Updated Collaboration Plan
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1 Introduction

During the past months, a series of collaboration opportunities have emerged, like the ones with the EU-funded Selfman project and with some national projects such as the ones funded via the Free Software thematic group of the Systematic competitiveness cluster in the Paris region in France.

At the same time, the actual collaboration and exchange of views with other ICT projects is still limited, due to the fact that Mancoosi is still in its initial phase, and we need to build a corpus of shareable knowledge first.

Hence, this report essentially presents an update of the collaboration plan previously submitted as Deliverable D7.1 in August 2008, covering the potential liaison and co-operation activities with the other ICT projects under the WP2007/2008 objective "Service and Software Architectures, Infrastructure and Engineering". Exploitation of synergies between Mancoosi and the other projects will consist in participation to workshops, contributions to working groups, joint dissemination activities and the production of joint dissemination material.

2 Mancoosi collaboration plan with FP6/FP7 projects

2.1 S-CUBE

Project name	S-CUBE
Project type	Network of Excellence
Web site	`http://www.s-cube-network.eu/`
Start date	March 2008
Duration	4 years

S-Cube is a Network of Excellence in software services and systems aiming at establishing "an integrated, multidisciplinary, vibrant research community". S-Cube is coordinating a set of transversal activities with the objective to reduce research fragmentation and improve global European innovation efficiency. S-Cube activities consist of integration activities, joint research activities and dissemination activities. Mancoosi intends to contribute to the following activities by registering as an associate S-Cube partner and taking part in the subsequent workgroups:

- S-Cube knowledge model: this model will "capture terminology and competences of the S-Cube partners and their research". In the field of open-source software services and systems, Mancoosi will contribute to the terminology and conceptual graph covering the field of software dependencies management and software upgrade

- S-Cube joint research activity 1: this activity is "concerned with engineering and adaptation methodologies for service-based applications. It combines different research efforts form the requirements engineering discipline, the human computer interaction discipline and the software engineering, adaptation and testing disciplines". The Mancoosi team will contribute to this activity in the field of formal methods for software engineering.

- Spreading excellence activity, aiming at broad dissemination of research results, Mancoosi will submit for inclusion the produced dissemination material to the general books and

brochures produced by S-Cube partners.

2.2 DEPLOY

Project name	DEPLOY
Web site	`http://www.deploy-project.eu/`
Start date	01/02/2008
Duration	4 years
Project type	Integrated project
Coordination	Newcastle University (UK)

Like Mancossi, DEPLOY aims at advancing software engineering methods through the use of formal methods. DEPLOY is leading a working group on formal methods for SOA covering the following topics: interface specification and compatibility checking; application and work-flow modelling and analysis, model-based design; model-based testing; model checking and automated verification. Mancoosi will contribute to this working group in the area of system modeling, upgrade modeling and integrated systems maintenance.

2.3 QualiPSo

Project name	QualiPSo
Web site	`http://www.qualipso.org`
Start date	01/10/2007
Duration	4 years
Project type	Integrated project
Coordination	Engineering Ingegneria Informatica SpA (IT)

As stated on the project's Web site, "QualiPSo intends to define and implement the technologies, processes and policies to facilitate the development and use of open-source software components". Mancoosi will collaborate with QualiPSo along the following axis:

- Trustworthy results: the QualiPSo project describes this axis as "the identification, quantification, and assessment of the quality factors related to the software products as well as to the artefacts produced during software development that affect trust in open source software products, with emphasis on functional and non-functional factors". Maintenance and upgradability of integrated components is a key part affecting adoption of software products. The Mancoosi team will propose to integrate the Mancoosi toolchain into the QualiPSo platform to support trustworthy open-source software.

- Competence centers: QualiPSo intends to develop "a long lasting network of professionals caring for the quality of open-source for enterprise computing. Six QualiPSo Competence Centres – running the collaborative platforms, tools and process developed in this project – will be set up to support the development, deployment and adoption of OSS by private and public Information Systems Departments, large companies, SMEs, end users and ISVs". The Mancoosi team will put its tooling and competencies at the disposal of the QualiPSo consortium for integrating Mancoosi achievements and know-how into the QualiPSo platform and enterprise service portfolio.

- Exploitation, dissemination and training: the Mancoosi tooling and documentation will be submitted to the QualiPSo consortium for potential integration into the material disseminated by QualiPSo.

2.4 NESSI Open Framework Reference Architecture

Project name	NEXOF Reference Architecture (NEXOF-RA)
Web site	`http://www.nexof-ra.eu/`
Start date	01/03/2008
Duration	2 years
Project type	Integrated project
Coordination	Engineering Ingegneria Informatica SpA (IT)

NEXOF-RA describes itself as a project aiming at "building the NEXOF generic open platform for creating and delivering applications enabling the creation of service based ecosystems where service providers and third parties easily collaborate". The NEXOF-RA will focus on the following areas: Core services, User interaction, Infrastructure, Security and Quality of service.

The NEXOF-RA specification will be designed in an open process involving all the relevant initiatives and organizations concerned on building a new generation of services of the Internet of the future. Mancoosi will play an active role in the design of those specifications by contributing in particular to the following topics targeted by the NEXOF-RA.

- Definition of infrastructure services[1]: NEXOF infrastructure services include "network connectivity, storage, processing and execution environments for software components and virtual machines, [...] and the combination of these into integrated environments".

- Highly available SOA[2] and scalable approaches to service oriented infrastructures[3]: those two topics focus on the consistency and on the provisioning of NEXOF services for maximizing the NEXOF quality of service, hence share concerns with Mancoosi objectives.

2.5 SELFMAN

Project name	SELFMAN
Web site	`http://www.ist-selfman.org`
Start date	01/06/2006
Duration	3 years
Project type	STREP
Coordination	Université catholique de Louvain

The goal of SELFMAN is to understand how to build large-scale distributed systems as self managing, to reduce the complexity of managing them. SELFMAN has built a practical distributed storage with a transactional interface, over a peer-to-peer network. One SELFMAN implementation, Scalaris, has won the first prize in the IEEE International Scalable Computing Challenge 2008. SELFMAN is also working on advanced component models for distributed systems, which allow systems to do automatic reconfiguration as a part of self management.

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[1] `http://www.nexof-ra.eu/definition_infrastructure_services`
[2] `http://www.nexof-ra.eu/highly_available_SOA`
[3] `http://www.nexof-ra.eu/scalable_approaches_SOI`

Both the transactional storage and the component model of SELFMAN are interesting for Mancoosi to explore distributed software installation and updating. We are exploring collaboration in these areas, with a possible successor project to SELFMAN.

3   Other collaboration actions

3.1   Participation in the SSAI collaboration meetings

In addition to direct collaborations with the working groups set up by the other FP7 projects listed above, Mancoosi took part to transversal initiatives such as the SSAI collaboration meetings on September 22-23, 2008 at the European Commission in Brussels, in order to identify new collaboration and dissemination strategies.

3.2   Workshops

Mancoosi workshops will take place at months 18 and 36. The FP7 projects mentionned above will be invited to submit contributions.

4   Actual collaboration efforts

At the day of writing this report, members of the Mancoosi project have actually participated in the following joint events organised by the EC:

- September 22-23, 2008: Panel on FLOSS in EC projects, organised by eXtreemOS in Brussels, Belgium.

- October 21-22, 2008: Panel on FLOSS projects, at the Open Source World Conference in Malaga, Spain.