Irish approach to data stewardship in the environment domain

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Overview of Presentation

• What is ‘Data Stewardship’?
• The Irish context for the environment domain
• Stewardship services most relevant for the domain
• Conclusions
## Data stewardship – all data organisations

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<th>Data management/technical</th>
<th>Ethics and legal</th>
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<td>Maintaining metadata and classifications codes</td>
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<td>Liaising with external providers for metadata and life cycle</td>
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<td>Liaising internally for quality</td>
<td>Monitoring ‘once only’ principle</td>
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<td>Making internal and external data available based on FAIR principles</td>
<td>Overseeing quality and security processes</td>
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Role of ‘the Data Steward’

• Makes sure all the pieces fit together overall and in Public Sector Bodies (PSBs)
• Public sector data needs to be fully exploited in the public interest
• DS ensures technical standards are in place, or develops new standards if not available – mix of strategy, oversight and operational roles
• Ensures right mix of skills is available so that PSBs can exploit their data
• Plans ‘who does what’ in public service data analysis, and ensures that the system has services in place to facilitate this (or provides them if missing)
• National context crucial in defining this role – formal or informal roles of other PSBs, level of analytical capacity, data maturity, data sharing, etc
Irish context for the environment domain

- Irish statistical system is centralised – not for environment
- PSBs normally have straightforward statistical reporting (operational processes more complex) – not for environment
- Data sharing for policy between PSBs is limited in Ireland
- Most of Irish environmental data is in the public sector
- Mix of CSO stewardship services appropriate to this context
Service 1 - Partnerships

- Partnerships essential for NSO’s as ‘we don’t know it all’ (particularly in environment) and we need to increase our influence in the system
- We have a mix of partnerships under Memoranda of Understanding and liaison groups – focus on data management, analysis or both
- Particularly important since GDPR – but ‘soft influence’ important too as we need data improvements and policy input to analysis projects
- Partnerships with Environment PSBs include liaison groups, joint projects and separate projects of mutual interest and now programmes of work
Service 2 - Secondments

- Secondees are our representatives in PSBs – 38 in 16 PSBs
- Increases our level of day-to-day influence beyond MoU/liaison groups
- PSB’s have an incentive to improve their data when they have the skillsets to exploit data for decision making
- Involved in non-statistical data analysis work – PSB decides and pays
- In the environment domain – complementary to existing scientific and statistical skills rather than a ‘takeover’! Also, programmes of work
- More scope for intermediation of our stewardship services – more later
Service 3- Multi-dimensional analysis

• Gerry Brady is presenting on environment analysis in Session 3
• Limited data sharing in Ireland for policy analysis – CSO has an important role in linking socio-economic and domain contexts, incl. environment
• We have an excellent and improving system of identifiers for data linkage, despite not having population registers
• In general, we facilitate requests with our Official statistics/open data, ‘pathfinder projects’, microdata access – ‘pyramid of services’
• New service – ‘Data Science and Statistical Support Unit’
Service 4 – Researcher access

- National and EU demands (including ‘Green Deal’ data spaces) to improve access to pseudonymised data
- Our Researcher Microdata Files (RMFs) have been mainly based on primary data collected by CSO so far
- Administrative data access has further governance requirements for ethics, consent, public interest, etc. (COVID experience)
- Huge potential in the environment domain – big data, synthetic data, linked RMFs
Service 5 - Accreditation

- Irish Statistical System Code of Practice – experience to date
- Particularly highly valued by Environment PSBs
- In addition to secondments, acts as a further conduit for CSO stewardship services (including dissemination supports)
- CSO has responsibilities in the European System (ESS) anyway
- ESS Peer Review outcomes
Service 6 – Quality and Methodology

- Quality Management Framework rolling out to PSBs – more detail on the supports available in the paper
- Again, highly valued by Environment PSBs – we in CSO learn from the experience too
- Methodological advice available to PSBs on an ad hoc basis – may also be of value for complex methodologies in the environment domain (e.g. ‘nowcasting’ in energy balances)
Conclusion

• Data stewardship is something we all need to think about
• Potential NSO role as ‘steward’ is specific to the National AND domain/situation context – COVID example and now Ukraine
• Different mix of services required in each domain
• Environment domain is ideal for a partnership based approach
• Apart from partnering services, the NSO role derives from data access and linkage – socio-economic context for the ‘just transition’