

International Reference Life Cycle Data System (ILCD): Documentation compliance rules for the ILCD Data Network

Draft

Disclaimer: This is a draft that will undergo further consultation which may result in significant changes of the document. As soon as a next version becomes available it supersedes this version.

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1 Introduction

This text comprises the documentation compliance requirements of the International Reference Life Cycle Data System (ILCD) for the ILCD Data Network. It provides the requirements for appropriate documentation of LCA data sets with additional explanations for users. These requirements ensure that the LCA practitioner gets the data and information that he/she needs to judge the quality and appropriateness of a data set for his/her specific application. The requirements refer to the most recent version of the ILCD reference data set format.

Note that applying the ILCD documentation compliance requirements do not imply that the data meets a certain quality requirement or that the data set would be endorsed by the participating governments. Please also refer to the license conditions of the ILCD format, currently accessible from <http://lca.jrc.ec.europa.eu>.

Most but not all of the ILCD documentation compliance requirements are also implemented in compliance stylesheets of the ILCD data format editor (*work in progress*). These stylesheets support an efficient automatic checking of individual data sets and whole databases regarding the compliance of the extent of the documentation. The appropriateness of the documentation can of course not be part of an automated check, but is to be judged by the LCA practitioner and/or reviewer.

2 ILCD documentation compliance rules

A data set is **ILCD-compliant**, if the conditions of this chapter and subchapters are met. They are differentiated by data set type. 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 **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 to developers: This is also fulfilled if additional “namespaces” (e.g. of fields defined in other formats) are included in the data set, in the way specified in the ILCD schema files.)
- At least **all the documentation sections and fields (i.e. “tags”) given in the following sub-chapters** are present and used as defined in the ILCD format. In case a field/tag can also be empty, this will especially be stated below. Please note that depending on the specific data set, the use of some additional fields can be necessary to provide accurate information; this is to be judged case-wise by the LCA practitioner and/or reviewer. In some frequent cases this is pointed out in the tables of the following chapters.
- The **information given in the fields/tags has to be correct** (what has to be verified by e.g. a reviewer).

2.1 How to read the tables

Meaning of the information columns in the following tables

- **“Max. No. characters”**: The maximum permissible number of characters is restricted below the number that is technically permitted by the ILCD format. This serves to avoid e.g. data set names of 500 characters etc.
- **“Compliance requ. type”**: This column identifies which fields are to be filled in to have a **ILCD format valid data set (entry “V”)** and an **ILCD documentation compliant data set (entry “C”)**. “O” means optional. (Note that the entries of this column are similar while not identical as those of column “Requ. filter indicator”; column “Requ. filter indicator” serves 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. (Note for developers: This information can also be used to automatically check for deviations below or above the range and to provide a feedback to the LCA practitioner.)
- **“Mandatory entry (if any)”**: A specific entry is given here, in case such is mandatorily to be entered for ILCD documentation compliant data sets.

Meaning of the text colours in the following tables

- To ease the use of the following tables, for all entries that are actively to be dealt with by the LCA practitioner, the text is highlighted in dark green.
- **Of the above the required entries (i.e. for “ILCD format scheme valid” and “ILCD documentation compliant” data sets) are further highlighted in bold.**
- For fields that are just section or subsection headings and need hence no entry as well as for fields that are filled in always by the LCA software tool or editor without user-interaction, the text in the rows is 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.

2.2 Process data set

Preceding remark: How much effort is it to appropriately document an ILCD documentation compliant Process data set?

For orientation, referring to a typical 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). Only 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 ILCD compliant documentation. Of these 64, 54 are to be dealt with by the LCA practitioner (respectively reviewer), the other 10 are automatically filled in by the LCA software or editor. However, for 20 of the ILCD documentation compliant fields the practitioner is to actively deal with, the entries are to be just selected from predefined lists, e.g. via pull-down menus, and 10 are references to other data sets (Source, Contact, Flow, or LCIA method data sets). (For the extend 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 defaults be defined on e.g. data set modeller, copyright, LCI method principle, etc. Of the ILCD documentation compliant fields only 20 require the practitioner to actually provide a 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 occurrence (e.g. references to sources, input/output flows, etc.), none of these fields is a free text field. Note that for parameterised data sets 5 additional fields are to be filled in. 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 casewise.

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 an LCI study report, while already providing virtually all relevant information to the data set user and easing electronic exchange and management of the information.

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
Process data set	processDataSet	m	[1,1]			V				1
version	@version	m		SchemaVersion		V			One of the ILCD format schema versions that is supported by the ILCD Data Network is to be	1-a

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
									referenced.	
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>		O			„yes“ only for data sets without the Inputs and Outputs and Mathematical model sections. Purely descriptive data set without inventory data.	1-c
Process information	processInformation	m	[1,1]			V				1-1
Key Data Set Information	dataSetInformation	m	[1,1]			V				1-1-2
UUID of Process data set	UUID	m	[1,1]	<u>UUID</u>		V				1-1-2-1
Name	name	r	[0,1]			C				1-1-2-2
Base name	baseName	r	[1,1]	<u>StringMultiLang</u>	100	C	10 ... 50		Naming conventions of the „ILCD - Nomenclature and other conventions ...“ document are to be applied.	1-1-2-2-1
Treatment, standards, routes	treatmentStandardsRoutes	r	[0,1]	<u>StringMultiLang</u>	100	C	5 ... 30		Naming conventions of the „ILCD - Nomenclature and other conventions ...“ document are to be applied.	1-1-2-3
Mix and location types	mixAndLocationTypes	r	[0,1]	<u>StringMultiLang</u>	100	C	5 ... 30		Naming conventions of the „ILCD - Nomenclature and other conventions ...“ document are to be applied.	1-1-2-4
Quantitative product or process properties	functionalUnitFlowProperties	r	[0,1]	<u>StringMultiLang</u>	100	C	5 ... 30		Naming conventions of the „ILCD - Nomenclature and other conventions ...“ document are to be applied.	1-1-2-5
Other content	other	o	[0,1]			O				0
Identifier of	identifierOfSub	o	[0,1]	<u>String</u>		O				1-7-32-131

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
sub-data set	DataSet									
Synonyms	synonyms	o	[0,1]	FTMultiLang		O				1-1-2-6
Complementing processes	complementingProcesses	o	[0,1]			O				1-1-2-8
Complementing process	complementingProcess	o	[1,n]	GlobalReferenceType		O				1-1-2-8-1
Classification information	classificationInformation	r	[0,1]			C				1-1-2-7
Classification	classification	r	[0,n]			C				1-1-2-7-2
Name	@name	r		string	100	C	10 ... 75		The classes of the file ILCDClassification.xml are to be used for ILCD compliance.	1-1-2-7-2-a
Classes	@classes	r		anyURI		C				1-1-2-7-2-b
class	class	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 are to be used for ILCD compliance.	1-1-2-7-2-1-b
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	referenceToExternalDocumentationFilesSource	o	[0,n]	GlobalReferenceType		O			It is recommended to provide a more comprehensive documentation via an referenced/attached LCI study report, ideally using the ILCD report template.	1-1-2-13
Other content	other	o	[0,1]			O				0
Quantitative reference	quantitativeReference	r	[0,1]			C				1-1-4
Type of	@type	r		TypeOfQu		C			Recommended to be of the type	1-1-4-15

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
quantitative reference				<u>quantitativeReferenceValues</u>					„Reference flow(s)“.	
Reference flow(s)	referenceToReferenceFlow	r	[0,n]	<u>Int6</u>		C				1-1-4-16
Functional unit, Production period, or Other parameter	functionalUnitProductionPeriodOrOtherParameter	r	[0,n]	<u>StringMultiLang</u>		O	20 ... 100		It is recommended, to additionally give one or more functional units for the reference flow (if one reference flow, not for multifunctional processes).	1-1-4-17
Other content	other	o	[0,1]			O				0
Time representativeness	time	r	[0,1]			C				1-1-6
Reference year	referenceYear	r	[0,1]	<u>Year</u>		C				1-1-6-18
Data set valid until:	dataSetValidUntil	r	[0,1]	<u>Year</u>		C				1-1-6-19
Time representativeness description	timeRepresentativenessDescription	r	[0,1]	<u>FTMultiLang</u>		C	20 ... 100			1-1-6-20
Other content	other	o	[0,1]			O				0
Geographical representativeness	geography	r	[0,1]			C				1-1-8
Location	locationOfOperationSupplyOrProduction	r	[0,1]			C				1-1-8-21
Location	@location	r		<u>NullableString</u>	25	C	2 ... 20		Must use one of the locations that are specified in the ILCDLocations.xml or other file, as referenced in the field „<processDataSet @locations>. This is typically LCA software supported, with pulldown lists for the practitioner. Can be empty if geography-unspecific e.g.	1-1-8-21

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
									technology-model data set (i.e. do only enter GLO if data set represents worldwide average).	
Latitude and Longitude	@latitudeAnd Longitude	o		GIS		O				1-1-8-23
Geographical representativeness description	descriptionOf Restrictions	o	[0,1]	FTMultiLang		C	20 ... 200			1-1-8-24
Other content	other	o	[0,1]			O				0
Sub-location(s)	subLocationOfOperationSupply OrProduction	o	[0,n]			O				1-1-8-22
Sub-location(s)	@subLocation	o		String	25	O	2 ...20			1-1-8-22
Latitude and Longitude	@latitudeAnd Longitude	o		GIS		O				1-1-8-23
Geographical representativeness description	descriptionOf Restrictions	o	[0,1]	FTMultiLang		O	20 ... 500			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	technologyDescriptionAndIncludedProcessesAndLCIResults	r	[0,1]	FTMultiLang		C	200 ... 1000			1-1-10-25
Included data sets	referenceToIncludedProcessesAndLCIResults	r	[0,n]	GlobalReferenceType		C			Field can be un-used. Recommended however to reference all quantitatively	1-1-10-26

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
									relevant, included data sets from the ILCD Data Network.	
Technical purpose of product or process	technologicalApplication	r	[0,1]	FTMultiLang		C	50 ... 200			1-1-10-27
Pictogramme of technology	referenceToTechnologyPictogramme	o	[0,1]	GlobalReferenceType		O				1-1-10-28
Flow diagram(s) or picture(s)	referenceToTechnologyFlowDiagramOrPicture	o	[0,n]	GlobalReferenceType		O			Recommended to be used to improve documentation of most data sets.	1-1-10-29
Other content	other	o	[0,1]			O				0
Mathematical model	mathematicalRelations	o	[0,1]			O			This section is required for parameterised LCI data sets.	1-1-12
Model description	modelDescription	o	[0,1]	FTMultiLang		O	50 ... 1000		This entry is required for parameterised LCI data sets.	1-1-12-31
Variable / parameter	variableParameter	o	[0,n]			O				1-1-12-33
Name of variable	@name	o		MatV	25	O	5 ... 15		This entry is required for parameterised LCI data sets.	1-1-12-33-1
Formula	formula	o	[0,1]	MatR		O			This entry is required for parameterised LCI data sets.	1-1-12-32
Mean value	meanValue	o	[0,1]	Real		O			This entry is required for parameterised LCI data sets.	1-1-12-34
Minimum value	minimumValue	o	[0,1]	Real		O			This entry is recommended for parameterised LCI data sets.	1-1-12-35
Maximum value	maximumValue	o	[0,1]	Real		O			This entry is recommended for parameterised LCI data sets.	1-1-12-36
Uncertainty distribution type	uncertaintyDistributionType	o	[0,1]	UncertaintyDistributionTypeValues		O				1-1-12-37
Relative StdDev in %	relativeStandardDeviation95In	o	[0,1]	Perc		O				1-1-12-38
Comment,	comment	o	[0,1]	StringMulti	200	O	5 ... 100		This entry is required for	1-1-12-39

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
units, defaults				<u>Lang</u>					parameterised LCI data sets.	
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]	<u>TypeOfProcessValues</u>		C			All data set types are supported, of course.	1-3-14-40
LCI method principle	LCIMethodPrinciple	r	[0,1]	<u>LCIMethodPrincipleValues</u>		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“.	1-3-14-41
Deviation from LCI method principle / explanations	deviationFromLCIMethodPrincipleExplanations	r	[0,1]	<u>FTMultiLang</u>		C	4 ... 400			1-3-14-42
LCI method approaches	lciMethodApproaches	r	[0,n]	<u>LCIMethodApproachesValues</u>		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	deviationsFromLCAMethodApproachesExplanations	r	[0,1]	<u>FTMultiLang</u>		C	4 ... 400			1-3-14-44
Modelling constants	modellingConstants	r	[0,1]	<u>FTMultiLang</u>		C				1-3-14-45
Deviation from	deviationFromModellingConstants	r	[0,1]	<u>FTMultiLang</u>		C	4 ... 400			1-3-14-46

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
modelling constants / explanations	tsExplanations									
LCA methodology report	referenceToLCAMethodAndAllocationPrinciplesAndModellingConstantsDetails	o	[0,n]	<u>GlobalReferenceType</u>		O			It is recommended to reference a more complete methodology report followed, in this case the ILCD Handbook.	1-3-14-47
Other content	other	o	[0,1]			O				0
Data sources, treatment, and representativeness	dataSourcesTreatmentAndRepresentativeness	r	[0,1]			C				1-3-16
Data cut-off and completeness principles	dataCutOffAndCompletenessPrinciples	r	[0,1]	<u>FTMultiLang</u>		C	100 ... 300		Make sure to meet the cut-off and completeness requirements as defined for the data quality level that you claim in section „Compliance declarations“.	1-3-16-48
Deviation from data cut-off and completeness principles / explanations	deviationFromDataCutOffAndCompletenessPrinciplesExplanations	r	[0,1]	<u>FTMultiLang</u>		C	4 ... 400		See above.	1-3-16-49
Data selection and combination principles	dataSelectionAndCombinationPrinciples	r	[0,1]	<u>FTMultiLang</u>		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 /	deviationFromDataSelectionAndCombinationPrinciplesExplanations	r	[0,1]	<u>FTMultiLang</u>		C	4 ... 400		See above.	1-3-16-51

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
explanations										
Data treatment and extrapolation s 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 the section „Compliance declarations“. Also check with entries you give in the respective „... representativeness“ sections.	1-3-16-52
Deviation from data treatment and extrapolation s principles / explanations	deviationFromDataTreatmentAndExtrapolationPrinciplesExplanations	r	[0,1]	FTMultiLang		C	4 ... 400		See above.	1-3-16-53
Data handling report	referenceToDataCompletenessSelectionCombinationTreatmentAndExtrapolationPrinciplesDetails	o	[0,n]	GlobalReferenceType		O				1-3-16-54
Data source(s) used for this data set	referenceToDataSource	r	[0,n]	GlobalReferenceType		C			Provide all relevant data sources, including for the relevant included processes, 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			1-3-16-58
Sampling procedure	samplingProcedure	o	[0,1]	FTMultiLang		O	20 ... 500			1-3-16-59

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
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
Use advice for data set	useAdviceForDataSet	r	[0,1]	STMultiLang		C	20 ... 200			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				1-3-18-63
Supported impact assessment methods	referenceToSupportedImpactAssessmentMethods	r	[0,n]	GlobalReferenceType		C				1-3-18-64
Completeness elementary flows, per topic	completenessElementaryFlows	r	[0,n]			C				1-3-18-65
completeness type	@type	r		CompletenessTypeValues		C			It is recommended to clearly state ALL impact categories that are actually addressed by the inventory values, and to which degree.	1-3-18-65-1
value	@value	r		CompletenessValues		C			It is recommended to clearly state ALL impact categories that are actually addressed by the inventory values, and to which degree.	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

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
review				<u>reviewValues</u>					stated review type meets the requirements of the „review compliance“ that you state in section „Compliance declarations“.	
<i>Scope of review</i>	<i>scope</i>	<i>r</i>	<i>[0,n]</i>			<i>C</i>				1-3-20-82
Scope name	@name	r		<u>ScopeOfReviewValues</u>		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>				1-3-20-83
Method name	@name	r		<u>MethodOfReviewValues</u>		C			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>				1-3-20-90
<i>Data quality indicator</i>	<i>dataQualityIndicator</i>	<i>r</i>	<i>[1,n]</i>			<i>C</i>				1-3-20-91
Name of data quality indicator	@name	r		<u>DataQualityIndicatorValues</u>		C			Make sure that the data quality indicator matches the requirements of the of the „quality“, „method“, „nomenclature“, „documentation“, and „review“ compliance that you state in section „Compliance declarations“.	1-3-20-91-1
Value of data quality indicator	@value	r		<u>QualityValues</u>		C			Make sure that the data quality indicator matches the requirements of the of the „quality“, „method“, „nomenclature“,	1-3-20-91-2

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
									„documentation“, and „review“ compliance that you state in section „Compliance declarations“.	
Review details	reviewDetails	r	[0,1]	<u>FTMultiLang</u>		C	500 ... 1500			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>		C				1-3-20-89
Other content	other	o	[0,1]			O				0
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]	<u>GlobalReferenceType</u>		C		„ILCD compliance v. X.Y“	Must refer to the most recent version of the ILCD compliance system.	1-3-22-90
Approval of overall compliance	approvalOfOverallCompliance	o	[0,1]	<u>ComplianceValues</u>		O				1-3-22-95
Quality compliance	qualityCompliance	r	[0,1]	<u>ComplianceValues</u>		C			Make sure to meet the quality requirements set in the ILCD Handbook document „ILCD compliance rules“.	1-3-22-9X
Nomenclature compliance	nomenclatureCompliance	r	[0,1]	<u>ComplianceValues</u>		C			Make sure to meet the nomenclature requirements set in the ILCD Handbook document „ILCD compliance rules“.	1-3-22-92
Methodological	methodologicalCompliance	r	[0,1]	<u>ComplianceValues</u>		C			Make sure to meet the method requirements set in the ILCD	1-3-22-91

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
compliance									Handbook document „ILCD compliance rules“.	
Review compliance	reviewCompliance	r	[0,1]	<u>ComplianceValues</u>		C			Make sure to meet the review requirements set in the ILCD Handbook document „ILCD compliance rules“.	1-3-22-93
Documentation compliance	documentationCompliance	r	[0,1]	<u>ComplianceValues</u>		C			Make sure to meet the documentation requirements set in the ILCD Handbook document „ILCD compliance rules“.	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	administrative information	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				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“ 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 generator / modeller	referenceToPersonOrEntityGeneratingTheDataSet	r	[0,n]	<u>GlobalReferenceType</u>		C				1-5-26-99
Other content	other	o	[0,1]			O				0
Data entry by	dataEntryBy	r	[0,1]			C				1-5-28
Time stamp	timeStamp	r	[0,1]	<u>dateTime</u>		C				1-5-28-104

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
(last saved)										
Data set format(s)	referenceToDataSetFormat	r	[0,n]	<u>GlobalReferenceType</u>		C		„ILCD format X.Y“	Must include the reference to the most recent ILCD format version, as supported by the ILCD Data Network. (Can have additional references to other formats („namespaces“) as used in this data set.)	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>		O				1-5-28-103
Official approval of data set by producer/operator:	referenceToDataSetUseApproval	r	[0,n]	<u>GlobalReferenceType</u>		C			Field can be un-used. Used only if official approval is given.	1-5-28-109
Other content	other	o	[0,1]			O				0
Publication and ownership	publicationAndOwnership		[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
Date of last revision	dateOfLastRevision	r	[0,1]	<u>dateTime</u>		C				1-5-30-113
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>		C			It is recommended to provide a URL or URI that can be used to find the original version of the data set.	1-5-30-300
Workflow and publication status	workflowAndPublicationStatus	o	[0,1]	<u>WorkflowAndPublicationStatusValues</u>		O				1-5-30-110

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
Unchanged re-publication of:	referenceToUnchangedRepublication	o	[0,1]	GlobalReferenceType		O				1-5-30-114
Registration authority	referenceToRegistrationAuthority	o	[0,1]	GlobalReferenceType		C			Field can be un-used. Forseen to be used for registered data sets of the ILCD Data Network.	1-5-30-200
Registration number	registrationNumber	o	[0,1]	String		C			Field can be un-used. Forseen to be used for registered data sets of the ILCD Data Network.	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	referenceToEntitiesAndPersonsWithExclusiveAccessToThisDataSet	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 ... 200			1-5-30-118
Other content	other	o	[0,1]			O				0
Other content	other	o	[0,1]			O				0
Inputs and Outputs	exchanges	r	[0,1]			C				1-7
Inputs and Outputs	exchange	r	[0,n]			C				1-7-32
Data set internal ID	@dataSetInternalID	r		Int6		C				1-7-32-120
Reference to flow data set	referenceToFlowDataSet	r	[1,1]	GlobalReferenceType		C				1-7-32-119
Location	location	o	[0,1]	String	25	O	2 ... 20			1-7-32-121
Reminder flow?	functionType	r	[0,1]	ExchangeFunctionTypeValues		C			For normal inventory flows of any type the field is empty respectively not used.	1-7-32-122

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
Exchange direction	exchangeDirection	r	[0,1]	<u>ExchangeDirectionValues</u>		C				1-7-32-123
Variable	referenceToVariable	o	[0,1]	<u>string</u>		O			Required 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
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>		O			Required for unit process data sets (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>		O			Required for unit process data sets (for the, aggregated data set types the entry will almost always be	1-7-32-133

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
									„Unknown“ or includes a relevant share of „Expert judgement“ and is hence non-informative).	
Data source(s)	referencesToDataSource	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
Comment	generalComment	o	[0,1]	<u>StringMultiLang</u>		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

2.3 Flow data set

LCA practitioners should seldomly need to create new elementary flow data sets, as a huge set is provided as ILCD Reference Elementary Flow Data Sets. Process and waste flows in contrast are regularly to be created. For naming and classifying new flow data sets and assigning appropriate reference flow properties and units, see the “Nomenclature and other conventions ...” document.

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
Flow data set	flowDataSet	m	[1,1]			V				2
	@version	m		<u>SchemaVersion</u>		V			One of the ILCD format schema versions that is supported by the ILCD Data Network is to be referenced.	
	@locations	o		<u>String</u>		O			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 data set	UUID	m	[1,1]	<u>UUID</u>		V				2-9-36-137
Name	name	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 - Nomenclature and other conventions ...“ document are to be applied.	2-9-36-138
Treatment, standards, routes	treatmentStandardsRoutes	R	[0,1]	<u>StringMultiLang</u>	100	C	5 ... 30		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	C	5 ... 30		Naming conventions of the „ILCD - Nomenclature and other conventions ...“ document are to be applied.	2-9-36-140
Quantitativ	flowProperties	R	[0,1]	<u>StringMulti</u>	100	C	5 ... 30		Naming conventions of the	2-9-36-141

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 flow properties				<u>Lang</u>					„ILCD - Nomenclature and other conventions ...“ document are to be applied.	
Other content	other	O	[0,1]			O				0
Synonyms	synonyms	O	[0,1]	<u>FTMultiLang</u>		O				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				2-9-36-144
Name of categorization system	@name	R		<u>string</u>	100	C	5 ... 50		Required for elementary flows for ILCD compliance.	2-9-36-144-a
Categories file	@categories	O		<u>anyURI</u>		O				2-9-36-144-b
Category name	category	R	[1,n]			C				2-9-36-144-1
Hierarchy level	@level	O		<u>LevelType</u>		O				2-9-36-144-1-a
Unique category identifier	@catId	O		<u>string</u>	200	C	5 ... 100		Required for elementary flows for ILCD compliance.	2-9-36-144-1-b
Other content	other	O	[0,1]			O				0
Classification	classification	R	[0,n]			C				2-9-36-145
Name	@name	R		<u>string</u>	100	C	10 ... 75		The classification file ILCDClassification.xml is to be used for ILCD compliance.	1-1-2-7-2-a
Classes	@classes	R		<u>anyURI</u>		C				1-1-2-7-2-b
class	class	R	[1,n]			C				1-1-2-7-2-1

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
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 are to be used for ILCD compliance.	1-1-2-7-2-1-b
Other content	other	o	[0,1]			O				0
CAS Number	CASNumber	r	[0,1]	<u>CASNumber</u>		C			Required only if existing for substance of flow.	2-9-36-146
Sum formula	sumFormula	r	[0,1]	<u>String</u>		C			Recommended, and only for single substances.	2-9-36-147
General comment on data set	generalComment	o	[0,1]	<u>FTMultiLang</u>		O				2-9-36-150
Other content	other	o	[0,1]			O				0
Quantitative reference	quantitativeReference	r	[0,1]			C				2-9-38
Reference flow property	referenceToReferenceFlowProperty	r	[1,1]	<u>Int5</u>		C			Rules for which „Reference flow property“ and „Reference unit“ to choose are documented in the „ILCD 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
Location of supply	locationOfSupply	o	[1,1]	<u>StringMultiLang</u>	25	O	2 ... 20		Must use one of the locations that are specified in the ILCDLocations.xml or other file, as referenced in the field „<flowDataSet @locations>. This is typically LCA software supported, with pulldown lists for the practitioner. Can be empty if geography-unspecific e.g. technology-model data set (i.e. do only enter GLO if data set represents worldwide average).	2-9-42-152

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
Other content	other	o	[0,1]			O				0
Technological representativeness	technology	o	[0,1]			O				2-9-43
Technical purpose of product waste	technologicalAp plicability	o	[0,1]	FTMultiLang		O			Recommended for product flows.	2-9-43-1
Technical specification	referenceToTec hnicalSpecificati on	o	[0,n]	GlobalRefe renceType		O			Recommended for product flows.	2-9-43-2
Other content	other	o	[0,1]			O				0
Other content	other	o	[0,1]			O				0
Modelling and validation	modellingAndV alidation	r	[0,1]			C				2-11
LCI method	LCIMethod	r	[0,1]			C				2-11-48
Type of flow	typeOfDataSet	r	[1,1]	FlowTypeV alues		C				2-11-48-153
Other content	other	o	[0,1]			O				0
Compliance declarations	complianceDecl arations	r	[0,1]			C				2-11-56
Compliance	compliance	r	[1,n]			C				1-3-22-1
Compliance system name	referenceToC omplianceSys tem	r	[1,1]	GlobalRefe renceType		C		„ILCD compliance X.Y“	Must refer to the most recent v. version of the ILCD compliance system.	1-3-22-90
Approval of overall compliance	approvalOfOv erallCompliance	o	[0,1]	ComplianceValues		O				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	timeStamp	r	[0,1]	dateTime		C				1-5-28-104

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
(last saved)										
Data format(s)	referenceToDataSetFormat	r	[0,n]	<u>GlobalReferenceType</u>		C		„ILCD format X.Y“	Must include the reference to the most recent ILCD format version, as supported by the ILCD Data Network. (Can have additional references to other formats („namespaces“) as used in this data set.)	1-5-28-105
Data entry by:	referenceToPersonOrEntityEnteringTheData	o	[0,1]	<u>GlobalReferenceType</u>		O				1-5-28-103
Other content	other	o	[0,1]			O				0
Publication and ownership	publicationAndOwnership		[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	referenceToPrecedingDataSetVersion	O	[0,n]	<u>GlobalReferenceType</u>		O				1-5-30-112
Permanent data set URI	permanentDataSetURI	R	[0,1]	<u>anyURI</u>		C			It is recommended to provide a URL or URI that can be used to find the original version of the data set.	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
Flow properties and LCIA factors	flowPropertiesAndLCIAFactors	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	@dataSetInte	R		<u>Int5</u>		C				2-15-66-191

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
internal ID	rnalID									
Flow property	referenceToFlowPropertyDataSet	r	[1,1]	<u>GlobalReferenceType</u>		C			Must be a reference to one of the ILCD reference flow property data sets, unless a not defined flow property is referenced.	2-15-66-190
Mean value (of flow property)	meanValue	r	[1,1]	<u>Real</u>		C				2-15-66-192
Minimum value	minimumValue	r	[0,1]	<u>Real</u>		O				2-15-66-193
Maximum value	maximumValue	r	[0,1]	<u>Real</u>		O				2-15-66-194
Uncertainty distribution type	uncertaintyDistributionType	o	[0,1]	<u>UncertaintyDistributionTypeValues</u>		O				2-15-66-195
Relative StdDev in %	relativeStandardDeviation95In	r	[0,1]	<u>Perc</u>		O				2-15-66-196
Data derivation type / status	dataDerivationTypeStatus	r	[0,1]	<u>FlowDataDerivationTypeStatusValues</u>		C				2-15-66-198
Comment	generalComment	o	[0,1]	<u>StringMultiLang</u>		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

2.4 Flow property data set

LCA practitioners will only seldomly need to create a new flow property data set. Such cases are e.g. if specific substance contents are to be modeled (e.g. “Ethane content (volume)” in natural gas) or specific market prices (e.g. “Market value JP 2003, bulk prices” for cost modelling or economic allocation purposes). An otherwise complete set of such data sets should be provided as free service and 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 is not yet existing. In case new flow property data sets are to be created, see the existing examples on “Metane content (volume)” and “Market value US 2000, bulk prices” as part of the ILCD Reference Flow Property Data Sets.

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
Flow property data set	flowPropertyDataSet	m	[1,1]			V				4
	@version	m		SchemaVersion		V			One of the ILCD format schema versions that is supported by the ILCD Data Network is to be referenced.	
Flow property information	flowPropertiesInformation	m	[1,1]			V				4-25
Data set information	dataSetInformation	m	[1,1]			V				4-25-104
UUID of flow property data set	UUID	m	[1,1]	UUID		V				4-25-104-273
Name	name	r	[0,1]	StringMultiLang	100	C	3 ... 50		Naming conventions of the „ILCD - Nomenclature and other conventions ...“ document are to be applied.	4-25-104-274
Synonyms	synonyms	o	[0,1]	FTMultiLang		O				4-25-104-275
Classification information	classificationInformation	r	[0,1]			C				4-25-104-276
Classification	classification	r	[0,n]			C				1-1-2-7-2
Name	@name	r		string	100	C	10 ... 75		The classification file	1-1-2-7-2-a

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
									ILCDClassification.xml is to be used for ILCD compliance.	
Classes	@classes	r		<u>anyURI</u>		C				1-1-2-7-2-b
class	class	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 are to be used for ILCD compliance.	1-1-2-7-2-1-b
Other content	other	o	[0,1]			O				0
General comment on data set	generalComment	o	[0,1]	<u>FTMultiLang</u>		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]	<u>GlobalReferenceType</u>		C				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]	<u>GlobalReferenceType</u>		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	referenceToC	r	[1,1]	<u>GlobalReferenceType</u>		C		„ILCD	Must refer to the most recent	1-3-22-90

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
e system name	complianceSystem			<u>referenceType</u>				compliance X.Y“	v. version of the ILCD compliance system.	
Approval of overall compliance	approvalOfOverallCompliance	o	[0,1]	<u>ComplianceValues</u>		O				1-3-22-95
Other content	other	o	[0,1]			O				0
Other content	other	o	[0,1]			O				0
Administrative information	administrativeInformation		[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 X.Y“	Must include the reference to the most recent ILCD format version, as supported by the ILCD Data Network. (Can have additional references to other formats („namespaces“) as used in this data set.)	1-5-28-105
Other content	other	o	[0,1]			O				0
Publication and ownership	publicationAndOwnership		[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>		C			It is recommended to provide a URL or URI that can be used to find the original version of the data set.	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

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
Other content	other	o	[0,1]			O				0

2.5 Unit group data set

LCA practitioners will usually not need to create new unit group data sets or insert new units. A complete set of such data sets should be provided as free service and 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 is not yet existing.

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
Unit group data set	unitGroupDataSet	m	[1,1]			V				5
	@version	m		SchemaVersion		V			One of the ILCD format schema versions that is supported by the ILCD Data Network is to be referenced.	
Unit group information	unitGroupInformation	m	[1,1]			V				5-33
Data set information	dataSetInformation	m	[1,1]			V				5-33-138
UUID of unit group data set	UUID	m	[1,1]	UUID		V				5-33-138-306
Name	name	r	[0,1]	StringMultiLang	100	C	3 ... 50		Naming conventions of the „ILCD - Nomenclature and other conventions ...“ document are to be applied.	5-33-138-307
Classification Information	classificationInformation	r	[0,1]			C				5-33-138-308
Classification	classification	r	[0,n]			C				1-1-2-7-2

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>n</i>										
Name	@name	r		<u>string</u>	100	C	10 ... 75		The classification file ILCDClassification.xml is to be used for ILCD compliance.	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 are to be used for ILCD compliance.	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
Compliance system name	referenceToComplianceSystem	r	[1,1]	<u>GlobalReferenceType</u>		C		„ILCD compliance X.Y“	Must refer to the most recent v. version of the ILCD compliance system.	1-3-22-90
Approval of overall compliance	approvalOfOverallCompliance	o	[0,1]	<u>ComplianceValues</u>		O				1-3-22-95
Other content	other	o	[0,1]			O				0

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
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]	<u>dateTime</u>		C				1-5-28-104
Data set format(s)	referenceToDataSetFormat	r	[0,n]	<u>GlobalReferenceType</u>		C		„ILCD format X.Y“	Must include the reference to the most recent ILCD format version, as supported by the ILCD Data Network. (Can have additional references to other formats („namespaces“) as used in this data set.)	1-5-28-105
Other content	other	o	[0,1]			O				0
Publication and ownership	publicationAnd Ownership	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>		C			It is recommended to provide a URL or URI that can be used to find the original version of the data set.	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

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
Name of unit	name	r	[1,1]	String	25	C	1 ... 15			5-39-168-323
Mean value (of unit)	meanValue	r	[1,1]	Real		C				5-39-168-325
Comment	generalComment	o	[0,1]	StringMultiLang		O				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

2.6 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		SchemaVersion		V			One of the ILCD format schema versions that is supported by the ILCD Data Network 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]	UUID		V				7-43-174-354
Short name of source	shortName	o	[0,1]	StringMultiLang	100	O	2 ... 25			7-43-174-355
Classification information	classificationInformation	r	[0,1]			C				7-43-174-357

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>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 for ILCD compliance.	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 are to be used for ILCD compliance.	1-1-2-7-2-1-b
Other content	other	o	[0,1]			O				0
Source citation	sourceCitation	r	[0,1]	<u>ST</u>		C	20 ... 500			7-43-174-356
Publication type	publicationType	o	[0,1]	<u>PublicationTypeValues</u>		O				7-43-174-359
Source description or comment	sourceDescriptionOrComment	o	[0,1]	<u>FTMultiLang</u>		O				7-43-174-360
<i>Link to digital file</i>	<i>referenceToDigitalFile</i>	o	[0,1]			O				7-43-174-361
	@uri	o		<u>anyURI</u>		O				
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	timeStamp	r	[0,1]	<u>dateTime</u>		C				1-5-28-104

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
(last saved)										
Data set format(s)	referenceToDataSetFormat	r	[0,n]	<u>GlobalReferenceType</u>		C		„ILCD format X.Y“	Must include the reference to the most recent ILCD format version, as supported by the ILCD Data Network. (Can have additional references to other formats („namespaces“) as used in this data set.)	1-5-28-105
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 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>		C			It is recommended to provide a URL or URI that can be used to find the original version of the data set.	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
Other content	other	o	[0,1]			O				0

2.7 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
Contact set	contactDataSet	m	[1,1]			V				6
version	@version	m		<u>SchemaVersion</u>		V			One of the ILCD format schema versions that is supported by the ILCD Data Network 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]	<u>UUID</u>		V				6-41-172-327
Short name for contact	shortName	o	[0,1]	<u>StringMultiLang</u>	25	C				6-41-172-328
Name of contact	name	r	[0,1]	<u>StringMultiLang</u>	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		<u>string</u>	100	C	10 ... 75		The classification file ILCDClassification.xml is to be used for ILCD compliance.	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 are to be used for ILCD compliance.	1-1-2-7-2-1-b
Other content	other	o	[0,1]			O				0
Contact address	contactAddresses	o	[0,1]	<u>STMultiLang</u>		O				6-41-172-338

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
Telephone	telephone	o	[0,1]	String		O				6-41-172-339
Telefax	telefax	o	[0,1]	String		O				6-41-172-340
E-mail	email	o	[0,1]	String		O				6-41-172-341
WWW-Address	WWWAddress	r	[0,1]	ST		O				6-41-172-342
Central contact point	centralContactPoint	r	[0,1]	STMultilingual		C				6-41-172-343
Contact description or comment	contactDescriptionOrComment	o	[0,1]	STMultilingual		O				6-41-172-345
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	administrativeInformation	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 X.Y“	Must include the reference to the most recent ILCD format version, as supported by the ILCD Data Network. (Can have additional references to other formats („namespaces“) as used in this data set.)	1-5-28-105
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

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		C			It is recommended to provide a URL or URI that can be used to find the original version of the data set.	1-5-30-300
Owner of data set	referenceToOwnershipOfDataSet	r	[0,1]	GlobalReferenceType		C				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

2.8 LCIA method data set

The compliance rules for “**LCIA method** data sets” will be defined / formalised in 2009, once the present draft implementation of this data set type has been replaced by a full implementation.

2.9 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).