

Transnational Innovation Hub : 1st meeting

Date & time : 26.02.2021, 15h-17h

Location : Teams & Miro

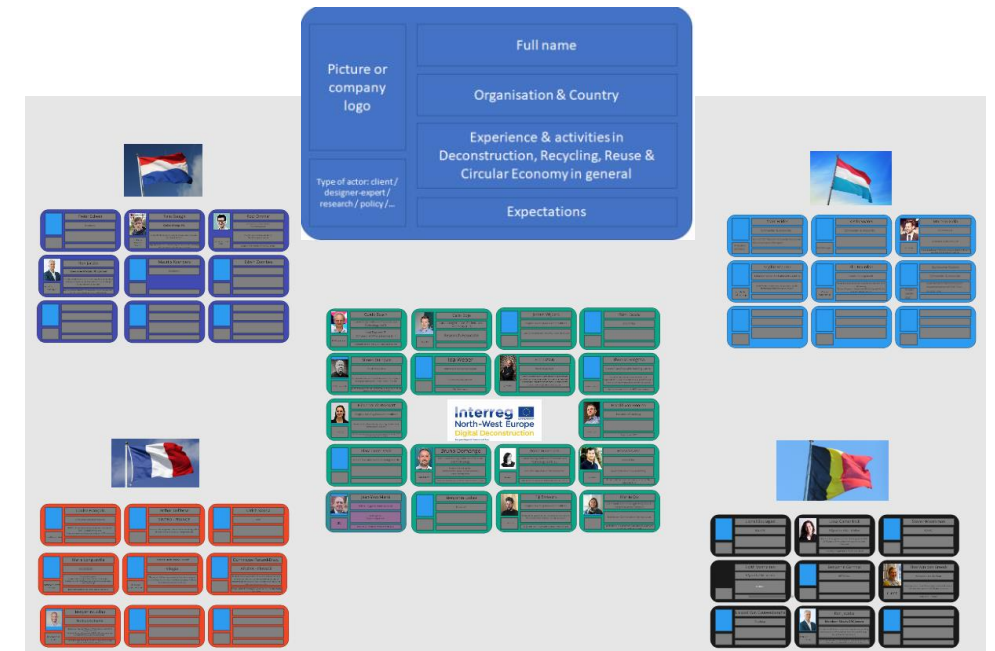
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Meeting agenda

- 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/o9JlShYcjc=/>
 - Get to know : **participants passport**
 - Needs and barriers for circular demolition
 - DDC SWOT
 - Next steps for the TIH



Picture or company logo	Full name
	Organisation & Country
	Experience & activities in Deconstruction, Recycling, Reuse & Circular Economy in general
	Expectations

Type of actor: client / designer-architect / research / policy / ...

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)

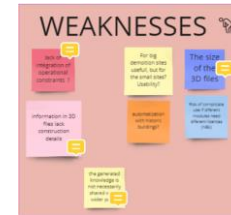
DDC SWOT



- **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 ?



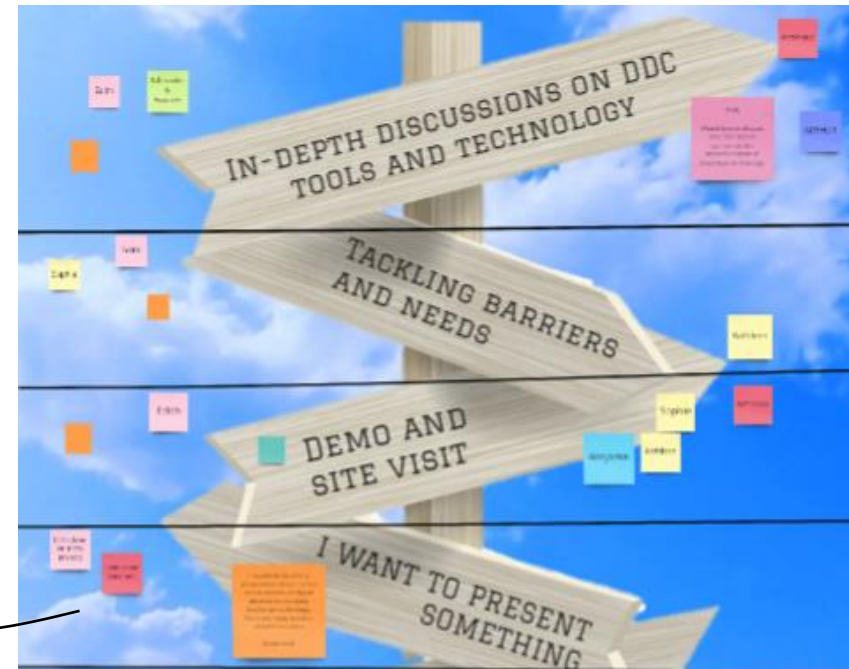
- Too long **project duration**
- Risk of **no adhesion** by user
- **Complex structure**
- Need for **continuous updating** of the DDC automated 3D segregation
- **Lack of relevant info** about the products
- **Competitors**
- **Threats to circular eco.** : maintaining the status quo

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 dvpt 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



Country	Name	Organisation	Presence
BE	Lissa Camerlinck	Erfgoed en Visie	P
	Tine Van den Broek	KL	P
	Liesbet Van Cauwenberghe	Tracimat	P
	Kathleen Brants	Tracimat	P
	Benjamin Germiat	Retrival	P
	Edith Vermeiren	Erfgoed en visie, U-mine	P
	Ron Jacobs	Kloekner Metals ODS Janssen	P
	Lionel Bousquet	BXLMRS	A
	Steven Meersman	B2ASC	A
NL	Tom Steegh	Cadac Group	P
	Rodj Omar	Ommar & Ruhl archi	P
	Pieter Scheer	Dusseldorp	A
	Maurits Koenders	Dusseldorp	A
	Edwin Zoontjes		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

Attendance list

- 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 Interop Platform	 Calin Boje Luxembourg Institute of Science and Technology (LIST) Research Associate	 Jeroen Vrijders Belgian Building Research Institute 13 years of experience in recycling, reuse, demolition	 Rémi Escola GreenFlex
 Simon Duindam Block Materials Associate Professor in Land & Economics for 18 years and applying this to the field of IT Developing a European Digital Building Materials Platform and DDC Interop Platform	 Ida Weber Brightlands Smart Services Campus Community Development B2B Netherlands	 Erol Oztan Block Materials 8 years circular expert in process development with production data base Cirkula to improve materials in existing buildings to create more responsible for circular demolition and construction	 Thomas Bergstra Green Transformable Building Lab NL 7.5 years in developing reuse schemes, pilot organization / 6 years of subvention support for public commissioning of separate sustainability projects Identify input for further DDC development
 Eléonore de Roissart Belgian Building Research Institute Research on urban mining, recycling, reuse in the construction industry B2B Netherlands			 Harald van Hooen Province of Limburg GreenFlex Project Lead DDC
 Elma Durmisevic Green Transformable Building Lab NL	 Bruno Domange LIST Luxembourg Institute of Science and Technology Environmental Engineer Deconstruction, reuse, circular economy waste management Research Environmental conditions in and for the future building	 Annie Guerriero Luxembourg Institute of Science and Technology (LIST), LU Arch. PhD, Researcher in IT for construction Research Impact of equipment and methods on circular economy	 Francois Aze GreenFlex Senior Consultant in circular economy Research Understand your needs to move from low to high value recycling
 Jean-Yves Marié BIM-V - Cypres International BIM Engineer Expert in digital twin CEO Develop 3D mapping products of the DDC	 Benjamin Laclau Nobatek	 Tijl Smeyers Belgian Building Research Institute Research on urban mining, recycling, reuse in the construction industry/circular economy Research Exploring topics: from existing circular practices	 Marie Dix Communication manager Brightlands Smart Services Campus Experience in Communication interesting project Lead the digital building materials platform