

RECOMMENDATION ITU-R BT.565*,**

**Protection ratios for 625-line television against
radionavigation transmitters operating in
the shared bands between 582 and 606 MHz**

(1978)

The ITU Radiocommunication Assembly,

considering

- a) the Final Acts of the European VHF/UHF Broadcasting Conference, Stockholm, 1961***, and the Special Agreement relating to the use of the band 582-606 MHz by the radionavigation service, Brussels, 1962;
- b) the assumption, which remains to be fully confirmed, that the results of tests carried out with monochrome television signals are also applicable to colour television;
- c) that protection ratios should be such that they are satisfied for 99% of the time;
- d) that values of protection ratios refer to the conditions at the input to the television receiver;
- e) that the level of the television signal is expressed in terms of the power at the peak of the modulation envelope;
- f) that the level of the radionavigation signal is expressed as the power at peak-pulse level,

recommends

that the values of protection ratio given below should be used in determining the protection available to monochrome or colour-television systems operating in the band 582 to 606 MHz:

1 Protection ratios required when the radionavigation signal falls within the passband of the television receiver

When the radionavigation signal falls within the passband of the television receiver, the required signal-to-interference ratio should be:

- 10 dB for systems with negative modulation,
- 15 dB for systems with positive modulation.

The ratio is sensibly constant over the greater part of the passband of the television receiver, but decreases in accordance with the selectivity of the receiver as shown in Fig. 1.

* This Recommendation should be brought to the attention of Radiocommunication Study Group 8.

** Radiocommunication Study Group 6 made editorial amendments to this Recommendation in 2002 in accordance with Resolution ITU-R 44.

*** However, at the European VHF/UHF Broadcasting Conference, Stockholm, 1961, some delegates made reservations as to the prospect of fulfilling the technical criteria in actual planning.

The protection ratios given in Fig. 1 do not relate to interference to the sound channel from signals of the radionavigation services. Further studies should be carried out on this subject.

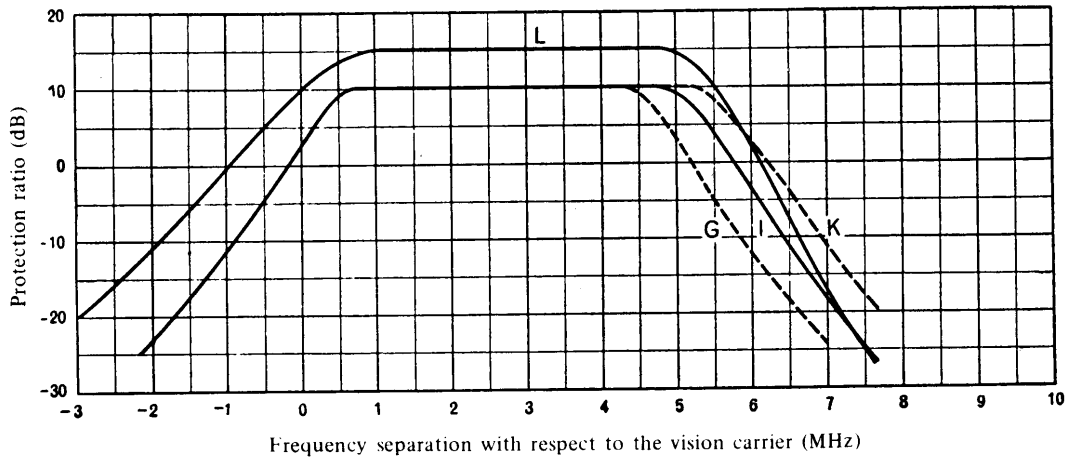


FIGURE 1 – Protection ratio required by system L, G, I and K picture signals against a radionavigation signal in the band 582 to 606 MHz

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2 Protection ratios required when the radionavigation signal falls outside the passband of the television receiver

Reference should be made to Recommendation ITU-R BT.655 for image channel interference.

No information exists at present on adjacent channel interference.

NOTE – Other interference effects (intermodulation) are likely to occur if radionavigation stations, which in general use high peak powers and highly directional antennas, are situated near receiving locations, especially where the television signal is weak.