Glossary

Summary

The purpose of this document is to provide the definitions of the relevant terms used in the Summer 2019 Working Paper on Electricity Network Access and Forward-looking Charging Significant Code Review (SCR).

This glossary may be updated to reflect changes and decisions as the SCR progresses. This document is provided for the benefit of readers of the Access and Forward-looking Charges SCR related documents to assist in understanding some of the more technical elements of the review. The definitions in this glossary provide the explanations of relevant terms as they are understood in the context of the review. As such, these terms may differ from other publications, for instance the Open Networks Terms and Definitions document.

Term (abbreviation)	Definition
Access	Access is the nature of users' access to the electricity networks (for example, when users can import/export electricity and how much) and how these rights are allocated.
Active Network Management (ANM)	Active Network Management is the use of distributed control systems to continually monitor network limits, along with systems that provide signals to DER to modify outputs in line with these limits.
Asset Replacement	Asset replacement is when an existing asset(s) is removed and a new asset(s) is installed, by a TO or DNO. This is included as a non-load capex (excluding non-op capex) cost driver. (See 'Non-Load related Capex – Asset Replacement' for the price control perspective definition of 'Asset Replacement')
Asset Replacement Model (ARM)	ARM is a type of cost model used by DNOs to calculate Distribution Use of System (DUoS) charges for LV/HV customers in the CDCM. It is also referred to as the '500MW model'.
Balancing and Settlement Code (BSC)	The BSC covers governance of electricity balancing and settlement in Great Britain.
Balancing Services Use of System (BSUoS) Charges	The Balancing Services Use of System (BSUoS) charge recovers the cost of day to day operation of the transmission system. Generators and suppliers are liable for these charges, which are calculated daily as a flat tariff across all users. The methodology that calculates the BSUoS is set out in Section 14 of the CUSC.
Bilateral Agreement	A Bilateral Agreement is an agreement made between two parties. In the context of network use, there are various

	types of Bilateral Agreements that cover the arrangements between network parties and connected parties.
Blackstart	This is a non-load capex (ex. Non-op capex) cost driver for Transmission. Blackstart refers to the series of actions necessary to restore electricity supplies to customers following a total or widespread partial shutdown of the GB Transmission and Distribution Systems. Black Start requires transmission substations to be re-energised and reconnected to each other in a controlled way to re-establish a fully interconnected system.
Branch	Branch is a section of electrical network connecting two nodes.
Charging Delivery Body (CDB)	The Charging Delivery Body is a role within Charging Futures. The Charging Delivery Body manages a coordinated, efficient, and transparent programme for the development of electricity network charging with stakeholder interests at the heart of what they do.
Charging Futures	Charging Futures is a programme to coordinate significant charging reform (on electricity access and charging arrangements), in a way where every stakeholder can equally contribute to change.
Charging Futures Forum (CFF)	The Charging Futures Forum is the quarterly forum for users of the electricity network to learn, contribute and shape the future of charging arrangements. Attendees hear regular updates, and are given the opportunity to support high level reviews and consult on work to support the progress of the Task Forces.
Common Connection Charging Methodology (CCCM)	The CCCM is the methodology used by DNOs to set charges for connection to distribution networks in Great Britain. IDNOs publish their own connection charging methodologies which may be analogous to the CCCM and or include provisions specific to their own networks.
Common Distribution Charging Methodology (CDCM)	The CDCM is a charging methodology for electricity distribution networks. The CDCM charges HV and LV connected users for use of the EHV, HV and LV network.
Connect and Manage	The Connect and Manage transmission access regime was introduced by the government in August 2010 and implemented on 11 February 2011. Its aim was to improve access to the electricity transmission network for generators by offering generation customers connection dates ahead of the completion of any wider transmission system reinforcements which may be needed. Any resultant constraint management costs are socialised via BSUoS charges. This is part of the arrangements used to manage transmission constraints whereby a customer is permitted to connect to an area of the network ahead of the completion of reinforcement. The connection will then be managed to control the identified constraint(s) until such a time as the reinforcement is completed or the constraint is no longer applicable. Prior to the connection being made there may still be a requirement for enabling works.

Connection boundary	The connection boundary refers to the extent to which the connectee should pay for any wider reinforcement of the network required to connect the customer.
Connection charges	At transmission, connection charges cover the provision of electrical plant, lines and ancillary meters to construct entry and exit points on the national electricity transmission system. They also cover charges in respect of maintenance and repair where these costs are not recoverable as Use of System Charges, including all charges provided for in the statement of connection charging methodology (such as Termination Amounts and One-off charges). At distribution level, the full cost of new sole use Connection Assets are charged to the connectee. In addition, the connectee pays for a share of the Reinforcement costs under pre-determined apportionment rules.
Connection and Use of System Code (CUSC)	The CUSC is the contractual framework for connection to, and use of, the National Electricity Transmission System (NETS) in Great Britain.
Consequences of exceeding access rights	Better defined access rights may therefore require greater monitoring of access rights and changes to the enforcement regime. Potential approaches that could be used to deal with exceedance of access rights are being considered, an include: • **Financial consequences –** a charge for exceeding access rights. • **Contractual consequences –** contractual obligations for the user to take specific actions if they exceed their access rights (eg the user is obliged to increase their access rights or install equipment that limits the risk of the user continuing to exceed their access rights, ore customer might lose their preferred access choice and have imposed default access terms). • **Physical consequences –** the network/system operator could install equipment to limit the ability of the user exceeding their access rights, or it could curtail or temporarily disconnect the user if they exceed their access rights. Ultimately a user could face disconnection or de-energisation if it repeatedly exceeds their access rights.
Constraints (on a network)	Constraints are a term used for restrictions on the ability of a network to transport energy. For example, due to thermal or voltage limitations. An electricity network is constrained when the required capacity to transport desired electricity flows is higher than the actual capacity on the network. Can also be referred to as network congestion.
Cost model	A cost model is the model used to analyse the network costs and calculate the use of system charges for the users that use the network. The Transport model, the Long Run Incremental Cost model, the Forward Cost Pricing Model and the 500MW model are all examples of cost models.
Cost reflective charges	Cost reflective charges are charges (or elements of a charge) that are set to reflect the costs or benefits that a user confers on the network. These could be network investment or operational costs.

Curtailment	Curtailment refers to a user's ability to import or export from the network being restricted ie the users access to the network is said to be curtailed. Typically, applicable to generator export but can be applied to demand from large industrial sites. Under defined arrangements this is a temporary reduction, typically in the allowed exports from a generator, below a customer's agreed export capacity. Activated in response to a notification or signal that the generator is required to curtail its generation.
Demand Side Response (DSR)	Demand side Response (DSR) refers to the ability of sources of demand (for example, an industrial process) to increase or decrease their net demand in response to signals (sometimes price-signal) in order to support system or network management.
Distribution Connection and use of System Agreement (DCUSA)	The DCUSA is a multi-party contract covering use of electricity distribution networks in Great Britain.
Distributed Energy Resources (DER)	See Distribution generation.
Distributed Generation	Also called DG, embedded generation, and distribution-connected generation. These are generators connected to the distribution system, rather than the transmission system. Small and Medium sized DG (sub-100MW) do not pay transmission charges and can receive Embedded Benefits. Large-sized DG (over 100MW) do pay transmission charges and do not receive Embedded Benefits.
Distribution network	In England and Wales this is the wires, cables and other network infrastructure that typically operate at 132kV and below, while in Scotland it is the infrastructure that operate below 132kV. Distribution networks carry electricity from the transmission system and Distributed Generation to industrial, commercial and domestic users.
Distribution Network Operator (DNO)	DNOs own, operate and maintain the distribution networks. They do not sell electricity to consumers, this is done by the electricity suppliers. There are 14 licensed DNOs in Britain, and each is responsible for a regional distribution services area.
Distribution System Operator (DSO)	A Distribution System Operator (DSO) has a role to monitor, control and actively manage the power flows on the distribution system to maintain a safe, secure and reliable electricity supply. As a neutral facilitator of an open and accessible market for network services, a DSO will enable competitive access to markets and the optimal use of DER on distribution networks to deliver security, sustainability and affordability in the support of whole system optimisation. A DSO enables customers to be producers, consumers and storers of energy, enabling customer access networks and markets, customer choice and great customer service.
Distribution Use of System (DUoS) charges	These charges recover the DNOs allowed revenues under the price control settlements and are charged to demand users (and generation users when they are importing power) on the distribution network, while generators on the distribution network are treated as negative demand. They

	are broadly separated into forward-looking charges, which relate to the incremental cost of using the network in a specific location, and residual charges that recover the remaining costs and are non-locational.
Diversity assumptions	Diversity assumptions are when networks plan the size of their networks by assuming that users do not use their full access all the time, and consider this to be spare incidental capacity. Therefore the actual size of the network would not equal the 'agreed' size of the network.
Extra High Voltage Distribution Charging Methodology (EDCM)	The EDCM calculates charges for EHV connected users for use of the EHV distribution network.
Electricity network	The electricity network includes both the distribution network and the transmission network.
Energy Networks Association (ENA)	Energy Networks Association (ENA) is a trade associated that represents the transmission and distribution network operators for gas and electricity in the UK and Ireland. They aim to promote the interests and good standing of the industry, and provide a forum of discussion among company members.
Electricity System Operator (ESO)	The party with the responsibility for the minute-to-minute operation of the system and transmission network, ensuring it is balanced and stable.
Embedded generation	See 'distributed generation'.
Energy system transformation	The Energy System Transformation refers to the process by which we are changing the energy system (including power, heat, and transport), from a system based on carbon intensive fossil fuels, to one based on low carbon technology.
Extra High Voltage	In this consultation, EHV refers to the extra high voltage infrastructure on distribution networks. These are distribution network assets with nominal voltages of greater than 22kV.
Fault	Troublecall Occurrences classified under Interruptions reporting as Unplanned Incidents which require some form of action to restore an asset to Pre-Fault Availability. Faults drive network operating costs.
Fault Level Reinforcement	This is a load related cost driver and refers to network development to relieve an existing fault level related network constraint to facilitate new demand or generation growth.
Financial firmness (access option)	Financially firm access would require users to be financially reimbursed when their access to the system is limited or unavailable. There are several ways in which the value of this financial compensation could be calculated. For example, it could be based on the value of the saving to the network operator of curtailing the user, the Value of Lost Load or the value of the potential amount of energy imported or exported if the user had not been curtailed. This option is likely to be more expensive to provide than non-financially firm access and therefore be more expensive for the individual user.
Firmness	This is the extent to which a user's access to the network can be restricted (physical firmness) and their eligibility for compensation (financial firmness) if it is restricted.

Firmness defined by Customer Outcomes (access option)	Firmness could be defined by measuring the customer's experiences of curtailment. For example, measuring the number of curtailments, the aggregate time curtailed, the energy lost by curtailment or a combination of all them. It could also be combined with time-profiled access to create time-windows when curtailment may occur. The more curtailment that a user is willing to experience, the cheaper the network access will be. If these curtailment levels are exceeded then it could trigger the network operator to take certain actions (eg reinforce the network and/or pay compensation to the user).
Firmness defined by Physical Drivers (access option)	The firmness of a user's access could be defined by the physical assets that connect them to the wider system and the design of the network at the point they are connected. For example, distribution users could choose "single circuit" or "dual circuit" access. A dual circuit could reduce the risk of interruption – because it means if one circuit fails there is a backup – but is likely to be more expensive. Alternatively, users could choose options that only constrain them for specific technical reasons (eg a thermal constraint) or could choose options that reinforce the network up to a specified level.
Flexibility	Flexibility refers to the ability of users on the network to quickly change their operations (eg modifying generation and/or consumption patterns) in reaction to an external signal (eg change in price) in order to provide system services, such as supporting system balancing and network constraint management. Sources of flexibility are typically demand side response, storage, and dispatchable generation.
Flexibility – Contracted Flexibility	This is where parties trade and directly contract with one another to procure flexibility. In the context of network management, this could be the electricity system operator (ESO) or distribution network operators (DNOs) procuring flexibility services from users, to the extent that additional actions are needed to ensure secure network management once users' actions from price-signalled flexibility are taken into account. It could also be network users trading access between themselves – for example, if one user with a flexible connection was contracting with another party nearby to either turn up or down to reduce the extent they would be curtailed. Contracted flexibility can be through long term or short term contracts.
Flexibility Market	The arena of commercial dealings between buyers and sellers of Flexibility Services.
Flexibility – Network Price Signal Flexibility	This refers to where a party varies its demand or generation in response to the price of energy or network use at a particular time and/or location. In the context of the value that flexibility can provide for network management, this can be signalled through forward-looking network charges. These charges can be discounted for users choosing non-standard access rights, ie options that involve them being flexible in their access to the network.
Flexibility Service	The offer of modifying generation and/or consumption patterns in reaction to an external signal (such as a change in price) to provide a service within the energy system.

Flexible Connection	Flexible connections are connection arrangements whereby a customer's export or import is managed (often through real-time control) based upon contracted and agreed principles of available capacity. Flexible connections typically allow quicker and cheaper connection to the network, but have no defined cap on the extent to which a user's access can be interrupted.
Flexible Resources	Flexible responses, typically distributed generation, storage or demand response, are connected to the electricity network, and are flexible in how they operate and impact the network.
Forward Cost Pricing (FCP)	FCP is a cost model used by some DNOs to calculate Distribution Use of System (DUoS) charges for EHV connected customers.
Forward looking charges (FLC)	The elements of network charges that signal to users how their actions can either increase or decrease future network costs. They typically provide signals about the costs or benefits of locating at different points on the network (sometimes called "locational charges") and/or of using the network at different times.
GB Transmission System	The system consisting of high voltage electric wires owned or operated by transmission licensees with Great Britain. This term is referred to in the CCCM and is similar to the term National Electricity Transmission System or "NETS" which is defined in the CUSC.
Generation Dominated Area (GDA)	GDAs are areas of network where the network peak capacity requirement is a result of generation as opposed to demand.
Half-hourly metering	A form of interval energy data. Some metering equipment can measure energy on a half hourly (HH) basis and where this is the case, network charges could be based on measures of usage within different half-hourly periods.
High voltage	Distribution network assets with nominal voltages over 1kV but up to and including 22kV.
Independent Connection Provider (ICP)	An Independent Connection Provider (ICP) is an organisation, other than an IDNO or the DNO in whose Distribution Service Region the connection is situated, accredited to undertake Contestable Works in relation to the provision of a Connection to the DNO's Distribution System.
Independent Distribution Network Operator (IDNO)	This is an Electricity Distributor that is not a Distribution Services Provider (or, if it is, is operating in relation to that part of its Distribution System that is outside its Distribution System that is outside its Distribution Services Area.
Inspections	Inspections drive costs, specifically network operating costs. The visual checking of the external condition of system assets including any associated civil constructions such as buildings, substation surrounds, support structures, cable tunnels and cable bridges.
Interface between transmission and distribution	Where we discuss the interface between transmission and distribution, we are referring to the fact that there are different regulations and charging methodologies across the networks. This creates 'interface issues' whereby the fact that there are different regulations may influence investment and operation decisions that don't necessarily reflect the underlying economics.

Large User	By large users, here, we are referring to those distribution-connected users who have an agreed capacity (eg the majority of users with current transformer metering), and transmission-connected users.
Larger generators	Those generators with a generating capacity greater than or equal to 100MW.
Last in First Out (LIFO)	LIFO is a means of allocating network capacity where a network constraint is resolved by curtailing all participating users in the order in which they applied for connection to the network. The term LIFO stack refers to the ordered list of participating Users. In the context of a multi-customer ANM scheme, a customer recently joining a scheme will be subject to more curtailment than other customers in the scheme who were connected in the scheme earlier.
Load flow modelling	A model of flows across the electricity network that gives different tariffs for different zones.
Local access	This would offer access to a given geographical area or a specific voltage level, but exclude access to the whole GB system.
Local circuit tariff	TNUoS charges have two components – a wider network tariff and a local charge. Local charges are only paid by generators. The local circuit charge refers to the infrastructure between the location of the generator and the first connection to the Main Integrated Transmission System (MITs).
Locational Marginal Pricing (LMP)	LMP is a system of electricity pricing where the cost to buy and sell power can vary at different locations within wholesale electricity markets
Long Run Incremental Cost (LRIC)	LRIC is a cost model used by some DNOs to calculate Distribution Use of System (DUoS) charges for EHV connected customers.
Long Run Marginal Cost (LRMC)	Long run marginal cost is the incremental cost incurred in a production process when all inputs are variable. For example, the cost of a firm increasing the scale of operations by building a larger factory rather than asking employees to work overtime.
Losses	This is a non-load capex (ex. Non-op capex) cost driver. Losses are a measure of the difference between units entering and units exiting the DNO network through different connection points.
Low voltage	Distribution network assets with nominal voltages below 1kV.
Meter	This is a device that measures the amount of energy passing through a given point.
Metering Point	This is the point, determined according to the principles and guidance given at Schedule 9 of the Master Registration Agreement, at which a supply to (export) or from (import) a distribution system is measured. The measurements are used to ascertain a Supplier/DG Party's liabilities under the Balancing and Settlement Code. The term can also refer to the point where metering equipment has been removed, or was intended to be measured.

	For an Unmetered Supply, a Metering Point can be the point where a supply is deemed to be measured.
Minimum Scheme	In the context of a new distribution connection, the Minimum Scheme is the network design with the lowest overall cost which meets all technical, regulatory and safety requirements in order to provide the capacity required by the applicant (but not necessarily the lowest cost for the connecting customer).
Modification	This refers to any actual or proposed replacement, renovation, modification, alteration or construction to a Customer's plant or apparatus, or the manner of its operation, which materially effects another party.
National Terms of Connection (NTC)	The National Terms of Connection set out the terms and conditions that the Distribution Network Operator requires users to accept in return for maintaining the connection of the premises to its network.
National Electricity Transmission System (NETS)	This is the system consisting of high voltage electric wires owned or operated by transmission licensees with Great Britain and offshore and used for the transmission of electricity from power stations to sub-stations, or between sub-stations, or to or from external interconnection. This system includes any plant, apparatus or meters that are owned or operated by any transmission licensee, within Great Britain or Offshore, in connection with the transmission of electricity, but does not include Remote Transmission Assets. This term is referred to in the CUSC and is similar to the term GB Transmission System which is defined in the CCCM.
Network access rights	Network access rights define the nature of users' access to the networks – how much they can import or export, when and for how long, where to/from, and how likely their access is to be interrupted and what happens if it is.
Network access allocation	This refers to how the network access rights are allocated to users (eg 'first come, first served' or another approach).
Network capacity	The amount of electricity flows that the network is able to accommodate.
New Fault Level Capacity	This is the assessed Fault Level Capacity at the appropriate point on the Distribution System following reinforcement. It is used in the calculation of the apportioned cost chargeable to the customer in the charging methodology statements.
New Innovation Allowance	Has the meaning given to it in Special Condition 3H (The Network Innovation Allowance) of the electricity transmission licence. This cost driver is considered as other costs within a price control.
Network Innovation Competition	Has the meaning given to it in Special Condition 3I (The Network Innovation Competition) of the ET licence. This cost driver is considered as other costs within a price control.
New Network Capacity	New Network Capacity is the assessed network capacity following reinforcement. It is used in the calculation of the apportioned cost chargeable to the customer in the charging methodology statements. The new capacity is based on the operator's assessment of the thermal ratings, voltage drop and

	upstream restrictions and compliance with relevant design, planning and security of supply policies. The equipment ratings to be used are the appropriate operational ratings at the time of the most onerous operational conditions taking account of seasonal ratings and demand.
Node	A Node is a single point on the network. Examples include: • A given customer's point of connection; • A given customer's point of common coupling (the point at which sole use assets meet, or could meet the shared use network); or • The point at which incoming (high voltage) or outgoing (low voltage) feeders connect to a substation.
Nodal Charging	Nodal Charging has a price set for each individual node. The LRIC approach used for some distribution networks uses the cost of incremental demand at each customer's point of common coupling to derive charges for use of the shared network for that customer. This is a nodal charging approach.
Non-contestable Work	Non-contestable work is work that can only be undertaken by the host Distribution Network Operator (DNO).
Non-financially firm (access option)	Users would be curtailed, within specified parameters (eg specific time-periods), without financial compensation at the time of curtailment. However, users would be compensated in other ways. For example, this option could entail lower network charges than financially firm access and could also allow the user to get connected quicker.
Notification of Restrictions on Availability	This is a notification of outage conditions and/or circuit restrictions as applicable. It is usually associated with a Design Variation. Where a Customer is subject to a Notification of Restrictions on Availability, then the customer is not compensated for being constrained off.
Off-peak demand	Off-peak demand refers to the times when demands on the network are not at their highest (see Peak).
Peak demand (times, demand)	Peak refers to the times when demands on the network are highest. These times can vary in different parts of the network.
Peer-to-Peer (P2P)	A peer-to-peer (P2P) network is group of computational entities, each of which acts as a node for sharing with the rest of the group rather than having a central server.
Physical firmness (Access option)	Physical firmness access options concern the customer's access to the network being defined by the capacity of the physical assets that connect them to the wider system.
RIIO (Revenue = Incentives + Innovation + outputs)	RIIO is the network price control model employed by Ofgem. The model adjusts a network companies allowed revenues depending on metrics related to incentives, innovation and outputs.
Secured Amount	This is the monetary amount that a Customer is liable to provide security for against the event of termination of a transmission Bilateral Agreement.
Shallow connection boundary	Under a shallow connection boundary, the connection customer pays for their own sole-use connection assets and the reinforcement of any "shared-use" assets is paid for by use of system charges.
Shallow-ish connection boundary	Under a shallow-ish connection boundary: - The connection customer will pay for their own extension assets.

	- The connection customer will contribute towards any wider network reinforcement required. This is in contrast to a deep connection boundary where the connection customer would pay for all wider network reinforcement costs required.
Shared (access option)	Shared access is being considered as an option that would allow multiple sites to share access to the whole network, up to a jointly agreed level. These sites would coordinate to ensure that they maintain their access within the limits set out in their shared access right. There are two high-level variants of shared that could work: • **Local shared access –** a smaller number of users in a specific constrained location on the network share access with each other. • **Wider area shared access –** a larger number of users, within a broader constrained area of the network share access with each other.
Short Run Marginal Cost (SRMC)	Short-run marginal cost is an economic concept that describes the cost of producing a short term increase in additional goods or services. Marginal cost is a key concept for an efficient level of production at an optimal level. If the revenue gained from producing more goods or services is less than the marginal cost, the unit would not be efficient.
Significant Code Review	A Significant Code Review provides a tool for Ofgem to initiate wide ranging and holistic change and to implement reform to a code based issue, as introduced under the Code Governance Review - https://www.ofgem.gov.uk/licences-industry-codes-and-standards/industry-code-governance/code-governance-review.
Single Circuit (connection)	A Single circuit connection agreement means that in the event of a fault on that circuit or the distribution system feeding that circuit, or the need to take the circuit for maintenance, the customer's connection will remain unavailable for the duration of the necessary works.
Site	A Site is Customer or Company premises for which a connection point is made; or for a new connection as defined in the formal connection application site plan.
Site Specific Requirements	These are works deemed necessary by NGET in accordance with the Grid Code at an embedded generation site to enable the connection of that generator as identified through the Statement of Works process.
Small generators	Those generators with a generating capacity less than 100MW.
Small users	By small users, here, we are referring to those users who do not have a specified capacity. These users are typically not CT metered.
Smart meter	A smart meter is an electronic device that records consumption of electric energy and communicates the information for the purpose of system monitoring and billing.
Standardisation (Access rights)	This refers to how standardised or bespoke the parameters of an access arrangement could be.

	• **Standardised –** access would have 'off-the-peg' design choices and parameters, with a range of set choices that would fit broad groups of users' or network requirements. • **Hybrid –** options would have alterations to standardised options to reflect certain users' or networks' requirements or where bespoke options are available within standardised bands or thresholds. • **Bespoke –** access choices are fully tailored to fit the requirements of a user or network condition.
Strategic Wider Works (SWW) Project	Projects valued over the TO specific SWW threshold which will be undertaken or continued into RIIO-T2, and are considered cost drivers.
Supervisory Control and Data Acquisition (SCADA)	SCADA systems are computer systems for gathering and analysing real time data. SCADA systems are used to monitor and control plant or equipment.
Termination Amount	The monetary amount a customer is liable for in the event of termination of a transmission bilateral agreement. Not this may exceed the Secured Amount.
Thermal rating	The current carrying capacity of the cable (or circuit) determined by the heating effect caused by electrical losses.
Time-limited Short-term access (< 1 year)	Users could choose to have a limited duration access option (eg less than one year) where long-term access is not immediately available or where the user does not want to make a long-term commitment.
Time-profiled access	Time-profiled access options would provide choices other than continuous, year-round access rights, which might be cheaper to provide and help make better use of network capacity. Access would be based on time-profiled capacity. Static time-profiled capacity would involve access limits that vary over time (eg half-hourly, daily, weekly, monthly, seasonally) in pre-determined periods. This could lead to the development of "on-peak" and "off-peak" access. Dynamic time-profiled capacity would involve access limits that vary over time depending on specific conditions (eg when the wind exceeds a threshold level or when the wholesale price exceeds a specific amount).
Total Expenditure (TOTEX)	A financial assessment approach which considers 'total expenditure', ie. both capital expenditure and operational expenditure.
Trading Access	Trading access would allow network users to bilaterally trade or exchange access (eg users could trade curtailment obligations with other users). This would be limited to bilaterally trading between two users. The identity of the users, and the extent to which access rights are traded may have some network or system operator involvement, but do not need to be agreed as part of a user's access rights. Trading of access is being considered outside of the SCR.
Trans European Replacement	Project TERRE is joint implementation project consisting of multiple European Transmission System Operators (TSOs), including National Grid. The project requires that TSOs

Reserves Exchange (TERRE)	procure some of their replacement reserve service needs in a joint market with other European TSOs.
Transmission	Part of the electricity transmission network transmitting high-voltage electricity from where it is generated to where it is distributed throughout the country. There are 3 Transmission Operators (TOs) permitted to develop, operate and maintain a high voltage system within their own distinct onshore transmission areas.
Transmission Entry Capacity (TEC)	This is the allowed capacity a larger generator can export onto the network, as agreed in the connection agreement.
Transmission Network Use of System Charges (TNUoS) charges	These charges recover the TNOs allowed revenues under the price control settlements and are charged to both demand users and generators. They are broadly separated into forward-looking charges, which relate to the incremental cost of using the network in a specific location, and residual charges that recover the remaining costs and are non-locational.
Transmission network	The transmission network typically comprises of circuits operating at high-voltage, defined as 400kV, 275kV, and 132kV (in Scotland only). The system is used for the transmission of energy from generators to lower voltage distribution networks, which subsequently distribute the supply to users.
Transmission Nodal Model	The Transmission Nodal Model is the name of the charging methodology used to calculate the element of TNUoS charges that provides forward-looking signals about the impact of users on the wider network.
Transmission System Operator (TSO)	TSOs own, operate and maintain the transmission networks. There are 3 licensed TSOs in Britain, and each is responsible for a regional transmission services area.
Transmission works	Transmission Works are the works required on the transmission network to either enable a Connection, maintain service performance and standards, or to recover equipment where no longer required. In relation to a particular customer, Transmission Works are specified in Appendix H or identified in the relevant Construction Agreement.
Transport Model	The Transport Model is a zonal model for all customers' use of the transmission network.
Triad periods	The triad refers to the three half-hour settlement periods with highest system demand between November and February, separated by at least ten clear days. National Grid uses the triad to determine TNUoS charges for customers with half-hour metering. The triads for each financial year are calculated after the end of February, using system demand data for the half-hour settlement periods between November and February.
Unmetered Connection	This is a connection to the electricity network that is provided without a metering point. A maintained inventory of connected equipment and usage profile will be provided to allow for accurate consumption and maximum capacity charging.
User	A user refers to anyone who may "use" the electricity system – both generation and demand. Additionally, users can be "Active" or "Passive". Passive users may not be able

	to, or may choose not to, actively engage in access or charging options.
User Commitment Methodology	The user Commitment Methodology are the rules by which parties must underwrite works which they trigger on the transmission system. In the event that the party terminates its Connection Agreement prior to connection (or even if it reduces the capacity at which it eventually connects), it must pay a Cancellation Charge (the liability) to the network operator. They may also be required to provide security to cover a proportion of the liability prior to the start of any works on the connection.
Voltage of Connection	This is the voltage at the Point of Connection (POC) between the existing distribution network and the assets being installed to provide a new connection. This is not necessarily the voltage of supply to the customer.
Whole Network	Whole Network means taking consideration of both transmission and distribution network costs and impacts.
Whole System	In context of Open Networks, Whole System means making optimal network investment and operational decisions for the whole electricity system, not just the transmission or distribution networks in isolation from all the equipment connected to the network.
Wider network tariffs	TNUoS charges have two components – a wider network tariff and a local charge. The wider network tariff reflects the incremental cost of power being added to the system at different geographical points.
Wider Transmission Reinforcement Works	These are transmission reinforcement works (often remote from the connection) other than the Enabling Works and which are specified in the Construction Agreement. These works are not required to be completed prior to the user's equipment being energised under a Connect and Management Arrangement.
Zonal Charging	Zonal Charging is a price set for a group of nodes. • The FCP approach used for some distribution networks uses the cost of incremental demand for a group of nodes to derive charges for use of the shared network for all customers connected to those nodes – this is a zonal charging approach. • The ICRP approach used for the transmission network calculates a charge per node, and then groups nodes which are both electricity adjacent with and have similar charges into zones, with nodal charges averaged across each zone to determine charges for customers connected in that zone.
Zone	A zone is a group of nodes (zones can be defined in many different ways).