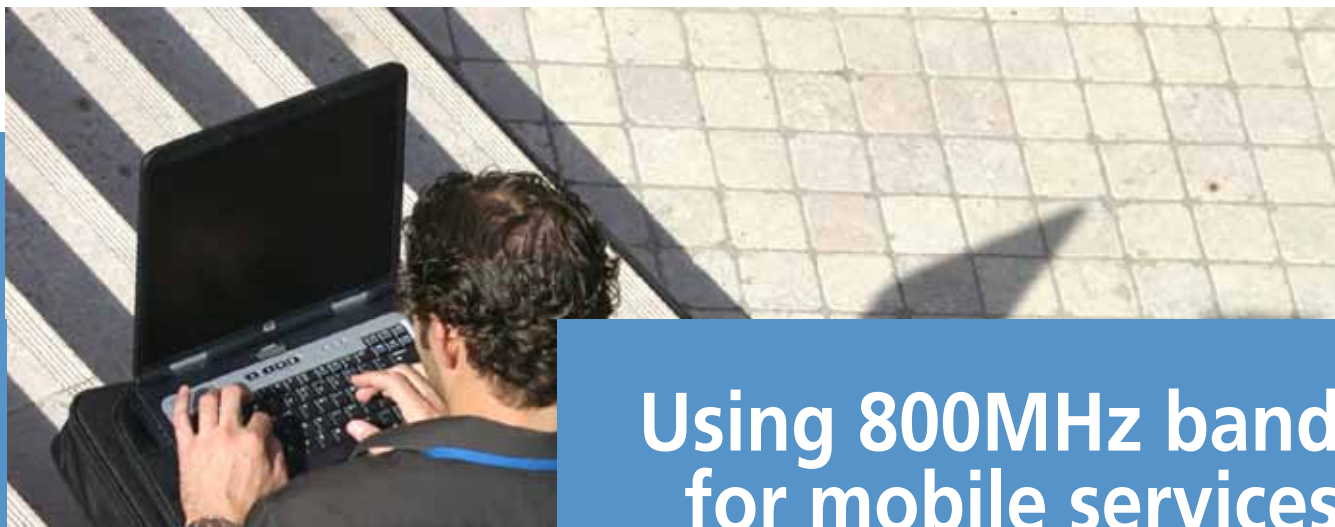


10 things you need to know about...



Using 800MHz band for mobile services

1 The 800 MHz band will no longer be available for broadcasting.

The 800 MHz band (790-862 MHz) comprises the TV channels 61-69. It is referred to as the 'the digital dividend'. This spectrum is mainly used terrestrial television currently. It is also used for wireless microphones and some other services. Having been recently re-allocated to mobile services in Europe, it will no longer be available to broadcasting.

2 The re-allocation of the 800 MHz band reflects the current EU spectrum policy.

This EU decision was motivated by the assumption that mobile services would generate larger social value and economic benefits than if the spectrum had continued to be used for broadcasting. This view has been promoted by the mobile industry. The European Commission, CEPT and a number of national Administrations also actively support this view.

3 Clearing the 800 MHz band will have significant implications for terrestrial broadcasting both short and long term.

Short-term implications include the need to modify digital TV networks. Those networks that currently operate in the 800 MHz band will need to be moved to the band below 790 MHz where a replacement channel can be found. Other networks may also need to be re-arranged to accommodate these changes. In some cases the consumer's antenna will need to be adjusted or upgraded.

4 Costs of clearing up the 800 MHz band from broadcasting cannot be borne by the broadcasters or the public.

The changes required to the digital TV transmission networks and receiving equipment will incur significant costs. It is imperative that these costs not fall upon broadcasting industry or the consumer. It is the responsibility of national administrations to ensure that sufficient funds are made available to cover these costs.

5 Long term implications: less spectrum for broadcasting and more interference

The total amount of spectrum available for digital terrestrial television is reduced to the band below 790 MHz. In turn, this reduces the potential for future innovation and development of digital terrestrial services (e.g. HDTV, mobile TV, 3DTV, etc.). In addition, interference from mobile networks and terminals in the may disrupt reception of digital television.



6 The new mobile networks in the 800 MHz band will cause interference to broadcasting.

Current TV receivers cover the whole UHF band (i.e. 470-862 MHz). They are not designed to resist the interference from the mobile networks operating in the 800 MHz band. As there are as yet no operational mobile networks in the 800 MHz band it is uncertain how serious the interference problem is going to be. Uncertainty doesn't equate to inexistence.

Theoretical studies and laboratory measurements indicate that all TV receivers and cable installations are potentially vulnerable to interference. The most difficult interference situation is in channel 60 but lower channels can also be affected.

The European Commission has adopted a Decision that puts forward the so-called 'minimum restrictive technical conditions' for mobile networks to be implemented in the 800 MHz band. These conditions are in some cases insufficient to protect broadcasting services from interference caused by mobile networks.

National administrations have the responsibility to put in place additional technical and regulatory measures, where necessary, to mitigate the interference.

7 The public must be informed about the change and assisted where required.

The forthcoming changes will affect the viewers at least in the following two ways:

1. When the current broadcasting networks are modified to clear the 800 MHz band the viewers may need to tune their receivers to the replacement channels. In some cases the receiving installation will need to be upgraded.
2. In case of interference caused by the mobile networks and terminals, the viewers will need an effective mechanism to report the interference to relevant authorities and have it dealt with promptly.

The public should be made aware of the changes, the risks and what help is available. This is the responsibility of the national administrators.

8 Mobile services in the 800 MHz band will be introduced after 2012.

The 800 MHz band needs first to be cleared from broadcasting (and other services operating in the band) before it can be made available to mobile services. In most European countries this will only be done after the analogue TV has been switched off (ASO). The ASO should be completed in the whole Europe by 2015.

9 The 800 MHz band to be used for mobile broadband services.

Mobile broadband is a fast growing service usually offered by the mobile network operators. The main application on mobile broadband is connection to the Internet, thus the term 'mobile internet'. The 800 MHz band will be used to deploy LTE networks that is the most advanced mobile broadband technology. This frequency band offers excellent propagation conditions but has limited capacity. Other frequency bands must be used to provide required capacity for broadband services.

10 Mobile broadband should support media services.

Fixed broadband is an increasingly popular platform for access to media services, such as music, catch-up TV and other forms of video on demand. The users expect the same services to be available on both fixed as well as mobile broadband. It is therefore essential for the mobile broadband networks to be open and capable of supporting delivery of media services to the public.