# ESCAPE: A generic tool for enhanced scientific communication

M. van Bentum (University of Twente, Library and Archive)

D. Vierkant (University of Twente, ICT Service Centre)

J.M. Gutteling (University of Twente, Centre for Conflict, Risk and Safety Perception)

## **General scope**

In order to enhance communication of research results as part of a network of actors in a particular field one wants to

- relate relevant objects (documents, persons, institutions, projects, ...) on the basis of content and describe/annotate these relations
- communicate and present these aggregated objects for various target groups, not only scientists but also policy makers, journalists, companies, and the general public
- enhance this communication by commenting and tagging related objects

# The tool

ESCAPE is a tool in which users can aggregate digital objects stored at any location and describe, annotate, comment and tag the relations between these objects. The system not only allows formal relations (like bibliographic metadata) but especially 'content relations' concerning topics, reviews, comments, discussions, applications, etc.

The user interface has the following functionalities:

- Searching and viewing existing aggregations by browsing through the related objects using a textual or clickable graph representation (available for the general public)
- Making and editing new aggregations in an easy manner, requiring little technical knowledge (available for the authorized creator/editor, for instance the head or coordinator of a research program)
- Adding comments and tags to a particular aggregation (available for authorized editors, for instance scientists participating in a research program and invited scientists, professionals, policy officials, etc. working in the same field)

### Use case: iCRiSP

ESCAPE is a generic tool for aggregating, relating and annotating all types of digital objects. One of the use-cases is iCRiSP. The research centre for Conflict, Risk and Safety Perception iCRiSP, which is part of the University of Twente's Institute for Behavioural Research, focuses on the implementation of knowledge from social and behavioural sciences regarding issues of conflict, risk and safety in public and private sectors of society. One of the activities of iCRiSP is the valorisation of the results of social and behavioural research in its domain. Valorisation is defined by iCRiSP as the promotion of the sustainable implementation of study results by private and public actors in society. ESCAPE helps to increase the visibility of the products generated in the valorisation process. At the conference, this use-case will be presented.

#### Technology

In the ESCAPE tool relations are modelled and described using RDF and OWL. Aggregations of related digital objects are stored as OAI ORE Resource Maps in a Fedora repository and indexed in a Mulgara triplestore. Interoperability is achieved by using standards such as FOAF, DCMI TERMS, SKOS, SWAN and OAI ORE. Through this interoperability it would be possible to join information from systems like ESCAPE in portals to offer a broader view on relations in scientific communication, similar to what portals like Scientific Commons offer for publication repositories world wide.

In 2009 ESCAPE was a project carried out by the University of Twente, the University of Groningen and the Royal Netherlands Academy of Arts and Sciences (KNAW) and commissioned by SURF Foundation, the Netherlands.