

RECOMMENDATION ITU-R V.665-1*

TRAFFIC INTENSITY UNIT

(1986-1990)**

The ITU Radiocommunication Assembly,

considering

- (a) that in ITU-T texts concerning telephone operations and tariffs and in ITU-R texts concerning radiotelephone transmissions (e.g. telephone radio-relay systems and the maritime mobile service radiotelephony), the quantity “traffic intensity” is used together with the unit in which it is expressed. With progress in telecommunications, increasing use will be made of this term and this unit;
- (b) that ITU-T Recommendation E.600 defines the erlang as the unit of traffic;
- (c) that International Electrotechnical Vocabulary (IEV) Chapter 715 (Telecommunication networks, teletraffic and operation) defines the quantity “traffic intensity” and its unit “erlang” in a manner compatible with ITU-T,

unanimously recommends

1. that *traffic intensity* is the *number* of simultaneously busy resources in a given pool of resources***;
2. that the *erlang* is the unit of traffic intensity corresponding to the occupancy of one resource;
3. that the erlang should be represented by the symbol E.

Note 1– The name “erlang” was given to the traffic unit in 1946 by the International Telephone Consultative Committee (CCIF), in honour of the Danish mathematician, A. K. Erlang (1878-1929), who was the founder of traffic theory in telephony.

* See also Recommendation ITU-T B.18 (1993).

** This Recommendation was updated in 1997 for editorial reasons only.

*** The term “resource” means any physically or conceptually identifiable entity, whose use and state at any time can be unambiguously determined, for example, a telecommunication circuit, a switching equipment or a subscriber line.