

## **Frequency management issues for DVB-H and IP Datacast services.**

Broadcasting is probably the last major radio service to be digitized and in this process the traditional boundaries between radio services (Broadcasting – Fixed – Mobile) should be re-considered. DVB-H is a good example of convergence of systems and services provided and should therefore be encouraged.

The deployment of DVB-H equipment (handheld DVB equipment in accordance with EN 302304) is closely related to the planning for and implementation of DVB-T and T-DAB in Europe and the switch-over from analogue to digital television in the European market place.

The CEPT administrations have developed the initial frequency requirements for the first planning exercise leading to the final spectrum requirements for the RRC-06 conference. Some administrations have indicated frequency requirements based on reference planning configurations RPC2 and RPC3 providing for mobile or portable indoor reception while others have required RPC1 with fixed reception mode in order to initially achieve an efficient use of spectrum in this area.

The IP Datacast Forum would invite administrations to consider the following key issues regarding frequency planning and implementation of DVB-H and IP Datacast services:

- a) The DVB-H type of service is a mobile broadcasting service complementary to the DVB-T. Thus DVB-H is part of the existing DVB-T technology and does not need allocation of separate and dedicated frequency bands. It is, however, important that the national frequency planning provides for flexibility with a high degree of allotment planning and with parts of the required allotments / assignments based on RPC3 planning configuration.
- b) The application of DVB-H type of services within the Broadcasting Service is a viable alternative and supplement to traditional TV-Broadcasting services to the homes and should be implemented in parallel with the DVB-T services. It is therefore important that DVB-H is taken into account in the national requirements for the RRC-06 planning process and that spectrum is made available for DVB-H type of services even in the initial phase of the DTT developments.
- c) As the DVB-H service does not require separate frequency bands, the implementation of this type of broadcasting service is not directly linked to the national digital switch-over. An early transition from analogue to digital broadcasting on a national and European basis would, however, support full availability of spectrum for DTT services including new and innovative broadcasting services such as DVB-H. The IP Datacast Forum has noted that most European countries have decided a national digital switch over date prior to 2015. Some countries have already started the switch-over on a region by region approach which could further support flexibility in the planning and implementation of DTT services including DVB-H.

- d) In Europe more than 9 countries have currently implemented operational DTT services based on long term licenses and during the year 2005 more services are envisaged and new countries have indicated intentions to start operational DTT services. In this context it should be considered to provide the necessary flexibility in the national legislation and in the frequency planning to allow initial operation of DVB-H services. The technology is available and the DVB-H type of service is required by the users.
- e) The regulatory procedures to be agreed by the RRC-06 conference in particular regarding conversion of allotments to assignments need sufficient flexibility to introduce new and innovative services in accordance with market demands.
- f) The national regulatory and licensing regimes for MUX operators should not hinder development of the DVB-H type of services as complementary to the DVB-T service. The regulation and license regimes must be sufficiently flexible to allow new services to be developed in close cooperation between the MUX- and mobile operators and the content providers. Furthermore European coordination of license conditions would support European wide broadcasting services including DVB-H.
- g) The DVB-H type of equipment is available on the market and by nature broadcasting equipment is brought across borders and used in neighboring countries. DVB-H equipment should therefore be subject to free circulation and use all over Europe as it is the case with all other broadcasting equipment.
- h) DVB-H type of services are developed and implemented also outside Europe and it should therefore be ensured that market opportunities are provided for this type of service in Europe by a flexible frequency management system and regulation for introduction of DVB-H and IP Datacast services.