



Alliance for Telecommunications Industry  
Solutions' (ATIS')  
Wireless Technologies and Systems Committee  
(WTSC)  
Evaluation Group

**Dr. Farrokh Khatibi**

**Presenter**

**[fkhatibi@qualcomm.com](mailto:fkhatibi@qualcomm.com)**

**Jim Ragsdale**

**ATIS WTSC RAN Chair**

**[jim.ragsdale@ericsson.com](mailto:jim.ragsdale@ericsson.com)**



# ATIS Overview

- ATIS is committed to providing leadership for, and the rapid development and promotion of, worldwide technical and operations standards for information, entertainment and communications technologies using a pragmatic, flexible and open approach.
- 250+ ATIS Member Companies Represent a Wide Cross Section of the Global Information, Entertainment, and Communications Industry.
  - With more than 20 committees and over 600 participants, ATIS actively formulates worldwide technical and operations standards for the global ICT Industry
  - ATIS has continually widened its organizational focus to fully embrace wireless technologies as well as other cutting edge technologies
- ATIS is the North American Organizational Partner for the 3rd Generation Partnership Project (3GPP), a member of and U.S. contributor to the ITU-R/ITU-T, and a member of the Inter-American Telecommunication Commission (CITEL).
- ATIS is accredited by the American National Standards Institute (ANSI).



# ATIS' Wireless Technologies and Systems Committee (WTSC)

## ATIS' WTSC:

- Develops standards for GSM/UMTS/LTE networks and terminals as well as radio access technologies.
- Members include major global wireless companies.
- Ensures international standards are in alignment with the North American (NA) marketplace, and ensures that NA requirements are met, by cooperating closely with and contributing to leading bodies such as the ITU-R, ITU-T, and ITU-D as well as 3GPP.
- Is instrumental in developing standards to enable meeting U.S. Federal Communications Commission (FCC) mandated deadlines for the new Commercial Mobile Alerts Systems (CMAS).



# ATIS' Wireless Technologies and Systems Committee (WTSC) – Voting Members\*

- Aircell LLC
- Alcatel-Lucent
- AT&T
- Aviat Networks
- Cisco Systems
- Clearwire
- Department of Commerce
- Department of Defense
- Embarq
- Ericsson, Inc.
- FBI ESTS
- Huawei Technologies
- Intel
- InterDigital Communications
- Kineto Wireless, Inc.
- MetroPCS
- National Communications System
- Nokia Siemens Networks
- Nokia Telecommunications Inc.
- Nortel
- One2Many
- Public Safety Canada
- Qualcomm Incorporated
- Qwest
- Research In Motion
- Rogers Wireless Inc.
- Samsung Telecommunications America
- Sprint
- T-Mobile USA Inc.
- Telcordia Technologies
- TeleCommunications Systems, Inc.
- Tellabs Operations, Inc.
- TruePosition Inc.
- Union Telephone Company
- Verizon Communications

*\* as of May 2010*



# ATIS' WTSC Radio Access Networks (RAN) Subcommittee

## WTSC Radio Access Networks (RAN) Subcommittee functions and capabilities include:

- Formulation of positions in support of WTSC objectives on radio access technologies
- Coordination of WTSC activities relevant to international standards activities that may include:
  - Preparation, review and presentation of ATIS contributions for submission to international standards bodies and ITU-R as a sector member.
  - Establishment of appropriate mechanisms to coordinate contributions and positions that support ATIS objectives with other relevant committees and organizations.
- Evaluation of Radio Transmission/Interface Technologies for IMT and other broadband wireless access technologies.
- Development, evaluation, coordination and liaison with other SDOs on current and future radio access technologies (e.g., other evaluation groups).



# Statement of Intent

## Candidate technologies or portions of the candidate technologies ATIS WTSC is evaluating:

- LTE Release 10 and beyond (LTE-Advanced) SRIT from 3GPP OPs
- RIT based on IEEE 802.16m

## Using all three (3) methods outlined in M.2135-1, as appropriate:

- Inspection
- Analysis
- Simulation



# Process

## In response to the ITU-R liaison (*Document 5D/TEMP/268-E*), ATIS Evaluation Group (EG) Members are:

**Performing a quality check, per Report ITU-R M.2133, of the templates and the self-evaluation for each candidate technology.**

- Identify gaps/deficiencies in submitted material and/or self-evaluation
- Identify areas requiring clarifications
- General questions

**Performing a quantitative assessment, per Reports ITU-R M.2133, M.2134 and M.2135-1, for each candidate technology.**

- Detailed analysis/assessment and evaluation of the compliance templates submitted by the proponents per Report ITU-R M.2133, Section 4.2.4
- Provide evaluators comments in the templates, along with EG supporting documentation for such comments
- Detailed analysis of the proponent's self-evaluation



## Process (2)

**Developing questions and feedback to WP 5D and/or the proponents or other EGs.**

- Evaluation Group believes that the Correspondence Group Fora were a great help to the evaluation process





## Actions taken by the Evaluation Group

- Members were assigned specific areas to address, with the intent to compile as many data points as possible.
- Evaluation Group is reconciling the data points into a single comprehensive report for submission to ITU-R WP 5D.
- Held meetings:
  - November 3-4, 2009
  - January 5-6, 2010
  - January 25-29, 2010
  - February 8-9, 2010 (*interim report submitted, February 10, 2010*)
  - March 30-April 1, 2010
  - May 4-5, 2010
- Scheduled meeting:
  - May 24-28, 2010 (*final report, June 2, 2010*)



# Results

- Preliminary Analysis and Inspection results submitted to WP5D in interim evaluation report (5D/671)
- Input on all requirement parameters has been received and is undergoing assessment
- Working document toward final evaluation report is in preparation for submission to June WP5D meeting
- No major issues have been identified thus far
- Minor issues have been submitted and addressed on Correspondence Group Forum
  - Correction concerning proponents calculation of Peak Spectral Efficiency has been incorporated in working document towards final report



# References

- ATIS: <http://www.atis.org>
- WTSC: <http://www.atis.org/0160>
- WTSC RAN: <http://www.atis.org/0160/ran.asp>
- ATIS WTSC Evaluation Group:  
<http://www.atis.org/0160/IMT-AEvalGroup.asp>
  
- Contact:  
Steve Barclay  
ATIS Director – Standards Development  
[sbarclay@atis.org](mailto:sbarclay@atis.org)



# Thank You