S-101 ENC Project Team

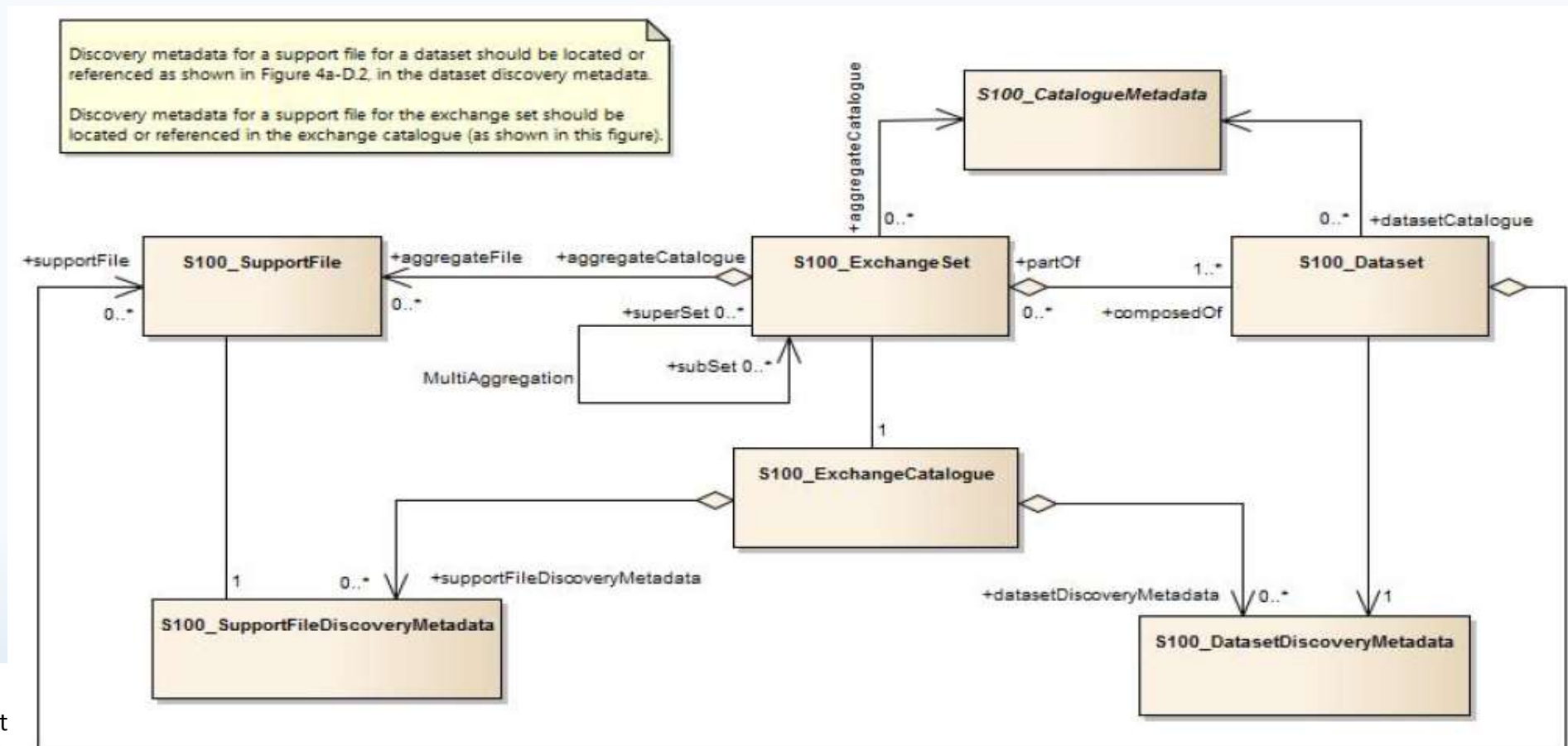# S-101 Exchange Catalogue

Presented by KHOA

Background

- **Technical cooperation project between KHOA and NOAA**
  - Support the S-100 test bed
  - The task was to develop Exchange Catalogue Editor which satisfies Exchange Catalogue data model included in S-100 3.0
  - To use it for S-100 test bed

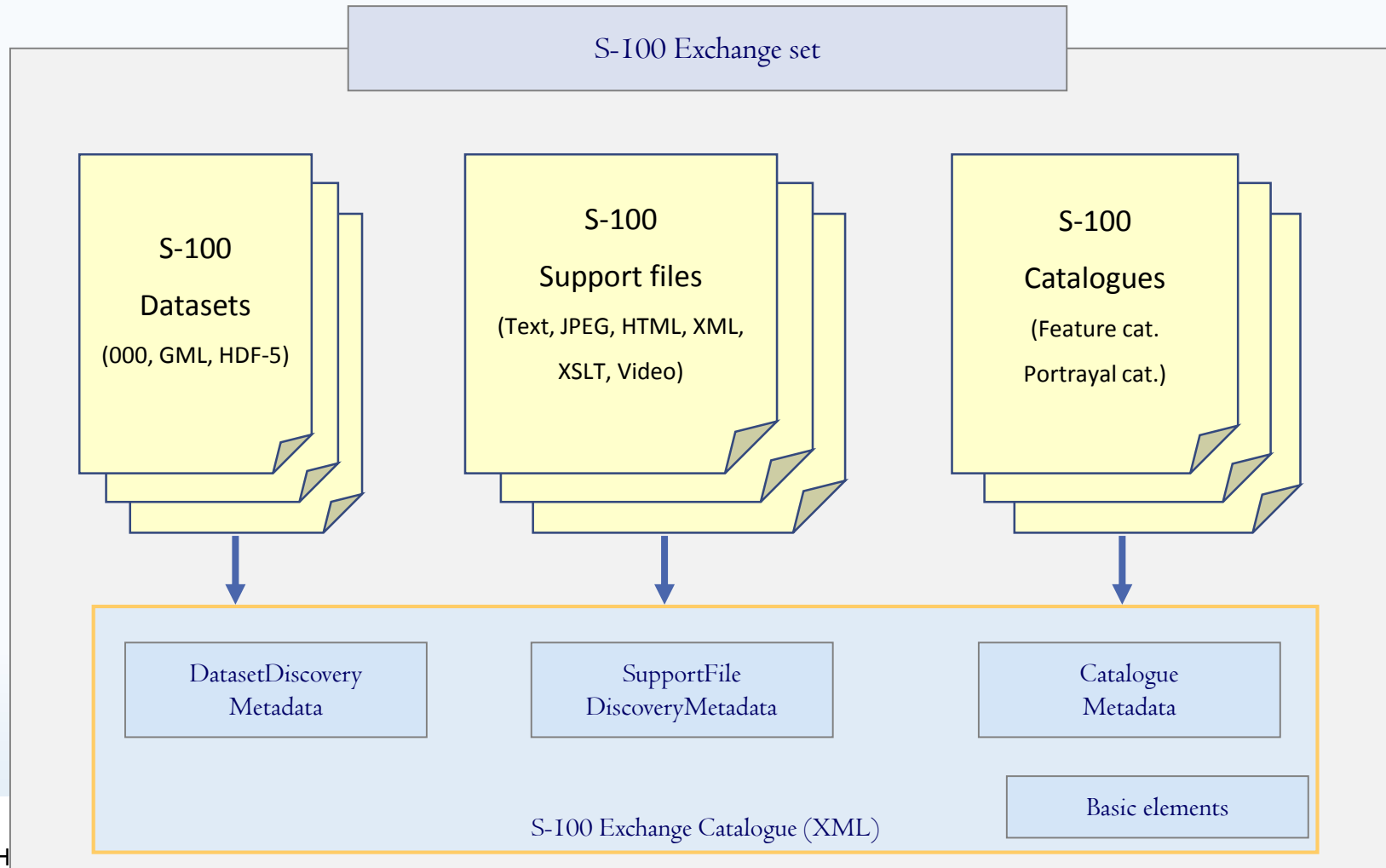# Overview of S-100 Exchange set

- **Structure of Exchange set**
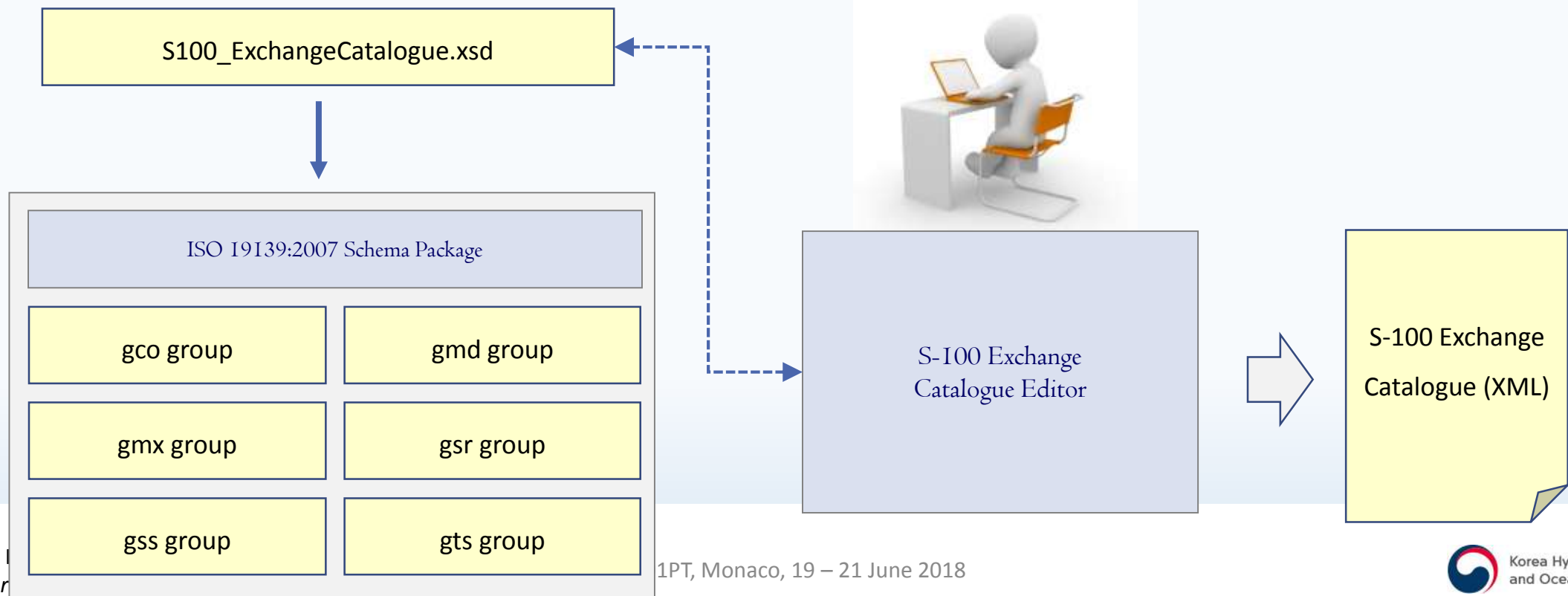 - a container that combines all the elements needed for the exchange of S-100 data

Overview of S-100 Exchange set

- **Structure of Exchange set**

Considerations for S-100 Exchange Set Editor

- S-100 Exchange Catalogue XML
  - defined in S100_ExchangeCatalogue.xsd
  - making reference to ISO 19139:2007 Schema Package
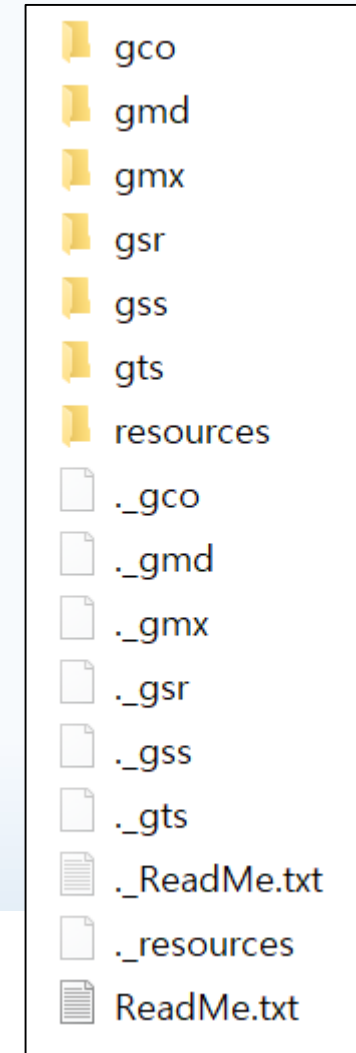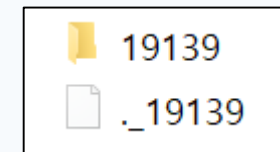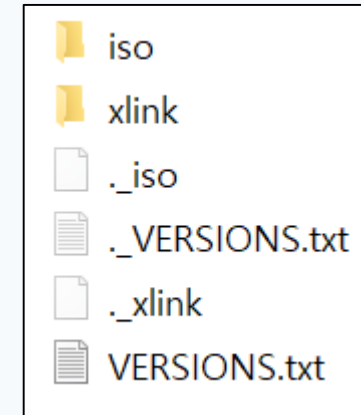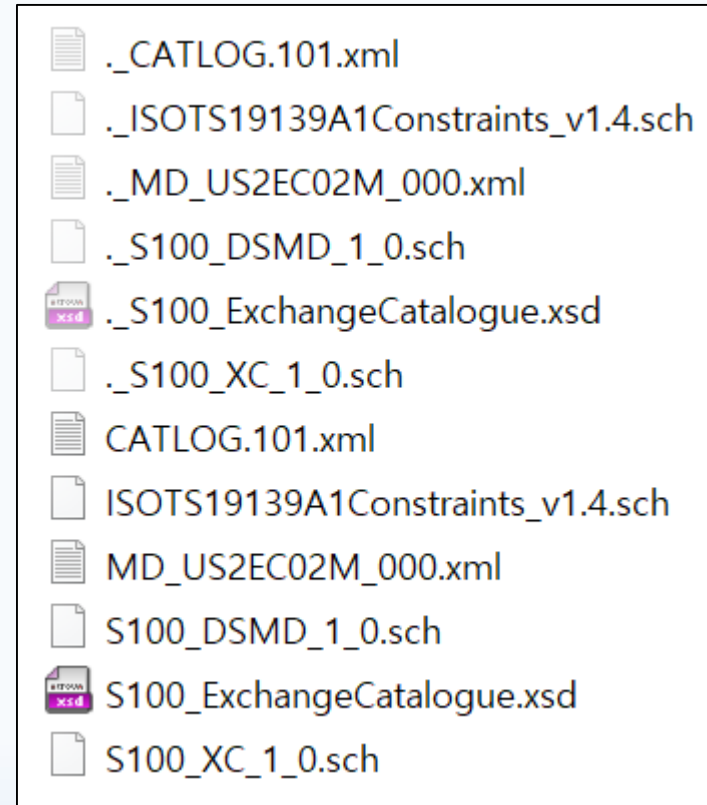 - The change of schema impact on S-100 Exchange Catalogue Editor

S100_ExchangeCatalogue.xsd

ISO 19139:2007 Schema Package

gco group	gmd group
gmx group	gsr group
gss group	gts group

S-100 Exchange Catalogue Editor

S-100 Exchange Catalogue (XML)

Korea Hydrographic
and Oceanographic Agency

Outcome of the development

- S-100 Exchange Catalogue Editor

Outcome of the development

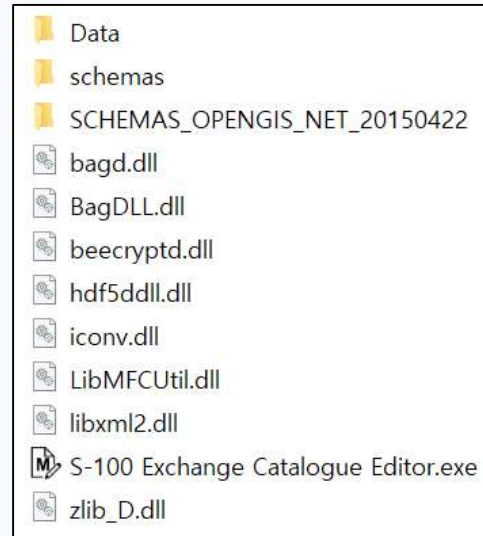- S-100 Exchange Catalogue Editor

Outcome of the development

- S-100 Exchange Catalogue Editor

Outcome of the development

- S-100 Exchange Catalogue Editor

Outcome of the development

- S-100 Exchange Catalogue Editor

Outcome of the development

- Examples of S-100 Exchange set

S-101 ENC	S-122 MPA	S-123 MRS	S-201 AtoN

S-101 ENC
- 📁 AADLULGD02
- 📁 AADLULGD03
- 📁 AADLULGD04
- 📁 AADLULGD05
- 📁 AADLULGD06
- 📁 AADLULGD07
- 📁 AADLULGD08
- 📁 AADLULGD09
- 📄 S101ed1.xml

- 📄 AADLULGD01.000
- 📄 MD_AADLULGD01_000.xml

S-122 MPA
- 📁 USNPI122EX_00001
- 📄 CATALOG.122.XML

- 📁 support
- 📄 MD_USNPI122EX_0001.XML
- 📄 USNPI122EX_00001.gml

- 📄 USNPI122C224_105.TXT
- 📄 USNPI122image001.jpg
- 📄 USNPI122image002.jpg
- 📄 USNPI122image003.jpg
- 📄 USNPI122NARW0001.TXT
- 📄 USNPI122NARWPCTN.TXT
- 📄 USNPI122NARWPRES.TXT
- 📄 USNPI122NARWREPT.TXT

S-123 MRS
- 📁 JSNPI123EX_A0001
- 📄 CATALOG.123.XML

- 📄 JSNPI123EX_A0001.GML
- 📄 MD_JSNPI123EX_A001.XML

S-201 AtoN
- 📁 KRABCDEFGH
- 📄 S201_0_0_6_CAT.XML

- 📁 support
- 📄 KRABCDEFGH_000.gml
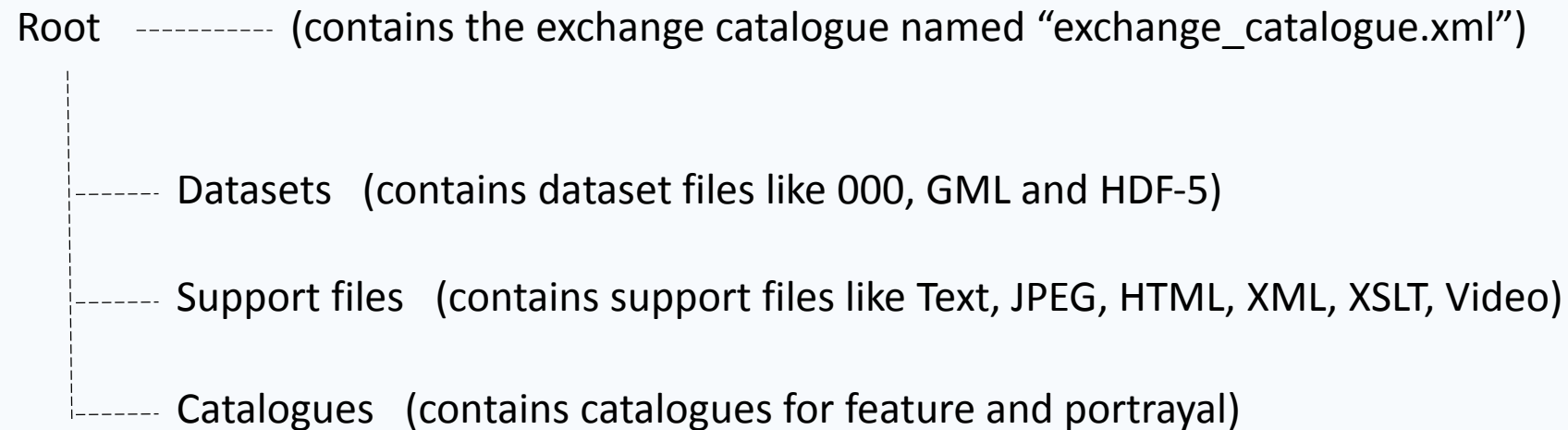- 📄 MD_KRABCDEFGH_000.xml

- 📄 KR00100001.jpg
- 📄 KR00100002.jpg
- 📄 KR00100003.jpg
- 📄 KR00100004.jpg
- 📄 KR00100005.jpg
- 📄 KR00100006.jpg
- 📄 KR00100007.jpg
- 📄 KR00100008.jpg

Outcome of the development

- Review of the development
  - KHOA research team reviewed the outcome of developing S-100 Exchange Catalogue Editor using the cases from S-101 ENC, S-122 MPA, S-123 MRS, and S-201 AtoN Exchange set

Root   --------   (contains the exchange catalogue named "exchange_catalogue.xml")

      ------- Datasets   (contains dataset files like 000, GML and HDF-5)

      ------- Support files   (contains support files like Text, JPEG, HTML, XML, XSLT, Video)

      ------- Catalogues   (contains catalogues for feature and portrayal)

Conclusions

- **Technical cooperation project between KHOA and NOAA**
  - The task was to develop S-100 Exchange Catalogue Editor
  - stand-alone S/W which S100_ExchangeCatalogue.xsd and ISO 19139:2007 Schema Package can be loaded and which can create exchange set to include Exchange Catalogue
  - It is planned to use the Editor for S-100 Test Bed

Update since the S-100WG3

- Automatic search of spatial information in S-101 Data Coverage and add those information to the Dataset Discovery Metadata

Future plan

- Improvement of Exchange catalogue editor
  - Discussion of S-100 exchange catalogue for other product specification
  - Add a function of multi exchange catalogue schema
  - Consideration of any feedback

- Creation of S-101 Test datasets
  - If TDS, Support files, Feature catalogue, Portrayal catalogue are ready
  - The tool can be used for creating the S-101 Test datasets