

Fostering rollout of NGA networks - The Case of Regulation access to Portugal Telecom's Ducts

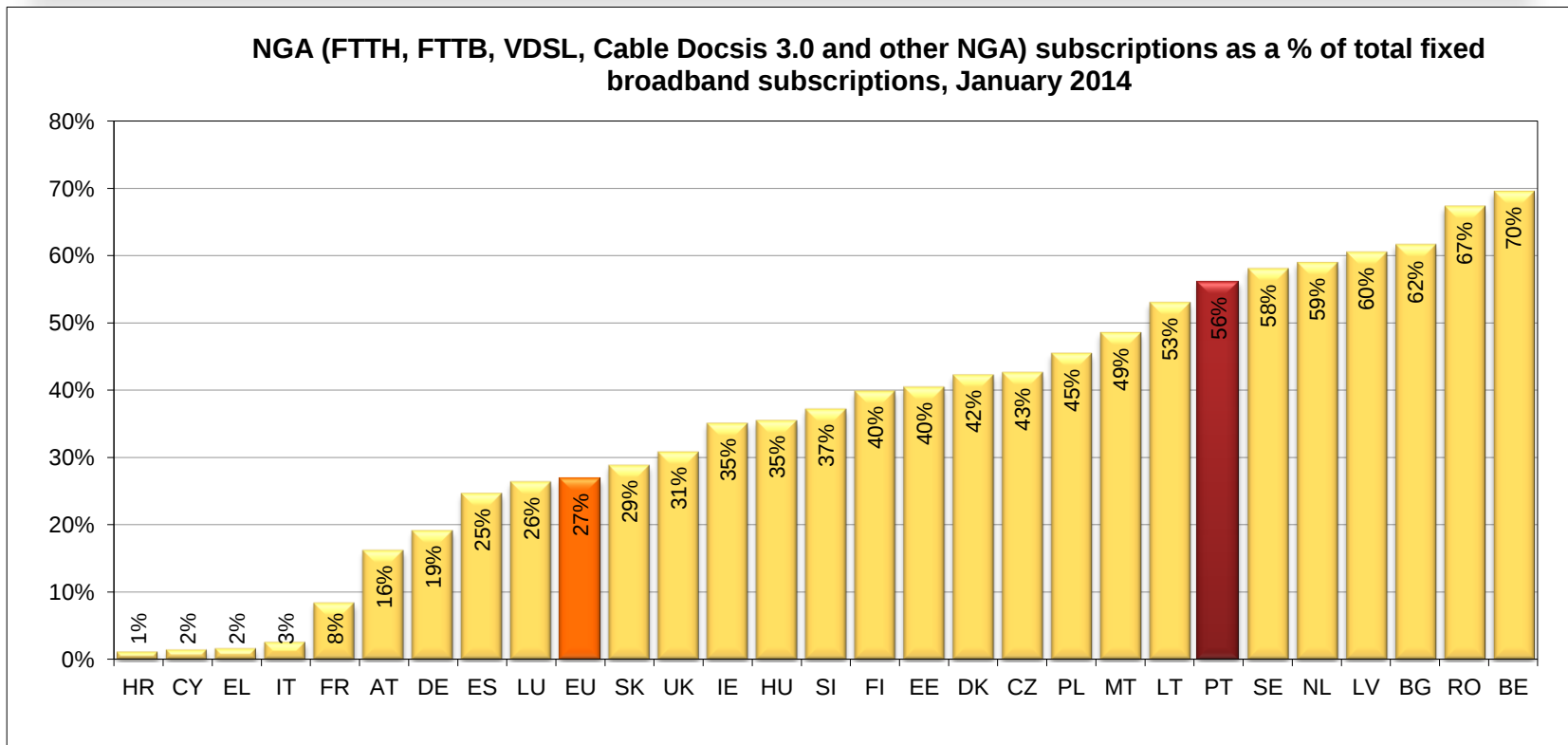
Fátima Barros

**Supervisory Board for the Equivalence of Access
to Telecom Itália Network Seminar, Rome**

1. Next Generation Access (NGA) networks: EU current situation

NGA in Portugal vs European Union Users

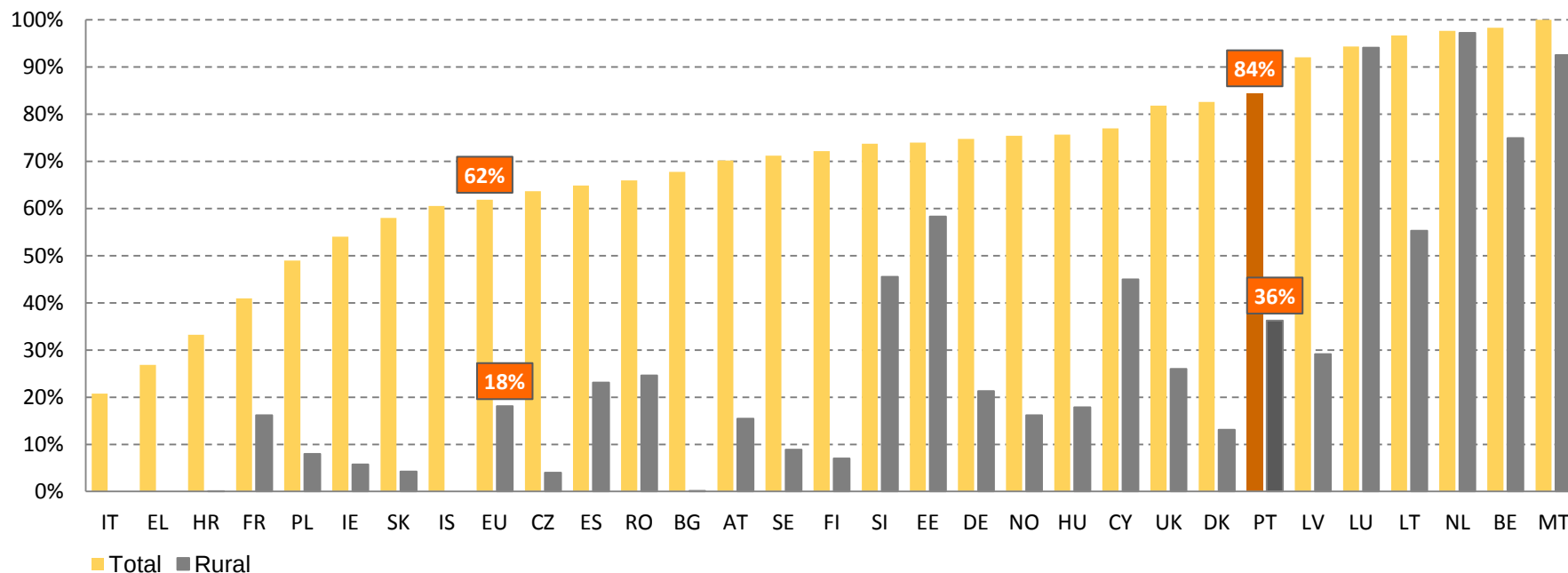
Portugal continues to make progress towards the achievement of the DAE (Digital Agenda for Europe) targets regarding NGA



Source: European commission - Digital Agenda
http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=5810

NGA in Portugal vs European Union Coverage

Coverage of Next Generation Access (NGA) networks in EU (end of 2013)

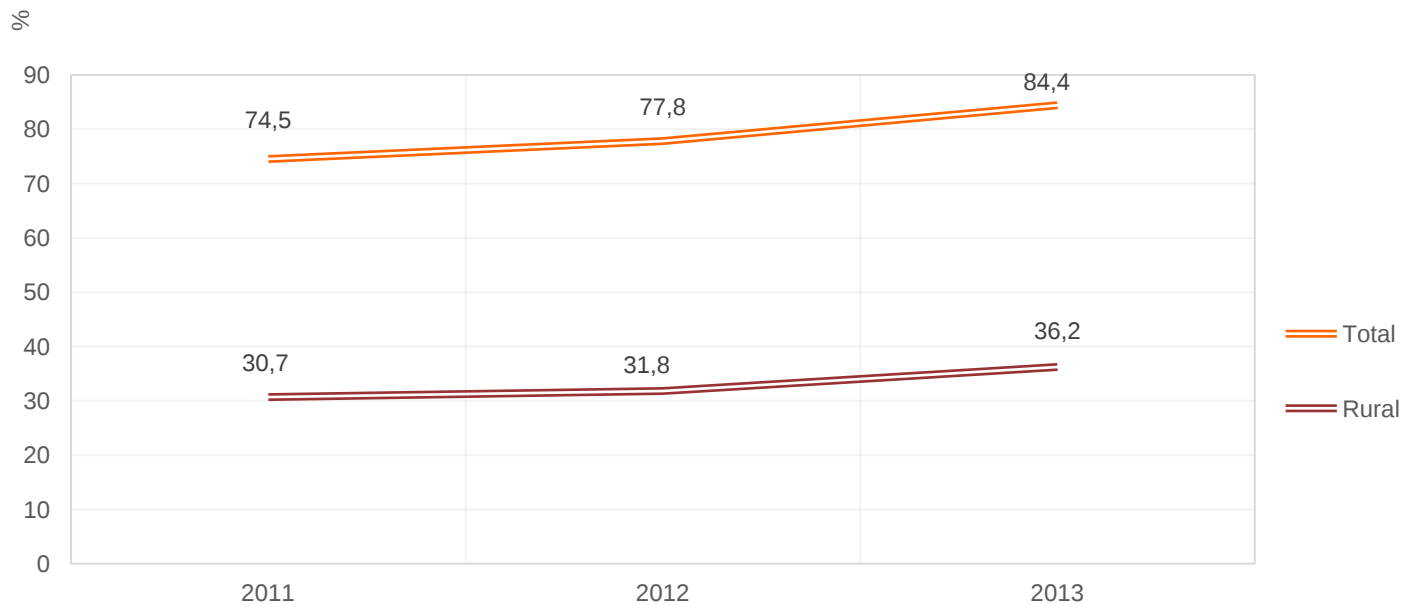


NGA – VDSL, Cable DOCSIS 3.0 and FTTP

Source : European Commission – Digital Agenda
http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=5810

NGA in Portugal vs European Union Coverage

NGA BROADBAND COVERAGE IN PORTUGAL

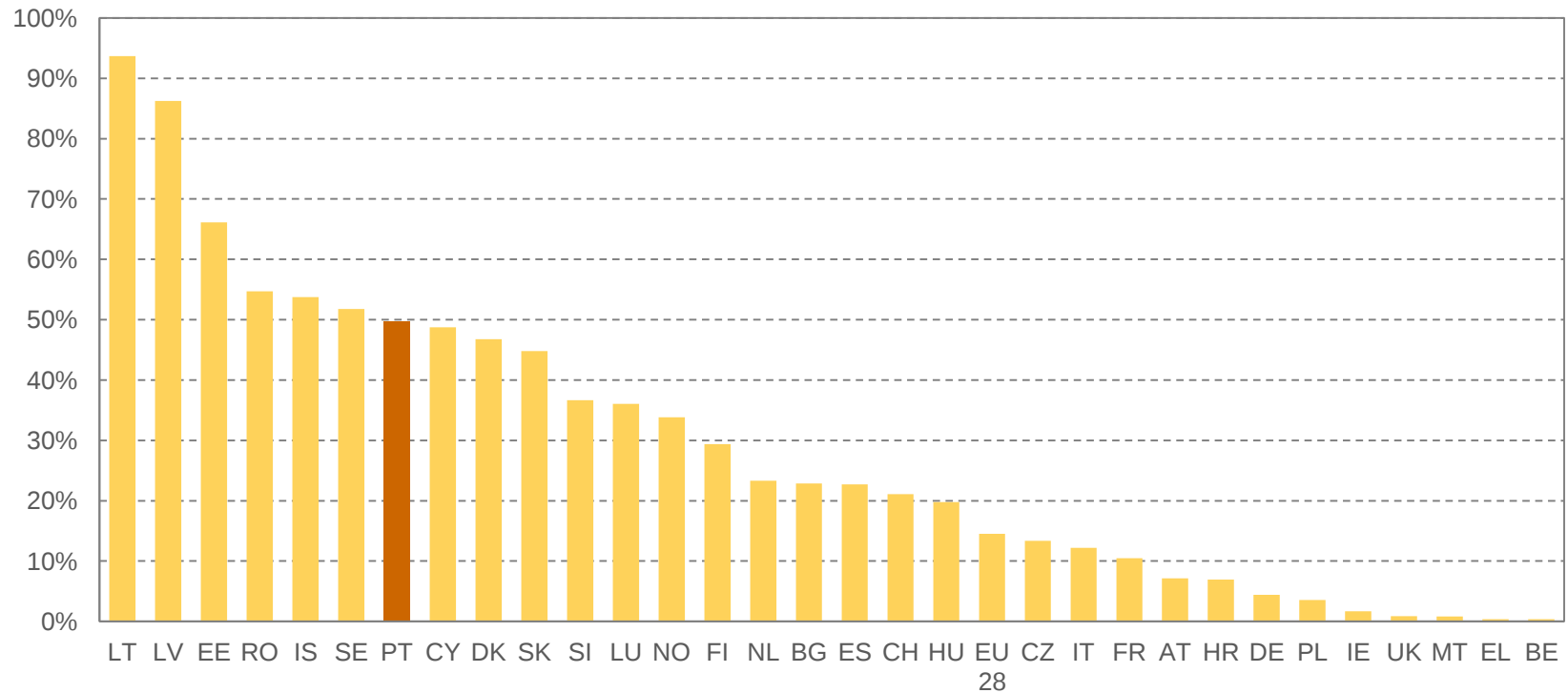


Source : European Commission – Digital Agenda
http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=5810

NGA in Portugal vs European Union

FTTH coverage

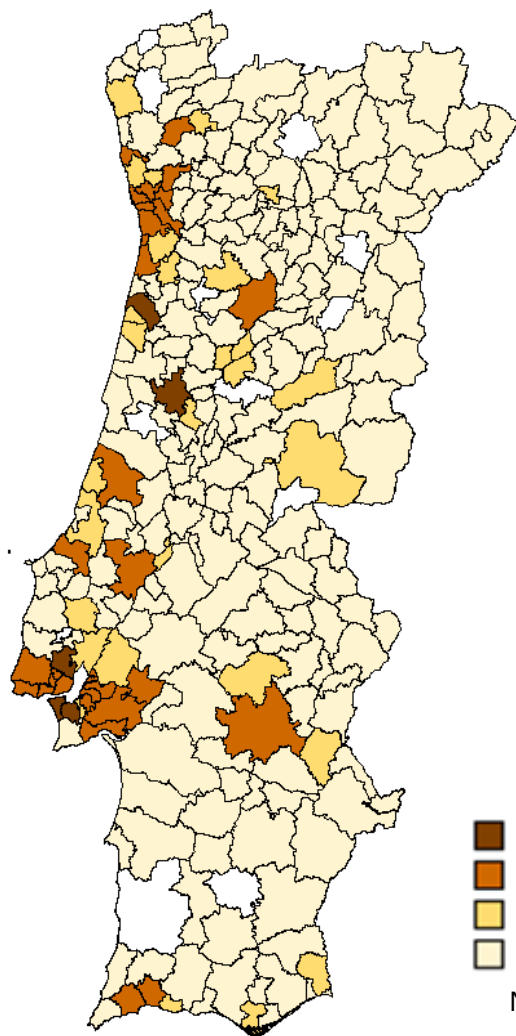
FTTH coverage by country, 2013



Source : European Commission – Digital Agenda
<http://ec.europa.eu/digital-agenda/en/news/study-broadband-coverage-europe-2013>

NGA in Portugal

Coverage and players



Nr. of NGA players (nr. of municipalities)

DOCSIS 3.0



>50%

Fibre sharing
agreement

FTTH



>30%

Fibre sharing
agreement

FTTH



>30%

DOCSIS 3.0



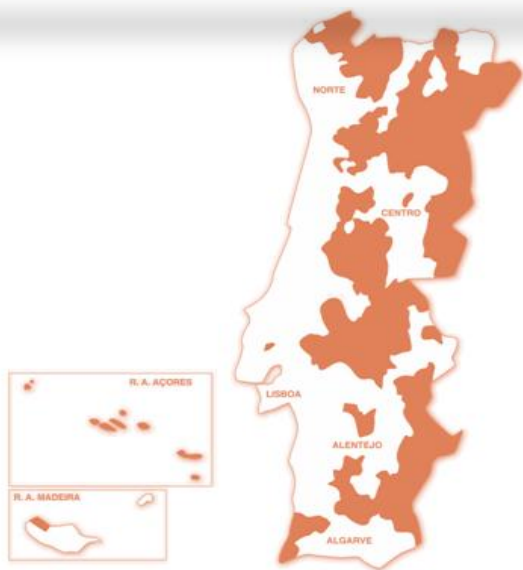
<20%

FTTH



~10%

Besides NGA networks in areas more attractive to private investment, there are NGA networks in rural areas implemented with public aid



> 40 Mbps

140 municipalities (out of 308)

1 million people (10% of the population)

Coverage of the municipalities > 50%

Open network

Investment of 156.5 M€ – FTTH-GPON roll-out concluded by 2013
Wholesale passive offers already in use

Privileged use of existing civil infrastructure (ducts, poles, etc.) from utilities (e.g. electricity concessionaires) or Public Authorities (e.g. municipalities) and also from PTC

2. Regulation of non discriminatory access to PT Ducts (to foster NGA rollout)

Access to infrastructure (ducts) Benefits



Reduces unnecessary duplication of investment

Reduces the environmental impact of network construction



Reduces entry costs



Reduces time-to-market

Assists in a more rapid deployment of networks

Access to infrastructure (ducts)

Historical facts

1991

Incumbent obliged to follow equality access conditions for the installation of cable networks in its ducts

Incumbent cable operation launched

2004

Duct access specifically foreseen in the **Electronic Communications Law (concessionaire)**

Terms of the offer ("agreement") established by ANACOM decision of 2004

2006

Reference Offer for Duct Access (ORAC) entry in operation

**PT has 24,000 km of ducts
½ used by OLOs**

2009

ANACOM concluded analysis of former markets 4 and 5

**ANACOM imposed obligations regarding access to ducts
(e.g. transparency, non-discrimination and cost orientation)**

2010

ANACOM decision regarding changes to the reference offer of access to ducts

Information on duct occupation available in duct database

Reference Offer for Access to PT ducts Elements

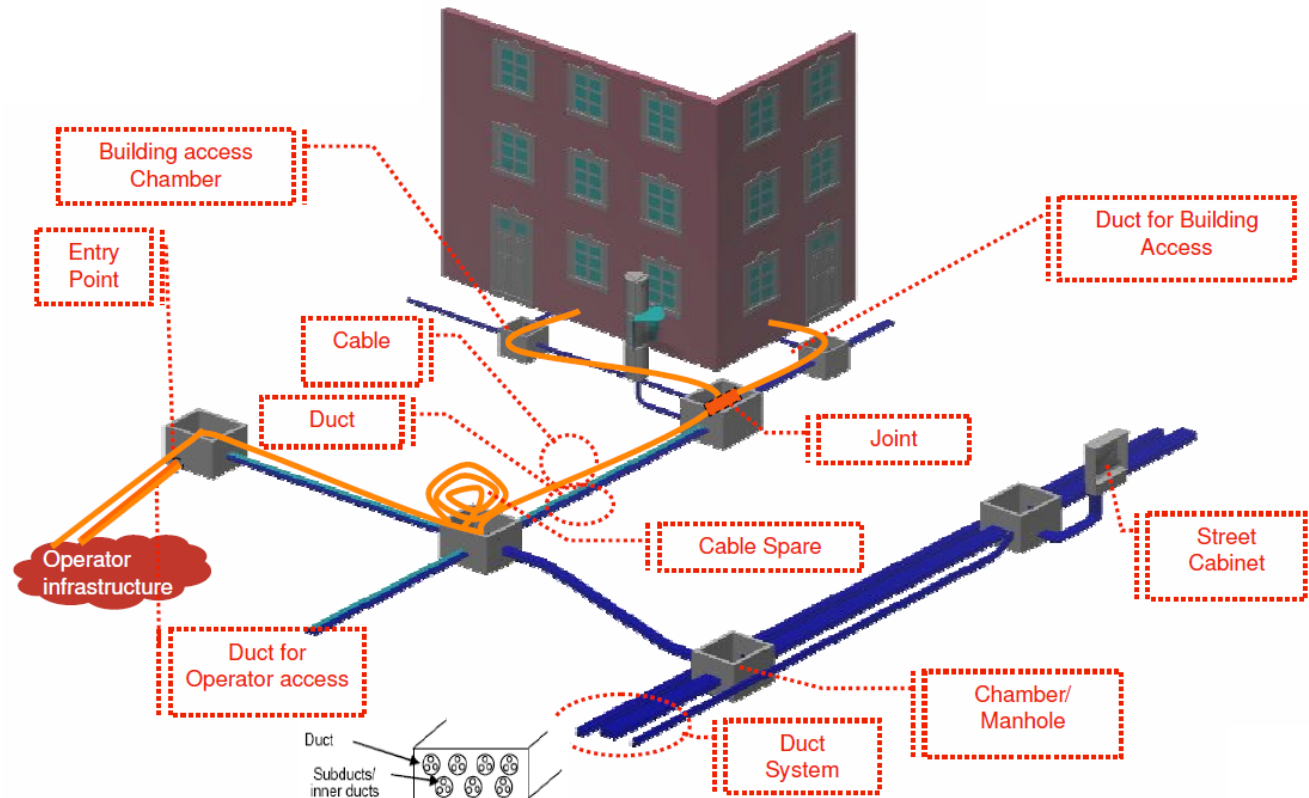
ORAC
includes
ducts on

Access

and

Core

network

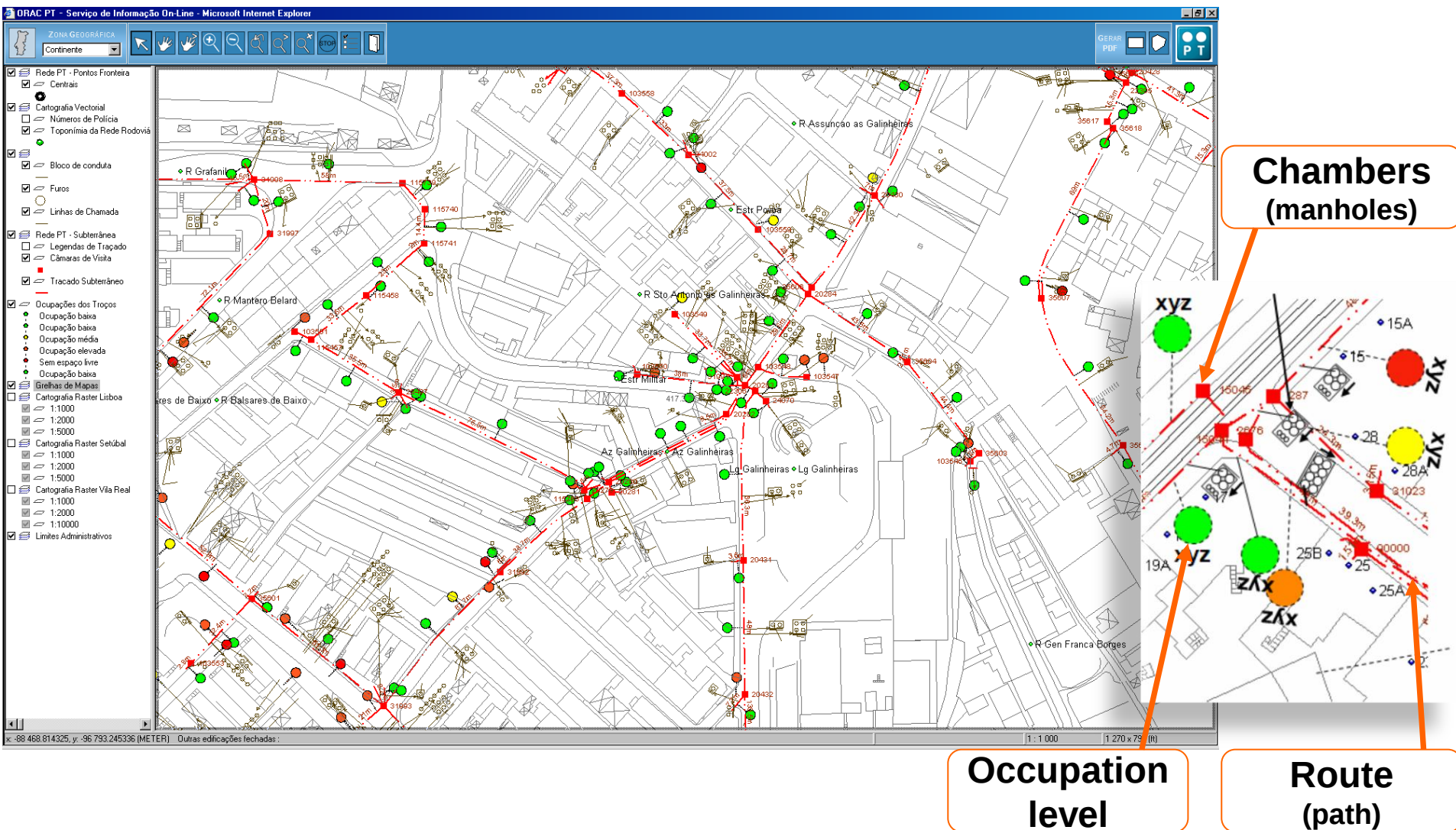


Training to acquire specific competencies/ knowledge

4 training companies have implemented a Credential Program Partnering with PT

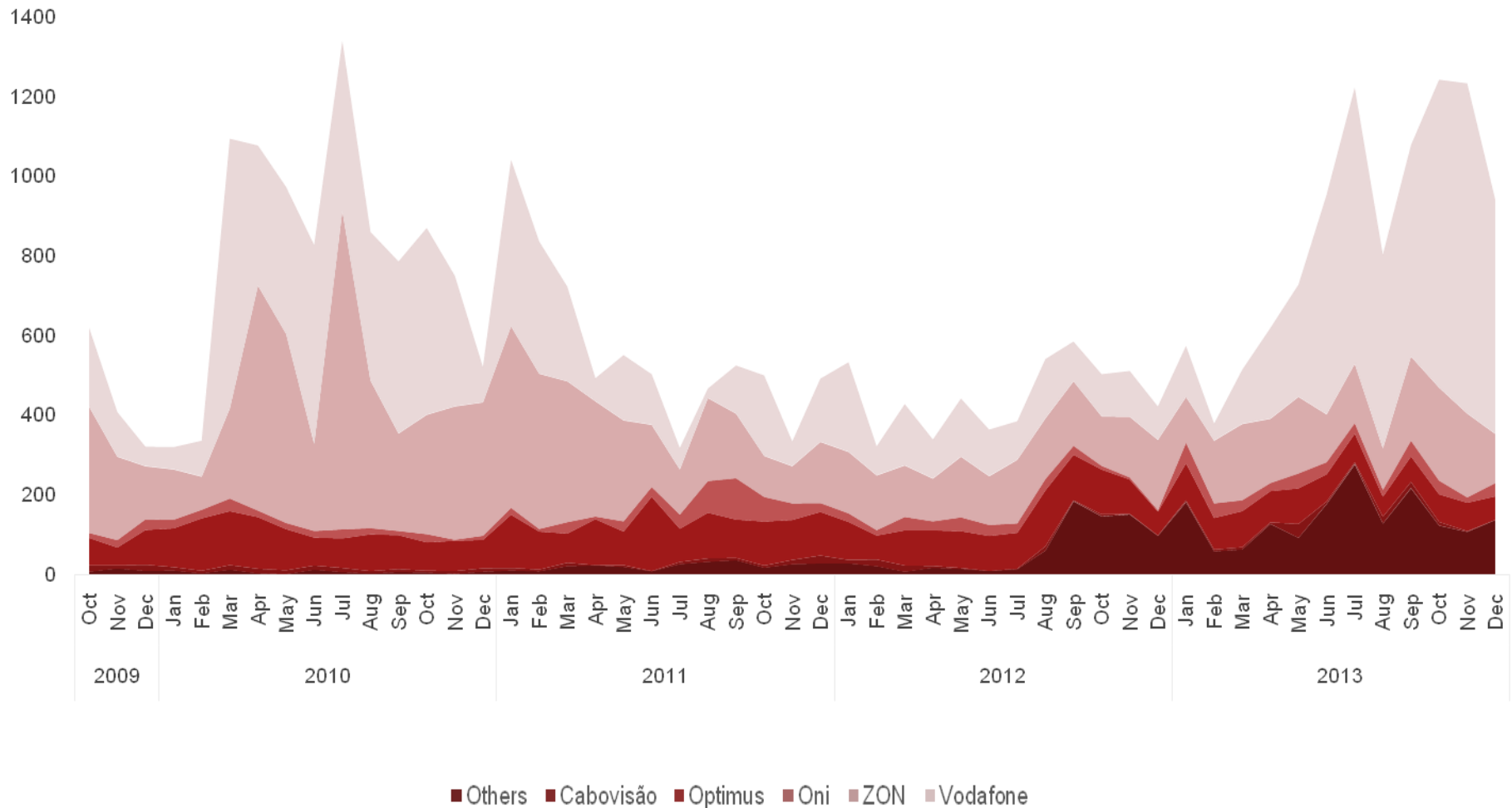
Theoretical and practical exam

The reference duct access offer PT database accessed by the players



The reference duct access offer

The evolution of the wholesale services demand



3. Symmetric duct access regime in Portugal (Decree-law nr 123/2009)

Access to “horizontal” and “vertical” infrastructure - Symmetrical regulation by Decree Law

In 2008 and 2009, the Portuguese Government adopted measures to promote investment in NGA, focusing on access to horizontal and vertical infrastructures

Decree-Law nr. 123/2009



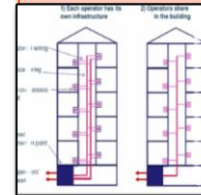
**Access to
infrastructure**



**Coordination of
civil works**



**Streamlining
permit granting**



**In building
infrastructure**



Decree-Law 123/2009 foresees the obligation of all entities (except the concessionary) to give access to its own (or managed) infrastructure suitable for accommodating ECN's

Symmetrical access conditions

Open/non-discriminatory access to all suitable ducts and related infra-structure



Access price cost oriented



Entities shall publish procedures and conditions applicable to the access



Any (viability) access request must be answered in 20 working days



Installation must be done in 4 months



Gathers information on:

- geo-referenced data from all entities
- information on procedures and access conditions to infrastructures
- procedures and conditions for the allocation of rights of way
- advertisements of construction of new infrastructure

By determination of 23 January 2014, ANACOM has approved a second tender for the implementation and management of the CIS

Proposals were received until 20 March 2014. Implementation will begin soon



New buildings – mandatorily equipped (by the building owner) with at least **two fibres per home and associated infrastructure to be shared by the telecom operators.**

Old buildings – rules have also been laid down to avoid monopolization of in-building infrastructures **by the first operator**, by imposing **sharing of the new (or upgraded) infrastructure within the building.**



The **first operator to reach a “old” (already built) building has to install** at least **two fibres per home** (apartment) **and associated infrastructure to be shared by other operators** (e.g. vertical infrastructure and ODF).

The **second operator** reaching the building **will pay 50% of the costs** incurred in the installation of the shared infrastructure. The third operator will pay 33% and so on.

4. Conclusion



Portugal case: Infrastructure competition

Without the ANACOM's imposition of the PT ducts access obligation, together with the non discrimination and transparency measures, we would not have reached the current NGA coverage levels in terms of new infrastructures installed by different players (infrastructure based competition).

- Six months ago, PT and Vodafone announced an agreement to share the PON network
 - Each operator will have access to 450.000 new houses
 - Each operator has access to 50% of the capacity of the shared PON network (dark fiber)
 - Reciprocity in the access to PON network according to a IRU model (indefeasible right of use)
 - Investment in regions where cable is the only NGN operator: there will be 3 independent operators instead of 1
 - In regions where cable and PT are already present there will be a third competitor

- The coverage of the shared network is jointly decided, involving less profitable regions.
- Each operator is responsible for his own investment in order to fulfil the agreement conditions
- The right of access ensures that operator has effective and autonomous control of the network with full freedom to design and implement his commercial retail offers (only passive elements of the network are involved)
- It is a 25 years agreement
- The needs for coordination and exchange of information are minimal
- Each operator can do similar agreements with other operators in other geographical regions



ANACOM

ALINHADA COM
OS NOVOS DESAFIOS

EMBRACING NEW CHALLENGES



Thank You