

World DAB Automotive 2019

Turin 20 June 2019

DAB Rollout in Italy: the regulatory standpoint

Agcom's action is constrained by:

- Policy objectives set at EU level;
- > national law provisions;
- > spectrum availability and market scenario.

Regulatory policy objectives

- Strengthening freedom of expression and promoting media pluralism;
- > safeguarding competition to the benefit of consumers;
- promoting efficient investment and innovation in new and enhanced infrastructures;
- > avoiding any discrimination and optimizing the use of radio frequencies.

Main goals set by national legislation:

- To allocate one multiplex to the Audio-Visual Public Service Provider (Law n. 66/2001);
- To adopt a specific Regulation for the launch of digital radio based on specific principles (Law n. 112/2004):
 - To consider DAB as a natural evolution of analog FM radio;
 - To guarantee content pluralism and a right balance between national and local broadcasting;
 - 0 ...
- To adopt the SFN configuration as far as possible in designing the national frequency allocation plan (Decree n. 177/2005).

Spectral resources availability and market scenario

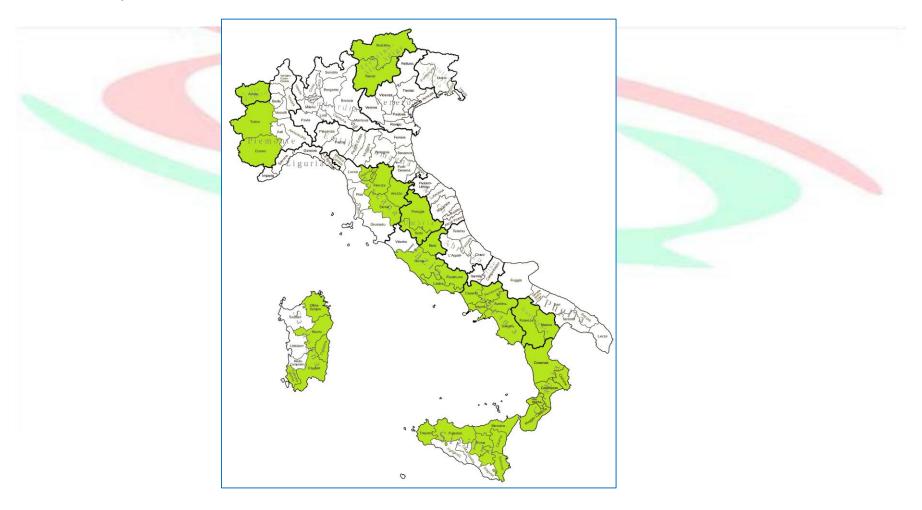
- ➤ WRC/RRC and multilateral international agreements: VHF III spectrum availability;
- > DTT vs DAB: spectrum allocation among different Media services;
- > TLC vs Media: evolving spectrum allocation due to markets evolution;
- Analog FM radio vs DAB: market needs and timeline of market developments.



- ➤ Digital radio launch phase Regulation (Agcom Decision n. 664/09/CONS)
 - has created the conditions for a proper development of "DAB ecosystem" (network providers, content providers, users) by enforcing Laws provisions and regulatory principles taking into account the needs of a growing market;
 - Adapting rules to the evolving scenario: Regulation has been updated in 2013 and 2016 and has just entered in a new updating phase.
- > Frequency allocation planning
 - 39 service areas (Agcom Decision 465/15/CONS);
 - <u>actually planned: 16 out of 39 service areas</u> due to spectral resources shortage;
 - 3 national multiplexes (1 for PBS and 2 for private network operators);
 - 1 to 5 local multiplexes for each planned service area.



> Service areas planned to date





- ➤ Law n. 145/2018 has introduced important changes:
 - VHF III band mainly allocated to DAB (DTT use must be residual);
 - DTT Public Service multiplex must be moved to UHF band (the deadline is June 2022);
 - Frequency planning must be based on Ge 06 and successive international agreements.
- ➤ Law n. 205/2017 can give a boost to DAB market evolution:
 - Radio receivers must include DAB technology.

Ongoing activities:

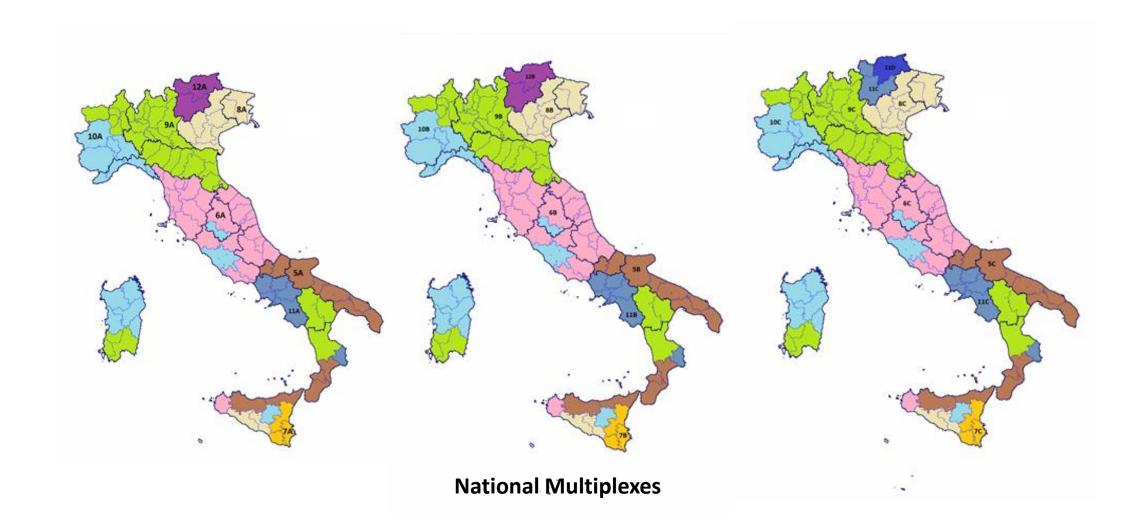
- International coordination: Agcom cooperates with Ministry of Economic Development to the bilateral/multilateral international negotiations aiming to agree on a fair distribution of VHF III blocks (principle of equitable access)
 - scope: being able to rationalise national networks planning (by maximizing SFN configurations) and to maximize the number of planned local networks;
 - state:
 - well advanced with neighbouring administrations of West side (France, Monaco, Vatican State) and South side (Malta);
 - o to be started (on July) with neighbouring administrations on East side (Adriatic and Ionian countries);
 - o agreements signed with neighbouring administrations on North side (Austria and Switzerland) in 2018.



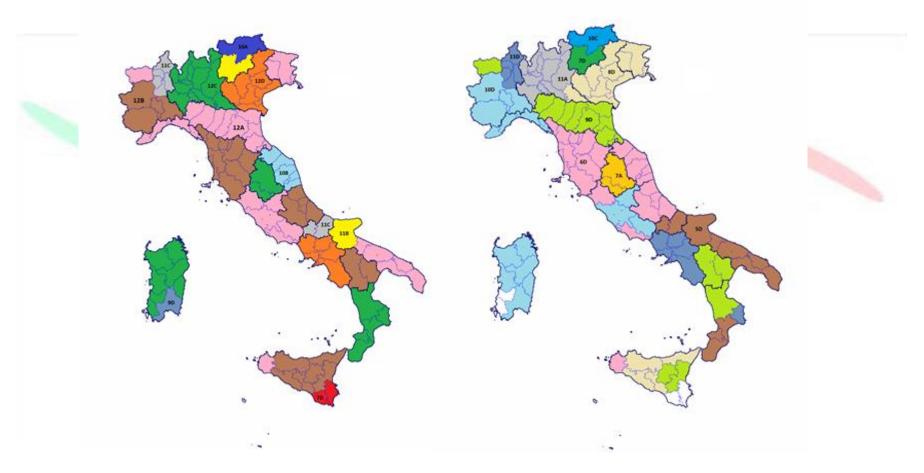
- ➤ New frequency planning (started with Agcom decision 13/19/2019)
 - Extending planning to all service areas (that could be redesigned);
 - using only resources coming from Ge 06 and following international agreements;
 - maximizing SFN configurations for national networks;
 - adopting an appropriate frequency re-use (no correlation between different networks);
 - maximizing the number of local multiplexes (also through a second level planning);
 - state: to be completed by the end of the year, even in case of pending coordination agreements with East side neighbouring administrations. If needed, there will be a review clause for the East side planning.
- ➤ Updating DAB launch phase Regulation (public consultation started with Agcom decision n. 223/19/CONS)
 - Scope: adapting rules to the evolving market scenario (growing service penetration).



What can be done right now by using Ge 06 coordinated resources



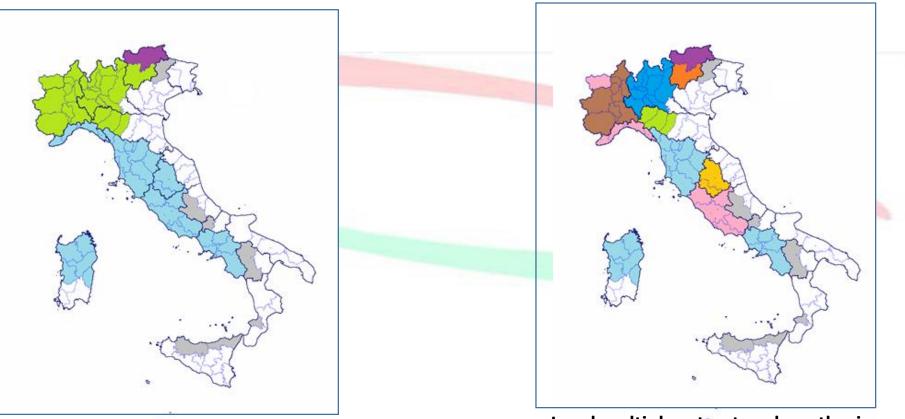
What can be done right now by using Ge 06 coordinated resources



Local (mostly regional) Multiplexes



What can be done with additional resources coming from international agreements



National multiplex structure hypothesis based on West side international agreements

Local multiplex structure hypothesis
based on West side international agreements
Note: same color does not imply same frequency