

RECOMMENDATION ITU-R M.1221

**TECHNICAL AND OPERATIONAL REQUIREMENTS FOR CELLULAR
MULTIMODE MOBILE RADIO STATIONS**

(Question ITU-R 206/8)

(1997)

Summary

This Recommendation contains technical and operational requirements for multimode mobile radio stations in satellite personal communication networks and cellular radio systems intended for international roaming.

The ITU Radiocommunication Assembly,

considering

- a) that satellite personal communication networks (S-PCNs) are essentially global networks, and consequently S-PCN mobile earth stations (MESs) will roam worldwide;
- b) that potential manufacturers of S-PCN MESs have indicated plans for multimode mobile radio stations, e.g. handsets comprising S-PCN MESs and additionally fellow mobile radio stations (FMRSs) of terrestrial cellular networks;
- c) that the probability of mobile radio stations to enter territories, which do not belong to the corresponding service area, will increase considerably by means of S-PCN and cellular multimode mobile radio stations carried by international travellers;
- d) that there could be considerable risk of interference being caused to other services by foreign FMRSs in visited areas;
- e) that mobile radio stations of cellular networks, when switched on, can be categorized such as:
 - “receive first stations” which wait with their first transmission until they have received a valid signal from their associated networks;
 - “transmit first stations” which do not wait with their first transmission until they have received a valid signal from their associated networks;

and that “receive first stations” seem, in a first approach, not to cause interference outside their service areas as indicated under § d);

- f) that the principal issue is not only relevant to S-PCN but will also become relevant with the introduction of International Mobile Telecommunications-2000 (IMT-2000) and other global or regional systems,

recommends

- 1** that each cellular multimode mobile radio station intended for international roaming should be of the “receive first” type such as defined under § e).
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