

10 things you need to know about...



Hybrid Digital Radio Demonstration

- 1** It's a full radio chain from production to receiver.
Based mainly on open source software, it is a multiplatform proof-of-concept with multimedia elements.
- 2** The full chain is designed for multiplatform radio services
Produce the content once and then distribute it to many platforms: FM, DAB+, DRM, RadioDNS, IP streaming
- 3** It introduced a modular content production platform
Multiplatform requires modular production software with broadcast of audio and slides synchronised.
- 4** It implements open software-defined radio for digital radio broadcasting
Together with a generic hardware radio peripheral, it's possible to encode, multiplex and modulate digital radio using a simple PC.
- 5** It demonstrates an open source platform for broadband delivery
The demonstration uses simple MP3 HTTP streaming using icecast2/shoutcast supported by all IMDA profile 1 receivers
- 6** It incorporates hybrid broadcast/broadband functionality using RadioDNS
RadioDNS automatically detects and serves broadband content (web, visuals, etc) associated to a radio station when tuned to it.
- 7** Services are tailored to different commercially-available receivers
Displayed are commercially available receivers, from the very simple to the complex and through a range of PDA and mobile phone devices. Each showing off the visualisation application example where possible
- 8** It introduced the concept of "broadcast hotspot"
Broadcast tuners are sometime not present in multimedia devices (e.g iPad, iPhone), so we have used a small external device to "serve" these over WiFi or Bluetooth
- 9** It was integrated by EBU, with some help
- EBU Technical and Eurovision engineers have collaborated with experts from CRC (Canada) (for DAB and broadcast hotspot elements), Global (for RadioDNS on Nokia N900) and Spark (for DRM).*
- 10** Total production and broadcast system cost is around €5000
Using open tools and innovative design helps keep the costs to a minimum for this local broadcast facility proof-of-concept. And we'll make the software developed available as open source.

EBU's open hybrid multi-platform digital radio chain (Stand: 10.D21)

