

**France Telecom answer to the public consultation from
RSPG on "*implication of switchover to digital broadcasting*"**

France Telecom welcomes the opportunity to respond to the public consultation on "implication of switchover to digital broadcasting" which can lead to a more efficient use of spectrum.

- **How can co-ordination between Member States on spectrum management, at bilateral and EU level, contribute to a quick and efficient switchover?**

In addition to the RRC-04 preparation made by CEPT regarding DVB-T planning exercise, accompanying national policy efforts will be necessary to accelerate switchover.

EU incentives should foster harmonisation of possible spectrum dividend throughout Europe, tackling the diversity of situations between member states and stimulate national voluntary approaches.

An optimised digital broadcast planning exercise should ease possible spectrum dividend harmonisation for other services like telecommunications or broadcasting services towards mobiles and ease spectrum borders coordination.

- **In particular, what would be the added value from EU co-ordination ahead of the Radio Regional Conference starting in 2004 and other international negotiations?**

The EU coordination could elaborate the way to ensure that RRC-04, when establishing the new digital plan, is sufficiently forward-looking to allow the identification of harmonised spectrum dividend.

- **Are greater transparency and technological neutrality of spectrum assignment, notably through valuation and market tools, instrumental to switchover?**

Incentives to free analogue bands could accelerate the switch off process. As spectrum will be made available by switching to digital, spectrum dividend may be allocated to new services in a harmonised way. Consequently, this can be performed through regulatory and administrative procedures rather than through market mechanisms.

Moreover fees for different services should be harmonised in order to allow fair competition between operators providing the same service in different bands thanks to the development of convergence.

- **What will be the "spectrum dividend" from switch-off, and how should this be allocated to specific services?**

It is worthy noting that the global spectral efficiency improvement is very important and varies between 3 and 6. Using conservative conditions, a DVB-T 8MHz bandwidth slot, which corresponds to an analogue TV programme, offers a 16 Mbps data rate, corresponding to 4 TV programme of same quality (4 Mbps). The gains are even greater, as DVB-T modulation allows a co-channel (neighbour) use, which was not allowed by analogue PAL or SECAM systems.

It is very difficult to already estimate the amount of spectrum dividend as the digital broadcast services are not well defined and as the new broadcasting services definitions vary according to different European countries. Moreover, these services may change according to the evolution of convergence. In addition, apart from DVB-T, there is a lot of complementary means to convey broadcasting services: satellite, cable or ADSL. The use of these different technologies may also increase somehow the spectrum dividend.

Specific advantage of DVB-T is the possibility, if designed and rolled-out for that purpose to allow mobile reception. Point-to-multipoint unidirectional terrestrial broadcast and point-to-point bidirectional 2G/3G mobile services are certainly complementary means to provide multimedia contents to mobiles. For example, according to the number of customers who are requesting a multimedia content, and their geographical distribution, the service provider will select the most suitable way to deliver the service.

Moreover, in case spectrum could be freed for other applications, it should be of considerable interest to allocate this spectrum dividend to a new service like mobile telecommunication.

As a consequence, it is expected that the spectrum dividend from analogue television switch-off would represent important amount of spectrum and that this spectrum could be in particular allocated to mobile services. There would be an interesting alternative for operators requiring larger cells due to propagation properties for cost effectiveness to consider the lowest frequencies of the band.

France Télécom believes that there is a need for harmonised spectrum in the lowest part of the 470-862 MHz band in order to extend the coverage of UMTS/IMT-2000 services in an economical way for low-density population areas. The freed spectrum should be large enough to allow fair competitive conditions between operators.

In conclusion, harmonised spectrum dividend could be preferentially used for communications towards mobiles.

- **Does convergence require more flexible allocation mechanisms than traditional ones, which tightly link frequency bands and individual communication services according to *ex ante* decisions?**

The Radio Regulations allow fixed and broadcast services in the 470-862 MHz bands. Hence, an additional primary mobile allocation would be necessary to provide innovative mobile convergent services. Provided the national regulations are adequate, provision of convergence services is then possible.

However, it may be appropriate to allow dedicated spectrum allocation in some specifically identified part of these bands for convergent services.