

## **DEFINITIONS OF TERMS AND REFERENCES USED IN THE RADIO FREQUENCY UTILISATION PLAN**

### **Frequency band. Services in Finland**

Frequency band and services in use or intended to be used in this frequency band in Finland. The frequency bands and services are based on the Radio Regulations (RR) and the ERC Report 25.

### **Sub-band, its width and usage**

Sub-bands, their width and intended use. In mobile and fixed services, the centre frequencies of the extreme channels are the lower and upper limits of a sub-band. In other radio services, the sub-band limits form the limits for the given usage.

### **Mode of traffic**

Mode of traffic of a sub-band is either simplex (use of one frequency) or duplex (use of two frequencies).

### **Class of station**

Class of station is based on the Radio Regulations (RR). In the land mobile service, for instance, the class of station of a base station is FB.

### **TX/RX code**

Defines the direction of transmission, i.e. whether the frequency is used for transmitting (TX) or receiving (RX) or both (TXRX).

### **Channel spacing**

States the frequency separation between the centre frequencies of two adjacent channels. In the table the channel spacing value is identified through a comma (,).

### **Bandwidth**

States the bandwidth allowed for a transmission using the channel (i.e. necessary bandwidth). In the table the bandwidth value is identified through a full stop (.).

### **Class of emission**

Determines, for instance, type of modulation and type of information to be transmitted.

### **Duplex separation and paired band**

The corresponding frequency band (paired band) is situated at the distance given by the duplex separation either on higher frequencies (+) or on lower frequencies (-) than the band given in the table.

### **Standard type**

Gives information on the most essential properties of radio link equipment (e.g. DRS 34/18000 = capacity 34 Mbit/s, frequency range 18000 MHz or FM 4/419 = modulation FM, capacity 4 speech channels and frequency range 419 MHz).

### **Radio Regulations, RR**

The mandatory (binding) Annex to the Constitution and Convention of the International Telecommunications Union (ITU Radio Regulations).

### **Duty cycle**

The duty cycle is defined as the ratio of the maximum transmitter "on" time, relative to a one-hour period.

### **Output power of radio link**

If no maximum output power is mentioned for the transmitter of a radio link, the value given in the standard reference is applicable. The standard reference concerning the radiation pattern envelope of a radio link antenna defines the required maximum side lobe attenuation, which can be relaxed depending on the usage environment of the system in question.

### **References to standards**

The standard references do not set compulsory requirements for placing of equipment on the market. When there are references to standards or other comparable specifications in the Radio Frequency Plan, this implies that they have been used as assumptions for equipment performance in an interference analysis concerning a new frequency assignment or as a technical basis for compatibility studies between different radio communications services or as a technical basis for coordination agreements with other countries. Standard references may in some cases also be used to define a channel access procedure, the use of which is a condition for the use of certain frequency bands.

The standard references do not specify the version of standard, but the references are to be understood to refer to the latest adopted versions.

### **References to different technologies**

The Radio Frequency Plan also contains references to specific technologies in connection with remarkable frequency assignments or regulations on exemption from individual licensing. The references are not intended to proclaim the permitted technology as the only permitted alternative. Other technologies with sufficiently compatible radio characteristics are permitted as well.

### **Inductive equipment**

The operation of inductive equipment is based on data transfer over reactive magnetic or electronic fields instead of free propagation of radio waves. Therefore a piece of inductive equipment is not such radio equipment as referred to in the Radio Act. However, the Radio Frequency Plan contains references to the interfaces for inductive applications referred to in Recommendation ERC/REC 70-03 and applications complying with these may be used in Finland. Also the use of other inductive equipment operating within the frequency range 9 kHz – 30 MHz and with field strength below the maximum values for field strength mentioned in the standard EN 300 330-1 is not restricted in Finland.