Digital radio in cars – the time is now

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Contents

1. WorldDMB and radio today
2. DAB in international markets
3. In-car opportunity
Key objectives

- international roll-out of DAB+
- digital radio in cars (and smart phones) as standard
- digital switchover
Over 80 members from 22 countries – across radio ecosystem

(1) Audi, BMW, Daimler, Hyundai, Jaguar Landrover, Volvo – plus suppliers
Drivers and passengers love radio in the car
But the world is changing – media, devices, cars

Online music services

- Digital music services
- Smart devices
- Connected cars
Digital broadcast offers opportunities to innovate

UK, % benefits of digital radio

- Sound quality: 65%
- Wider choice: 59%
- Easy tuning: 35%
- Text information: 24%
- Extra features: 23%

Source: Ofcom
Digital allows a stronger content proposition
Multimedia services, e.g. weather and traffic information

Categorised slideshow

TPEG
DAB / DAB+ and connectivity should work together

Benefits of connected car
- Personalised content
- Car maintenance
- Car to car

Benefits of DAB broadcast
- Rich content
- Free to air
- Robust (one to many)
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A digital radio wave is moving across Europe
Four core markets: UK, Norway, Denmark and Switzerland
Followed by Germany (2011) and Netherlands (2013)
Several potential markets

Established markets

New markets

Potential markets
In Asia Pacific, a similar process is under way

Hong Kong: DAB+ launch 2011

Australia: DAB+ launched Jul 2009
In Asia Pacific, a similar process is under way

Vietnam: DAB+ trial in 2013

Thailand: DAB+ trial planned for 2014

Malaysia: DAB+ trials on air

Indonesia: planning for DAB+ trial 2014

China: DAB in Beijing & Shanghai

Hong Kong: DAB+ launch 2011

Australia: DAB+ launched Jul 2009
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EBU calling for DAB / DAB+ across Europe

Note: (1) Recommendation R138  https://tech.ebu.ch/docs/r/r138.pdf

- Digital broadcast backbone
- Devices to offer analogue & digital
  - consumer
  - automotive
  - smartphones
- Harmonisation across Europe
In Europe, countries with DAB: 60% of new car sales

Country share of European new car sales 2013

Source: ACEA
In developed markets, DAB in new cars becoming the norm

% of new cars with DAB digital radio

Norway: 63%
UK: 55%
Switzerland: 29%

Source: Digitalradio Norge, DRUK, MCDT
DAB coverage is well established

DAB / DAB+ population coverage

<table>
<thead>
<tr>
<th>Country</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>99%</td>
</tr>
<tr>
<td>CH</td>
<td>99%</td>
</tr>
<tr>
<td>Denmark</td>
<td>98%</td>
</tr>
<tr>
<td>NL</td>
<td>95%</td>
</tr>
<tr>
<td>UK</td>
<td>95%</td>
</tr>
<tr>
<td>Germany</td>
<td>93%</td>
</tr>
<tr>
<td>Italy</td>
<td>65%</td>
</tr>
</tbody>
</table>

Source: WorldDMB
Strong marketing support for digital radio
Conclusions

1. Digital radio has reached critical mass in Europe
   - Clear benefits for drivers
   - Coverage, marketing and technology are in place

2. Broadcasters need to engage with car manufacturers to shape future of radio in-car
Thank you

For further information, please contact:
www.worlddab.org