

What makes IRMOS unique?

IRMOS is set apart from SOI through a set of key features. IRMOS will provide a **Real-time Framework** as a single infrastructure with real-time attributes at all levels (network, processing, storage, application, workflow and business) and provision of **Quality of Service Guarantees**. Furthermore, while this infrastructure is considered to be **Cross-Organisational**, allowing the distribution of interactive real-time applications, it provides at the same time **Inter-organisation Confidence** by giving all participants in the inter-organisation value chain the confidence that interactive real-time applications will be delivered in a predictable, reliable and efficient way. The aforementioned framework also allows **Business Processes Automation** by providing services that enable the quick and efficient assembly of businesses without the need for protracted manual negotiations or service provisioning.

Partners



IRMOS is established by a European-level highly motivated consortium with partners providing their area of excellence in the European dimension. This ensures that the project technical results will be of significant value and that the project will receive the maximum possible awareness on the European level.

If you are interested in the project you can find further information in

<http://www.irmosproject.eu>



The IRMOS Project

The objective of IRMOS is to enable **real-time** interaction between people and applications over a Service Oriented Infrastructure, where processing, storage and networking needs to be combined and delivered with guaranteed levels of service.

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Innovations

The following innovations will be contributed by the IRMOS project:

- A **platform of services** that enables **real-time** interaction between people and applications
- An **intelligent network infrastructure** that not just manages the network bandwidth, but also takes into account several QoS aspects like delay and jitter, when network paths for a service have to be selected and enables automated SLA negotiation and monitoring
- An **integrated optimisation approach** at various levels from inter-organisation business processes and SLAs to intelligent networking and virtualisation techniques that enable real-time interaction and concurrency at all points of value chains that span organisational boundaries
- Software tools and associated **modelling environments** to enable real-time interactive applications to be written to target the IRMOS framework
- **Specification languages** that unify various parameters and characteristics used to describe real-time applications on SOIs, and allow value chain participants to collaborate in the design, deployment and execution of networks of services

Expected Impact

The expected impact is envisaged to be significant in multiple sectors. More precisely IRMOS will:

- Advance the business models of real-time applications with the benefits that come from SOAs
- Increase competitiveness of involved players due to low cost implementation and broader market accessibility
- Lower the entry level for SMEs to participate in the market of real-time interactive services (such as multimedia processing)
- Strengthen efficiency and productivity of organizations by advancing resilience of SOIs
- Work on standardization and extend the state of the art with the provision of open APIs to be used in the development of real-time interactive applications
- Provide tools to write software with predictable performance, resilient to the changes of the environment in SOIs

Demonstrators

IRMOS results will be independent from applications but, nonetheless, they will be validated through three different application scenarios (demonstrators): Digital Film Post-production, Virtual and Augmented Reality and Interactive Realtime eLearning.

