

## RECOMMENDATION ITU-R F.276-2\*

**Frequency deviation and the sense of modulation  
for analogue radio-relay systems for television**

(1956-1959-1970-1974)

The ITU Radiocommunication Assembly,

*considering*

- a) that radio-relay systems for television using frequency modulation may form part of an international circuit;
- b) that international connections of such systems may at times have to be made at intermediate or radio frequencies;
- c) that the use of too large a frequency deviation results in an unnecessarily wide band of transmitted radio frequencies and should be avoided, because of the need for economy in the use of the radio frequency spectrum;
- d) that, for various reasons, the use of pre-emphasis may be desirable (see Recommendation ITU-R F.405),

*recommends*

**1** that the value of the frequency deviation without pre-emphasis in radio-relay systems for television should be 8 MHz peak-to-peak, referred to the nominal peak-to-peak amplitude of the video-frequency signal (see ITU-T Recommendation J.61);

**2** that when pre-emphasis, in accordance with Recommendation ITU-R F.405, is used, the relative deviation of 0 dB in Fig. 2 of that Recommendation should correspond to the value of the deviation without pre-emphasis given in § 1.

NOTE 1 – This value of deviation was established for the transmission of monochrome television signals and was subsequently adopted for colour television signals;

**3** that the sense of modulation at the point of international connection should be the subject of agreement between the administrations concerned.

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