RedIRIS, with more than 500 affiliated institutions, including Spanish universities and Public Research Organisations, is the network of advanced communications for the Spanish 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 (MINETAD).

RedIRIS commenced its activity in 1988 and has pioneered the introduction of 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 MINECO's listing of extraordinary scientific and technical installations (Mapa de Instalaciones Científico-Técnicas Singulares), which groups together the most important pieces of 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. Examples of these include 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: Internet2 (USA), Canarie (Canada), RedCLARA (Latin America), EUMEDCONNECT (North Africa), UbuntuNet (East and South Africa), TENET (South Africa), TEIN3 (Asia-Pacific), SINET (Japan), CERNET and CSTNET (China) and ERNET (India).

Further information
www.rediris.es
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 infrastructure is based on a dark-fibre model utilising cutting-edge optical equipment, which offers significant technological advances in terms of capacity (almost unlimited) and flexibility, as well as ease of management, configuration and restoration of services, all at a mid- to long-term price that is appreciably lower than that of networks based on leased capacity. These features make it possible to roll out new telematic services and facilitate participation by Spanish researchers in new projects.

RedIRIS also offers other network services, such as the Internet Global access service, IPv6, the Multicast content distribution service, the DNS service, Network incident management (IRIS-NQC) and the equipment time synchronisation service. What's more RedIRIS makes the ability to configure private networks available to affiliated institutions, enabling them to connect research groups in different geographic locations as if they were on the same network, thereby allowing them to benefit from the operational advantages of local area networks when carrying out research projects or to extend an institution’s Intranet to all its centres.

International participation

RedIRIS plays an active role in leading international industry forums (GÉANT, 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 FIWARE) and academic network international cooperation programmes (BELLA and AfricaConnect/EUMEDCONNECT).

Other RedIRIS Services

- **Security** ([http://www.rediris.es/servicios/seguridad](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. It also offers security certificates and advises institutions on security issues.

- **Digital Identity** ([http://www.rediris.es/servicios/identidad](http://www.rediris.es/servicios/identidad))
  RedIRIS digital identity services simplify access to different online services for its users by means of mechanisms that allow for flexible data exchange, in accordance with the strictest privacy and security standards. RedIRIS offers digital identity federation and identifier registration services, the PGP code server service, digital security certificates, the e-Science identity service and the IRIS-SARA access service, using the connection to the SARA Network which has already been rolled out with RedIRIS.

- **Mobility** ([http://www.rediris.es/servicios/movilidad](http://www.rediris.es/servicios/movilidad))
  RedIRIS provides affiliated institutions with the eduroam mobility service, to provide its users with a simple wireless connection to the Internet at other academic and scientific centres, using the login credentials that they use at their centre of origin.

- **E-mail quality** ([http://www.rediris.es/servicios/calidad_correo](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/collaboracion](http://www.rediris.es/servicios/collaboracion))
  RedIRIS offers affiliated institutions a collaborative repository, a replicas repository and e-mail 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](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-related issues, handling ITC equipment or service procurement procedures and any other issue relating to the work of RedIRIS.

- **Promotion** ([http://www.rediris.es/servicios/difusion](http://www.rediris.es/servicios/difusion))
  RedIRIS carries out a range of communication actions (publications such as use cases and the RedIRIS e-bulletin; event organisation and training courses) designed to promote its activities and services among members of its Community.