IEEE DySPAN-SC and IEEE 1900 Standards Working Groups:
Update for IEEE TCCN Meeting at
IEEE Globecom 2014

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Austin, TX, USA

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

Diagram:
- Working groups and baseline standards
  - IEEE 1900.1
  - IEEE 1900.2
  - IEEE 1900.4
  - IEEE 1900.5
  - IEEE 1900.6
  - IEEE 1900.7

- Amendments or further standards under scope of working group
  - IEEE 1900.1a
  - IEEE 1900.4a
  - IEEE 1900.4.1
  - IEEE 1900.5.1
  - IEEE 1900.5.2
  - IEEE 1900.6a
  - IEEE 1900.6b

Legend:
- Standard completed
- Ongoing work
- Terminated work
Introduction to DySPAN-SC

- Working Groups
  - 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)
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 periodic revisions of its standards

- **IEEE 1900.5**
IEEE 1900.6

- The new 1900.6b amendment standard on support for spectrum databases (e.g., geolocation databases, as in the TV white space case) has been approved by the IEEE-SA, and work on this amendment standard has started.
- Has undertaken initial consideration of use cases and scenarios, and the entities and interfaces between those entities that will be involved.
- Currently soliciting new participants – the overlap between spectrum sensing information and spectrum databases is an extremely hot topic.

IEEE 1900.7

- Significant progress, with some important parts of the standard quite stable although open to further contributions/suggestions.
  - FBMC PHY
  - Variant on CSMA/CA MAC with enhanced scalability; frame structure and other elements.
- Looking for inputs on some other areas, e.g., “Cognitive plane”
- Currently looking towards the standard being completed for sponsor ballot in March 2015
IEEE DySPAN-SC in general

- Linked to requests originating from some of its working groups (e.g., IEEE 1900.6), has completed the consideration/development of harmonized (common) policies/procedures for all individual-based working groups
- Covers all working groups except IEEE 1900.4, which is entity-based
- Completed/approved common working group policies/procedures in last week’s Singapore meeting, and these have also been approved by all working groups, pending one which held a straw poll achieving unanimous support, however, needs to hold a further ballot to formally approve
- Reflects IEEE-SA baseline policies/procedures, with very minor variations
- Harmonizes the consideration of face-to-face and phone meetings, and participation of new-comers—consecutive attendance of two meetings now leads to voting membership of the associated 1900 working group

A link to these approved policies/procedures is here: http://grouper.ieee.org/groups/dyspan/files/individual-WG-PnPs.pdf
Participation is welcome to upcoming meetings!

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<tr>
<th>Dates</th>
<th>Format</th>
<th>Location</th>
<th>Host</th>
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<tbody>
<tr>
<td>24(^{th})-26(^{th}) (perhaps also 27(^{th})) March, 2015</td>
<td>Joint IEEE DySPAN-SC and IEEE 1900 WGs</td>
<td>San Diego, CA, USA</td>
<td>WInnForum</td>
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<td>Late July or Early August 2015 (TBD)</td>
<td>Joint IEEE DySPAN-SC and IEEE 1900 WGs</td>
<td>Either London or Berlin (TBD)</td>
<td>King’s College London or Fraun. FOKUS</td>
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<tr>
<td>Late November or Early December 2015 (TBD)</td>
<td>Joint IEEE DySPAN-SC and IEEE 1900 WGs</td>
<td>Either Kyoto or Toyko (TBD)</td>
<td>NICT</td>
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Numerous WG telephone conferences in between these meetings.

For further information, please visit: [www.dyspan-sc.org](http://www.dyspan-sc.org), or contact:

- Hiroshi Harada, DySPAN-SC Chair/Secretary, [hiroshi.harada@i.kyoto-u.ac.jp](mailto:hiroshi.harada@i.kyoto-u.ac.jp)
- Oliver Holland, DySPAN-SC Treasurer, Acting Secretary and TCCN Liaison, [oliver.holland@kcl.ac.uk](mailto:oliver.holland@kcl.ac.uk)
- ...Or the associated working group Chair(s): 1900.1 – Oliver Holland, [oliver.holland@kcl.ac.uk](mailto:oliver.holland@kcl.ac.uk); 1900.4 – Masayuki Ariyoshi, [ariyoshi@bx.jp.nec.com](mailto:ariyoshi@bx.jp.nec.com); 1900.5 – Mat Sherman, [matthew.sherman@baesystems.com](mailto:matthew.sherman@baesystems.com); 1900.6 – Oliver Holland, [oliver.holland@kcl.ac.uk](mailto:oliver.holland@kcl.ac.uk); 1900.7 – Stanislav Filin, [sfilin@ieee.org](mailto:sfilin@ieee.org)
Thank you!