PROCEEDR

OPTIMISING RESOURCE USE FOR ROADSIDE INFRASTRUCTURES

DAY 2 - COLLABORATIVE SESSION - PROCEEDR

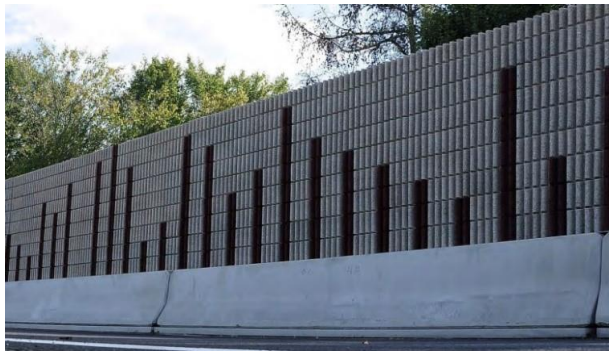
PROCEEDR lessons learnt for standardisation and regulation work

Summary of DAY 1 and possible next steps

Focus of the research project : Noise & Safety Barriers

Different types of roadside barriers (even integrated systems) have been considered with reference to materials used, and solutions adopted in Europe.

Safety barriers / Integrated safety & noise barriers / noise barriers





Main findings of the PROCEEDR survey for industry stakeholders

- About **50% of the industry stakeholders are not familiar with** schemes used to assess **environmental sustainability** of the whole construction process e.g., LEED, BREEAM, DGNB/ÖGNI or specifically for road infrastructure.
- About 50% of the companies have ever been **asked to provide environmental sustainability criteria in bidding processes**/evaluation in the product/service procurement phase.
- **70 to 90% of the companies tries to improve the sustainability** of the product concerning selection of the raw material, manufacturing process and maintenance.
- The results indicates that the **interest for improving the sustainability** of the products exists, however, there is a **lack in knowledge related to existing tools**, which can be improved by **adding documentation concerning sustainability assessment in bidding process**.
- Topic of sustainability in the noise and safety barrier sector is rather new, **the noise barrier sector seems to be more advanced in considering some of the sustainability criteria** and trying to improve their products

Final Recommandations to the industry stakeholders

The following suggestions are made to improve sustainability of noise & safety barriers:

- **Choosing materials that have lower environmental impacts**, such as recycled, renewable or biodegradable materials, or materials that have lower embodied energy or carbon footprint.
- **Optimizing the design and function of road equipment**, such as using modular, adaptable or multifunctional components, or incorporating smart features or renewable energy sources.
- **Improving the construction and maintenance processes** of road equipment, such as using efficient methods, technologies and equipment, or minimizing waste, emissions and resource consumption.
- **Minimizing Transport** distances by making greater use of local materials.
- Adopting new technologies for **foundations works**.
- **Greenwashing should be avoided**

Possible scenario for sustainability implementation

The goal should be to reach a firm quantitative declaration across the different LCA phases - according to EN15804 - to highlight those that area most relevant for improving the overall sustainability of road noise and safety barriers.

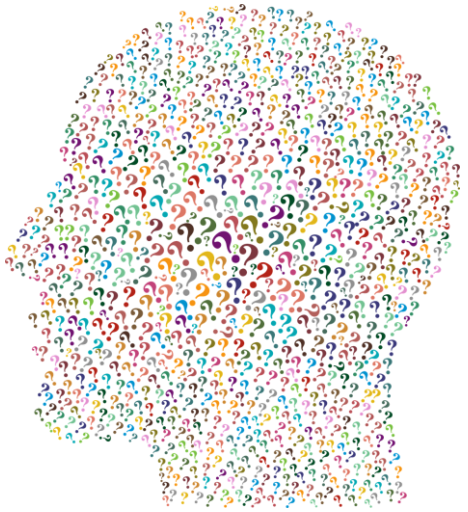
- Improving the sustainability of road equipment is a complex and multifaceted challenge that requires **a holistic and integrated approach**
- Both **materials and processes are important aspects** to consider for enhancing the **environmental, social, and economic sustainability** of road equipment.
- Assessing sustainability for noise and safety barriers can be done by manufacturers and raw material suppliers according to **many EPD systems**
- An **harmonization of sustainability assessment** for these products will be made available only when **EPD will be part of the CE marking as foreseen by the new CPR**

Possible scenario for sustainability implementation

- **Producers of raw materials bring new solutions**. There is a wide variety of new and innovative materials available to the noise barrier sector (phase A1-A3). In the safety barrier sector is more constrained at the moment and limited to concrete and steel.
- **Manufacturers bring questions to the producers** (phase A1-A3) and M should be **flexible to implement new materials** (e.g., to go beyond CE marking) phase A1-A3).
- **Installers communicate and interact with Manufacturers** and bring questions and solutions to them (phase A3-A5). Manufacturers respond to new questions from the Installers (phase A3-A5).
- **Phase B is mainly limited to the Authorities**, where strong links between all stakeholders are needed: manufacturers, installers, and producer of raw materials.
- **Phase C is managed by the Authorities** supported by producers of raw materials, installers, and manufacturers.

Questions to NRAs & discussion on next steps

- **Training / recommendations** to NRAs on **how to implement GPP** for **noise and safety barriers** in Europe
- Application of the PROCEEDR tool: implementing **new case studies** provided by ERF or generated by NRAs
- Possible use of the tool **to prevent/avoid green washing**?
- How to consider **traffic disruption** in the tool?
- Tool to be used to **compare solutions or projects**?
- Which KPI are (more) relevant?
- Which weighting factors should be assigned to the different KPI?



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Thank you very much for your attention on behalf of the PROCEEDR consortium