



DAB+ global update & status

Bernie O'Neill

Project Director, WorldDAB

Amman, Jordan, 23 August 2017

Thank you to our hosts and partners



مؤسسة الاذاعة والتلفزيون الأردنية



2090 DAB services on air around the world

WorldDAB - here to help you



95+
Members

Covering 27 countries



Connecting
1,000+
Industry Experts



Our members include experts from
broadcasters, regulators and network
providers through to manufacturers of
receivers, chips, professional equipment
and automobiles



MINISTRIES OF
TELECOMS



REGULATORS



BROADCAST
ASSOCIATIONS



BROADCASTERS



NETWORK
OPERATORS



END-TO-END
MANUFACTURERS



DEVICE
MANUFACTURERS



AUTOMOTIVE
MANUFACTURERS



RESEARCH &
DEVELOPMENT



CHIP
MANUFACTURERS



SOLUTION
PROVIDERS



MONITORING
EQUIPMENT
MANUFACTURERS

FM is full – difficult to innovate



DAB: opportunities for innovation

- New content, new services
- Greater listening
- Increased revenues

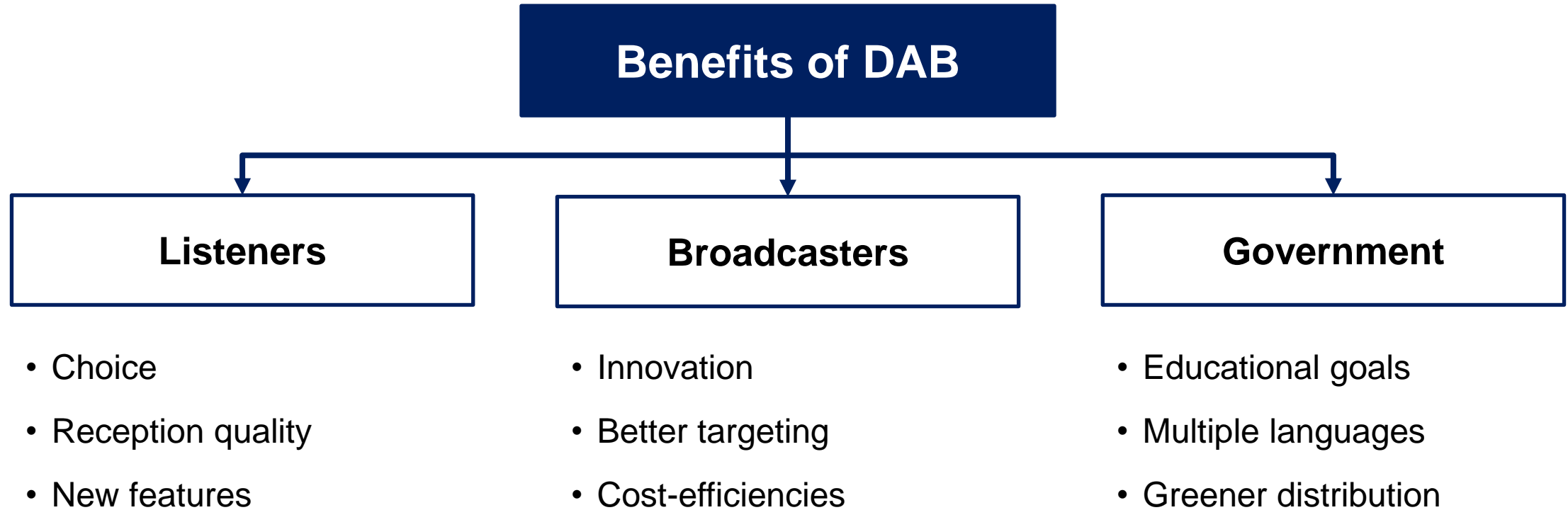
Reality: world is going digital – and radio needs to innovate

Competitive landscape



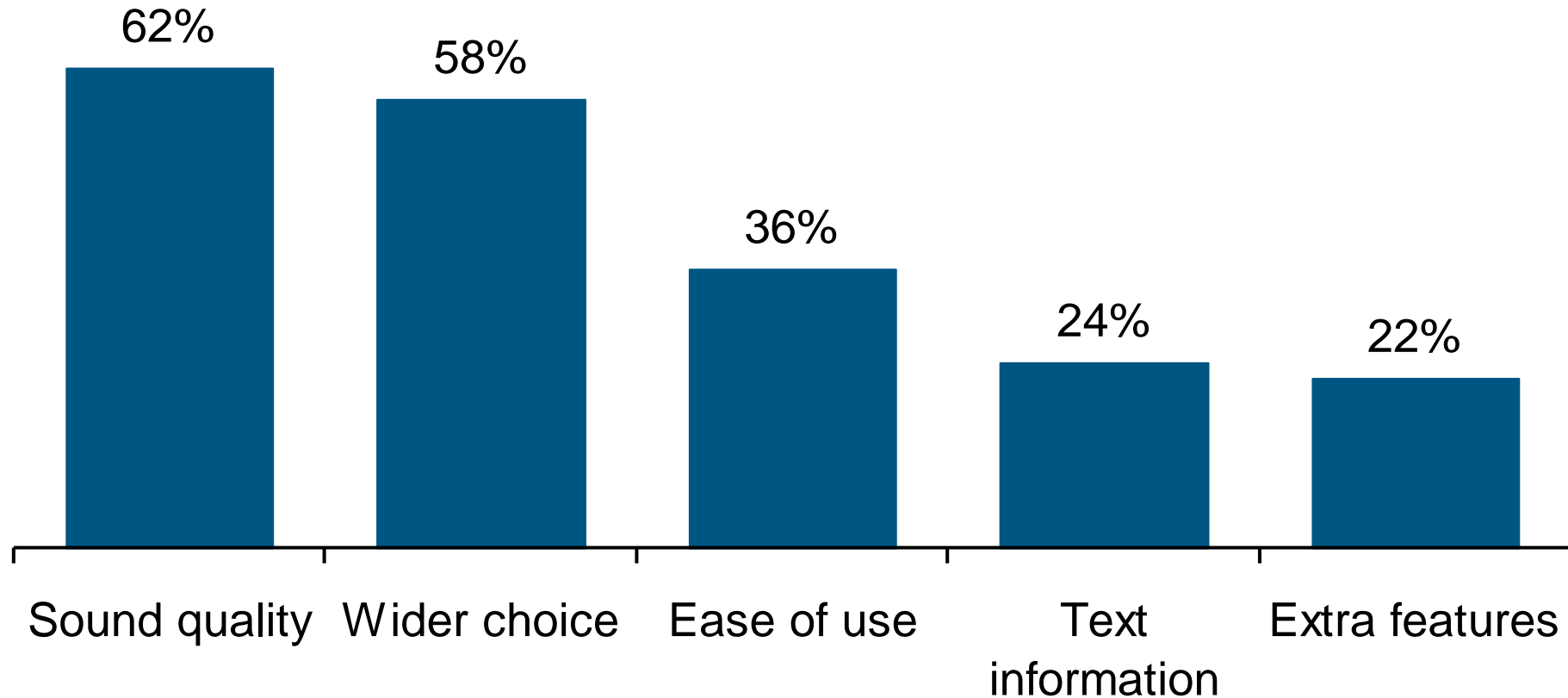
- Key threat to radio (public and private) is cloud-based music services
- Audience and advertisers require innovation – difficult on FM
- DAB allows innovation without destroying existing business models

DAB brings benefits for all



Digital broadcast offers range of benefits

UK, % benefits of digital radio



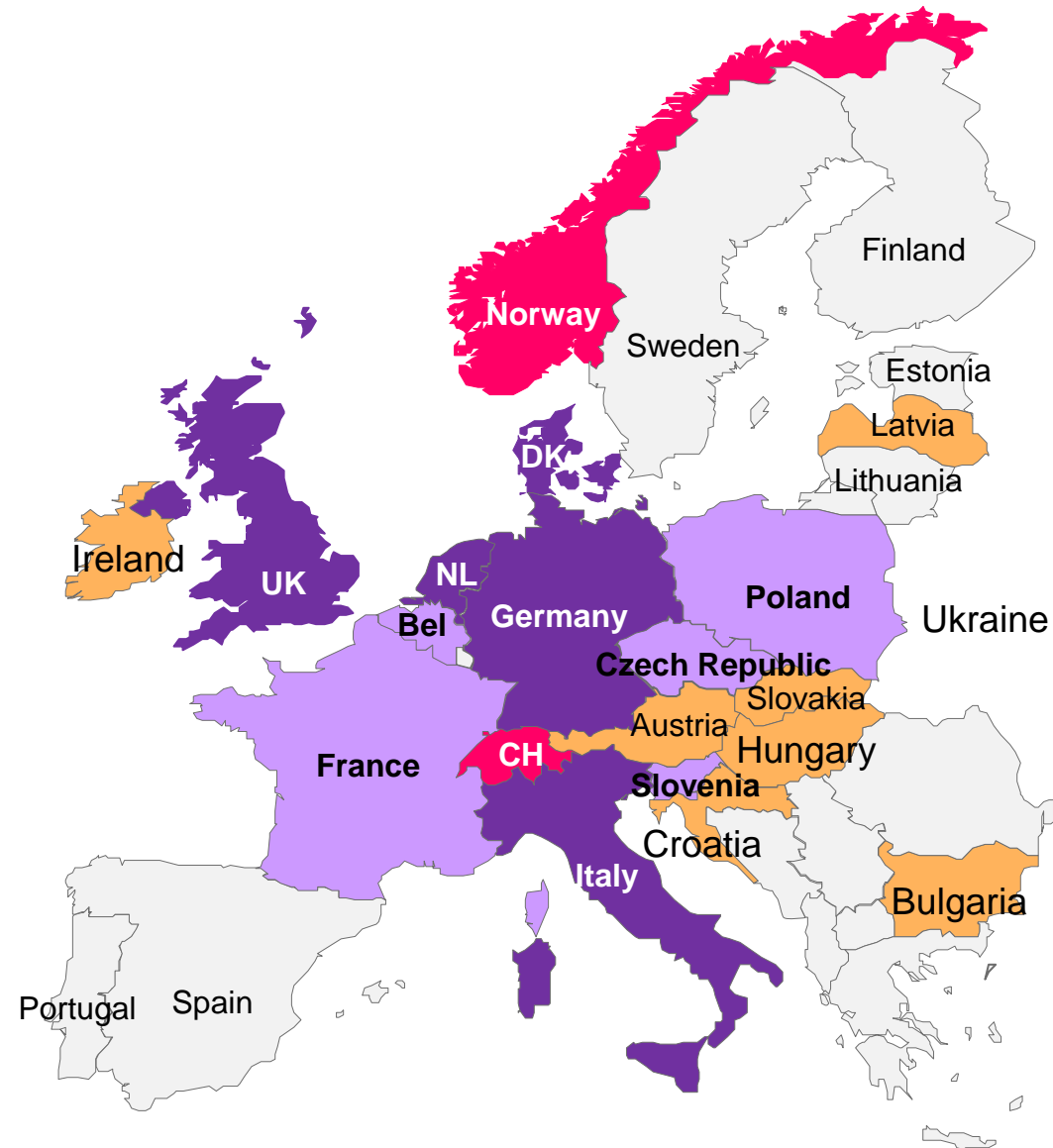
38 countries with DAB services on-air

418m people can receive DAB

Over 55m DAB receivers sold

DAB is established across Europe

-  *Date for DSO*
-  *Established*
-  *On the move*
-  *Trials*



100 % DIGITAL



DAB+ in Asia Pacific



South Africa large scale DAB+ trial



South Africa DAB+ trial covering 20% population – commercial launch planned – SA leading the way for other Southern African nations

DAB+ in the Arab States



ASBU
Arab States Broadcasting Union
الاتحاد العربي للبث الإذاعي

**Arab States
Broadcasting
Union
recommends
DAB+**



Tunisia DAB+ on air since 2008, 12 DAB+ services, 20% population coverage

Qatar trial on-air

Oman pilot conducted and getting ready to launch DAB+

Jordan DAB+ trial on air in Amman today!

Saudi Arabia showing strong interest in digitising radio

Kuwait has regular DAB+ with 90% population coverage

UAE trial since 2014, 1.8m popn coverage, initiated industry consultation on DAB+ receiver specifications

Bahrein trial since 2016, 4 services, 40% population coverage

DAB+ Features

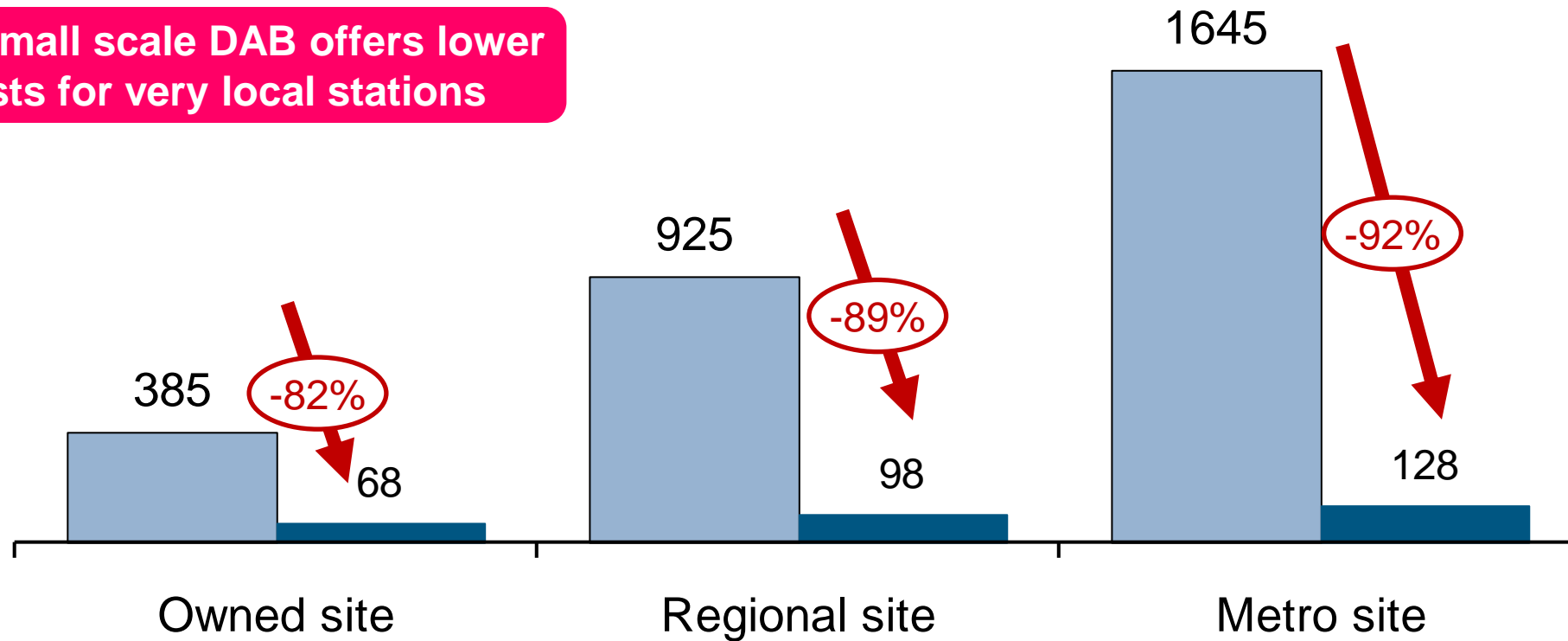


DAB+ offers lower costs

Annual cost to broadcasters of transmission per service¹, \$k

■ FM ■ DAB+

New small scale DAB offers lower costs for very local stations



IP is not the answer – especially for listeners on the move

Issue	DAB / DAB+	Internet
Free to air (for listeners)	✓	X
Cost-effective coverage (broadcasters)	✓	X
Reliable in emergency (society)	✓	X

Opportunity to launch new services

Sydney analogue services



17 services on AM and FM

Sydney digital services



Over 40 on DAB+

New services - music

UK



Classic Rock

Australia



Unsigned bands

Germany



Electronic music



Decade



Country



Classical

Specialist speech services – e.g. sports or archive

Sport



BBC
RADIO



- *Germany: live football*
- *UK: digital-only sports channel – e.g. tennis, Formula One*

Science



- *Germany: higher education for younger audiences*

Drama & comedy

BBC
RADIO



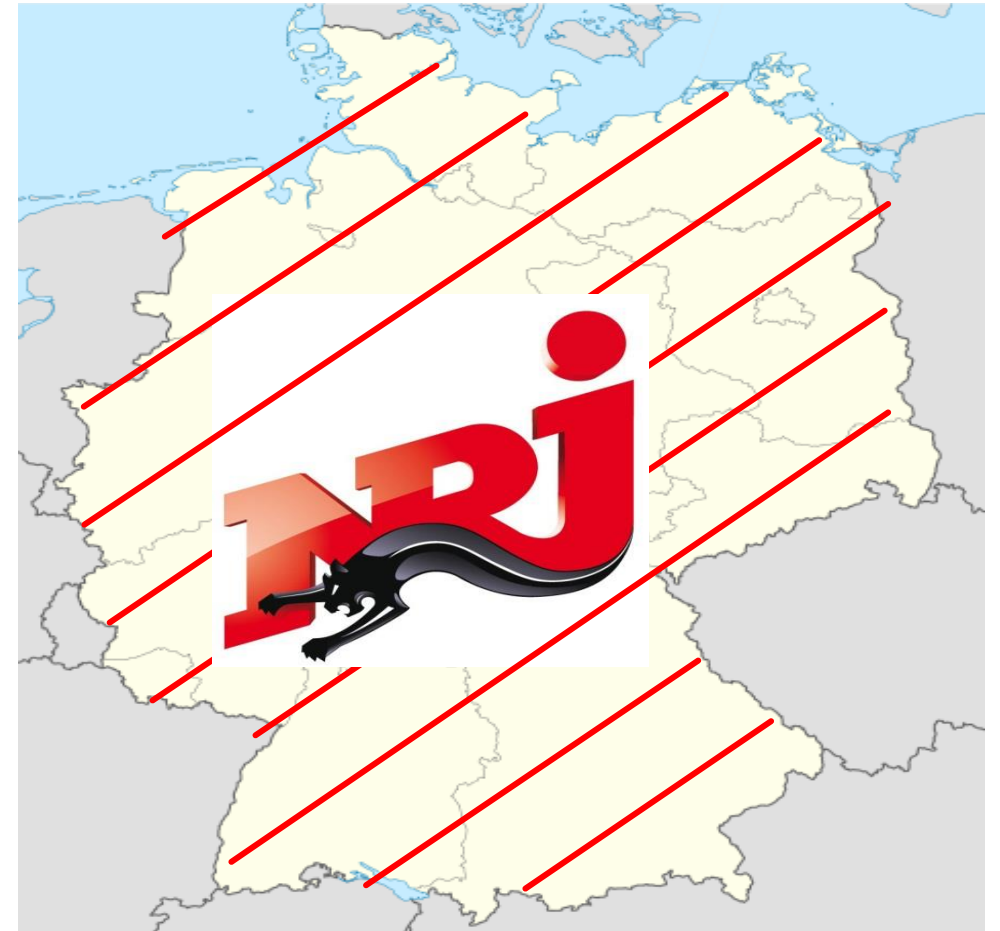
- *UK: archive from the BBC*

Potential to extend geographic reach

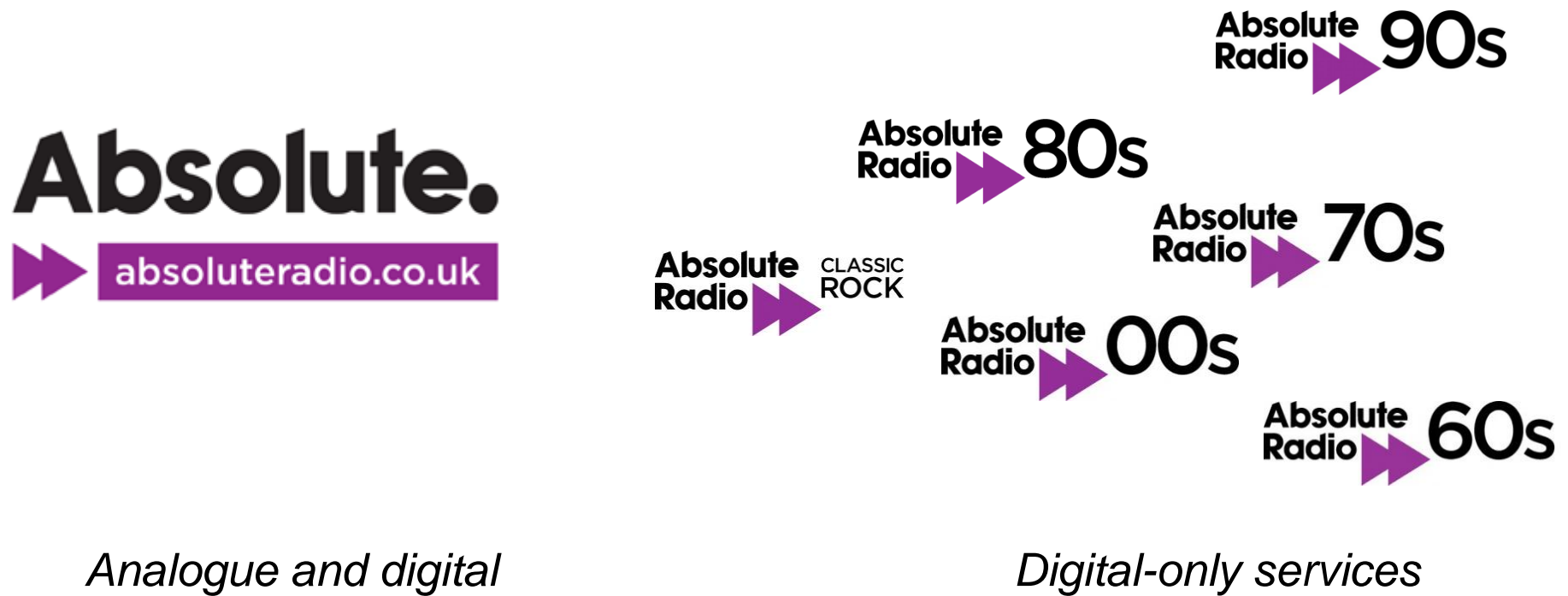
Energy on FM



Energy on DAB+



Opportunities for growth are significant



Audience up 136% in seven years

2009: ZERO Listeners
2016: 1.5m Listeners

**Absolute
Radio**  **80s**



DAB also creates opportunities for smaller radio groups, e.g. Wireless Group



Men 15-44
Live sport / talk

*"The real home
of football"*

Four national stations on DAB



Men 15-44
Live sport / talk

*"The real home
of football"*



Adults 25-44
Rock & pop

*"Popular, entertaining,
unpredictable"*



Men 15-44
Live sport / talk

*"Because sport
never stops"*



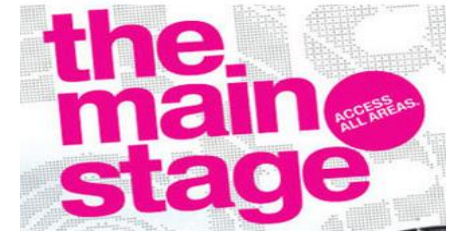
Adults 35-54
News, current affairs &
entertainment

"We'll get you talking"

Sept 16 acquired by
... for £220 million

News Corp

Pop up stations – for range of events



Smooth Christmas Radio

DAB radios are reaching the mass market

Over 55 million
receivers sold

Available from \$16

DAB+ receivers

Over 500 consumer devices - at all price points



Prices
from \$16

Colour screen devices create new opportunities

Revo Pixis



Colour images for additional information

BBC RADIO 2



On now
Jeremy Vine 12:00 - 14:00

Coming up
Steve Wright in the Afternoon 14:00 - 17:00

90elf. Dein Fußball-Radio.

Blitztabelle

Pl.	Tend.	Mannschaft	Diff.	Pkte.
1.	▲	Borussia Dortmund	+39	61
2.	—	Bayer Leverkusen	+39	61
3.	▼	Hannover 96	+39	61
4.	—	Mainz 05	+39	61
5.	—	FC Bayern	+39	61

ON CAPITAL FM TODAY



95.9 CAPITAL FM

- Photos of the Week
- Lady Gaga crowd surfing
- Top 10: Britney's cover shoot

FASHION AGAINST AIDS

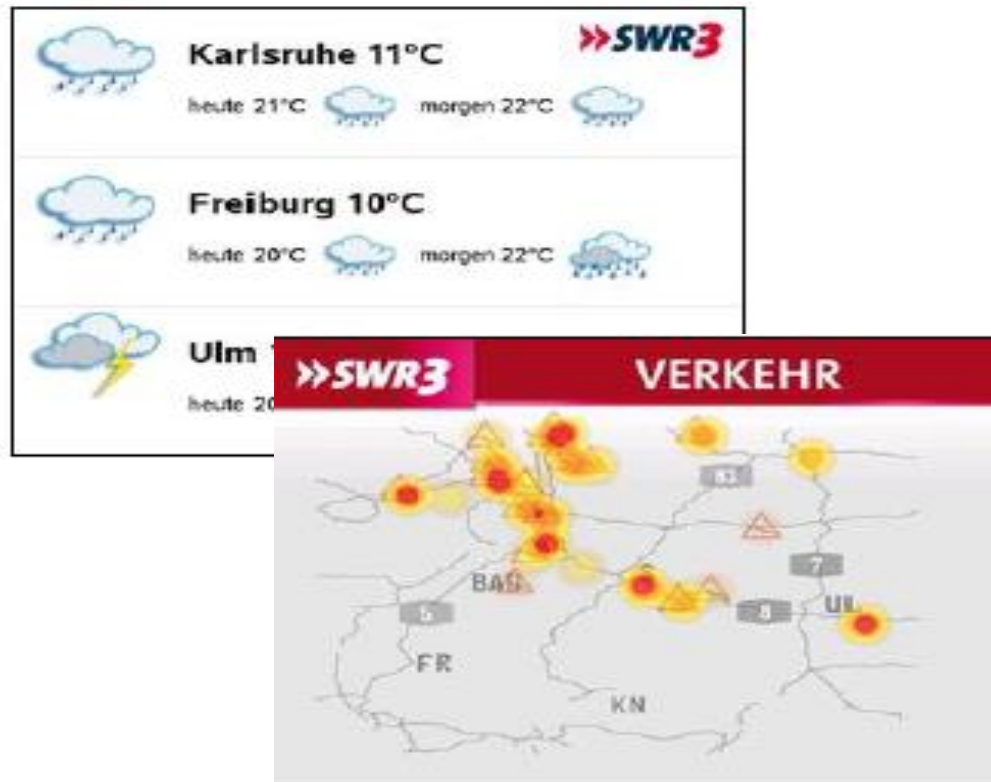


To win tickets to see Estelle live at H&M, go to capitalfm.co.uk

H&M DAA

Data services for cars

Categorised slideshow

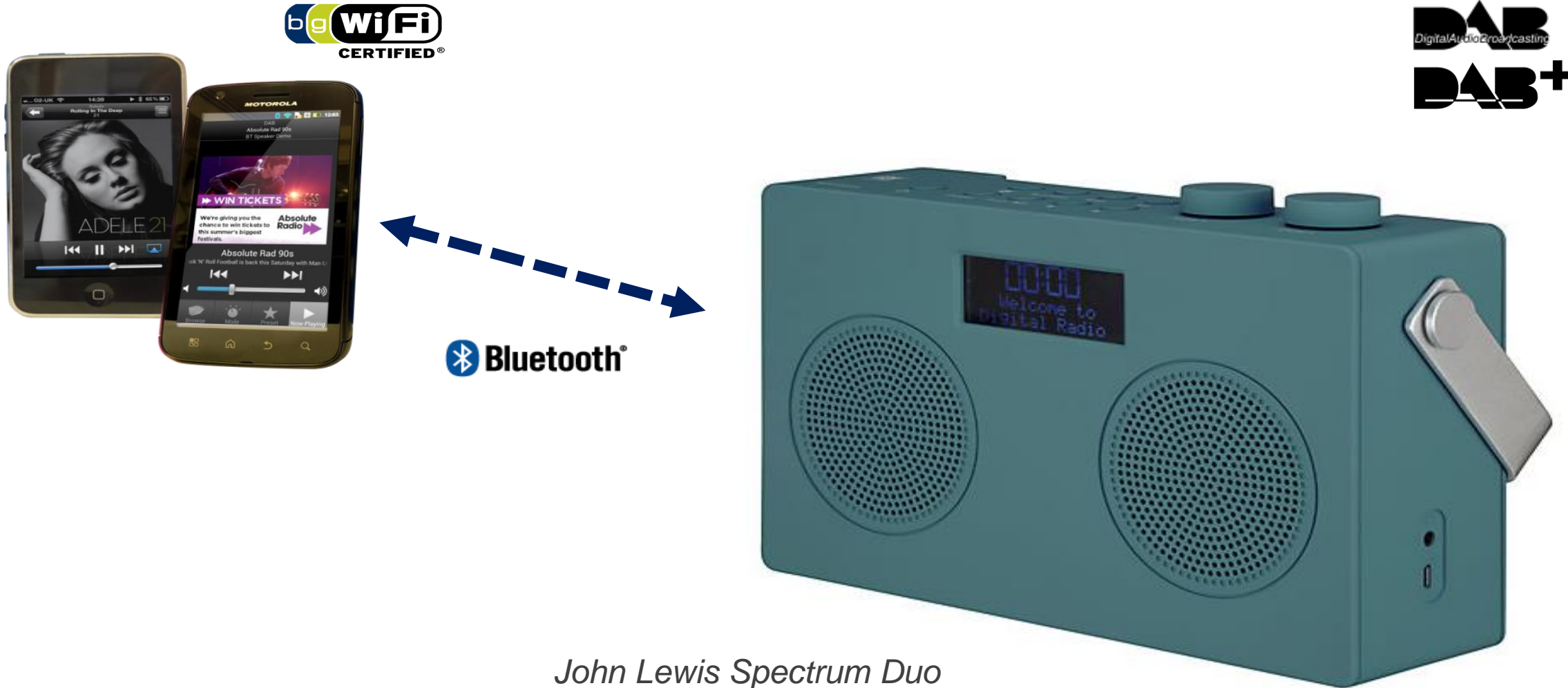


TPEG



Enhanced traffic information

Hybrid radios with Bluetooth connectivity – from €59



John Lewis Spectrum Duo

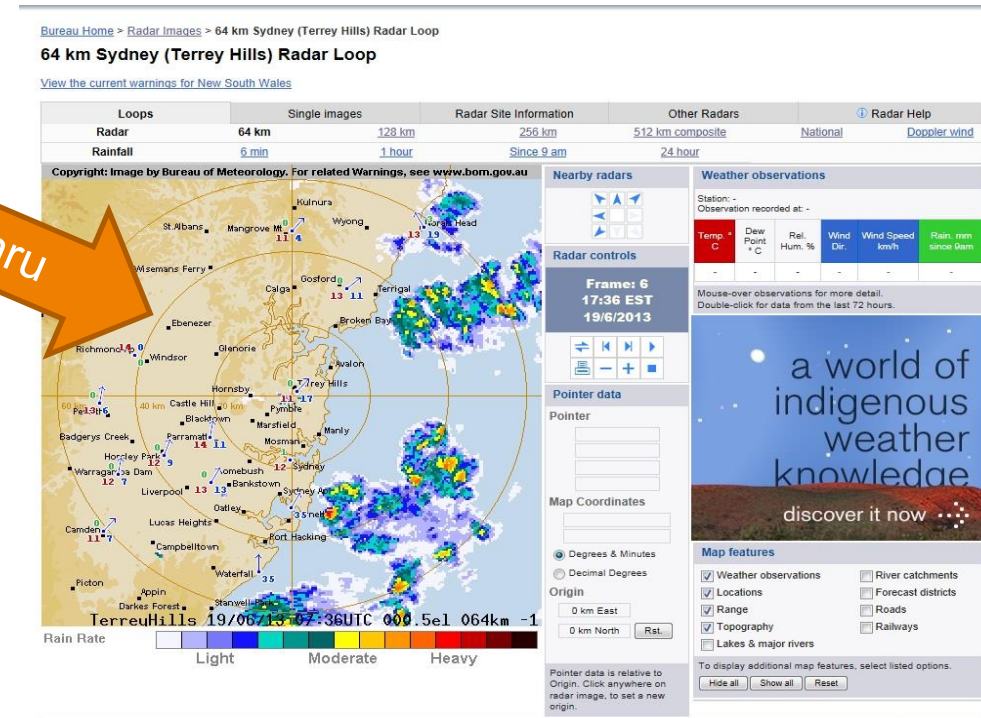
Emergency features - Hybrid Radio

DAB can provide rich multimedia to support information delivery

Text and Images can have embedded links to provide additional information if the radio receiver is connected to the internet



Accessing a website from a URL delivered associated with the information provided



Growing number of markets are considering receiver regulation



- Germany: government has proposed regulation that receivers should have FM and digital capability



- France: already has a digital receiver law*



- Italy: regulator AGCOM has called for government support



- Netherlands: Ministry of Economic Affairs has asked EU for regulation to require receivers to have FM and digital



- techUK – members supportive of regulation in favour of digital receivers

The automotive sector is a key priority





DS AUTOMOBILES



HOLDEN



HONDA



HYUNDAI



INFINITI.

ISUZU



JAGUAR

Jeep



LEXUS



MASERATI



mazda



Mercedes-Benz



MITSUBISHI



NISSAN



PEUGEOT



RENAULT



SEAT

ŠKODA



TOYOTA

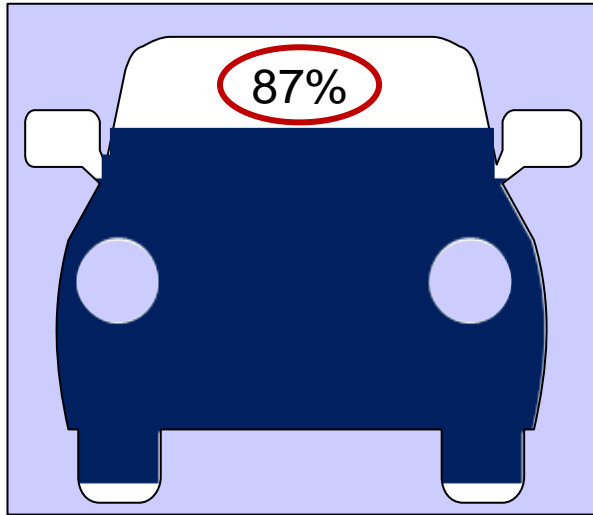


UD TRUCKS

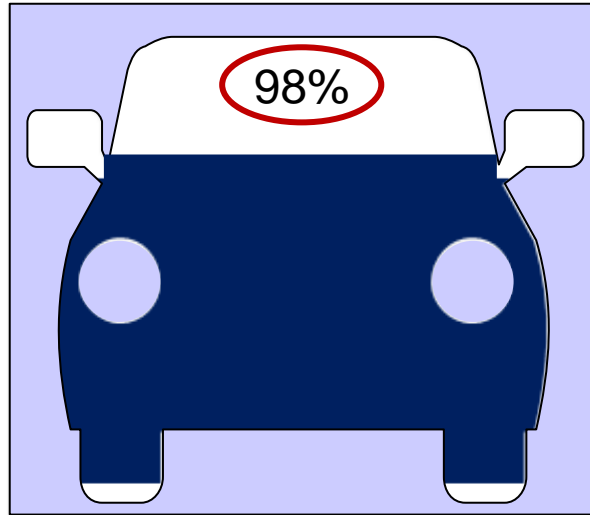


In advanced markets, DAB is widely available in cars

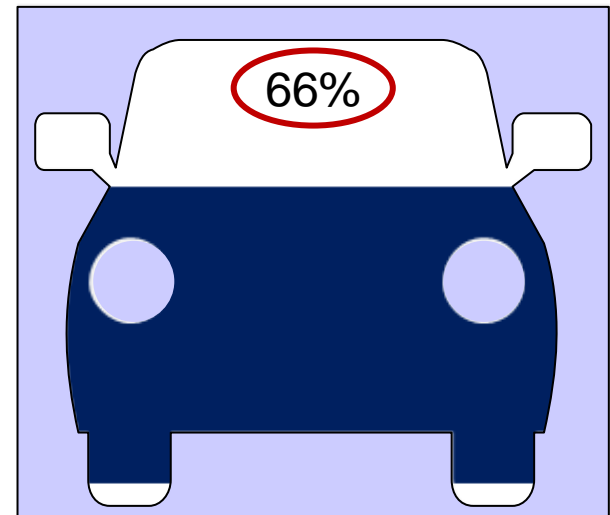
% of new cars with DAB+ as standard



UK



Norway



Switzerland

Wide range of aftermarket devices available

- 1Din Radios



- 2Din Radios



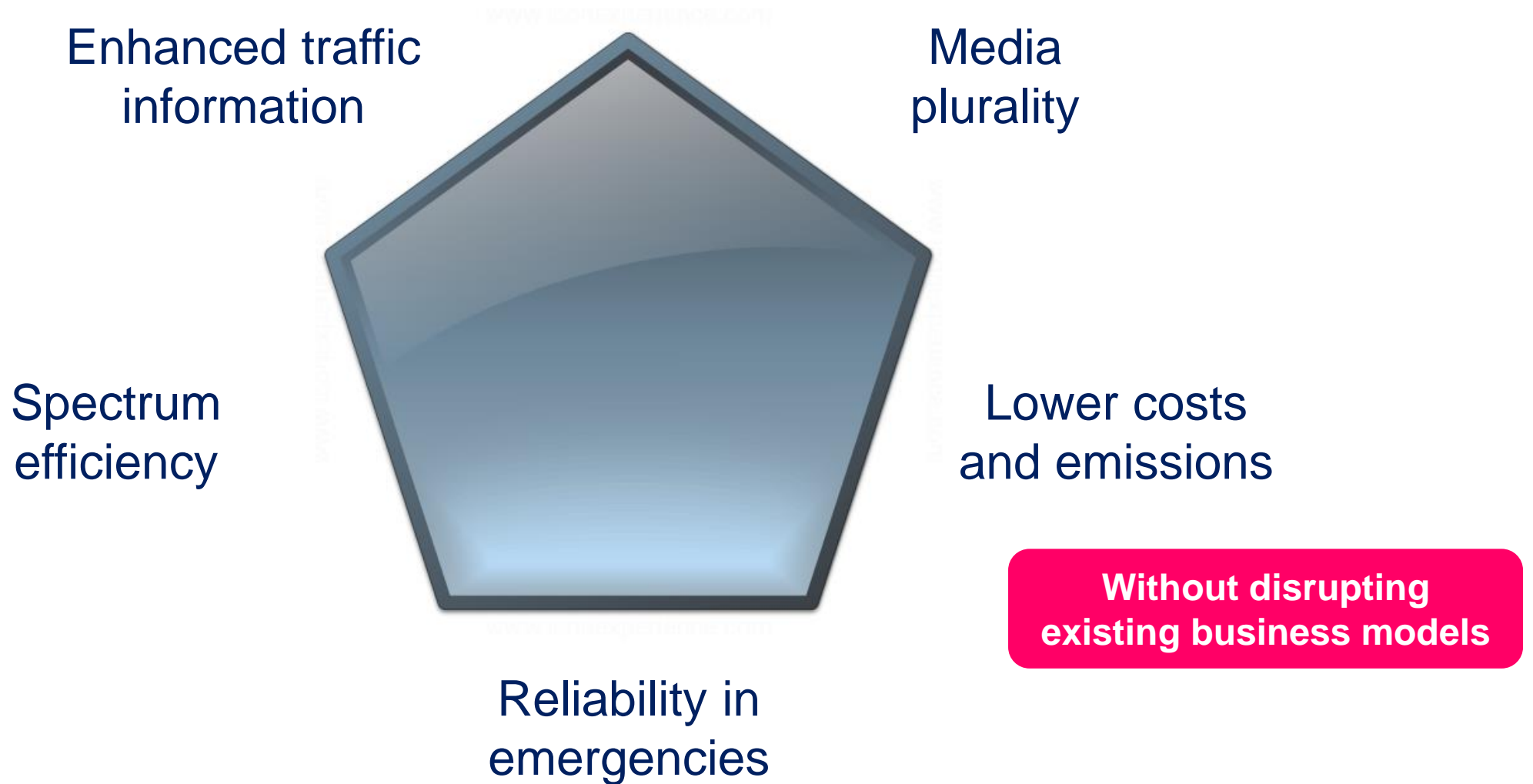
- Dealer fit solutions



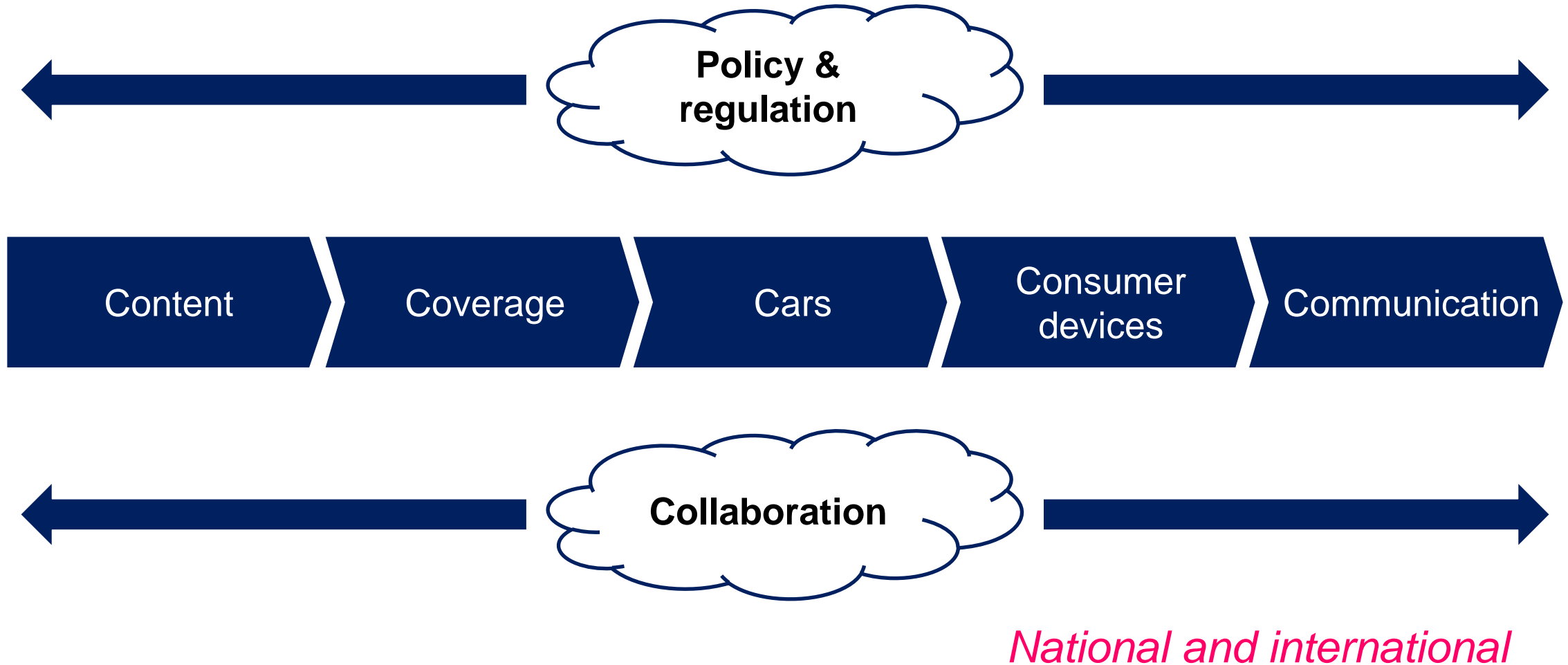
- Do it yourself adapters



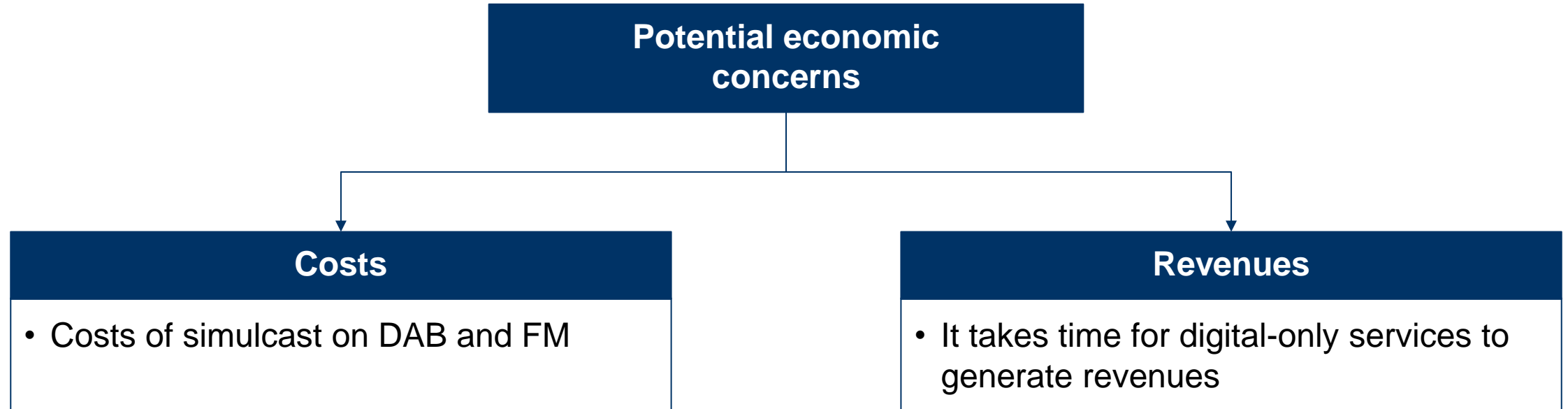
Digital delivers benefits for society



Keys to success are: political commitment and industry collaboration

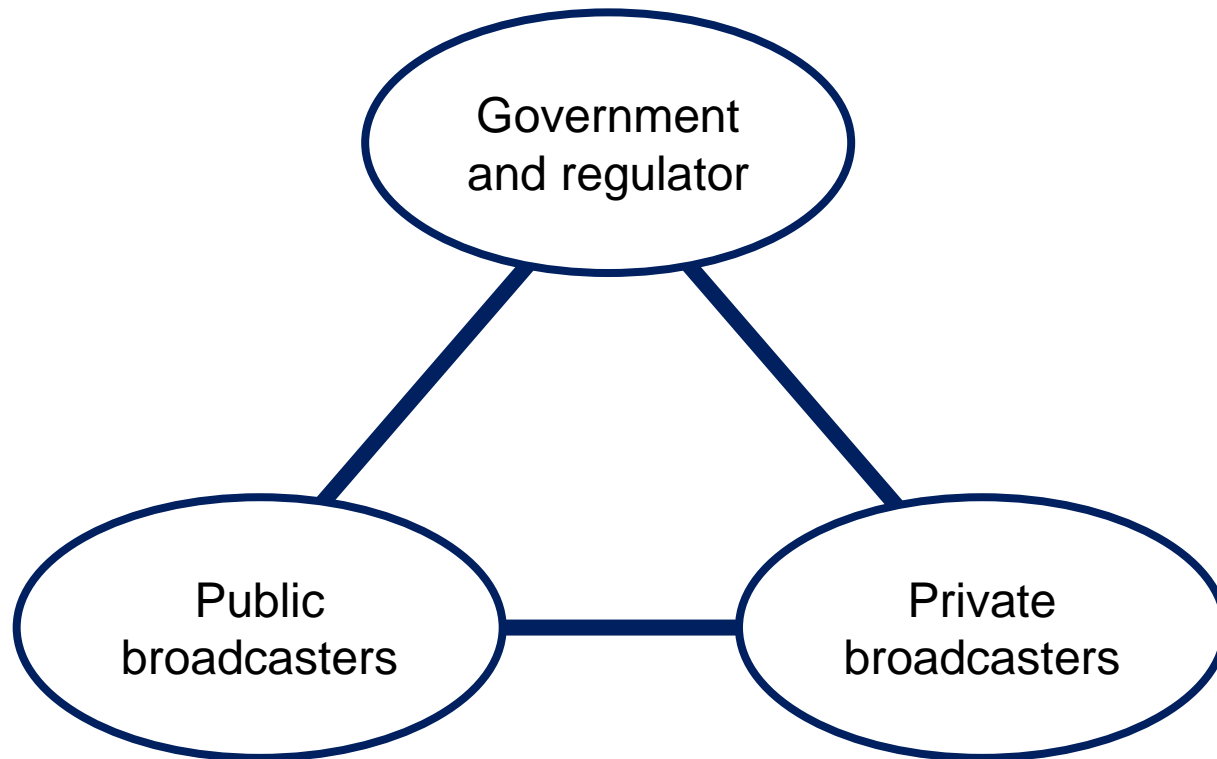


Some may be concerned about economics of going digital



Public authorities and public broadcasters can help

Digital radio partnerships



- 1** Regulatory incentives, e.g.
 - FM licence renewals
 - relaxation of ownership rules
- 2** Government contribution (subject to State Aid rules)
- 3** Infrastructure sharing: public and private broadcasters (e.g. Bavaria)

Thank you

www.worlddab.org

@worlddab

projectoffice@worlddab.org