

RECOMMENDATION 550-1

USE OF ECHO SUPPRESSORS IN THE MARITIME MOBILE-SATELLITE SERVICE

(Study Programme 17A/8)

(1978-1986)

The CCIR,

CONSIDERING

- (a) that maritime mobile-satellite systems will be interconnected with the international telephone network;
- (b) that in order to achieve transmission objectives for the maritime mobile-satellite service which are in accordance with those of other international telephone connections, it is necessary to take into account the effects of echo;
- (c) CCITT Recommendation G.131 concerning the rules governing the use of half-echo suppressors;
- (d) CCITT Recommendation G.164 concerning the characteristics of half-echo suppressors;
- (e) CCITT Recommendation G.165 concerning the characteristics of echo cancellers;
- (f) CCITT Recommendation Q.115 regarding control of echo suppressors,

UNANIMOUSLY RECOMMENDS

1. that half-echo suppressors or echo cancellers shall be fitted in the terrestrial part of the connection;
2. that if two-wire telephone sets are used at the ship terminal, a half-echo suppressor or an echo canceller shall be fitted at the ship end of the connection;
3. that if echo suppressors are fitted, they should have characteristics in accordance with CCITT Recommendation G.164;
4. that if echo cancellers are fitted, they shall have characteristics in accordance with CCITT Recommendation G.165;
5. that it should be possible to disable echo suppressors, as described in CCITT Recommendation G.164, in both the terrestrial and the ship end of the connection;
6. that control of echo suppressors in the terrestrial connection should follow the requirements established in CCITT Recommendation Q.115;
7. that manual disabling of echo suppressors at the ship end of the connection should be possible;
8. that enabling of the echo suppressor, located at the ship end of the connection, must be done automatically when a call is terminated, independently of the disabling technique used.

Note 1. – See also CCITT Recommendations G.473 and M.1100 concerning the transmission plan for maritime satellite systems.

Note 2. – For disabling of echo cancellers see CCITT Recommendation G.165, § 3.5 and 4.

Note 3. – When tone disabling is used precautions must be made to ensure that the echo suppressor or echo canceller is not disabled by speech.

Note 4. – CCITT Recommendation G.161 may still be used for the design of analogue echo suppressors.
