Interruption length

FIGURE 1/O.62

Probability curve for the detection
of an interruption

4) 300 ms - 1 min,

5) 1 min and over (optional).

Facility for adjusting to other time groupings may be provided at the option of the administrations. The count shall be presented on a visual display.

Note - The value of 0.6 ms applies to the 1 020 Hz test tone.

3.2 Relative duration of interruption events (optional)

To allow an easier estimation of data transmission errors which may result from interruptions, the instrument shall provide means to calculate and indicate the relative duration of interruption events. This quantity is the ratio of the time where the test tone is below a designated threshold to the total measurement time. Interruptions between 3 ms and 1 minute shall be taken into account. Results shall be indicated in a range 1×10^{-1} to 1×10^{-8}.

3.3Seconds containing an interruption (optional)

As a further option, the instrument shall provide means to calculate and indicate the percentage of seconds containing one or more interruptions of a duration $\geq$ 3 ms. Results shall be indicated in a range 0 to 100% with one digit after the decimal point.

3.4Power failure

In the event of a power failure any loss of measurement results should be clearly indicated on a display for later observation."

Add a new section 5 to read as follows:

"5.Simultaneous measurements

The measurement of interruptions may be provided in an instrument which also makes measurements of other transient impairments, e.g., amplitude and phase hits. A test signal frequency of 1 020 Hz +2 -7 Hz may be used to facilitate the integration of several measurements of transient phenomena in such a combined instrument. In all other respects, the measurement of interruptions shall be in accordance with the principles of this Recommendation."

The X-axis of Figure 1/0.62 shall be labelled as shown below:

4.Proposed amendments to Recommendation 0.62

SOPHISTICATED EQUIPMENT TO MEASURE INTERRUPTION
ON TELEPHONE-TYPE CIRCUITS

Amend section 2.3.1 to read as follows:

"2.3.1 The detector shall respond to a test signal of 2 000 Hz ± 100 Hz (see also § 5)."

* The loss shall continue to increase above 6 000 Hz at a rate of not less than 12 dB per octave until it reaches a value of 60 dB. The loss at higher frequencies shall be at least 60 dB.

Delete §§ 2.3.3 and 2.3.3.1.

Insert new §§ 2.4, 2.4.1 and 2.4.2 as given below:

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

- Balanced, earth free

- Input longitudinal interference loss ≥ 46 dB

2.4.1 Terminating impedance (other impedances optional) 600 ohms

- Return loss ≥ 30 dB

2.4.2 High impedance approx. 20 kohms

- Binding loss across 300 ohms ≤ 0.15 dB".

Renumber the existing §§ 2.4.2.1 and 2.4.2.2 to "§§ 2.4.3 and 2.4.4".

Replace section 3 with the following text:

"3.Display of measurement results

3.1 Interruption counters

The detected interruptions shall be divided into the following time categories for recording purposes:

1) 0.3 (0.6) ms - 3 ms (optional, see note),

2) 3 ms - 30 ms,

3) 30 ms - 300 ms,