

<http://www.ida.gov.sg/Infrastructure/>

Information Communication Technology (ICT) Standardisation

Standards play an important and integral part in facilitating the development and adoption of new technologies. Hence, IDA is working with various industry partners and standards organisations here and overseas to make standards a part of Singapore's ICT eco-system.

The IDA Standards Team plays a key role in fostering and facilitating the industry's participation in local and international ICT standards forums. It is the Secretariat to the IT Standards Committee (ITSC), an industry-led effort supported by SPRING Singapore and IDA, chartered to drive and lead infocomm standardisation activities in Singapore and represent Singapore in the international standardisation forum of ISO/IEC JTC1 on Information Technology.

The ITSC is one of the nine Standards Committee under the national Standards Council appointed by SPRING Singapore. It is led by Mr Robert Chew, Partner of Accenture Pte Ltd and comprises more than 300 volunteers from the industry.

Infocomm standards in Singapore are developed on a consensus basis and are the results of the collaborative efforts amongst the government agencies, tertiary institutions, professional bodies and the infocomm industry. ITSC is a neutral and open platform for interested industry and government parties to come together to agree on technical standards.

The ITSC Council comprises a Council with representatives from associations, academia, research institutes and government agencies such as ISS, I2R, SCS, SiTF, ITMA, NUS, NTU, SPRING & IDA, which charts the directions and policies. In addition, the appointed Technical Committees and Working Groups comprising technical experts from the industry, academia and research institutes, develop and promote national infocomm standards, and participate in international infocomm standardisation activities. These standardisation activities are carried out by volunteers.

At present, there are ten Technical Committees addressing infocomm standards in areas of:

- Automatic Data Capture
- Biometrics
- Construction Industry IT Standards
- eFinancial Services
- Information Exchange
- Intelligent Transport Systems
- Learning Standards
- Multimedia Representation
- Security and Privacy Standards
- Cards and Personal Identification

These form the spectrum of infocomm standards that ITSC monitors and develops. Where possible, ITSC will mirror its Technical Committees after the Technical Committees of ISO and the Sub-Committees of ISO/IEC JTC1 on information technology, which Singapore is a 'participating' member.

Overview

Over the years, Singapore has put in place an advanced and reliable infocomm infrastructure that has met the needs and demands of our economy and society. The latest study on broadband usage in Singapore reveals a broadband penetration of over 50%, while Internet penetration amongst households is at 66% of the population. These achievements were possible, in part, due to a robust and stable National Infocomm Infrastructure (NII).

The development of the NII started as a key initiative of the IT 2000 Masterplan, with the building of a high-speed nationwide broadband network as a major milestone in its development. Singapore ONE was formally announced as the island-wide broadband initiative in 1996, and it jumpstarted the broadband industry and formed the platform over which all local Internet traffic is exchanged today. Singapore ONE also led to the creation of many broadband companies and applications in schools and businesses.

Singapore has also grown to be one of the major global telecommunications hubs in the region. With total submarine cable capacity of 28 Tbps (End 2005) and direct international Internet connectivity of 20 Gbps (Jun 05), Singapore is well positioned as a hub for international capacity. Over the last few years, Singapore has also grown to be a transable hub where regional submarine cable systems and international cable systems interconnect.

As Singapore progresses into a world of globalised and networked economies where countries have to both compete and collaborate at the same time, the presence of a good infocomm infrastructure will be crucial. It will not only support the needs of the users and to allow them to thrive in this new global environment, it will also enhance Singapore's global competitiveness. We must continue to plan ahead beyond present needs, and keep pace with rapid technological changes.

Therefore, as part of the iN2015 Masterplan, Singapore is looking into the deployment of a seamless, trusted and intelligent infocomm infrastructure that will be realised by 2015, as a critical enabler for the vertical sector economies of Singapore to gain a competitive edge in the global market. Such an infrastructure will also contribute to the overall competitiveness of the infocomm sector as it creates wider and more intelligent highways and ports for the flow of digital goods. It will also empower every individual and business in Singapore with the opportunity to engage in networked, infocomm-enabled services.

Singapore will undertake bold steps in the next five years to make strategic investments to deploy the Next Generation National Infocomm Infrastructure (Next Gen NII). This comprises a nation wide ultra high speed fibre access infrastructure and a complementary pervasive wireless network. The Next Gen NII will support new industries like the digital media and the biomedical sciences industry as next engines of growth for Singapore's economy.

Programmes

Next Generation National Broadband Network (NBN)

Singapore's Next Generation National Infocomm Infrastructure comprises the ultra high-speed Next Generation NBN and the pervasive Wireless Broadband Network (WBN). The Next Gen NBN will entrench Singapore's Infocomm hub status and open the doors to new economic opportunities, business growth and social vibrancy for the country. Next Gen NBN will be capable of ultra high speeds of symmetric 1Gbps or more.

Wireless Broadband Network

Singapore's Next Generation National Infocomm Infrastructure comprises both wired and wireless networks to ensure Singaporeans enjoy seamless connectivity. To complement the Next Generation National Broadband Network, the Wireless Broadband Network will be deployed in key catchment areas around Singapore and offer wireless access at highly affordable rates under a Wireless Broadband Market Development Call-For-Collaboration.

Wireless@SG Programme

Wireless@SG is a wireless broadband programme developed by IDA as part of its Next Generation National Infocomm Infrastructure initiative. It will be run and developed in the next two years by three local wireless operators who will deploy a wireless broadband network in Singapore.

Related Links

ICT Research Institutes and Standards Organisations in Singapore

[Agency for Science, Technology and Research \(A*STAR\)](#)

[Information Technology Standards Committee \(ITSC\) http://www.itsc.org.sg/](http://www.itsc.org.sg/)

[Institute for Infocomm Research \(I2R\)](#)

[Institute of High Performance Computing \(IHPC\)](#)

[Institute of Microelectronics \(IME\)](#)

[Java Smart Services Lab \(JSSL\)](#)

Java Wireless Competency Centre (JWCC)

Positioning and Wireless Technology Centre (PWTC)

Singapore Advanced Research & Education Network (Singaren)

Singapore infocomm Technology Federation (SiTF)

SPRING's National Standardisation Programme

Programmes

National Standardisation Programmes