



International InData Workshop on Harmonization of EPDs Databases

"International experts from Europe meet at the University of Cordoba to discuss on harmonization of environmental construction databases"

Last March 23rd, 2023, InData Initiative has organized the workshop entitled "Harmonization of EPDs Databases" in the city of Cordoba. Spain. The event was promoted by the "Escuela Técnica Superior de Ingeniería Agronómica y de Montes ETSIAM" of the University of Córdoba, BBSR Federal Institute for Research on Building, Urban Affairs and Spatial Development, the "Instituto de Ciencias de la Construcción Eduardo Torroja. CSIC" and the company ONESTA. The workshop was held at the Rectorate of this University coinciding with the 21st meeting of InData.

The objective of the workshop was to show key aspects related with environmental data and to discuss about Databases from three different perspectives.

The meeting began with the welcome by the Director of the ETSIAM Rosa Gallardo, who pointed out the commitment of this university to environmental issues as well as the importance of Cordoba being the city where the twenty-first meeting of this network will be held. The director remarked the importance of this workshop "more necessary than ever to have environmental data with enough quality to make life cycle analysis calculations and especially important now, since in the near future environmental data of construction products will be included in the declarations of performance".

The introduction and start of the sessions continued with interventions by Tanja Brockmann from the Federal Institute for Research on Building, Urban Affairs and Spatial Development of Germany and José Antonio Tenorio from the Eduardo Torroja Institute of Construction Sciences (IETcc CSIC). Tanja Brockmann recalled that the InData Working Group was created in 2015 as an informal, non-profit working group to establish an international web-based open data network to give a structure to environmental product declarations (EPDs) for life cycle analysis, using a common open-source format. Experts from ministries, research centers, universities, companies and environmental programs from Austria, Denmark, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden, the United Kingdom are currently participating. Among InData's main achievements is the promotion of a machine-readable data management system, which is already used by almost all European EPDs. For his part, Tenorio from CSIC explained the importance for us of this day's meeting by bringing together three points of view through three panels: Spain vision on the technical regulation of Housing Ministry and the Spanish Office of Climate Change OECC, InData's vision and accumulated knowledge and experience and the European vision.



Tanja Brockmann, Rosa Gallardo and José Antonio Tenorio

Panel 1. Spanish perspective

The session was opened by the presentation of the Ministry of Transport, Mobility and Urban Agenda (MITMA) of the Government of Spain, with the presence of Juan Queipo Llano. The speaker remarked that this Spanish Ministry is working to include embedded carbon in buildings in the regulations in the coming years, complementary to operational carbon, "with a aim to achieving the objectives of complete decarbonization by 2050". The focus of the footprint reduction will be directed to new and existing buildings and also for administration buildings. Queipo de Llano gave a preview of the different methods, strategies and decisions needed to address these measures.



Juan Queipo de Llano

With the presence of the Spanish Climate Change Office (OECC) of the Government of Spain, Belén Vitón presented the carbon footprint and offsetting scheme in Spain and its future evolution. She showed the Spanish registry and reduction plans and pointed out the inclusion of scoring criteria in public procurement as one of the lines of empowerment of the reduction of emissions and carbon footprint. Vitón stressed the need for reliable databases for the regulatory framework and the objectives of the OECC for this, highlighting the need to have a

generic product data base that should be, in the opinion of the OECC, open, public and at national level.



Belén Vitón.

After the Spanish vision of the government administration, the speeches were followed by presentations on the outlook for the European members as a whole.

Panel 2. InData and ...being in practice

Olivers Kusche, an independent consultant Okworx Digital Solutions of Germany, and a member of InData gave a summary of its history, highlighting the important milestones achieved. "In the beginning there was no data that was machine-readable in an automated way. InData's vision has contributed to the change, now there are 5597 specific products declared in ECO Portal and 1132 representative and generic data in Ökobaudat, all of them under the same format and a common search engine. Progress continues to be made towards full digitization of the data, allowing free export and unlimited use".



Oliver Kusche

The presentation was followed by the speech of Sofia Kubalski, representative of the program manager EPD International of Sweden. Kubalski among other messages stressed in the importance of flexibility in accessing data, both in its import, as well as multiple output (export) formats that enable the use of the data. "APIs make the requirements clearer."



Sofia Kubalski

As one of the InData members representing Spain, José Antonio Tenorio, Senior Scientist at IETcc. CSIC, took the floor with his presentation under the title "Generic dataset in EPD databases". The CSIC researcher insisted on the need and development of a greater number of EPDs, especially for products that are commercialized in the Spanish market, and stressed the opportunity to establish generic values with which calculate during the design stage of the building, in order to establish an initial global reference level. "It is essential that the assessment of the environmental impacts of buildings were done from the early stages of the construction process to take into account in the design of the building. Otherwise it will simply be a valuation tool for constructed buildings."



José Antonio Tenorio

The panel concluded with the online presentation of Martin Romby Hauge, Technical Director of Gaiup from Denmark speaking about "Automated and real-time building LCA from BIM models", showing the development of a new software that aims to understand, improve and document climate impact, saving time, resources and also CO2 emissions.

Panel 3. European & International perspective

The third session included three speeches of great importance in their nuances and novelties.

Óscar Nieto, responsible for policies of the European Commission, in his presentation "CE Marking and the harmonization of the Declaration of Performance (DoP)", explained the main new features that the revision of the regulation of construction products will bring and among them, referring to this area, the inclusion of environmental values to be included in the declaration of performance of the products. "The new regulation means important changes in the single market necessary for growth, improved competitiveness, digital transition and above all in terms of environmental sustainability which is necessary in the green transition, the overall sustainability of the built environment, the use of natural resources, reuse and recycling." What is today in the voluntary sphere will be mandatory. Nieto explained the need for a global database to collect CE marking values, including environmental ones.



Oscar Nieto

From the Spanish Association for Standardization (UNE), Aitor Aragón, responsible for standardization committees, presented the European D²EPC project and highlighted the importance of the UNE-EN ISO 22057:2022 standard on BIM data templates of the EPDs and the digital declaration of performance (Smart CE), as well as its necessary compatibility with the ILCD+EPD format where the fields for digitizing the EPDs are developed.



Aitor Aragón

To conclude the day's presentations, Martin Erlandsson, Deputy Director of the Swedish Environmental Research Institute (IVL) in Sweden, offered another important approach to ISO 22057, such as its powerful dictionary to describe the characteristics and use identical classification of construction products.

Each panel was followed by a rich discussion. The experts who attended the workshop contributed, from different corporations and geographic areas, guidelines that seek to mark a single path for the homogenization and development of environmental data, for a more sustainable building.



Debate

The workshop was held in the Mudejar room of the Rectorate of the University of Cordoba, promoter of the event together with CSIC, and was sponsored by ONESTA, a corporation that is highly involved in environmental protection and collaborates in research support with this

University. This action is framed within the framework of the future ONESTA - University of Cordoba Chair for a construction with low environmental footprint products.



From left to right. José Lucas, José Antonio Tenorio, Tanja Brockmann, Teresa Garnica, Emilie Brisson Stapel, Emanuele Durante, Alberto Espina, Robert Spang, Oliver Kusche, Ugo Pannuti, Martin Erlandsson, Juan Queipo de Llano, Sheila Otero, Stefan Zwerenz, Håkon Hauan, Carmela Mansi, Sofía Kubalski, Alex Röder, Hildegund Figl, Marta Sánchez, Marta Conde, Belén Vitón, Enrique Larrumbide, Aitor Aragón, Arturo Alarcón, Oscar Nieto, Carlos Alonso.

International InData Workshop on Harmonization of EPDs Databases

Thursday, March 23, 2023, 15:00-19:00

Agenda

Welcome Address

Rosa Gallardo Cobos. Dean of ETSIAM. University of Cordoba, Spain

Introduction & Kick Off

Tanja Brockmann. Federal Institute for Research on Building, Urban Affairs and Spatial Development, Germany

José A. Tenorio. Senior Researcher. Torroja Institute for Construction Sciences. CSIC, Spain

Panel 1. Spanish perspective

- 15:10 New sustainability requirements in Spanish building regulations

Ainhoa Díez de Pablo. MITMA. Government of Spain

- 15:20 Carbon footprint and Offsetting scheme in Spain and future evolution
Belén Vitón Sanz. OECC. Government of Spain

- 15:30 Q&A

Panel 2. InData and ...being in practice

- 15:40 InData achievements – a common data format and data network
Oliver Kusche. Freelance Consultant okworx digital solutions, Germany

- 16:00 EPDs and digitalization
Sebastian Stiller. CEO EPD International, Sweden

- 16:15 Generic datasets in EPDs databases
José A. Tenorio

- 16:30 Automated and Real-Time Building LCA from BIM Models.
Martin Romby Hauge, CTO at Gaiup, Denmark

- 16:45 Q&A

- 17:00 Break

Panel 3. European & International perspective

- 17:20 CE Marking and DoP harmonization
Oscar Nieto. Policy Officer - European Commission DG GROW

- 17:30 Relation with other relevant data: energy efficiency (D2EPC) and CE marking (Smart CE)
Aitor Aragón. Responsible of Standardization Committees. UNE, Spain

- 17:40 ISO 22057 data template approach
Martin Erlandsson. Assistant director at IVL. Sweden

- 17:50 Q&A & Discussion

- 18.50 Closing & Organizational

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Federal Institute for
Research on Building,
Urban Affairs and
Spatial Development
within the Federal Office for
Building and Regional Planning

