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WIRELESS ACCESS STANDARDS AND SPECTRUM IN ITU-R

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The ITU-R work on Wireless Access Standards is conducted in Working Party 5A (WP 5A), which is responsible for studies related to the land mobile service, including wireless access in the fixed service, but excluding International Mobile Telecommunications (IMT) that is the responsibility of Working Party 5D (WP 5D), comprising IMT-2000 systems, IMT-Advanced systems, and the future development of IMT. Radio interface standards for broadband wireless access systems, for both mobile and nomadic applications, are covered in Recommendation ITU-R M.1801, which includes by reference the RLAN standards (Rec. ITU-R M.1450) and the IMT standards (Recs. M.1457 for IMT-2000 and M.2012 for IMT-Advanced). For further information refer to the guide¹ for the use of ITU-R texts related to the land mobile service, including wireless access in the fixed service that is available on the WP 5A webpage.

Besides the ongoing work on IMT standardization and spectrum harmonization, a major project has been initiated in WP 5D toward the definition of requirements and standards for the next generation mobile networks, “IMT for 2020 and beyond”. WP 5D is studying the definition of a work plan, timeline, process, requirements, and deliverables for the future development of IMT, necessary to provide by the 2020 timeframe the expected ITU-R outcome for the evolution of IMT in support of the next generation of mobile broadband communications systems. WP 5D is using the moniker “IMT-2020” as a placeholder terminology, and the specific nomenclature to be adopted for the future development of IMT is expected to be determined at the Radiocommunication Assembly 2015 (RA-15), which will be held in Geneva, Switzerland, 26–30 October 2015.

In addition, efforts are ongoing in ITU-R to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for IMT and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, under agenda item 1.1 of the World Radiocommunication Conference 2015 (WRC-15), which will be held in Gene-

va, from 2–27 November 2015. Furthermore, due to the unprecedented growth of mobile broadband in recent years, in terms of both number of subscribers and bandwidth-rich applications, discussions are underway about a possible new agenda item for a future WRC, such as WRC-19, to consider identification of certain bands for IMT in higher frequency ranges, say between 6 GHz and 100 GHz, including possible additional allocations to the mobile service on a primary basis if required, that would be capable of supporting much wider contiguous bandwidths, such as at least 500 MHz. This is being supported by research on IMT above 6 GHz that is being carried out by various projects and organizations on a global scale as well as by WP 5D. In particular, several presentations on this were made at the “workshop on research views of IMT beyond 2020”² hosted by ITU during the 18th meeting of WP 5D in February 2014.

¹ <http://www.itu.int/oth/R0A06000001/en>

² http://www.itu.int/dms_pub/itu-r/oth/0a/06/R0A060000630001MSWE.docx