SHORT TERM SCIENTIFIC MISSION
BRIEF

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Host Institution: Open University, Milton Keynes, United Kingdom

Research interest:

The aim of this visit is to explore the possibility of integration of three technologies under development in the domain of computer-supported reflection and deliberation systems from three APPLY COST network institutions: the Open University (host institution), the University of Bologna (applicant's institution), and the Universidade Nova in Lisbon (Institution coordinating the APPLY COST action).

The desired outcome of this Short-Term Scientific Missions (STSM) is a draft workplan leading to a focused pilot initiative in the context the APPLY network, aiming to demonstrate the potential of innovative technologies in facilitating the policy debate through computeraided reflection and deliberation systems.

STSM Summary:

During the STSM, I (the grant holder) have had daily meetings with the Dr. Anna De Liddo (Open University), Prof. Paolo Torroni (my own advisor at University of Bologna) and Prof. Joao Leite (Universidade Nova). By exchanging knowledge about each own technology, initial meetings were intended to identify several real case studies. In particular, our aim was to investigate how collective intelligence (CI) systems could be enhanced by the introduction of machine-based frameworks, concerning automatic information extraction and reasoning. As a result, two preliminary scenarios were selected for development during the period of the STSM. The first one concerned the adoption of MARGOT, a tool for automatically extract argument components from text developed at the University

of Bologna, on DebateHub debates, a CI framework that allows user to discuss about general-purpose topics, in order to highlight key nodes of information.

The second experiment explored the task of automatically predicting semantic connections between user interventions belonging to the same discussion that may appear as unrelated. Here, the defined machine learning algorithms leveraged data gathered from several CI frameworks, developed by the host institution: DebateHub, LiteMap and Cohere.

Overall, the meetings paved the way to more sophisticated frameworks, where the definition of machine-human hybrid tools can indeed bring advantages to both realities. This STSM will be followed up by further collaboration and meetings.