

Cooperation Agreement

between

The PHOSPHORUS project and Project

Purpose

The purpose of the present CA is to:

- Achieve synergy between both projects by collaboration in the common areas of interest
- Explore the possibility to share the experience and technical knowledge between PHOSPHORUS and Project during the series of workshops foreseen within the scope of PHOSPHORUS and Project, organised for partners of both projects.
- Formalize the dissemination and promotion of the Phosphorus and Project results in research community.

Background

PHOSPHORUS <http://www.ist-phosphorus.eu/>

The Phosphorus project focuses on delivering advanced network services to Grid users and applications interconnected by heterogeneous network infrastructures. The project is addressing some of the key technical challenges to enable on-demand end-to-end network services across multiple domains. The PHOSPHORUS network concept and test-bed makes applications aware of their complete Grid resources (computational and networking) environment and capabilities, and enables dynamic, adaptive and optimized use of heterogeneous network infrastructures connecting various high-end resources.

The main innovation introduced by Phosphorus is a network Service and Control Planes concept where the network (lightpath) and Grid (computational, storage) resources are provisioned in a single-step: network and Grid-specific resources are controlled and set-up at the same time and with the same priority, with a set of seamlessly integrated procedures. From a user's perspective, this results in a real, node-to-node deployment of on-demand Grid services.

PHOSPHORUS will enhance and demonstrate solutions that facilitate communication among applications middleware, existing Network Resource Provisioning Systems, and the proposed Grid-GMPLS Control Plane. The main technical objectives are: 1) enhancements of the GMPLS Control Plane (G²MPLS) to provide optical network resources as first-class Grid resource, 2) implementation of interfaces between different NRPS to allow multi-domain interoperability with PHOSPHORUS' resource reservation system, 3) middleware extensions and APIs to expose network and Grid resources and make reservations of those resources.

To disseminate ideas and developments the Phosphorus consortium will strongly interact with other relevant programmes, research activities and initiatives at the European and international level. Various network-oriented R&D projects are encouraged to share results and exchange ideas with Phosphorus project.

Project <http://www...../>

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Timeframe

The collaboration is foreseen to be performed until the end of the Phosphorus or Project project.

Main Participants

The work will be carried out jointly by participants of both projects.

Financial Conditions

No transfer of funds between the two projects is anticipated. However, partners in either project may decide to transfer some of their existing resources into one or more of the co-operation activities mentioned above.

Signed:

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(on behalf of the Project)

Artur Binczewski

(on behalf of the PHOSPHORUS Consortium)