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## **Year 2 Deliverable Report D8.2.2**

### **WP8: Periodic Management Report - Year 2**

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# WP8: Period Management Report

## 1. Introduction

This report gives a summary of the management issues of each ASSYST work package, including an analysis of the progress against original objectives.

Workpackages 1 to 7 correspond to the 7 major stated objectives. Management issues relating to the workpackages will be reported in the context of the bulleted objectives taken from the work package descriptions.

A commentary will be given on how each WP is contributing to the stated objectives. Detailed achievements of each workpackage can be found in their Review Report. The workpackages and sub-workpackages will be graded according to the FET evaluation classification:

0	Fails to meet the objectives
1 Poor	Objective inadequately achieved
2 Fair	Objective achieved but with significant weaknesses
3 Good	Objective achieved but improvements are necessary
4. Very Good	Objectives achieved well but improvements are possible
5. Excellent;	Objectives entirely achieved

These quantitative evaluations will be based on our qualitative evaluations as follows

- ☺ the sub-workpackage is going well or very well
- ☹ neutral note or feature of the subworkpackage, e.g. something is to be done
- ⊗ some aspect of the subworkpackage needs special attention

These symbols are intended to guide our activities during the forthcoming year where the target is ☺ for all activities for the next and final review.

## 2. Progress against objectives

The seven work packages of ASSYST correspond to the seven objectives given in ANNEX-1. Therefore to measure progress against objectives we review how each sub-workpackage has contributed to that objective.

### Objective 1: To promote COSI-ICT and Complex Systems Science in Europe and Worldwide

#### 4.5/5.0 WP1: Kickoff, Roadmap & Promoting CS Research, Supporting Research Policy

- Communicating to scientists and policy makers the state of the art including the European position at the cutting edge of the new science relative to the rest of the world, the potential of the new science, promoting particularly the work of the COSI-ICT IPs. A major vehicle for this objective is an authoritative and periodically revised roadmap.

#### 5.0/5.0 WP1.1 Kickoff & First Roadmap Meeting

☺ workpackage completed

#### 3.5/5.0 WP1.2: Roadmap for COSI-ICT and Complex Systems

☺ produced and published the first roadmap in 2009-2010.

☺ A roadmap meeting was held in January 2011.

⊗ 2020 vision are being collected (response poor – must press ourselves and others harder)

☺ Plan: a new draft of the roadmap to be written in August for ECCS'10, with feedback from the Community. This to include roadmap for COSI-ICT. Methodology is clarified.

⊗ this edition of the roadmap is later than it should be

- Communicating to non-academic policy makers and business people at national and international levels the achievements of Complex Systems Science so far by success stories and applications. These will be published and communicated in appropriate and attractive ways for non-specialists.
- To contact and network with funding agencies at national and international levels in and outside Europe in order to form a clear view of funding policies for R&D in Complex Systems Science and COSI-ICT
- To lobby for funding for Complex Systems Science and COSI-ICT at national and European levels. This includes active engagement with the European Commission and the FET unit, aimed at directing specific calls towards this area in FP7.
- Organising scientific interaction with North and South America, and Japan building on existing networks and making new scientific networks (brought here from Objective 2).

#### 4.5/5.0 WP1.3 Finding & Publishing CS Success Stories & Lobbying for CS Support

- ☺ We need to plan the brochure for policy makers and business people
- ☺ Have published a number of success stories through the ASSYST Newsletter
- ☺ Negotiating a book with Springer on success stories in CS science
- ☹ Springer book is late
- ☺ ASSYST lobbying contributed to the €22+1 million DYM-CS call
- ☺ Many meetings attended promoting complex systems, COSI-ICT and Flagships

#### 5.0/5.0 WP1.4 Coordinating with EC initiatives (e.g. ERANET, Complexity.net) for policy

- ☺ Have worked closely supporting Complexity-Net. Membership of Scientific Board
- ☺ Have worked closely with other CAs, GSD, PerAda, Attended FET CA meeting in Brussels.
- ☺ Excellent BIG-STEP meeting with Complexity-Net, GSD, GSDP, ComplexEnergy, étoile
- ☺ Excellent COSI-ICT meetings with PerAda *Towards a Science of Socially Intelligent ICT*
- ☺ Excellent summer school with PerAda
- ☺ Have supported the Flagship initiative
- ☺ Have attended many meetings relating to policy
- ☺ Interactive newss streamed observatorium event accepted for FET'11 in Budapest

#### 4.5/5.0 WP1.5 Scientific Meetings (Europe, Turkey, SFI, Valpariso, Japan, etc.)

- ☺ Invited to meeting in Washington *Socially Coupled Systems and Informatics*
- ☺ Invited to StatPhys: *Unwinding Complexity* in Australia
- ☺ Roadmap meeting organised in Sanya with China
- ☺ Summer school held in Turkey
- ☺ Trip planned to USA: Washington, NECI, SFI, Arizona,
- ☺ Trip planned to Africa
- ☺ Trip planned to South America
- ☺ Trip planned to Japan

#### 4.0/5.0 WP1.6 Coordinating national societies with the Complex Systems Society

- ☺ Meetings held with UK Complexity Society (now liquidated)
- ☺ Decision needed on journal *Emergence, Complexity & Organisation*
- ☺ Action required on supporting geographically based Special Interest Groups

#### 5.0/5.0 WP1.7 Organising CS, FET & COSI-ICT Projects Forum Day at ECCS

- ☺ COSI-ICT Projects Forum meeting was held at ECCS'10 – videos on ASSYST website
- ☺ Global Problems Panel held at ECCS'10
- ☺ Satellite conference for Complexity-Net projects accepted for ECCS'11
- ☺ Satellite conference for COSI-ICT projects accepted for ECCS'11
- ☺ Global problems Panel planned for ECCS'11

**WP1 Evaluation Summary: 4.5/5.0 - All work package performances are good or excellent.**

## Objective 2: To promote and support CS scientific interchange in Europe and worldwide

### 4.2/5.0 WP2 Scientific Meetings for Interchange, Dissemination, Roadmap & Policy

- Organising scientific meetings in Europe, the new member states and candidate states in order to facilitate the exchange of research ideas for both senior and young researchers of the European CS & COSI-ICT research community.

#### 5.0/5.0 WP2.1 Organising (Art-Complexity) Scientific Meetings around Europe & New Member States

- ☺ Co-organised Art-Complexity exhibition at BIGSTEP meeting in Brussels
- ☺ Sponsored *Emergency Exit* event at Venice Biennale August – September 2010
- ☺ Sponsoring creation of MacKay's art-mathematics-complexity sculpture in Murano glass
- ☺ *Social Cognitive Stigmergy* Art-Science Meeting at Open University, March 2010.
- ☺ Planning Art-Complexity event in a new member state

#### 5.0/5.0 WP2.2 Organising Scientific Meetings in Turkey and Associate Member States

- ☺ Turunc summer school held in Turkey
- ☺ Turunc scientific meeting held in Turkey
- ☺ Summer school in Turkey planned for 2011

- Organising scientific interaction with India and China, building on the India-China-Europe Triangle structure formed by previous projects.

#### 3.5/5.0 WP2.3 Organising Scientific Meetings with India (India-China-Europe Triangle)

- ☺ Torino Egypt-India Mathematics workshop planned for India late summer 2010
- ☺ Energy-Complexity Workshop in India planned for Autumn 2010 with TERI
- ☹ These workshops were delayed.

#### 5.0/5.0 WP2.4 Organising Scientific Meetings with China (India-China-Europe Triangle)

- ☺ Summer school held in Shanghai in China, August 2010
- ☺ Chinese roadmap meeting co-organised in Sanya in January 2011

- Setting up a UNESCO Chair to create a European-African network of research in CS and COSI-ICT.

#### 3.0/5.0 WP2.5 Organising Scientific Meetings with Africa (UNESCO Chair) (extended to include Latin America)

- ☺ Meeting held with development specialists at Open University, Dec 2010
- ☺ Latin American student group supported
- ☺ UNESCO Chair/UNITWIN meeting held in Paris, Jan 2011
- ☺ Planned trip to Africa to initiate discussions on étoile courses
- ☺ Planned trip to South America to initiate discussions on étoile courses
- ☺ Proposal for OU-based UNESCO Chair/UNTWIN to go to UK UNESCO rep in Dec 2011
- ☹ This activity is very late

- To use the scientific meetings of ASSYST as a means of collecting information on the state of the art of CS and COSI-ICT in Europe and throughout the world to feed into a roadmap and to support Objective 1.

#### 3.0/5.0 WP2.6 Organising Scientific Meetings with the Para Limes Institute

- ☹ The Para Limes Institute has closed down
- ☺ We have activities to replace those planned
- ☺ Efficiency savings on ASSYST enable us to overcome the € 4K lost

#### 4.0/5.0 WP2.7 Coordinating scientific meetings to feed into roadmap and policy

- ☺ A roadmap meeting was held in January 2011
- ☹ This meeting was later than desirable

### WP2 Evaluation Summary: 4.2/5.0 - Performances are variable – some WPs need definitive action.

### Objective 3. To create strong links between CS & COSI-ICT and the Private Sector

- Creating business-science networks at national and international levels.
- Informing the business community of the opportunities provided by CS and COSI-ICT science.
- Organising meetings between students and professional people in public and private sectors.
- Facilitating contact between business with needs and scientists able to satisfy those needs.

#### 4.0/5.0 WP3.1 Connecting Private Sector Applications with CS Science & COSI-ICT

- ☺ *Opening the Cloud* meeting held in January 2011
- ☺ Second cloud computing meeting planned for Grenoble targeted at business people
- ☺ Publications on cloud computing planned targeted at ACM and IEEE journals
- ☺ a white paper on *Wicked Problems in Applying Complex Systems Thinking*
- ☺ Trip planned to USA: Washington, NECI, SFI, Arizona,
- ☺ Workshop on *Towards a Science of Socially Intelligent ICT* held at Imperial College in August 2010
- ☺ Planned workshop on *Territorial Intelligence* (use of socially intelligent ICT to deliver information and services in the network economy) in Paris on 8<sup>th</sup> November 2010
- ☺ *Territorial Intelligence* workshop will be held in the Autumn of 2011
- ☺ Planned WP3 & WP4 meeting with the Complex Systems Society on the civil and industrial applications of CS science. Speakers will be people from the private and public sectors. This could be part of the CSS professional membership scheme.
- ☺ The above activity not yet done
- ☺ Work towards the development of an SME Special Interest Group
- ☺ NESS (Non-equilibrium Social Science) Initiative - meeting supported Dec 2010.

#### **WP3 Evaluation Summary: 4.0/5.0 – Some successes, good events are planned but must be delivered**

### Objective 4. To create strong links between CS & COSI-ICT and the Public Sector

- Creating policy-science networks at national (UK, France, Italy,...) & international (EU) level.
- Informing the public sector of the opportunities provided by CS and COSI-ICT science.
- Organising meetings between students and professional people in public and private sectors.
- Facilitating contact between public sector needs and scientists able to satisfy those needs.

#### 4.0/5.0 WP4.1A Connecting Public Sector Applications with CS Science & COSI-ICT

- ☺ BIG-STEP Meeting co-organised in Brussels, April 2010
- ☺ Satellite meeting organised at ECCS'10
- ☺ Invited participation in EC workshop *Agent Based Models for the Global Economy & its Markets*
- ☺ Organising scientific meetings of social intelligence to produce pedagogic materials to inform the public and private on what social intelligence is and how it can be used
- ☺ Planned WP3 & WP4 meeting with the Complex Systems Society on the civil and industrial applications of CS science. Speakers will be people from the private and public sectors. This could be part of the CSS professional membership scheme.
- ☺ The above activity not yet done
- ☺ Report on questionnaire results in study of ICT & Territorial Intelligence
- ☺ ASSYST working with GSDP to create courses for Senior Civil Servants
- ☺ Planned meeting on *Visualisation of public data*, Summer 2011
- ☺ Planned event in Torino on Emergency Planning Event in Summer 2011
- ☺ Possible high-profile event with Greater London Authority planned
- ☺ Some of these events are late

#### **WP4 Evaluation Summary: 4.0/5.0 – Some successes, good events are planned but must be delivered**

## Objective 5. To provide conference support for CS and COSI-ICT research and dissemination

- Support the European Conference on Complex Systems (ECCS).
- Provide an international forum for CS and COSI-ICT projects.
- Provide an international forum for FET to communicate with the CS & COSI-ICT community.

### 5.0/5.0 [WP5.1 European Conference on Complex Systems: COSI-ICT showcase](#)

- ☺ ECCS'10 organised by Jorge Louçã in Lisbon attracts 350 delegates
- ☺ ECCS'11 is being organised in Vienna by Stefan Thurner
- ☺ ECCS'12 may be held in Warsaw or Barcelona
- ☺ Various CS and COSI-ICT use the forum of ECCS
- ☺ ECCS Satellite meetings provide an open forum for projects, including Complexity-Net
- ☺ Flagships and FuturICT Flagship presented at ECCS

- Support research on mathematics and statistics in CS and COSI-ICT.

### 4.5/4.5 [WP5.2 Workshops on Mathematics in the Science of Complex Systems](#)

- ☺ Mathematics in the Science of Complex Systems, MITOCS'11 held in Venice, February 2011
- ☺ A MITSOCS meeting will be held in May at Warwick University (Robert MacKay & Jeff Johnson)
- ☺ A MITSOCS meeting will be held at Bar Ilan University in Israel in July 2011 (Mina Teicher)
- ☺ MITSOCS 2012 is planned for Venice
- ☺ Springer will publish a MITSOCS book
- ☺ WP2.3 plans a mathematics meeting in Torino with Egyptian and Indian participants
- ☺ A slow start has been overcome with an excellent programme of activities

- Provide support for female scientists to attend conferences.

### 5.0/5.0 [WP5.3 Coordinating Female Scientists and Minorities to attend ECCS](#)

- ☺ About 20 people supported to attend ECCS'10
- ☺ Considerable leverage on the funds
- ☺ New requirements have been formulated to help students network & engage with the CSS

- Support engagement with the European Social Simulation Society (ESSA) and its conference.

### 5.0/5.0 [WP5.4 Coordinating Scientific Meetings with ESSA \(European Social Simulation Association\)](#)

- ☺ ASSYST will sponsor students at the ESSA Summer School, Guildford University, July 2010
- ☺ Rosaria Conte, President of ESSA is a keynote speaker at ECCS'10
- ☺ Work under way on a scheme to network ESSA and ASSYST students

## WP5 Evaluation Summary: 4.9/5.0 – A very successful workpackage with a big scientific contribution

## Objective 6: Education

- Delivering the European PhD in Complex Systems.

### 4.0/5.0 WP6.1 European PhD and Masters in Complex Systems

- ☺ Erasmus Mundus Masters programme between Ecole Polytechnique, Warwick, and Chalmers Universities & the CSS has begun.
- ☺ European Joint Doctoral Programme is currently submitted for further Erasmus Mundus funding
- ☺ Students have been identified as potential European PhD recipients
- ☺ étoile will provide the core curriculum education for the European PhD
- ☺ Politecnico Torino will collaborate in the European PhD

- Defining a core maths/stats/physics/computing curriculum for Complex Systems Science.

### 4.0/5.0 WP6.2 Coordinating discussion & publication of the core Mathematics Curriculum

- ☺ A draft curriculum has been produced for mathematics
- ☹ It is impractical to get the curriculum validated by the CS community without exemplar courses
- ☺ we will produce étoile courses in mathematics 2011

### 4.0/5.0 WP6.3 Coordinating discussion & publication the Computing and Simulation Curriculum

- ☺ A draft curriculum has been produced for computing
- ☹ It is impractical to get the curriculum validated by the CS community without exemplar courses
- ☺ We will produce étoile courses in computing in 2011
- ☺ Andrew McGettrick gives presentation on BCS and ACM computing curriculum

### 4.0/5.0 WP6.4 Coordinating discussion & publication the Physics Curriculum

- ☺ A draft curriculum has been produced for physics
- ☹ It is impractical to get the curriculum validated by the CS community without exemplar courses
- ☺ we will produce étoile courses in physics in 2011/2012

- Providing postgraduate open educational resources across Europe for masters & PhD courses.

### 4.5/5.0 WP6.5 CSS: Sharing educational resources across Europe

- ☺ étoile project proposal successful (Enhanced Technology for Open intelligent Learning Environments)
- ☺ Delivered mathematics course to 100+ students in Romania March-April 2010.
- ☺ Planned mathematics course for Romania in 2011
- ☺ Various courses planned for delivery in 2011 and 2012

- Providing residential schools on CS and COSI-ICT.

### 4.0/5.0 WP6.6 Organising Residential Schools

- ☺ 4<sup>th</sup> Annual French summer School held in Paris, August 2010

## WP6 Evaluation Summary: 4.1/5.0

The education workpackage has made steady progress in preparation for étoile and can have a very high impact before the project ends.

## Objective 7. Provision of High Quality Web-based Information Services and Tools

- Wiki-based communication between members of the CS & COSI-ICT research community.
- MyReview and other software for supporting conferences and journals.

#### 3.5/5.0 WP7.1 WIKI web infrastructure & IT tools

- ☺ Upgrading of the TikiWiki platform
- ☹ Complex Systems Society site is hacked
- ☹ Complex Systems Society site is not being used as expected
- ☹ Content on the CCS web site is not coherent or well maintained
- ☹ The CSS site does not match CSS activity
- ☺ An experienced website design-engineer is redesigning the site for the CSS
- ☺ Access to TINA tools for understanding the CS community and its science
- ☺ MyReview system maintained
- ☺ 2010 Who's Who published

- Maintaining a web site providing services, news and information on events, schools, etc.
- Coordinating publications on complex systems and COSI-ICT
- Collecting, editing and disseminating information & publicity: promoting CS in the EC.
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- Repository for publications, data and tools for CS and COSI-ICT.

#### 5.0/5.0 WP7.2 CSS web site content: news, events, CS & COSI-ICT publications

- ☺ ASSYST Newsletter has high quality content
- ☺ New interactive format for the ASSYST newsletter
- ☺ ASSYST document reorganized
- ☺ Digital library extended with new videos from meetings and conferences.
- ☺ ECCS'10 video streamed

- FlashMeeting videoconferencing system to facilitate virtual meetings and save on travel.

#### 5.0/5.0 WP7.3 ASSYST meeting coordination, information synthesis & publication

- ☺ FlashMeeting gives excellent support to the management and scientific meetings

### **WP7 Evaluation Summary: 4.5/5.0**

**Generally WP7 is successfully providing high quality web-based information services and tools. The redesign of the Complex Systems Society Wiki website can further enhance and much better support the work of the Society.**

### 3. Conclusions

All the objectives of ASSYST are being addressed by one or more work packages. Some work packages are already producing excellent results, while others will deliver on a longer timescale. The overall position is as follows:

WP	Purpose	Evaluation	Summary
WP1	Promoting CS & COSI-ICT	4.5	All work package performances are good or excellent.
WP2	Scientific Meetings	4.2	Performances are variable – some WPs need definitive action.
WP3	Private Sector	4.0	Some successes, good events are planned but must be delivered
WP4	Public Sector	4.0	Some successes, good events are planned but must be delivered
WP5	Conference Support	4.9	A very successful workpackage with a big scientific contribution
WP6	Education	4.1	The education workpackage has made steady progress in preparation for étoile and can have a very high impact before the project ends.
WP7	Internet Coordination & information services	4.5	Generally WP7 is successfully providing high quality web-based information services and tools. The redesign of the Complex Systems Society Wiki website can further enhance and much better support the work of the Society.

The management of the work packages is coordinated by the monthly FlashMeetings and many face-to-face meetings with partners. This seems to have worked well. Year 3 will see all our activities come to fruition and we expect to meet all our objectives.