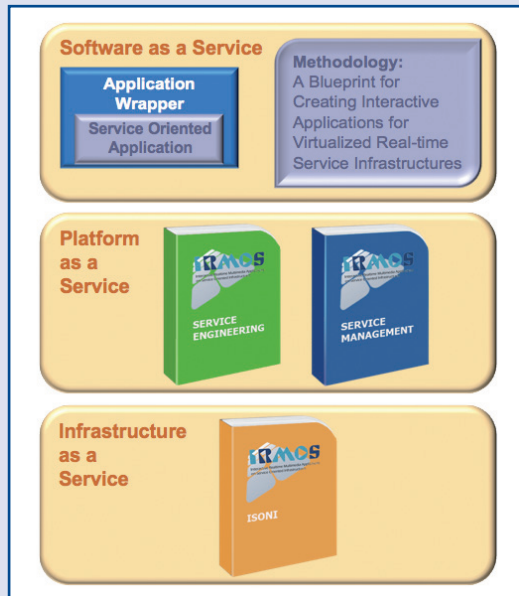


## The IRMOS Cloud Solution

IRMOS addresses the following cloud service models:

- *Infrastructure as a Service (IaaS)*: provided by the IRMOS Intelligent Service Oriented Network Infrastructure (ISONI), including processing, storage and networking resources
- *Platform as a Service (PaaS)*: provided by the IRMOS Service Engineering and Service Management tools
- *Software as a Service (SaaS)*: provided by a set of tools and a specific methodology for the creation and adaptation of applications for virtualized real-time service infrastructures



## Partners



IRMOS is established by a highly motivated consortium with partners leading their areas of excellence in the European dimension. The project technical results have received 'Excellent' marks and will be available through open source or commercial channels.

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

[www.irmosproject.eu](http://www.irmosproject.eu)



## The IRMOS Project

The main objective of IRMOS is to enable real-time interaction and collaboration between people, using distributed multimedia applications running on top of a cloud infrastructure, where processing, storage and networking are delivered with guaranteed levels of service.

IRMOS is partially funded by the EC Seventh Framework Programme FP7/2007-2011 under grant agreement n° 214777.

[www.irmosproject.eu](http://www.irmosproject.eu)

## Innovations

- IRMOS provides a set of tools along with a specific methodology on how to engineer applications for cloud-based platforms
- IRMOS provides a Service Modelling Environment and tools to model service-oriented applications and predict their behaviour when executed on clouds
- IRMOS provides Performance Estimation Services that allow end-users to deal only with high-level application parameters, since these services undertake the task of defining the low-level resource attributes and workload characteristics of the applications
- IRMOS provides Service Management Tools that support resources negotiation, reservation, application execution and monitoring, addressing the real-time related performance requirements in a transparent way to the user while conforming to the Service Level Agreements
- IRMOS incorporates ISONI, an Intelligent Service Oriented Network Infrastructure that provides Virtual Service Networks by virtualizing computing, networking and storage resources
- IRMOS enables real-time attributes at all levels of the environment (from the application to the platform, down to the infrastructure level)

## Impact

The IRMOS approach and technical solutions constitute a new generation of Service Oriented Cloud Computing environment.

The support of interactive real-time applications provided by IRMOS is a key requirement for the telecommunications industry, and is seen as a strong driver for the take-up of cloud solutions in the telco marketplace.

Additionally, IRMOS will:

- Increase competitiveness of involved players due to low cost implementation and broader market accessibility
- Provide management interfaces between service providers and network operators opening up new opportunities for all stakeholders
- Lower the entry barrier for SMEs to participate in the market of real-time interactive services

## Application Scenarios

IRMOS results are independent from applications but, nonetheless, they are validated through three different application scenarios:

- Digital Film Postproduction, which requires very high bandwidth storage and network in unison with high compute power in order to complete workflows in real-time
- Virtual and Augmented Reality in the automotive industry, which poses very tight requirements on the network infrastructure in order to enable interactivity
- Mobile Interactive Real-time eLearning, incorporating mobile devices and requiring a high degree of scalability for the used resources

