



*Demand aggregation to encourage
infrastructure rollout to under-served
regions*

Daniela Battisti

Public Sector Broadband Procurement
Workshop
WPIE/OECD
Paris, 4 December 2002



Agenda

- **Public Sector Broadband Penetration and Current Activities**
- **Government Objectives and Actions**

Public Sector Broadband penetration



Geographical/ Political

- Fragmentation of urban areas (< 50 cities with more than 100.000 habitants, > 5800 with less than 5.000)
- Political trend toward federalism (administrative, fiscal, etc.). Over the past decade, there has been a progressive increase in the powers of local and regional governments previously under the responsibility of central government.

Technological/ Infrastructure

- Lack of alternatives to copper-based connections. Absence of cable networks except in few large cities
- Delay of penetration of new technologies such as WIFI and UMTS due to legislative and market obstacles
- Currently less than 20% of Public Buildings are wired

Market/ Competition

- A sufficient level of competition has not been reached in the market especially in rural areas. Currently only 6 districts (out of 104) have competitive offer with more than one operator. In 2005 new entrants expect to cover only 24 districts

The characteristics of the Italian system make enabling actions such as demand aggregation essential to develop broadband in the Public Administration



Objectives

- Brings about an **expansion in direct demand** from government offices as well as **indirect** demand from the users of the applications
- **Demonstrates the utility** of new technologies and improves the likelihood of them being taken up
- Creates a **critical mass** - including in those areas where the market is least developed - which fosters the supply of connectivity, services and applications, and reduces prices
- Cover 85%-90% of government buildings

Role

- **Ministry of Communications**
 - Legislative activities
 - WLL license tender
- **Ministry for Innovation & Technologies**
 - Legislative activities
 - Public connectivity system
 - Public Demand Mapping
- **Ministry for Health**
 - Telemedicine, Med-net
- **Ministry for Education & Research**
 - E-learning system
 - Connection for schools with wireless technologies
 - Implementation of GARR network
- **Treasury**
 - Consip tender for connectivity and digital services in order to rationalize public spending for goods and services
- **Local Administrations Regions/ Municipalities**
 - Regional plan for broadband development
- ...

**Broadband development is a priority for Italian public administration
Now the Government is pursuing a stronger coordination among priorities and actions to be implemented**

BB Digital Divide



DIGITAL DIVIDE - 2002

	N° Comuni	% Popolaz.	% Aziende	% Superficie	FO	ULL	WLL	ADSL	SAT
Zona Verde	70	13%	16%	2%					
Zona Gialla	1.078	50%	52%	23%					
Zona Rossa	6.953	37%	32%	75%					

- About 63% of the population can access the ADSL connection (over estimate), even though the availability rate is growing fast
- About 13% of the population can access services offered by the OLO through ULL (end of June 2002)
- Less of the 5% of the population can access fiber optic services

DIGITAL DIVIDE - Forecast 2005

	N° Comuni	% Popolaz.	% Aziende	% Superficie	FO	ULL	WLL	ADSL	SAT
Zona Verde	541	42%	46%	15%					
Zona Gialla	1.109	33%	31%	22%					
Zona Rossa	6.451	25%	23%	63%					

- About 75% of the population will have access to the ADSL connection
- About 42% of the population can access services offered by the OLO through ULL
- Less of the 9% of the population will have access to fiber optic services
- Less of the 5% of the population can access WLL services

Fonte: Between – Osservatorio Larga Banda



Role

- Consip is a company owned by the Treasury in charge of the **rationalization of public spending** for goods and services.
- Consip defines and implements procurement models based on public demand aggregation
- Consip mission is to rationalize public spending through several drivers:
 - Create a "best value" environment in which the public sector can purchase, being confident of the savings and the quality of goods and services
 - Maintain the autonomy of the public administration while defining their needs during the purchasing process
 - Promote the market competitiveness
 - Increase transparency, effectiveness and efficiency in the public sector purchases
- Central and peripheral administrations must purchase using the framework contract, other administrations can decide of not following Consip indications; however, in their choice, they must assure the same quality and price standards

Main activities include:

- Definition of purchasing strategies, according to context rules and guidelines
- Definition of several frame contracts for Public Administrations
- Support in local demand aggregation for procurement
- Development of e-procurement within the Public Administration



Main Achievements

- Consip since 2000 has been working on public demand aggregation of goods and services, managing 18% of public spending
- Tenders managed by Consip and won by the incumbent and one OLO led to **75% discount for telecommunication services** due to demand aggregation
- Consip is currently working on an auction aggregating public demand for broadband services (DSL/Wireless/Fiber connectivity)
- Consip is currently working on aggregation of public demand for innovative services requiring broadband connectivity (Videoconference, Local Area Networks, etc.)
- E-procurement is a step taken to increase Internet capabilities among society, to introduce a new way of interacting between the Government and citizen or suppliers, and reduce the "digital divide"

Broadband aggregation - example RUPA



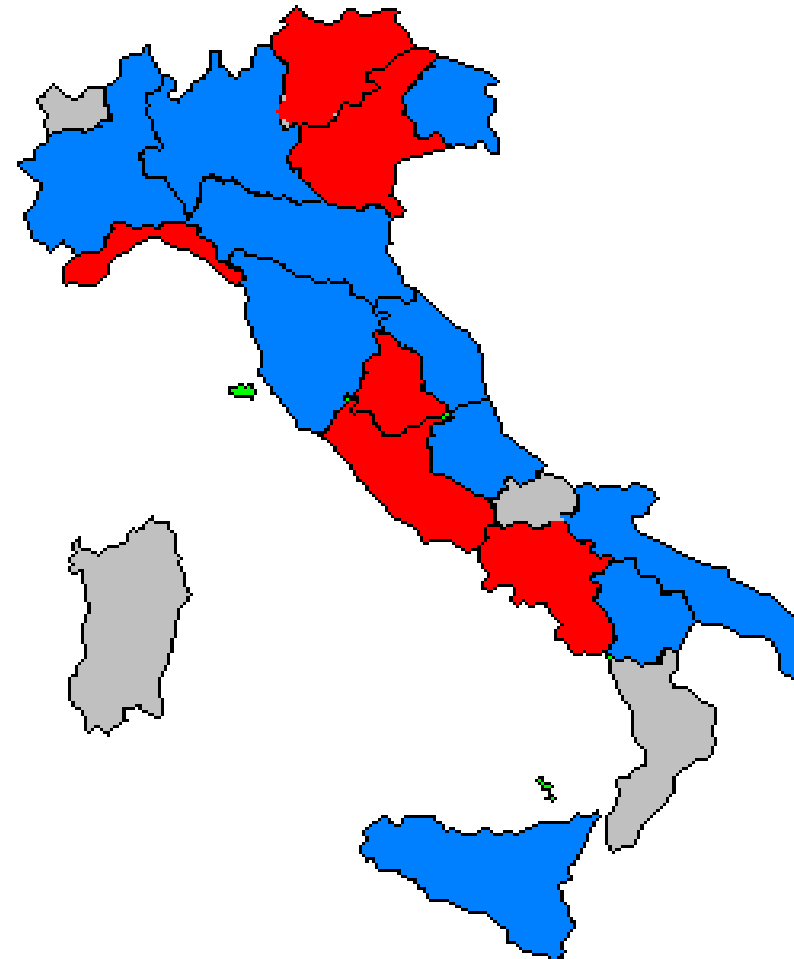
Role

- RUPA is the network that provides connectivity (from 64 kbs to 34 mbps) and interoperability services to the central agencies of the Public Administration since 1999
- It works as a set of interconnected VPN, provided and managed by dedicated IT companies (awarded of 5+4 years frame contracts in 1998)
 - Pathnet - wholly owned by the Italian telecommunications incumbent TI - for transport services of the Intranets
 - EDS-PA - owned by EDS - for interoperability services (e-mail, Extranets, access to the Internet)
- The *Centro Tecnico*, a special unit under the Ministry for Innovation and Technology, manages the contract framework on behalf of the administrations that use RUPA
- Central Administrations must use RUPA as their Intranet to guarantee interoperation among them and with the Local Administrations
- The RUPA hosts and connects 21 Intranets of Ministries and 15 Intranets of other central official bodies
- Local administrations can use RUPA or regional networks both to host their Intranets and to access RUPA (in order to interoperate with central bodies)



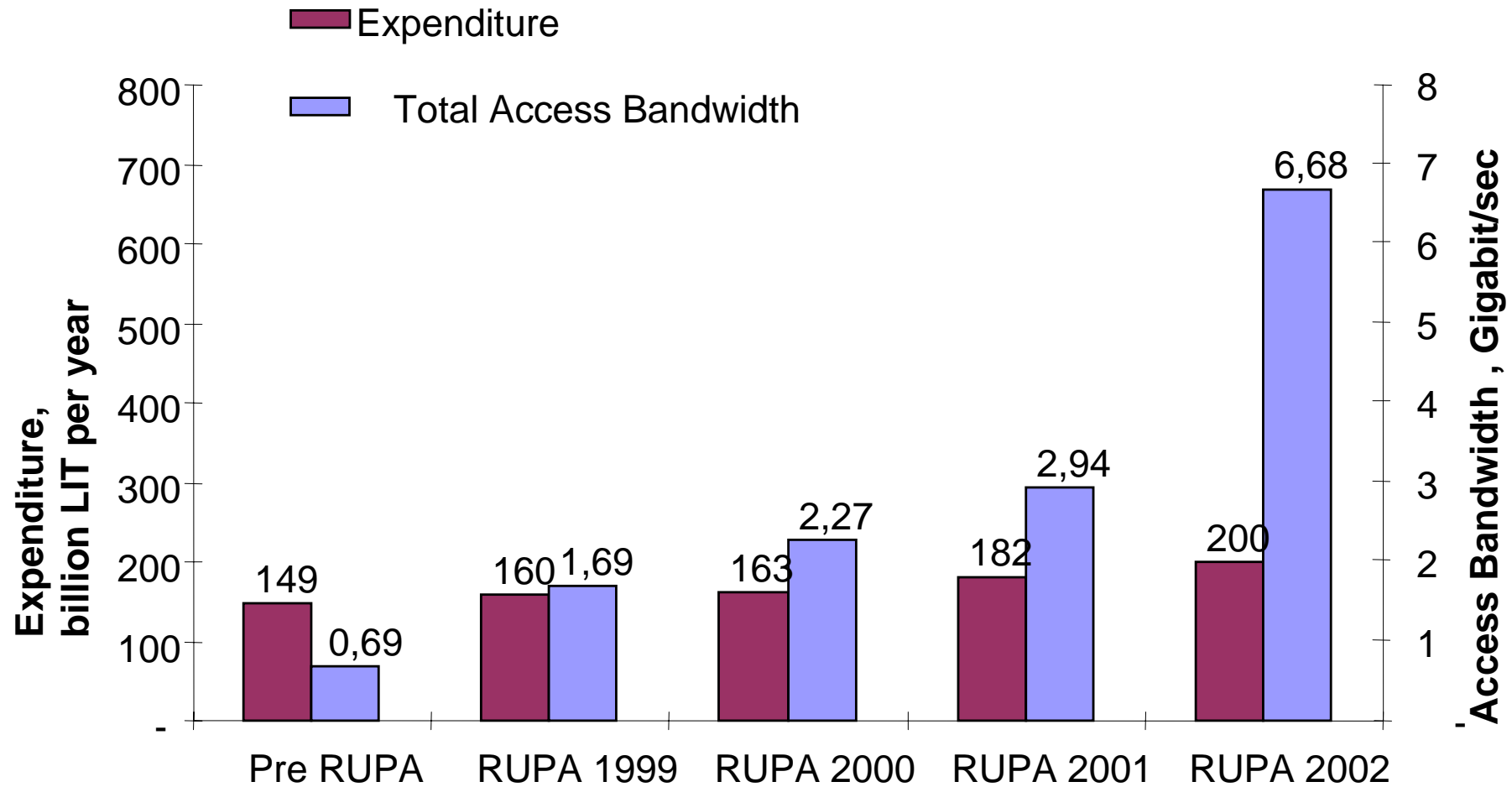
ongoing activities with :

- Reg. Piemonte
- Reg. Lombardia
- Prov. Aut. Bolzano
- Reg. Emilia
- Reg. Toscana
- Reg. Marche
- Reg. Abruzzi
- Reg. Basilicata
- Reg. Puglia
- Reg. Sicilia



 Signed agreement
 Agreement under evaluation

RUPA – Achievements



RUPA – Achievements



1

Simplification of procedures

Pre-competed national frame contracts

- Compliant with European competitive procurement procedures

Easy subscription y individual agencies

- avoiding individual tender procedures
- easily starting and adapting new individual contracts

Simplified contract management

- Centralized procedures for monitoring, enforcing and updating of contract provisions
- Centralized revision of service price and performance

2

Technical support and Innovation

- A list of standard services has been made available with many options (SLA, performance, etc.)
- Security enforcing has been tackled centrally as a top priority
- The transition from proprietary to IP-based platforms has been greatly accelerated
- The implementation of new projects has been simplified and accelerated

3

Lower prices

Initial tender to minimize quality adjusted weighted average price of listed services

- Contractual power due to exclusivity clauses for central government agencies

Annual price revisions

- Most favoured customer clauses
- Market analysis



Role

- CSI Piemonte is an operative body delegated by Regional Administration to find solutions for the economic development in Piedmont.
- CSI Piemonte – Consortium of Regional Public Administration in Piedmont – is responsible for the development and management of network transport infrastructure and interoperability services on a regional scale.
- CSI Piemonte is also a contracting authority – in representation of all public administrations in the Piedmont – for broadband service providers that are present on regional territory: Telecom Italia, Wind and – but only in Turin metropolitan area - Colt-telecom and Fastweb.
- Last April, CSI Piemonte launched TOPIX (Turin and Piedmont Internet eXchange). TOP-IX is PUBLIC-PRIVATE and non-profit consortium, based in Turin (Italy), of public entities and main private Internet operators in Italy.
- The mission of the Consortium is to create an Internet Exchange Point to :
 - aggregate public sector and private sector demand for broadband
 - stimulate the communication between actors that constitute the economical system in Piedmont (Public Administration, enterprises and citizens) by facilitating Internet operators partnerships.
- TOPIX will be a territorially distributed Internet Exchange Point, strongly oriented towards innovative technologies (multicast and Ipv6) to sustain development of new generation services.
- Communication between Public Administrations in Piedmont and central administrations has been guaranteed by the National Interoperability Network (RUPA).

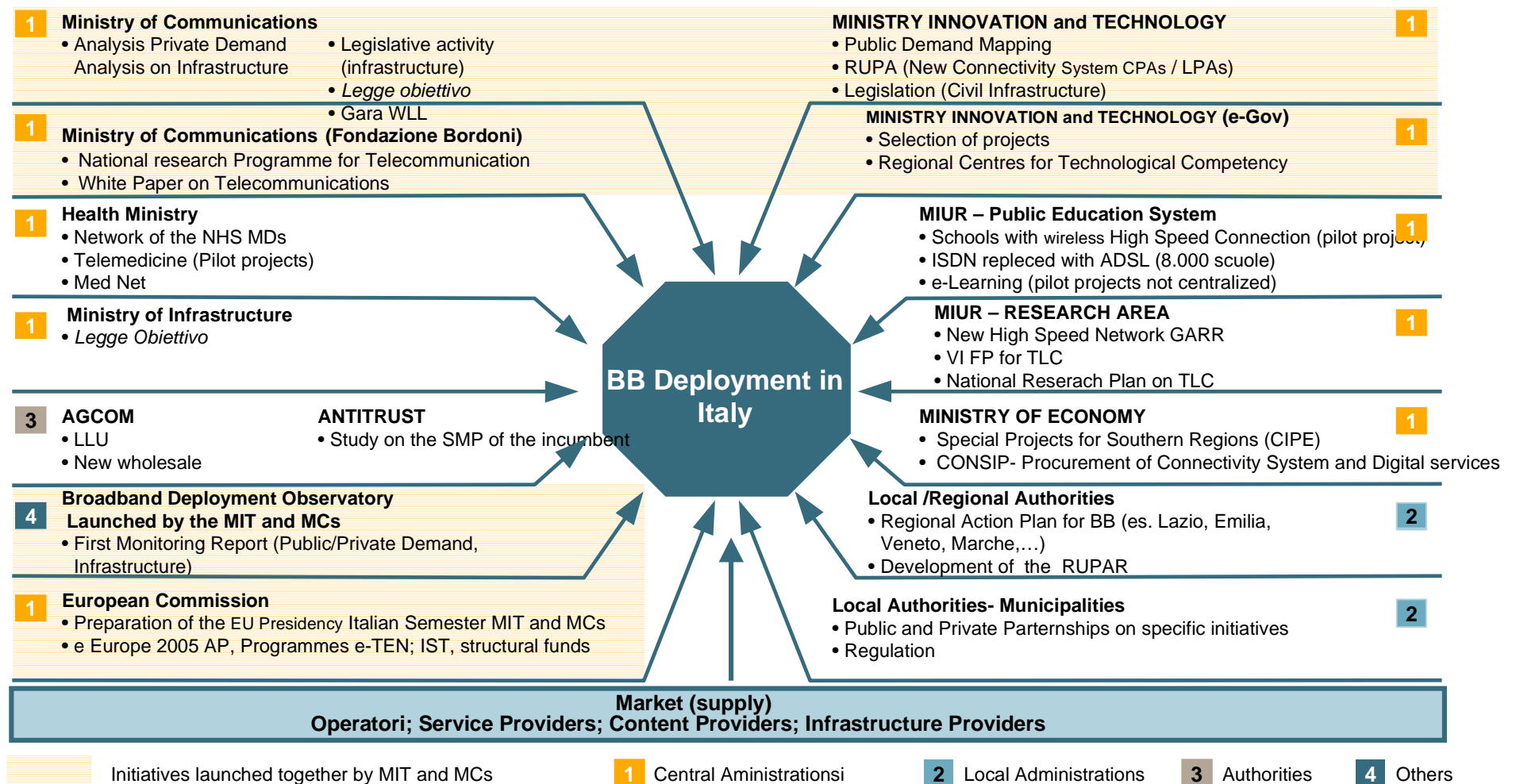


Agenda

- **Public Sector Broadband Penetration and Current Activities**
- **Government Objectives and Actions**



There is plenty of initiatives promoted by different actors. However, there is a clear need for an authoritative and consistent guidance across the different initiatives to maximize the effects





At the moment there are the conditions to promote a systematic plan for the deployment of BB in Italy

Current situation

- The Administrations and other stakeholders are launching different and autonomous initiatives to deploy BB
- Such initiatives could converge through the definition of a common strategical framework and cross-administrations guidance

BB as a 'Project for the Country'

- In order to make BB a project for the whole country we must :
 - establish the general principles for the BB development (a common definition, quality of the services, standards, ecc.)
 - aggregate the different initiatives underway
 - promote cooperation between the different players to promote sinergies and share resources
 - define a common timetable for the initiatives
 - monitor the advancement and remove perceived obstacles

- The Permanent Committee on Broadband should promote the development and deployment of bb according to such a framework

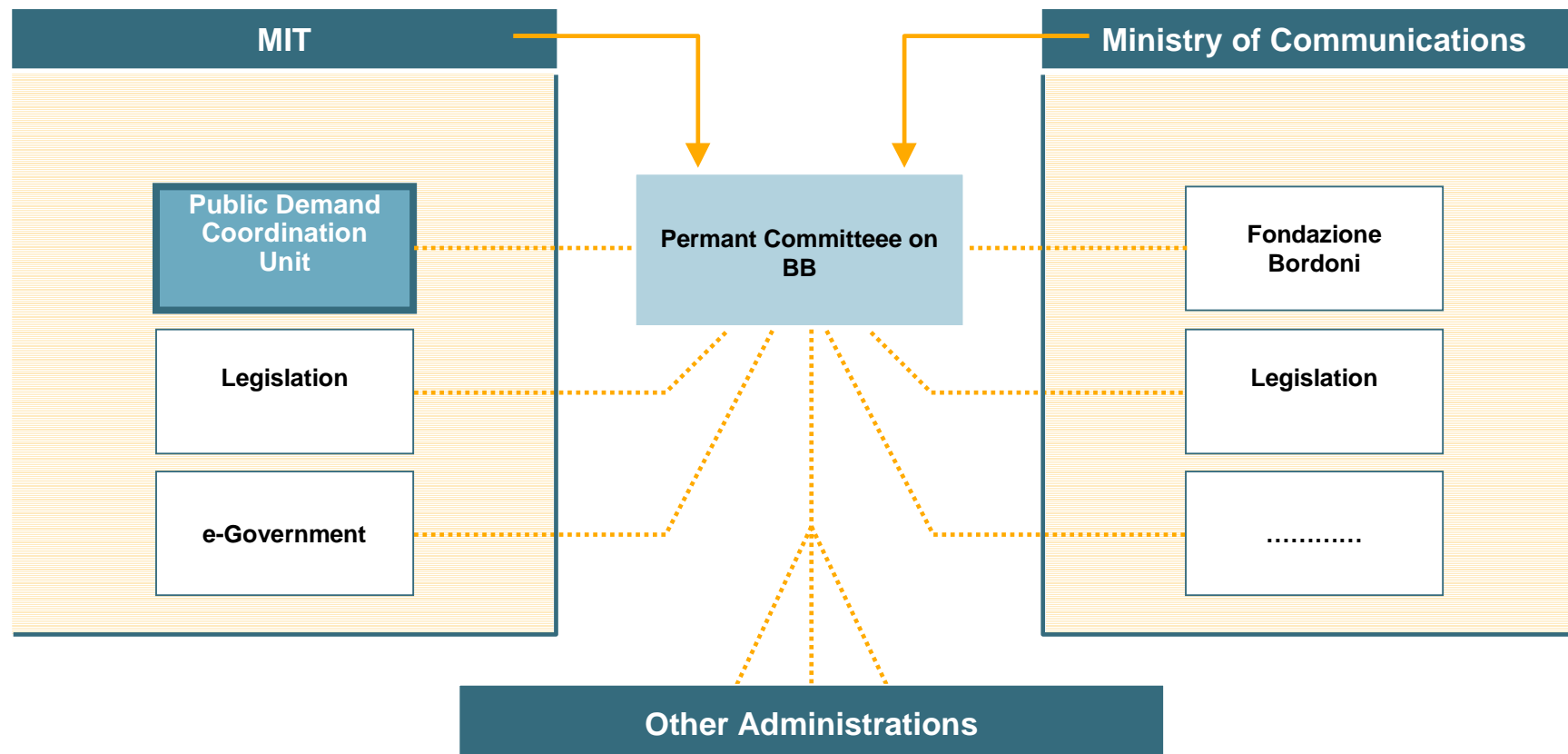


1 Modify Italian peculiarities	Legislative <ul style="list-style-type: none">• adoption of European legislation• participation to the definition of the new legislation for TLC Rules <ul style="list-style-type: none">• work with the AGCOM (NRA) to ease competition Simplification <ul style="list-style-type: none">• Infrastructure access• New infrastructure implementation
2 Coordinate activities and initiatives	<ul style="list-style-type: none">• Mapping (subjects, context, tools, timing)• Orientation• Support (technical and administrative)• Coordination of Local and Central initiatives
3 Identify sources of funding	Public financial resources <ul style="list-style-type: none">– Funds PAC– Funds PAL– EU Funds Project Financing <ul style="list-style-type: none">• Financial Markets• Infrastrutture SpA/ Sviluppo Italia• Others

A committee for broadband development has been proposed to coordinate all the efforts at the central and local level



The Permanent Committee will advise the two Ministries and the other Administrations on a strategy to enable the development and implementation of the BB Plan





The Unit for the Coordination of the Public Demand, as a working group of the Permanent Committee, will act as a facilitator of the implementation of a model for the Demand Aggregation that will guarantee the competition



To act as a stimulus, public-sector demand must expand from current broadband coverage of 20% to more than 80% by 2005

	Number of buildings	Current situation		Objectives	
		Narrowband	Broadband	Narrowband	Broadband
Central govt ¹	10,000	6,300 (63%)	3,700 (37%)	500 (5%)	9,500 (95%)
Local govt ²	13,000	7,900 (61%)	4,300 (33%)	1,000 (8%)	12,000 (92%)
Schools ³	42,000	34,500 (82%)	7,500 (18%)	6,500 (15%)	35,500 (85%)
NHS buildings ⁴	20,000	18,600 (93%)	1,400 (7%)	3,000 (15%)	17,000 (85%)
Total	85,000	67,300 (79%)	16,900 (20%)	11,000 (13%)	74,000 (87%)

- Source: CT RUPA and individual departments
 - Source : individual regions
 - Inclusive of central and local governments. Source: Ministry of Universities, Education & Research (targets set on basis of eEurope 2005 plan)
 - Source: Ministry of Health (targets set with reference to strategic goals of National Health Plan and eEurope 2005)
- Figures compiled by Roland Berger Strategy Consultants

Increase by 2005 of broadband coverage of government from current level of 20% to '87%, with at least 15% of connections at speeds over 2 Mbit/s



A dual role/meaning for demand aggregation activities:

- increasing coordination of different actors' programmes
- increasing efficiency of procurement procedures

1

Increasing Coordination of Actors' Programmes

- Goal: Reaching critical mass of users and applications in low demand/high cost areas
 - Combined service provision by different central/local agencies
 - Shared use of indivisible resources (human, space, access, ...)
- Means: Selecting projects taking into account external effects of coordination
- Incentives: Co-financing most promising projects

2

Increasing efficiency of procurement

Reducing barrier to entry for providers and technologies

- Support must be technologically neutral
- Unbundled procurement encourages entry in segments/regions
- Keep separate bottlenecks and competitive segments

Promoting long term dynamic efficiency

- Multiple sourcing to promote the growth of a competitive market
- Limit price discrimination to achieve better prices for the general public
- De - average the measure of costs to achieve transparency and to target support