QUESTION ITU-R 255/5

Performance and availability objectives and requirements for
fixed wireless systems, including packet-based systems

(2015)

The ITU Radiocommunication Assembly,

considering

*a)* that nowadays as the demand for bandwidth need is increasing significantly, the fixed wireless systems (FWS) technology has also evolved from supporting low capacity to high capacity which can provide much higher speed data transmission;

*b)* that regarding the capacity evolution, the FWS technology has evolved over the years both in terms of the technology and applications;

*c)* that this evolution in FWS technology is also leading towards consistent evolution in network performance, availability, architectures, capacity and bandwidth requirements;

*d)* that packet-based applications constitute major part of existing transport and access networks, and are expected to be strongly increased in near future;

*e)* that there is a need to understand the performance, availability objectives and requirements for the physical data layer of those evolving FWS, including packet-based systems;

*f)* that there is a need to provide guidance which would assist administrations, manufacturers and telecom operators in setting up and maintenance of networks,

noting

that Recommendations ITU-R F.1668 and ITU-R F.1703 specify the objectives of error performance and availability for real fixed wireless links used in 27 500 km hypothetical reference path and connections, based on Recommendations ITU-T G.826 and ITU-T G.827, respectively,

decides that the following Question should be studied

What are the key items related to the performance and availability objectives and requirements of physical data layer of FWS, including packed-based systems, taking into account:

− existing ITU-T media-independent specifications on architecture and interfaces;

− existing ITU-T specific Recommendations on error performance and availability objectives;

− existing ITU-R specific Recommendations on link planning and propagation;

− existing publications from other organizations that would need to liaise with in doing this work,

further decides

1 that eventual problems identified in analyses should be liaised with ITU-T and/or other Fora for guidance and alignment;

2 that the results of the above studies should be included in new and/or revised ITU‑R Reports/Recommendations as appropriate;

3 that initial results of the above studies should be completed by 2019.

Category: S2