



Belgian Road Research Centre
Together for sustainable roads

Roads 4.0

Trends, challenges, actions

27/10/2021

Digital Construction Day

Annick De Swaef, CEO BRRC

Xavier Cocu, Innovation Coordinator BRRC

Driving forces for change

Digitalisation



Sustainability

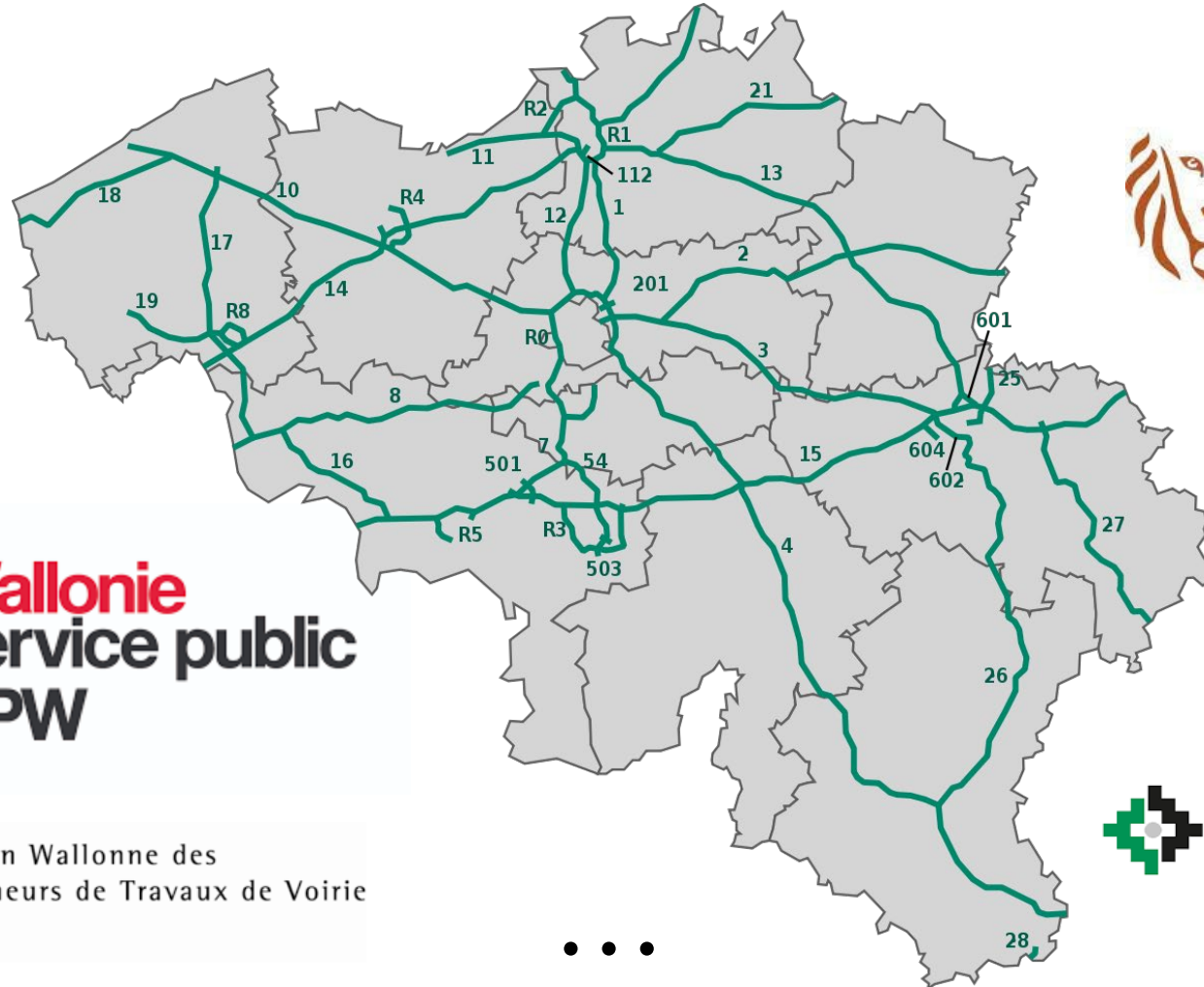


Technology rules

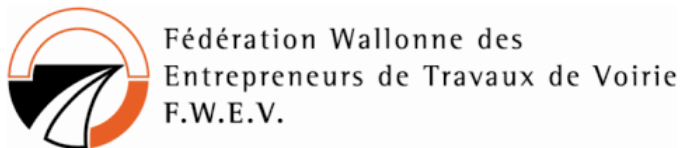
Efficiency and cost control

Artificial Intelligence, Building Information Modelling/Management, Augmented Reality, Digital (underground) Network Information, Sensors & Data Acquisition Systems (LiDAR, drones, ...), Digital Design Tools, Machine Control, Track & Trace Systems/Apps, Roadwork/tasks Robotisation & Automation, Digital Communication Platforms, etcetera

Who's in the driver's seat?



Vlaanderen
is wegen en verkeer



Construction Confederation
Construction, Energy & Environment

Managing the public-private interface

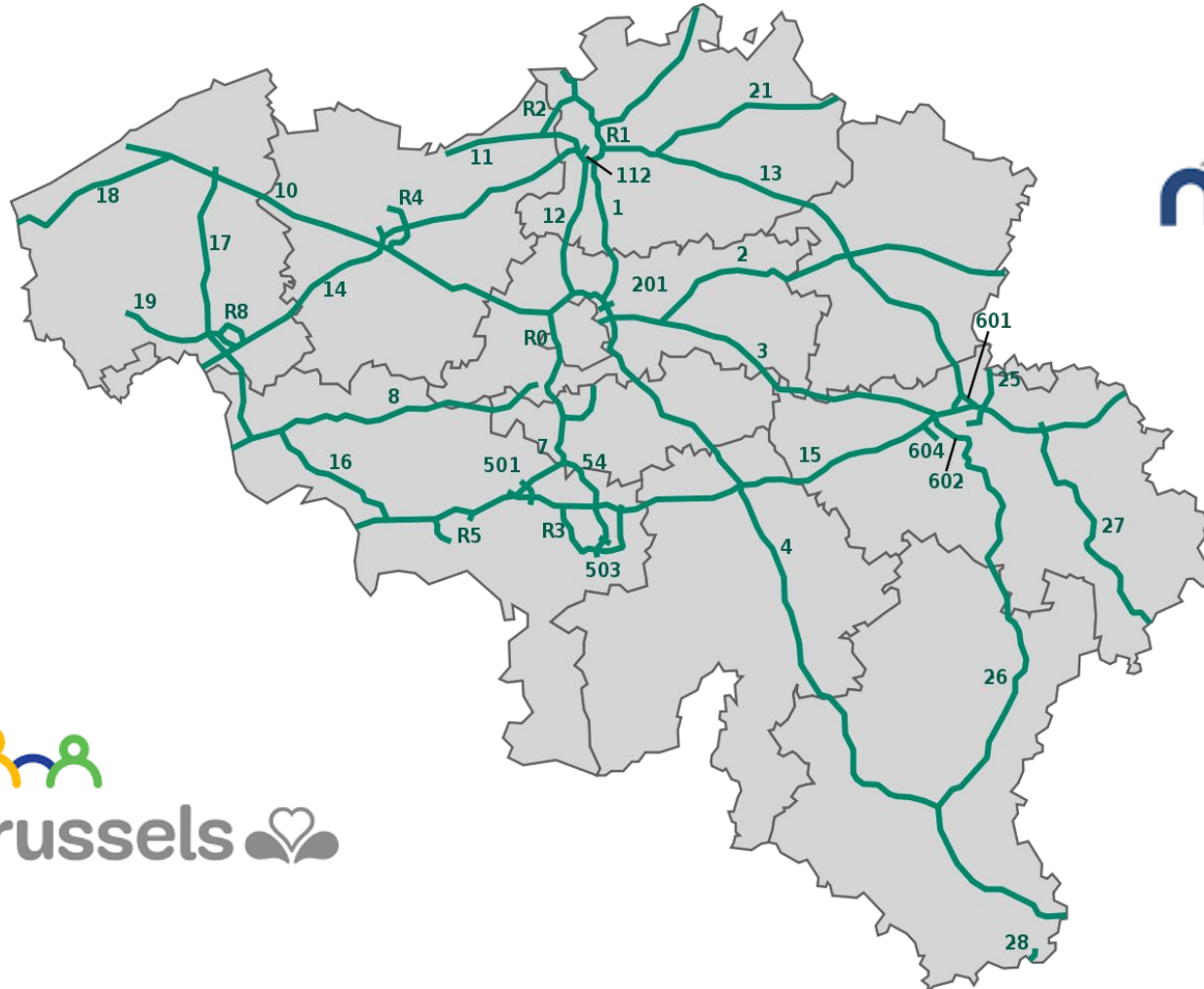
Construction project



Transport system



New data layers, new partners



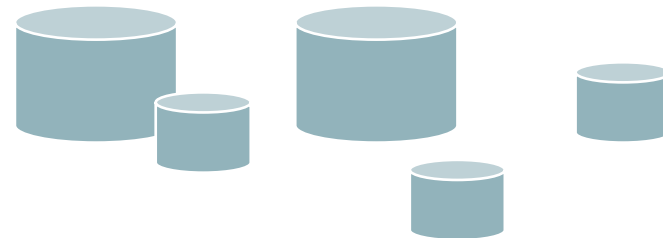
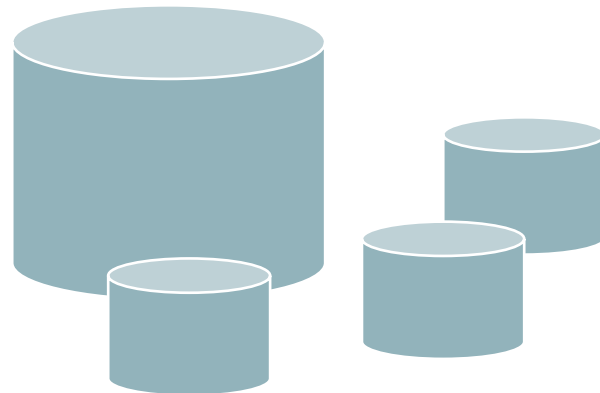
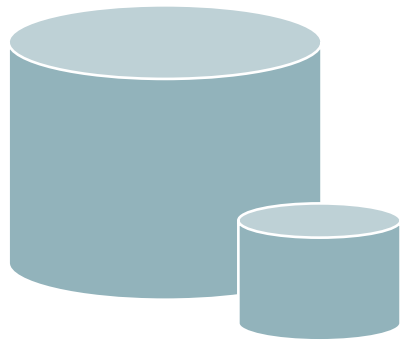
.AGORIA



Align, collaborate, standardize



Exchange platforms for data and information



New kids on the block? New marketplace?



Competitive advantage?

Or ...
do we need?

Co-created
public-private
digital agenda



Driving forces for change

Digitalisation → Sustainability





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Roads 4.0 @ BRRC

New technical committee

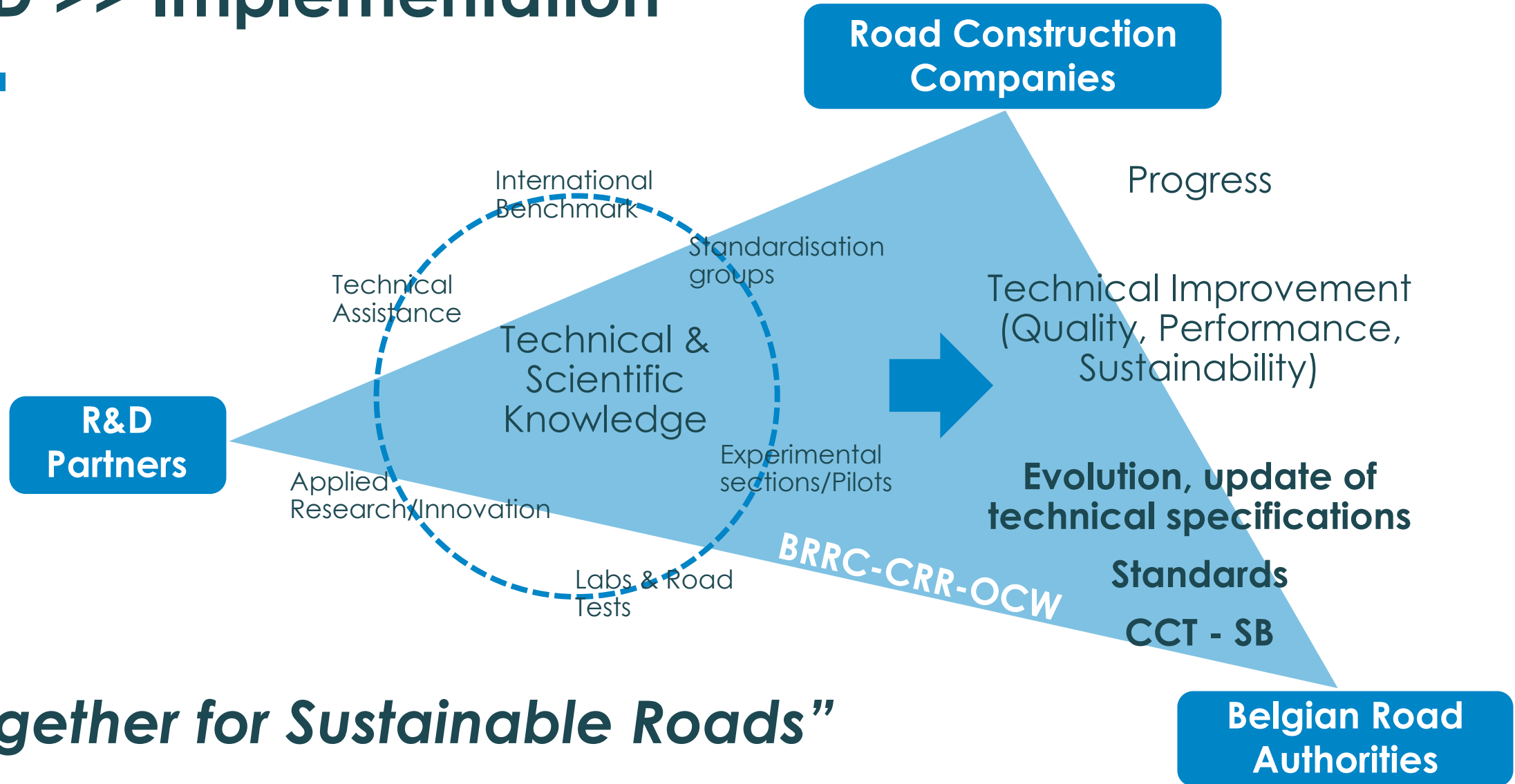
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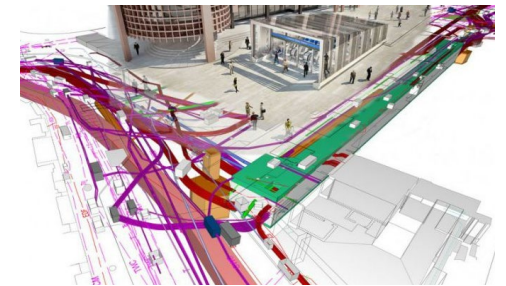
R&D >> Implementation



“Together for Sustainable Roads”

Digitalisation

Digi
BAROMETER



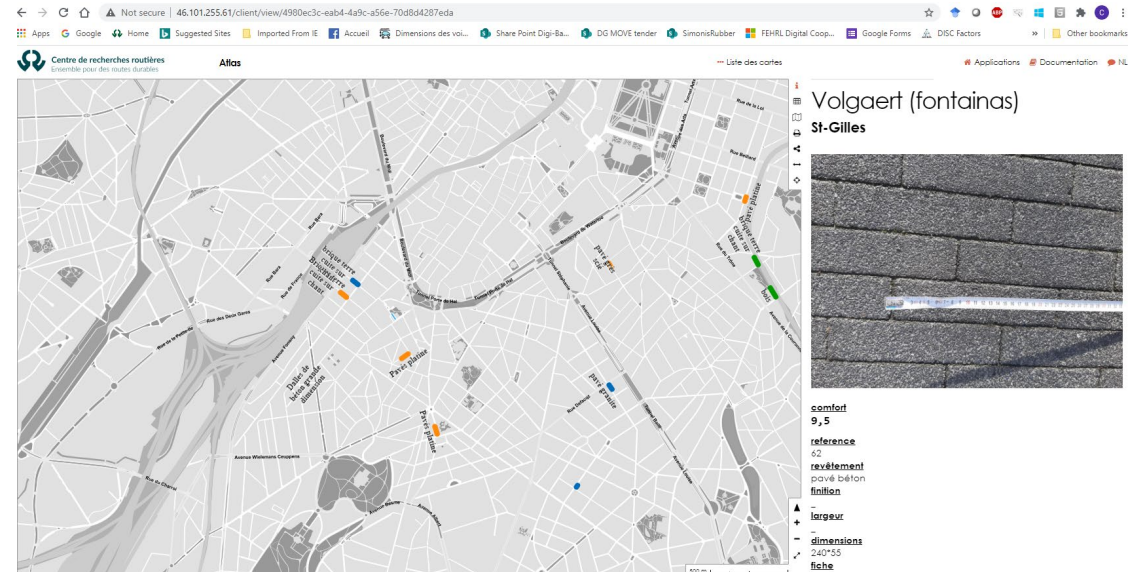
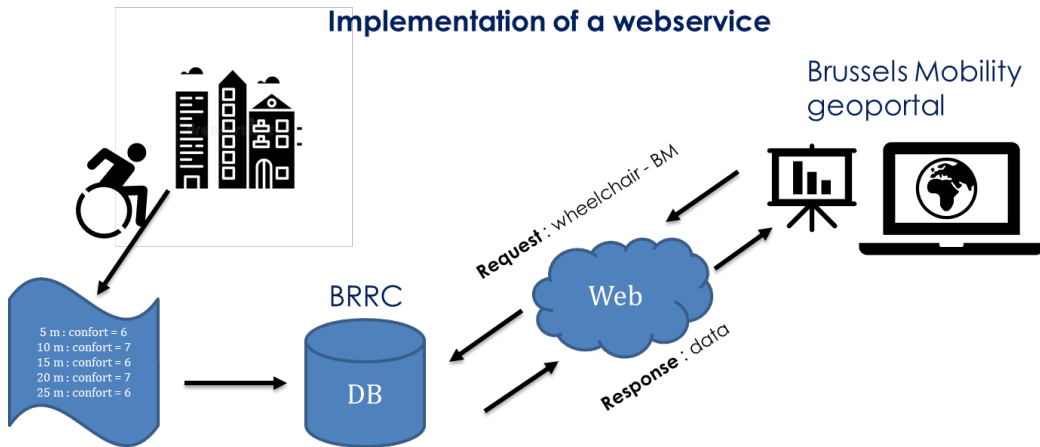
Category	Avg Scores
INTERNAL OPERATIONS & ORGANISATION	61%
AUTOMATION	61%
BIM	39%
MACHINE CONTROL	56%
DIGITAL COMMUNICATION	45%
FUTURE TRENDS	19%

Ambition

To **further help companies seize the business opportunities associated with digital transformation**, through a holistic approach to facilitate the improvement of processes and working methods used throughout the life cycle of an infrastructure.

Road Data

Data is Key for a knowledge based organisation

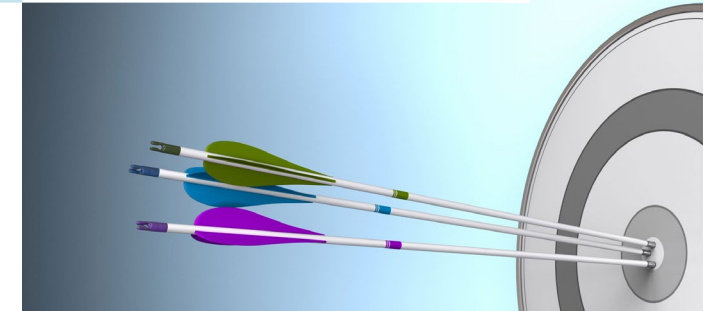


Ambition

To capture, analyse, validate, enrich and make available **high value data and metadata**, in the most appropriate format, **for the benefit of our members and/or our own studies**, in line with their needs.

New technical committee *Roads 4.0 @ BRRC*

- Create a multidisciplinary online community with **experts** in road construction (public & private) and ICT solution providers;
- Detect technological opportunities with **win-win-win** value proposition for all stakeholders involved;
- Assign core-team, cf. technical committee, to help guide BRRC's activities related to sector digitalisation.



Digital workshops in 2020

(Her)bekijk de Digital Workshops

Heb je een van de Digital Workshops bijgewoond en vond je het onderwerp interessant? Wil je het met je collega's delen? Of kon je er niet bij zijn?

Door op de onderstaande links te klikken, krijg je toegang tot de opnames van de Digital Workshops, zodat je ze rustig kunt bekijken of herbekijken.

- [Algemene inleiding over de Digi-Barometer](#)
- [Digital Workshop “Planning zonder Excel: digitale planning voor wegenbouwers”](#)
- [Digital Workshop “Augmented Reality: hoe helpt AR je werven te organiseren?”](#)
- [Digital Workshop “Assetbeheer in post-coronatijden: verhoog productiviteit en veiligheid”](#)
- [Digital Workshop “Laat je inspireren door de digitale weg van Water-link \(praktijkcase\)”](#)
- [Digital Workshop “Digitale transformatie in de wegenbouw”](#)
- [Digital Workshop “Microsoft Power Apps: Registratie van taken op de werf”](#)



Programme 12/10/21, Roads 4.0 @ BRRC

- **Mot de bienvenue**
- **Flash-back sur le Digi-baromètre** & ambition du CRR en matière de numérisation
- **Tendances et défis** en matière de numérisation dans la construction routière
 - Du point de vue d'un **gestionnaire routier (Natasha Blommaert, AWW)**
 - Du point de vue des **petites et moyennes entreprises (Didier Block, FEWV)**
 - Du point de vue d'une **grande entreprise (David Jacobs, Willemen infra)**
- **Pause**
- **Perspectives offertes par la numérisation** – Point de vue du secteur technologique
- Pitch de quelques **projets récents ou en cours** au CRR:
 - Le futur **Géoportail du CRR**
 - Demonstration de **technologies 3D** au moyen de planches expérimentales
 - Projet CEDR CoDEC: Gestion des données BIM et SIG pour la gestion de l'entretien des tunnels, ponts et routes
- **Wrap-up**

Digital workshops 2022?

JOIN us on  [BRRC Roads 4.0 Initiative](#)





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