

## **COST Action IC1205 on Computational Social Choice: STSM Report**

**Applicant: Bojan Srdjevic**

**Home institution: University of Novi Sad, Faculty of Agriculture**

**Home country: Serbia**

**Host: Paulo Melo**

**Host institution: Faculty of Economics, University of Coimbra**

**Host country: Portugal**

**Dates: 08/05/2016 to 14/05/2016**

During my stay in the Faculty of Economics, University of Coimbra (Portugal), I have worked with Prof. Dr. Paulo Melo mainly on judgment aggregation methods and their implications. Our focus was on how to reach collective decisions in real-life scenarios, especially when faced with constraints such as incomplete information, obstruction by participants, inconsistencies and recognition (or lack of recognition) of consistent majorities. We also discussed usability and effects which preferential and no preferential voting schemes imply while deriving the final solutions in participative decision making processes arising in economic activities, natural resources management, etc.

In joint discussions with Prof. Dr. Luis Dias from the same institution, we analyzed contemporary developments in multi-criteria decision making, voting techniques from SCT and their applicability within the framework of computational social choice. We also discussed various topics related to design and application of voting methods and methodologies for collective decision making in CIT environments.

Part of our work is dedicated to MCDM methods we use in our research (such as AHP, ELECTRE, TOPSIS and others), and we explored possible options to combine SCT voting methods with MCDM methods looking for synergies.

Finally, we explored opportunities for future co-operation, especially in preparing the new scientific projects and conducting joint research in collective decision making under uncertainties and conflicts.

I thank the COST Action IC1205 for the opportunity to make this visit.