

CERIF: A format to enable interoperability of research information

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Current Research Information Systems (CRISs) are intended for the management of research related information. CRISs are in operation across organisations that are involved in research activities to capture important metadata and to ensure for the performance of research related processes. In practise, research related organisations often run CRISs that do not interoperate with other CRISs, applications or repositories. Such a lack of communication not only results in islands of information that are difficult to access but also results in a loss of information quality due to redundancy on the one hand and incompleteness on the other. To overcome the information islands and to connect them towards a valuable knowledge infrastructure, we propose for a standard layer, CERIF: Common European Research Information Format.

The European Commission recommended CERIF to member states as a standard for recording research information and handed over the responsibility for CERIF to euroCRIS (<http://www.eurocris.org/>).

CERIF has been developed and extended since first implemented in 1991. CERIF captures research actors like people and organisations, their core research activities in projects, publications and a wider research environment such as funding programme, events, patents, products, equipment, service, etc. Not only research entities as such are represented, but CERIF also allows for a flexible and scalable capturing of the relations between those entities.

With the latest CERIF2006 release major improvements have been implemented for the management and for the application of these interrelations as a so called Semantic Layer. The semantic layer allows for a simple definition of multiple role and type schemes and supports the integration of terminologies, ontologies or other classification schemes and a mapping between them. Additionally, CERIF2006 provides an XML based data exchange specification and validation schemes.

CERIF-based systems are running in various organisations and in a wide range of research environments across European member states and beyond. We consider CERIF to be well suited not only for building quality CRISs but also for enabling communication between CRISs, applications and repositories in a European research infrastructure. Existing repositories, including those of grey literature usually lack quality metadata. CRISs provide the data that can be used as metadata to describe objects in a grey literature repository including their full research context, and their provenance. Furthermore, CERIF provides the ability to link objects in a grey literature repository to – for example – repositories of research datasets.

