Working Group on Intelligent Data Mining and Analysis (IDMA) Intelligent Systems Subcommittee

2017 IEEE PES General Meeting Monday, July 17, 2017, 11:00 AM-12:00 PM Sheraton Grand Chicago Hotel, Chicago, USA Room: S-Tennessee, Level 2

Chair: Zita Vale, Polytechnic of Porto

The meeting started at 11:00 AM with the following Agenda:

- 1 Welcome and introduction of attendees
- 2 Approval of the minutes of the 2016 IDMA Working Group Boston meeting
- 3 Publications and panel session organization
- 4 Other WG activities
- 5 Working group website
- 6 Adjournment.
- 1 Welcome and introduction of attendees

The Chair welcomed everyone present in the meeting and each attendee introduced him/herself. The meeting has been fully or partially attended by 65 people. 56 people signed the attendance list in annex.

2 – Approval of the minutes of the IDMA Working Group meeting at IEEE PES GM 2016 in Boston

The minutes were approved unanimously.

3 – Publications and panel session organization

The working group is organizing the table of contents of an edited book covering the WG topics. The working group members are invited to send more contributions to complete the table of contents. A call for the book chapters and sections will be published in the working group webpage and disseminated by the group members.

The following two panel sessions proposed by the WP have been accepted and will take place during IEEE PES GM 2017:

- "Smart grid monitoring and control" will take place on Tuesday, July 18, 2017, from 01:00 PM to 03:00 PM in G100 Tiered classroom;
- "Trusted monitoring and Intelligent Consumption data management for smart buildings" will take place on Wednesday, July 19, 2017, from 01:00 PM to 05:00 PM in G100 Tiered classroom (joint panel with the PES Smart Buildings, Loads and Customer Systems Technical Committee).

The organization of panels in future conferences has been discussed, considering the decisions taken in previous meetings and the currently most relevant topics. During the discussion, the following topics have been identified: "knowledge discovery from large data sets", "deep-learning", deep reinforcement learning", "transactive energy", "intelligent buildings", "IoT data", "datahubs", "local energy markets", "Consumption data, intelligent energy management in buildings", "Data quality, integration, and standards in smart grids", "Smart metering and big data", "Cibersecurity, privacy, and big data in smart grids".

It was proposed to explore synergies with the PES Smart Buildings, Loads and Customer Systems Technical Committee, with with IEEE IES (Industrial Electronics Society) WG on IA Software Agents, and with Power System Economics Subcommitee. Further contacts and work will be done by several WG members. The outcomes should be sent to the WG chair so that the draft IDMA panel session proposals are presented during the ISS meeting.

WG members will also explore the possibility to organize panel sessions in other IEEE conferences, namely IEEE PES T&D, IEEE ISGT and other events for which the WG topics are relevant.

4 – Other WG activities

The WG members agreed to create a new TF on Application of machine learning to power system analysis. The proposal for the new TF will be presented during the ISS meeting.

The task force on Open data sets is meeting in the afternoon of Monday, July 17, 3:00 PM-4:00 PM, in G-422 Executive meeting room. Activities concerning use cases and data sets for data mining applications in power and energy systems which have been launched and managed by IDMA working group are being continued in the scope of this TF. The working group members are invited to participate in the TF meeting and to contribute with new inputs to the data sets published in the subcommittee web site (http://sites.ieee.org/pes-iss/data-sets/).

5 – Working group website

Working group members are encouraged to contribute to the material published in the working group webpage by sending suggestions of relevant information to be included (please email them to zav@isep.ipp.pt or to <a href="mailto:email

6 – Adjournment

The meeting was adjourned at 12:00 PM.

Respectfully submitted,

Zita Vale

ANNEX I: Meeting attendants signatures and contacts	