

Digital dividend



1 – Where is the digital dividend located in the radio spectrum?

The digital dividend is a term used for the portion of radio spectrum which will be released after the switch-over from analogue to digital terrestrial TV in the frequency bands from 174 to 230 MHz (VHF) and from 470 to 862 MHz (UHF). This is possible because digital terrestrial TV technology uses spectrum much more efficiently than analogue.

2 – Is the amount of digital dividend spectrum consistent from country to country?

The size of the dividend will vary from one country to another, owing to national circumstances, such as the geographical position, size and topography, penetration of satellite/cable services, requirements for regional or minority services and spectrum usage in adjacent countries.

3 – Why is digital dividend spectrum considered valuable?

The digital dividend spectrum is very valuable as it combines good physical characteristics, such as propagation over large distances and penetration into the buildings, with the sufficient capacity to deliver a variety of wireless services. Regulators at the national and the European level are deciding on the future use of the digital dividend spectrum.

4 – EBU's view on using digital dividend spectrum

It is the EBU view that spectrum policy should reflect national media and audiovisual policies and safeguard cultural diversity and media pluralism. Digital broadcasting technology is continually evolving and the UHF band is the only frequency band that could facilitate future development of the terrestrial TV platform. It is therefore essential to keep sufficient amount of the digital dividend spectrum available for broadcasting in the long term. Broadcasters would use the spectrum to deliver new and innovative services, such as HDTV, mobile reception, datacast and the future 3DTV.

5 – Using part of the digital dividend for electronic communications services

The European Commission and some national administrations are in favour of using a part of the digital dividend for electronic communications services, such as mobile communications and wireless broadband. These new services would be introduced in the upper part of the UHF band (790-862 MHz). As a consequence, the channels 61-69 would no longer be available for broadcasting.



6 – Are there rules governing the co-existence of broadcasting and electronic communications in adjacent spectrum bands?

CEPT¹⁾ and the European Commission are working towards establishing a set of rules that should enable co-existence of electronic communications networks in the frequency band 790-862 MHz and broadcasting below 790 MHz. Where these conditions are insufficient to protect broadcasting services, the national administrations shall apply additional measures to resolve the remaining interference cases.

7 – Can receivers cope with using the digital dividend for applications other than broadcasting?

All existing TV receivers cover the band 790-862 MHz and that would make them vulnerable to interference from the new mobile networks using this band. In particular it is difficult to predict and prevent interference from mobile terminals to portable TV reception. However, the application of the technical conditions mentioned in the previous item will help reducing this risk. Furthermore, in some situations, there might be a need to install a filter at the TV receiver input in order to reject the interference received from the band 790-862 MHz.

8 – If there are existing DTT services in bands ear-marked for use by communications applications in the future, what about moving them to other frequencies?

Where the existing DTT services in the band 790-862 MHz need to be relocated to the band below 790 MHz there will be associated costs, e.g. due to changes to the DTT networks, changes to the user equipment and support to the viewers in the affected areas. National administrations should ensure sufficient and timely available funds to cover these costs.

9 – Is the use of digital dividend spectrum essential for the provision of broadband services in rural areas?

It is often implied that access to the digital dividend is a prerequisite for the provision of broadband services in rural areas. Although the UHF spectrum enables large network cells the capacity is insufficient to support the increasing demand for bandwidth in the broadband networks in the long run. Therefore the issues of rural broadband should be addressed in a wider context and other spectrum allocated to wireless communications should be used in addition to digital dividend.

10 – Digital dividend spectrum was used for the provision of public service, should this notion be applied when it is used for purposes other than pure broadcasting?

New electronic communications services should be provided in such a way as to safeguard public interest. This includes open access to the new networks for services and equipment. Furthermore, the wireless broadband networks should be able to support Quality of Service (QoS) requirements for media services.

¹⁾ European Conference of Postal and Telecommunications Administrations