

Is there scope for sub-national markets in Spain?

**Workshop on Sub-national Markets
Wien, 20th June 2008**

Introduction

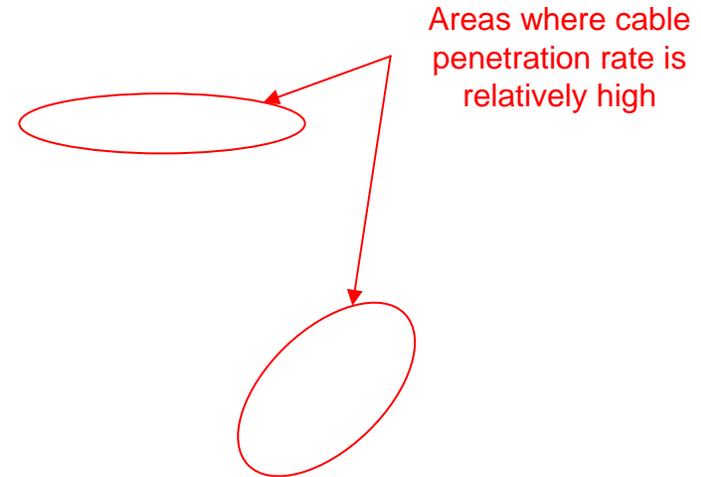
- ❑ Geographic market definition is relevant in those product markets (specially broadband markets) where there could be more than one access network with different coverage and competition conditions may differ.
- ❑ Three categories of access operators, with different levels of coverage, can be identified:
 - Telefónica, as the incumbent operator.
 - Cable operators: 3 regional operators (Euskaltel, Telecable and R-Cable in Basque Country, Asturias and Galicia, respectively) and ONO, present in the rest of Spain.
 - LLU operators, specially France Telecom and Jazztel.
- ❑ Relevant product markets (included in the EC Recommendation), where sub-national geographic markets may be defined, are:
 - Access to the public telephone network at a fixed location for residential and non-residential customers (market 1).
 - Wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location (market 4).
 - Wholesale broadband access (market 5).

Competition conditions in relevant retail and wholesale markets

Retail access markets (I)

Fixed telephony penetration rate
(per 100 inhabitants)

Broadband access penetration rate
(per 100 inhabitants)



Both levels of penetration vary significantly. This result would reveal differences both in cost and demand.

Retail access markets (II)

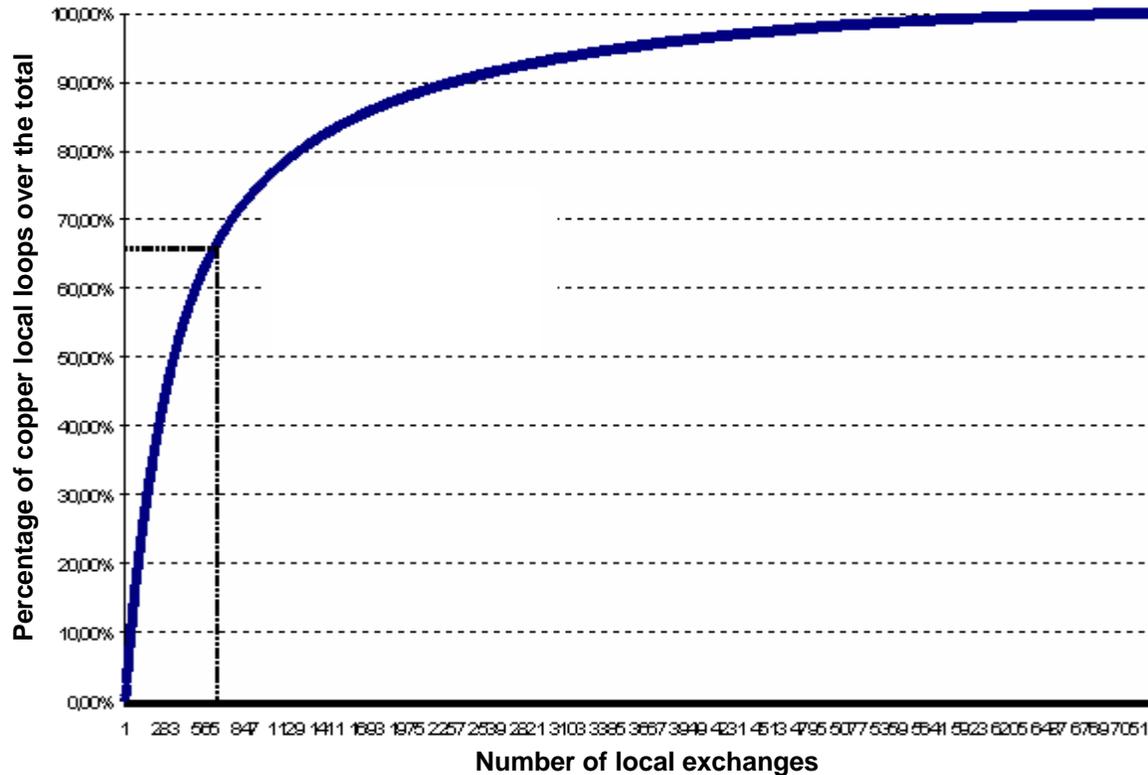
% Households passed by cable

% lines in local exchanges with LLU

**In fact, the development of cable and LLU is clearly not homogenous.
Different scenarios can be identified according to the number of
competing access networks**

Wholesale access markets (I)

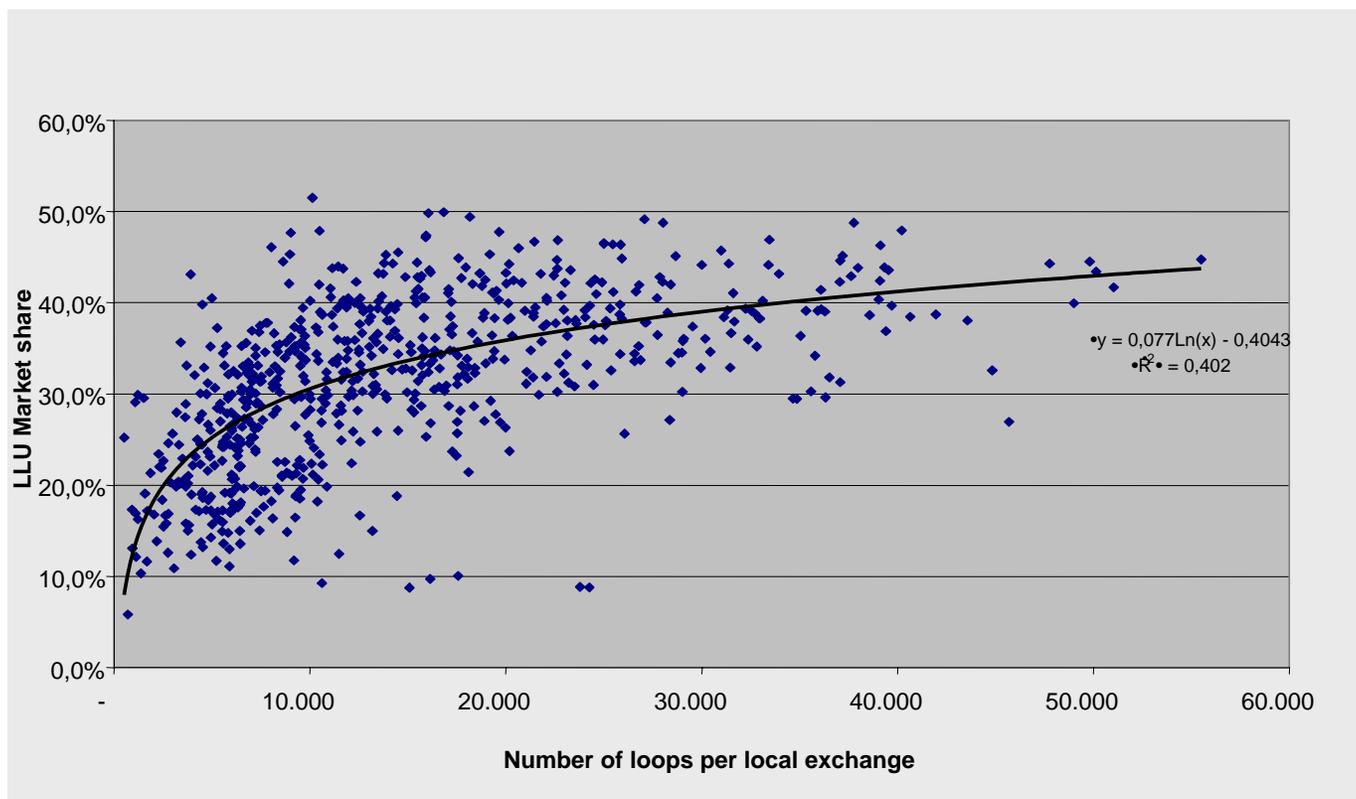
Coverage of local exchanges where collocation and unbundling is effective



A relatively low number of local exchanges reaches a coverage above 60% of total number of local loops.

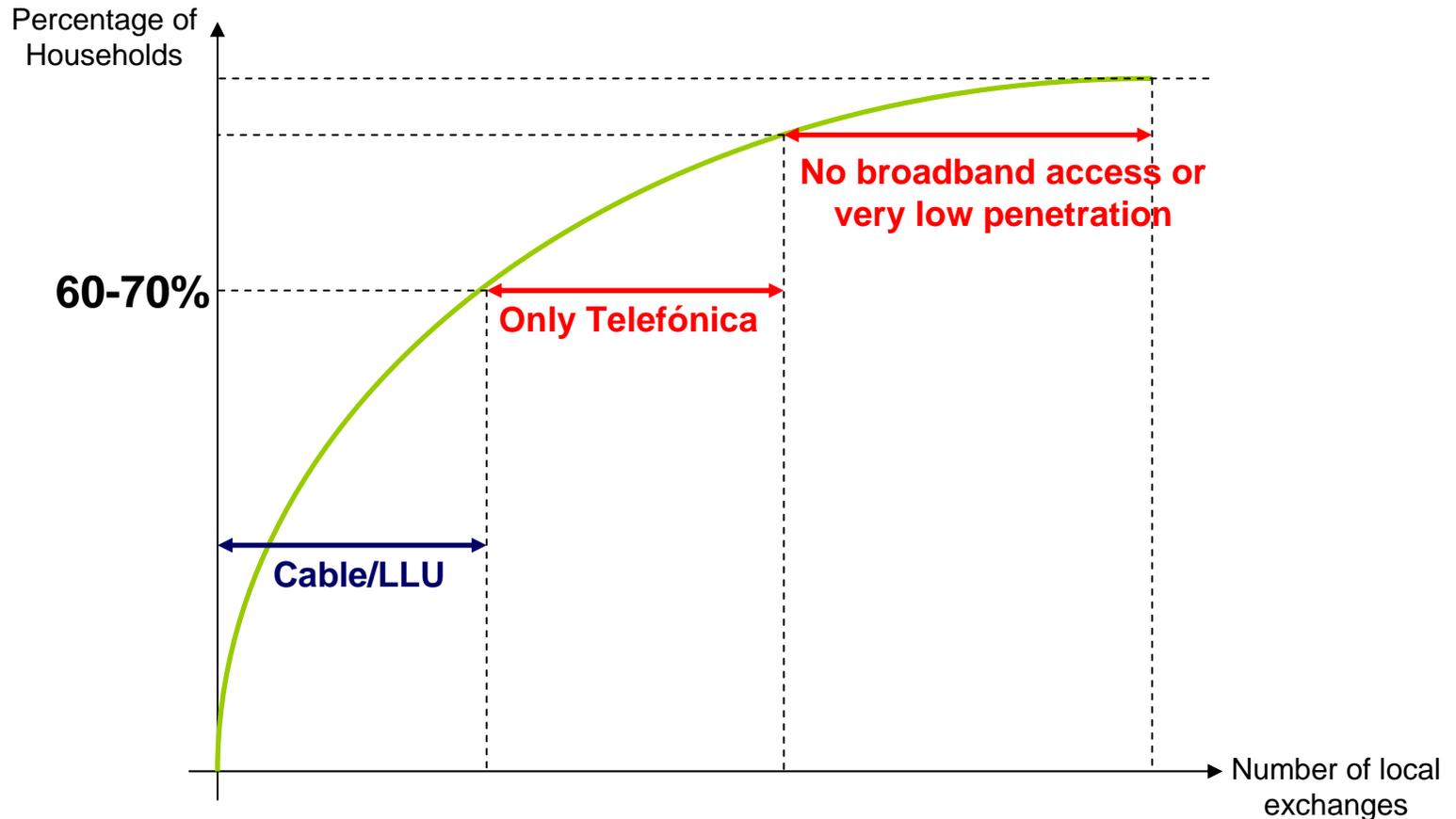
Wholesale access markets (II)

Relationship between LLU operators' market share and the size of market share



The size of local exchange is one of the drivers for LLU operators' investment decision, resulting into a positive correlation with respect to LLU operators' market share

Scope of access competition



The overlap between cable or LLU and Telefónica's network results into a relevant degree of access competition in around 70% of households

Sub-national or geographically differentiated remedies vs. national markets

Would the definition of sub-national markets be justified? (I)

- ❑ It is clear that there are differences in the development of alternative access networks.
- ❑ They may reveal different competition conditions but, according to EC, additional elements should be taken into account for the purposes of market definition:
 - Distribution of market shares and the evolution of shares over time.
 - Pricing of both the incumbent and alternative operators and its evolution over time.
 - Differences in the functionalities or types of products being offered by both the incumbent and alternative operators or in their marketing strategies.
 - Entry conditions in a given area.

The level of competition may vary among geographical areas but further analysis is needed to define non national geographic markets

Would the definition of sub-national markets be justified? (II)

- ❑ With respect retail access markets, differences in market share are still irrelevant.
 - Telefónica's market share is above []% in almost every region.
 - Even more, only in less than [] municipalities (representing less than []% of the total number of loops) its share is lower than []%.
- ❑ On the contrary, in broadband markets, differences are more significant
 - In fact, there are regions where cable penetration is equal to DSL penetration.

In absence of cable operators' self-supply, these differences would not emerge.

Would the definition of sub-national markets be justified? (III)

- ❑ Differences in market shares do not seem to be enough to justify the definition of sub-national markets. Additionally:
- ❑ There is no price difference at a national level.
 - Retail access market exhibits national uniform prices due to the geographical averaging price obligation.
 - Broadband services exhibit stable and national uniform prices.
 - Wholesale broadband service is regulated according to cost orientation and geographical averaging obligations
- ❑ Thus, given price regulation imposed to Telefónica, it is not possible to observe significant price differences at a geographical level lower than national one
- ❑ But, service quality does vary in terms of transmission speed.

Price differences in conjunction with differences in service functionalities should be analysed in broadband markets

Would the definition of sub-national markets be justified? (IV)

There seems not to be enough arguments to define sub-national markets, not only in retail access markets but also in broadband markets.

The result will depend critically on:

1. The analysis of indirect constraints in order to include cable access
2. The analysis of price differences and their evolution in regulated markets.
3. The assessment of differences in service functionalities

Given the conditions set by EC in its comments to Ofcom and RTR, geographic differentiation of remedies would be more proportional

Methodology for market segmentation

Definition of Geographic Unit

- ❑ The geographic unit (GU) must meet the following conditions:
 - Clear and objective, allowing CMT to assess the level of current and potential competition
 - Feasible to implement, for CMT and operators, as well.
 - The set of GUs must cover the whole national territory.
 - CMT must be able to check the effect of obligations in any GU.
- ❑ Different criteria can be applied for choosing the GU:
 - Administrative: postal codes, buildings, households, municipalities
 - Technical: local exchanges
 - Combination of both ones: telephone districts

Geographic Unit	Total Number of Units
Telefónica's local exchanges	597 local exchanges 11,8 mil remote exchanges 28 digital secondary exchanges (CSD)
Municipalities	8,1 mil
Telephone districts	509
Local exchanges of cable operators	>220 local and tandem exchanges >120 concentrators

- ❑ The appropriate GU for markets 4 and 5 and also for market 1 would be the local exchange of Telefónica's access network.

Aggregation of geographic units

- ❑ The following criteria are relatively easy to measure and may reflect the most significant differences at the local exchange level

Criteria	Variable	Threshold
Market share	<ul style="list-style-type: none"> ✓Incumbent's market share ✓Cable operator's coverage 	<ul style="list-style-type: none"> <25% presumption of competition >40 % doubts on competition level >50 % presumption of SMP
Control of an infrastructure not easily duplicated	<ul style="list-style-type: none"> ✓Number of lines in the local exchange 	Number of lines per local exchange susceptible to be unbundled
Barriers to expansion	<ul style="list-style-type: none"> ✓Number of lines not available for unbundling 	Number of lines of cable operators Threshold not defined yet
Economies of scale, scope and density	<ul style="list-style-type: none"> ✓Socioeconomic variables. ✓Number of alternative operators 	Socioeconomic variables Number of LLU and cable operators In both cases, thresholds not defined yet

- ❑ Statistical techniques such as Principal Component Analysis and cluster analysis may be useful to set some of those thresholds.
- ❑ Based on these criteria, the GU are grouped in such a way that competition conditions are sufficiently homogenous within the group and enough different between them.

Impact of NGNs

- ❑ Telefónica has announced its decision to invest in the roll-out of a new fibre access networks (NGNs).
- ❑ In the Public Consultation on NGNs, CMT points out additional elements to be consider when defining geographic markets or, at least, identifying geographic areas subject to different remedies.
- ❑ The investment decision is more related to:
 - Demand characteristics related to socioeconomic variables such as income per capita, penetration of broadband services, education level
 - Cost characteristics derived from the population density and the type of buildings.
- ❑ The network topology of NGNs changes and the number of local exchanges reduces in comparison to the legacy network.
- ❑ It poses additional difficulties on:
 - The stability of market boundaries.
 - The appropriate geographic unit.

Ongoing work

- ❑ CMT is still working on gathering a comprehensive and exhaustive database, including:
 - Telefónica's retail telephone and ADSL lines
 - LLU operators' lines
 - Cable operators' lines, comprising both active and ready to market ones
 - Investment plans of Telefónica and cable operators
- ❑ Minimum unit in the database
 - Street
- ❑ This level of disaggregation is necessary to:
 - Get the footprint of regional cable networks
 - Map it onto the GUs, that is, the local exchange of Telefónica.
 - Characterize the area covered by each Telefónica local exchange in terms of number of competitors, lines, market shares and installed capacity.
 - Derive some of the thresholds for the aggregation of GUs.

Preliminary conclusions

- ❑ Competition conditions have not evolved on a homogeneous basis; this trend would be reinforced with NGNs.
 - Consequently, a more in depth assessment of geographic dimension is required.
- ❑ Market segmentation seems to be necessary in market 5 and, to a lower extent, in market 4.
 - However, the degree of heterogeneity in market 1 does not appear to be sufficient to justify either sub-national markets or geographically differentiated remedies.
- ❑ For the 2 years time period, local exchange of Telefónica's network is the appropriate geographic unit.
 - With the roll-out of NGNs, demand characteristics become more relevant in the identification of areas subject to be competitive.

THANK YOU!!

Jesús Pascualena Aguirre
Department of Economic Analysis and Markets
Comisión del mercado de las Telecomunicaciones (CMT)
jpascualena@cmt.es