



European Translational Information and Knowledge Management Services

eTRIKS Deliverable report

Grant agreement no. 115446

Deliverable D3.7

Published eTRIKS Knowledge Management Standards

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Dissemination Level		
PU	Public	PU
PP	Restricted to other programme participants (including Commission Services)	
RE	Restricted to a group specified by the consortium (including Commission Services)	



CO	Confidential, only for members of the consortium (including Commission Services)	
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DELIVERABLE INFORMATION

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Authors:	Philippe Rocca-Serra
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1. Executive Summary

High level description of the work involved leading to the eventual output

The deliverable report outlines how the content of the eTRIKS Standards Starter Pack document released as eTRIKS deliverable 3.4 has been made available as dynamic, interactive resource as part of the Biosharing catalogue of resources. Thus, the work ensures long term sustainability of eTRIKS output owing to the fact that ELIXIR has identified BioSharing as a key resource under the Elixir-UK node.

The work was performed by Philippe Rocca-Serra, interacting with the team of Biosharing developers.

2. Inputs and Outputs from related deliverables

Reference the description of work where links between deliverables are cited and the period reports, where links between work packages are laid out. Make particular mention of work which occurred before hand and work which is then enabled by achieving this deliverable

The main inputs contributing to this work have come from:

D3.4 & D3.6 eTRIKS standards Starter Pack

D5.5 Business model for sustainability platform

Technical advice and guidance from the developers of Elixir UK node resource Biosharing, the catalogue of biomedical data management standards and databases.

This work resulted in the creation a new Biosharing “Collection” entry:

<https://biosharing.org/collection/eTRIKS?q=&view=table>

3. Description of work achieved

The work achieved by this deliverable is the creation of a web accessible, user friendly and interactive version of the eTRIKS Standards Starter Pack (eSSP), which is a static document providing a landscape of the data standardisation resources recommended by eTRIKS experts to support the publication and reporting of translational research data. The SSP encompasses description and structuring of experimental results produced by in-vitro, in-vivo and clinical research.



This has been achieved by a close interaction with the Biosharing catalogue of standards and resources (<https://biosharing.org>), an effort spearheaded by Dr Sansone, at the University of Oxford e-Research Centre. Biosharing has recently been endorsed as Elixir-UK node official resource. This therefore presents a unique opportunity for long-term visibility and availability for the eSSP under the Biosharing hosting.

Summary of:

Timeline details: on time, no delays

4. Content of deliverable

4.1 Assessing the Needs

Following the publication of [eTRIKS eSSP v1.0 \(Deliverable 3.4\)](#) and [v1.1 \(Deliverable 3.6\)](#), a request for a more interactive resource presenting the results and recommendations was issued. It was matched by questions about the sustainability and updates of the eSSP.

In terms of ease of access and features that would increase the immediacy of the eSSP content, this meant the ability to navigate, query, sort and discover dependencies and association between standard resources.

In terms of sustainability, three needs have to be met.

- The ability to store and archive eTRIKS work in a stable, institutionally recognized resource.
- The ability to keep recommendations up to date and in line with evolution of the standardization landscape.
- The ability to provide continued and free at the point of use access.

4.2 Biosharing catalogues of biomedical standards and efforts

Biosharing.org is now officially a resource endorsed by Elixir UK node, and supported by the University of Oxford e-Research Centre and the Biocuration Society.

The aim of Biosharing is to provide a one-stop shop for Standard as resources that matter in the field of BioSciences. This is achieved by collecting and curating information about annotation standards, terminologies and controlled vocabularies, format specifications and data management policies. Furthermore, Biosharing provides tools and metrics to assess the level of adoption of such standards by surveying their uptake in knowledge bases and data repositories around the world. Cooperation with the Biocuration Society, leading publishing houses (OUP NAR, OUP Database, BMC Gigasciences, Nature Publishing Group) ensures reliability of the source information. Curation by a dedicated pool of scientists ensures data quality for improved search and discoverability.

Biosharing is already used to assist data managers, funding agencies and publishers for the recommendations of key resources and for defining data management plan.

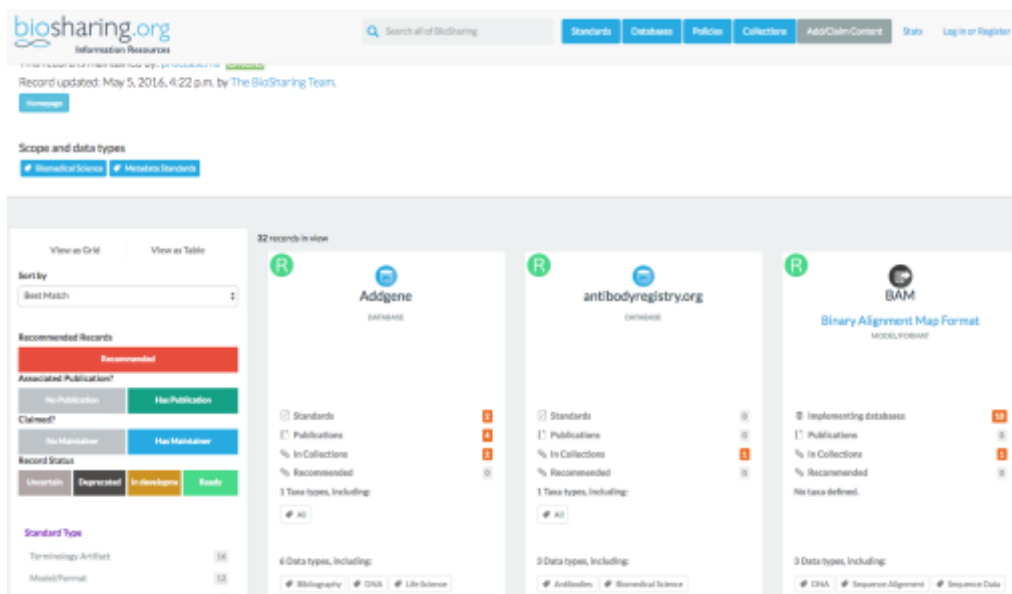
Therefore, Biosharing represents an ideal hosting site for distribution of the recommendations made by eTRIKS.



4.3 The eTRIKS Collection in Biosharing

The eTRIKS set of standards recommended in the eSSP is available for searching and browsing from the Biosharing web site:

Resources can be viewed as ‘tiled cards’ (<https://biosharing.org/collection/eTRIKS?q>), as shown below:



Or they can be viewed in a tabular rendering



(<https://biosharing.org/collection/eTRIKS?q=&view=table>):

ID	Name	Type	Version	Status	Keywords	Actions
1	Bioassay Ontology	Standard	1.0.0	None	None	View, Download, Share, Add Claim Content
10	CDISC Analysis Data Model	Standard	2.0.0	None	None	View, Download, Share, Add Claim Content
20	CDISC Clinical Data Specification Handbook	Standard	1.0.0	None	Medical Data Model	View, Download, Share, Add Claim Content
30	CDISC Define Operations Markup Language	Standard	1.0.0	None	None	View, Download, Share, Add Claim Content
40	CDISC Operational Data Model	Standard	1.0.0	None	Operational Database, The SCAD, medical image repository, Medical Data Model	View, Download, Share, Add Claim Content
50	CDISC Protocol Registration Model	Standard	1.0.0	None	None	View, Download, Share, Add Claim Content
60	CDISC Standard for Exchange of Handbook Data	Standard	1.0.0	None	None	View, Download, Share, Add Claim Content
70	CDISC Study Data Transfer Model	Standard	1.0.0	None	SDTM Data Model	View, Download, Share, Add Claim Content
80	CDISC Study/Task Design Model	Standard	1.0.0	None	None	View, Download, Share, Add Claim Content

Records can be filtered thanks to faceted search as visible in the following figure:

The screenshot displays a faceted search interface with the following elements:

- View options: "View as Grid" and "View as Table".
- Sort by: A dropdown menu set to "Best Match".
- Recommended Records: A red bar labeled "Recommended".
- Associated Publication?: Two buttons: "No Publication" (grey) and "Has Publication" (green).
- Claimed?: Two buttons: "No Maintainer" (grey) and "Has Maintainer" (blue).
- Record Status: Four buttons: "Uncertain" (grey), "Deprecated" (dark grey), "In development" (orange), and "Ready" (green).
- Standard Type: A list with counts:
 - Terminology Artifact: 16
 - Model/Format: 12
 - Reporting Guideline: 1
- Registry: A list with counts:
 - Standard: 29
 - Database: 3
- Domains: A list with counts:
 - Life Science: 10
 - Biomedical Science: 9
 - Clinical Trial: 8
 - Biomedical Science: 6
- A "Show More" link at the bottom right of the Domains section.

The figure below shows how a Biosharing record for CDISC STDM standard indicates that:

- It is recommended and endorsed by eTRIKS (top left hand corner R tag)
- It is connected to a range of related resources (lower right pane)
- It is maintained and developed by an active community.

The screenshot shows the biosharing.org website interface. At the top, there is a search bar and navigation tabs for Standards, Databases, Policies, Collections, Add/Claim Content, Stats, and Log in or Register. The main heading is "CDISC Study Data Tabulation Model" with the abbreviation "CDISC SDTM". Below this, there is a "MODEL/FORMAT" section. The "General Information" section states that the SDTM product family has been supported by the CDISC Submission Data Standards (SDS) team since 1999. It also mentions that SDTM is used for non-clinical data (SEND) and Medical Devices. The homepage is listed as <http://www.cdisc.org/sdm>, developed in the United States of America, with a taxonomic range of "None/Spans". There are social media links for LinkedIn and Facebook. A note indicates the record was updated on June 30, 2016, at 2:31 p.m. by The BioSharing Team. The page is divided into three main sections: "In Collections" (listing eTRIKS Standards Starter Pack and Clinical Research (CDISC)), "Support" (listing forums and online documentation), and "Related Standards" (listing various CDISC standards such as Reporting Guidelines, Terminology Artifacts, and Models and Formats).

List of abbreviations

eSSP: eTRIKS standards starter pack

CDISC: Clinical Data Interchange Standards Consortium

SDTM: Study Data Tabulated Model

