The I2S2 project aims to understand and identify the requirements for a data-driven research infrastructure in the Structural Sciences. The work is focused on the exemplar domain of Chemistry, but with a view towards inter-disciplinary application. This Idealised Scientific Research Data Lifecycle Model produced by the I2S2 project seeks to extend and adapt from a “researcher perspective”, the Keeping Research Data Safe (KRDS) Activity Model. It adapts KRDS from an archive-centric to a researcher-centric view by:

- Defining and emphasising more of the activities in the research (KRDS “Pre-Archive”) phase where research data is created;
- Adding a “Publication” set of activities;
- Concatenating the KRDS “Archive” phase activities in the centre of the model for simplification and presentational purposes;
- Adding some specific local research administration activities.

In addition for the purposes of the project, it adds some selective detail of information flows and information objects between the activities. Note this is an idealised model and several activities such as peer review or conduct experiment may have multiple instances or repetitions. “Documentation, Metadata, and Storage” may also be undertaken as researcher activities independent of the archive in other instances and in the KRDS activity model. The Data Management Plan (DMP) should reflect the archive and information infrastructure available to the researcher. It represents the final project view as of April 2011 and supersedes all previous versions released by the project.