



Digital Radio in Germany

Current Situation in Germany Concerning Radio

- broadcasting is under the responsibility of German Bundesländer
- 9 regional and 1 national public broadcaster(s)
- many regional / local and 18 national private broadcasters
- networks operated by public broadcasters and MediaBroadcast



Current Situation in Germany Concerning DAB

- DAB since several years on air (start in 1995)
- VHF and L-Band spectrum has been used
- in 2006 coverage of 80% of territory
- about 500.000 receivers in the market (>50 €)



DAB did never really take off

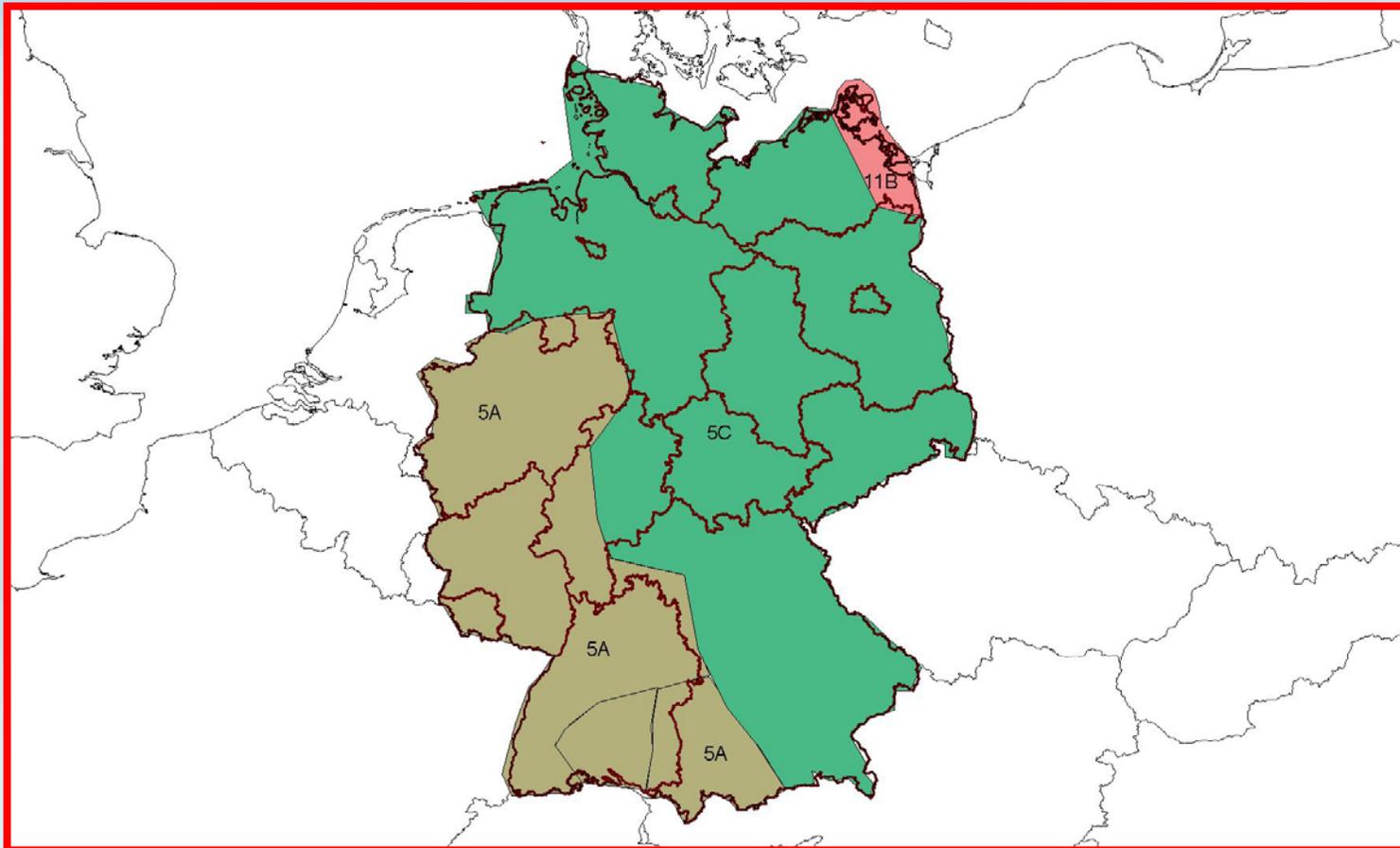
reasons: limited spectrum, limited coverage (erp < 1kW),
poor inhouse reception, costs of simulcast, ...

Re-Launch of DAB

- initiative to re-start DAB Spring/Summer 2010
- introduction of advanced audio coding (HE AAC V2):
 - audio programmes in DAB+
(existing DAB Layer II programmes will be migrated to DAB+ or DMB-Radio according to market needs)
 - multi-standard audio decoder required as provided by digital receiver profiles 1 and 2
- VHF plan entries of GE06 for DVB-T will be used for DAB family
- objectives for re-launch:
 - start with 3(4) layers, i.e. 1 national, 2 regional and 1 local (only in parts of D)
 - good indoor reception

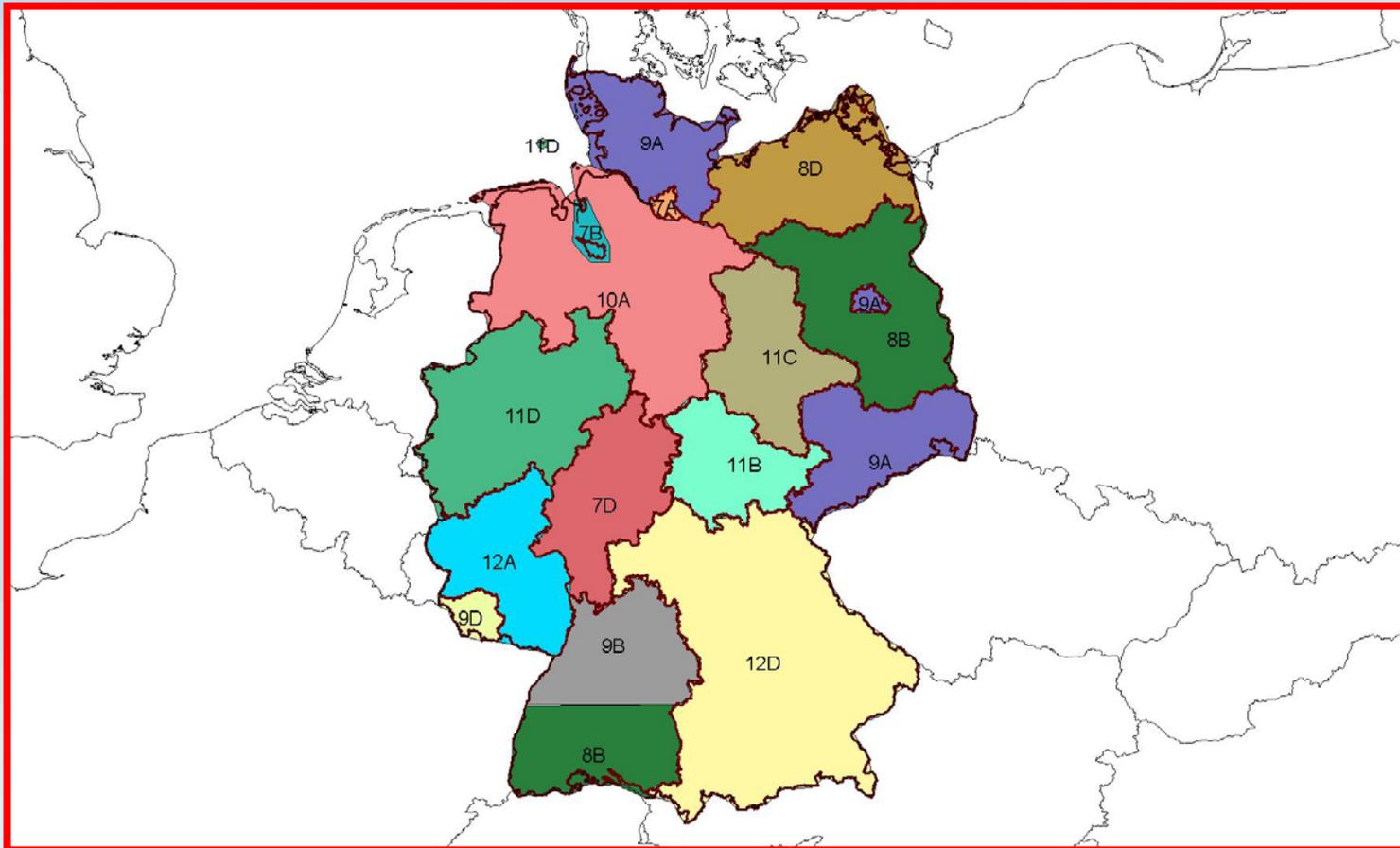
Re-Launch of DAB

National Coverage



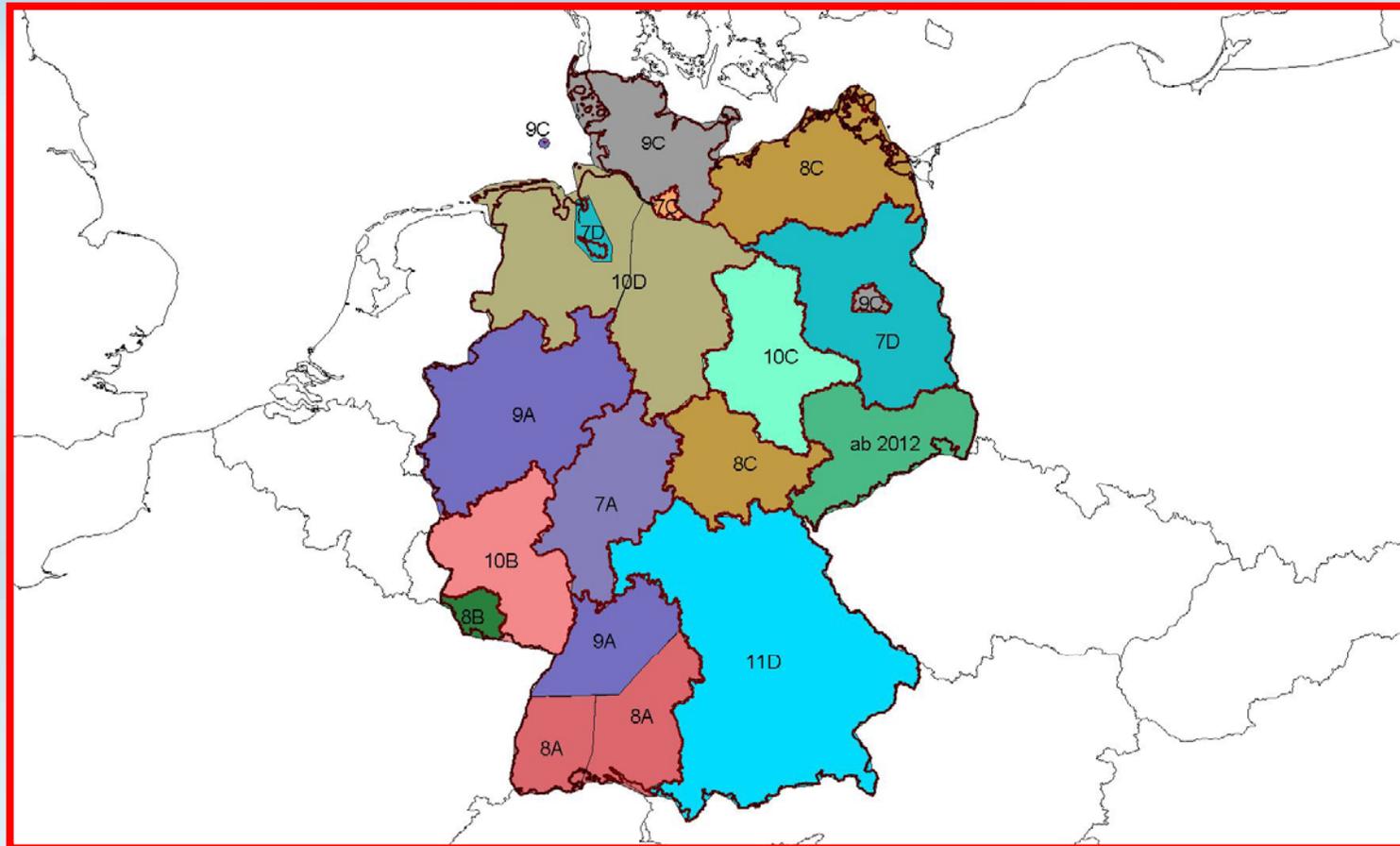
Re-Launch of DAB

First Regional Coverage (Bundesländer)



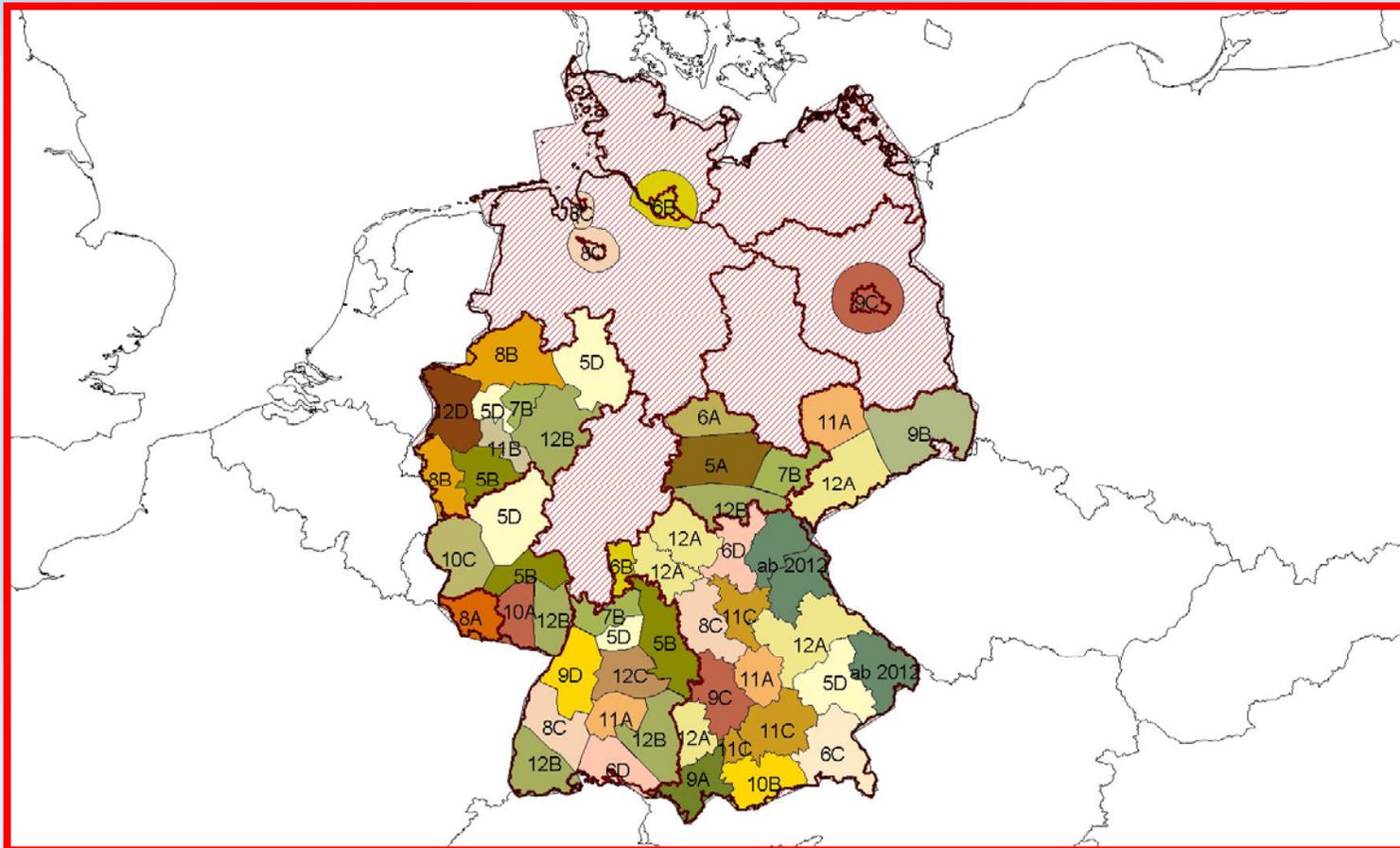
Re-Launch of DAB

Second Regional Coverage (Bundesländer)



Re-Launch of DAB

Local Coverage



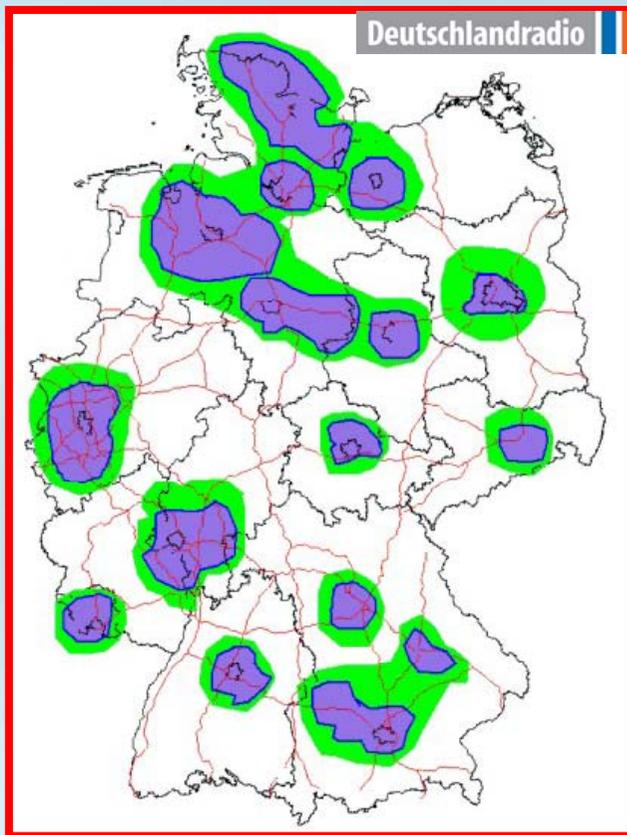
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- **graduated roll-out: densely populated areas first, subsequent extension of coverage areas**

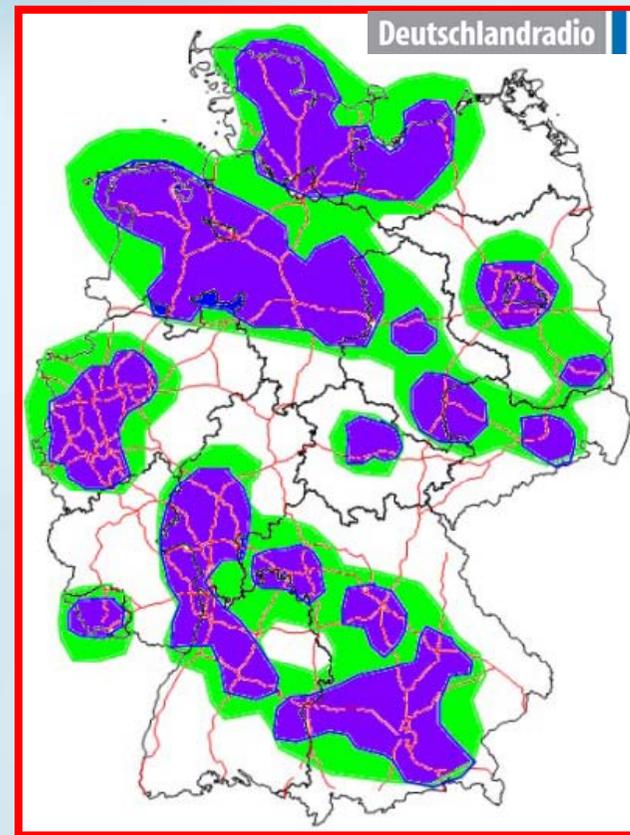
Re-Launch of DAB

National Coverage

2010



2011



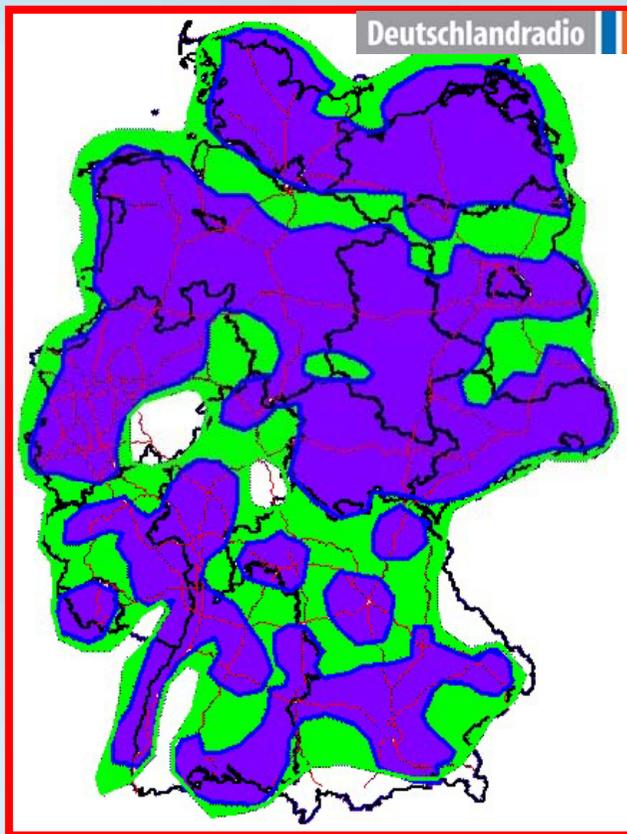
mobile reception

portable indoor reception

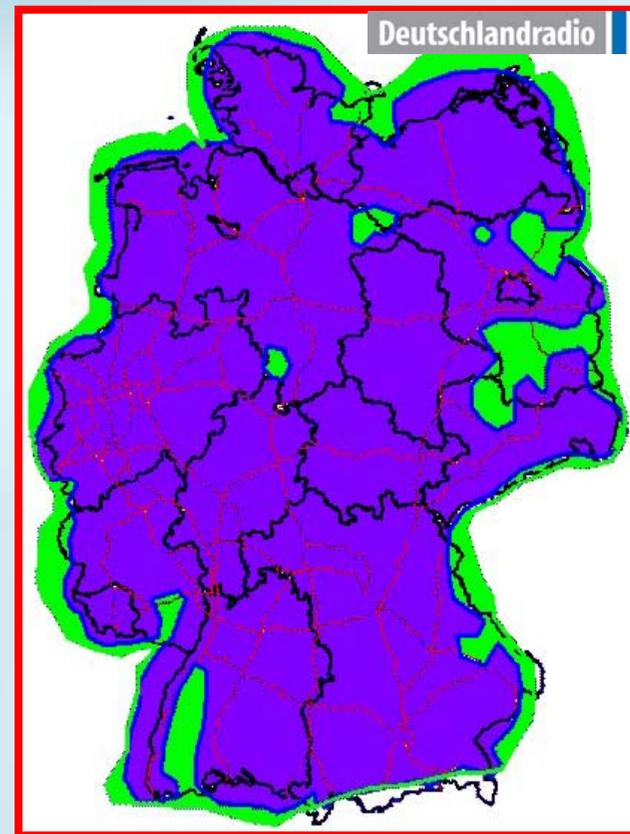
Re-Launch of DAB

National Coverage

2012



2013



mobile reception

portable indoor reception

Planned Service Features, Receiver Requirements

Priorization of service features by public broadcasters:

- **priority 1 service features:**
 - Dynamic Label DL and DL+
 - EPG
 - TMC, TPEG
 - **priority 2 service features:**
 - multimedia: slideshow (SLS)
 - **priority 3 service features:**
 - multimedia: broadcast website (BWS)
- } mandatory in profile 2
- } recommended in profile 2

Project „Future Radio“

- started off as a SWR project in cooperation with regional regulator, private BC and manufacturers with limited duration (2008/2009)
- meanwhile coordinated with all other public broadcasters in Germany
- scope: what kind of services are vital for a successful migration to digital audio broadcasting ?

- linear programmms
- multimedia (e.g. categorized slideshows)

} digital receiver profiles 1 and 2

- file downloads of interviews, background info (e.g. FileCollector, „podcast via broadcast“)

} beyond digital receiver profile 2

- FileCollector requirements will be provided to WorldDMB for further discussion and assessment
- project focus: survey of consumer acceptance and expectations



**Thank you for
your attention !**