COUNTRY: **SPAIN**

SCORE: 78.37 | RANK: 10/24

Spain has comprehensive privacy legislation, although it relies heavily on registration requirements that could act as a barrier for cloud computing services.

Spain has up-to-date cybercrime legislation and has ratified the Convention on Cybercrime. Spain also has comprehensive electronic commerce and electronic signature legislation, and Internet service providers (ISPs) are free from any Internet filtering or censorship.

Some minor gaps exist in intellectual property protection, and enforcement is poor particularly in relation to circumvention of technological protection measures.

Spain is a very active participant in international forums and supports international standards development and interoperability.

Spain recorded significant gains in information technology (IT) infrastructure in recent years. In the Digital Agenda for Spain, released in 2013, Spain reaffirmed its commitment to achieve the European Commission set targets for all households to have download speeds of at least 30 Mbps by 2020, and 50 percent of households at 100 Mbps by 2025.

Spain's overall scores remained fairly steady. The country's position in the Scorecard rankings improved slightly — to 10th in 2018 from 11th in 2016.

# SPAIN	RESPONSE	EXPLANATORY TEXT
DATA PRIVACY (SCORE: 9.8/12.5 | RANK: 8/24)		
1. Is a data protection law or regulation in place?	✔	Organic Law 15/1999 of December 1999, on the Protection of Personal Data (Ley Orgánica 15/99 de 13 de Diciembre 1999 de Protección de Datos de Carácter Personal (LOPD)). The law is often referred to simply as the Data Protection Act. The law was strengthened and updated by royal decrees in 2009 and 2010. Spain, like other EU member countries, is updating its laws to reflect the provisions of the EU General Data Protection Regulation (GDPR), which comes into force in 2018. The 2018 edition of the Scorecard will report on the new laws in detail.
2. What is the scope and coverage of the data protection law or regulation?	Comprehensive	The legislation is comprehensive, covering all sectors.
3. Is a data protection authority in place?	✔	The Spanish Data Protection Agency (Agencia Española de Protección de Datos) <www.agpd.es> is the national regulator. Regional data protection agencies also operate in Madrid, Catalonia, and the Basque Country.
4. What is the nature of the data protection authority?	Sole commissioner	An independent commissioner is appointed by royal decree on advice from the Minister of Justice.
5. Is the data protection authority enforcing the data protection law or regulation in an effective and transparent manner?	✔	The Spanish Data Protection Agency <www.agpd.es> is a very active regulator with a history of imposing fines for breaches of the legislation. However, the regulator uses three categories of breaches (minor, serious, very serious) and most fines are very small.
6. Is the data protection law or regulation compatible with globally recognized frameworks that facilitate international data transfers?	EU framework	Spain is bound by the EU Directive, and its legislation is compatible with the text of the EU Directive.
7. Are data controllers free from registration requirements?	✘	The Spanish privacy legislation includes extensive registration requirements. Although there is no registry of data controllers or data storage and transfer activities, the Spanish Data Protection Agency <www.agpd.es> does maintain a registry of databases that contain personal data.

# SPAIN	RESPONSE	EXPLANATORY TEXT
8. Are there cross-border data transfer requirements in place?	Detailed requirements	Transfer to countries outside Europe are subject to detailed cross-border data transfer requirements.
		Article 33 of the Data Protection Act provides that transfers of personal data to countries that do not provide a level of protection comparable to that provided by the Act, in addition to complying with the Act, also require prior authorization from the Director of the Data Protection Agency, "who may grant it only if adequate guarantees are obtained."
		In practice a signed agreement between the exporter and importer of the data, on terms developed by the Spanish Data Protection Agency <www.agpd.es>, is taken to be an adequate guarantee of the protection of the data involved.
		Other parts of the Spanish law follow the usual European practice of allowing all cross-border data transfers within the EU and to countries deemed to have adequate protection by the EU, and then restricting other transfers to certain specific exceptions.
		As of May 2017, the exceptions include transfers to:
		• The United States made by companies participating in the EU-US Privacy Shield <www.privacyshield.gov>;
		• Any country based on contractual provisions, e.g., by standard contractual clauses (Model Clauses), approved by the European Commission, or internal rules (Binding Corporate Rules) applicable to data exporters and data importers.
9. Are cross-border data transfers free from arbitrary, unjustifiable, or disproportionate restrictions, such as national or sector-specific data or server localization requirements?	◑	The cross-border data transfer requirements in Spain are more prescriptive than in other jurisdictions, and the requirement for prior authorization for some transfers may act as a barrier and deterrent to the adoption of cloud computing.
		There are no general data localization requirements in place.
10. Is there a personal data breach notification law or regulation?	◑	Spain has limited data breach notification requirements. These are reflected in the notification system developed and operated by the Spanish Data Protection Agency <www.agpd.es>. In compliance with EC Regulation No. 611/2013, service providers are required to report data breaches via an online notification form within 24 hours. Individuals affected by the data breach need not be notified where service providers can show evidence that security measures have been implemented that have rendered the data in question unintelligible. It should be noted that both the law and subsequent notification requirements are limited to breaches that occur in the context of providing electronic communication services.
		Mandatory security measures for data controllers and processors were first introduced in Royal Decree 1720/2007. The law requires the mandatory development of an internal register of all customers affected by the breach, but notification is voluntary.
11. Are personal data breach notification requirements transparent, risk-based, and not overly prescriptive?	◑	Spain only has very limited data breach notification requirements in place.
		The notification requirements are limited to breaches that occur in the context of providing electronic communication services.
12. Is an independent private right of action available for breaches of data privacy?	✔	Article 18 of the Spanish Constitution includes broad privacy rights, including "the right of honour, personal, and family privacy and identity" and "secrecy of communications." A private right of action is therefore available, although in practice most cases are resolved using the Data Protection Act rather than private rights.
SECURITY (SCORE: 9.3/12.5 | RANK: 9/24)		
1. Is there a national cybersecurity strategy in place?	✔	The National Cyber Security Strategy <www.ieee.es/en/contenido/noticias/2013/12/DIEEEA65-2013.html> was adopted by the Spanish government in December 2013. It is a comprehensive document, which sets objectives and targeted lines of actions.
2. Is the national cybersecurity strategy current, comprehensive, and inclusive?	✔	The National Cyber Security Strategy is compatible with, and makes references to, both the National Security Plan and existing security laws — and these plans and laws work together as a package. The Strategy is complemented by the National Cyber Security Plan, which provides further detail on implementation.
		The strategy is generally up to date and Spain has committed appropriate resources to the promotion of cybersecurity.
3. Are there laws or appropriate guidance containing general security requirements for cloud service providers?	◑	There are some limited security requirements set out in privacy legislation. Other regulations apply to specific sectors and to critical infrastructure, but these are generally not applicable to general cloud computing services and products.
4. Are laws or guidance on security requirements transparent, risk-based, and not overly prescriptive?	◑	Spain has very limited security requirements in place.

# SPAIN	RESPONSE	EXPLANATORY TEXT
5. Are there laws or appropriate guidance containing specific security audit requirements for cloud service providers that take account of international practice?	✘	There are no specific security audit requirements in Spain.
6. Are international security standards, certification, and testing recognized as meeting local requirements?	✔	Certification requirements are common in Spain, and Spain is a Certificate Authorizing Member (the highest level) of the Common Criteria Recognition Arrangement (CCRA) <www.commoncriteriaportal.org>.

CYBERCRIME (SCORE: 12/12.5 | RANK: 1/24)

# SPAIN	RESPONSE	EXPLANATORY TEXT
1. Are cybercrime laws or regulations in place?	✔	The Spanish Penal Code includes coverage of cybercrime. Royal Decree 3/2010 strengthened these provisions.
2. Are cybercrime laws or regulations consistent with the Budapest Convention on Cybercrime?	✔	The Spanish Penal Code was amended and strengthened by Royal Decree 3/2010 to ensure compliance with the Council of Europe Convention on Cybercrime. Spain ratified the Cybercrime Convention in June 2010.
3. Do local laws and policies on law enforcement access to data avoid technology-specific mandates or other barriers to the supply of security products and services?	✔	Access to encrypted data is not currently required by Spanish legislation, although there have been several proposals to reform this area of law. There are no detailed requirements or proposals in Spain that would mandate specific security technology or backdoor access to existing technology. However, Spain is one of a number of European countries that have requested the European Commission consider a Europe-wide policy on backdoor access to encrypted data.
4. Are arrangements in place for the cross-border exchange of data for law enforcement purposes that are transparent and fair?	✔	Spain is party to numerous Mutual Legal Assistance Treaties (MLATs) and other international agreements for sharing data for law enforcement cooperation, both directly and via European-wide agreements. These agreements are up to date and follow international best practice.

INTELLECTUAL PROPERTY RIGHTS (SCORE: 9.8/12.5 | RANK: 9/24)

# SPAIN	RESPONSE	EXPLANATORY TEXT
1. Are copyright laws or regulations in place that are consistent with international standards to protect cloud service providers?	✔	Spain's copyright legislation was significantly updated in 2015. The law follows international standards. Copyright "safe harbor" protection for intermediaries such as cloud service providers is provided in European Union member countries by Article 14 of the E-commerce Directive. According to this article, an Internet intermediary cannot be held liable unless actual knowledge of infringement or awareness of facts or circumstances from which infringement is apparent exists. However, there are proposals in Europe to weaken these protections; see the Proposal for a Directive of the European Parliament and of the Council on copyright in the Digital Single Market — COM (2016) 593 at <ec.europa.eu/newsroom/dae/document.cfm?doc_id=17200>.
2. Are copyright laws or regulations effectively enforced and implemented?	◑	Spain has a poor record of copyright enforcement and continues to record very high levels of copyright infringement across a wide range of content. Spain's copyright laws were updated in 2015 and this is expected to have a positive effect on copyright protection, although it is taking longer than expected for improvement in enforcement activity. An effective intellectual property "safe harbor" has been implemented for cloud service providers.
3. Is there clear legal protection against misappropriation of trade secrets?	✔	Trade Secrets law in Europe is influenced by the EU Trade Secrets Directive, which was adopted on May 26, 2016, by the European Commission and must be implemented by all Member States by the end of 2018 <ec.europa.eu/growth/industry/intellectual-property/trade-secrets_en>. In the meantime, there are limited trade secrets protections scattered across different laws in Spain. • The Spanish Criminal Code (Articles 199 and 200) prohibits the revelation of secrets accessed via employment or where the person has an obligation of confidentiality; • The Spanish Unfair Competition Act (Article 13) prohibits the unauthorized disclosure of industrial secrets or business secrets, subject to further tests regarding the intent of the disclosure.
4. Is the law or regulation on trade secrets effectively enforced?	◑	There is only very limited enforcement of trade secrets law in Spain. It is expected that enforcement will improve significantly once Trade Secrets Directive is implemented — due by the end of 2018.

# SPAIN	RESPONSE	EXPLANATORY TEXT
5. Is there clear legal protection against the circumvention of Technological Protection Measures?	◑	Spain's Law on Intellectual Property (1996, revised 2011) prohibits the manufacture or distribution of devices "mainly" or "specifically" created to circumvent technological protection measures (TPMs). Further changes are required to allow criminal and civil actions to proceed against the manufacture and sale of devices and services that are primarily designed or marketed to facilitate the circumvention of technological protection measures (TPMs) used to prevent unauthorized access to or reproduction of software in violation of the law. The Criminal Code was expanded to include provisions regarding the protection of TPMs in July 2015 but wording in the provision could still cause misinterpretation by the courts.
6. Are laws or regulations on the circumvention of Technological Protection Measures effectively enforced?	◑	Spanish courts have concluded that devices primarily designed for purposes of circumvention of TPMs are lawful when capable of some ancillary non-infringing use. While these courts arguably are improperly interpreting the law, legislative amendments could clarify the intent of the law and ensure that the provisions function as intended to effectively enable the prosecution of manufacturers and distributors of circumvention devices.
7. Are there clear legal protections in place for software-implemented inventions?	✔	Patent Law 24/2015 entered into force in Spain in April 2017. The law generally allows computer-related inventions to be patented.
8. Are laws or regulations on the protection of software-implemented inventions effectively implemented?	✔	The Spanish Patent and Trademark Office <www.oepm.es> have issued clear guidelines on the patentability of computer-related inventions.

STANDARDS AND INTERNATIONAL HARMONIZATION (SCORE: 11.5/12.5 | RANK: 8/24)

# SPAIN	RESPONSE	EXPLANATORY TEXT
1. Is there a regulatory body responsible for standards development for the country?	✔	The Spanish Association for Standardization and Certification (Asociación Española de Normalización y Certificación (AENOR)) <www.aenor.es> is a private, non-profit organization.
2. Are international standards favored over domestic standards?	✔	Spain favors EU and international standards.
3. Does the government participate in international standards setting process?	✔	Spain is an active participant in EU and International Standards Organization (ISO) standards development processes. Spain is a participant in the top-level ICT standards committee (JTC-1) <www.iso.org/isoiec-jtc-1.html>.
4. Are e-commerce laws or regulations in place?	✔	Law 34/2002 on Information Society Services and Electronic Commerce (LSSI), referred to as the E-Commerce Act, provides a comprehensive approach to e-commerce law.
5. What international instruments are the e-commerce laws or regulations based on?	UNCITRAL Model Law on E-Commerce	The E-Commerce Act implements the EU E-Commerce Directive (2000/31/EC) into Spanish law. It is largely based on the UNCITRAL Model Law on E-Commerce.
6. Is there a law or regulation that gives electronic signatures clear legal weight?	✔	The Spanish Law on Electronic Signatures 2003 sets out relevant concepts and terminology, introduces a digital signature for legal entities, and establishes certification infrastructure.
7. Are cloud service providers free from mandatory filtering or censoring?	◑	There is no general government Internet filtering or censorship in Spain; however, the law forbids the dissemination of material that promotes discrimination, hate and violence, and this includes web-based content.

PROMOTING FREE TRADE (SCORE: 9.5/12.5 | RANK: 6/24)

# SPAIN	RESPONSE	EXPLANATORY TEXT
1. Is a national strategy or platform in place to promote the development of cloud services and products?	✘	Spain has an ICT Strategy Commission (CETIC), which is considering options for the development of a cloud computing strategy. As of June 2017 there is no formal strategy in place.
2. Are there any laws or policies in place that implement technology neutrality in government?	✔	The 2007 Law on Citizens' Electronic Access to Public Services (also known as Law on eGovernment) includes a technology neutrality principle.
3. Are cloud computing services able to operate free from laws or policies that either mandate or give preference to the use of certain products, services, standards, or technologies?	✔	There are no relevant mandatory product requirements or preferences in Spain that would affect cloud services and products.
4. Are cloud computing services able to operate free from laws, procurement policies, or licensing rules that discriminate based on the nationality of the vendor, developer, or service provider?	✔	Procurement is governed by Law 30/2007 on Contracts of the Public Sector. There is no domestic preference requirement in Spain.

# SPAIN	RESPONSE	EXPLANATORY TEXT
5. Has the country signed and implemented international agreements that ensure the procurement of cloud services is free from discrimination?	◑	Spain is a full member of the World Trade Organization (WTO) plurilateral Agreement on Government Procurement <www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm>.
6. Are services delivered by cloud providers free from tariffs and other trade barriers?	✔	There are no relevant tariffs or other trade barriers in place in Spain.
7. Are cloud computing services able to operate free from laws or policies that impose data localization requirements?	✔	There are no data localization requirements in Spain that would affect cloud computing.
IT READINESS, BROADBAND DEPLOYMENT (SCORE: 16.6/25 | RANK: 9/24)		
1. Is there a National Broadband Plan?	By 2020: • 100% of population to have access to speeds of at least 30 Mbps By 2025: • 50% of households at 100 Mbps	The Digital Agenda for Spain <www.agendadigital.gob.es> was launched in 2013 and contains nine specific plans, including a plan dedicated to Telecommunications and Ultra-fast Networks. This plan contains measures to foster ultrafast fixed access networks (regulatory measures to reduce roll out cost, better use of existing infrastructure) and to encourage take-up. Following elections in June 2016, the new government established the Ministry of Energy, Tourism, and Digital Agenda <www.minetad.gob.es> in November 2016. As of June 2017, an updated version of the Digital Agenda is expected. Note: The European Commission has set goals under the Digital Agenda for Europe initiative <ec.europa.eu/digital-agenda/en/broadband-strategy-policy> for European Union-wide broadband coverage with speeds above 30 Mbps by 2020 and for 50% of EU households being subscribed to a broadband service with speeds above 100 Mbps by 2020. In September 2016, the European Commission adopted a strategy on Connectivity for a European Gigabit Society <ec.europa.eu/digital-single-market/en/connectivity-european-gigabit-society> that proposes by 2025 100% of EU households have 100 Mbps speeds and by 2025 gigabit connectivity for schools, transport hubs, providers of public services, and digitally intensive enterprises.
2. Is the National Broadband Plan being effectively implemented?	✔	The Digital Agenda for Spain includes dedicated budgetary allocations for ongoing implementation. The plan is the subject of regular updates and additional resolutions <www.boe.es/diario_boe/txt.php?id=BOE-B-2017-29862>. Spain's approach is for broadband networks deployed by the private sector. In regions where market-based deployment fails due to a lack of profitability, public-private cooperation mechanisms are deployed. The Digital Agenda for Spain proposes mechanisms for improving the experience of broadband users, increasing the demand of digital services and promoting the production and distribution of digital content over the Internet. Spain's national broadband plan is consistent with the targets set by the European Commission's Digital Agenda for Europe (DAE). Additional information about the national broadband strategies and progress is available for each EU member country at the European Commission Digital Single Market portal <ec.europa.eu/digital-single-market/country-information-spain>.
3. Are there laws or policies that regulate "net neutrality"?	Extensive regulation	Spain is subject to wider European Union legislation on net neutrality. Regulation (EU) 2015/2120 of the European Parliament and of the Council was adopted in November 2015, laying down measures concerning open Internet access <eur-lex.europa.eu/legal-content/EN/NOT/?uri=CELEX:32015R2120>. Article 3.3 of the regulation requires providers to treat all data equally, irrespective of content or the applications or services used to deliver it. However, it also states that this does not prevent providers from implementing "reasonable traffic management measures." The law is complemented by implementation guidelines for Net Neutrality issued by the Body of European Regulators for Electronic Communications (BEREC) <berec.europa.eu>.
4. Base Indicators		
4.1. Population (millions) (2015) • Total for all countries in this scorecard: 4,700 million	47	In 2015, the population of Spain increased by 0.3%. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
4.2. Urban Population (%) (2015) • Average for all countries in this scorecard: 73%	80%	In 2015, the urban population of Spain increased by 0.3%. [World Bank, Data Catalog, Indicators, Urban Population (Jan. 2017) <data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>]

# SPAIN	RESPONSE	EXPLANATORY TEXT
4.3. Number of Households (millions) (2015) • Total for all countries in this scorecard: 1,249 million	16	In 2015, the number of households in Spain increased by 0.3%. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
4.4. Population Density (people per square km) (2015) • Average for all countries in this scorecard: 471	93	In 2015, the population density of Spain decreased by 0.1%. [World Bank, Data Catalog, Indicators, Population Density (Jan. 2017) <data.worldbank.org/indicator/EN.POP.DNST>]
4.5. Per Capita GDP (US$ 2015) • Average for all countries in this scorecard: US$ 22,649	$25,832	In 2015, the per capita GDP for Spain increased by 3.2% to US$ 25,832. This was above the five-year compound annual growth rate (CAGR) from 2010–2015 of -3.4%. This ranks Spain 11th for value of per capita GDP and 20th for growth (CAGR) for this indicator in this scorecard. [World Bank, Data Catalog, Indicators: GDP Per Capita, Current US$ (Jan. 2017) <data.worldbank.org/indicator/NY.GDP.PCAP.CD> and GDP Growth, Annual % (Jan. 2017) <data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>]
4.6. ICT Service Exports (billions of US$) (2015) • Total for all countries in this scorecard: US$ 978 billion	$32	In 2015, the value of ICT service exports for Spain decreased by 9.7% to US$ 31.93 billion. This was below the five-year compound annual growth rate (CAGR) from 2010–2015 of 0%. This ranks Spain 9th for value of ICT service exports and 20th for growth (CAGR) for this indicator in this scorecard. [World Bank, Data Catalog, Indicators: ICT Service Exports US$ (Jan. 2017) <data.worldbank.org/indicator/BX.GSR.CCIS.CD>]
4.7. Personal Computers (% of households) (2015) • Average for all countries in this scorecard: 63%	76%	In 2015, 75.9% of households in Spain had personal computers. This is an increase of 2.5% since 2014 and ranks Spain 44th out of 236 countries surveyed. The growth from 2014 is above the five-year compound annual growth rate (CAGR) from 2010 to 2015 of 2%. This ranks Spain 11th for the number of personal computers (as a % of households) and 14th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
5. IT and Network Readiness Indicators		
5.1. ITU ICT Development Index (IDI) (2016) (score is out of 10 and covers 175 countries) • Average for all countries in this scorecard: 6.58	7.62	Spain's ITU ICT Development Index (IDI) for 2016 is 7.62 (out of 10), resulting in a rank of 26th (out of 175 economies). The 2016 IDI for Spain increased by 2.1%, and the IDI ranking improved by 1 from a rank of 27th since 2015. This ranks Spain 9th in the ITU ICT Development Index and 15th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), Measuring the Information Society (Dec. 2016) <www.itu.int/net4/ITU-D/idi/2016>]
5.2. World Economic Forum Networked Readiness Index (NRI) (2016) (score is out of 7 and covers 139 countries) • Average for all countries in this scorecard: 4.77	4.77	Spain has a Networked Readiness Index (NRI) score of 4.77 (out of 7), resulting in a rank of 35th (out of 139 economies) and a rank of 24th (out of 32) in the High income: OECD grouping of economies. The 2016 NRI for Spain increased by 0.8% and declined by 1 place from a rank of 34th since 2015. This ranks Spain 11th in the ITU ICT Development Index and 14th for growth (CAGR) for this indicator in this scorecard. [World Economic Forum, Global Information Technology Report (2016) <reports.weforum.org/global-information-technology-report-2016>]
6. Internet Users and International Bandwidth		
6.1. Internet Users (millions) (2015) • Total for all countries in this scorecard: 2,330 million	37	[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]

# SPAIN	RESPONSE	EXPLANATORY TEXT
6.2. Internet Users (% of population) (2015) • Average for all countries in this scorecard: 67%	79%	In 2015, 79% of the population in Spain used the Internet, resulting in a ranking of 37 out of 236 countries surveyed by the ITU. This is an increase of 3.3% since 2014 and is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 3.6%. This ranks Spain 9th in the proportion of the population using the Internet and 14th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>] Note: There may be some variations as to how countries calculate this. Some countries base this upon all or part of the population — such as between 16 and 72 years of age.
6.3. International Internet Bandwidth (total gigabits per second (Gbps) per country) (2015) • Total for all countries in this scorecard: 117,736 Gbps	3,900	Spain has increased its international Internet bandwidth by 18% since 2014 to 3,900 Gbps and is ranked 11 out of 236 countries surveyed by the ITU. The growth from 2014 is above the five-year compound annual growth rate (CAGR) from 2009–2014 of 18.1%. This ranks Spain 10th for total international Internet bandwidth and 20th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
6.4. International Internet Bandwidth (bits per second (bps) per Internet user) (2015) • Average for all countries in this scorecard: 97,747 bps	105,006	The international Internet bandwidth (per Internet user) of Spain has increased by 14% since 2014. The growth from 2014 is above the five-year compound annual growth rate (CAGR) from 2010–2015 of 13.4%. This ranks Spain 7th for international Internet bandwidth per user and 17th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
7. Fixed Broadband		
7.1. Fixed Broadband Subscriptions (millions) (2015) • Total for all countries in this scorecard: 697 million	14	Spain has increased the number of fixed broadband subscribers by 4% since 2014 to 13.54 million and is ranked 13th out of 236 countries surveyed by the ITU. The growth from 2014 is close to the five-year compound annual growth rate (CAGR) from 2010–2015 of 4.9%. This ranks Spain 13th for the number of fixed broadband subscriptions and 13th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
7.2. Fixed Broadband Subscriptions (% of households) (2015) • Average for all countries in this scorecard: 63%	84%	[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>] Note: This may be skewed by business usage in some countries.

# SPAIN	RESPONSE	EXPLANATORY TEXT
7.3. Fixed Broadband Subscriptions (% of population) (2015) • Average for all countries in this scorecard: 21%	29%	Spain has increased its fixed broadband subscriptions (as a % of the population) by 3.8% since 2014, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 4.5%. This ranks Spain 39th out of 236 countries surveyed by the ITU. This ranks Spain 8th for the number of fixed broadband subscriptions (as a % of the population) and 13th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>] The Organisation for Economic Co-operation and Development (OECD) figures below present a breakdown of the type of fixed broadband connections in Spain as of June 2016. In the OECD, Spain was ranked 22nd (out of 35) for fixed broadband subscribers as a percentage of population [OECD Broadband Subscribers (Feb. 2017) <www.oecd.org/sti/broadband>] • DSL: 14.8% • Cable: 5.5% • Fiber/LAN: 8.7% • Satellite: 0.0% • Fixed wireless: 0.2% Total: 29.3% (13.5 million subscriptions) and just below the OECD average total for June 2016 of 29.8%. This reflects a decrease in DSL subscriptions and consequential increase in cable and fiber connections. The fixed broadband growth for the June 2015–2016 period was 4.98% (ranked 9 out of 35 for growth), above the OECD average growth of 3.42%. In Spain, fiber makes up 29.7% of fixed broadband subscriptions (ranked 8 out of 35), above the OECD average of 20.1%. The growth in fiber subscriptions for the June 2015–2016 period was 83.23% (ranking Spain 3 out of 35 for growth) and significantly above the OECD average of 15.94%. Note: From July 2015 OECD adjusted its definitions of fixed and mobile broadband by transferring the categories Satellite and Fixed Wireless from Mobile to Fixed Broadband. Note: Fiber subscriptions data includes FttH, FttP, and FttB, and excludes FTTC. Note: There may be minor variations in the ITU and OECD subscriber totals due to definition or timing differences.
7.4. Fixed Broadband Subscriptions (% of Internet users) (2015) Average for all countries in this scorecard: 29%	36%	[International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
7.5. Average Broadband Data Connection Speed (total megabits per second (Mbps) per country) (Q1 2017) • Average for all countries in this scorecard: 12 Mbps • Average peak for all countries in this scorecard: 70 Mbps	15	In Spain the Q1 2017 average broadband data connection speed was 15.49 Mbps and is ranked 28th out of 239 countries measured by Akamai. This ranks Spain 8th for average broadband data connection speed in this scorecard. Additional connection metrics for Q1 2017 in Spain include: • Average peak broadband connection speed: 84.78 Mbps (ranked 22nd globally and 6th in this scorecard) • Above 4 Mbps: 90% (ranked 39th globally and 7th in this scorecard) • Above 10 Mbps: 56% (ranked 29th globally and 8th in this scorecard) • Above 15 Mbps: 36% (ranked 26th globally and 8th in this scorecard) • Above 25 Mbps: 16% (ranked 20th globally and 7th in this scorecard) [Akamai, The State of the Internet (1st Quarter, 2017) <www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/>]

# SPAIN	RESPONSE	EXPLANATORY TEXT
8. Fiber-to-the-home/building (FttX)		
8.1. Fiber-to-the-home/building (FttX) Internet Subscriptions (millions) (2015) • Total for all countries in this scorecard: 258 million	3.2	Spain has increased the number of FttX subscribers by 102% since 2014 to 3.161 million, and is ranked 9th out of 236 countries surveyed by the ITU. This ranks Spain 7th for the number of FttX subscriptions and 5th for growth (from 2014) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
8.2. Proportion of Fiber-to-the-home/building (FttX) Internet Subscriptions (% of households) (2015) • Average for all countries in this scorecard: 18%	19.5%	Spain has increased the proportion of FttX subscribers to households by 102% (since 2014) to 19.51%. This ranks Spain 7th for the proportion of FttX subscriptions to households and 5th for growth (from 2014) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>] Note: This may be skewed by business usage in some countries.
8.3. Proportion of Fiber-to-the-home/building (FttX) Internet Subscriptions (% of fixed broadband subscriptions) (2015) • Average for all countries in this scorecard: 23%	23.3%	Spain has increased the proportion of FttX subscribers to fixed broadband subscribers by 102% (since 2014) to 23.34%. This ranks Spain 7th for the proportion of FttX subscriptions to fixed broadband subscriptions and 5th for growth (from 2014) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]
9. Mobile Broadband		
9.1. Mobile Cellular Subscriptions (millions) (2015) • Total for all countries in this scorecard: 4,823 million	51	In 2015, Spain increased the number of mobile cellular subscriptions by 0.5% since 2014, which is above the five-year compound annual growth rate (CAGR) from 2010–2015 of -0.1%. Spain is ranked 29th out of 236 countries surveyed by the ITU. The number of subscriptions account for 108% of the population. This ranks Spain 20th for the number of mobile cellular subscriptions and 22nd for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>] Note: This figure may be inflated due to multiple subscriptions per head of population, but excludes dedicated mobile broadband devices (such as 3G data cards, tablets, etc.).
9.2. Number of Active Mobile Broadband Subscriptions (millions) (2015) • Total for all countries in this scorecard: 2,506 million	39	In 2015, Spain has increased the number of active mobile broadband subscriptions by 7%, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 28.8%. Spain is ranked 18th out of 236 countries surveyed by the ITU. This ranks Spain 16th for the number of active mobile broadband subscriptions and 11th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]

# SPAIN	RESPONSE	EXPLANATORY TEXT
9.3. Active Mobile Broadband Subscriptions (% of population) (2015) • Average for all countries in this scorecard: 77%	83%	Spain has increased the number of active mobile broadband subscriptions (as a % of the population) by 7% since 2014, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 28.3%. Spain is ranked 31st out of 236 countries surveyed by the ITU. This ranks Spain 10th for the number of active mobile broadband subscriptions (as a % of the population) and 11th for growth (CAGR) for this indicator in this scorecard. [International Telecommunication Union (ITU), World Telecommunication/ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>] Note: This refers to the sum of standard mobile broadband and dedicated mobile broadband subscriptions to the public Internet. It covers actual subscribers, not potential subscribers, even though the latter may have broadband enabled-handsets. The OECD figures below present a breakdown of the type of mobile broadband connections in Spain as of June 2016. In the OECD, Spain was ranked 15th (out of 35) for mobile wireless broadband subscribers as a percentage of population [OECD Broadband Subscribers (Feb. 2017) <www.oecd.org/sti/broadband>] • Standard mobile broadband subscriptions: 82.9% • Dedicated mobile data subscriptions: 3.5% Total: 86.5% (40.1 million subscriptions and accounting for 3.3% of all OECD subscriptions of 1.21 billion) and below the OECD average total for June 2016 of 95.1%. Mobile broadband growth in Spain for the June 2015–2016 period was 7.59% (ranked 26 out of 35 for growth), below the OECD average growth of 10.7%. Note: From July 2015 OECD adjusted its definitions of fixed and mobile broadband by transferring the categories Satellite and Fixed Wireless from Mobile to Fixed Broadband. Note: The OECD wireless broadband figure includes both data and voice subscriptions (referred to as Standard Mobile Broadband) and data-only subscriptions (referred to as Dedicated Mobile Data). Note: The OECD figures include mobile data subscriptions, which are not as consistently reported in the ITU indicators.
9.4. Average Mobile Data Connection Speed (total megabits per second (Mbps) per country) (Q1 2017) • Average for all countries in this scorecard: 11 Mbps	14	In Spain the Q1 2017 average mobile data connection speed was 13.8 Mbps and is ranked 16th out of 70 countries measured by Akamai. This ranks Spain 6th for average mobile data connection speed in this scorecard. [Akamai, The State of the Internet (1st Quarter, 2017) <www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/>]