

3rd Year Final Report

Document information		
Project Title	ComplexWorld	
Project Number	E-01.01	
Project Manager	The Innaxis Foundation and Research Institute	
Deliverable Name	3rd Year Final report	
Deliverable ID	D31.2	
Edition	00.00.03	
Template Version	03.00.00	
Task contributors		
The INNAXIS Foundation and Research Institute		

Abstract

This report collects together the main activities developed by the ComplexWorld Network highlighting the key achievements in 2013, the third year of the network.

Authoring & Approval

Prepared By - Authors of the document.			
Name & Company Position & Title Date			
XXXXXXXXXXXXX/Innaxis	Consortium Coordinator / Collaborative Research	10/12/2013	

Reviewed By - Reviewers internal to the project.		
Name & Company Position & Title Date		
XXXXXXXXXXXX/Innaxis Consortium Member 02/01/2013		

Reviewed By - Other SESAR projects, Airspace Users, staff association, military, Industrial Support, other organisations.			
Name & Company Position & Title Date			
XXXXXXXXXXXXXXX/Eurocontrol	Project Officer	10/01/2014	

Approved for submission to the SJU By – Representatives of the company involved in the project.			
Name & Company Position & Title Date			
XXXXXXXXXXXXX/Innaxis <consortium 12="" 2013<="" coordinator="" td=""></consortium>			

Rejected By – Representatives of the company involved in the project.			
Name & Company Position & Title Date			
<name company=""> <position title=""> <dd mm="" td="" yyyy<=""></dd></position></name>			

Rational for rejection	
None.	

Document History

Edition	Date	Status	Author	Justification
00.00.01	12/12/2013	Submitted	Innaxis	New Document
00.00.02	13/01/2014	Submitted	Innaxis	Update according to Eurocontrol feedback
00.00.03	13/02/2014	Submitted	Innaxis	Update according to SJU feedback

Intellectual Property Rights (foreground)

SJU Foreground.

founding members

2 of 21

Table of Contents

Е	XECU	UTIVE SUMMARY	4
1	IN	TRODUCTION	5
	1.1 1.2 1.3 1.4 1.5	PURPOSE OF THE DOCUMENT	6 6 6
2	RE	EVIEW OF MANAGEMENT AND ADMINISTRATIVE ACTIVITIES	7
	2.1	CURRENT STATUS	7
3	TH	IE COMPLEXWORLD WIKI	9
	3.1 3.2	CURRENT STATUS	9 9
4	RE	EVIEW OF EVENTS AND CONFERENCES1	0
	4.1 4.2	STATUS	
5	RE	EVIEW OF PHD PROGRESS1	2
	5.1 5.2	STATUS	
6		RFORMANCE FRAMEWORK14	
7	MI	INUTES OF GATE REVIEW MEETING1	7
	7.1	Minutes and Action Items1	7

i

Executive summary

The current deliverable presents the activities developed by the ComplexWorld Network during 2013, its third year of activity.

According to the activities scheduled for this year, the network has accomplished all tasks planned to be ended during this Year3. In particular, the following activities are described in this report:

- Management and administrative activities
- The ComplexWorld Wiki
- Events and Conferences
- PhDs progress

All these chapters contain the current status of each of the initiatives as well as the conclusions and recommendations achieved after this period of performance.

Finally, a Performance Framework table is presented to evaluate the performance of the network according to different indicators.

In addition, the minutes of the Gate Review Meeting are collected at the end of the report.



1 Introduction

1.1 Purpose of the document

The objective of this report is to highlight the main activities that have been developed during 2013. The activities of the network are reported through a number of deliverables, as shown in the following table:

Project:		Deliverables		Resources
ID	Name	Description	Date	Effort (p-d)
D33.1	Wiki infrastructure and mgt plan	tech report	15-Apr-13	20
D31.1	Y3 intermediate report	progress report + progress meeting	30-Jun-13	18
D33.3	Championing projects and PhDs: wiki report1	tech report	15-Jul-13	30
D32.2	Tutorials: programme and report	tech report	30-Jul-03	10
D32.1	ATOS and ECCS: programmes and report	tech report	31-Oct-13	32
D33.2	ATM complexity paper submission + book publication process	tech report	15-Dec-13 (deliverable delayed after approval of PO)	87
D33.4	Championing projects and PhDs: wiki report2	tech report	15-Dec-13	34
D33.5	CW workshops	tech report	15-Dec-13	54
D34.1	Maintaining website / blog	tech report	15-Dec-13	15
D31.2	Y3 final report	progress report + progress meeting	15-Dec-13	17
	end date		30-Jan-14	

The main general goal of the ComplexWorld network during the third year has been to develop and execute a collaborative research vehicle for Projects and PhD candidates in order to facilitate their contribution to the knowledge development in Complexity Science. This general goal is being carried out via different initiatives that aim at facilitating this collaboration. A key aspect has been the development of a wiki-enabled infrastructure - ComplexWorld Wiki (CWW) - as part of the Knowledge Development of the Network to open the opportunity of contributing to the Position Paper to a wider community. Additionally, many other initiatives have been organised, both to support this goal and of value in their own right, which will be detailed in the following chapters following the original classification of the Network activities.

founding members



5 of 21

Additionally, a very significant outcome of the network (in terms of resources allocated so as visibility) is the book whose preparation has been started this year and which is expected to be delivered to the publisher in 2014.

1.2 Intended readership

The target reader is any stakeholder, mainly from Eurocontrol and the SESAR JU, interested in understanding the main activities developed by the Network during the reporting period.

1.3 Inputs from other projects

N/A

1.4 Glossary of terms

Wiki: In simple terms a wiki is perhaps best described as a Web site that can be easily edited by anyone straight in the web browser without need for any additional software. From Wikipedia: "A wiki is a website which allows its users to add, modify, or delete its content via a web browser usually using a simplified mark-up language or a rich-text editor."

A wiki seeks to involve the visitor in an ongoing process of creation and collaboration that constantly changes the web site's landscape

1.5 Acronyms

CW: ComplexWorld CWW: ComplexWorld Wiki PO: Project Officer PP: Position Paper SESAR: Single European Sky ATM Research SESAR JU: SESAR Joint Undertaking

founding members

2 Review of management and administrative activities

2.1 Current status

Although the contract for the third year of the network was signed on the 12th of April, 2013, some members of the ComplexWorld Network started their activities earlier on the 15th of December, 2012 at their own risk to avoid delays during the third year. The third year of the network is planned to finish on the 30th of January, 2014, after the Final Review meeting on the 19th of December, 2013.

As in the previous Y2, the ComplexWorld Consortium continues endeavouring to reduce the effort allocated to Management activities in benefit of Knowledge Development, Research Coordination and Network Development activities.

The following plot shows the distribution of effort during the third year of ComplexWorld, by activities (in person-days):

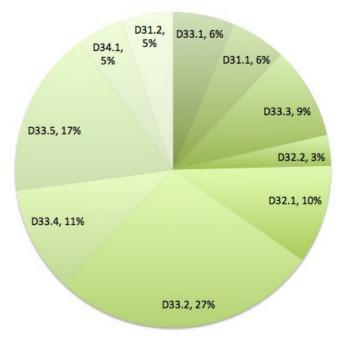


Figure 1 Distribution of effort among the accomplished tasks

All deliverables have been completed on time, following the agreed schedule¹. The table above therefore shows the total effort allocated on each task according to the budget of the Y3 Work Order.

The status of the deliverables at the time of writing this report is as follows:

Deliverable ID	Title	Status
D33.1	Wiki infrastructure and management plan	Submitted, approved, invoiced, and paid

¹ It was agreed with the Project Officer to delay **D.33.2 ATM complexity paper submission + book publication process** with respect to the date scheduled in the Work Order, from the 31st October to the 15th of December, 2013.



Avenue de Cortenbergh 100 | B- 1000 Bruxelles | www.sesarju.eu

7 of 21

D31.1	Y3 intermediate report	Submitted, approved, invoiced, and paid
D33.3	Championing projects and PhDs: wiki report1	Submitted, approved, invoiced, and paid
D32.2	Tutorials: programme and report	Submitted, approved, and invoiced
D32.1	ATOS and ECCS: programmes and report	Submitted, approved, and invoiced
D33.2	ATM complexity paper submission + book publication process	Submitted, approval pending
D33.4	Championing projects and PhDs: wiki report2	Submitted, approval pending
D33.5	CW workshops	Submitted, approval pending
D34.1	Maintaining website / blog	Submitted, approval pending
D31.2	Y3 final report	Submitted, approval pending
	end date	30-Jan-14

Table 1 Deliverable's status

All deliverables which are pending of approval are those whose scheduled delivery date is the 15th of December, as it is the case of this deliverable. All previous ones have already been approved.

founding members

3 The ComplexWorld Wiki

3.1 Current Status

The ComplexWorld Wiki (CWW) was launched during the first half of 2013 and all Position Paper content uploaded. From now, the CW Position Paper as a stand-alone document will not be updated and, hence, the ComplexWorld Wiki will be the latest version of the CW Position Paper. Considering the Wiki as a living website, the network will continue to foster the platform to provide the research community with a useful and satisfactory user experience.

The general goal is to turn the CWW in the content repository for complexity research in ATM, where the different researchers publish the state of the art achieved through their different initiatives, ensuring maximum visibility and traceability for the different research challenges that the ATM community is facing. This objective requires the involvement of the relevant stakeholders and their collaboration to build up a common knowledge platform. To promote it, this knowledge development task is fully aligned and coordinated with the network development activities so as to ensure an appropriate flow of knowledge: the outcomes of the network development activities are inputs for the CWW and the content of the CWW inspire new network development activities to complement its content, as it will be detailed in Section 4.

In addition to the PP and with the objective of enabling the construction of a common framework of knowledge, the ComplexWorld network has included in the CWW sections for the PhD students and projects, and especially for those linked to ComplexWorld. Their collaborations have increased along the year (promoted by different communications, email promotions and presentations at several events) and, up today, half or the project representatives and PhD students have already provided full information about their work within WP-E.

With all this content, the number of visits and the number of unique visitors have increased all along the year since its launch until November 2013, which is the last report available. Until November 2013, a total of 221 different people have visited the CWW, which includes more than 50 pages and has 30 accounts created.

3.2 Conclusions and Recommendations

- 1. The CWW is working appropriately providing a friendly user tool to allow the seamless collaboration of all interested contributors. Additionally, support is provided by the network coordinator in case of questions or problems with its usage.
- 2. The initiative of moving the Position Papers to a wiki format has been positively accepted and well received, it can be easily updated and reviewed and it facilitates the interactions among the different knowledge threads arisen from the diverse network activities.
- 3. The number of visits and single visitors is very relevant and still increases month by month.
- 4. The number of accounts requested and active contributors updating/creating pages is also increasing but in a lower rate.
- Additional support from Eurocontrol/SJU is encouraged so as to get higher commitment from the ComplexWorld projects and PhDs since the research community is basically composed of Eurocontrol/SJU funded activities.
- As 1st call WP-E projects are approaching its end or have already finished, ComplexWorld should allocate effort to integrate all publishable summaries into the CWW as part of its activities of Year 4.

4 Review of events and conferences

4.1 Status

In Year 2 the Network followed a strategy of events consisting of leveraging on existing events, by participating directly or even creating satellite sessions at, several, well-established and well-attended conferences. In accordance to the successful results of this strategy, the Network has continued in this line planning the events where the ComplexWorld Network will be represented. This strategy is continued in the current period but complemented with other new initiatives.

Year 3 has been a very active year in terms of number of events organized. In addition to the collaboration on existing events, different CW partners have organised a number of thematic workshops on topics related to the CW Position Paper and, therefore, enhancing the CWW content and promoting the contributions to the knowledge platform. A total of five workshops have been organized aimed at bringing additional input for the CWW. The workshops are specifically designed for this objective and, consequently, are developed for a limited and selected audience, coming mainly from the WP-E stakeholders although they are open to any interested party. In line with the defined strategy, the Network organises these workshops alongside to other larger events.

The complete number of events organized by ComplexWorld is listed below:

- CW Workshop on Uncertainty, 27th May in Naples, coordinated with the ATACCS event (Application and Theory of Automation in Command and Control Systems) more information: <u>http://www.complexworld.eu/uncertainty-in-atm-cw-workshop/</u>
- ComplexWorld Seminar at the 2013 Air Transportation System Conferences, 8-11th July in Toulouse, hosted by ENAC and organized together with ATOS, ASDA and ISIATM. More information in: <u>http://isiatm.enac.fr/ats_conferences/</u> The ComplexWorld activities during this seminar consisted in:
 - ComplexWorld Papers session, including a presentation of the ComplexWorld Wiki (9th of July). Low number of papers received.
 - ComplexWorld Workshop on Resilience and Robustness in ATM (10th of July)
 - ComplexWorld Tutorials Session (11th of July) on the selected topics: Delay Propagation and Patters; Data Science; Uncertainty and Non-Determinism; and Intermodality
- 3rd ComplexWorld Satellite session at ECCS'13, Barcelona, 16-20th September. More information: <u>http://www.eccs13.eu/</u> The Satellite was held on the 18th and entitled "Complexity Science and Transport Systems", full details can be found here: <u>http://www.complexworld.eu/upcoming-events/eccs-2013-cw-satellite-meeting/</u> This conference aims to expand the ComplexWorld network beyond the ATM field and, in particular, to build bridges with Complexity Science researchers.
- CW Workshop on Air Transport Network: an Integrated View, 20th of September, 2013. Barcelona. More information: <u>http://www.complexworld.eu/upcoming-events/cw-workshop-3-air-transport-network-an-integrated-view/</u>
- CW Workshop on Data Science in Aviation, 15th October, 2013, Madrid. <u>http://www.datascienceworkshop.com</u>. Very successful event with nearly 90 people registered, showing high interest on the topic.
- ComplexWorld PhD session at SIDs 2013, Stockholm, 26-28th November, 2013. <u>http://www.sesarinnovationdays.eu/</u>.
- CW Workshop on Non-classical Complex Metrics, 28th November, 2013, Stockholm. Full information: <u>http://www.complexworld.eu/cw-workshop-4-complex-metrics-in-atm-2/</u>

In some workshops, a questionnaire was developed and distributed in advance among the expected participants (both attending and non-attending projects and PhDs) with two-fold objective:

 Setting up the basis and putting in context the topic of the Workshop ensuring a common understanding of the related topics



10 of 21

 Collecting inputs in advance, so the organisers can prepare the Workshop accordingly and focus its development on the main issues. Also, those projects representatives and PhDs who could not attend the Workshop personally can be represented

The Questionnaire and the format of the Workshop enable the gather of information to enhance the CWW content which is coordinated by the Workshop organisers by requesting specific input to the participants. More information on the Workshops is provided in **D33.5 ComplexWorld Workshops: report** deliverable.

4.2 Conclusions and Recommendations

- 1. The decision of organising thematic workshops for a reduced targeted audience has been successful in terms of development of new knowledge for the ComplexWorld Wiki and the cohesion and coherence of the different WP-E initiatives.
- 2. The distribution of a questionnaire related to the Workshop topics prior to its celebration is considered a good practice and recommended for the following workshops when the topic of the workshop is related to several WP-E activities (projects and PhDs).
- 3. The organisation of the ComplexWorld events in parallel to other larger consolidated events is positive as the network can reach to a broader community, gaining visibility and taking advantage of their knowledge and experience. Also it allows a better use of the human resources of the Network. Nevertheless, it makes it difficult to control the details of the organization on those events, a drawback that was already identified in Year 2.
- 4. Organizing 5 independent workshops is high resource consuming in terms of management, coordination, promotion and marketing. In the future it would be recommendable to concentrate all workshops in one single event of several days.
- 5. Announcing the events large in advance increases significantly the probability of success of that event in terms of attendance. It is considered a good practice to make a communication action at the beginning of the year announcing the agenda of events of that year.
- 6. Improvements should be made to receive a higher number of papers for the Seminar.



5 Review of PhD Progress

5.1 Status

The engagement of the PhD students in the activities of the Network during this reporting period has been very satisfactory, attending and participating actively in the events. In particular, the following network activities have been organised:

- Workshop 1 on Uncertainty: all PhDs whose thesis are thematically related to the topic of the workshop participated on it (both from ComplexWorld so as from HALA!). The large majority of them attended personally the workshop and, those who couldn't join it, participated providing inputs as required in the Workshop questionnaire helping to complement the CWW content on the field.
- Workshop 2 on Resilience and Robustness in ATM: all PhDs whose thesis are thematically related to the topic of the workshop participated on it (both from ComplexWorld so as from HALA!). The large majority of them attended personally the workshop and, those who couldn't join it, participated providing inputs as required in the Workshop questionnaire helping to complement the CWW content on the field.
- The Tutorials Session: five of the six CW PhD students attended the tutorials
- Workshop 3 on Air Transport Network: an Integrated View : All targeted ComplexWorld PhD students attended the workshop (the HALA! ones failed)
- Workshop 5 on Data Science in Aviation, did not have PhDs attendance as their thesis are not related to the topic of the workshop
- Workshop 4 on Non-classical Complex Metrics, attended by two of the ComplexWorld PhDs
- ComplexWorld PhD session at SIDs 2013, where two of the PhDs presented their evolution and last results. The other 4 students had presented their work in previous CW workshops so there was no requirement by the network to participate in this event as presenter. However, all PhDs, including ComplexWorld and HALA! attended this session.

	Effective		Candidate's Progress Report 3	Candidate's Progress Report 4	Supervisor's Progress Report 2	Paper 1 International Congress
University	start date	Y1	D6	D7	D8	D9
Friedrich Alexander University Erlangen- Nuremberg						
(FAU)	01/07/2011	Approved	Approved	Approved	Approved	Noted
Universidad Politécnica de Madrid (UPM)	01/09/2011	Approved	PhD cancelled	PhD cancelled	PhD cancelled	PhD cancelled
Delft University of Technology (TUD)	01/10/2011	D4: submitted D5: submitted	Submitted	Pendant	Submitted	Submitted
IFISĆ, Universitat de Ies Illes	01/07/2011	Approved	Approved	Approved	Approved	Submitted

Regarding the status of the deliveries from the PhD students:

founding members



Avenue de Cortenbergh 100 | B- 1000 Bruxelles | www.sesarju.eu

12 of 21

Balears (UIB) - CSIC						
Sapienza University of Rome (SUoR)						
	01/02/2012	Approved	Approved	01/02/2014	01/02/2014	01/02/2014
Vrije Universiteit						
Amsterdam						
(VUA)	01/07/2011	Approved	Approved	Approved	Approved	Noted
University of						
Hannover						
(UoH)	01/09/2011	Approved	Approved	Submitted	Submitted	Noted

Table 2 PhD students' delivery status

As the UPM PhD was cancelled, ComplexWorld launched on September, 2013 its second call for PhDs to co-finance a maximum of 1PhD Thesis to complement the research plan of the Network. The selected topic was the application of Data Science techniques to the aviation field. A joint proposal between Innaxis and UPM was awarded.

5.2 Conclusions and Recommendations

- 1. The level of engagement of the PhD students in the network activities has improved significantly, bringing the opportunity of integrating their research in the CWW to enable the alignment of their work and the Wiki content.
- 2. The organisation of thematic workshops which are interesting both for ComplexWorld students so as for HALA! PhDs is considered a good practice as it fosters the cohesion among the different WPE activities and creates more opportunities of complementing and updating the CWW content.
- 3. As a result of their participation in workshops, the PhDs has been engaged in the contribution to the wiki.



6 Performance Framework

The goal of this section is to provide some indicators of performance of the network. These indicators, ranging from 'medium' to 'good' and 'very good,' and their current level represent the views of the Coordinator of the network regarding the evolution of the different activities of the network:

	Area	Indicator	ComplexWo rld assessment	Comments
MGMT.001	Management	Communication w/members	Very Good	
MGMT.002	Management	Communication w/ECTL	Very Good	
MGMT.003	Management	Deliverables on time	Very Good	Deliverables have been finished on time. Delay in D33.5 (with respect to the Work Order schedule) was anticipated well in advance, justified and agreed with the Project Officer
MGMT.004	Management	Billing/Administrative management	Very Good	To date, all approved deliverables have been invoiced and the first three of them are already paid.
KD.001	Knowledge Development	Quality of the wiki	Good	The CWW has been successfully developed and is achieving a significant number of visits and visitors. Also, new collaborators have contributed complementing the original content. Eurocontrol support is highly recommended.
KD.002	Knowledge Development	Relevance to the Community	Good	The wiki is a vehicle for openness of knowledge development to the research community. The workshops have helped significantly to align the content of the wiki with Projects and PhDs results as well as to get higher visibility.
KD.003	Knowledge Development	Dissemination of the wiki	Very Good	The wiki has been promoted through different media. It has been publicized in all CW workshops and related events. Online communication actions have been launched with very good impact rates.

founding members



KD.004	Knowledge Development	Involvement of participants	Good	The CWW offers an easy-to- use platform to foster the collaboration among network participants facilitating the collecting of input for the wiki content. While the involvement of the PhDs is satisfactory, a higher commitment from the projects representatives is needed. Valuable contributions have been obtained (including from people not related to the WP- E) although it is still requires some promoting effort from the network members.
ND.001	Network Development	Conferences and Events	Very Good	Workshops 1 to 5 organized, Data Science in Aviation WS attracted by far the highest level of interest in terms of participation. CW Seminar organized; higher number of papers received would have been preferable. Tutorials session organized, with very relevant keynote speakers. 3rd CW satellite at ECCS organized with good number
ND.002	Network Development	Involving the Existing Community	Good	of attendees. The PhDs are demonstrating high interest and commitment with the network activities. The involvement of the projects is weaker, both in the workshops so as in the CWW contributions.
ND.003	Network Development	Involving New Communities	Good	ECCS is a community not previously working in the field of air transport. This year, a higher audience has been involved and high quality papers have been received.
ND.004	Network Development	Communication Actions	Very Good	Frequent LinkedIn updates and email announcements (including events and CWW), good acceptance

founding members



PhD.001	PhD Management	PhD correctly informed	Very Good	Direct fluent communication with PhDs about their commitments. No resource allocation planned in the network activities for any other formal management.
PhD.002	PhD Management	Financial Management	Good	No issues
PhD.003	PhD Management	ECTL correctly informed about PhD evolution	Very Good	InGrid frequently updated and ECTL informed punctually.

founding members

Avenue de Cortenbergh 100 | B- 1000 Bruxelles | www.sesarju.eu

16 of 21

7 Minutes of Gate Review meeting

Attendance:

- Stela Tkatchova, SESAR JU (ST)
- Marc Bourgois, Eurocontrol (MB)
- Héctor Ureta, Innaxis (HU)
- Paula López-Catalá, Innaxis (PLC)

Date: 19th December, 2013

Location: SJU premises in Brussels

7.1 Minutes and Action Items

Issues on the agenda

- 1. Management and administration
- 2. ComplexWorld Wiki CWW -
- 3. Events and conferences
- 4. PhD Progress
- 5. Performance Framework
- 6. Y4 Ideas

1. Management and Administration

Eurocontrol informs Innaxis that the last invoice, corresponding to D322.2 and D32.1 has just been paid.

ComplexWorld reports on the main issues of the activities performed during the year, all reported in detail in the corresponding deliverables. The book and the wiki (including the related tasks) are very well evaluated by the SJU considering it as a very valuable result of the network to be concluded during the following years. The knowledge development activities have consumed the majority of the effort allocated.

2. <u>ComplexWorld Wiki – CWW-</u>

The workshops, and the high effort dedicated to them is well appreciated by Eurocontrol and the SJU. The outcomes of these events have served to open the Position Paper content to a wider community, not only in terms of visibility but also contributors. These outcomes (wiki updates) are carefully reviewed during the meeting.

ComplexWorld reports on the contribution and participation of the projects and PhDs. The PhDs have demonstrated, in general, a high level of commitment. The involvement of the projects is weak (with some exceptions as CASSIOPEIA, POEM and MAREA).

The SJU is interested on having a specific section on each project and PhD page in InGrid indicating the Conclusions and an assessment on future research lines. They should also be introduced clarifying the research questions. Also suggests to have a repository of each PhD publications.

ComplexWorld reports on the contributors external to the WPE, which is an important achievement (FP7 projects and others).

A brief analysis of the impact of the wiki is presented: number of visits, evolution, traffic sources, email campaigns, number of accounts... While the visibility figures are very successful, the number of accounts created and its activity needs to be fostered. Additional marketing activities and new initiatives will be planned in order to increase the number of contributors. Help from the SJU and Eurocontrol is specially necessary in this point.

It is agreed that the wiki should be presented to the Scientific Committee as an important result of the CW activities (next meeting April 2014).

3. Events and conferences

The events performed by the network during the year are reviewed. The Data Science workshop and its high attendance is highlighted as an indicator of the potential of this line of research. Future editions of this workshop are planned. By the moment, no content has been extracted from that workshop but it is expected as part of the book.

4. PhD Progress

The table of fulfilment of tasks assigned to the PhDs is reviewed and main aspects of their evolution is explained by Eurocontrol. No further comments on it.

Regarding the call for candidates for the PhD on Data Science, Eurocontrol and the SJU are invited to distribute the information. The SJU will forward the call details to the Scientific Committee.

5. <u>Performance framework</u>

The Performance Framework table is presented to Eurocontrol and the SJU and agreed by all attendees. No further comments on it.

6. <u>Y4 Ideas</u>

The book will be the major time consuming task of the network in Year 4.

Additionally, the CWW will be maintained and updated, in particular, the following tasks are planned: - upload publishable summaries of the finished projects of the network.

- integrate documentation of past and future (Year4) events,

SESAR JU emphasizes the need of developing promotion activities to increase the number of contributors to the wiki: communication actions, prizes to the top participants (to be checked), LinkedIn posts...

In parallel, a number of events are planned for the 2014 agenda:

 ICRAT2014 will be the platform where ComplexWorld will celebrate its annual seminar and tutorials session. The Call for Papers is already open (single call for the different parallel events taking place). Eurocontrol recommends to reduce the number of tutorials while increasing the length of each lesson (i.e. two tutorials of 2 hours each). The tutorials session should be integrated in the main event thread.



- 1 or 2 workshops will be organized. One would be on Data Science in Aviation (2nd edition). ComplexWorld offers the SJU the possibility of suggesting a topic for the other workshop. CW believes this would foster the cohesion of the WPE and its Exploratory Research programme. The SJU proposes the idea of allowing the CW project representatives to suggest new topics derived from their work in WP-E (future research lines to continue of extend the current results).
- Eurocontrol and the SJU support the idea of organizing the 4th CW Satellite session at ECCS given its increasing visibility and success.

These ideas for Year4 should be presented to Eurocontrol in a spreadsheet including effort allocated and a short description of the content of the deliverables. This spreadsheet will be the basis of the Y4 WorkOrder.

ID	Action Item	Asigned to	Due date	Comments/Full description
D31.2.01	Send papers to SJU	PLC	31-12-2013	1st paper: full. 2nd paper:draft
D31.2.02	Remind CWW user credentials to ST	PLC	07-01-2014	
D31.2.03	Report Scientific Committee on weather uncertainty results	ST	31-01-2014	Manuela Sauer (PhD) results, partly available in the CWW
D31.2.04	Provide feedback on D33.5 Workshops Report	МВ	10-01-2014	PLC will update the report according to the comments (if any)
D31.2.05	Suggest Massimiliano Zanin to contact Fabio Lamana for a possible collaboration	PLC	31-01-2014	Perhaps writing a joint paper for SIDs 2014 would make sense
D31.2.06	Send link to ST to CWW- Intermodality	PLC	10-01-2014	
D31.2.07	Include in the CWW´s projects page a section to identify future research lines and conclusions	PLC	31-01-2014	
D31.2.08	Inform ComplexWorld on the projects of the	MB	31-01-2014	

Action Items





Avenue de Cortenbergh 100 | B- 1000 Bruxelles | www.sesarju.eu

19 of 21

	second call related to its topic			
D31.2.09	Eurocontrol and SJU to coordinate tasks to include PhDs material on its extranet	MB/ST	31-01-2014	
D31.2.10	Clarify the overpayment of the UPM PhD	AV	31-01-2014	
D31.2.11	Contact ICRAT Programme Committee to coordinate CW activities and integrate them into the the main programme (including tutorials)	PLC	31-01-2014	
D31.2.12	Collect ideas for a potential 2nd workshop during 2014	ST/PLC	31-01-2014	
D31.2.13	Provide Eurocontrol with a spreadsheet of WO Y4	PLC	17-01-2014	
D31.2.14	SJU to make a presentation on the CWW to the Scientific Committee	ST	April 2014	
D31.2.15	SJU to distribute to the Scientific Committee the PhD Call for Candidates	ST	20-01-2014	PLC will provide the link

founding members



i

- End of Document-



21 of 21