# RESOLUTION 705 (REV.WRC-15)

## Mutual protection of radio services operating in the frequency band 70-130 kHz

The World Radiocommunication Conference (Geneva, 2015),

### considering

*a)* that various radio services, including radionavigation systems used by maritime and aeronautical services, operate in frequency bands between 70 and 130 kHz;

*b)* that, radionavigation being a safety service, all practical steps consistent with the Radio Regulations should be taken to prevent harmful interference to any radionavigation system;

*c)* that the ITU-R has noted that users of phased pulse radionavigation systems in the frequency band 90-110 kHz receive no protection outside the frequency band, yet may receive benefit from their signals outside the occupied bandwidth,

noting

that ITU-R studies show:

- that for continuous wave radionavigation systems in the frequency bands 70-90 kHz and 110-130 kHz, the protection ratio should be 15 dB within the receiver passband of  $\pm$ 7 Hz at 3 dB;
- that phased pulse radionavigation systems require a 15 dB protection ratio within the frequency band 90-110 kHz;
- that these pulse radionavigation systems would be aided by protection ratios of 5 dB and 0 dB for frequency separations between wanted and interfering signal of 10-15 kHz and 15-20 kHz, respectively,

### further noting

that the ITU-R has recommended the exchange of information between authorities operating radionavigation systems in the frequency band 90-110 kHz and those operating other systems in the frequency band 70-130 kHz employing emissions of very high stability,

### recognizing

*a)* that radio services other than radionavigation operating in the frequency bands 70-90 kHz and 110-130 kHz fulfil essential functions that may be affected;

*b)* the provisions of Nos. **4.5**, **4.10**, **5.60** and **5.62**,

### resolves that administrations

1 in assigning frequencies to services in the frequency bands 70-90 kHz, 90-110 kHz and 110-130 kHz, consider the potential mutual impairment to other stations operating in accordance with the Table of Frequency Allocations and apply protective measures; 2 use the relevant ITU-R Recommendations and encourage the exchange of information between authorities operating radionavigation systems in the frequency band 90-110 kHz and those operating other systems in the frequency band 70-130 kHz employing emissions of very high stability, to assist in preventing potential interference problems;

3 encourage consultation, both nationally and internationally, between operators of radionavigation systems using the frequency band 90-110 kHz and of other systems using the frequency band 70-130 kHz,

#### requests the ITU-R

to continue studies in this matter, particularly the development of technical criteria and standards to permit compatible operations within the allocated frequency bands.