Demonstrating measurable impact of research outputs with Readiness Levels

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H2020 COLUMBUS Project (2015-2018; www.columbusproject.eu) aims to capitalise on the European Commission's significant investment in marine and maritime research by ensuring accessibility and uptake of research Knowledge Outputs by end-users: policy, industry, science and wider society.

A methodology for proactive and targeted Knowledge Transfer, developed by COLUMBUS Partners, was designed and implemented to ensure measurable value creation across maritime activities under the Blue Growth Agenda, within the timeframe of the project.

The 3-year Knowledge Transfer effort by 9 Competence Nodes covering a range of maritime activities under the Blue Growth Agenda, is captured in over 60 Case Studies, each describing the resulting impact of transferring a specific research output to targeted end users.

In this presentation, we combine TRL (Technology Readiness Levels) and SRL (Societal Readiness Levels) to demonstrate the outcome of targeted Knowledge Transfer, especially when the research outputs are diverse and at different maturity level. Preliminary results suggest clustering of various Case Studies with different impact, for instance:

Type 1 Case Study (CS): where the Knowledge Output (KO) remains at same TRL (or COLUMBUS methodology is not responsible for TRL growth) but the COLUMBUS effort is clearly provoking growth at SRL through awareness, and as concepts for new application;

Type 2 Case Study: TRL and SRL go hand in hand, either because the original KO grows in TRL through COLUMBUS efforts; or because the original KO acquires additional Research & Development that provokes TRL growth.

Type 3 Case Studies: neither TRL not SRL definitions are appropriate for capturing the Knowledge Transfer effort, but eventual impact remains valuable and tangible.