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CIVIL DEFENCE COMMITTEE

CO-ORDINATION OF CIVIL DEFENCE RADIO FREQUENCIES

Note by the Secretary

Some time ago the Brussels Treaty Civil Defence Committee have had under discussion the question of civil defence radio frequencies. Papers resulting from these studies have since been submitted to the NATO Civil Defence Experts for possible review.

2. Attached, for the information of the Committee, is a note that summarises the present position on the existing machinery for the co-ordination of radio frequencies.

3. In view of the facts set out in this note and also that some NATO countries have already ordered their wireless equipment and made internal arrangements as to the use of wave-lengths, it would appear that the suggestion made under paragraph 4 of the attached note is, in all circumstances, the most practical.

4. The Committee is requested to consider this problem and at its next meeting decide whether it wishes to pursue this question or agrees that, in all the circumstances, the matter is best left to be settled as suggested in paragraph 3 above.

(Signed) P. AMNINOS

Palais de Chaillot,  
Paris, XVIIe.

NOTE ON THE EXISTING MACHINERY FOR THE CO-ORDINATION  
OF RADIO FREQUENCIES

GENERAL

1. The arrangements for the international co-ordination of frequency usage are as follows:

(a) The whole of the usable radio frequency spectrum is reviewed periodically by International Conferences held under the auspices of the International Telecommunication Union, of which practically all nations are members. The last Conference of this kind was held at Atlantic City in 1947. These Conferences sub-divide the radio frequency spectrum into broad bands allocated to the various categories of radio service such as Fixed, Land Mobile, Aeronautical Mobile, Maritime Mobile, Navigational Aids and Broadcasting (including Television) Services. In the main, this agreed division applies "world-wide" but in some parts of the spectrum, the allocations vary among the three different "Regions" into which the world is divided for this purpose.

(b) Some countries find it convenient to prepare a national allocation plan based on the international frequency allocation table but amplified where necessary to sub-allocate the internationally agreed bands among the various radio interests. In the very high frequency and higher parts of the spectrum where radio propagation is effective only over relatively short distances, it is not necessary for these sub-allocations to conform to the internationally agreed allocations in all cases. For example, if a country has no foreseeable requirement for VH/F broadcasting in a band allocated internationally to that service, it may decide to re-allocate the band to land mobile services. Services operating under national re-allocations of this kind must do so on a basis of non-interference to services of other countries and in particular would have no standing in relation to foreign services operating in accordance with the international allocation table, with which they might conflict.

(c) The system of sub-allocation referred to in the previous paragraph makes it largely unnecessary for proposals for the use of very high frequencies (and still higher frequencies) to be co-ordinated among all radio users within a country; and international co-ordination in this field is largely a formality owing to the limited possibilities of interference. For low frequencies, medium frequencies and high frequencies, however, co-ordination of proposals both nationally and internationally is necessary before they can be put into effect. National co-ordination is usually carried out through the medium of a committee of all radio users meeting at frequent intervals. International co-ordination is carried out through the International Frequency Registration Board, an organ of the International Telecommunications Union. The International Regulations governing the use of this part of the spectrum are at the moment somewhat complicated as a result of the decisions of the Extraordinary Administrative Radio Conference in 1951; but in general terms, it can be said that frequency assignment plans have been agreed internationally for low and medium frequencies and that any proposals to change or increase frequency usage must be approved by the IFRB before they gain the right to international protection and are registered in the international frequency list. The high frequency portion of the

spectrum is in a state of flux. Frequency plans were agreed to for the Maritime and Aeronautical mobile Services and are being gradually brought into use. During this period of change proposals for new and changed frequency usage are considered by the International Frequency Registration from the standpoint of possible interference either with planned or existing services. These arrangements for international co-ordination cannot of course provide protection against deliberate "pirating" or "jamming" and must depend for their efficiency on international co-operation - which in this, as in other matters, is not always forthcoming.

(d) Within NATO, the European Radio Frequency Agency is responsible for co-ordinating all military radio frequency requirements for SHAPE Forces in the European theatre. While the Agency is required to take account of civilian frequency usage in drawing up its plans, it does not undertake co-ordination of civilian frequency proposals. It does not of course deal with problems arising in countries outside NATO but it has a close liaison with the Allied High Commission in Germany.

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2. So far as the application of these arrangements to the planning of civil defence frequencies is concerned, it is important to recognise that in the very high frequency portion of the spectrum at least, it is not practicable to draw up a frequency allocation plan common to all nations. The spectrum space available is insufficient to provide a wide enough band for each category of service to accommodate the maximum requirements in that category for any one nation. Moreover, such international planning is largely precluded by the differing patterns of existing services. Finally, it is difficult to see what advantage would accrue through the use of common frequencies for civil defence purposes except as part of a co-ordinated telecommunications scheme.

3. As stated by the Belgian Representative at the meeting of the Brussels Treaty Civil Defence Committee, the fact that ERFA had agreed that Belgian Civil Defence Services could use certain frequency channels was not an indication that ERFA was the right body to co-ordinate civil defence frequency usage since the co-ordination possible within the agency did not cover nations outside NATO. In my view such an agreement would not, in practice, fully cover civil users in NATO countries.

4. It is clear that what the meeting was seeking was some international body who would co-ordinate the internal civil use of specific frequency channels in individual countries - at least in the European ITU Region. In fact, no such body exists and I do not think its formation to be very likely - certainly not for civil defence purposes only.

5. The best solution seems to be for individual countries to follow their normal procedure for co-ordinating the internal civil use of frequencies (including those for civil defence) in their own countries, and to liaise direct with other countries concerned where the internal use of a specific frequency in one country might give rise to interference in another country - or, of course, where the use of a common frequency for civil defence purposes is desirable in two or more countries because of a proposal for integrated action by the civil defence services of the countries concerned.