



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

G.211

INTERNATIONAL ANALOGUE CARRIER SYSTEMS GENERAL CHARACTERISTICS COMMON TO ALL ANALOGUE CARRIER-TRANSMISSION SYSTEMS

MAKE-UP OF A CARRIER LINK

ITU-T Recommendation G.211

(Extract from the *Blue Book*)

NOTES

- 1 ITU-T Recommendation G.211 was published in Fascicle III.2 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.

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Recommendation G.211

MAKE-UP OF A CARRIER LINK

(amended at Geneva, 1964; further amended)

In the international telephone network, provision must be made for the interconnection of various sorts of carrier-transmission systems using symmetric cable pairs, open-wire lines, coaxial cable pairs or radio-relay links. It is thus desirable for the carrier equipment used in these various systems, and which is not confined to a particular sort of line, to meet general CCITT recommendations.

Basically, these equipments comprise translating equipments and through-connection filters.

1 Translating equipments

These equipments are classified below according to the procedure used to make up the large-capacity systems from the basic supergroup.

Two procedures are in use:

Procedure 1: the mastergroup and supermastergroup procedure;

Procedure 2: the 15-supergroup assembly procedure; their use is described in the Recommendations concerning the various line systems.

For international links, procedure 2 can be used above 4 MHz only by agreement between the Administrations concerned, including the agreement of the Administration(s) of the transit country or countries, if any.

In the Recommendations, the names of the equipments defined above are also used for equipments which translate a basic group, supergroup or mastergroup or a basic (No. 1) 15-supergroup assembly into the line-frequency band and vice versa.

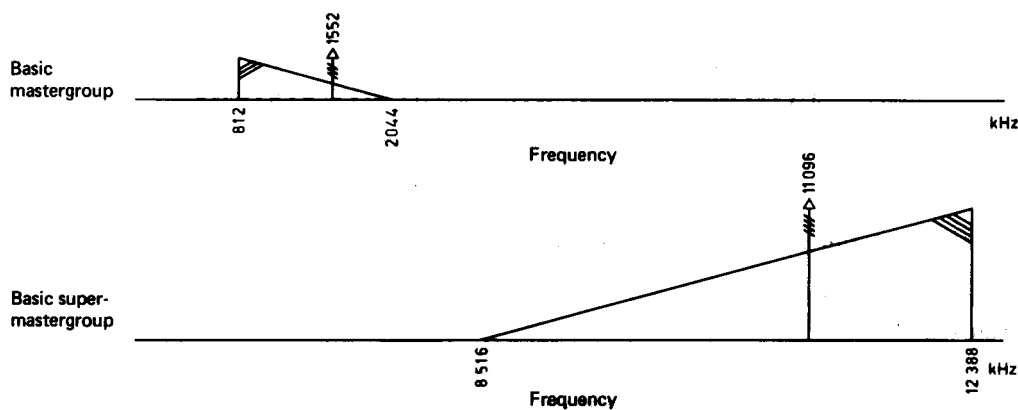
The translating equipments used in procedure 1 are:

- channel-translating equipment, for translating the audio-frequency band into the basic group and vice versa (see Recommendations G.232, G.234 [1] and G.235);
- group-translating equipment for translating five basic groups into the basic supergroup and vice versa;
- supergroup-translating equipment for translating five basic supergroups into the basic mastergroup and vice versa;
- mastergroup-translating equipment for translating three basic mastergroups into the basic supermastergroup and vice versa;
- supermastergroup-translating equipment for translating the basic supermastergroup into the line-frequency band and vice versa.

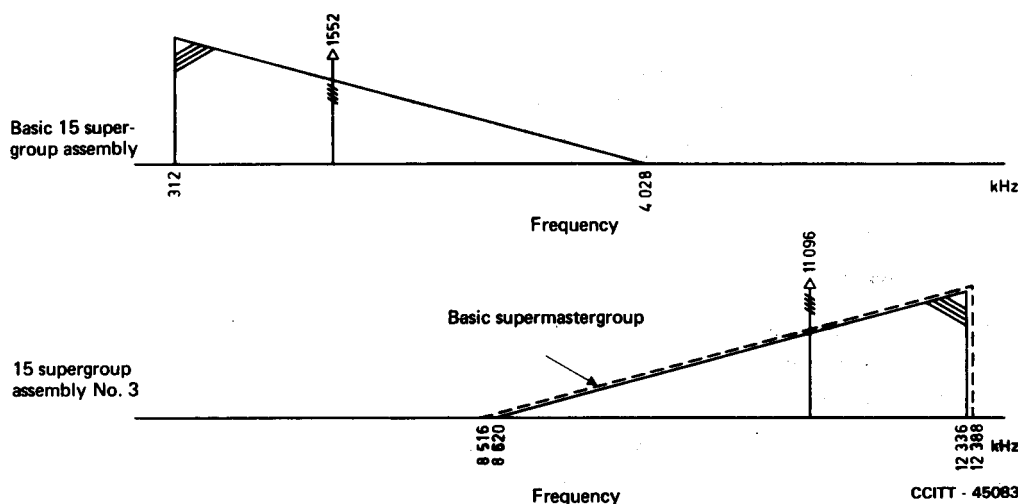
Note - Figure 1/G.211, *a*) and *b*) recapitulates the basic frequency bands used in procedure 1; the through-connection possibilities described in Recommendation G.242 are provided for in these bands.



a) Frequency bands occupied by basic group and supergroup



b) Frequency bands occupied by basic mastergroup and supermastergroup



c) Frequency bands occupied by basic 15-super-group assembly and by 15-super-group assembly No. 3

FIGURE 1/G.211

Frequency bands occupied by basic groups, supergroups, mastergroups and supermastergroups, by the basic 15-super-group assembly and the 15-super-group assembly No. 3, together with the associated pilots