

World Radiocommunication Conference Highlights

● **The International Telecommunication Union (ITU) World Radiocommunication Conference (WRC-07)** in Geneva from 22 October to 16 November saw intense negotiations on the future of wireless communications, with rapid technological developments and growth in the information and the communication technology (ICT) sector having driven demand for spectrum.

The Radio Regulations, an international treaty governing the use of the radio-frequency spectrum and satellite orbits were revised and updated by the conference to achieve the global connectivity goals of the 21st Century.

The conference addressed some 30 agenda items related to almost all terrestrial and space radio services and applications, including future generations of mobile telephony, satellite services, maritime distress and safety signals, digital broadcasting, and the use of radio in predicting and detecting natural disasters.

Its key highlights included the global harmonisation of additional spectrum identified for use by International Mobile Telecommunications (IMT), representing an important step in the worldwide development of IMT systems.

On aeronautical security and modernisation of civil

aviation telecommunication systems, the conference upgraded radiolocation service to primary allocation status in the bands 9000–9200 MHz and 9300–9500 MHz, allocated additional spectrum for aeronautical telecommand and high bit-rate aeronautical telemetry and added new allocations for the aeronautical mobile (R) service.

The conference also approved proposals concerning the use and further development of satellite systems using highly inclined orbits, high altitude platforms, as well as compatibility and sharing between different space and terrestrial services.



It also revised the technical and regulatory provisions for fixed-satellite service (FSS) in the 600 MHz bandwidth used in different regions under varying climatic conditions for applications such as communications, TV, Internet and others.

ITU accepts WiMAX into IMT-2000 family

WiMAX or Wireless interoperability for Microwave Access based on IEEE 802.16 standards for wireless metropolitan area networks (MAN) was often seen as a competitor with the International Telecommunication Union's (ITU) IMT-2000 family of third-generation (3G) mobile communications technologies until the ITU accepted WiMAX-derived technology as the sixth member of the IMT-2000 (International Mobile Telecommunications 2000) family in October 2007.

This globally important move opens the way for deployment of a range of voice, data, and multimedia services to both stationary and mobile devices, significantly enabling the deployment of mobile Internet in both urban and rural areas.

According to WiMAX Forum president Ron Resnick, WiMAX technology will facilitate the provision of broadband wireless access services at lower cost and will include multiple wireless broadband Internet services, including VoIP (Voice over Internet Protocol).



Singapore's Ultra-high Speed Digital Highway Ready by 2015

● **Singapore took a step closer towards** having an open access Next Generation National Broadband Network (Next Gen NBN), which will offer pervasive ultra-high speed connectivity by 2015. It has issued a Request-For-Proposal (RFP) open to all interested parties to submit their bid to design, build and operate the passive infrastructure layer of the Next Gen NBN.

The Next Gen NBN is expected to be available nationwide by 2015, although consumers can begin to look forward to a range of new and exciting Next Gen Services such as high-definition video conferencing, telemedicine, Grid Computing-on-Demand, security and immersive learning applications on the Next Gen NBN from around 2010.

Malaysian girl pleads on behalf of tigers and wins international competition

● A 14 year old Malaysian girl, **Sze Ee Lee**, has won the 36th Universal Postal Union International Letter-Writing Competition. This is the first time that a Malaysian won this competition since it began in 1972.

More than three million youngsters from all over the world took part in the competition which addressed the issue of climate change. Participants were asked to put themselves in the position of a wild animal whose habitat is threatened by environmental or climatic change. Their letters were to be addressed to the peoples of the world to explain how humans could help them survive.

Sze Ee Lee took on the role of a tiger cub living in the rainforest. In her letter she asked, "Why do humans still need to invade our jungle besides hunting us like in those primitive days?" She pleaded, "We have no other place to go."

The letter ended with a poignant plea, "It is said that 'the pen is mightier than the sword'. So please publish more books, magazines, pamphlets. I believe many people of the world are still ignorant or lack information about wildlife. There is a Malay saying 'tak kenal maka tak cinta' which means 'to know you



is to love you'. So please get as many people to know us and consequently to love us."

Her composition – well written and moving, and above all positive – won unanimous praise from the UNESCO jury.

Ultra-Modern Technology on a Conventional Stamp

● **Swiss Post** is issuing the world's first stamp with an integrated BeeTagg, combining a conventional stamp with ultra-modern technology. Swiss Post's partner in this first tagging venture is Schweiz Tourismus, which is using the stamp and integrated BeeTagg as part of its winter advertising campaign.

The Swiss Post BeeTagg special stamp was created in conjunction with Schweiz Tourismus and Swiss Snowsports, the umbrella association for all Swiss ski and snowboarding schools and teachers, and depicts two skiers surrounded by magnificent Swiss mountain scenery. This image, together with the BeeTagg, is part of Schweiz Tourismus's 2007/2008 winter advertising campaign aimed at getting people excited about the winter season in Switzerland.

Schweiz Tourismus is incorporating the BeeTagg in its campaign as an additional means of communication, enabling its customers to order catalogues and brochures as well as taking part in a competition.

The BeeTagg mobile application makes use of mobile tagging. It enables the user to establish a connection to a predefined and mobile-friendly web page via their mobile phone. The BeeTagg is a two-dimensional code that looks like a honeycomb and functions in a similar way to a bar code. The user simply installs the free BeeTagg reader, then scans the tag incorporated into the Swiss Post stamp with the camera on their mobile phone. The reader recognizes the tag and connects the phone to a predefined web page.



4G officially named IMT Advanced

● After several years as an undefined industry buzzword, generally referring to the wholly Internet Protocol (IP) based next generation of mobile communications following the IMT-2000's third-generation (3G) technologies, the ITU Radiocommunication Assembly (ITU-R) in Geneva last October formally named the fourth-generation (4G) as IMT-Advanced.

There will be an open call in 2008 and 2009, for candidates for IMT-Advanced to be submitted to the ITU and the start of assessment of candidate technologies and systems. Services based on IMT-Advanced are expected to be commercially available as early as 2011, subject to market demand.

The ITU-R also agreed to expand the IMT-2000 3G radio interface family with the addition of OFDMA (orthogonal frequency division multiple access) technology.