

A future-proof wireless solution for rural areas

H3G Italy

Broadband and the EU recovery

Turin - April 3rd 2009



Context and objective



- ✓ H3G is attending the Digital Divide debate, together with the other Italian Players

- ✓ Universal service commitment for Broadband: 2 Mbit/s, at least

- ✓ Key Requirements
 - Coordination: put to value today asset and planned actions (Private/Public)
 - Technology Neutrality: a mix of fixed and mobile, on a value/cost effectiveness basis
 - Future proof: the architecture must be scalable
 - Market Competition: the infrastructure must be open to different players

Focus on coordination



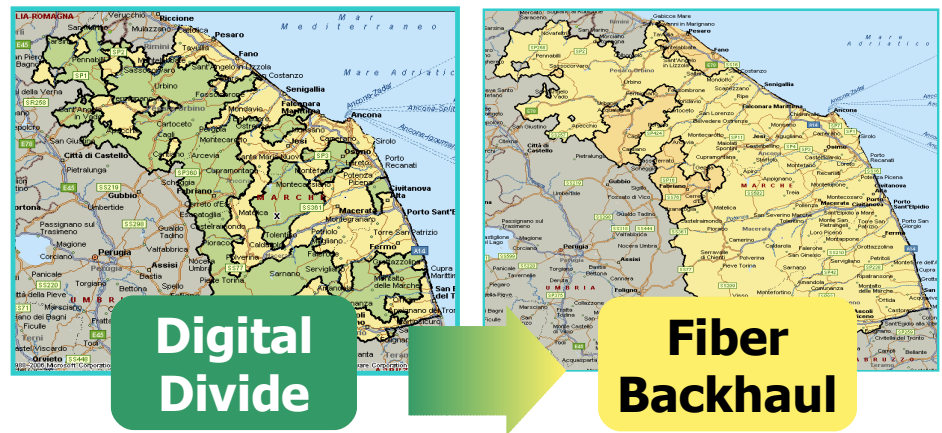
- ✓ Creation of the “National Network Database”, to properly address any further development and coordinate private and public actions in the less developed areas, thus avoiding effort duplication

- ✓ **An Example: public investments to provide fiber backhaul** to each municipality, have been recently planned in several Italian Regions

- ✓ The sparsely distributed urbanization in those Regions, **will call for additional effort on the access network**

- ✓ Any further development, must be planned to **complement and take advantage of** this public fiber backhaul

Public Plan 2008 -2011: an example (Marche)



http://www.sviluppoitalia.it/societa.jsp?area=126&ID_LINK=1626

Technology Neutrality



- ✓ “The one that fits all” logic doesn’t apply to the Digital Divide rebus
- ✓ The best wireless/wireline mix of technology must be evaluated on the time/cost/scalability space

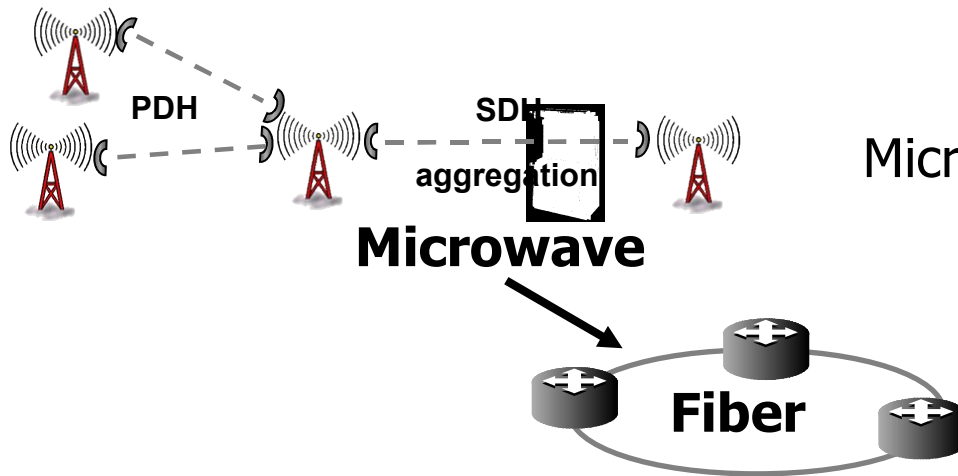
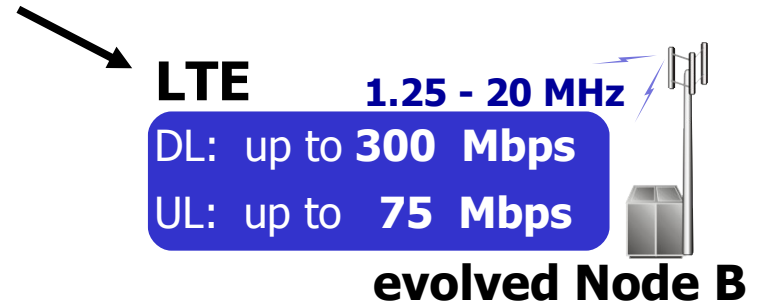
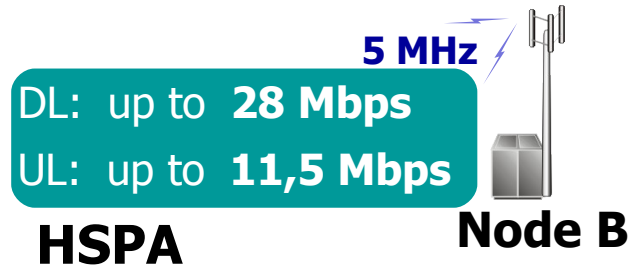
The Digital Divide rebus: wireline/wireless - private/public			
	Fixed (FTTE)		Wireless
DD Technical Profile/Case	private	private / public	private / public
backhaul not supporting BB	25%	60%	15%
remote conc./MUX	-	-	100%
long distance from the exchange	-	-	100%

Future Proof



Access Network scalability:
today, a basic offer of 7.2 Mbps

upgraded up to 300 Mbit/s
upon LTE introduction



Microwave **Backhaul** to complement the
fiber backhaul in the remote areas

... to be replaced by fiber
if market demand drives the move

Market Competition



- ✓ The infrastructure must be **open to competition**
- ✓ A **network sharing** approach is strongly recommended: a common shared access infrastructure connected to the different operator networks
- ✓ A single frequency can be shared as well, among the different player, thus further **reducing the total cost of ownership**

