SOCIO-ECONOMIC IMPACT OF RIS

MODULE CO-ORDINATORS

Prof.ssa M.Lavitrano, E. Guarini (UNIMIB) and Lorenzo Zirulia (Università degli Studi di Milano)

Evi-Carita Riikonen (ICOS ERIC)

OVERVIEW

According to the European Union Horizon 2020 work program for science (European Commission), "research infrastructures are facilities, resources and services that are used by the research communities to conduct research and foster innovation in the fields". In other words, research infrastructures (RIs) and core facilities (CFs) are physical or virtual places enabling the access to new knowledge which may find applications in different sectors and affect several domains (e.g. science, economy, society and politics). The knowledge created by RIs and their users may trigger innovation developments as well as contribute to tackling societal challenges (e.g. climate change, health, energy, ageing, etc). The potential of research infrastructures to generate impacts beyond science is widely recognised by policy makers and funding agencies. Hence, the growing demand to be able to measure RIs impacts not only for research but for the society at large. The assessment of socio-economic impact of infrastructures has a long tradition in applied economics and related fields. However, RIs and CFs have specific features that demand a tailored approach, which is what this course aims to do. One should consider that a heterogeneous and various set of direct and indirect users may interact with a RI in multiple ways and with different expectations and objectives. These stakeholders range from those communities directly associated with the research and the services offered by the RI (e.g., scientists and researchers) to academia, industry (including those building physical virtual facilities), consumers of goods and services provided by RIs, government and the general public (citizens and tax-payers). Thanks to these multiple interactions, the RI generates societal benefits which span beyond scientific impacts.
.

CONTENT

The content for this module draws from recent discussion on socio-economic impact assessments of RIs as well as practices of measurement of RI's impact. The first part will introduce the different socio-economic impacts assessments frameworks which have recently been proposed in the academia and policy field to measure RIs impacts. Then, it will specifically focus on   the methodologies used to assess RIs and CFs costs and benefits. In the second part, in depth case studies of recent socio-economic impact evaluation are presented, including full cost-benefit analyses as well as assessments of specific types of benefits.

LEARNING OBJECTIVES

THIS COURSE WILL AIM TO:

- INTRODUCE STUDENTS TO A FRAMEWORK FOR SOCIO-ECONOMIC IMPACT ASSESSMENT OF RI/CF BASED ON RIGOROUS EMPIRICAL METHODS, BOTH QUANTITATIVE (E.G. CBA) AND QUALITATIVE.
- MAKE THE PARTICIPANTS ABLE TO IDENTIFY AND ASSESS THE SOCIAL COSTS AND BENEFITS ASSOCIATED WITH DIFFERENT TYPOLOGIES OF RI/CF, AND TO CRITICALLY ASSESS EXISTING STUDIES.

LEARNING OUTCOMES

AT THE END OF THE COURSE, STUDENTS WILL KNOW:

- HOW TO UNDERSTAND, DESIGN AND IMPLEMENT A SOCIO-ECONOMIC IMPACT ASSESSMENT STUDY
- HOW TO CORRECTLY REPORT THE CONSTRUCTION COSTS AND THE LONG-TERM OPERATIONAL COSTS OF A RI/CF
- HOW TO EMPIRICALLY ANALYSE THE SOCIAL BENEFITS OF A RI/CF USING QUANTITATIVE AND QUALITATIVE METHODS.

TARGET AUDIENCE

Managers and operators of RIs, professional from RIs, funding and governmental agencies.

LEARNING MODEL

Lectures will be held online and will combine face-to face and hand-on-sessions. During hands on sessions, discussions will be structured in working groups .A final assessment of the knowledge acquired will be carried out at the end of the course.

ASSESSMENT

Student group work on critical evaluation of case studies, including final presentation in class.