The Global MRIO Lab - final outcomes from Project RÃ©union

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(1) There has been ample experience with constructing large-scale global MRIO tables within a number of institutions or consortia. However, these undertakings have been impeded by their high financial resource requirements, resulting in infrequent or untimely database updates, or discontinuation of time series. In order to be relevant for international policy, global MRIO databases need to be created and updated in a timely, continuous, consistent, and cost-effective way.

(2) These issues can in principle be addressed by instigating a collaboration between the various global MRIO teams. This idea was first discussed at a meeting at Lâ€™Hermitage-les-Bains on RÃ©union Island in March 2011, by participants of the Project RÃ©union, from TNO Delft/CML Leiden, the University of Groningen, the OECD, Purdue University, the Japan External Trade Organisation, the Center for International Climate and Environmental Research in Oslo, and the University of Sydney. The goal of Project RÃ©union was to coordinate worldwide activities on environmentally-extended MRIO database compilation.

(3) As a first step, Project RÃ©union members agreed, in their 2013 meeting at Kurokawa Onsen, to aim at demonstrating the ability to generate, based on unified data pools and construction pipelines, a set of global MRIO databases expressed in the regional and sectoral classifications of the EXIOBASE, WIOD and Eora tables. In 2013, Project RÃ©union received funding from the Australian Research Council, and work started on realising the collaboration using virtual laboratory technology.

(4) This presentation deals with the global expansion of the Australian IELab archetype into a global virtual laboratory for Project RÃ©union participants. I will explain the concept, architecture, and development of the Global MRIO Lab, with particular focus on a few technical aspects in which the global lab differs from its Australian predecessor, and which had to be solved within the scope of Project RÃ©union. I will describe some first concrete outcomes of Project RÃ©union, with the aim of demonstrating how the virtual laboratoryâ€™s concept and technical innovations enable researchers to create world MRIO databases in a flexible way. I will report on reflections on Project RÃ©unionâ€™s journey, and an outlook for the future.