

GLOSSARY

This Glossary is being provided as an interpretative tool to assist in understanding the context in which terms are being used in our PQP2 proposal. It is neither exclusive nor inclusive and should not be taken as a code of defined terms.

References to the 'IM determination' or 'IMs' mean the Fibre Input Methodologies Determination 2020 (consolidated 21 December 2021).

References to the 'Act' mean the Telecommunications Act 2001.

TERM	DEFINITION
ABAA	Accounting-Based Allocation Approach. Has the meaning set out in the IM determination as follows: “the accounting-based allocation approach of using cost allocators to allocate operating costs, or asset allocators to allocate asset values”.
ABC	Agree, Build, Connect. The standard process followed by most fibre installation companies in rolling out Ultra-Fast Broadband (UFB) to New Zealand. More commonly referred to as ‘Scope, Civil/Blow, Tech’. A replacement for the old ‘1 Man / 1 Job / 1 Day’ process.
ABFFP	Air Blown Fibre Flexibility Point. A pit in the ground used for our UFB network. It will contain a splitter where optical signals are split to feed each home.
AC	Alternating Current.
Access (expenditure context)	A sub-category of our Network Capacity capex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Access networks enable end-users to use the fibre network by connecting end-user sides to Chorus access sites.
Access seekers	Has the meaning set out in the Act as follows: (a) “means, in relation to a designated service or specified service, the person named or described in Part 2, or Part 3, of Schedule 1 as the access seeker for the designated service or specified service; and (b) means, in relation to a service that is supplied under a registered undertaking, a service provider who seeks access to the service and who complies with any conditions set out in the registered undertaking for eligibility as an access seeker; and (c) means, in section 155ZZD, a person who seeks access to a fibre optic cable that must be provided on an open access basis under that section; and (d) means, in relation to a fibre fixed line access service, a person who seeks access to the service from the regulated fibre service provider; and (d) means, in relation to a fibre fixed line access service, a person who seeks access to the service from the regulated fibre service provider.”
Access sites	Access sites host equipment used to connect consumers to the network. This is the most common category of our sites.
Active cabinets	A cabinet that is powered and contains cable termination and telecommunications equipment supporting the provision of voice, data and broadband services to consumers in the area served by that cabinet.

TERM	DEFINITION
ADSL	Asynchronous Digital Subscriber Line. A basic broadband service provided over our copper lines as described on our service provider website: https://sp.chorus.co.nz/product/adsl-adsl2/overview .
Aerial deployment	Fibre cable deployment method where fibre cables are attached to poles above the ground. The sheath protects the fibres so must be able to withstand wind loadings, span tension, snow loading, and be UV protected.
Aggregation (expenditure context)	A sub-category of our Network Capacity capex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Aggregation expenditure includes connecting access electronics to RSPs using Handovers at POIs.
Aggregation model	This model consolidates the outputs of all the underlying opex and capex forecast cost models so that the output presents the underlying forecast data in the required way, e.g. in regulatory expenditure categories and in regulatory (calendar) years. It also calculates the allocated FFLAS values and removes 10YP inflation. This model informs the proposal and regulatory templates. Please refer to the Modelling and Cost Allocation Report for more information on this model and its functionality.
Aggregation switches	Aggregation switches provide the hardware and software required to deliver network services from the access network onto an aggregated (shared) network. In most cases network traffic is received onto our network from a Retail Service Provider (RSP) and then directed to an access network to provide fibre access to the relevant end-user.
Agile	Agile is an iterative and incremental approach for delivery. It is a methodology for developing a product or managing work where solutions evolve through collaboration. This is done together between self-organising and cross functional teams and their customers to focus on delivering the highest value in the shortest time.
Allocated [spend]	The output of capex and opex expenditure that has had cost allocation applied (in line with IM rules) to generate expenditure related to PQ FFLAS.
Alternative sites programme	This is a multi-year programme of work to enable reduced dependency on key third-party sites. Works include the upgrade and capacity increase of key power and engineering services.
AMCL	Asset Management Consulting Limited. AMCL is an Institute of Asset Management-endorsed assessor. We engaged them to complete an asset management capability assessment and to develop a roadmap for PQP1.
Anchor services	Has the same meaning as in the Act, namely: “means a fibre fixed line access service declared in regulations made under section 227 to be an anchor service” (s 164(1)).”

TERM	DEFINITION
AR	Augmented reality.
ARMC	Audit and Risk Management Committee. Our Board sub-committee that has oversight of our risk and financial management, accounting, audit and financial reporting.
ARPU	Average Revenue Per User.
Asset management (expenditure context)	A sub-category of our Support opex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This sub-category covers activities such as strategic planning, investment management and technology operations for our fibre network and supporting IT systems, and activities such as programme management, contract management, property operations, consent acquisition, network scoping, health, safety and environment, and process optimisation.
ATA voice	Analogue Terminal Adaptor voice. ATA voice is a service that enables the delivery of PSTN-grade analogue phone and telephony service over a point-to-multipoint fibre access from the end user to the Handover Point. Its service description is available here: https://sp.chorus.co.nz/system/files/resources_files/ATA%20Voice%20Service%20Description%20August%202023.pdf
ATPU	Average Throughput Per User. This is a measure of the average data usage per connection during the network peak.
Augmentation (expenditure context)	A sub-category of our Extending the Network capex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This capex sub-category includes two types of work – new address creation within the existing footprint of the network (infill), and extension – work to extend coverage to communities outside the UFB contracts.
B4UDIG	Before you dig, which is a third party online service, enables anyone undertaking excavation works to obtain information on the location of cables, pipes and other utility assets in and around any proposed dig site, helping to protect themselves and valuable assets during these works.
Backhaul	Backhaul is the intermediary link in a telecommunications network between the access network and the core network, or within/across the core network.
Bandwidth	Bandwidth is rate at which data is transferred.
Base capex	Has the meaning set out in the IM determination as follows:

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	“Capital expenditure approved by the Commission as part of the base capex allowance and incurred by Chorus in relation to one or more base capex sub-categories”.
BBM	Building Blocks Model. The BBM is the method of calculation that forms the basis of PQ regulation, described by the Commission as the “method for calculating the revenues or profitability for a regulated firm from the sum of their actual and forecast costs for the period”.
BDD	Buried Direct Distribution System.
Bit error rate	The rate at which errors occur in a transmission system. This can be directly translated into the number of errors that occur in a string of a stated number of bits. The definition of bit error rate can be translated into a simple formula: BER = Errors/Total Number of Bits.
Bitstream	The generic term for our Layer 2 fibre access services (noting that some services include ‘Bitstream’ in their name while others do not, but this is not determinative of whether the service is a bitstream service).
Broadband	A technology enabling high speed internet access.
Brownfield	An investment scenario where existing dwellings or premises already exist. As defined in the IM determination as follows: “Existing dwellings or premises”.
BRP	Big Room Planning. A process within agile methodologies. Basically, it’s all the teams and everyone else needed coming together (in a ‘big room’) to coordinate and collaborate towards a shared understanding of how they’ll achieve outlined business goals over the next quarter (usually).
BST	Base-Step-Trend. Forecasting method which involves the selection of a starting base which is then escalated and adjusted as appropriate to derive a forecast that best reflects the expenditure requirements of the forthcoming period.
Business IT (expenditure context)	A sub-category of our IT and Support capex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This sub-category covers systems and applications across IT domains that support business activities.
BWoF	Building Warrant of Fitness.

TERM	DEFINITION
Cabinets	A cabinet is an enclosed structure containing telecommunications equipment, used for copper and/or fibre services. Chorus cabinets are often small roadside non-building structures but can vary.
Capex	<p>Capital expenditure. In the context of our proposal, we refer to capital expenditure or capex, interchangeably. Capital expenditure has the meaning set out in the IM determination as follows:</p> <p>“means costs that-</p> <p>(a) have been, or are intended to be, incurred in the acquisition or development of a core fibre asset or UFB asset that is intended to be commissioned; and</p> <p>(b) are eligible, or would be eligible, to be included in the value of commissioned asset”</p> <p>We apply NZ GAAP in determining capex.</p>
Capex per connection	Non-growth capital expenditure per connection. This presentation provides the best view of costs that are controllable and recurring in nature.
Capital contributions	<p>Has the meaning set out in the IM determination as follows:</p> <p>“means:</p> <p>(a) money or the monetary value of other considerations charged to or received in relation to the construction, acquisition or enhancement of a core fibre asset or UFB asset by a regulated provider from 1 or more of the following:</p> <ol style="list-style-type: none"> i. an access seeker; ii. an end-user; or iii. any other party; and <p>(b) includes the \$20 million fund established by Chorus for financial loss year 2013 in respect of non-standard installations; but</p> <p>(c) does not include any Crown financing”.</p>
CEO	Chief Executive Officer.
CFO	<p>Chief Financial Officer.</p> <p>Sometimes used to refer to the team, as well as the individual.</p>
CIP	Crown Infrastructure Partners (previously Crown Fibre Holdings Ltd).
CNO	<p>Customer and Network Operations.</p> <p>Chorus functional unit responsible for installations, provisioning and maintenance.</p>
Co-location	Means the provision of space and other related services (such as power) in an exchange owned or leased by an LFC toto enable RSPs to house their telecommunications equipment which may enable that RSP to access the fibre network.

TERM	DEFINITION
Commissioned	Has the meaning set out in the IM determination as follows: “Employed by the regulated provider in providing a service (whether or not the asset is also employed in providing other services)”.
Complex Installations (expenditure context)	A sub-category of our Installations capex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This capex sub- category mainly covers design and build of installations for specific business requirements.
Connection capex	Has the meaning set out in the IM determination as follows: “means capital expenditure approved by the Commerce Commission as part of the connection capex baseline allowance or the connection capex variable adjustment and directly incurred by Chorus in relation to connecting new end-user premises, building or other access points where the communal fibre network already exists or will exist at the time of connection, and includes: (a) UFB initiative brownfield connection expenditure; (b) UFB initiative greenfield and infill connection expenditure; and (c) Chorus initiated migration from copper fixed line access services to PQ FFLAS”.
Connection capex mechanism	This is the term we use to refer to the connection capex variable adjustment, which has the meaning set out in the IM determination as follows: “means the amount determined by the Commission in accordance with clause 3.7.21”.
Connection services	Installation of fibre between communal fibre network infrastructure and an end-user’s premises, building or other access point.
Constant price	Constant prices are obtained by expressing values in terms of a fixed price for a specified base period. They allow comparisons excluding any nominal changes, such as Consumer Price Index (CPI) and Real Price Effects (RPE). Please refer to the Modelling and Cost Allocation Report for more information. ‘Nominal’ prices include RPE and CPI, ‘real’ includes only RPE and ‘constant’ excludes the effects of both CPI and RPE.
Consumer	Consumer or “end-user” are used interchangeably in this proposal to refer to the businesses, homes and other organisations (such as schools, hospitals etc.) who ultimately use our services. See definition of End-user below (within the business we make a distinction between consumer and business end users but that distinction is not relevant for this proposal, except as specifically signalled.) In contrast, we use the term ‘customer’ to refer to our Retail Service Providers (RSPs) in the proposal.
Controller cards	Controller cards are installed into chassis/shelf slots in an exchange, they determine what functions can be supported.

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Core sites	Core sites concentrate traffic from multiple mesh sites. They house the large-capacity switches and the equipment for national transport. They tend to support the highest number of services and, therefore, have the highest reliability requirements.
Corporate (expenditure context)	<p>A sub-category of our IT and support capex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This sub-category covers accommodation and sundry business investment.</p> <p>It is also a sub-category of our Support opex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. It covers corporate functional units, accommodation and items such as office expenses, insurance and professional services.</p>
Cost Allocation	<p>Has the meaning set out in the IM determination as follows:</p> <p>"Allocation of FFLAS for regulated fibre service providers subject to both information disclosure regulation and price-quality regulation".</p>
CPI	<p>Consumer Price Index.</p> <p>As defined in the Act:</p> <p>"means the Consumer Price Index (all groups) published by Statistics New Zealand, or if that index ceases to be published, any measure certified by the Government Statistician as being equivalent to that index". Also defined in the IMs as:</p> <p>"means the consumer price index stipulated for each quarter in the 'All Groups Index SE9A' as published by Statistics New Zealand".</p>
CPPP	Cost Per Premise Passed.
CSA	<p>Customer Service Area.</p> <p>A geographical area used as a basis for dividing the country into areas for Service company contracts. There are 11 in total.</p>
CTO	<p>Chief Technology Officer.</p> <p>The CTO is the executive responsible for the Chorus functional unit responsible for defining, planning and executing our technology strategy, planning and ensuring network capacity and coverage, deploying new network technologies, delivering IT change and operating our technology.</p>
Customer opex (expenditure context)	One of our expenditure categories as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Customer opex includes our customer-facing people in operational roles, and in roles focussed on promoting fibre access, evolving our product suite and managing our commercial relationships with RSPs. It also includes associated external costs, including marketing spend.

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Customer incentives	Payments to RSPs usually on a per connection basis offered as an incentive to RSPs to drive new fibre connections and upgrades to higher speed connections.
Customer operations (expenditure context)	A sub-category of our Customer opex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Customer operations includes a mix of higher volume demand driven activity (such as our call centre), lower volume demand driven activity (such as coordinating complex installations and multi-unit extensions) and project work (such as our managed migrations programme).
CY	Calendar Year. E.g. CY2023 is the 12-month period from 1 January 2023 to 31 December 2023. We refer interchangeably to calendar year (CY) and regulatory year (RY) in our proposal as they mean the same thing.
DC	Direct current.
DFA	Delegated Financial Authority.
DFAS	Direct Fibre Access Service. This product is described on our service provider website: https://sp.chorus.co.nz/product/direct-fibre-dfas/overview . Where provided in PQ areas, this constitutes a regulated service (referred to as LUDFAS in regulation).
Directly buried underground [deployment]	Fibre cable deployment type where fibre cables are ploughed, trenched or drilled directly into the ground at the correct depth.
Directly attributable	Has the meaning set out in the IM determination as follows: “means - in relation to operating costs, where a cost is wholly and solely incurred in the provision of a particular service; and in relation to asset values, where an asset is wholly and solely employed by a regulated provider in the provision of a particular service”.
DP	Decision Packet. A grouping of capital expenditure with a similar outcome. DPs are aggregated to calculate expenditure categories.
DSL	Digital Subscriber Line. It is a family of communication technologies allowing high- speed data over existing copper-based access networks in the local loop. Globally, DSL copper-based access networks are

TERM	DEFINITION
	being replaced by ultra-fast fibre-based access networks in the form of Fibre to the Node (FTTN) and Fibre to the Home (FTTH).
Ducted underground [deployment]	Fibre cable deployment type where fibre cables are pulled, air blown or inserted through a duct laid in the ground. This method allows relatively easy replacement or augmentation. The outer sheath does not need to be as strong as direct buried cable as the duct provides additional protection.
DWDM	Dense Wave Division Multiplexing. DWDM is a multiplexing technology that increases the bandwidth of fibre networks by combining data signals over optical fibres but retaining separate data streams.
Easement	Has the meaning set out in the IM determination as follows: "means a right to use but not possess land belonging to another person or a right to prevent certain uses of another person's land".
EDB	Electricity Distribution Business. Also referred to as 'lines companies'.
Element management platforms	Used to manage the flow of information and user interaction with the network elements.
End-user	Has the same meaning as defined in section 5 of the Telecommunications Act 2001, namely: "in relation to a telecommunications service, means a person who is the ultimate recipient of that service or of another service whose provision is dependent on that service". We use this term interchangeably with 'consumer' within our proposal.
ESA	Exchange Service Area.
Exchange	An LFC-owned or leased building, or leased or licensed area within a building, with a floor area of at least 15 square metres (or, since UFB2, can include a cabinet) and a main distribution frame terminating copper or fibre network connected to end-user premises.
Extending the Network (expenditure context)	One of our capital expenditure categories as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Extending the Network covers work to extend communal infrastructure to new streets or developments, and to infill the network to accommodate address growth.
FAR	Fixed Asset Register.
FAT	Fibre Access Terminals.

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	Generally, a pit in the ground providing access and breakout of Chorus' cables to feed homes and businesses.
Fault	Has the meaning set out in the IM determination as follows: "For the purposes of Part 2 [Information Disclosure FFLAS]: (a) an unplanned outage in ID FFLAS; or (b) a reduction in the performance of ID FFLAS below any levels specified in an ID determination; and For the purpose of Part 3 [PQ FFLAS]: (a) an unplanned outage in PQ FFLAS; or (b) a reduction in the performance of PQ FFLAS below any levels specified in a PQ determination".
FFLAS	Fibre Fixed Line Access Services. Has the meaning set out in section 5 of the Act as: "means a telecommunications service that enables access to, and interconnection with, a regulated fibre service provider's fibre network [subject to specified exclusions]." The scope of FFLAS is further discussed in the "Scope of regulated service" section of our PQP2 Modelling and Cost Allocation Report.
FFP	Fibre Flexibility Point. FFP houses the splitter which connects the feeder fibre from the central office to the distribution fibre to the end-user premises. It may be housed in a cabinet, pit or within an MDU, among other locations.
Fibre Frontier	Fibre Frontier is the name we have given to our programme of work to extend the network beyond the current UFB footprint.
Fibre in a Day	Fibre installation that is successfully completed in a single appointment.
Field Sustain (expenditure context)	A sub-category of our Network Sustain and Enhance capex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Field Sustain covers ongoing investment in physical network assets outside of network sites, such as poles, fibre, and terminators.
Frame delay	Has the meaning set out in the IM determination as follows: "means the time taken for a data frame to transit a fibre network between points of ingress and egress".
FSA	Field Services Agreement. The contractual agreements between Chorus and our outsourced field service providers.

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FSP	Field Service Provider. Outsourced field services companies used for our build and maintenance activities. Also referred to as service companies (sercos) or partners.
FTE	Full-time equivalents. Refers to the equivalent number of employees based on an employee working a 40-hour week.
FTTH	Fibre to the Home. Also referred to as FTTP (fibre to the premises). An all-fibre local access network architecture with fibre from the local exchange to the end-user premise. This network architecture was used for the UFB build.
FTTN	Fibre to the Node. A local access network architecture with fibre from the local exchange to the active cabinet and a non-fibre connection (e.g. in Chorus' case, copper) from the cabinet to the end-user premise.
Fulfilment	The term used for our provisioning processes and channels (e.g. new product ordering, add/remove product, change of address, prequalification, feasibility etc.).
FWA	Fixed wireless access. FWA being a telecommunications service that uses wireless communication (typically radio) to provide internet access to fixed locations such as a home or business premises, without the need for physical cables at that location.
FW/Sat	Fixed wireless access and satellite services. This is used in the proposal as a shorthand to refer to competitive technologies.
FY	Financial Year. Our financial year is a 12-month period that runs from 1 July to 30 June. E.g. FY2023 means the year starting on 1 July 2022 and ending on 30 June 2023. We may refer to financial years in different formats – e.g. FY2023, FY23 and FY2022-23 all refer to the same period of time.
GAAP	Generally Accepted Accounting Practices.
Gbps	Gigabits per second. Being a unit of data transfer rate equal to one billion bits per second.
GCP	Geographically consistent pricing.

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	This is used to refer to the requirement in s201 of the Act that a regulated provider who is subject to PQ regulation must charge the same price for providing FFLAS that are in all material respects the same, regardless of the geographic location of the access seeker or end-user.
GDP	Gross domestic product.
GFAM	Global Forum on Maintenance & Asset Management.
GPON	Gigabyte Passive Optical Network. This is a fibre architecture that supports point-to-multipoint access network (i.e. services multiple users from a single optical fibre by using splitters).
Greenfields	An investment scenario where new dwellings or premises are built on undeveloped land. As defined in the IM determination as follows: "means the establishment of new dwellings or premises on previously undeveloped land".
GTIP	Good Telecommunications Industry Practice, which has the meaning set out in the IM determination as follows: "the exercise of a degree of skill, diligence, prudence, foresight and economic management, that would reasonably be expected from a skilled and experienced asset owner engaged in the management of a fibre network under comparable conditions. A decision on good telecommunications industry practice should take into account domestic and international best practice, including international standards and factors such as the relative size, age and technology of the relevant fibre network and domestic regulatory and market conditions, including applicable law."
Handovers	Handovers (also referred to as handover links) consist of a handover port on an aggregation switch, where traffic is handed over between Chorus and RSPs. A handover function always occurs in a site with a mesh or core function. The handover service is described on our service provider website: https://sp.chorus.co.nz/product/ufb-handover/overview . See also definitions of mesh sites and core sites.
HFC	Hybrid Fibre Coaxial. A network utilising fibre backhaul but copper coaxial access cable to connect to the end user.
HILP	High-Impact-Low-Probability.
Hyperfibre	Hyperfibre is the next generation of fibre technology, delivered over XGS-PON technology and currently supporting speeds of up to 10 gigabit per second (Gbps) downstream and upstream. Our Hyperfibre Home service description is available on our service provider website: https://sp.chorus.co.nz/product/hyperfibre-home/overview .

TERM	DEFINITION
I2M	Initiative to Market. An internal process through which we evaluate and approve proposals before they go to market.
IAM	Institute of Asset Management.
IAS 17	IAS 17 is the previous International Accounting Standard prescribing the appropriate accounting policies and disclosures applying to leases, prior to the introduction of IFRS 16.
ICABS	Intra-Candidate Area Backhaul Service. Dark fibre backhaul connectivity between exchanges within a UFB1 candidate area (previously offered with a lit option). , The ICABS service is described on our service provider website: https://sp.chorus.co.nz/product/intra-candidate-area-backhaul-icabs/overview .
ID	Information Disclosure. This sets out the requirements for disclosure of financial and other network-related information by regulated suppliers.
ID FFLAS	Has the meaning set out in the IM determination as follows: “means, in respect of a regulated provider, all FFLAS provided by that regulated provider that is subject to information disclosure regulation in regulations made under s 226 of the Act”.
IDC	Interest During Construction.
IFP	Integrated Fibre Plan. Has the meaning set out in the IM determination as follows: “means a collection of documents as set out in clause 3.7.7, that provides the Commission with an overview of Chorus’ capital expenditure related to the management of its fibre network and the provision of PQ FFLAS”. Our IFP include the proposal documents ‘Our Fibre Assets’ and ‘Our Fibre Plans’. When referencing ‘IFP’ documents (e.g. IFP Delivery), we mean the relevant chapter within the ‘Our Fibre Plans’ document.
IL	Importance Level. Used in the context of Building Code seismic performance.
IM	Input Methodology. Has the meaning set out in the IM determination as follows: “has the same meaning, as the case may require, as defined in s 164 of the Telecommunications Act 2001 or s 52C of the Commerce Act 1986”.

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	<p>Section 164 of the Act says:</p> <p>“means a description of any methodology, process, rule, or matter that includes any of the matters listed in section 176 and that is published by the Commission under section 180”.</p> <p>Section 52C of the Commerce Act 1986 says:</p> <p>“means a description of any methodology, process, rule, or matter that includes any of the matters listed in section 52T and that is published by the Commission under section 52W; and, in relation to particular goods or services, means any input methodology, or all input methodologies, that relate to the supply, or to suppliers, of those goods or services”.</p>
Independent verification report	<p>Has the meaning set out in the IM determination as follows:</p> <p>“means a report prepared by an independent verifier to verify the information provided with a capex proposal according to the verification requirements for that capex category”.</p> <p>Under the Terms of Reference (May 2023), the independent verification report covers all expenditure i.e. base capex, connection capex and opex (as defined in the IMs).</p> <p>See also IV, below.</p>
Infill	<p>Has the meaning set out in the IM determination as follows:</p> <p>“the establishment of new dwellings or premises within an existing suburb or developed area”.</p>
Installations (expenditure context)	<p>One of our capital expenditure categories as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. “The Installations capex category covers costs related to establishing a physical link between the communal network and an Optical Network Terminal (ONT) at an end point. It includes associated provisioning and incentive costs.</p>
Intact connections	<p>A connection at a premise where a fibre lead-in has previously been installed (separately to the connection order).</p>
IoT	<p>Internet of Things.</p> <p>The Internet of Things describes a network of devices with sensors, processing ability, software and other technologies that connect and exchange data with other devices and systems over the internet.</p>
ISP	<p>Internet Service Provider.</p> <p>Also referred to as retail service providers (RSPs).</p>
IT and Support (expenditure context)	<p>One of our capital expenditure categories as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. IT and Support covers investment in our information technology systems, plus corporate capex.</p>
ITDP	<p>IT Development Plan.</p>

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iTools	System used to manage large scale projects or complex product builds (e.g. p2p fibre products). Cloud based workflow tool used to track and manage national wide rollout of fibre.
IV	<p>Independent Verifier.</p> <p>Has the meaning set out in the IM determination as follows: “means a person who (a) is independent; and (b) has been engaged to verify part or all of Chorus’ capex proposal”.</p> <p>Under the Terms of Reference (May 2023), the Independent Verifier was tasked with verifying Chorus’ proposed expenditure against the evaluation criteria and relevant assessment factors from Section 2 of Subpart 8 of the Commission’s Fibre Input Methodologies Determination 2020, and producing a verification report covering all expenditure i.e. base capex, connection capex and opex (as defined in the IMs).</p> <p>See also independent verification report above.</p>
Late adopters	Consumers who need more convincing around the benefits of fibre and why they should migrate from the copper network to the fibre network.
Latency	The time it takes for a data packet to transit from end to end. Latency is one of the service performance indicators we monitor regularly.
Layer 0	Refers to our physical assets that support our fibre cables, such as ducts, poles, manholes and buildings. This term is used and understood by Chorus and the Commission, but is not named in the Act or part of the OSI Model.
Layer 1	<p>Has the meaning from the Act, namely: “means layer 1 of the OSI Model, which is normally associated with passive fibre optic network infrastructure” and where the OSI model “means the 7 layer model of network architecture known as the Open Systems Interconnection Model”.</p> <p>A Layer 1 service provides wholesale access to the physical/passive layer of a digital communications network, based on the Open Systems Interconnection (OSI) model of computer networking.</p>
Layer 2	<p>Has the meaning from the Act: ““means layer 2 of the OSI Model, which is normally associated with active fibre optic network infrastructure” and where the OSI model “means the 7layer model of network architecture known as the Open Systems Interconnection Model”.</p> <p>A layer two service provides wholesale access to the data link layer of the OSI model of computer networking. The service includes Ultra- Fast Broadband (UFB) bitstream services.</p>
Lead ins	A fibre cable that extends from the FTTH (fibre to the home) infrastructure and terminates in a premise. In residential areas they usually have eight or fewer fibre strands but will have a higher fibre count if they terminate in a large building with multiple drop off points.

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LEO	Low earth orbit satellite services.
LFC	Local Fibre Companies. Has the meaning set out in the Act, namely: “LFC or local fibre company means a company through which the investment of the Crown and a UFB partner in relation to a fibre optic communications network is effected, including (a) a company in which the Crown and the UFB partner hold shares; and (b) a company in which the Crown holds a financial interest pursuant to the selection of that company as a UFB partner”.
Line card	Electronic interface that connects the access network to inside plant equipment.
Loose tube	Type of fibre cable construction where several fibre strands are housed inside a support tube. One or more tubes make up a cable.
Maintenance (expenditure context)	A sub-category of our Network opex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Network maintenance covers reactive (work to address an issue identified through a fault, alarm or inspection); recoverable (work for which we can recover all or part of the cost from another party); and preventative (routine inspection works, including testing and survey).
Managed migrations	Managed migrations is a Chorus programme to encourage migration to fibre from copper.
MAR	Maximum Allowable Revenue. Has the meaning from the IM main final decisions reasons paper 13 October 2020: “when applied under PQ regulation, the maximum allowable revenue based on, among other things, the PQ RAB [regulated asset base], will apply an overall limit on certain prices that end-users are charged and will thereby facilitate the reflection of the cost of those assets in the prices set”.
MBIE	Ministry of Business, Innovation and Employment.
MDU	Multi, or Multiple Dwelling Unit. It is a building with multiple dwellings, business or residential. Includes semi-detached apartments, town houses, gated communities and assisted-living facilities that share a common property boundary.
Mesh sites	Mesh sites concentrate traffic from several access sites. As good practice mesh sites are limited to serving up to 50,000 access end-user connections. A mesh site can also be an access site and may also be a POI.

TERM	DEFINITION
Metaverse	The metaverse is the emerging 3D-enabled digital space that uses virtual reality, augmented reality and other advanced internet and semiconductor technology to allow people to have lifelike experiences online.
MiU	Mix it Up incentives package.
MNO	Mobile Network Operator.
MTBF	Mean Time Between Failures.
Narrative categories	In our proposal, we introduce narrative categories that we use to explain how we have built up our forecasts. These narrative categories are the same as the expenditure categories set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. The categories are also unchanged from those presented in our PQP1 proposal, as set out in the attachments to the Commission's Information Request dated 18 November 2020.
NBS [e.g. IL3]	New Building Standard. The rating given to a building as a whole to indicate its seismic standard.
NBV	Net Book Value.
NetMAP	Network Management of Assets and Plant. NetMAP is a Geographic Information System (GIS) based on GE Smallworld's Physical Network Inventory (PNI) product. It is used to plan, design, record, analyse and provision our network. It contains a complete topological model of Chorus' fibre, copper and duct network.
Network opex (expenditure context)	One of our expenditure categories as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Network opex covers outsourced physical network maintenance activities, physical network operating costs (such as power and leases) and outsourced costs of our network and security operating centres.
Network and Customer IT (expenditure context)	A sub-category of our IT and Support capex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This sub-category covers systems and platforms across IT domains that support network or customer activities. There are three classes of investment (product development; customer experience and optimisation; lifecycle and compliance).
Network Capacity (expenditure context)	One of our capital expenditure categories as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Network Capacity covers ongoing investment in network electronics and associated systems to optimise for capacity growth and lifecycle requirements.

TERM	DEFINITION
Network electronic assets	Assets used to deliver fibre access services. They enable individual connections, aggregate and distribute data between end-users and RSPs networks at POIs.
Network Operations (expenditure context)	A sub-category of our Network opex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This expenditure sub- category includes our outsourced Network Operations Centre (NOC) and associated support resources. See also definition of NOC below.
Network Sustain and Enhance (expenditure context)	One of our capital expenditure categories as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Network Sustain and Enhance covers investment in our physical network assets. We reinvest in the physical assets as needed to cost-effectively sustain or enhance their performance, manage risk or satisfy compliance requirements.
New Property Development (expenditure context)	A sub-category of our Extending the Network capex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. New Property Development covers work with developers to build communal fibre into new developments, such as residential subdivisions and office parks.
NGA	Next Generation Access. Chorus' next generation of products. This is a general term for the fibre products.
NIPA	Network Infrastructure Project Agreement. The contracts for the UFB build between Chorus and Crown Fibre Holdings Limited (now CIP). There are two NIPA agreements.
NOC	Network Operating Centre. The NOC is an outsourced centre which manages network electronics alarms, provides technical support and configuration services, and provides network electronics equipment repair and return.
Nominal Cost	Cost including historical or forecast rates of inflation. This includes both CPI and Real Price Effects (RPE). Please refer to the Modelling and Cost Allocation Report for more information. 'Nominal' prices include RPE and the consumer price index (CPI), 'real' includes only RPE and 'constant' excludes the effects of both CPI and RPE.
NZ GAAP	New Zealand Generally Accepted Accounting Practices.
NZIER	New Zealand Institute of Economic Research.

TERM	DEFINITION
NZ IFRS 15	NZ IFRS 15 Revenue from Contracts with Customers is the International Financial Reporting Standard, as applied in New Zealand, that establishes the principles that an entity applies when reporting information about the nature, amount, timing and uncertainty of revenue and cash flows from a contract with a customer.
NZ IFRS 16	NZ IFRS 16 Leases is the International Financial Reporting Standard, as applied in New Zealand, prescribing the appropriate accounting policies and disclosures applying to leases. It replaces the previous IAS 17 standard.
NZTA	Waka Kotahi, the New Zealand Transport Agency.
NZX	New Zealand Stock Exchange.
OFDF	Optical Fibre Distribution Frame. An optical fibre distribution frame installed in an MDU or End-User premises used to terminate the fibre lead-in.
OHUG	Overhead to Underground. A programme of work of removing fibre network infrastructure from above-ground poles and undergrounding it, contemporaneously with lines company removal of poles used for electricity distribution.
OLT	Optical Line Terminal. A device located at the central office or exchange that connects the fibre network to the end user premises to enable the delivery of UFB services.
ONT	Optical Network Terminal (or Termination). A device used as the interface between the fibre cable from the network and the end user premises, allowing end users to be connected to fibre.
Operating Costs (expenditure context)	A sub-category of our Network opex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. It includes leases, electricity, security operations and fire protection and building compliance costs. Operating costs also has the general meaning of operating expenditure or opex.
Opex	Operating expenditure. In the context of our proposal, we refer to operating expenditure or opex, interchangeably. Operating expenditure has the meaning set out in the IM determination as follows: "means: (a) in respect of subparts 7 and 8 of Part 3, the value of operating costs attributable to PQ FFLAS supplied by Chorus which are incurred in a regulatory period, and

TERM	DEFINITION
	<p>(b) in all other instances, the value of operating costs attributable to PQ FFLAS supplied by a regulated provider which are incurred in a regulatory period.”</p> <p>We apply NZ GAAP in determining opex.</p>
Opex per connection	Operating expenditure per connection, excluding forecast pass-through costs, but including lease costs. This presentation provides the best view of costs that are controllable and annual in nature.
P2P	<p>Point to Point.</p> <p>A dedicated fibre that runs from an exchange or central office to a single end user’s premises. The P2P services include Business Premium (BS4), DFAS and BFAS.</p>
PAMPs	<p>Portfolio Asset Management Plans.</p> <p>These plans describe our physical assets, population and condition, risks and investment plans.</p>
Passive cabinets	A cabinet that only contains equipment that does not require power (typically cable termination and a jumpering frame).
Pass-through cost	Has the meaning set out in the IM determination, clause 3.1.2, including local authority rates, telecommunications levies, dispute resolution scheme membership fees.
PBF	<p>Pre-built fibre.</p> <p>This is fibre we provide in conjunction with a new property development where the property developer requests the houses in its subdivision have installations established as part of the build.</p>
POI	<p>Point of Interconnect.</p> <p>A site where Chorus provides Handovers to enable RSPs to connect their own network to Chorus’ fibre services. RSPs may locate equipment at a POI to directly connect to Handovers or use additional connectivity to equipment in other sites.</p>
PON	<p>Passive Optical Network.</p> <p>A fibre network architecture consisting of optical fibres spliced end-to-end that can be shared between end users via a splitter.</p>
Port	An endpoint (physical or virtual) in a network device for any given link.
PPCC	<p>People, Performance and Culture Committee.</p> <p>Our Board committee that oversees people, culture and related policies and strategies.</p>

TERM	DEFINITION
PQ	Price-quality.
PQ FFLAS	Price quality fibre fixed line access service. As defined in the IMs: “means, in respect of a regulated provider, all FFLAS provided by that regulated provider that is subject to price-quality regulation in regulations made under section 226 of the Act”.
PQP	Price-quality period.
PQP1	As per the information request from the Commission dated 20 November 2020: “PQP1 has the meaning of ‘first regulatory period’ in the IM Determination”. We used this term interchangeably with ‘RP1’ for our PQP1 proposal. It covers the 3-year period from 1 January 2022 to 31 December 2024.
PQP2	PQP2 is the second regulatory period, determined by the Commission on 28 February 2023 as the 4-year period from 1 January 2025 to 31 December 2028.
PQP3	The duration of PQP3 has yet to be determined. It is the third regulatory period and will commence on 1 January 2029.
Premises passed	Premises that have been passed with communal infrastructure (and, where the context requires, includes layer two communal infrastructure) and indicates the availability of fibre access services via connection to the premises in that area, as used in UFB build.
Price-quality (PQ) determination	As defined in the IMs: “means a price-quality determination made under s 170 of the Act in respect of a regulatory period”. The PQ determination for PQP1 was the Fibre Price-Quality Path Determination 2021 [2021] NZCC 27 (16 December 2021). The PQ Determination for PQP2 has yet to have been set.
Provisioning	Has the meaning set out in the IM determination as follows: “means: a) for the purpose of Part 2, the process by which a regulated provider installs, activates, changes (including bulk migrations from one type of ID FFLAS to another) and disconnects ID FFLAS; and b) for the purpose of Part 3, the process by which a regulated provider installs, activates, changes (including bulk migrations from one type of PQ FFLAS to another) and disconnects PQ FFLAS”.
PSM	Product, Sales and Marketing. The Chorus functional unit responsible for innovation and marketing. It is also a sub-category of our Customer opex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act

TERM	DEFINITION
	2001, dated 28 February 2023. It is directed at attracting and retaining end-users and managing RSP relationships.
QBR	Quarterly Business Review. Part of the Chorus governance processes, explained further in our Governance chapter of Our Fibre Plans.
RAB	Regulated Asset Base. It has the meaning set out in the IM determination as follows: “means, in respect of a regulated provider, all fibre assets that are employed by that regulated provider in the provision of [ID/PQ/ ID-only] FFLAS”. The IM main final decisions reasons paper 13 October 2020 also states: “Under the BBM, we calculate the value of the network (the collection of assets) that is used to supply the regulated services; this forms the regulated provider’s regulatory asset base [RAB]”.
RBI	Rural Broadband Initiative. The Government-led initiative to deliver access to faster broadband to rural areas of New Zealand as further described on the CIP website: https://www.crowninfrastructure.govt.nz/rural/rural-broadband-initiative-phase-two-rbi/ .
Real prices	Costs that have been adjusted to exclude historical and forecast rates of real price effects (RPE), enabling comparison of prices across time periods. Please refer to the Modelling and Cost Allocation Report for more information. ‘Nominal’ prices include RPE and the consumer price index (CPI), ‘real’ includes only RPE and ‘constant’ excludes the effects of both CPI and RPE.
Regulatory template RT01	Regulatory template for forecast expenditure with specifications as set out in Attachment C to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Also shows the breakdown of total capex into connection and base capex amounts for each year.
Regulatory template RT02	Regulatory template for cost escalation with as set out in Attachment C to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This template steps through foreign exchange, inflation and other real price effects.
Regulatory template RT03	Regulatory template for cost allocations with specifications as set out in Attachment C to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This template shows cost allocators and allocation rates.
Regulatory template RT04	Regulatory template for connections capex and adjustment with specifications as set out in Attachment C to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. It sets out forecast connection volumes and unit costs by year for each year and for each connection cost group.

TERM	DEFINITION
Relocations (expenditure context)	A sub-category of our Network Sustain and Enhance capex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Relocation of network assets arising from roading authority work programmes; undergrounding (over-head to under-ground (OHUG) programmes) and third-party requests.
Remote Users Group	In November 2022, the Government launched the Remote Users Scheme as a new initiative aiming to equip as many rural and remote New Zealanders as possible with the digital connectivity infrastructure needed to access broadband services where they live. More information can be found here: https://www.mbie.govt.nz/about/news/government-launches-new-connectivity-initiative-for-those-living-in-rural-and-remote-areas/ .
Resilience (expenditure context)	A sub-category of our Network Sustain and Enhance capex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Resilience is our ability to keep the network running through adverse events (diversity, robustness or contingency).
ROW	Right of Way.
RP1	Regulatory Period 1. The first regulatory period has the meaning set out in the IM determination as follows: “the regulatory period that starts on the implementation date [1 January 2022] and lasts for a period of 3 years”. Refer also to PQP1.
RPE	Real Price Effects.
RSP	Retail Service Provider. A business/organisation that retails telecommunications services to end users (itself or via a reseller).
Rural Connectivity Group	The Rural Connectivity Group is Joint venture between One, Spark and 2degrees to bring 4G mobile and wireless broadband coverage to rural New Zealand under the Rural Broadband Initiative 2 and the Mobile Black Spot fund. Further details are available on the Rural Connectivity Group website: https://www.thercg.co.nz/ .
RY	Regulatory Year. Has the meaning set out in the IM determination as follows: “means a 12-month period ending on 31 December, where if the term “regulatory year” is combined with a year, the 12-month period ending on 31 December of that year (for example, “regulatory year 2023” [or RY2023] means the 12-month period ending on 31 December 2023. We refer to RY and Calendar year, CY interchangeably.

TERM	DEFINITION
SaaS	Software as a Service.
SAMP	Strategic Asset Management Plan.
SFA	Specified Fibre Area. It has the definition from the Act, namely: “an area that has been declared by the Commission, under section 69AB, to be a specified fibre area”.
SDU	Single Dwelling Unit. A premise containing within its boundaries a single residential or commercial occupant.
Site Sustain (expenditure context)	A sub-category of our Network Sustain and Enhance capex category as set out in Attachment B to the Commission’s Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This capex sub-category of expenditure covers ongoing investment in our network buildings and their power, cooling and management services.
SLA	Service Level Agreement. A feature of our contractual arrangements that sets out the levels of service we must meet and the consequences if those levels are not met.
Slotted core	Type of fibre cable construction. These are the older cables that have a central strength member and a support form with cavities or slots that carry a group of fibres.
Smart locations	A “Smart Location” (also known as an NBAP, a non-building access point) is an asset that is or can be provided with fibre access services and often does not have a physical address (e.g. the location is a digital billboard, CCTV or lamp post), or if it does have an address, it is not a premise (e.g. a pumping station).
SMS	Spares Management System.
SOC	Security Operations Centre. Provides the security and fire services for our network buildings.
SOW	Statement of Work.
Splitters	A splitter is a passive optical component that splits an incoming optical signal from a single fibre optic cable into multiple signals, each of which then goes to an individual end point. The splitter allows a single fibre to be shared among multiple end users or network connections.

TERM	DEFINITION
Standard Installations (expenditure context)	A sub-category of our Installations capex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. The capex category of Standard installations covers most install work, and associated investment in incentives.
Submarine [deployment]	Fibre cable deployment type where fibre cables are laid underwater on the seabed. The cable must have a strong outer sheath to protect the fibres.
Support opex	One of our expenditure categories as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. Support opex includes expenditure on asset management and corporate functions, and operating costs for IT systems.
TCF	New Zealand Telecommunications Forum. An industry organisation whose members represent the majority of telecommunications providers in New Zealand. Further details are provided on the TCF website: https://www.tcf.org.nz/consumers/ .
Tbps	Terabits Per Second. Tbps is a unit of data transfer rate that represents one trillion bits transmitted per second. 1 Tbps equals 1,000 Gbps.
TDL	Telecommunication Development Levy. As determined under sections 80 – 92 of the Act.
Technology (expenditure context)	A sub-category of our Support opex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. This sub-category covers the non-capitalised costs of operating our business IT and network and customer IT systems – including licenses, support and maintenance.
TICSA	Telecommunications (Interception Capability and Security) Act 2013
Totex	Total expenditure. We use this term to refer to the sum of capex and opex.
Transport (expenditure context)	It is a sub-category of our Network Capacity capex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023.
Transport assets	Transport assets are a type of network electronics used in conjunction with Access and Aggregation electronics to provide increased capacity over long distances.

TERM	DEFINITION
Transport services	Layer 1 or managed throughput fibre services provided over the fibre network, to transport voice and data traffic between central offices.
Truck roll	The dispatch of a technician to construct or repair the network.
TUANZ	Telecommunications Users Association of New Zealand. An industry body with telecommunications users as members (ISP's, RSP's, education institutes and some business/organisations) who aim to steer industry engagement and regulation etc. Further details are provided on its website: https://tuanz.org.nz/ .
UFB	Ultra-Fast Broadband. The ultra-fast broadband project enabling fibre to the home rolled out under the UFB Initiative with Crown investment funding. Includes the extension to that programme known as UFB2 and 2+.
UFB2/2+	Extension to the original UFB contract as set out in the second NIPA agreement with CIP entered into on 26 January 2017.
UFB Communal (expenditure context)	A sub-category of our Extending the Network capex category as set out in Attachment B to the Commission's Notice to supply information under section 221 of the Telecommunications Act 2001, dated 28 February 2023. UFB Communal covers our contracted commitments with the government under the ultra-fast broadband programme.
UFB communal network	UFB communal network is the fibre network infrastructure built under our UFB build commitment ,including cabinets and/or fibre cross connection points, distribution fibre running along each street past premises, and feeder fibre running from a central offices to a cabinet/fibre cross connection point, where such infrastructure is not located on end-user premises.
Unallocated [spend]	Expenditure before cost allocation has been applied. This includes both FFLAS and non-FFLAS.
Unbundled	The practice of providing (including through regulation) competing RSPs with the opportunity to access the physical telecommunications infrastructure at Layer 1 to enable them to compete with the network owner (the LFC) to offer Layer 2 services.
UPS	Uninterruptible Power Supplies.
VCA	Value of Commissioned Assets. Has the meaning set out in the IM determination: (d) means the value determined, for the Purpose of Part 3, in accordance with clause 3.3.1(2) and 3.3.1(7).

TERM	DEFINITION
	This is the cost, as at the commissioning date, incurred by Chorus under GAAP in constructing or acquiring an asset.
VDSL	Very High-Speed Digital Subscriber Line. Also referred to as 'very-high-bitrate digital subscriber line', it is a digital subscriber line (DSL) technology providing faster data transmission than ADSL over a single flat untwisted or twisted pair of copper wires (up to 52 Mbit/s downstream and 16 Mbit/s upstream).
Voice services	Services that enable the delivery of telephony and low speed data services over a fibre or copper network (including, but not limited to, anchor services, baseband, ¹ ATA voice).
VOLS	Value of Lost Service.
VR	Virtual reality. A simulated experience that employs pose tracking and 3D near-eye displays to give the user an immersive feel of a virtual world.
WIP	Work In Progress.
XGS-PON	XGS-PON stands for 10 Gigabit per second Passive Optical Network, and is a high speed broadband technology that can support up to 10 Gbps symmetrical data transfer. XGS-PON is used in providing our Hyperfibre services.

¹ We note that there is no additional fibre baseband service. Our fibre voice only service is the ATA voice service.