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|  | **Radiocommunication Study Groups** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| Annex 8 to Working Party 5A Chairman’s Report |
| preliminary DRAFT CPM TEXTFOR WRC-19 Agenda item 1.12 |
| Agenda item 1.12 |

*1.12 to consider possible global or regional harmonized frequency bands, to the maximum extent possible, for the implementation of evolving Intelligent Transport Systems (ITS) under existing mobile-service allocations, in accordance with Resolution* ***237 (WRC-15)****;*

Resolution **237 (WRC‑15)** – *Intelligent Transport Systems applications*

# 1/1.12/1 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]*

# 1/1.12/2 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))]*

Since 1995, research and development activities have been conducted in info-communication systems as core technologies of ITS. Legacy ITS systems, including ETC (Electronic Toll Collection) have been globally deployed. Advanced ITS systems, including vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications have been deployed in some regions to achieve safe drive support systems. Communicating with moving vehicles is one of the typical use cases for radiocommunication, and a variety of ITS applications greatly depend on functionality of radiocommunication. Radiocommunication technology is essential to the next generation of ITS, especially for safe driving support system and automated driving system, etc.

As it is noted, legacy ITS applications have been deployed worldwide. ITS may also become important in resolving road traffic problems such as congestion and accidents. However, ITS industries are combinations of electronics, communications, civil engineering, automotive and other related industries.

Recognizing that harmonized spectrum and international standards would facilitate deployment of ITS radiocommunication, agenda item 1.12 was approved by WRC-15 to study the possibility for harmonization of ITS spectrum within the existing mobile service allocations on a global or regional basis. The mobile service bands being used by ITS may also be utilized by other applications and services and some of the frequency bands are also being considered under other agenda items.

# 1/1.12/3 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.]*

[International standardization activities for ITS info-communication systems have been conducted by ITU-R and ISO at the global level, by ETSI, CEN, ARIB and others at the regional level, and by IEEE, SAE and other organizations in the private sector. In ITU-R, several recommendations and reports have been published, as follows:

– Recommendation ITU-[R M.1890](http://www.itu.int/rec/R-REC-M.1890/en), “Intelligent Transport Systems – Guidelines and Objectives”, 2011.

– Recommendation ITU-R [M.1453-2](http://www.itu.int/rec/R-REC-M.1453/en), “Intelligent Transport Systems – Dedicated Short Range Communications at 5.8 GHz”, 2005.

– Recommendation ITU-R [M.1452-2](http://www.itu.int/rec/R-REC-M.1452/en), “Millimetre wave radiocommunication systems for ITS applications”, 2012.

– Report ITU-R [M.2228](http://www.itu.int/pub/R-REP-M.2228), “Advanced Intelligent Transport Systems (ITS) radiocommunications”, 2012.

– Recommendation ITU-R [M.2084](http://www.itu.int/rec/R-REC-M.2084/en), “Radio interface standards of vehicle-to-vehicle and vehicle-to-infrastructure communications for intelligent transport systems applications”, 2015.

– Report ITU-R M.[ITS USAGE] “Intelligent transport systems usage Report in ITU Member States”, to be published in 2016.]

# 1/1.12/4 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]*

# 1/1.12/5 Regulatory and procedural considerations

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