To allow an easier estimation of data transmission errors which may result from impulsive noise, the instrument shall provide means to calculate and indicate the relative duration of the impulsive noise events. This quantity is the ratio of the time that the input signal exceeds a designated threshold to the total measurement time. Results shall be indicated in a range of 1×10^{-1} to 1×10^{-8}.

3.8.3 Seconds containing impulsive noise events (optional)

As a further option, the instrument shall provide means to calculate and indicate the percentage of seconds containing one or more occurrences of impulsive noise. Results shall be indicated in a range 0 to 100% with one digit after the decimal point.

5.Proposed revisions to Recommendation 0.71

IMPULSIVE NOISE MEASURING EQUIPMENT FOR TELEPHONE-TYPE CIRCUITS

Replace existing §§ 3.1, 3.1.1 and 3.1.2 by:

"3.1Input impedance (frequency range 300 Hz to 4 kHz)

- Balanced, earth free

- Input longitudinal interference loss ≥ 46 dB

3.1.1 Terminating impedance (other impedances optional) 600 ohms

- Return loss ≥ 30 dB

3.1.2High impedance approx. 20 kohms

- Bridging loss across 300 ohms ≤ 0.15 dB"

Add new sentence, table and note at the end of section 3.5.2:

"For measurements of impulsive noise with a 1 020 Hz test signal (see Recommendation 0.6) applied to the circuit under test, a notch filter at 1 020 Hz shall be provided as an option. This filter shall have the following characteristics:

Note - It should be noted that measurement results may differ if measurements are performed with and without test tone.

Replace section 3.8 with the following text:

"3.8Display of measurement results

3.8.1Impulsive noise counter

Each event to be counted shall be recorded as one unit on a counter. The counter shall be able to register at least 999 events.

3.8.2Relative duration of impulsive noise events (optional)