

IEEE DySPAN-SC and IEEE 1900
Standards Working Groups:
Update for IEEE TCCN Meeting at
IEEE ICC 2015

June 10, 2015

London, UK

Oliver Holland, King's College London

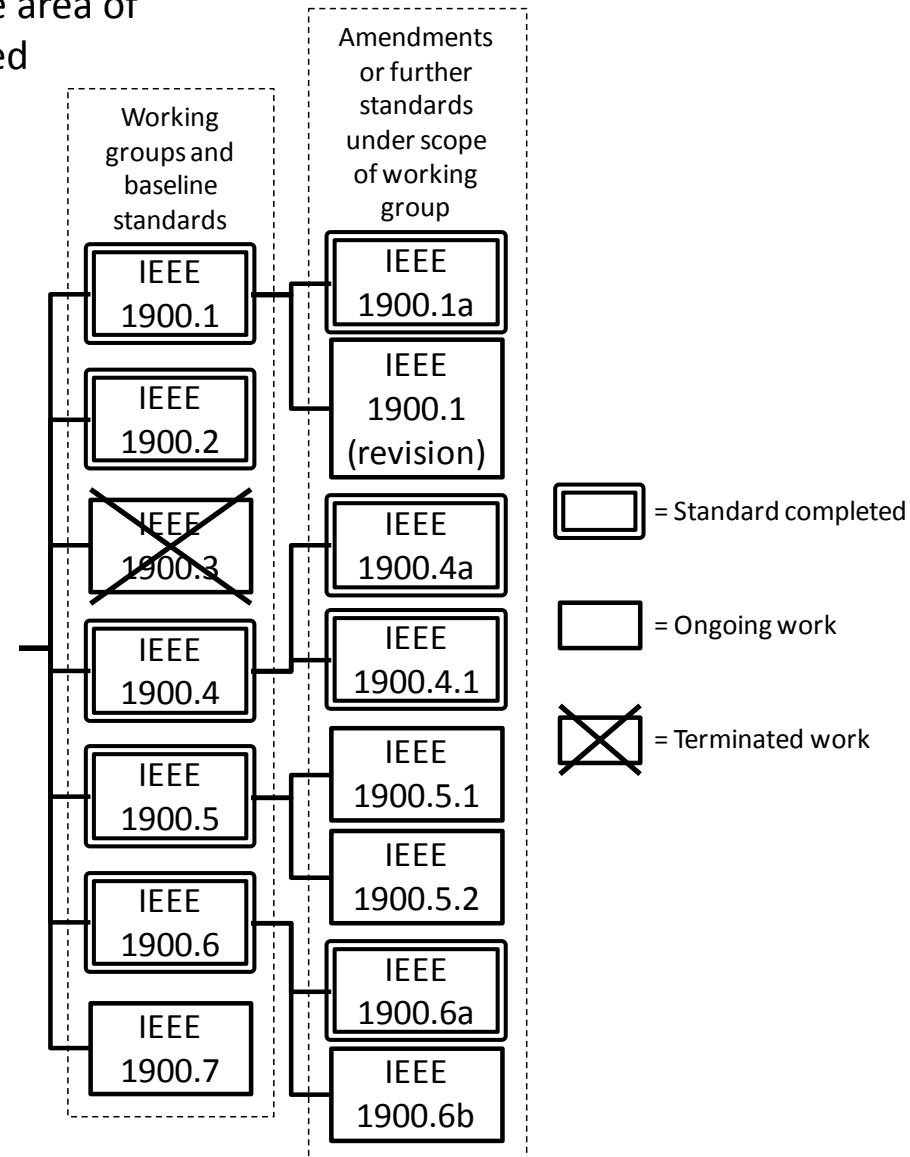
Outline

1. Introduction to DySPAN-SC
2. Progress Since Last Report
3. Upcoming Meetings and Links to Contribute

Introduction to DySPAN-SC

- ❑ Sponsors IEEE 1900 working groups, covering the area of “Dynamic Spectrum Access Networks” and related technologies
- ❑ Committee leadership comprises

- ❑ Chair: Hiroshi Harada, University of Kyoto and NICT
- ❑ Vice-Chair: Currently open
- ❑ Treasurer and Acting Secretary: Oliver Holland, King’s College London
- ❑ IEEE 1900.1 Chair: Oliver Holland, King’s College London
- ❑ IEEE 1900.2 Chair: Stephen Berger, TEM Consulting
- ❑ IEEE 1900.4 Chair: Masayuki Ariyoshi, NEC
- ❑ IEEE 1900.5 Chair: Mat Sherman, BAE Systems
- ❑ IEEE 1900.6 Chair: Oliver Holland, King’s College London
- ❑ IEEE 1900.7 Chair: Stanislav Filin, NICT



Introduction to DySPAN-SC

- ❑ Working Groups
 - ❑ IEEE 1900.1: “Terminology Relating to Emerging Wireless Networks, System Functionality, and Spectrum Management”
 - ❑ IEEE 1900.2: “Recommended Practice for the Analysis of In-Band and Adjacent Band Interference and Coexistence Between Radio Systems” (in hibernation)
 - ❑ IEEE 1900.3: “Recommended Practice for Conformance Evaluation of Software Defined Radio (SDR) Software Modules” (disbanded)
 - ❑ IEEE 1900.4: “Architectural Building Blocks Enabling Network-Device Distributed Decision Making for Optimized Radio Resource Usage in Heterogeneous Wireless Access Networks” (in hibernation)
 - ❑ 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”

Progress Since Last Report

- ❑ IEEE 1900.1
 - ❑ Has continued work started in March 2013 on a revision of the IEEE 1900.1-2008 standard, considering all aspects: Updates to terms/definitions, new terms/definitions or deletion of terms/definitions, updates to supporting materials (e.g., explanatory material on the relationship between concepts), updates to structuring, etc. PAR expiration end of 2017
 - ❑ Tentatively aiming for a first complete draft of the revised terms/definitions in mid-2015
- ❑ IEEE 1900.4
 - ❑ Currently in hibernation pending new work items or revision of its currently publications IEEE 1900.4, 1900.4a (including integration into the former), and 1900.4.1 standards
- ❑ IEEE 1900.5
 - ❑ Work continues on 1900.5.1 standard, “Policy Language for Dynamic Spectrum Access Systems”, started in December 2011. PAR expiration December 2015, however, approval has been given for this to be extended for 2 years (pending IEEE-SA approval); aimed to complete though in mid-2016
 - ❑ Work continues on 1900.5.2 standard, “Standard Method for Modeling Spectrum Consumption”, started in March 2013. PAR expiration December 2015

Progress Since Last Report

- ❑ IEEE 1900.6
 - ❑ Work continues on 1900.6b amendment standard on support for spectrum databases (e.g., geolocation databases, as in the TV white space case)
 - ❑ Detailed drafting of some initial use cases and scenarios, and aspects of the interfaces between the entities as well as the support for non-compliant entities, and especially the characteristics of any new entities that might be involved (e.g., the spectrum database)
 - ❑ Number of participants and work continuing to accelerate
- ❑ IEEE 1900.7
 - ❑ First complete version of standard prepared; has been approved by DySPAN-SC for Sponsor Ballot, and the invitation period for balloters to join the ballot group has completed at the end of yesterday US East Coast time
 - ❑ Ballot itself due to initiate almost exactly round-about now
 - ❑ Has also extended its PAR by one year until the end of December 2016, just in case the extension is necessary

Progress Since Last Report

- ❑ IEEE DySPAN-SC in general
 - ❑ Has developed strong interaction and collaboration with the Wireless Innovation Forum; 1900.5 (initiated the collaboration) and 1900.6 (strongly possible collaborative potential)
 - ❑ Linked to strong common interests between the work areas
 - ❑ Liaison has been created between elements of DySPAN-SC and the Wireless Innovation Forum for such (and other) purposes

Upcoming Meetings and Links to Contribute

- ❑ Participation is welcome to upcoming meetings!
- ❑ Two face-to-face meetings remaining this year

Dates	Format	Location	Host
27 - 30 July 2015	Joint IEEE DySPAN-SC and IEEE 1900 WGs	Berlin, Germany	Fraunhofer FOKUS
30 November to 3 December 2015	Joint IEEE DySPAN-SC and IEEE 1900 WGs	Kyoto, Japan	NICT

Numerous telephone conferences in between these meetings.

- ❑ For further information, please visit: www.dyspan-sc.org, or contact:
 - ❑ Hiroshi Harada, DySPAN-SC Chair/Secretary, hiroshi.harada@i.kyoto-u.ac.jp
 - ❑ Oliver Holland, DySPAN-SC Treasurer, Acting Secretary and TCCN Liaison, oliver.holland@kcl.ac.uk
 - ❑ ...Or the associated working group Chair(s): 1900.1 – Oliver Holland, oliver.holland@kcl.ac.uk; 1900.4 – Masayuki Ariyoshi, ariyoshi@bx.jp.nec.com; 1900.5 – Mat Sherman, matthew.sherman@baesystems.com; 1900.6 – Oliver Holland, oliver.holland@kcl.ac.uk; 1900.7 – Stanislav Filin, sfilin@ieee.org

Thank you!