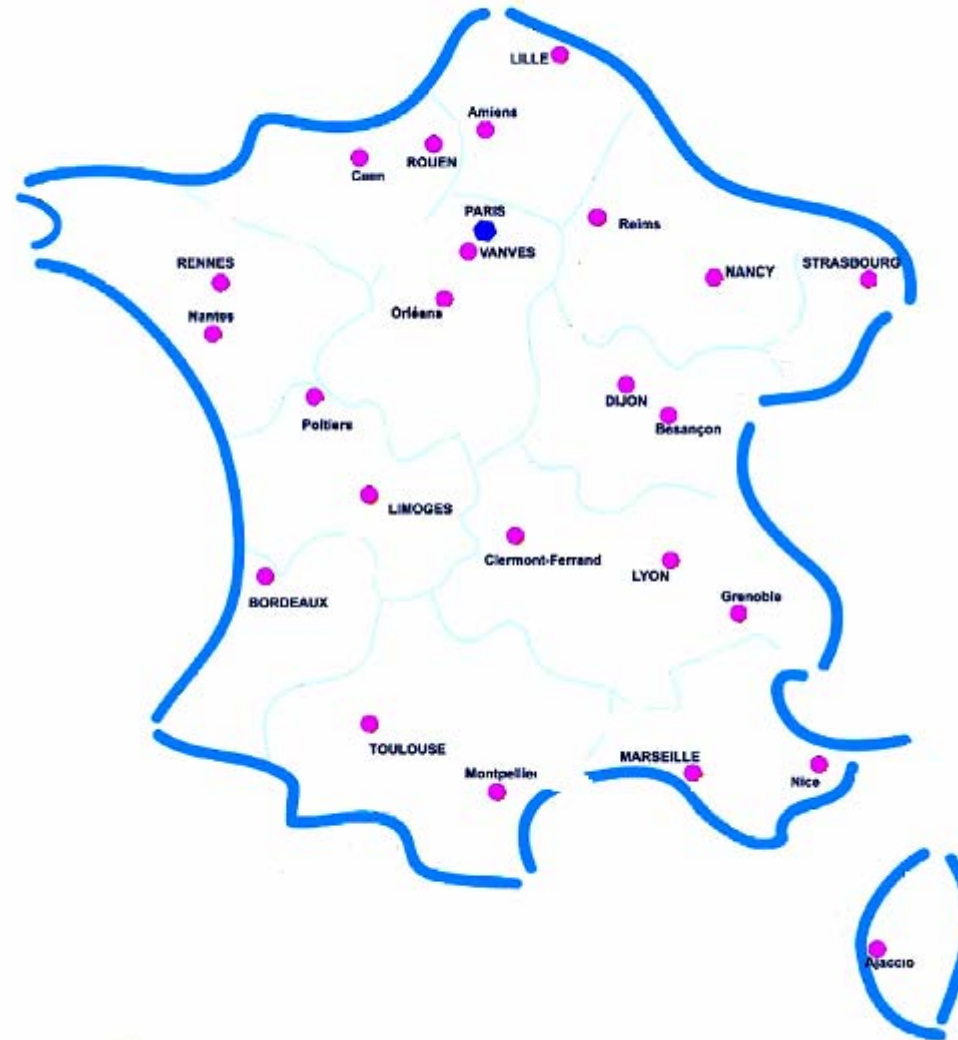




# Migration of France3 DSNG operations to DVBS2

## 1

- **France3 is operating with 20 DSNG vans :**
  - France3 is the french **regional** public broadcaster
  - **Twice a day** there are **24** simultaneous regional newscasts
  - DSNG vans transmit both rough material and live events, depending on the regional newscast schedule
  - It's common to have 5 or 6 regional DSNG vans transmitting in parallel



# 2

- **2 types of regional DSNG vans, 2.8T-3.5T range**
  - Manually operated (15 x)
    - Transmission in QPSK, in 6 MHz or 9 MHz slots
  - With automatised transmission (5x)
    - Transmission in 8PSK, in 4.5 MHz slots or in QPSK, in 6 MHz slots
- **Use of 3 x 6 MHz permanent slots**



Wiring, Cabeling 2

NO Sat

11

## 3

- **To save money**

- To replace 3 x 6 MHz permanent slots with 5 x 3.6 MHz slots

- Before : QPSK, FEC 7/8, 6800 kbit/s, roll-off 0,35
- After : 8PSK, FEC 5/6, 6800 kbit/s, roll-off 0,20

- To allow our both types of DSNG vans to lease 4.5 MHz occasional slots

- **To allow 3 or 4 extra DSNG vans to work with transmission automation**

- Obligation to have all transmissions from automatised DSNG vans occuring in the same Atlantic Bird 2 satellite transponder
  - Where France3 leases a 18 MHz permanent satellite capacity
  - Where a dedicated VSAT service is located to control the automatised DSNG vans

## 4

- **Who will confirm the operational parameters ?**
  - Which roll-off ? 0.20 ?
  - Which latency (DVB-S2 adds latency due to the 64 kbit frame structure) ?
  - Which interoperability ?
  
- **Best combination of parameters ?**
  - 8PSK, FEC 5/6, 6800 kbit/s, roll-off 0,20, with 1.4 dB less from the link margin,
  - 8PSK, FEC 3/4, 6400 kbit/s, roll-off 0,20, with a lower picture quality

## 4

- **To obtain a strong involvement from our partners :**
  - 1/ A Call for Technology, to precise what is now available
  - 2/ A Call for Tender, concerning all vehicles, IRDs, controllers
  - 3/ Operational tests, from the very beginning of the project



May 06	Jun 06	Jul 06	Aug 06	Sept 06	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07
Call for technology										
		Call for tender								
				Preliminary tests			Operational tests			
					DSNG vans transformation					
					IRDs replacement					
								3 new DSNG vans		

## 5

**■ Wrong figures**

- We need to check reel figures at different steps
  - Return on investment only with 5 slots in 18 MHz

**■ Weak interoperability**

- Not a big risk
- Mostly important to transmit towards other broadcasters
- How long before DVB-S2 being dominant ?

## 6

- **What about extra SCPC carriers ?**
  - 2 X 64 kbit/s QPSK FEC ½
    - More DVB-S2 slots means more extra SCPC carriers
  - To keep the same transmission system or not ?

## 7

- **VCM mode ?**
  - Depending on a good level of interoperability
- **ACM mode ?**
  - Really interesting for DSNG operations, but when ?
- **MPEG4-AVC ?**
  - Extra bandwidth saving
  - Allowing smaller and cheaper vehicles ?



**Merci de votre attention**