

Annex 1 - Table of essential services and identification thresholds

Sector	Subsector	Essential service	Identification thresholds
Drinking water supply and distribution	n/a	The supply of potable water to households.	Operators serving 200,000 or more people.
Energy	Electricity	The function of supply (the sale or resale of electricity) to consumers.	<p>In England, Scotland and Wales:</p> <p>Electricity suppliers (incl. aggregators where they act as suppliers) that meet the following two criteria (both must apply):</p> <ul style="list-style-type: none"> • use of smart metering infrastructure; • supply greater than 250,000 consumers. <p>Operators of electricity generators* with a generating capacity greater or equal to 2 Gigawatts (GW), including:</p> <ul style="list-style-type: none"> • Standalone transmission connected generation; • Multiple generating units with a cumulative capacity greater or equal to 2 Gigawatts (GW); <p>*excluding nuclear electricity generation. The government does not consider the civil nuclear sector to be in scope of the NIS Directive;</p> <p>In Northern Ireland:</p> <p>Licensed suppliers who supply to greater than 8,000 customers</p> <p>Any generator with a generating capacity equal to or greater than 350 MW</p>
		Electricity (SEM Operator)	The holder of a SEM operator licence under Article 8(1)(d) of the Electricity (NI) Order 1992.
		Electricity (transmission).	In England, Scotland and Wales: Network operators with the potential

			<p>to disrupt supply to greater than 250,000 consumers.</p> <p>International interconnectors and Direct Current converter station with a capacity greater than or equal to 1 Gigawatts (GW).</p> <p>In Northern Ireland:</p> <p>The holder of a transmission licence under Article 8(1)(b) of the Electricity (NI) Order 1992.</p>
		Electricity (distribution)	<p>In England, Scotland and Wales:</p> <p>Network operators with the potential to disrupt supply to greater than 250,000 consumers.</p> <p>In Northern Ireland:</p> <p>The holder of a distribution licence under Article 8(1)(bb) of the Electricity (NI) Order 1992.</p>
	Oil	Oil transmission (upstream).	Operators with throughput of more than 20 million barrels of oil equivalent (boe) per year.
		<p>Oil transmission (downstream).</p> <p>The distribution of petroleum-based fuels to other storage sites throughout the UK by road, pipeline, rail or ship.</p>	<p>In England, Scotland and Wales:</p> <p>Operators which provide or handle 500,000 tonnes of fuel per year.</p> <p>In Northern Ireland:</p> <p>Operators which provide or handle 50,000 tonnes of fuel per year.</p>
		Oil production, refining and treatment and storage (upstream).	Operators with throughput of 20 million boe per year.
		Oil production, refining and treatment and storage (downstream).	In England, Scotland and Wales:

		<ul style="list-style-type: none"> - The import of any of crude oil, intermediates, components and finished fuels. - The storage of any of crude oil, intermediates, components and finished fuels. - The production of intermediates, components and finished fuels through a range of refining or blending processes. - The delivery of petroleum-based fuels to retail sites, airports or end users. 	<p>Operators which provide or handle 500,000 tonnes of fuel per year.</p> <p>In Northern Ireland: Operators which have a storage capacity of greater than 50,000 tonnes of fuel.</p>
	Gas	The function of supply (the sale or resale of gas) to consumers.	<p>In England, Scotland and Wales:</p> <p>Gas suppliers (including aggregators where they act as suppliers) that meet the following two criteria (both must apply):</p> <ul style="list-style-type: none"> • use of smart metering infrastructure; • supply greater than 250,000 consumers. <p>In Northern Ireland:</p> <p>Licensed suppliers who supply to greater than 2,000 customers</p>
		Gas (transmission) (downstream)	<p>In England, Scotland and Wales:</p> <p>Network operators with the potential to disrupt supply to greater than 250,000 consumers.</p> <p>Operators of gas interconnectors with technical capacity greater than</p>

			<p>20mcm/d</p> <p>In Northern Ireland:</p> <p>The holder of a licence under Article 8(1)(a) of the Gas (NI) Order 1996.</p>
		Gas (distribution).	<p>In England, Scotland and Wales:</p> <p>Network operators with the potential to disrupt supply to greater than 250,000 consumers.</p> <p>For Northern Ireland:</p> <p>The holder of a licence under Article 8(1)(a) of the Gas (NI) Order 1996.</p>
		Gas storage facilities supplying/storing gas for the national transmission network.	<p>In England, Scotland and Wales:</p> <p>Operators with potential to input greater than 20mcm/d to the national transmission network.</p> <p>In Northern Ireland:</p> <p>The holder of a licence under Article 8(1)(b) of the Gas (NI) Order 1996.</p>
		LNG system operators supplying/storing gas for the national transmission network.	<p>In England, Scotland and Wales:</p> <p>Operators with potential to input greater than 20 mcm/d to the national transmission network.</p> <p>In Northern Ireland:</p> <p>The holder of a licence under Article 8(1)(d) of the Gas (NI) Order 1996.</p>
		Gas (transmission) (upstream)	Operators with throughput of more than 20 million boe per year.
		Gas (production, refining and treatment)	Operators with throughput of more than 20 million boe per year.
Digital Infrastructure	n/a	Top Level Domain (TLD) Name Registries	Operators who service an average of 2 billion or more queries in 24 hours for domains registered within ICANN.

			<p>Note: The threshold specified is an annual average and shall be based on the best available historic data from the preceding 12 months.</p> <p>Note: The threshold specified excludes growth of traffic load due to malicious activity such as DDoS attacks.</p>
		Domain Name Services (DNS) Service Providers	<p>Operators who provide DNS resolvers, offered for use by publicly accessible services, which service an average of 2,000,000 or more requesting DNS clients in 24 hours; or</p> <p>Operators who provide authoritative hosting of domain names, offered for use by publicly accessible services, servicing 250,000 or more different domain names.</p> <p>Note: The thresholds specified are an annual average and shall be based on the best available historic data from the preceding 12 months.</p>
		Internet Exchange Point (IXP) Operators	<p>Operators who have 50% or more annual market share amongst UK IXP Operators in terms of interconnected autonomous systems, or who offer interconnectivity to 50% or more of Global Internet routes.</p> <p>Note: Interconnected autonomous systems has the meaning set out in Article 4 (13) of the NIS Directive.</p> <p>Note: Global Internet routes means: The total number of active entries within the Global Internet Routing Table, averaged per calendar year.</p>
Health Sector	Health care settings	Health care services.	Providers of non-primary NHS healthcare commissioned under the National Health Service Act 2006 as amended in England (but not including any individual doctors providing such healthcare).

			<p>Local Health Boards and NHS Trusts in Wales (defined by the National Health Service (Wales) Act 2006).</p> <p>The 14 territorial Health Boards in Scotland; the following four special NHS Boards in Scotland: NHS National Waiting Times Centre, NHS24, Scottish Ambulance Service and The State Hospitals Board for Scotland; and Common Services Scotland (known as NHS National Services Scotland).</p> <p>Health and Social Care Trusts in Northern Ireland (defined by Health and Social Care (Reform) Act (Northern Ireland) 2009)</p>
Transport	Air transport	Owner or operator of an aerodrome (as defined in Civil Aviation Act 1982).	Owner or operator of any aerodrome (i.e. airport) with annual terminal passenger numbers greater than 10 million.
		Provider of air traffic services (as defined in Transport Act 2000).	<p>Any entity which is licensed to provide UK en-route air traffic services.</p> <p>Air traffic service providers at airports with annual terminal passenger numbers greater than 10 million.</p>
		Air carriers (as defined in paragraph 4 of Article 3 of Regulation (EC) No 300/2008).	Air carriers with more than 30% of the annual terminal passengers at any individual UK airport that is in scope of the directive and more than 10 million total annual terminal passengers across all UK airports
	Maritime Transport	Harbour Authorities (as defined in the Merchant Shipping Act 1995).	<p>Harbour Authorities or operators at ports with annual passenger numbers greater than 10 million.</p> <p>Or at ports that account for:</p> <ul style="list-style-type: none"> - 15% of UK total Roll on-Roll off

		Operators of Vessel Traffic Services (as defined in Merchant Shipping (Vessel Traffic Monitoring and Reporting Requirements) Regulations 2004 SI 2004/2110).	(Ro-Ro) traffic; <ul style="list-style-type: none"> - 15% of UK total Lift on-Lift off (Lo-Lo) traffic; - 10% of UK total liquid bulk; or - 20% of UK biomass fuel.
		Operators of a port facility (as defined in Port Security Regulations 2009 – SI 2009/2048).	Operators of port facilities at ports that meet the above thresholds and that handle the type of freight specified in those thresholds.
		Passenger and freight water transport companies (as defined for maritime transport in Annex I to Regulation (EC) No 725/2004)	Operators that handle more than 30% of the freight at any individual UK port that is in scope and more than 5 million tonnes of total annual freight at UK ports. Operators that have more than 30% of the annual passenger numbers at any individual UK port that is in scope and more than 2 million total annual passengers at UK ports.
	Rail Transport	Operators of railway assets (as defined in section 6 of the Railways Act 1993) on the mainline railway network. This will include operators of trains, networks, stations and light maintenance depots, where operating those assets on the mainline railway network. Railway Undertaking as defined in the Northern Ireland Transport Act 1967.	Any operator of a railway asset on the mainline rail network (as defined).

		<p>The mainline railway network will be defined to include all railways in GB but will exclude:</p> <ul style="list-style-type: none"> i. International rail; ii. Metros, trams and light rail systems; iii. Heritage, museum or tourist railways whether or not they are operating solely on their own network; iv. Networks which are privately owned and exist solely for use by the infrastructure owner for its own freight operations or other activities not involving passenger or freight services for third parties. 	
		Operators of railway assets (as defined in section 6 of the Railways Act 1993) for metros, trams and light rail (including underground) systems.	Operators with annual passenger journeys greater than 50 million.
		Operators of international rail services.	<p>Any operator of a Channel Tunnel Train (as defined in the Channel Tunnel Security Order 1994).</p> <p>Any operator of international rail services in Northern Ireland, as defined in the Northern Ireland Transport Act 1967.</p>
		International rail infrastructure managers	Any infrastructure manager of the Channel Fixed Link i.e. the Concessionaires (as defined in the Channel Tunnel Act 1987)

			Any infrastructure manager of international rail services in Northern Ireland, as defined in the Northern Ireland Transport Act 1967.
	Road Transport	Road authorities as defined in point (12) of Article 2 of Commission Delegated Regulation (EU) 2015/962.	A road authority responsible for roads in the United Kingdom that annually in total have vehicles travelling more than 50 billion miles on them.
		Operators of Intelligent Transport Systems as defined in point (1) of Article 4 of Directive 2010/40/EU of the European Parliament and of the Council.	A road authority that provides an Intelligent Transport Systems service that covers roads in the United Kingdom that annually in total have vehicles travelling more than 50 billion miles on them.