

*1<sup>st</sup> plenary meeting– Rhodes – 19-20 September, 2012*



**SeaDataNet**

*PAN-EUROPEAN INFRASTRUCTURE  
FOR OCEAN & MARINE DATA  
MANAGEMENT*

***MIKADO, NEMO***

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## ***MIKADO v2: 2 releases since last plenary***

- 2.0 (13 January 2011)
- 2.0.1 (22 February 2011)
- 2.1 ( 22 March 2011)
- 2.2 (22 June 2011)
- 2.2.1 (6 September 2011)
- 2.3 (12 March 2012)
- **2.4 (24 July 2012)**
  - Current release

## ***MIKADO, v2.3, released 12/03/2012***

- Adds-on
  - Look and feel set to Nimbus
  - EDIOS series manual : online help and controls added for curve and surface descriptions
  - EDIOS series vocabulary changed for sampling interval units (List L260 instead of list P061)
  - Seismic O&M in automatic and manual modes
  - Seismic SensorML in automatic and manual modes
- Fixed bugs
  - Remove potential duplicates due to mapping of P011 to P021
  - Spatial resolution value (= distance between traces, var47) can be 0 for seismic data

## ***MIKADO, v2.4, released 24/07/2012***

- New features

- New variable added for Seismic SensorML (Shot distance)
- Djava.endorsed.dirs="dist/lib" removed from mikado.bat and mikado.csh (not needed by JAVA JRE 1.7)

- Fixed Bugs

- Vocabulary L051 (device categories) used to replace deprecated L057 and L054
  - Edios Program : field position updated for id in manual mode form
  - CSR downloading : mdFileID value corrected
  - O&M and SensorML : \_oem and \_sml extensions removed in automatic mode (to be configured by data manager).
- For Geo-seas, user's manual update (O&M, sensorML, CDI records), planned in Octobre 2012.

## ***SensorML and O&M extensions for seismic data***

- One CDI for seismic data (corresponds to one seismic line or one fragment of a seismic line)
  - Linked to one O&M (observation and measurement description)
    - Linked to *one* to *n* Sensor ML (Sensor technical description with acquisition parameters, necessary for data processing)

# MIKADO manual CDI

Local URL of  
the O&M  
description

Mikado 2.3 SDN V2 Manual / CDI : C:\Michele\test MIKADO\SENSORML\SISM10\_FB52010030080\_163741.xml

Manual Automatic Options Tools ?

Identification Where When What How Who Where to find the data Cruise/Station Others

**Distributor**

Organisation name \* IFREMER / IDM/SISMER

SDNIdent (Organisation name) \* SDN:EDMO:486

**Collate-centre**

Organisation name \* IFREMER / IDM/SISMER

SDNIdent (Organisation name) \* SDN:EDMO:486

**Distribution Websites and services**

Data size	Linkage	protocol	Database Refere...	Distribution meth...
*	http://www.sdn...	http://www.sdn...		downloadRegistr...
349.576	http://www.sdn...	https://www.ifr...	SISM10	downloadRegistr...

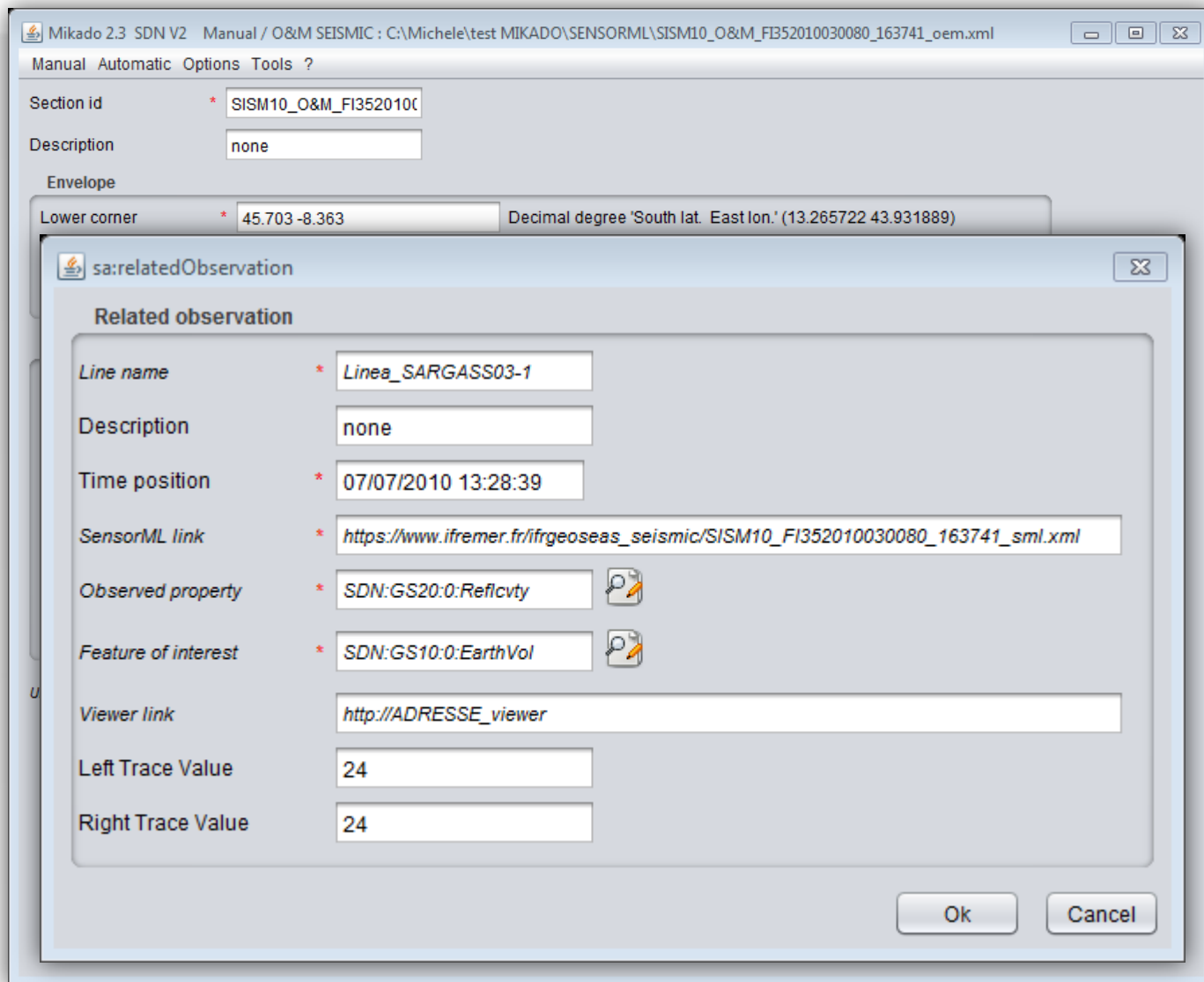
**Dataset Access Restriction**

Access constraints	SDNIdent (access constraints)
* restricted	SDN:L081:2:RS



# MIKADO manual O&M

Local URL of  
the Sensor ML  
description



Mikado 2.3 SDN V2 Manual / O&M SEISMIC : C:\Michele\test MIKADO\SENSORML\SISM10\_O&M\_FI352010030080\_163741\_oem.xml

Manual Automatic Options Tools ?

Section id \* SISM10\_O&M\_FI3520100

Description none

Envelope

Lower corner \* 45.703 -8.363 Decimal degree 'South lat. East lon.' (13.265722 43.931889)

sa:relatedObservation

Related observation

Line name \* Linea\_SARGASS03-1

Description none

Time position \* 07/07/2010 13:28:39

SensorML link \* [https://www.ifremer.fr/ifrgeoseas\\_seismic/SISM10\\_FI352010030080\\_163741\\_sml.xml](https://www.ifremer.fr/ifrgeoseas_seismic/SISM10_FI352010030080_163741_sml.xml)

Observed property \* SDN:GS20:0:Reficvty

Feature of interest \* SDN:GS10:0:EarthVol

Viewer link [http://ADRESSE\\_viewer](http://ADRESSE_viewer)

Left Trace Value 24

Right Trace Value 24

Ok Cancel



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# MIKADO manual SensorML

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Manual Automatic Options Tools ?

Overall infos Source Receiver Acquisitor Capabilities Documentation Observation

### Seismic method


Term URI \*

Value \*  

definition \*

### Dimensionality


Term URI \*

Value \*  

definition \*

### Data product


Term URI \*

Value \*  

definition \*

### Overall quality

Term URI \*

Value \*  

definition \*



# MIKADO Automatic O&M

Mikado 2.3 SDN V2 Automatic / New O&M SEISMIC

Manual Automatic Options Tools ?

Connection Queries

Requests

- Main Query
  - ✓ :\$ Name
- Single subqueries
  - ✓ var01 Description
  - ✓ var02 South latitude
  - ✓ var03 East longitude
  - ✓ var04 North latitude
  - ✓ var05 West longitude
  - ✓ var15 UKOA link
- Multiple subqueries
  - ✓ var06 Line name
  - ✓ var07 Line description
  - ✓ var08 Time position
  - ✓ var09 SensorML link
  - ✓ var10 Observed property
  - ✓ var11 Feature of interest
  - ✓ var12 Viewer link
  - ✓ var13 Left Trace
  - ✓ var14 Right Trace

query

SELECT	var	sql
	:\$	

FROM

WHERE

ORDER BY

Test

check

Check All

# MIKADO Automatic SensorML

Mikado 2.3 SDN V2 Automatic / New SENSORML SEISMIC

Manual Automatic Options Tools ?

Connection Queries

Requests

- Main Query
  - ✓ :\$ Section id
- Single subqueries
  - ✓ var01 Seismic method
  - ✓ var02 Dimensionality
  - ✓ var03 Data product
  - ✓ var04 Overall quality
  - ✓ var05 Source type
  - ✓ var06 Receiver type
  - ✓ var07 First channel
  - ✓ var08 Last channel
  - ✓ var09 First offset
  - ✓ var10 Last offset
  - ✓ var11 Sampling interval
  - ✓ var12 Samples per trace
  - ✓ var13 Recording delay
  - ✓ var14 Top band width
  - ✓ var15 Document description
  - ✓ var16 Document link
  - ✓ var17 O&M link

query

SELECT

var	sql

FROM

WHERE

ORDER BY

Test

check

Check All



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## Example on Geo-Seas

The screenshot displays the Geo-Seas web application interface. On the left, there is a sidebar with navigation tools like 'Tools', 'Enlarge', 'Position', 'Basket', and 'DETAILS'. The main content area shows search results for a specific seismic line. The results are organized into sections: 'Data Source', 'Observation', and 'Capabilities'. The 'Data Source' section includes details like 'SeismicMethod', 'Dimensionality', 'DataProduct', and 'OverallQuality'. The 'Observation' section includes details like 'SourceType', 'ReceiverType', 'FirstChan', 'LastChan', 'FirstOffset', 'LastOffset', 'MinShot', 'MaxShot', 'SamplingInterval', 'SamplesPerTrace', and 'RecordingDelay'. The 'Capabilities' section includes details like 'TopBandwidth'. The 'Observation' section also includes a 'Result' link to a specific seismic line.

**Data Source**

**characteristics**

**OverallInfos**

**SeismicMethod** Seismic reflection

**Dimensionality** Two-dimensional seismic reflection

**DataProduct** Stacked

**OverallQuality** Good seismic section

**Source**

**SourceType** Aquapulse

**Receiver**

**ReceiverType** Hydrophones

**FirstChan** 1

**LastChan** 24

**FirstOffset** -1

**LastOffset** -1

**Shots**

**MinShot** 379

**MaxShot** 505

**Acquisitor**

**SamplingInterval** 2000

**SamplesPerTrace** 2500

**RecordingDelay** 0

**capabilities**

**TopBandwidth** 250 Hz top-bandwidth multi-channel seismic reflection systems

**documentation**

**Online Resource**

**history**

**observationReference**

**Observation** [http://diam04.ogs.trieste.it/Geo-Seas/C-1031/C-1031\\_oem.xml](http://diam04.ogs.trieste.it/Geo-Seas/C-1031/C-1031_oem.xml)

Search on Geo-Seas  
Look at a specific  
retrieving several  
CDI, one Seismic  
line

O&M description  
of the seismic  
line, made of  
several segments

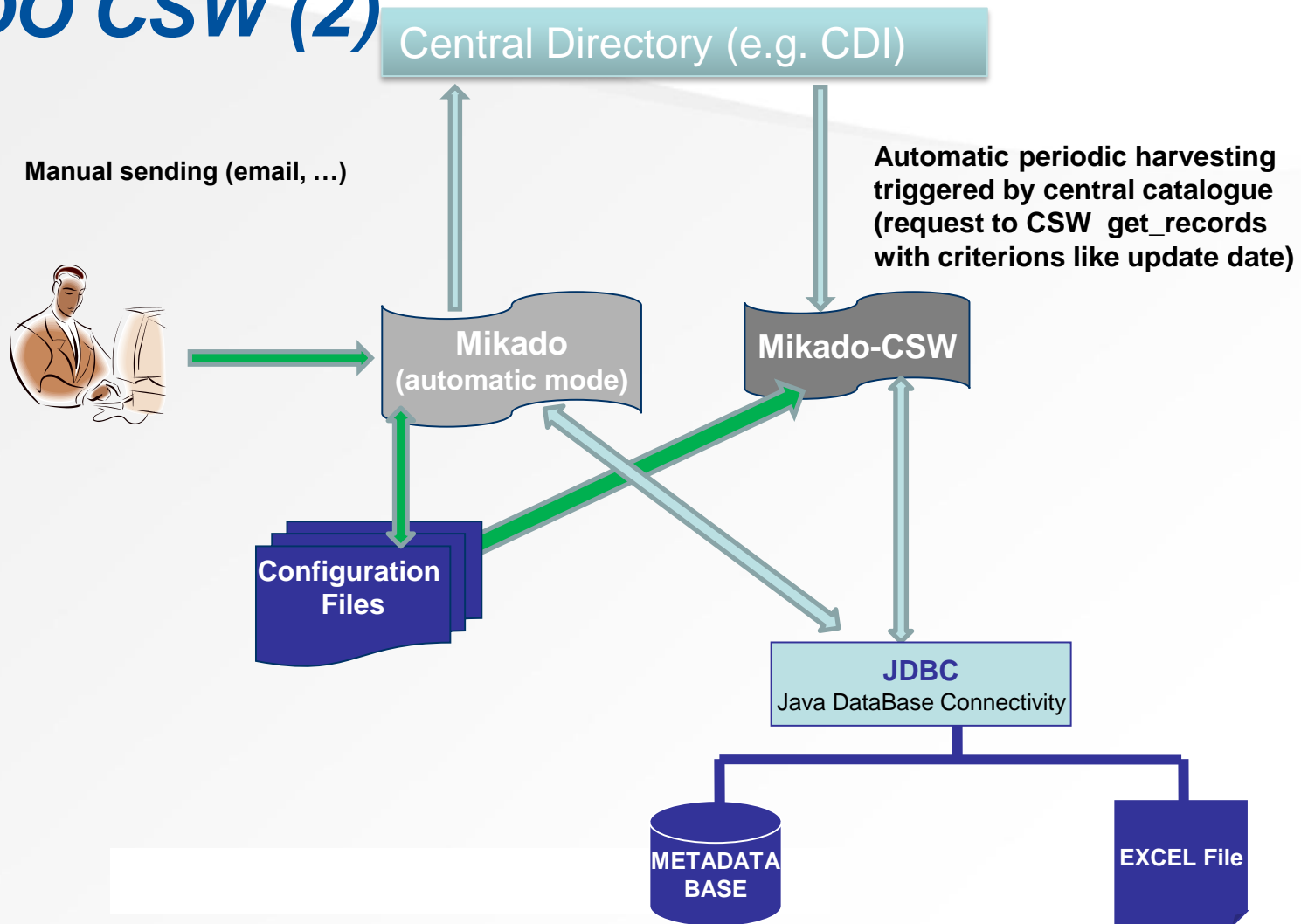
## ***MIKADO, next releases***

- Release 2.5, planned 11/2012
  - For Geo-Seas, new MODUS (4, 5) in the coupling table for the online viewer of seismic data
- Release 3.0, planned 12/2012
  - Support ISO-19139 CDI format for manual edit and batch
    - Interaction needed between Ifremer and CNR for mapping details between ISO-19115 and ISO-19139
  - BODC vocabulary, version 2
    - New services to be included
    - Backwards compatibility with old XML files : Read of old URN and conversion to new ones
  - Pre-requirements
    - Importation tools must be ready for ISO-19139 catalogues and must manage BODC V2 vocabulary

## **MIKADO CSW (1)**

- Why making use of Catalogue Services for the Web to update Central Catalogues?
  - To decrease the delay between updates of Central catalogues
  - To automate the metadata flows from Data Centres metadata repositories to Central Catalogues
- When making use of CSW ?
  - For frequent updates (e.g. new data to be described weekly in CDI)

## MIKADO CSW (2)





## ***NEMO – 3 releases since last plenary***

- 1.3.1 (2 March 2011)
- 1.4.0 (8 July 2011)
- 1.4.3 (24 January 2012)
- 1.4.4 (23 May 2012)
- **1.4.5 (11 July 2012)**
  - Current release

## ***NEMO v1.4.3, released 24 January 2012***

- Several input and output files for trajectories
- Preferences and settings kept when installing a new version of NEMO
- Save a uncompleted model (only some steps are validated)
- To run NEMO in batch mode from any directory
- Mandatory filed are marked by a '\*' in the input screens
- In the Data screen :
  - **Output default value is not mandatory** if the output format is **ODV**
  - **Position of the measured parameters are highlighted** in the file on the screen (check facility)

## ***NEMO v1.4.4, released 23 May 2012***

- Time-series with non-constant sampling rate are supported
- Non numerical parameters can be described in the "Data" screen
- Response time improved for the display of the "Station" screen
- some known bugs have been corrected

## ***NEMO v1.4.5, released 11 July 2012***

- Main changes are bugs corrections detected in Ostende during the training course (2-6 July, 2012)
  - End date of time series with not constant sampling rate
  - Address of the file in the coupling table
  - Default value in ODV format

## ***NEMO next releases – major changes***

- V1.5
  - BODC vocabulary, version 2
  - More checks on user input for separator description
  - Release is ready, wait for BODC V2 official implementation in all SeaDataNet software
- V1.6
  - Conversion to NetCDF format
  - Development will start as soon as NetCDF format is validated : any date?





Any questions?