

No. 13, Year 2014 / 2015

## **EWG-DSS Newsletter**

Newsletter of the EURO Working Group on Decision Support System

## In this Issue

Editorial1
EWG-DSS Members 2
EWG-DSS Channels 2
Interview 2
EWG-DSS Award 4
Publications 5
EWG-DSS Events 6
EWG-DSS Meetings 6
Events in 2014 6
Events in 2015 8
Other Events 9
Best Paper Prizes 9
Upcoming Events 10
EWG-DSS Collab-Net Project 11
EWG-DSS Survey 11
Other Announcements 12
News about Members 12

## **Editorial Board**

The Newsletter of the EURO WG on Decision Support Systems is annually edited by its

**Coordination Board Members:** 

PascaleZaraté; FátimaDargam; Rita Ribeiro; Jorge Hernández; Boris Delibasic; Shaofeng Liu Isabelle Linden; and Jason Papathanasiou.

Comments and announcements for the next issues of the EWG-DSS Newsletter should be sent to the email address below with the subject: "Newsletter". Email: ewg-dss@fccdp.com

#### **Editorial** (by the EURO Working Group on DSS Coordination Board Members)

## Dear Euro Working Group members! Dear Friends!

It is again time to summarize our activities and achievements of year 2014 and 1<sup>st</sup> quarter of 2015 in our Newsletter. In 2014, the EWG-DSS group managed to successfully organize two events with wide participation from the DSS community, namely: the GDN-2014, which the EWG-DSS jointly organized with the INFORMS GDN Group, held in June in Toulouse, France, during June 10<sup>th</sup>-13<sup>th</sup>, with special focus on "Group Decision Making and Web 3.0"; and also the DSS Stream with seven sessions in the IFORS-2014 Conference in Barcelona, in July, the 20th Conference of the International Federation of Operational Research Societies on "The Art of Modeling". From those events, the EWG-DSS published two Proceedings, one being a Book in Springer Lecture Notes in Business Information Processing, and the other the GDN-2014 Conference Proceedings (edited by IRIT); one Issue in the PPC Journal of Production Planning in Control, and organized several Journal Special and Featured Issues in IJDSST, JDS, EJDP, as well as its annual Springer book edition in the Lecture Notes of Business Information Processing. More information about those editions you will find in the Publications section of this issue

All prizes and award initiatives have been successfully carried on by the EWG-DSS. The promotion of the "Best Papers Prizes" in our Conferences, for which some sponsor-companies distribute licenses of simulation and DSS-area-related software packages as prizes for best presented papers; and the EWG-DSS Yearly Award for young researchers happened as usual. The research cooperation initiative of the EWG-DSS Coordination Board Members' Institutions with the Federal University of Pernambuco in Recife - Brazil, towards the advances of the EWG-DSS Collaboration Academic Social Network (Project Collab-Net) has also been carried on.

Recently, in January 2015, as another research support initiative for all the group members, the EWG-DSS took part in the European Commission Information and Networking event for the Horizon 2020 ICT-15 Call for Projects. More details about this pariticipation you find in the section "Other Announcements" of this issue.

For the year 2015, the EWG-DSS has the pleasure to announce its "1<sup>st</sup> International Conference on Decision Support System Technology" in Belgrade, Serbia, from May 27<sup>th</sup> to 29<sup>th</sup>, 2015. The EWG-DSS series of International Conferences on Decision Support Systems Technology (ICDSST), starting with the ICDSST-2015 in Belgrade, were planned to consolidate the tradition of annual research events organized by the EURO EWG-DSS group. The ICDSST Conferences offer the European and International DSS Communities, including the academic and the industrial sectors, opportunities to present state-of-the-art DSS developments and to discuss about the current challenges that surround Decision-Making processes, focusing on realistic but innovative solutions; as well as on potential new business opportunities. More details about the ICDSST-2015 Conference you can find in EWG-DSS Events in this issue.

This Newsletter Nr. 13 briefly summarizes the EWG-DSS achievements of 2014 and early 2015, and announces the planned events for 2015, 2016 and further years, together with some relevant information from members, their projects and publications. We hope you enjoy this Newsletter issue, specially its exciting interview with the EWG-DSS co-founder and coordination board member: Prof. Rita Ribeiro.

As a group we reached in 2014 our research and collaboration goals and we are very happy about the successful impact that we have made so far within the DSS communities in Europe and Worldwide. All this would not have been possible without the consistent support from all of the EWG-DSS members; its trustful group of reviewers and collaborators. Hence, we sincerely thank *You All* for your contributions. We appreciated your support and collaboration in 2014 / 2015 and we look forwards to working even more with you in the future!

## Best wishes from the EWG-DSS Coordination Board!





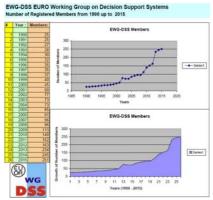
Shaofeng Liu, Rita Ribeiro, Jorge Hernández, Pascale Zaraté, Fátima Dargam, Boris Delibasic, Isabelle Linden and Jason Papathanasiou. (Photo: Thessaloniki, Greece. May, 2013)

## **EWG-DSS Members**



The EWG-DSS has currently over 250 officially registered members.

Since 1989, the group membership has grown substantially and we are proud to continuously attract the interest of new members and the participation of old ones in the organized scientific events and editions of the group.



An updated list of registered members with their respective email-addresses can be sent to you, by request (mail to: ewg-dss@fccdp.com).

## **EWG-DSS Channels**

The EWG-DSS communication channels are used to get in touch with the Coordination Board Members and with all group members effectively.

## **EWG-DSS Mailing-List:**

## ewg-dss@irit.fr

This mailing-list is devoted only to the registered EWG-DSS members for announcements, projects information, as well as calls for publications.

#### **EWG-DSS Web-Links:**

#### EWG-DSS – Blog

## http://ewgdss.wordpress.com/

In the EWG-DSS blog you find up-todate information about the group's activities, projects, newsletters, research collaborations, publications and links to the organized conferences.

#### • <u>EWG-DSS – EURO Homepage</u>

http://www.euroonline.org/web/ewg/10/ewg-decisionsupport-systems

The EWG-DSS page at the EURO online site is the group's official homepage. There you find a summary of the detailed information you find in the EWG-DSS Blog and the links to the DSS organized Streams in EURO K Conferences, our Annual Events; Conferences; Meetings; Awards, etc.

### • <u>EWG-DSS – IRIT Server</u>

https://wwwsecu.irit.fr/listes/info/ewgdss

The EWG-DSS Server is hosted by IRIT. It contains all the EWG-DSS shared files. Via the option "Review Members", one is able to check the email addresses of each member. To access the server you need to be a registered member of the group.

#### • <u>EWG-DSS – LinkedIn Group</u>

http://www.linkedin.com/groups?about= &gid=1961459&trk=anet\_ug\_grppro

The Linked-In EWG-DSS Group has currently over 240 members. This group is open to all Linked-In users. There you find briefings of the EWG-DSS's activities, discussions of related topics, job opportunity announcements, conferences calls for participation, Journals calls for papers, etc. If you like networking or if you wish to make your announcement / discussion more visible to a wider and selective audience, you should take advantage of this platform! To read and interact with the Linked-In EWG-DSS Group, you have to log in the Linked-In network and follow our group link.

#### <u>EWG-DSS – Slideshare Account</u>

#### http://www.slideshare.net/ewgdss

In the EWG-DSS Slideshare account you find all the digital versions of previous EWG-DSS Newsletters, as well as some online presentations. If you wish to share some of your research presentations with us, you are also welcome to use this account. Please contact us for more details.

#### <u>EWG-DSS – Twitter Account</u>

#### https://twitter.com/EWGDSS

In 2014 we opened a Twitter account for the EWG-DSS. Meanwhile it has already gained the attention of several group members and collaborators. There you can be updated with short announcements our events and publications. Follow us on Twitter to get breaking news of our activities within the DSS communities in Europe and Worldwide!



#### Remember:

"Our communication channels are our main tools to cooperate!"

## **Interview**



Rita A. Ribeiro

Senior Researcher at UNINOVA and Invited Associate Professor at Faculty of Sciences and Tecnology, Universidade Nova Lisboa - UNINOVA

Campus FCT-UNL, 2829-516 Caparica, Portugal

http://www.ca3uninova.org/member rita ribeiro

**EWG-DSS:** Dear Rita, it is more than a pleasure for us to interview you – a

founding member of the EWG-DSS – in our Newsletter of 2014 / 2015. We all know that you are in the DSS area for a long time. How did it start? Tell us about your research career.

RR: I was introduced to DSS during my Master degree (1986-88) at George Washington University (USA) and I found it was the perfect field of research for me because it combined, rather well, my background on both management science (bachelor degree) and computer science (at the time I was a lecturer of systems analysis at Universidade Nova Lisboa, in Portugal). Later, due to the intrinsic imprecise nature in many ill-defined problems, making considered adding to the mix concepts and techniques from the Artificial Intelligence domain, particularly fuzzy logic. Fuzzy logic allowed me to go deeper into the problematic of how to represent and manipulate imprecise (sometimes subjective) evaluations (e.g. "very high") in assessing both criteria or relative importance of criteria and I focused my research on fuzzy multi-criteria decision making and did my PhD on the topic. Since then, I have been enjoying working on the socalled "computational intelligence in uncertain environments" and I founded a research group on the topic, at UNINOVA, where I am the coordinator (www.ca3-uninova.org).

In the end of 2000 I left my academic tenure position at Universidade Nova de Lisboa and become a free-lancer researcher at UNINOVA (a research institute major owned by Universidade Nova Lisboa). Even though it was a big step to resign from a comfortable tenure position, as a professor of Computer Science in the University, to become a free-lancer researcher living on research projects - I never regretted my decision because I enjoy complete freedom to pursue my research interests at UNINOVA. Since 2007, I have been awarded two five year research contracts by the Portuguese equivalent of the national science foundation, and I also got an honorary position in the university as an invited associate professor, which enables supervising PhD students without hassles.

Another major event in my career took place in the end of 2000 when Portugal joined the European Space Agency (ESA). This opened the opportunity to devote my research to the fascinating topic of Computational Intelligence in (Aero)Space Applications – an always challenging and fascinating application area to work with! I am the coordinator and founder of a research group where details about all projects and research can be seen (<a href="https://www.ca3-uninova.org">www.ca3-uninova.org</a>). This chosen application area has been

rather rewarding and I already got 20 projects financed by ESA (since 2000), which allowed developing very interesting applications while testing diverse concepts, methods and technologies, as well as learning a lot about "Space the final frontier"....

**EWG-DSS:** Rita, tell us now about how you became involved with the EWG-DSS and its Coordinating Board.

RR: In May 1989 I went to the EURO Summer Institute on Decision Support Systems, where the EWG-DSS group was created, and I became a founding member. In 2007, by invitation of Pascale Zaraté and Fátima Dargam, I joined the coordination board of EWG-DSS. Until 2010 we three kept organizing annual meetings, usually attached to well-known conferences such as the EURO and the IFIPS 8.3 on DSS, and we also developed a site where people could register and access news about the group members, conference announcements and so forth. To increase the group visibility, in 2011 we expanded the Management Board with 3 new Members (Jorge Hernández; Boris Delibasic and Shaofeng Liu) and in January 2014 we included 2 more members in the board (Isabelle Linden and Jason Papathanasiou).

Nowadays, the EWG-DSS board is composed of 8 coordinators, who work together to promote and disseminate several topics of research, as well as to increase the group membership and encourage the collaboration among them. We now promote interesting events, such as annual workshops and conferences and special sessions on international conferences. From those events we publish selected papers on Springer Lecture Notes on Business and Information Processing, as well as in other specialized DSS journals such as IJDSST, JDS, IJIDS etc. In addition, this year we are also organizing an international conference on "Big data Analytic for Decision Making". With this enlarged group we hope to keep enlarging our horizons and improve support for the DSS community, i.e. we now aim for the sky!

**EWG-DSS:** What are your current research interests within the DSS domain and your plans for the next years?

RR: My current research departs from the important considerations about decision making www.virtualsalt.com/crebook5.htm: it is a process of sufficiently reducing uncertainty and doubt about alternatives to allow a reasonable choice to be made from among them. Certainty on decisions is a rare

commodity and most decisions involve a certain amount of risk / uncertainty (if there is no uncertainty you have an algorithm and not a decision).

When dealing with decision-making in uncertain environments we have to answer questions such as: 1) how to normalize the data to enable aggregation of criteria into a single score per alternative?; 2) how to reduce the criteria levels of satisfaction (i.e. evaluations) when in presence of lack of confidence or accuracy on gathered data?; 3) how to consider the dependence of criteria satisfaction levels on their preferences/relative importance of criteria?; 4) how to select appropriate aggregation operators that could provide solutions, which require upward or downward reinforcement or both?. The first 3 questions can be grouped into a datapreparation process and I have been making several contributions for the topic. More recently, I have been working on a method for combining the 4 challenges, denoted FIF (fuzzy inference fusion), which is basically a data fusion process (DF is a process of combining data from multiple sources into a single composite with higher information quality).

In addition to the above research, in recent years I have been studying spatial-temporal decision-making, because most decisions are made within changeable environments and within a time frame. As time passes, the decision environment will grow and consequently, expand. information, criteria and alternatives may appear or disappear. Considering this volatile environment, there is a growing need for new methods and techniques capable of handling spatial-temporal decisionmaking problems. Within this topic of research I contributed with a general fuzzy dynamic decision making framework, capable of dealing with changes in criteria and alternatives along time (including removal or addition of new criteria or alternatives), as well as considering past information (prior knowledge) and future information (prediction/prognostic) to support more robust and informed decisions.

In general, I can say that my research strategy departs from the observation real applications (under development) to the formulation of hypothesis (mostly models and methods) to be tested in other domains. A proven result of this approach is the theoretical paper on the framework for dynamic multicriteria (2011), because after it was subject to a technology transfer from spacecraft landing to drone landing. Further, all the above research is being grounded by applications that act as

proof-of-concepts, particularly Space projects, which are a source of enjoyment but also a big challenge to model and develop.

My future research plans are to keep following this research strategy and to contribute to advancements on data fusion, dynamic and spatial-temporal decision making. I also want to continue developing projects that involve problems requiring using concepts and technologies for data fusion and dynamic decision making in uncertain environments.

Finally, I want to finish this interview with a wish for 2015: to submit a H2020 project on DSS with members of the EWG-DSS, in order to increase research synergies and further the collaboration between members.

**EWG-DSS:** Rita, It is a pleasure for the EWG-DSS to count with your precious collaboration in the Coordination Board! We thank you very much for this informative & enjoyable Interview!

#### Contributing to the Newsletter

Every member of the EWG-DSS is very welcome to contribute to this Newsletter.

Subjects can be related to:

- Project Descriptions
- Recent Publications
- PhD Dissertations
- Book Presentations / Reviews
- Research Group Presentations
- Research Views and Perspectives
- Journal Announcements CfP
- Forthcoming Events
- General Announcements

Contributions should be sent to the email address <a href="mailto:ewg-dss@fccdp.com">ewg-dss@fccdp.com</a> with the subject: "Newsletter".

## **EWG-DSS Award**

The annual EWG-DSS-Award is a motivating initiative for PhD students and young researchers to have their papers selected as best papers or most innovative presented work, among the research work submitted to the EWG-DSS organized scientific events of the same year.

Each year, the winner is rewarded with a modest prize in money, sponsored by the EWG-DSS, and the EWG-DSS-Award certificate.

#### Winner of the 2013-Award:



In 2013, the EWG-DSS award was granted to Daouda Kamissoko with the paper: "Decision Support System for infrastructure network disruption management", a joint work with: Pascale Zaraté, and François Peres, that

was presented in the EWG-DSS 2013 Thessaloniki Workshop in Greece, in May 2013.

Daouda received his award certificate officially from the EWG-DSS Coordination Board Members during the GDN-2014 Conference in Toulouse in July 2014. See picture below.



The Award prize for 2013 was of €300.00. We sincerely congratulate Daouda and his co-authors for their winning paper and for the EWG-DSS 2013 Award!



## Winner of the 2014-Award:



In 2014, the EWG-DSS award was granted to Ksenija Mandic, with the paper entitled: "Supplier Selection using Interpolative Boolean Algebra and TOPSIS method", a joint work with: Boris Delibasic, and Dragan Radojevic, that was presented in

the GDN 2014 conference in Toulouse in July 2014.





For the EWG-DSS 2014-Award, candidates were considered, namely: 1. Jadielson Moura, with his joint work with Ana Paula Costa: "Incorporating personal style into a Negotiation Support System"; 2. Marcella Urtiga with her joint work with Danielle Morais: "A Pre-Negotiation Model for Water Resources Conflicts using a Value Creation Approach"; 3. Daniel Thiemann with his joint work with Tanja Engelmann: "Preference in the Awareness negotiation preparation of teams for fostering joint team priorities as a precondition for integrative bargaining"; 4. Yvonne van der Toorn with her joint work with Per van der Wijst, Debby Damen and Marije van Amelsvoort: "Trust and Understanding in Face-to-Face and Synchronous Online Negotiations"; 5. Nazanin Vafaei with his joint work with Basar Oztaysi: "Selecting the field hospital place for disasters: A case study in Istanbul"; 6. Amanda Garcia with her joint work with Amer Obeidi Keith Hipel; "A Proposed and Methodology for Predicting Opponent Behaviour in Conflict Analysis"; 7. Mohammad Ghaderi with his joint work with Francisco Ruiz and Nuria Agell: "Learning Non-Monotonic Preferences, a New Algorithm"; 8. Oluwafemi Oyemomi with his joint work with Shaofeng Liu and É. Irina Neaga: "Effective Knowledge Sharing for Intelligent Supply Chain Decision Support": 9. Taho Yang, with his work: "An e-Kanban based Decision-Support System for Semiconductor Ingot Manufacturing"; 10. John Tindle with his work: "Multi-Resolution Analysis (MRA): Integrated Solutions for Today's Analytical Challenges"; 11. Dries Benoit with his joint work with Kristof Coussement and Michael Antioco: "Improved Decision Making by Incorporating Expert Opinions into Statistical Models"; and 12. Ksenija Mandic with her joint work: "Supplier selection using Interpolative Boolean algebra and TOPSIS method", as described before.

We wish to take this opportunity to congratulate all the short-listed paper-candidates (presented in the GDN-2014 in Toulouse and in the IFORS 2014 – DSS Streams in Barcelona) for their research-work quality!

The Award prize for 2014 was of €300.00 and will be officially conferred to Ksenija Mandic within the first EWG-DSS International Conference ICDSST-2015 in Belgrade, Serbia, in May 2015.

We sincerely congratulate Ksenija and her co-authors for their achievement!

# The "EWG-DSS Award 2015" can be yours! Participate! How to apply?



To apply for the annual EWG-DSS Award, you only need to participate in one of our Conferences, or Session Streams organized by the group and allow your work to be part of our selection! More details can be found via the link:

http://ewgdss.wordpress.com/awards/.

#### How to sponsor the Award?

The EWG-DSS hopes to count with sponsorship from research funds and from the industrial sector to make the future "EWG-DSS-Awards" more financially appealing to the candidates. You are encouraged to support this initiative by financially sponsoring it if possible, as well as to participate and/or to disseminate this information among your students, colleagues, research partners and collaborators.

## **Publications**



In this section you find the list of recent EWG-DSS editions, as well as

individual publications of members of the group, who sent their information for this Newsletter.

We encourage all EWG-DSS members to send to us their lists of most recent publications for the next Newsletter!

#### **EWG-DSS Recent Editions:**

#### Edited Special issues and books



LNBIP Springer Book: Decision Support Systems III - Impact of Decision Support Systems for Global Environments. Editors: Fatima Dargam, Jorge E. Hernández, Pascale Zaraté, Shaofeng Liu, Rita Ribeiro, Boris Delibašić,. Jason Papthanasiou Edition: ISSN: 1865-1348. Volume 184, 2014, Publisher: SPRINGER. Lecture Notes in Business Information Processing Springer, Heidelberg Dordrecht London New Editor: Springer-LNBIP, ISBN: 978-3-319-11363http://www.springer.com/978-3-319-11363-0



 LNBIP Springer Book: Group Decision and Negotiation. A Process-Oriented View. Proceedings of the Joint INFORMS-GDN and EWG-DSS International Conference, GDN 2014, Toulouse, France, June 10-13, 2014. Series: Lecture Notes in Business Information Processing, Vol. 180. Editors: Zaraté, Pascale, Kersten, Gregory E., Hernández, Jorge E. ISBN 978-3-319-07178-7 http://www.springer.com/978-3-319-07178-7



- Production Planning & Control: The Management of Operations. Volume 25, Issue 8, 2014. Special Issue: Collaborative Decision-Making and Decision Support Systems for enhancing Operations Management in Industrial Environments. Editors: Jorge E. Hernández, Andrew C. Lyons, Pascale Zarate & Fatima Dargam. DOI:
  - http://dx.doi.org/10.1080/09537287. 2013.798083
- Following the Toulouse 2014 Conference, and the IFORS Barcelona 2014 EWG-DSS DSS Stream, the EWG-DSS organizes a special issue for the EURO Journal of Decision Processes (EJDP). Theme: Collaborative Decision Processes and Analysis. Guest Editors: Pascale Zaraté (Toulouse University), Fátima Dargam (SimTech Simulation Technology & Expected publication: ILTC). December 2015
- Following the Toulouse 2014 Conference, and the IFORS Barcelona 2014 EWG-DSS DSS Stream, the EWG-DSS organizes a special issue for the International Journal of Decision Support System Technology (IJDSST) Multi-Criteria Decision Theme: Making Approaches. Guest Editors: Boris Delibašić, University of Belgrade, Serbia, Rita Ribeiro, UNINOVA, Portugal. Expected publication: 3<sup>rd</sup> quarter of 2015.
- Following the Toulouse 2014
  Conference, and the IFORS
  Barcelona 2014 EWG-DSS DSS
  Stream, the EWG-DSS organizes a
  special issue for the Journal of
  decision Systems (JDS). Theme:
  Special Issue on Integrated
  Decision Support Systems. Guest
  Editors: Isabelle Linden, University

- οf Namur, Belgium, Jason Papathanasiou. University of Macedonia, Greece, Shaofeng Liu, University of Plymouth, UK. Expected publication: 3rd quarter of 2015.
- The EWG-DSS organized in 2014 a Springer Lecture Notes in Business Information Processing Book (LNBIP 221), on the theme: Information and Knowledge Management in Decision Processes, based on an EWG-DSS open call for papers and on selected papers from the GDN-2014 and the DSS Stream on the IFORS-2014. Guest editors of this LNBIP volume are: Isabelle Linden, University of Namur, Shaofeng Liu, University of Plymouth, Fátima SimTech Dargam, Simulation Technology / ILTC, and Jorge E. Hernández, University of Liverpool Universidad de LaFrontera. Expected book publication date: 3rd quarter of 2015

#### Recent Members' Publications:

- Mandic K., Delibasic B., Knezevic S., Benkovic S., "Analysis of the financial parameters of Serbian banks through the application of the fuzzy AHP and TOPSIS methods." Economic Modelling 43 30-37. (2014): pp http://dx.doi.org/10.1016/j.econmod .2014.07.036
- A. Arrais-Castro; L. Varela; G. D. Putnik; R. Ribeiro; F. Dargam, "Collaborative Negotiation Platform using a Dynamic Multi-Criteria Decision Modeľ, International Journal of Decision Support Systems Technologies (IJDSST), Vol.7, Nr. 1, pp. 1-14, IGI-Global, DOI: 10.4018/ijdsst.2015010101, March 2015.
- J. Javad; R. Ribeiro; F. Dargam, "Dynamic MCDM for Multi Group Decision Making", Lecture Notes information Business on Processes, GDN-2014 on Group Decision Making and Web 3.0, LNBIP 180, pp. 90-99, Springer Int. Publishing Switzerland

#### **Book Announcement:**

Marc Naura, Book on "Decision Support Systems implementation within organizations". Published by LAP Lambert Academic Publishing, 2014. ISBN: 978-3-659-52289-5. The book is also available online: https://www.dropbox.com/s/hm1ivj mbtgny01u/Naura-DSS%20ebook%202014.pdf?dl=0

#### **Author Contact Details:**

#### **Marc Naura**

PhD, CEnv, MCIEEM

Engineering and the Environment University of Southampton

Highfield; Southampton

SO17 1BJ; UK

e-mail: marc.naura@soton.ac.uk

www.icer.soton.ac.uk/

www.riverhabitatsurvey.org

Thanks to all group members who contributed to the publication section.

## **EWG-DSS Events**

Since 2011 the EWG-DSS has been organising at least one workshop per year. With the scientific workshops, our group has made a step forwards within its main purpose of establishing a platform for encouraging state-of-thehigh quality research collaboration work within the DSS community in Europe and Worldwide.

Other aims of the EWG-DSS group are:

- Encourage the exchange of information among practitioners, endusers, and researchers in the area of Decision Systems.
- · Enforce the networking among the communities available facilitate activities that are essential for the start-up of international cooperation research and projects.
- · Facilitate professional academic and industrial opportunities for members.
- Favour the development of innovative models, methods and tools in the field Decision Support and related areas.
- Actively promote the interest on Decision Systems in the scientific community by organizing dedicated workshops. seminars. miniconferences and conference streams in major conferences, as well as editing special and contributed issues in relevant scientific journals.

Below you find a chronological list of all places where EWG-DSS organized events so far.

# **EWG-DSS Meetings**

## List of all EWG-DSS Meetings, Workshops & Conferences:

- . Fontainebleau (France) 1990;
- . Bruges (Belgium) 1991;
- . Nagycenk (Hungary) 1992;
- Sintra (Portugal) 1993;
- . Turku (Finland) 1994;
- . Samos (Greece) 1995;

- . Ispra (Italy) 1996;
- . Bruges (Belgium) 1997;
- . Granada (Spain) 1998;
- . Turku (Finland) 1999;
- . Toulouse (France) 2000;
- . Caiscas (Portugal) 2001; . Bruges (Belgium) - 2002;
- . Luxembourg 2003;
- . Istanbul, (Turkey) 2003;
- . Prato, (Italy) 2004;
- . Graz (Austria) 2005;
- . London (UK) 2006;
- . Reykavik (Iceland) 2006;
- . Montreal (Canada) 2007;
- . Prague (Czech Republic) 2007;
- . Toulouse (France) 2008;
- . Bonn (Germany) 2009;
- . Lisbon (Portugal) 2010;
- . London (UK) 2011;
- . Paris (France) 2011.
- . Liverpool (UK) 2012;
- . Vilnius (Lithuania) 2012.
- . Thessaloniki (Greece) 2013.
- . Rome (Italy) 2013.
- . Toulouse (France) 2014.
- . Barcelona (Spain) 2014.

## **Events in 2014**

In 2014, the EWG-DSS jointly organised the GDN-2014 Conference in Toulouse, France in June and the DSS Stream within the 20th IFORS Conference in Barcelona, Spain in July.

## GDN 2014 / EWG-DSS & GDN



The Joint International Conference of the INFORMS **GDN Section and the EURO** Working Group on DSS, June June 10<sup>th</sup> to 13<sup>th</sup>, Toulouse, **France** 

## Theme: Group Decision Making and Web 3.0

GDN 2014 was a joint event the GDN group (General chairs: Melvin F Shakun, New York University, USA & Marc Kilgour, Wilfrid Laurier University, Canada) amd the EWG-DSS group (EWG-DSS co-chairs: Fatima Dargam, SimTech Simulation Technology, Austria & Rita Ribeiro, UNINOVA, Portugal)

## Key-note speakers:

The 2014 joint INFORMS GDN & EWG-DSS conference had four invited key-note speakers:

Alain Lempereur - Ian B. Slifka Professor and Director, Graduate Programs in Coexistence and Conflict Member of the Executive Committee,

Program on Negotiation at Harvard Law School The Heller School for Social Policy and Management, Brandeis University, Waltham, MA 02454-9110 (USA).

Talk: It takes more than two to tango for responsible negotiation

**Denis Bouyssou** - Research Director, CNRS, Lamsade, University Paris Dauphine, Paris, France.

Talk: Should we use bibliometric indices to evaluate research?

**Adiel Almeida** - Professor at the Federal University of Pernambuco, Brazil.

Talk: Resolving Evaluation of Criteria by Interactive Flexible Elicitation in Group and Multicriteria Decision Aid

**Hannu Nurmi** - Professor at Department of Political Science and Contemporary History University of Turku, Finland.

Talk: Reflections on Fairness and Rationality of Voting Rules

The Joint international Conference GDN 2014 was a great success! This conference attracted 110 participants coming from 32 countries: Australia, Austria, Belgium, Brazil, Canada, Egypt, Finland, China. France. Germany, Ghana, Greece, Guinea, India, Israel, Italy, Japan, Poland, Netherlands, Portugal, Romania, Serbia, Spain, Sweden, Switzerland, Taiwan, Thailand, Tunisia, Turkey, United Arab Emirates, United Kingdom and United States.

We would like to acknowledge the interest and cooperation of all the authors who submitted their finished and on-going research work for presentation in this conference. All presentations were very interesting and there was a high level of information exchange for further fruitful cooperation among all participants.



Foto taken during a workshop of GDN2014.

Details about the Conference Program, Special Talks, electronic Proceedings, Special Issues and photo gallery can be found at the GDN 2014 Homepage.

Link:

http://www.irit.fr/gdn2014/

#### IFORS-2014 / DSS Stream



IFORS-2014 Barcelona, Spain July 13<sup>th</sup> -18<sup>th</sup>, 2014

## EWG-DSS Stream on Decision Support Systems

As usual, the EWG-DSS Coordination Board has organized in the IFORS-2014 Conference a DSS Decision Support Systems Stream. The EWG-DSS DSS Stream in IFORS-2014 counted with the following sessions.

Session TE-42: Applications in Decision Making & Decision Analysis. Chair(s): Shaofeng Liu, Fatima Dargam. Presentations:

- A Decision Support System for Estimating the Scale of Using Renewable Sources of Energy and Storing Electricity in a Regional Electrical Grid, by Alexander Belenky;
- A DSS for Resolving Evaluation of Criteria by Interactive Flexible Elicitation on Supplier Selection Problems, by Adiel Teixeira de Almeida, Jonatas Almeida, Adiel Almeida-Filho, Ana Paula Costa;
- Learning Non-Monotonic Preferences, a New Algorithm, by Mohammad Ghaderi, Francisco Ruiz, Nuria Agell;
- Support decision in soccer football, by Silvely Néia, Vilma Tachibana, Pedro Castro.

Session HA-42: Business Intelligence, Knowledge Management & Decision Systems. Chair(s): Ana Paula Costa, Fatima Dargam:

- Assessing a Firm's Patent Litigation Propensity and the Effectiveness of its Defense Strategy: Decision Support Models, by Ilan Vertinsky, Steven Minns, Steven Minns;
- The Theory of Search Applied to Business Strategy, by Haemin Aziz, Allan Payne;
- A System based on a Competency Framework to Support the Choice of Teaching Activities, by Isabelle Linden:
- Effective Knowledge Sharing for Intelligent Supply Chain Decision Support, by Shaofeng Liu, E. Irina Neaga, Oluwafemi Oyemomi.

Session HB-42: Integrated and Simulation-Based DSS Approaches. Chair(s): Shaofeng Liu, Isabelle Linden. Presentations:

- An e-Kanban based Decision-Support System for Semiconductor Ingot Manufacturing, by Taho Yang;
- Evaluation of the Application of Agent-based Simulation in Container Terminal Planning, by Thiago Brito;
- Multi-Resolution Analysis (MRA): Integrated Solutions for Today's Analytical Challenges, by John Tindle:
- Improved Decision Making by Incorporating Expert Opinions into Statistical Models, by Dries Benoit, Kristof Coussement, Michael Antioco.

Session HD-42: Collaborative Decision Making (Social Networks & Web Resources). Chair(s): Fatima Dargam, Adiel Teixeira de Almeida:

- Online Multidisciplinary Information Management Software, by Haris Doukas, Ilias Papastamatiou, George Mavrotas, John Psarras;
- IT Service Selection in Cloud Computing – An Evaluation of Multiciteria Decision Model Approaches, by Holger Schrödl;
- Exploring the multi-channel consumer decision-making journey, by Sahar Karimi, K. Nadia Papamichail, Christopher Holland;
- Multi-criteria Spatial Decision Making and Determining Location Score based on Geographic Zone with GIS, by Ceren Erdin Gundogdu

Session HE-42: Decision Analysis & Decision Making Approaches. Chair(s): Shaofeng Liu, Isabelle Linden. Presentations:

- Use of Contabilometria as a Decision Making in the Sector Accounting in VL Technology Company LTDA the Municipalities Princesa Isabel – PB, by José Jefferson Marques de Sousa;
- Using the Analytic Hierarchy Process Decision Analysis to Better Understand Consumers Intentions to Revisit a Green Hotel, by Chiao-Chen Chang;
- Timing and decision making, by Gil Greenstein;
- Decision Making and the Big Data Era, by Fatima Dargam.

We would like to acknowledge the interest and cooperation of all the authors who submitted their research work for presentation in the EWG-DSS DSS Stream in the IFORS-2014. More about this event can be found in <a href="https://ewgdss.wordpress.com/2014/07/11/ewg-dss-dss-stream-at-ifors-2014-next-week/">https://ewgdss.wordpress.com/2014/07/11/ewg-dss-dss-stream-at-ifors-2014-next-week/</a>.

## **Events in 2015**



ICDSST 2015: 1st EWG-DSS International Conference on Decision Support System Technologies

May 27<sup>th</sup>- 29<sup>th</sup>, 2015 Belgrade, Serbia



http://ewgdssbelgrade2015.wordpress.com/ICDSST 2015 Special Focus on:

## ICDSST 2015 Special Focus on: "Big Data Analytics for Decision Making"

The EURO Working Group on Decision Support Systems EWG-DSS, in cooperation with the University of Belgrade in Serbia, invites you to participate in the 1st International Conference on Decision Support System Technology - ICDSST 2015, on "Big Data Analytics for Decision Making". The conference will be hosted at the Faculty of Organizational Sciences from the University of Belgrade, Serbia during the period of May 27<sup>th</sup> to 29<sup>th</sup>, 2015.

The main purpose of the ICDSST 2015 is to attract researchers, developers and specialists of the related areas of decision-making, its methodologies technologies; well as practitioners application oriented directed to the implementation of big data analytics solutions, to get together in order to exchange experiences and identify the key issues within various decision-making application areas, so that exploitation of new approaches and tools for dealing with Big Data in Decision Making processes can be effectively implemented in future developments.

## **ICDSST-2015 Invited Speakers**

#### Andre Moitinho de Almeida

Researcher University of Lisbon, Portugal

Talk: Visual Analytics in Astronomy - Part I

#### Antonio Falcao

Research Engineer at CA3 – Uninova, Portugal

Talk:Visual Analytics in Astronomy - Part II

#### Tatiana Kovacikova

Full Professor in the Applied Informatics / Department of InfoCom Networks. University of Zilina Talk:COST (European Cooperation in Science and Technology) in H2020

#### Yong Shi

Executive Deputy Director Key Lab of Big Data Mining and Knowledge Management, Chinese Academy of Sciences

Talk: Big Data Mining and Data Science

#### **Zoran Obradovic**

Director Center for Data Analytics and Biomedical Informatics, Temple University, USA.

Talk: Predictive Analysis in Compex Dynamic Networks

The conference proceedings will be published by Springer as book chapters in a volume of the Springer Lecture Notes in Business Information Processing (LNBIP) series. The preand post-publications planned for the ICDSST 2015 are the following:

- Proceedings (Book of Abstracts) of the EWG-DSS ICDSST 2015 on "Big Data Analytics for Decision Making" (containing all abstracts of all accepted papers for publication and presentation at the ICDSST-2015). Editors: B. Delibasic, F. Dargam, P. Zaraté, J.E. Hernández, S. Liu, R. Ribeiro, I.Linden, J. Papathanasiou.
- ICDSST 2015 SPRINGER Lecture Notes in Business Information Processing - Proceedings. LNBIP 216 - Decision Support Systems V: "Big Data Analytics for Decision Making" (containing accepted and presented Full Papers of ICDSST-2015). Editors: B. Delibasic, J.E. Hernández, J. Papathanasiou, F. Dargam, P. Zaraté, R. Ribeiro, S. Liu, I.Linden,
- Special Issue of the IJDSST International Journal of Decision Support Systems Technolohogy on "Business Data Analytics and Management" (selected and revised papers presented at the ICDSST-2015). Guest Editors: B. Delibasic, N. Ploskas, S. Liu.
- Special Issue of the IJIDS International Journal of Information and Decision Sciences, on "Analytics for Decision Making" (selected and revised papers presented at the ICDSST-2015).

Guest Editors: I. Linden, J. Papathanasiou, J.E. Hernández

We are looking forwards to seeing you in Belgrade!

Information for Submissions and Participation can be found at the ICDSST 2015 conference homepage: http://ewgdssbelgrade2015.wordpress.com/





EWG-DSS Stream on DSS - Decision Support Systems on the EURO 2015.

https://ewgdss.wordpress.com/2014/12/15/dss-stream-at-euro-2015-in-glasgow/

EURO-2015 - The 27th EURO Conference on Operational Research (EURO XXVII). University of Strathclyde, Glasgow, Scotland. July 12<sup>th</sup>-15<sup>th</sup>, 2015

The EURO 2015 is the 27th European Conference for Operational Research and Management Science (ORMS), organized by the European Association of Operational Research Societies in conjunction with the UK OR Society.

As the organizers of the Stream of Decision Support Systems, the EWG-DSS would like to invite you: researchers, practitioners, as well as students working in the areas of decision making, analysis and decision support to participate at this conference and to submit your work to this stream. The DSS Stream's is composed of 6 sessions. These sessions define the main topics of interest in this stream:

- Applications in Decision Making & Decision Analysis:
- Business Intelligence and Knowledge-Based Decision Support;
- Knowledge Management & Decision Systems;
- DSS supported by Simulation and Optimization Approaches;
- Collaborative Decision Making (Social Networks & Web Resources);
- Big Data Analytics & Decision Making.

Information for Submissions and Participation can be found at the EURO 2015 conference homepage: www.euro2015.org



EWG-DSS Session on "Decision Support Systems" within the Stream: Preference Analysis and Decision Support in Negotiations and Group Decisions. https://ewgdss.wordpress.com/2014/12/15/dss-session-at-gdn-2015/

## GDN 2015 Warsaw, Poland June 22<sup>nd</sup>- 26<sup>th</sup>, 2015

The 2015 Group Decision and Negotiation International Conference will take place at the Warsaw School of Economics, in June 22-26, 2015. This is the 15th conference organized by the INFORMS Section on Group Decision and Negotiation.

In the GDN2015 Conference, the EWG-DSS organizes a Decision Support Systems Session in the PADSING Stream of Preference Analysis and Decision Support in Negotiations and Group Decisions. The topics of Interest of the PADSING Stream include: Formalizing group decision and negotiation problems; Designing and evaluating negotiation templates; Methodological issues of preference analysis; Handling the imprecise and vague preference information; Group decision support based on partial information: Application of MCDM methods for negotiation and group decision support; Game-theoretic symmetric and asymmetric analysis of the negotiation: Methods and models for mediation and arbitration; Experimental studies on use and usefulness of decision support in negotiation and group decision making; Experimental studies on decision makers' cognitive capabilities; Formal models negotiation and group decision making support; Empirical applications of formal decision support tools in facilitating real-world negotiations and group decisions; Preference learning and modification; and Preference aggregation of decision makers versus knowledge aggregation of experts; among others.

The DSS Session within the PADSING Stream will select papers on the main topics of interest of this stream, with emphasis on DSS Applications & Adequate Methodologies for Negotiation and Group Decision Making.

Information for Submissions and

Participation can be found at the GDN 2015 conference homepage: gdn2015@sgh.waw.pl.

## **Other Events**



ICDSST 2016: 2nd EWG-DSS International Conference on Decision Support System Technologies May 23<sup>rd</sup> – 25<sup>th</sup>, 2016 Plymouth, UK

https://icdsst2016.wordpress.com/

ICDSST 2016 Special Focus on: "Decision Support System Technologies addressing Societal Challenges"

The EURO Working Group on Decision Support Systems EWG-DSS, in cooperation with the University of Plymouth in the UK, under the local organization of Professor Shaofeng Liu, organizes its 2<sup>nd</sup> International Conference on Decision Support System Technology - ICDSST 2016, hosted at the Plymouth Graduate School of Management & Plymouth Business School, Faculty of Business from Plymouth University, during the period of May 23<sup>rd</sup> to 25<sup>th</sup>, 2016.

ICDSST 2016 aims to provide a communication platform for scholars, researchers, developers, specialists and other professionals in the related area of decision making and decision support, including DSS methodologies and technologies as well as application oriented solutions, to get together in order to exchange ideas, share experience, discuss key issues, and research identify future and development directions. ICDSST 2016 will focus on the theme of how DSS can help address various societal challenges (inspired by the EU Horizon 2020 programme) in order to build a better society which our personal life, business and community closely rely on

ICDSST 2016 Key-Topics of interest include (but are not limited to):

- DSS for health, demographic change and well-being;
- DSS for food security, sustainable agriculture and forestry, and bioeconomy
- DSS for marine and maritime and inland water research
- DSS for secure, clean and efficient energy
- DSS for smart, green and integrated transport

- DSS for sustainable construction and architecture
- DSS for climate action, environment, resource efficiency and raw materials
- DSS for inclusive, innovative and reflective societies
- DSS for secure societies protecting freedom and security of the world and its citizens
- DSS for business analysis, innovation and entrepreneurship
- DSS for operations and supply chain management
- DSS for marketing management and new product/service development
- DSS for human resource and leadership management
- DSS for accounting, finance and banking management
- DSS for economics and regional and international development
- •Innovative decision making approaches/methods and technologies
- Big Data analytics for solving societal decision making issues
- Knowledge management and business intelligence
- Decision making in modern education.

As in previous year's EWG-DSS events, accepted papers may be published through various means, including the conference proceedings, Springer book series - Lecture Notes in Business Information Processing (LNBIP), Special Issues in DSS related journals, or recommended for publications in other suitable journals.

Information for Submissions and Participation in the ICDSST 2016 will be continuously updated in the conference homepage:

https://icdsst2016.wordpress.com/

# **Best Paper Prizes**

## **EWG-DSS Best Papers Prizes**

Continuing the initiative created in 2013 for the EWG-DSS Thessaloniki Workshop and repeated in the EURO Mini-Conference in Graz, the EWG-DSS will also distribute prizes for best papers during the ICDSST 2015 in Belgrade in May 2015.

The following licenses of DSS-arearelated software packages will be sorted among the participants as prizes for best presented papers during the ICDSST-2015 Conference:

- A License of Analytica Enterprise, sponsored by <u>Lumina</u> http://www.lumina.com/;
- A full commercial one-year-license of the simulator FlexSim, sponsored by FlexSim Software Products, US, www.flexsim.com;

- 2 Licenses of Arena (latest Academic Version), sponsored by Rockwell Automation http://www.ArenaSimulation.com.
- A icense of ExtendSim, sponsored Imagine That Inc., www.ExtendSim.com.

More details about the prizes in the ICDSST-2015 can be found at: https://ewgdssbelgrade2015.wordpress.com

# **Upcoming Events**

#### **ICDSST 2015**



1st EWG-DSS International **Conference on Decision Support** System Technology on: "Big **Data Analytics for Decision** Making" May 27th-29th, 2015 Belgrade, Serbia

Details about Participation can be found at the ICDSST 2015 homepage: http://ewgdssbelgrade2015.wordpress.com/

#### Participate at the ICDSST 2015!

#### **EURO 2015**



**EUROXXVII** 12-15 July 2015 University of Strathclyde EWG-DSS - DSS Stream



**EURO-2015** Conference on **Operational Research EWG-DSS Stream on DSS -Decision Support Systems on** the **EURO 2015** Glasgow, Scotland July 12th-15th, 2015

https://ewgdss.wordpress.com/2014/12/15/d ss-stream-at-euro-2015-in-glasgow/

#### Participate at the EURO 2015!

#### **GDN 2015**





**EWG-DSS Session on "Decision Support Systems**" **Stream: PADSING - Preference** 

## **Analysis and Decision Support** in Negotiations and Group **Decisions**

Warsaw, Poland June 22<sup>nd</sup>- 26<sup>th</sup>, 2015

https://ewgdss.wordpress.com/2014/12/15/d ss-session-at-gdn-2015/

## Participate at the GDN 2015!

#### **ISCRAM 2015**



The **12th** International Conference on Information Systems for Crisis Response and Management (ISCRAM 2015) May 24<sup>th</sup>-27<sup>th</sup>, 2015 Location: Kristiansand, Norway.

Information for Registrations and Participation can be found at the conference homepage: http://iscram2015.uia.no/

(Conference announcement received by the EWG-DSS Member: Tina Comes).

#### Participate at the ISCRAM 2015!

#### **IDT 2015**



IDT-2015 - The 7th International Conference on Intelligent **Decision Technologies** 

Venue: Hilton Sorrento Palace Sorrento, Italy June 17th-19th, 2015

http://idt-15.kesinternational.org/

IDT's have the potential to support decision making in many areas including management, international business, finance, accounting, marketing, healthcare, medical and diagnostic systems, military decisions, production and operation, networks, traffic management, crisis response, human-machine interfaces, financial and stock market monitoring and

prediction. robotics. Emergent Intelligent Decision Technologies are: Virtual decision environments, social human-machine networking, 3D interfaces. cognitive interfaces. collaborative systems, intelligent web mining, e-commerce, e-learning, ebusiness, bioinformatics, evolvable systems, virtual humans, designer drugs.

The conference proceedings will be published by Springer as book chapters in a volume of the KES Smart Innovation Systems and Technologies series, submitted for indexing in Scopus and Thomson-Reuters Conference Proceedings Citation Index (CPCI) and the Web of Science.

Information for Registrations and Participation can be found at the conference homepage:

http://idt-15.kesinternational.org/

(Conference announcement received by the EWG-DSS Member: Gloria Wren).

## Participate at the IDT 2015!

#### **OR 2015**



# **OR2015**

International Conference on **Operations Research** Joint conference of GOR, ÖGOR and ASRO/SVOR

**University of Vienna** Vienna, Austria September 1<sup>st</sup>-4<sup>th</sup>,2015 http://or2015.univie.ac.at

#### Stream:

#### **Simulation & Decision Support**

The primary aim of the stream Simulation & Decision Support at OR2015 is to bring together interested people and to discuss the recent developments in these areas. We are particularly interested in contributions on modeling, simulation and decision support in general or in applications using modeling, simulation and systems in real decision support applications. So we are highly interested on contributions related to

- theoretical aspects of modeling, simulation and decision support including formal modeling, modelchecking, frameworks, sensitivity data analysis, management, simulation and formal languages, etc.
- applications of modeling, simulation and decision support in

any area, including manufacturing and engineering, transportation, services and computer systems, as well as in economical, ecological, social, and environmental circumstances.

#### **OR2015 Deadlines:**

ONEO TO Beddinies:
Abstracts Submission:
April 30, 2015
Notification of Acceptance:
May 30, 2015
Early Registration
June 30, 2015

#### **Stream Organizers:**

#### **Fatima Dargam**

(F.Dargam@SimTechnology.com)
SimTech Simulation Technology
& EWG-DSS - EURO Working Group on
Decision Support Systems

#### **Heinrich Kuhn**

(heinrich.kuhn@ku.de)
Catholic University EichstaettIngolstadt, Faculty of Economics Department of Supply Chain
Management and Operations
Ingolstadt, Germany

#### Andrea Emilio Rizzoli

(andrea@idsia.ch)
Scuola Universitaria Professionale della
Svizzera Italiana, Dipartimento
Tecnologie Innovative
Manno, Switzerland

OR2015 Abstract submission: http://or2015.univie.ac.at/abstractsubmission

#### Participate at the OR 2015!

#### MCO 2015



## MCO 2015

3rd International Conference on Modelling, Computation and Optimization in Information Systems & Management Sciences

Metz, France. May 14<sup>th</sup>-16<sup>th</sup>, 2015

Information about Registrations and Participation can be found at the conference homepage: <a href="http://lita.sciences.univ-metz.fr/iccsama2015/MCO/index.php">http://lita.sciences.univ-metz.fr/iccsama2015/MCO/index.php</a>

(Conference announcement received by the EWG-DSS Member: Xuan Thanh Vo).

Participate at the MCO 2015!

# **EWG-DSS Collab-Net Project**



EWG-DSS Collaboration Academic Social Network Project (Collab-Net) targets mainly to disseminate research being conducted by members of the group.

The development of the EWG-DSS Collab-Net project counts with efforts of the EWG-DSS coordination board team and with the support of researchers from the University of Macedonia in Greece, under the supervision of Jason Papathanasiou; the University of Namur in Belgium, under the supervision of Isabelle Linden; and from the Federal University of Pernambuco in Recife, Brazil, under the supervision of Adiel Almeida and Ana Paula Costa. We are very grateful to all the involved persons in this project cooperation.

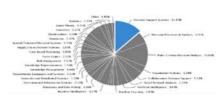
At the moment, we are concentrating on the online interface for the EWG-DSS Membership and publications / collaborations database and network.

Updated details about the Collab-Net Project can be read in the link below and in the papers published about it, listed in the Publications of the EWG-DSS group.

#### I ink

http://ewgdss.wordpress.com/ewg-dss-net/

# **EWG-DSS Survey**



In order to support the data acquisition and data update of the EWG-DSS Collab-Net Project, a survey was elaborated in the end of 2013, in which all **EWG-DSS** members collaborators were invited participate, so that we could gather some feedback about the quality of the research initiatives organized by the EWG-DSS group, as well as collect some more updated information about the members' areas of research.

From the feedback, we could recognize various new current areas of research of the EWG-DSS members. This will certainly help us to identify new fronts for research collaboration.

#### **EWG-DSS Members Research Areas:**

	Answer	
	Answer	Percent
1.	Decision Support Systems	<u>11.83%</u>
2.	Decision Processes & Analysis	<u>5.91%</u>
3.	Multi-Criteria Decision Analysis	<u> 10.03%</u>
4.	Negotiation Systems	<u>3.08%</u>
5.	Collaborative Decision Support	5.14%
6.	Social Network Analysis	<u>2.31%</u>
7.	Artificial Intelligence	4.63%
8.	Machine Learning	2.83%
9.	Multi Agent Systems	1.54%
10.	Emotions in Decision Making	0.51%
11.	Collaborative Intelligence	1.29%
12.	Business Intelligence	4.37%
13.	Computer Architecture and Design	<u>0.77%</u>
14.	Computer-Supported Cooperative Work	<u>1.54%</u>
15.	Databases and Data Mining	<u>3.60%</u>
16.	Environmental Information Systems	<u>2.31%</u>
17.	Human Computer Interaction	<u>1.03%</u>
18.	Networks and Distributed Systems	<u>1.29%</u>
19.	Programming Languages and Systems	<u>1.54%</u>
20.	Knowledge Management	<u>4.88%</u>
21.	Knowledge Representation	<u>1.54%</u>
22.	Computational Logics	<u>0.51%</u>
23.	Computational Linguistics	<u>0.00%</u>
24.	Cognitive Science	<u>0.26%</u>
25.	Neural Networks	<u>0.51%</u>
26.	Risk Management	<u>2.57%</u>
27.	Fuzzy Logics	<u>2.57%</u>
28.	Case Based Reasoning	<u>1.03%</u>
29.	Belief Revision	<u>0.51%</u>
30.	Supply Chain Decision Systems	<u>2.83%</u>
31.	, Spatial/Temporal Decision Systems	<u>1.54%</u>
32.	Simulation	2.31%
33.	Optimization	5.40%
34.	Heuristics	2.31%
35.	Game Theory	1.54%
36.	Statistics	2.31%
37.	Other	1.80%
	Total	100%
	: = -=-	

As a result, the EWG-DSS could also obtain some feedback about the overall level of satisfaction of the members with the coordination of the group was quite satisfactory.

#### Satisfaction of the EWG-DSS Members:

	Answer	Percent
1.	Very Unsatisfied	<u>1.92%</u>
2.	Unsatisfied	<u>0.00%</u>
3.	Neutral	<u>9.62%</u>
4.	Satisfied	<u>40.38%</u>
5.	Very Satisfied	<u>48.08%</u>
	Total	100%

The EWG-DSS survey also helped the group to improve its overall activities, whenever necessary. More details about it can be found in the EWG-DSS homepage. Your participation in this study was very important and we thank you very much for your support!

## **Other Announcements**

## EWG-DSS Participation in January 2015 in the European Commission Horizon2020 ICT -16 Big Data Networking Day

Fatima Dargam, Co-coordinator of the EWG-DSS, took part in the H2020 ICT16 Networking day. **ICT** and Communications (Information Technologies) is part of Horizon 2020. The activities supported under this topic contribute to the Big Data challenge by addressing fundamental research problems related to the scalability and responsiveness of analytics capabilities, such as privacyaware machine learning, language understanding, data mining and visualization. Special focus is on industry-validated, user-defined predictions, and challenges like rigorous processes for monitoring and measurement.

The aim of the Horizon 2020 ICT-16 / Big Data networking day was to inform and guide prospective applicants preparing project proposals, to facilitate sharing of ideas and experiences. It also gave participants the chance to network and to find partners for their projects. Bilateral meetings with EC Project Officers before the submission of proposals to discuss proposal ideas will \*not\* be possible any longer, in compliance with H2020 regulations.

Some additional information about ICT-16:

- <u>ICT-16 Technical background note</u> (https://ec.europa.eu/digital-agenda/events/cf/ictpd14/document.cfm? doc id=30344)

- <u>ICT Research & Innovation under Horizon</u> 2020

(http://ec.europa.eu/programmes/horizon2020/en/area/ict-research-innovation)

- <u>Horizon 2020 - The work Programme</u> 2014-2015

(http://ec.europa.eu/programmes/horizo n2020/en/h2020-section/informationand-communication-technologies)

The event took place in Januray 2015, in the European Commission Centre de Conference Albert Borschette, in Brussels, Belgium. The participation of Fatima Dargam on the Horizon 2020 ICT-16 / Big Data networking day, was partially sponsored by the EWG-DSS budget and partially by SimTech GmbH. In this event, apart from getting more information about the objectives and requirements of the ICT-16 call, it was possible to give a short presentation about the EWG-DSS research interests and SimTech's interests, (EWG-DSS & SimTech's Collaboration Interests), their competences in research and development (in the case of EWG-DSS, taking into account its members' published work) and some interests for project collaboration within the topics of the ICT-16 Call.

The slide-show presented by Fatima Dargam in this occasion can be found in the link: <a href="https://ec.europa.eu/digital-agenda/events/cf/big-data-networking-day/item-display.cfm?id=14504">https://ec.europa.eu/digital-agenda/events/cf/big-data-networking-day/item-display.cfm?id=14504</a>.

A description of the presentation is also available online and can be found in the link: <a href="https://ec.europa.eu/digital-agenda/events/cf/ictpd14/item-display.cfm?id=14488">https://ec.europa.eu/digital-agenda/events/cf/ictpd14/item-display.cfm?id=14488</a>.

By this occasion, the EWG-DSS contacted all its members for receiving feedback. For this purpose, a page-tab was created in the EWG-DSS Blog with the information given below. Link to the page:

https://ewgdss.wordpress.com/experience-competence/

#### **Experience & Competence**

EWG-DSS Members-Institutions
Research & Development
Competences for Collaboration in
European Projects

The main purpose of the EWG-DSS is to establish a platform for encouraging state-of-the-art high quality research and collaboration work within the Decision Support Systems community.

The EWG-DSS has Experience in Research and Development in: Decision Support Systems Applications in various Real & Global Scenarios; Multi-Criteria Decision Making (MCDM), including Dynamic Decision Making Models; Negotiation Support Systems, including distributed, webbased systems; Knowledge

Management & Resource, Discovery for Decision Making (DM); and Innovative DM Methods, Technologies and Real-Industry Applications; among others.

Member-Institutions of the EWG-DSS are interested in collaborating in projects that, among other related subjects, exploit DM areas heavily affected by Big Data. Mainly the ones which include the use of data coming from technical as well as social datafeeds like: Collaborative Decision Making with Social Media Input Data; Dynamic-temporal spatial applications; Societal Challenges / Smart Cities; and DM in critical & crisis management applications, among others.

In the pdf document linked below, <a href="https://ewgdss.files.wordpress.com/20">https://ewgdss.files.wordpress.com/20</a>
15/01/competences-of-ewg-dss-members.pdf, you find a summary of some EWG-DSS Members-Institutions in relation to their experience and competence in research and development for projects' collaboration.

The EWG-DSS Coordination Board offers to re-direct interested contacts to the appropriate Member-Institutions that best fit to collaborate with their project proposals.

Feedback of the participation of Fatima Dargam on the Horizon 2020 ICT26 Networking Day was reported to the EWG-DSS members with a written report, available via the link:

https://drive.google.com/file/d/0B3gpZer9P0uua2ZVUmFlc0l3Mjg/view?usp=sharing.

## **News about Members**

Extraordinary Doctoral PhD Thesis Award 2014 for Dr. Jorge Hernandez



Jorge E. Hernandez is a member of the EWG-DSS Coordination Board since 2011 (J.E.Hernandez@liverpool.ac.uk).

With the Extraordinary Doctoral PhD Thesis Award 2014, awarded by the Universitat Politècnica de València, from Valencia-Spain, in June 2014, was recognized Dr. Jorge Hernandez,

Lecturer in Operations and Supply Chain from the Marketing and Operations Management group at the University of Liverpool Management School. In addition, Dr. Hernandez participates as a co-coordinator of the prestigious EURO Working Group on Decision Support Systems (EWG-DSS).

This distinction recognizes the high and continuous research impact and value from the doctoral research work after two years the PhD thesis has been defended. This considers in the first instance, the unanimous and confidential nomination from the PhD assessment panel board. From here, the PhD Thesis moves to a second evaluation stage where it competes against all the PhD thesis that have been selected in the same way from all the variety of disciplines across the University.

The PhD Dr. Hernandez competed against 600 PhD theses selected from September 2011 to July 2013 from all the disciplines (Science, Engineering, Construction Technology, Computer Science, among others). From those, 110 were nominated to the final selection stage from which the 10% were finally selected for allocating the Extraordinary PhD Thesis Awards 2014. Dr. Hernandez's PhD thesis was oriented to study and research how companies, under a supply chain management and multi-level context, are capable to handle and support collaborative decision-making mechanisms efficiently but, and most important, by not forcing them to share all the information or by installed undesired applications on their on ICT systems.

Under this perspective, Dr. Hernandez, proposed has collaborative а production planning enterprise architecture designed and implemented under a decentralised tree-based supply chain topology. To support this, a tool based on one of the most important technologies for this purpose such as the multi-agent systems has been selected. This technology is as robust tool for the decision-making, information flow and simulation modelling process. especially in ylggus chain environments.

Furthermore, the results from the implemented tool highlights the fact that, by considering a collaborative approach, improvements in the service levels and profit rates for each node and the whole supply chain can be achieved against the traditional mechanisms.

António Rodrigues, a founding member of the EWG-DSS, opens the SPOLM-2014 in Brazil.



António Rodrigues is Professor of Operations Research at the University of Lisbon, in Portugal (ajrodrigues@fc.ul.pt).

In 2014, Prof. António Rodrigues, a founding member of the EWG-DSS and Professor of the University of Lisbon, had the honor to make the opening session as distinguished invited speaker of the 17th SPOLM Symposium of Operational Research and Logistics of the Brazilian Navy. The SPOLM-2014 took place in August of 2014 at the Escola de Guerra Naval in Rio de Janeiro, Brazil. His opening discoursed presentation about "Adaptive Risk Management". During SPOLM-2014, Antonio also ministered a mini-course on "Methods of Applications Recursive and Estimations".



His presentation on "Adaptive Risk Management" is available for download upon request (ajrodrigues@fc.ul.pt).



The EWG-DSS is grateful to all group members who sent contributions to this Newsletter.

#### **Contribution to next Newsletters**

Every member of the EWG-DSS is very welcome to contribute to the EWG-DSS annual Newsletters.

Subjects can be related to:

- Project Descriptions
- Recent Publications
- PhD Dissertations
- Book Presentations / Reviews
- Research Group Presentations
- Research Views and Perspectives
- Journal Announcements CfP
- Forthcoming Events
- General Announcements

Contributions should be sent to the email address <a href="mailto:ewg-dss@fccdp.com">ewg-dss@fccdp.com</a> with the subject: "Newsletter".

## **EWG-DSS LinkedIn Group**



