



## Project Consortium

The project consortium consists of 16 partners from nine EU countries and Switzerland:

- Power and Telecommunication Network Operators: Telecom Italia, Red Electrica de España, ACEA Roma
- Technology Providers: Siemens, Alcatel-Lucent
- Consultants & Service Providers: AIS Malta, AIA, IABG
- Research Organisations: Fraunhofer (Coordinator), ENEA, TNO, VTT, City University London, ETH Zürich, ENST

## Organisational Details

### Demonstration Event I in Germany

**Date:** May 06<sup>th</sup>, 2009

**Location:** IABG  
Einsteinstraße 20  
85521 Ottobrunn (Munich)

### Demonstration Event II in Italy

**Date:** May 19<sup>th</sup>, 2009

**Location:** Holiday Inn (Rome-West)  
Via Aurelia Km 8,400  
Rome 00165

### Demonstration Event III in Spain

**Date:** June 18<sup>th</sup>, 2009

**Location:** Red Eléctrica De España  
Paseo Conde de los Gaitanes 177  
28109 Alcobendas (Madrid)

### Registration via E-Mail to

Fraunhofer IAIS  
Dr. Rüdiger Klein  
E-Mail: [irriis@iais.fraunhofer.de](mailto:irriis@iais.fraunhofer.de)

**There will be no registration fee.**

## About Project IRRIS

The integrated EU funded project IRRIS has the objective to enhance substantially the dependability of Large Complex Critical Infrastructures (LCCI). The main focus of IRRIS lies on dependencies between different LCCI – within the same domain and across different domains. The methodologies that exist today do not reveal the true holistic nature of the risk. IRRIS aims at frameworks, tools and techniques for identifying and understanding the inter-dependent nature of cumulative risk within large complex infrastructures.

For this purpose IRRIS developed an appropriate methodology and modelling approach to describe and analyse dependent LCCI as networks of networks. Innovative simulation tools were created in order to run systematic experiments on realistic scenarios of dependent LCCI in the power and telecommunication domains. An essential element to improve the management of dependent LCCI is enhanced communication between them. The communication between LCCI is improved through so-called Middle-ware Improved Technology (MIT) developed in IRRIS and evaluated through complex simulations.

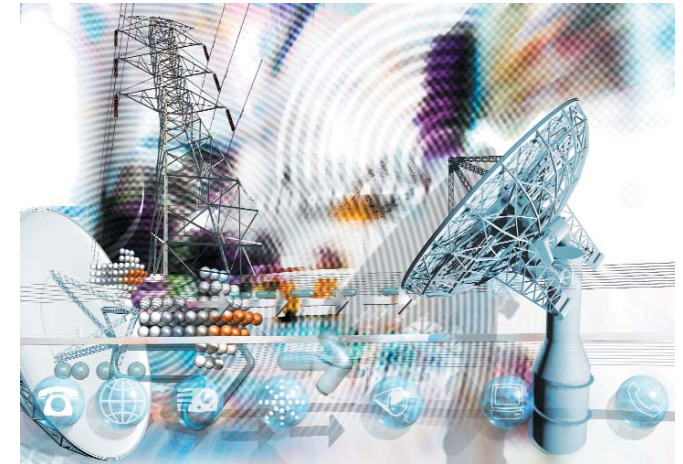
Now, after three years work, the IRRIS the consortium will demonstrate the developed technology to show their benefits to increase dependability, survivability and resilience of European Information and Communication Technology based Critical Infrastructures.

## Contact

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## Invitation to International IRRIS Demonstration Events in Germany, Italy and Spain

Challenges of Large Complex Critical Infrastructures –  
Demonstration of IRRIS Tools and their Contribution to Increase Dependability, Survivability and Resilience



Integrated Risk Reduction of Information-based Infrastructure Systems



## Problem

Infrastructures like power grids and telecommunication networks are key elements of modern societies. These infrastructures are “critical” since failures, attacks or accidents at these infrastructures can severely influence the proper functioning of the economy, public administration and society. Critical Infrastructures have become increasingly complex and (inter) dependent. As a consequence, faults, for instance, may lead to cascading and escalating effects among heterogeneous infrastructures from energy supply to telecommunication, finance, transportation, health and public administration.

IRRIIS addresses the challenges of Critical Information Infrastructure Protection by

- development, integration and validation of novel and advanced modelling and simulation tools for heterogeneous networks of networks;
- design, development, integration and validation of appropriate Middleware Improved Technology (MIT) to facilitate communication between infrastructures and enhance security;
- providing realistic scenarios and systematic experiments for Large Complex Critical Infrastructures.

## Our Invitation: Interactive Demonstration

The three international demonstration events will show the broad focus of functionality of IRRIS system components and their benefits in a complex scenario. The contribution of IRRIS results to increase the resilience of (inter)dependent systems of critical infrastructures will become visible within each demonstration event.

### Who Should Participate?

The demonstration events address:

- Representatives from operators of Large Complex Critical Infrastructures in particular from the telecommunication and energy supply sectors.
- Technology developers and providers.
- Researchers, working in the field of Critical (Information) Infrastructure Protection (CIIP).

### Your Benefits

The project IRRIS explicitly followed up an approach focused on stakeholders’ requirements. The demonstration events are an appropriate chance to express specific feedback on the developed systems.

The demonstration events give you the opportunity to learn about the functionalities of the systems, their principal use and get into contact with the developing consortium. It is your chance to integrate highly innovative technology into your processes to increase dependability, survivability and resilience of Critical Infrastructures.

## Agenda

Chairman: Dr. Rüdiger Klein, Fraunhofer IAIS

09:30 – 10:00	Participants Registration
10:00 – 10:05	Welcome
10:05 – 10:45	Introduction: An Overall View on IRRIS
10:45 – 11:15	Understanding critical infrastructures dependencies
11:15 – 11:30	Coffee Break
11:30 – 12:00	Current and Future Scenarios from a Telco Point of View
12:00 – 12:30	Current and Future Scenarios from a Power Point of View
12:30 – 13:00	The IRRIS Simulation System SimCIP
13:00 – 14:00	Lunch
14:00 – 14:30	Live Demonstration of SimCIP (Functionality/Scenarios)
14:30 – 15:00	Live Demonstration of Functionality of MIT Communication, Risk Estimator and the Incident Knowledge Analyser
15:00 – 15:30	Coffee Break
15:30 – 16:00	Live Demonstration of Experiments Showing the Benefits of IRRIS
16:00 – 16:30	Live Demonstration of the Decision Support Tool CRIPS
16:30 – 17:00	Feedback and Discussion