FLUIDEZ NAS COMUNICAÇÕES

ANACOM

Broadband Experience in Portugal

XII IRG-Regulatel Summit

José Amado da Silva

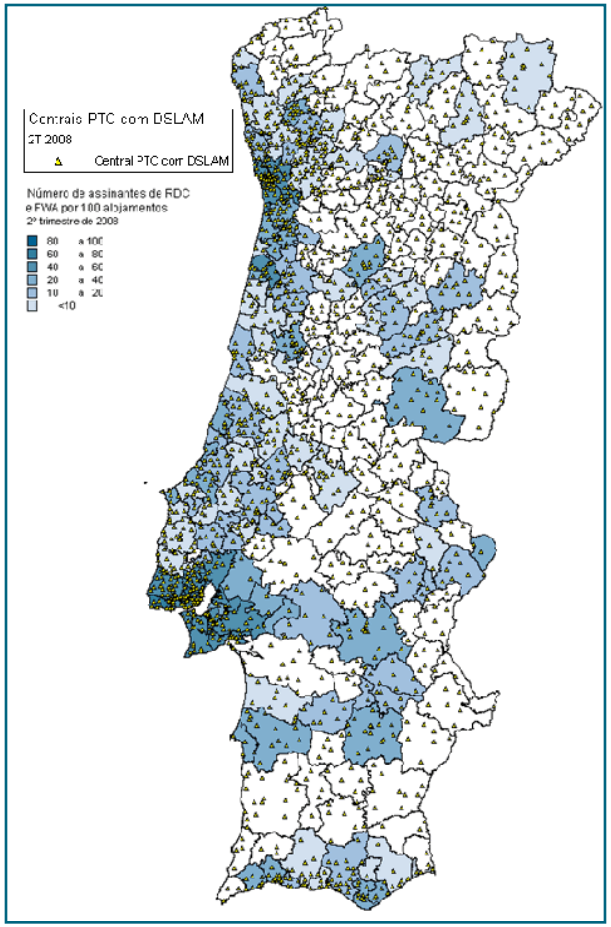
October 2009

AUTORIDADE NACIONAL DE COMUNICAÇÕES

From Broadband to Wider broadband

1. The Broadband market
2. The NRA, promoting the level playing field
3. The government; ensuring wider broadband for most
4. Public policies and regulation

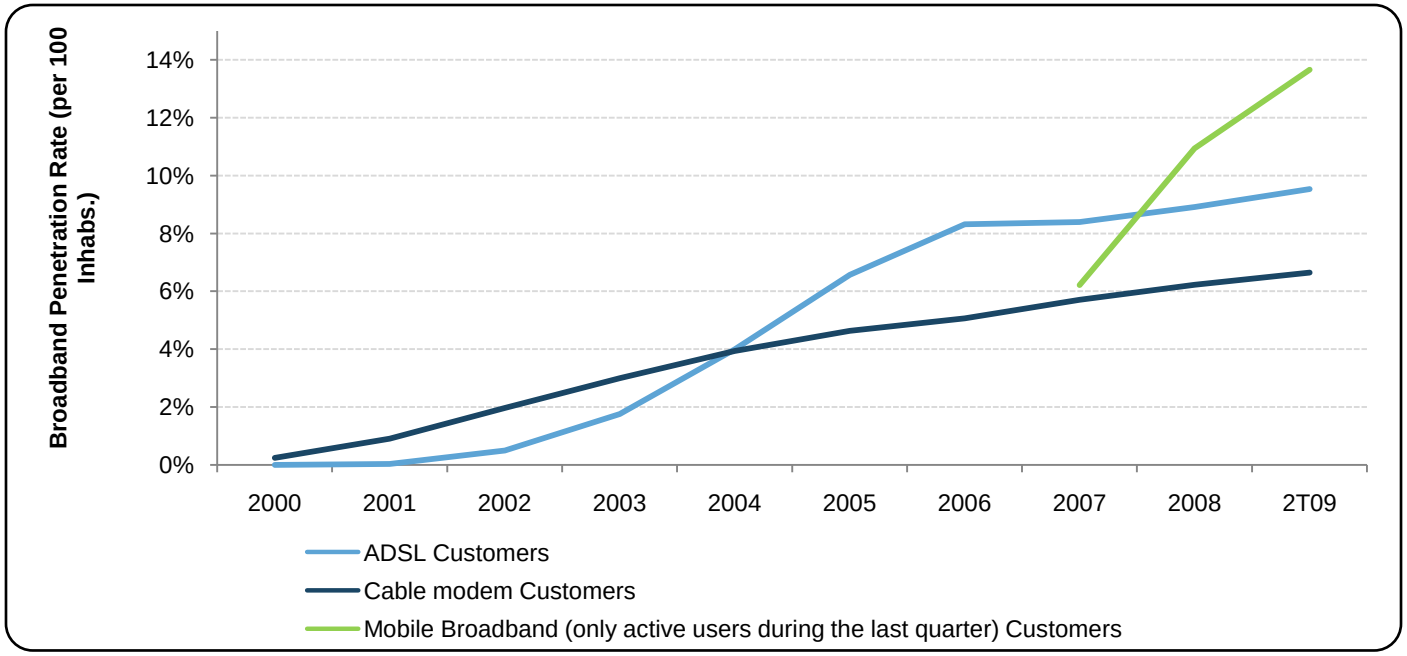
Broadband networks



- ADSL coverage is ubiquitous.
- Good cable coverage

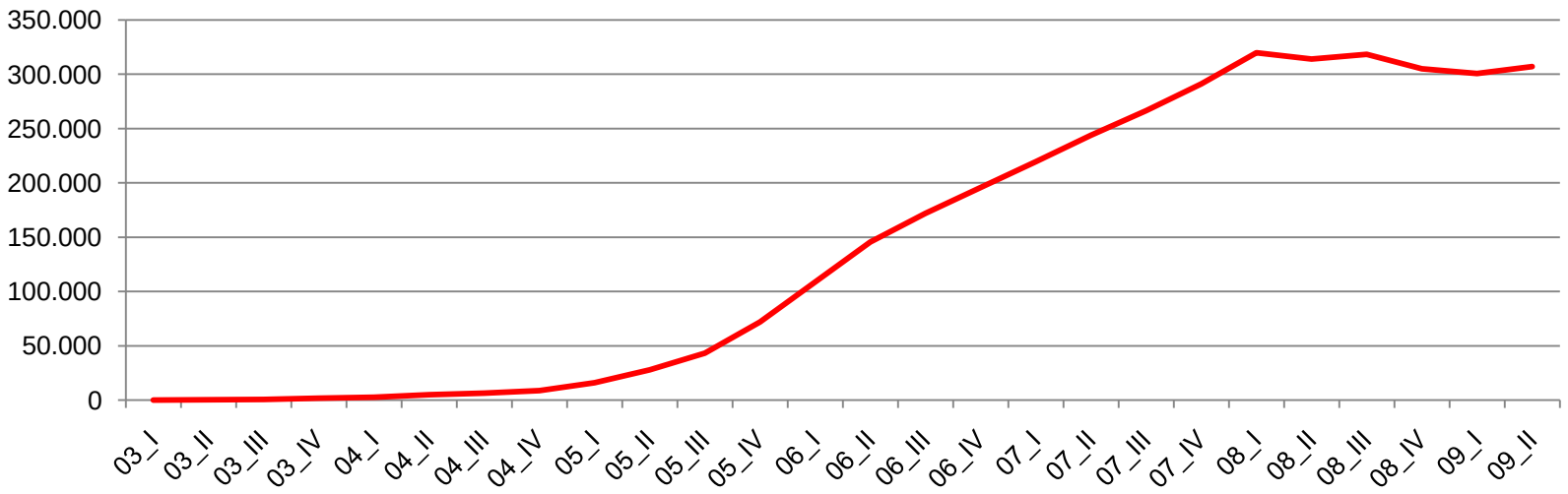
- Existing plans to pass 1 Million + FTTH homes passed by the end of 2009.
- Cable with Docsys 3.0
- From 25 Mbps to 100Mbps+ offers

Broadband penetration



- Infrastructure competition: Cable vs PSTN vs Mobile

Broadband and Wider Broadband



- Overall, ADSL offers have recently declined due to alternative offers.

From Broadband to Wider broadband

1. The Broadband market (offers and demand)
2. The NRA, promoting the level playing field
3. The government; ensuring wider broadband for most
4. Public policies and regulation

2 The NRA, ensuring the level playing field

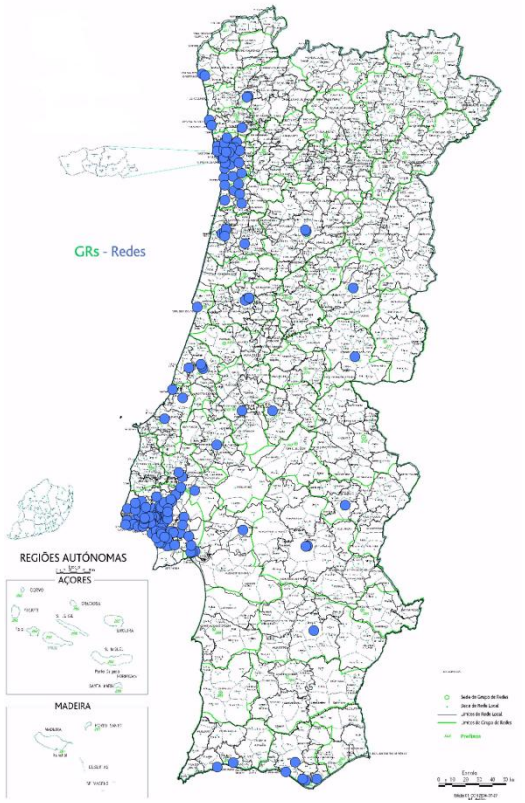
- Enabling historic telecommunications operator's ducts offer, *Since 2004.*
- Enabling infrastructure competition - Cable, PSTN, Spectrum.
- Acknowledging broadband competition - market geographical segmentation.

Market geographical segmentation

- Geographical markets taking into different competitive areas:
- Competitive areas located in 10% of MDFs ensure a coverage of 61%

Access obligations

	LLU	Bit stream
"C Areas"	✓	✘
"NC Areas"	✓	✓



Regulatory approaches to wider Broadband

- Reviewing markets acknowledging geographical differences whenever appropriate.
- Promoting Infrastructure sharing
- Promoting thorough yet simple rules
- Promoting the efficient use of spectrum

From Broadband to Wider broadband

1. The Broadband market (offers and demand)
2. The NRA, promoting the level playing field
3. The government; ensuring wider broadband for most
4. Public policies and regulation

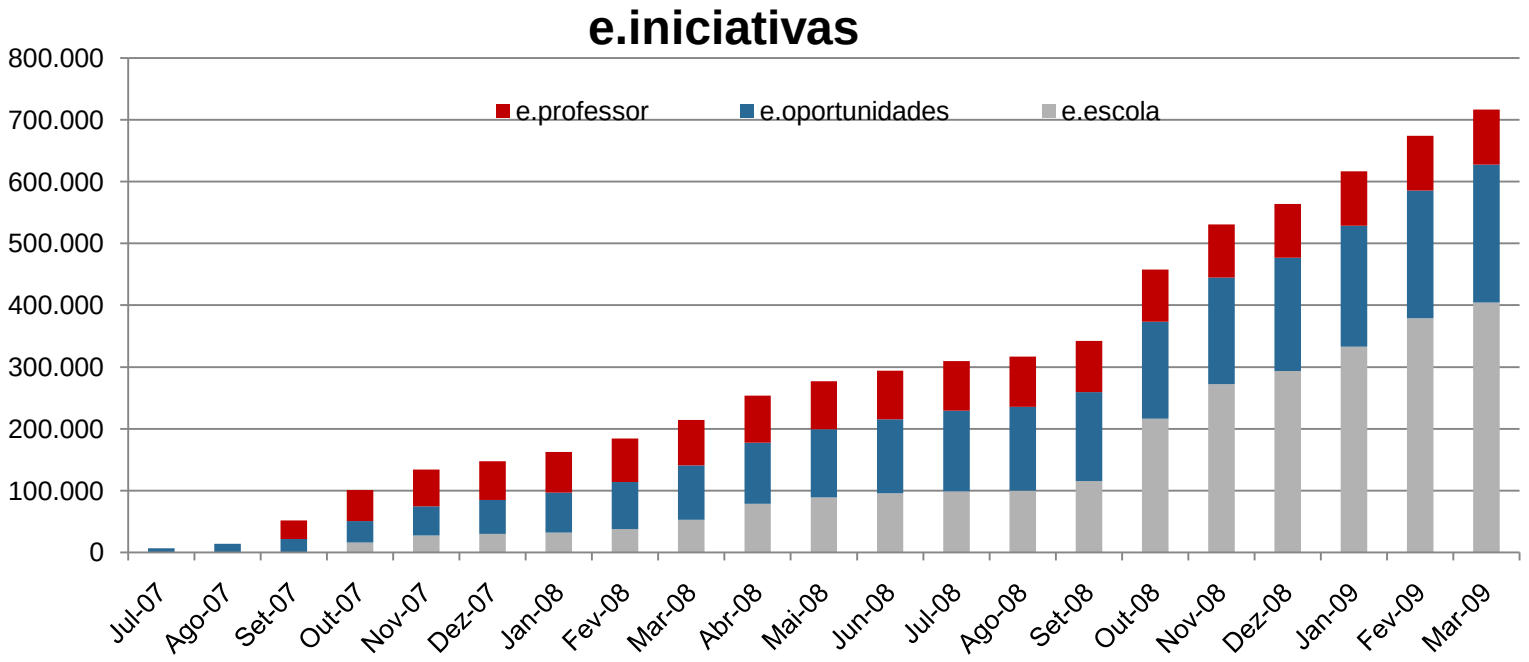
Government objectives

- 1 million users connected by 2010
- Hospitals, Universities, Museums and Libraries connected by the end of 2009;
- All Primary and Secondary Schools and Public Services of Justice connected by the end of 2010

Decree Law n.º 123/2009

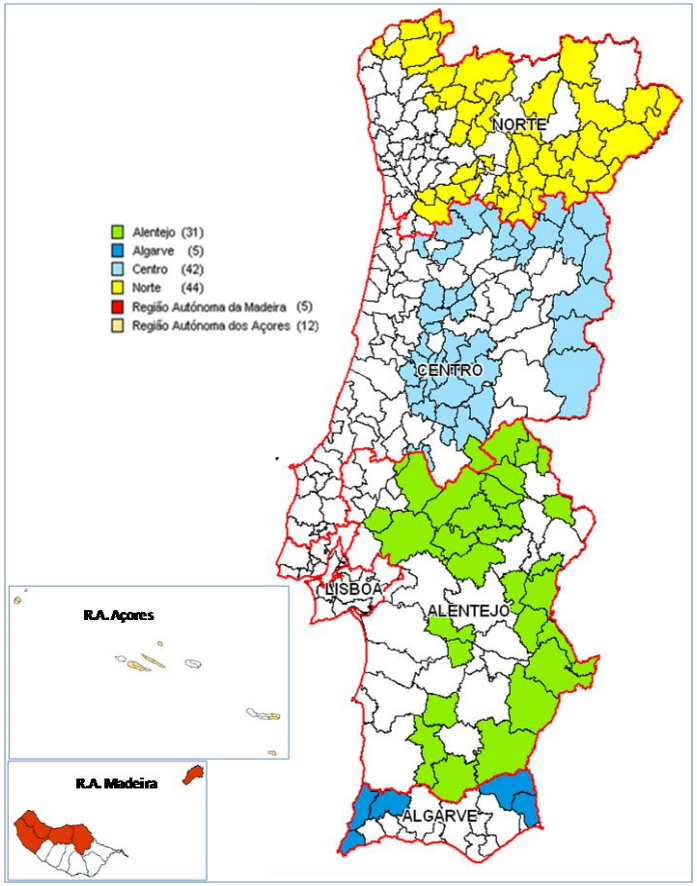
- Access for telecommunications operators to dutcs and other public infrascturcture
- A public geo-referenced information system
- Simpler and effective rules for the construction of new infrastructures
- Fibber in new buildings

Government initiative



- Laptop with Vista, Office 2007, mobile broadband access for €150 and a €5 rebate on the monthly fee for secondary school students, trainees and professors

NGA in municipalities without competition



- Public Subsidy for NGA in municipalities with no cable network and no collocated alternative operators.
- 140 out of 308 municipalities, mainly in rural areas.
- Open access
- 50% coverage within 2 years

Policy Goals

- Regulators ensure a level playing field
- Undertakings assess risk and make investment decisions.
- Consumers experience new forms of communication.
- Government promotes the info inclusion at regional or social levels.
- Society reaps the benefits of the information age.

From Broadband to Wider broadband

1. The Broadband market (offers and demand)
2. The NRA, promoting the level playing field
3. The government; ensuring wider broadband for most
4. Public policies and regulation

Types of approaches

- RCM
- Protocol
- Legislation
- Public tenders

Resolution of the Council of Ministers no. 120/2008

- The promotion of investment on next generation networks is a strategic priority for the Country.

- The following actions shall be taken:

a) To promote the mass adoption of high speed Internet accesses and the development of advanced applications, in order to have 1 million users connected to next generation networks until 2010;

b) To connect all primary and secondary education schools to next generation networks until 2010;

c) To connect the whole network of hospitals and health centres to next generation networks until 2009;

d) To connect all public justice services to next generation networks until 2010;

e) To connect the public higher education and polytechnic institutions to next generation networks until 2009;

f) To connect the public museum and library networks to next generation networks until 2009.

Resolution of the Council of Ministers no. 120/2008

- Measures must be taken aiming namely at the following outcomes:

- To adopt the legislative acts or others needed to ensure access by all operators, under equal terms, to the network of ducts and remaining relevant facilities from all entities holding this type of underground infrastructure;

- To eliminate barriers to the roll-out of optical solutions in connection with next generation networks in buildings, including the introduction of the appropriate changes to the technical regulations currently in force (namely ITED and ITUR).

Next Generation Networks Protocol

- The Portuguese government signed a protocol with telecommunications operators
- The protocol sets out government commitments, including:

- Legislative measures that lead to the maximum possible removal of horizontal and vertical barriers
- Encourage investment in remote areas or with low demand, particularly through tax benefits
- Promote the establishment of a credit line of at least EUR 800 million available to investors in NGN
- Benefits and incentives: only for networks that guarantee open access, transparent and non discriminatory access to all the parties involved

Other legal initiatives: fiscal tools and public contracts

- Law nº 10/2009 – **"Investment and Employment Initiative" budget programme - measures for modernizing the technological infrastructure and tax aid scheme for investments made in 2009 in next generation networks**

- Decree-Law 34/2009 – **Exceptional public procurement measures for a rapid implementation of public investment projects deemed to be priorities, namely next generation networks**

Decree-Law 123/2009 - Legal regime governing the construction, access to and set up of electronic communications networks and infrastructures

ANACOM

- **General principles**: competition, open access, equality, non-discrimination, effectiveness, transparency, technological neutrality and absence of cross-subsidisation between sectors.
- **Promotion of the construction, set up and access to infrastructures suitable for the accommodation of electronic communications networks** – in a technologically neutral approach – in property owned by public bodies, comprising not only the State, Autonomous Regions and local authorities, bodies under their authority or supervision, but also public companies, concessionaries and other bodies holding infrastructures that integrate the public domain of the State, Autonomous Regions and local authorities.

Decree-Law 123/2009

- Harmonised procedures: is a very relevant aspect, particularly as regards the relationship between operators and local authorities (308);
- Open access: open and non-discriminatory access to ducts, masts and other facilities owned by operators and bodies that, even though operating in other sectors, hold relevant duct networks. That right may be subject to the compliance with technical or security instructions laid down by holders of infrastructures or of property where such infrastructures are installed.
- Refuse of access: this right is limited only by the lack of capacity of infrastructures to accommodate communications networks, in case the use of infrastructures renders ineffective the main purpose for which they were established, or where it implies infringement of public service obligations entered into by bodies concerned, or in case of lack of space available as a result of the stage of occupation.

Decree-Law 123/2009
Open access

- The access to infrastructures must be ensured in equal, transparent and non-discriminatory conditions, subject to cost-oriented remuneration conditions, taking into account costs with the construction, maintenance, repair and improvement of infrastructures under consideration.
- At the request of any part, ANACOM shall assess and decide, in a particular case, whether the amount requested is appropriate in the light of the preceding principles.

Decree-Law 123/2009
Advertisements of execution of works

- All operators and public and private bodies, where they plan to execute works that allow the construction or extension of infrastructures suitable for the accommodation of electronic communications networks, must make this intention public, so that electronic communications companies may join the intended works.
- Electronic communications companies shall bear their share in the cost of investment in the works, which corresponds to the difference in the cost of investment resulting from its association thereto.

Decree-Law 123/2009

- Public and private bodies who hold infrastructures suitable for the accommodation of electronic communications networks, electronic communications companies, as well as holders of infrastructures suitable for the accommodation of electronic communications networks that are used by the latter, shall draw up, keep and permanently update a record with descriptive and geo-referenced information of infrastructures suitable for the accommodation of electronic communications networks, namely ducts, inspection chambers, manholes and associated infrastructures.
- Records shall include the following minimum elements:

  a) Location, geo-reference, layout and main resources allocated;

  b) Most relevant technical characteristics, including size, type of infrastructures and of use.

Decree-Law 123/2009
Centralised information system (SIC)

- ANACOM must design, manage, and maintain the SIC, and to make it accessible and available, ensuring the provision of the following information:

  a) Procedures and conditions on which depends the allocation of rights of way;

  b) Advertisements on the construction of infrastructures suitable for the accommodation of electronic communications networks;

  c) Record, with geo-referenced, comprehensive and integrated information of all infrastructures suitable for the accommodation of electronic communications networks;

  d) Procedures and conditions that apply to the access to and use of each infrastructure referred to in the preceding point.

- The SIC is based on a principle of sharing and reciprocity of information, and it may be accessed by all bodies that comply with obligations necessary to the inclusion of information therein.

Centralised information system (SIC)

- SIC is deemed to be an entirely strategic instrument in the context of network development, whose usefulness goes beyond the electronic communications sector, as it may be a great help in the planning of other networks and in the scope of territorial planning.
- This strategic element naturally requires the adoption of the necessary rules to prevent non-authorized access to information therein deemed to be confidential.

Decree-Law 123/2009
Infrastructures for telecommunications in housing developments, urban settlements and concentrations of buildings (ITUR)

ANACOM

- The following infrastructures must be set up in housing developments and urban settlements (**public ITUR** - integrate the municipal domain and their management and preservation being incumbent on the respective municipal councils):
  a) Space for the set up of piping, cables, equipment and other devices, namely including telecommunications cabinets, inspection chambers and manholes;
  b) Piping network or piping for the set up of cables, equipment and other devices.

- As regards concentrations of buildings, in addition to the infrastructures referred to in the preceding paragraph, copper pair, coaxial cable and fibre optic cabling for connection to public electronic communications networks, as well as electrical installations supporting equipment and ground systems, must also be set up (**private ITUR** - are co-owned by all owners)

Decree-Law 123/2009
Infrastructures for telecommunications in buildings (ITED)

ANACOM

- The following infrastructures must be set up in buildings:

  a) Spaces for the set up of piping;
  b) Piping network necessary for the set up of equipment, cables and other devices;
  c) Cabling systems in copper pair, coaxial cable, for the distribution of Type A radio or television signals, and fibre optic cabling;
  d) Electrical installations supporting equipment and ground systems.

- The requirement of setting up distribution systems of Type A terrestrial radio or television signals shall apply to buildings with two or more dwellings.

Decree-Law 123/2009
Adaptation to fibre optic of constructed buildings

- **Adaptation to fibre optic of constructed buildings**
  Alterations carried out in buildings already constructed must be capable of entry and crossing of fibre optic cables of several electronic communications companies and respective connection to existing telecommunications infrastructures and the first operator to access the building to set up this type of infrastructures must ensure:

  a) The set up of the whole building rising main with an appropriate capacity to supply electronic communications services to all dwellings of the building;
  b) The existence of customer connection points enabling each electronic communications company to connect each dwelling by their own resources, through a connection to the rising main;
  c) The possibility of sharing the infrastructure set up, regardless of the type of network structure, by other electronic communications companies that wish to provide electronic communications services on the basis of fibre optic technology.

Decree-Law 123/2009
Adaptation to fibre optic of constructed buildings

- Electronic communications infrastructures between electronic communications companies shall be shared in a reciprocal fashion, observing the principles of transparency, non-discrimination and cost-orientation of prices, namely taking into account the increase of costs incurred by the electronic communications company when setting up a shareable infrastructure, under the following terms:

  a) The first operator to access the building shall bear in full the cost of constructing the infrastructure, as laid down in the preceding paragraphs;

  b) The second operator to access the building may connect to the infrastructure developed by the first operator by paying the latter 50% of the cost, and the following operators may also connect to that same infrastructure by bearing costs in the corresponding proportion.

Public tenders on next generation networks

- The government launched 5 public tenders on next generation networks - tenders for the deployment, management, operation and maintenance of high-speed electronic communication networks

- The contracting authority is the Portuguese Government, with responsibility for the tender falling to the Ministry of Public Works, Transport and Communications. The tender is being conducted by ANACOM

- The high-speed electronic communications networks may be covered by public funding

- The high-speed electronic communications networks should be explored as an open network

ANACOM

Thank you

José Amado da Silva

Chairman of the Board of ANACOM