

Biomedical Research from the Italian Ministry of Health

Gaetano Guglielmi, Md, PhD
Deputy General Director
for Health and Innovation Research
Ministry of Health - Italy

Overview Research Funded by It-MoH

- Italy Investment in R&S = **7,9%** Global of investment EU Countries and EU Commission
- Italian Ministry of Health R&S Investment :
 - **51%** of the National Public System in Competitive Biomedical Research and
 - **17 % National** Expenditure in R&S in Biomedical Area

Overview Research Funded by It-MoH

- Italian Ministry of Health is **17° Funding Institution in the world Rank** in Biomedical research, only italian in the first 50
- **33,2%** of the Italian Scientific publication are in Biomedica Area and **60% is a product of IRCCS research**

**ITALIAN MINISTRY OF HEALTH
FIRST PUBLIC FUNDING PROVIDER IN BIOMEDICAL RESEARCH**

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Overview Research Funded by It-MoH

- **1,2 billion** allocated in the **last 4 years** in Biomedical research projects by Italian Ministry of Health
- **500 milion in 1.061 projects assigned in the last 4 years with competitive call and International Peer Review Evaluation** (538 projects with Young Researchers as PI)
- Eligibility Costs Strategies:
The **real value** of the 1.061 projects (global NHS Investments) is ore than **2,3 billion**

Health Research Network of the Ministry of Health

- Istituto Superiore di Sanità (National Health Institute)
- INAIL (National Institute for Environmental and Work Related Diseases)
- Agenzia per i Servizi Sanitari Regionali (National Healthcare Agency)
- **49 IRCCS** Institutes/Hospital for Healthcare and Scientific Research (Research Comprehensive Center)
- **10 IZS** – Veterinary Institutes
- **21 Regions** (National Health System)

Yearly Biomedical research budget

- **Ordinary research** IRCCS, IZS, ISS, Agenas
(2016= 180 Mio)
- **Competitive Call** Biomedical research proposal
(2017= 50 Mio)
- **Competitive Call** Scientific hardware upgrade
(2017= 15 Mio)
- **5 ‰ Taxation** allocated to Biomedical research
(2017 = 68 Mio)

Year 2016: 49 IRCCS

IRCCS N° RESEARCHERS	10.172
IRCCS - N° Scientific publication(*)	11.857
IRCCS – Total Normalized IF (*)	50.984
IRCCS – N° Patients in Ordinary Hospitalization	693.825 Acute Diseases 620.896 Rehabilitation 59.296 Other 13.633



Data related only at the specific Expertise Area recognized for every IRCCS

Project goals

- **connect the research network** of the Ministry of Health with the Italian Research and Education Network (GARR) and with the pan-European network GÉANT.
- provide high capacity link with a highly reliable connectivity service
- provide a **set of unique and technologically advanced services**, applications and networks

Network infrastructure for IRCCS and IZS

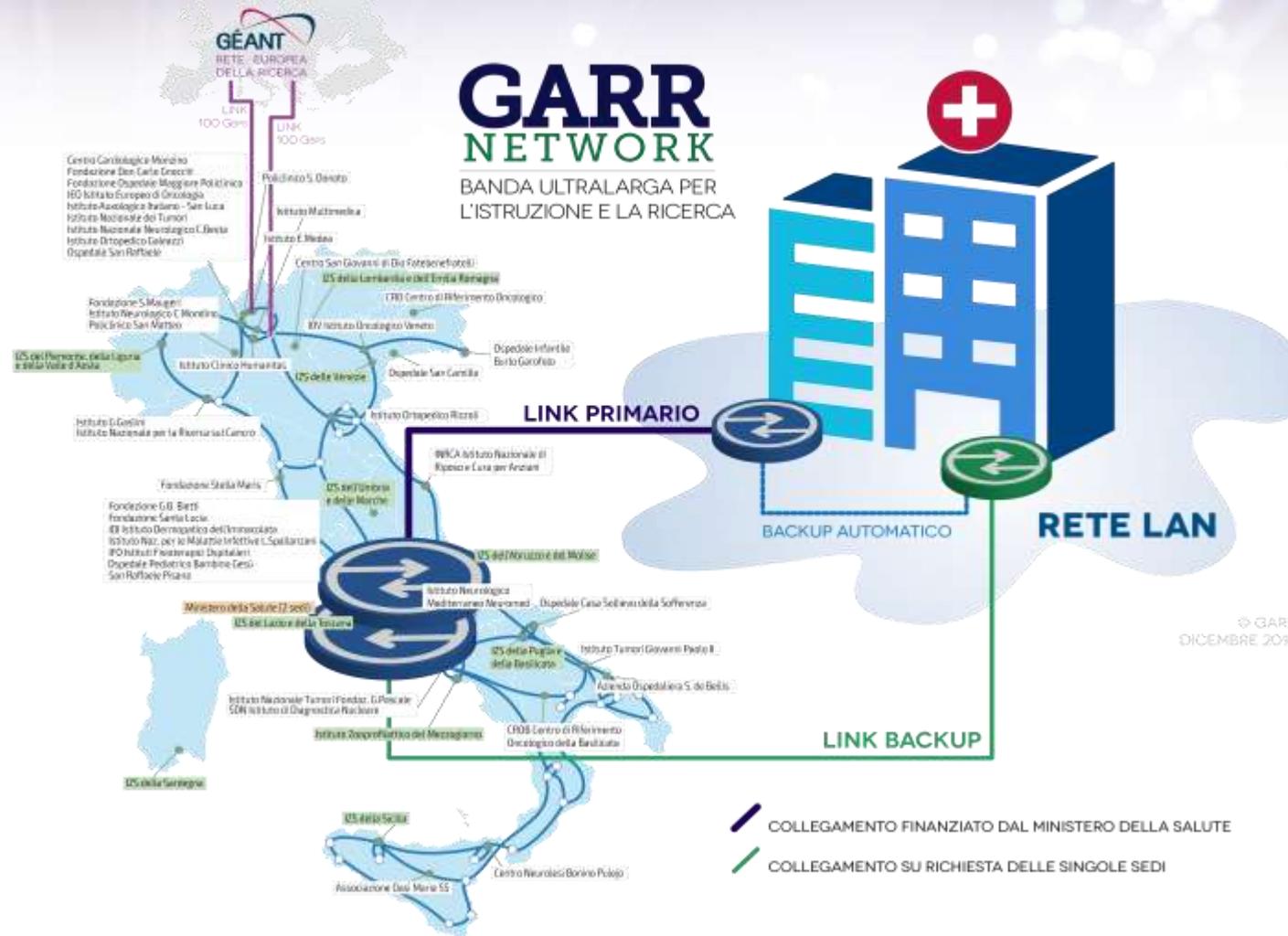
Infrastructure is characterized by:

- high bandwidth direct connection
- **user equipment for the LAN connection**

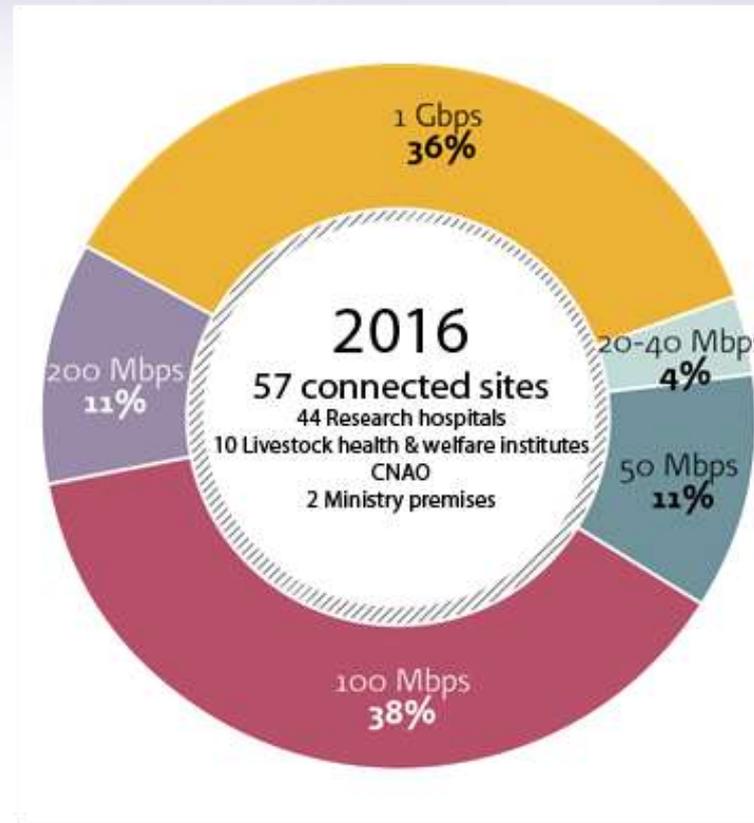
44 IRCCS (Research Hospitals) sites, 10 IZS (Livestock well-being and health Institutes) sites, CNAO (National Centre of Oncological Hadrontherapy (CNAO) site, 2 Ministry of Health premises

- ensure an upgrade of the infrastructure according to user requirements
- offer the same connectivity features throughout the Italian territory
 - symmetrical and bidirectional transmission capacity
 - coverage of 90% of institutions with 100Mbps capacity (100% of locations in 2017)
 - **optical fibre, where possible, due to its scalability characteristics**

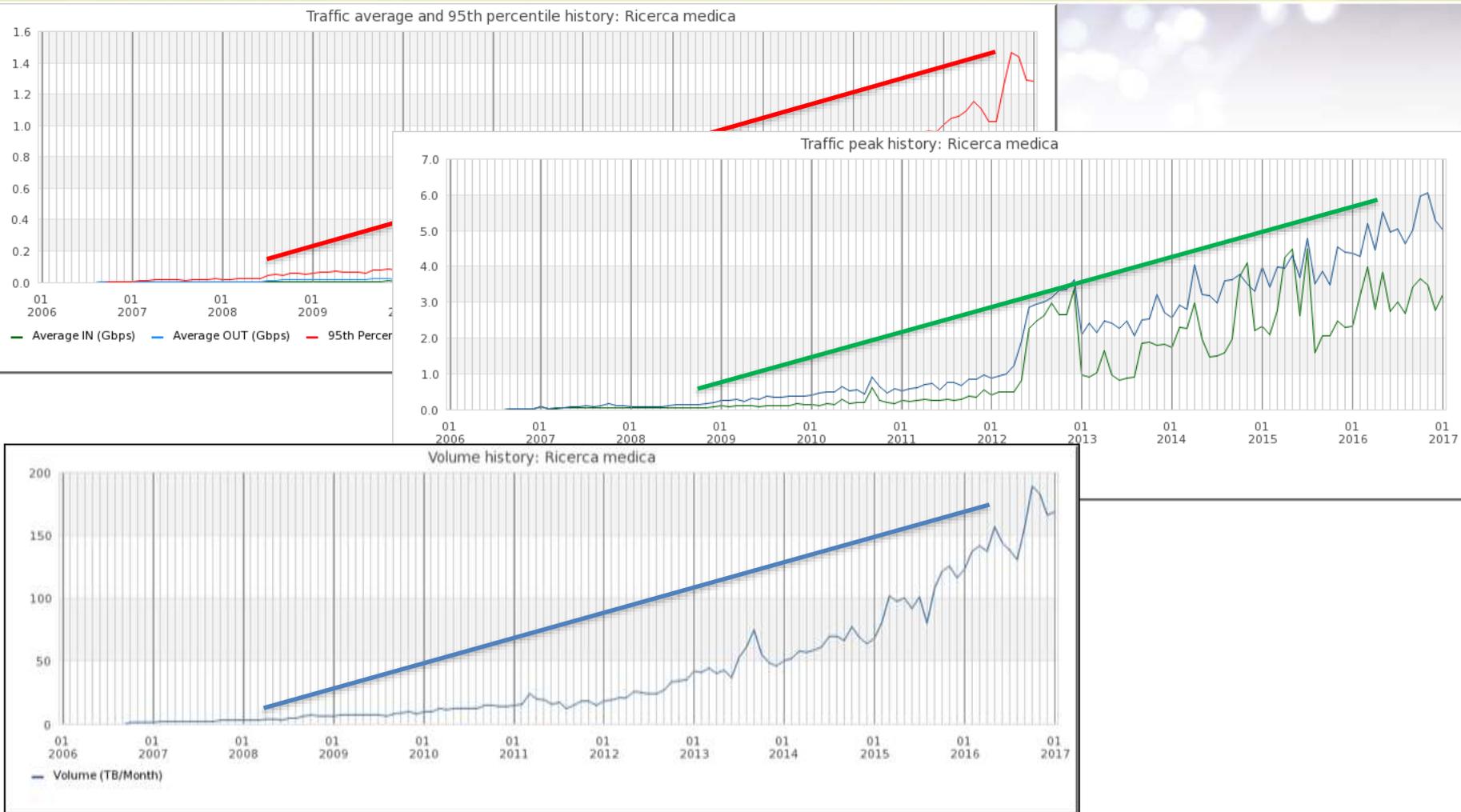
Ministry of health connected sites



Upgrade of the network capacity



Network usage



¹TeraByte (TB)=10 bilioni di Byte= 10^{12} bytes

Digital Identity

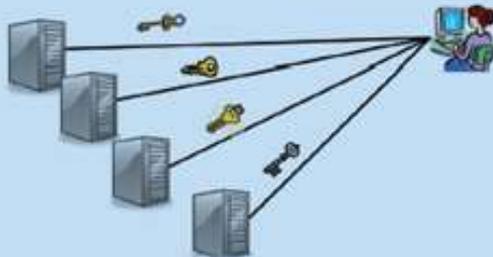


IDEM (IDEntity Management) provides a unique key to access web shared services

Thanks to **IDEM Federation** user credential management is simplified

Users has to remember only one password

WITHOUT THE IDEM SSO A PASSWORD FOR EACH SERVICE



For each service or application, the user needs to follow different procedures, and to remind different user IDs and passwords. Organizations, on the other hand, have a lower level of control on the users' credentials, and therefore cannot ensure their security.

WITH THE IDEM SSO ONE PASSWORD FOR ALL SERVICES



The organization that connects its identity management system to the IDEM Federation enables its users to access many services, both internal and external, with a single username and password.

Benefit and roles

Benefit for organizations

- Cost reduction for user credential management and for web services deployment
- Greater control of authentication and authorization users process

Benefit for researches

- less passwords to remember
- streamlining access to web resources regardless of the place of connection

Which roles:

- all institutes connected to GARR can join IDEM Federation with their **Identity Provider**
- Other entities - **Service Provider** – which provide web resources useful for research community (magazines, databases, CMS), can register them into IDEM Federation
- IDEM Federation works as a bridge toward EDUGAIN interfederation