REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

Non-Confidential Annex 1

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
IDD001	SingTel IDD 001 service is a premium ITS that provides customers connections to over 200 destinations worldwide. IDD 001 is suitable for customers who demand high-quality international calls and assurance of instant access to high-quality international network. It offers clearest call quality, fastest contact and most reliable connection to friends and family anywhere in the world.	Asia Access Telecom, Bludot Communications, Connecting Communications, Global Voice, Globalcom Information Services, Macquarie, MediaRing, M1, MCI Worldcom, NTT, Pacific Internet, Phoenix Communications, Pinnz Network, StarHub, SunPage Communications, Zone Telecom	√	√
STD020	SingTel STD020 service is a premium ITS that provides high-quality calls to Malaysia. STD020 assures instant access, the clearest call quality and the most reliable connection to business associates, friends and family anywhere in Malaysia.	Asia Access Telecom, Bludot Communications, Connecting Communications, Global Voice, Globalcom Information Services, Macquarie, MediaRing, M1, MCI Worldcom, NTT, Pacific Internet, Phoenix Communications, Pinnz Network, StarHub, SunPage Communications, Zone Telecom	√	√

* This list is not exhaustive in nature

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
BudgetCall013	BudgetCall013 is an alternative ITS that allows customers to make calls to more than 240 destinations from fixed and mobile lines. With BudgetCall013, customers can expect reasonable quality of calls with a lower phone bill.	Asia Access Telecom, Bludot Communications, Connecting Communications, Global Voice, Globalcom Information Services, Macquarie, MediaRing, M1, MCI Worldcom, NTT, Pacific Internet, Phoenix Communications, Pinnz Network, StarHub, SunPage Communications, Zone Telecom	√	√
v019	SingTel's v019 service enables customers to make calls to more than 240 destinations at very low rates all day long. Furthermore, calls can be made from any direct phone line, PhoneNet, ISDN and mobile phone line equipped with a SingTel IDD access.	Asia Access Telecom, Bludot Communications, Connecting Communications, Global Voice, Globalcom Information Services, Macquarie, MediaRing, M1, MCI Worldcom, NTT, Phoenix Communications, Pinnz Network, StarHub, SunPage Communications, Zone Telecom	√	√

* This list is not exhaustive in nature

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
FaxPlus 012	FaxPlus 012 provides real – time dedicated fax access to the rest of the world. Similar to the other ITS, FaxPlus 012 provides customers with access to more than 200 destinations.	Phoenix Communications, SunPage Communications, Xpedite, Zone Telecom, e-SIX Pte Ltd	√	√
FaxPlus Connect	FaxPlus Connect is an IP-based faxing solution that enables faxes to be sent from desktop computers or fax machine, with online delivery status acknowledgement. FaxPlus Connect frees customers from tedious faxing to multiple destinations, while cutting their international faxing costs.	Pacific Internet, Premiere Global Fax, TopCom Fax, Win Fax (Servers)	√	√
International Calling Card	SingTel ICC™ is a post-paid International Calling Card which promises instant connection at competitive rates. Customers have the freedom of calling from any phone, anytime to almost anywhere in the world.	AT&T, NTT, StarHub	√	√

* This list is not exhaustive in nature

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
WorldConference	WorldConference is another ITS service for businesses, allowing them to communicate with their business associates and employees as frequently as they wish, regardless of geographical boundaries. WorldConference is easy to use, highly secure, reliable and supported by SingTel's 24-hour conference centre helpdesk.	ACT, AT&T, Bludot Communications, British Telecoms, Genesys, Global Crossing, Intercall, Macquarie, MCI Worldcom, MSN, NTT Communications Clear Conference, Premier Conferencing, Raindance, Skype, StarHub, WebEx	√	√
Corporate Switched Telecommunications Network (CSTN)	CSTN is another alternative ITS service for businesses. Similar to WorldConference, CSTN is a global virtual network voice solution that allows business to stay in touch with their offices and business associates around the world. CSTN equips businesses with its own VPN while sharing the same public network infrastructure.	AT&T, British Telecoms, Equant, Infonet, MCI Worldcom, NTT, StarHub, Telstra	**X**	√

* This list is not exhaustive in nature

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
Voice VPN (also called ConnectPlus VoIP VPN)	ConnectPlus VoIP VPN is a Value-Added Service on the ConnectPlus IP VPN service. It provides businesses with inter-site voice and fax connectivity via the same connection for their data VPN. A cost-effective and fully-managed service, ConnectPlus VoIP VPN will comprehensively address the voice and fax communication needs of businesses. Multi-site offices, telecommuters, mobile users, partners and suppliers can be connected securely over SingTel's world-class IP-backbone. In addition, customers may also enjoy attractive rates for calling to sites outside of their VPN via the offnet call option.	AT&T, British Telecoms, Equant, Infonet, MCI Worldcom, NTT, Sprint, StarHub, Telstra	**X**	√
WorldCard™	SingTel WorldCard™ is a prepaid calling card which offers great savings and calling privileges to many destinations. It allows customers to call from Singapore to 240 overseas destinations. Furthermore, customers can also call back to Singapore from 60 overseas destinations, call	123Com, 1World Telecom, Bludot Communications, Centrin, Chesterfield, China Motion, China Netcom, ETNS, F.E. Comms, Global One, Global Voice, Globe Telecom, Hak	√	√

* This list is not exhaustive in nature

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
	other overseas destinations from 12 designated countries, as well as call within Singapore from any phone, anywhere at any time.	Japan, IDT Asia, International Access, MediaRing, Nextel, Northgate, OSMS, P2P Telecom, PG Com, Phoenix Communications, Pinnacle Telecom, PLDT, Radar Max, ShineTown, Smartcom, SMSHub™, Spotnet, StarHub, SunPage Communications, Tele-Access, Teleinfo Technology and Services, Tri-cel, Ultimate Communications, Unifone, Union Pac, United World Telecom, Victel		
Hello!™ Card	SingTel Hello!™ Card is a prepaid international calling card that provides good quality calls and competitive calling rates to 21 designated countries. With this card, you can call from Singapore to Australia, Bangladesh, Canada, China, Hong Kong, India, Indonesia, Italy,	123Com, 1World Telcom, Bludot Communications, Centrin, Chesterfield, China Motion, China Netcom, ETNS, F.E. Comms, Global One, Global Voice, Globe Telecom, Hak	√	√

* This list is not exhaustive in nature

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
	Japan, Malaysia, Myanmar, Philippines, Saudi Arabia, South Korea, Sri Lanka, Taiwan, Thailand, UAE, UK, USA and Vietnam.	Japan, IDT Asia, International Access, MediaRing, Nextel, Northgate, OSMS, P2P Telecom, PG Com, Phoenix Communications, Pinnacle Telecom, PLDT, Radar Max, ShineTown, Smartcom, SMSHub™, Spotnet, StarHub, SunPage Communications, Tele-Access, Teleinfo Technology and Services, Tri-cel, Ultimate Communications, Unifone, Union Pac, United World Telecom, Victel		
Operator Assisted Service	Operator-Assisted Service allows the end-user to make ITS calls using the operator-assistance provided by our operators. This service is available 24 hours daily.	StarHub	√	√

* This list is not exhaustive in nature

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
Overseas Paid 800	Overseas Paid 800 is a value-added feature on IDD001 service. Special arrangements have been made with overseas service providers that allows customers special access to domestic toll-free numbers overseas.	StarHub	√	√
Overseas Collect Call	Overseas collect call service enables the recipient of an ITS call to make payment for the call.	Nil	√	√
International Toll Free Service (ITFS)	SingTel ITFS service allows businesses to reach out to customers from around the world. Customers are provided with a 24-hour toll-free access to businesses from over 70 countries, thus providing customers with direct access to businesses at all times.	AT&T, British Telecoms, MCI Worldcom, PCCW, Sprint, StarHub, Telekom Malaysia, Telstra	√	√

* This list is not exhaustive in nature

ITS	Description	Examples of Competitors*	Availability	
			Residential Customers	Commercial Customers
ISDN International Data Service	ISDN International Data is an ITS delivered over an ISDN line. It is accessible via 3 digit access codes, including IDD 001 and IDD 008. It can be used for the purpose of making video phone or data calls.	StarHub	√	√

* This list is not exhaustive in nature

Non -Confidential Annex 2

Notes: Capacity data are as of year-end. Capacity at year-end 2006 assumes that submarine bandwidth providers upgrade cable capacity to maintain 10 percent excess inventory over purchased capacity. For details on the "Slow" and "Fast" scenarios, see Figure 9. Intra-Asia cables include SeaMeWe-3 and FLAG Europe-Asia, which also serve the Europe-Africa-Asia route. Total upgradeable capacity is based on the maximum design capacity of existing systems.

Source: TeleGeography, *Submarine Bandwidth 2004: Executive Summary*. See, www.telegeography.com/ee/free_resources

/

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

Non-confidential Annex 3

Lit Submarine Cable Capacity Trends by Route, 1999-2005

Lit Submarine Cable Capacity (Gbps)

	1999	2000	2001	2002	2003	2004	2005	2006	Fully Upgraded
Trans-Atlantic	163.0	533.0	1,843.0	2,022.4	2,337.9	2,337.9	2,641.9	2,982.7	12,297.9
Trans-Pacific	42.9	182.9	262.9	1,042.9	1,042.9	1,042.9	1,230.9	1,456.5	6,502.9
Intra-Asia	25.0	40.0	560.0	560.0	560.0	560.0	670.0	802.0	15,810.0
U.S.-Latin America	13.1	213.1	293.1	303.1	513.1	518.1	637.7	749.2	5,165.6
Europe-Africa-Asia	21.1	31.1	31.1	41.1	61.1	61.1	73.1	87.5	251.1

Notes: Capacity figures denote lit, protected capacity at the end of the respective year. Capacity for 2004 is projected based on capacity upgrade announcements and new cable construction information as of March 2004. Capacity for 2005 and 2006 is projected assuming cables with upgradeable capacity will increase total capacity 20 percent each year until fully upgradeable capacity is achieved. Intra-Asia capacity includes cables with landings in both Hong Kong and Japan. Trans-Pacific capacity excludes Southern Cross and PacRim East. Trans-Atlantic capacity excludes Atlantis-2. Cables retired prior to year-end 2004 are excluded from Fully Upgraded capacity. Fully upgraded capacity is based on system design capacity.

TeleGeography research PriMetrica, Inc. 2004

Source: TeleGeography, *International Bandwidth 2004*. See, www.telegeography.com/ee/free_resources/

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

Non-Confidential Annex 4

ITS	Examples of Competitors*	Availability of competitors' services#	
		Residential Customers	Commercial Customers
IDD001	Asia Access Telecom, Bludot Communications, Connecting Communications, Global Voice, Globalcom Information Services, Macquarie, MediaRing, M1, MCI Worldcom, NTT, Pacific Internet, Phoenix Communications, Pinnz Network, StarHub, SunPage Communications, Zone Telecom	√	√
STD020	Asia Access Telecom, Bludot Communications, Connecting Communications, Global Voice, Globalcom Information Services, Macquarie, MediaRing, M1, MCI Worldcom, NTT, Pacific Internet, Phoenix Communications, Pinnz Network, StarHub, SunPage Communications, Zone Telecom	√	√
BudgetCall013	Asia Access Telecom, Bludot Communications, Connecting Communications, Global Voice, Globalcom Information Services, Macquarie, MediaRing, M1, MCI Worldcom, NTT, Pacific Internet, Phoenix Communications, Pinnz Network, StarHub, SunPage Communications, Zone Telecom	√	√

* This list is not exhaustive in nature

\# The availability provided here is on a 'best-effort' basis

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

ITS	Examples of Competitors*	Availability of competitors' services#	
		Residential Customers	Commercial Customers
v019	Asia Access Telecom, Bludot Communications, Connecting Communications, Global Voice, Globalcom Information Services, Macquarie, MediaRing, M1, MCI Worldcom, NTT, Pacific Internet, Phoenix Communications, Pinnz Network, StarHub, SunPage Communications, Zone Telecom	√	√
FaxPlus 012	Phoenix Communications, SunPage Communications, Xpedite, Zone Telecom, e-SIX Pte Ltd	√	√
Fax Plus Connect	Pacific Internet, Premiere Global Fax, TopCom Fax, Win Fax (Servers)	√	√
International Calling Card	AT&T, NTT, StarHub	√	√
WorldConference	ACT, AT&T, Bludot Communications, British Telecoms, Genesys, Global Crossing, Intercall, Macquarie, MCI Worldcom, MSN, NTT Communications Clear Conference, Premier Conferencing, Raindance, Skype, StarHub, WebEx	√	√

* This list is not exhaustive in nature

\# The availability provided here is on a 'best-effort' basis

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

ITS	Examples of Competitors*	Availability of competitors' services#	
		Residential Customers	Commercial Customers
Corporate Switched Telecommunications Network (CSTN)	AT&T, British Telecoms, Equant, Infonet, MCI WorldCom, NTT, StarHub, Telstra	NA	√
Voice VPN (also called ConnectPlus VoIP VPN)	AT&T, British Telecoms, Equant, Infonet, MCI Worldcom, NTT, Sprint, StarHub, Telstra	NA	√
WorldCard™	123Com, 1World Telecoms, Bludot Communications, Centrin, Chesterfield, China Motion, China Netcom, ETNS, F.E. Comms, Global One, Global Voice, Globe Telecom, Hak Japan, IDT Asia, International Access, MediaRing, Nextel, Northgate, OSMS, P2P Telecom, PG Com, Phoenix Communications, Pinnacle Telecom, PLDT, Radar Max, ShineTown, Smartcom, SMSHub™, Spotnet, StarHub, SunPage Communications, Tele-Access, Teleinfo Technology and Services, Tri-cel, Ultimate Communications, Unifone, Union Pac, United World Telecom, Victel	√	√

* This list is not exhaustive in nature

\# The availability provided here is on a 'best-effort' basis

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

ITS	Examples of Competitors*	Availability of competitors' services#	
		Residential Customers	Commercial Customers
Hello!™Card	123Com, 1World Telecoms, Bludot Communications, Centrin, Chesterfield, China Motion, China Netcom, ETNS, F.E. Comms, Global One, Global Voice, Globe Telecom, Hak Japan, IDT Asia, International Access, MediaRing, Nextel, Northgate, OSMS, P2P Telecom, PG Com, Phoenix Communications, Pinnacle Telecom, PLDT, Radar Max, ShineTown, Smartcom, SMSHub™, Spotnet, StarHub, SunPage Communications, Tele-Access, Teleinfo Technology and Services, Tri-cel, Ultimate Communications, Unifone, Union Pac, United World Telecom, Victel	√	√
Operator Assisted Service	StarHub	√	√
Overseas Paid 800	StarHub	√	√
Overseas Collect Call	NA	NA	NA
International Toll Free Service (ITFS)	AT&T, British Telecoms, MCI Worldcom, PCCW, Sprint, StarHub, Telekom Malaysia, Telstra	√	√

* This list is not exhaustive in nature

\# The availability provided here is on a 'best-effort' basis

REQUEST OF SINGAPORE TELECOMMUNICATIONS LIMITED FOR EXEMPTION FROM DOMINANT LICENSEE OBLIGATIONS WITH RESPECT TO THE RETAIL INTERNATIONAL TELEPHONE SERVICES MARKET PURSUANT TO SECTION 2.5.1 OF THE CODE OF PRACTICE FOR COMPETITION IN THE PROVISION OF TELECOMMUNICATIONS SERVICES 2005

ITS	Examples of Competitors*	Availability of competitors' services#	
		Residential Customers	Commercial Customers
ISDN International Data Service	StarHub	√	√

* This list is not exhaustive in nature

The availability provided here is on a 'best-effort' basis

Non-Confidential Annex 5

SINGTEL AVERAGE IDD CALL COLLECTION RATE

Financial Year ending 31 March	S$ per minute
2001	0.70
2002	0.58
2003	0.54
2004	0.47
2005	0.42

Average IDD call collection rates are on a net basis, excluding rates to Malaysia.

Source : SingTel Financial Results