

Session 4: Indicator, Publishing & Additional Data Types

Document and publish indicators, data access types, brief overview of other data types

Agenda: Session 4 (60 min)

Time	Duration	Topic
15:00	10 min	Microdata catch-up + publish microdata to NADA
15:10	20 min	Exercise 4a – Document + publish indicator
15:30	10 min	Data access types in NADA
15:40	5 min	Other data types (brief overview, if time)
15:45	10 min	Review all published entries & feature demo
15:55	5 min	Day 1 wrap-up

Part 1: Publish Your Microdata Project

Complete S3 + Publish to NADA (10 min)

If you did NOT finish Exercise 3b in Session 3:

- Quickly complete remaining steps
- Fill in any missing fields: abstract, topics, questionnaire upload

Then publish your microdata project:

1. Open your microdata project in Metadata Editor
2. Click **Publish to NADA**
3. Enter your **NADA catalog URL**: `https://nada.lsb.lao-stat.de`
4. Enter your **API key** (created in Exercise 1c)
5. Select data access type: **Public Use Files** (or Open Access)
6. Click **Confirm**
7. Verify on nada.lsb.lao-stat.de

Part 2: Exercise 4a – Document an Indicator Dataset (20 min)

Reference: [World Bank Indicator Quick Start Guide](#)

What are indicators?

Indicators are summary statistics that measure progress toward goals. Examples:

- Poverty headcount ratio (% of population living below poverty line)
- Life expectancy (years)
- School enrollment rate (%)
- CO₂ emissions per capita

Key differences from microdata:

- **Microdata:** Individual-level records (each row = one person/household)
- **Indicators:** Aggregated summary values (poverty rate = single number per country/year)
- **Metadata focus:** Instead of variables, indicators define a **series** (what is being measured?) and **time/geographic coverage** (where, when?)

Today's exercise uses: Poverty headcount ratio CSVs from World Bank + thumbnail image

Exercise 4a: Key Takeaway – Indicator vs. Microdata Metadata

What we just learned:

Aspect	Microdata (DDI)	Indicator (World Bank schema)
Record type	Individual-level	Aggregated summary
Key metadata	Variables, value labels, codebook	Series definition, units, coverage
Data import	Single file + variable enrichment	Multiple CSVs or linked datasets
User question	"What are the details?"	"What is the current status?"
Documentation effort	Medium-high (variables)	Low-medium (series definition)

Publish Your Indicator to NADA

Same workflow as document and microdata

1. Open your indicator project in Metadata Editor
2. Click **Publish to NADA**
3. Enter your **NADA catalog URL**: `https://nada.lsb.lao-stat.de`
4. Enter your **API key** (created in Exercise 1c)
5. Select data access type: **Open Access** (public statistics)
6. Click **Confirm**
7. Verify on nada.lsb.lao-stat.de

All three projects are now published! Document (S3) + Microdata + Indicator.

Data Access Types in NADA (1/3)

Control who can access your data – per study

NADA controls access at the **study level** for microdata and geographic datasets. Restriction levels range from fully open to no access.

Open Access Data Files

Data can be downloaded and used without restriction. Should be published under an open data license. No login required, no personal information collected.

Direct Access Data Files

Data can be downloaded without restriction, but some **use restrictions** may apply (e.g., no commercial use). No login required, no personal information collected.

Data Access Types in NADA (2/3)

Public Use Data Files (PUF)

User must be **logged in and registered** on the site. User agrees to **terms of use** before downloading. The system keeps records of who downloads the data.

Licensed Data Files

User must be logged in and registered. User submits a **detailed application form** explaining their reasons for wanting access. System administrator **reviews and approves** the application before access is granted.

Data Access Types in NADA (3/3)

Data Available from External Repository

Study metadata is listed in NADA, but a **link points to another site** where the actual data files are hosted.

Data Available in an Enclave

No data shared through the application. Users submit an application to access data at a **secure facility** physically located on the premises of the data producer.

Data Not Available

Data are not available for this study. Only **metadata and related materials** (e.g., study report) are published.

Data Access Types: Discussion

For our training projects

We used these access types today:

- **Document project:** Open Access (public publication)
- **Microdata project:** Public Use Files or Open Access (synthetic, no privacy risk)
- **Indicator project:** Open Access (public statistics)

Discussion: Why might a real census microdata choose "Data enclave only" vs. "PUF"?

Day 1 Wrap-up: Learning Outcomes (1/2)

What you accomplished in Day 1 (Sessions 1-4)

- [x] Understand what metadata is and why it matters
- [x] Know key metadata standards (DDI, Dublin Core, ISO 19139, SDMX)
- [x] Understand NADA/Metadata Editor ecosystem
- [x] Prepare data for documentation (quality, organization, privacy)
- [x] Navigate Metadata Editor interface
- [x] **Document a document project (Dublin Core / MARC21 / BibTex metadata)**
- [x] **Document a microdata dataset (DDI Codebook 2.5)** ← Exercise 3
- [x] Import data files + work with auto-extracted metadata
- [x] Add external resources (questionnaires, reports, thumbnails)

Day 1 Wrap-up: Learning Outcomes (2/2)

Core functions mastered

- [x] **Document an indicator dataset (World Bank schema)** ← Exercise 4a
- [x] **Published each project to NADA directly after documentation**
- [x] Understand data access types (Open, PUF, Licensed, Enclave, etc.)
- [x] Understand ALL Metadata Editor core functions:
 - Project creation and navigation
 - Study, file, and variable metadata entry
 - External resource management
 - Publishing workflows (live + draft)
 - Permissions and role-based access

Congratulations — you've completed the full metadata documentation and publishing pipeline for three different project types!

Preview: Day 2 (Tomorrow)

Morning (09:00–12:00):

- **S5:** Day 1 recap + NADA implementation showcases (other countries' catalogs)
- **S6:** End-to-end cataloging workflow + LNADA reconstruction strategy + NESSTAR migration planning

Afternoon (13:30–16:00):

- **S7:** NADA system administration (architecture, installation, users, security)
- **S8:** Platform configuration, backup/disaster recovery, maintenance, wrap-up, Q&A

Key themes for Day 2:

- Real-world metadata challenges (LSB-specific data types, large cataloging projects)
- Scaling up: from documenting 3 projects to cataloging hundreds
- System administration: keeping LNADA running, secure, and maintainable
- Strategic planning: how to rebuild LNADA to serve Lao Statistics Bureau's needs

Part 4: Other Data Types – Brief Overview (10 min, if time)

Quick reference for additional metadata types

The Metadata Editor supports several data types beyond document, microdata, and indicator:

Type	Standard	Use case	Quick start file
Geographic	ISO 19139 (GML/XML)	Maps, shapefiles, spatial data	quick_start_files/geographic/
Image	IPTC/EXIF	Photos, satellite imagery	quick_start_files/image/
Video	Schema.org VideoObject	Video recordings, documentaries	quick_start_files/video/
Script	Custom schema	Code repositories, analytical scripts	quick_start_files/script/
Table	SDMX or CSV metadata	Statistical tables, time series	quick_start_files/table/

Optional activity:

- If time permits, open one quick start file (e.g., geographic)
- Create a project, import the sample file
- See how metadata differs from microdata/indicator
- These can be explored in Day 2 if participants are interested