



RedIRIS, with more than 500 affiliated institutions, notably including Spanish universities and Public Research Organisations, is the national network of advanced communications for the academic and scientific community.

From an organisational perspective, RedIRIS is a scientific infrastructure, under the Ministry of Economy, Industry and Competitiveness (MEIC), which sets its strategy and finances its operations. Since 2004, its technical and operational management has been entrusted to the public entity Red.es, under the Ministry of Energy, Tourism and the Digital Agenda.

RedIRIS commenced its activity in 1988 and has pioneered the introduction of the Internet and various telematic services in Spain. Since its creation, it has been a fundamental support element for carrying out collaborative projects, above all in the e-Science sphere. The network's pivotal role has been acknowledged with inclusion in the listing of extraordinary scientific and technical installations, Unique Scientific and Technical Infrastructures (ICTS), which groups together the most important scientific infrastructure in Spain.

In order to provide users with the best possible connectivity and to keep abreast of the latest telematic services, RedIRIS cooperates with other academic and research networks, both regional and international. Of particular note is the pan-European academic network GÉANT, which is jointly managed by RedIRIS and through which it connects with other academic and research networks both in Spain and in other European countries, as well as with research networks on other continents, such as Internet2 (USA), RedCLARA (Latin America) or EUMEDCONNECT (North Africa).

> More information: www.rediris.es



ECONOMÍA, INDUSTRIA

Y COMPETITIVIDAD







# CONNECTIVITY SERVICES: RedIRIS-NOVA

RedIRIS provides high capacity national and international connectivity (multiple 10 Gbps links) to all affiliated institutions that are connected (either directly or by means of regional networks) to any of its Presence Points. Its main mission is to offer services to research projects, paying particular attention to those that intensively use communications, thereby promoting innovation in the academic and scientific sphere and contributing to the development of e-Science in Spain.

Services are offered using a high-capacity backbone communications network, known as RedIRIS-NOVA. This dark-fibre infrastructure, lit using cutting-edge optical equipment, offers significant technological advances in terms of capacity (almost unlimited) and flexibility, which facilitate participation by Spanish researchers in new projects.

RedIRIS also offers other network services, such as the Internet Global access service, the IPv6 service, the secondary DNS service, or Network incident management (IRIS-NOC). What's more, it offers affiliated institutions the opportunity to configure private networks, enabling them to connect research groups in different geographic locations as if they were on the same network.

# OTHER SERVICES OFFERED BY RedIRIS

#### Mobility (http://www.rediris.es/servicios/movilidad)

The RedIRIS eduroam service provides users from affiliated institutions with a simple wireless connection to the Internet at other Spanish and international academic and scientific centres, using the login credentials that they use at their centre of origin.

### **Digital Identity** (http://www.rediris.es/servicios/identidad)

RedIRIS digital identity services simplify access to different online services for its users with their usual credentials by means of mechanisms that allow for flexible and secure data exchange. RedIRIS achieves this via its digital identity federation service (SIR), in tandem with the Europe-wide counterpart service, eduGAIN. Furthermore, it offers the IRIS-SARA service, which enables institutions access, via their RedIRIS connection, to the SARA Network, the network and e-administration services of the Ministry of the Treasury and Public Administration.

### • Security (http://www.rediris.es/servicios/seguridad)

RedIRIS has a team of experts that oversees the security of your network and the communications that take place through it. Moreover, it offers digital certificates (including those used for e-science), which minimise denial-of-service attacks (DDoS), and also advises institutions on security issues.

#### Email quality

### (http://www.rediris.es/servicios/calidad\_correo)

RedIRIS places tools at the disposal of its affiliated institutions in order to help improve their email quality. Among the services it offers, reputation list management for IP addresses, to help reduce spam, and a centralised spam filtering platform ("Washing machine") are worth particular mention.

# • Collaboration (http://www.rediris.es/servicios/colaboracion)

RedIRIS offers affiliated institutions a collaborative repository, a replicas repository and email distribution lists, so that users with common interests can exchange information quickly and efficiently, while ensuring that such exchanges remain secure and confidential.



# • Technical support to institutions

### (http://www.rediris.es/servicios/soporte\_instituciones)

RedIRIS offers its affiliated institutions technical support on issues relating to the management of communications networks, services monitoring, device and computer network security, digital identity, handling ITC service or equipment procurement procedures and any other issue relating to the work of RedIRIS.

## Dissemination

#### (http://www.rediris.es/servicios/difusion)

RedIRIS carries out a range of communication actions (publications such as use cases and the RedIRIS e-bulletin; presence on social networks, online and in-person event organisation) designed to promote its activities and services among members of its Community, as well as cooperation between the latter.

### INTERNATIONAL PARTICIPATION

RedIRIS plays an active role in the leading international industry forums (GEANT, RIPE, FIRST etc.), collaborates with the European Union's advisory groups on e-science matters (eIRG), and participates in the implementation of European programmes included in the 2020 Horizon Programme (GN4 and FI-NEXT) and academic network international cooperation programmes (BELLA and AfricaConnect/EUMEDCONNECT).

