Comments of MCI

Regarding the Consultation Paper:

The Preliminary Decision Regarding the Request of Singapore Telecommunications Ltd for Exemption from Dominant Licensee Obligations with Respect to the "International Capacity Services" Market

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1. Introduction

MCI WorldCom Asia Pte Ltd ("MCI") is grateful for the opportunity to comment on the preliminary decision ("Preliminary Decision") regarding the request of Singapore Telecommunications Ltd's ("SingTel") for exemption from dominant licensee obligations with respect to the "international capacity services" ("ICS") market.

MCI's views as expressed in this submission are informed by our experience as an operator in Singapore as well as our comparative experience operating in other key markets in Asia, Latin America, the United States, and Europe, where we are one of the largest Pan-European non-incumbent operators**.**

MCI submits that any attempt to relax dominant licensee regulations on SingTel is premature at this juncture. MCI urges the iDA to carry out a more rigorous exercise, taking into account the a more accurate state of competition in the telecommunications sector, before considering any lifting of dominant licensee obligations on SingTel. We believe that SingTel possess the ability to use its dominant control over the local leased lines market to exert significant market power in many of the downstream services. In this submission, we will provide and explain the reasons underpinning our beliefs.

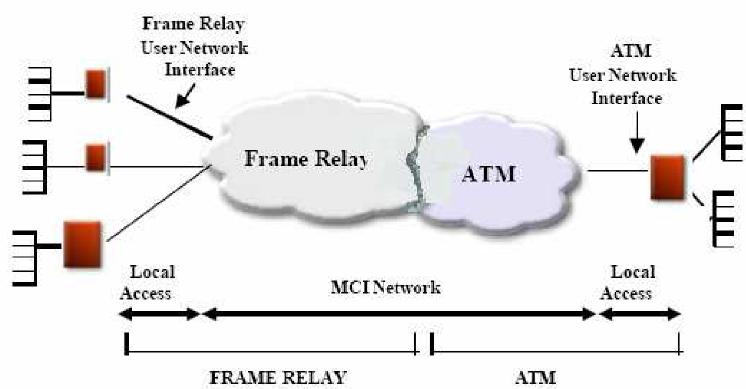
2. Local Access Leased Lines are key Inputs to International Managed Data Services ("IMDS")

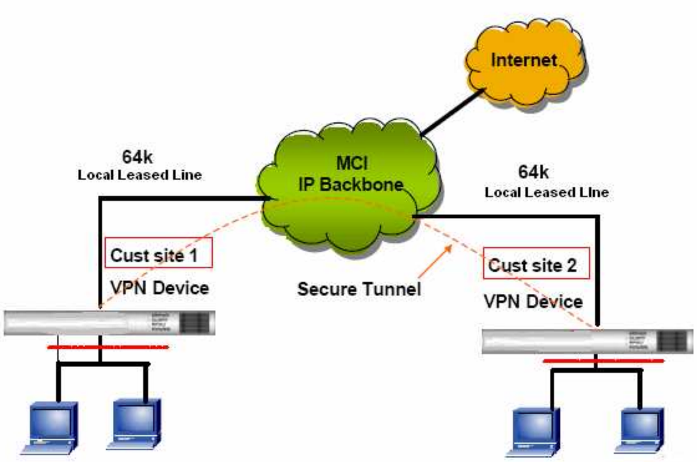
Local access leased lines are the building blocks for telecommunication services. They are commonly known as the "last mile" of broadband access for large companies, Internet Service Providers, and government agencies. These varied customer groups – the producers of goods, services, and content for the Information Society – use local access leased lines to carry communications and manage all of their mission-critical functions, from production to marketing, sales and finance.[1] These last mile circuits link Singapore businesses to local and international networks. They are the essential input for the development of Singapore's Broadband for businesses.[2]

[1] "Many corporate telecommunications products are dependent on LLCs for access, such as international leased capacity, Interconnectivity and a host of value-added and managed data services", *Explanatory Memorandum issued by IDA, Designation of Singapore Telecommunications Limited's Local Leased Circuits as a Mandated Wholesale Service, 16 Dec 2003*

[2] "Delay in broadband means delay for businesses in developing services. Multi-national corporations can and do develop services first in countries with broadband." *International Telecommunications Users Group, "INTUG Broadband for Business"* Speech to the Working Party on Telecommunications and Information Services of the OECD. June 3-4, Seoul S. Korea. http://www.intug.net/talks/es_2002_06_seoul.html

The following diagrams depicts the ATM, Frame Relay, and IP-VPN services or collectively known as the International Managed Data Services (IMDS) for which SingTel has sought non-dominance exemptions. Local access leased lines are required to provide the essential "last mile" connection for the retail end-users to access the international managed data services. The prices of local access leased lines impacts the end-users. Where the price of the local access leased lines are excessive, then in turn, so too are the prices paid by end-users for the services. In MCI's Singapore experience, local access leased line charges can account for close to 70% of the network cost of providing and international telecoms service to a retail end-user and much higher for Internet Dedicated services.





The iDA has recognized that the full conditions for effective and sustainable competition in both the Retail and Wholesale leased line market is not yet present and in its December 16 Decision[3] sought to address the issue by designating "last-mile" LLCs ("LLC tail circuits") as an Interconnection Related Service ("IRS") under the Competition Code. Despite the regulated measures, MCI remains concerned that SingTel could have the ability to exercise its significant market power in the local leased lines market to impede competition in the IMDS market.

While the iDA has taken regulatory action to facilitate competition through the regulation of SingTel's local access leased lines, MCI is unsure if the intended policy objectives of the December 16 Decision could at all be achieved. MCI submits that there remains technical hurdle in the interconnection rules which is yet addressed. MCI believes that the RIO Schedule 7B Wholesale Local Leased Circuit (Tail Circuits) Service provides for a set of inferior technical conditions that will prevent effective local access leased lines interconnection at SingTel's local exchanges. MCI is of the view that the mandated interconnection, where un-multiplexed individual circuits are handed-off at the V.35 technical interface standard, is not a suitable Carrier-to-Carrier interconnection. (Appendix A contains a detailed discussion on the issue)

3. SingTel, a Vertically-Integrated Operator

The iDA in its preliminary decision makes mention of assessing SingTel's ability to leverage market power in vertically-integrated markets as a key criteria in assessing market dominance in the downstream services. A careful read of the 25 November 2004 Preliminary Decision[4] will however reveal little details of that analysis.

A vertically-integrated operator with significant market power in the upstream services and a strangle hold of the local access leased lines is a cause for concern for the Competitive Carriers. A vertically-integrated operator has the ability to engage in bundling strategies leading to possible anticompetitive effects. National Regulatory Agencies in Europe[5] and in Australia[6] frequently conduct price-cost comparisons tests as a first step in ascertaining if Competitive Carriers are subjected to a vertical price-squeeze.

The industry structure is a key consideration for National Regulatory Agencies in Europe when it comes to the lifting of non-dominance regulations. The European Commission in Article 13 of its Framework Directive states that "where an [licensee] has significant market power on a specific market, it may also be deemed to have significant market

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[3] , Explanatory Memorandum issued by IDA, Designation of SingTel's Local Leased Circuits as a Mandated Wholesale Service, dated 16 December 2003

[4] Preliminary Decision Regarding the Request of SingTel for Exemption from Dominant Licensee Obligations with Respect to the "International Capacity Services" Market, 25 November 2004

[5] http://europa.eu.int/rapid/pressReleasesAction.do?reference=IP/03/717&format=HTML&aged=0&language=EN&guiLanguage=en

6 The Australian Competition and Consumer Commission (ACCC) conducts imputation analysis comparing Telstra's retail prices with the prices of two core telecommunications access services. This is designed to reveal whether there is a sufficient margin between Telstra's retail prices and the prices it charges access seekers to use its network (plus related costs) to enable efficient firms to compete at the retail level.

power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking".[7] The Commission also recognizes that an operator may often have a dominant position at the network level and a significant presence at the downstream services or retail level.[8]

The issue of vertical integration is also considered in all non –dominant applications and assessment reviews by the Office of the Telecommunications Authority ("OFTA"). OFTA very clearly recognizes that adequate consideration must be given to entities that possess vertical relationships and their ability to leverage an unfair advantage in the upstream or downstream market. The Australian Competition and Consumer Commission ("ACCC") also considered vertical integration as a critical element for review in assessing the state of competition in the telecommunications sector.[9]

MCI believes that SingTel is a vertically-integrated operator. It has substantial control of the following key upstream inputs:

(i) Capacity ownership on major submarine cable systems landing in Singapore
(ii) Cross-connection services at the SingTel stations where these cables land
(iii) Backhaul infrastructure for 8 of the 9 submarine cables landing in Singapore[10]
(iv) Bottleneck control of the local leased lines.[11]

SingTel also boasts of having a leadership position in Singapore and of increased market shares in the region through its network of SingTel Global Offices, "many of which have obtained licenses in liberalized markets and now generate their own revenue from corporate clients based in their respective locations".[12] SingTel is reported to have as many as 151 subsidiaries and investments in 24 joint-venture companies[13] (SingTel's group structure is featured in Appendix B)

MCI reiterates that SingTel's application[14] contains little or no substantive information with regard to its vertical integration on the provision of downstream services for which it requests non-dominant treatment. Neither was the issue of vertical integration considered in sufficient detail in the iDA's Preliminary Decision of 25 November 2004. There was

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[7] Tetra Pak v Commission 1996, where the Court decided that an undertaking that has dominant position in one market, and enjoyed a leading position on a distinct but closely associated market, was placed as a result in a situation comparable to that of holding ad dominant poxsitions on the markets in question taken as a whole.

[8] According to Article 14(3) of the framework directive, "where an undertaking has significant power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking".

[9] Telecommunications competitive safeguards for the 2001-2002 financial year, Report 1. Telecommunications competitive safeguards 2001-2002

[10] Tuas Cable Landing Station (Sea-Me-We2, Sea-Me-We 3, i2i), Katong Cable Landing Station (APC, APCN-2), Changi Cable Landing Station (APCN, C2C, TIS)

[11] "SingTel continues to be the main LLC supplier and retains a substantial share of this market with StarHub as the primary alternative supplier" Para 9, Explanatory Memorandum issued by IDA, Designation of SingTel's Local Leased Circuits as a Mandated Wholesale Service, dated 16 December 2003.

[12] SingTel's Annual report 2003/2004, Review of the Group's business and Operations, http://home.singtel.com/investor_relations/annual_reports/default.asp

[13] SingTel's Annual Report 2003/2004, http://home.singtel.com/investor_relations/annual_reports/default.asp

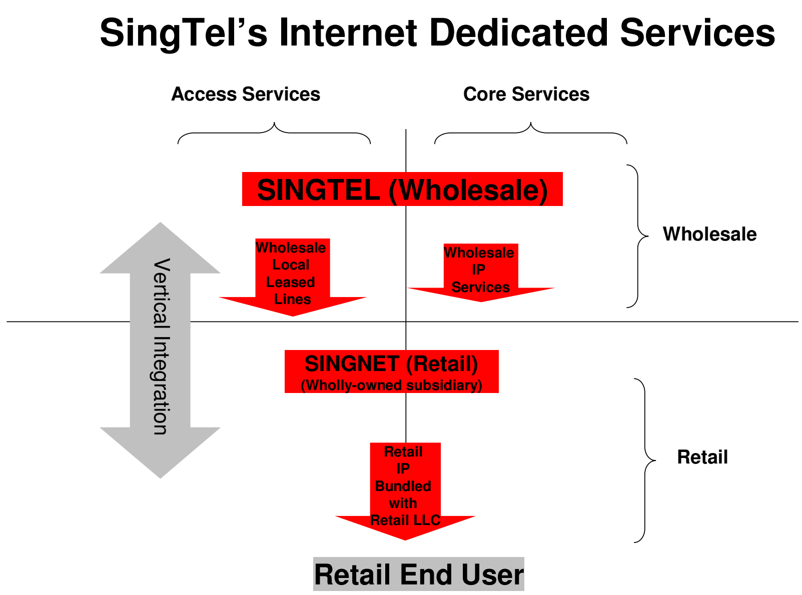
[14] The iDA released SingTel's Request, along with a Consultation Paper on 4 March 2004

however mention of vertical integration in iDA's December 16 Decision where the following was held:

(i) The wholesale LLC market is not competitive.
(ii) Competing operators have no alternative but to buy LLCs at or near SingTel's retail prices and compete with SingTel for customers at the same retail price levels.
(iii) The absence of wholesale LLC services has constrained the operator's competitiveness in the retail markets (LLCs as well as other "downstream data and Internet services), thereby hampering them from building their customer base.

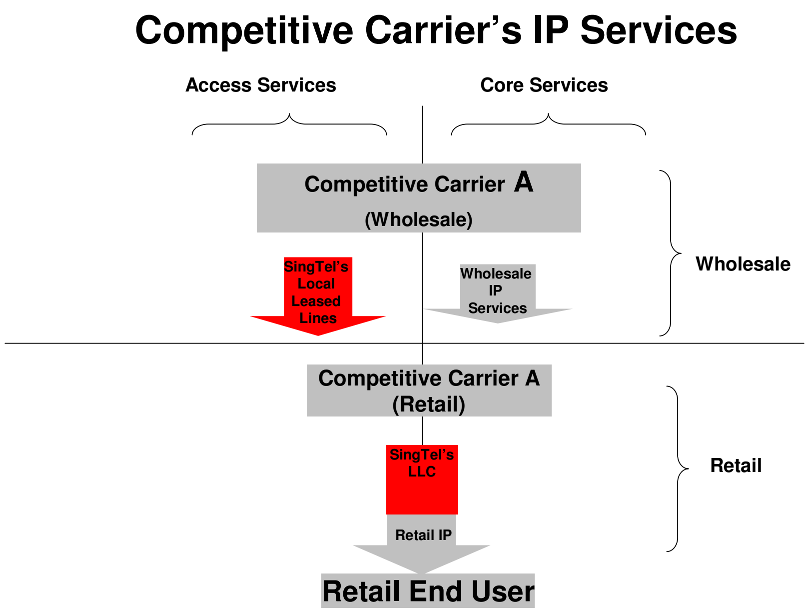
MCI is curious if the iDA has considered the possible price squeeze in the Internet Dedicated Services market.[15] MCI submits that the Internet Dedicated Service market deserves consideration, as it accounts for a substantial make-up of corporate customer spent on data services. Data and Internet made up 17% of Australia's total telecommunications revenue in 2002[16]. In Singapore, internet related services accounted for close to a third of SingTel's FY 2Q 2004's data and internet revenues.[17] In the UK, business internet accounted for 36% of corporate data services share of revenues.[18]

SingTel competes in Internet Dedicated Service market in Singapore through the provisioning and sale of the service via wholly-owned subsidiary SingNet. MCI believes that SingNet (Retail) procures the key upstream inputs (core IP Transit services and local access services) from SingTel (Wholesale) and provisions the Internet Dedicated Service to the Retail-End User as depicted in the following diagram:



[15] A vertically -integrated operator with market dominance at the upstream level may subject downstream competitors to a margin squeeze if it charges the input price so high that its down-stream affiliates of the licensee could not profitably sell the products if required to pass on its customers the full retail price of the input.
[16] ACCC Telecommunications report 2001-2002, Report 1.
[17] SingTel's Management Discussion and Analysis of Financial Condition and Results of Operations : 2Q FY2004
[18] OFCOM Strategic Review of Telecommunications Phase 2 consultation document, page 52

A Competitive Carrier on the other hand invariably competes with SingTel, the vertically-integrated operator[19], by serving the same Retail End-User using its own wholesale IP services but may have to turn to SingTel's for local access leased lines to deliver the services[20]. The manner of provisioning is depicted in the following diagram:



In the absence of a competitive wholesale LLC market[21], it now becomes a challenge for the Competitive Carrier to effectively compete with SingTel in Internet Dedicated services: The cost of wholesale local leased lines to a Competitive Carrier can account for up to 94%[22] of the annual contract market value of the bundled service.

Diagram not published due to commercial sensitivity.

[19] SingNet and SingTel can be considered as a fully vertically integrated entity given SingTel's full ownership of the Service Based Operator.
[20] "SingTel continues to be the main LLC supplier and retains a substantial share of this market". Explanatory Memorandum issued by IDA, Designation of SingTel's Local Leased Circuits as a Mandated Wholesale Service, dated 16 December 2003
[21] "The absence of wholesale prices also resulted in higher LLC prices to operators in Singapore when compared to wholesale prices available in markets overseas" Explanatory Memorandum issued by IDA, Designation of SingTel's Local Leased Circuits as a Mandated Wholesale Service, dated 16 December 2003
[22] A pricing analysis is attached and submitted on a confidential basis.

4. Conclusion: The importance of considering local leased lines in any review of SingTel's dominance of downstream services

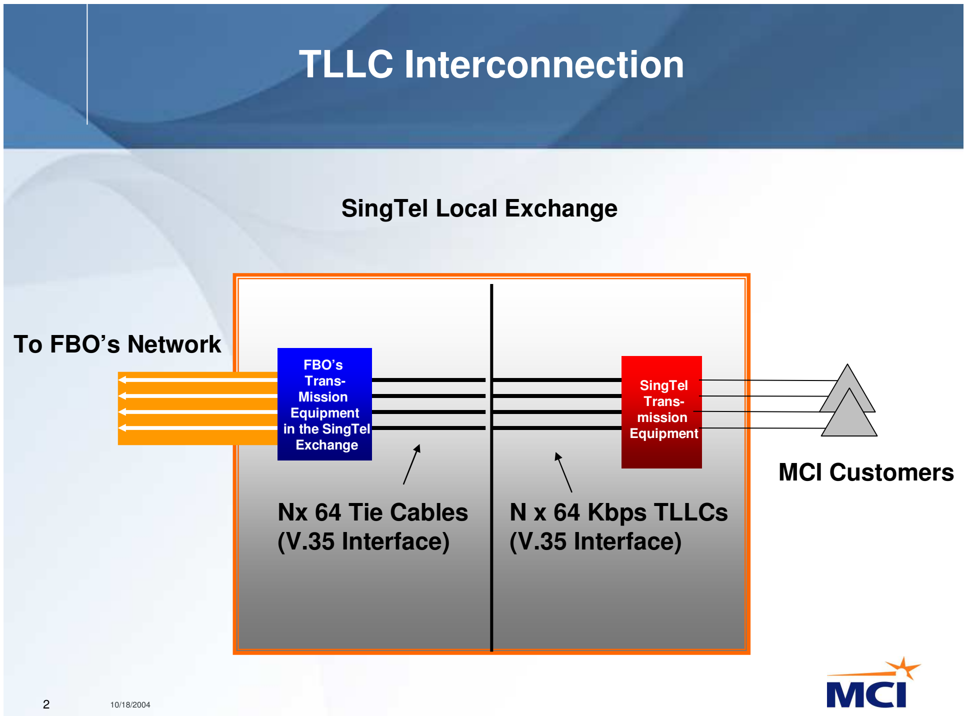
MCI applauds the iDA for the policy objective considerations[23] which led to the Dec 16 Decision to regulate SingTel's local access leased lines. We hope that the furnished information[24] would enable the iDA to reconsider the interconnection rules to allow the full benefits of the decision to take effect. Until the issue of SingTel's ability to leverage its strength in this key upstream input is considered in full, MCI submits that necessary conditions to grant SingTel's request for non-dominant treatment is not yet in place.

[23] The policy objective was to bring about competitive telecommunication prices to benefit End Users in Singapore, Source: Explanatory Memorandum issued by the IDA, 16 Dec 2003

[24] MCI appealed to the iDA on 18 October 2004

Appendix A: The Regulated Interconnection Rules for Local Leased Lines

The regulated v.35 interconnection is depicted schematically as follows:



MCI believes that such an interconnection type presents network inefficiencies for the interconnecting FBO and should not be allowed to become the manner in which non-dominant FBOs and the dominant licensee interconnect for leased circuits in Singapore.

MCI owns, operates and maintains one of the largest communication networks in the world with facilities in more than 140 countries and over 2,800 cities. MCI has always enjoyed a Carrier-Class leased interconnection in a G.703 multiplexed environment in the countries where it operates to serve its customers. The proposed un-multiplexed V.35 interconnection will be a first for MCI.

Our concerns are as follows:

A. An efficient network to network interconnection must always be at the multiplexed G.703 technical interface standard

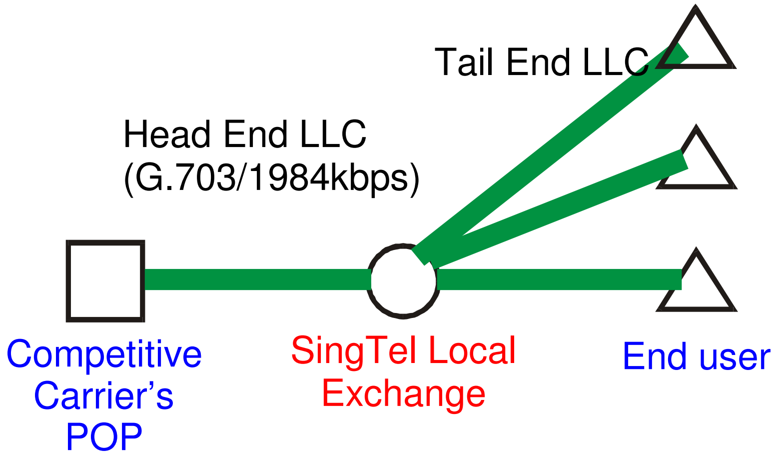
The local leased line infrastructure is essentially a series of individual last mile circuits groomed or multiplexed into high capacities main links and delivered efficiently to the end destination and "Groomed" or multiplexed main circuit handoffs at the G.703 technical interface standard is the manner in which carriers interconnect their networks.

In the provision of international telecommunication services, carriers will be receiving these high capacity main links directly into their international transmission equipment at their Point of

Presence ("PoP"). This is unlike the case of a single end user premise to end user premise connection where no multiplexing is required for the single circuit.[25].

The following diagram shows a Competitive Carrier interconnecting with SingTel's DigiNet infrastructure at the Competitive Carrier's PoP. This is the technical arrangement prior to iDA's regulated relief.

A True Carrier-to-Carrier Interconnection for LLCs



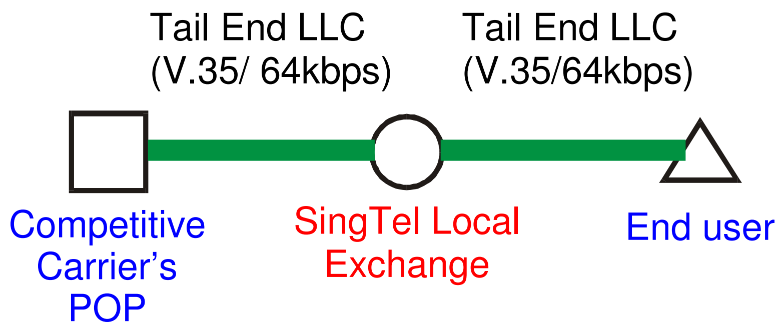
The DigiNet Groomed Service is provided as follows: individual customer circuits (Nx 64kbps) connect the end user premises to the SingTel local exchange. These circuits are multiplexed or "groomed" for delivery into a high speed main link (1984kbps) connecting the local exchange to the competitive operator's PoP. The multiplexed link can transverse across several local exchanges to the Competitive Carrier's PoP. The interconnection interface for the 1984kbps Head End LLC is always a G.703 technical interface standard.

While SingTel's DigiNet provides the option for the Competitive Carrier to take up Tail End LLC connections at the individual "ungroomed" Nx 64kbps circuits at the V.35 technical interface standard, they are rarely (perhaps never) taken up. A Competitive Carrier's network, designed for optimum efficiency, will not allow the picking up of multiple local tails "ungroomed" and at the V.35 technical interface standards.

[25] The decision to exclude grooming should not be extended to a Carrier-toCarrier type interconnection. End-User Premise to End-User Premise type connections, which is strictly prohibited in iDA's December 16 Decision , does not involve the need for groomed or multiplexed circuits

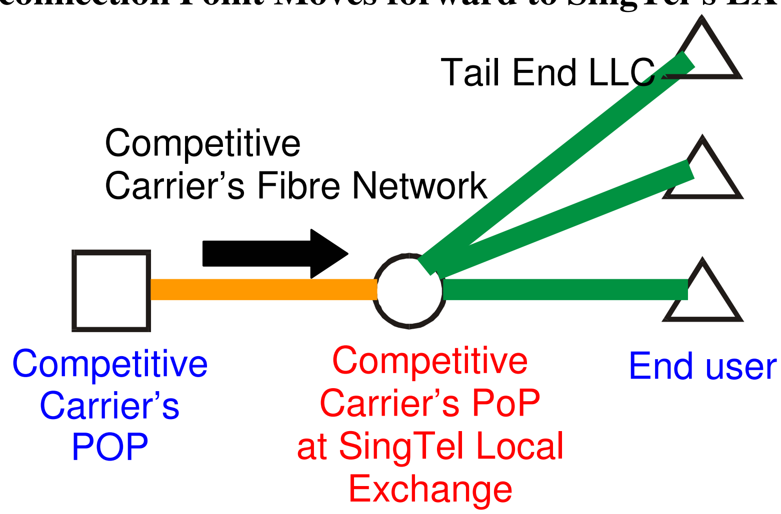
This method of interconnection as depicted in the following diagram is more suited for a retail end-user premise to end-user premise type connection.:

"Retail End-User Premise" to "Retail End -User Premise" Type Connection



The 16 December 2003 iDA Decision to mandate interconnection to SingTel's DigiNet Tail Circuits for operators co-located in SingTel's exchange buildings effectively allows a Competitive Carrier to extend its network presence closer to its End User. By collocating at SingTel's Local Exchange, the Competitive Carrier effectively moves forward his PoP. This is shown in the following diagram:

Interconnection Point Moves forward to SingTel's LX



MCI submits that the conditions for a Carrier-to- Carrier interconnect must remain unchanged, even as a Competitive Carriers extends its network closer to its End Users. The Competitive Carrier must continue to pick up the Tail End LLCs, "groomed" and at the G.703 technical interfaced standard.

This is key to any efficient Carrier to Carrier interconnect. Any attempts to handover the Tail End LLCs, "ungroomed" and at the V.35 technical interface standard degrades the network efficiency of the Competitive Carrier and forces it to absorb the costs associated with an ineffective and inefficient handoff.

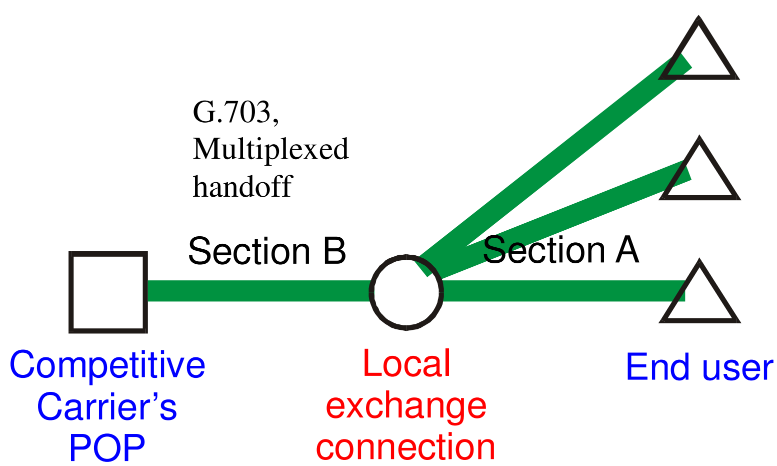
B. Groomed main circuits at the G.703 technical interface standard is commonly found in Carrier-to-Carrier interconnections in the rest of the world

An efficient Carrier to Carrier Interconnect, "groomed" and at the G.703 technical interface standard is a mode of interconnection ubiquitous in any telecommunications sector in the world.

(i) Australia: Telstra's X.173 Groomed Service

Telstra's X.173 Groomed Service is provided over two separately identifiable segments- the individual customer circuits (Nx 64kbps) connecting the end user premise to the Telstra local exchange which are multiplexed into a high speed main link (1984kbps) connecting the local exchange to the Competitive Carrier's POP. The multiplexed link can transverse across local exchanges to the Competitive Carrier's PoP. The X.173 Groomed Service is always taken up on a wholesale arrangement by a Competitive Carrier to serve its customers.

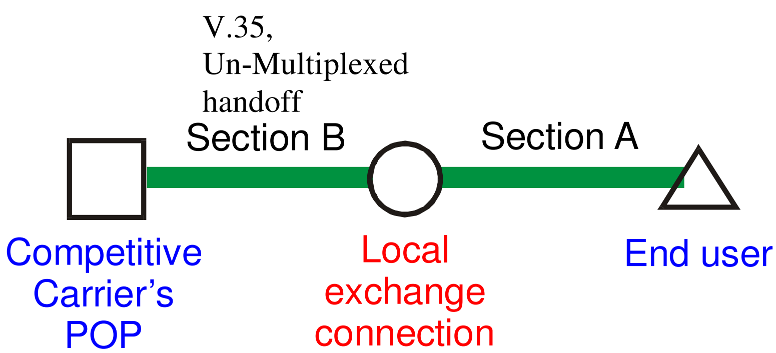
Australia's Carrier-to-Carrier Interconnection for LLCs



This contrasts with the ungroomed Telstra X.173 Service which is a single low speed circuit connecting the end user premise to the Telstra local exchange and another low speed circuit of the same capacity connecting that Telstra local exchange to the Competitive Carrier's PoP.

The "ungroomed" service is rarely taken up by the Competitive Carriers. It is more suited as a retail end-user premise to end user premise type connection.

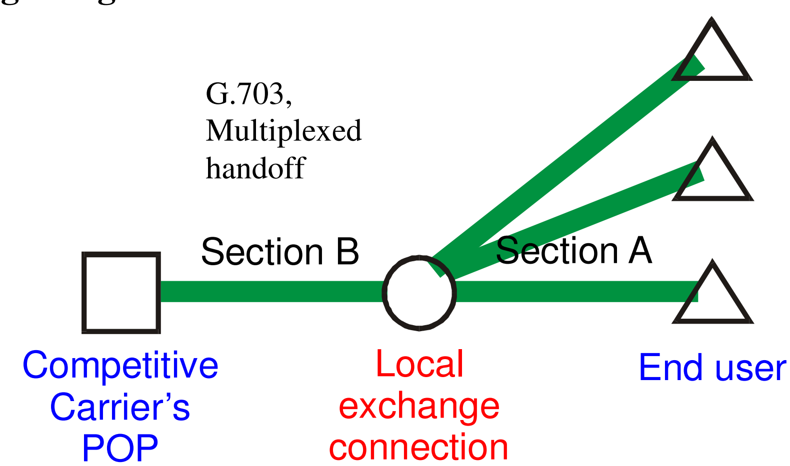
"Retail End-User Premise" to "Retail End -User Premise" Type Interconnection



(ii) Hong Kong: PCCW's Digital Data Service (DDS)

Similarly to Telstra, Hong Kong Telecom (now known as Pacific Century Cyberworks or PCCW) offers their Digital Data Service (DDS) where the circuit is divided into two separate parts: One from the business end user to the PCCW local exchange, and another from the local exchange to the other end (in this case the Competitive Carrier's POP)

Hong Kong's Carrier-to-Carrier Interconnection for LLCs



The basic principle of this groomed DDS G.703 service is as follows:

The grooming aspect of the DDS service will utilize a higher speed connection (typically a 1536 kb/s structured connection) between the PCCW exchange and the Competitive Carrier for carrying several lower speed connections from the end user sites, which reduces the number of interfaces and connections to the Competitive Carrier's PoP.

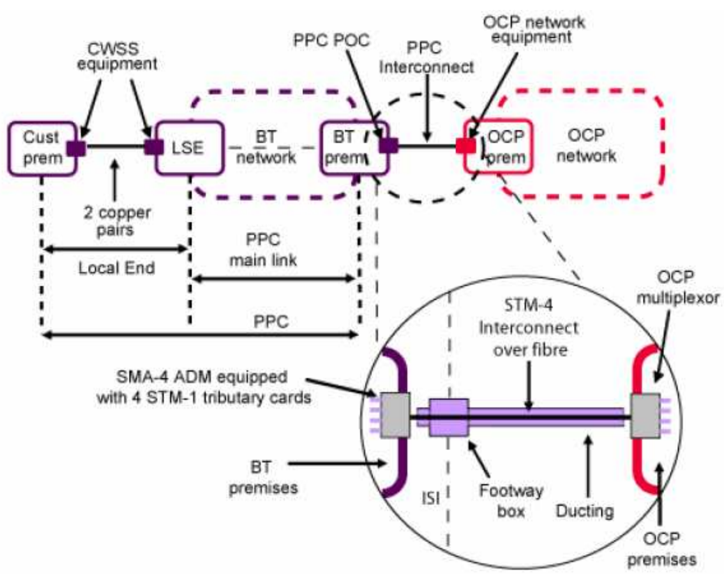
Like Telstra, PCCW does offer an "ungroomed" service at the V.35 technical interface level which is suited for end user premise to end user premise type connections

(iii) UK's efficient network Interconnection – The Private Partial Circuit Interconnect

A Private Partial Circuit (PPC) is a part leased line providing a dedicated capacity connection from a customer premise to an operator's point of connection (POC) with BT's Lease Line SDH network. PPCs are available at all bandwidths from 64kbps to 622Mbp.[26]

The PPC consists of the following network elements:

1. A PPC local end connecting the third party customer to the Local Exchange.
2. The PPC main link where the individual PPC local ends are multiplexed or "groomed" together with other circuits and carried through BT's network to the Competitive Carrier's point of connection, where it is handover over to the Competitive Carrier's network
3. The Interconnection can be a customer sited hand-over (CSH) or in-span handover (ISH) The Interconnection is done using a Multiplexer fitted with four STM-1 tributary cards, each capable of handling up to 155 Mbps capacity. There are options for higher interconnect capacity ranging from multiplexers providing 155mbps to 2.5 Gbps capacity.



[26] Partial Private Circuits Charge Control. Final Statement, 30 September 2004 (page 11)

The key differences between the SingTel's mandated wholesale Local Leased Circuit (Tail Circuits) Services and the UK PPC Offer are summarised in the following table:

Interconnection Elements	**UK PPC Interconnect**	**SingTel's Mandated Wholesale Local leased Circuit (Tail Circuit) Interconnect**
Technical Interface Standard	G.703	V.35 (for the relevant speeds)
Maximum Interconnect Capacity	2.5 Gbps	1984kbps
Grooming Handover	Yes	No
Restriction on Tail Circuit Access at local exchange PoP	No (Competitive Carrier need only to interconnect at one single point to access BT's full LLC network)	Yes (Competitive Carriers are restricted to Tail Circuits Access at collocated SingTel Exchanges)
Tail LLC Bandwidth Limits	622Mbps	155Mbps

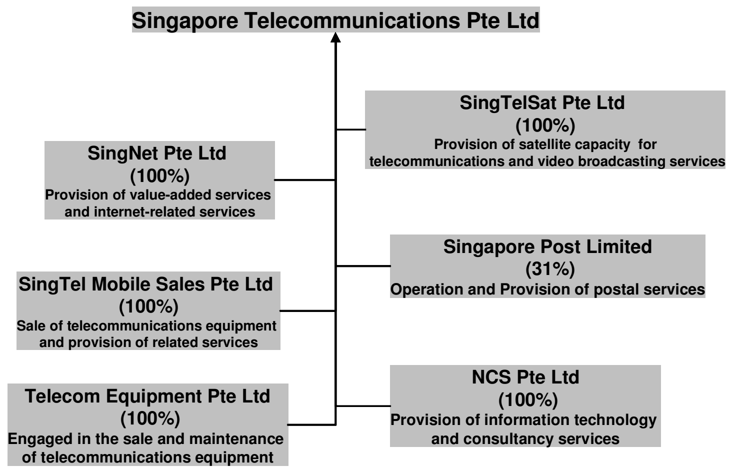
MCI is of the opinion that any attempt to designate a V.35 technical interface standard at the local exchange coupled with an inability to pick up Groomed or Multiplexed circuits, as restricted by the December 16 Decision, relegates an efficient Carrier-to-Carrier interconnection to that of End-User premise to End -User Premise type Connection.

MCI submits that End User to End User circuits handoff are done at the V.35 interface level while Carrier Hand-offs must necessarily be at the Groomed G.703 level.

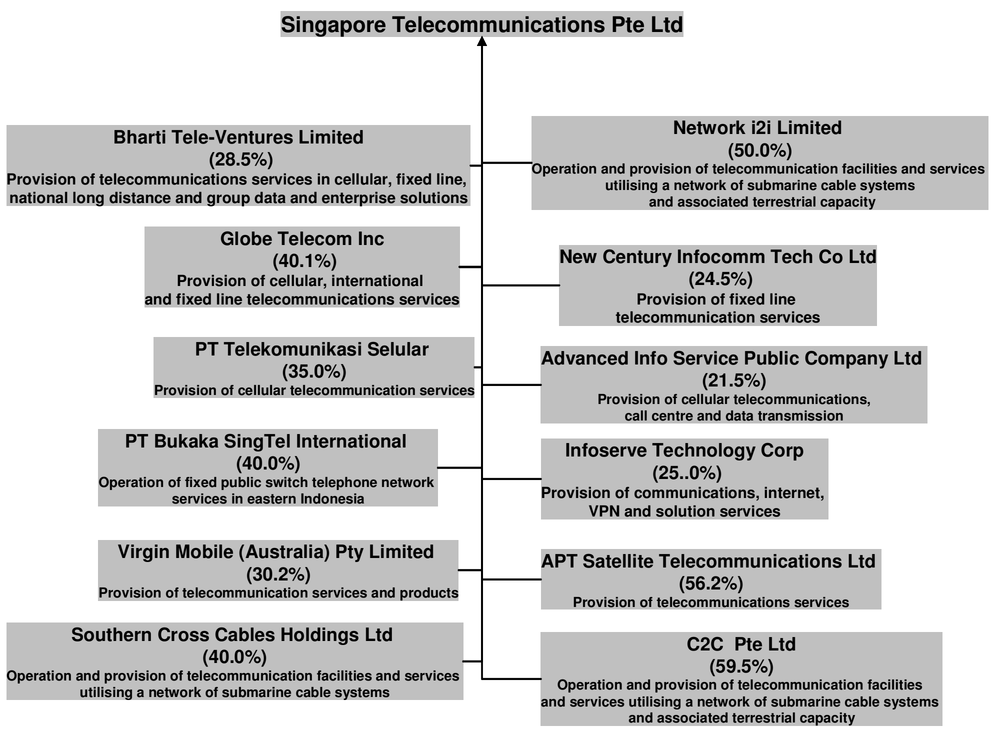
Without an efficient Carrier to Carrier handoff, the policy objective of the 16 December 2003 Decision is impaired: Competitive Facilities Based Operators will find it a technical challenge to interconnect at the local exchange and will be confronted with a difficult business decision to justify the network rollout.

MCI is also concerned that the expiry of the 18-24 months interim relief and the continued inability of carriers to effectively interconnect at SingTel's local exchanges would impact iDA's longer-term measure, which is to designate the "last mile" LLCs (LLC Tail Circuits) as an Interconnection Related Service.

Appendix B: SingTel's Group Structure[27]

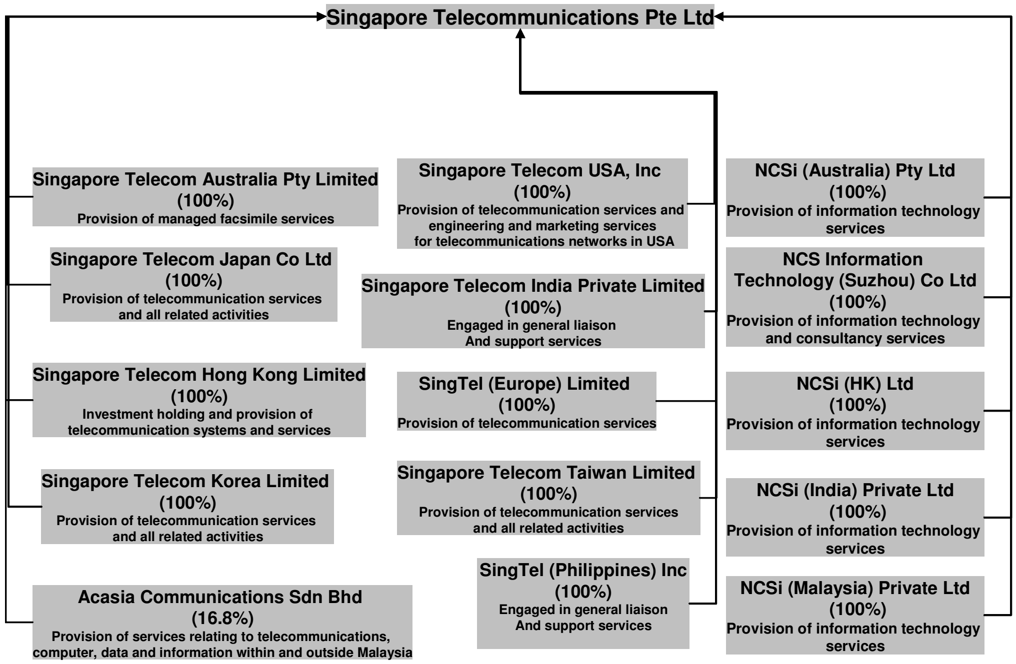


SingTel's Regional Investments:



[27] SingTel's Annual Report 2003/2004, http://home.singtel.com/investor_relations/annual_reports/default.asp

SingTel's overseas entities:



Appendix C: Price Squeeze Analysis for Internet Dedicated Services

Diagram not published due to commercial sensitivity.