The FuturICT Knowledge Accelerator: Introduction to a EU Flagship project on techno-socio-economic systems — Dirk Helbing — ETH Zürich, Switzerland

The ultimate goal of the FuturICT flagship project is to understand and manage complex, global, socially interactive systems, with a focus on sustainability and resilience. Revealing the hidden laws and processes underlying societies probably constitutes the most pressing scientific grand challenge of our century and is equally important for the development of novel robust, trustworthy and adaptive information and communication technologies (ICT), based on socially inspired approaches.

Integrating ICT, Complexity Science and the Social Sciences will create a paradigm shift, facilitating a symbiotic co-evolution of ICT and society. Data from our complex globe-spanning ICT system will be leveraged to develop models of techno-socio-economic systems. In turn, insights from these models will inform the development of a new generation of socially adaptive, self-organized ICT systems.

FuturICT as a whole will act as a Knowledge Accelerator, turning massive data into knowledge and technological progress. In this way, FuturICT will create the scientific methods and ICT platforms needed to address planetary-scale challenges and opportunities in the 21st century. Specifically, FuturICT will build a sophisticated simulation, visualization and participation platform, called the Living Earth Platform. This platform will power Crisis Observatories, to detect and mitigate crises, and Participatory Platforms, to support the decision-making of policy-makers, managers, and citizens.