Towards a sound data basis for Environment Statistics

Michael Nagy & Eva Milota
Pyramid(s) of Information

Information Pyramid (source EUROSTAT)

Primary information from surveys, registers etc.

Accounting systems

Indicator (sets)

CL

Specific Purpose

Multi-Purpose

Audience „Pyramid“
Overlaps and Duplications of Data Flows (Example)

Urban and Industrial Wastewater and Sewage Sludge

NSI

MoE

MoA

WW Volumes

WW Volumes

WW Quality

Sewage Sludge quantity

Sewage Sludge Quality

Sewage Sludge Quality
## Groups of Data Producers / Reasons for Data Production

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Proposed Criteria for Data Providers

• Representativeness

• Structured data collection which is repeated

• Sound statistical principles (or similar)
Data Sharing / Duplication of Data Flows

• Same kind of data produced, but different...
  • ... context
  • ... coverage
  • ... definitions / classifications
  • ... accuracy
  • ....
Data Sharing / Duplication of Data Flows

• Contradictory results? Data not complementary?
  • Sewage sludge quantities generated: MoE (Water Dept.)
  • Sewage sludge quantities used in agriculture: MoA
  • Sewage sludge treatment and disposal: MoE (Waste Dept.)

• Legal Framework (LF) for data sharing exists, but still problems?
  • LF to weak for particular data flow
  • Who covers financially the additional efforts?
  • Unclear situation related to data protection
  • Data flow from administration to NSI works, but not the other way around (for non-aggregated data)
Possible Solution: National Data Collection Strategy

- NSIs are key stakeholders, next to public administration (+ some research institutes)
- High-level agreements and inter-institutional steering is needed
- Legal Framework to be developed or modified
- Common framework needed (consistent with other frameworks)
- Build upon eGov-Strategy (if existing in the country)
- Common guiding rules
- Technical agreements concerning primary data:
  - Temporal and spatial disaggregation
  - Reporting units
  - Statistical classifications can be applied
  - Common reference data sets are used
  - Data can be linked with data from other institutions (use of common keys etc.)
Example Austrian NAMEA

Data sources:
• Statistics Austria
• Ministry of Agriculture, Forestry, Environment and Water Management
• Ministry of Economy, Family and Youth
• Austrian Environment Agency
Conclusion

Environment Statistics is multidisciplinary:

- Data producers for each topic have to be clearly identified
- Data collection strategy to be developed and implemented. Goal: multiple use of data
- High-level agreements / legal framework important
- Existing eGov-Strategy could provide the strategic / organisational frame
- Existing data collections may be needed to be modified to fit statistical criteria (quality, classifications, statistical units,...)

- Common framework or clear understanding of the links between the different frameworks needed
Thank you for your attention!

eva.milota@statistik.gv.at
michael.nagy@umweltbundesamt.at