



## PROPOSAL FOR THE ESTABLISHMENT OR MODIFICATION OF RADIO TRANSMITTING OR RECEIVING STATION

1. It is desired to obtain clearance on behalf of ..... for the establishment/modification \* of a radio transmitting/receiving or radar\* station which is to be used for.....
  - a) Location (giving nearest large town) .....
  - b) (1) National Grid (Civil) Map Reference (preferably an eight-figure reference) .....
  - c) Number of masts: .....
  - d) (2) Height in metres at the highest point of aerial system(s) above Mean Sea Level: .....
  - e) (2) (3) Height in metres at base of aerial system (s) above Mean Sea Level: .....
  - f) (4) Manufacture of transmitter; type number etc: .....
  - g) (4) Designation of emissions (s): .....
  - h) (4) Pulse recurrence frequency (where applicable): .....
  - i) (4) Pulse width in micro seconds (where applicable): .....
  - j) RF Power. Include:-
    - (i) Mean power supplied to aerial transmission line (dBWPY): .....
    - (ii) Peak power supplied to aerial transmission line (dBWPX): .....
    - (iii) Mean radiated power (dBWPYe/PYi): .....
    - (iv) Peak radiated power (dBWPXe/Pxi): .....(see Article 1 of the Radio Regulations)
  - k) (4) Aerials:-
    - (i) Aerial aperture dimensions in metres .....  
(Where applicable, eg. Radar aerials):

- (ii) Height of center of aerial aperture above Mean Sea Level:
  - (iii) Aerial beam width (between half-power, ie 3 dB points):  
.....
  - (iv) Aerial type and relative gain: .....
  - (v) Direction of maximum radiation in:-
    - (a) Azimuth: (5) .....
    - (b) Elevation: (5) .....
  - (vi) Aerial azimuth scan rate: .....
  - l) (6) Frequency bands: .....
- (To be used to certify that site sharing was not found possible):-  
 Consideration has been given to existing sites within ..... Kilometers of the  
 above proposed location, but none of these is suitable for the following reasons:-  
 .....  
 .....  
 .....

**\*For Stations using Frequencies between 30 MHz and 30 GHz**

3. The sponsoring Department should include one of the following statements as appropriate:-

- \*a. "The field around this station will nowhere exceed  $100W/m^2$ .
- \*b. "The operating agency of this station has undertaken to ensure that the current 'Safety Precautions Relating to Intense Radio Frequency Radiation' (7) will be followed and that specifically, members of the public will be excluded from any area around this station where the field may exceed  $100W/m^2$ "

**\*For Station using frequencies below 30MHz**

4. The sponsoring Department should include which of the following alternative statements is appropriate:-

- \*a. "There is no part of any public road lying within 50 meters (9) of the main radiating element of this station."

-ALTERNATIVELY-

- \*b. "Although part of a public road runs closer than 50 meters (9) from the main radiating element of this situation, it has been calculated that there will be no risk of accidental initiation of civil electric detonators, when packed for storage and transport (10) being carried on this road."

**NOTES**

\*Delete as necessary

1. In certain circumstances ( for example North Sea Platforms), positions may be given in latitude and longitude.
2. Aerial system means the aerial and its supporting structure e. g. Pole, mast or building.
3. Height to include extensions such as lighting conductors.
4. Applies to radio transmitting and radar stations only.
5. If scanning mechanically or electronically, states scan limits.
6. As listed in the United Kingdom Peacetime Frequency Allocation Table for frequency bands of MHz and above, or in band symbols VLF, LF, MF or HF) for frequencies below 30 MHz as in Radio Regulations No. 208.
7. Home Office booklet printed by HM Stationery Office (Third Impression 1974).
8. (Reserved)
9. This safe distance has been found from experiments with existing VLF, LF and MF stations , and with HF stations having a radiated power not greater than 3MW (64.8 dBW). For stations to employ a radiated power greater than 64.8 dBW the minimum safe distance can be calculated from the formula.

$$d (\text{min}) = 27.4 \sqrt{\text{Antilog} \frac{(P_1 - 60)}{10}} \text{ meters (Where } P_1 \text{ is the radiated Power in dB with reference to 1(Watt))}$$

For HF Broadcasting Stations to employ a radiated power greater than 3MW the minimum safe distance can be calculated from the formula:

$$d (\text{min}) = 27.4 \sqrt{P_2} \text{ (where } P_2 \text{ is the radiated power in megawatts (MW))}$$

10. Departments concerned with the operational use of EED in the vicinity of radio stations may need to take special precautions to minimize RF radiation hazards. Information on the characteristics of such stations can be obtained from the Secretaries of the Working Group on Radio Size Clearance or by direct application to the operators of the radio stations concerned.

11. Exceptionally within SIX weeks – a request for this extension having been made to the Sponsoring Department by an action addressee.

Note: To further clarify this submission, engineering study and interference study must be appended and made part to the application.