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| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| COMMITTEE 6 | **Revision 1 to Document 102(Add.24)-E** |
|  | **11 November 2015** |
|  | **Original: English** |
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| Korea (Republic of) | |
| Proposals for the work of the conference | |
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| Agenda item 10 | |

10to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention,

Introduction

The Republic of Korea submitted contribution (Add.24 to Doc. 102) on this agenda item to facilitate discussion at the Conference. During the discussions, there were some comments to move onto constructive way forward on selection of frequency ranges.

– WRC-15 should take into account suitable frequency ranges to be studied for the next study period rather than specific frequency bands.

– Global harmonization can be achieved with implementation of some frequency ranges on a single device taking into account global roaming of region by region or country by country and economies of scale should be counted for low cost of device.

– For the time being frequency ranges below around 40 GHz may encourage future system development in the nearer term, taking into account expected usage and radio propagation characteristics.

– There is no compatibility studies between IMT-2020 and other incumbent services and the feasibility of coexistence should not be prejudged at this stage. However it is expected the coexistence with other incumbent services be much easier than the cases of current IMT using below 6 GHz.

Rationality of suitable frequency ranges

Taking into account the state of the art technology, a bandwidth of around 15% of the centre frequency could be supported by one RF component with reasonable complexity. For instance, 4.5 GHz of bandwidth could be covered by one RF component when the centre frequency is 30 GHz. It is expected that frequency range from 24.25 GHz to 29.5 GHz proposed from regional groups could be implemented by one single device to facilitate global roaming in around the year 2020. In the same manner, other frequency bands such as 38 GHz bands and around 40 GHz bands respectively could also be grouped as broader frequency ranges, taking into account this technical aspect. The technical advancement will not only provide the economies of scale for low cost device, but also increase the flexibility of spectrum management. Each administration could use a portion of those frequency ranges, similar to 3GPP band plans in LTE, ensuring the continuous use of other incumbent services according to their different situation of spectrum availability as appropriate.



Proposal

KOR/102A24/1

It is proposed that the following suitable frequency ranges should be included for study under this agenda item to provide the flexibility of administrations, taking into account implementation aspects for global harmonization on a single device and economy of scale for low cost device:

– 24.25-29.5 GHz;

– 31.8-33.4 GHz, and

– 37-40.5 GHz.

**Reasons:** For efficient work at this Conference.

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