

ROLLING STOCK PRODUCT CATEGORY CLASSIFICATION: UN CPC 495

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VALID UNTIL 20XX-YY-ZZ

DRAFT VERSION FOR OPEN CONSULTATION

THE DEVELOPMENT OF THIS SPD-PCR IS A PILOT STUDY TO TEST THE SPD CONCEPT



ROLLING STOCK

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INTRODUCTION TO OPEN CONSULTATION

Note to reader: This document is being developed in a pilot study exploring the feasibility of Social Product Declarations (SPDs). SPDs are similar to Environmental Product Declarations (EPDs) but cover aspects of social sustainability instead of environmental sustainability. There is not yet a system in place for registration of SPDs in the International EPD® System, nor are there procedures in place for verifying SPDs or developing Product Category Rules (PCR) for SPDs. The pilot study is a first step in testing the feasibility of SPDs, to potentially enable the registration of SPDs in the International EPD® System in the future.

This draft SPD-PCR is available for open consultation from 2022-11-08 until 2023-01-07. Feel free to forward the draft to any other stakeholder you might think is relevant, including colleagues and other organisations.

We are interested in comments from stakeholders on:

- General -
 - On the feasibility, need and demand of Social Product Declarations (SPDs) in general 0
 - Whether guidance and requirements included in the draft PCR are sufficient to develop credible and verifiable 0 SPDs for the product category, including comments on what is missing to enable development of credible and verifiable SPDs
- Scope of PCR
 - Product category definition and description
 - Classification of product category using CPC codes 0
 - Goal and scope, life cycle inventory and life cycle impact assessment
 - Stakeholder categories 0
 - 0 Functional unit/declared unit
 - System boundary 0 0
 - Data quality requirements
 - Recommended databases for generic data 0
 - Impact categories and impact assessment methodology 0 Reference values for reference scale approach
- Additional information

Comments may be sent directly to the PCR Moderator (contact details available in Section 1). There is a template for comments on www.environdec.com that may be used.

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For questions about the PCR, please contact the PCR moderator. For general questions about the International EPD® System, EPD/SPD or PCR development, please contact the Secretariat via pcr@environdec.com.



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1 INTRODUCTION

This document is being developed in a pilot study exploring the feasibility of Social Product Declarations (SPDs). SPDs are similar to Environmental Product Declarations (EPDs) but covers aspects of social sustainability instead of environmental sustainability. There is not yet a system in place for registration of SPDs in the International EPD[®] System, nor are there procedures in place for verifying SPDs or developing Product Category Rules (PCR) for SPDs. The pilot study is a first step in testing the feasibility of SPDs, to potentially enable the registration of SPDs in the International EPD[®] System in the future.

This document constitutes Product Category Rules (PCR) for Social Product Declarations (SPDs). SPDs are voluntary documents for a company or organisation to present transparent, consistent and verifiable information about the social performance of their products (goods or services).

The rules for the overall administration and operation of the programme are the General Programme Instructions (GPI), publicly available at <u>www.environdec.com</u>. A PCR should enable different practitioners using the PCR to generate consistent results when assessing products of the same product category.

Within the present PCR, the following terminology is adopted:

- The term "shall" is used to indicate what is obligatory, i.e. a requirement.
- The term "should" is used to indicate a recommendation, rather than a requirement. Any deviation from a "should" requirement shall be justified in the PCR development process.
- The terms "may" or "can" is used to indicate an option that is permissible.
- For definitions of further terms used in the document, see the normative standards.

A PCR is valid for a pre-determined period of time to ensure that it is updated at regular intervals. The latest version of the PCR is available at <u>www.environdec.com</u>. Stakeholder feedback on PCRs is very much encouraged. Any comments on this PCR may be sent directly to the PCR Moderator and/or the Secretariat during its development or during its period of validity.

Any references to this document shall include the PCR registration number, name and version.

The programme operator maintains the copyright of the document to ensure that it is possible to publish, update, and make it available to all organisations to develop and register SPDs. Stakeholders participating in PCR development should be acknowledged in the final document and on the website.

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2 GENERAL INFORMATION

2.1 ADMINISTRATIVE INFORMATION

Name:	Rolling stock	
Registration number and version:	To be added by the Secretariat	
Programme:	EPD [®]	
	The International EPD® System	
Programme operator:	EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden.	
I	Website: <u>www.environdec.com</u> E-mail: <u>info@environdec.com</u>	
PCR Moderator:	Marzia Traverso Circular srl and RWTH Aachen, marzia.traverso@inab.twth-aachen.de	
PCR Committee:	Marzia Traverso, Circular srl and RWTH Aachen, and Davide Bonaffini, Hitachi Rail	
Date of publication and last revision:	To be added by the Secretariat	
Valid until:	To be added by the Secretariat	
Schedule for renewal:	A PCR is valid for a pre-determined time period to ensure that it is updated at regular intervals. When the PCR is about to expire, the PCR Moderator shall initiate a discussion with the Secretariat how to proceed with updating the PCR and renewing its validity. A PCR may be also be updated without prolonging its period of validity, provided significant and well-justified proposals for changes or amendments are presented. See www.environdec.com for the latest version of the PCR.	
	When there has been an update of the PCR, the new version should be used to develop EPDs. The old version may however be used for 90 days after the publication date of the new version, as long as the old version has not expired.	Ändrad fältkod
Standards conformance:	General Programme Instructions of the International EPD® System, version 4.0, based on ISO 14025 and ISO 14040/14044	
PCR language(s):	At the time of publication, this PCR was available in English. If the PCR is available in several languages, these are available at <u>www.environdec.com</u> . In case of translated versions, the	Ändrad fältkod
	English version takes precedence in case of any discrepancies.	

2.2 SCOPE OF PCR

2.2.1 PRODUCT CATEGORY DEFINITION AND DESCRIPTION

This document provides Product Category Rules (PCR) for the assessment of the social performance of Rolling stock and the declaration of this performance by a Social Product Declaration (SPD). The product category corresponds to UN CPC 495 Rolling stock. This PCR is applicable for all rolling stock and refers to locomotives and passenger carriage types of rolling stock, see examples in Table 1.

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Table 1. Examples of types of rolling stock covered by this PCR. The list is non-exhaustive.

	Characteristics	Utilized vehicles
A. Passengers se	rvice types	
Urban	 Inner city Very short distance between stations High passenger capacity 	 Totally low or partially low floor tramways Light rail vehicles Heavy rail vehicles Metros People Movers
Suburban	Mainline service Short distance between stations High train frequency High passenger capacity Short term on-board time	- Heavy rail vehicles - Single- and double-deck electric multiple units - Hybrid vehicles such as tram-trains
Regional	Mainline service Medium to long distance between stations Average train frequency Average number of passengers	Single- and double-deck electric multiple units Electric/disel locomotives with single- and double- deck passenger coaches Disel multiple units for non-electrified lines Coaches
Intercity	Mainline service Medium to long distance between stations Direct city-to-city connections	Single- and double-deck electric multiple units Electric/diesel locomotives with single- and double- deck passenger coaches High performance diesel multiple units for non- electrified lines Coaches
High / Very high speed	Mainline service Medium to long distance between stations Direct main city connections	- Single- and double-deck electric multiple units, specialized for high speed service
B. Freight service		
Mainline	- Mainline service - Long distance between stops	- Electric/diesel locomotives and goods wagons in different typologies depending on the cargo

2.2.2 GEOGRAPHICAL REGION

This PCR may be used globally.

2.2.3 SPD VALIDITY

An SPD based on this PCR shall be valid for a 5-year period starting from the date of the verification report ("approval date"), or until the SPD has been de-registered from the International EPD® System.

An SPD shall be updated and re-verified during its validity if changes in technology or other circumstances have led to:

- an increase of 10% or more of any of the declared indicators of social impact listed in Section 5.4.5.1,
- errors in the declared information, or
- significant changes to the declared product information, content declaration, or additional environmental, social or economic information.

If such changes have occurred, but the SPD is not updated, the SPD owner shall contact the Secretariat to de-register the SPD.

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3 PCR REVIEW AND BACKGROUND INFORMATION

This PCR was developed in accordance with the PCR development process described in the GPI of the International EPD® System, including open consultation and review.

3.1 OPEN CONSULTATION

3.1.1 VERSION 1.0

This PCR is available for open consultation from 2022-11-08 until 2023-01-07, during which any stakeholder is able to provide comments by contacting the PCR Moderator and/or the Secretariat.

Information about any physical or web-based meetings held during the open consultation phase will be added after the open consultation, if applicable.

Stakeholders were invited via e-mail or other means to take part in the open consultation and were encouraged to forward the invitation to other relevant stakeholders. The following stakeholders provided comments during the open consultation and agreed to be listed as contributors in the PCR and at <u>www.environdec.com</u>:

To be added after the open consultation.

3.2 PCR REVIEW

3.2.1 VERSION 1.0

PCR review panel:	The Technical Committee of the International EPD® System. A full list of members is available at <u>www.environdec.com</u> . The review panel may be contacted via <u>info@environdec.com</u> . Members of the Technical Committee were requested to state any potential conflict of interest with the PCR Committee, and if there were conflicts of interest they were excused from the review.
Chair of the PCR review:	To be added by the Secretariat
Review dates:	To be added by the Secretariat

3.3 REASONING FOR DEVELOPMENT OF PCR

This PCR was developed to enable publication of Social Product Declarations (SPDs) for this product category based on ISO 14040/14044 (and in the future ISO 14075) and introduce the social assessment to evaluating the social impacts of the product.

The PCR enables different practitioners to generate consistent results when assessing the social impact of products of the same product category, and thereby it supports comparability of products within a product category.

3.4 UNDERLYING STUDIES USED FOR PCR DEVELOPMENT

The methodological choices made during the development of this PCR (functional unit/declared unit, system boundary, impact categories, data quality rules, etc.) were based on several studies produced during in the last ten years and on the UNEP 2020

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Guidelines for Social Life Cycle Assessment¹, the Methodological Sheets (UNEP 2021)². The continued development of this PCR has since followed the development of S-LCA methodologies.

¹ UNEP, 2020. Guidelines for Social Life Cycle Assessment of Products and Organizations 2020. Benoît Norris, C., Traverso, M., Neugebauer, S., Ekener, E., Schaubroeck, T., Russo Garrido, S., Berger, M., Valdivia, S., Lehmann, A., Finkbeiner, M., Arcese, G.(eds.). United Nations Environment Programme (UNEP). Published December 2020

² UNEP, 2021. Methodological Sheets for Subcategories in Social Life Cycle Assessment (S-LCA) 2021. Traverso, M., Valdivia, S., Luthin, A., Roche, L., Arcese, G., Neugebauer, S., Petti, L., D'Eusanio, M., Tragnone, B.M., Mankaa, R., Hanafi, J., Benoît Norris, C., Zamagni, A. (eds.). United Nations Environment Programme (UNEP). Published December, 2021



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4 GOAL AND SCOPE, LIFE CYCLE INVENTORY AND LIFE CYCLE IMPACT ASSESSMENT

The goal of this section is to provide specific rules, requirements and guidelines for developing an SPD for the product category as defined in Section 2.2.1 and 2.2.2. In the goal and scope, stakeholder categories, subcategories, functional unit, system boundaries, type of data, reference scale, and life cycle impact assessment method shall be defined to make the study and the report comparable.

4.1 STAKEHOLDERS CONSIDERED IN THE SOCIAL LCA

The main categories taken into consideration should be:

- Workers. For this stakeholder category, the following subcategories should be considered: health and social well-being (health checks, risks, accidents, etc.), wages (salaries by employee category, overtime, bonuses, etc.), social benefits (employee support, family allowances, season tickets), unemployment benefits, etc.), further aspect on the working conditions (types of contracts, working hours, average age of employees, holidays, nursery, maternity / paternity, leave, etc.), discrimination (women employed in the workforce, complaints, etc.), freedom of association and collective bargaining, training and education, job satisfaction and involvement.
- Local community. For this stakeholder category, the following subcategories should be considered: health and safety (improvement of local infrastructures, risks generated by the activity, improvements in services, etc.), local employment (creation of jobs, involvement of the population for decision-making processes, etc.) social benefits and losses (accidents, inflation, family allowances etc.), cultural heritage and land rights, discrimination, emigration / immigration, poverty and corruption.
- Users and workers should be considered in the use phase.

4.2 FUNCTIONAL UNIT

The functional unit of reference remains the same used in the EPD to make the SPD a complementary assessment of the EPD; and is therefore represented by the transport of **1** passenger per km.

The characteristics of the train and its average annual distance of km as well as number of years of the use stage of the train must be given as well in the description of the FU.

The FU is necessary to be chosen at the beginning of the project to be used for identifying all material and energy flows and the related stakeholders involved.

4.3 REFERENCE SERVICE LIFE (RSL)

The service life of the train can be defined in kilometers and years which represent the entire life span of the train. It is relevant to understand the type of stakeholders involved in the use phase and the distribution of them in geographical terms during the years.

4.4 SYSTEM BOUNDARY

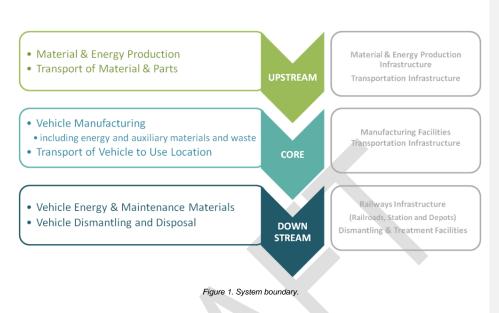
The system boundaries determine the parts of the product system that shall be included in the evaluation. The boundaries of the system must be consistent and relevant in relation to the objective of the study. They should be defined according to a life cycle logic, which includes all the processes of the upstream stage (i.e. processes related to raw materials, purchase of goods and services by the company) to downstream processes (i.e. related to distribution, use, and end of life of the products). The system boundary shall be from cradle to gate including the use stage. The end-of-life stage is optional. This is because the use stage of a train is very long and it is not easy to trace the end of life. Figure 1 shows the main process of each life-cycle stage.

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4.4.1 LIFE CYCLE STAGES

For the purpose of different data quality rules and for the presentation of results, the life cycle of products is divided into four different life cycle stages

- Upstream processes (from cradle-to-gate) mandatory
- Core processes (from gate-to-gate) mandatory
- Downstream: Use stage mandatory
- Downtream: End-of-life stage optional

In the SPD, the social performance associated with each of the four life-cycle stages above shall be reported separately. The processes included in the scope of the PCR and belonging to each life cycle stage are described in Sections 4.4.1.1–4.4.1.3.

4.4.1.1. UPSTREAM PROCESSES

Upstream module includes the extraction and processing of raw materials. Some components of this stage are purchased from external suppliers from different countries of the world. All components produced internally are not considered here but in the core processes. About the upstream modules. Data whenever possible should be collected through primary sources; when primary data are not available, data from databases should be used (see Section 4.5). After collecting the data, a hotspot analysis should be performed. The followings shall be excluded:

- Construction, maintenance and disposal of materials and energy of production plants;
- Construction, maintenance and disposal of supplier infrastructures;
- Transportation of raw materials to suppliers;
- Manufacturing of components by suppliers;
- Packaging production;
- Transport of auxiliary materials to the assembly plant.

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4.4.1.2. CORE PROCESSES

The core module represents the activities of train assembly, internal transport between the company plants, transport to the customer and the generation and treatment of plant waste.

Specifically, the core module consists of three main phases:

- Phase 1: structural works;
- Phase 2: painting;
- Phase 3: assembly of the components, including the final train;

Exclusions:

- Construction, maintenance and disposal of production plants;
- Packaging of components / assemblies / products used.

4.4.1.3. DOWNSTREAM PROCESSES (USE STAGE)

Use phase of the train involving the commissioning company, which is particularly important for a product such as the train whose main function is the transport one.

4.4.1.4. DOWNSTREAM PROSSES (END-OF-LIFE)

The End-of-Life (EoL) can be considered if it is known the final destination of the train and the possible disposal treatment used. In this case it must be described and all input and output. In this case at least workers and local community are the main stakeholder to be considered.

4.4.1.5. ENVIRONMENTAL LCI FLOWS AS PART OF THE SOCIAL LCA SYSTEM BOUNDARY.

Some flows of the life cycle inventory of the environmental LCA can have relevant social impacts. The Hotspot Analysis will help to identify if there are further flow of the environmental LCI which are relevant for the social impacts.

4.5 SOCIAL HOTSPOT OF THE MAIN RAW MATERIALS

For raw materials, as it often occurs the information on the n-tier suppliers are not available, that is the reason why the most producing countries should be at least considered and their geographical position. In general, the raw materials used for the construction of the train are bronze, copper, carbon steel, cast iron, aluminum, cadmium, mica, lead, zinc, nickel, steel, silicon, and silver, as well as various types of plastics.

For these materials, an hotspot analysis based on the social issues at country levels should be done and the results should be reported transparently with the sourced used to identify the main countries producers and the related social hotspots. Two databases are suggested: Social Hotspot Database (Benoît-Norris, C., D. Aulisio, G. A. Norris. 2014 and 2012) and PSILCA³.

The analysis should cover at least the most important categories related to human and labour rights, such as: child labour, forced labour, fatal and non-fatal work accidents, and freedom of association.

4.6 LIFE CYCLE INVENTORY

For the life cycle inventory, data collection shall be done using as many as possible primary data collected along the product life cycle with questionnaires. When those are not available, inventory data can be obtained by literature and the sustainability reports published by the suppliers (secondary data).

More details are described in the paragraphs below.

³ https://psilca.net/wp-content/uploads/2020/06/PSILCA_documentation_v3.pdf



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4.6.1 SUPPLIERS (UPSTREAM AND CORE PROCESSES)

A questionnaire should be developed to collect data related to the following information by suppliers involved in the upstream and core processes. An example of questionnaire is provided in Annex 1.

If no data coming from questionnaire, the data should be collected by on suppliers' websites and in sustainability reports and they should regard the following themes:

- Average rate of accidents at work;
- Certifications on sites and personnel;
- Social benefits provided to workers;
- Employee support provision of subscriptions or accommodation;
- Number of new employees hired in the last year;
- Maternity coverage;
- Parental leave and/or extraordinary leave;
- Human rights and discrimination;
- Percentage of women in the workforce;
- Employee training;
- Working conditions;
- Freedom of association and collective bargaining;
- Job satisfaction and involvement;
- Minimum and average wages.

Regarding to local communities, data should be collected on:

- Local employment
- Cultural heritage and land rights (Presence of indigenous population in the area, Involvement of local authorities / population in business decision-making processes, Loss of space used for recreational activities);
- Poverty (Activities proposed by the company to reduce poverty).

In the case not enough primary data can be obtained by suppliers throughout the two option above, then secondary data from databases should be used (e.g. social hotspot database). In this case it is necessary to know at least the countries where the materials and components are produced. A social hotspot analysis should be carried by considering the related country and sector-level data available in social risk databases such as SHDB[®] and PSLICA[®]

4.6.2 PRODUCER COMPANY (CORE PROCESSES)

Inventory data for the producer company shall be obtained through interviews, surveys, the consultation of the sustainability report and information published on the website of the same company. More in detail, data collected should be related to the following themes:

- Health and social wellbeing;
- General safety-related accidents data;
- Provision of free meals for employees;
- Definition of the main working time;
- Documented working conditions (e.g. regular contracts);
- Stability of jobs (type of contracts if those are undetermined or determined, intern or extern workers and so on);
- Number of working hours performed by employees forced to leave personal documents;
- Number of audits and monitoring cycle on working conditions by external certifiers;

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- Actions taken to increase the diversity of personnel and/or to promote equal opportunities;
- Data on freedom of association and collective bargaining;
- Employees have the right to organize collective bargaining activities;
- Data on job satisfaction and involvement survey;
- Employee salaries (Minimum and average wages)
- Violations of laws and regulations concerning employees in the workplace;
- Percentage of local employees;
- Policy against the employment of children under the age of 15 years old;
- Identified complaints related to discrimination.

4.6.3 USE STAGE: PASSENGERS AND WORKERS

For the inventory analysis of the utilization phase, the purchasing company and its sustainability report shall be considered.

In the use stage, the main stakeholders are the consumers or users (of the train) and the workers involved in the service.

For the workers the same data collected for the production and supply chain shall be considered. For users at least the following aspects shall be included:

- Number of consumer complaints related to the service performance per year;
- Number of complaints from regulatory bodies related to breach of consumer privacy or data loss in the past year;
- Measurements and monitoring tools in place for user's satisfaction: yes/no question and quality level.
- Presence of management measures to assess consumers health and safety
- Presence of a mechanism for consumers/users to provide feedback.
- Communication of the results of social and environmental life cycle impact assessment
- Publication of a sustainability/GRI report;
- Certification / label obtained by the product / site organization.

4.7 CUT-OFF RULES

The cut-off criteria should be based on the relevance of the materials and components in terms of mass, but also in terms of social hotspots related to the materials. It shall be possible to identify which of these materials are called "critical" according to the definition given by the European Commission in the Critical Raw Materials List (CRM)⁴. Quantity and criticality should be the criteria used as cut-off criteria capable of detecting the potential impacts and the most important social hotspots⁵.

Transportation to the final customer and the end-of-life phase can also be neglected if the train has just entered service and the endof-life occurs in European countries. The disposal sector can be neglected if no social hotspot occurs according to national and international statistics.

4.8 DATA QUALITY REQUIREMENTS

A S-LCA calculation requires two different kinds of data:

Data related to the social aspects of the considered system (such materials flows that enter the production system). These data
usually come from the company that is performing, or has commissioned, the S-LCA (i.e., the SPD owner).

⁴ European Commission 2020 Critical Raw Materials list: https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials_en

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 Data related to the life cycle impacts of the material flows that enter the production system. These data usually come from databases. Data on social aspects shall be as specific as possible and shall be representative of the studied process.

Data on the social life cycle of materials inputs are classified into three categories: specific data, selected generic data, and proxy data, defined as follows:

- Specific data (also referred to as "primary data" or "site-specific data") are social data collected from the actual production facility where the product-specific processes take place and data from other parts of the life cycle that can be traced back to the specific product system under study, e.g., materials provided by a contracted supplier that can provide the data for the services actually provided, etc.
- Generic data (sometimes referred to as "secondary data"), divided into:
 - Selected generic data: data from commonly available data sources (e.g. commercial databases and free databases) that fulfil prescribed data quality characteristics for precision, completeness;
 - Proxy data: data from commonly available data sources (e.g. commercial databases and free databases) that do not fulfil all of the data quality characteristics of "selected generic data".

As a general rule, specific data shall always be used, if available, after performing a data quality assessment. It is mandatory to use specific data for the core processes as defined above. For the upstream processes and downstream processes, generic data may also be used if specific data are not available.

Any data used should preferably represent average values for a specific reference year. However, the way these data are generated could vary. Such deviations should be declared.

Generally, the secondary data shall have been updated at least in the last 5 years. Older data in the database must be updated with other literature sources and it should be transparently reported giving the year and the sources used.

4.8.1 RULES FOR USING GENERIC DATA

To allow the classification of generic data as "selected generic data", they shall fulfil selected prescribed characteristics for precision, completeness, and representativeness such as:

- The reference year must be as current as possible and preferably assessed to be representative for at least the validity period
 of the SPD.
- Completeness in which the inventory data set should, in principle, cover all elementary flows that contribute to a relevant degree of the impact categories.

Section 4.9 provides a list of examples of databases/datasets to be used for generic data.

4.9 EXAMPLES OF DATABASES FOR GENERIC DATA

Table 2 provides examples of databases to use for finding generic data. Please note that this listing does not imply that other data that fulfil the data quality requirements may not be used, and that data quality assessment shall also be performed if datasets from the databases listed in Table 2 are used. It is recommended to consistently use one database for the entire S-LCA.

Table 2 List of examples of databases for generic data.

Process	Database(s)
Production of bronze, copper, carbon steel, cast iron, aluminum, cadmium, mica, lead, zinc, nickel, steel, silicon, and silver	USGS, SHDB
Production of electronic components, plastic, glass	SHDB

4.10 IMPACT CATEGORIES AND IMPACT ASSESSMENT

The social performance indicators to use for SPDs developed according to this PCR are listed in Section 5.4.5.

The methods used to assess the social performance indicators shall be described in the SPD. Guidance for the assessment is given in below subsections.

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4.10.1 EVALUATION SCALE

Rating scales should be used to assess the impact categories for the hotspots considered and for the various life-cycle phases of the product.

4.10.1.1. EVALUATION SCALE FOR MAIN HOTSPOTS

The rating scale for social hotspots that should be used is the same as the risk scale proposed by the SHDB (Social Hotspot Database). This is based on a scale of 1 to 4 where 1 represents the lowest risk value (in green) and 4 represents the highest risk value (in red).

Table 3 Social hotspot rating scale.

1	Low	
2	Medium	
3	High	
4	Very High	
		7

4.10.1.2. EVALUATION SCALE FOR LIFE-CYCLE PHASES OF THE PRODUCT

The scale proposed by the Guidelines for Social Life Cycle Assessment of Products and Organizations from 2020 (UNEP, 2020) for the drafting of the S-LCA should be used for the assessment of impacts of all life-cycle stages of the train - from extraction to raw materials, production of components, manufacturing of the train and its use.

This consists of a rating scale ranging from +2 to -2 where +2 represents the ideal condition case and -2 represents the worst-case scenario.



Figure 2 Rating scale for social performance of life-cycle phases (adapted from UNEP 2020).

The 0 or neutral value indicates when, for the specific indicator, values that comply with national and/or international regulations are reached. The +1 value is obtained when the company for that aspect has a proactive behavior that positively exceeds simple compliance with current national and international legislation. +2 is usually considered when the indicator meets an ideal condition for that specific value: e.g., 0 working Injuries, living wage. On the other side, the value -1 on highlights one or more non-compliance for that social aspect considered which is not considered a hotspot in that geographical area. The -2 is when the non-compliance occurs in an issue which is a hotspot in that area. The referencing analysis must be made declared for each case study inventory indicator and then a final value should be reached for that impact category in order to be able to give an overview of the positive or negative impacts of the train along its life cycle.

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Generally, the reference value which define the zero level must be transparently reported as well as the source used.

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4.10.1.3. EVALUATION OF SOCIAL IMPACTS

To carry out the assessment of social impacts, a score ranging from -2 to +2 should be assigned to each indicator considered, where -2 represents the worst condition and +2 represents the best condition.

The choice of the score to be assigned to each indicator considered should be made on the basis of the answers given to the questionnaires for the social life cycle inventory, and on the national and international reference value.

For example, considering the health and safety impact category, for workers, when the companies comply with the national laws of the state where the plants are located, the score should be 0, if the companies have characteristics that are slightly better than the national laws, the score that should be assigned is +1, and finally, score +2 should be assigned to the companies that, for each impact category considered, present ideal performance characteristics and have characteristics that are superior to the laws of the state where the plants are located. As far as negative scores are concerned, the score -1 should be assigned to companies that do not comply with national laws; instead, the score -2 should be assigned if the company does not comply with the national laws of the state and the specific aspect is recognized to be a hotspot in that geographical areas.

The evaluation should be done for the stakeholder categories: workers and local communities for both the suppliers and the train company.

It is important to report transparently the reason why each score has been assigned with a comment and the reference (national law, international law or sector average).

No aggregation of results is suggested and all indicators with evaluations of -1 and -2 should be highlighted and related improvement actions should be reported.

4.10.1.4 INTERPRETATION OF THE RESULTS OBTAINED FROM THE SOCIAL IMPACT ASSESSMENT

At this phase, the results of the S-LCIA should be checked and discussed to set the basis for conclusions, recommendations and decisions based on the definition of the objective and scope of the study.

Considering the rolling stock product along its life cycle, the interpretation of the results should be carried out starting from the stage of extraction of the train construction materials to the end of the life cycle of the considered product.

Interpretation of the results for the train should be done by considering:

- the results obtained from the analysis done for the extraction and processing of materials (one should see which countries
 present more risks from the social point of view);
- the results obtained from the analysis of suppliers, in which case distinctions should be made between suppliers whose data were found in sustainability reports and those to whom questionnaires were administered;

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- the results obtained from the interviews posed to the train manufacturing company;
- the results obtained for the use stage of the train.



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5 CONTENT AND FORMAT OF SPD

SPDs based on this PCR shall contain the information described in this section. Flexibility is allowed in the formatting and layout provided that the SPD still includes the prescribed information.

The SPD content shall:

- be in line with the requirements and Guidelines for Social Life Cycle Assessment of Products and Organizations (UNEP 2020⁶), and guidelines in ISO 14020 (Environmental labels and declarations - General principles),
- be verifiable, accurate, relevant and not misleading, and
- not include rating, judgements or direct comparison with other products⁷.

An SPD should be made with a reasonable number of pages for the intended audience and use.

The content of SPDs published in machine-readable format shall correspond with the content of the underlying SPD.

5.1 SPD LANGUAGES

SPDs should be published in English but may also be published in additional languages. If the SPD is not available in English, it shall contain an executive summary in English including the main content of the SPD. This summary is part of the SPD and, thus, also subject to the verification process.

5.2 UNITS AND QUANTITIES

The following requirements apply for units and quantities:

- Health and safety, regarding quantifiable indicators, should be expressed in: number/year, number/month;
- Salary, regarding quantifiable indicators, should be expressed in: €/month, €/year;
- Social benefits should be expressed in: % of employees, number of programs for employees;
- Working conditions, regarding quantifiable indicators, should be expressed in: number of hours, % of employees, number of days/year,
- Discrimination, regarding quantifiable indicators, should be expressed in: number of actions/year, ratio (women/men)/year, number of complaints per year;
- Freedom of associations and collective bargaining, regarding quantifiable indicators, should be expressed in: % of employees;
- Training and education, regarding quantifiable indicators, should be expressed in: number of apprenticeships/year, % of employees/year, hours of training/year;
- Time should be expressed in the units most practical, e.g., seconds, minutes, hours, days or years.
- The thousand separator and decimal mark in the SPD shall follow one of the following styles (a number with six significant figures shown for illustration):
 - SI style (French version): 1 234,56
 - SI style (English version): 1 234.56

In case of potential confusion or intended use of the SPD in markets where different symbols are used, the SPD shall state what symbols are used for thousand separator and decimal mark.

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⁶ UNEP, 2020. Guidelines for Social Life Cycle Assessment of Products and Organizations 2020. Benoît Norris, C., Traverso, M., Neugebauer, S., Ekener, E., Schaubroeck, T., Russo Garrido, S., Berger, M., Valdivia, S., Lehmann, A., Finkbeiner, M., Arcese, G. (eds.). United Nations Environment Programme (UNEP).

⁷ Therefore, results of normalization are not allowed to be reported in the SPD.



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- Dates and times presented in the SPD should follow the format in ISO 8601. For years, the prescribed format is YYYY-MM-DD, e.g., 2017-03-26 for March 26th, 2017.
- The result tables shall:
 - Only contain values or the letters "ND" (Not Declared). It is not possible to specify ND for mandatory indicators. ND shall only be used for voluntary parameters that are not quantified because no data is available.⁸
 - Contain no blank cells, hyphens, less than or greater than signs or letters (except "ND").

5.3 USE OF IMAGES IN SPD

Images used in the SPD, especially pictures featured on the cover page, may in themselves be interpreted as an social claim. Images such as trees, mountains, wildlife that are not related to the declared product shall therefore be used with caution and in compliance with national legislation and best available practices in the markets in which the SPD is intended to be used.

5.4 SPD REPORTING FORMAT

The reporting format of the SPD shall include the following sections:

- Cover page (see Section 5.4.1)
- Programme information (see Section 5.4.2)
- Product information (see Section 5.4.3)
- Content declaration (see Section □)
- Social performance (see Section Fel! Hittar inte referenskälla.)
- Additional environmental information (see Section Fel! Hittar inte referenskälla.)
- Additional social and economic information (see Section Fell Hittar inte referenskälla.)
- References (see Section 5.4.5)

The following sections shall be included, if relevant:

- Differences versus previous versions (see Section Fel! Hittar inte referenskälla.)
- Executive summary in English (see Section 5.4.7)

5.4.1 COVER PAGE

The cover page shall include:

- Product name and image
- Name and logotype of SPD owner
- The text "Social Product Declaration" and/or "SPD"
- Programme: The International EPD[®] System, <u>www.environdec.com</u>
- Programme operator: EPD International AB
- Logotype of the International EPD[®] System
- SPD registration number as issued by the programme operator⁹
- Date of publication (issue): 20XX-YY-ZZ

⁹ The SPD shall not include a "registration number" if such is provided by the certification body, as this may be confused with the registration number issued by the programme operator.

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⁸ This requirement does not intend to give guidance on what indicators are mandated ("shall") or voluntary.

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- Date of revision: 20XX-YY-ZZ, when applicable
- Date of validity; 20XX-YY-ZZ
- A note that "An SPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com."
- A statement of conformity with ISO 14040
- For SPDs covering multiple products: a statement that the SPD covers multiple products and a list of all products covered by the SPD.
- For Sector SPDs: a statement that the SPD is a Sector SPD.
- For construction product SPDs:

In the case of SPDs registered through a regional hub (a regional or national programme based on and fully aligned with the International EPD[®] System through an agreement with the programme operator), "Programme", "Programme operator", and "Logotype" shall be expanded to include a reference to the regional programme and the organisation responsible for it.

Where applicable, the cover page shall also include the following information:

- Information about dual registration of SPD in another programme, such as registration number and logotype.
- A statement of conformity with other standards and methodological guides.

5.4.2 PROGRAMME INFORMATION

The programme information section of the SPD shall include:

- Address of programme operator: EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden, E-mail: info@environdec.com
- The following statement on the requirements for comparability of SPDs, adapted from ISO 14040: "SPDs within the same product category but from different programmes may not be comparable. For two SPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison."
- A statement that the SPD owner has the sole ownership, liability and responsibility of the SPD
- Information about verification¹⁰ and the PCR in a table with the following format and contents:

Accountabilities for PCR, S-LCA and independent, third-party verification
Product Category Rules (PCR)
PCR: <name, and="" code(s)="" cpc="" number,="" registration="" un="" version=""></name,>
PCR review was conducted by: <name and="" chair="" chair,="" contact="" how="" information="" of="" on="" operator="" organisation="" programme="" review="" the="" through="" to=""></name>
Social Life cycle assessment (S-LCA)
S-LCA accountability: <name, organization=""></name,>
Third-party verification

¹⁰ If the SPD has been verified by an approved individual verifier who has received contractual assistance from a certification body that is not accredited, this certification body shall not be included in this table.

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Independent third-party verification of the declaration and data, according to ISO 14040:2006, via:

Third-party verifier: <name, organisation, and signature of the third-party verifier>

Approved by: The International EPD[®] System

OR

Independent third-party verification of the declaration and data, according to ISO 14040:2006, via:

 $\hfill\square$ SPD verification by accredited certification body

Third-party verification: <name, organisation> is an approved certification body accountable for the third-party verification

The certification body is accredited by: <name of accreditation body & accreditation number, where applicable>

OR

Independent third-party verification of the declaration and data, according to ISO 14040:2006 via:

 $\hfill\square$ SPD verification by SPD Process Certification*

Internal auditor: <name, organisation>

Third-party verification: <name, organisation> is an approved certification body accountable for third-party verification

Third-party verifier is accredited by: <name of accreditation body & accreditation number, where applicable>

*For SPD Process Certification, an accredited certification body certifies and reviews the management process and verifies SPDs published on a regular basis. For details about third-party verification procedure of the SPDs, see GPI v4, Section 7.5.

Procedure for follow-up of data during SPD validity involves third-party verifier:

□ Yes

5.4.3 PRODUCT INFOMRATION

The product information section of the SPD shall include:

- address and contact information to SPD owner,
- description of the organisation. This may include information on products- or management system-related certifications (e.g. ISO 9001-) and other relevant work the organisation wants to communicate (e.g. SA 8000, supply-chain management and corporate social responsibility),
- name and location of production site,

🗆 No

- product identification by name, and an unambiguous identification of the product by standards, concessions or other means,
- identification of the product according to the UN CPC scheme system. Other relevant codes for product classification may also be included, e.g.
 - Common Procurement Vocabulary (CPV),
 - United Nations Standard Products and Services Code® (UNSPSC),

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- Classification of Products by Activity (NACE/CPA),
- Australian and New Zealand Standard Industrial Classification (ANZSIC), or
- Global Trade Item Number (GTIN).
- a description of the product,
- a description of the technical purpose of the product, including its application/intended use,
- a description of the background system, including the main technological aspects,
- for SPDs covering multiple products: a description of the selection of products/sites, a list of contributing manufacturers (if Sector SPD), etc. (see Section Fel! Hittar inte referenskälla.),
- geographical scope of the SPD, i.e., for which geographical location(s) of use and end-of-life the product's performance has been calculated,
- declared/functional unit,
- reference service life (RSL) and/or technical/actual lifespan, if relevant,
- declaration of the year(s) covered by the data used for the S-LCA calculation and other relevant reference years,
- reference to the main database(s) for generic data and S-LCA software used, if relevant,
- system diagram of the processes included in the S-LCA, divided into the life cycle stages,
- description if the SPD system boundary is "cradle-to-gate", "cradle-to-gate with options" or "cradle-to-grave",
- information on which product life-cycle stages are not considered (if any), with a justification of the omission, and
- references to any relevant websites for more information or explanatory materials.

This section may also include:

- name and contact information of organisation carrying out the underlying S-LCA study,
- any additional information about the underlying S-LCA-based information, such as cut-off rules, data quality, allocation methods, and other methodological choices and assumptions, and
- if end-of-life treatment is not included, the SPD shall contain a statement that it shall not be used for communicating social information to consumers/end users of the product.

5.4.4 CONTENT DECLARATION

The content declaration shall have the form of a list of materials and chemical substances including information on their performance and social risks. The gross weight of the material declared in the SPD must cover at least 95 percent of a unit of product, or at least 100% of materials and components which have the most relevant social impacts according to the social hotspot analysis.

Materials used for rolling stock must be classified into the following categories and included in the SPD.

- metals (ferrous metals or non-ferrous metals);
- elastomers;
- polymers (thermosets or thermoplastics);
- composites (e.g., fibre reinforced polymers or others);
- electric and electronic equipment;
- glass;
- safety glass;
- oil, grease or similar;
- acids, cooling agents or similar;
- other inorganic materials (e.g., ceramics);

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- mineral wool;
- modified organic natural materials (MONM), including wood.

5.4.5 SOCIAL PERFORMANCE

The social performance indicators declared in the SPD should cover the below impact categories, per stakeholder category. The declared social performance results shall be declared per life-cycle stage.

Annex 2 provides examples of LCI indicators to use as a basis for assessing the social performance indicators.

The indicators used for workers should cover:

- Health and social well-being;
- Wages;
- Social benefits;
- Working conditions;
- Discrimination;
- Freedom of association and collective bargaining;
- Training and education;
- Job satisfaction and involvement.

The indicators used for local communities should cover:

- Health and safety;
- Local employment;
- Cultural heritage and land rights;
- Poverty.

The indicators used for companies should cover:

- The presence of the sustainability report;
- The average rate of accidents at work;
- Site and personnel certifications;
- Social benefits provided to workers (eg unemployment benefit, health insurance, etc.);
- Employee support provision of season tickets (eg gym) or accommodation (eg apartment);
- New employees hired in the last year;
- Maternity coverage;
- Parental leave and / or extraordinary leave (eg for disability, bereavement...);
- Human rights;
- Women employed in the workforce;
- Employee training.

5.4.6 REFERENCES

A reference section shall be included, including a list of all sources referred to in the SPD and PCR (registration number, name, and version) used to develop the SPD.

- The underlying S-LCA report
- Reference to methodology and version used for each social impact category

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- Other documents that verify and complement the SPD
- The PCRs used (registration number, name and version).
- Standards
- The PCRs used (registration number, name and version).
- General programme instructions (including version number)

5.4.7 EXECUTIVE SUMMARY IN ENGLISH

For SPDs published in another language than English, an executive summary in English shall be included.

The executive summary should contain relevant summarised information related to the programme, product, social performance, additional information, information related to sector SPDs, references, and differences versus previous versions.

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6 LIST OF ABBREVIATIONS

ANZSIC	Australian and New Zealand Standard Industrial Classification
CPC	Central product classification
CPV	Common procurement vocabulary
SPD	Social product declaration
GPI	General Programme Instructions
ISO	International Organization for Standardization
S-LCA	Social Life cycle assessment
LCI	Life cycle inventory
ND	Not declared
PCR	Product category rules
RSL	Reference service life
UN	United Nations
UNSPSC	United Nations standard products and services code

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7 REFERENCES

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EPD International (2021) General Programme Instructions for the International EPD® System. Version 4.0, dated 2021-03-29. www.environdec.com

European Commission 2020 Critical Raw Materials list:: <u>https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials_en</u>

Kirill Maister, Claudia Di Noi, Andreas Ciroth, Michael Srocka, 2020. PSILCA - A Product Social Impact Life Cycle Assessment database PSILCA database v.3 documentation https://psilca.net/wp-

content/uploads/2020/06/PSILCA_documentation_v3.pdfISO (2004) ISO 8601:2004 Data elements and interchange formats – Information interchange – Representation of dates and times.

ISO (2006b) ISO 14040:2006, Environmental management - Life cycle assessment - Principles and framework.

UNEP (2020). Guidelines for Social Life Cycle Assessment of Products and Organizations 2020. Benoît Norris, C., Traverso, M., Neugebauer, S., Ekener, E., Schaubroeck, T., Russo Garrido, S., Berger, M., Valdivia , S., Lehmann, A., Finkbeiner, M., Arcese, G. (eds.). United Nations Environment Program (UNEP).

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8 VERSION HISTORY OF PCR

VERSION 1.0, 20ZZ-XX-YY

Add description of the PCR version, e.g. "Original version of the PCR".

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ANNEX 1: EXAMPLE OF QUESTIONNAIRE TO USE IN COLLECTING DATA FROM SUPPLIERS

Indicate the reference year of the following data:

Please describe the production process and production steps of the relevant plant including in the description only the process steps that affect the product sold to [INSERT NAME OF EPD OWNER].

It is therefore requested to add the name of the phase and/or the process unit and to add others if necessary. (Example: step 1= extraction of raw materials in quarry, step two= processing of the product.)

Description of the production process of the product.

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Health and safety	
Provision of toilets for employees	yes no
	yes□
Provision of free meals for employees	no□
	yes□
Personal protective equipment (PPE) supplied	no□
	yes□
Does the company/site comply with local health and safety regulations?	no□
Existence of contingency plans (e. g. in case of fire)	yes□ no□
	yes□
Existence of Committee on Health and Safety	no□
Accidents due to the use of harmful substances (num/year)	
Periodic health checks for employees (number/year)	
Average rate of accidents at work (number/year)	
Safety and health training for workers (hours/year)	

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Salaries	Step 1	Step 2	Step 3
Salary of employees (€/month Please indicate the average salaries paid by type of worker)			
Pay gap between highest and lowest paid salary (Ratio/year)			
Salary of female employees (€/year specy by category of employees)			
Bonus paid	yes□	no□	
Overtime paid	yes□	no□	
Social benefits			
Social benefits provided to employees (e,g, unemployment benefits, health insurance, pension, ect.)	yes□	noロ	
Specify the type of service or list if more than one			
Support for employees - provision of subscriptions (e. g. gym) or accomodation (e. g. apartmet)	yes□	no□	
Specify the type of medium and if monetary include the value			
Family benefits	yes□	no□	
Parental leave and/or special leave (for disability, bereavement, etc.)	yes□	no□	
Nursery facilities available for employees' children Specify the cost per child.	yes□	no□	
Transparency of employer vis-à-vis employees (e. g. working conditions, wages, conditions of trainees, holidays, etc.)	yes□	no□	
Attach documentation			
Compliance with human rights legislation	yes□	noロ	
Specify available documentation			
Definition of main working time	yes□	no□	
Specifying the time frame			

Working conditions	Step 1	Step 2	Step 3
Overtime - regular overtime of 48 hours per week			
(Average number of overtime/type of employees (year or week))			
Weekly working time from contract of employment (Average number			
of hours from contract/types of workers per week)			
Flexible working hours (% of employees with flexible hours)			
Documented working conditions (e. g. regular contracts) (% of outside workers)			
Permanent workers (% of permanent employees)			

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Holidays (Average number of days/year)		
Maternity cover (% of women and/or men (differentiated) with maternity/paternity leave		
Number of audits and monitoring cycle on working conditions by external certifiers		
(Number/year) (please indicate the certifying body)		
Violations of laws and regulations on employees at the workplace (Cases/year)		
Local employees (% of local employees)		
Hours worked by trainees between 15 and 18 years of age (average hours/year)		
Average salary expected for trainees (€/year)		

Discrimination	
Actions taken to increase staff diversity and/or promote equal	
opportunities (Number of actions/year)	
Please indicate the type of actions	
Women employed in the labouor force (%)	
Identified complaints related to discrimination (Number of complaints per	
year)	
Actions taken to increase staff diversity and/or promote equal opportunities (Number of actions/year) Please indicate the type of actions Wornen employed in the labouor force (%) Identified complaints related to discrimination (Number of complaints per year) Please indicate the type of discrimination complained of Employees know how to file a complaint or raise doubts about any action by management that violates non-discrimination Does the company have policies against employing children under the age yes□ no□	
	yes no
by management that violates non-discrimination	
	yes□ no□
of 15?	

Training and education		
Training of annalual employees	yes□	no□
Appropriate training before entering employment	yes□	no□
Freedom of association and collective bargaining		
Employees have the right to form associations	yes□	no□
Employees have the right to organise collective bargaining activities	yes□	no□
Employees have the right to strike	yes□	no□
The employer does not hinder or interfere but proactively	yes□	no⊒
informs employees about their right to join unions and to organize		
themselves in collective bargaining		
Job satisfaction and involvement		
Survey on job satisfaction and involvement	yes□	no□

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LOCAL COMMUNITY

Health and safety		
Impact on the local community due to pollution and noise generated,		
or to harmful substances released into the environment (Number of cases per year)		
Please indicate the type of impact		
Accidental ecosystem impacts caused by activity		
(specify type of environmental incident)		
(Number of cases per year)		
Improvement of local infrastructure	Yes⊒	no□
(e. g. telecommunications, road network, energy and water supply) to support activities		
Please indicate the type of improvement		
Improvements in education and knowledge of the population due to activity	yes□	noロ
Please indicate the type of improvement		
Improvement of local health services due to activities	yes□	no
Please indicate the type of improvement		
Programmes to improve health and safety for the local community	yes□	no□
(for example building a hospital) (Number of programmes)		
Please indicate the type of programme		
Does the work done contribute to the sustainability of the local economy?	yes□	no□
Local employment		
Local job creation/increase of employment rate through the enterprise (direct job		
creation).		
(Number of new jobs/year)		
Loss of jobs typical of that area (e. g. agriculture or tourism) due to activity		
(Number of jobs lost/year)		
Business and employment opportunities in other sectors		
(e. g. waste management) arising from company activity		
(Number of additional jobs created/year)		
	1	

Cultural heritage and land rights		
Loss of space used for recreational activities (e. g. sports) (km ² lost/year)		
Please indicate the type of space		
Presence of indigenous population in the area	yes□	noロ
Involvement of local authorities/population in decision-making on the activity	yes□	no□

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Poverty	
Activities proposed by the company to reduce poverty (Number of activities/year)	
Please indicate type of activity	

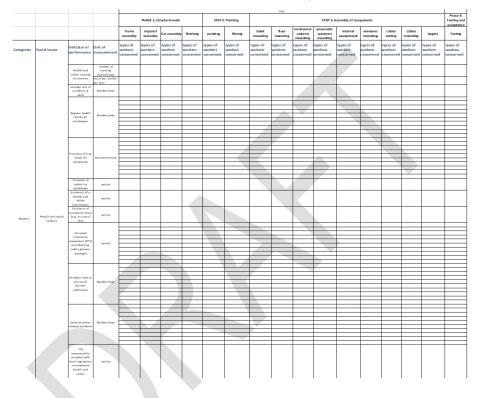
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ANNEX 2 – EXAMPLES OF S-LCI INDICATORS FOR ASSESSING SOCIAL PERFORMANCE

Table 4 Indicators for the social health and safety theme.

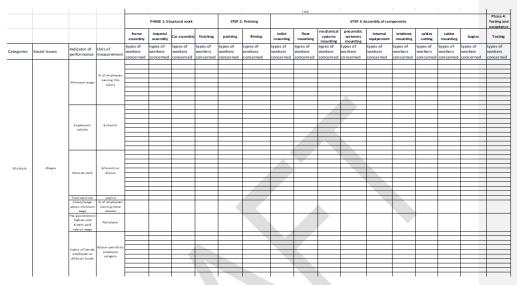


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Table 5 Performance indicators for the social theme wages.



				Tab	IE O F	nonna		uicator	s for the	SUCIAI	Deneni	suiem	е.						
								-	•		FASI								1
					PHASE 1: St	nuctural work		STEP 2	2: Painting					asembly of con	nponents				Phase 4: Testing and acceptance
				frame assembly	imperial assembly	Car assembly	finishing	painting	filming	toilet mounting	floor mounting	mechanical systems mounting	pneumatic systemns mounting	internal equipement	windows mounting	cables cutting	cables mounting	bogies	Testing
Categories	Social issues	Indicator of performance	Unitor	workers		types of workers concerned	workers	types of workers concerned	types of workers concerned	types of workers concerned	types of workers concerned	types of workers concerned	workers	types of workers concerned	types of workers concerned				
Wotkers	Social Involtes	Social howerfup provided to provide the provident of the uncertainty of the insurance, particular to the support of provision of subject provident framity allowance, provident of the support of the support of the sup	% of employees requiring social beyofts % of employees receiving support																

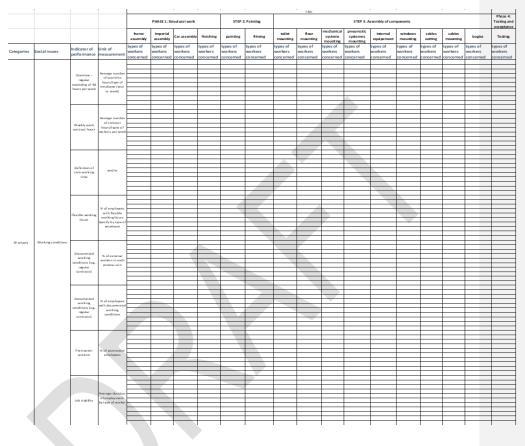
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Table 6 Performance indicators for the social benefits theme



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Table 7 Performance indicators for the social issue working conditions.

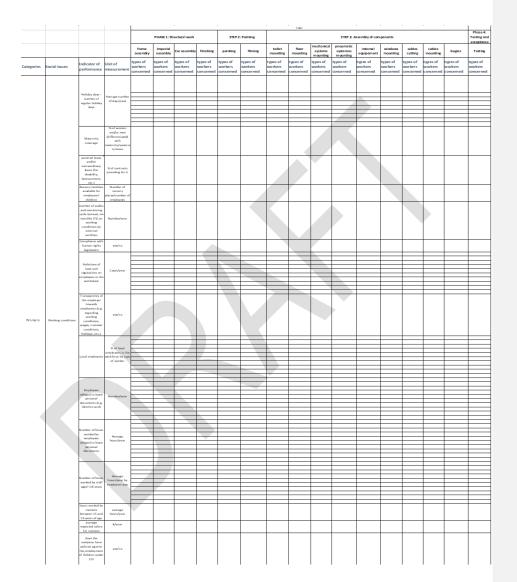


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Table 8 Performance indicators for the social issue working conditions.



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Table 9 Performance indicators for social discrimination.

			i .			•	-				FASI			÷	÷		÷	•	1
					PHASE 1: Structural work				STEP 2: Painting: STEP 3: Assembly of components									Phase 4: Testing and acceptance	
				frame assembly	imperial assembly	Car assembly	finishing	painting	filming	toilet mounting	floor mounting	mechanical systems mounting	pneumatic systemns mounting	internal equi pement	windows mounting	cables cutting	cables mounting	bogies	Testing
Categories	Socialissues	Indicator of performance	Unit of measurement	types of workers concerned	types of workers concerned	workers	workers	types of workers concerned		workers	types of workers concerned	workers	types of workers concerned	types of workers concerned	types of workers concerned	workers		types of workers concerned	types of workers concerned
Workers		Actions taken to increase staff diversity and/or to promote equal opportunities	Number of actions/year																
	Discrimination	Women in the workforce	Ratio/year																
		Identified discrimination complaints	Number of complaints per year																
		Employees know how to fike a complaint or raise concerns about any management action that violates non- discrimination	yes/no																

Table 10 Performance indicators for the social theme freedom of association and collective bargaining.

				PHASE 1: Structural work				STEP 2	: Painting	As STEP 3: Assembly of components									
				frame assembly	imperial assembly	Car assembly	finishing	painting	filming	toilet mounting	floor mounting	mechanical systems mounting	pneumatic system ns mounting	internal equipement	windows mounting	cables cutting	cables mounting	bogies	Testing
ntegories	Social issues		Unit of measurement	workers	workers		workers	workers	types of workers concerned	types of workers concerned	workers		types of workers concerned	types of workers concerned	types of workers concerned	workers		types of workers concerned	types of workers concerned
W orkers	f median of mediation and suffictive languing	Membership of trade unions	56 of independents who are members of trade unions																
		Employees have the right to form associations	yes/no																
		Employees have the right to organise collective bargaining activities	yes/no																
		Employees have the right to strike	yes/no																
		The employer does not hinder or interfere but proactively informs employees of their right to join trade unions and to organise in collective bargaining	yes/na																

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Table 11 Performance indicators for social issues training and education and job satisfaction and involvement.

				PHASE 1: Structural work				STEP 2	Painting	FAGI STEP 3 : Assembly of components									
			frame assembly	imperial assembly	Car assembly	finishing	painting	filming	toilet mounting	floor mounting	mechanical systems mounting	pneumatic systemns mounting	internal equipement	windows	cables cutting	cables mounting	bogies	Testing	
Categories		Indicator of performance	Unitor		workers	workers	workers	workers	types of workers concerned	workers	workers	types of workers concerned	workers	workers	workers	types of workers concerned	workers	types of workers concerned	types of workers concerned
Workers	Training and subaution	Started and/or completed apprenticeship	Number of apprenticeships/y ear																
			Average hours of training/year by type of employee																
		Adequate training prior to employment	% of employees receiving training/year by employee type																
	Job satisfaction and involvement	Job satisfaction and engagement survey	yes/no																

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