



COMMITTEE ON EARTH OBSERVATION SATELLITES

CEOS Interoperability Handbook

Rationale

WGISS has been doing over years a great job in

- exploring technologies
- understanding technologies
- experimenting technologies

that could result in better interoperability among agencies in the field of Earth observation.

In the past, WGISS has produced, in relation with these activities, several guidelines and other documents

WGISS Documents

- Auxiliary Data in the CEOS Community: Reference Guidelines Document – Part 1: Current Usage (1996)
- Auxiliary Data in the CEOS Community: Reference Guidelines Document – Part 2: Guidelines (1996)
- Guidelines for an International Interoperable Catalogue System (1998)
- Guidelines on Standard Formats and Data Description Languages (1998)
- Browse Guidelines Document (1999)
- Catalogue Interoperability Protocol related documentation
 - Interoperable Catalogue System – User Requirements Document (1997)
 - Interoperable Catalogue System – System Design Document (1998)
 - Interoperable Catalogue System – Collections Manual (1999)
 - Interoperable Catalogue System – Guide Design and Protocol Specification (1998)
 - Catalogue Interoperability Protocol Specification – Release B (2005)

Why a CEOS Interoperability Handbook?

- WGISS documents are excellent
 - they clarify many of the interoperability concepts we are using today
 - reading them again avoids recasting existing ideas
 - it is worth updating some of them (e.g. the Browse Guidelines) and/or writing new ones
- but they are excellent for experts.
- They do not provide an overall, synthetic and pragmatic view of WGISS skills in the way expected by of EO data systems decision makers, designers, implementers willing to take advantage of WGISS achievements.
- A handbook could provide for this
 - not too long (circa 50 pages)
 - available as a pdf document and/or as web pages hosted by the WGISS web site
 - frequently updated (with versioning)
- A draft was prepared in response to AI 20–10 with contributions from several task teams.

ToC of Current Draft

| | |
|--|-----------------|
| Glossary | 1 |
| Foreword | 3 |
| Purpose | 5 |
| Abstract | 9 |
| Introduction | 11 |
| Data Preservation | 17 |
| 1.1 Introduction to Data Preservation | 17 |
| 1.2 Data Archiving | 17 |
| 1.3 Data Formats | 17 |
| Data Access | 19 |
| 2.1 Introduction to Data Access | 19 |
| 2.2 Data Description | 19 |
| 2.3 Interoperable Access to Data | 21 |
| From Data to Information | 23 |
| 3.1 Introduction to Interoperable Data processing | 23 |
| 3.2 Interoperable Data Providing via Internet | 23 |
| 3.3 Interoperable Data Processing via Internet | 26 |
| 3.4 Access to Multiple web-based Interoperable Service Systems | 26 |
| Infrastructures Enabling Interoperability | 27 |
| 4.1 About Infrastructures enabling Interoperability | 27 |
| 4.2 Building an Infrastructure enabling Interoperability .. | 27 |
| 4.3 CEOS Infrastructures enabling Interoperability | 27 |
| Other Organizations | 28 |
| Index | Index–29 |

Structure

- The handbook comprises a header, a body and a trailer
 - header: title, glossary, foreword, purpose, abstract
 - body : chapters, which may split into paragraphs
 - trailer : index, toc, bibliography
- Paragraph Structure
 - each leaf paragraph contains
 - a conceptual item (“About...”)
 - a procedural item (“How to...”)
 - each procedural item contains one or several “recommendations” given as a short and non ambiguous statement
 - each recommendation is given with its rationale (“pros” and “cons”)

Challenge for WGISS

- WGISS must make explicit what may be only implicit among WGISS members
- WGISS may be forced to reach a consensus on some topics

Schedule

- WGISS21
 - agree on the document structure
 - find volunteers for writing parts of the handbook
 - find volunteers for reviewing the handbook
- WGISS22
 - release of draft version 0
 - review of draft version 0
- Plenary
 - release of version 0

Thoughts?