

# ADN – Marseille 2017



# Association de Diffusion Numérique

- **Status:** French association ( law 1901 )
- **Our tasks:** broadcast service for non-commercial community radios
- **Location:** Marseille in southern France
- **Start up:** June 2014
- **Aim:** Keep broadcasting as a free and accessible media for non-commercial and cultural exchange, making DAB development with open source technologies (Open Digital Radio)

# Location of main DAB transmitter

- Site: Le Petit Sanguin
- 13240 Septèmes-les-Vallons, France
- Altitude of site: 553 m
- Altitude median of antenna: 578 m
- N: 43° 23' 20,59"      E: 5° 24' 44,93"
- Effective radiated power authorisation: 4 kW  
actually 2,5 kW increase to **4kW on March 2017**

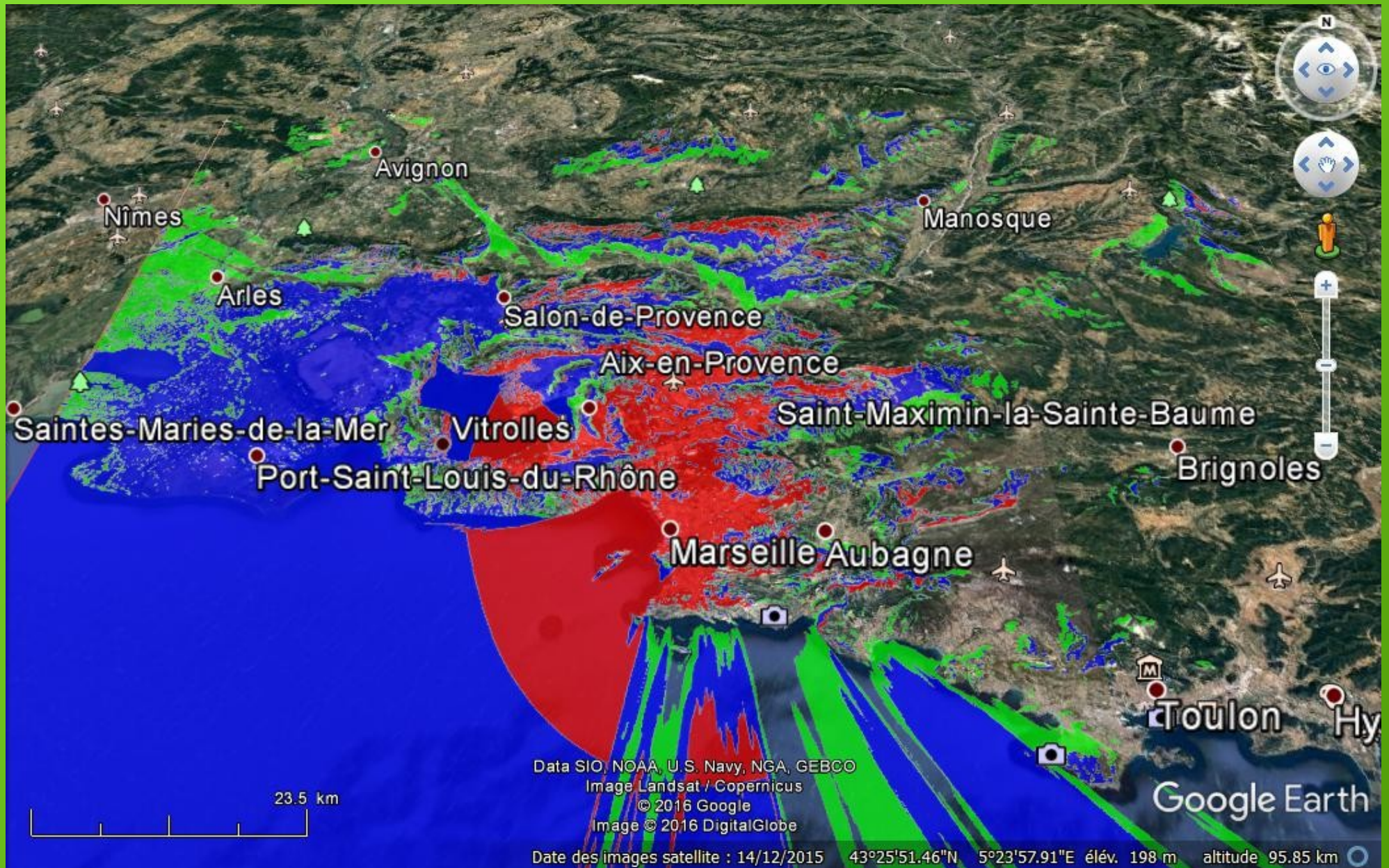


# Location of ADN Marseille France





# ADN-DAB 8C 199.360 MHz 4 kW erp coverage area 2016





# Coverage with 67 dB $\mu$ V/m red area





# DAB local allotment in Marseille



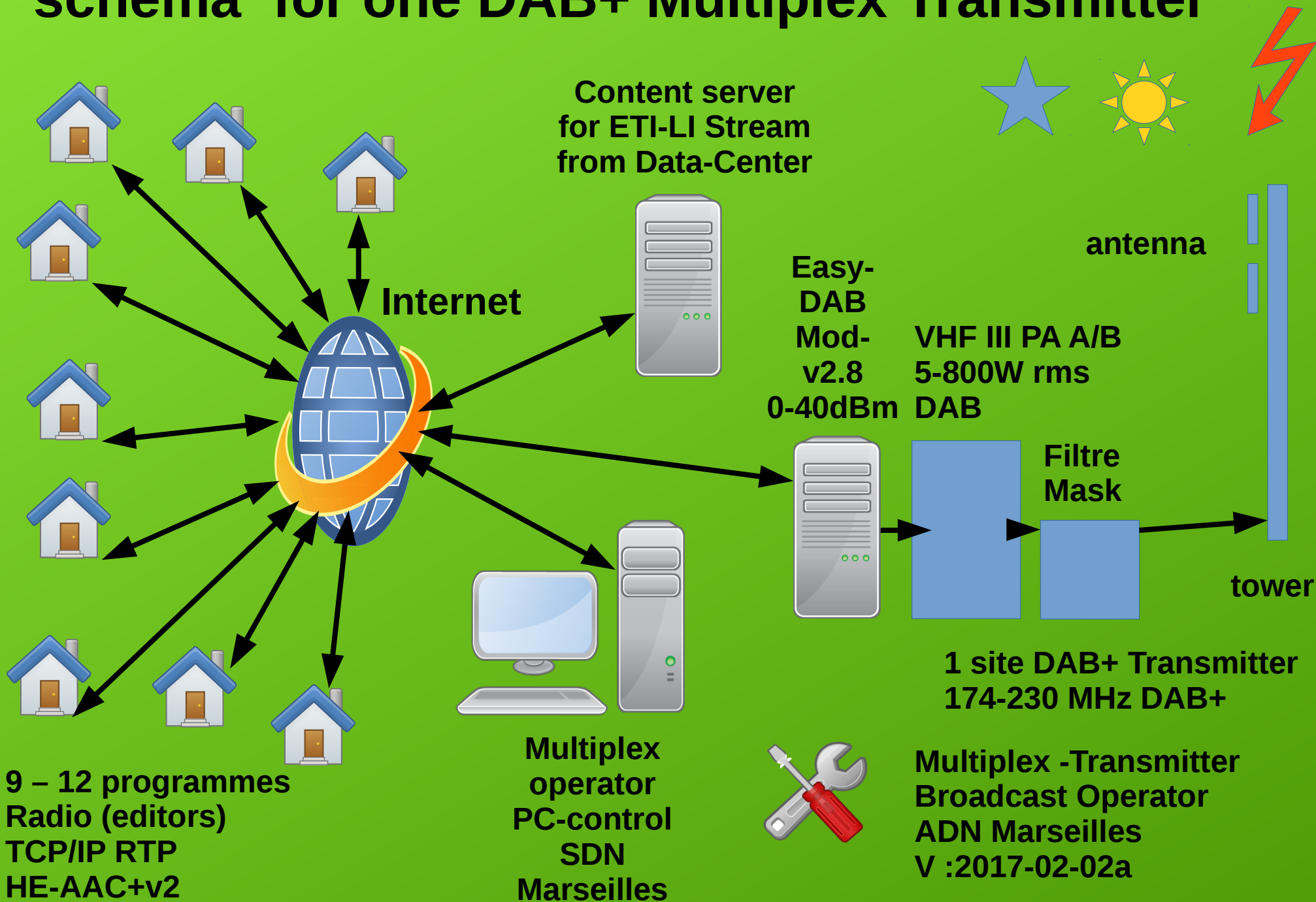
# Deployment preview for 2017/18

- New implementation of SFN DAB transmitters in the area of Aubagne, Cassis, and Sanary-sur-Mer
- Consulting for other coverage areas are available





# schema for one DAB+ Multiplex Transmitter





# ADN-DAB transmitter tower antenna systems



# Editors in the local DAB Multiplex 5

- 1) Radio AYP – (Armenian community Paris)
- 2) Radio RCOM - Culture Outre Mer - Marseilles
- 3) Radio Galere – Marseilles divers communities
- 4) Radio Garlaban - **Off Air - Free**
- 5) Radio Grenouille – Marseilles
- 6) Radio LINA - Marseilles
- 7) Radio JM – Juif community of Marseilles
- 8) Radio Neo - PARIS
- 9) Radio Zinzine – Marseilles – Aix-En-Provence - Alpes-de-Haute-Provence
- 10) **Free**
- 11)
- 12)



# ADN – DAB development:

- Open new sites for small-scale DAB transmitters to cover the whole allocated areas
- Low cost development to keep DAB radio open for smaller local broadcasting services
- Experiments with local DRM+ service
- DAB - SFN network
- Increase audio quality with new AAC+ audio codecs in editor's production site using a single definitive encoding.

# Cassis small town in eastern border of the local allotment of Marseille





# Sources and references:

- Allotment kml data : <http://csa.fr>
- Radio mobile Roger Coudé, coverage area calculation [www.cplus.org/rmw](http://www.cplus.org/rmw)
- INSEE data for calculation of inhabitants in the covered area : <https://www.insee.fr>
- QGIS calculation : <http://qgis.org/fr/site/>
- Google Earth for maps: <https://www.google.fr/intl/fr/earth/>
- Libre Office for design : <https://fr.libreoffice.org>
- CTR Marseille for advice : <http://csa.fr>
- Open Digital Radio's contribution towards our development : [www.opendigitalradio.org/fr/](http://www.opendigitalradio.org/fr/)
- Thanks to all other collaborators

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