

Recommendation 4.2

Recommendation to Sample curators to train staff in handling IGSN

Description

Status:

Motivation for this Recommendation:

Sample curators are well-positioned to take a leading role in promoting the use of IGSNs, as they possess the expertise and oversight necessary to ensure high-quality sample documentation. By actively encouraging and training researchers, technicians, and other staff to register IGSNs and record sample relationships, curators help establish consistent practices across projects and departments. This not only reduces the risk of metadata loss or inconsistency but also strengthens the traceability and reproducibility of research. Empowering a broader group of staff to apply IGSNs correctly supports long-term stewardship of sample records and ensures that sample-based data can be reliably reused, cited, and linked to other research outputs.

Recommendation

It is recommended, that sample curators:

- 1. Enable, train and encourage staff, including researchers, technicians, and other people who take samples, split samples or create subsamples to register IGSN to be able to identify these samples where appropriate.
- 2. Enable, train and encourage staff, including researchers, technicians, and other people who split samples or create other types of subsamples to record any parent IGSNs with these subsamples.

To answer - Who exactly are sample curators? Where to do this?

Binding Convention:

	mandatory	conditional	optional
Helmholtz FAIR Principle			

Precondition for Implementation:

Related Recommendations

Parent: [M4.0 Recommendation to use IGSN as the standard reference in technical infrastructures to samples where appropriate](#)

Dependent: none

Other: none

Contributors

Names of contributors to this recommendation

Content

1. Explanation of the Background and Benefits of the Recommendation

The IGSN (International Generic Sample Number) was developed to address long-standing challenges in the consistent identification and citation of physical samples in research. Earlier practices often relied on local naming conventions or internal codes, which lacked global uniqueness and hindered long-term traceability—especially when samples were reused, transferred, or cited in publications. Initial IGSN implementations focused primarily on geosciences, particularly in large-scale programs like IODP (International Ocean Discovery Program) and SESAR (System for Earth Sample Registration), demonstrating the value of persistent identifiers in managing complex sample workflows. Today, IGSN use is expanding across disciplines, including environmental and life sciences, supported by allocating agencies and tools that enable automated registration and metadata integration. In this context, sample curators are key to ensuring that the benefits of IGSN—such as reproducibility, provenance tracking, and interoperability—are realized in practice by embedding them into sampling routines and training processes.

Motivation

Sample curators are well-positioned to take a leading role in promoting the use of IGSNs, as they possess the expertise and oversight necessary to ensure high-quality sample documentation. By actively encouraging and training researchers, technicians, and other staff to register IGSNs and record sample relationships, curators help establish consistent practices across projects and departments. This not only reduces the risk of metadata loss or inconsistency but also strengthens the traceability and reproducibility of research. Empowering a broader group of staff to apply IGSNs correctly supports long-term stewardship of sample records and ensures that sample-based data can be reliably reused, cited, and linked to other research outputs.

2. Possible alternative solutions

3. Consideration of the advantages and disadvantages of implementing the recommendation

See [the general discussion of advantages and challenges implementing IGSNs in the recommended way](#).

4. The Recommendation

[Format: Wer! macht was! wo! wann! unter welchen Voraussetzungen!]

5. Naming of communities that have already implemented the recommendation

6. Documentation of the test to validate correct implementation

7. Examples of Instances

8. Further Information

References

Relevant Community Recommendations

9. History of this document

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