

# Technical Helpdesk for National LCA Databases

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## Responsible Management Practices in LCA Databases – Concept and Criterias

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# Contents

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1. Criteria background
2. Criteria
3. Example results

# Criteria background (1/3)

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Provide **actionable practices to manage and assess LCA databases**, giving users relevant information about quality, timeliness, security and other attributes of the database, and at the same time giving managers guidelines on how to administer them.



# Criteria background (2/3)

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- 9 criteria:
  - **Qualitative description** of what is being addressed
  - **Quantitative score** - Similar to Pedigree Matrix
- 2 sets of evaluators:
  - **Internal evaluator** - Database manager and team
  - **External evaluator** - Another manager from another database
- 2 set of reviews:
  - **Internal review** - only database manager and its team
  - **Joint review** - Internal and external evaluator

# Criteria background (3/3)

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1. Responsibility and Accountability.
2. Technical and methodological support.
3. Routines for consistent maintenance and updating.
4. Conforming documentation
5. Balance between continuity and innovation
6. Appropriate transparency
7. Secure storage
8. Harmonization of new approaches/datasets with existing
9. Commonly available data exchange interfaces

# 1. Responsibility and Accountability

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## Question:

*Does the providing organization for the database have a **clear point of contact** to address user issues with data in the database in case of future problems?*

## Answers:

- 1 – Organization has provided a specific individual or individuals with their contact information for addressing user's issues and clear indication that customer support is available
- 3 – Organization has provided only a general or organizational contact, e.g. company email address
- 5 – Organization provides no particular information and user is forced to understand how to contact the organization.

## 2. Technical and methodological support

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### Question:

*Does the responsible organization have the **technical and methodological resources and support available to respond to customer needs in a timely manner?***

### Answers:

→1 – Organization has a **Helpdesk** responding **within a day** to respond to customer needs by phone, email and social media.

→3 – Organization has technical and methodological resources and support available to respond to selected customer needs **within in a week by email only**<sup>(a)</sup>

→5 – No support is provided for inquiries

(a) Assessor may upgrade the score to a value of 2 if the organization provides more contact modes or faster response.

# 3. Routines for consistent maintenance and updating

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## Question:

*Does the database provider supply clear instructions and standards to users to prevent errors and mistakes in the update procedure?*

## Answers:

→ 1 – **Independently audited routines for quality assurance and review** are in place and supported by IT (electronic user guidance, FAQs, troubleshooting/error trapping, etc.)

→ 3 – **Applicable** (to current maintenance and upgrade tasking) **documented routines for quality assurance and review** are in place and supported by IT (electronic user guidance, FAQs, troubleshooting/error trapping, etc.)

→ 5 – Routines for quality assurance and review are in place described in a user manual<sup>(a)</sup>

(a) Assessor may upgrade the score to a 4 if the complexity of the manual is low and easy for users to apply.



# 4. Conforming documentation

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## Question:

*Does the database provider **publish suitable documentation** conforming to the guidance principles to provide a basis for use of the database and to avoid misleading the customer?*

## Answers:

→1– (a) documentation is extracted/summarized into dataset fields, (b) data and information used is substantiated (sources, averaging, etc.), (c) modeling and other calculations are shown, if any, (d) dataset documentation is complete and clear, and (e) information is available on aggregated datasets (source data and aggregation rationale)

→3(a) – (a) documentation is mostly in attached files, (b) substantiation or calculation transparency is limited, (c) documentation has some gaps or is lacking in clarity, (d) aggregated dataset documentation is limited or missing

→1(\*) – (a) documentation is fully in attachments, (b) there is little or no substantiation or transparency, (c) documentation has major gaps (d) there is no documentation of aggregated datasets (a) Evaluator may upgrade scores, to 2 and 4, respectively, if only one or two aspects are deficient.

(\*) Evaluator may upgrade scores, to 2 and 4, respectively, if only one or two aspects are deficient

# 5. Balance between continuity and innovation

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## Question:

*Does the provider **issue updates** at a frequency that keeps the data current but does not inhibit or slow down the work of users in their application?*

## Answers:

→1- Database is updated frequently (at least annually) on a published schedule concerning all relevant and significant technology aspects and standard method improvements and updates to existing user databases are semi-automatic (and not affecting application use)

→3- Database is updated infrequently (2+ years) concerning only selected technologies or method aspects and/or updates have to be done manually (which can affect application usage)

→5- Database is updated rarely or not at all (no versioning) and concerning a single technology or method aspects and updates have to be done manually

## 6. Appropriate Transparency

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### Question:

*Does the providing organization **give a level of transparency in the datasets as requested by users yet still respects the confidentiality requirements of datasets that contain sensitive information?***

### Answers:

- 1 – Fully transparent documentation (including provision of data of disaggregated processes) of the modeling and data for the reviewer and user
  
- 3 – Aggregated datasets for a group of activities with fully transparent documentation of the modeling and source data for the reviewer(s) and a verification statement regarding the review
  
- 5 – Aggregated datasets without documentation or a reviewer statement

# 7. Secure Storage

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## Question:

*Are the mechanisms in place to **prevent unintended loss or accidental distribution of data content?***

## Answers:

→1 - Database is stored on specific server, with limited and controlled access rights<sup>(a)</sup> to suitable persons and the content is automatically backed-up frequently - based on independent 3rd party assessment, or database is ISO 27000 certified

→3 - Database is stored on specific server, with limited and controlled access rights, to suitable persons and redundant backup - as self-declared

→5 - Database is stored without controls or no information is provided

(a) Means access through a password, link encrypted, etc.

# 8. Harmonization of new approaches/datasets with existing

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## Question:

*When the database is expanded, does the managing organization take **all necessary steps to facilitate harmonization of new with existing content?***

## Answers:

→ 1 - All three of the following exist, **(i) quality guidelines for establishing datasets** that are in accordance with the existing datasets, **(ii) a clearly defined data format** to upload, store the information into the database, and **(iii) a review organization/structure** that is checking that a new dataset actually fits into the existing database (i.e. is compliant with the quality guidelines of the database, with a comprehensive documentation for the first element (i.e. quality guidelines) and the third element (i.e. the review) is done by an independent party

→ 3 – All three issues exist (above), with the review done internally only

→5 – The first two issues exist (above), review process is not defined or is unclear

# 9. Commonly available data exchange interfaces

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## Question:

*Are the database contents suitable for exchange via standard interfaces into other software or systems? Have the contents been harmonized in order to avoid misunderstandings, misinterpretations and unintended inconsistencies?*

## Answers:

→ 1 - Interfaces for more than two different common electronic formats exist

→ 3 - Interfaces for two different common electronic formats exist

→ 5 - Interfaces for only one common electronic formats exist or formats are unique to database (i.e. non-standard)

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# Evaluation example - Responsibility and Accountability

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Database	AusLCI	Ecobase (Chile LCI)	Thailand National LCI Database
<b>Practice</b>	Personal emails provided see <a href="http://auslci.com.au/index.php/Contact">http://auslci.com.au/index.php/Contact</a> as well as phone number.	The excel spreadsheet contains a message to contact the developers (Cristian Emhart or Cristobal Loyola), and gives their emails, if any question or problem arises during the calculator usage.	Personal contact information provided in: <a href="http://www.thailcidatabase.net/index.php/menu-aboutus/menu-contacts">http://www.thailcidatabase.net/index.php/menu-aboutus/menu-contacts</a>
<b>Score</b>	<b>1</b> – Organization has provided a specific individual or individuals with their contact information for addressing user’s issues and clear indication that customer support is available		

# Evaluation example - Commonly Available Interfaces for Data Exchange

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Database	AusLCI	Ecobase (Chile LCI)
<b>Practice</b>	Data sets are provided in SimaPro and Open LCA as a database, and in EcoSpold 2 and Open LCA spreadsheets on the AusLCI website.	There is no standard right now for the database, as it is currently stored in an Excel spreadsheet.
<b>Score</b>	<p style="text-align: center;"><b>1</b></p> <p>Interfaces for more than two different common electronic formats exist</p>	<p style="text-align: center;"><b>5</b></p> <p>Interfaces for only one common electronic formats exist or formats are unique to database (i.e. non-standard)</p>



# Evaluation example - Appropriate Level of Transparency

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Database	AusLCI	Thailand National LCI Database
<b>Practice</b>	Many parameterized processes with exceptional transparency. (e.g. <a href="http://www.auslci.com.au/datasets/xml_viewer.php?LCIcode=AUSLCIUPX58169a34c472d.XML">http://www.auslci.com.au/datasets/xml_viewer.php?LCIcode=AUSLCIUPX58169a34c472d.XML</a> )	Gate-to-Gate information provided to reviewers as user request, (aggregated) data will be given in case of no confidentiality agreement
<b>Score</b>	<p style="text-align: center;"><b>1</b></p> <p>Fully transparent documentation (including provision of data of disaggregated processes) of the modelling and data for the reviewer and user</p>	<p style="text-align: center;"><b>3</b></p> <p>Aggregated datasets for a group of activities with fully transparent documentation of the modeling and source data for the reviewer(s) and a verification statement regarding the review</p>

# For helpdesk assistance –

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- Become a Helpdesk member:
  - To access the Helpdesk exchange space (or any other Clearinghouse area), you will need to create an account in the Clearinghouse ([www.spcclearinghouse.org](http://www.spcclearinghouse.org)):
  - Toward the bottom of the homepage you will see a button labeled ‘Join the Community now’. Click on this link and open a form to allow you to create a login and profile.
  - Once logged in, you can modify or update your profile or explore the various SCP topic areas.
  - Go to ‘About’ and then to ‘Exchange Spaces’ where you will see Lifecycle Approaches in the drop down menu and one menu level below that is the Technical Helpdesk.
  - The Technical Helpdesk space will be available to any visitor, logged in or not. Without being logged in and joining the helpdesk space, any visitor can look at the various sections of the helpdesk space, but cannot contribute any content.
  - In order to become a member of the helpdesk space, on the homepage under the summary, is “Request space membership”. Click here, you will automatically be given rights of a members to contribute content, since it is a public group.
  - For your next login, you go directly to <http://spaces.spcclearinghouse.org/> and then choose the Technical Helpdesk space in the dropdown list.
- Helpdesk Manager - Bruce Vigon, Consultant to SETAC,
- Helpdesk Coordinator – Kristina Bowers, UN Environment, Economy Division