

**ASG - Integrated Project -**  
*Competence, Knowledge and Expertise of major European research institutions with significant contributions from the software, telecommunications, and telematics industry:*

**ASTEC** ASTEC Sp. z o.o., Poland  
ADVANCED SOFTWARE TECHNOLOGIES

DaimlerChrysler AG, Germany **DAIMLERCHRYSLER**

**FHF** FH Furtwangen, Germany  
FACHHOCHSCHULE FURTWANGEN

Fraunhofer IESE, Germany **Fraunhofer** Institut Experimentelles Software Engineering

**HPI** HPI at University Potsdam, Germany

Marketplanet, Poland **Marketplanet**

National University of Ireland Galway, Ireland  
Ollscoil na hÉireann, Gaillimh

NIWA, Austria **niwa**

**era** Polska Telefonia Cyfrowa, Poland  
Możesz więcej!

The Poznan University of Economics, Poland **AKADEMIA EKONOMICZNA W POZNANIU**

Rodan Systems, Poland **RODAN SYSTEMS S.A.**  
ZARZĄDZANIE INFORMACJĄ

Siemens AG, Germany **SIEMENS**

Swinburne University, Australia **SWINBURNE**  
SWINBURNE UNIVERSITY OF TECHNOLOGY

Telekomunikacja Polska, Poland **tp**

**telenor** Telenor Communications II AS, Norway

transIT GmbH, Germany **transIT GmbH**

University of Innsbruck, Austria **UNIVERSITÄT INNSBRUCK**

University Jyväskylä, Finland **UNIVERSITY OF JYVÄSKYLÄ**

**UNIVERSITÄT KOBLENZ · LANDAU** University of Koblenz-Landau, Germany

University of Leipzig, Germany **UNIVERSITÄT LEIPZIG**  
Faculty of Economics and Management Information Systems Institute

University of Potsdam, Germany **Universität Potsdam**

**Location:**

Fraunhofer IESE  
 Institut Experimentelles Software Engineering  
 Sauerwiesen 6  
 67661 Kaiserslautern

**Registration / Audience:**

Participation only after previous Registration and Confirmation by the local organizer! Use exclusively the Registration Form and the contact data on the internal ASG-Web-Site: **www.asg-platform.org**  
 (Audience: for ASG-Partner and Invited Speaker only)

**Information / Questions:**

**- organizational & scientific -**

Joachim Beyer  
 (Fraunhofer IESE)  
 Email: joachim.bayer@iese.fraunhofer.de  
 Phone +49 6301 707225

**- Scientific Sessions - Administration-**

Dr. Regina Gerber (Work Component Dissemination)  
 University of Potsdam  
 phone: +49(331)977-1080  
 rgerber@rz.uni-potsdam.de

**Map of Location:**

Institut Experimentelles Software Engineering



Integrated Project  
 Adaptive Services Grid (ASG)

**ASG Prototype Development**

*Scientific Session -  
 Multi-component Workshop  
 lead by  
 Work Component C-6*

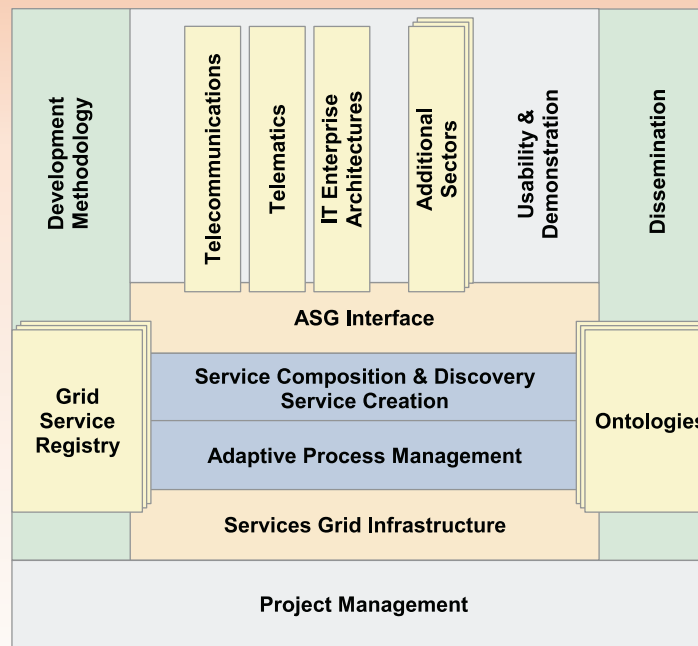


## Preface

One of the major results of the ASG project is a proof-of-concept prototype that demonstrates the successful implementation of the project. The ASG prototype integrates individual tools developed by the different partners in the ASG consortium. Based on the integrated ASG platform, sample scenario-specific services, their provision, and execution under the supervision of adaptive process management is available. The rationale behind the ASG prototype to show the validity of the ASG platform in specific sample scenarios.

The development of a running prototype is a challenging endeavor in a research project. In ASG, there are 22 contributing partners. To develop a proof-of-concept prototype in such a large consortium requires support for engineering the platform in a distributed way. Work Component C-6 supports the development of the ASG prototype by providing an overall ASG platform development process defining the roles, activities, and tools that contribute to the development of the prototype. Additionally, C-6 coordinates the continuous releases of the prototype towards the major prototype releases that will take place every six months (M6, M12, M18, and finally M24).

This scientific session concentrates on the next iteration for the ASG prototype development spanning M7-M12. This includes the refinement of the ASG use cases to be covered by the M12 prototype. These use cases will be elaborated as requirements for the different ASG subsystems and, based on these requirements, releases towards the M12 prototype will be planned.



## Agenda --- Scientific Session ASG Prototype Development

### Tuesday, 08/03/2005

09:30	Introductions and Welcome
10:00	Use Case "Travel Planner"(1)
11:00	Coffee Break
11:15	Use Case "Travel Planner"(2)
13:00	Lunch
13:45	Development Process
15:15	Coffee Break
15:30	Release Planning
16:30	Data Types in ASG
18:00	Open issues and Closing

## Involved Work Components

**Project Management (C-0)** details the project management structure involving scientific, administrative, financial, and dissemination coordination

**ASG Interface (C-1)** will provide interfaces and mechanisms to ensure access to and semantic interoperability across ASG and its users - develop a language for semantically rich description of user requests and service descriptions (incl. functional and non-functional requirements)

**Service Discovery & Composition (C-2)** will provide mechanisms to register, discover, and compose services - service composition will create composed services to fulfil requests

**Service Creation (C-3)** will provide mechanisms for dynamic creation of services - automated generation of software components according to semantic service specification and agreements - Semantic specifications will be transformed into specific language constructs

**Adaptive Process Management (C-4)** will provide mechanisms for the enactment, monitoring and management of service and process execution in order to ensure collective QoS and stateful coordination of services in ASG - include identification of prospective service providers for the services

**Services Grid Infrastructure (C-5)** will provide a generic open software platform for implementation of the ASG elements - core computational grid functionality, standard service interfaces and basic grid services - specifically address non-functional properties - considerably enhancing existing grid computing models

**ASG Development Methodology (C-6)** will manage the software lifecycle process of applications using ASG - including both the structure of software processes, the deliverables produced in the various phases and development of tools - tailoring ASG to a new application domain

**Usability and Demonstration (C-7)** will provide advanced new services in the context of specific application domains - Partners from the Telecommunications, Telematics and IT industry

**Dissemination (C-D)** as a dedicated work component - will provide a set of dissemination actions, both with respect to scientific dissemination, training and industrial dissemination will be conducted