## 802.16 Comments on IMT-Advanced Review Process

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| Editorial note: Proposed additions are shown in blue. Proposed deletions are shown in red. |                           |            |                |                    |

# Edits indicated to *IEEE 802.18 IMT-Advanced Review Process (IEEE 802.18-08/0054r4)*

Date: 2008-09-11

### Background

- The IMT-Advanced process in ITU-R has advanced to the point where:
  - The technical requirements (IMT.TECH) are complete and approved by Working Party 5D (WP 5D).
  - The evaluation criteria and methodology document (IMT.EVAL) is substantially complete, and in the process of final revision, with approval expected at the October 2008 WP 5D meeting in Seoul.
  - The Circular Letter, 5/LCCE/2, has been released, along with one addendum, inviting submission of technology proposals and participation in the evaluation process.
  - Final approval of IMT-Advanced reports is expected at the November ITU-R SG 5 meeting.
- Interested IEEE 802 WG's now need to consider how to respond to IMT-Advanced.
  - Submit a Radio Interface Technology proposal (RIT) as a single WG.
  - Submit a proposal for a Set of Radio Interface Technologies (SRIT) jointly with one or more other WG's.
- The EC Chair has tasked 802.18 to review and recommend approval of technology proposals to the EC for submission to the ITU-R IMT-Advanced process.

#### 2008 2010 2009 2011 WP 5D **No.1 No.2 No.3 No.4 No.5 No.6 No.7 No.8** No.9 **No.10** meetings Step1 and 2 (0)(20 months) Step 3 $\Delta(1)$ (8 months) Step 4 (2)(16 months) Steps 5,6 and 7 (3)(20 months) Steps 8 (12 months) (4)

**IMT-Advanced Schedule** 

#### Steps in radio interface development process:

- Step 1: Issuance of the circular letter
- Step 2: Development of candidate RITs and SRITs
- Step 3: Submission/Reception of the RIT and SRIT proposals and acknowledgement of receipt
- Step 4: Evaluation of candidate RITs and SRITs by evaluation groups

#### **Critical milestones in radio interface development process:**

- (0): Issue an invitation to propose RITs March 2008
- (1): ITU proposed cut off for submission October 2009 of candidate RIT and SRIT proposals

- Step 5: Review and coordination of outside evaluation activities
- Step 6: Review to assess compliance with minimum requirements
- Step 7: Consideration of evaluation results, consensus building and decision
- Step 8: Development of radio interface Recommendation(s)
- (2): Cut off for evaluation report to ITU

June 2010

(3): WP 5D decides framework and key characteristics of IMT-Advanced RITs and SRITs

October 2010

(4): WP 5D completes development of radio interface specification Recommendations

IMT -Advanced A2 -01

## IEEE 802 Approval Process for IMT-Advanced <u>Final</u> Technology Proposals

- A single Working Group (WG), or a joint WG collaboration, creates and approves a draft RIT proposal, or a draft SRIT proposal, conforming to IMT-Advanced submission requirements.
- The proposal is then sent to 802.18, which reviews the proposal for completeness (see slide 5) per the most recent IMT-Advanced submission requirements available at the time of submission by the WG(s).
- After review, 802.18 will determine by vote, requiring 75% approval, whether the proposal is considered complete per IMT-Advanced submission requirements, and either submit the approved proposal [to the EC for final approval,] or return the proposal to the WG for update with incomplete items identified.
- After [EC review and] approval, the IEEE SA ITU-R liaison will submit the proposal to the ITU-R with appropriate cover letter.
- Proposals returned to IEEE by the ITU-R as "incomplete" will be sent back to the WG(s) by the IEEE SA ITU-R liaison for correction, and the corrected proposal will be re-submitted to ITU-R per the process outlined above.

## ITU-R Definition of Completeness for IMT-Advanced Technology Proposals

- A "complete proposal", as summarized from materials in the current version of IMT.REST, "Requirements, evaluation criteria and submission templates for the development of IMT-Advanced", is defined as follows:
  - 1. Completed templates and other requested information.
  - 2. Either a self-evaluation, or the endorsement of an initial evaluation submitted by another entity, per IMT-Advanced requirements for self-evaluation.
  - 3. Where necessary, a statement of compliance with the ITU policy on intellectual property rights (see Annex 1 of Resolution ITU-R 1-5), as specified in the Common Patent Policy for ITUT/ITU-R/ISO/IEC available at <a href="http://www.itu.int/ITU\_T/dbase/patent/patent-policy.html">http://www.itu.int/ITU\_T/dbase/patent/patent-policy.html</a>.
- The definition of "complete" is subject to change by ITU-R.
- The most current versions of the requirements, evaluation criteria, and submission templates for the development of IMT\_Advanced are on the IMT-Advanced web page (<u>http://www.itu.int/ITU-R/go/rsg5-imt-advanced/</u>).

#### 802.18 Commitments to WGs for IMT-Advanced

- 802.18 agrees to do the following in order to expedite the approval process for WGs:
  - 1. Review partial submissions from WGs prior to the final cutoff date for submissions to 802.18, without a vote to formally approve or disapprove, and return comments to the WG.
  - 2. Approve or disapprove by vote any full submission as soon as possible after receipt by 802.18, but not later than 21[28] calendar days after 802.18 receives the submission.
  - 3. Agrees that failure by 802.18 to vote to approve or disapprove a full submission within 21[28] days means that the submission is approved by default.
  - 4. Return a submission disapproved by vote with comments to the chair of the WG within 24 hours of the vote to disapprove.
  - 5. Work with participating WG's and the EC to overcome any obstacles to achieve a complete submission per ITU-R IMT-Advanced submission requirements.
  - 6. Report to the EC any indications that delays are occurring in the submission process which threaten successful submission of proposals to ITU-R WP 5D.

#### Critical Milestones – 802 Business As Usual

- Last date for WG's to submit technology proposals (final WG approved drafts) to 802.18 for review: June 18, 2009.
- Last date for 802.18 approval of proposals for submission to the EC: July 16, 2009.
- Last date for EC approval of technology proposals: July 17, 2009 (July Plenary EC meeting).
- Last date WP5D will accept technology proposals: October 7, 2009 (exact date may change).

#### **Recommendations to the EC to Expedite the IMT-Advanced Process**

- 802.18 recognizes that the timeline shown on slide 7 impairs the ability of WGs to submit fully formed and reviewed technical proposals to the ITU-R IMT-Advanced process in a timely fashion, but we are constrained by 802 policies and practices in developing this timeline.
- 802.18 recommends that the EC take one of the following actions to expedite the approval process:
  - 1. Convene a special EC meeting on IMT-Advanced on or about October 2, 2009, to vote on any last minute submissions to ITU-R WP 5D.
  - Alternatively, delegate the IMT-Advanced approval process to 802.18, making approval by 802.18 sufficient for WG submission to ITU-R WP 5D.
- 802.18 further recommends that the EC require that all WGs participating in the IMT-Advanced process attend the September 2009 Wireless Interim Session to expedite the IMT-Advanced approval process.
- Taking these actions will considerably reduce the lead time for WG proposals, and assure the best possible outcome for IEEE 802 (see slide 9 for the milestones, and slide 10 for a graphical view of the improvement).

#### Critical Milestones [– Accelerated Process]

- 802.18 does not wish to impair the ability of WGs to submit fully formed and reviewed technical proposals to the ITU-R IMT-Advanced process in a timely fashion. Therefore, 802.18 recommends that the EC delegate the IMT-Advanced approval process to 802.18, making approval by 802.18 sufficient for submission to ITU-R WP 5D. If necessary, the EC could take additional action to approve proposals that could not be completed in the 802.18 process specified here.
- Last date for WG's to submit technology proposals (final WG approved drafts) to 802.18 for review: September 4[2], 2009 (tentative).
- September 21-25: Review proposals during 802.18 session. Proposals could be revised, with the consent of the submitting WG or its delegation.
- Last date for 802.18 approval of proposals for submission to [the EC]ITU-R: September 25[30], 2009 (tentative).
- [Last date for EC approval (or, alternatively, 802.18 approval, per EC delegation) of technology proposals: October 2, 2009 (tentative).]
- Last date WP5D will accept technology proposals: October 7, 2009 (exact date may change).

## **Statement of intent from WG**

In order to prepare for the work load of IMT-Advanced proposal reviews, 802.18 requires advance information regarding the intentions and work plans of participating WGs.

In particular, 802.18 requires that participating WGs provide notification of their intent by January 20. The notification must include:

- statement of intention to submit IMT-Advanced proposal for 802.18 review
- intended proposal scope (for example: RIT and/or SRIT; test environments to be supported; standards or draft standards to be used as a foundation)
- work plan for completion of required proposal elements

#### **Contributions to February and June WP 5D Meetings**

WGs may want to provide information to WP 5D at its meetings of February and June. 802.18 will support such contributions, provided that they are clearly identified as not complete proposals per Step 3 of the IMT-Advanced process.

- Jan 20: WG draft contributions to February WP 5D meeting
  - Information on intent, background, work plan, etc.
- Jan 22: 802.18 approval of contributions to February WP 5D meeting
- Feb 3: deadline for contributions to Feb WP 5D meeting
- May 12: WG draft contributions to June WP 5D meeting
  - Work plan update, additional information on features, etc.
- May 14: 802.18 approval of contributions to June WP 5D meeting
- June 3: deadline for contributions to June WP 5D meeting

#### Critical Milestones [update; delete top half] Note 1



Note 1: All submission deadlines are "Anywhere on Earth." This means that the deadline has not passed if, anywhere on earth, the deadline date has not yet passed. Approval deadlines are based on the formal schedules approved by 802.18 and/or the EC.

#### **Final Comments**

- 802.18 continues to be committed to finding ways to work, along with the EC and the proposing WGs, to expedite the IMT-Advanced technical proposal process in the most effective manner possible for IEEE 802.
- After the final documents describing submission details have been approved by the ITU-R SG 5, 802.18 will review the schedule to determine if it is reasonable to shorten the lead time for 802.18 review of full submissions by WGs.
- As part our commitment, members from 802.18 will be participating in the WP5D meeting in October 2008 in Seoul.