

## Bridging the gap: from Individual Behavior to the Socio-tEchnical MaN

### IBSEN

#### Kick-off meeting, Leganés, 15-17 September, 2015

This document is a short guide for the discussions to be held during the KO meeting of IBSEN. It consists of three parts: a summary of the project objectives, a list of the deliverables for the first year, a schematic list of issues we should discuss and agree upon. This list is incomplete and you are all welcome to contribute more issues. At the very list, it would be very useful if you could reflect on them before the meeting so we can use the meeting time as productively as possible.

#### Project objectives

1. Developing an **experimental setup** for large groups of people, typically of the order of a few thousands of people simultaneously. This will involve the following intermediate steps:
  - 1.1. Designing an experimental protocol that allows one to deal with thousands of people at the same time (existing protocols, good for tens of people, cannot be used for both technical and practical reasons).
  - 1.2. Implementing the setup in software that responds to the protocol. It needs to run on web browsers, smartphone apps, or both, as well as databases for participant managing and automated payments.
  - 1.3. Compiling existing data analysis tools and proposing new ones in order to extract behavioral rules from data beyond simple regression models.
  - 1.4. Testing and demonstrating repeatability of experimental results with different groups of at least 1,000 people each, in order to assess the validity of the conclusions obtained from single group experiments.
2. Applying the experimental setup to **specific research questions** with the aim of finding the rules that govern human behavior on the large scale, including the influence of social context and individual identity. There will be a focus on the novel phenomenology that may arise in large systems as compared to the smaller ones typical of conventional experiments in the following two main directions:
  - 2.1. Investigation of the co-evolution of social structure and socio-economic behavior in a first set of paradigmatic social situations: cooperation, coordination, group and identity formation.
  - 2.2. Study of the interplay of emergent phenomena (macro level) and behavior at the micro-level and the mechanisms for the interplay between them for markets and opinion formation.

3. **Assessing our approach** and identifying improvements and next steps through:
  - 3.1. Building a simulator of human interaction in groups based on the behavioral rules found and comparing with the experimental results.
  - 3.2. Analyzing the discrepancies between experiment and simulation and identifying possible reasons and need for improvements.

### **First year deliverables**

For reference, the list of deliverables for the first 12 months is presented below *in chronological order*:

1. Month 2: Project website (Milestone 3)
2. Month 6:
  - Data management plan
  - Risk management plan
  - 1st periodic workshop
  - 1st batch of ethics approvals
3. Month 12:
  - Volunteer database (Milestone 1, 10 000 subjects)
  - Experimental protocol (Milestone 2, workshop with practitioners)
  - Experimental infrastructure
  - 2nd periodic workshop
  - 2nd batch of ethics approvals

### **Known issues**

- Existing software
  - SoPHIE (Achim Hendriks, <http://www.sophie.uni-osnabrueck.de>)
  - Utz Weizel (Nijmegen, Global eXperimental Platform, GXP, <http://globalxperiment.org>, still private)
  - oTree (Daniel Chen, Martin Schonger, and Chris Wickens, ETH Zürich, <http://www.otree.org>)
  - Edo Gallo (Cambridge, UbiquityLab, no known webpage)
  - Possible Meeting at Cambridge November 17-18
- Experimental design
  - Comply with IBSEN Charter of Ethics
  - Approval by Ethics Committees in advance
  - No underage subjects
  - Synchronicity: can 1000+ subjects participate really simultaneously?
  - Platform: computer vs e.g. cell phones
  - Recruitment: means to attract subjects



- Specific proposals in WP2, additional new ones of interest (WP2 starts on month 6)
- Hardware needs?
- Data handling
  - No third-party data, no reuse of our own data (unless permission can be documented)
  - One common database or databases at every site?
  - Data protection officer at UC3M
  - Payment procedure: PayPal (or similar) vs bank transfers
  - Anonymization: immediate to avoid data protection issues, but interaction with keeping a database of volunteers with demographics for selection
  - Data management and risk management
- Dissemination
  - Use logo and project acronym as much as possible
  - Twitter: IBSEN\_H2020
  - Website: <http://www.ibsen-h2020.eu>
  - Material for the webpage (officer required it to be amenable to the public)
- Financial matters
  - No specific issues here, just a reminder that Cristina Velasco, from UC3M Research Administrative office, will be with us to brief us on this as well as take any question you may have
- Other
  - Next workshops (6 and 12 months from now): places and dates. Workshop on Month 12 must involve external practitioners. Workshops should include management meeting as stipulated in the Consortium Agreement.