RECOMMENDATION 503 (REV.WRC-19)

High-frequency broadcasting

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

considering

a) the congestion in the HF broadcasting bands;

b) the extent of co-channel and adjacent-channel interference;

c) that AM reception quality is relatively poor compared with FM broadcast or CD quality;

d) that new digital techniques have enabled significant improvements in reception quality to be obtained in other broadcasting bands;

e) that the introduction of digital modulation systems in the broadcasting bands below 30 MHz has been shown to be feasible using low bit-rate coding;

f) that Resolution **517 (Rev.WRC-19)** invites ITU-R to continue its studies on digital techniques in HF broadcasting, with a view to assisting the development of this technology for future use;

g) that studies on this subject are currently being carried out by ITU-R, with a view to issuing a relevant Recommendation,

recognizing

a) that the implementation of an ITU-recommended worldwide system for digital sound in the HF bands would be extremely beneficial, particularly for developing countries, since it allows for:

– mass-scale production resulting in receivers as economical as possible;

– more economical analogue-to-digital conversion of existing transmitting infrastructures;

b) that the above system would result in digital receivers having a number of advanced features such as assisted tuning, improved audio quality and robustness to co-channel and adjacent-channel interference, which would greatly contribute to a better spectrum utilization,

recommends administrations

1 to draw the attention of manufacturers to this matter, in order to ensure that future digital receivers take full advantage of the advanced technology while maintaining low cost;

2 to encourage manufacturers to monitor closely the development of the studies carried out by ITU-R, with a view to starting mass production of new low-cost digital receivers as soon as possible after the approval of relevant ITU-R Recommendation(s).