



GENERAL PROGRAMME INSTRUCTIONS

VERSION 1.8

January 2017

CONTENTS

1	INTRODUCTION	2
1.1	OBJECT	2
1.2	FIELD OF APPLICATION	2
1.3	NORMATIVE BASIS	2
2	ORGANISATION	3
2.1	ARTICLES	3
2.2	THE PROGRAMME OPERATOR	4
2.2.1	<i>The secretariat</i>	4
2.2.2	<i>Technical committee</i>	4
2.2.3	<i>PCR committee</i>	5
2.3	THE STEERING COMMITTEE	5
2.3.1	<i>Members</i>	5
2.3.2	<i>Steering committee chairman</i>	5
2.3.3	<i>Mandate</i>	5
2.3.4	<i>Authoritative documents</i>	7
2.4	REVISION AND EFFECTIVE DATE	7
2.5	FEEES	7
2.6	WEBSITE	7
3	PROCEDURES	8
3.1	PCR DEVELOPMENT	9
3.1.1	<i>Supplementary PCR documents</i>	9
3.1.2	<i>Validity and revisions</i>	10
3.2	EPD DEVELOPMENT AND PUBLICATION	11
3.2.1	<i>Declaration types</i>	11
3.2.2	<i>EPD TYPES AS REGARDS DECLARED LIFE CYCLE PHASES</i>	11
3.2.3	<i>Process</i>	11
3.2.4	<i>Ownership and use</i>	12
3.2.5	<i>Language</i>	13
3.2.6	<i>Core EPD's from other Eco Platform members</i>	13
3.2.7	<i>Specific LCA calculation rules</i>	13
3.3	VERIFICATION	14
3.3.1	<i>Validity</i>	14
3.3.2	<i>Verifier independence</i>	14
3.3.3	<i>Competence requirements for verifiers</i>	15
3.3.4	<i>Process</i>	15
3.3.5	<i>Complaints and disputes</i>	17
3.4	DATA AND DOCUMENTATION MANAGEMENT	17
3.4.1	<i>Object</i>	17
3.4.2	<i>Basis</i>	17
3.4.3	<i>Process</i>	17
4	DEFINITIONS, TERMS AND ABBREVIATIONS	19

1 INTRODUCTION

1.1 OBJECT

EPD Danmark develops and administers independently verified Type III Environmental Product Declarations (EPD) for construction products and building-related products.

The object of EPD Danmark is:

- to support and expand the development and application of trustworthy and verifiable environmental information on construction products in the form of Type III Environmental Products Declarations.
- to support the building industry in the documentation and declaration of the sustainability of products according to the legislation and standardisation applying at any time.
- to make it possible for manufacturers of construction products to comply with the new European legal requirements and harmonisation initiatives within sustainability of construction products.

EPD Danmark supports the harmonisation of Environmental Products Declarations for construction products in Europe through its active membership of the ECO Platform¹.

1.2 FIELD OF APPLICATION

Construction products and building-related products comprise products, materials, components, prefabricated elements, building systems and built-in furniture and textiles which are made for the construction work and for use in the building.

EPD Danmark is primarily targeted at the Danish building industry which operates nationally as well as internationally, but it has no geographical limitations. Thus, the programme is open to any manufacturer of a construction product, irrespective of nationality and no matter whether the product is marketed in another country than Denmark.

The communication format for the prepared EPDs is primarily targeted at B2B communication, but does not exclude the application as B2C.

EPDs from EPD Danmark contain no comparative assertions.

1.3 NORMATIVE BASIS

Environmental Product Declarations, developed within the framework of the EPD Danmark programme, are in accordance with the following standards:

EN 15804 + A1:2013 - "Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products"

EN ISO 14025:2010 - "Environmental labels and declarations - Type III environmental declarations - Principles and procedures"

¹ <http://www.eco-platform.org/>

EN 15942:2011 – “Sustainability of construction works - Environmental product declarations - Communication format Business-To-Business”

Environmental product declarations developed within the framework of the EPD Danmark programme must also follow the technical guidance in CEN/TR 16970, supplementing the requirements in EN 15804:

CEN/TR 16970 – “Sustainability of construction works – Guidance for the implementation of EN 15804”

In addition, reference is also made to the standards stated below for Life Cycle Assessment (LCA) and environmental product declarations:

CEN/TR 15941:2010 – “Sustainability of construction works - Environmental product declarations – Methodology for selection and use of generic data”

EN ISO 14040:2008 – “Environmental Management - Life Cycle Assessment - Principles And Framework”

EN ISO 14044:2008 – “Environmental Management - Life Cycle Assessment - Requirements And Guidelines”

EN ISO 14020:2002 – “Environmental Labels And Declarations - General Principles”

ISO 21930:2007 – “Sustainability in building construction – Environmental declaration of building products”

2 ORGANISATION

2.1 ARTICLES

1. The name of the organisation is EPD Danmark.
2. The Danish Technological Institute is legally responsible for EPD Danmark.
3. EPD Danmark is organised into the following units which are described in sections 2.2 and 2.3.
 - a. Steering Committee
 - b. Secretariat
 - c. Technical Committee
 - d. PCR Committee
4. The object of EPD Danmark is described in section 1.1.
 - a. EPD Danmark has no commercial aim, administrative expenses are, however, covered by member-paid fees.
5. EPD Danmark is administered by the Programme Operator and a Steering Committee, cf. sections 2.2 and 2.3.
6. Decisions in EPD Danmark shall be approved by the Steering Committee, cf. section 2.3.
7. All documents and publications within EPD Danmark will be drawn up in Danish. Selected documents for international communication will be published in English.

2.2 THE PROGRAMME OPERATOR

The Danish Technological Institute is the legal entity acting as programme operator for EPD Danmark with the overall responsibility and the obligations described in the international standard ISO 14025.

The Danish Technological Institute is an independent non-profit institution, which develops, applies and disseminates research and technology based knowledge to the Danish business sector. The most important task of the Danish Technological Institute is to ensure that new knowledge and technology can be converted quickly into value in the form of new or improved products, materials, processes, methods and organisational structures.

The Danish Technological Institute is approved by the Danish Ministry of Science, Technology and Innovation as a GTS Institute (Approved Technological Service Institute). The GTS Institutes are involved in research and development of new knowledge and technology, and they offer their know-how to the Danish business sector on a commercial basis. The GTS Institutes deliver know-how at a highly advanced technological level, and they are all independent of political and financial interests. Surplus earnings are invested exclusively in new research, development and innovation.

The Danish Technological Institute has an extensive and profound knowledge of the building industry and many years' experience in accredited testing, calculations and certification of building materials. The Danish Technological Institute is also a Notified Body according to the Construction Products Regulation and offers specialist advice on i.a. CE marking of construction products.

On the basis of these considerations it is an obvious continuation of the Institute's activities to manage a Danish EPD programme for construction products and building-related products.

The tasks which fall under the responsibility of the Danish Technological Institute as programme operator in connection with the administration and operation of EPD Danmark are gathered in a Technical Committee and a Secretariat. The fields of responsibility and tasks are described in the following sections.

2.2.1 THE SECRETARIAT

All tasks which are managed exclusively by the programme operator are gathered in the Secretariat. These tasks are all administrative tasks which do not require the approval of the Steering Committee. The Secretariat carries out the following tasks:

- To consider applications
- To develop and maintain the website
- To fix prices
- To develop, maintain and administer databases
- To coordinate with the accredited verifier
- To manage the verification procedure for EPDs
- To publish verified EPDs on the website
- To administer manufacturers' confidential information
- To manage complaints
- To organise the involvement of stakeholders in programme development and PCR consultation
- To participate in European harmonisation work

2.2.2 TECHNICAL COMMITTEE

The Technical Committee manages all tasks which require the approval of the Steering Committee before they are finally adopted. The Technical Committee carries out the following tasks:

- To develop and maintain the general programme instructions

- To develop and maintain the verification report template for the accredited verifier
- To develop and maintain the PCR template
- To develop and maintain the EPD template

The Technical Committee may set up technical ad hoc groups to contribute with technical skills in connection with the above-mentioned tasks. In addition, the Technical Committee is responsible for ensuring that EPD Danmark is always up to date with the latest standards, and that best practice and European harmonisation initiatives within the area are implemented in the programme procedures.

2.2.3 PCR COMMITTEE

The programme operator is responsible for the PCR Committee. The PCR Committee prepares supplementary PCR documents and consists of a permanent chairman from the programme operator's organisation and an external group of relevant actors who are to contribute to the technical contents of the supplementary PCR document. It is the programme operator's responsibility, as a permanent chairman, to set up a representative and competent PCR group.

2.3 THE STEERING COMMITTEE

The purpose of the Steering Committee is to ensure reliability, impartiality, consistency and transparency in the authoritative documents and procedures which form the basis of EPD Danmark.

2.3.1 MEMBERS

The Steering Committee consists of permanent members appointed by the programme operator. Each member organisation appoints individually a representative of the organisation to handle the work in the Steering Committee. The representatives are appointed for a period of two years and may be reappointed.

The members are:

- | | |
|---|--------------------------|
| ▪ Aalborg University | (Stig Hirsbak) |
| ▪ The Danish Construction Association (Dansk Byggeri) | (Per Thomas Dahl) |
| ▪ Technical University of Denmark (DTU) | (Maj Munk Andersen) |
| ▪ The Danish Association of Lime and Heavy Clay Producers
(Kalk- og Teglværksforeningen af 1893) | (Tommy Bisgaard) |
| ▪ The Association of Danish Window Manufacturers
(VinduesIndustrien) | (Johny Jensen) |
| ▪ Rambøll (consulting engineering group) | (Hanne Tine Ring Hansen) |
| ▪ Arkitema Architects | (Lars Kvist) |

The representatives appointed by the steering committee members must have a general and broad background knowledge of construction works, the fields mentioned in 1.2 and products and product-related environmental considerations. In addition, the members must have a thorough knowledge of EPD Danmark, including the contents of these general programme instructions, and as a minimum the standards for LCA and the Environmental Product Declarations (EN 15804, ISO 14025 og ISO 14040/44).

2.3.2 STEERING COMMITTEE CHAIRMAN

The Steering Committee shall have a chairman who is elected from among the steering committee members for a period of 2 years. The chairman may be re-elected. The steering committee members will decide on the chairmanship by majority vote. The steering committee chairman shall ensure that EPD Danmark fulfils its overall object.

2.3.3 MANDATE

The impartial steering committee has two primary tasks:

- Approval of authoritative documents, cf. section 2.3.4
- Approval of template for accredited third party verification report

Furthermore, principal issues concerning the preparation and application of environmental product declarations for construction products, standardisation, needs of the industry, etc. may be taken up in the Steering Committee by the programme operator. Any decisions hereon may subsequently be entered in the authoritative documents in connection with a subsequent revision.

The authoritative documents are prepared and revised by the programme operator, and the Steering Committee is responsible for approving these documents prior to their publication and use.

The general programme instructions, including descriptions of procedures and provisions concerning the steering committee members and their mandate, shall be approved by a majority of the steering committee members.

By an approval of the general programme instructions the individual steering committee member confirms that the instructions are in accordance with ISO 14025 and the overall object of EPD Danmark stated in 1.1.

If the general programme instructions cannot be approved, a detailed written argumentation for the deviations from ISO 14025 shall be submitted to the programme operator. The general programme instructions cannot be approved and applied without a majority approval of the Steering Committee.

Supplementary PCR documents must be reviewed and approved by a PCR panel before they can be published and applied. The PCR panel consists of a permanent chairman appointed by the Steering Committee and at least two members who have not been involved in the development of the supplementary PCR document. The chairman of the PCR panel is appointed for periods of 2 years. The chairman of the PCR panel shall appoint the other panel members ad hoc. By an approval of a supplementary PCR document it is confirmed that the supplementary PCR document is in accordance with EN 15804, ISO 14025 and the provisions of these general programme instructions. The work performed by the PCR panel is paid for at a rate fixed by the programme operator.

If a supplementary PCR document cannot be approved, a detailed written argumentation for the deviations from EN 15804, ISO 14025 and/or the provisions of these general programme instructions shall be submitted to the programme operator. A supplementary PCR document cannot be published and applied without the unanimous approval of the PCR panel. 20 working days at the latest after their receipt of a supplementary PCR document the panel members shall return the review report in accordance with section 4.1.

At least once a year a meeting will be held between the members of the Steering Committee and the programme operator. At this meeting the status and challenges of EPD Danmark will be discussed among other things, and there will be a dialogue on the development and operation of EPD Danmark in the coming year as a minimum.



Figure 1 – Flowchart of the organisational structure

2.3.4 AUTHORITATIVE DOCUMENTS

The following documents form the technical basis of the preparation of EPDs in EPD Danmark:

- General Programme Instructions, Version 1.6
- DS/EN 15804 + A1:2013 - "Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products"
- Supplementary PCR documents for specific product categories
- EPD template

2.4 REVISION AND EFFECTIVE DATE

These general programme instructions version 1.6 for EPD Danmark shall apply until the programme operator decides to make a revision, however, a revision must be made at least every second year. A revision must be made, if one or more of the standards stated below are revised:

- EN 15804
- EN 15942
- ISO 14025
- ISO 14020
- ISO 14044
- ISO 14040

Such revisions may be made on the basis of e.g. international measures to harmonise EPD programmes or other external inputs.

These general programme instructions are approved by the Steering Committee and shall apply as from 23-04-2014

2.5 FEES

Clients who have registered one or more EPDs with EPD Danmark shall pay a fee, which contributes, to administration and the operation and maintenance of databases and website. The programme operator fixes the price structure.

2.6 WEBSITE

The website of EPD Danmark is found at **<http://www.epddanmark.dk>**. On this website, the programme instructions applying at the time in question will be available together with EPDs and PCRs developed and published by EPD Danmark. The Secretariat is responsible for the contents and updating of the website.

3 PROCEDURES

Nr.	Title	Date	Version	Page
1	PCR development	01/06/2013	1.0	9
2	EPD development and publication	01/06/2013	1.0	10
3	Verification	01/06/2013	1.0	14
4	Management of data and documentation	01/06/2013	1.0	17

3.1 PCR DEVELOPMENT

A PCR document defines the specific technical conditions, requirements and calculation rules which are to be applied when preparing an environmental product declaration for a product.

EPD Danmark includes two types of PCR documents:

- A. DS/EN 15804 + A1:2013 - "Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products"
- B. Complementary PCR documents for product categories (cPCR)

All EPD's must always comply with the requirements in EN 15804. In addition, the following types of cPCR's are accepted:

- Product CEN TCs cPCR documents
- cPCR's from other programmes successfully audited by ECO Platform (<http://www.eco-platform.org/the-eco-epd-programs.html>) or programmes with whom EPD Danmark holds an agreement on mutual recognition, as long as it is clearly stated in the EPD, and as long as it does not conflict with EPD Danmark rules and procedures.

It is possible to develop and verify a EPD directly to the EN 15804 standard. If there is no cPCR available, EPD for construction products are developed only according to EN 15804. The EPD always states according to which standard the EPD was made.²

The international standard ISO 14025 defines the basic procedural requirements for the development of a PCR document and the carrying out of a PCR review.

3.1.1 SUPPLEMENTARY PCR DOCUMENTS

Supplementary PCR documents are developed by the PCR Committee, which sets up a PCR group of relevant parties from the industry and LCA specialists.

Product subcategories are defined by EPD Danmark, and basically they will be in accordance with the harmonised technical specifications (harmonised standards and European Assessment Documents) under the Construction Products Regulation (EU - 305/2011).

According to ISO 14040 and the ILCD Handbook³ there are two basic principles for LCA modelling: attributional LCA and consequential LCA. EPD Danmark employs attributional LCA, as EN 15804 relates exclusively to this method.

To make sure that the process of preparing a supplementary PCR document is quick and operational, it should be aimed to limit the total process from the start-up and until the supplementary PCR document is available to a maximum period of 12 weeks.

The PCR group is registered and published, stating the expected dates for the open consultation procedure and publication, respectively.

Figure 2 shows an overview of the development of a supplementary PCR document.

² CEN/TR 16970 – "Sustainability of construction works – Guidance for the implementation of EN 15804"

³<http://ict.jrc.ec.europa.eu/pdf-directory/ILCD-Handbook-General-guide-for-LCA-DETAIL-online-12March2010.pdf>



Figure 2 Process for the development of a supplementary PCR document

The PCR Group shall prepare the first draft on the basis of the template for supplementary PCR documents which is made available by EPD Danmark. This template shall always be followed, as this will ensure that all requirements applying to all product categories, based on EN 15804, and all contents requirements have been met.

Together with the preparation of the first draft, the PCR Group shall also draw up a list of the stakeholders who will be contacted directly in connection with the open consultation procedure.

In connection with the open consultation the draft will be made available at <http://www.epddanmark.dk> for a period of 25 working days. At the same time the draft will be sent directly to the stakeholders stated on the consultation list. They, too, will have 25 working days to deliver comments and amendments to the draft. After expiry of the consultation period the PCR Group may revise the draft in accordance with the consultation replies received.

The revised draft will be sent to the PCR panel for review and approval. The review will be carried out according to the provisions of these programme instructions. The panel draws up a PCR review report which must include the results of the PCR review and comments and recommendations made by the panel members.

The final PCR document is approved by the programme operator and published at <http://www.epddanmark.dk>.

3.1.2 VALITY AND REVISIONS

An approved supplementary PCR document is valid for 3 years. Hereafter the PCR panel must re-evaluate the document and decide on revisions, if any, of the document. After revision and approval or new approval without revision the supplementary PCR document will be valid for 3 years.

It is the programme operator's responsibility to carry out the necessary revisions of a supplementary PCR document during its period of validity. The involvement of stakeholders shall follow the procedure described in 4.1.1, and the revised PCR document must be approved by the panel prior to its publication.

3.2 EPD DEVELOPMENT AND PUBLICATION

ISO 14025 describes the general procedure for development of Type III Environmental Product Declarations and the requirements as regards their contents. In addition, all environmental product declarations published by EPD Danmark shall comply with the provisions of EN 15804, which further specify the requirements as regards calculation rules, contents and format for the product category of construction products.

3.2.1 DECLARATION TYPES

Possible types of declaration in EPD Danmark:

1. Manufacturer declaration (one manufacturer)
 - 1.1. One specific product from one place of production
 - 1.2. One specific product as an average from several places of production
 - 1.3. Average product from one place of production
 - 1.4. Average product from several places of production
2. Group declaration (several manufacturers)
 - 2.1 One specific product from various places of production
 - 2.2 Average product from various places of production (e.g. line of business EPD)

3.2.2 EPD TYPES AS REGARDS DECLARED LIFE CYCLE PHASES

According to EN 15804 the LCA based information can be divided on three types of EPDs. The types are stated below with the relevant compulsory information modules according to EN 15804, figure 1:

- Cradle-to-gate
A1, A2, A3 (Product)
- Cradle-to-gate with additional choices
A1, A2, A3 (Product)
In addition, one or more optional modules must be declared
- Cradle-to-grave
A1, A2, A3 (Product)
A4, A5 (Building process)
B1, B2, B3, B4, B5, B6, B7 (Use)
C1, C2, C3, C4 (Service life ended)
Declaration of module D is optional. (Reuse and recycling potential)

3.2.3 PROCESS

To have an EPD prepared the manufacturer must contact the Secretariat of EPD Danmark. The Secretariat will establish the communication between the parties involved throughout the entire project process and will, if necessary, also provide the manufacturer with know-how about data collection, calculation of LCA and preparation of the EPD and project report. The process is illustrated in Figure 3.



Figure 3. Development and verification of EPD (PR=Project report)

The Secretariat will provide the manufacturer with a registration application form and templates for the EPD and project report.

The project report structure shall follow the corresponding template provided by EPD Danmark and shall document the LCA study, with relevant data and results, prepared for the product. The EPD is prepared on the basis of the project report and its results and in accordance with the provisions of EN 15804 and the EPD template prepared by EPD Danmark.

When the project report and the EPD have been prepared, they are sent to the Secretariat. Both documents are re-forwarded to the independent verifier who will go through the documents and then (possibly) approve them. The verifier shall draw up a standardised verification report, based on a template provided by the Secretariat. The verification report is sent to the Secretariat who will make the final approval and publish the EPD.

3.2.4 OWNERSHIP AND USE

The manufacturer will get the verified EPD in full and retain full ownership of it, and he is responsible for its information and contents.

The manufacturer is also responsible for the correctness and completeness of all data stated and applied when preparing the EPD.

EPD Danmark reserves the right to register and publish the EPD in the database of EPD Danmark.

A manufacturer, who does not want the EPD to be made public in EPD Danmark's database, must specify the reason for this to the Secretariat, who will then decide on the request. If the Secretariat decides to comply with the manufacturer's request not to publish the EPD, the EPD will be registered with a title in the database, but it will not be accessible in full.

The customer will not be allowed to quote from or delete passages from the EPD, so that its results, conclusions etc. get another meaning than was originally the intention.

The project report, which is prepared on the basis of the LCA study, is handed out to the manufacturer, who retains full ownership of it. The project report will also be kept confidential by EPD Danmark.

The project report will not under any circumstances be published by EPD Danmark.

The manufacturer will not be allowed to quote from or delete passages from the report, so that its results, conclusions etc. get another meaning than was originally the intention.

3.2.5 LANGUAGE

EPD Danmark accepts the use of Danish or English.

If the applicant wants the same EPD published in both languages, the verifier must approve the data given in both EPDs prior to registration.

If the applicant wants an already published EPD translated, the programme operator are responsible for preparing the EPD in the other language-template. The applicant must provide the translated EPD-text specific for the declared product.

3.2.6 CORE EPD'S FROM OTHER ECO PLATFORM MEMBERS

Mutually recognised core EPDs from other ECO Platform members will be made publicly available in a separate section on www.epddanmark.dk.

The EPDs will be provided with an EPD Danmark front page on which it is stated that the EPD has the status as a mutually recognised core EPD from <EPD programme> and whether or not it is representative of the Danish market.

EPD Danmark has no additional requirements added to the core EPD according to EN 15804.

3.2.7 SPECIFIC LCA CALCULATION RULES

- Green electricity certificates, e.g. RECs certificates, are checked for credibility according to the verification rules and accepted in the LCA calculation.
- EPD Danmark has no prescription of databases data for specified regions. However the data quality must always be ensured.

3.3 VERIFICATION

The verification of an EPD includes an examination of the completeness, plausibility, consistency and transparency of the calculations and information in the project report and the EPD compared to the specifications given in the PCR documents.

The independent verification of LCA, LCI data and supplementary environmental information must as a minimum confirm:

- Compliance with EN 15804 and supplementary PCR documents
- Compliance with ISO 14040 and ISO 14044
- Compliance with these General Programme Instructions
- That the evaluation of data comprises adequacy, accuracy, completeness, representativity, consistency, reproducibility, sources and uncertainty
- The probability, quality and accuracy of data from LCA
- The quality and accuracy of supplementary environmental information
- The quality and accuracy of supporting information

In addition, the independent verification of the Environmental Product Declaration (EPD) must confirm:

- Compliance with EN 15804 and ISO 14025
- Compliance with these General Programme Instructions
- Relevant supplementary PCR documents

The verification of project reports and EPDs must follow the general procedures, which are described in ISO 14025 and performed in practice on the basis of EPD Danmark's verification report template.

The verification procedure must confirm that all information given in the EPD accurately reflects the information contained in the documents on which the declaration is based. The verification procedure must also confirm that the information is valid and scientifically well-founded.

The PCR review and the independent verification of the EPD are two separate processes. The independent verification of the EPD can be performed by the PCR panel or an independent verifier who may have been a member of the PCR panel.

All EPD's must be individually verified. This means, that EPD's prepared from an EPD tool are not considered valid.

3.3.1 VALITY

A verified EPD is valid for 5 years from the date of verification. If significant changes are made to the product or the processes, which the product goes through during its life cycle and which are of great importance to the product's environmental impact, or if the PCR for the product are changed, the EPD must be revised one year at the latest after the coming into force of such changes.

3.3.2 VERIFIER INDEPENDENCE

The verifier must always be an independent third party to the manufacturer as well as the LCA practitioner. This means that the verifier may not be organisationally attached to the manufacturer or the LCA practitioner.

It is the programme operator's responsibility to appoint and make arrangements with a qualified verifier. The programme operator is in charge of the communication with the verifier and handles the documents which are relevant for the verification. The verifier must verify the EPD and project report and prepare a verification report

according to the standardised procedure in the verification template not later than 20 working days after the receipt.

To avoid potential conflicts between the verifier and the manufacturer during the verification process, the programme operator is responsible for making sure, that a fixed price has been agreed-upon before the verification process starts. The verifier will receive information on the product, EPD-type and sizes of the EPD and project report, and must settle a price on this basis.

3.3.3 COMPETENCE REQUIREMENTS FOR VERIFIERS

It is the programme operator's responsibility to make sure that the approved verifiers are qualified and have the necessary competences as regards know-how and experience within LCA and EPD for construction products.

Qualifications and competences are important to ensure the quality of verification and thereby the quality of the finished EPD. It is the aim of EPD Danmark to have the highest quality level to be expected for the time being from the market and which can be mutually recognised by all actors.

The competence requirements of approved verifiers include:

- An education in engineering or other relevant scientific education
- Thorough knowledge of product-related environmental aspects in the building industry, substantiated by at least 4 years' professional experience in environment-related work in the building industry or other related area*
- Process and product knowledge from the lines of business covered by EPD Danmark
- LCA expertise, substantiated by at least 3 completed life cycle assessments (LCA)
- Proof of knowledge within LCA software (e.g. GaBi, Umberto, SimaPro, etc.)
- Knowledge of relevant standards for LCA (ISO 14040, ISO 14044)
- Knowledge of relevant standards for environmental labels and declarations (ISO 14025, EN 15804, ISO 21930)
- Knowledge of EPD Danmark and its rules and procedures

** This may be substantiated - for example - by having worked with development of LCA or critical review of LCA, having been involved in the international LCA/EPD standardisation work in CEN and/or ISO. The verifier must furthermore be part of the LCA / EPD 'society', e.g. through memberships of relevant organisations or committees (e.g. SETAC, LCA fora, national networks, LinkedIn groups, etc.).*

The programme operator shall undertake, at least once a year, to update approved verifiers with available knowledge and competences. This may be done through private courses or discussions//information in relevant networks.

3.3.4 PROCESS

The verification must be performed by an independent third party who fulfils the competence requirements stated in 4.3.3⁴. It is the programme operator's responsibility to approve verifiers according to the requirements in clause 4.3.3 as well as keep a publicly available list of the approved verifiers in EPD Danmark.

The verification procedure is independent of the final approval and publication by EPD Danmark, where the verification is checked for anomalies and irregularities.

A verification has three possible outputs:

1. EPD verified and approved
2. EPD verified and approved with reservations
3. EPD not approved in its present form

⁴ An accredited verification scheme is under development.

The verification report will be kept confidential by EPD Denmark.

VERIFIED AND APPROVED

If the EPD is approved by the verifier, the verifier must forward a completed and signed verification report to the Secretariat, who will make the final approval and publication together with the Technical Committee.

VERIFIED AND APPROVED WITH RESERVATIONS

If the EPD is approved with reservations, the verifier must forward a completed verification report, describing the reservations, to the Secretariat as well as to the manufacturer. The verifier and the manufacturer (+LCA consultant) will then enter into a dialogue about those parts of the EPD which have resulted in the reservations. After clarification the verifier can approve the EPD without reservations. The Secretariat is notified by the forwarding of an updated verification report, and can make the final approval and publication.

NOT APPROVED

If the verifier concludes that the EPD and/or project report contains errors and shortcomings to such an extent that radical changes and/or new calculations are necessary, the verifier may declare in his report that the EPD cannot be approved in its present form. If this happens, the manufacturer must start the procedure all over again, as illustrated in Figure 3.

EPD Denmark furthermore reserves the right to decide, on the basis of the verification report, that the supporting data for the Environmental Product Declaration are inadequate. If this happens, the declaration cannot be issued.

The financial costs involved if an EPD is either approved with reservations or not approved, will be paid by the manufacturer. It is then the manufacturer's own responsibility to negotiate financial compensation with the LCA consultant, if such a consultant has been used. Any issues in connection with this verification process may be reported to the impartial Steering Committee who shall decide on the specific case.

THE MANUFACTURER'S OBLIGATIONS

A manufacturer, who has a verified EPD registered with EPD Denmark, is under an obligation, during the entire validity period of the EPD, to notify the verifier through the Secretariat of any changes in production, processes, materials, product design and any other information submitted as background information in the EPD and which will therefore have an influence on the data and results stated in the EPD.

Such a manufacturer should therefore establish routines for an ongoing inspection and follow-up of the product, and such procedures may be connected to any existing environmental management system in the company.

The manufacturer may not publicly use an Environmental Product Declaration which has not yet been approved, registered and published by EPD Denmark. False or misleading use of the Environmental Product Declaration and EPD Denmark's logo must not take place, including the use of the Environmental Product Declaration for comparative claims or mixed up with Type I environmental labels.

VIOLATION OF THE RULES

Just like the manufacturer, the independent verifier has an obligation to report any violations of the provisions of these general programme instructions and subsequently give instructions as to which corrective measures should be taken. In cases where a verifier or EPD Denmark has repeatedly notified a manufacturer about necessary corrective measures, and the manufacturer has not taken such measures, EPD Denmark reserves the right to withdraw the verified Environmental Product Declaration and deregister it from the database. The Environmental Product Declaration will then be invalid indefinitely.

3.3.5 COMPLAINTS AND DISPUTES

Complaints about the contents of a published EPD shall be filed with the Secretariat and must be substantiated in writing and supported by documentation. The Secretariat is then responsible for obtaining a common statement from the LCA practitioner and the verifier. Any conflicts or disagreements shall be tried to be settled out of court between the parties involved. Disputes shall be settled according to the Rules of Arbitration and Danish legislation.

3.4 DATA AND DOCUMENTATION MANAGEMENT

3.4.1 OBJECT

Project specific data are often confidential because of competitive requirements, information protected by intellectual property rights (IPR) and similar legal restrictions.

During the development of an EPD, it will in most cases be necessary to give external experts access to confidential data, production methods, etc.

There is no requirement that such confidential data be made public. Business data identified as confidential and provided in connection with the independent verification process must be kept confidential in accordance with these General Programme Instructions.

3.4.2 BASIS

ISO 14025 defines the basic rules of data confidentiality, which together with section 4.4.3 below describe the procedures for handling of confidential information in EPD Denmark.

3.4.3 PROCESS

EXCHANGE OF CONFIDENTIAL INFORMATION

In connection with the solving of specific tasks and the provision of services, the parties involved may have to exchange confidential information.

Confidential information includes information of any kind and in any form which is not intended for free public access, including e.g. prices and rates, source codes, data, drawings, specifications, manuals, instructions, etc.

Confidential information received shall be kept, protected and handled properly with at least the same care, as the receiving party applies to his own business secrets.

The parties and their staff, sub-suppliers and consultants shall observe absolute professional secrecy as regards any confidential information received. This does not, however, apply to own internal use for the purpose.

Each party must limit the distribution of confidential information received to those staff members who actually need the information in question.

The parties are not allowed to pass on to any third party any confidential information received from the other party. This does not, however, apply to the passing on of information to the independent verifier, who is approved by the party giving the information. Approval of such verifiers cannot be refused without stating a material reason.

The parties are not allowed to use confidential information received from the other party for any other purpose than for own internal use for the original purpose, apart from any use to which the other party has granted his permission.

Each party shall be responsible for any misuse or unauthorised distribution of information on the part of the party's employees, consultants or other attached persons who gain access to any confidential information received.

4 DEFINITIONS, TERMS AND ABBREVIATIONS

The following definitions, terms and abbreviations apply in these programme instructions and in project reports, EPDs and other communication under EPD Danmark:

EPD

Abbreviation for a Type III Environmental Product Declaration. A Type III Environmental Product Declaration for a construction product is prepared on the basis of the European standard EN 15804 and/or ISO 14025.

TYPE III ENVIRONMENTAL PRODUCT DECLARATION

In everyday language "EPD" or "environmental product declaration". A Type III Environmental Product Declaration provides quantified environmental information on a product's life cycle to enable comparisons between products fulfilling the same function. Such declarations are based on independently verified LCA data and are developed by means of predetermined parameters. The predetermined parameters are defined in the product's PCR and are based on the ISO 14040 series of standards (ISO 14040 and ISO 14044).

TYPE III ENVIRONMENTAL PRODUCT DECLARATION PROGRAMME

Programme for the development and application of Type III Environmental Product Declarations, based on a set of general programme instructions.

PROGRAMME OPERATOR

Organisation which develops and conducts a Type III Environmental Product Declaration Programme.

PCR

Product Category Rules. A set of specific rules, requirements and instructions for the development of an EPD for a specific product category.

SUPPLEMENTARY PCR DOCUMENT

In EPD Danmark the PCR basis of a specific product category consists of two parts. "Part 1" is the European standard EN 15804, which defines the basic PCR rules which are common to all construction products. "Part 2" is the supplementary PCR document, which defines the PCR rules applying to the specific product category, and which thereby *supplements* the provisions in EN 15804.

PCR REVIEW

Process whereby a third party panel verifies the specific Product Category Rules (PCR) prepared for a product category.

LCA

Life Cycle Assessment. The Life Cycle Assessment is the backbone of an EPD and is performed on the basis of the international standards ISO 14040 and ISO 14044. A Life Cycle Assessment compiles and evaluates all inputs and outputs and potential environmental impacts of a product throughout its life cycle.

LCI

Life Cycle Inventory analysis. Phase of the life cycle assessment involving the compilation and quantification of inputs and outputs of elementary flows.

LCIA

Life Cycle Impact Assessment. Phase of the life cycle assessment aimed at understanding and evaluating the magnitude and significance of the potential environmental impacts of a product system.

LIFE CYCLE

Consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal.

EN 15804

European standard published by CEN, on a mandate from the European Commission. The standard forms the technical basis of the preparation of Type III Environmental Product Declarations for construction products (EPD).

PROJECT REPORT

Report containing all relevant data from the life cycle assessment. The project report is considered to be a LCA performed on the basis of the relevant PCR document(s). The project report forms the basis of the verification of the LCA and is not published.

VERIFICATION

Confirmation that specified requirements have been fulfilled. The verification of the LCA data as well as the EPD itself shall ensure the reliability of the work performed. The verification shall be performed by an independent party and may be done either internally as concerns the LCA developer or by an external third party.

VERIFIER

Person or body that carries out verification.

THIRD PARTY

Person or body that is recognised as being independent of the parties involved, as concerns the issues in question. The parties involved are usually the LCA developer and the customer/manufacturer.

PRODUCT CATEGORY

Group of products which can fulfil equivalent functions.

DECLARED UNIT

Quantity of a product system for use as a reference unit for a LCA/EPD. Typically used for LCA covering the life cycle phases in cradle-to-gate.

FUNCTIONAL UNIT

The quantified performance of a product system for use as a reference unit, typically for LCA covering life cycle phases describing the use of the product.

ENVIRONMENTAL IMPACT CATEGORY

Category representing environmental issues of concern in which analysis results may be classified – e.g. "stratospheric ozone layer depletion".

CHARACTERISATION FACTOR

Factor, calculated by means of a characterisation model (e.g. CML), which may be used to convert the classified analysis results into the common unit (e.g. kg CFC-11 equivalents) of the category indicator (e.g. ability to deplete stratospheric ozone).

ALLOCATION

Partitioning of flows (input and output) to and from a process or a product system between the product system under study and one or more other product systems.

RSL

Reference Service Life – the expected service life of a product under a set of given conditions for the use of the product.

B2B

Business-to-business. Communication between organisations and/or professional actors.

B2C

Business-to-consumer. Communication between an organisation or professional actor and a consumer.

to be continued...