





<u>Services and Infrastructures Towards Smart</u> <u>Society of Advanced Services</u>

62nd FITCE Congress
September28th and 29th
Anphitheater Place OTE Academy Athens

The evolution of italian Broadband plan

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Evolution of European Digital Agenda



- 2010 European digital agenda: Establisment of Telco Key role in order to accomplish european goals for digitalization
- 2015 Strategy for Digital Single Market wich establised specific indication for the accomplishment of three main goals:
 - Improve the access of consumers and companies to digital goods and services in the whole Europe
 - Create a right context for the development of network infrastructures and digital services
 - Maximize digital economy potential growing
- 2020 Second digital strategy for five years "Shape the future of Europe" for the achievement of three main digital goals:
 - A digital technology for all the people
 - A fair and competitive economy
 - An open society, democratic and sustainable
- 2021: Integration of second digital strategy with a compass for the digital
 2030: The european model for digital decade



The Second European Digital Agenda INtraTEL s.r.l.



Based on two strategic Communications:

- **Shape European Digital Future**
- **European Digital decade**



The Second European Digital Agenda: Main goals

- Create digital and sicure markets and services
- A good strategy for blockchain and a commercial policy based on blockchain
- Generative artificial intelligence anthropocentric and reliable
- Digital sovereignty
- Cybersecurity
- Gigabit connectivity with 5G, 6G and extensive usage optical fixed negtworks
- Spaces and data infrastructures
- European Digital Decade



The COM(2021)0118: a digital compass for 2030



- Skills: at least 80% of adult citiziens should arrange of basic digital skills
- Companies: 75% of companies should use cloud computing services, big data and artificial intelligence and 90% of SMEs whould reach at least a basic level od digital intensive
- Infrastructures: all the europen families should be covered from a Gigabit network and all the inhabited areas from 5G technology; semiconductor production should be cutting-edge and sustainable in Europe representing at least the 20% of the global production value
- Public services: all the main public services should be available on line; all the citiziens will have access to their electronic health record and 80% of them should be able to use an electronic identity solution



Next Generation EU



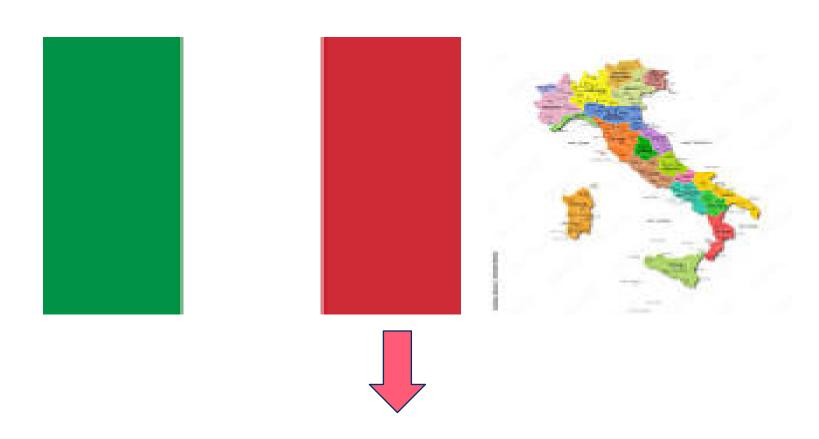
- Next Generation EU is not only a plan for the resumption of activities after the pandemic crisis. It also constitutes a special chance to transform the internal economies, create opportunities and new Jobs for the European people in order to fulfill a healthier and more sustainable life. EU owns all the power and strength to succeed.
- EU has a vision for the future, a concrete and substantial joint investment program of about 800 BIL€ to be spent within June 2026

Main goal: a more green, more digital and more resilient EUROPE



ITALY vs full digital





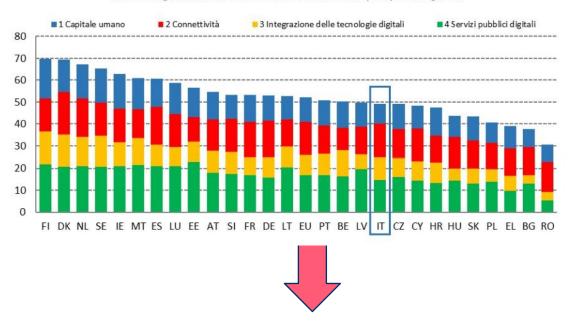
What about Italy?



ITALY vs full digital



Indice di digitalizzazione dell'economia e della società (DESI), Ranking 2022



Desi index for Italy is still poor



DESI Index in Italy comparing with European ranking



•- HUMAN CAPITAL & DIGITALIZATION:

•- DIGITALIZATION & CONNECTIVITY:

•- DIGITALIZATION AND INTEGRATION OF DIGITAL TECHNOLOGIES IN THE COMPANIES:



•- DIGITALIZATION OF PUBLIC SERVICES:





'Next Generation EU for G-Bit society



All EU-Members Plans



Italian PNRR - National Plan of Resilience and Recovery



National Recovery and Resillience Plan (PNRR)



191,5 BIL €
25% (48 BIL €) for DIGITAL
TRANSACTION



National Recovery and Resillience Plan (PNRR)



The PNRR is built in sixteen Components, grouped in six MISSIONS. The MISSIONS are composed according to the six Pillars that are included in the Community Regulation.

The constituent **MISSIONS** are the following:

MISSION 1
DIGITALIZATION, INNOVATION, COMPETITIVITY AND CULTURE AND TOURISM

MISSION 2

GREEN REVOLUTION AND ECOLOGICAL TRANSITION

MISSION 3
INFRASTRUCTURES FOR A SUSTAINABLE MOBILITY

MISSION 4

EDUCATION AND RESEARCH

MISSION 5
COESION AND INCLUSION

MISSION 6 HEALTH

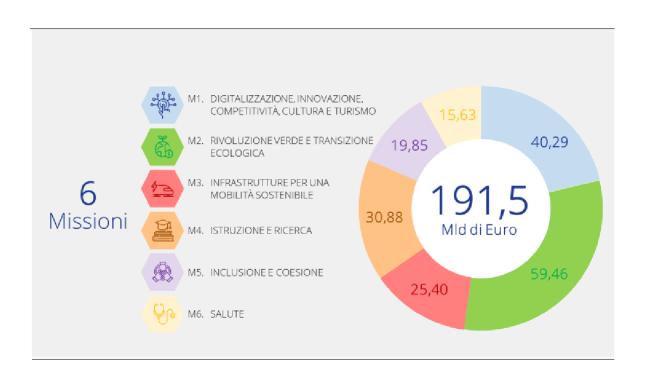


ITALIA DIGITALE 2026 and Italian strategy for ultrabroadband



The Italian Piano Nazionale di Ripresa e Resilienza italiano (PNRR), approved by Government on 2021 April 29 th, allocates 27% of resources to the digital transition with:

- -6,71 billions of euro for projects related to the Ultrabroadband Italian Strategy, which arises in continuity with that one launched by the Government on 2015;
- -6,74 billions of euro for projects of PA digitalization.





Italian Plans for Ultrabroadband strategy



- Completion of ongoing plans
- 'Italy 1G' plan
- 'Italy 5G' plan
- 'Connected schools' plan
- 'Connected Healthcare' plan
- 'Small Islands' plan
- Voucher to support the customer's application

and.... the PNRR to complete the 'investment program'



Connectivity goals





Italy

Italia 1 Giga 2026: 1 Gbps in download and al least 200 Mbps in upload 5G usage to complete the global coverage



European Union

Digital Compass 2030

1 Gbps for everyone

5G wherever



Main PNRR Call for tenders: a challenging coincidence of deadlines



- Call for tender Italia 1G: 3.9 Bln€ of PNRR funds in order to guarantee the coverage of di 6.9 Mln of real estate units (houses) in 15 lots to be implemented within June 2026
- Call for tender 'Scuole Connesse' (connected schools): 0.2 Bln € of PNRR funds in order to guarantee the connection of about 10.000 school buildings distributed in 8 in 8 lots to be implemented within june 2026
- Call for tender 'Sanità Connessa' (connected health care): 0.4 Bln€ of PNRR funds in order to guarantee the connection of about 10.000 infrastructures of Public Health Service distributed in 8 lots to be implemented within June 2026
- Call for tender 5G Covarage: 1 Bln€ of PNRR funds in order to guarantee 5G coverage (and backhauling with fiber) of about 3.000 aree areas distributed in 6 lots to be implemented within June 2026
- Call for tender 5G Backhauling: 1 Bln€ of PNRR funds in order to guarantee the connection in fiber of about 11.000 Radio Base Stations distributed in 6 lots to be implemented within June 2026



A COLOSSAL FIBER OPTIC DEVELOPMENT TO BE IMPLEMENTED IN 4 YEARS



ITALY 1 Giga and ITALY 5G plans



The Plan "Italy 1 Giga" has the goal to provide connectivity to 1 Gbit/s in download and 200 Mbit/s in upload to the real estate Units which will result not covered by the operator infrastructure plans scheduled by 2026 in terms of networks abling to provide reliably at least 300 Mbit/s in download.

The Plan "Italy 1 Giga" has an endowment of approx 3,8 BIL of Euro

The **Plan "Italy 5G"** has the goal to encourage diffusion of 5G mobile networks in the 'digital devide' areas from a complementary and synergic perspective compared to the development path already started for 5G national networks and the coverage obligations of mobile operators.

Public actions are planned finalized to the implementation of networks in order to provide high performanmoe innovative mobile services (ad es. transmission feed of at least 150 Mbit/s in download and at least 50 Mbit/s in upload), within the constraints set out from the rules on state aids.

The Plan "Italy 5G" has an endowment of approx 2,2 BlL of Euro



ITALY 1 Giga and ITALY 5G plans execution



Plan "Italy a 1 Giga"

Public invitation to tender (15 regional lots) published January 2022 (up to 70% of the investment cost)

Award completed June 2022 and contracts signed with the contracting companies (Open Fiber e TIM/Fibercop) July 2022

3,4 BIL of euro committed

Plan "Italy 5G"

Public invitation to tender (2 lots in backhauling and network densification) published incentivo (up to 90% of the investment cost))

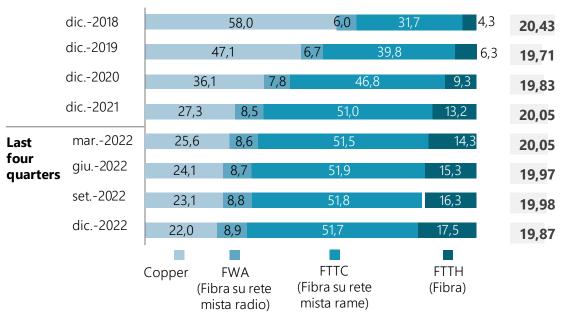
Award completed June 2022 and contracts signed with the contracting companies (TIM and Inwit/Vodafone/TIM) July 2022

1,07 BIL of euro committed



Fixed Network: Summary of accesses INtraTEL s.r.l.





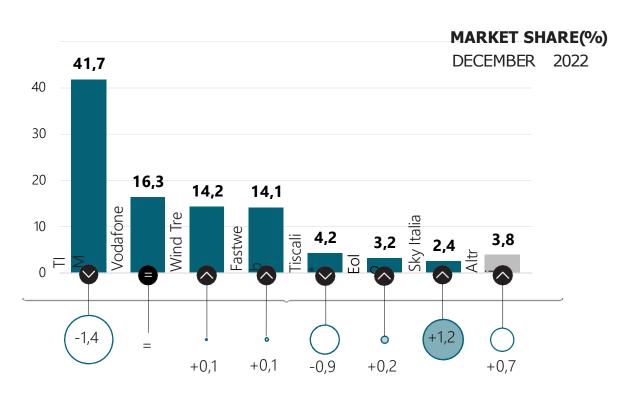
Nota: Sono compresi gli accessi fisici TIM, Full ULL, SLU, Vula, DSL Naked, WLR, Bitstream NGA, Fibra e **FWA**

		Composition S			
(absolute values)	(Δ %)	(Δ 2021-2022) Percentage points			
	-0,6	Rame:	-5,3	`	
accessi	_	FWA:	+04		
-184 mila accessi	-0,9	FTTC:	+07	,	
-559 mila accessi	-2,7	FTTH:	+42		





Fixed Network: Summary of accesses



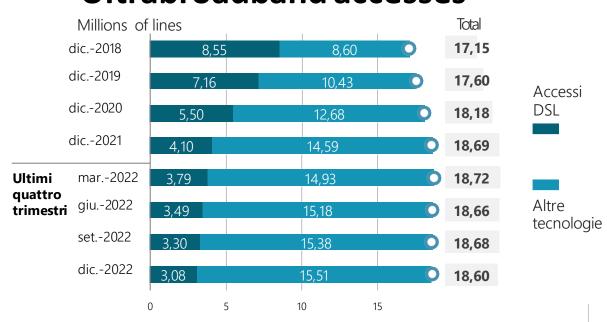
Difference vs. dicembre 2021 (percentage points)

 $^{^{\}star}$ Il valore esposto - a seguito della fusione intervenuta a partire dallo scorso 1° agosto - include anche la quota in precedenza attribuita a Linkem



Fixed Network: Broadband and Ultrabroadband accesses



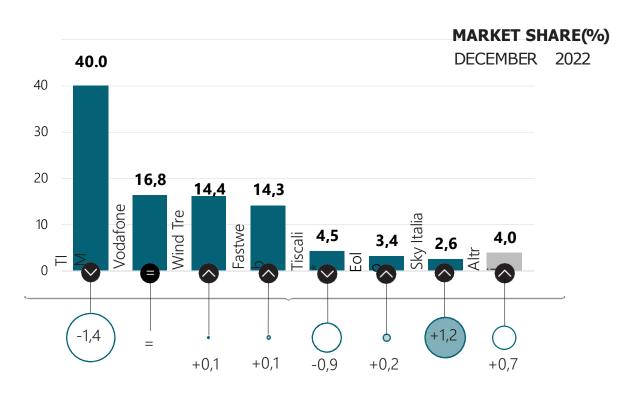








Fixed Network: Broadband and Ultrabroadband accesses



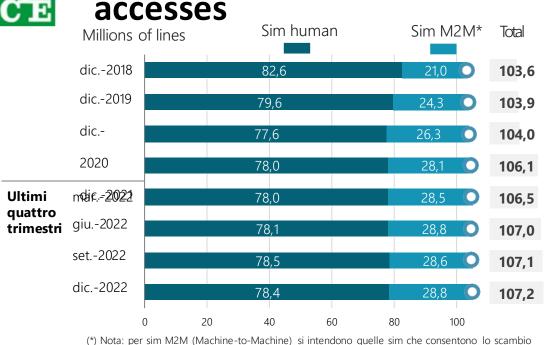
Difference vs. December 2021
8Percentage points)

 $^{^{\}star}$ Il valore esposto - a seguito della fusione intervenuta a partire dallo scorso 1° agosto - include anche la quota in precedenza attribuita a Linkem



Mobile Network: Summary of





(*) Nota: per sim M2M (Machine-to-Machine) si intendono quelle sim che consentono lo scambio dati, informazioni e comandi tra apparecchiature e dispositivi con limitata o nessuna interazione umana

	Quarter change (Set. 2022 – Dic. 2022)			Annual change (Dic. 2021 – Dic. 2022)			
	(n° di sim in m	igliaia)	(%)	(n	° di sim in	n migliaia) (%)
Total sim:	+88	1	+0,1	+1	.124	1	+1,1
Sim huma	n: -105	\	-0,1	+	-385	1	+0,5
Sim M2M:	+193	1	+0,7	+	-739	1	+2,6

Nota: i dati degli operatori TIM e Vodafone includono le linee delle società controllate, rispettivamente Kena mobile e VEI (che offre servizi di telefonia mobile denominati ho.)





- Intratel srl is a company that provides ideas, services and advanced solutions in the context of Information & Communication Technology (ICT), Telecommunications, Energy & New Media.
- Our mission is to create value for the shareholders, stakeholders and for the whole country system



About us (1)



- Design of fiber optical telecommunication netwoks for TIM and OPEN FIBER
- Design security infrastructures, civil and industrial video surveillance, video analysis, anti-intrusion and access control
- Urban video surveillance and artificial intelligence systems
- Wireless networks and inside structured cabling
- Mobile networks design and electromagnetic field tests



About us (2)



- Support to SMEs for implementing digital transformation facilities
- Corporate consultancy/training on the issues of new digital leadership
- Corporate mentoring paths
- Corporate communication consultancy
- Creation and management of technological platforms and solutions
- Intratel Academy





Remember that the innovation doesn't wait, doesn't ask the permission, we can only take it or stay behind!!!!!

The best way to predict the future is to build it and in Europe we have all the elements to do it!!!

Andrea Penza

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