|  |  |
| --- | --- |
| **Radiocommunication Study Groups** |  |
|  |  |
|  |  |
| Source: Document 5A/TEMP/144 (Rev.1)  Subject: WRC-19 agenda item 1.11 | **Annex 6 to Document 5A/469-E** |
| **12 June 2017** |
| **English only** |
| Annex 6 to Working Party 5A Chairman’s Report | |
| WORKING DOCUMENT TOWARDS draft CPM Text for  wrc-19 agenda item 1.11 | |
| Agenda item 1.11 | |

(**WP 5A** / **WP 4A**, **WP 4B**, **WP 4C**, **WP 5B**, **WP 5C**, **WP 5D**, **WP 7C**, **WP 7B**, **WP 7D**,   
(WP 3K), (WP 6A))

*1.11 to take necessary actions, as appropriate, to facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations, in accordance with Resolution* **236 *(WRC-15)****;*

Resolution **236 (WRC‑15)** – *Railway radiocommunication systems between train and trackside*

# 1/1.11/1 Executive summary

*[Text of the executive summary, not more than half a page of text to describe briefly the purpose of the agenda item, summarize the results of the studies carried out and, most importantly, provide a brief description of the method(s) identified that may satisfy the agenda item]*

Resolution **236 (WRC-15)** invites the WRC-19, based on the results of ITU-R studies, to take necessary actions, as appropriate, to facilitate global or regional harmonized frequency bands, to the extent possible, for the implementation of railway radiocommunication systems between train and trackside, within existing mobile-service allocations.

*[Editorial note: texts on summarization of the results of the studies and brief description of the method(s) identified that may satisfy the agenda item need to be added]*

# 1/1.11/2 Background

*[Text of the background, not more than half a page of text to provide general information in a concise manner, in order to describe the rationale of the agenda items (or issue(s))]*

The evolving railway transportation technologies facilitate rapid transportations, which contributes to global economic and social development, especially for developing countries. As one of the core infrastructures, railway radiocommunication systems between train and trackside (RSTT) provides improved railway traffic control, passenger safety and improved security for train operations.   
At present, the frequency bands of RSTT vary in different countries, which lead to high operation costs for cross-border railway transportation.

Therefore, international standards and harmonized spectrum would facilitate worldwide deployment of RSTT and provide for economies of scale in railway transportation for the public.

# 1/1.11/3 Summary and analysis of the results of ITU-R studies

*[This section should contain a summary of the technical and operational studies performed within ITU-R, including a list of relevant ITU-R Recommendations. Depending on the agenda item, this section could be divided in two parts, one part dealing with the summary of technical and operational studies* *and the other part dealing with the analysis of the results of studies. The results of the ITU-R studies should also be analysed with respect to the possible methods of satisfying the agenda item, and presented in a concise manner.]*

As the responsible group, ITU-R Working Party 5A prepared a questionnaire ([5/LCCE/60](http://www.itu.int/md/R00-SG05-CIR-0060/en)) to Administrations of Member States, gathering information on the usage of RSTT. Responses from 28 Administrations and one ITU regional organization were received and compiled into Report ITU-R M.[RSTT.USAGE]. Working Party 5A also developed a Recommendation ITU-R [RSTT] and a Report ITU-R M. [RSTT.DESCRIPTION]. These study results provide useful elements to facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations.

## 1/1.11/3/3.1 Summary and analysis on spectrum needs of RSTT

*[TBD]*

## 1/1.11/3/3.2 Summary and analysis on technical and operational characteristics and implementation of RSTT

*[TBD]*

## 1/1.11/3/3.3 Summary and analysis on spectrum usage of RSTT

# 1/1.11/4 Methods to satisfy the agenda item

*[This section should contain the brief description of the Method or Methods to satisfy the agenda item as per section 4 of Annex 2 to Resolution ITU-R 2-7]*

## [1/1.11/4.1 Method A: NOC]

[Recommendation ITU-R M. [RSTT.XXX] provides global and regional harmonized frequency bands to facilitates harmonization for RSTT and consequently suppress the Resolution 236 (WRC-15.]

## [1/1.11/4.2 Method B: Propose a new Resolution XYZ (WRC-19) and consequently suppress the Resolution 236 (WRC-15)

To facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations. ]

# 1/1.11/5 Regulatory and procedural considerations

*[Example(s) of regulatory text relating to the Method(s) to satisfy the agenda item]*

## 1/1.11.5.1 For Method A:

[NOC]

## 1/1.11/5.2 For Method B:

[ADD

RESOLUTION xxx (WRC-19)

[Railway radiocommunication systems between train and trackside]

The World Radiocommunication Conference ([place], 2019)

considering…

recognizing…

noting…

resolves

1 to encourage administrations to use harmonized frequency bands for RSTT to the maximum extend possible, taking into account the national and regional requirements and also having regard to any needed consultation and cooperation with other concerned countries;

2 to encourage administrations to consider the following global harmonized frequency bands for their railway radiocommunication systems between train and trackside: [xxx-yyy, XXX-YYY];

3 to encourage administrations to consider the following regional harmonized frequency bands for their railway radiocommunication systems between train and trackside:

*a)* in Region 1: [XXXXX];

*b)* in Region 2: [XXXXX];

*c)* in Region 3: [XXXXX],

*Editor’s note: Frequency bands 137-174 MHz, 335-510 MHz, 43.5-45.5 GHz, 92-94 GHz, 94.1‑100 GHz, and 102-109.5 GHz for Region 3 for the harmonization for RSTT is proposed by Japan (*[*5A/386*](http://www.itu.int/md/R15-WP5A-C-0386/en)*), however it was not getting consensus during the WP 5A meeting of MAY, 2017.*

invites ITU-R

1 to continue to study and make recommendations concerning technical and operational characteristics and implementation, as necessary, to meet the needs of RSTT, taking into account the capabilities, evolution and any resulting transition requirements of the existing systems for national and international operations; of railway radiocommunication systems between train and trackside;

2 to review and update the relevant ITU-R Recommendations and ITU-R Report, as appropriate,

invites Member States, Sector Members, Associates and Academia

to participate actively in the study by submitting contributions to ITU-R,

instructs the Secretary-General

to bring this Resolution to the attention of International Union of Railways (UIC) and other relevant international and regional organizations.

SUP

RESOLUTION 236 (WRC-15)

]