# **Radiocommunication Study Groups**



Source: Revision 2 to Document 5D/TEMP/262

12 November 2009 English only

# **Working Party 5D**

# LIAISON STATEMENT TO IEEE ON CANDIDATE TECHNOLOGY SUBMISSION<sup>1</sup> (DOCUMENT 5D/542)

Working Party 5D has received at its October 2009 meeting several candidate technology submissions for IMT-Advanced. The current view of WP 5D and the expected future work of WP 5D on IMT-Advanced during the period from October 2009 to October 2010 may be found in ITU-R Circular Letter 5/LCCE/2 Addendum 3. A copy is provided in Attachment 1.

Working Party 5D in its October 2009 meeting, has initiated the assessment and evaluation of the candidate technology submissions under the IMT-Advanced process from two perspectives.

Firstly, WP 5D has reviewed the candidate technology submission for acceptability to determine if the submission was a "complete submission". This level of review is not a technical review.

Secondly, WP 5D has initiated the evaluation of the candidate technology submission including:

- Assessment of the self-evaluation for inconsistencies, errors, omissions, etc.
- Review of technical details in all templates, etc.
- Developing additional information required from the proponents for efficient evaluation work by Independent Evaluation Groups and by WP 5D (if needed).

Working Party 5D plans to continue this work with the help of the reports from the Independent Evaluation Groups expected over the next two meetings.

Working Party 5D in this liaison, provides its acknowledgement and current view (as provided in Attachment 2) of the candidate technology submission based on the October 2009 meeting.

Additionally, WP 5D has initiated liaison correspondence (as provided in Attachment 3) with the Independent Evaluation Groups with regard to the detailed work plan, timelines, expected information to be received, and a suggested evaluation report structure towards providing information to WP 5D. WP 5D encourages interactions between the proponents and the Independent Evaluation Groups and believes this same information may be useful to the proponents. As a tool to augment communication, WP 5D has established a Correspondence Group. The terms of reference and information on participation for the Correspondence Group may be found at <a href="http://groups.itu.int/rsg5-forum">http://groups.itu.int/rsg5-forum</a>.

Working Party 5D thanks the proponent for providing the candidate technology submission and looks forward to fruitful cooperation during the on-going steps of the IMT-Advanced process.

<sup>1</sup> Document 5D/542 - Submission of a candidate IMT-Advanced RIT based on IEEE 802.16

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Please note that the candidate technology submission package, along with the WP 5D "Acknowledgement", is posted on the ITU-R WP 5D website that has been established for the IMT-Advanced Submission and Evaluation Process. (<a href="http://www.itu.int/itu-r/go/rsg5-imt-advanced">http://www.itu.int/itu-r/go/rsg5-imt-advanced</a>).

#### **ATTACHMENT 1**

Addendum 3 to Circular Letter 5/LCCE/2

9 November 2009

To Administrations of Member States of the ITU, Radiocommunication Sector Members and ITU Associates participating in the work of Radiocommunication Study Group 5

**Subject:** 

Receipt of submission of proposals for candidate radio interface technologies for the terrestrial components of the radio interface(s) for IMT-Advanced by the 7 October 2009 deadline and the next steps in the IMT-Advanced process

#### 1 Introduction

The first invitation for the submission of proposals for candidate radio interface technologies (RITs) or a set of RITs (SRITs) for the terrestrial components of IMT-Advanced was issued with Circular Letter 5/LCCE/2 on 7 March 2008. The Circular Letter initiated an ongoing process to evaluate the candidate RITs or SRITs for IMT-Advanced, and invited the formation of Independent Evaluation Groups and the subsequent submission of evaluation reports on these candidate RITs or SRITs.

On 13 August 2008, Addendum 1 to Circular Letter 5/LCCE/2 announced the availability of further information associated with the IMT-Advanced submission and evaluation process.

On 18 December 2008, Addendum 2 to Circular Letter 5/LCCE/2 announced the availability of three ITU-R Reports that provide details of the IMT-Advanced requirements, evaluation criteria and submission templates.

This Addendum provides information on the candidate technology submissions received by ITU-R by the deadline of October 2009 under Step 3 of the IMT-Advanced process and highlights the planned next steps for the work following the IMT-Advanced process detailed in Document IMT-ADV/2(Rev.1).

# 2 Acknowledgement of candidate submissions received for IMT-Advanced

Working Party 5D, following the guidelines of the IMT-Advanced process, has reviewed the candidate technology submissions provided to the October 2009 meeting of Working Party 5D and acknowledges the receipt of a "complete" candidate technology submission per Section 4 of Report ITU-R M.2133 as follows:

- IMT-ADV/4 - Acknowledgement of candidate submission from IEEE under Step 3 of the IMT-Advanced process (IEEE Technology).

- IMT-ADV/5 Acknowledgement of candidate submission from Japan under Step 3 of the IMT-Advanced process (IEEE Technology).
- IMT-ADV/6 Acknowledgement of candidate submission from Japan under Step 3 of the IMT-Advanced process (3GPP Technology).
- IMT-ADV/7 Acknowledgement of candidate submission from TTA under Step 3 of the IMT-Advanced process (IEEE Technology).
- IMT-ADV/8 Acknowledgement of candidate submission from 3GPP proponent (3GPP Organization Partners of ARIB, ATIS, CCSA, ETSI, TTA AND TTC) under Step 3 of the IMT-Advanced process (3GPP Technology).
- IMT-ADV/9 Acknowledgement of candidate submission from China (People's Republic of) under Step 3 of the IMT-Advanced process (3GPP Technology).

For convenience, these submissions are also posted on the ITU-R IMT-Advanced webpage (http://www.itu.int/itu-r/go/rsg5-imt-advanced).

Working Party 5D, under the IMT-Advanced process, has not made any determination of the suitability or acceptability of any of these candidate technologies for IMT-Advanced at this stage.

# **3** Future IMT-Advanced process steps and workplan for evaluation

Under the IMT-Advanced process, the ITU-R will now proceed with the detailed evaluation of the candidate RITs or SRITs by evaluation groups (Step 4), the review and coordination of outside evaluation activities (Step 5), the review to assess compliance with minimum requirements (Step 6) and take final consultation on the evaluation results and the consensus building and render a decision (Step 7) during the period from October 2009 through to October 2010. It is anticipated that a further Addendum to Circular Letter 5/LCCE/2 will be developed in October 2010 announcing the terrestrial RIT(s) or SRIT(s) accepted for inclusion in the standardization phase of IMT-Advanced to be completed in Step 8 of the process (development of radio interface Recommendation(s)).

A more detailed view of the process may be found at <a href="http://www.itu.int/oth/R0A06000012/en">http://www.itu.int/oth/R0A06000012/en</a>.

# 4 Updates to the ITU-R IMT-Advanced web page

Any future changes to the submission and evaluation process will be announced in Addenda to this Circular Letter. Other information, such as Independent Evaluation Group contact information, details of received submissions of candidate radio interface technologies, information important to the work of the Independent Evaluation Groups, etc., will be updated dynamically on the IMT-Advanced web page (<a href="http://www.itu.int/ITU-R/go/rsg5-imt-advanced/">http://www.itu.int/ITU-R/go/rsg5-imt-advanced/</a>). Consequently, participants in the IMT-Advanced development and evaluation activities are kindly requested to periodically check the website.

Valery Timofeev Director, Radiocommunication Bureau

#### **Distribution:**

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 5
- ITU-R Associates participating in the work of Radiocommunication Study Group 5
- Chairman and Vice-Chairmen of Radiocommunication Study Group 5
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

# **Attachment 2**

Acknowledgement of candidate submission from IEEE under Step 3 of the IMT-Advanced process (IEEE technology)

**Document IMT-ADV/4** 

# **Attachment 3**

Liaison to the Independent Evaluation Groups.

Liaison to EGs (268Rev1ev2).doc

# **Radiocommunication Study Groups**



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# **Working Party 5D**

# LIAISON STATEMENT TO INDEPENDENT EVALUATION GROUPS ON EXPECTATIONS AND TIMEFRAMES ON THE EVALUATION OF CANDIDATE IMT-ADVANCED TECHNOLOGIES

#### **Background**

Working Party 5D has received at its October 2009 meeting six candidate technology submissions for IMT-Advanced. The current view of WP 5D and the expected future work of WP 5D on IMT-Advanced during the period from October 2009 to October 2010 may be found in ITU-R Circular Letter 5/LCCE/2 Addendum 3 (copy enclosed in Attachment 1).

As part of the on-going process for IMT-Advanced, the period from October 2009 (the 6<sup>th</sup> meeting of Working Party 5D) to June 2010 (the 8<sup>th</sup> meeting of Working Party 5D) has been designated for evaluation of the IMT-Advanced candidate technology submissions by Independent Evaluation Groups.

This liaison provides information on the detailed workplan, timelines, expected information to be received, and a suggested evaluation report structure.

#### **Candidate Technology Submission for Evaluation**

Please note that the candidate technology submission packages that the Independent Evaluation Groups should utilize in the course of their work, along with the WP 5D "Acknowledgement", is posted on the ITU-R WP 5D website that has been established to provide public access to the relevant information for the IMT-Advanced Submission and Evaluation Process. (http://www.itu.int/it-r/go/rsg5-imt-advanced).

- IMT-ADV/4 Acknowledgement of candidate submission from IEEE under Step 3 of The IMT-Advanced process (IEEE Technology)
- IMT-ADV/5 Acknowledgement of candidate submission from Japan under step 3 of the IMT-Advanced process (IEEE Technology)
- IMT-ADV/6 Acknowledgement of candidate submission from Japan under step 3 of the IMT-Advanced process (3GPP Technology)
- IMT-ADV/7 Acknowledgement of candidate submission from TTA under step 3 of the IMT-Advanced process (IEEE Technology)
- IMT-ADV/8 Acknowledgement of candidate submission from 3GPP proponent (3GPP Organization Partners of ARIB, ATIS, CCSA, ETSI, TTA AND TTC) under step 3 of the IMT-Advanced process (3GPP Technology)

• IMT-ADV/9 - Acknowledgement of candidate submission from China (People's Republic of) under step 3 of the IMT-Advanced process (3GPP Technology)

Note: before commencing evaluation activities, the attention of the Independent Evaluation Groups is drawn to section 8 of documents IMT-ADV/5, IMT-ADV/6, IMT-ADV/7, and IMT-ADV/9.

### WP 5D request to the independent evaluation groups

In order to advance the evaluation work and to provide an opportunity for timely dialog and feedback as well as to meet the define schedule for evaluation, WP 5D kindly requests that Independent Evaluation Groups provide to WP 5D their evaluation results in two phases:

Phase 1 – an interim/preliminary evaluation report provided to the WP 5D February 2010 meeting.

Phase 2 – a final evaluation report provided to the WP 5D June 2010 meeting.

It is recognized that the evaluation report to WP 5D for the February meeting may be either an interim/preliminary report or a final report at the decision of the Independent Evaluation Group. In any event, WP 5D would encourage that Independent Evaluation Groups should, if at all possible, develop a first view/assessment for the February 2010 timeframe.

#### WP 5D suggested evaluation report framework and baseline

To assist WP 5D in its understanding of the assessment of an Independent Evaluation Group and to facilitate communication among the Independent Evaluation Groups WP 5D suggests that an Independent Evaluation Group address, using the framework and baseline below, the following administrative and technical aspects in their work:

- Part I) Administrative aspects of the Independent Evaluation Group
  - 1) Name of the Independent Evaluation Group
  - 2) Introduction/background of the Independent Evaluation Group
  - 3) Method of Work: Independent Evaluation Groups are requested to identify their process and method of working in developing and preparing the interim and final evaluation reports to indicate to WP 5D aspects such as
    - how the evaluation group conducted its work (e.g. through meetings, correspondence activity, etc.)
    - interaction with proponents and other evaluation groups
    - how it performed the assessment (including addressing whether the assessment was done by analysis, inspection, through the use of simulations or by combination of other means)
  - 4) Administrative Contact details
  - 5) Technical Contact Details
  - 6) Other pertinent administrative information

Part II) Technical aspects of the work of the Independent Evaluation Group:

Evaluation Reports are suggested to contain as a minimum the following:

- A) What candidate technologies or portions of the candidate technologies they are or might anticipate evaluating
- B) Confirmation of utilization of the ITU-R evaluation guidelines in Report ITU-R M.2135 (amended by IMT-ADV/3).

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Documentation of any additional evaluation methodologies that are or might be developed by the Independent Evaluation Group to complement the evaluation guidelines.

- C) Quality check per Report ITU-R M.2133 of the templates and the self-evaluation for each candidate technology as indicated in A)
  - 1. Identify gaps/deficiencies in submitted material and/or self-evaluation
  - 2. Identify areas requiring clarifications
  - 3. General questions
- D) Quantitative assessment per Reports ITU-R M.2133, M.2134 and M.2135 for each candidate technology as indicated in A).
  - 1. Detailed analysis/assessment and evaluation by the Independent Evaluation Group of the compliance templates submitted by the proponents per the Report ITU-R M.2133 Section 4.2.4
  - 2. Provide evaluators comments in the templates along with Independent Evaluation Group supporting documentation for such comments
  - 3. Detailed analysis of the proponent's self-evaluation by the Independent Evaluation Group
- E) Questions and Feedback to WP 5D and/or the proponents or other Independent Evaluation Groups
- F) Proposed next steps in Independent Evaluation Group from February 2010 to June 2010 towards the final Independent Evaluation Group report to be sent to WP 5D for the June 2010 meeting.

WP 5D encourages interactions between the proponents and the Independent Evaluation Groups. As a tool to augment communication, WP 5D has established a Correspondence Group. The terms of reference and information on participation for the Correspondence Group may be found at <a href="http://groups.itu.int/rsg5-forum">http://groups.itu.int/rsg5-forum</a>.

You will need to login by clicking "TIES" in the login pane Then enter your TIES username and password.

In the left hand menu bar you will then see a link to "IMT-Advanced Evaluation CG".

# **Important Timeframes and Deadlines**

Independent Evaluation Groups are requested to provide the material for the *February* meeting of WP 5D to Mr. Colin Langtry, Counsellor for Study Group 5 by the ITU-R deadline for input to the February meeting which has been established as 16:00 hours UTC on 10 February 2010.

Independent Evaluation Groups are requested to provide the material for the *June* meeting of WP 5D to Mr. Colin Langtry, Counsellor for Study Group 5 by the ITU-R deadline for input to the June meeting which has been established as 16:00 hours UTC on 2 June 2010.

Working Party 5D thanks the Independent Evaluation Groups for their efforts towards the success of IMT-Advanced and looks forward to receiving your views in the coming months.

Contacts:

Mr. Yoshio Honda Chairman, SWG Coordination yoshio.honda@ericsson.com Mr. Colin Langtry Counsellor, Study Group 5 colin.langtry@itu.int

# **ATTACHMENT 1**

Addendum 3 to Circular Letter 5/LCCE/2

9 November 2009

# To Administrations of Member States of the ITU, Radiocommunication Sector Members and ITU Associates participating in the work of Radiocommunication Study Group 5

**Subject:** Receipt of submission of proposals for candidate radio interface technologies for the

terrestrial components of the radio interface(s) for IMT-Advanced by the 7 October 2009

deadline and the next steps in the IMT-Advanced process

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Valery Timofeev Director, Radiocommunication Bureau

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