

# BRESAT



## D3.1.1

# Analysis of the Unaddressed Marketplace

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Department for Business  
Innovation & Skills



Donoussa  
Municipality of Navas and Small Cyclades





# AGENDA

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1. The Un-Addressed Marketplace & How It Is Derived
2. Satellite Broadband Services – Technical and Commercial Characteristics & Geographic Availability
3. Affordability by Country Based on GNI

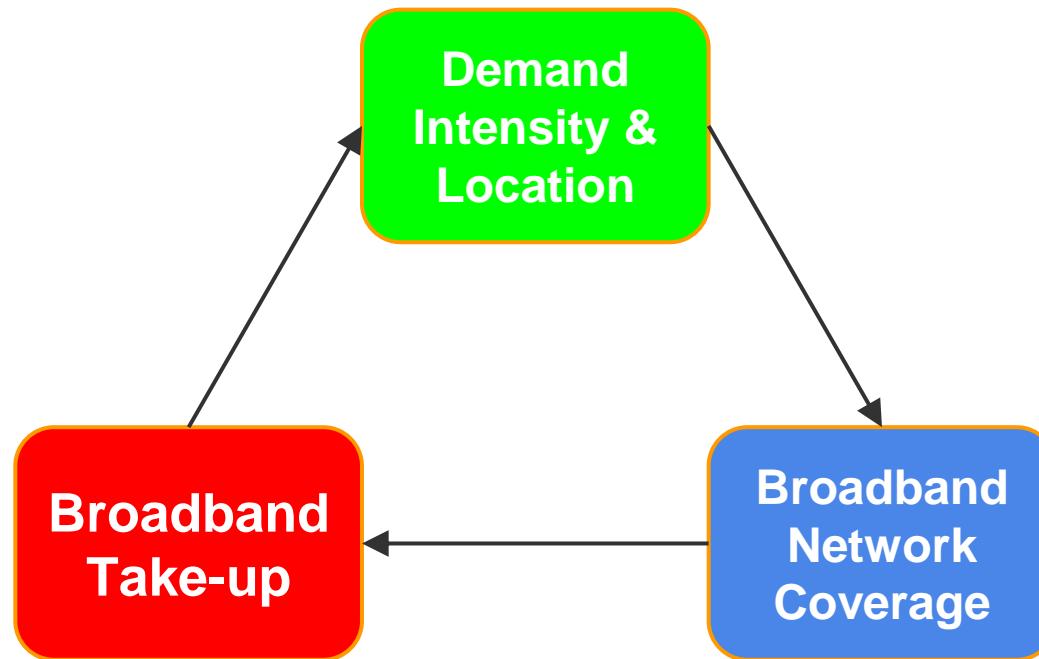




# The Un-Addressed Marketplace & How It Is Derived

The un-addressed marketplace is where it is not commercially viable to deploy terrestrial broadband

It is derived as follows:





# Demand Intensity & Location

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The intensity & location of demand is the first objective

We assume that fixed broadband demand is 1:1 with households and businesses.

Although some households and businesses take multiple lines, this isn't a large factor and it is only of limited interest.





# Broadband Network Coverage

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Point Topic provided the EC Broadband Coverage in Europe (2012) analysis

Broadband network coverage comes from infrastructure surveys & EC inputs

Technology splits available for standard, NGA and LTE/HSPA.

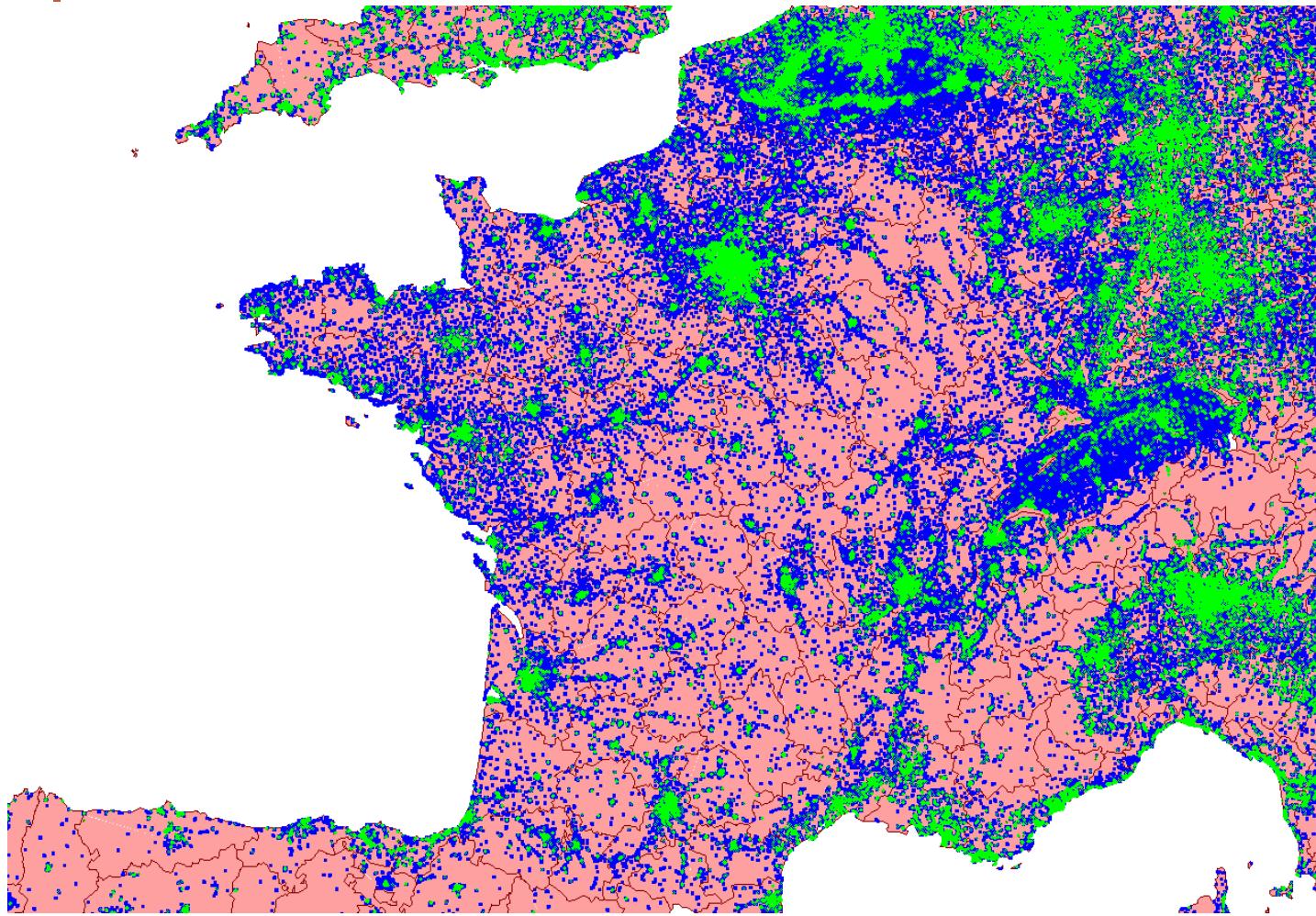
Point Topic's own work (and historical databases) allow us to generate operator presence lists and coverage maps





# Network Coverage Modelled

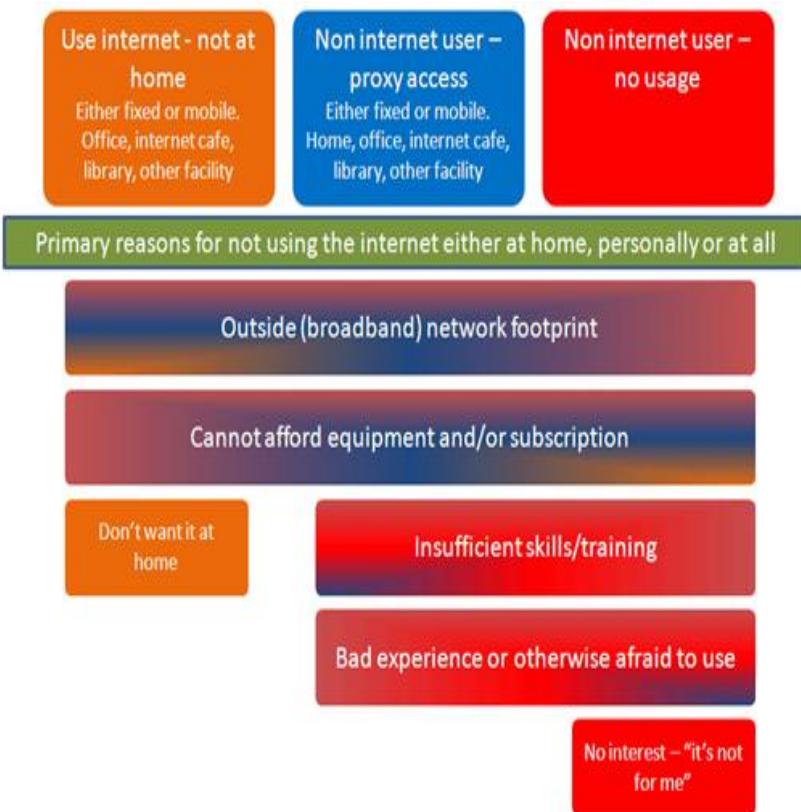
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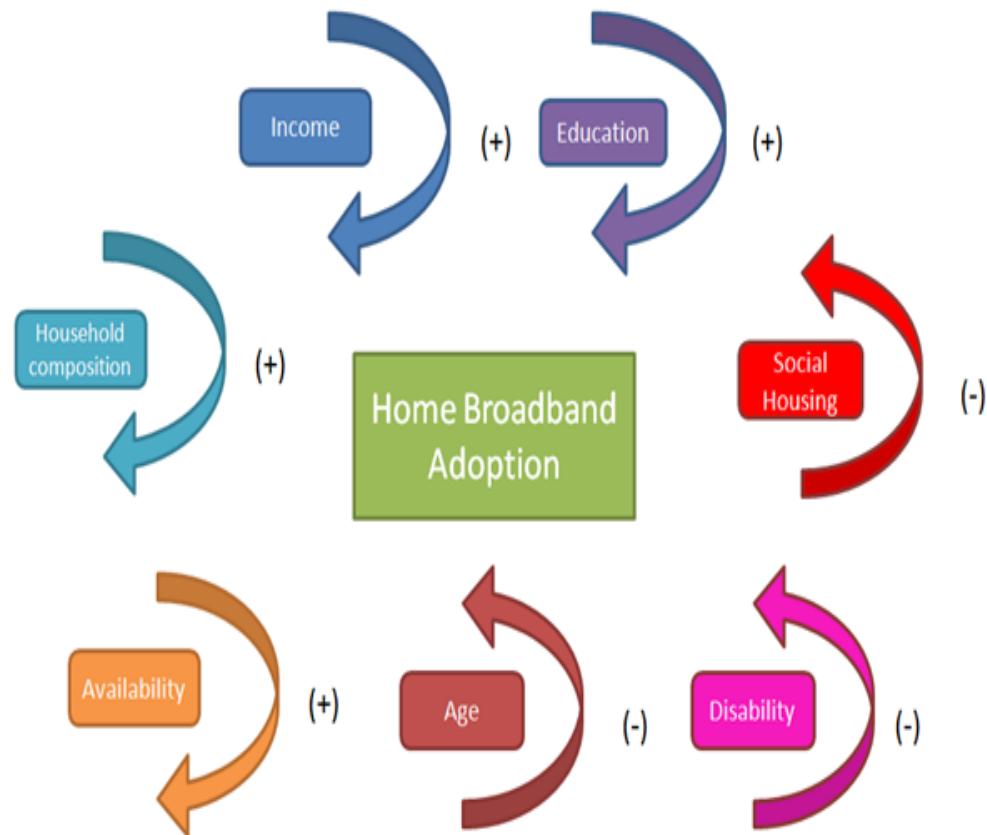


# Broadband Take-up

## Reasons given

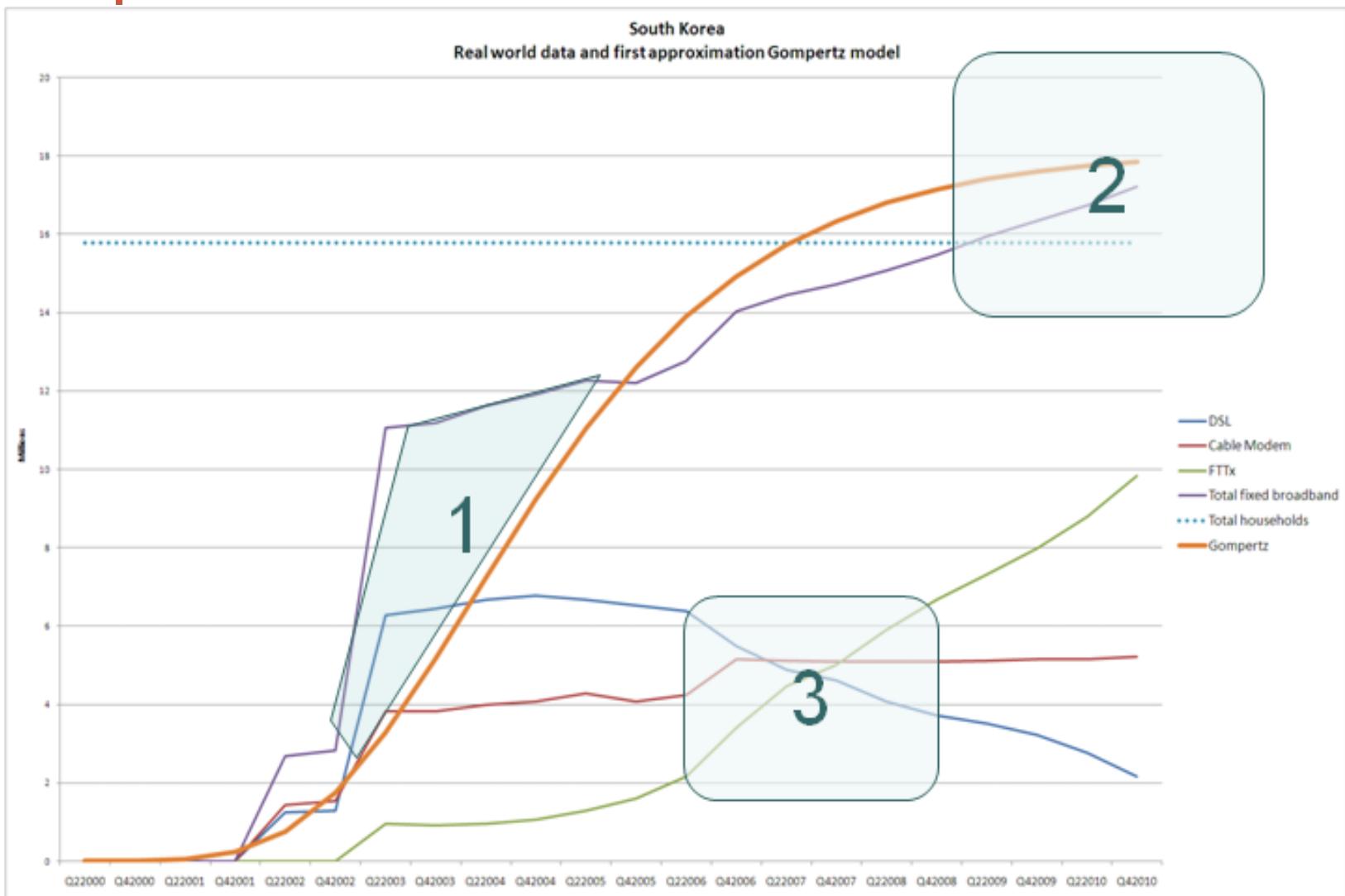


## Predictors



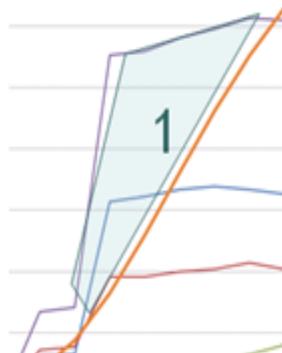


# Take up Modelling - Gompertz Curves





# Lessons From The Real World



**Public policy in action** – the Korean government implemented the KII in the early part of the century. The intervention distorted the market as the results show as urban consumers suddenly had access to a service priced at a level that was attractive enough to shift the consumption curve considerably. We can learn much from this particularly when it comes to reviewing the proposed interventions and the expected effects on availability and take-up of the Digital Agenda.



**Long term consistency** – despite the distortions, interventions and the various market shocks over the last 10 years the Gompertz based methodology allows us to predict outcomes with confidence.



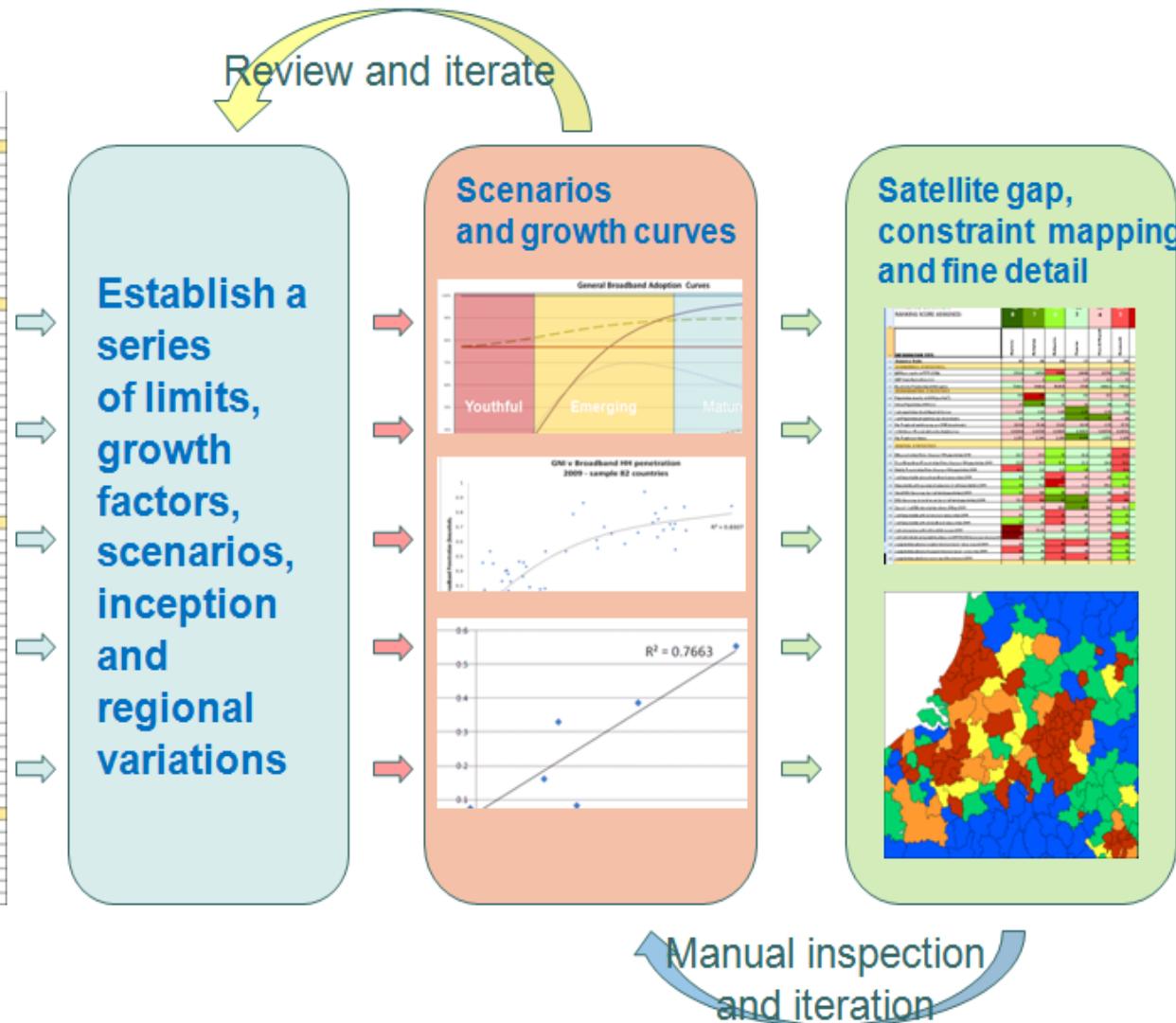
**Substitution and technology effects** – at this intersection we can see the cable market reaching its ceiling as service providers and consumers prefer FTTx, or products labelled as FTTx. So cable deployment stops while FTTx numbers increase and we can see the substitution effect as DSL lines are replaced by a clearly technologically superior product. A comparison that is much less marked with cable v FTTx.





# General approach

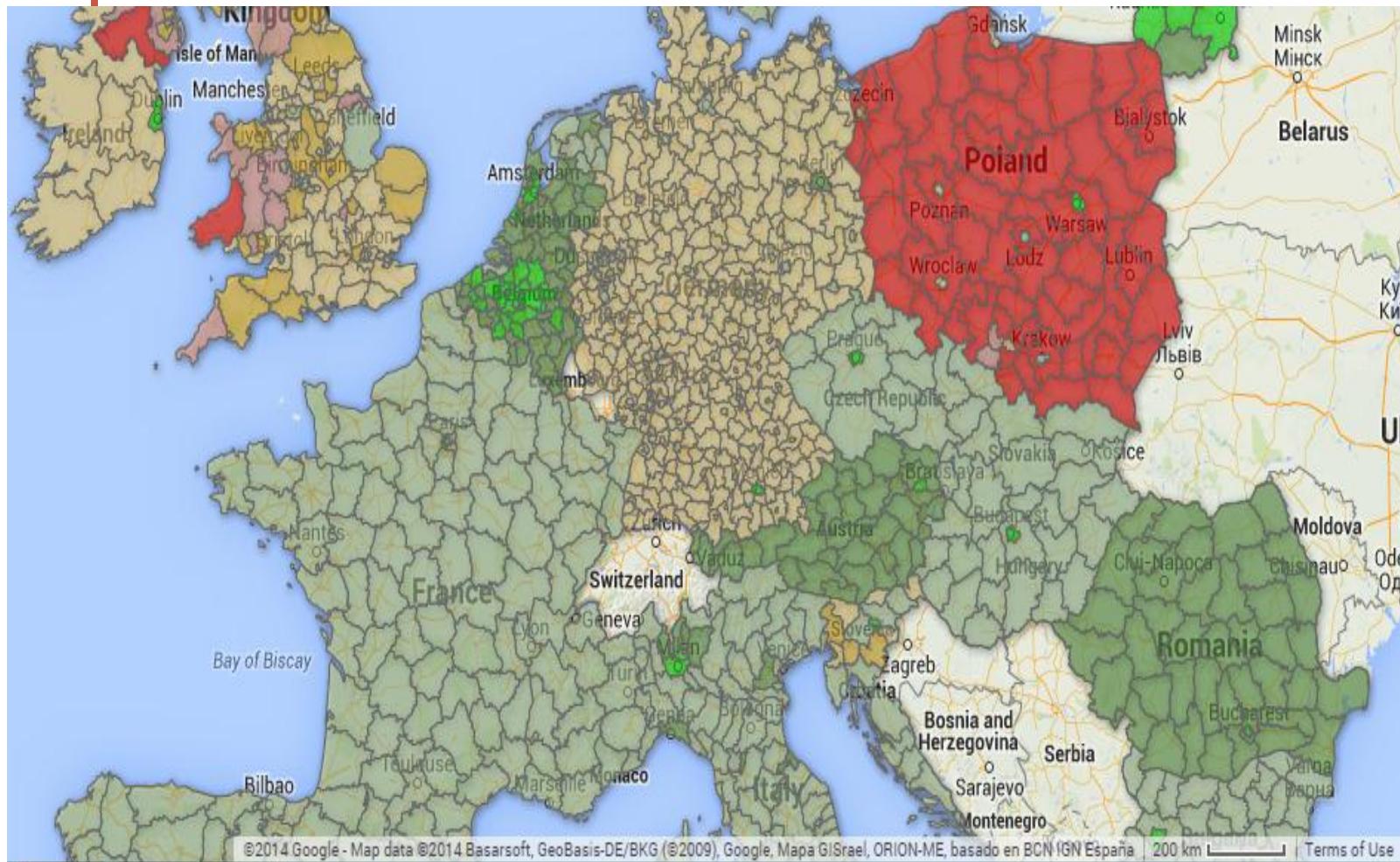
INFORMATION TYPE
Country Code
ECONOMIC STATISTICS
Euro Purchasing Power Parity
GDP 2010 (Billions US\$)
GDP 2012 (Billions US\$) (Estimate)
GDP 2012 (US\$) (Market Prices)
GDP per capita (US\$)
GDP as % of Global 2010 (Market) (0.00%)
GDP as % of Global 2010 (Nominal) (0.00%)
GDP from Services (%)
GDP from Industry (%)
GDP from Agriculture (%)
Banking for grouping (Other plus x 100)
Electricity Production GWh/capita
Demographic statistics
Total Population 2010
Urban Area
No. Cities with population over 300,000 (2008-2010)
No. of households in 2008
Rate of urbanisation
Population density at 2010 (per km <sup>2</sup> )
Urban Population 2008 (%)
No. Hospitals 2009
% of population Each Hospital Serves 2009
Total Population 2010 above the age of 65 years old
Total Population 2010 below the age of 15 years old
% of Population of working age (Maximum)
Total No. SME's 2009
No. People of working age per SME (Maximum) 2009
No. Schools 2009
% Children < 13 years old each school serves 2009
No. People per house 2009
DIGITAL STATISTICS
BB penetration Rate 2010
BB Penetration Rate 2009
Fixed BB Penetration Rate 2009
Fixed BB Penetration rate 2008
Mobile Penetration rate
Mobile Broadband coverage & Population Covered
% of households using a broadband connection 2009
% not without a BB connection 2009
Total No. Broadband Lines 2009
% Households with a personal computer 2009
Country's Personal Computer Penetration (%) 2008
Total DSL Coverage (as % of total population) 2009
DSL Coverage in rural areas (as % of total population) 2009
Speed - % of BB subscriptions above 2Mbps 2009
Market 3G&4G 2009 (Mbps/PPP) (Lat=100) Least Expensive Offer
Mobile Broadband Coverage & Technology Report
% of households with an internet connection 2009
% of households with a broadband connection 2009
% of enterprises with a fixed BB access 2009
% of individuals using mobile phone via UMTS (3G) to access internet 2009
% population who are regular internet users - once a week 2009
% population who are frequent internet users - every day 2009
% population who have never used the internet 2009
Digital Divide
(Market Maturity)
Digital Divide Lowest TariFF/Usd Relative Ranking Score
IMTA Ranking - from ECTA Regulatory Scorecard (Low score is Good)
Scoreboard Internet
Importance of ICT to government vision (Rank)
Internet Access in Schools (Rank)
Mobile Network Coverage % population Covered (Rank)



# Putting It All Together

## The Unaddressed Marketplace

on [www.bresat.eu](http://www.bresat.eu)

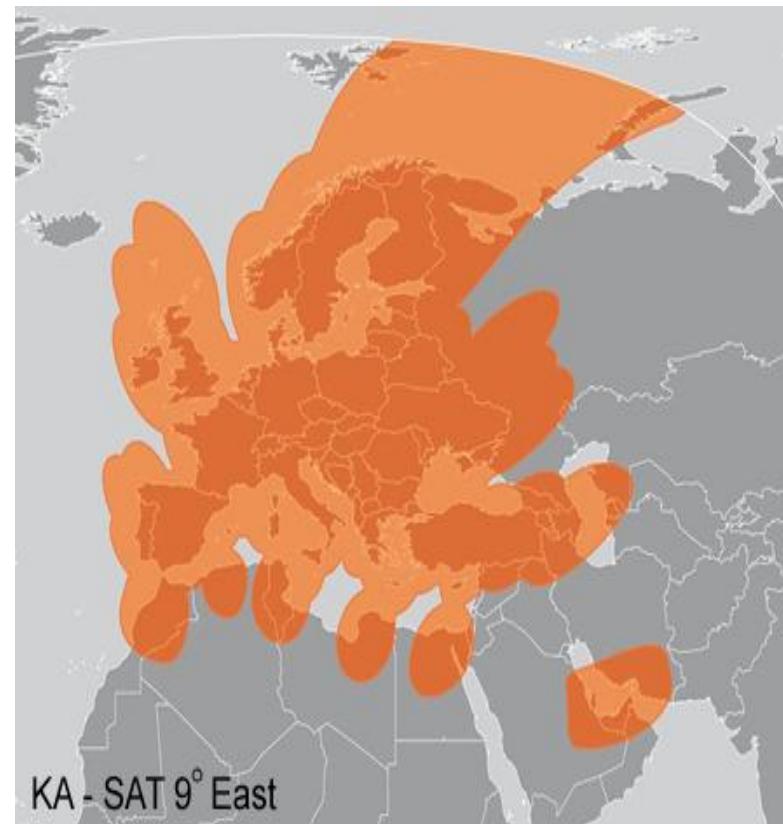
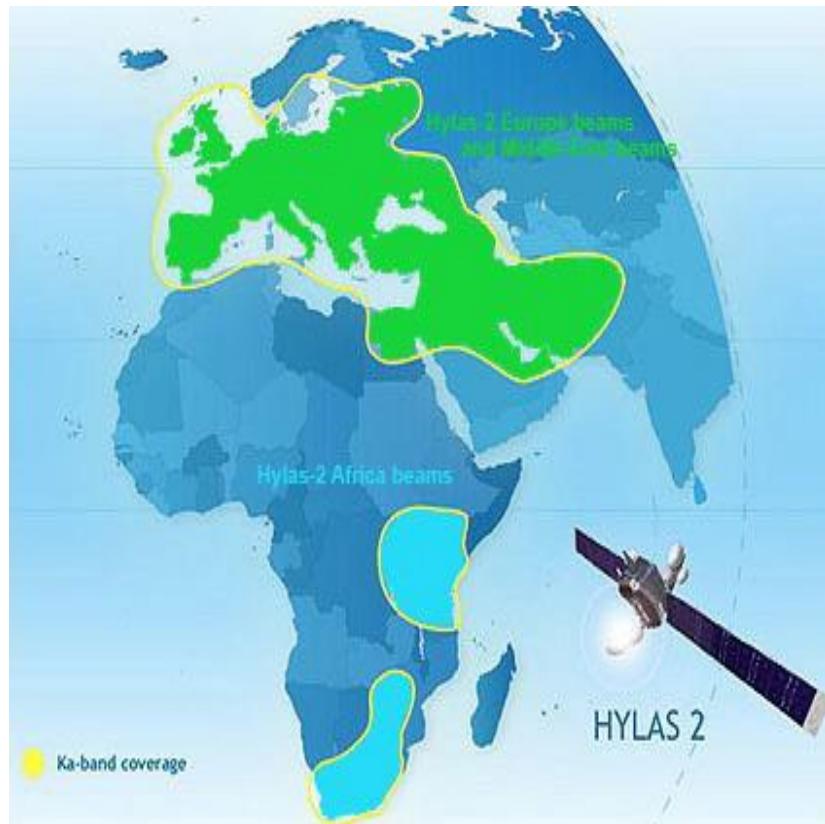




# Satellite Broadband – Geographic Availability

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Extensive EU28 geographic availability through Ka band satellites from different operators





# Satellite Broadband – Technical and Commercial Characteristics

Satellite broadband charges are broadly the same across the whole of Europe

However prices increase with download speed and download allowance as they use more satellite capacity.

Example  
Pricing:

<b>Light 12</b> 12 month contract	16GB 8GB + 8GB Peak + Off Peak	up to 6Mb	up to 1Mb	£29.00	£134.50
<b>Light 24</b> 24 month contract					£99.00
<b>Medium 12</b> 12 month contract	32GB 10GB + 22GB Peak + Off Peak	up to 10Mb	up to 2Mb	£39.00	£99.00
<b>Medium 24</b> 24 month contract					£49.00
<b>Max 12</b> 12 month contract	20GB + Unlimited Peak + Off Peak	up to 15Mb	up to 2Mb	£54.00	£49.00
<b>Max 24</b> 24 month contract					FREE *





# Affordability by Country Based on GNI

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According to the International Telecommunications Union, broadband can be considered affordable when it is at or below 5% of the average monthly income.

Country GNI (Gross National Income) allows us to correlate the affordability of broadband for the population

However GNI is usually reported on country averages; income is distributed among the population of a country so even if broadband prices are under 5% of the average monthly income of the population, it could still be above 5% for the poorest segments of the population. Often these will be the most rural households.



# Broadband Affordability by Country Based on GNI

