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How to allow the deployment of High Definition services, Mobile TV and new broadband wireless communication services by maximizing an efficient usage of digital dividend for France.

- The mass development of new television format services in France requests the usage of UHF radio frequencies combined with an optimized management of available scarce frequencies especially in France compared to its neighbouring countries. Bear in mind that terrestrial TV transmission represents for the 2.2 TV/household more than 60 % of them, ahead of satellite, cable or ADSL reception.
- On top of those new formats, High Definition is the new "hype" for television and will be by 2010 the de facto standard in terms of image quality for the viewers. By 2012 at least already one TV per household will be HD, thank to the French 2007 and 2008 laws. On October 30 2008 5 HD channels have started full services, 4 free channels and one pay TV on digital terrestrial on top of existing satellite, cable and ADSL. Two services with already more than 80% coverage and the three others about 60% by end H1 2009 in progress.
- In case of free services, by law, digital terrestrial broadcaster's free channels must simulcast SD and HD content to customers. In spite of the progress in compression efficiency brought by MPEG-4 (aver 60% improvement compared to MPEG-2 and 3HD services per 8MHz multiplex, next step 4?) this obligation remains the major obstacle to the generalization of HD and for emerging mobile TV as well as new communication services. To reduce the constraints, simulcast must be given-up at the same time as the digital switch over. This can be possible because simulcast will be obsolete taking into account the very fast HD market penetration.
- Transition towards HD do not pre-empt any digital dividend as soon as the shift to MPEG-4 for free services is anticipated and done. Legal associated measures (by example free coupon) and consumer protection will speed up this migration. Digital set-up boxes for SD and HD terrestrial services are mandatory for sale on the market but progressively by law now up to 2012. By this time the price, including taxes, of such MPEG-4 HD boxes in the open market will be similar to the price of MPEG-2 boxes when the have been introduced for digital terrestrial services in 2005 (~100€with taxes).
- The spectrum efficiency for data transmission over allocated frequencies must continue to be improved with existing and up-compatible technologies whether it is for broadcast as

well as for telecom. However major migrations when they appear mandatory must be anticipated first.

- Reallocation of bandwidth must be prepared to avoid damage or pollution of the already installed base (e.g. problems for channels 61 to 69)
- It is valueless to oppose broadcasting and telecommunication interests but it is mandatory to reinforce global development towards new added value services. The economical and societal usefulness of audiovisual services is equivalent to those from telecommunication.
- An opportunistic management of spectrum policy allows to developed new services thanks to a more efficient use of available taboo channels. These specific channels in the 700MHz band could be used for broadband access for rural development but also for content distribution in cities area if they are used with interference protection process.
- A coordinated and detailed approach of frequency planning must be prepared from now on mainly because:
 - It will structure the total number of adequate TV sets with built-in decoder
 - It will not to allocate available frequencies due to switchover without good coordination and looking for optimum global and efficient solutions.

The proposed approach will allow to broadcast in band 4 and 5 at least a total number of 32 HD terrestrial services in France (8 multiplex without simulcast) plus one multiplex for mobile TV and to keep free the equivalent of 2 multiplex (nine channels - 72MHz) the allocation of which could be decided later between new mobile services and/or new wireless services.

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