

The NEM Initiative – a broadcaster's view

Andrew Oliphant, Head of Transmission Group
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The BBC supports open standards

Standards will underpin all we do, internally and with our partners. Where appropriate standards already exist we will adopt them and where a number of standards could be applied, the standards the BBC adopts will be chosen to meet the requirements while supporting interoperability. Where they do not exist we will assist the industry in driving the necessary standards forward.

Technology and creativity in partnership

BBC technical strategy document, Autumn 2004

An omission from the NEM Vision

Digital Radio Mondiale

Digital transmission for the AM bands

- AM bands can achieve communication over wide areas
- Digital Radio Mondiale will be important to ensure “Smooth transition from current analogue broadcasting to digital broadcasting”



Standards are getting more complicated ...



Some of the standards needed to broadcast a DTT service

... so they need more verification

What has to be verified?

- The standard is precise and clear
 - verify by interworking trials
- The standard works as expected
 - verify by laboratory tests and field trials
- The standard meets users' needs
 - verify by pilot services

An example – the DVB-T specification

Verifying the DVB-T specification - interworking



- First interworking trial, Torino, December 1996
- BBC modem and CCETT modem

- Final interworking trial, Rennes, June 1988
- Seven modulators and nine receivers
 - including commercial prototypes and consumer chipsets



Lab tests and field trials



- Results submitted to CEPT
- Formed the basis of the Chester Agreement
 - An international agreement on the introduction of digital terrestrial TV in Europe

Pilot services

- BBC trial network started 15 June 1996
 - Two transmitters: Crystal Palace (London) and Pontop Pike (north-east England)
 - Multiplex of four programmes
 - Regional opt-outs
 - Realistic distribution network
- Allowed BBC to study all aspects of running a digital TV network
 - Extensive demonstrations to gain public reaction
- Field trials to verify coverage predictions



We've done all that ...

- The standard is precise and clear
 - verified by interworking trials ✓
- The standard works as expected
 - verified by laboratory tests and field trials ✓
- The standard meets users' needs
 - verified by pilot services ✓

So have we finished? No!

Verification of services is an ongoing task

- New services have to be checked with existing receivers
- In the UK, DTT is an open platform
- DTG Testing Ltd tests new receivers and ensures conformance of new services



Conclusions

- Digital Radio Mondiale will be important for switch-over
- You don't have a standard until it has been verified
- Verification of digital standards is an ongoing process
- Verification needs experts working together
- Verification will be an important part of the NEM Initiative's agenda

A final thought about verification ...

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This was a 'cut & paste' from the .pdf version of the vision document that I received by email. It should have read:

“As the boundaries between home and work will blur for a large part of the population, activities of the nomadic citizens will be carried out by seamlessly using a multiplicity of networks, both fixed and mobile.”

Thank you for listening ...

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