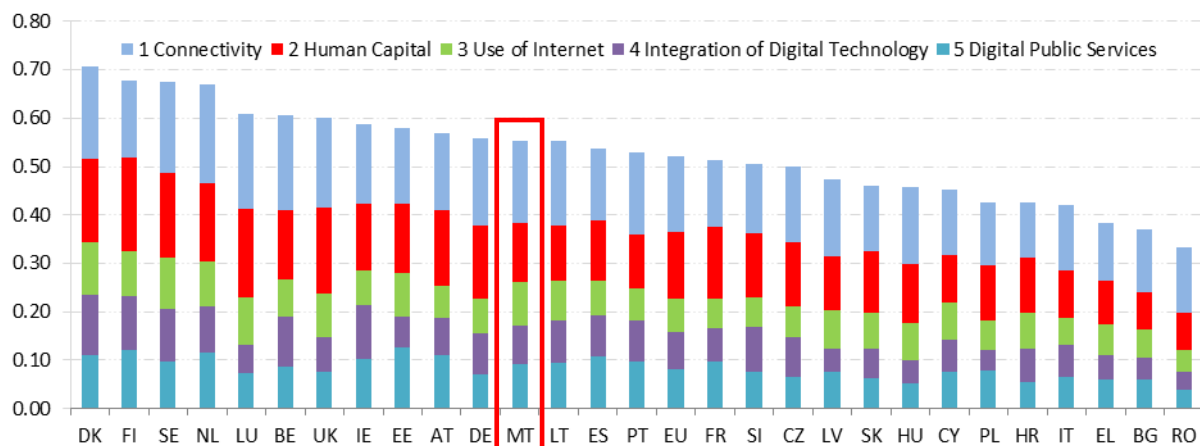


Europe's Digital Progress Report (EDPR) 2017 Country Profile Malta

Europe's Digital Progress Report (EDPR) tracks the progress made by Member States in terms of their digitisation, combining quantitative evidence from the Digital Economy and Society Index (DESI)¹ with qualitative information on country-specific policies. It is structured around five chapters:

1 Connectivity	Fixed broadband, mobile broadband, broadband speed and prices
2 Human Capital	Internet use, basic and advanced digital skills
3 Use of Internet	Citizens' use of content, communication and online transactions
4 Integration of Digital Technology	Business digitisation and eCommerce
5 Digital Public Services	eGovernment

Digital Economy and Society Index (DESI) 2017 ranking



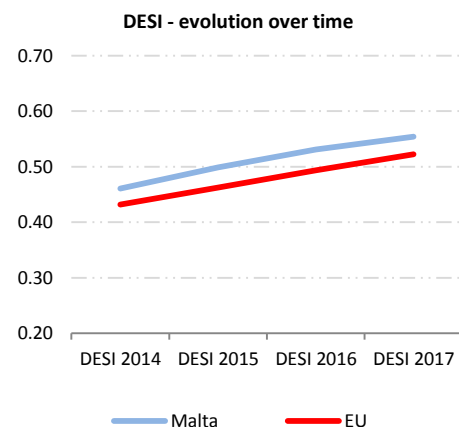
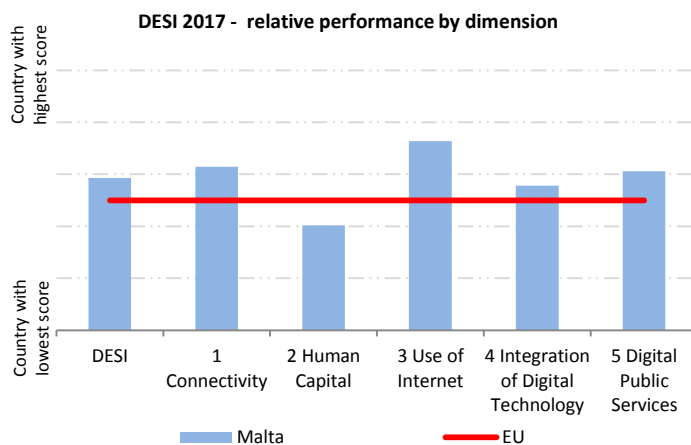
¹ <https://ec.europa.eu/digital-single-market/en/desi>

	Malta		Cluster	EU
	rank	score	score	score
DESI 2017	12	0.55	0.54	0.52
DESI 2016 ²	13	0.53	0.51	0.49

Malta ranks 12th out of the 28 EU Member States. Overall, it progressed at an average pace over the last few years. Malta performs above EU average in broadband connectivity, internet use by citizens, the use of digital technology by businesses and the provision of digital public services. Malta is a European leader in fast broadband, being the only Member State with full coverage of NGA networks. Malta is best in Europe also in the provision of digital public services. At the same time, it scores below the EU average in digital skills, open data and in mobile broadband.

Malta belongs to the Medium performing cluster of countries³.

The Digital Malta Strategy⁴ was launched in 2014. This is a policy document to guide the country towards the 2020 Vision that "Malta will prosper as a digitally-enabled nation in all sectors of society". The strategy puts forwards 71 actions under three strategic themes, namely Digital Business, Digital Government and Digital Citizen. These vertical strategic pillars are supported by three driving forces, namely Regulation and Legislation, Infrastructure and Human Capital.



² The DESI 2016 was re-calculated for all countries to reflect slight changes in the choice of indicators and corrections to the underlying indicator data. As a result, country scores and rankings may have changed from the previous publication. For further information please consult the DESI methodological note at <https://ec.europa.eu/digital-single-market/en/desi>.

³ Medium performing countries are Latvia, Czech Republic, Slovenia, France, Portugal, Spain, Lithuania, Malta, Germany and Austria.

⁴ <https://digitalmalta.org.mt/en/Pages/Home.aspx>

1 Connectivity

1 Connectivity	Malta		Cluster	EU
	rank	score	score	score
DESI 2017	9	0.68	0.63	0.63
DESI 2016	9	0.66	0.60	0.59

	Malta		EU	
	DESI 2017 value	rank	DESI 2016 value	DESI 2017 value
1a1 Fixed Broadband Coverage % households	100% → 2016	1	100% 2015	98% 2016
1a2 Fixed Broadband Take-up % households	80% → 2016	7	80% 2015	74% 2016
1b1 Mobile Broadband Take-up Subscriptions per 100 people	66 ↑ June 2016	24	63 June 2015	84 June 2016
1b2 4G coverage⁵ % households (average of operators)	80% ⁶ 2015	23	NA	84% 2016
1b3 Spectrum⁷ % of the target	37% → 2016	28	37% 2015	68% 2016
1c1 NGA Coverage % households	100% → 2016	1	100% 2015	76% 2016
1c2 Subscriptions to Fast Broadband % subscriptions >= 30Mbps	59% ↑ June 2016	9	58% June 2015	37% June 2016
1d1 Fixed Broadband Price⁸ % income	NA price 2016, income 2015		NA price 2015, income 2015	1.2% price 2016, income 2015

Malta ranks 9th in terms of connectivity, same as last year. As for the supply side of fixed broadband, Malta is the most advanced Member State in the EU with all households covered by at least 30 Mbps NGA broadband (EU average: 76 %). Fixed broadband take-up (80 %) stands also above the EU average (74%). Thanks to the high availability of NGA, as much as 59% of fixed internet subscriptions are high-speed connections, which is much higher than the EU level of 37%. At the same time, there has been little growth in mobile broadband take-up (from 63 subscriptions per 100 people in 2015 to 66 in 2016), placing Malta well below the EU average of 84. On spectrum allocation to mobile broadband, Malta score relatively low, as only 37 % of the EU harmonised spectrum has been effectively assigned in Malta (EU average: 68 %).

⁵ This is a new DESI indicator measuring the average coverage of telecom operators' 4G networks.

⁶ The 4G coverage data have been reviewed following the publication of DESI. The updated figure is 100% as of mid-2016.

⁷ .There is a decrease in most of the Member States due to the additional EU harmonisation of the 700 MHz band in April 2016.

⁸ Due to a slight methodological change, historical data was re-calculated.

Among other objectives, the Maltese broadband plan emphasises the deployment of Next Generation Networks (NGA) to ensure that the 2020 targets of the Digital Agenda for Europe (DAE) are met. Malta has already achieved the DAE coverage target of 30 Mbps broadband for all homes. At the same time, on the take-up target of ultrafast broadband (50% of homes subscribing to at least 100 Mbps internet), Malta scores low, as only 3% of homes have a subscription to 100 Mbps or higher speeds (EU average: 11 %). Nevertheless, download speeds of Maltese broadband subscriptions evolve, the number of 30 Mbps connections went up by 41 % in two years.

In terms of the new connectivity goals, set out in the Communication on the Gigabit Society, Malta will be undertaking a number of demand driven initiatives, such as the MCA (Malta Communications Authority, Malta's telecom regulator) Free Wi-Fi project, which aims at making Malta one of the first WiFi states in Europe, the SmartPhone Initiative, which is a campaign that promotes the use of the smart phone as a productivity tool and other training initiatives. All these initiatives form part of a wider strategy that the MCA Information Society is currently coordinating, aimed at addressing the digital divide and promote e-commerce among SMEs and micro companies.

Malta is currently working on improving its international connectivity. A study commissioned by the MCA finds that a new connection to mainland Europe or North Africa would improve Malta's position as a destination for international business investment and ensure that the country's future international telecoms connectivity requirements can be met.

Malta has very good fixed broadband infrastructure and a relatively high take-up of fixed broadband, which are important foundations for a well-functioning digital economy and society. The existing fixed networks serve as a good basis to achieve the targets of the Gigabit Society. Malta has completed the transposition of the Broadband Cost Reduction Directive 2014/61/EU, which may trigger investments in very high capacity networks. Malta's challenge in connectivity is to improve mobile. Both mobile broadband take-up and the level of assigned EU harmonised spectrum is low.

2 Human Capital

2 Human Capital	Malta		Cluster	EU
	rank	score	score	score
DESI 2017	17	0.50	0.57	0.55
DESI 2016	16	0.49	0.55	0.53

	Malta				EU
	DESI 2017		DESI 2016		DESI 2017
	value	rank	value	rank	value
2a1 Internet Users % individuals	76% ↑	18	74%	16	79%
	2016		2015		2016
2a2 At Least Basic Digital Skills % individuals	49% ↓	20	52%	15	56%
	2016		2015		2016
2b1 ICT Specialists⁹ % employed individuals	3.6% ↑	13	3.4%	14	3.5%
	2015		2014		2015
2b2 STEM Graduates Per 1000 individuals (aged 20-29)	15 →	19	15	19	19
	2014		2013		2014

Malta shows some progress in engaging its citizens to use the Internet. The percentage of Internet users in Malta slightly increased (76%) compared to one year ago (74%). Still, this increase was not enough to close the gap with the EU average (79%). As regards digital skills, Malta shows a mixed picture. On the one hand, individuals with basic digital skills (49%) stands below EU average (56%). On the other hand, the percentage of ICT specialists in the labour force is now slightly higher than the EU average (3.6% compared to 3.5% in the EU). At the same time, the share of STEM graduates (Science, Technology and Mathematics) is also below average.

Malta has a large number of initiatives in this area. As for children, the MCA together with the Ministry for Education and Employment offers regular coding sessions in schools and the MCA participates in annual coding events such the Code week, the Malta Robotics Olympiad and the Hour of Code. For the elderly, both the MCA and the Malta Information Technology Agency (MITA) have a number of projects offering training to boost basic digital skills. Malta continues to participate in the EU Safer Internet Programme. Activities include a series of media campaigns, publications, school campaigns and information days targeting children, their parents and teachers. Other activities carried out by MITA include a Cyber Security awareness campaign launched in January 2017. As for students, MITA organises a yearly summer work placement programme for students studying ICT with the purpose of providing students with an opportunity to gain real work experience.

As for higher education, in the ESF 1.33 Project (increasing ICT student capacity), the objective is to ensure the provision of skilled and trained workforce to fulfil the needs of the ICT sector. This project offers full-time training programmes and scholarships to ICT students.

⁹ Historical data have been revised by Eurostat.

3 Use of Internet

3 Use of Internet	Malta		Cluster	EU
	rank	score	score	score
DESI 2017	8	0.59	0.45	0.48
DESI 2016	6	0.57	0.42	0.45

	Malta				EU
	DESI 2017		DESI 2016		DESI 2017
	value	rank	value	rank	value
3a1 News % individuals who used Internet in the last 3 months	79% 2016	↓ 13	81% 2015	11	70% 2016
3a2 Music, Videos and Games¹⁰ % individuals who used Internet in the last 3 months	90% 2016	4	NA		78% 2016
3a3 Video on Demand¹¹ % individuals who used Internet in the last 3 months	26% 2016	8	NA		21% 2016
3b1 Video Calls % individuals who used Internet in the last 3 months	48% 2016	↑ 11	45% 2015	10	39% 2016
3b2 Social Networks % individuals who used Internet in the last 3 months	82% 2016	↑ 2	78% 2015	4	63% 2016
3c1 Banking % individuals who used Internet in the last 3 months	60% 2016	↓ 15	61% 2015	13	59% 2016
3c2 Shopping % internet users (last year)	60% 2016	↓ 14	66% 2015	11	66% 2016

In terms of the take-up of Internet services, Malta scores well above the EU average. As for the most popular activities online, 90 % of Maltese internet users play music, videos and games (70 % in the EU), 82 % use social media (second highest in Europe, EU average is 63 %) and 79% read news online (70 % in the EU). Malta outperforms the EU also in Video on Demand subscriptions (26 %) and in making video calls (48 %). At the same time, regarding transactional services such as eBanking and shopping online, Malta stands rather in the middle of the ranking. 60 % of internet users bank or shop online. The latter declined by 6 percentage points, and is now below average (66 %). This may be as a result of the relatively low levels of digital skills as well as lack of trust. 25 % of internet users in Malta declared not to buy online because of security concerns (19 % in the EU) and 8 % experienced abuse of personal information and/or other privacy violations (3 % in the EU).

In this area, the MCA is embarking on a number of initiatives aimed at developing digital skills, including free Internet Banking sessions to individuals and SMEs focussing on the benefits of adopting mobile and electronic payments and basic e-commerce training for the elderly.

¹⁰ Break in series due to a change in the Eurostat survey.

¹¹ Break in series due to a change of data source. New source is Eurostat.

4 Integration of Digital Technology

4 Integration of Digital Technology	Malta		Cluster	EU
	rank	Score	score	score
DESI 2017	13	0.40	0.40	0.37
DESI 2016	12	0.36	0.37	0.35

	Malta				EU
	DESI 2017		DESI 2016		DESI 2017
	value	rank	value	rank	value
4a1 Electronic Information Sharing % enterprises	30%	19	30%	19	36%
	2015		2015		2015
4a2 RFID % enterprises	6.2%	5	6.2%	5	3.9%
	2014		2014		2014
4a3 Social Media % enterprises	27% ↑	5	26%	5	20%
	2016		2015		2016
4a4 eInvoices % enterprises	9% ↑	23	8%	24	18%
	2016		2015		2016
4a5 Cloud % enterprises	14%	11	NA		13%
	2016		2015		2016
4b1 SMEs Selling Online % SMEs	20% ↑	7	16%	14	17%
	2016		2015		2016
4b2 eCommerce Turnover % SME turnover	7.6% ↑	19	4.2%	25	9.4%
	2016		2015		2016
4b3 Selling Online Cross-border % SMEs	11.7%	4	11.7%	4	7.5%
	2015		2015		2015

Malta continues to perform slightly above EU average in the use of digital technologies by enterprises, falling by one place to rank 13th. Maltese businesses are strong in using social media (27 %, EU average 20 %) and RFID technology (6.2 %, EU 3.9 %) ranking 5th in Europe, but few of them send electronic invoices (only 9 % with an EU average of 18 %) and Electronic Information Sharing stands at 30 % compared to 36 % in the EU. The use of advanced Cloud Computing services is above EU average, but Malta is still far from being an EU-class hub. There has been progress in eCommerce. 20 % of SMEs sell online, up from 16 % a year ago, which is the 7th highest in Europe, and the eCommerce turnover of SMEs also grew. In addition, Malta scores particularly well on cross-border sales (11.7 %, 4th highest in Europe, EU average is 7.5 %).

Malta has introduced several projects to provide financing for enterprises in the area of digital. The Micro Guarantee Scheme aims at facilitating access to debt finance for small businesses. This scheme provides eligible companies with a guarantee of up to 80 % on loans of up to €100,000, which may be used to finance projects leading to business enhancement, growth and development. Micro Invest provides support through a tax credit representing a percentage of the eligible expenditure and wages of newly recruited employees and/or apprentices.

A number of special measures have been launched in Malta to support the growth of Malta's startup ecosystem. The TAKEOFF Business Incubator annually runs a seed-funding competition to attract new startups into the incubator. Additionally, to incentivise digital

entrepreneurship, in 2016 the MITA Innovation Hub launched an accelerator programme which provides a seed investment and pro-bono services to help early-stage startups validate, prototype, test and take their business idea to market. In 2015, Malta Enterprise launched Business START (B.START), a seed funding grant specifically targeting small startups that offer innovative products with global potential. The scheme provides two phases of support. Phase 1 is mainly intended for new entrepreneurs and will provide support through a grant instrument. Phase 2 is based on a repayable quasi-equity financial instrument, which will enable enterprises to address initial growth. In 2016, the Malta Investment Management Company (MIMCOL) also launched a seed investment scheme, aimed at incentivising investment in Maltese startup or early stage companies by offering tax credits to investors. Furthermore, Malta Enterprise also operates a startup financing scheme (see Highlight 2017 on the next page).

Malta has a Knowledge Transfer Scheme to address skill shortages of the workforce. Malta Enterprise provides a framework for the training and re-skilling of existing and new employees by supporting knowledge transfer and acquisition of new competences, in line with the requirements of the industry.

In addition, Malta has numerous initiatives to support the development of its digital gaming industry. Initiatives include the regular game lectures and game nights at the Institute of Digital Games, a M.Sc. programme in digital games offered by the University of Malta as well as the Malta Global Game Jam, a worldwide event where around 25,000 participants meet in physical locations around the globe to create an innovative digital or board game in 48 hours.

The MCA has introduced the Malta Cloud Forum which is a platform that brings together stakeholders both from the public sector and industry to increase the awareness and encourage the use of Cloud Computing amongst micros and SMEs, conduct on-going market research on the use of the cloud and raise awareness.

Highlight 2017¹²: The Startup Finance Scheme

The Startup Finance scheme, launched in 2016 by Malta Enterprise, aims to support small startup enterprises, by providing aid in three different ways:

- (i) Support linked to equity: Malta Enterprise may provide a repayable grant equivalent to the value of private equity held in the company. The total value of grants should not exceed the nominal value of paid up share capital held by private parties or €200,000 (whichever is the lowest).
- (ii) Support linked to procurement of equipment: The equipment must be new and shall be considered as a security against the repayment of the grant.
- (iii) Support to Crowdfunding: Malta Enterprise may agree to match any amount pledged through a pre-approved crowdfunding campaign, up to a maximum of €50,000 per campaign.

¹²Highlight 2016: The ICT Career Exposure Experience (CEE) Week. The ICT Career Exposure Experience (CEE) Week is an initiative of the eSkills Malta Foundation and the Education Psycho-Social Services Section within the Ministry for Education and Employment. The programme targets students, aged 14 - 15 years, who can spend one week at an ICT company. Students will be able to observe the daily routines of ICT professionals and increase their understanding of ICT and ICT-related careers; to begin to identify career interests in one or more ICT-related fields; to gain awareness of the academic, technical, and inter-personal skills required in the ICT and related professions; and to develop an understanding of the critical connections between school and work.

5 Digital Public Services

5 Digital Public Services	Malta		Cluster	EU
	rank	score	score	score
DESI 2017	12	0.61	0.59	0.55
DESI 2016	12	0.57	0.56	0.51

	Malta				EU
	DESI 2017		DESI 2016		DESI 2017
	value	rank	value	rank	value
5a1 eGovernment Users % internet users (last year)	24% ↓	20	28%	18	34%
	2016		2015		2016
5a2 Pre-filled Forms Score (0 to 100)	98 ↑	1	92	2	49
	2016		2015		2016
5a3 Online Service Completion Score (0 to 100)	100 →	1	100	1	82
	2016		2015		2016
5a4 Open Data¹³ % of maximum score	17% ↑	27	0%	28	59%
	2016		2015		2016

Overall, Malta ranks 12th in Digital Public Services, above the EU average, but the indicators in this dimension of the index show a mixed picture. Malta is a European leader on the supply of eGovernment services for citizens. It ranks first on the re-use of information across administrations to make life easier for citizens (Pre-filled Forms) as well as on the sophistication of services (Online Service Completion), where it has the maximum score. However, use by citizens does not match the ambition of the supply side. Despite the high quality in the online provision of public services, only 24 % of internet users sent filled forms to public authorities in 2016, which is 4 percentage points lower than a year ago and well below the EU average of 34 %. Open data is another area, where there is room for improvement: Malta scores second lowest in the EU.

MITA has recently conducted an EU funded project to identify the reasons behind the low take up of eGovernment services. The main reasons behind the low use are the cumbersome login mechanism and the lack of user friendliness. Following the study, a number of measures have been adopted to simplify access, to increase awareness and to make services available on mobile devices. A Mobile Government Strategy has been launched to enable access to services through a number of mobile apps on a 24/7 basis as of the first half of 2017. Regarding open data, MITA is currently developing the National Data Portal. This project will include both the Open Data Portal as mandated by the PSI Directive and the internal Data Sharing Platform.

The continuous improvements in digital public services are key to ensure that more and more citizens and companies benefit from eGovernment.

¹³ Change of data source. The historical data have also been restated. The new source is the European Data Portal.