## Op. ITU-R 14-7

## **OPINION ITU-R 14-7**

## PREFERRED RADIO-FREQUENCY CHANNEL ARRANGEMENTS FOR RADIO-RELAY LINKS FOR INTERNATIONAL CONNECTIONS

(1959-1963-1970-1974-1978-1982-1986-1990-1993)

The ITU Radiocommunication Assembly,

considering

a) that line-of-sight and near line-of-sight radio-relay links have already been established by many countries for international connections and that such networks are expanding;

b) that some countries may be considering the use of trans-horizon links for international connections;

c) that the ITU-R has recommended preferred radio-frequency channel arrangements for analogue and digital radio-relay links (see Recommendation ITU-R F.746);

d) that, for radio-frequency interconnection of links in international networks, agreement is necessary on specific radio frequencies as well as on the arrangement of radio channels within a band;

e) that specific radio frequencies can readily be defined in terms of the centre frequency of the radio-frequency interconnection arrangement;

f) that, for technical reasons, only certain preferred values of the centre frequency are acceptable in a given frequency band;

g) that there are various aspects of radio-wave propagation and equipment design that lead to the choice of particular frequency bands for certain capacities and types of radio-relay systems;

h) that radio-relay links used for international connections must meet high standards of performance similar to those recommended by the ITU-T for line transmission systems;

j) that it is essential to avoid interference to radio-relay links used for international connections, either from other radio-relay links or from other radio services (including unwanted emissions), operating in the same or other countries,

is of the opinion

that the attention of world and regional radiocommunication conferences should be drawn to:

**1.** the technical advantages of international agreement on preferred frequency bands, within which international line-of-sight and trans-horizon radio-relay links may be established, using the radio-frequency channel arrangements recommended by the ITU-R;

2. the technical advantages of preferred values for the centre frequency of channels as defined by the basic pattern, or derived by means of subdivision, of the radio frequency channel arrangements for line-of-sight and transhorizon systems being established by international agreement;

**3.** the risk of interference between line-of-sight and trans-horizon links if these operate in the same frequency band and in the same geographical zone;

4. the need to avoid interference to radio-relay links used for international connections, from other radio services or unwanted emissions caused by them.