



Transnational Innovation Hub : 1st meeting

Date & time : 26.02.2021, 15h-17h

Location : Teams & Miro

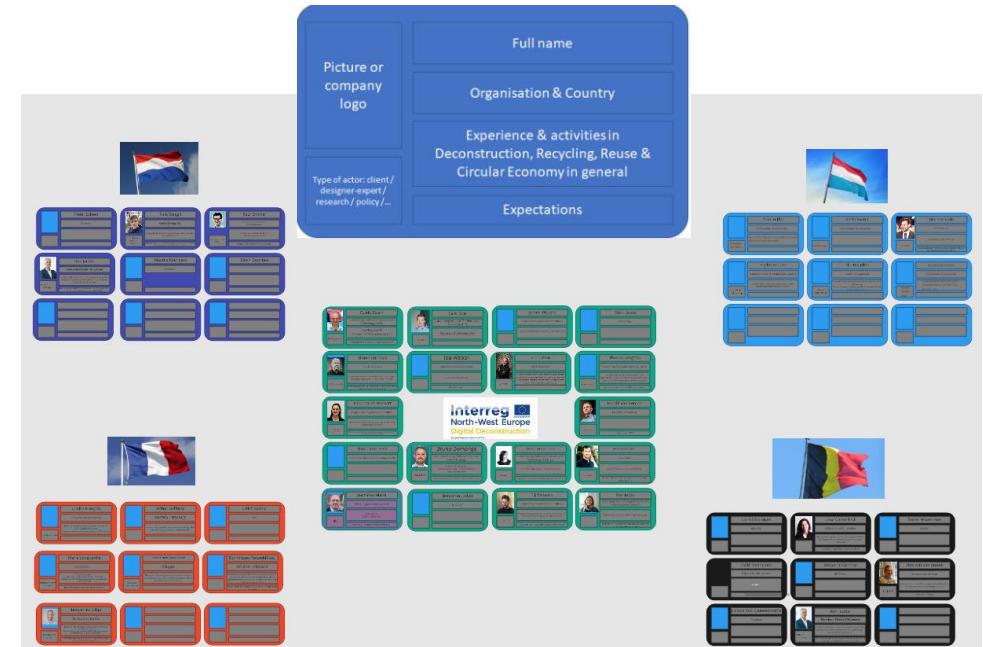
Contact : Jeroen Vrijders & Eléonore de Roissart

jvr@bbri.be / edr@bbri.be



Meeting agenda

- Presentation
 - RIH purpose and objectives (BBRI)
 - DDC project (DDC project lead partner)
 - Introduction to the developed technologies & Integrated Platform (GTB Lab)
 - User needs (BBRI)
 - Demonstration of 1 DDC module (BIM-Y)
- Miro :
 - https://miro.com/app/board/o9J_lShYcjc=/
 - Get to know : **participants passport**
 - Needs and barriers for circular demolition
 - DDC SWOT
 - Next steps for the TIH



Current needs and barriers to more circular demolition ?

- Many systemic barriers in other organisations
- There is the potential for DDC and RIH to address specific practical barriers
- Barriers not addressed by DDC or RIH

- Systemic issues

- Mindset change towards reuse : client incentive, construction managers & cie lack of knowledge
→ sensibilisation and education through RIH
- Stakeholders in construction have difficulties with digital tools and BIM → propose "easier/low-tech" digital tools in RIH
- Lack of uniform system → object classification : workshops in RIH
- Legal and financial incentive (tax, public tendering criteria, cost-benefit issues)
- Liability/insurance/legal guarantee/technical indicators
- Circular project certification system

- Practical barriers

- Quick demolition/reuse audit on site → Scan, MD, tools in RIH
- **Assessing** reuse and high quality recycling : CO₂ and energy saved, **economic** (difficulties to estimate cost at the beginning of the project, easy indicators needed) → DDC tools
- 1 user-friendly tool for all actors, Interoperability and information exchange between stakeholders → the DDC IP
- Specific reuse (historic value) → Scan
- Identification of stakeholders/clients → Networking in RIH
- Not enough pragmatic use cases of reuse → Experience sharing in RIH
- Reselling platforms, logistics, ensure flow of reused materials, link supply and demand
- Setting a common goal amongst all stakeholders from initial to execution
- Poor capacity of integration of the operational feasibility in the upstream decision
- No skilled manual knowledge, training needed
- Toxic risk (lead and asbestos)



DDC SWOT



- Low competition : Need for digital revolution in (de)construction, a lot of potential for DDC
- DDC-IP : good information overview, able to make links with modules
- Uniformity of material database
- For the reuse sector : dvpt, visibility boost, access a large market of reusable elements
- Integration with other tools : AI (element identification), BIM, digital twin, material passports, transfer with other data services
- Attract (young) talents/programmers that have made digital work for other themes
- Collaboration : U-mine



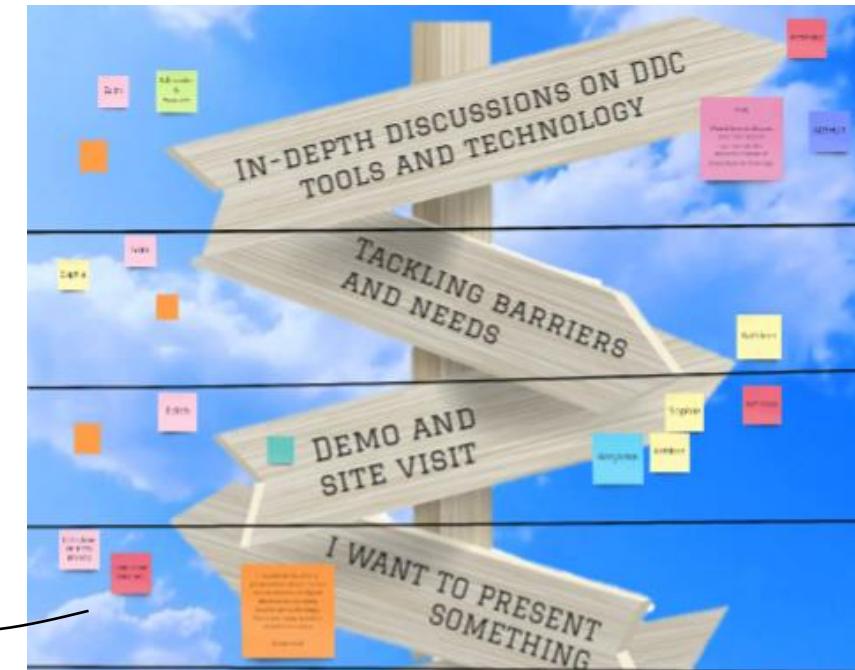
- Usability : size of 3D files, different modules/licenses,
- Availability : Generated knowledge available to a wider public ? Output available for everybody ?
- Restricted to big demolition sites : quid small, automation possible with historic buildings ?
- Assessing reuse potential requires detailed analysis (not only reversibility potential)
- Non geometric element info + operational constraints integrated ?
- Too long project duration
- Risk of no adhesion by user
- Complex structure
- Need for continuous updating of the DDC automated 3D segregation
- Lack of relevant info about the products
- Competitors
- Threats to circular eco. : maintaining the status quo

Next steps

- Objectives next time(s)
 - More time for detailed discussions
 - Link to Regional Innovation Hubs
- Feedback from participants on their objectives/wills for the next TIH (Miro) :

Specific objectives to present something :

- Dominique Brazzi (FR) : **AFLEYA**, currently developing digital tools to help devpt of new processes of resource efficiency in construction
- Edith Vermeiren (BE) Lissa Camerlinck (BE) : Erfgoed and Visie, **U-mine** : present something + collaboration
- Simon **BLM** : present blockchain and law-economics



Attendance list

Country	Name	Organisation	Presence
BE	Lissa Camerlinck	Erfgoed en Visie	P
	Tine Van den Broek	KL	P
	Liesbet Van Cauwenbergh	Tracimat	P
	Kathleen Brants	Tracimat	P
	Benjamin Germiat	Retrival	P
	Edith Vermeiren	Erfgoed en visie, U-mine	P
	Ron Jacobs	Kloeckner Metals ODS Janssen	P
	Lionel Bousquet	BXLMRS	A
	Steven Meersman	B2ASC	A
NL	Tom Steegh	Cadac Group	P
	Rodj Ommar	Ommar & Ruhl archi	P
	Pieter Scheer	Dusseldorf	A
	Maurits Koenders	Dusseldorf	A
	Edwin Zontjes		A
LUX	Sophie Mauer	Administration des BP	P
	Elie Bourdon	Fonds du Logement	P
	Moreno Viola	CRTI-B	P
	Kevin Soares	Schroeder & Associés	P
	Marc Feider	Schroeder & Associés	A
	Guillaume Dubois	Schroeder & Associés	A
FR	Louise François	AREP	P
	Arthur Delfosse	Sinteo	P
	Dominique Renard-Brazzi	Afleya	P
	Ulrich Sassia	AREP	A
	Marie Longueville	VILOGIA	P
	Charles Madelaine-Dupuich	ViLoGIA	A
	Benjamin Laclau	Nobaltek	P

- 18 external and DDC pilot owners :
2 (/5, NL), 4 (/6, LUX), 5 (/7FR), 7 (/9, BE)
- 18 DDC partners

Guido Bosch
Luxembourg Institute of Science and Technology (LIST)
Lead Engineer IT
30+ years in SW engineering & IT
Implementation of the DDC Interceptor Platform

Calin Boje
Luxembourg Institute of Science and Technology (LIST)
Research Associate

Jeroen Vrijders
Belgian Building Research Institute
10 years of experience in recycling, reuse, demolition

Rémi Escola
GreenFlex

Tom Steegh
Cadac Group

Simon Duindam
Block Materials
Associate Professor in Care & Technology for 18 years and applying this now in real live for 17 years.

Ida Weber
Brightlands Smart Services Campus
Community Development

Erol Oztan
Block Materials
8 years circular experts in process development with products and data bases for innovative materials in existing buildings to create more deposits for producer demolition and renovation

Thomas Bergstra
Green Transformable Building Lab NL
15 years in developing circular economy in organization / 4 year of automotive support for public communication of regional circular economy projects

Harald van Hooren
Province of Limburg

Eleonore de Roissart
Belgian Building Research Institute
Research on urban mining, recycling, reuse in the construction industry

Elma Durmisevic
Green Transformable Building Lab NL
Environmental Engineer
Decommission, reuse, circular economy
waste management

Bruno Domange
LIST Luxembourg Institute of Science and Technology
Environmental Engineer
Decommission, reuse, circular economy
waste management

Annie Guerriero
Luxembourg Institute of Science and Technology (LIST), LU
Arch. PhD, Researcher in IT for construction
Circular economy and building and construction

Francois Aze
Green Flex
Senior Consultant in circular economy
Understand your needs to manage reuse and high value recycling

Jean-Yves Marié
BIM-Y - Cypress International
Civil Engineer
Expert in digital twin
BIM-3D modeling module of the DDC

Benjamin Laclau
Nobaltek

Tijl Smeyers
Belgian Building Research Institute
Research on urban mining, reclamation and reuse in the construction industry circular economy
Exploring topics: reuse, recycling circular possibilities

Marlie Dix
Communication manager Brightlands
Smart Services Campus
Experience in communication in strategic and operational areas