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IWH

MDI:
Where We Stand and Where We're Going

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MDI Team

- **MDI's Purpose:** Harmonise firm-level data across countries and simplify cross-country analysis for various **research topics**

- **MDI's Functionality:** Standardised environment for running **identical analyses** across multiple **NSIs**, ensuring data comparability and accessibility

- **MDI's Stakeholders: NSIs** provide data and access, **researchers** create research modules, and **MDI staff** manage the infrastructure and support users

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The Data

MDI: allows replication of analysis in each country on harmonized firm-level datasets

Community
Innovation Survey

ICT / e-Commerce
Survey

Structural Business
Statistics

Business Register

ProdCom

Balance Sheet
Statistics

*Energy Consumption
Surveys*

International
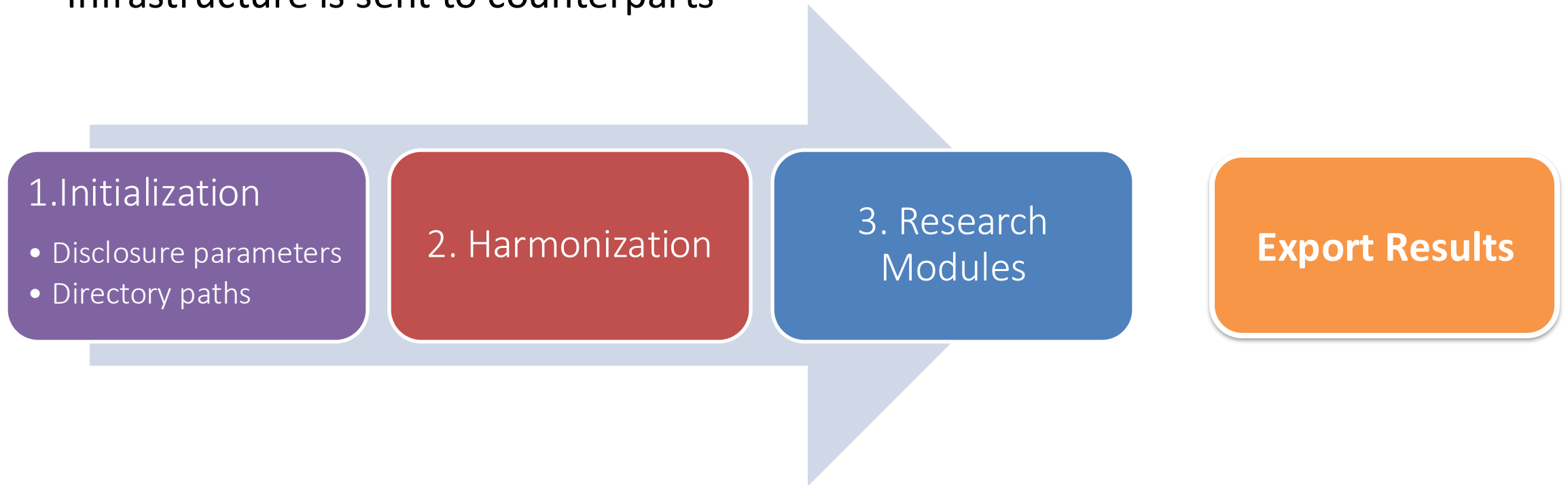Sourcing Survey

International Trade
Statistics

- For each dataset, **same list of indicators** with **Firm-level** data
- Time **coverage**: 2000-2022 (with discrepancies across countries)
- The MDI system will be used to **generate the CompNet** micro-aggregated **data** in future vintage

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- Creation of **metadata** at each NSI

  - Document in **machine** and **human readable format** the **datasets** and **variables available** at each NSI

- **Definition** of **MD datasets** and indicators

  - Define **mappings** from **national datasets** and variables **to harmonized MD datasets** and variables

- Provision of R-based **MDI infrastructure**

- Provide **tools** for **metadata creation**, **harmonization**, **research** modules, **disclosure** analysis for **export** of results.

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The Launch process

- All NSI metadata for the raw data is prepared
- All MD metadata and mappings are prepared
- Infrastructure is sent to counterparts

1.Initialization	2. Harmonization	3. Research Modules	Export Results
• Disclosure parameters • Directory paths			

- We've had **3 launches** so far

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Access and export costs

Country	Yearly access cost (€, 1 user)	Launch cost (€, ≈25 files)
AT	1705.44	343.92
FI	*no direct access*	free
FR	≈ 1792.00*	≈ 31.80**
NL	2127.00	≈ 250.00
SI	free	free
PT	*no direct access*	free

*Total yearly cost for CASD data access divided by the number of users we currently have.
**Assuming it takes 30 minutes for output revision, which for Launch 2.1 was the case.
***Assuming output revision takes a similar time as for Launch 2.1.

Making sure **output** is **properly structured** for disclosure is key!
→ Lower extraction costs
→ Shorter extraction time

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1. MD datasets

- Constructed **only** using metadata & concordance tables in all countries

- Yearly cycle for updates of MD datasets (discussions with stakeholders on variable definitions, unit of measurements, new variables etc.)

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2. Automating CompNet data construction with MDI

- Pivotal role of NSI metadata

- Mapping to CompNet indicators

- Use NSI capacity for annual updates to underlying files and metadata

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3. Research coordination for NPBs

- Collaborate with NPBs on research, including tools, methods, analyses, best practices for analytics and data quality

- Implement a *light* system for cross-country stakeholders, MDI team, and NPBs to interact

- Structure for managing thematic projects across NPBs, including team coordination, GitHub usage, and standardisation for research

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Q&A – Open Discussion!

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