

COUNTRY: UNITED KINGDOM

SCORE: 81.84 | RANK: 4/24

The United Kingdom has a comprehensive set of cyberlaws. Data protection laws are particularly strong, with regular enforcement. However, businesses are required to register their data sets with the regulator, which seems to be an unnecessary burden on business and may act as a barrier to some cloud services.

The United Kingdom is updating its laws to reflect the provisions of the EU General Data Protection Regulation (GDPR), which will come into force in May 2018. This update continues despite the BREXIT process.

The United Kingdom is free from Internet censorship and filtering, and up-to-date laws are in place for e-commerce and electronic signatures.

The United Kingdom is a signatory to the Convention on Cybercrime. There is significant debate in the United Kingdom on the regulation of law enforcement access to data, and some proposals could have a potential negative effect on cloud computing.

Advanced intellectual property laws are in place and are regularly enforced, although there is still a gap in relation to trade secrets protection and enforcement. The United Kingdom also scored very well in the information technology (IT) infrastructure section of this year's report.

The United Kingdom's ranking improved substantially, and the country went from ninth to fourth place in the 2018 Scorecard rankings. The UK released a national Cyber Security Strategy in late 2016 and outperformed other nations in the Security rankings.

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
DATA PRIVACY (SCORE: 10/12.5 RANK: 7/24)		
1. Is a data protection law or regulation in place?	✓	The Data Protection Act 1998 (DPA) is a comprehensive privacy law for the public and private sectors. It has been updated several times. The UK, 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. This is likely to be the case even if the UK leaves the European Union. 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 and covers all sectors.
3. Is a data protection authority in place?	✓	The Information Commissioner's Office (ICO) <ico.org.uk> is the UK's independent public authority responsible for data protection in England, Scotland, Wales, and Northern Ireland.
4. What is the nature of the data protection authority?	Sole commissioner	The Information Commissioner is appointed on government recommendation, has independent status and reports directly to Parliament.
5. Is the data protection authority enforcing the data protection law or regulation in an effective and transparent manner?	✓	The Information Commissioner's Office (ICO) <ico.org.uk> is a very active enforcement agency. Large fines are common <ico.org.uk/action-weve-taken/enforcement>.
6. Is the data protection law or regulation compatible with globally recognized frameworks that facilitate international data transfers?	EU framework	The Data Protection Act 1998 implements the EU Data Protection Directive.
7. Are data controllers free from registration requirements?	✗	Data controllers must register with the Information Commissioner's Office (ICO) <ico.org.uk> to notify their intention to process personal data before they begin. Fees and an annual renewal requirement apply. There are a small number of exemptions to the registration requirement.
8. Are there cross-border data transfer requirements in place?	Detailed requirements	The Data Protection Act allows data to be transferred to non-EU countries, subject to a range of conditions (such as consent and contract).

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
9. Are cross-border data transfers free from arbitrary, unjustifiable, or disproportionate restrictions, such as national or sector-specific data or server localization requirements?	✓	<p>UK law generally follows 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.</p> <p>As of June 2017, the exceptions include transfers to:</p> <ul style="list-style-type: none"> • 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. <p>The UK provisions on cross-border data transfers generally follow international practice. One flexible measure that is unusual in European legislation is that data can be transferred based on an internal risk assessment by the organization.</p>
10. Is there a personal data breach notification law or regulation?	1	<p>There is no specific requirement to inform consumers about a data breach.</p> <p>Under the Privacy and Electronic Communications Regulations (PECR), organizations providing a service allowing members of the public to send electronic messages (e.g., telecoms providers or internet service providers (ISPs)) are required to notify the Information Commissioner's Office (ICO) if a personal data breach occurs.</p>
11. Are personal data breach notification requirements transparent, risk-based, and not overly prescriptive?	1	<p>There is no specific requirement to inform consumers about a data breach. However, the Information Commissioner's Office (ICO) <ico.org.uk> has advised organizations that they should inform the ICO of any "serious" breaches, and these types of notifications occur regularly in the UK.</p> <p>Limited notification requirements apply to breaches that occur in the context of providing electronic communication services.</p>
12. Is an independent private right of action available for breaches of data privacy?	✓	<p>Article 8 of the Human Rights Act 1998 provides a right to respect for private and family life, home, and correspondence. Actions under this provision are rare, although it is sometimes used in actions related to privacy breaches by the media.</p>
SECURITY (SCORE: 11/12.5 RANK: 1/24)		
1. Is there a national cybersecurity strategy in place?	✓	<p>The United Kingdom National Cyber Security Strategy (2016–2021) was released in November 2016 <www.gov.uk/government/publications/national-cyber-security-strategy-2016-to-2021>.</p>
2. Is the national cybersecurity strategy current, comprehensive, and inclusive?	✓	<p>The National Cyber Security Strategy (2016–2021) <www.gov.uk/government/publications/national-cyber-security-strategy-2016-to-2021> is current and was published in November 2016. It is comprehensive and includes implementation plans. It renews the first five-year National Cyber Security Strategy issued in 2011. It is based around three key objectives: defend, deter, develop, and underpinned by a focus on international cooperation and action.</p>
3. Are there laws or appropriate guidance containing general security requirements for cloud service providers?	✓	<p>The Data Protection Act requires organizations to ensure that personal data is protected against theft, unauthorized access, or accidental loss. The act does not prescribe the implementation of any specific security measures; it simply requires "appropriate" technical and organizational security measures.</p> <p>A voluntary Cyber Essentials Framework <www.cyberaware.gov.uk/cyberessentials> is in place to recognize those businesses that do adopt minimum security standards. Since October 2014 Cyber Essentials has been mandatory for suppliers of government contracts that involve handling personal information and providing some ICT products and services.</p>
4. Are laws or guidance on security requirements transparent, risk-based, and not overly prescriptive?	✓	<p>The Data Protection Act does not prescribe the implementation of any specific security measures; it simply requires "appropriate" technical and organizational security measures.</p> <p>The Cyber Essentials Framework <www.cyberaware.gov.uk/cyberessentials> provides a greater level of detail, but it is designed to be easy to understand and implement.</p>
5. Are there laws or appropriate guidance containing specific security audit requirements for cloud service providers that take account of international practice?	✓	<p>One of the Cyber Essentials certifications (Cyber Essentials PLUS) requires annual external recertification, which acts as a de facto audit requirement <www.cyberaware.gov.uk/cyberessentials/files/assurance-framework.pdf>.</p>
6. Are international security standards, certification, and testing recognized as meeting local requirements?	✓	<p>The UK is a Certificate Authorizing Member (the highest level) of the Common Criteria Recognition Arrangement (CCRA) <www.commoncriteriaportal.org>.</p> <p>However, the UK has also adopted a faster and more flexible approach to security certification for its own market through the Commercial Product Assurance (CPA) scheme <www.ncsc.gov.uk/scheme/commercial-product-assurance-cpa>. This scheme has a focus on evaluating off-the-shelf products against existing security standards in order to fast-track their approval and use.</p>

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
CYBERCRIME (SCORE: 8.5/12.5 RANK: 18/24)		
1. Are cybercrime laws or regulations in place?	✓	The Computer Misuse Act 1990 and the Fraud Act 2006 provide the key coverage of cybercrime offenses.
3. Are cybercrime laws or regulations consistent with the Budapest Convention on Cybercrime?	✓	UK law is largely compatible with the Council of Europe Convention on Cybercrime. However, the Council of Europe has noted that the UK has not yet implemented laws relating to misuse of devices, as required by Article 6 of the Convention.
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 encryption keys by law enforcement agencies has been the subject of significant debate in the UK. In November 2016, the Investigatory Powers Act was passed. Section 217 requires ISPs (and some communications providers) to inform the government in advance of any new services. The law allows the government to issue a technical capacity notice, which can include a requirement to make technical changes to software and systems. One of the itemized list of options to be considered is the removal of "electronic protection" on encrypted communications < www.gov.uk/government/collections/investigatory-powers-bill >.
4. Are arrangements in place for the cross-border exchange of data for law enforcement purposes that are transparent and fair?	✓	The UK 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 < www.gov.uk/guidance/mutual-legal-assistance-mla-requests >. In 2015, the UK released Requests for Mutual Legal Assistance in Criminal Matter — Guidelines for Authorities Outside of the United Kingdom < www.gov.uk/government/publications/mla-guidelines-for-foreign-authorities-2012 >. The UK and the United States are negotiating an agreement for reciprocal direct access by law enforcement authorities to data held by service providers in the other country. Completion of the agreement depends on a proposed change in US law.
INTELLECTUAL PROPERTY RIGHTS (SCORE: 11.5/12.5 RANK: 1/24)		
1. Are copyright laws or regulations in place that are consistent with international standards to protect cloud service providers?	✓	A combination of the Copyright, Designs and Patents Act 1988 and the Digital Economy Act 2010 implement international standards in the UK. Copyright "safe harbor" protection for intermediaries such as cloud service providers is contained in the Electronic Commerce (EC Directive) Regulations 2002. Comprehensive safe harbor defenses are available for "information society service" providers, and the provisions go beyond protection against copyright infringement.
2. Are copyright laws or regulations effectively enforced and implemented?	✓	The UK has a strong track record of enforcing copyright. A wide range of civil and criminal sanctions are available. An effective intellectual property "safe harbor" has been implemented for cloud service providers.
3. Is there clear legal protection against misappropriation of trade secrets?	ⓘ	There is currently no specific statutory protection of trade secrets. Trade secrets are instead protected by contract and the laws of equity. Protection under the laws of equity applies to confidential information generally, rather than being limited to trade secrets. It protects information where: it has the necessary quality of confidence; it was imparted in circumstances importing an obligation of confidence; and there is unauthorized use of the information to the detriment of the confider. Employment law also provides a layer of protection for 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 >.
4. Is the law or regulation on trade secrets effectively enforced?	ⓘ	Breach of confidence gives rise to a range of civil remedies including injunctions to prevent further misuse, compensatory damages, and an account of profits. There are no criminal sanctions. It is expected that enforcement will improve significantly once the UK implements the Trade Secrets Directive, due to be implemented by the end of 2018.
5. Is there clear legal protection against the circumvention of Technological Protection Measures?	✓	Section 296 of the Copyright, Designs and Patents Act 1988 provides detailed provisions on technological protection measures. The law contains a broad definition of technological protection measures, detailed and comprehensive prohibitions on providing, promoting, advertising or marketing circumvention devices, and extensive sanctions.

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
6. Are laws or regulations on the circumvention of Technological Protection Measures effectively enforced?	✓	Regular enforcement action is taken in the UK regarding circumvention devices. The UK also has a formal complaints process in place to ensure that individuals and organizations can enforce legitimate and appropriate exemptions to copyright that may be prevented by the presence of technological protection measures < www.gov.uk/government/publications/technological-protection-measures-tpms-complaints-process >.
7. Are there clear legal protections in place for software-implemented inventions?	✓	The UK Intellectual Property Office < www.gov.uk/government/organisations/intellectual-property-office > has issued a Manual of Patents Practice < www.gov.uk/government/publications/patents-manual-of-patent-practice >. The Manual states that computer-implemented inventions may be patentable based on "the substance of the invention."
8. Are laws or regulations on the protection of software-implemented inventions effectively implemented?	✓	The UK Intellectual Property Office < www.gov.uk/government/organisations/intellectual-property-office > regularly grants patents to software-implemented inventions. Their approach has been supported by the UK courts.
STANDARDS AND INTERNATIONAL HARMONIZATION (SCORE: 12/12.5 RANK: 5/24)		
1. Is there a regulatory body responsible for standards development for the country?	✓	The British Standards Institution (BSI) < www.bsigroup.com > has existed since 1901. The BSI has a Memorandum of Understanding with the UK Government, which establishes the position of BSI as the recognized UK National Standards Body.
2. Are international standards favored over domestic standards?	✓	The UK favors international standards over national standards, although the adoption of internationally based EU standards is common in many sectors.
3. Does the government participate in international standards setting process?	✓	The British Standards Institution (BSI) < www.bsigroup.com > represents the UK in international standards development processes, and is an active participant in many ICT standards committees. The United Kingdom is a participant in the top-level ICT standards committee (JTC-1) < www.iso.org/iso/iec-jtc-1.html >.
4. Are e-commerce laws or regulations in place?	✓	In the UK, e-commerce laws are scattered throughout numerous pieces of legislation and are also included in the common law on contracting. Some of the core provisions are contained in the Electronic Commerce (EC Directive) Regulations 2002, although these do not include provisions on electronic contracts or electronic signatures (which are dealt with in the common law interpretation of terms such as writing and signature). As a result of this ad hoc approach to e-commerce law, most new laws are accompanied by specific electronic commerce enabling provisions.
5. What international instruments are the e-commerce laws or regulations based on?	UNCITRAL Model Law on E-Commerce	The Act implements the EU E-Commerce Directive, which 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 Electronic Communications Act 2000 creates a legal framework for electronic commerce and the use of electronic signatures, both in the private and public sectors. The Act is completed by the Electronic Signatures Regulations 2002, which implements the European Directive 1999/93/EC on a community framework for electronic signatures.
7. Are cloud service providers free from mandatory filtering or censoring?	✓	In the UK ISPs have traditionally filtered content on a voluntary basis, including content related to a number of topics, including pornography, drug use, suicide, violence, and hacking activities. In April 2017 the Digital Economy Act 2017 introduced a new regulatory regime for some online content, classified as Internet pornography or extreme pornography < www.legislation.gov.uk/ukpga/2017/30/contents/enacted/data.htm >.
PROMOTING FREE TRADE (SCORE: 9/12.5 RANK: 10/24)		
1. Is a national strategy or platform in place to promote the development of cloud services and products?	✓	The UK Government has had a Cloud First Policy in place since 2013, which was reaffirmed in February 2017 < www.gov.uk/guidance/government-cloud-first-policy >. The Cloud First Policy generally requires agencies to adopt cloud computing. Departments remain free to choose an alternative to the cloud when they can demonstrate that it offers better value for money.

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
2. Are there any laws or policies in place that implement technology neutrality in government?	📘	The UK is (currently) bound by the EU Directive on Public Procurement Law. Article 23 requires that: “technical specifications shall afford equal access for tenderers and not have the effect of creating unjustified obstacles to the opening up of public procurement to competition.” However, the Procurement Policy Note 07/15: open standards for technology (March 2015) < www.gov.uk/government/publications/procurement-policy-note-0715-open-standards-for-technology > establishes a strong preference for open standards and includes a catalog of open standards that have been accepted for use across government.
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?	✘	The Procurement Policy Note 07/15: Open Standards for Technology (March 2015) < www.gov.uk/government/publications/procurement-policy-note-0715-open-standards-for-technology > states that: “When specifying IT requirements for software interoperability, data and document formats, In-Scope Organizations must: • request that open standards adhering to the definition described in the open standards principles are adopted, subject to the principle of equivalence; and • use compulsory open standards profiles that have been adopted for use.”
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?	✔	There are no relevant domestic preferences in UK policy on ICT procurement.
6. Has the country signed and implemented international agreements that ensure the procurement of cloud services is free from discrimination?	📘	The United Kingdom 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?	✔	The information technology sector in the UK is free from tariffs and other trade barriers.
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 place in the UK that would affect cloud computing.
IT READINESS, BROADBAND DEPLOYMENT (SCORE: 19.8/25 RANK: 4/24)		
1. Is there a National Broadband Plan?	By 2018: • Provide superfast broadband (at least 24 Mbps) to 95% of the UK	Broadband Delivery UK (BDUK) < www.gov.uk/guidance/broadband-delivery-uk > was released in September 2013 with the following targets: • Provide basic broadband (at least 2 Mbps) for all by 2016 • Improve mobile coverage in remote areas by 2016 • Provide superfast broadband (at least 24 Mbps) coverage to 90% of the UK by early 2016 • Provide superfast broadband (at least 24 Mbps) to 95% of the UK by December 2017 The UK also has set out a target to establish 22 “superconnected cities,” which comprise cities targeted for digital infrastructure projects in an effort to attract business investment. The UK Digital Strategy (March 2017) < www.gov.uk/government/publications/uk-digital-strategy > builds upon BDUK and shifts the focus to broadband coverage for the “final 5%” of UK premises. The remaining unserved premises (5% is approximately 1.4 million premises) are geographically dispersed across the landmass of the UK. 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.

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
2. Is the National Broadband Plan being effectively implemented?	✓	<p>The UK Digital Strategy (March 2017) <www.gov.uk/government/publications/uk-digital-strategy> states that £1.7 billion of public funding is already being invested to deliver broadband across the UK. Additional funds have been allocated to extend delivery, with 600,000 more premises expected to benefit by 2020. Over 90% of UK premises can access superfast broadband, and the UK government states that it is “on track” to reach 95% of UK premises by December 2017.</p> <p>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-united-kingdom>.</p>
3. Are there laws or policies that regulate “net neutrality”?	Extensive regulation	<p>The United Kingdom is (currently) 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>.</p>
4. Base Indicators		
4.1. Population (millions) (2015) • Total for all countries in this scorecard: 4,700 million	64	<p>In 2015, the population of the United Kingdom increased by 0.6%.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>
4.2. Urban Population (%) (2015) • Average for all countries in this scorecard: 73%	83%	<p>In 2015, the urban population of the United Kingdom increased by 0.3%.</p> <p>[World Bank, Data Catalog, Indicators, Urban Population (Jan. 2017) <data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>]</p>
4.3. Number of Households (millions) (2015) • Total for all countries in this scorecard: 1,249 million	27	<p>In 2015, the number of households in the United Kingdom increased by 0.6%.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>
4.4. Population Density (people per square km) (2015) • Average for all countries in this scorecard: 471	269	<p>In 2015, the population density of the United Kingdom increased by 0.8%.</p> <p>[World Bank, Data Catalog, Indicators, Population Density (Jan. 2017) <data.worldbank.org/indicator/EN.POP.DNST>]</p>
4.5. Per Capita GDP (US\$ 2015) • Average for all countries in this scorecard: US\$ 22,649	\$43,876	<p>In 2015, the per capita GDP for the United Kingdom increased by 2.2% to US\$ 43,876. This was below the five-year compound annual growth rate (CAGR) from 2010–2015 of 2.5%.</p> <p>This ranks the United Kingdom 4th for value of per capita GDP and 9th for growth (CAGR) for this indicator in this scorecard.</p> <p>[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>]</p>
4.6. ICT Service Exports (billions of US\$) (2015) • Total for all countries in this scorecard: US\$ 978 billion	\$132	<p>In 2015, the value of ICT service exports for the United Kingdom increased by 3.9% to US\$ 131.96 billion. This was below the five-year compound annual growth rate (CAGR) from 2010–2015 of 7.3%.</p> <p>This ranks the United Kingdom 2nd for value of ICT service exports and 9th for growth (CAGR) for this indicator in this scorecard.</p> <p>[World Bank, Data Catalog, Indicators: ICT Service Exports US\$ (Jan. 2017) <data.worldbank.org/indicator/BX.GSR.CCIS.CD>]</p>
4.7. Personal Computers (% of households) (2015) • Average for all countries in this scorecard: 63%	90%	<p>In 2015, 89.9% of households in the United Kingdom had personal computers. This is an increase of 1% since 2014 and ranks the United Kingdom 10th out of 236 countries surveyed. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2010 to 2015 of 1.7%.</p> <p>This ranks the United Kingdom 2nd for the number of personal computers (as a % of households) and 17th for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
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	8.57	The United Kingdom's ITU ICT Development Index (IDI) for 2016 is 8.57 (out of 10), resulting in a rank of 5th (out of 175 economies). The 2016 IDI for the United Kingdom increased by 0.4%, and the IDI ranking declined by 1 from a rank of 4th since 2015. This ranks the United Kingdom 2nd in the ITU ICT Development Index and 23rd 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	5.72	The United Kingdom has a Networked Readiness Index (NRI) score of 5.72 (out of 7), resulting in a rank of 8th (out of 139 economies) and a rank of 7th (out of 32) in the High income: OECD grouping of economies. The 2016 NRI for the United Kingdom increased by 1.8% and the ranking has remained the same since 2015. This ranks the United Kingdom 3rd in the ITU ICT Development Index and 22nd 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	59	[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) < www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx >]
6.2. Internet Users (% of population) (2015) • Average for all countries in this scorecard: 67%	92%	In 2015, 92% of the population in the United Kingdom used the Internet, resulting in a ranking of 15th out of 236 countries surveyed by the ITU. This is an increase of 0.4% since 2014 and is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 1.6%. This ranks the United Kingdom 1st in the proportion of the population using the Internet and 21st 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	22,000	The United Kingdom has increased its international Internet bandwidth by 5% since 2014 to 22,000 Gbps and is ranked 3 out of 236 countries surveyed by the ITU. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2009–2014 of 25.7%. This ranks the United Kingdom 2nd for total international Internet bandwidth 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 >]
6.4. International Internet Bandwidth (bits per second (bps) per Internet user) (2015) • Average for all countries in this scorecard: 97,747 bps	374,554	The international Internet bandwidth (per Internet user) of the United Kingdom has increased by 4% since 2014. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 23.1%. This ranks the United Kingdom 2nd for international Internet bandwidth per user and 10th 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	25	United Kingdom has increased the number of fixed broadband subscribers by 4% since 2014 to 24.65 million, and is ranked 8th out of 236 countries surveyed by the ITU. The growth from 2014 is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 5.2%. This ranks the United Kingdom 8th for the number of fixed broadband subscriptions and 12th 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 >]

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
7.2. Fixed Broadband Subscriptions (% of households) (2015) • Average for all countries in this scorecard: 63%	92%	[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.
7.3. Fixed Broadband Subscriptions (% of population) (2015) • Average for all countries in this scorecard: 21%	39%	
7.4. Fixed Broadband Subscriptions (% of Internet users) (2015) • Average for all countries in this scorecard: 29%	42%	[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	17	In the United Kingdom the Q1 2017 average broadband data connection speed was 16.92 Mbps and is ranked 18th out of 239 countries measured by Akamai. This ranks the United Kingdom 5th for average broadband data connection speed in this scorecard. Additional connection metrics for Q1 2017 in The United Kingdom include: • Average peak broadband connection speed: 76.14 Mbps (ranked 29th globally and 8th in this scorecard) • Above 4 Mbps: 92% (ranked 33rd globally and 5th in this scorecard) • Above 10 Mbps: 60% (ranked 26th globally and 7th in this scorecard) • Above 15 Mbps: 42% (ranked 17th globally and 6th in this scorecard) • Above 25 Mbps: 20% (ranked 14th globally and 5th 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/>]
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	5.4	The United Kingdom has 5.44 million FttX subscribers. This ranks the United Kingdom 6th for this indicator in this scorecard. At the time of publication there is insufficient information to provide information about growth trends for the United Kingdom for this indicator. [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%	20.4%	[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%	22.1%	[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	79	In 2015, the United Kingdom increased the number of mobile cellular subscriptions by 1% since 2014, which is above the five-year compound annual growth rate (CAGR) from 2010–2015 of 0.6%. The United Kingdom is ranked 19th out of 236 countries surveyed by the ITU. The number of subscriptions account for 124% of the population. This ranks the United Kingdom 14th for the number of mobile cellular subscriptions and 21st 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.).

# UNITED KINGDOM	RESPONSE	EXPLANATORY TEXT
<p>9.2. Number of Active Mobile Broadband Subscriptions (millions) (2015)</p> <ul style="list-style-type: none"> Total for all countries in this scorecard: 2,506 million 	56	<p>In 2015, the United Kingdom has decreased the number of active mobile broadband subscriptions by -1%, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 15.8%. the United Kingdom is ranked 11th out of 236 countries surveyed by the ITU.</p> <p>This ranks the United Kingdom 11th for the number of active mobile broadband subscriptions and 18th for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p>
<p>9.3. Active Mobile Broadband Subscriptions (% of population) (2015)</p> <ul style="list-style-type: none"> Average for all countries in this scorecard: 77% 	88%	<p>The United Kingdom has decreased the number of active mobile broadband subscriptions (as a % of the population) by -1% since 2014, which is below the five-year compound annual growth rate (CAGR) from 2010–2015 of 15.2%. the United Kingdom is ranked 30th out of 236 countries surveyed by the ITU.</p> <p>This ranks the United Kingdom 9th for the number of active mobile broadband subscriptions (as a % of the population) and 19th for growth (CAGR) for this indicator in this scorecard.</p> <p>[International Telecommunication Union (ITU), World Telecommunication/ ICT Indicators Database (Dec. 2016) <www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>]</p> <p>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.</p> <p>The Organisation for Economic Co-operation and Development (OECD) figures below present a breakdown of the type of mobile broadband connections in the United Kingdom as of June 2016.</p> <p>In the OECD, the United Kingdom was ranked 14th (out of 35) for mobile wireless broadband subscribers as a percentage of population [OECD Broadband Subscribers (Feb. 2017) <www.oecd.org/sti/broadband>]</p> <ul style="list-style-type: none"> Standard mobile broadband subscriptions: 83.3% Dedicated mobile data subscriptions: 8.4% <p>Total: 91.7% (59.7 million subscriptions and accounting for 4.9% of all OECD subscriptions of 1.21 billion) and just below the OECD average total for June 2016 of 95.1%.</p> <p>Mobile broadband growth in the United Kingdom for the June 2015–2016 period was 2.52% (ranked 31 out of 35 for growth), below the OECD average growth of 10.7%.</p> <p>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.</p> <p>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).</p> <p>Note: The OECD figures include mobile data subscriptions, which are not as consistently reported in the ITU indicators.</p>
<p>9.4. Average Mobile Data Connection Speed (total megabits per second (Mbps) per country) (Q1 2017)</p> <ul style="list-style-type: none"> Average for all countries in this scorecard: 11 Mbps 	26	<p>In the United Kingdom the Q1 2017 average mobile data connection speed was 26 Mbps and is ranked 1st out of 70 countries measured by Akamai.</p> <p>This ranks the United Kingdom 1st for average mobile data connection speed in this scorecard.</p> <p>[Akamai, The State of the Internet (1st Quarter, 2017) <www.akamai.com/us/en/about/our-thinking/state-of-the-internet-report/>]</p>