

17 June, 2013

The Dynamic Spectrum Alliance

A new global initiative to help governments address wireless data growth and close the digital divide

Singapore, 17th June 2013 - Today, 23 companies and organizations from across the world: 6Harmonics, Adaptrum, BSkyB, Carlson, Computer and Communication Research Center - Taiwan, The Council for Scientific and Industrial Research (CSIR), Indigo Telecom, InterDigital, Microsoft, MediaTek, Network Startup Resource Center (University of Oregon), Neul, National Institute of Information and Communications Technology - Japan (NICT), RealTek, Ruckus Wireless, Singapore Institute for Infocomm Research (I2R), StarHub, Strathclyde Centre For White Space Communications, Tanzania Commission for Science and Technology (COSTECH), Taiwan Institute for Information Industry, UhuruOne, WaveTek and White Space Technologies Africa joined forces to announce formation of the Dynamic Spectrum Alliance.

The Dynamic Spectrum Alliance will promote regulatory policies that will pave the way for innovative new wireless technologies that address growing wireless data and digital divide challenges. So-called "Dynamic Spectrum Access" technologies can opportunistically exploit otherwise unused and inefficiently used radio frequencies ("white spaces" spectrum) to create various forms of wireless connectivity. One near term opportunity to globally leverage such technologies is in the unused TV band frequencies. The Dynamic Spectrum Alliance will also focus on promoting laws and regulations to ensure that spectrum technology can extend rural broadband, support the development of "smart cities", and help ensure that consumers and their devices have wireless bandwidth when and where they need it.

"Whether you look at how TV White Spaces are being put to use to serve underserved communities in Africa, or how the technology is creatively used in one of the biggest ports to lower costs, it is clear that it can have an immediate effect on people's lives today", said Pete Henderson, Chairman, Indigo Telecom. "A large role for the Dynamic Spectrum Alliance will be educating regulators on consumer benefits that can be derived from enabling this technology."

Over the last few years, it has become clear that the strain on artificially limited spectrum resources will continue to grow, particularly as the use of both wireless devices and machine to machine communication increases. Gaps in coverage and network overload in busy areas are already resulting in poor service for end-users. The Dynamic Spectrum Alliance believes that these problems can be alleviated through spectrum sharing. The technology is beginning to be commercialized, as evidenced by technical trials, demonstrations and commercial pilots around the world. From Cape Town to Cambridge, Helsinki, Isle of Bute, Kenya, Singapore, and many other demonstrations and pilots, the future of dynamic spectrum is rapidly approaching.

While some leading edge regulators have begun enabling these technologies, policymakers have an opportunity to enable a variety of exclusive-use and non-exclusive spectrum access approaches across a variety of spectrum bands. "We are delighted to see more and more regulators taking up the spectrum solutions on offer," said James Collier, co-founder of Neul. "We hope the example of the Singapore Infocomm Development Authority (IDA) is picked up by others and we look forward to partnering with regulators around the world in developing effective legal frameworks for spectrum sharing."

From an industry-wide perspective, the Dynamic Spectrum Alliance will be technology neutral and support a variety of standards-based and proprietary technologies that will lower barriers to entry and increase technical and business model innovation that can result from dynamic access to unused spectrum. The initial members call on all organizations with an interest in these emerging technologies to join the Dynamic Spectrum Alliance to ensure we can take full advantage of the opportunities to improve quality of life throughout the world.

About DSA

The Dynamic Spectrum Alliance (DSA) is a global organization advocating more efficient and effective spectrum management. Our membership spans multinationals and SMEs from around the world, all working to create innovative solutions that will increase the amount of spectrum available to the benefit of consumers and businesses alike. The DSA seeks to be the voice of this industry in interactions with governments, helping to promote laws and regulations that encourage further development of this innovative industry.

Member companies

6Harmonics

6Harmonics is a Canadian startup company developing Adaptive Radio Systems. Its branded GWS access platform is a family of OFDM-based cognitive solutions for wide area broadband wireless networks using unlicensed spectrum or dynamically accessing other authorized spectrum.

Adaptrum

Adaptrum is a Silicon Valley based company developing dynamic spectrum access technologies to enable new, unlicensed, multi-use networks to meet the growing wireless broadband demand.

BSkyB

BSkyB entertains and excites more than 10.3 million homes through its Sky service – the most comprehensive multichannel, multiplatform television service in the UK and Ireland. The company is the UK's fastest-growing broadband and home phone provider, and operates The Cloud, one of the UK's largest public Wi-Fi providers.

Carlson

Carlson introduces the world's first affordable TV white spaces wideband radio, RuralConnect, a breakthrough product for broadband in challenging terrain. Carlson developed this high-capacity, non-line-of-sight (NLOS) broadband solution in response to the needs of wireless Internet service providers to help bring broadband connectivity to every corner of the world.

Centre for White Space Communications

Centre for White Space Communications, Scotland is a multi-disciplinary, industry-focused R&D centre investigating the use of 'white space' radio spectrum. The Centre is led by the University of Strathclyde in Glasgow, Scotland, and builds upon more than 30 years of experience and expertise in the areas of telecommunications and signal processing technologies.

Computer and Communication Research Center (CCRC), Taiwan

CCRC of National Tsing Hua University was established in September 1994. Its research activities mainly focus on high-speed networking, wireless communications, multimedia communication systems, and their applications.

COSTECH

Tanzania Commission for Science and Technology (COSTECH) is a parastatal organization with the responsibility of coordinating and promoting research and technology development activities in the country. It is the chief advisor to the Government on all matters pertaining to science and technology and their application to the socio-economic development of the country.

The Council for Scientific and Industrial Research (CSIR)

CSIR is one of the leading scientific and technology research, development and implementation organizations in Africa. The CSIR is committed to supporting innovation in South Africa to improve national competitiveness in the global economy.

Institute for Infocomm Research, I²R

I²R is a member of the Agency for Science, Technology and Research (A*STAR) family. Established in 2002, their vision is to foster world-class infocomm and media research and develop a deep talent pool of infocomm professionals to power a vibrant knowledge-based Singapore.

Indigo

Indigo Telecom is a satellite service provider with a global reach. It is a system integrator that designs and implements solutions using best of breed technology in a cost effective way.

InterDigital

InterDigital develops fundamental wireless technologies that are at the core of mobile devices, networks, and services worldwide.

Microsoft

Founded in 1975, Microsoft is the worldwide leader in software, services and solutions that help people and businesses realize their full potential.

MediaTek Inc.

MediaTek Inc. is a leading fabless semiconductor company for wireless communications and digital multimedia solutions. The company is a market leader and pioneer in cutting-edge SOC system solutions for wireless communications, high-definition TV, optical storage, and DVD and Blu-ray products.

Network Startup Resource Center

The Network Startup Resource Center (NSRC), based at the University of Oregon, was established in 1992 to provide technical assistance to organizations setting up computer networks in developing areas for collaborative research, education and international partnerships.

Neul

Neul is a Cambridge, UK based company who sees the future being realized through a new, simple, end-to-end way to economically connect everything. They provide wireless network services and solutions that will deliver the Internet of Everything - from SMART cities, environmental monitoring, energy and agriculture to education and healthcare.

National Institute of Information and Communications Technology (NICT)

Founded as Japan's sole national institute to promote the full spectrum of research, development and standardization of information and communication technologies, including DSA based wireless communications.

RealTek

Realtek Semiconductor Corp. is one of the world's leading IC providers, with a broad portfolio of ICs for network, computer peripheral, and multimedia applications. With advanced design expertise in RF, analog, and mixed signal circuits, and with strong manufacturing and system knowledge, Realtek offers full-featured, high-performance, and competitive total solutions.

Ruckus Wireless

Headquartered in Sunnyvale, CA, Ruckus Wireless is a global supplier of advanced wireless systems for the rapidly expanding mobile Internet infrastructure market. The company offers a wide range of indoor and outdoor "Smart Wi-Fi" products to mobile carriers, broadband service providers, and corporate enterprises, and has approximately 24,400 end-customers worldwide.

StarHub

StarHub is Singapore's fully-integrated info-communications company, operating multiple networks and offering a full range of information, communications and entertainment services for both consumer and corporate markets.

Taiwan Institute for Information Industry

Institute for Information Industry was incorporated in 1979 as a non-governmental organization to support the development/applications of the information industry as well as the information society in Taiwan. Since its inception it has been a source of vision, innovation and technological excellence.

UhuruOne

UhuruOne is one of Africa's leading telecom companies. With the initial focus on providing affordable Internet access to Tanzania, UhuruOne has grown to create and operate the largest seamless Pay As You Go W-Fi Mesh network in Sub-Saharan Africa.

WaveTek

WaveTek is a leader in creating "Technology Solutions Beyond Space & Time" with a primary focus on bringing Internet access to traditionally non-served and underserved areas of the world, leveraging several dynamic spectrum technologies.

White Space Technologies Africa

White Space Technologies Africa is a wireless telecommunications company based working throughout the African continent. They build specialized wireless networks, as well as distribute quality wireless hardware to end users, and ISP's in the African market.

Note to editors

For more information, news and perspective from Dynamic Spectrum Alliance please visit the Dynamic Spectrum Alliance website at dynamicspectrumalliance.org. For additional assistance, journalist and analysts may contact Theo Moore (tmoore@apcworldwide.com)