

Source: Document 6/306(Rev.1)

Document 6/BL/11-E
9 February 2011
English only

Radiocommunication Study Group 6

DRAFT NEW RECOMMENDATION ITU-R BT.[PROTECT] AND RECOMMENDATION ITU-R BS.[PROTECT]*

Protection criteria for terrestrial broadcasting systems

Scope

This Recommendation provides guidelines to ensure that radiocommunication services and other sources of radio-frequency emissions do not degrade the performance of terrestrial broadcasting systems beyond acceptable levels.

Taking these guidelines into account, compatibility studies may need to be conducted when necessary.

Radiation below 30 MHz from “Power line high data rate telecommunication systems” is covered in Recommendation ITU-R [SM.1879](#).

The ITU Radiocommunication Assembly,

considering

- a) that Article 5 of the Radio Regulations (RR) allocates certain frequency bands to the terrestrial broadcasting service on a primary basis;
- b) that the terrestrial broadcasting service is initially planned on a noise-limited basis, taking into account intrinsic receiver noise and external radio noise;
- c) that broadcasting services may also be planned on an interference-limited basis;
- d) that Recommendation ITU-R P.372 describes levels of external radio noise;
- e) that Recommendation ITU-R SM.1757 and Report ITU-R SM.2057 provide guidance on the protection requirements for the various radiocommunication services in respect of the aggregate emissions from devices using ultra-wideband technology;
- f) that Recommendation ITU-R SM.1879 provides guidance on the protection criteria of radiocommunication services in respect of the aggregate radiation from power line telecommunication systems in the bands below 30 MHz;

* Following the approval of this Recommendation by Study Group 6, Recommendations ITU-R BS/BT.1786 should be suppressed.

g) that protection criteria for some intra-service broadcasting applications have been specified in some ITU-R Recommendations (for example Recommendation ITU-R BT.1368) and regional agreements,

recognizing

a) the obligations incumbent on administrations through Articles 42 and 45 of the ITU Constitution (Nos. CV 193, CV 197, CV 198 and CV 199) to ensure the continued availability of the RF spectrum and guard against harmful interference,

noting

a) that in the specific instance of emissions from power line high data rate telecommunication systems (PLT systems) in the bands below 30 MHz the provisions of Recommendation ITU-R SM.1879 apply,

recommends

1 that the values in *recommends* 2 and 3 be used as guidelines, above which compatibility studies on the effect of radiations and emissions from other applications and services into the broadcasting service should be undertaken;

2 that the total interference at the receiver from all radiations and emissions without a corresponding frequency allocation in the Radio Regulations should not exceed 1 per cent of the total receiving system noise power¹;

3 that the total interference at the receiver arising from all sources of radio-frequency emissions from radiocommunication services with a corresponding co-primary frequency allocation should not exceed 10 per cent of the total receiving system noise power.

¹ Except radiation from PLT devices below 30 MHz.