



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**P.55**

**TELEPHONE TRANSMISSION QUALITY  
OBJECTIVE MEASURING APPARATUS**

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**APPARATUS FOR THE MEASUREMENT  
OF IMPULSIVE NOISE**

**ITU-T Recommendation P.55**

(Extract from the *Blue Book*)

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## NOTES

1 ITU-T Recommendation P.55 was published in Volume V of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

**APPARATUS FOR THE MEASUREMENT OF IMPULSIVE NOISE**

*(Mar del Plata, 1968)*

Experiments have shown that clicks or other impulsive noises which occur in telephone calls come from a number of sources, such as faulty construction of the switching equipment, defective earthing at exchanges and electromagnetic couplings in exchanges or on the line.

There is no practical way of assessing the disturbing effect of isolated pulses on telephone calls. A rapid succession of clicks is annoying chiefly at the start of a call. It is probable that these series of clicks affect data transmission more than they do the telephone call and that connections capable of transmitting data, according to the noise standards now under study, will also be satisfactory for speech transmission.

In view of these considerations, the CCITT recommends that Administrations use the impulsive noise counter defined in Recommendation O.71 [1] for measuring the occurrence of series of pulses on circuits for both speech and data transmission.

*Note* – At the national level, Administrations might continue to study whether the use of this impulsive noise counter is sufficient to ensure that the conditions necessary to ensure good quality in telephone connections are met. In those studies, Administrations may use whatever measuring apparatus they consider most suitable – for example a psophometer with an increased overload factor – but the CCITT does not envisage recommending the use of such an instrument.

**Reference**

- [1] CCITT Recommendation *Specification for an impulsive noise measuring instrument for telephone-type circuits*, Vol. IV, Rec. O.71.