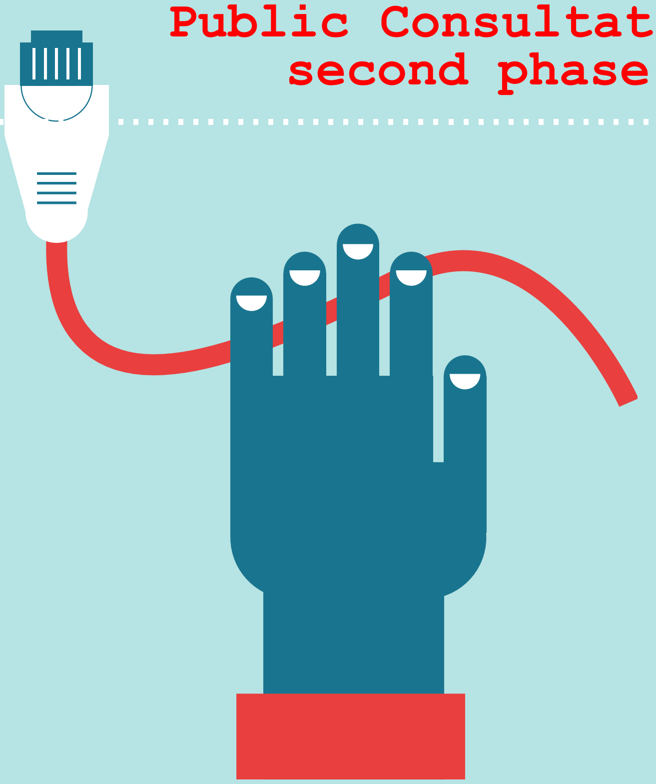
ITALIAN

ULTRA BROADBAND

STRATEGY

Ministry of Economic Development

Public Consultation 2015
second phase



Summary

Introduction

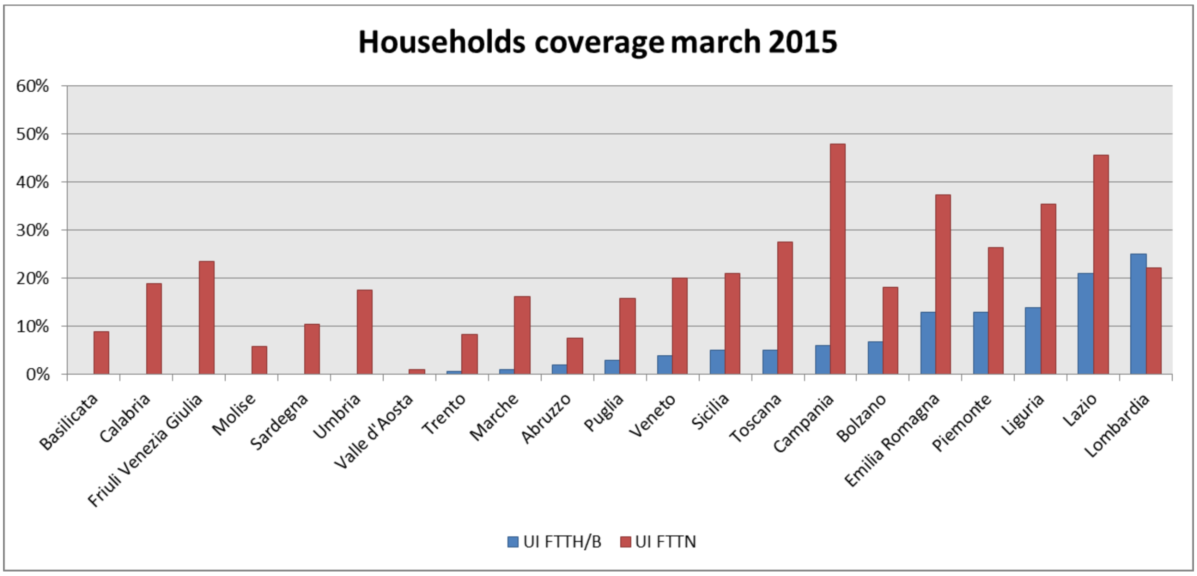
Infratel carried out the public consultation for the periodic updating of the map related to the Ultrawide Bandwidth available connectivity offered by telecommunications operators. The public consultation is fundamental to identify the areas where operators have not intervened up to today with their own infrastructuring programs or have not interests to do so within the next three years (so called "market failure" areas), and thus to highlight which geographic areas will then be affected by the aid measures referred in the "Strategy for the Italian Ultra Wide Band" approved with Resolution by the Board of Ministers on 3 March 2015.

The consultation - which takes place in accordance with paragraph 78 of the "Community Guidelines for the application of the rules on state aid in relation to rapid deployment of broadband networks" (2013C-25/01), is aimed at a clear identification of the geographical areas eligible for public intervention, optimizing the use of available resources and minimizing potential distortions of competition.

Analisys of the public consultation

The current situation in Italy related to the coverage of networks able to provide services at speeds over 30Mbps and 100Mbps in terms of UI (residential units) on a regional basis is shown in Fig. 1.

Figure 1 UI Coverage at March 2015 - Italian Regions



The most evident results of Figure 1 is represented by the gap still needed in each Region to achieve the EU 2020 objectives, i.e. the 100% coverage of the population at 30Mbps and the activation by the 50% of public service at 100Mbps.

Thus, to support the National Strategy for ultra broadband diffusion whose final goal is to reach the European 2020 targets, Infratel Italia Spa, as every year, launched a public consultation with the operators.

The consultation was launched on the 8th of May 2015 by publication on the website www.consultazioneinfratel.it, where questionnaires and shapefiles, related to the 94,645 areas in which the country was divided, were available.

Subsequently, after the publication phase, the 19th of October 2015 has been opened a new phase in order to let the Operators be able to confirm, modify or improve their declared plans, in accordance with the point (65) of the "Community Guidelines for the application of the rules on state aid in relation to rapid deployment of broadband networks" (2013C-25/01). This new phase has been called “second phase”.

With regard to the network architecture used to offer ultra broadband services the following definitions in terms of residential units have been adopted:

- **a) Residential Unit enabled by Fibre to the Node (FTTN) architecture:** the fiber terminates at an intermediate node of the access network on physical carrier (copper) or at an existing node access systems of radio carrier (typical band less than or equal to 100 Mbit/s);
- **b) Residential Unit enabled by Fiber to the Distribution Point (FTTDP)architecture:** the fiber terminates at an intermediate optical node (Distribution Point) at a distance less or equal to 50m from the UI (typical bandwidth above 100 Mbit/s);
- **c) Residential Unit enabled by Fiber to the Building (FTTB) architecture:** the fiber terminates at an optical termination point at the basement of the building where the UI is located(typical bandwidth above 100 Mbit/s);
- **d) Residential unit enabled by Fiber to the Home (FTTH)architecture:** the fiber terminates at an optical termination point inside the UI (typical bandwidth above 100 Mbit/s

The “first phase” of the consultation closed the 8th of July 2015 while the second phase the 7th of December 2015.

Table 1 Operators that participated to the Public Consultation 2015

N.	Operator	N.	Operator
1	A.M.T. Services	16	LineaCom
2	Argosid	17	Mc-Link
3	Argosid-Connettività	18	Metroweb
4	Asco TLC	19	Ne-t (by Telerete Nordest) s.r.l.
5	Asdasd	20	Ngi
6	Bigtlc	21	Nice Blu Srl
7	Brennercom	22	Planetel
8	Convergenze	23	Retelit/E-via
9	Csi-Piemonte	24	Selene
10	DeltraWeb	25	Telecom Italia
11	Estracom	26	Telweb
12	Fastweb	27	Terre Cablate
13	Intred	28	Trentino Network
14	Interplanet	29	Unidata
15	KPN	30	Vodafone

The number of operators, compared to the 2014 Public Consultation, rose from 7 to 30 demonstrating a greater attention of the private sector to the development of ultra broadband.

Table 2 shows the comparison, at national level, between the data related to the 2014 consultation, to the 2015 consultation as well as to the “second phase” one.

Following the increased granularity of the survey in 2015 due to the division of the territory in 94,645 areas, it was found that the UI that pass from the Cluster C and D (market failure) into the Cluster A and B are equal to 2.630.000 IU (around 10% of the total).

Conversely in the areas served by the operators, approximately 1.8 Mln. of UI are not served in the three years passing through the Cluster A and Cluster B to C (equivalent to 7% of the total).

Table 2 Comparison between 2014 consultation, 2015 consultation and 2015 second phase

	Public consultation 2014 (UI covering plans 2017)	Public consultation 2015 (UI covering plans 2018)	Second phase of the Public Consultation 2015 (UI covering plans 2018)
U.I. UBB FTTN served by private plans	36,45%	41,2%	50,4%
U.I. UBB FTTH/B/Dp served by private plans	n.a.	21,4%	22,3%
U.I. (FTTN + FTTH/B/Dp) served by public intervention	18,0%	20,6%	21,9%
U.I. not covered by UBB	45,55%	36,3%	26,2%

Table 3 shows the Regional coverage levels in terms of UI in 2015.

The details related to the local municipality coverage are reported in the file "**BUL Coverage 2015 municipality level**".

Table 3: Broadband Coverage in Italy at 31/03/2015

31/03/2015 Coverage	2015 FTTH, FTTB, FTTDP Coverage	2015 FTTN coverage	2015 not served %
REGION			
Abruzzo	2%	7,5%	92%
Basilicata	0%	9,0%	91%
Calabria	0%	19,0%	81%
Campania	6%	47,9%	51%
Emilia Romagna	13%	37,4%	61%
Friuli Venezia Giulia	0%	23,6%	76%
Lazio	21%	45,6%	54%
Liguria	14%	35,5%	65%
Lombardia	25%	22,2%	65%
Marche	1%	16,3%	84%
Molise	0%	5,8%	94%
Piemonte	13%	26,4%	73%
Puglia	3%	15,9%	84%
Sardegna	0%	10,4%	90%
Sicilia	5%	21,0%	79%
Toscana	5%	27,5%	71%
Trentino Alto Adige	3%	12,3%	87%
Umbria	0%	17,6%	82%
Valle d'Aosta	0%	1,1%	99%
Veneto	4%	20,1%	80%
Total	**10,06%**	**26,40%**	**71,38%**

In the following tables and figures are reported the forecast coverage levels by operators in 2018 comparing the data related to the first and second phase of the 2015 consultation: in particular the coverage as a result of the only private plans (Table 4, Figure 2), the coverage as effect of public investment (incentives or direct intervention) implemented or underway (Table 5, Figure 3), the total forecast coverage (Table 6, Figure 4).

In the previously mentioned tables are excluded the effects of the public intervention related to the CIPE Resolution n. 65/2015 of the 6th of August 2015.

In the tables previously mentioned, the FTTC and FTTH/B/DP coverage levels are calculated with reference to the total UI served by the two different architectures separately.

Table 4: Regional coverage level forecast (2018) – private plans

2018 Coverage	First phase		Second phase	
	Coverage % by Private Plans with FTTH/B/DP architecture	Coverage % by Private Plans with FTTN architecture	Coverage % by Private Plans with FTTH/B/DP architecture	Coverage % by Private Plans with FTTN architecture
Abruzzo	8,00%	17,22%	10,2%	43,41%
Basilicata	6,22%	16,69%	6,22%	16,62%
Calabria	8,31%	15,27%	8,3%	14,87%
Campania	16,84%	35,44%	17,11%	30,61%
Emilia Romagna	25,41%	54,06%	26,9%	71,56%
Friuli Venezia Giulia	17,75%	37,94%	19,59%	59,58%
Lazio	37,74%	68,58%	38,1%	72,00%
Liguria	24,84%	60,87%	26,12%	75,96%
Lombardia	33,52%	42,12%	34,9%	59,01%
Marche	8,68%	45,00%	9,24%	51,43%
Molise	3,52%	12,29%	4,2%	18,51%
Piemonte	22,84%	46,46%	23,67%	56,24%
Puglia	16,95%	22,65%	17,0%	22,71%
Sardegna	8,76%	36,86%	9,88%	49,77%
Sicilia	16,79%	28,54%	17,0%	31,31%
Toscana	21,99%	52,61%	23,11%	66,21%
Trentino Alto Adige-Bolzano	14,07%	34,57%	14,6%	40,71%
Trentino Alto Adige-Trento	11,47%	28,41%	11,47%	28,41%
Umbria	12,21%	46,14%	13,6%	62,51%
Valle d'Aosta	1,54%	15,26%	2,27%	23,28%
Veneto	14,65%	39,95%	16,0%	55,03%
Total	**21,42%**	**41,16%**	**22,27%**	**50,43%**

Figure 2: Regional coverage level forecast (2018) – private plans

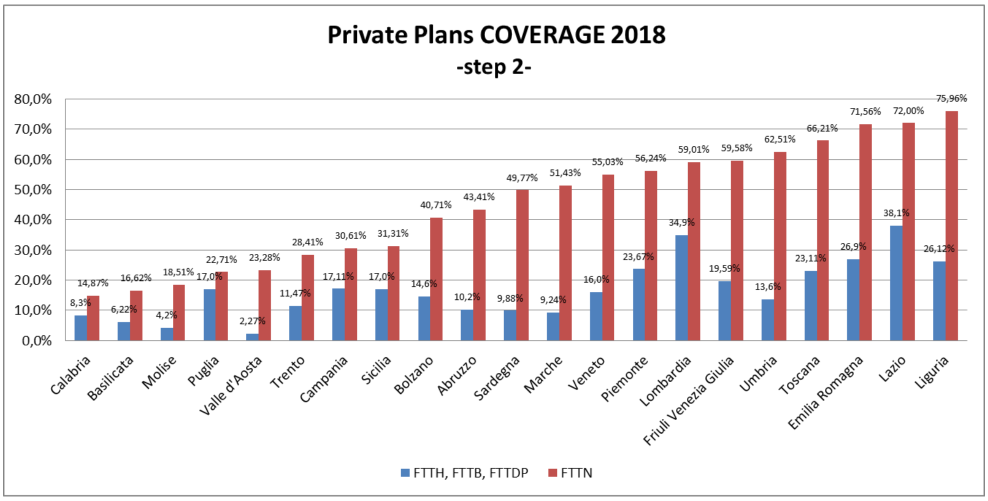


Table 5: Regional coverage level – public plans closed and on going

	First phase		Second phase	
2018 Coverage	Coverage % by Public Plans with FTTH/B/DP architecture	Coverage % by Public Plans with FTTN architecture	Coverage % by Public Plans with FTTH/B/DP architecture	Coverage % by Public Plans with FTTN architecture
Abruzzo	0,0%	24,7%	0,0%	24,7%
Basilicata	0,1%	56,3%	0,1%	56,3%
Calabria	0,3%	78,0%	0,3%	78,6%
Campania	7,8%	38,0%	7,8%	45,1%
Emilia Romagna	0,0%	0,0%	0,0%	0,0%
Friuli Venezia Giulia	0,0%	0,0%	0,0%	0,0%
Lazio	0,0%	11,4%	0,0%	11,6%
Liguria	0,0%	0,0%	0,0%	0,0%
Lombardia	0,0%	0,9%	0,0%	1,3%
Marche	0,0%	10,7%	0,0%	10,7%
Molise	0,0%	14,0%	0,0%	15,2%
Piemonte	0,0%	0,0%	0,0%	0,0%
Puglia	0,0%	72,6%	0,0%	72,6%
Sardegna	0,0%	28,9%	0,0%	37,0%
Sicilia	0,0%	48,9%	0,0%	48,9%
Toscana	0,0%	5,0%	2,5%	7,6%
Trentino Alto Adige-Bolzano	0,0%	0,0%	0,0%	0,0%
Trentino Alto Adige-Trento	0,0%	0,0%	0,0%	0,0%
Umbria	0,0%	0,0%	0,0%	0,0%
Valle d'Aosta	0,0%	0,0%	0,0%	0,0%
Veneto	0,0%	5,5%	0,0%	6,0%
Total	**0,65%**	**19,93%**	**0,80%**	**21,06%**

Figure 3: Regional coverage level – public plans closed and on going

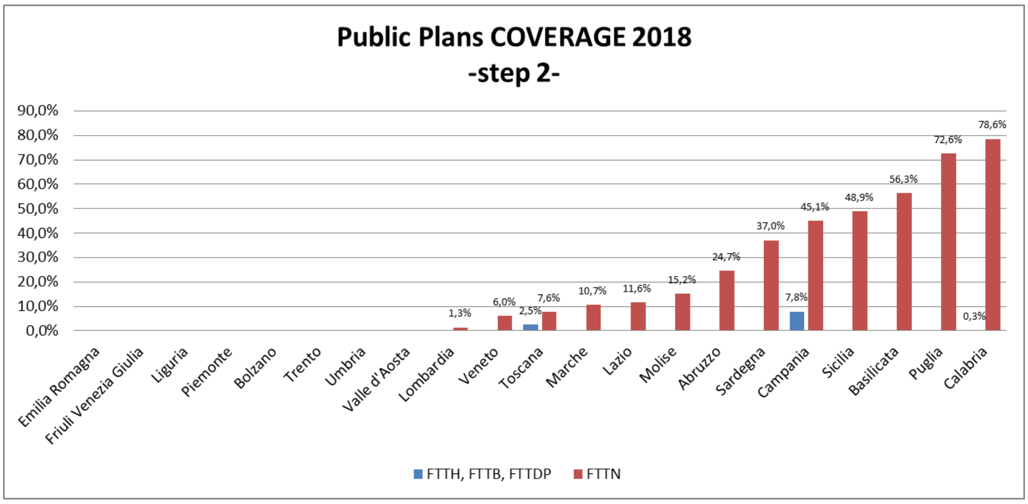
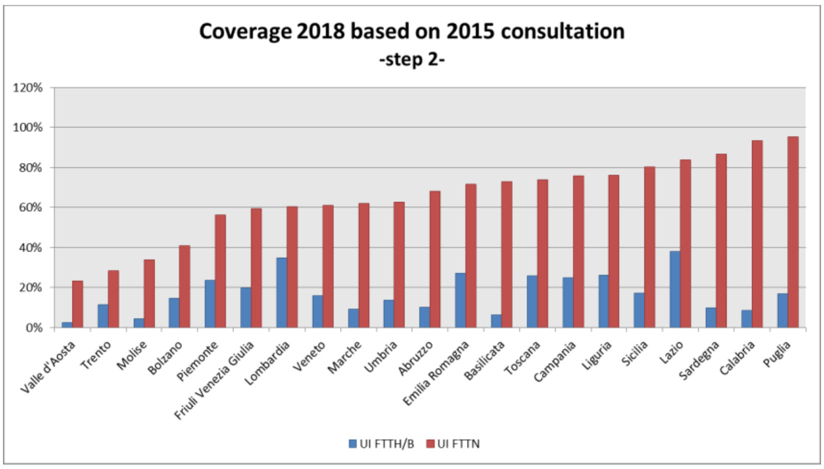


Table 6: Regional coverage level forecast (2018)

Coverage 2018	First phase			Second phase		
	% coverage FTTH/B/Dp architecture	% coverage FTTN architecture	% not served	% coverage FTTH/B/Dp architecture	% coverage FTTN architecture	% not served
Abruzzo	8%	41,9%	57%	10%	68,1%	31%
Basilicata	6%	73,0%	24%	6%	73,0%	24%
Calabria	9%	93,3%	3%	9%	93,4%	3%
Campania	25%	73,4%	24%	25%	75,7%	22%
Emilia Romagna	25%	54,1%	46%	27%	71,6%	28%
Friuli Venezia Giulia	18%	37,9%	62%	20%	59,6%	40%
Lazio	38%	79,9%	20%	38%	83,6%	16%
Liguria	25%	60,9%	39%	26%	76,0%	24%
Lombardia	34%	43,0%	47%	35%	60,3%	30%
Marche	9%	55,7%	44%	9%	62,1%	38%
Molise	4%	26,3%	73%	4%	33,7%	65%
Piemonte	23%	46,5%	53%	24%	56,2%	44%
Puglia	17%	95,2%	1%	17%	95,3%	1%
Sardegna	9%	65,8%	34%	10%	86,8%	13%
Sicilia	17%	77,4%	20%	17%	80,2%	17%
Toscana	22%	57,7%	42%	26%	73,8%	26%
Trentino Alto Adige-Bolzano	14%	34,6%	65%	15%	40,7%	59%
Trentino Alto Adige-Trento	11%	28,4%	72%	11%	28,4%	72%
Umbria	12%	46,1%	54%	14%	62,5%	37%
Valle d'Aosta	2%	15,3%	85%	2%	23,3%	77%
Veneto	15%	45,4%	54%	16%	61,0%	39%
Total	**22,07%**	**61,10%**	**36,33%**	**23,07%**	**71,49%**	**26,20%**

Figure 4: FTTH/FTTB/FTTDP/FTTN coverage regional level forecast (2018)



Publication of the areas

The details of the coverage levels, in terms of UI, in each of the 94,645 areas subject to the Public Consultation has been divided into two separate files.

In the file "**BUL Public consultation 2015 Black and Grays Areas Phase2**" is reported the coverage in Cluster A and B determined by the investments done and forecasted.

In the file "**BUL Public consultation 2015 White Areas Phase 2**" is reported the coverage in Cluster C and D. In case of areas not fully covered is reported the forecasted % of coverage.

The white areas will be interested in the first phase by the public intervention aimed at achieving the overall objectives of the Ultra BroadBand Plan, consistent with the CIPE Resolution n. 65/2015 of the 6th of August 2015 and according to the models of the new State aid scheme under evaluation of the competent offices of the EU Commission.

As stated in point (65) of the "Guidelines for the application of the rules on state aid in relation to rapid deployment of broadband networks" (2013C-25/01), the granting administration, after the consultation and after the publication of the areas subject to public interventions, is required to check whether the private operators wish to get committed in financial autonomy in the implementation of these interventions within the next three years. For these reasons, completed the second phase of the 2015 consultation, will now start a new phase where the operators will formalize a contract with the Administration that will include a series of deadlines to meet during the three years, as well as the accountability of progress. At the end of this phase will be reviewed the areas subject to intervention.

Glossary and acronyms

- BUL – Ultra Broadband
- CLUSTER A: NGA black areas as defined in the Guidelines for the application of State aid
- CLUSTER B: NGA gray areas as defined in the Guidelines for the application of State aid
- CLUSTER C: NGA white areas as defined in the Guidelines for the application of State aid, within municipalities characterized by a number of UI greater than a specific threshold
- CLUSTER D: NGA white areas as defined in the Guidelines for the application of State aid, within municipalities characterized by a number of UI lower than a specific threshold
- FEASR – European Agricultural Fund for Rural Development
- FESR – European Regional Development Fund
- FM – Market Failure
- FSC – Development and Cohesion Fund
- FTTB – Fiber-to-the-Building
- FTTC – Fiber-to-the-Cabinet
- FTTdp – Fiber-to-the-distribution point
- FTTH – Fiber-to-the-Home
- FWA – Fixed Wireless Access

- LTE – Long Term Evolution
- NGA – Next Generation Access
- NGAN – Next Generation Access Network
- EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks (2013/C 25/01)
- Italian Strategy for ultra broadband" approved by the Council of Ministers on March 3,, 2015
- UI – Residential unit - household
- UI enabled with a capacity exceeding 100 Mbps - UI distance <= 50 meters from the nearest fiber termination device – OTB
- UI enabled to at least 30 Mbps - UI inside a building with a distance <= 400 meters from the fiber termination