



## Radiocommunication Bureau (BR)

Addendum 1 to  
Circular Letter  
**4/LCCE/102**

29 January 2014

**To Administrations of Member States of the ITU, Radiocommunication Sector Members,  
ITU-R Associates participating in the work of Radiocommunication Study Group 4 and  
ITU-R Academia**

**Subject:           Announcement of the IMT-Advanced satellite radio interface technologies  
resulting from the successful completion of Steps 4 through 7 of the  
IMT-Advanced satellite process, the availability of Report ITU-R M.2279<sup>1</sup>, and  
announcement of the approval of Recommendation ITU-R M.2047 for the  
IMT-Advanced satellite radio interface technologies**

### **1           Introduction**

The first invitation for the submission of proposals for candidate radio interface technologies (RITs) or sets of RITs (SRITs) for the satellite component of IMT-Advanced was issued with Circular Letter 4/LCCE/102 on 24 November 2010. The Circular Letter initiated an ongoing process to evaluate the candidate RITs or SRITs for the satellite component of IMT-Advanced. It also invited the formation of Independent Evaluation Groups and the subsequent submission of evaluation reports on these candidate RITs or SRITs.

This Addendum announces the technologies for IMT-Advanced satellite radio interface that have successfully completed Steps 4 through 7 of the IMT-Advanced satellite process and are now designated as satellite radio interfaces of IMT-Advanced. It also announces the approval of Recommendation ITU-R M.2047 for the IMT-Advanced satellite radio interface technologies.

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<sup>1</sup> Report ITU-R M.2279 *“Outcome of the evaluation, consensus building and decision of the IMT-Advanced satellite process (Steps 4 to 7), including characteristics of IMT-Advanced satellite radio interfaces”*

## **2 Completion of Steps 4 to 7 of the IMT-Advanced satellite process documented in Report ITU-R M.2279**

Report ITU-R M.2279 is the record of the work performed after receipt of the proposals for IMT-Advanced candidate satellite radio interface technologies, including the evaluation activity and the consensus building. This document contains the outcome and conclusions of Steps 4 to 7 of the IMT-Advanced satellite process, as outlined in Document IMT-ADV-SAT/2(Rev.2). The Report provides the technical characteristics of the candidate satellite radio interface technologies and states the decisions reached by the ITU-R on each of the candidate proposals. Note that the actual specifications of the agreed IMT-Advanced satellite radio interfaces are contained in Recommendation ITU-R M.2047.

Under the IMT-Advanced satellite process, ITU-R has concluded the detailed evaluation of the candidate RITs and SRITs by evaluation groups (Step 4), finished the review and coordination of outside evaluation activities (Step 5), concluded a review to assess compliance with minimum requirements (Step 6), completed consultation on the evaluation results and consensus building and rendered a decision (Step 7) on those technologies that moved forward into Step 8.

## **3 Announcement of IMT-Advanced satellite technologies and results of consensus building**

Each of the two candidate technology submissions (and their respective SRIT or RITs) has individually satisfied Steps 4 through 7 of the IMT-Advanced satellite process successfully and thus each of these IMT-Advanced satellite candidate technology submissions had the opportunity to proceed to Step 8. The two candidate technology submissions are contained in the following two acknowledgement documents:

- Document IMT-ADV-SAT/4(Rev.1) – Acknowledgement of candidate submission from Republic of Korea under Step 3 of the satellite IMT-Advanced process (SAT-OFDM).
- Document IMT-ADV-SAT/3(Rev.1) – Acknowledgement of candidate submission from China (People’s Republic of) under Step 3 of the satellite IMT-Advanced process (BMSat).

Additionally, consensus building has been performed during Step 7 with the objective of achieving global harmonization and having the potential for wide industry support for the satellite radio interfaces that are developed for IMT-Advanced.

The final outcome of Steps 4 to 7 of the IMT-Advanced satellite process was the approval of the technologies **“SAT-OFDM”** and **“BMSat”** as IMT-Advanced satellite technologies.

In addition, both **“SAT-OFDM”** and **“BMSat”** were accepted for inclusion in the standardization phase of the IMT-Advanced satellite process and proceeded to Step 8 and to subsequent development of IMT-Advanced satellite radio interface.

It was noted that:

- the basis for specifying the **“SAT-OFDM”** technology in Step 8 is Doc. IMT-ADV-SAT/4(Rev.1); and
- the basis for specifying the **“BMSat”** technology in Step 8 is Doc. IMT-ADV-SAT/3(Rev.1).

Note that the documentation discussed herein is available on the ITU-R IMT-Advanced-Satellite web page (<http://www.itu.int/ITU-R/go/rsg4-imt-adv-sat/>).

Further details are included in Report ITU-R M.2279.

#### **4 Announcement of the approval of the specifications for the satellite radio interfaces of IMT-Advanced**

Under Step 8 of the IMT-Advanced satellite process, the detailed technical specifications of the satellite radio interface technologies for IMT-Advanced are provided in Recommendation ITU-R M.2047.

With the approval of Recommendation ITU-R M.2047 “*Detailed specifications of the satellite radio interfaces of International Mobile Telecommunications-Advanced (IMT-Advanced)*”, all steps of the process as previously communicated in this Circular Letter for the IMT-Advanced satellite radio interface have been satisfied.

#### **5 Updates to the ITU-R IMT-Advanced-Satellite web page**

The IMT-Advanced-Satellite web page (<http://www.itu.int/ITU-R/go/rsg4-imt-adv-sat/>) will be updated dynamically to reflect any future updates. Consequently, participants in the IMT-Advanced satellite development activities are kindly requested to periodically check that web page.

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Director

**Distribution:**

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 4
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- ITU-R Academia
- Chairman and Vice-Chairmen of Radiocommunication Study Group 4
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau