The "Digital Italy" Plan

The Digital Agenda to boost efficiency, competitiveness and employment in our country
The Digital Agenda

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  › The Plan’s strategic lines
  › Services
  › The activities implemented or about to be implemented by the Ministry of Economic Development
  › Infrastructure
    • The National Broadband Plan to bridge the digital divide
    • The Next Generation Networks Plan: ultra-wideband for Italian homes and businesses
In late 2008 the Ministry of Economic Development - Department of Communications - launched the "Digital Italy Plan" with the goal of completely digitizing the country’s communications infrastructure. In 2010, the ambitious targets set by Europe in the Digital Agenda was integrated into the Plan.

In launching the Digital Agenda, in fact, the European Commission was introducing a strategy for the growth of the Union in the next decade, maximizing the economic and social impact of ICT and, especially, of the Internet.

The Agenda is one of the flagship initiatives within the broader EU2020 strategy, aimed at achieving inclusive, intelligent and sustainable growth in Europe, and involves seven main course of action, on: fast and ultrafast Internet access; digital single market; interoperability and standards; trust and security; research and innovation; digital literacy, digital services; all of this keeping well into account governance and international aspects.

To fulfil the objectives of the Digital Agenda it is therefore essential to coordinate government policy, at both central and local levels, with the market.
The “Digital Italy” Plan was designed by the government to stimulate the development of digital infrastructures, encourage the widespread use of digital technologies, services and processes, and boost Competitiveness, Productivity and Efficiency, to support economic growth and employment in the country. The telecommunications network is the network of networks, essential for the development and competitiveness of all other networks, physical or virtual. For this reason, its development is at the heart of the Ministry’s activities and government action.

The two pillars of the Plan are the National Broadband Plan to bridge the digital divide and the Next Generation Access Networks Plan. The latter, in particular, will allow at least 50 per cent of Italians to surf the Internet at a speed exceeding 100 mbps on fixed networks (FTTH) and on mobile networks (LTE) by 2020.
The benefits of developing infrastructure for broadband and ultra wideband networks

- Boost the efficiency of governments offices and businesses producing long-term reduction in unproductive expenditure, up to €30 billion/year (as estimated by “Confindustria Servizi Innovativi e Tecnologici”)

- Strong direct contribution towards greater employment: the plan for next generation networks alone will provide employment for 10,000 people in 2011, 15,000 in 2012, 17,000 in 2013, 19,000 in 2014 and up to 26,000 in 2016.

- A strong driver for growth in GDP

- The revival of the ICT sector in Italy, once a leading sector of Italian technology, today experiencing a dangerous decline.
The main aims of the "Digital Italy Plan"

**Digital Content**
- Develop Public Digital Content
- Protect Privacy and Copyright
- Develop e-Commerce and e-Payment

**Digital Services**
- Implement the Digital Services Plan
- Adapt to Digital Technology (CAD)
- Plan Switch Off

**Digital Infrastructure**
- Complete Broadband & Digital Terrestrial
- Develop NGN and “Future Internet”
- Allocate New Frequencies

**Digital Demand**
- Digital Incentives and Education
- Help and Integrate the Weak categories
- Implement Multichannel Access
1. Broadband and ultra wideband connectivity Service Database – Such database, updated regularly through public consultation, provides comprehensive and rapid mapping of connectivity services in Italy: it highlights digital divide areas to guide government policy in broadband and ultra wideband network development plans.

2. National Broadband Plan - launched in June 2009, to bridge the digital divide in our country, which was affecting over 8 million citizens, but that today, thanks to the work already done and in progress, will be reduced by almost half, by June this year. The Ministry of Economic Development with the active cooperation of the Regions has spent and committed € 395 million for the completion of the Plan. Almost all regions (except Valle d'Aosta and the autonomous provinces of Trento and Bolzano), in fact, contributed with their funds, also assigned from the European Union (EAFRD and ERDF), to the National Broadband Plan.

3. At present there are 874 worksites in operation, employing 3000 people every year and an additional 600 will soon be starting (calls for tender have already ended) during the first half of 2011.

4. Other additional 400 worksites will be operational after new calls for tender closing in April 2011.
3. Analogue television switch-off: the Ministry of Economic Development - Department of Communications has set a timetable for the switch-off of analogue television transmissions, which is at the forefront in Europe. The switch-off plan is continuing with success in all Italian regions. Citizens have become so accustomed to digital quality that they no longer wish to receive analogue TV and want to bring forward switch off by a year (2011 instead of 2012). Thus, Italy, the frontrunner in the switch-off plan, will also be one of the first countries to conclude it.

4. Tender for the allocation of rights to use 800 MHz band frequencies: The Italian government has decided to bring forward the tender to 2011, thus speeding up the switch-off of analogue television. An important and strategic decision that has a twofold public purpose: to guarantee all citizens a higher quality of TV service and free up 800 band frequency resources now used for digital switchover. This is very valuable spectrum which – in accordance with the European Union’s orientation, should be used for strategically important purposes: in particular for mobile broadband communication services. From 1 January 2013, these frequencies will be available to mobile phone operators: this puts Italy in the forefront in Europe.
To achieve the aims of the Digital Agenda it was essential to establish coordination between the central government, local authorities and the market. Without synergistic collaboration it would have been impossible to achieve such a long-term objective (10 years). For this reason, the Ministry of Economic Development has launched an awareness campaign aimed at all other government offices, involving them directly in strategic projects through the signing of specific agreements.

5. The Ministry of Economic Development is working on the National Broadband Plan, already brought to the attention of the European Commission, in coordination with the Regions, and has set out executive plans to implement electronic communications infrastructure in territories without fast connectivity services. Programme agreements have been signed between the Ministry and almost all Italian regions (only Trentino Alto Adige and Valle D'Aosta opted not to take part) to co-finance actions to implement broadband networks in the digital divide areas in their regions.
6. The Ministry of Economic Development has also involved the Italian Provinces (UPI) and the National Association of Italian Municipalities (ANCI) in the Digital Italy Plan, coordinating with local authorities all countrywide activities for the development of electronic communication networks, as ensuring proper implementation of administrative simplification procedures introduced for both fixed and mobile connectivity.

7. Together with ANCI, a co-ordination table was set up with all stakeholders to define an underground REGISTER to facilitate the sharing of civil infrastructures to optimize investments and reduce environmental impact.

The Digital Agenda aims to establish by 2020 a single and dynamic digital market; in this perspective, Italy

9. Is transposing Directive 2009/140/EC and Directive 2009/136/EC, which revise the regulatory framework for electronic communications, through a coordination among the Ministry of Economic Development, the Department for Digitization of PA and Technological Innovation of the Presidency of the Council of Ministers, the Ministry of Justice, the Communications Regulatory Authority, and the Data Protection Authority.

10. Will contribute to the debate, at European level, about making roaming costs for Europeans travelling approach zero.

11. Will strengthen the requirements for network security and integrity, communications security and confidentiality, and the protection of personal data.

12. Will continue to be an active member of the Safer Internet Management Committee of the European Commission’s also participating in the Advisory Board of the “EAST EAsy to STop-it” project, to be realized through the Safer Internet programme. The project aims at contributing to protect minors in the use of the Internet by implementing appropriate tools to promote and facilitate the safe use of new media - Internet and Mobile Telephony – which will be made available to users.
The strategy to quicken the pace of the digital transformation, foreseen in our country’s key processes, involves speeding up network development:

- The completion of broadband coverage (National anti-Digital Divide Plan)
- The Government plans to bridge the Digital Divide by 2013 and bring broadband to the almost five million people still excluded from this high-speed Internet service.
- A strong drive towards the development of ultra-wideband networks (NGAN Plan)
- The Government's plan for the development of New Infrastructure for Next Generation Access Networks is to be launched in public-private partnerships, to accelerate and optimize the implementation of European Agenda goals, which are beyond current investment capacity of the Italian TLC system: i.e. implementation of next-generation access infrastructure for about half the population by 2020
The Government’s role in Digital Infrastructure

- Driver of industrial policy for the country’s strategic infrastructure:
  - Investing directly and creating synergy with all other institutional, public and private investors and businesses operating in the sector;
  - Coordinating a single action plan on infrastructure, sharing existing underground infrastructures;
  - Using all regulatory and administrative facilities needed to quickly develop networks;
- Involvement of all stakeholders (on 10 November 2010 the Minister of Economic Development signed an MOU for the development of next generation access networks with the top twenty Italian telecom operators);
- Partnerships with local authorities (especially regional), maintaining plan unity, but providing for development in a federal perspective, by co-funding regional structures.
- Way out market management, within 12 years
The Next Generation Access Network Infrastructure development model involves setting up a company that will govern the development of network infrastructures, open to the participation of the Government, Regions, Institutional Investors and - of course - Telecom operators, with an open and forward looking infrastructure system. It will be initially under public governance and coordinated at the national level, but it will operate also on a regional basis, with the greatest possible flexibility to meet the needs and the spending capacity of the different local realities.

This plan provides for investments amounting to: around 8 billion euros in 10 years for infrastructure (mainly involving public and private institutional investors, with a contribution from industry) and about 2 billion euros for electronics and software services (mainly involving industry).
The next generation access networks are a goal to which the country must aspire, because it will provide a competitive edge which in a few years will be just as crucial as the elimination of the digital divide is today.

Twenty major national telecom operators – Telecom Italia, Vodafone, Fastweb, Wind, BT, H3G, Tiscali and FOS have signed - along with the Minister of Economic Development - Paolo Romani - a Memorandum of Understanding for the development of next generation networks using an innovative model to implement the goals set by the European Digital Agenda, so that – by 2020 - 50 per cent of Italians will be able to subscribe to services providing speeds exceeding 100 Mbps.

The Executive Plan is being defined by a special committee established on 30 November by Ministerial Decree. This Committee, chaired by the Head of the Communications Department of the Ministry of Economic Development, Roberto Sambuco, and comprising a representative of each of the signatories, will have to design the creation of a company to implement passive infrastructure, aimed at the development of next generation networks, involving the regions, local authorities and public and private financial institutions.
MiSE - Dipartimento Comunicazioni

Plan governance

- **Government**
- **Regions**
- **Operators**
- **Other financial institutions**

**NEWCO**

- **Equity**
- **Equity-loans**

**OPERATORS**

- **Returns from optic fibre use**
- **Extra investments and extra costs for dedicated infrastructure**

**INSTITUTIONAL INVESTORS**

- **Contributions**

**STATE - REGIONS**

- **Remuneration of capital investment**
Purpose of the intervention: The project is aimed at creating and/or sharing ducts, dark fibre, vertical links, optic patch panels and optic links for radio stations, in line with the principle to develop a neutral and open infrastructure;

Target area: the project, in accordance with EU regulation, particularly that one on "State Aids”, and with national rules on NGN covers an area of about 13 million housing units (50% of total) and over 3 million apartment buildings spread throughout the country. In some cities, where development projects for NGAN networks are already planned, there could be, according to the principle of subsidiarity as defined in the MoU, either infrastructure in common (e.g. building terminations and vertical connections) or the complete infrastructure in sub-areas not included in short-term operator plans, coordinating actions to avoid unnecessary duplication of infrastructure installation and offering opportunities for faster and less expensive project development.
Infrastructure Project Guidelines

- Development of common infrastructure: Infrastructure common to all operators consists of vertical connections in buildings and horizontal connections in secondary networks (1 fibre per IU). The size of more centralized infrastructure sections depends on coverage requirements and the network architecture of individual operators. Shared development is based on the "Infrastructure Sample" model, Multi-GPON +20% of point-to-point connections (P2P), designed mainly for business needs.

- Development of dedicated infrastructure: The project also provides for additional infrastructure investment other than shared Sample Infrastructure (for example, the number of primary network optical fibre conduits greater than those provided for in the sample model, splitters, and documentation of fibre in buildings, accessible and manageable to ensure permutations between IU and the networks of different operators, which characterize each GPON network). This investments is the responsibility of the operators that implement the infrastructure.
The next generation networks plan is based on the principle of "Intelligent and Planned Underground Management“, according to which:
- Projects are developed for NGAN infrastructure trenches well in advance of executive plans;
- The underground plans of all operators are shared: power grids, water supply, sewerage, district heating, gas distribution networks, networks for public lighting and finally road works (by way of example, in Rome in 2010 these interventions involved 10% of the roads included in the NGAN infrastructure project);
- Specific MoUs with municipalities, local utilities and other stakeholders will establish the technical and economic rules for the placement of microtubes for the NGAN Infrastructure Project;
- The regulatory framework for the availability of all existing infrastructure, parallel infrastructure, authorization for low impact excavations (no dig, minitrenches, microtrenches)
- The application of this principle will result in the use of a significant percentage of existing or parallel conduits (in economic calculations both are considered as existing infrastructure).
• For more information, see the Memorandum of Understanding and the technical annex, available on the website of the Ministry of Economic Development - Department of Communications.

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