

IS-ENES2 collated requirements

- [Introduction to IS-ENES2](#)
- [Requirements gathered](#)
 - [General requirements](#)
 - [Identification and citation](#)
 - [Curation](#)
 - [Cataloguing](#)
 - [Processing](#)
 - [Optimisation](#)
 - [Provenance](#)
 - [Community support](#)
- [Summary and conclusions](#)

Introduction to IS-ENES2

Requirements gathered

General requirements

General requirements for IS-ENES2

Use case 1: Data producers submit model data results to IS-ENES data nodes. Data is quality-checked and published in IS-ENES/ESGF data infrastructure. All data items are uniquely identified. Data is long term archived. Data aggregates (experiment level) are assigned DOIs. DOIs are used by end users in scientific publications. DOI-assigned data aggregates are published in various Metadata Catalogues e.g. in world data centers for climate.

Use case 2: End user of IS-ENES data infrastructure encounters problems (technical or scientific). End user contacts IS-ENES/ESGF user support (organized in first/second level support, second level support internationally distributed). General problems are documented in FAQ site.

Use case 3: End user wants to process large amounts of data. Three possibilities to do this:

A) Download and process at home institute. This is supported via a bulk data download and synchronization tool for IS-ENES/ESGF sites.

B) Contact a large IS-ENES/ESGF site who already has the required data available (replicated from other sites) and process there (personal interaction necessary to get account and permission at the site). This is supported by the user support service.

C) Contact a web processing service or a portal providing (parts of) the requested analysis functionalities. This supported by the IS-ENES climate4impact portal (<https://climate4impact.eu/>) as well as by IS-ENES/ESGF web processing services (not yet fully in production)

Some more detailed IS-ENES use cases were submitted to the RDA (Research Data Alliance) Data Fabric interest group as well as Data Repository interest group and are available at:

<https://rd-alliance.org/enes-data-federation-use-case.html> and <https://rd-alliance.org/climate-data-analytics-use-case.html> .

Identification and citation

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Summary and conclusions