(h) The main and emergency (reserve) transmitters shall have a minimum normal range as specified below, that is to say, they must be capable of transmitting clearly perceptible signals from ship to ship by day and under normal conditions and circumstances over the specified ranges.* (Clearly perceptible signals will normally be received if the R.M.S. value of the field strength at the receiver is at least 50 microvolts per metre.)

	Minimum normal range in miles	
	Main transmitter	Emergency transmitter
All passenger ships, and cargo ships of 1,600 tons gross tonnage and over	150	100
Cargo ships below 1,600 tons gross tonnage	100	75

(i) (i) The main and emergency receivers shall be capable of receiving the radiotelegraph frequency, and the classes of emission, assigned by the Radio Regulations for the purpose of distress in the medium frequency band.

(ii) In addition, the main receiver shall permit of the reception of such of the frequencies and classes of emission used for the transmission of time signals, meteorological messages and such other communications relating to safety of navigation as may be considered necessary by the Administration.

(iii) The auto alarm receiver may be used as the emergency receiver.

* In the absence of a direct measurement of the field strength the following data may be used as a guide for approximately determining the normal range:—

Normal range in miles	Metre-amperes†	Total aerial power (watts)‡
200	128	200
175	102	125
150	76	71
125	58	41
100	45	25
75	34	14

† This figure represents the product of the maximum height of the aerial above the deepest load water line in metres and the aerial current in amperes (R.M.S. value).

The values given in the second column of the table correspond to an average value of the ratio

$$\frac{\text{effective aerial height}}{\text{maximum aerial height}} = 0.47$$

This ratio varies with local conditions of the aerial and may vary between about 0·3 and 0·7.

‡ The values given in the third column of the table correspond to an average value of the ratio

$$\frac{\text{radiated aerial power}}{\text{total aerial power}} = 0.08$$

This ratio varies considerably according to the values of effective aerial height and aerial resistance.