

International Reference Life Cycle Data System (ILCD)

Documentation of LCA data sets

Final Draft

Version 1.1 beta

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First edition

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1 Overview

This document provides the provisions for ILCD documentation-compliant LCA data sets under the ILCD Handbook and ILCD Data Network. The document also lists the general possibilities of the ILCD data set format for the documentation of LCA data sets for technical audience (e.g. LCA practitioners and reviewers). The term “LCA data sets” is used here as cover term for the following types of data sets: Process data set, Flow data set, Flow property data set, Unit group data set, Source data set, and Contact data set. The latest addition is the LCIA method data set.

Figure 1 shows the inter-relationships of these data set types, with the Process data set being the key data set, as it provides the Life Cycle Inventory. Via the characterisation factors of the LCIA method data set, LCIA results can be calculated from the process data set's inventory.

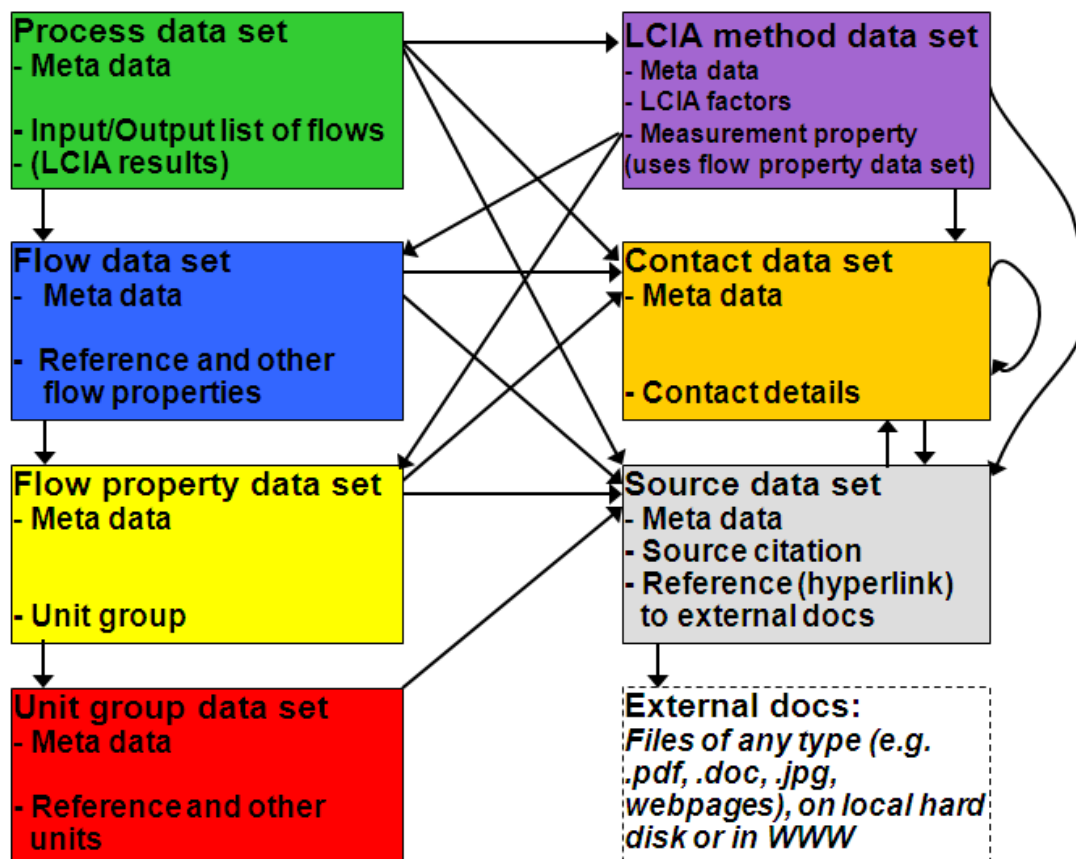


Figure 1 Inter-relationship of the data set types of the ILCD format and their core content, schematic.

Documenting data sets according to the provisions of this document ensures that the LCA practitioner gets the information that he/she needs to judge the quality and appropriateness of a data set for the specific application.

The ILCD data set format ensures that the information is provided in a well structured way and supports information loss-free electronic data exchange, avoiding errors that occur e.g. in manual transfer.

Note that applying the provisions of this document does not imply that the data meets a certain quality requirement or that the data set would be endorsed by any organisation.

Most but not all of the ILCD documentation provisions are also implemented in compliance stylesheets of the ILCD data set editor. These stylesheets support an efficient automatic checking of individual data sets and whole databases regarding the compliance of the extent of the documentation. However, the correctness and appropriateness of the documentation content can of course not be part of an automated check, but is to be judged by the LCA practitioner and/or reviewer.

Note that depending on the intended application (e.g. support of comparative studies) and target audience ("third-party report") of a data set and studies it is meant to support, further information may be mandatory in line with ISO 14044 and the ILCD Handbook.

2 Detailed provisions for LCA data set documentation

2.1 IT compatibility of data set files

An LCA data set complies with the ILCD data set format from IT perspective, if the data set is "ILCD format schema valid", i.e. it is actually provided in the ILCD format as defined in the XSD schema files and corresponding files. Note that this does not imply ILCD-compliant documentation, which includes also the extent and correctness of the documentation (see below).

[Note to developers: This schema-validity is also fulfilled if additional "namespaces" (i.e. for additional fields defined in other formats that may be integrated into the data set) are included in the data set, in the way specified in the ILCD schema files.]

2.2 Extent of ILCD documentation

The following sub-chapters provide the detailed provisions on the scope of documentation.

The ILCD data set format is made for wide compatibility and for allowing a complete documentation of the data sets. In practice, typically only a part of the total documentation possibilities will be regularly used. To guide provision of appropriately documented datasets and to ease/focus regular use, the tables of the following chapters define therefore the minimum requirements for a well documented, i.e. **"ILCD documentation-compliant"** LCA data set. To meet the minimum requirements for ILCD-compliant documentation, at least all the documentation sections and fields (i.e. elements) given in the following sub-chapters are present and used as defined in the ILCD format.

Note that some requirements refer to the informatics / technical format of the presented information, others to the correctness / appropriateness and extent of the information. The latter can not be judged automatically but has to be verified by e.g. a reviewer.

! Note that depending on the intended application (e.g. support of comparative studies) and target audience ("third-party report") of a data set and studies it is meant to support, **further information may be mandatory in line with ISO 14044 and the ILCD Handbook**. This includes e.g. documentation of the data collection procedures, lists of excluded processes and flows, a list of assumptions made, and other items that may alternatively be attached to the data set in a LCI study report. These items and the corresponding field (if any) beyond the basic documentation compliance requirements are NOT again identified in the following tables. Details see under "Reporting" in the "ILCD Handbook - General guide for LCA".

2.3 How to read the tables

Meaning of the key information columns in the following tables

- **“Max. No. characters”**: The maximum permissible number of characters is an additional compliance constraint below the number that is technically permitted for the given field type by the ILCD format. This serves to better differentiate the maximum number of chapters in a field (avoiding e.g. data set names of 500 characters) without introducing too many field types.
- **“Compliance requ. type”**: This column identifies which fields are to be filled in to have a **ILCD format schema valid data set (entry “V”)** and a **appropriately documented “ILCD documentation-compliant” data set according to this document (entry “C”)**. In the exceptional case that a specific field can also be empty, this is stated below by putting the requirement type into brackets (e.g. “(C)”). “O” means optional. Please note that depending on the specific data set, the use of some otherwise not required fields can be required to provide accurate information. For example, if it is stated that an independent external review has been performed, the reviewer name and the review results are to be given as well. This is to be judged case-wise by the LCA practitioner and/or reviewer. In some frequently relevant cases this is pointed out in the tables of the following chapters in the "Comment" column: **only in the specified cases the field is a required “C” field, otherwise its use is optional.** (Note also that the entries of this column are similar while not identical as those of column “Requ. filter indicator”; column “Requ. filter indicator” may serve as a general filter for the format fields for use in e.g. LCA software or editors.)
- **“Indicative text lengths IF field in use (chars)”**: The range given indicates a **typical extent of text** to be expected for an appropriately documented data set. This is however NOT a formal requirement that would need to always be met. [Note for developers: This information can be used to automatically check for deviations below or above the range and to provide feedback to the LCA practitioner.]
- **“Mandatory entry (if any)”**: The required specific entry is given here, in case such is mandatorily to be entered for an appropriately documented ILCD data set.

The columns with grey column heading provide additional information for IT developers interested to support ILCD documentation-compliance with electronic check.

Meaning of the text colours in the following tables

- To ease the use of the following tables, for all entries that may actively to be dealt with by the LCA practitioner, the text is highlighted in dark green.
- **Among those entries that may need to be addressed by the practitioner, the REQUIRED entries (i.e. for “ILCD format schema valid” and “ILCD documentation-compliant” data sets) are further highlighted in bold.**
- For fields that are assumed to be filled in always by the LCA software tool or editor without user-interaction and fields that are just section or subsection

headings and need hence no entry are set in grey. Also all columns in the tables that are of no particular interest to the practitioner (while to IT implementers), the text is set in grey.

- The practitioner also has no direct interaction with the fields “Other content”, i.e. the “namespace” extension points. The text in these rows is set in white.

2.4 Process data set

Preceding remark: How much effort is it to appropriately document a Process data set?

By pre-defining entries and requiring condensed text information, the effort to document a process data set in the ILCD format is by far lower than writing a full LCI study report. At the same time the data set already provides virtually all relevant information to the user and eases electronic exchange and management of the information: An appropriately documented process data set therefore can fulfil - together with background method reports - the ISO 14044 requirements for a "Third party report".

On the effort, for orientation and referring to a typical¹ data set: The data set type "Process data set" has a total of 123 fields that can carry a specific entry (i.e. without counting the 41 section and subsection headings that only structure the data set). 4 of these fields are mandatory for a schema-valid data set (and these are typically filled in automatically, e.g. the UUID and the data set version number), and 64 are required for an "ILCD documentation compliant" data set. Of these 64 fields, 54 are to be dealt with by the LCA practitioner (respectively reviewer). The other 10 fields are always automatically filled in by the LCA software or editor.

However, of the 54 fields that are to be handled by the practitioner and that are required for an appropriately documented ILCD data set, for 20 fields the practitioner is to select entries from predefined lists, e.g. via pull-down menus. 10 fields are references to other data sets (Source, Contact, Flow, or LCIA method data sets). (For the extent of information documented in these referenced data sets, see the subsequent chapters). Several of the other fields can often also automatically be filled in by the LCA software, especially can organisation-wide or user-specific defaults be defined on e.g. data set modeller, copyright, LCI method principle, etc. Only 20 fields require the practitioner to actually provide a short freely formulated text entry and 4 to enter numbers. In many cases several of the above counted 20 text fields will need to carry the entry "none" (e.g. in case of no deviations from method approaches, no access restrictions, etc.), limiting the actual effort. While a number of fields can have multiple occurrences (e.g. references to sources used, input/output flows, etc.), none of these multiple occurrence fields is a free text field. For all data set types case-wise it can be necessary to fill in additional fields to correctly document a data set; this is to be judged case-wise.

In addition to the fields in the Process data set, the referenced e.g. flow, contact and source data sets need to be documented as well; these are regularly reused across the various Process data sets.

¹ Note that for parameterised data sets 5 additional fields are to be filled in.

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|-------------------------------------|---------------------------------|------------------------|----------------|------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Process data set | <i>processDataSet</i> | <i>m</i> | [1,1] | | | V | | | | 1 |
| version | @version | m | | <u>SchemaVersion</u> | | V | | | The actual ILCD format schema version is to be referenced. | 1-a |
| location | @locations | m | | <u>String</u> | | V | | | The file ILCDLocations.xml should be referenced, or another locations-file that includes the specified locations of the ILCDLocations.xml file. | 1-b |
| Meta data only | @metaDataOnly | o | | <u>boolean</u> | | C | | | „yes“ only for data sets without the Inputs and Outputs and Mathematical model sections, i.e. for a purely descriptive meta data set without inventory data. | 1-c |
| Process information | <i>processInformation</i> | <i>m</i> | [1,1] | | | V | | | | 1-1 |
| Key Data Set Information | <i>dataSetInformation</i> | <i>m</i> | [1,1] | | | V | | | | 1-1-2 |
| UUID of Process data set | UUID | m | [1,1] | <u>UUID</u> | | V | | | | 1-1-2-1 |
| Name | <i>name</i> | r | [0,1] | | | C | | | | 1-1-2-2 |
| Base name | <i>baseName</i> | r | [1,1] | <u>StringMultiLang</u> | 100 | C | 10 ... 50 | | Naming conventions of the „ILCD - Nomenclature and other conventions“ document shall be applied. | 1-1-2-2-1 |
| Treatment, standards, routes | <i>treatmentStandardsRoutes</i> | r | [0,1] | <u>StringMultiLang</u> | 100 | C | 5 ... 30 | | Naming conventions of the „ILCD - Nomenclature and other conventions“ document shall be applied. If - in rare cases - the field has no meaningful entry, enter a blank (" "). | 1-1-2-3 |
| Mix and location types | <i>mixAndLocationTypes</i> | r | [0,1] | <u>StringMultiLang</u> | 100 | C | 5 ... 30 | | Naming conventions of the „ILCD - Nomenclature and other conventions“ document shall be applied. If - in rare cases - the field has no meaningful entry, enter a blank (" "). | 1-1-2-4 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------------------|----------------------------------|------------------------|----------------|---------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Quantitative product or process properties | functionalUnitFlowProperties | r | [0,1] | StringMultiLang | 100 | C | 5 ... 30 | | Naming conventions of the „ILCD - Nomenclature and other conventions“ document shall be applied. If - in rare cases - the field has no meaningful entry, enter a blank (" "). | 1-1-2-5 |
| <i>Other content</i> | <i>other</i> | o | [0,1] | | | O | | | | 0 |
| Identifier of sub-data set | identifierOfSubDataSet | o | [0,1] | String | | O | | | | 1-7-32-131 |
| Synonyms | synonyms | o | [0,1] | FTMultiLang | | O | | | It is recommended to ease the identification of monofunctional processes by adding synonyms, be it synonymous chemical names, trivial names or brand names. | 1-1-2-6 |
| <i>Complementing processes</i> | <i>complementingProcesses</i> | o | [0,1] | | | O | | | | 1-1-2-8 |
| Complementing process | complementingProcess | o | [1,n] | GlobalReferenceType | | O | | | | 1-1-2-8-1 |
| <i>Classification information</i> | <i>classificationInformation</i> | r | [0,1] | | | C | | | | 1-1-2-7 |
| <i>Classification</i> | <i>classification</i> | r | [0,n] | | | C | | | | 1-1-2-7-2 |
| Name | @name | r | | string | 100 | C | 10 ... 75 | | The classes of the file ILCDClassification.xml shall be used. Classes of additional classification systems can be added only via separate "Classification" field sets. | 1-1-2-7-2-a |
| Classes | @classes | r | | anyURI | | C | | | | 1-1-2-7-2-b |
| <i>class</i> | <i>class</i> | r | [1,n] | | | C | | | | 1-1-2-7-2-1 |
| Hierarchy level | @level | r | | LevelType | | C | | | | 1-1-2-7-2-1-a |
| Unique class identifier | @classId | r | | string | 200 | C | 1 ... 150 | | The classes of the file ILCDClassification.xml shall be used. Classes of additional classification systems can be added only via separate | 1-1-2-7-2-1-b |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------------------------------|----------------------------------|------------------------|----------------|-----------------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| | | | | | | | | | "Classification" field sets. | |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| General comment on data set | generalComment | o | [0,1] | FTMultiLang | | O | | | | 1-1-2-12 |
| Data set LCA report, background info | referenceToExternalDocumentation | o | [0,n] | GlobalReferenceType | | O | | | It is recommended to provide a more comprehensive documentation via a referenced/attached LCI study report, ideally using the ILCD report template (which is optional). A report is required, if the data set is foreseen to be used for comparative studies and the documentation inside the data set does not meet the requirements of a "Third-party report" under ISO 14044 and the ILCD. | 1-1-2-13 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Quantitative reference | quantitativeReference | r | [0,1] | | | C | | | | 1-1-4 |
| Type of quantitative reference | @type | r | | TypeOfQuantitativeReferenceValues | | C | | | Recommended to be of the type „Reference flow(s)“. | 1-1-4-15 |
| Reference flow(s) | referenceToReferenceFlow | r | [0,n] | Int6 | | C | | | If "Type of quantitative reference" is "Reference flow", at least one reference flow is to be identified among the input/output product or waste flows. | 1-1-4-16 |
| Functional unit, Production period, or Other parameter | functionalUnitOrOther | r | [0,n] | StringMultiLang | | C | 20 ... 100 | | Required ("C"), if field "Type of quantitative reference", is of type other than "Reference flow(s)". However also if of type "Reference flow(s)", it is recommended, to additionally give one or more functional units for the reference flow(s). If | 1-1-4-17 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|--------------------------------------------|----------------------------------------------|------------------------|----------------|----------------|---------------------|----------------------|-------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| | | | | | | | | | the data set is foreseen to be used in comparative studies, this might be a formal requirement under ISO. | |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Time representative | time | r | [0,1] | | | C | | | | 1-1-6 |
| Reference year | referenceYear | r | [0,1] | Year | | C | | | Note the definition of the field. | 1-1-6-18 |
| Data set valid until: | dataSetValidUntil | r | [0,1] | Year | | C | | | | 1-1-6-19 |
| Time representativeness description | timeRepresentativenessDescription | r | [0,1] | FTMultiLang | | C | 20 ... 100 | | | 1-1-6-20 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Geographical representative | geography | r | [0,1] | | | C | | | | 1-1-8 |
| <i>Location</i> | <i>locationOfOperationSupplyOrProduction</i> | r | [0,1] | | | C | | | | 1-1-8-21 |
| Location | @location | r | | NullableString | 25 | (C) | 2 ... 20 | | Shall use one of the locations that are specified in the ILCDLocations.xml or other file, as referenced in the field „<processDataSet @locations>. Empty if geography-unspecific e.g. technology-model data set (i.e. ONLY enter "GLO" if the data set represents worldwide average data). | 1-1-8-21 |
| Latitude and Longitude | @latitudeAndLongitude | o | | GIS | | O | | | If a link to a GIS is foreseen: For country or other region-code representative data sets, the "Location" code can be used to identify the Latitude and Longitude shape data of the country/region; | 1-1-8-23 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------------------------------|-------------------------------------------------|------------------------|----------------|-------------------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| | | | | | | | | | Alternatively it is recommended to use the data of the centre of the country/region. | |
| Geographical representativeness description | descriptionOfRestrictions | o | [0,1] | FTMultiLang | | C | 20 ... 200 | | | 1-1-8-24 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| <i>Sub-location(s)</i> | <i>subLocationOfOperationSupplyOrProduction</i> | o | [0,n] | | | O | | | | 1-1-8-22 |
| Sub-location(s) | @subLocation | o | | String | 25 | O | 2 ...20 | | Note the field definition. | 1-1-8-22 |
| Latitude and Longitude | @latitudeAndLongitude | o | | GIS | | O | | | | 1-1-8-23 |
| Geographical representativeness description | descriptionOfRestrictions | o | [0,1] | FTMultiLang | | C | 20 ... 500 | | Required ("C") only if field "Sublocation(s)" has an entry. | 1-1-8-24 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Technological representativeness | technology | r | [0,1] | | | C | | | | 1-1-10 |
| Technology description including background system | technologyDescriptionAndIncludedProcesses | r | [0,1] | FTMultiLang | | C | 200 ... 4000 | | | 1-1-10-25 |
| Included data sets | referenceToIncludedProcesses | r | [0,n] | GlobalReferenceType | | O | | | It is recommended to reference all quantitatively relevant ("key") included process data sets. Field should stay un-used only for single operation unit processes or if included processes are not | 1-1-10-26 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|------------------------------------------------|-----------------------------------------------|------------------------|----------------|----------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| | | | | | | | | | available/documented as separate ILCD-formatted data sets or meta data sets. | |
| Technical purpose of product or process | technologicalAp r plicability | r | [0,1] | FTMultiLang | | C | 50 ... 400 | | | 1-1-10-27 |
| Pictogramme of technology | referenceToTec hnologyPictogra mme | o | [0,1] | GlobalRefe renceType | | O | | | | 1-1-10-28 |
| Flow diagram(s) or picture(s) | referenceToTec hnologyFlowDia grammOrPictur e | o | [0,n] | GlobalRefe renceType | | C | | | System boundary diagram should be placed here as well. Technical flow charts are recommended to improve documentation of most data sets. | 1-1-10-29 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Mathematical model | mathematicalRel ations | o | [0,1] | | | C | | | This whole section is required only for parameterised LCI data sets. | 1-1-12 |
| Model description | modelDescriptio n | o | [0,1] | FTMultiLang | | C | 50 ... 4000 | | This entry is required ("C") only for parameterised LCI data sets, i.e. if at least one field "Name of variable" is in use. | 1-1-12-31 |
| Variable / parameter | variableParame ter | o | [0,n] | | | C | | | | 1-1-12-33 |
| Name of variable | @name | o | | MatV | 25 | C | 5 ... 15 | | This entry is required ("C") only for parameterised LCI data sets, for at least on set of "Variable / parameter" fields. | 1-1-12-33-1 |
| Formula | formula | o | [0,1] | MatR | | C | | | This entry is empty if the "Name of the variable" is a parameter that is defined by the "Mean value" given, i.e. a formula should be entered only if it actually is a variable that is calculated along a formula. | 1-1-12-32 |
| Mean value | meanValue | o | [0,1] | Real | | C | | | This entry is required ("C") only for parameterised LCI data sets, if a "Name of variable" is given. | 1-1-12-34 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|----------------------------------|-------------------------------|------------------------|----------------|-------------------------------------|---------------------|-----------------------|-------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| | | | | | | | | | If this one is a variable the "Mean value" is the calculated result of the "Formula" field with the given parameterisation (i.e. with the default parameter settings). | |
| Minimum value | minimumValue | o | [0,1] | Real | | O | | | | 1-1-12-35 |
| Maximum value | maximumValue | o | [0,1] | Real | | O | | | | 1-1-12-36 |
| Uncertainty distribution type | uncertaintyDistributionType | o | [0,1] | Uncertainty Distribution TypeValues | | O | | | | 1-1-12-37 |
| Relative StdDev in % | relativeStandardDeviation95In | o | [0,1] | Perc | | O | | | | 1-1-12-38 |
| Comment, units, defaults | comment | o | [0,1] | StringMultiLang | 200 | C | 5 ... 100 | | This entry is required ("C") only for parameterised LCI data sets. | 1-1-12-39 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Modelling and validation | modellingAndValidation | r | [0,1] | | | C | | | | 1-3 |
| LCI method and allocation | LCIMethodAndAllocation | r | [0,1] | | | C | | | | 1-3-14 |
| Type of data set | typeOfDataSet | r | [0,1] | TypeOfProcessValues | | C | | | Note the differences between "LCI result" and "Partly terminated system" data sets. | 1-3-14-40 |
| LCI method principle | LCIMethodPrinciple | r | [0,1] | LCIMethodPrincipleValues | | C | | | Make sure that the entry fits with the approach declared in the section „Compliance declarations“ and the entry/ies in the field „LCI method approaches“. Note: For data sets that are made for the | 1-3-14-41 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|------------------------------------------------------|-----------------------------------|------------------------|----------------|---------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| | | | | | | | | | Situations A, B, C1 or C2 of the ILCD Handbook, this fact is to be entered in the field "Compliance declarations". | |
| Deviation from LCI method principle / explanations | deviationFromLCIMethodPrinciple | r | [0,1] | FTMultiLang | | C | 4 ... 400 | | Enter "None", if no deviations. | 1-3-14-42 |
| LCI method approaches | IciMethodApproaches | r | [0,n] | LCIMethodApproachesValues | | C | | | Make sure that the entry fits with the approach declared in the section „Compliance declarations“ and the entry/ies in the field „LCI method principle“. | 1-3-14-43 |
| Deviations from LCI method approaches / explanations | deviationsFromLCIMethodApproaches | r | [0,1] | FTMultiLang | | C | 4 ... 400 | | Enter "None", if no deviations. | 1-3-14-44 |
| Modelling constants | modellingConstants | r | [0,1] | FTMultiLang | | C | | | | 1-3-14-45 |
| Deviation from modelling constants / explanations | deviationFromModellingConstants | r | [0,1] | FTMultiLang | | C | 4 ... 400 | | Enter "None", if no deviations. | 1-3-14-46 |
| LCA methodology report | referenceToLCAMethodDetails | o | [0,n] | GlobalReferenceType | | O | | | It is recommended to reference the methodology protocol applied. For ILCD-method compliant data sets this is the "ILCD Handbook - Specific guide for LCI data sets". Note that such a report might be required if the data set is intended to be used in comparative studies to ensure it meets the "third-party report" requirements of ISO14044 and the ILCD. | 1-3-14-47 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Data sources, | dataSourcesTree | r | [0,1] | | | C | | | | 1-3-16 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|--------------------------------------------------------------------------------|--------------------------------------------------|------------------------|----------------|-------------|---------------------|----------------------|-------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <i>treatment, and representative ness</i> | <i>atmentAndRepresentativeness</i> | | | | | | | | | |
| Data cut-off and completeness principles | dataCutOffAndCompletenessPrinciples | r | [0,1] | FTMultiLang | | C | 100 ... 300 | | Make sure to meet the cut-off and completeness requirements as defined for the data quality level that you claim in sub-section "Validation/Data quality indicators" and the section „Compliance declarations“. | 1-3-16-48 |
| Deviation from data cut-off and completeness principles / explanations | deviationFromDataCutOffAndCompletenessPrinciples | r | [0,1] | FTMultiLang | | C | 4 ... 400 | | Enter "None", if no deviations. | 1-3-16-49 |
| Data selection and combination principles | dataSelectionAndCombinationPrinciples | r | [0,1] | FTMultiLang | | C | 50 ... 300 | | Make sure to meet the method requirements as defined for the data method type and quality level that you claim in the section „Compliance declarations“. For „LCI results“ and „partly terminated systems“ data sets also check the „Included processes“. | 1-3-16-50 |
| Deviation from data selection and combination principles / explanations | deviationsFromCutOffAndCompletenessPrinciples | r | [0,1] | FTMultiLang | | C | 4 ... 400 | | Enter "None", if no deviations. | 1-3-16-51 |
| Data treatment and extrapolation principles | dataTreatmentAndExtrapolationPrinciples | r | [0,1] | FTMultiLang | | C | 50 ... 300 | | Make sure to meet the technological, geographical and time representativeness requirements as defined for the data quality level that you claim in sub-section "Validation/Data quality indicators" and the section „Compliance | 1-3-16-52 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
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| | | | | | | | | | declarations“. Also check with entries you give in the respective „... representativeness“ sections. | |
| Deviation from data treatment and extrapolation principles / explanations | deviationsFromTreatmentAndExtrapolationPrinciples | r | [0,1] | FTMultiLang | | C | 4 ... 400 | | Enter "None", if no deviations. | 1-3-16-53 |
| Data handling report | referenceToDataHandlingPrinciples | o | [0,n] | GlobalReferenceType | | O | | | | 1-3-16-54 |
| Data source(s) used for this data set | referenceToDataSource | r | [0,n] | GlobalReferenceType | | C | | | Provide citations/reference of all relevant data sources, including for the relevant ("key") included processes of the background system, if any. | 1-3-16-55 |
| Percentage supply or production covered | percentageSupplyOrProductionCovered | r | [0,1] | Perc | | C | | | Especially for generic or average data sets, consider which market-relevant technologies are actually and explicitly addressed/included in the inventory of this data set. | 1-3-16-57 |
| Annual supply or production volume | annualSupplyOrProductionVolume | o | [0,1] | StringMultiLang | | O | 10 ... 20 | | Note that for data sets that are intended to be used in a decision context, it is recommended to document the "market size" here, to later be able to check whether a modelled scenario has large-scale consequences on the market. | 1-3-16-58 |
| Sampling procedure | samplingProcedure | o | [0,1] | FTMultiLang | | O | 20 ... 500 | | | 1-3-16-59 |
| Data collection period | dataCollectionPeriod | o | [0,1] | StringMultiLang | | O | 10 ... 50 | | | 1-3-16-60 |
| Uncertainty adjustments | uncertaintyAdjustments | o | [0,1] | FTMultiLang | | O | 4 ... 200 | | | 1-3-16-61 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|--------------------------------------------|---------------------------------------------|------------------------|----------------|------------------------|---------------------|-----------------------|-------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Use advice for data set | useAdviceForDataSet | r | [0,1] | FTMultiLang | | C | 100 ... 1000 | | In case no specific methodological use advice needs to be given, please enter "no specific methodological advice". | 1-3-16-62 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Completeness | completeness | o | [0,1] | | | O | | | | 1-3-18 |
| Completeness product model | completenessProductModel | r | [0,1] | CompletenessValues | | C | | | Make sure to meet the cut-off and completeness requirements as defined for the data quality level that you claim in subsection "Validation/Data quality indicators" and the section „Compliance declarations“. | 1-3-18-63 |
| Supported impact assessment methods | referenceToSupportedImpactAssessmentMethods | r | [0,n] | GlobalReferenceType | | C | | | Usability of this field pending finalisation of the implementation of the "LCIA method data set". If specific data sets are unavailable, a reference to an empty default "LCIA method data set" can be put. | 1-3-18-64 |
| Completeness elementary flows, per topic | completenessElementaryFlows | r | [0,n] | | | C | | | | 1-3-18-65 |
| completeness type | @type | r | | CompletenessTypeValues | | C | | | | 1-3-18-65-1 |
| value | @value | r | | CompletenessValues | | C | | | | 1-3-18-65-2 |
| Completeness other problem field(s) | completenessOtherProblemField | o | [0,1] | FTMultiLang | | O | 50 ... 200 | | | 1-3-18-80 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Validation | validation | r | [0,1] | | | C | | | | 1-3-20 |
| Review | review | r | [0,n] | | | C | | | | 1-3-21 |
| Type of | @type | r | | TypeOfRev | | C | | | Make sure that the performed / | 1-3-20-81 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|--------------------------------|------------------------------|------------------------|----------------|----------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| review | | | | iewValues | | | | | stated review type meets the requirements of the „review compliance“ that you state in section „Compliance declarations“. The ILCD generally requires an independent review for externally provided data sets; details see "ILCD compliance" documentation. | |
| <i>Scope of review</i> | <i>scope</i> | <i>r</i> | <i>[0,n]</i> | | | <i>C</i> | | | | <i>1-3-20-82</i> |
| Scope name | @name | r | | ScopeOfReviewValues | | C | | | Make sure that the performed / stated review scope meets the requirements of the „review compliance“ that you state in section „Compliance declarations“. | 1-3-20-82-1 |
| <i>Method(s) of review</i> | <i>method</i> | <i>r</i> | <i>[0,n]</i> | | | <i>C</i> | | | | <i>1-3-20-83</i> |
| Method name | @name | r | | MethodOfReviewValues | | C | | | Make sure to meet the cut-off and completeness requirements as defined for the data quality level that you claim in subsection "Validation/Data quality indicators" and the section „Compliance declarations“. Make sure that the performed / stated review methods meets the requirements of the „review compliance“ that you state in section „Compliance declarations“. | 1-3-20-83-1 |
| <i>Data quality indicators</i> | <i>dataQualityIndicators</i> | <i>r</i> | <i>[0,1]</i> | | | <i>(C)</i> | | | <i>This section and in that case all fields in it are required if "Compliance system name" references one of the ILCD-compliance systems, EXCEPT for "ILCD Data Network - entry-level" requirements, for which this is</i> | <i>1-3-20-90</i> |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|----------------------------------------|-----------------------------------------|------------------------|----------------|-----------------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| | | | | | | | | | <i>optional.</i> | |
| <i>Data quality indicator</i> | <i>dataQualityIndicator</i> | <i>r</i> | <i>[1,n]</i> | | | <i>(C)</i> | | | <i>see comment at "Data quality indicator"</i> | <i>1-3-20-91</i> |
| Name of data quality indicator | @name | r | | <u>DataQualityIndicatorValues</u> | | (C) | | | <i>see comment at "Data quality indicator". Make sure that the data quality indicator matches the requirements of the „quality“, „method“, „nomenclature“, „documentation“, and „review“ compliance that you state in section „Compliance declarations“.</i> | 1-3-20-91-1 |
| Value of data quality indicator | @value | r | | <u>QualityValues</u> | | (C) | | | <i>see comment at "Data quality indicator". Make sure that the data quality indicator matches the requirements of the „quality“, „method“, „nomenclature“, „documentation“, and „review“ compliance that you state in section „Compliance declarations“.</i> | 1-3-20-91-2 |
| Review details | reviewDetails | r | [0,1] | <u>FTMultiLang</u> | | C | 1000 ... 3000 | | | 1-3-20-84 |
| Reviewer name and institution | referenceToNameOfReviewerAndInstitution | r | [0,n] | <u>GlobalReferenceType</u> | | C | | | | 1-3-20-87 |
| Other review details | otherReviewDetails | o | [0,1] | <u>FTMultiLang</u> | | O | 50 ... 500 | | | 1-3-20-88 |
| Complete review report | referenceToCompleteReviewReport | r | [0,1] | <u>GlobalReferenceType</u> | | O | | | May be required depending on compliance to be met and intended applications / target audience. Recommended also for other cases. | 1-3-20-89 |
| Other content | other | o | [0,1] | | | O | | | | 0 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|--------------------------------|-------------------------------|------------------------|----------------|-------------------------------------|---------------------|----------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Compliance declarations | complianceDeclarations | r | [0,1] | | | C | | | | 1-3-22 |
| Compliance | compliance | r | [1,n] | | | C | | | | 1-3-22-1 |
| Compliance system name | referenceToComplianceSystem | r | [1,1] | GlobalReferenceType | | C | | <p>One of the following entries and source data sets (Note: instead of "A", also "B", "C1" and "C2" may be used, as applicable):</p> <ul style="list-style-type: none"> "ILCD Data Network Entry-level" "ILCD-compliant, Situation A - High quality data" "ILCD-compliant, Situation A - Basic quality data" "ILCD-compliant, Situation A - Data estimate". See "ILCD Data Network: Compliance rules and entry-level requirements". | <p>Must reference to the corresponding source data set of the most recent version of one of the ILCD compliance system variants. For the definitions for use in the ILCD Data Network see; see the separate document "ILCD : Compliance rules and entry-level requirements". For general ILCD-compliance requirements - for LCI data sets see also the "Specific guide for LCI data sets". Other compliance systems (e.g. of specific EPD schemes etc.) can be referenced in addition.</p> | 1-3-22-90 |
| Approval of overall | approvalOfOverallCompliance | o | [0,1] | ComplianceValues | | C | | | For the ILCD related compliance system entries: Make sure to | 1-3-22-95 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|---------------------------------|--------------------------|------------------------|----------------|----------------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| compliance | ce | | | | | | | | meet the overall requirements; for an overview and specific settings for the ILCD Data Network see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". | |
| Quality compliance | qualityCompliance | r | [0,1] | ComplianceValues | | C | | | For the ILCD related compliance system entries: Make sure to meet the quality requirements. For an overview and specific settings for the ILCD Data Network see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". | 1-3-22-9X |
| Nomenclature compliance | nomenclatureCompliance | r | [0,1] | ComplianceValues | | C | | | For the ILCD related compliance system entries: Make sure to meet the nomenclature requirements. For an overview and specific settings for the ILCD Data Network see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". | 1-3-22-92 |
| Methodological compliance | methodologicalCompliance | r | [0,1] | ComplianceValues | | C | | | For the ILCD related compliance system entries: Make sure to meet the method requirements. For for an overview and specific settings for the ILCD Data Network see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". | 1-3-22-91 |
| Review compliance | reviewCompliance | r | [0,1] | ComplianceValues | | C | | | For the ILCD related compliance system entries: Make sure to meet the review requirements. For an overview and specific settings for the ILCD Data Network see the separate | 1-3-22-93 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|------------------------------------|----------------------------------|------------------------|----------------|----------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| | | | | | | | | | document "ILCD Data Network: Compliance rules and entry-level requirements". | |
| Documentation compliance | documentationCompliance | r | [0,1] | <u>ComplianceValues</u> | | C | | | For the ILCD related compliance system entries: Make sure to meet the documentation requirements. For an overview and specific settings for the ILCD Data Network see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". | 1-3-22-94 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Administrative information | administrativeInformation | r | [0,1] | | | C | | | | 1-5 |
| Commissioner and goal | commissionerAndGoal | r | [0,1] | | | C | | | | 1-5-24 |
| Commissioner of data set | referenceToCommissioner | r | [0,n] | <u>GlobalReferenceType</u> | | C | | | Note the definition of the field. | 1-5-24-96 |
| Project | project | o | [0,1] | <u>StringMultiLang</u> | | O | 20 ... 200 | | | 1-5-24-97 |
| Intended applications | intendedApplications | r | [0,1] | <u>FTMultiLang</u> | | C | | | Make sure the entry fits with the declared „LCI method principle“, „Compliance declarations“, any potential specific requirements on reporting put by ISO 14044 and the ILCD Handbook (e.g. "third-party report"), and the „Type of data set“. | 1-5-24-98 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Data set generator/modeller | dataGenerator | r | [0,1] | | | C | | | | 1-5-26 |
| Data set | referenceToPer | r | [0,n] | <u>GlobalRefe</u> | | C | | | | 1-5-26-99 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|------------------------------------------------------------|------------------------------------------|------------------------|----------------|----------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| generator / modeller | sonOrEntityGeneratingTheDataSet | | | <u>referenceType</u> | | | | | | |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Data entry by | dataEntryBy | r | [0,1] | | | C | | | | 1-5-28 |
| Time stamp (last saved) | timeStamp | r | [0,1] | <u>dateTime</u> | | C | | | | 1-5-28-104 |
| Data set format(s) | referenceToDataSetFormat | r | [0,n] | <u>GlobalReferenceType</u> | | C | | „ILCD format“ | Must include the reference to the most recent ILCD format version, with its original source data set and UUID / URI. (Can have additional references to other formats („namespaces“) that might be used in the data set for additional information beyond the documentation scope of the ILCD format.) | 1-5-28-105 |
| Converted original data set from: | referenceToConvertedOriginalDataSetFrom | o | [0,1] | <u>GlobalReferenceType</u> | | O | | | | 1-5-28-108 |
| Data entry by: | referenceToPersonOrEntityEnteringTheData | o | [0,1] | <u>GlobalReferenceType</u> | | C | | | | 1-5-28-103 |
| Official approval of data set by producer/operator: | referenceToDataSetUseApproval | r | [0,n] | <u>GlobalReferenceType</u> | | C | | | Used only if official approval is given by the good producer or service operator of the product represented by the data set. If such is not given, insert a reference to an empty default contact data set with a "No official approval" text entry. | 1-5-28-109 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Publication and ownership | publicationAndOwnership | r | [0,1] | | | C | | | | 1-5-30 |
| Data set version | dataSetVersion | m | [1,1] | <u>Version</u> | | V | | | Is typically automatically generated, but may need to be manually adjusted; make sure the proper format ("XX.XX.XXX") is used. | 1-5-30-111 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|------------------------------------------------------------|----------------------------------------|------------------------|----------------|----------------------------------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Date of last revision | dateOfLastRevision | r | [0,1] | dateTime | | C | | | | 1-5-30-113 |
| Preceding data set version | referenceToPrecedingDataSetVersion | o | [0,n] | GlobalReferenceType | | O | | | | 1-5-30-112 |
| Permanent data set URI | permanentDataSetURI | r | [0,1] | anyURI | | O | | | It is strongly recommended to provide a URI that can be used to find the original version of the data set and verify changes or availability of new versions. | 1-5-30-300 |
| Workflow and publication status | workflowAndPublicationStatus | o | [0,1] | WorkflowAndPublicationStatusValues | | O | | | | 1-5-30-110 |
| Unchanged re-publication of: | referenceToUnchangedRepublication | o | [0,1] | GlobalReferenceType | | O | | | | 1-5-30-114 |
| Registration authority | referenceToRegistrationAuthority | o | [0,1] | GlobalReferenceType | | O | | | | 1-5-30-200 |
| Registration number | registrationNumber | o | [0,1] | String | | O | | | | 1-5-30-201 |
| Owner of data set | referenceToOwnershipOfDataSet | r | [0,1] | GlobalReferenceType | | C | | | | 1-5-30-115 |
| Copyright? | copyright | r | [0,1] | boolean | | C | | | | 1-5-30-116 |
| Entities or persons with exclusive access to this data set | referenceToEntitiesWithExclusiveAccess | o | [0,n] | GlobalReferenceType | | O | | | | 1-5-30-117 |
| License type | licenseType | r | [0,1] | LicenseTypeValues | | C | | | | 1-5-30-119 |
| Access and use restrictions | accessRestrictions | r | [0,1] | FTMultiLang | | C | 4 ... 400 | | | 1-5-30-118 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------|-------------------------------|------------------------|----------------|------------------------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <i>Inputs and Outputs</i> | <i>exchanges</i> | r | [0,1] | | | C | | | | 1-7 |
| <i>Inputs and Outputs</i> | <i>exchange</i> | r | [0,n] | | | C | | | | 1-7-32 |
| Data set internal ID | @dataSetInternalID | r | | <u>Int6</u> | | C | | | | 1-7-32-120 |
| Reference to flow data set | referenceToFlowDataSet | r | [1,1] | <u>GlobalReferenceType</u> | | C | | | | 1-7-32-119 |
| Location | location | o | [0,1] | <u>String</u> | 25 | O | 2 ... 20 | | Usually not used field. See field definition. | 1-7-32-121 |
| Reminder flow? | functionType | r | [0,1] | <u>ExchangeFunctionTypeValues</u> | | O | | | For normal inventory flows, other than reminder flows, the field is to remain un-used. | 1-7-32-122 |
| Exchange direction | exchangeDirection | r | [0,1] | <u>ExchangeDirectionValues</u> | | C | | | | 1-7-32-123 |
| Variable | referenceToVariable | o | [0,1] | <u>string</u> | | O | | | Required only for parameterised data sets and for those flows only that are scaled via one of the „Parameters“ or „Variables“ of the section „Mathematical model“. | 1-7-32-124 |
| Mean amount | meanAmount | r | [1,1] | <u>Real</u> | | C | | | | 1-7-32-125 |
| Resulting amount | resultingAmount | r | [0,1] | <u>Real</u> | | C | | | | 1-7-32-126 |
| Minimum amount | minimumAmount | o | [0,1] | <u>Real</u> | | O | | | | 1-7-32-127 |
| Maximum amount | maximumAmount | o | [0,1] | <u>Real</u> | | O | | | | 1-7-32-128 |
| Uncertainty distribution type | uncertaintyDistributionType | o | [0,1] | <u>UncertaintyDistributionTypeValues</u> | | O | | | | 1-7-32-129 |
| Relative StdDev in % | relativeStandardDeviation95In | o | [0,1] | <u>Perc</u> | | O | | | | 1-7-32-130 |
| <i>allocations</i> | <i>allocations</i> | o | [0,1] | | | O | | | | 1-7-32-200 |
| <i>allocation</i> | <i>allocation</i> | o | [1,n] | | | O | | | | 1-7-32-201 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|--------------------------------------|-------------------------------|------------------------|----------------|------------------------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Internal reference to co-product | @internalReferenceToCoProduct | o | | <u>Int6</u> | | O | | | | 1-7-32-202 |
| Allocated fraction | @allocatedFraction | o | | <u>Perc</u> | | O | | | | 1-7-32-203 |
| Data source type | dataSourceType | o | [0,1] | <u>DataSourceTypeValues</u> | | C | | | Required ("C") for unit process data sets only. (For the other, aggregated data set types the entry will almost always be „Mixed primary/secondary“ and is hence non-informative). | 1-7-32-132 |
| Data derivation type / status | dataDerivationTypeStatus | o | [0,1] | <u>DataDerivationTypeStatusValues</u> | | C | | | Required ("C") only if "Type of data set" is "unit process, ...". Recommended also for other data set types. | 1-7-32-133 |
| <i>Data source(s)</i> | <i>referencesToDataSource</i> | o | [0,1] | | | O | | | | 1-7-32-134 |
| Data source(s) | referenceToDataSource | o | [0,n] | <u>GlobalReferenceType</u> | | O | | | | 1-7-32-134 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Comment | generalComment | o | [0,1] | <u>StringMultiLang</u> | | O | 10 ... 100 | | | 1-7-32-136 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| LCIA results | lciaResults | o | [0,1] | | | O | | | | 1-8 |
| LCIA result | lciaResult | o | [0,n] | | | O | | | | 1-8-1 |
| LCIA method | referenceToLciaDataSet | o | [1,1] | <u>GlobalReferenceType</u> | | O | | | | 1-8-1-100 |
| Mean amount | meanAmount | o | [1,1] | <u>Real</u> | | O | | | | 1-8-1-101 |
| Uncertainty distribution type | uncertaintyDistributionType | o | [0,1] | <u>UncertaintyDistributionTypeValues</u> | | O | | | | 1-8-1-102 |
| Relative StdDev in % | relativeStandardDeviation95In | o | [0,1] | <u>Perc</u> | | O | | | | 1-8-1-103 |

| PROCESS DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (specific requirements, recommendations, explanations) | eDoc ID |
|---------------------------------|--------------------------|------------------------|----------------|-----------------|---------------------|----------------------|-------------------------------------------------|--------------------------|----------------------------------------------------------------|-----------|
| Comment | generalComment | o | [0,1] | StringMultiLang | | O | 20 ...200 | | | 1-8-1-104 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |

2.5 Flow data set

LCA practitioners should rarely need to create new elementary flow data sets, as a huge set is provided as ILCD reference elementary flow data sets. Product and Waste flows in contrast are regularly to be created by the practitioner. For naming and classifying new flow data sets and assigning appropriate reference flow properties and units, see the respective chapters of the "Nomenclature and other conventions" document.

| FLOW DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|------------------------------|---------------------------|------------------------|----------------|---------------|---------------------|----------------------|-------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Flow data set | flowDataSet | m | [1,1] | | | V | | | | 2 |
| | @version | m | | SchemaVersion | | V | | | The actual ILCD format schema version is to be referenced. | |
| | @locations | o | | String | | O | | | Only for Product and Waste flows and only if "Locations" are used for flow data sets: The file ILCDLocations.xml should be referenced, or another locations-file that includes the specified locations of the ILCDLocations.xml file. | |
| Flow information | flowInformation | m | [1,1] | | | V | | | | 2-9 |
| Data set information | dataSetInformation | m | [1,1] | | | V | | | | 2-9-36 |
| UUID of flow | UUID | m | [1,1] | UUID | | V | | | | 2-9-36-137 |

| FLOW DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------------|------------------------------|------------------------------|----------------------|------------------------|------------------------|----------------------------|----------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| data set | | | | | | | | | | |
| <i>Name</i> | <i>name</i> | R | [0,1] | | | C | | | | 2-9-36-138-1 |
| Base name | baseName | R | [1,1] | <u>StringMultiLang</u> | 100 | C | 10 ... 50 | | Naming conventions of the „ILCD Handbook - Nomenclature and other conventions“ document are to be applied. | 2-9-36-138 |
| Treatment, standards, routes | treatmentStandardsRoutes | R | [0,1] | <u>StringMultiLang</u> | 100 | O | 5 ... 30 | | Field will regularly be used for product and waste flows. Naming conventions of the „ILCD - Nomenclature and other conventions“ document are to be applied. | 2-9-36-139 |
| Mix and location types | mixAndLocationTypes | R | [0,1] | <u>StringMultiLang</u> | 100 | O | 5 ... 30 | | Field will regularly be used for product and waste flows. Naming conventions of the „ILCD - Nomenclature and other conventions“ document are to be applied. | 2-9-36-140 |
| Quantitative flow properties | flowProperties | R | [0,1] | <u>StringMultiLang</u> | 100 | O | 5 ... 30 | | Field will regularly be used for product and waste flows. Naming conventions of the „ILCD - Nomenclature and other conventions“ document are to be applied. | 2-9-36-141 |
| Other content | other | O | [0,1] | | | O | | | | 0 |
| Synonyms | synonyms | O | [0,1] | <u>FTMultiLang</u> | | O | | | It is recommended to ease the identification of product flows by adding synonyms, be it synonymous chemical names, trivial names or brand names. | 2-9-36-142 |
| Category and classification information | classificationInformation | R | [0,1] | | | C | | | | 2-9-36-143 |
| Elementary flow categorization | elementaryFlowCategorization | R | [0,n] | | | C | | | Required ("C") only if "Type of flow" is "Elementary flow". Not applicable if "Product flow" or "Waste flow". | 2-9-36-144 |
| Name of | @name | R | | <u>string</u> | 100 | C | 5 ... 50 | | Required ("C") only if "Type of | 2-9-36-144-a |

| FLOW DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-------------------------------------------|-----------------------------|------------------------------|----------------------|------------------|------------------------|------------------------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| categoriz ation system | | | | | | | | | flow" is "Elementary flow". Not applicable if "Product flow" or "Waste flow". | |
| Categories file | @categories | o | | <u>anyURI</u> | | C | | Reference to "ILCDFlowCategorization.xml" required for elementary flows. | Required ("C") only if "Type of flow" is "Elementary flow". Not applicable if "Product flow" or "Waste flow". | 2-9-36-144-b |
| Category name | category | R | [1,n] | | | C | | | Required ("C") only if "Type of flow" is "Elementary flow". Not applicable if "Product flow" or "Waste flow". | 2-9-36-144-1 |
| Hierarchy level | @level | o | | <u>LevelType</u> | | C | | | Required ("C") only if "Type of flow" is "Elementary flow". Not applicable if "Product flow" or "Waste flow". | 2-9-36-144-1-a |
| Unique category identifier | @catId | o | | <u>string</u> | 200 | C | 5 ... 100 | Reference to one of the identifiers of "ILCDFlowCategorization.xml" required for elementary flows. | Required ("C") only if "Type of flow" is "Elementary flow". Not applicable if "Product flow" or "Waste flow". | 2-9-36-144-1-b |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Classification | classification | R | [0,n] | | | C | | | Required ("C") only if "Type of flow" is "Product flow" or "Waste flow". Optional if "Elementary flow" for additional classification(s). | 2-9-36-145 |
| Name | @name | R | | <u>string</u> | 100 | C | 10 ... 75 | | Required ("C") only if "Type of flow" is "Product flow" or "Waste flow". Optional if "Elementary flow" for additional classification(s). | 1-1-2-7-2-a |
| Classes | @classes | R | | <u>anyURI</u> | | C | | Reference to classification file n.xml required | Required ("C") only if "Type of flow" is "Product flow" or "Waste flow". Optional if "Elementary flow" for additional classification(s). | 1-1-2-7-2-b |

| FLOW DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------------|------------------------------------------|------------------------------|----------------------|-------------------------|------------------------|------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| | | | | | | | | for prdoct and waste flows. | | |
| <i>class</i> | <i>class</i> | R | [1,n] | | | C | | | Required ("C") only if "Type of flow" is "Product flow" or "Waste flow". Optional if "Elementary flow" for additional classification(s). | 1-1-2-7-2-1 |
| Hierarch y level | @level | r | | <u>LevelType</u> | | C | | | Required ("C") only if "Type of flow" is "Product flow" or "Waste flow". Optional if "Elementary flow" for additional classification(s). | 1-1-2-7-2-1-a |
| Unique class identifie r | @classId | r | | <u>string</u> | 200 | C | 1 ... 150 | One of the classes of the file ILCDClassificati on.xml is to be used. | Required ("C") only if "Type of flow" is "Product flow" or "Waste flow". Optional if "Elementary flow". | 1-1-2-7-2-1-b |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| CAS Number | CASNumber | r | [0,1] | <u>CASNumb er</u> | | C | | | Required ("C") if existing and only for elementary flows. Only to be used for single substance flows. | 2-9-36-146 |
| Sum formula | sumFormula | r | [0,1] | <u>String</u> | | O | | | Recommended, only for single substances. | 2-9-36-147 |
| General comment on data set | generalComme nt | o | [0,1] | <u>FTMultiLan g</u> | | O | | | | 2-9-36-150 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Quantitative reference | quantitativeRefe rence | r | [0,1] | | | C | | | | 2-9-38 |
| Reference flow property | referenceToRef erenceFlowPro perty | r | [1,1] | <u>Int5</u> | | C | | | Rules for which „Reference flow property“ and „Reference unit“ to choose are documented in the „ILCD Handbook - Nomenclature and other conventions“ document. | 2-9-38-151 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Geography | geography | o | [0,1] | | | O | | | | 2-9-42 |

| FLOW DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------------|-----------------------------------|------------------------------|----------------------|---------------------|------------------------|------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Location of supply | locationOfSupply | o | [1,1] | StringMultiLang | 25 | O | 2 ... 20 | | Only used if "Locations" are used and only for "Product flows" and "Waste flows". (Note: Locations of emissions are documented directly with the Process' Inputs and Outputs.) Shall use one of the locations that are specified in the ILCDLocations.xml or other file, as referenced in the field „<flowDataSet @locations>“. | 2-9-42-152 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Technological representativeness | technology | o | [0,1] | | | O | | | | 2-9-43 |
| Technical purpose of product or waste | technologicalApplicability | o | [0,1] | FTMultiLang | | O | | | Recommended for Product and Waste flows; not applicable to Elementary flows. | 2-9-43-1 |
| Technical specification | referenceToTechnicalSpecification | o | [0,n] | GlobalReferenceType | | O | | | Recommended for Product flows, especially for complex products and products of multifunctional processes. | 2-9-43-2 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Modelling and validation | modellingAndValidation | r | [0,1] | | | C | | | | 2-11 |
| LCI method | LCIMethod | r | [0,1] | | | C | | | | 2-11-48 |
| Type of flow | typeOfDataSet | r | [1,1] | FlowTypeValues | | C | | | | 2-11-48-153 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Compliance declarations | complianceDeclarations | r | [0,1] | | | C | | | | 2-11-56 |
| Compliance | compliance | r | [1,n] | | | C | | | | 1-3-22-1 |
| Compliance system name | referenceToComplianceSystem | r | [1,1] | GlobalReferenceType | | C | | The following entry and source data set is to be used: • "ILCD- | Must reference to the corresponding source data set of the most recent version of the ILCD compliance system. For the definitions for use in the | 1-3-22-90 |

| FLOW DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------|------------------------------------------|------------------------------|----------------------|----------------------------|------------------------|------------------------------|----------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| | | | | | | | | compliant" | ILCD Data Network see; see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". Other compliance systems (e.g. of specific EPD schemes etc.) can be referenced in addition. | |
| Approval of overall compliance | approvalOfOverallCompliance | o | [0,1] | <u>ComplianceValues</u> | | C | | | For the ILCD related compliance system entries: Make sure to meet the overall requirements; for an overview and specific settings for the ILCD Data Network see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". | 1-3-22-95 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Administrative information | administrative information | r | [0,1] | | | C | | | | 2-13 |
| Data entry by | dataEntryBy | r | [0,1] | | | C | | | | 2-13-62 |
| Time stamp (last saved) | timeStamp | r | [0,1] | <u>dateTime</u> | | C | | | | 1-5-28-104 |
| Data set format(s) | referenceToDataSetFormat | r | [0,n] | <u>GlobalReferenceType</u> | | C | | „ILCD format“ | Must include the reference to the most recent ILCD format version, with its original source data set and UUID / URI. (Can have additional references to other formats („namespaces“) that might be used in the data set for additional information beyond the documentation scope of the ILCD format.) | 1-5-28-105 |
| Data entry by: | referenceToPersonOrEntityEnteringTheData | o | [0,1] | <u>GlobalReferenceType</u> | | O | | | | 1-5-28-103 |

| FLOW DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------------------------|-----------------------------------------------|------------------------------|----------------------|---------------------------------|------------------------|------------------------------|----------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Publication and ownership | publicationAndO wnership | r | [0,1] | | | C | | | | 2-13-64 |
| Data set version | dataSetVersion | m | [1,1] | <u>Version</u> | | V | | | Is typically automatically generated, but may be manually adjusted. | 1-5-30-111 |
| Preceding data set version | referenceToPre cedingDataSetV ersion | O | [0,n] | <u>GlobalRefe renceType</u> | | O | | | | 1-5-30-112 |
| Permanent data set URI | permanentData SetURI | R | [0,1] | <u>anyURI</u> | | O | | | It is strongly recommended to provide aURI that can be used to find the original version of the data set and verify changes or availability of new versions. | 1-5-30-300 |
| Owner of data set | referenceToOw nershipOfDataS et | R | [0,1] | <u>GlobalRefe renceType</u> | | O | | | | 1-5-30-115 |
| Other content | other | O | [0,1] | | | O | | | | 0 |
| Other content | other | O | [0,1] | | | O | | | | 0 |
| Flow properties and LCIA factors | flowProperties AndLCIAFactor s | R | [0,1] | | | C | | | | 2-15 |
| Flow properties | flowProperties | R | [1,1] | | | C | | | | 2-15-66 |
| Flow property | flowProperty | R | [1,n] | | | C | | | | 2-15-66-1 |
| Data set internal ID | @dataSetInte rnalID | R | | <u>Int5</u> | | C | | | | 2-15-66-191 |
| Flow property | referenceToFl owPropertyDa taSet | r | [1,1] | <u>GlobalRefe renceType</u> | | C | | | Must be a reference to one of the ILCD reference flow property data sets, unless a flow property is required and referenced that is not defined under the ILCD. | 2-15-66-190 |
| Mean value (of flow property) | meanValue | r | [1,1] | <u>Real</u> | | C | | | | 2-15-66-192 |
| Minimum | minimumValu | r | [0,1] | <u>Real</u> | | O | | | | 2-15-66-193 |

| FLOW DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-------------------------------------|-------------------------------|------------------------------|----------------------|-------------------------------------------|------------------------|------------------------------|----------------------------------------------------------|-----------------------------|-------------------------------------------------------------|-------------|
| value | e | | | | | | | | | |
| Maximum value | maximumValue | r | [0,1] | Real | | O | | | | 2-15-66-194 |
| Uncertainty distribution type | uncertaintyDistributionType | o | [0,1] | Uncertainty Distribution TypeValues | | O | | | | 2-15-66-195 |
| Relative StdDev in % | relativeStandardDeviation95In | r | [0,1] | Perc | | O | | | | 2-15-66-196 |
| Data derivation type / status | dataDerivationTypeStatus | r | [0,1] | FlowDataDerivationTypeStatusValues | | O | | | | 2-15-66-198 |
| Comment | generalComment | o | [0,1] | StringMultiLang | | O | | | | 2-15-66-199 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |

2.6 Flow property data set

LCA practitioners will only rarely need to create a new flow property data set. Such cases are e.g. if specific substance contents are to be modelled (e.g. “Ethane content (volume)” in natural gas) or specific market prices (e.g. “Market value JP 2010, bulk prices” for cost modelling or economic allocation purposes). An otherwise complete set of Flow property data sets is provided as part of the ILCD reference flow property data sets. Before creating a new flow property data set, it is advised to therefore carefully evaluate the need and verify that it does not yet exist. If new flow property data sets are to be created, see the document “Nomenclature and other conventions” and the existing examples on “Methane content (volume)” and “Market value US 2000, bulk prices” as part of the ILCD reference flow property data sets.

| FLOW PROPERTY DATA SET: Field name | Element / attribute name | Requ. Filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance Requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|------------------------------------|----------------------------------|------------------------|----------------|------------------------|---------------------|-----------------------|-------------------------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|
| <i>Flow property data set</i> | <i>flowPropertyDataSet</i> | <i>m</i> | <i>[1,1]</i> | | | <i>V</i> | | | | <i>4</i> |
| | @version | <i>m</i> | | <u>SchemaVersion</u> | | <i>V</i> | | | The most recent ILCD format schema version is to be referenced. | |
| <i>Flow property information</i> | <i>flowPropertiesInformation</i> | <i>m</i> | <i>[1,1]</i> | | | <i>V</i> | | | | <i>4-25</i> |
| <i>Data set information</i> | <i>dataSetInformation</i> | <i>m</i> | <i>[1,1]</i> | | | <i>V</i> | | | | <i>4-25-104</i> |
| UUID of flow property data set | UUID | <i>m</i> | <i>[1,1]</i> | <u>UUID</u> | | <i>V</i> | | | | 4-25-104-273 |
| Name | name | <i>r</i> | <i>[0,1]</i> | <u>StringMultiLang</u> | 100 | C | 3 ... 50 | | Naming conventions of the „ILCD Handbook - Nomenclature and other conventions" document are to be applied. | 4-25-104-274 |
| Synonyms | synonyms | <i>o</i> | <i>[0,1]</i> | <u>FTMultiLang</u> | | <i>O</i> | | | | 4-25-104-275 |
| <i>Classification information</i> | <i>classificationInformation</i> | <i>r</i> | <i>[0,1]</i> | | | <i>C</i> | | | | 4-25-104-276 |
| <i>Classification</i> | <i>classification</i> | <i>r</i> | <i>[0,n]</i> | | | <i>C</i> | | | | 1-1-2-7-2 |
| Name | @name | <i>r</i> | | <u>string</u> | 100 | C | 10 ... 75 | | The classification file ILCDClassification.xml shall be used. | 1-1-2-7-2-a |
| Classes | @classes | <i>r</i> | | <u>anyURI</u> | | <i>C</i> | | | | 1-1-2-7-2-b |
| <i>class</i> | <i>class</i> | <i>r</i> | <i>[1,n]</i> | | | <i>C</i> | | | | 1-1-2-7-2-1 |
| Hierarchy level | @level | <i>r</i> | | <u>LevelType</u> | | <i>C</i> | | | | 1-1-2-7-2-1-a |
| Unique class identifier | @classId | <i>r</i> | | <u>string</u> | 200 | C | 1 ... 150 | | The classes of the file ILCDClassification.xml shall be used. | 1-1-2-7-2-1-b |
| Other | other | <i>o</i> | <i>[0,1]</i> | | | <i>O</i> | | | | 0 |

| FLOW PROPERTY DATA SET: Field name | Element / attribute name | Requ. Filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance Requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-------------------------------------------------------|--------------------------------------------------|------------------------|----------------|---------------------|---------------------|-----------------------|-------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| content | | | | | | | | | | |
| General comment on data set | generalComment | o | [0,1] | FTMultiLang | | O | | | | 4-25-104-278 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Quantitative reference | quantitativeReference | r | [0,1] | | | C | | | | 4-25-106 |
| Reference unit | referenceToReferenceUnitGroup | r | [1,1] | GlobalReferenceType | | C | | | Conventions of the „ILCD Handbook - Nomenclature and other conventions" document are to be applied. | 4-25-106-279 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Modelling and validation | modellingAndValidation | o | [0,1] | | | O | | | | 4-27 |
| Data sources, treatment and representativeness | dataSourcesTreatmentAndRepresentativeness | o | [0,1] | | | O | | | | 4-27-118 |
| Data source | referenceToDataSource | o | [1,n] | GlobalReferenceType | | O | | | Recommended for „Economic flow properties“, i.e. (market) prices. | 4-27-118-280 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Compliance declarations | complianceDeclarations | r | [0,1] | | | C | | | | 1-3-22 |
| Compliance | compliance | r | [1,n] | | | C | | | | 1-3-22-1 |
| Compliance system name | referenceToComplianceSystem | r | [1,1] | GlobalReferenceType | | C | | The following entry and source data set is to be used: • "ILCD-compliant" | Must reference to the corresponding source data set of the most recent version of the ILCD compliance system. For the definitions for use in the ILCD Data Network see; see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". Other compliance systems (e.g. of specific EPD schemes etc.) | 1-3-22-90 |

| FLOW PROPERTY DATA SET: Field name | Element / attribute name | Requ. Filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce Requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------------------|------------------------------------|------------------------------|----------------------|----------------------------|------------------------|------------------------------|----------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| | | | | | | | | | can be referenced in addition. | |
| Approval of overall compliance | approvalOfOverallCompliance | o | [0,1] | <u>ComplianceValues</u> | | C | | | For the ILCD related compliance system entries: Make sure to meet the overall requirements; for an overview and specific settings for the ILCD Data Network see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". | 1-3-22-95 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Administrative information | administrativeInformation | r | [0,1] | | | C | | | | 4-29 |
| Data entry by | dataEntryBy | r | [0,1] | | | C | | | | 4-29-130 |
| Time stamp (last saved) | timeStamp | r | [0,1] | <u>dateTime</u> | | C | | | | 1-5-28-104 |
| Data set format(s) | referenceToDataSetFormat | r | [0,n] | <u>GlobalReferenceType</u> | | C | | „ILCD format“ | Must include the reference to the most recent ILCD format version, with its original source data set and UUID / URI. (Can have additional references to other formats („namespaces“) that might be used in the data set for additional information beyond the documentation scope of the ILCD format.) | 1-5-28-105 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Publication and ownership | publicationAndOwnership | r | [0,1] | | | C | | | | 4-29-132 |
| Data set version | dataSetVersion | m | [1,1] | <u>Version</u> | | V | | | Is typically automatically generated, but may be manually adjusted. | 1-5-30-111 |
| Preceding data set version | referenceToPrecedingDataSetVersion | o | [0,n] | <u>GlobalReferenceType</u> | | O | | | | 1-5-30-112 |
| Permanent data set URI | permanentDataSetURI | r | [0,1] | <u>anyURI</u> | | O | | | It is strongly recommended to provide a URI that can be used to | 1-5-30-300 |

| FLOW PROPERTY DATA SET: Field name | Element / attribute name | Requ. Filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce Requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|------------------------------------------|-------------------------------|------------------------------|----------------------|-------------------------------------|------------------------|------------------------------|----------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|------------|
| | | | | | | | | | find the original version of the data set and verify changes or availability of new versions. | |
| Owner of data set | referenceToOwnershipOfDataSet | r | [0,1] | GlobalReferenceType | | O | | | | 1-5-30-115 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |

2.7 Unit group data set

LCA practitioners should very rarely need to create new unit group data sets or insert new units. A complete set of such data sets is provided as part of the ILCD reference unit group data sets. Before creating a new unit group data set, it is advised to therefore carefully evaluate the need and verify that it does not yet exist; see also the document "Nomenclature and other conventions".

| UNIT GROUP DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------|-----------------------------|------------------------------|----------------------|-------------------------------|------------------------|------------------------------|----------------------------------------------------------|-----------------------------|-----------------------------------------------------------------|-----------------|
| <i>Unit group data set</i> | <i>unitGroupDataSet</i> | <i>m</i> | <i>[1,1]</i> | | | <i>V</i> | | | | <i>5</i> |
| | @version | m | | SchemaVersion | | V | | | The most recent ILCD format schema version is to be referenced. | |
| <i>Unit group information</i> | <i>unitGroupInformation</i> | <i>m</i> | <i>[1,1]</i> | | | <i>V</i> | | | | <i>5-33</i> |
| <i>Data set information</i> | <i>dataSetInformation</i> | <i>m</i> | <i>[1,1]</i> | | | <i>V</i> | | | | <i>5-33-138</i> |
| UUID of unit group data set | UUID | m | [1,1] | UUID | | V | | | | 5-33-138-306 |

| UNIT GROUP DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. character s | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------|----------------------------------|------------------------------|----------------------|------------------------|----------------------------|------------------------------|----------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|
| Name | name | r | [0,1] | <u>StringMultiLang</u> | 100 | C | 3 ... 50 | | Naming conventions of the „ILCD Handbook - Nomenclature and other conventions“ document are to be applied. | 5-33-138-307 |
| <i>Classification Information</i> | <i>classificationInformation</i> | r | [0,1] | | | C | | | | 5-33-138-308 |
| <i>Classification</i> | <i>classification</i> | r | [0,n] | | | C | | | | 1-1-2-7-2 |
| Name | @name | r | | <u>string</u> | 100 | C | 10 ... 75 | | The classification file ILCDClassification.xml is to be used. | 1-1-2-7-2-a |
| Classes | @classes | r | | <u>anyURI</u> | | C | | | | 1-1-2-7-2-b |
| <i>class</i> | <i>class</i> | r | [1,n] | | | C | | | | 1-1-2-7-2-1 |
| Hierarchy level | @level | r | | <u>LevelType</u> | | C | | | | 1-1-2-7-2-1-a |
| Unique class identifier | @classId | r | | <u>string</u> | 200 | C | 1 ... 150 | | The classes of the file ILCDClassification.xml shall be used. | 1-1-2-7-2-1-b |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| General comment | generalComment | o | [0,1] | <u>FTMultiLang</u> | | O | | | | 5-33-138-309 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Quantitative reference | quantitativeReference | r | [0,1] | | | C | | | | 5-33-140 |
| Reference unit | referenceToReferenceUnit | r | [1,1] | <u>Int5</u> | | C | | | | 5-33-140-310 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Modelling and validation | modellingAndValidation | r | [0,1] | | | C | | | | 5-35 |
| Compliance declarations | complianceDeclarations | r | [0,1] | | | C | | | | 5-35-158 |
| <i>Compliance</i> | <i>compliance</i> | r | [1,n] | | | C | | | | 1-3-22-1 |

| UNIT GROUP DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. character s | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------|-----------------------------------|------------------------------|----------------------|-------------------------------------|----------------------------|------------------------------|----------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Compliance system name | referenceToComplianceSystem | r | [1,1] | GlobalReferenceType | | C | | The following entry and source data set is to be used: • "ILCD-compliant" | Must reference to the corresponding source data set of the most recent version of the ILCD compliance system. For the definitions for use in the ILCD Data Network see; see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". Other compliance systems (e.g. of specific EPD schemes etc.) can be referenced in addition. | 1-3-22-90 |
| Approval of overall compliance | approvalOfOverallCompliance | o | [0,1] | ComplianceValues | | C | | | For the ILCD related compliance system entries: Make sure to meet the overall requirements; for an overview and specific settings for the ILCD Data Network see the separate document "ILCD Data Network: Compliance rules and entry-level requirements". | 1-3-22-95 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Administrative information | administrative information | r | [0,1] | | | C | | | | 5-37 |
| Data entry by | dataEntryBy | r | [0,1] | | | C | | | | 5-37-164 |
| Time stamp (last saved) | timeStamp | r | [0,1] | dateTime | | C | | | | 1-5-28-104 |
| Data set format(s) | referenceToDataSetFormat | r | [0,n] | GlobalReferenceType | | C | | „ILCD format“ | Must include the reference to the most recent ILCD format version, with its original source data set and UUID / URI. (Can have additional references to other formats („namespaces“) that might be used in the data set for | 1-5-28-105 |

| UNIT GROUP DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. character s | Complian ce requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|---------------------------------------|------------------------------------|------------------------------|----------------------|----------------------------|----------------------------|------------------------------|----------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| | | | | | | | | | additional information beyond the documentation scope of the ILCD format.) | |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Publication and ownership | publicationAndOwnership | r | [0,1] | | | C | | | | 5-37-166 |
| Data set version | dataSetVersion | m | [1,1] | <u>Version</u> | | V | | | Is typically automatically generated, but may be manually adjusted. | 1-5-30-111 |
| Preceding data set version | referenceToPrecedingDataSetVersion | o | [0,n] | <u>GlobalReferenceType</u> | | O | | | | 1-5-30-112 |
| Permanent data set URI | permanentDataSetURI | r | [0,1] | <u>anyURI</u> | | O | | | It is strongly recommended to provide a URI that can be used to find the original version of the data set and verify changes or availability of new versions. | 1-5-30-300 |
| Owner of data set | referenceToOwnershipOfDataSet | r | [0,1] | <u>GlobalReferenceType</u> | | O | | | | 1-5-30-115 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Units | units | r | [0,1] | | | C | | | | 5-39 |
| Unit | unit | r | [1,n] | | | C | | | | 5-39-168 |
| Data set internal ID | @dataSetInternalID | r | | <u>Int5</u> | | C | | | | 5-39-168-324 |
| Name of unit | name | r | [1,1] | <u>String</u> | 25 | C | 1 ... 15 | | | 5-39-168-323 |
| Mean value (of unit) | meanValue | r | [1,1] | <u>Real</u> | | C | | | | 5-39-168-325 |
| Comment | generalComment | o | [0,1] | <u>StringMultiLang</u> | | C | | | The long/full name of the unit shall be given here. | 5-39-168-326 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |

2.8 Source data set

Source data sets serve to document all kinds of information sources used, ranging from data collection sheets, publications, method reports, images, to LCI background databases used, etc.

| SOURCE DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------|----------------------------------|------------------------|----------------|------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|----------------------------------------------------------------------|-----------------|
| Source data set | sourceDataSet | m | [1,1] | | | V | | | | 7 |
| version | @version | m | | <u>SchemaVersion</u> | | V | | | The most recent ILCD format schema version is to be referenced. | 1-a |
| Source information | sourceInformation | m | [1,1] | | | V | | | | 7-43 |
| Data set information | dataSetInformation | m | [1,1] | | | V | | | | 7-43-174 |
| UUID of source data set | UUID | m | [1,1] | <u>UUID</u> | | V | | | | 7-43-174-354 |
| Short name of source | shortName | o | [0,1] | <u>StringMultiLang</u> | 100 | C | 2 ... 40 | | | 7-43-174-355 |
| <i>Classification information</i> | <i>classificationInformation</i> | r | [0,1] | | | C | | | | 7-43-174-357 |
| <i>Classification</i> | <i>classification</i> | r | [0,n] | | | C | | | | 1-1-2-7-2 |
| Name | @name | r | | <u>string</u> | 100 | C | 10 ... 75 | | The classification file ILCDClassification.xml shall be used. | 1-1-2-7-2-a |
| Classes | @classes | r | | <u>anyURI</u> | | C | | | | 1-1-2-7-2-b |
| <i>class</i> | <i>class</i> | r | [1,n] | | | C | | | | 1-1-2-7-2-1 |
| Hierarchy level | @level | r | | <u>LevelType</u> | | C | | | | 1-1-2-7-2-1-a |
| Unique class identifier | @classId | r | | <u>string</u> | 200 | C | 1 ... 150 | | The classes of the file ILCDClassification.xml shall be used. | 1-1-2-7-2-1-b |

| SOURCE DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------|-----------------------------------|------------------------|----------------|-----------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| er | | | | | | | | | | |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Source citation | sourceCitation | r | [0,1] | ST | | C | 20 ... 500 | | | 7-43-174-356 |
| Publication type | publicationType | o | [0,1] | PublicationTypeValues | | C | | | Required ("C") only if the source is an image (in support of embedded display in process data sets). General use of field recommended. | 7-43-174-359 |
| Source description or comment | sourceDescriptionOrComment | o | [0,1] | FTMultiLang | | O | | | | 7-43-174-360 |
| Link to digital file | referenceToDigitalFile | o | [0,1] | | | O | | | | 7-43-174-361 |
| | @uri | o | | anyURI | | O | | | | |
| Belongs to: | referenceToContact | o | [0,n] | GlobalReferenceType | | O | | | | 6-41-172-344 |
| Logo of organisation or source | referenceToLogo | o | [0,1] | GlobalReferenceType | | O | | | | 6-41-172-346 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Administrative information | administrative information | r | [0,1] | | | C | | | | 1-5 |
| Data entry by | dataEntryBy | r | [0,1] | | | C | | | | 1-5-28 |
| Time stamp (last saved) | timeStamp | r | [0,1] | dateTime | | C | | | | 1-5-28-104 |
| Data set format(s) | referenceToDataSetFormat | r | [0,n] | GlobalReferenceType | | C | | „ILCD format“ | Must include the reference to the most recent ILCD format version, with its original source data set and UUID / URI. (Can have additional references to other formats („namespaces“) that might be used in the data set for additional information beyond the documentation scope of the ILCD | 1-5-28-105 |

| SOURCE DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|----------------------------------|------------------------------------|------------------------|----------------|---------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| | | | | | | | | | format.) | |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Publication and ownership | publicationAndOwnership | r | [0,1] | | | C | | | | 1-5-30 |
| Data set version | dataSetVersion | m | [1,1] | Version | | V | | | Is typically automatically generated, but may be manually adjusted. | 1-5-30-111 |
| Preceding data set version | referenceToPrecedingDataSetVersion | o | [0,n] | GlobalReferenceType | | O | | | | 1-5-30-112 |
| Permanent data set URI | permanentDataSetURI | r | [0,1] | anyURI | | O | | | It is strongly recommended to provide a URI that can be used to find the original version of the data set and verify changes or availability of new versions. | 1-5-30-300 |
| Owner of data set | referenceToOwnershipOfDataSet | r | [0,1] | GlobalReferenceType | | O | | | | 1-5-30-115 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |

2.9 Contact data set

Contact data sets serve to identify organisations, persons and the like. These can be the experts that have modelled a data set, reviewers, data set owners, etc.

| CONTACT DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|------------------------------|--------------------------|------------------------|----------------|-----------|---------------------|----------------------|-------------------------------------------------|--------------------------|-------------------------------------------------------|----------|
| Contact data | contactDataSet | m | [1,1] | | | V | | | | 6 |

| CONTACT DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------|----------------------------------|------------------------|----------------|---------------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|----------------------------------------------------------------------|-----------------|
| <i>set</i> | | | | | | | | | | |
| version | @version | m | | SchemaVersion | | V | | | The most recent ILCD format schema version is to be referenced. | 1-a |
| Contact information | contactInformation | m | [1,1] | | | V | | | | 6-41 |
| Data set information | dataSetInformation | m | [1,1] | | | V | | | | 6-41-172 |
| UUID of Contact data set | UUID | m | [1,1] | UUID | | V | | | | 6-41-172-327 |
| Short name for contact | shortName | o | [0,1] | StringMultiLang | 25 | C | 2 ... 40 | | | 6-41-172-328 |
| Name of contact | name | r | [0,1] | StringMultiLang | 100 | C | | | | 6-41-172-329 |
| <i>Classification Information</i> | <i>classificationInformation</i> | r | [0,1] | | | C | | | | 6-41-172-336 |
| <i>Classification</i> | <i>classification</i> | r | [0,n] | | | C | | | | 1-1-2-7-2 |
| Name | @name | r | | string | 100 | C | 10 ... 75 | | The classification file ILCDClassification.xml shall be used. | 1-1-2-7-2-a |
| Classes | @classes | r | | anyURI | | C | | | | 1-1-2-7-2-b |
| <i>class</i> | <i>class</i> | r | [1,n] | | | C | | | | 1-1-2-7-2-1 |
| Hierarchy level | @level | r | | LevelType | | C | | | | 1-1-2-7-2-1-a |
| Unique class identifier | @classId | r | | string | 200 | C | 1 ... 150 | | The classes of the file ILCDClassification.xml shall be used. | 1-1-2-7-2-1-b |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Contact address | contactAddresses | o | [0,1] | STMultiLang | | O | | | | 6-41-172-338 |
| Telephone | telephone | o | [0,1] | String | | O | | | | 6-41-172-339 |
| Telefax | telefax | o | [0,1] | String | | O | | | | 6-41-172-340 |

| CONTACT DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance req. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|-----------------------------------|-----------------------------------|------------------------|----------------|----------------------------|---------------------|----------------------|-------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| E-mail | email | o | [0,1] | <u>String</u> | | O | | | | 6-41-172-341 |
| WWW-Address | WWWAddress | r | [0,1] | <u>ST</u> | | O | | | | 6-41-172-342 |
| Central contact point | centralContactPoint | r | [0,1] | <u>STMultilingual</u> | | C | | | | 6-41-172-343 |
| Contact description or comment | contactDescriptionOrComment | o | [0,1] | <u>STMultilingual</u> | | O | | | | 6-41-172-345 |
| Belongs to: | referenceToContact | o | [0,n] | <u>GlobalReferenceType</u> | | O | | | | 6-41-172-344 |
| Logo of organisation or source | referenceToLogo | o | [0,1] | <u>GlobalReferenceType</u> | | O | | | | 6-41-172-346 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Administrative information | administrative information | r | [0,1] | | | C | | | | 1-5 |
| Data entry by | dataEntryBy | r | [0,1] | | | C | | | | 1-5-28 |
| Time stamp (last saved) | timeStamp | r | [0,1] | <u>dateTime</u> | | C | | | | 1-5-28-104 |
| Data set format(s) | referenceToDataSetFormat | r | [0,n] | <u>GlobalReferenceType</u> | | C | | „ILCD format“ | Must include the reference to the most recent ILCD format version, with its original source data set and UUID / URI. (Can have additional references to other formats („namespaces“) that might be used in the data set for additional information beyond the documentation scope of the ILCD format.) | 1-5-28-105 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Publication and ownership | publicationAnd Ownership | r | [0,1] | | | C | | | | 1-5-30 |
| Data set version | dataSetVersion | m | [1,1] | <u>Version</u> | | V | | | Is typically automatically generated, but may be manually adjusted. | 1-5-30-111 |

| CONTACT DATA SET: Field name | Element / attribute name | Requ. filter indicator | Min / max occ. | Data type | Max. No. characters | Compliance requ. type | Indicative text lengths IF field in use (chars) | Mandatory entry (if any) | Comment (requirements, recommendations, explanations) | eDoc ID |
|---------------------------------|------------------------------------|------------------------|----------------|-------------------------------------|---------------------|-----------------------|-------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Preceding data set version | referenceToPrecedingDataSetVersion | o | [0,n] | GlobalReferenceType | | O | | | | 1-5-30-112 |
| Permanent data set URI | permanentDataSetURI | r | [0,1] | anyURI | | O | | | It is strongly recommended to provide a URI that can be used to find the original version of the data set and verify changes or availability of new versions. | 1-5-30-300 |
| Owner of data set | referenceToOwnershipOfDataSet | r | [0,1] | GlobalReferenceType | | O | | | | 1-5-30-115 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |
| Other content | other | o | [0,1] | | | O | | | | 0 |

2.10 LCIA method data set

LCIA method data sets serve to document the characterisation factors of the respective method as well as underlying models and data sources used. LCIAS method data sets can also represent a complete LCIA methodology, i.e. a compilation of LCIA methods that are foreseen to be used jointly and cover typically a range of complementary impact categories.

Specific requirements for documentation-compliance have not yet been defined for LCIA method data sets. The complete LCIA method data set format specification is available in the ILCD format developer kit, same as for the other data set types.

2.11 For all data set types applies moreover...

Information in a data set may be given in any language, but all information to be provided according to the above compliance rules has to be given at least once and in the same language. The used language is to be correctly identified by giving the correct *lang* attribute inside each format tag (see format specifications; this is usually done by the LCA software/editor supporting the documentation).

The preferred language is English (xml:lang="en"), but also other languages can be used alternatively (and in addition).

European Commission

EUR 24381 EN – Joint Research Centre – Institute for Environment and Sustainability

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Abstract

Life Cycle Thinking (LCT) and Life Cycle Assessment (LCA) are the scientific approaches behind modern environmental policies and business decision support related to Sustainable Consumption and Production (SCP). The International Reference Life Cycle Data System (ILCD) provides a common basis for consistent, robust and quality-assured life cycle data and studies. Such data and studies support coherent SCP instruments, such as Ecolabelling, Ecodesign, Carbon footprinting, and Green Public Procurement. This document supports the International Reference Life Cycle Data System (ILCD) Data Network. It provides the provisions for ILCD documentation-compliant LCA data sets under the ILCD Handbook and ILCD Data Network. The document also lists the general possibilities of the ILCD data set format for the documentation of LCA data sets for technical audience (e.g. LCA practitioners and reviewers). The term “LCA data sets” is used here as cover term for the following types of data sets: Process data set, Flow data set, Flow property data set, Unit group data set, Source data set, and Contact data set, as well as LCIA method data sets. The principle target audience for this document is the LCA practitioner and reviewer. This document is based on and conforms to the ISO 14040 and 14044 standards on LCA.

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