

RECOMMENDATION ITU-R F.270-2*

**Interconnection at video signal frequencies of
radio-relay systems for television**

(1959-1970-1978)

The ITU Radiocommunication Assembly,

considering

- a) that radio-relay systems for television may form part of an international circuit;
- b) that interconnections of such systems amongst themselves, or with other radio-relay or line systems, may at times have to be made at video signal frequencies,

recommends

that radio-relay systems for television, forming part of an international circuit, should conform in their baseband characteristics to the requirements for video interconnection points given in ITU-T Recommendation J.61; in particular, the following characteristics are preferred:

- 1 the nominal impedance Z_0 at the video interconnection point should be 75 Ω unbalanced, and the return loss should not be less than 30 dB;
- 2 the nominal amplitude of the video signal at the input and output (excluding the chrominance sub-carriers) should be 1 V peak-to-peak (see Notes 1 and 2);
- 3 the nominal upper limit of the video-frequency band for different television systems should conform to the design objectives and tolerances for the various television standards as given in Recommendation ITU-R BT.470 and Part D of ITU-T Recommendation J.61.

NOTE 1 – In the design of equipment, account should be taken of the losses in the interconnecting cables, when the video interconnection point is at some distance from the terminals of the modulating and demodulating equipment.

NOTE 2 – The nominal relative levels of the chrominance sub-carriers are given in Recommendation ITU-R BT.470 for the various television standards.

* Radiocommunication Study Group 9 made editorial amendments to this Recommendation in 2001 in accordance with Resolution ITU-R 44.