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16 April 2007

Mr Andrew Haire
Deputy Director-General (Telecoms)
Info-communications Development Authority of Singapore
8 Temasek Boulevard
#14-00 Suntec Tower Three
Singapore 038988

Dear Mr Haire

CONSULTATION ON THE PROPOSED REGULATORY FRAMEWORK FOR DEVICES USING ULTRA-WIDEBAND (UWB) TECHNOLOGY

- 1. Singapore Telecommunications Limited and Singapore Telecom Mobile Private Limited (collectively **SingTel**) refer to the consultation paper issued by the Info-communications Development Authority of Singapore (**IDA**) on 1 March 2007 in relation to the regulatory framework for ultra-wideband (**UWB**) devices.
- 2. SingTel welcomes the opportunity to provide its comments and views on the issues raised in the consultation paper.
- 3. In relation to the proposal to license, on a case-by-case basis, the use of UWB imaging systems with peak emissions below the 960 Mhz or in the 3400 to 10600 MHz band, SingTel provides its comments below.
- 3.1 SingTel notes that the primary users of UWB imaging systems would include, among other entities, healthcare practitioners. SingTel also understands that UWB imaging systems for medical purposes operate at a higher power than a generic UWB imaging system. SingTel currently has installed GSM900 mobile systems in buildings, including various healthcare establishments such as hospitals and polyclinics. When licensing the use of UWB imaging systems, the guidelines must clearly specify the location(s) within the establishment where the UWB imaging system(s) may operate so as not to interfere with the existing mobile systems.

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- 3.2 With the increasing use of mobile phones by healthcare staff in hospitals and polyclinics and especially in areas where mobile phones were previously prohibited (such as the Intensive Care Unit), SingTel realises the difficulty in determining the boundaries for the operation of UWB imaging systems and mobile systems.
- 3.3 Therefore, SingTel stresses that the guidelines in issuing the license must be clearly defined to prevent potential interference with existing systems.
- 4. In terms of safeguards for existing users below the band 960 MHz or in the 3400 to 10600 MHz band, given the potential for interference with existing systems, SingTel submits that additional licensing conditions are indeed required as further safeguards.
- 4.1 The consequences of interference to the mobile systems include poor quality of calls, to a point where either party may not even be able to fully hear each other as well as dropped calls. Again, with the increasing use of mobile systems by staff in healthcare establishments, it may well be critical that the mobile systems function smoothly.
- 4.2 As a precaution against such interferences, SingTel proposes that UWB imaging devices operating in the frequency band below 960 MHz be subjected to a mandatory type-approval test to ensure that there is no disturbance to the existing mobile systems.
- 4.3 Further, the licensing framework should establish the course of actions available to the mobile operator, as well as clarify and establishment the IDA's involvement in the investigation of interferences if and/or when such interferences are detected. This will provide both the mobile operators and UWB imaging device licensees with clearly defined guidelines for the purpose of resolving interference issues particularly, in the event of any dispute over responsibilities.

5. Thank you for considering this submission.

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Yours sincere

Vice - President

Regulatory and Interconnect Strategy

Page 2 of 2

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