Telecom Corporation of New Zealand Limited

Overview of the Asset Allocation Plan

Section 37 Telecommunications (TSO, Broadband and Other Matters) Amendment Act 2011

29 November 2011



Table of contents

Section	One Introduction	5
A.	Foreword	5
В.	Statutory Foundation for the Asset Allocation Plan	6
C.	Background	7
	Operational Separation	7
	Ultra-Fast Broadband (UFB)	7
	Structural Separation	8
D.	Reporting Entities	10
	New Chorus	10
	New Telecom	10
E.	Asset Split and Arrangements between the Two Entities	12
	Ongoing Transition	13
	Summary of PP&E and Intangible Asset Split	13
F.	Client Confidential Information (CCI)/Confidential Information (CI)	15
	Information Sharing Rules in Separation Undertakings	15
	Data Compliance	15
	Proposed Approach to Data Compliance Post Separation	15
G.	Definition of Terms	16
Section	Two Basis of Compilation	18
A.	Overview	18
В.	PP&E and Intangible Assets	19
C.	Other Assets	20
D.	Liabilities	21
	Debt Related Liabilities and Derivatives	21
	Other Liabilities	21
E.	Off Balance Sheet Items	21
F.	Sharing Arrangements	22
Section	Three PP&E and Intangible Assets	23
A.	Overview	2 3
	Process	24
В.	Property, Plant and Equipment	2 9
	Telecommunications Equipment and Plant	
	Other Telecommunications Equipment and Plant Assets	
	Land	
	Buildings	61

		Other Assets	63
	C.	Intangible Assets	67
		Software	67
		Other Intangibles	69
		Goodwill	71
Secti	on I	Four Other Assets	72
	A.	Cash	72
	В.	Receivables and Prepayments	73
		Accounts Receivable	73
		Finance Lease Receivables	73
		Prepayments and Other Receivables	74
		Inter-company Accounts Receivable	7 5
		Inter-company Funding Short-term	7 5
	C.	Inventories	76
	D.	Long-term Investments	77
		Shares in Hutchinson	77
		Shares in Other Listed Companies	77
		Shares in Unlisted Companies	78
		Investment in Government Stock	78
		Investment in Associates	79
	E.	Long-term Receivables	80
		Finance Lease Receivable	80
		Other Receivables	80
Secti	on I	Five Debt Related Liabilities and Derivatives	81
	A.	Long-term Debt	81
		European Medium Term Notes (EMTNs)	81
		Telebonds	81
	В.	Derivatives	81
		Forward Exchange Contracts and Options	82
		Cross-Currency Interest Rate Swaps	82
Secti	on S	Six Other Liabilities	84
	A.	Accounts Payable and Accruals	84
		Trade Accounts Payable	84
		Accrued Personnel Costs	84
		Revenue Billed in Advance	84
		Accrued Interest	85
		Other Accrued Expenses	85

I	В.	Taxation	86
		Taxation Payable	86
		Deferred Tax	86
(С.	Provisions	87
Section	on S	Seven Off Balance Sheet Items	88
,	۹.	Commitments	88
		Operating Leases	88
		Capital Commitments	88
ı	В.	Contingent Assets	89
		Insurance Receivable Arising from Earthquake Claims	89
(C.	Contingent Liabilities	90
		Lawsuits and Other Claims	90
ı	D.	Intellectual Property	91
Section	on E	Eight Sharing Arrangements	92
,	۷.	Services Agreements for Products/Services which New Chorus will Supply to RSPs	94
ı	В.	Agreement for Provision of Agency Services	96
(С.	Gen-i Business Agreement	99
ſ	D.	Shared System Agreement	100
-	E. Tele	New Chorus and New Telecom Owned Network Assets Used By Both New Chorus and ecom	
		Property (Co-location Licence and Master Lease)	102
		Network Electronics Sharing Agreement	103
		Fibre Repair Agreement	104
ı	F.	Transitional Services Agreement	105
(G.	Fibre Capacity Agreement	107
Section	on I	Nine Telecom Dictionary	108
Appe	ndi	ix A: v0-type Definitions	113

A. Foreword

Section One Introduction

A. Foreword

- In order to implement structural separation, Telecom is required to produce a range of different documents that provide an account of how the separation will occur. It is important to be aware that each document will have its own emphasis depending on the purpose that it is used for.
- Telecom has prepared the Asset Allocation Plan for regulatory purposes; more specifically to meet structural separation obligations under the Telecommunications (TSO, Broadband, and Other Matters) Amendment Act 2011 (Amendment Act). The Asset Allocation Plan will provide transparency on the structural separation of Telecom.
- The Asset Allocation Plan has been drafted with this context in mind. At a high level, what this means in practice is that aspects of the division of assets and the post-separation contractual arrangements related to the demerger that are likely to be material to markets and competition may be emphasised in this document relative to others. Matters of a purely financial nature may be deemphasised relative to some other documentation; for example the commercial documentation pertaining to the demerger.
- After approval of the Asset Allocation Plan by the Minister section 37 of the Amendment Act requires that Telecom makes an overview of the Asset Allocation Plan publicly available as soon as practicable but no later than separation day. This overview of the Asset Allocation Plan is based on the Asset Allocation Plan but, as permitted under the Amendment Act, confidential commercial information has been removed.
- Telecom must, on the day before separation day, make changes to the Asset Allocation Plan in order to update it to take account of assets acquired, and liabilities incurred, since the date on which that plan was submitted or approved; and any trivial differences between the plan as approved and the demerger arrangement and notify the Minister in writing of those changes. The publicly available overview must also be updated to take account of that information, which this version of the overview of the Asset Allocation Plan does.

B. Statutory Foundation for the Asset Allocation Plan

- The Asset Allocation Plan has been prepared in order to meet Telecom's obligations under section 32 of the Amendment Act and covers all assets and liabilities owned by Telecom Corporation of New Zealand prior to the demerger. Telecom considers that the Asset Allocation Plan complies with the requirements of that Act.
- Section 32(1) of the Amendment Act requires Telecom to prepare an allocation plan and submit it to the Minister and the Commerce Commission (Commission) not later than 40 working days after the date on which the section comes into force.
- Section 32(3) of the Amendment Act requires that the Asset Allocation Plan prepared must:
 - a) specify how assets and liabilities of Telecom as at 5 working days before the plan is submitted are intended to be allocated between Telecom and Chorus (which obligation may be met by specifying categories of assets and liabilities, rather than every individual asset and liability, if the categorisation is reasonable and enables the Minister to understand where the assets and liabilities will be held after separation day); and
 - b) specify how each asset, or category of assets, will be used to provide telecommunications services to the market; and
 - c) specify the key terms of all intended material sharing arrangements.
- What is "material" must be determined having regard to the degree of importance of the matter, in terms of its likely impact on, and likely consequences for, the provision of telecommunications services to the market, as required by section 32(4).
- After approval by the Minister section 37 of the Amendment Act requires that Telecom makes an overview of the Asset Allocation Plan publicly available as soon as practicable but no later than separation day. The overview must provide sufficient information about the intended allocation of assets and liabilities and sharing arrangements to enable a reasonable person to understand the material aspects of the Asset Allocation Plan but does not require the disclosure of any confidential commercial information.
- Telecom may, by notice in writing to the Minister, make changes to the Asset Allocation Plan to update it at any time prior to approval by the Minister. On the day before separation day Telecom must update the Asset Allocation Plan to take account of assets acquired, and liabilities incurred, since the date on which that plan was submitted or approved; and any trivial differences between the plan as approved and the demerger arrangement and notify the Minister in writing of those changes. The publicly available overview will similarly be updated. Section 39 of the Act requires that the demerger be effected in accordance with, and give full effect to, the approved Asset Allocation Plan.

C. Background

Telecom Corporation of New Zealand Limited was established on 24 February 1987 as a company with limited liability. It is incorporated under the Companies Act 1993, and is domiciled in New Zealand. Telecom is the largest telecommunications service provider in New Zealand, offering a comprehensive range of products and services to consumer and business customers. In 2004, Telecom acquired IT service companies Gen-i and Computerland to extend its IT services capabilities. Gen-i and Computerland were integrated into Telecom in late 2005 and now jointly comprise a business division offering information, communication and technology (ICT) services under the Gen-i brand.

Telecom's underlying product offerings are founded upon the provision to customers of connectivity for local access, calling, broadband and data services on both Telecom's PSTN fixed line network, as well as Telecom's mobile networks. These are supported by other offerings, including the provision of converged ICT solutions by Telecom's Gen-i operations.

Operational Separation

The introduction of the Undertakings in 2008 created a significant change in Telecom's regulatory environment. The comprehensive set of Undertakings on operational separation was introduced on 31 March 2008 and represents a set of legally binding obligations. The Undertakings apply to 'relevant services', which are defined by reference to fixed network access services and wholesale fixed services.

On 1 July 2008 the operational separation of Telecom was enacted. The Telecom Separation Undertakings (Separation Undertakings) required that a fixed network business unit (Access Network Services), wholesale business unit and retail business unit be established. The Access Network Services unit was subsequently branded as Chorus. Chorus is required to operate on a stand-alone and arm's length basis from the rest of Telecom.

Chorus is the operationally separate business unit managing Telecom's local access network in New Zealand. Chorus is responsible for network access through local loop unbundling, subloop unbundling and co-location, Telecom's fibre to the node (FTTN) programme and the general field services and maintenance activities for Telecom's networks.

Ultra-Fast Broadband (UFB)

- On 31 March 2009, the Government announced a draft proposal for comment relating to its UFB Initiative. The Government's goal is to accelerate the rollout of UFB to 75% of New Zealanders, concentrating in the first six years on priority broadband users such as businesses, schools and health services, as well as greenfield developments and certain tranches of residential areas. The Government proposes to support this with Government investment alongside additional private sector investment and open-access infrastructure.
- In September 2009 the Minister announced the final design of the Government's UFB Initiative. This included a competitive partner selection process directed to provide an open access, passive fibre network infrastructure.

C. Background

- The Government established Crown Fibre Holdings (CFH) Limited as the vehicle for investing the Government's NZ\$1.35 billion of available investment. The Government's intention was for CFH to establish, with private sector partners, a local fibre company in each of the 33 regions to deploy fibre network infrastructure and provide access to dark fibre products and, optionally, certain wholesale services. Local fibre companies will be required to be open networks facilitating access to their infrastructure on a non-discriminatory or equivalent basis to all users and cannot be controlled by any party which also operates as a telecommunications retailer.
- On 24 May 2011, the Government announced that Chorus was chosen as the Crown's UFB partner in 24 out of the 33 regions, which represents around 70% of the UFB coverage area. The separation of Telecom's retail business (New Telecom) from its wholesale / infrastructure business (New Chorus) is a prerequisite for Telecom to participate in the New Zealand Government's UFB Initiative.

Structural Separation

- Telecom, the ultimate holding company of the Telecom Group, proposes to separate into two listed companies, New Telecom and New Chorus via a demerger process before the end of the year. New Telecom which will provide fixed line, mobile and ICT products and services and New Chorus which will provide fixed access and aggregation services in New Zealand and be an integral part of the New Zealand Government's UFB and Rural Broadband Initiatives.
- After the demerger New Telecom will no longer own the local access network. New Telecom will build and deliver services to end users using the New Chorus network, just like other Retail Service Providers (RSP).
- New Chorus will be a new company established to be the nationwide access network owner and will be permanently separated from Telecom's current retail and other businesses through a demerger. The residual Telecom business is New Telecom. New Chorus will be regulated within the context of UFB and other policy objectives. A summary of the UFB arrangement with CFH can be found at:

http://phx.corporate-

ir.net/External.File?item=UGFyZW50SUQ9OTUxNDZ8Q2hpbGRJRD0tMXxUeXBIPTM=&t=1

- New Telecom will be a national RSP, no longer vertically integrated with the essential bottleneck assets. New Telecom will be like any other RSP (with the exception of any ring fenced and transitional arrangements that are agreed) and will compete on a level playing field.
- Shareholders will need to approve a demerger and Telecom needs to ensure that there are two sustainable businesses operating in a fit for purpose regulatory environment.
- The demerger is a permanent, substantial and costly undertaking. Unique and significant costs (including tax costs) arise from the demerger which will need to be mitigated to ensure that the demerger makes sense commercially and that it will be approved by Telecom's shareholders and by or on behalf of Telecom's bondholders. Some of the costs of the demerger have been mitigated through legislation. Without amendments to other statutes, structural separation would be prohibitively expensive and would have effectively constrained Telecom from demerging. The legislative changes have ensured that Telecom is not unduly penalised for separation and is able to participate in UFB and in order to ensure that both

Section One Introduction

C. Background

New Chorus and New Telecom have equivalent rights to those Telecom held pre-demerger.

- The infrastructure investment upgrade for fibre to the premise (FTTP) is extensive and is governed by the UFB contracts with CFH comprising both Government investment and private investment.
- The demerger of Telecom will broadly involve the following steps:
 - (a) Establishing New Chorus as a standalone company, initially as a wholly owned subsidiary of Telecom (this was done on 1 July 2011);
 - (b) Transferring network and other assets from existing Telecom companies to New Chorus (this will include a mechanism to ensure current Chorus business unit (BU) customers become New Chorus customers);
 - (c) Allocating other rights, obligations and liabilities (including debt), between the two companies (including documenting arrangements between them on arms' length terms) and separating IT and other systems currently shared between Telecom's divisions; and
 - (d) Structurally separating the two companies by distributing Telecom's shares in New Chorus to Telecom's shareholders so that Telecom itself no longer holds any shares in New Chorus.
- The demerger of Telecom will be implemented pursuant to the High Court-approved scheme of arrangement process set out in the Companies Act. That process will facilitate the approval of the proposed allocation of assets and liabilities between New Telecom and New Chorus.

D. Reporting Entities

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New Chorus

- New Chorus will be established as a separately listed company from separation date with a separate Board of Directors.
- New Chorus will be the nationwide provider of fixed line access telecommunications infrastructure throughout New Zealand and an integral part of the New Zealand Government's UFB and Rural Broadband Initiatives, over the next ten years.
- New Chorus will offer services to RSPs on an open access basis to allow them to build and deliver innovative services to New Zealand end-users. The nationwide fixed line access network is the local access and regional transport network that connects service providers to end customers.
- The products and services New Chorus will provide are the voice capable last mile connection, packet-based bit-stream access and backhaul to a Point of Interconnection (POI) in a UFB Candidate area. On 15 July 2011 Chorus released service descriptions and other related documents for the key UFB products. See Chorus's website: http://www.chorus.co.nz/f878,62106/Product_Summary_July_2011.pdf
- New Chorus customers comprise RSPs who require access inputs to create end-to-end services.
- New Chorus's key assets include:
 - (a) Local access fibre, copper and physical infrastructure and buildings throughout NZ;
 - (b) Local access electronics and aggregation; and
 - (c) Operating Support Systems (OSS)/ Business Support Systems (BSS) for managing wholesale service provider customers.
- As New Chorus is a new entity with no history, New Chorus's opening balance sheet will reflect that absence of history.

New Telecom

- New Telecom will continue as a listed company from separation date, initially showing the New Chorus business which has been separated as a discontinued operation.
- New Telecom will be a retail-focused telecommunications business selling fixed line, mobile and ICT products and services. It will also provide some other non-regulated services to the industry, such as national backhaul and certain commercial wholesale services. Its customers comprise end-user customers with some wholesale customers.
- Telecom has an international presence. AAPT is an Australian telecommunications provider that owns and operates its own national voice and data network. The international BU provides international telecommunication services to both Telecom and other service providers. Global customers are provided services through points of presence in North America, Europe and Asia. International also manages internet carriage to New Zealand and Australia, over the Southern Cross cable, to a range of peering networks in the United States of America. Any assets supporting Telecom's activities outside of New Zealand will be allocated to New Telecom. The

Section One Introduction

D. Reporting Entities

detailed allocations in the following sections relate to Telecom's New Zealand assets.

- Upon demerger, New Telecom will not own local access fixed networks in New Zealand and will build and deliver services to end users using the New Chorus network, just like other RSPs. Equivalent ownership restrictions to those embodied in Telecom's Kiwi Share will apply to New Chorus, with New Telecom not being subject to any such ownership restrictions from the separation date forward.
- New Telecom's key assets include:
 - (a) Service platforms for voice and data applications;
 - (b) Mobile network;
 - (c) The necessary national network, physical sites to accommodate service platforms and connect together to provide end to end services;
 - (d) OSS/BSS for managing and provisioning end to end services; and
 - (e) Sales/distribution channels and brand.

E. Asset Split and Arrangements between the Two Entities

E. Asset Split and Arrangements between the Two Entities

In October 2010 Telecom publicly outlined at a high level an indicative split of assets, transition of services and that dealings between the two entities would be at arm's length. See Telecom's website:

http://phx.corporate-

ir.net/External.File?item=UGFyZW50SUQ9NjU2Nzl8Q2hpbGRJRD0tMXxUeXBIPTM=&t=1.

The split of assets in this Asset Allocation Plan is broadly in line with that publicly outlined high level indicative split. The industry also participated in the MED's consultation process on the regulatory implications of structural separation around that time.

- Today's Wholesale services (both commercial and regulated) will continue to be provided to industry but will be split between New Chorus's and New Telecom's wholesaling divisions. The objective in amending the access regime was to translate, as closely as possible, the status quo in the new structurally separated environment. RSPs should, therefore, be able to provide the same retail services to end-users after structural separation as they provide currently. The aims for this transition will be:
 - (a) **Existing service continuation:** For Chorus BU and Telecom Wholesale BU services that exist today we are aiming to retain the same definition as today (whether commercial or regulated). This principle enables continuity for industry and preserves the current level of competition as today's world transitions into a demerged environment. This also avoids re-engineering costs that would otherwise be involved for all. In response to industry, the Telecommunications Act 2001 (Act) requires New Chorus to supply the UBA service in a bundle with the local access and calling service.
 - (b) **The legacy asset split:** The allocation of existing assets needed to support two sustainable businesses including transitional and long-term arm's length commercial arrangements to allow for existing service continuation.
 - (c) **Systems:** At the day of demerger, existing systems will continue to be used in accordance with detailed commercial arrangements between New Chorus and New Telecom. Key guiding principles for those arrangements will be to:
 - Hold a consistent level of service as exists now while recognising that a structurally separated New Chorus will not have separate business units within it (any further mandated development under today's Separation Undertakings will only continue if it is also required under New Chorus's new undertakings); and
 - (ii) Ensure that New Telecom is not advantaged or disadvantaged relative to other RSPs. In particular, where systems shall continue to be shared, those systems shall leverage (rather than replicate or rework) the significant investment in data compliance completed for operational separation into a demerged model for as long as sharing of systems continues.
- This approach is efficient and ensures that separation costs are not increased by seeking to separate legacy systems that will be naturally replaced as New Chorus moves to fibre. Any money spent separating legacy systems is money that is not available to develop the new fibre world.

- E. Asset Split and Arrangements between the Two Entities
- The governance arrangements around the systems utilised by both entities will determine management and development of those systems for as long as they are shared. Based on past experience, New Chorus and New Telecom will be naturally incentivised to move to complete separation of systems when economically sensible.

Ongoing Transition

Section 69XB(I) of the Act requires that New Chorus commit to a reasonable plan containing time frames for a transition to the end of the sharing arrangements between New Telecom and New Chorus. This obligation will be located in the New Chorus copper open access deed of undertaking (Copper Undertaking), to encourage a transition plan but it does not require fixed deadlines or milestones to be met. This approach enables transition to occur in a commercially sensible way rather than by arbitrary fixed deadlines that may negatively impact service quality standards for RSPs and consumers and drive costly and complex variation processes as experienced under the operational separation regime. It is proposed that New Chorus will produce a plan 12 months after separation day and update it annually thereafter.

Summary of PP&E and Intangible Asset Split

Details of the split of Telecom's property, plant and equipment and intangible assets between New Chorus and New Telecom post demerger are set out in section three of this plan. Set out below is a high level summary of the allocation of asset groups to New Chorus, New Telecom or split between both entities:

E. Asset Split and Arrangements between the Two Entities

Asset groups allocated to New Chorus	Asset groups allocated to New Telecom	Assets groups allocated between New Chorus and New Telecom
		between New Chorus and New Telecom Ducts and manholes (97) Fibre optic cable (96) Radio towers (79.03) PDH FOTS transport (35.06) SDH FOTS transport (35.08) DWDM transport (35.04) Transport DMR (79.01) Transport radio antennas and feeders (79.02) Network routers hardware (48.01) Network routers software (48.02) Building services (12) Power systems: general (14.01) Power systems: access derived systems (14.02) Tools and plant (39) Freehold land (41.01) Land site costs (41.04) Buildings (51) Property fit-outs (42) Motor vehicles (40) Office equipment (13) Furniture (18) Spectrum licences (28, 32) Land easements (41.02)
	CPE managed networks (26) CPE data equipment (57) ISDN NTUs (78) Payphones (31) Submarine cable IRUs (77) Goodwill	Land licences (41.03) IT Hardware and Software (58 to 75)

F. Client Confidential Information (CCI)/Confidential Information (CI)

Information Sharing Rules in Separation Undertakings

- At its simplest, the existing Separation Undertakings require greater protections on the activities upstream of business units. In terms of information protections this means:
 - (a) Chorus CI and Chorus CCI is ring fenced to Chorus BU only;
 - (b) Wholesale CI and Wholesale CCI is ring fenced to Wholesale BU only; but
 - (c) There are no restrictions on any part of Telecom seeing Retail BU or Gen-i BU information.
- However, certain exceptions to the information sharing rules set out above are included in the Separation Undertakings.

Data Compliance

- Telecom currently operates around 1,300 systems. Of these around 70 have been identified as being "shared information systems" (i.e. systems containing either CI or CCI that are accessed by more than one business unit). "Data Compliance" is the term that has been given to the programme of work dedicated to identifying "shared information systems requiring treatment" and where appropriate Telecom has made changes to systems so that any access complies with the Separation Undertakings.
- In order to achieve Data Compliance Telecom has applied different kinds of solutions to different systems:
 - (a) Some have been decommissioned;
 - (b) Some have been enabled with system access controls; and
 - (c) Other systems are reliant on behavioural controls.

Proposed Approach to Data Compliance Post Separation

- In relation to Data Compliance under structural separation, the intent is to maintain and leverage off the existing systems work. Over time New Chorus and New Telecom may commercially decide to make changes to enhance separation of information.
- New Chorus will leverage the systems capability (FMO) developed to support Separation Undertakings to develop its fibre product capability. New Chorus will own the systems capability responsible for managing fibre services, and where this may currently be provided on capability also servicing New Telecom (as is the case with first in Layer 2 fibre services) this will migrate in a timeframe agreed between New Chorus and CFH.

G. Definition of Terms

G. Definition of Terms

- Throughout this Asset Allocation Plan the following terms are used with the meanings described below.
- Assets are defined in section 69B of the Act as:
 - a. means property of any kind, whether or not situated in New Zealand, whether tangible or intangible, real or personal, corporeal or incorporeal, and whether or not subject to rights: and
 - b. includes
 - i. estates or interests in any land, including rights of occupation of land or buildings:
 - ii. buildings, vehicles, plant, equipment, machinery, fixtures and fittings, and rights in them:
 - iii. choses in action and money:
 - iv. rights of any kind, and applications, objections, submissions, and appeals in respect of those rights:
 - v. intellectual property and applications pending for intellectual property:
 - vi. goodwill, and any business undertaking.
- 56 Chorus (or New Chorus) is defined in section 69B of the Act as:
 - a. ChorusCo; and
 - b. Includes any of its subsidiaries
- *ChorusCo* is defined in section 69B of the Act as the company that is to be demerged from Telecom on separation day in accordance with the demerger arrangement.
- Chorus business unit is the business unit that controls and operates Telecom's local access network. Chorus must build and maintain this network. Chorus also provides field services to other business units and the industry.
- Liabilities are defined in section 69B of the Act as liabilities, debts, charges, duties, and obligations of every description, whether present or future, actual or contingent, and whether payable or to be observed or performed in New Zealand or elsewhere.
- Sharing arrangement is defined in section 69C of the Act as:
 - a. An arrangement, agreement, contract, or understanding between New Telecom and New Chorus for the purpose of providing either or both with access to, or continued use of, a system, asset, or service that is owned or controlled by Telecom at the close of the day before separation day; and
 - b. Includes an arrangement, agreement, contract, or understanding of the kind described in paragraph (a) that is conducted with or through a third party; but
 - c. Does not include any of the following, or anything that is wholly in accordance with the following:

Section One Introduction

- G. Definition of Terms
- i. the regulated terms of a supply of a designated service or a specified service; or
- ii. a registered undertaking; or
- iii. an undertaking under part 4AA (Services provided using networks developed with Crown funding); or
- iv. a deemed TSO instrument; or
- v. an undertaking approved in accordance with sub-part 4 of part 2A of the Act (undertakings by Chorus); or
- vi. an arrangement that is exempted under section 69N; or
- vii. an arrangement that relates to ensuring compliance by New Telecom ,New Chorus, or both with
 - a. the duties imposed by the Telecommunications (Interception Capability) Act 2004 on a network operator (or within the meaning of that Act); or
 - b. duties or requirements imposed by any other Act, interception warrant, or other lawful authority that relate to the interception of communications.
- New Telecom is the entity which remains after New Chorus is demerged from the Telecom Corporation of New Zealand Limited Group.
- Wholesale business unit is the business unit that provides broadband, business data, voice and interconnect products and services to telecommunications service providers in New Zealand.

Section Two Basis of Compilation

- This section outlines the methods of allocation under section 32(3)(a) of the Amendment Act and describes how assets will be used to provide telecommunication services to the market, in accordance with the requirement in section 32(3)(b) of the Amendment Act.
- The Asset Allocation Plan covers all assets and liabilities owned by Telecom Corporation of New Zealand Limited. The value and presentation of assets and liabilities could be impacted by many factors including the movement in account values through to the date of demerger, and the confirmation of numerous accounting treatments required to effect the demerger and associated commercial arrangements between New Chorus and New Telecom.
- Section 32(3)(a) of the Amendment Act specifies that the allocation obligation can be met by specifying categories of assets and liabilities, rather than every individual asset and liability. The categorisation must be reasonable and enable the Minister to understand where the assets and liabilities will be held after separation day.
- The categorisation used for describing the allocation of assets and liabilities is as follows:
 - (a) assets relating to property, plant and equipment (PP&E) and intangible assets. These are categorised by v0-type (as outlined below) or lower if necessary;
 - (b) all other assets and liabilities. These are categorised in material asset and liability groupings at the same level of detail as the financial statements in Telecom's Annual Report, or lower if necessary; and
 - (c) off balance sheet items. Commitments and contingencies as reported in the notes to the financial statements in Telecom's Annual Report.
- This section also outlines the material sharing arrangements in accordance with the requirement in section 32(3)(c) of the Amendment Act.

B. PP&E and Intangible Assets

- PP&E assets comprise of telecommunications equipment and plant, buildings, land, motor vehicles, furniture and fittings and information technology hardware assets. Intangible assets include software, spectrum licences, IRUs on submarine cables, land licences and land easements. The individual fixed assets that comprise these asset groups are recorded in Telecom's Fixed Asset Register (FAR). Intangible assets also include goodwill, which is not recorded in the FAR.
- There are approximately 270,000 individual fixed assets and intangibles recorded in Telecom's FAR. Each of these assets belongs to a specific asset class and a specific category called an EvG4. The asset class groups assets with similar physical characteristics, function, technology life cycle and asset useful life. The EvG4 informs the functional grouping of assets for business management.
- There are over 300 populated asset classes and over 450 populated EvG4 codes in the FAR and the use of these in the FAR results in approximately 1,900 unique combinations. Each unique combination of asset class and EvG4 is assigned to a v0-type¹ asset grouping. There are over 100 v0-types. This process of grouping fixed assets was used for regulatory reporting to the Commission and is reconciled to the FAR and the statutory accounts.
- 71 The table below provides examples of asset class and EvG4 mappings to v0-type:

Asset class	EvG4	v0-type
1240 – cust reticulation MDFs	DSL3 – Alcatel DLSAM	46 – ADSL, DSLAM, DSL
1302 – Access Derived System BLK (5-year life)	AC10 – Access 2M on Cu SHDSL	45.03 – Access HDSL /SHDSL /HDB3
1303 – Access Derived System IND (5-year life)	AC19 – Access Feeder Cabinet 24RUActive	8.01 – Active cabinet shells

The allocation of PP&E and intangible assets between New Chorus and New Telecom is outlined at the v0-type level where the assets rolling up under that v0-type use the same allocation basis. Where possible complete v0-type asset groupings will be transferred to New Telecom or New Chorus. Where individual assets rolling up to a v0-type are allocated using different methods, the method for each asset will be outlined. For example, the information

¹ The definition and allocation of EvG4 codes to assets in the FAR has become more detailed with time. In some instances the EvG4 coding of assets is not sufficiently detailed to enable them to be accurately mapped to their v0-type. In these instances assets are assigned to a v0-type by inspection of the asset name by subject matter experts.

C. Other Assets

technology asset allocation is described at the EvG4 level.

- 73 The v0-type asset groupings have the following important characteristics:
 - (a) assets are grouped into homogeneous groups of asset classes of plant with similar characteristics;
 - (b) asset groupings include assets of a similar nature and with the same sources of operational data; and
 - (c) asset groupings achieve adequate granularity while ensuring the number of v0-types remain manageable.

These characteristics make v0-types a reasonable categorisation to use for allocation.

Refer to section three for a description of each v0-type, method of allocation between New Chorus and New Telecom and how each v0-type asset grouping will be used to provide telecommunication services to the market.

C. Other Assets

- Other assets comprise all assets on the balance sheet other than PP&E and intangible assets. This includes cash, inter-company accounts, receivables and prepayments, inventories and investments.
- Other assets are categorised in the Asset Allocation Plan at the same level of detail as the financial statements in Telecom's Annual Report. In the Annual Report similar general ledger accounts are grouped together into material asset groupings. It is anticipated that each general ledger code rolling up to the material asset groupings has the same allocation methodology. If a general ledger code is allocated using different methodology it is described separately.
- Refer to section four for a description of the other asset groupings, method of allocation between New Chorus and New Telecom and how each other asset grouping will be used to provide telecommunication services to the market.

Liabilities

Liabilities D.

Liabilities can be broadly grouped into two category areas: debt (and associated derivatives) 78 and other liabilities.

Debt Related Liabilities and Derivatives

- Debt related liabilities and derivatives include the liabilities that could be affected by the 79 capital structure of New Chorus and New Telecom. This includes Euro Medium Term Notes (EMTN), Telebonds, and the associated derivatives (forward exchange contracts, crosscurrency interest rate swaps and interest rate swaps).
- 80 Additional disclosures will be made in the shareholder and bondholder issuances.
- Refer to section five for a description of the debt related liabilities and derivatives and the 81 method of allocation between New Chorus and New Telecom.

Other Liabilities

- Other liabilities are those that are not affected by the capital structure, which include 82 accounts payables and accruals and provisions.
- Other liabilities are categorised in the Asset Allocation Plan at the same level of detail as the 83 financial statements in Telecom's Annual Report. These notes group similar general ledger accounts together. It is likely that each general ledger code rolling up to the material liability groupings would have the same allocation methodology. If a general ledger code is allocated using a different methodology it is described separately.
- Refer to section six for a description of the other liabilities and the method of allocation 84 between New Chorus and New Telecom.

Off Balance Sheet Items E.

- Off balance sheet items are comprised of commitments in the form of operating leases and 85 capital commitments, contingent assets in the form of insurance receivables, contingent liabilities arising from lawsuits and other claims and intellectual property assets.
- Refer to section seven for a description of the off balance sheet items and the method of 86 allocation between New Chorus and New Telecom.

F. Sharing Arrangements

- Following separation New Telecom and New Chorus will operate independently from each other. Sharing arrangements are required to ensure that both New Telecom and New Chorus will be able to operate as independent businesses from the date of separation.
- There are seven types of sharing arrangements which are:
 - (a) Service Agreements for Products/Services which New Chorus will provide to RSPs;
 - (b) Agreement for Provision of Agency Services;
 - (c) Gen-i Business Agreement;
 - (d) Shared Systems Agreement;
 - (e) New Chorus and New Telecom owned network assets used by New Chorus and New Telecom;
 - (f) Transitional Services Agreement; and
 - (g) Fibre capacity agreement.
- The sharing arrangements will apply from the date of separation. They provide for the protection of customer and commercial confidential information by applying to the shared operations unit (the business group within New Telecom that will operate and maintain shared systems, currently the Shared Services BU) similar rules to those currently in place.
- As required under the New Chorus Copper Undertaking, New Chorus will prepare and submit a sharing arrangement transition plan to the Minister within 12 months of separation day. The plan will include (amongst other things) a description of the actions required to move to ending the sharing arrangements, timeframes for those actions, and trigger points and dependencies.
- Refer to section eight for a detailed description of the sharing arrangements.

Section Three PP&E and Intangible Assets

- PP&E and intangible assets are recorded in Telecom's SAP general ledger through a combination of entries from Telecom's FAR and journals.
- The majority of the value of these fixed assets is recorded in Telecom's FAR. As explained in section two, all of the fixed assets in the FAR are assigned to v0-types on the basis of their asset class and EvG4. The method of allocation of these assets between New Telecom and New Chorus is specified at the v0-type level.
- The following components of the fixed asset values are journalled to the SAP general ledger:
 - (a) Work in Progress (WIP);
 - (b) fixed asset provisions;
 - (c) consolidation adjustments;
 - (d) goodwill; and
 - (e) overseas company fixed assets
- Work in progress is the expenditure on capital projects that has not yet been capitalised to the FAR. Fixed asset provisions accelerate the depreciation on assets that are due to be replaced and/or written off before the end of their accounting useful life, such as CDMA mobile network assets.
- The WIP, fixed asset provisions and consolidation adjustments are not in the FAR and therefore have no asset class or EvG4 identifiers. Subject matter experts review the breakdown of these balances and assign them to an appropriate v0-type and business unit owner. Where fixed asset provisions and consolidation adjustments relate to individual assets or v0-types then the allocation of those balances to New Chorus or New Telecom will match the allocation of that fixed asset or v0-type to New Chorus or New Telecom.
- Goodwill is supported by two cash generating units, which are the Gen-i and Telecom Retail operating segments. The Gen-i and Telecom Retail BUs remain part of New Telecom and hence the goodwill will be allocated to New Telecom.
- Overseas company fixed assets are allocated to New Telecom because New Chorus is New Zealand based only, which is consistent with the principles for asset allocation noted in the 'Process' section below and as noted in section one, subsection D. No further analysis is completed on these numbers for the purpose of the Asset Allocation Plan.
- Where an asset on the ground cannot be identified in the asset register, the ownership shall be determined based on which of the New Chorus or New Telecom business has the predominant use of the asset, subject to any applicable principles of allocation set out in this plan (e.g. v0-type).

Process

- A detailed process has been undertaken to identify how the assets, at the v0-type level, are intended to be allocated between New Telecom and New Chorus on separation. The following principles have been applied in this process:
 - (a) Systems and individual assets are not split. Where both entities need the use of an asset a single owner is determined and commercial agreements will be put in place.
 - (b) Asset allocations reflect the business purpose, objectives, products and operating model of each of New Chorus and New Telecom. Where there is contention between New Chorus and New Telecom and there is no clear differentiator, the asset allocation decision is based on whichever entity has the preponderance of use.
 - (c) All assets owned by entities outside of New Zealand are allocated to New Telecom.
- 101 The v0-type asset groupings are provided in the table below.

Asset category	Asset group	v0-type
Passive Network – Telecommunications	Passive copper network	98 – passive copper network 71 – transport copper cable
Equipment and Plant	Ducts and manholes	97 – ducts and manholes
	Fibre optic cables	96 – fibre optic cable
	Radio towers (excludes mobile radio towers)	79.03 – radio towers
	MDF	23 – MDF
	Submarine cables	33 – submarine cables other
Active Transmission – Telecommunications	Active cabinet shells	8.01 – active cabinet shells
Equipment and Plant	2Mbps over copper systems	45.03 – access HDSL/SHDSL/HDB3
		35.05 – PCM30 transport
	FOTS – SDH/PDH	47.02 – PDH FOTS access
		47.03 – SDH FOTS access
		35.06 – PDH FOTS transport
		35.08 – SDH FOTS transport
	DWDM	35.04 – DWDM transport

Asset category	Asset group	v0-type
	Radio systems	47.04 – access DMR 79.01 – transport DMR 79.02 – transport radio antennas and feeders 84.01 – CMAR 84.02 – country sets
	Media converters	47.05 – media converters
	Optical splitters/ Gigabit Passive Optical Network (GPON) equipment	8.02 – PON cabinets 46.03 – GPON shelves line cards 46.04 – GPON HONTs
	Copper small pair gain	76 – access small pair gain
	Network routers and network firewalls	48.01 – network routers hardware 48.02 – network routers software 49 – network firewalls
	Satellite earth station	29 – satellite earth station
Mobile – Telecommunications	Mobile radio towers, antennas and feeders	95 – mobile radio towers, antennas and feeders
Equipment and Plant	CDMA base stations, switches hardware and software	24.01 – CDMA base stations 19.01 – CDMA switches hardware 19.02 – CDMA switches software
	WCDMA core hardware, software and base station equipment	86.01 – WCDMA core hardware 86.02 – WCDMA core software 86.03 – WCDMA base stations
	Other mobile	81 – other mobile
Services – Telecommunications	Voice over Internet Protocol (VoIP)	7.01 – VoIP hardware 7.02 – VoIP software
Equipment and Plant	Digital Subscriber Line (DSL)	46 – ADSL, DSLAM, DSL
	Voice Multiplex (Mux) and Integrated Services Digital Network (ISDN) Mux	50 – voice and ISDN Mux

Asset category	Asset group	v0-type
	PSTN/IN/Voice Service Platforms	20 – PSTN/ISDN/IN 34.01 – PSTN/ISDN hardware 34.02 – PSTN/ISDN software 36.01 – IN, VSP, VCC hardware 36.02 – IN, VSP, VCC software
	Asynchronous Transfer Mode (ATM)	10 – ATM
	Legacy data networks	11 – legacy data networks
	IPNet, broadcast	21 – IPNet 35.03 – broadcast transport 47.07 – access broadcast
Other – Telecommunications Equipment and Plant	Power systems and building services	12 – building services 14.01 – power systems: general 14.02 – power systems: access derived systems
	Customer Premises Equipment (CPE)	15 – CBR data access 16 – CPE voice equipment 26 – CPE managed networks 57 – CPE data equipment 78 – ISDN NTUs
	Payphones	31 – payphones
	Other	39 – tools and plant
Land	Freehold land	41.01 – freehold land
	Site costs	41.04 – land site costs
Buildings	Buildings	51 – buildings
	Other property assets	42 – property fit-outs
Other Assets	Motor vehicles	40 – motor vehicles
	Office equipment	13 – office equipment 18 – furniture
	Information technology	58.01 – IT hardware: billing
		59.01 – IT hardware: common
		61.01 – IT hardware: common information systems
		62.01 – IT hardware: corporate

Asset category	Asset group	v0-type
		63.01 – IT hardware: customer services
		64.01 – IT hardware: data
		65.01 – IT hardware: fulfil and assure
		66.01 – IT hardware: Gen-i
		67.01 – IT hardware: International
		68.01 – IT hardware: managed services CPE
		69.01 – IT hardware: mobile
		70.01 – IT hardware: network management
		72.01 – IT hardware: online
		73.01 – IT hardware: sales and marketing
		74.01 – IT hardware: transport
		75.01 – IT hardware: VoIP/voice
Software	Software	58.02 – IT software: billing
		59.02 – IT software: common
		61.02 – IT software: common information systems
		62.02 – IT software: corporate
		63.02 – IT software: customer services
		64.02 – IT software: data
		65.02 – IT software: fulfil and assure
		66.02 – IT software: Gen-i
		67.02 – IT software: International
		68.02 – IT software: managed services CPE
		69.02 – IT software: mobile

Section Three PP&E and Intangible Assets

Asset category	Asset group	v0-type
		70.02 – IT software: network management
		72.02 – IT software: online
		73.02 – IT software: sales and marketing
		74.02 – IT software: transport
		75.02 – IT software: VoIP/voice
Other intangible assets	Other intangible assets	28, 32 – spectrum licences
		41.02 – land easements
		41.03 – land licences
		77 – submarine cable IRUs
International entities		
Work in progress		
Goodwill		

Telecommunications Equipment and Plant

Passive Network Assets

The passive network assets include the physical bearer links which are passive in nature (i.e. copper and fibre) and exclude the electronic equipment categorised as active transmission assets.

v0-type 98 – Pass	v0-type 98 – Passive copper network		
Description	The passive copper network is comprised of copper cables, cross-connection cabinets and poles.		
	Copper cables comprise underground, aerial and service lead-in cables and the associated costs of pressurisation, jointing and termination.		
	Underground copper cables are either direct buried or ducted. Direct buried underground cables generally include the cost of trenching (if not in the same trench as a duct), whereas ducted underground cables generally exclude the cost of trenching (as it is capitalised with the duct asset).		
	Aerial copper cables are also known as self supporting aerials and are mounted on poles.		
	Copper cable service lead-ins are the connections between the cable terminals and the demarcation point (external terminating block) on the customer's premises, and consist typically of a 4-wire cable. The copper cable lead-ins were first capitalised in 1998, as they had previously been expensed.		
	Copper cross-connection cabinets are passive cabinets and do not contain active equipment. Active cabinets also include a copper cross-connection facility, but the cost of this is included in the active cabinet asset v0-type. Cross-connection in a cabinet enables utilisation of feeder cables back to the exchange to be maximised, provides a flexible connection point between feeder cables and distribution cables, and isolates faulty pairs in distribution cables.		
	Wooden poles support aerial copper and fibre cables.		
Allocation	Prior to separation the passive copper network assets are controlled by the Chorus BU. On separation the passive copper network will be allocated to New Chorus as the provider of the local access and regional transport network.		

Telecommunications services provided to the market

The passive copper network of copper cables, cross connection cabinets and poles represent a complete system of metallic connections from the customer to a cabinet and/or exchange.

New Chorus will provide service providers with a MPF (Metallic Path Facility) connection to the end customer over which they can provide broadband, voice (fixed and mobile), data and ICT services. This is via New Chorus's UCLL (Unbundled Copper Local Loop) MPF service, which includes SLU (Sub Loop Unbundling: a MPF connection from the customer to a cabinet) and SLES (Sub Loop Extension Service: a MPF connection from the cabinet to the exchange).

v0-type 97 – Ducts and manholes		
Description A <u>duct</u> is a pipe that is buried in the ground or installed within other structure for providing a passageway into which cables Multiple ducts may be buried or installed together. The duct includes the cost of the trenching. Ducts are split into the cate and sub-duct. Sub-ducts are small ducts, several of which are used inside a larger duct and through which fibre cables are pulled. In ducts increases the number of fibre cables that can be safely in duct, provides additional protection for the cables and constallation of fibre cables in ducts already containing copper call.		
	A <u>manhole</u> is a box installed in the ground which generally forms an integral part of the duct system by providing access to, and interconnection of, the ducts to facilitate installing, joining or performing maintenance on ducted cables. Some manholes may be isolated from a duct system and only provide access to cable joints. Manholes come in a variety of sizes and material types and may be installed in footpaths, berms or roadways.	
Allocation	Prior to separation the duct and manhole assets are controlled by the Chorus BU. On separation the ducts and manholes will be allocated to New Chorus as the provider of the local access and regional transport network, with three exceptions. These are:	
	 an attribution of the duct assets (which includes materials and civil costs) associated with the fibre allocated to New Telecom as if the assets had been part of a joint build between New Chorus and New Telecom; 	
	a manhole in Antarctica which is allocated to New Telecom; and	
	manholes and duct assets associated with international landing cables	
Telecommunications services provided to the market	Ducts and manholes support the copper and fibre cable network. They are not themselves used directly in the provision of telecommunication services to the market.	

v0-type 96 - Fibre optic cable

Description

Fibre optic cable assets include underground fibre optic cables, aerial fibre optic cables, fibre optic lead-ins and optical fibre distribution frames (OFDF) plus all the associated jointing. They are used in the access, regional backhaul and core transport networks. The Cook Strait submarine cable is included in this v0-type asset grouping.

There are a range of *underground fibre optic cables* which vary by type and pair count size. Fibre optic cables used in harbour crossings are classed as underground cables, with the exception of the Cook Strait submarine cable. The underground fibre optic cables are either direct buried or ducted/subducted. Direct buried underground fibre optic cables generally include the cost of trenching (if not in the same trench as a duct), whereas ducted underground fibre cables generally exclude the cost of trenching (as it is capitalised with the duct asset). *Aerial fibre optic cables* are mounted on poles and are used where it is difficult and uneconomic to lay ground cables. *OFDF* assets include shelves, racks, internal building cabling and the cost of jointing fibre lead in cable to building cable.

Allocation

Notionally fibre cable assets need to be split between New Chorus and New Telecom based on use – access and/or regional transport for New Chorus and national transport for New Telecom. The majority of fibre cables used for national transport also contain fibre strands used for regional transport or even access.

On separation New Telecom will be allocated 50% of the fibre strands designated for carrying national or regional transport between the New Telecom exchanges. All remaining national fibre cable assets will be allocated to New Chorus on separation. New Chorus will own all the fibre sheaths, which contain the fibre strands.

The Levin-Nelson submarine fibre cable will be allocated to New Telecom because it is part of the national transport network.

The 6 and 24 fibre cables at Scott Base will stay with New Telecom because they are part of the national transport network.

Between the Hut and Stockton, the fibre strands providing connectivity for the local security cameras operation will be assigned to New Telecom. All other fibre strands and the fibre sheath will be owned by New Chorus.

Telecommunications services provided to the market

The fibre network is used in conjunction with other assets in the provision of fibre access to customer premises, backhaul from active cabinets, regional transport and national transport services. New Chorus will use these fibre cable assets in conjunction with other assets to provide service providers with a connection to the end customer for their provision of broadband, voice, data and ICT services.

Telecom and other RSPs will use these assets in the provision of broadband, voice, data and ICT services. New Telecom will use the Levin-Nelson

Section Three F	PP&E and	Intangible Assets
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submarine cable for national connectivity.

v0-type 79.03 – Transport radio towers	
Description	Transport radio towers support antennas for DMR point-to-point systems. These include special purpose lattice towers used on the larger radio systems and wooden or concrete poles used on smaller radio systems.
Allocation	The radio towers will be allocated in line with the allocation of the DMR systems which the radio towers support.
	Hence all towers with the exception of two will be allocated to New Chorus. New Telecom will be allocated the radio towers on either side of the Cook Strait, as the DMR systems the towers carry are part of the national transport network.
Telecommunications services provided to the market	Chorus radio towers are used in conjunction with the DMR systems they support and other assets in the provision of access services and regional transport services. They will also be used to support co-location services for other service providers to install their own radio antenna equipment.
	Telecom radio towers are used in conjunction with the DMR systems they support and other assets in the provision of national transport services, plus voice, data and ICT services. They will also be used to support co-location services for other service providers to install their own radio antenna equipment.

v0-type 23 – Main distribution frames (MDFs)	
Description	Outside copper cables terminate in exchange buildings on MDFs. These MDFs provide a flexible connection facility between the pairs in these cables and internal cables leading to equipment in the exchange.
	The MDF assets comprise the metal framework plus the connection blocks used to terminate the outside cables. The cost of terminating these cables on the MDF is capitalised with the cost of the cable and so is included as part of v0-type 98 – passive copper network.
Allocation	Prior to separation the MDF assets are owned by the Chorus BU. They are a copper technology and an integral part of the passive copper network. All MDFs will be allocated to New Chorus on separation as the provider of the local access and regional transport network.
Telecommunications services provided to the market	The MDFs form an integral part of the passive copper network. They support all services provided over the copper network that emanate from an exchange on copper.
	As part of the co-location service, the MDFs also hold terminal blocks to which other service providers can terminate their co-located equipment that requires connection to either outside copper cable pairs or to other co-located equipment via internal copper cables.

v0-type 71 – Transport copper cable	
Description	Transport (inter-ESA) copper cables are the original physical links between exchanges within a district or region, typically connecting small distant rural areas/exchanges to parent exchanges in main centres. Most of the transport copper cables have been replaced by fibre optic cable systems, but some are still in use carrying copper derived 2Mbps PCM backhaul systems.
Allocation	Prior to separation the transport copper cable assets are owned by the Chorus BU. On separation the transport copper cables will be allocated to New Chorus as the provider of the regional transport network.
Telecommunications services provided to the market	Transport copper cables support the provision of broadband, voice (fixed and mobile), data and ICT services to distant rural communities not yet fed by fibre or radio systems, or the provision of low capacity backup links for high priority services like 111.

v0-type 33 – Submarine fibre cable (excluding IRUs)		
Description	These are offshore submarine cables which Telecom's International BU owns a share of. This asset type does not include submarine cables within New Zealand.	
Allocation	All assets owned by entities outside of New Zealand are allocated to New Telecom.	
Telecommunications services provided to the market	Offshore submarine cables support all services requiring connection to international destinations, including broadband, voice (fixed and mobile), data and ICT services. Service providers can purchase capacity on the transport systems operated over the submarine cables through the entity that operates these systems (for example, Southern Cross, which is partly owned by Telecom).	

ction tiffee PPQE and intangible Assets

Active Transmission Assets

- Active transmission assets comprise the active (i.e. electronic) equipment only and exclude the physical bearer links that are passive in nature (copper and fibre). Active transmission assets provide connectivity to the passive network assets. Transmission systems derive capacity from the bearer links that connect the end sites.
- 104 The transmission systems provide capacity linking:
 - (a) a customer site to an exchange site;
 - (b) a roadside cabinet to an exchange site; and

B. Property, Plant and Equipment

(c) between exchange sites and/or other transport nodes, both regionally (regional backhaul) and nationally (core transport).

v0-type 8.01 – Active cabinet shells	
Description	An active cabinet shell is an above ground structure that provides a weatherproof housing for telecommunication equipment such as:
	 (a) 2Mbps over copper systems, fibre optic and radio terminals; (b) DSL equipment; (c) Mux equipment to interface analogue signals to the digital bearer; and (d) Copper connection modules for jumpering between the Mux and/or DSL equipment and copper distribution cables and/or copper feeder
	cables. The cabinet contains an environmental control system consisting of fans, filters and heat exchangers along with mains AC power, DC rectifiers and backup batteries. Active cabinet shells do not include walk-in shelters as these are part of the buildings v0-type 51 asset group.
	The main function of active cabinets is to shorten the customer access loop and hence provide superior speed broadband services or more functional voice services.
Allocation	Prior to separation the active cabinets are owned by the Chorus BU. On separation the cabinets will be allocated to New Chorus as the provider of the local access and regional transport network.
Telecommunications services provided to the market	Active cabinets are used in the provision of UCLL services including SLU, SLES and cabinet backhaul.
	Active cabinets also provide cabinet co-location services whereby service providers can install their own DSL/voice/data equipment in the cabinet and use power provided by the cabinet power supply.

v0-type 35.05 – 2Mbps over copper systems: Transport PCM	
Description	PCM30 transport equipment provides 2Mbps transport over inter-ESA transport copper cable using PCM technology. It consists of PCM terminals at each end plus repeaters along the cable route (typically every 1,800m) using separate 'go' and 'return' cable pairs to carry the 2Mbps streams.
	It is effectively an obsolete technology; however it is still used for transport over long copper cable distances (as there is practically no limit to the number of repeaters possible, unlike modern 2Mbps HDSL and SHDSL transport systems).
Allocation	This is a copper based technology and will be allocated to New Chorus on separation, consistent with the allocation of the inter-ESA transport copper cables (i.e. v0-type 71).
Telecommunications services provided to the market	Transport PCM supports the provision of broadband, voice (fixed and mobile), data and ICT services to distant rural communities not yet fed by fibre or radio systems, or the provision of low capacity backup links for high priority services like 111.

v0-type 45.03 – 2Mbps over copper systems: Access HDSL/SHDSL/HDB3	
Description	2Mbps over copper systems are used to provide 2Mbps symmetrical constant bit rate access to customers and network sites (such as cabinets and mobile base-stations) served by copper cables, and utilise Symmetrical High Speed Digital Subscriber Line (SHDSL), High Speed DSL (HDSL) and PCM/High Density Bipolar 3 (HDB3) technologies. All three systems are four wire working, meaning that they use a separate pair of wires for each of the 'go' and 'return' bearer circuits.
	SHDSL is the current technology of choice, but has limited range due to having no repeaters. HDSL and PCM/HDB3 can have repeaters (HDSL up to 2, unlimited for PCM) and hence, although they are effectively obsolete technologies, will continue to be used to fill in gaps in SHDSL coverage capability.
Allocation	This is a copper based technology and will be allocated to New Chorus on separation, consistent with the allocation of the passive copper network assets.
Telecommunications services provided to the market	Used to provide 2Mbps symmetrical constant bit rate access to customers and network sites (such as cabinets and mobile base stations) served by copper cables for the provision of broadband, voice (fixed and mobile), data and ICT services.

v0-type 35.06 and 35.08 FOTS: Transport PDH and Transport SDH	
Description	Transport PDH (Plesiochronous Digital Hierarchy) and SDH (Synchronous Digital Hierarchy) are Fibre Optic Transmission Systems (FOTS) used for inter-ESA transport over fibre.
	PDH is an obsolete point-to-point TDM (Time Division Multiplex) transmission technology largely replaced by SDH, a ring-based TDM technology that is not only inherently more robust, but simpler for dropping and inserting traffic at intermediate points.
Allocation	These network electronics are used by both New Telecom and New Chorus for transport purposes. Accordingly, the assets will be split by cost centre ownership between New Telecom and New Chorus. The Chorus and Wholesale (excluding International) BU cost centres will initially be allocated to New Chorus and all other cost centres will be allocated to New Telecom. Specific individual asset reallocations will then be made as necessary to address any anomalies arising from splitting these assets on this basis to better reflect predominant use of the asset.
Telecommunications services provided to the market	Transport FOTS systems are used for inter-ESA TDM transmission, and are used in the provision of broadband, voice (fixed and mobile), data and ICT services.

v0-types 47.02, 47.03 – FOTS: Access PDH and Access SDH	
Description	Access PDH and SDH are FOTS used for access over fibre to customer premises, cabinets or other network nodes within an ESA (e.g. mobile cell sites). PDH, being obsolete, is largely replaced by SDH. There are several types of PDH and SDH equipment types used for access, with PDH FOTS access systems ranging from 2Mbps to 140Mbps capacity, and SDH FOTS access systems providing capacity from 2Mbps to STM16 (one thousand 2Mbps circuits).
Allocation	These are local access connectivity systems (including the access links to New Telecom cell sites) and accordingly are allocated to New Chorus on separation.
Telecommunications services provided to the market	Access SDH FOTS include systems installed for connectivity from customer sites, active cabinets or mobile/cellular radio base stations to the ESA central node. As such, they will be used in the provision of broadband, voice (fixed and mobile), data and ICT services.

v0-type 35.04 – Transport DWDM	
Description	DWDM equipment is used to effectively increase the capacity of existing fibre routes by enabling several FOTS systems to operate over the same fibre by using and combining different coloured lasers.
	DWDM is generally used on long haul national routes and increasingly on long regional routes that would otherwise require installation of additional fibre cable to meet transmission capacity demands.
	DWDM is basically a point-to-point system that can be used to carry both Ethernet and SDH links.
Allocation	DWDM equipment solely used by the Chorus BU will be allocated to New Chorus.
	DWDM equipment aggregates traffic and is used for both regional (New Chorus) and national (New Telecom) transport. DWDM equipment used for both regional and national transport and equipment not used for regional transport will be allocated to New Telecom. This preserves New Telecom's control over infrastructure key to the delivery of national backhaul services.
	The DWDM equipment in Chorus BU cost centres will be allocated to New Chorus and DWDM equipment in all other cost centres will be allocated to New Telecom.
Telecommunications services provided to the market	DWDM is used to increase the capacity over transport fibre routes, and as such is used in the provision of broadband, voice (fixed and mobile), data and ICT services. Increasingly it is being used to provide point-to-point Ethernet (GigE and 10G) links.

v0-types 47.04, 79.01, 79.02 – Radio systems: DMR	
Description	A typical Digital Microwave Radio (DMR) terminal consists of an indoor mounted base band shelf, an indoor or outdoor mounted radio frequency transceiver and a parabolic antenna. Each terminal transmits and receives information to and from the opposite terminal simultaneously, providing full duplex operation. They can be used to provide voice and data communications and video links.
	Access DMR systems provide transmission links between the exchange and the roadside cabinet, or between the exchange and customer network interface. Regional backhaul and core transport DMR systems provide transmission links between exchanges. As capacity is limited compared to fibre cable-based systems, DMR is generally only used where terrain makes fibre cable installation uneconomic or impractical.
Allocation	New Telecom will be allocated the transport DMR systems on either side of the Cook Strait (along with the radio towers at these sites), as they are part of the national transport network. All other DMR systems are allocated to New Chorus for use in their local access and regional transport network.
Telecommunications services provided to the market	DMR systems are used in the provision of broadband, voice (fixed and mobile), data and ICT services, sometimes providing a diversity link.

v0-type 84.01 – Radio systems: Access CMAR	
Description	The Customer Multi Access Radio (CMAR) system consists of an exchange unit, intermediate repeaters and outstations. Outstations connect to customers using standard copper distribution systems. CMAR systems are concentrating devices in that they connect many customers via a small number of common backbone circuits (between 10 and 60 depending on system type).
Allocation	CMAR is a local access radio technology, and hence will form part of New Chorus's local access network post separation. Accordingly these assets will be allocated to New Chorus on separation.
Telecommunications services provided to the market	CMAR acts as a feeder in rural areas where it is uneconomic to provide copper loops all the way back to the exchange. CMAR's primary use is in the provision of POTS access.

v0-type 84.02 – Radio systems: Access country set	
Description	Country Set equipment consists of radio equipment, power supply, antenna and mast. Country Sets provide telephone services to between one or two rural customers per site by replacing all, or part of, the physical line between the exchange and the customer with a radio link.
Allocation	Country Sets usually provide the last section(s) of the local access network to the customer, and hence form part of the Chorus BU local access network. Accordingly these assets will be allocated to New Chorus on separation.
Telecommunications services provided to the market	Country Set equipment is used in the provision of POTS access in rural areas where it is uneconomic to provide copper loops.

v0-type 47.05 – Access media converters	
Description	A media converter is an electronic device that converts optical signals to electrical or interfaces different optical types. It may also provide supervisory and control functions of the bit-stream passing through.
Allocation	Media converters are a technology used on fibre cable. On separation New Chorus will be allocated the majority of the fibre cable assets, and hence these fibre technology assets will be allocated to New Chorus.
Telecommunications services provided to the market	Media converters are used to provide a set capacity over what would otherwise be a dark fibre link, where this is necessary for interfacing with network equipment.

v0-types 8.02, 46.03, 46.04 – Optical splitters/GPONs	
Description	A passive optical network cabinet is equipped with passive optical splitters and GPON equipment. An optical splitter is a passive device that splits a single-fibre strand input into multiple fibre strand outputs. GPON equipment comprises a GPON hub-end optical line terminal and the individual home-based optical network terminal equipment. The GPON hub is connected to the customer site via fibre optic cable.
Allocation	These assets are part of the FTTP architecture and hence will form part of the New Chorus local access network post separation. These fibre technology assets will be allocated to New Chorus.
Telecommunications services provided to the market	These optical splitter and GPON assets are used for the mass-market FTTP architecture. The use of optical splitting improves the economics by reducing fibre and exchange equipment costs.

v0-type 76 – Copper small pair-gain	
Description	Copper small pair gain systems are electronic devices designed to generally double the voice capacity of a single copper pair.
Allocation	This is a copper technology and will be allocated to New Chorus on separation, consistent with the allocation of the passive copper network assets.
Telecommunications services provided to the market	The prime use of copper small pair-gain systems is in the provision of POTS access in areas where there are insufficient copper pairs to allocate dedicated individual copper pairs to meet total customer demand.

ν0-types 48.01, 48.02, 49 – Network routers and firewalls	
Description	Network router hardware and software elements include Ethernet access routers, aggregation nodes and switches, edge routers and core routers.
	Ethernet access routers (such as Business Edge Routers – BERs, ERX or BNGs) are used to provide Ethernet services to customers. Ethernet Aggregation Switches (EAS) and Nodes (EAN) are used to aggregate Ethernet traffic from access nodes and ISAM type DSLAMs for passing on to ERXs and BNGs to the IP-Core or to other network providers. ERXs provide the current functionality required for broadband traffic. Edge and core routers also provide the national NGN MPLS Layer-3 IP transport network.
	Network firewalls are devices with appropriate software functionality which control security and access to the common NGN platform.
Allocation	A percentage (approximately 15%) of the EAS (Ethernet Aggregation Switch) equipment and all network router (7750s) equipment will be allocated to New Telecom as it is highly specialised for New Telecom use and includes Layer 3 equipment which is not part of New Chorus's business model.
	The 7450s used as EAS equipment and EAN (Ethernet Aggregation Nodes) equipment for the Layer 2 REN (Regional Ethernet Network) will be allocated to New Chorus.
	All other network routers will be allocated to New Telecom on separation on the basis of preponderance of use.
Telecommunications services provided to the market	New Chorus will use the 7450s to deliver New Chorus's Ethernet based services and to deliver services to New Telecom on non-discriminatory terms.
	New Telecom will use the network routers in the provision of HSNS services, UBA, EUBA, Ethernet backhaul and other Ethernet based services.

v0-type 29 – Satellite earth station	
Description	The satellite earth station equipment is based in New Zealand and owned by the International BU.
Allocation	These assets are used to serve the international market and Sky, and would accordingly be allocated to New Telecom on separation.
Telecommunications services provided to the market	The satellite dishes serve Sky TV and are used in the provision of voice/data/IP services to various Pacific Islands, the Chatham Islands and Scott Base (Antarctica).

Mobile Assets

105 The Telecom Group operates a nationwide CDMA network and a 3G WCDMA network (XT).

v0-type 95 – Mobile radio towers, antennas and feeders	
Description	The mobile radio towers, antennas and feeders are used in Telecom's CDMA and WCDMA radio network to capture the mobile signal at cell sites and transfer it to the base station equipment at the site.
Allocation	New Telecom will provide all mobile services and hence all mobile assets will be allocated to New Telecom on separation.
Telecommunications services provided to the market	These assets are used in the delivery of both CDMA and WCDMA mobile services. The mobile towers are also used to provide co-location services to other mobile operators in specific locations.

v0-types 24.01, 19.01, 19.02 – CDMA base stations, switches hardware and software	
Description	The CDMA base transceiver station equipment transmits and receives signals to/from CDMA mobile phones (via antennas and feeders) and links back via transport links to the CDMA mobile switches which process the mobile calls and links to other networks. These assets are the hardware and software components of the switching equipment for the CDMA network.
Allocation	New Telecom will provide all mobile services and hence all CDMA mobile assets will be allocated to New Telecom on separation.
Telecommunications services provided to the market	These assets are used in the delivery of CDMA mobile services on Telecom's CDMA mobile network.

v0-types 86.01, 86.02,86.03 – WCDMA core hardware, software and base station equipment	
Description	The WCDMA base transceiver station equipment transmits and receives signals to/from WCDMA mobile phones (via antennas and feeders) and links back via transport links to the WCDMA core hardware which process the mobile calls and links to other networks. These assets are the hardware and software components of the switching equipment and base station for the WCDMA network.
Allocation	New Telecom will provide all mobile services and hence all WCDMA mobile assets will be allocated to New Telecom on separation.
Telecommunications services provided to the market	These assets are used in the delivery of WCDMA mobile services on Telecom's WCDMA mobile network.

v0-type 81 – Other mobile	
Description	This asset group is comprised of base stations, switch hardware and software, towers, antennas and antenna feeder assets largely associated with the radio paging service.
Allocation	New Telecom will provide all mobile services and all mobile assets, including radio paging, and hence these assets will be allocated to New Telecom on separation.
Telecommunications services provided to the market	These assets are used in the provision of radio paging services.

Services Assets

Services assets are used in conjunction with the passive and active network assets to deliver telecommunications services to end users.

v0-types 7.01, 7.02 – VoIP	
Description	This is the IP Multimedia System (IMS) platform used to deliver IP voice services.
Allocation	New Telecom will provide some IP voice services, and hence as this platform is used to deliver voice services, it will be allocated to New Telecom on separation.
Telecommunications services provided to the market	Gen-i provides some products and related services through this platform.

v0-type 46 – ADSL, DS	v0-type 46 – ADSL, DSLAM, DSL	
Description	The DSL platform consists of equipment installed mainly in exchange buildings and roadside cabinets. The DSL access systems initially consisted predominantly of ADSL1 transmission with a modest amount of SHDSL. Currently higher speed ADSL2/2+/VDSL transmission are being deployed in the network via the introduction of Intelligent Services Access Manager (ISAM) equipment.	
Allocation	These assets are bottleneck access systems and accordingly allocated to New Chorus as providers of the local access network.	
Telecommunications services provided to the market	DSL access systems provide DSL connectivity between the telephone exchange or cabinet and the customers' premises via copper twisted pair cable. DSL access systems equipment is used to provide predominately broadband services, but also low speed data (including Ethernet) access services.	

v0-type 50 – VMux and ISDN Mux	
Description	Voice Mux equipment converts analogue voice signals into 64kbps digital channels and multiplexes up to 30 of these channels into a 2Mbps (E1) digital stream for transmission over derived transmission systems.
	ISDN Mux equipment multiplexes up to 12 ISDN Basic Rate Access (BRA) lines into a 2Mbps digital stream also for transmission over derived transmission systems, and then de-multiplexes this back into individual BRA terminations at the other end.
Allocation	These assets are predominantly located in buildings and cabinets that will be allocated to New Chorus on separation. Accordingly these assets will be allocated to New Chorus, as they form part of the 'last mile' access architecture.
Telecommunications services provided to the market	Voice Mux is used to provide analogue POTS lines from active cabinets, from ESAs that do not have a PSTN switch or RLU at the ESA network node or to business customers either served by fibre or where multiple lines are required.
	ISDN Mux is used to provide ISDN BRA service to customers on active cabinets or to customers in those ESAs that do not have an ISDN capable PSTN switch at the ESA network node.

v0-types 20, 34.01, 34.02, 36.01, 36.02 – PSTN/VSP	
Description	The PSTN is a nationwide switched fixed line voice telephone network. The IN platform and ISDN are adjuncts to the PSTN used to provide premium voice services with ISDN able to provide combined voice and data services.
Allocation	New Telecom will provide all voice services and accordingly these assets will be allocated to New Telecom on separation as the PSTN is a nationwide switched fixed line voice telephone network.
Telecommunications services provided to the market	These assets are used in the provision of PSTN and ISDN services, including related services (e.g. dial-up internet).

v0-type 10 – ATM	
Description	ATM is an early packet-switching technology protocol and is used to support legacy data services and broadband services off older generation DSLAM equipment. The platform consists of ATM edge and core switches located in main centres throughout New Zealand, with mainly 2Mbps, STM1 and STM4 interfaces.
Allocation	ATM forms part of the service layer of the network. ATM is predominantly used for backhaul for a range of legacy high speed data services, but also for some backhaul of New Chorus's legacy ASAM DSL equipment. As these assets are predominantly linked by national backhaul they will be allocated to New Telecom for the provision of data and broadband services.
Telecommunications services provided to the market	This asset platform provides legacy data services and broadband transport for ATM-based equipment DSLAM equipment.

v0-type 11 – Legacy data networks	
Description	Legacy data networks include DSTN, TTS, ATS, packet switch network equipment and other miscellaneous legacy data network equipment. The majority of these legacy data networks are fully depreciated and the products supported by these platforms have been grandfathered in many cases.
Allocation	These assets will be allocated to New Telecom on the basis of preponderance of use.
Telecommunications services provided to the market	These are business support assets and are no longer used directly in the provision of telecommunication services to the market.

v0-types 21, 35.03, 47.07 – IPNet, Broadcast	
Description	IPNet is a legacy data services network used for dial-up internet access. The IPNet assets contain the network access servers or modem banks and other associated equipment. It is a legacy network declining in use as customers switch to broadband for internet access.
	The services provided by the broadcasting equipment can be broken down to television linking services (for television studio networks) and audio linking services (for radio station networks).
Allocation	These assets are used by Telecom in the provision of dial-up internet and broadband services. Hence these assets will be allocated to New Telecom on separation.
Telecommunications services provided to the market	IPNet is used to deliver dial-up internet calls from the PSTN to internet service providers. Broadcast transport equipment is specialised devices used in the provision of video and audio services to the broadcast companies.

Other Telecommunications Equipment and Plant Assets

Other telecommunications equipment and plant comprises building services and power systems, CPE, payphone and tools.

v0-types 12, 14.01, 14.02 – Building services and power systems	
Description	Building services assets (v0-type 12) are equipment used in the buildings New Chorus and New Telecom will each own and operate. These assets comprise the AC power feeds, switchboards and reticulation, engine alternator sets, fuel storage tanks and associated plant and air conditioning systems including water chiller units.
	Power systems (v0-type 14.01 and 14.02) are also used in the buildings New Chorus and New Telecom will each own and operate. Assets comprise the DC plant including rectifiers, batteries, uninterruptible power systems, busbars and DC power cable reticulation.
Allocation	Building services and power systems assets will be used in the provision of services by both New Chorus and New Telecom post separation.
	The mobile building service and power systems assets can be identified by cost centre and these assets will be allocated to New Telecom.
	The remaining assets will be allocated between New Chorus and New Telecom on the basis of building owner (identified by the location code in the FAR).
Telecommunications services provided to the market	The building services and power systems assets support the functioning of the buildings and equipment used in the provision of telecommunication services. These assets also form the basis of the power-related co-location services available to service providers that install their own equipment in New Chorus or New Telecom exchange buildings.

v0-types 15, 16, 26, 57, 78 – Customer Premises Equipment	
Description	CPE is used to provide voice and data services to specific customers and is located at the customer's premises.
Allocation	CPE assets will be allocated to New Telecom on separation as they are located in customer premises beyond the New Chorus demarcation point to provide voice and data services to customers over access circuits.
Telecommunications services provided to the market	CPE is located at customer premises and used in the provision of voice and data services to corporate customers.

v0-type 31 – Payphones	
Description	Payphones includes the booths, phones and associated control systems.
Allocation	The payphone assets will be allocated to New Telecom on separation as they provide voice services to customers.
Telecommunications services provided to the market	Payphones are used to provide public access to PSTN voice services.

v0-type 39 – Other	
Description	Other largely consists of tools and plant which are miscellaneous items used for maintenance.
Allocation	These assets will be used in the provision of services by both New Chorus and New Telecom post separation. They will be allocated using the cost centre owner on the basis of preponderance of use. The Chorus and Wholesale (excluding International) BU cost centres will be allocated to New Chorus and all other cost centres will be allocated to New Telecom.
Telecommunications services provided to the market	These are business support assets used mainly in the maintenance of network assets, and are therefore not used directly in the provision of telecommunication services to the market.

Land

There are four types of land assets recorded in the FAR. Two are included in this category, being freehold land and site costs. Land easements and land licenses are included in the other intangible assets category.

v0-type 41.01 – Freehold land	
Description	Freehold land is usually the site for an exchange or other network building. Freehold land is non-depreciable.
Allocation	The freehold land asset allocation follows the allocation of the associated building.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

v0-type 41.04 – Site costs	
Description	Site costs for leasehold sites including land access, AC power supply, foundations, landscaping and civil engineering cost and labour.
Allocation	The site costs asset allocation follows the allocation of the associated building.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

Buildings

Telecom owns buildings and equipment shelters almost exclusively for the primary provision of PSTN services, Information Technology and Telecommunications (IT&T) network services, data centres and commercial and regulated co-location services. The majority of Telecom's non-network staff are located in leased office accommodation.

v0-type 51 – Buildings	
Description	Buildings comprise buildings (concrete, brick and wooden) and equipment shelters (brick, metal and wooden) on both freehold and leasehold land.
Allocation	Exchange buildings
	All but 30 exchange sites will be allocated to New Chorus. 29 of the 30 exchange sites will be allocated to New Telecom as they are the current Tier 2 and above exchange sites and, as such are the buildings that contain the core national transport nodes and other core infrastructure critical to New Telecom's ongoing operations. The Hillmorton exchange building is also allocated to New Telecom to assure regional network diversity.
	All other exchange buildings will be allocated to New Chorus. Sharing arrangements will be put in place to lease space in the buildings.
	Non-exchange buildings
	The non-exchange buildings will be allocated using the cost centre owner on the basis of preponderance of use. The Chorus and Wholesale (excluding International) BU cost centres will be allocated to New Chorus and all other cost centres will be allocated to New Telecom.
Telecommunications services provided to the market	The building services assets support the functioning of the equipment used in the provision of telecommunication services, such as the provision of IT&T network services, data centres and commercial and regulated co-location services.

v0-type 42 – Property fit-outs	
Description	Other property assets include building fixtures, fences, internal cabling, fire protection equipment, security equipment, seismic bracing and leasehold improvements. Non-network fit-out assets primarily include other property assets related to accommodation for non-network staff.
Allocation	Other property assets will be used in the provision of services by both New Chorus and New Telecom post separation. They will be allocated using the cost centre owner on the basis of preponderance of use. The Chorus and Wholesale (excluding International) BU cost centres will be allocated to New Chorus and all other cost centres will be allocated to New Telecom.
Telecommunications services provided to the market	Other property assets support the functioning of the buildings and equipment used in the provision of telecommunication services.

Other Assets

Other assets include motor vehicles, office equipment and furniture and IT system hardware.

v0-type 40 – Motor vehicles	
Description	Motor vehicles are primarily sedans, station wagons, vans and utes.
Allocation	Motor vehicles will be used in the provision of services by both New Chorus and New Telecom post separation. The assets will be allocated using the cost centre owner on the basis of preponderance of use. The Chorus and Wholesale (excluding International) BU cost centres will be allocated to New Chorus and all other cost centres will be allocated to New Telecom.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

v0-types 13, 18 Office equipment, Furniture	
Description	Office equipment includes electronic office equipment, phones and office furniture (e.g. chairs and workstations).
Allocation	Office equipment and furniture will be used in the provision of services by both New Chorus and New Telecom post separation. The assets will be allocated using the cost centre owner on the basis of preponderance of use. The Chorus and Wholesale (excluding International) BU cost centres will be allocated to New Chorus and all other cost centres will be allocated to New Telecom.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

v0-types 58-75 (.01) -	- Information technology hardware
	The following v0-type asset groups are included in information technology hardware:
	58.01- IT hardware: billing
	• 59.01- IT hardware: common
	61.01-IT hardware: common information systems
	62.01- IT hardware: corporate
	63.01- IT hardware: customer services
	64.01- IT hardware: data
	65.01- IT hardware: fulfil and assure
	66.01- IT hardware: Gen-i
	67.01- IT hardware: International
	68.01- IT hardware: managed services CPE
	69.01- IT hardware: mobile
	70.01- IT hardware: network management
	72.01- IT hardware: online
	73.01- IT hardware: sales and marketing
	74.01- IT hardware: transport
	75.01- IT hardware: VoIP/voice
Description	Information technology is the hardware (including data networks) used to provide front and back office support to the business. It excludes all software.
Allocation	Shared systems asset ownership has been determined on the basis of:
	(a) Preponderant use of a system (against volume, time, process and/or product accountability, etc); and/or
	(b) Driver of change (or greatest requirement for future change in shared system)
	The following approach has been used for the application of these principles:
	(1) Shared systems assets have been assigned to either New Chorus or New Telecom at the EvG4 asset level, which is at a lower level than v0-type.
	(2) Assets that are traceable directly to the Chorus BU prior to separation will be allocated to New Chorus, with the exception of those systems assets which are not independently and identifiably separable components. In these cases, the asset has been assigned to New Telecom, with commercial agreements in place for use by

Section Three PP&E and Intangible Assets

		New Chorus of shared systems.
	(3)	Those systems that directly support the PSTN and mobile networks will be allocated to New Telecom.
	(4)	Those systems assets that are directly traceable to the Gen-i, Retail, International and Corporate BUs will be allocated to New Telecom, with commercial agreements in place for use by New Chorus of shared systems.
	been in	ystems assets that are directly traceable to the Wholesale BU have dividually assessed and have either been assigned to New Chorus applicable, or retained with New Telecom, with commercial ents in place for use of shared systems.
Telecommunications services provided to the market		re business support assets, not used directly in the provision of munication services to the market.

International Assets

International assets are owned by AAPT, an Australian telecommunications provider that owns and operates its own national voice and data network, and Telecom's international BU which provides international telecommunication services to both Telecom and other service providers.

Description	Overseas company fixed assets include assets such as the satellite earth stations, AAPT assets in Australia and points of presence in North America, Europe and Asia.
Allocation	These will be allocated to New Telecom as they are outside of New Chorus's core New Zealand business.
Telecommunications services provided to the market	These assets are used to provide telecommunications services to the international market and in the provision of international services to the domestic market, including broadband, voice (fixed and mobile) and data.

Work in Progress

Description	Work in progress (WIP) is the expenditure on capital projects that has not yet been capitalised to the FAR and therefore has no asset class or EvG4 identifiers.
	WIP is comprised of capital expenditure on many projects in progress at any one point in time.
Allocation	Subject matter experts will review each project and assign the project to New Chorus or New Telecom, on the basis of which entity is executing the capital investment.
Telecommunications services provided to the market	WIP is either from market driven projects or projects to provide shared infrastructure. Market driven WIP will provide services to the telecommunications market when it is capitalised and used as an asset. Shared infrastructure WIP will be capitalised as business support assets, not used directly in the provision of telecommunication services to the market.

C. Intangible Assets

Software

	v0-types 58-75 (.02) – software
112	The following v0-type asset groups are included in software:
	• 58.02- IT software: billing
	• 59.02- IT software: common
	61.02- IT software: common information systems
	62.02- IT software: corporate
	63.02- IT software: customer services
	64.02- IT software: data
	65.02- IT software: fulfil and assure
	66.02- IT software: Gen-i
	67.02- IT software: International
	68.02- IT software: managed services CPE
	69.02- IT software: mobile
	70.02- IT software: network management
	72.02- IT software: online
	73.02- IT software: sales and marketing
	74.02- IT software: transport
	75.02 – IT software: VoIP / voice

C. Intangible Assets

Description	Software generally supports specific network operations, platforms or services.
Allocation	Shared systems asset ownership has been determined on the basis of:
	 (a) Preponderant use of a system (against volume, time, process and/or product accountability, etc); and/or (b) Driver of Change (or greatest requirement for future change in shared system).
	The following approach has been used for the application of these principles:
	(1) Shared systems assets have been assigned to either New Chorus or New Telecom at the EvG4 asset level, which is at a lower level than v0-type.
	(2) Assets that are traceable directly to the Chorus BU prior to separation will be allocated to New Chorus, with the exception of those systems assets which are not independently and identifiably separable components. In these cases, the asset has been assigned to New Telecom, with commercial agreements in place for use by New Chorus of shared systems.
	(3) Those systems that directly support the PSTN and mobile networks will be allocated to New Telecom.
	(4) Those systems assets that are directly traceable to the Gen-i, Retail, International and Corporate BUs will be allocated to New Telecom, with commercial agreements in place for use by New Chorus of shared systems.
	Those systems assets that are directly traceable to the Wholesale BU have been individually assessed and have either been assigned to New Chorus where applicable, or retained with New Telecom, with commercial agreements in place for use of shared systems.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

Other Intangibles

v0-type 28, 32 – Spectrum licences		
Description	Spectrum licenses relate to the right to utilise a specific frequency or range of frequencies and are used, amongst other examples, to host the access radio systems. These are intangible assets recording the spectrum licence costs incurred by Telecom for the right to use radio spectrum.	
Allocation	Spectrum licences will be allocated on the basis of usage between New Telecom and New Chorus.	
	New Chorus will be allocated spectrum licences covering point-to-point DMR gain, and New Telecom will be allocated all other spectrum licences. The spectrum licences to be allocated to New Telecom are:	
	850 MHz spectrum used for mobile;	
	Unused 2.6 GHz spectrum for mobile use;	
	1,800 MHz spectrum bought for GSM but used for digital microwave linking for fixed access, transport, mobile tails and sub-leased to a third party. This is predominantly used by New Chorus but New Telecom will own it as it has potential value as mobile spectrum. New Telecom will own the management rights and New Chorus will own the licence to use the spectrum – a continuation of the current practice; and	
	• 1.9 GHz and 2.1 GHz mobile spectrum (commonly referred to as '2100').	
Telecommunications services provided to the market	New Telecom will use the spectrum licences in the delivery of mobile services. The spectrum licences allocated to New Chorus will be used in the DMR point-to-point systems in the provision of access and regional transport services.	

C. Intangible Assets

v0-type 41.02 – Land easements	
Description	Land easements are the right to use land owned by other parties for the installation of network assets, predominantly underground cables and ducts. Costs incurred in the creation of easements primarily involve professional fees for surveying and legal work.
Allocation	All land easements for mobile sites are allocated to New Telecom on separation. The remaining land licences are allocated to New Chorus on the basis of preponderance of use.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

v0-type 41.03 – Land licences	
Description	Land licences are a right to occupy land for a fixed term, typically an initial period with two rights of renewal. Licences are predominantly used to secure accommodation for mobile base stations. There is no market for licenses and each is negotiated on an individual basis with the property owner. Costs are incurred at the commencement of the licence and at each renewal if exercised.
Allocation	All land licences for mobile sites are allocated to New Telecom on separation. The remaining land licences are allocated to New Chorus on the basis of preponderance of use.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

C. Intangible Assets

v0-type 77 – IRUs on submarine cables	
Description	The IRUs on submarine cables relate to submarine cables between New Zealand, Australia and the United States of America. This includes the IRU on Telecom's share of the Southern Cross submarine cable.
Allocation	All IRUS on submarine cables are offshore assets and accordingly will be allocated to New Telecom on separation.
	In particular, the Southern Cross submarine cable is not a domestic local access asset. Therefore the IRU on the Southern Cross submarine cable will be allocated to New Telecom as it is not part of New Chorus's core business.
Telecommunications services provided to the market	These are required for the provisioning of international voice and data services.

Goodwill

Description	Goodwill represents the excess of purchase consideration over the fair value of net assets acquired at the time of acquisition of a business or shares in a subsidiary.
Allocation	Goodwill is supported by two cash generating units, which are the Gen-i and Telecom Retail operating segments. The Gen-i and Telecom Retail BUs remain part of New Telecom and the goodwill will be allocated to New Telecom.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

A. Cash

Section Four Other Assets

A description of the other assets groupings, the method of allocation between New Chorus and New Telecom and how the other assets groupings will be used to provide telecommunication services to the market is provided in this section.

A. Cash

Description	Cash comprises cash balances and highly liquid deposits or securities. Bank overdrafts that are repayable on demand are included as a component of cash.
Allocation	All cash management in Telecom is handled centrally. The Chorus BU does not operate its own bank account for the payments of cash to suppliers and the receipt of cash from customers.
	There are four bank accounts which hold funds in trust for third parties which relate specifically to Chorus property management activities. These bank accounts (which in total amount to less than \$50,000) will be allocated to New Chorus.
	Any remaining cash balances as at separation will be allocated to New Telecom. New Chorus opening cash balances will be as a result of the debt structure agreed.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

B. Receivables and Prepayments

Accounts Receivable

Description	Accounts receivable includes trade receivables and unbilled rental and tolls. Unbilled rental and tolls arise from the provision of services to wholesalers, retail service providers and retail customers.
Allocation	Trade receivables and unbilled rental and tolls largely relate to income earned by Telecom (relating to retail customers) prior to separation and will be allocated to New Telecom on separation.
	Trade receivables which relate specifically to property management will be allocated on the basis of the allocation of the underlying property on separation.
	Unbilled rental and tolls relating to wholesalers and retail service providers will be analysed in detail and assessed to establish whether they relate to New Telecom or New Chorus. They will then be allocated on the basis of this assessment.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

Finance Lease Receivables

Description	Finance lease receivable relates to Telecom Rentals.
Allocation	Telecom Rentals and the associated finance lease will remain in New Telecom as the rentals are to external retail customers.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

B. Receivables and Prepayments

Prepayments and Other Receivables

Description	Prepaid expenses and other receivables arise from expenses paid in advance or income earned.
Allocation	Prepaid expenses and other receivables will be allocated on separation as follows:
	(a) personnel related receivables, such as payroll overpayments, will be allocated on the basis of which entity the individual is employed by post separation date.
	(b) property (owned or leased) related prepayments and other receivables will be allocated on the basis of the allocation of the underlying property on separation.
	(c) Field Services Companies related prepayments and other receivables will be allocated to New Chorus.
	(d) all other prepaid expenses and other receivables will be analysed in detail and assessed to establish whether they relate to New Telecom or New Chorus. They will then be allocated on the basis of this assessment.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

B. Receivables and Prepayments

Inter-company Accounts Receivable

Description	Inter-company accounts receivable account for the internal trading activities between Telecom's business units and are eliminated on consolidation.
Allocations	Inter-company accounts receivable balances at separation date will be allocated to New Telecom as this relates to internal revenues earned prior to separation.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

Inter-company Funding Short-term

Description	The majority of external funding is currently dealt with by TCNZ Finance Ltd and then allocated to other Telecom Group subsidiaries by inter-company loans.
Allocations	Inter-company funding balances at separation date will be allocated to New Telecom as this relates to internal funding established prior to separation.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

C. Inventories

C. Inventories

Description	Inventories include maintenance materials and consumables, goods held for sale, and work in progress.
Allocations	Inventories will be allocated after analysis of what part of the network the inventory would support. Inventory supporting parts of the network that are allocated to New Chorus will also be allocated to New Chorus. All other inventories will be allocated to New Telecom.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

D. Long-term Investments

D. Long-term Investments

Shares in Hutchinson

Description	Telecom owns a 10% interest in Hutchinson, a mobile company.
Allocations	This investment will be allocated to New Telecom as it is not part of New Chorus's core business.
	This is an investment asset, not used directly in the provision of telecommunication services to the market.

Shares in Other Listed Companies

Description	At 30 June 2010, Telecom owned shares in Macquarie Telecom Group Limited and iiNet Limited.
Allocations	The investments in Macquarie Telecom Group and iiNet Limited have been sold during the 2011 financial year.
Telecommunications services provided to the market	These were investment assets, not used directly in the provision of telecommunication services to the market.

D. Long-term Investments

Shares in Unlisted Companies

Description	This relates to Telecom's investment in TMT Ventures, a corporate venture capital programme. The venture capital is invested in a number of companies that are in start-up phase.
Allocations	The investment in TMT Ventures will be allocated to New Telecom as this is not part of New Chorus's core business.
Telecommunications services provided to the market	This is an investment asset, not used directly in the provision of telecommunication services to the market.

Investment in Government Stock

Description	Investment in Government stock.
Allocations	This investment will be allocated to New Telecom as it is not part of New Chorus's core business.
	This is an investment asset, not used directly in the provision of telecommunication services to the market.

D. Long-term Investments

Investment in Associates

Description	Investments in associates are:
	(a) Pacific Carriage Holdings Limited – related to Southern Cross cable which is allocated to New Telecom.
	(b) Southern Cross Cables Holdings Limited – related to Southern Cross cable which is allocated to New Telecom.
	(c) Community Telco Australia Pty Limited – Australian interest.
Allocations	The Southern Cross submarine cable is not a domestic local access asset. Therefore, the investment in Southern Cross Cables Holdings Limited will be allocated to New Telecom as it is not part of New Chorus's core business.
	These investments will be allocated to New Telecom as they are not part of New Chorus's core business.
Telecommunications services provided to the market	These are investment assets, not used directly in the provision of telecommunication services to the market.

E. Long-term Receivables

E. Long-term Receivables

Finance Lease Receivable

Description	Specified leases relate to Telecom leases and leases for assets across the Group. Loans receivable relate to employee restricted share scheme.
Allocations	Specified leases are anticipated to be wound up prior to separation. Loans receivable balances are intended to be allocated dependant on which entity the individual is employed by post separation date.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

Other Receivables

Description	Other receivables arise from settlements from suppliers.
Allocations	Other receivables are related to revenue earned by Telecom prior to separation and will be allocated to New Telecom on separation.
Telecommunications services provided to the market	These are business support assets, not used directly in the provision of telecommunication services to the market.

Section Five Debt Related Liabilities and Derivatives

A description of each debt related liability grouping and the method of allocation between New Chorus and New Telecom is provided in this section.

A. Long-term Debt

European Medium Term Notes (EMTNs)

Description	Telecom holds long term debt to fund capital purchases and to maintain a stable balance sheet position. The debt portfolio is managed through a board approved treasury constitution consisting of treasury governance and policy frameworks.
	Telecom has five tranches of EMTNs:
	250m USD notes due Dec 2011
	200m CHF notes due Aug 2012
	275m CAD notes due Oct 2013
	125m GBP notes due May 2018
	150m GBP notes due April 2020
Allocation	The debt to be exchanged on or around demerger is based on a set debt/EBITDA ratio agreed with CFH. Once this ratio is calculated the appropriate amount of debt and associated derivatives will be exchanged (subject to appropriate arrangements being reached with counterparties) and form part of the total debt for New Chorus. Any of the EMTN debt (and associated derivatives) that is not exchanged will either be bought back prior to the demerger or remain in New Telecom post demerger.

Telebonds

Description	Telecom has issued bonds to institutional and retail investors at various interest rates and maturity dates. The maximum maturity date on outstanding Telebonds is April 2016.
Allocation	It is intended that the Telebonds will be allocated to New Telecom

B. Derivatives

- Telecom uses derivative financial instruments to reduce its exposure to fluctuations in foreign currency exchange rates, interest rates and electricity prices.
- Each derivative designated as a hedge is classified as either:
 - (a) a hedge of the fair value of recognised assets or liabilities (a fair value hedge); or
 - (b) a hedge of a highly probable forecast transaction (a cash flow hedge); or
 - (c) a hedge of a net investment in foreign operations.
- Telecom classifies each derivative balance between short and long-term and as either an asset or liability. Telecom uses three derivative financial instruments being foreign exchange contracts, cross currency interest rate swaps and interest rate swaps.

Forward Exchange Contracts and Options

Description	Derivatives assets and liabilities arise on forward exchange contracts to buy and sell foreign currency. They relate to other asset and liability balances.
Allocation	Derivative assets and liabilities will be allocated in line with the allocation of the underlying exposure.
Telecommunications services provided to the market	These are business support assets or liabilities, not used directly in the provision of telecommunication services to the market.

Cross-Currency Interest Rate Swaps

Description	Derivatives assets and liabilities arise on cross-currency interest rate swaps entered into to manage the EMTN currency and interest rate risk exposures.
Allocations	These will be allocated in line with the allocation or repayment of the EMTNs.
Telecommunications services provided to the market	These are business support assets or liabilities, not used directly in the provision of telecommunication services to the market.

Interest Rate Swaps

Description	Derivative liabilities arise on interest rate swaps entered into to manage the EMTN currency and interest rate risk exposures.
Allocations	At Demerger date no interest rate swaps were in place with respect to the EMTN bonds transferring to New Chorus, therefore no interest rate swaps will transfer to New Chorus.
Telecommunications services provided to the market	These are business support assets or liabilities, not used directly in the provision of telecommunication services to the market.

Section Six Other Liabilities

A description of the other liabilities groupings and the method of allocation between New Chorus and New Telecom is provided in this section.

A. Accounts Payable and Accruals

Trade Accounts Payable

Description	Trade payables are non-derivative financial liabilities arising from the normal course of business.
Allocations	Apart from the following exceptions, trade payables balances at separation will be allocated to New Telecom, as they are related to expenses incurred by Telecom prior to separation.
	The following specific GL accounts are either accrual in nature, have an accrual entry in them or relate to service companies; they will be analysed in detail and assessed to establish whether they relate to New Telecom or New Chorus. They will then be allocated on the basis of this assessment.
	945250 – Wholesale Account Debt Guarantees
	945260 - Service Company OH Clearing
	945261 - Service Company Retentions Payable
	945511 – Accounts Payable CMS Property Interface
	945512 - Property Payments

Accrued Personnel Costs

Description	Accrued personnel costs include salaries and wages accruals, holiday pay, long service leave and bonus provisions.
Allocations	Personnel related balances are intended to be allocated on the basis of which entity the individual is employed by post separation date.

Revenue Billed in Advance

Section Six Other Liabilities

A. Accounts Payable and Accruals

Description	Revenue billed in advance primarily relates to unearned revenue on monthly connections to retail customers, wholesalers and retail service providers as well as commercial rental on Telecom owned buildings.
Allocations	Revenue billed in advance relating to connections to retail customers will be allocated to New Telecom.
	Revenue billed in advance relating to wholesalers and retail service providers will be analysed in detail and assessed to establish whether they relate to New Telecom or New Chorus. They will then be allocated on the basis of this assessment.
	Revenue billed in advance relating to commercial rental will be allocated on the basis of the allocation of the underlying property on separation.

Accrued Interest

Description	Accrued interest includes interest on local and foreign deposits, currency and interest rate swaps, interest rate swaps, EMTN and Telebonds.
Allocations	The accrued interest will be allocated in line with the allocation of the underlying debt liability.

Other Accrued Expenses

Description	Other accrued expenses are largely tax related (including GST), personnel related (including provision for FBT, accrued Government superfund, accrued ACC levy) or other.
Allocations	Tax related accruals will be allocated to New Telecom as they relate to income earned and expenses paid prior to separation date.
	Personnel related accruals will be allocated on the basis of which entity the individual is employed by post separation date.
	Other accruals (e.g. audit fees, capital expenditure) will be analysed in detail and assessed to establish whether they relate to New Telecom or New Chorus. They will then be allocated on the basis of this assessment.

B. Taxation

B. Taxation

Taxation Payable

Description	Taxation payable to the Inland Revenue department on net income earned and expenses incurred by Telecom.
Allocations	Taxable payable will be allocated to New Telecom. No taxation payable is intended to be allocated to New Chorus as it relates to income earned and expenses incurred by Telecom prior to separation date.

Deferred Tax

Description	Deferred tax includes tax depreciation, provisions and accruals, tax losses and other.
Allocations	Deferred tax will be allocated to the entity to which the underlying asset or liability that gives rise to the deferred tax balance is allocated on separation.

C. Provisions

C. Provisions

A provision is recognised, if as a result of a past event, Telecom has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits is required to settle the obligation. These include short-term and long-term provisions.

Description	The short and long-term provision balances are comprised of:
	(a) commercial (billing application configuration issues);
	(b) restructuring (restructuring activities previously undertaken or announced);
	(c) property (make-good requirements under property leases and onerous leases); and
	(d) other (includes legal provisions and parent's obligations over subsidiaries' debt).
Allocations	Provisions will be allocated on the basis of which entity will be responsible for the underlying liability post separation.

A. Commitments

Section Seven Off Balance Sheet Items

A. Commitments

Operating Leases

- Telecom has entered into commercial leases, as the lessee, on properties, network infrastructure, motor vehicles and other items of equipment.
- Operating leases on properties will be allocated between New Chorus and New Telecom based on:
 - (a) which entity's employees occupy the leased property post separation; and
 - (b) which entity owns the infrastructure located on the leased property post separation.
- The allocation of all other operating leases between New Chorus and New Telecom will be allocated based on which entity uses the leased network infrastructure, motor vehicle or equipment post separation.

Capital Commitments

- 123 Capital commitments are committed contractual arrangements primarily to purchase telecommunications network assets, with substantially all payments due within one year.
- 124 Capital commitments will be allocated between New Chorus and New Telecom in line with the allocation rules for PP&E and intangible assets in section three.

B. Contingent Assets

Insurance Receivable Arising from Earthquake Claims

- Telecom's captive insurance company, Teleco Insurance Limited, provides insurance for material damage and business interruption to Telecom. Teleco Insurance Limited purchases reinsurance from the insurance market.
- Telecom's pending insurance claim for material damage and business interruption arising from the Christchurch Earthquakes represents a contingent asset that will remain unrecognised until the claim has been formally approved by Telecom's reinsurers.
- Post the date of demerger, Teleco Insurance Limited will be a New Telecom subsidiary and will insure New Telecom but will cease providing insurance for New Chorus. The insurance contracts will remain with New Telecom on separation and hence this contingent asset will be allocated to New Telecom.

C. Contingent Liabilities

Lawsuits and Other Claims

Where Telecom concludes that its defence will more likely than not be successful, then such lawsuits or claims are considered a contingent liability and no provision is recognised. When it is more likely than not that Telecom is liable and that there will be an outflow of resources to settle a lawsuit or claim, a provision is recognised, unless the amount cannot be measured reliably.

Lawsuits: New Zealand and Australia	Generally, if the assets or services that are the subject of the litigation, dispute, claim, or inquiry were or are currently delivered by the Chorus BU and/or will be delivered by New Chorus, then they will be allocated to New Chorus. Similarly, if the assets or services that are the subject of the litigation, dispute, claim, or inquiry, were or are currently delivered by the non Chorus BU part of the Telecom business and/or will be delivered by New Telecom then they will be allocated to New Telecom.
Land claims	Interests in land included in PP&E purchased from the Government may be subject to claims to the Waitangi Tribunal or deemed to be wahi tapu and, in either case, may be resumed by the Government. Where the interests in land are allocated to New Chorus, the contingent liability is also allocated to New Chorus. Where the interests in land are allocated to New Telecom, the contingent liability is also allocated to New Telecom.
Bank guarantees	Telecom has issued bank guarantees to guarantee rental payments of a subsidiary company. The contingent liability is allocated to New Telecom along with the subsidiary company.
Cross border lease guarantees	All cross border lease guarantees arise from financing structures relating to subsidiary companies allocated to New Telecom. The contingent liability is allocated to New Telecom along with the subsidiary company.
Parent Company	Any parent company contingencies will be allocated to New Telecom.

D. Intellectual Property

D. Intellectual Property

- 129 Intellectual property includes items such as copyrights, business names and website addresses. Off balance sheet intellectual property includes both registered intellectual property and unregistered intellectual property.
- Intellectual property will be allocated to New Chorus where the intellectual property is related to the assets, products or services being allocated to New Chorus on separation. All other intellectual property will be allocated to New Telecom.

Section Eight Sharing Arrangements

- This section sets out the key terms of all intended material sharing arrangements.
- Under the Act the Commission has an oversight role in respect of the sharing arrangements.

 The Act requires that sharing arrangements:
 - (a) are recorded in writing;
 - (b) are on arm's length terms;
 - (c) are unlikely to harm competition in any telecommunications market; and
 - (d) ensure the protection of confidential commercial and customer information.
- The sharing arrangements provide for the protection of customer and commercial information in accordance with the following principles:
 - (a) commercially standard obligations of confidentiality and data protection are to apply in respect of each party's confidential information;
 - (b) New Chorus's customer confidential and commercial information may only be used by New Telecom's personnel who work in a Shared Management Unit or who perform lawful interception or 111 services (and legal and compliance personnel who ensure and assess New Telecom's compliance with its Access Seeker Confidential or Commercial Information obligations) to the extent they require such information to perform their job or such other personnel who require such use to undertake their legitimate functions and whom Chorus has agreed may use such information (such agreement not to be unreasonably withheld provided such use is limited to the extent necessary to undertake that function and such information is protected from further disclosure).
 - (c) Only personnel who Chorus has agreed may have access to parts of systems which contain Access Seeker Confidential or Commercial Information may have such access, such agreement not to be unreasonably withheld to the extent that access is necessary for personnel to undertake their legitimate functions; and
 - (d) An information control policy, that is similar to the rules that are currently in place, will apply to all personnel who require access for a purpose set out in (b) or (c) above.

More detailed provisions for the protection of customer confidential and commercial information will be outlined in the relevant sharing arrangements which will be monitored by the Commission.

- Copies of all sharing arrangements are required to be provided to the Commission within 10 working days of separation day. Similarly, any new sharing arrangements or material amendments to existing sharing arrangements after separation must be provided to the Commission. The Act provides the Commission with broad investigative powers and the ability to require amendments to sharing arrangements where they do not meet the requirements of the Act. Failure to rectify any non-compliance or comply with an amendment direction from the Commission can result in fines of up to \$10 million (and \$500,000 per day).
- The Act excludes from the sharing arrangements regime a range of agreements between New

Chorus and New Telecom. This is done where the agreements are regulated by another instrument (such as a standard terms determination, a deed of undertaking, or the terms of a deemed TSO instrument). However, in the interests of transparency this section presents a full picture of the contractual position between New Chorus and New Telecom. The application of the Act's exclusions will be made at the time that Telecom presents the sharing arrangements to the Commission as required by the Act.

A. Services Agreements for Products/Services which New Chorus will Supply to RSPs

Following separation, New Chorus will supply various products/services on commercial terms to all RSPs, including New Telecom.

The trades will be offered under three umbrella services agreements:

- (a) the UFB Services Agreement (CFH WSA);
- (b) the Chorus Services Agreement; and
- (c) the Chorus Wholesale Services Agreement,

depending on the service being provided. The terms of these umbrella services agreements vary, but are either based on templates widely used by Telecom with its existing customers or as agreed with CFH.

The following is a list of material services (other than services offered on the basis of standard terms determinations) that are to be provided by New Chorus to all RSPs, including New Telecom, under the indicated agreements:

UFB Services Agreement

- (a) ATA Voice;
- (b) Bandwidth Fibre Access;
- (c) Baseband (over fibre);
- (d) Bitstream 2;
- (e) Bitstream 3;
- (f) Bitstream 3a;
- (g) Bitstream 4;
- (h) Central Office Co-location;
- (i) Direct Fibre Access;
- (j) Intra-Candidate Area Backhaul;
- (k) Multicast; and
- (I) UFB Handover Connection Services.

Chorus Services Agreement

- (a) Baseband (over copper);
- (b) Carrier Network Services;
- (c) Commercial Backhaul;
- (d) E1 (2Mbps) Access Service;
- (e) E3 (34/45 Mbps) Access Service;

- (f) Field Force Products;
- (g) PSTN Backhaul; and
- (h) STM (1,4,16) Access Service.

Chorus Wholesale Services Agreement

- (a) Basic UBA Tail Extension (UBR Backhaul);
- (b) Commercial UBA;
- (c) Enhanced UBA Tail Extension;
- (d) HSNS Lite;
- (e) HSNS Premium;
- (f) UPC; and
- (g) UPC Lite.

Non-regulated services provided by New Chorus under these service agreements may be subject to New Chorus's deeds of undertaking, and accordingly, where they are, they will be priced on a non-discriminatory basis and as negotiated by New Chorus and the market. Pricing for services under the CFH WSA will be as determined by CFH, and regulated services will be priced as set by the applicable regulations. New Chorus will also supply legacy copper bitstream services to New Telecom under the Chorus Wholesale Services Agreement but, consistent with the Copper Undertaking, those services will not be available to other RSPs. Services that supersede those legacy copper services are available to other RSPs.

B. Agreement for Provision of Agency Services

Industry specifically requested that certain wholesale services be available from New Chorus as a one-stop shop rather than needing to deal with both New Chorus and New Telecom in relation to the wholesale product set. To meet this industry preference that New Chorus be the channel for wholesale services, and to satisfy New Chorus's regulatory requirements (the obligation to provide bundled UBA and local access and calling services), New Chorus will sell a number of different wholesale services on New Telecom's behalf.

139 The services to be provided by New Chorus under this Agency Agreement include:

- (a) Homeline
- (b) 0900 Calling
- (c) Analogue Data Service (A1, A2, A3)
- (d) ATM (Asynchronous Transfer Mode)
- (e) Audioconference Calls
- (f) Business Line Rental
- (g) Call Minder
- (h) Centrex
- (i) Customerlink
- (j) Digital Data Service
- (k) Digital Voice Access
- (I) Direct Connect
- (m) Direct-Dial-In (DDI) Service
- (n) Directory Assistance Service
- (o) Frame Relay
- (p) High Speed Digital Data Service
- (q) ISDN BRA
- (r) ISDN PRA
- (s) Local Number Portability Request
- (t) Megalink Service
- (u) Metro IP
- (v) Non Code Access Activation

- (w) Non Code Access Calling
- (x) One Office
- (y) Smartphone Services
- (z) Temporary Disconnect Calling
- (aa) Tollfree Services (eg 0800)
- (bb) Wiring Maintenance
- The agency scope encompasses three areas of New Chorus agency responsibility in relation to the relevant product set:
 - (a) managing the channel experience, the day-to-day relationship with the wholesale customer (including vetting the customer according to New Telecom's customer prerequisites and credit policy, as amended from time to time), specifically account management and service delivery management;
 - (b) performing business communications and marketing functions between New Telecom and the wholesale customer; and
 - (c) performing certain specified services, including:
 - (i) order capture and entry; and
 - (ii) billing, collection and managing billing enquiries and disputes.
- New Telecom is responsible for:
 - (a) retaining the commercial (contractual) relationship with the service provider (i.e. contracts managed by the agency are between New Telecom and the other service providers);
 - (b) owning the products (e.g. product life cycle management, development and profitability);
 - (c) providing the product/service;
 - (d) the service experience of the contracted service itself;
 - (e) reporting the gross customer revenue (excluding UBA and any other New Chorus services that are sold together with the agency related services);
 - (f) paying for all costs including product inputs (e.g. copper input products) and the agreed agency fee;
 - (g) carrying the credit risk of a default by the other service provider; and
 - (h) managing New Chorus as an agent.
- This Agency Agreement provides that New Telecom and New Chorus have very limited rights to terminate the agreement where New Chorus is still subject to a regulatory requirement to provide bundled UBA and local access and calling services.
- New Telecom will pay New Chorus a cost based agency fee plus an at risk margin based on service levels (which do not relate to revenue targets for New Chorus sales of New Telecom

products). The costs underlying the fee are fixed to 30 June 2012 and thereafter reviewed six monthly.

C. Gen-i Business Agreement

- New Telecom (through its Gen-i business division) will supply certain products to all its customers, including New Chorus. These products relate to current Gen-i services provided to the market generally. The products will be provided to all Gen-i customers including New Chorus on substantially the same terms (being those which Telecom (through Gen-i) currently provides such services to its customers).
- Where New Telecom provides products to New Chorus under the Gen-i Business Agreement, the trade shall continue for up to 36 months or until such time that either party terminates the service (with 3 months' written notice and payment of any early termination charges) or until Gen-i provides notice of the cessation of any service.

D. Shared System Agreement

Prior to separation, Chorus and Telecom Wholesale leverage a shared operations unit (a part of Telecom's current Shared Services BU which will sit in New Telecom and provide technology services to New Chorus as well as New Telecom) and use foundational IT systems and platforms as well as personnel to deliver their products which support multiple platforms, products and customer groups. In order to minimise customer impact, migrations, industry cost and investment in legacy products, New Chorus will not immediately develop independent IT platforms and processes to support its structural separation. To enable efficient delivery to the market for fibre products delivered before, or soon after separation, New Chorus will also continue to use existing shared systems.

The ownership of shared systems assets has been allocated in accordance with two core principles:

- (a) allocation to the party with the predominant use of a system; and/or
- (b) allocation to the party with the greatest requirement for future change.

As required under the New Chorus Copper Undertaking, New Chorus will prepare and submit a sharing arrangement transition plan to the Minister within 12 months of separation day. The plan will include (amongst other things) a description of the actions required to move to ending the sharing arrangements, timeframes for these actions, and trigger points and dependencies.

The Shared Systems Agreement governs the ongoing shared systems relationship between New Telecom and New Chorus and covers New Telecom providing to New Chorus:

- (a) Technology and Operations Management Services (provided in relation to New Chorus owned shared systems and New Chorus owned non-shared systems located in a New Telecom data centre);
- (b) Business Operations Services; and
- (c) Consultation, Design and Build Services,

and New Chorus providing to New Telecom:

- (a) Technology and Operations Management Services (access to/use of New Chorus owned shared systems); and
- (b) Business Operations Services.
- New Chorus will leverage the systems capability (FMO) developed to support Separation Undertakings to develop its fibre product capability. New Chorus will own the systems capability responsible for managing fibre services, and where this may currently be provided on capability also servicing New Telecom (as is the case with first in Layer 2 fibre services) this will migrate in a timeframe agreed between New Chorus and CFH.
- The overarching principle for these services is cost recovery. Costs for most services will be reviewed on six month cycles. Allocation proportions of those costs will be reviewed six monthly. For major changes having a material effect on the costs of providing services, ad

hoc cost reviews are available.

- 151 Charges for changes to shared systems are allocated as follows:
 - (a) for maintain/sustain changes, the owner of the system pays; and
 - (b) for other changes, the requesting party pays.
- There are a number of natural incentives for New Chorus and New Telecom to move away from the system sharing arrangements, including:
 - (a) the cost and complexity for New Chorus to operate separate stacks for fibre and copper;
 - (b) the reduced flexibility for each party inherent in sharing systems;
 - (c) service levels are reasonable endeavours only; and

the fact that the relevant services are not core to New Telecom.

- If either party wishes to exit a shared system or service, the parties shall agree the process, timeframe and costs for exit based on the necessary technical and operational requirements for exit and the remaining economic life of the assets. Early exit will carry greater costs than later exit due to amortisation and completion of minimum external cost sharing contributions over time.
- The arrangements will be subject to a three tier governance framework and an Architectural Governance Board. Each party will be equally represented at each level of the governance framework and decisions will be by consensus. Governance decisions and recommendations for the Architecture Governance Board will be guided by a set of agreed principles, including equivalence. At any point in the escalation process, either party may require an independent facilitator to be engaged to assist in the resolution of the issue that is the subject of the escalation process. Where the parties are unable to agree, arbitration will be the final mechanism for determination of issues.
- The defined asset sharing arrangements will be subject to the requirements of prevailing accounting standards as to how they will be reported in New Chorus and New Telecom statutory financial statements.

E. New Chorus and New Telecom Owned Network Assets Used By Both New Chorus and New Telecom

To avoid the unnecessary duplication of assets, certain assets will be:

- (a) owned by New Chorus and used by both New Chorus and New Telecom; and
- (b) owned by New Telecom and used by both New Chorus and New Telecom.

The network assets to be shared fall into two sub-categories: network electronics and buildings. Where sharing occurs, the non-owner agrees to use these assets on an "as is, where is" basis. In the case of network electronics, the owner is required to maintain the relevant assets being made available to the other party without reference to the other party's interests (i.e. it cannot discriminate between assets it uses itself and those assets it makes available to the other party in accordance with these arrangements). In the case of buildings, the occupational arrangements will include covenants pursuant to which the owner will agree to maintain the building and building services in a manner consistent with the covenants of New Chorus in the co-location arrangements with third parties for space in its exchanges.

In relation to fibre, New Chorus and New Telecom have agreed to enter into a master fibre repair agreement which provides that New Chorus will repair the fibre to agreed minimum specifications where New Telecom's fibre suffers degradation over its life.

Property (Co-location Licence and Master Lease)

Following separation, the split of assets between New Chorus and New Telecom will result in some exchanges being retained by New Telecom, with a majority being owned by New Chorus. Access to these exchanges is crucial to each party so that they can continue to access their assets and equipment to provide services to their customers and meet the appropriate service levels.

160 It is proposed that there will be four categories of arrangements from a property perspective:

- where Party A occupies a room or other defined and separately delineated space within Party B's exchange, and this space is exclusively occupied by Party A, then a lease will be granted by Party B to Party A. It is anticipated this arrangement will be the predominant arrangement to be used for New Chorus in New Telecom exchanges.
- (b) where Party A owns equipment within Party B's exchange, but this equipment is intermingled with other equipment (whether owned by Party B or another third party) such that the space is not exclusively occupied by Party A, Party A will be granted a co-location licence.
- (c) the third category of arrangement is for non-exchange buildings, predominantly mobile/radio sites. Where there is a shared use, the other party will be granted occupational rights based on New Chorus's wireless co-location product, which is an industry standard. Where it is appropriate to the space to be used and occupied by the grantee, a lease will be granted.

- (d) The final category relates to employees of either party who, following demerger, will be working within a building owned by the other party. A short-term lease at a commercial rent will be granted to the non-owner in respect of the space occupied by its employees.
- The pricing to be used for the first two categories of arrangements is based on the Chorus Commercial Co-Location Square meterage or rack-based pricing, which is currently sold to customers, based on differing metallic tiers of exchange.
- Pricing for wireless co-location and office space will be market based.
- The arrangements will be non-discriminatory and, accordingly, similar to the form of colocation arrangements currently in use by the Chorus BU. For those arrangements not within the New Chorus Undertakings, the terms of the arrangements will comply with the requirements of the Act.
- The term of the exchange leases and co-location licenses to be granted to New Chorus will generally be 35 years (including renewals). For exchange leases to be granted to New Telecom the term will be 9 years (including renewals). The terms for the co-location licence are 9 years (including renewals) for licences granted to New Telecom (however, in relation to PSTN equipment, in the event that New Chorus's fibre investment plan has the effect of requiring New Telecom to stay beyond the term, then the term will roll over accordingly). In each case, rent will be paid monthly in advance.

Network Electronics Sharing Agreement

- New Chorus will grant New Telecom and New Telecom will grant New Chorus the right to use certain network electronics (to the extent that such equipment is used at the separation date) for the life of that equipment (varying from several months to up to ten years). The equipment covered by the Master Network Electronics Sharing Agreement includes:
 - (a) DWDM transport equipment;
 - (b) transport radio antennas and feeders;
 - (c) network routers;
 - (d) PDH equipment systems;
 - (e) SDH equipment systems; and
 - (f) ATM equipment.

The network electronic equipment excludes any equipment relating to the mobile network.

- The major cost associated with the network electronics will be operating and maintenance costs which will be covered by monthly payments on a cost-recovery basis.
- Investment into network electronics will be managed on a joint investment plan in order for the asset owner to forecast growth and changes to be considered in network electronics investment. BAU investment plans will include a forecast from each party based on forecasts using historic data with six monthly true-ups. Non-BAU investment is to be agreed based on the principle that each party funds pro rata to its proportion of the benefits of such investment (based on usage).

If a party wishes to exit the network electronics arrangements in relation to assets the other owns, the parties shall agree the process, timeframe and costs for exit based on the necessary technical and operational requirements for exit and the remaining economic life of the assets. Early exit will carry greater costs than later exit due to amortisation and completion of minimum external cost sharing contributions over time.

Fibre Repair Agreement

Ownership of Telecom's existing fibre will be split on demerger between New Chorus and New Telecom so that New Telecom will retain ownership of the fibre capacity on certain national transport fibre links and backhaul links that is crucial to New Telecom in order to continue to provide telecommunications services to its customers.

New Telecom shall have the following interests in fibres upon separation:

- (a) where fibres were owned by Telecom, ownership in those fibres will be split between New Telecom and New Chorus; and
- (b) where Telecom had an interest (by way of a licence, IRU or other access right) in fibres owned by third parties, New Chorus and New Telecom shall enter into contractual arrangements to permit both of them to access or use certain relevant fibres (to the maximum extent permitted by the relevant third party agreements),

such that New Telecom will retain ownership (or interests to the extent permitted by (b) above) in fibre strands required to deliver a diverse national backhaul network.

- Repair of the New Telecom fibres will be conducted by New Chorus and the costs paid by New Telecom for such repairs shall be based on a pro-rata recovery of actual costs incurred apportioned between the parties in proportion to the ownership of the fibre strands at the point where the repair is made and will be governed by the Fibre Repair Agreement. After the later of 25 years from the date of installation of the relevant fibres or 90 months from the date of demerger (sunset period), New Chorus will no longer be obliged to contribute (on a proportional basis) to the cost of repairs/replacement of degraded fibres to bring such fibres up to a "minimum specification". For the avoidance of doubt, there shall be no sunset period relating to the cost sharing of repair/replacement of fibre damaged by an event (such as a digger cutting through a cable). In these cases the costs of repair/replacement shall be shared (on a proportional basis) for as long as the fibre has a "useable life".
- All existing access rights will be transferred to New Chorus on an "as is" basis and New Telecom accepts that New Chorus's repair obligations will be subject to those access rights.
- The agreement shall continue until New Telecom ceases to hold any interests in the New Telecom fibres or it is otherwise terminated in accordance with its terms. There will be a reciprocal mechanism for each party to give written notice that it has relinquished its fibre or that its interest in specified fibre has been extinguished.

F. Transitional Services Agreement

- Certain services will be required by both New Chorus and New Telecom in the short to medium-term (expected to be between 6 to 31 months) until the receiving party is able to migrate to self-sufficiency or third party provision of the required service. The majority of transitional services will be provided from the date of demerger until 30 June 2014 unless the Service Schedule provides otherwise or the customer elects early termination of the service. These arrangements will also include provisions relating to assets and liabilities that were not able to be transferred to New Chorus, or split between New Telecom and New Chorus, prior to the Demerger.
- Early termination of services may occur where the customer of the service provides notice (in most cases on no less than six months prior to termination) to the Supplier, on the following basis:
 - (a) the services to be terminated will not affect the provision of any other transitional services; and
 - (b) where the Supplier incurs additional cost or liability due to the termination, the customer will bear the costs of, and liabilities associated with, such termination.
- 176 The property services provided by New Chorus to New Telecom within these arrangements include:
 - (a) Site Acquisition Services;
 - (b) Network Property Management Services;
 - (c) Network Property Power and Building Engineering Services;
 - (d) Network Property Facilities Management Services;
 - (e) Power and Building Services Engineering Consultancy;
 - (f) Security Services;
 - (g) Electricity Management Services;
 - (h) Records Management Services;
 - (i) Antarctic Services;
 - (j) Sustainability Consulting Services;
 - (k) Mobile Co-location Services;
 - (I) Exchange Co-location Services;
 - (m) Disaster Recovery Services Power Supply;
 - (n) Project Support Services; and
 - (o) Agency Billing Services.

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- 177 The enterprise services provided by New Telecom to New Chorus within these arrangements include:
 - (a) Fulfil and Assure Billing Support Services;
 - (b) Miscellaneous Billing Services;
 - (c) Facilities Management and Support Services;
 - (d) Financial Management Services;
 - (e) Asset Management Services;
 - (f) Procurement and Spares Management Services;
 - (g) Workforce Development Services;
 - (h) Finance Systems Services;
 - (i) Online Systems Services;
 - (j) Shared Infrastructure Systems Services; and
 - (k) Sales Support Systems Services.
- The services under the transitional arrangement will be provided to the same level as the provision of the services pre-arrangement (to the extent that such services were provided pre-arrangement). Consistent with similar transition arrangements in other major transactions involving separation of businesses, service levels are non-binding between New Chorus and New Telecom with a view to creating incentives for the parties to move away from the services either onto an internally provided service or an alternative provider within the transitional term.
- The charges for transitional services are set on a cost-recovery basis based on the proportionate share of use of the relevant services. Service charges and service levels are based on service specifications, volume, extent, scope and type of service provided as part of BAU activities at the commencement of these arrangements, and excludes any one-off or extraordinary circumstances.
- Some services have a non-adjusting fixed cost-basis. Other service charges will be reviewed from 30 June 2012 on six or 12 month cycles depending on type of cost. Allocation proportions of those costs will be reviewed annually. Ad hoc cost reviews are available where a party considers the allocation proportions are materially inaccurate.

G. Fibre Capacity Agreement

Following separation New Chorus will obtain capacity on certain fibre links owned by New Telecom under an arm's-length capacity agreement based on standard industry terms.

Section Nine Telecom Dictionary

182 The acronyms used in this document and their definition are provided in this section.

Term	Definition
AAPT	Australian Associated Press and Telecommunications
AC	Alternating Current
ADSL	Asymmetric Digital Subscriber Line
Asset class	Is a field in the FAR. An asset class is a collection of assets with similar physical characteristics, function, technology life cycle, and asset useful life; with the same asset accounting life and tax rate.
ATM	Asynchronous Transfer Mode
ATS	Alarm Transport Services
BAU	Business As Usual
BRA	Basic Rate Access
BSS	Business Support System
BU	Business Unit. The internal structure that Telecom is organised into for its day to day operations. Five customer facing BUs: Chorus, Telecom Wholesale (including International), Telecom Retail, Gen-i Australasia and AAPT, and two support centres, Shared Services and Corporate.
CBR	Constant Bit Rate
CCI	Client Confidential Information
CDMA	Code-Division Multiple Access
CFH	Crown Fibre Holdings
CI	Confidential Information
Commission	Commerce Commission
CMAR	Customer Multi-Access Radio
СРЕ	Customer Premises Equipment
DMR	Digital Microwave Radio
DSL	Digital Subscriber Line

DSLAM	Digital Subscriber Line Access Multiplexer	
DSTN	Digital Services Transmission Network	
DWDM	Dense Wave Division Multiplex	
EAN	Ethernet Aggregation Node	
EAS	Ethernet Aggregation Switch	
EMTN	European Medium Term Notes	
ERX	A type of IP edge router used predominantly as Broadband Remote Access Servers (BRAs).	
ESA	Exchange Service Area. An ESA is the designated area around a telephone exchange that is served by that exchange.	
EUBA	Enhanced Unbundled Bit-stream Access	
EvG4	Evaluation Group 4. EvG4 is a field in the FAR that provides information on a function group of assets for business management.	
FAR	Fixed Asset Register	
FBT	Fringe Benefit Tax	
FOTS	Fibre Optic Transmission Systems. FOTS utilise fibre optic technology instead of copper to move traffic throughout the network.	
FTTN	Fibre To The Node	
FTTP	Fibre To The Premises	
GPON	Gigabit Passive Optical Network	
GSM	Global System for Mobile	
GST	Goods and Services Tax	
HDB3	High Density Bipolar 3	
HDSL	High-speed Digital Subscriber Line. HDSL is a version of DSL.	
HONT	Home-based Optical Network Terminal	
HSDDS	High Speed Digital Data Service	
HSNS	High Speed Network Service	
HW	Hardware	

ICT	Information, Communication and Technology	
IMS	IP Multimedia Subsystem	
IN	Intelligent Network	
IP	Internet Protocol	
IRU	Indefeasible Right of Use	
ISAM	Intelligent Services Access Manager	
ISDN	Integrated Services Digital Network	
IT	Information Technology	
IT and T	Information Technology and Telecommunications	
IX	International Exchange	
LRIC	Long Run Incremental Cost	
LX	Local Exchange	
Mbits	Megabits	
Mbps	Megabits per second	
MDF	Main Distribution Frame	
MPF	Metallic Path Facility	
MPLS	Multi-Protocol Label Switching	
Mux	Multiplex	
NBV	Net Book Value. NBV is GBV less accumulated depreciation and impairment costs.	
NCA	Non Code Access	
NGN	Next Generation Network	
NTU	Network Terminating Unit	
NZD	New Zealand Dollar	
OFDF	Optical Fibre Distribution Frames	
oss	Operating Support Systems	
PCM	Pulse Code Modulation	

PDH	Plesiochronous Digital Hierarchy	
POI	Point of Interconnection: is one of the designated places where RSPs can connect their networks (with New Chorus providing the 'last mile' connection to the customer).	
PON	Passive Optical Network	
POTS	Plain Old Telephone Service	
PP&E	Property, Plant & Equipment	
PRA	Primary Rate Access	
PSTN	Public Switched Telephone Network	
REN	Regional Ethernet Network	
RSP	Retail Service Provider	
RDLU	Remote Digital Line Unit	
RLU	Remote Line Unit	
SDH	Synchronous Digital Hierarchy	
SHDSL	Symmetrical High Speed Digital Subscriber Line	
SLES	Sub-loop Extension Service	
SLU	Sub-loop Unbundling	
STD	Standard Terms Determination	
STM	Synchronous Transfer Mode	
STP	Signalling Transfer Point	
SW	Software	
TDM	Time Division Multiplex	
TRAID	Transmission, Radio and Infrastructure Database	
TSO	Telecommunications Service Obligation	
TTS	Telecom Transaction System	
TX	Tandem Exchange	
UBA	Unbundled Bit-stream Access	
UBR	Unspecified Bit Rate	

Section Nine Telecom Dictionary

UCLL	Unbundled Copper Local Loop
UFB	Ultra-Fast Broadband
UPC	Unbundled Partial Circuits
VCC	Virtual Call Centre
VDSL	Very High Speed Digital Subscriber Line
VoIP	Voice over Internet Protocol
VSP	Voice Services Platforms
WCDMA or Wideband CDMA	Wideband Code-Division Multiple Access
WIP	Work In Progress
WSA	Wholesale Services Agreement

Appendix A: v0-type Definitions

In this Appendix are descriptions of the v0-types used throughout the Asset Allocation Plan.

v0- type	Name	Description
7.01 7.02	VoIP hardware VoIP software	This is the IP Multimedia System (IMS) platform used to deliver IP voice services.
8.01	Active cabinet shells	An active cabinet is an above ground structure that provides a weatherproof housing for telecommunication equipment such as:
		(a) Copper PCM, fibre optic and radio terminals required to provide a digital link back to an exchange;
		(b) DSL equipment;
		(c) Mux equipment to interface analogue signals to the digital bearer; and
		(d) Copper connection modules for jumpering between the Mux and/or DSL equipment and copper distribution cables.
8.02	PON cabinets	A PON cabinet is a variant of the active cabinet shell equipped with passive optical splitters and GPON equipment (v0-types 46.03 and 46.04). An optical splitter is a passive device that splits a single fibre strand input into multiple fibre strand outputs. It is used for the massmarket FTTP architecture.
10	ATM	The ATM network equipment is a legacy platform providing legacy data services and broadband transport from older generation DSLAM equipment.
11	Legacy data networks	Legacy data networks include DSTN, TTS, ATS, packet switch network equipment and other miscellaneous legacy data network equipment. The majority of these legacy data networks are fully depreciated and the products supported by these platforms have been in many cases grandfathered.
12	Building services	Building services assets are equipment used by Telecom in the buildings that it owns and operates. The assets comprise the AC power feeds, switchboards and reticulation, engine alternator sets, fuel storage tanks and associated plant and air conditioning systems including water chiller units.
13	Office equipment	Non-network assets, including electronic office equipment and phones.

v0- type	Name	Description
14.01	Power systems: general	Power systems assets are equipment used by Telecom in the buildings that it owns and operates. The assets comprise the DC plant including rectifiers, batteries, uninterruptible power systems, busbars and DC power cable reticulation.
14.02	Power systems: access derived systems	Access derived systems power systems (e.g. batteries).
15	CBR data access	The Constant Bit Rate (CBR) data access assets include Network Terminating Units (NTU) used by Retail and Wholesale customers for low speed data circuits provided through Telecom legacy data platforms such as DSTN.
16	CPE voice equipment	CPE voice equipment is used to provide voice services to specific customers and is located at the customer's premises.
18	Furniture	Includes chairs, workstations and other office furniture.
19.01 19.02	CDMA switches hardware CDMA switches software	These assets are the hardware and software components of the switching equipment for the CDMA network.
20	PSTN/ISDN/IN	The PSTN is a nationwide switched fixed line voice telephone network. The IN platform and ISDN are adjuncts to the PSTN used to provide premium voice services with ISDN able to provide combined voice and data services. This v0-type includes short life items not included within v0-types 34.01, 34.02, 36.01 and 36.02.
21	IPNet	IPNet is a legacy data services network used to deliver dial- up internet calls from the PSTN to internet service providers. The assets contain the network access servers or modem banks and other associated equipment. It is a legacy network declining in use as customers switch to broadband for internet access.
23	MDF	MDFs are the interface points providing flexibility for the connection between outside plant copper cables and inside plant switching equipment cables in a telephone exchange. These assets comprise the original metal framework and connection blocks when the MDF was constructed.
24.01	CDMA base stations	The CDMA base transceiver station equipment transmits and receives signals to and from mobile phones and secures the transmission with the base station controller.
26	CPE managed networks	The CPE managed network assets contain the NTU equipment installed at customer premises for customers where Telecom provides managed services.

v0- type	Name	Description
28	Spectrum licences – long life	Spectrum licences relate to the right to utilise a specific frequency or range of frequencies and are used, amongst other examples, to host the access radio systems. These are intangible assets recording the spectrum licence costs incurred by Telecom for the right to use radio spectrum for periods of 14 to 20 years.
31	Payphones	The payphones used in Telecom's network.
32	Spectrum licences – short life	Spectrum licences relate to the right to utilise a specific frequency or range of frequencies and are used, amongst other examples, to host the access radio systems. These are intangible assets recording the spectrum licence costs incurred by Telecom for the right to use radio spectrum for periods of less than 14 years.
34.01 34.02	PSTN/ISDN hardware PSTN/ISDN software	The PSTN/ISDN hardware contains the digital NEAX switching equipment (hardware) that is used in Telecom's PSTN/ISDN network, including: RLUs, RDLUs, LXs, TXs, IXs and STPs.
		The PSTN/ISDN software contains the NEAX software used in PSTN switching equipment and includes the operational software for LXs, TXs, IXs and STPs. As well as the base software file that enables each switch to function, the software includes enhancements to provide additional functionality and services.
35.03	Broadcast transport	Broadcast transport equipment is specialised devices used in the provision of video and audio services to the broadcast companies. The services provided by the broadcasting equipment can be broken down to television linking services (for television studio networks) and audio linking services (for radio station networks).
35.04	DWDM transport	DWDM transport equipment is used to effectively increase the capacity of existing fibre routes by enabling several systems to operate over the same fibre by using different coloured lasers, and is generally used on long haul national routes and increasingly on long regional routes.
35.05	PCM30 transport	PCM30 transport equipment provides 2Mbps transport over copper cable using PCM technology to provide 2Mbps capacity largely to some remote rural network nodes that only have copper bearers linking them to the rest of the network or has been retained for diversity. PCM is an older technology which is effectively obsolete but is occasionally used to fill-in functionality gaps, both in the transport and access networks.

v0- type	Name	Description
35.06	PDH FOTS transport	PDH equipment is a technology that is largely obsolete, with these units being used to fill-in gaps in the SDH transmission layer of the network. These PDH systems are reaching the end of their life and the manufacturer no longer offers any support to these systems. This v0-type includes PDH FOTS systems installed for inter-ESA connectivity.
35.08	SDH FOTS transport	SDH equipment systems are available as STM1 (155Mbps), STM4 (622Mbps), STM16 (2.5Gbps) and STM64 (10Gbps), and are usually arranged to form rings. This v0-type includes SDH FOTS systems installed for inter-ESA connectivity.
36.01 36.02	IN, VSP, VCC hardware IN, VSP, VCC software	The hardware and software elements for other PSTN platforms used by Telecom to provide various value added services such as automatic collect calling services-call prompting, CLIP/CLIR platform, IN platform and VCC.
39	Tools and plant	Various tools and other network equipment used by Telecom in the maintenance of the network assets.
40	Motor vehicles	Motor vehicles are primarily cars, station wagons, vans and utilities owned by Telecom for non-network purposes.
41.01	Freehold land (non- depreciable)	Freehold land is the land which Telecom owns and usually is the site for an exchange or other network building. Land is tangible but non-depreciable.
41.02	Land easements (non- depreciable)	Land easements reflect the right for Telecom to use land owned by other parties for the installation of its network assets, predominantly underground cables and ducts. Easements are both intangible and non-depreciable.
41.03	Land licences	Licences are a right to occupy in favour of Telecom for a fixed term, typically an initial period with two rights of renewal. Licences are predominantly used to secure accommodation for mobile base stations. Licences are intangible and depreciable.
41.04	Land site costs	Site costs for leasehold sites including land access, AC power supply, foundations, landscaping and civil engineering cost and labour. Site costs are tangible and depreciable.
42	Property fit-outs	Other property assets include building fixtures, fire protection and security equipment and leasehold improvements.

v0- type	Name	Description
45.03	Access HDSL/SHDSL/HDB3	SHDSL, HDSL and HDB3 technologies are used to provide 2Mbps symmetrical constant bit rate accesses to customers and network sites (such as cabinets and mobile base stations) served by copper cables. HDB3 systems are also still used to provide 2Mbps capacity to some remote rural network nodes that only have copper bearers linking them to the rest of the network (see v0-type 35.05). HDSL and HDB3 are older 2Mbit access multiplexing technologies which are effectively obsolete but will continue to be used to fill-in gaps in SHDSL coverage and functionality gaps.
46	ADSL, DSLAM, DSL	The DSL access systems equipment is used to provide predominately broadband services. DSL access systems provide DSL connectivity between the telephone exchange or Mux cabinet and the customers premise via copper twisted pair cable. The platform consists of equipment installed in exchange buildings and roadside cabinets. The DSL access systems initially consisted predominantly of ADSL1 transmission with a modest amount of SHDSL. Currently higher speed ADSL2/2+ transmission is being deployed in the network via the introduction of ISAM equipment.
46.03 46.04	GPON shelves line cards GPON HONTs	GPON equipment comprises a GPON hub-end optical line terminal and the individual HONT equipment. The GPON hub is connected to the customer site via fibre optic cable. To reduce the cost, individual fibres from customers are combined in an optical splitter/combiner. Each customer HONT is allocated a time-slot in which to transmit, and these time-separated signals are combined in the optical combiner and fed upstream back to the hub. The use of optical splitting improves the economics by reducing fibre and exchange equipment costs.
47.02	PDH FOTS access	PDH equipment is a technology that is largely obsolete, with these units being used to fill-in gaps in the SDH transmission layer of the network. These PDH systems are reaching the end of their life and the manufacturer no longer offers any support to these systems. This v0-type includes PDH FOTS systems installed for connectivity from customer sites, active cabinets or mobile radio base stations to the ESA central node.

v0- type	Name	Description
47.03	SDH FOTS access	SDH equipment systems are available as STM1 (155Mbps), STM4 (622Mbps), STM16 (2.5Gbps) and STM64 (10Gbps), and can be arranged to form rings to give higher robustness. This v0-type includes SDH FOTS systems installed for connectivity from customer sites, active cabinets or mobile radio base stations to the ESA central node.
47.04	Access DMR	Access DMR contains point-to-point digital microwave radio systems used in the access network instead of cable-based connectivity between customers and their respective access network nodes.
47.05	Media converters	Media converters are an electronic device that converts optical signals to electrical or interfaces different optical types. It may also provide supervisory and control functions of the payload passing through.
47.07	Access broadcast	Broadcast equipment is specialised devices used in the provision of video and audio services to the broadcast companies.
48.01 48.02	Network routers hardware Network routers software	Network router hardware and software elements include Ethernet access routers, aggregation nodes and switches, edge routers and core routers. Ethernet access routers (such as Business Edge Routers – BERs, ERX or BNGs) are used to provide Ethernet services to customers. EAS and EAN are used to aggregate Ethernet traffic from access nodes and ISAM type DSLAMs for passing on to ERXs and BNGs to the IP-Core or to other network providers. ERXs provide the current functionality required for broadband traffic. Edge and core routers also provide the national NGN MPLS Layer-3 IP transport network.
49	Network firewalls	Network firewalls are devices with appropriate software functionality which control security and access to the common NGN platform.

v0- type	Name	Description
50	Voice and ISDN Mux	Voice Mux equipment converts analogue voice signals into 64kbps digital channels and multiplexes up to 30 of these channels into a 2Mbps digital stream for transmission over derived transmission systems.
		Voice Mux is used to provide analogue POTS lines from active cabinets, from ESAs that do not have a PSTN switch or RLU at the ESA network node, or to business customers either served by fibre or where multiple lines are required. After transporting the 2Mbps stream to a PSTN switch or RLU, the individual lines are normally not de-multiplexed into individual channels, but rather the 2Mbps stream is terminated directly onto the RLU or switch. ISDN Mux equipment multiplexes up to 12 ISDN BRA lines into a 2Mbps digital stream for transmission over derived transmission systems, and then de-multiplexes this back into individual BRA terminations at the other end. ISDN Mux is used to provide ISDN BRA service to customers on active cabinets, or to customers in those ESAs that do not have an ISDN capable PSTN switch at the ESA network node.
51	Buildings	Buildings contains buildings (concrete, brick and wooden) and equipment shelters (brick, metal and wooden) owned by Telecom on freehold and leasehold land throughout New Zealand. These buildings are used primarily for network accommodation purposes. Several buildings owned by Telecom are used for multiple purposes in addition to network accommodation.
57	CPE data equipment	CPE is used to provide data services to specific customers and is located at the customers' premises.
58.01	IT HW: Billing	Hardware to support the back office billing function.
58.02	IT SW: Billing	Software to support the back office billing functions such as Singl.eview.
59.01	IT HW: Common	Hardware to support general non specific office applications and functions.
59.02	IT SW: Common	Software to support general non specific office applications and functions
61.01	IT HW: Common information system	Hardware to support Telecom IT infrastructure.
61.02	IT SW: Common information system	Software to support Telecom IT infrastructure.
62.01	IT HW: Corporate	Hardware to support SAP/TM1 and other corporate functions.

v0- type	Name	Description
62.01	IT SW: Corporate	Software to support SAP/TM1 and other corporate functions.
63.01	IT HW: Customer services	Hardware to support customer service functions provided by Telecom.
63.02	IT SW: Customer services	Software to support customer service functions provided by Telecom.
64.01	IT HW: Data	Hardware to support the network data platforms.
64.02	IT SW: Data	Software to support the network data platforms.
65.01	IT HW: Fulfil and assure	Hardware to support the fulfil and assure functions including provisioning services.
65.02	IT SW: Fulfil and assure	Software to support the fulfil and assure function including provisioning services.
66.01	IT HW: Gen-i	Hardware to support Gen-i BU operations specifically.
66.02	IT SW: Gen-i	Software to support Gen-i BU operations specifically.
67.01	IT HW: International	Hardware to support International BU operations specifically.
67.02	IT SW: International	Software to support International BU operations specifically.
68.01	IT HW: Managed services CPE	Hardware to support managed services that use onsite CPE.
68.02	IT SW: Managed services CPE	Software to support managed services that use onsite CPE.
69.01	IT HW: Mobile	Hardware to support the mobile network.
69.02	IT SW: Mobile	Software to support the mobile network.
70.01	IT HW: Network management	Hardware to support managing Telecom's networks including access and alarm systems.
70.02	IT SW: Network management	Software to support managing Telecom's networks.
71	Transport copper cable	These cables are the original physical links between exchanges within a district or region. Most have now been overlaid with fibre optic cables. However, some are still working carrying copper derived backhaul systems, in some cases merely as a back-up system.
72.01	IT HW: Online	Hardware to support the provision of online services used by Telecom and its customers such as broadband usage reporting and Yahoo/XTRA interfaces.
72.02	IT SW: Online	Software to support the provision of online services used by Telecom and its customers.

v0- type	Name	Description
73.01	IT HW: Sales and marketing	Hardware to support the sales and marketing functions.
73.02	IT SW: Sales and marketing	Software to support the sales and marketing functions.
74.01	IT HW: Transport	Hardware to support the network transport platforms.
74.02	IT SW: Transport	Software to support the network transport platforms.
75.01	IT HW: VoIP/voice	Hardware to support the VoIP/voice network platforms.
75.02	IT SW: VoIP/voice	Software to support the VoIP/voice network platforms.
76	Access small pair gain	Copper small pair gain systems are electronic devices designed to generally double the voice capacity of a single copper pair.
78	ISDN NTUs	This is a type of CPE used to provide ISDN voice and data services to specific customers and is located at the customer's premises.
79.01	Transport DMR	These assets are the DMR systems used by Telecom in the regional and core transport networks to provide transmission links between exchanges. As capacity is limited compared to most cable-based systems, DMR is generally only used where terrain or other geographic features make cable installation uneconomic or impractical. In some instances, a radio terminal may be remote from one or both exchange sites and be linked to the exchange by cable derived active transmission systems.
79.02	Transport radio antennas and feeders	These assets are the transport radio antennas and feeders used by Telecom in the transport network delivered over microwave and in isolated cases in the access network. It excludes the antennas and feeders used by the mobile networks.
79.03	Radio towers	Radio towers are the towers predominantly used in Telecom transport networks delivered over microwave. It excludes the towers used predominantly by the mobile network and those predominantly used in the access network.
81	Other mobile	This asset group is comprised of base stations, switch hardware and software, towers, antennas and antenna feeder assets largely associated with the radio paging service.
84.01	CMAR	CMAR is a local access radio technology for use in remote rural situations with low customer density.

v0- type	Name	Description
84.02	Country sets	Country set equipment provides telephone services to between one or two rural customers per site by replacing all, or part of, the physical line between the exchange and the customer with a radio link.
86.01 86.02	WCDMA core hardware WCDMA core software	These assets are the hardware and software components of the switching equipment for the WCDMA network.
86.03	WCDMA base stations	WCDMA base station equipment.
95	Mobile radio towers, antennas and feeders	The mobile radio towers, antennas and feeders are used in Telecom's CDMA/WCDMA radio network to capture the mobile signal and transfer it to the base stations. The mobile towers are used in Telecom's CDMA/WCDMA radio network or to provide co-location services to other mobile operators in specific locations.
96	Fibre optic cable	Fibre optic cables include underground fibre optic cables, overhead fibre optic cables and fibre optic lead-ins used in the access, regional backhaul and core transport networks. The fibre optic cable includes the fibre sheath, jointing, hauling costs and a share of route costs. OFDF are also included in this v0-type. OFDF assets include shelves, racks, internal building cabling and the cost of jointing fibre lead-in cable to building cable.
97	Ducts and manholes	A duct is a pipe that is buried or installed in the ground or within a building or other structure for providing passageway into which cables can be pulled. Multiple ducts may be buried or installed together. A manhole is a box installed in the ground which generally forms an integral part of the duct system by providing access to, and interconnection of, the ducts to facilitate installing, joining or performing maintenance on ducted cables. Some manholes may be isolated from a duct system and only provide access to cable joints. Both ducts and manholes include a share of the route costs.
98	Passive copper network	The passive copper network of access copper cables, cross connection cabinets and poles represent a complete system of connections from the customer to the exchange. Access copper cables comprise the cable components that go together in creating a complete connection. They include underground and aerial copper cables and joints, cable terminals, termination on MDF, copper cable service lead-ins and cable pressurisation. Copper cables include a share of the route costs.