

# Understanding and Implementing PREMIS

K. Bredenberg  
National Archives of Sweden  
P.O. Box 12541  
Stockholm  
Sweden  
karin.bredenberg@riksarkivet.se

A. Dappert  
British Library  
96 Euston Road  
London, NW1 2DB  
United Kingdom  
Angela.Dappert@gmail.com

E. Zierau  
The Royal Danish Library  
Søren Kierkegaards Plads 1  
1016 Copenhagen K  
Denmark  
elzi@kb.dk

## ABSTRACT

This tutorial will provide participants with an introduction to the PREMIS Data Dictionary [1]. It will give a basic overview of the standard and explore different models of implementation.

## KEYWORDS

Preservation strategies and workflows; Infrastructure, systems, and tools; Case studies, best practices and novel challenges; Training and education

## 1 INTRODUCTION

The PREMIS Data Dictionary for Preservation Metadata is a specification that provides a key piece of infrastructure for digital preservation activities, playing a vital role in enabling the effective management, discovery, and re-usability of digital information. Preservation metadata provides provenance information, documents preservation activity, identifies technical features, and aids in verifying the authenticity of digital objects. PREMIS is a core set of metadata elements (called “semantic units”) recommended for use in all preservation repositories regardless of the type of materials archived, the type of institution, and the preservation strategies employed.

## 2 SUMMARY OF TUTORIAL

The PREMIS Data Dictionary was originally developed by the Preservation Metadata: Implementation Strategies (PREMIS) Working Group in 2005 and revised in 2008 and 2015. It is maintained by the PREMIS Editorial Committee and the PREMIS Maintenance Activity is managed by the Library of Congress [2].

We have seen a constant call for PREMIS to undertake tutorials, such as this, as more and more organisations come to grips with digital preservation. This tutorial provides an introduction to PREMIS and its data model and an examination of the semantic units in the Data Dictionary organized by the entities in the PREMIS data model, objects, events, agents and rights.

In addition it presents examples of PREMIS metadata and a discussion of implementation considerations, particularly using PREMIS in XML and with the Metadata Encoding and Transmission Standard (METS) [3]. It will include examples of implementation experiences through the institutional experience of the tutors.

The tutorial aims at developing and spreading awareness and knowledge about metadata to support the long term preservation of digital objects.

## 3 CONTENT OUTLINE

The draft outline for the tutorial is outlined below.

### Introduction to PREMIS

- Background (brief history and rationale of PREMIS)
- Benefits of implementing PREMIS

### PREMIS in detail

- Core entities
- Simple examples to build familiarity

### Implementation

- PREMIS in METS
- Case studies
- Support and the PREMIS community
- Conformance

### Next Steps

- Round table discussion for institutional plans

### Wrap up

## 4 INTENDED AUDIENCE

The tutorial will benefit individuals and institutions interested in implementing PREMIS metadata for the long-term management and preservation of their digital information but who have limited experience in implementation. Potential audience includes cultural heritage operators, researchers and technology developers, professional educators, and others involved in management and preservation of digital resources.

The presentation is structured into two parts. The first part is intended for beginners with little or no knowledge of PREMIS, while the second half will cover more advanced use of PREMIS for practicing users and present the opportunity for questions and discussions.

## 5 EXPECTED LEARNING OUTCOMES

Participants will understand:

- What PREMIS is and why it exists;
- How PREMIS has changed across versions;
- The benefits of implementing PREMIS;
- The nature of the existing PREMIS community;
- The critical role PREMIS plays in the digital preservation community.

In addition, participants will get insight into:

- How PREMIS may be used in conjunction with METS;
- How different organisations implement PREMIS within their own repositories;
- The nature of conformance with PREMIS.

## 5 SHORT BIOGRAPHIES OF ORGANIZERS

**Karin Bredenberg** is a technical advisor on metadata at the Swedish National Archives. She graduated in Computer Engineering (programming C#), with a Bachelor of Science at the Royal Institute of Technology (KTH) in Stockholm 2006. Bredenberg works with Swedish adaptations of international metadata standards and is responsible for the common specifications regarding e-archiving and e-records management maintained by the Swedish National Archives. She currently serves as co-chair of the Society of American Archivists Technical Subcommittee on Encoded Archival Standards (TS EAS), chair of the newly created DLM Forum Archival Standards Board (DAS Board) as well as a member of the PREMIS Editorial Committee and as a member of the METS Board. During 2011-2014 she served as the work package lead regarding metadata exchange formats specifications in the Swedish project eARD. The project part on exchange format specifications received the Swedish e-Diamond Award 2014. 2009-2014 Bredenberg was part of the European APEX (<http://www.archivesportaleurope.net/>) as a standards specialist and 2014-2017 part of the European project E-ARK (<http://www.eark-project.com/>) working on Information Packages and use of metadata standards.

**Angela Dappert** Dr Angela Dappert is Project Manager for the EU-funded THOR project ([project-thor.eu](http://project-thor.eu)). She has widely researched and published on digital repositories and

preservation; consulted for archives and libraries on digital life cycle management and policies; led and conducted research in the EU-co-funded Planets, Scape, TIMBUS, and E-ARK projects; and applied digital preservation practice at the British Library through work on digital repository implementation, digital metadata standards, digital asset registration, digital asset ingest, preservation risk assessment, planning and characterization, and data carrier stabilization. She has applied work towards preservation of research data and processes, software environments and eJournals, with an emphasis on interoperability and standardisation. Angela holds a Ph.D. in Digital Preservation, an M.Sc. in Medical Informatics and an M.Sc. in Computer Sciences. She serves on the PREMIS Editorial Committee and a number of advisory bodies.

**Eld Zierau** is member of the PREMIS Editorial Committee, since 2013. She is a digital preservation researcher and specialist, with a PhD from 2011 within digital preservation. Originally, she is a computer scientist, and has worked with almost all aspects of IT in private industries for 18 years, before starting in digital preservation in 2007. She has been working with many aspects of digital preservation, and she is involved as an architect or a consultant on major initiatives such a new digital repository including data modelling of metadata for preservation.

## REFERENCES

- [1] PREMIS Editorial Committee. 2016. PREMIS Data Dictionary for Preservation Metadata, located at <http://www.loc.gov/standards/premis/v3/premis-3-0-final.pdf>, Web archived: archive.org., archive time: 2017-02-10 06:23:29 UTC archived URL: <http://www.loc.gov/standards/premis/v3/premis-3-0-final.pdf>.
- [2] PREMIS website. 2017. Located at <http://www.loc.gov/standards/premis/index.html>
- [3] METS website. 2017. Located at <http://www.loc.gov/standards/mets/index.html>