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Editorial

Since the last newsletter of November 2015, the construction sector has been affected by a number of important policy developments.

The selective demolition of buildings, the BIM model for demolition as well as the traceability of C&D waste materials are all high on the agenda; a promising sign that steps are being taken to turn waste into a resource.

On the environmental side, also encouraging was the decision by the JRC to define macro-objectives for resource efficiency in buildings.

In The Netherlands, a number of surveys were completed on the implementation of the circular economy package and a book on implementing the energy performance Directive in the 28 Member States was also published.

Finally, according to one recently published report, the construction equipment sector is doing relatively well.

I hope that this information will spark discussion and debate for establishing a more sustainable construction sector.

Julie Girling
MEP

President of the European
Parliament Gypsum Forum



EU Policies in Construction

European Demolition Industry Report-2015

The European Demolition Industry Report provides a global view of the demolition activities in Europe combined with a national view of the countries related with the European Demolition Association, EDA.

The European Demolition Industry Report goes from the general to the specific, and contains data concerning the economic, social and industrial context, the situation of the construction sector and the evolution of the demolition industry.

It is a 270 page book with solid data and standardized methodology, about the demolition market in Europe, which will help demolition industry stakeholders in their knowledge of the business.

The data of this report comes from the feedback of hundreds of demolition contractors, from 16 countries, taking part on an extensive survey done with all the National Demolition Associations/Federations.

This book provides information about the situation and forecasts of the markets and a detailed report country-by-country, on areas such as companies and activities, industry developments, equipment used and required, material handling, waste management, regulations and standards.

More information by clicking on the below link: <http://www.europeandemolition.org/industryreport>

BIM for Demolition

Since the vast majority of existing building have no digital representation, HISER project proposes the creation of a specific BIM for demolition works.

The most effective workflows for creating a BIM considering the starting conditions, required level of detail, available techniques

(e.g. laser scanning, photogrammetry) and existing software tools and algorithms for interpreting the point clouds are being analyzed. On top of this BIM model a web based tool with 3D interaction capabilities will be developed, usable from mobile device like a tablet PC. Currently the specifications for the tool are being finalized, considering both functional requirements from end-users and technical aspects about the software architecture to support it.

In relation to the former, the first objective is to provide an easy interface to make an on-site inventory linking each building component to a predefined product database, supported by simple questionnaires to characterize the components and the building constraints and surrounding. In the case of non-visible items (e.g. hidden metals, cables, installations, etc.) expert rules will be implemented which estimate quantities based on basic input data (room sizes, number and location of luminaires and power switches, etc.). The second objective is to develop a smart analysis module to extract all the required information from the BIM and orient the user in the most convenient alternative for managing the materials, considering building type, country, distance to recycling plants, fees for disposal, etc. Finally, interfaces will be developed to connect the tool with commercial Facility Management tools like [ACTIVE3D](#) (from partner Archimen), developing the required import/export mechanism

TRACIMAT-Tracing Construction and Demolition Waste Materials

To qualify for upcycling, recycled construction and demolition materials must be of good quality. It is equally important that users of the recycling material must have faith in this quality. These are two reasons why the Flemish Construction Confederation (VCB) has founded Tracimat, a non-profit construction and demolition waste (CDW) management organisation.

CDW management organisation?

A construction and demolition waste management organisation is an external and neutral organisation that will certify the selective demolition, thereby assuring the processing company of the quality of the input construction and demolition waste.

Certificate of selective demolition?

Tracimat will issue a "*certificate of selective demolition*" for construction and demolition waste that has been selectively collected and subsequently gone through a tracing system. The demolition certificate tells the processor whether the demolition waste can be accepted as "low environmental risk material" and therefore be processed separately from waste streams with a high environmental risk. Purer waste streams with a low environmental risk clearly have a greater upcycling potential. This in turn opens up opportunities for incorporation into more high-quality applications than are possible today. The demolition waste comes with a certificate issued by a recognised and independent organisation, which will enhance trust not only in the quality of the material, but also in the quality of the demolishing company. It will also boost trust in the recycled product, resulting in improved and more widespread marketing of recycled granulates.

Tracing system?

Tracimat will not issue a certificate of selective demolition until the waste has gone through a traceability system. The tracing process starts with the preparation of a destructive demolition inventory and waste management plan prepared by an expert prior to the selective demolition and dismantling work. To guarantee the quality of the demolition inventory and waste management plan, they must be prepared according to a specific procedure.

Tracimat will check the quality of the demolition inventory and waste management plan and issue a declaration on its conformity. Based on intermediate inspections at construction sites and desk control of the discharge certificates/processing documents,

Tracimat checks whether both the hazardous waste and the non-hazardous waste that complicates the recycling of the specific

construction and demolition material, have been selectively and properly disposed of.

Tracimat will initially focus on the stony fraction, which in terms of weight by far represents the greatest portion of the construction and demolition waste. Where possible, the organisation's field of activity will be expanded in the future to include other types of construction and demolition waste materials.

Launch of the European Energy Efficiency Platform

On 5 April 2016, the European Commission is launching the European Energy Efficiency Platform (E3P), with the aim to provide robust data and analysis to support those in charge of the development, implementation and monitoring of energy efficiency policy, industry, consumers' organizations, standardization bodies, research institutes, the scientific community and NGOs at the EU, national, regional and local level.

E3P will be organized around the six thematic areas of energy efficiency in products, cities, buildings, transport, industry and distribution (heating, cooling and electricity). A dedicated IT based platform will be at the center of the platform with interactive and collaborative features.

High Level Forum on Construction

On 14 April 2016, this forum was held in Brussels. Key recommendations for buildings and infrastructure were drawn for the ministerial meeting on construction:

- Buildings and infrastructure are taken for granted – they should not as buildings do not last forever and as there is a building mismatch (health and safety, energy efficiency in existing buildings)
- A need for a life cycle approach and apply circular economy principles – a large share of building costs relate to operation and maintenance
- A need to look at costs and benefits of measures across the whole value

chain; much information is lost and much scope for spectacular gains (BIM)

- Cooperation can pay off: e.g. shared equipment, inter-trade set-up
- Digital technologies can help to improve productivity along the value chain: but roll-out of BIM requires compatibility of software, standardisation and training
- A need to see how the sector can better contribute to broader policy goals (e.g. energy efficiency – a need for full use of tools and instruments e.g. public procurement)

Key conclusions pertinent to the Ministerial meeting on Construction

- A holistic approach helps the construction sector itself but also to contribute to economic and society ('to do good')
- Construction sector a major ally for building the circular economy (life cycle costing)

Macro Objectives for Resource efficiency in buildings

Upon the Commission request, the Joint research center (JRC) identified the following macro-objectives:

Life cycle environmental performance' macro-objectives for buildings

- Greenhouse gas emissions from building life cycle energy use: Minimise the total GHG emissions along a buildings lifecycle, with a focus on building operational energy use emissions and embodied emissions.
- Resource efficient material life cycles: Optimise building design, engineering and form in order to support lean and circular flows, extend long-term material utility and reduce significant environmental impacts.
- Efficient use of water resources: Make efficient use of water resources, particularly in areas of identified long-term or projected water stress.

Quality, performance and value' macro-objectives for buildings

- Healthy and comfortable spaces: Design, construction and renovation of buildings that protect human health by minimizing the potential for occupier and worker exposure to health risks.
- Resilience to climate change: The futureproofing of building thermal performance to projected changes in the urban microclimate, in order to protect occupier health and comfort.
- Optimised life cycle cost and value: Optimisation of the life cycle cost and value of buildings, inclusive of acquisition, operation, maintenance and disposal

Link to the document:

http://susproc.jrc.ec.europa.eu/Efficient_Buildings/docs/151222%20Resource%20Efficient%20Buildings_Macro%20objectives%20WP_Final%20version.pdf

Standardisation

Standardisation under the CPR

Last 26th October 2015 CEN organised an event to discuss the way forward of standardisation under the legal framework of the CPR.

Representatives from the industry, standardisation bodies, stakeholders and CEN discussed the main problems they face when developing / revising standards. The debate was splitted in different topics presented by Mr Ascensao and Mr Alexandre from CEN Cenelec Management Center.

HARMONISED STANDARD CITED IN THE OFFICIAL JOURNAL

Harmonised standards contain now a voluntary and a compulsory part, this situation is creating some problems for the citation but it is a need of the industry and should remain. Some experts suggested the development of two different documents, one for regulatory

purposes and other for testing and assessment.

REGULATORY AND TECHNICAL NEEDS

The two faces of harmonised standards are supposed to be independent but reality differs from theory. Some regulatory requirements are clearly established in the mandates but in general this is not the case and there are discrepancies between requirements and declaration. Improvement of mandates and better communication between regulators and EC would solve the issue. New or amendment of classification and thresholds are the two issues creating more problems, discrepancies and discussions as regards market and regulatory needs.

NEW RULES, STANDARDISATION COMMITTEE

The new standardisation regulation increases the uncertainty of the processes due to the complex procedure. The new standardisation requests (former mandates) are the meeting point of regulators at national level, Commission officials and stakeholders but for the moment the system is not working as fast and as reliable as expected.

WAY FORWARD

Experts agreed on the need to describe, simplify and clarify procedures and to develop a more open discussion on the obstacles standards find to be cited.

Delegated Act: classification of the reaction to Fire (class F)

The European Commission has now published a new delegated act to define the [classification of the reaction to fire performance of construction products](#). The reason to revise this classification was the meaning of classes F, F_{FL}, F_L and F_{ca}. Up to now it was "No performance determined" (NPD) or fail class E but this definition was inconsistent with the definition of class in the CPR (range of levels, delimited by a minimum and a maximum value, of performance of a construction product).

The new classification redefines class F (including F_{FL}, F_L and F_{ca}) as the lowest class. No other substantial changes were made, apart from adapting the wording to the terminology

and the concepts used in the CPR. The European classification system has been consolidated regarding the reaction to fire of construction products. This Decision as amended contains four classification Tables for different families of construction products

CEN TC 350 Plenary meeting- sustainability of construction works

The meeting was divided in two parts, the first one was the discussion of the experts on the differences and similarities of PEF and EPD according to EN 15804. After a short presentation from Mr Ilomaki where the principles of the environmental standards were presented: modularity and polluter pays principle. Then Mr Galatola explained the similarities and differences between the PEF methodology and EN 15804. Mr Mikkeli explained also the links with the CPR and how standards are used in policies.

The outcome of the debate was an agreement to work together to avoid duplicity of methodologies. The first step is the development of a revised Mandate of the EC to CEN to address the discrepancies of the methodologies and to try to bridge gaps between them.

The second part of the meeting was dedicated to discuss the documents under development, in particular:

- Technical requirements on new indicators is almost ready but 9 months extension was requested to deal with editorial comments and text improvement.
- Technical requirements on guidance for the implementation of EN 15804 already finished PEF / EN 15804 formula report is being developed to facilitate the discussion on the mandate. The concept of end of life is different in the two methodologies and is a core issue for the convergence of the system.
- The framework document for civil engineering works was finalised and

will be sent for enquiry before December.

- Preliminary work item to start the development of the methodology document(s) was presented.

Next meetings of CEN/TC 350 will take place:

- TG framework will meet the 12th of November 2015 in Madrid to discuss the Mandate.
- WG6 will meet the 13th of November 2015 and the 19th of January 2016 in Madrid.
- WG3 will meet the 10th of February 2016 in Paris.

Plenary meeting will meet the 10th of November 2016 in Berlin and working groups will meet the same week

EU Funded Projects

Horizon 2020 BAMB Project

Integrating Materials Passports with Reversible Building Design to Optimise Circular Industrial Value Chains

The aims of BAMB (Buildings as Material Banks) are the prevention of construction and demolition waste, the reduction of virgin resource consumption and the development towards a circular economy through industrial symbiosis, addressing the challenges mentioned in the Work Programme on Climate action, environment, resource efficiency and raw materials. The focus of the project is on building construction and process industries (from architects to raw material suppliers).

Please click on the following link for more details: <http://www.vub.ac.be/ARCH/ae-lab/projects/bamb>

Proscale – Toxicity in LCA

A consortium has been established to develop ProScale, a method intended to be used as additional information on toxicity in Life Cycle Assessment, Environmental Product Declaration and Product Environmental Footprint, combining hazard and exposure information along the life cycle of a product,

and based on existing data.

The idea of ProScale has been presented by BASF last year and discussed with stakeholders at several occasions. The ProScale consortium now gathers BASF, Covestro, Deutsche Bauchemie, DSM, IVL, Kingspan and Solvay. Its goal is to develop a first version of applicable methodology and to publish it by the end of the year. It will also be presented during a stakeholder conference.

Surveys

The Circular Economy in the Dutch Construction Sector

The Dutch Ministry of infrastructure and environment published recently a report discussing the role of construction in circular economy. The document includes some general ideas, the results of a stakeholder consultation and policy advice.

For the report, please click on the link: http://www.rivm.nl/dsresource?objectid=rivmp:303858&type=org&disposition=inline&ns_nc=1

Commission publication on the construction sector

On 11 March 2016, the European Commission published a brochure entitled "The European construction sector - A global partner". The brochure outlines the important role of the construction sector for European Union economies. According to the publication, the sector generates about 9% of gross domestic product (GDP) and provides 18 million direct jobs.

For more information, please click on the following link: http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=8753&lang=en&tpa_id=0&title=The-European-construction-sector%3A-a-global-partner

Book implementing the Energy Performance of Building Directive

In April 2016, Concerted Action EPBD¹ published a book called "2016 – Implementing the Energy Performance of Buildings Directive (EPBD)". This book provides an overview of the achievements in implementing the EPBD across Europe for the period from 2012 till 2015. It covers 28 EU Members States plus Norway and describes their main achievements and challenges in complying. It also lists possible solutions and recommendations for the upcoming review of the Directive

For more details, please click on the below link <http://www.epbd-ca.eu/ca-outcomes/2011-2015>

European construction equipment market performs relatively well in global comparison; striking regional disparities remain



The construction equipment sector saw a single-digit decline (-2.5%) in 2015, primarily attributable to the market situation in Russia, overall, however, there were encouraging signs of improvements in machinery demand. Building construction equipment performed better than civil engineering equipment, earthmoving and road construction machinery. These are the main findings of the CECE Annual Economic Report 2016, published today.

The growth of the European construction equipment sector seen in 2014 could not be sustained in 2015: sales in Europe declined slightly by a moderate 2.5%.

However, "what looks like bad news needs to be interpreted carefully", said Sebastian Popp, economic expert at CECE. Within Europe, market developments were highly diverse, a phenomenon which is apparent even in the large volume markets. We saw growth of almost 40% in Italy, but also declines of 25% in France", said Popp.

Central and Eastern European countries and Southern Europe were the pillars of growth, though from very different start points. Germany, the UK, and the Nordic Countries remained the anchors of stability.

The continued free fall in the Russian market was a decisive factor distorting the overall market statistics.

In fact, sales in Europe excluding Russia saw growth of 3.5%, ranking Europe without Russia in the top three performing regions in the world in 2015, behind only the Middle East and India.

In an environment that lacked any clear drivers of growth, and against a backdrop of declining world equipment sales (-11%), Europe should be seen as a positive example.

What remains notable, is that the European construction equipment sector is an exporting industry.

Even with declining worldwide sales, exports from Europe to the world grew slightly (by 4% in the first 10 months of the year).

The CECE Barometer, the most relevant leading indicator for the construction equipment industry in Europe, grew significantly in the last quarter of 2015 and the first quarter of 2016. The index is clearly in a positive zone, which suggests a positive first half of the year when it comes to equipment sales.