

IEEE Dynamic Spectrum Access
Networks Standards Committee
(DySPAN-SC):
Update for IEEE TCCN Meeting at
IEEE Globecom 2011

December 6, 2011

Outline

1. Introduction to DySPAN-SC
2. Recent and Expected Progress
3. Upcoming Meetings

Introduction to DySPAN-SC

- ❑ Responsible for IEEE 1900 working groups under Communications Society Standards Board mandate, considering the area of “Dynamic Spectrum Access Networks” and related technologies
- ❑ Committee leadership comprises
 - ❑ Chair: Hiroshi Harada, NICT
 - ❑ Vice-Chair: Max Riegel, Nokia-Siemens Networks
 - ❑ Secretary: Yohannes Alemseged, NICT
 - ❑ Treasurer: Oliver Holland, King’s College London
 - ❑ IEEE 1900.1 Chair: Bernd Bochow, Fraunhofer Fokus
 - ❑ IEEE 1900.2 Chair: Stephen Berger, TEM Consulting
 - ❑ IEEE 1900.4 Chair: Masayuki Ariyoshi, NEC
 - ❑ IEEE 1900.5 Chair: Lynn Grande, General Dynamics C4 Systems
 - ❑ IEEE 1900.6 Acting Chair: Chen Sun, NICT
 - ❑ IEEE 1900.7 Chair: Stanislav Filin, NICT
- ❑ Currently has 36 members

Introduction to DySPAN-SC

- ❑ Currently active Working Groups
 - ❑ IEEE 1900.1: “Terminology Relating to Emerging Wireless Networks, System Functionality, and Spectrum Management”
 - ❑ IEEE 1900.4: “Architectural Building Blocks Enabling Network-Device Distributed Decision Making for Optimized Radio Resource Usage in Heterogeneous Wireless Access Networks”
 - ❑ IEEE 1900.5: “Policy Language and Policy Architectures for Managing Cognitive Radio for Dynamic Spectrum Access Applications”
 - ❑ IEEE 1900.6: “Spectrum Sensing Interfaces and Data Structures for Dynamic Spectrum Access and other Advanced Radio Communication Systems”
 - ❑ IEEE 1900.7: “Radio Interface for White Space Dynamic Spectrum Access Radio Systems Supporting Fixed and Mobile Operation”
- ❑ Also operating an Ad-hoc Group on “Dynamic Spectrum Access in Vehicular Environments” investigating the need and scope of a possible standards working group in this area

Recent and Expected Progress

- ❑ IEEE 1900.1
 - ❑ Continuing work on the amendment to the 1900.1-2008 standard, expanding the list of terms to incorporate new terms/definitions that have emerged since 2008
 - ❑ Expects to finalize the amendment in next DySPAN-SC meeting, 12-14 December
- ❑ IEEE 1900.4
 - ❑ The 1900.4a amendment to 1900.4-2009, on the architecture and interfaces for dynamic spectrum access networks in white space frequency bands, was published on September 16
 - ❑ Work is continuing on 1900.4.1 “Standard for Interfaces and Protocols Enabling Distributed Decision Making for Optimized Radio Resource Usage in Heterogeneous Wireless Networks”
- ❑ IEEE 1900.5
 - ❑ The recirculation sponsor ballot on the standard has completed and the standard has been sent to Revcom for consideration
 - ❑ Work on the 1900.5.1 standard on “Policy Language for Dynamic Spectrum Access Systems” is due to kick-off on December 8

Recent and Expected Progress

- ❑ IEEE 1900.6
 - ❑ Has had a change of leadership, with Chen Sun, NICT, now serving as Acting Chair
 - ❑ Regarding 1900.6a developments, 6 technical issues have been identified and corresponding Calls for Contributions have been sent
 - ❑ An Excel file that tracks the status of WG technical issues has been uploaded to the mentor
- ❑ IEEE 1900.7
 - ❑ 1900.7 has been initiated, with the kick-off meeting being held in September. P&Ps have been approved by the WG during the September 29-30 meeting of 1900.7
 - ❑ An election processor has been identified for Vice-Chair and Secretary positions, and a call for nominations has been distributed
 - ❑ A timeplan for developing the standard has been identified. Various interesting presentations and other issues highlighting the way forward have been addressed

Upcoming Meetings

- ❑ Participation is welcome!

Dates	Meeting Place	Host
12-14 December, 2011	Scottsdale, AZ, USA	GDC4S
26-29 March, 2012	Osaka, Japan	NICT
25-29 June, 2012	Grenoble, France	CEA-LETI
December, 2012	Washington DC, USA	WInnForum

- ❑ For further information, please visit: www.dyspan-sc.org, or contact:
 - ❑ Hiroshi Harada, DySPAN-SC Chair, harada@nict.go.jp
 - ❑ Max Riegel, DySPAN-SC Vice-Chair, maximilian.riegel@nsn.com
 - ❑ Yohannes Alemseged, DySPAN-SC Secretary, yohannes@nict.go.jp
 - ❑ Oliver Holland, DySPAN-SC to TCCN Liaison, oliver.holland@kcl.ac.uk

Thank you for your attention!