

RSPG draft opinion #5: “The introduction of Multimedia Services in particular in the frequency bands allocated to the broadcasting services”

About Arqiva

1. Arqiva has a 50-year history in transmission and has helped pioneer the technologies of the digital age. Formerly the broadcast division of ntl Group, Arqiva was purchased in 2005 by an international consortium led by Macquarie Communications Infrastructure Group.
2. Arqiva is responsible for the entire analogue transmission networks for ITV1, Channel 4 and five and played a leading role in the introduction of digital terrestrial television, for which we have built national networks carrying the Digital 3 & 4 and SDN multiplexes. The network for Digital 3 & 4, with its regional structure, is one of the most complex digital terrestrial TV networks in the world.
3. Arqiva owns and operates some 350 FM and 70 MF transmitters, with customers ranging from the large radio groups such as GWR, EMAP, Chrysalis, Capital and Scottish Radio Holdings, to small community-based stations, and has played a leading role in the development and introduction of digital radio in the UK, supporting the commercial radio industry in making the transition from analogue. Arqiva built the transmission network for Digital One, the national commercial DAB multiplex, and has multiplexing and transmission contracts for 42 of the 46 local and regional DAB multiplexes.
4. In respect of mobile TV, one of the most promising potential uses of L-Band, Arqiva undertook the feasibility studies, field trials and network design for the Singapore mobile DVB-T network and also operates the infrastructure for the Oxford DVB-H trial and for the Mobile TV Now! DMB/DAB-IP trial currently on air in London.
5. All of the above activities are underpinned by Arqiva’s Spectrum Planning Group which has extensive experience of planning analogue and digital TV and radio networks and which also offers a coverage prediction service for Arqiva’s radiocommunications customers.

General comments

6. Arqiva welcomes the opportunity to comment on the proposed draft RSPG Opinion, which is highly timely as new multimedia services are being developed, trialled and launched across Europe. At the same time, traditional broadcasting is evolving with television having recently started the migration to High Definition, increasing use of interactivity, and the success (in the UK at least) of DAB Digital Radio.

7. Convergence, predicted for so long, is now a retail reality, with market players invading each other's territory and technology and consumer trends changing more quickly than ever before.
8. A clear example of convergence in action is the retail market for digital music (less bandwidth-hungry than audiovisual content), where consumers:
 - download tracks from online music stores to their PCs (and transfer them to mp3 players or stream to Xbox 360)
 - download tracks to mobile (cellular) phone (where in the UK a Mobile Network Operator is the second largest retailer of downloaded music after the iTunes Music Store)
 - download tracks directly to mp3 players via WiFi;
 - download content (e.g. ringtones, perhaps later complete music tracks) from advertising posters directly to their phone handsets via Bluetooth; and
 - all the while the competing 24-year old compact disc continues to be popular and valued - even amongst consumers purchasing downloads.
9. As if this has not created a bewildering array of competing retailers and technologies to satisfy the demand for music, Arqiva is currently trialling the ability for consumers to download music tracks broadcast by Digital Audio Broadcasting (DAB) to a DAB-compatible music player (which could be a mobile phone).
10. If convergence has two clear implications it is that:
 - the consumer preference for portability and personalisation of access and playback increases the demand for suitable spectrum to be made available in a timely, transparent fashion, with a premium placed on harmonised spectrum; and
 - "cherry picking" of tomorrow's technology winners by regulators and politicians has become almost impossible.
11. With this in mind Arqiva supports the adoption of a more flexible approach to spectrum management and the availability of "broadcasting" spectrum for HDTV and for services other than traditional broadcasting (such as mobile broadcast TV). Arqiva agrees that the availability and supply of high quality multimedia services with attractive new features could bring significant benefits to consumers on a pan-European basis. But European industry would also share in these benefits, building on the strong consumer take-up of digital TV in many Member States and the resulting experience gained by European creative industries in exploiting the new opportunities offered by digital (e.g. interactive advertising, voting, gaming).

12. Europe must not cede a competitive advantage in multimedia services to non-European countries, such as South Korea, which have already launched these services. The timely availability of suitable spectrum in which to operate such services clearly is an essential component. As is a light regulatory touch - an inappropriate extension of broadcasting content regulation to multimedia services, before these have acquired any consumers for regulators to gauge the content expectations of, would tend to stifle innovation.
13. In addition, for multimedia services to be accommodated in “broadcasting bands”, a clear framework around interference rights and management is vital to give existing and potential spectrum users reasonable certainty in the quality of spectrum. The optimal allocation of spectrum as a result of an auction depends on certainty for potential bidders being maximised. Unexpected interference to existing services will be unacceptable to consumers and network operators.
14. Organisations looking to acquire spectrum, either in auctions or in the secondary market (spectrum trading), require reasonable certainty as to what interfering level they can expect and can cause to other users. Uncertainty about interference will reduce the value that bidders can put on spectrum that is to be traded or auctioned and inject uncertainty into bidders’ plans for launching services.
15. If regulators do not ensure that their interference rights framework is effective, then there is a risk of both reducing the value of existing spectrum use and of discouraging future development.

Comments on specific spectrum bands

Band III

16. Arqiva supports flexibility in the international arrangements governing use of this spectrum.

Bands IV/V

17. Arqiva supports the balance achieved at RRC-06 between general support for non-broadcasting use of these bands within a framework of international co-ordination designed to facilitate the migration of terrestrial television services across Europe from analogue to digital.

18. Arqiva believes that Member States should be encouraged to explore the opportunities offered by RRC-06 to license multimedia services such as DVB-H with 8 MHz channelisation within spectrum released by digital switchover, if the national demand for mobile TV is there (all of the trials to date suggest that it will be).
19. Certainly Arqiva does not believe that Member States should preclude the licensing of mobile TV within UHF spectrum, which would carry a lower risk profile than an equivalent network built in L-Band, increasing the viability and (potentially) the coverage achieved.

L-Band

20. Arqiva supports a review by Member States of the Maastricht Special Agreement to introduce greater flexibility. Arqiva believes that Member States should be encouraged to introduce flexibility as quickly as practical and should maximise the potential use of this band for mobile TV use, for example by ensuring that barriers are minimised to the operation of DVB-H in spectrum packages comprised of underlying 1.7 MHz channels.