



DIGITAL RADIO IN FRANCE

World DMB Car Manufacturer Workshop – Hildesheim - May 27, 2009

2006-2007 : digital radio project



- The GRN (Groupement pour la Radio Numérique) was created by the main French radio broadcasters (among which Radio France, RTL Group, Lagardère, NRJ Group) and represents about 95% of the audience ratings in France.

Motorways radio operators have joined GRN too.



- All GRN members share a common vision for digital radio : not only digital sound but also rich and interactive multimedia to make digital radio a success
- December 2007: the French government chooses T-DMB as the standard for Digital Radio in bands III and L.

DMB Radio: all the quality we need

- Relies on advanced technologies
 - High sound quality at acceptable bitrate (MPEG-4 AAC)
 - Provision for multichannel sound (MPEG Surround)
 - Built-in synchronization between sound and data (MPEG-2 TS)
 - Local interactivity / use of return path if present (MPEG-4 BIFS)
- Already deployed and industrialized in one of the most dynamic country in terms of consumer electronic devices
 - Multiple chipset available (mature and widespread components, easy integration)
- New receivers with screen, new functionalities and convergence with all the digital supports (mobile phones, PMP...)

The launch of digital radio

Licenses overview

- 19 areas, 30% population coverage indoor and 50% in mobility
- Band III only in first phase
- Average of 9 radios per multiplex
- 4 to 7 multiplex in each area and priority given to existing FM stations
- A separate process will be initiated for stand-alone data services (128 kb/s)
- Second phase scheduled for 2010
50% population coverage
(after Canal+ analogue TV switch-off)
- Full national coverage by 2011-2012

**March
2008**

Call for tender for digital radio licenses

**October
2008**

Reception of candidates' bids

May 2009

**Selection of candidates
(377 validated applicants)**

May 2009

Licenses awarded

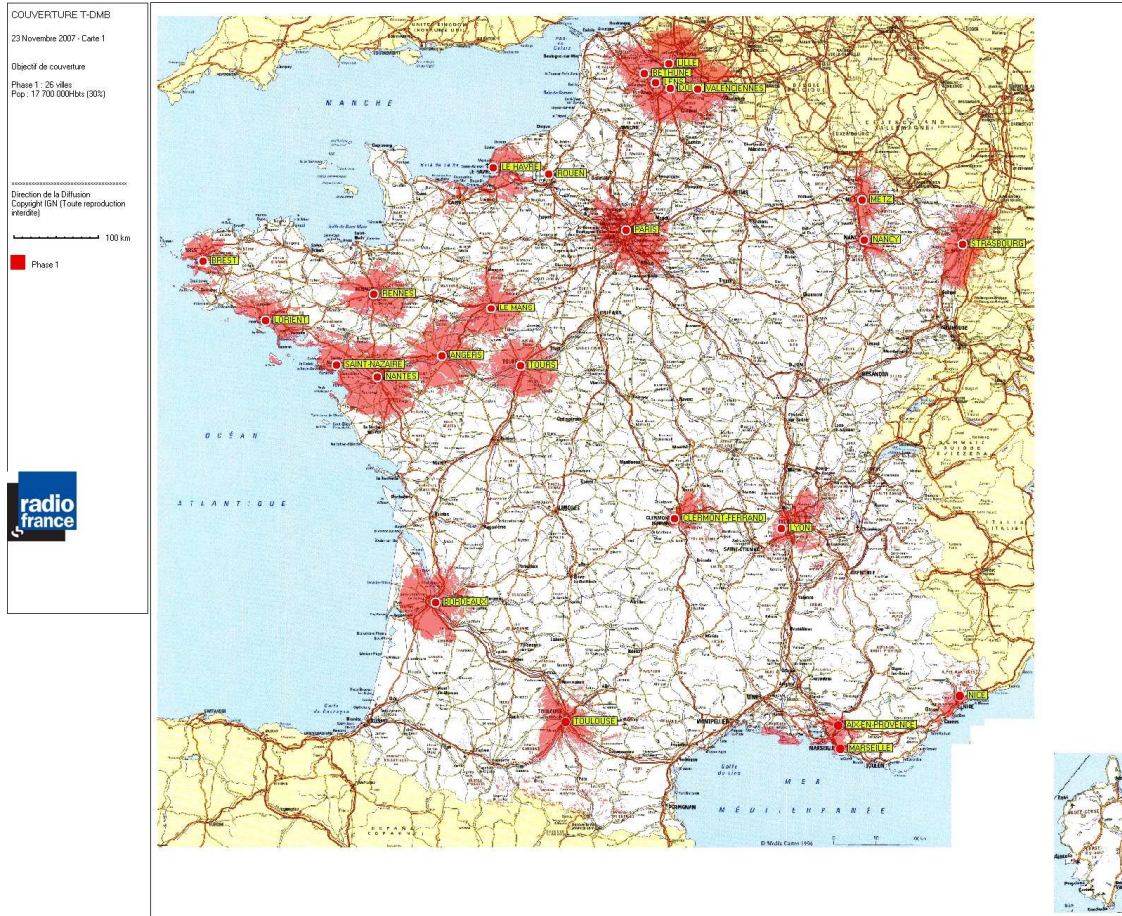
July 2009

Multiplex operator licensing

**December
2009**

Services On air

1st phase : 19 towns



1 ^{ère} phase Population couverte	
Angers	227.000
Bordeaux	720.000
Brest	188.000
Clermont-Ferrand	292.000
Dijon	214.000
Le Mans	225.000
Lille	1.093.000
Lyon	1.555.000
Marseille	1.069.000
Metz	237.000
Nancy	305.000
Nantes	553.000
Nice	672.000
Paris	7.830.000
Rennes	328.000
Rouen	320.000
Strasbourg	534.000
Toulouse	673.000
Tours	252.000

Digital Radio: implementations

The GRN (Groupement pour la Radio Numérique), the SIMAVELEC (Syndicat des Industries de Matériels Audiovisuels Electroniques) and TDF put together a white Book on digital radio, published on June 24, 2008 and updated on March 17, 2009.

« Technical specifications for DMB digital radio deployment in France »

http://www.simavelec.fr/dossiers_traites.htm



The purpose of this document is to propose the technical recommendations needed for the deployment of DMB radio services in France. The intend is to focus on the specific parts of the T-DMB standard that will be used to build radio services in France so that radio receivers manufacturers can take full advantage of available digital radio features.

In November 2008, WorldDMB has updated the DMB specification to allow for the implementation of DMB Radio (TS 102 428 v1.2.1) :

- DMB Radio definition
- Support for DLS
- FM/DMB switching (16bit Service Identifier)

RANUTER terrestrial digital multimedia broadcasting

... a collaborative project
launched in May 2009 in order to...

- Promote T-DMB technology & its associated business model through operational implementations of innovative multimedia services
- Experiment on French motor-ways new services increasing road safety and mobility
- Prototype new car-integrated devices providing drivers with value added information services

A project approved by the French Automotive Cluster MOV'EO and supported by the Ministry of Economy and Industry and the Normandy region



The radio receivers

- Success factors in France : advanced services and better sound quality
 - Visual radio is key : **color display** is necessary
 - Interactive services are integral part of our vision for digital radio : **BIFS is an essential requirement**
 - Optional surround sound (MPEG Surround) for **relevant receivers**
- As a result French market will require profile 2 & 3 receivers

March 5, 2009 French law :

- **1st September 2010**

Obligation to insert the DMB into the radio receivers with display

- **1st September 2012**

Obligation extended to all the receivers, car radios excepted

- **1st September 2013**

Obligation extended to car radios

Update 26 May 2009

C.S.A. decisions

Candidates selected for Paris, Marseilles and Nice : services on air in december 2009

NOMBRE DE RADIOS

	Zone de Paris		Zone de Marseille		Zone de Nice	
	FM	Radio numérique	FM	Radio numérique	FM	Radio numérique
Radios privées	48 ¹	55 ² <small>Dont 7 nouveaux projets hertziens dans la zone</small>	32 ³	41 <small>Dont 12 nouveaux projets hertziens dans la zone</small>	29 ³	40 <small>Dont 13 nouveaux projets hertziens dans la zone</small>
Radios publiques	8	8	7 ⁴	8	6 ⁵	8

- New frequencies planification before the end of 2009 for a national coverage
- 2 regional calls for tender in december 2009
- 1 regional call for tender every 3 months from march 2010

Thank you

for attention !