

What are the railways/countries planning next?

12th UIC Workshop on Railway Noise & Vibrations,
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Overview

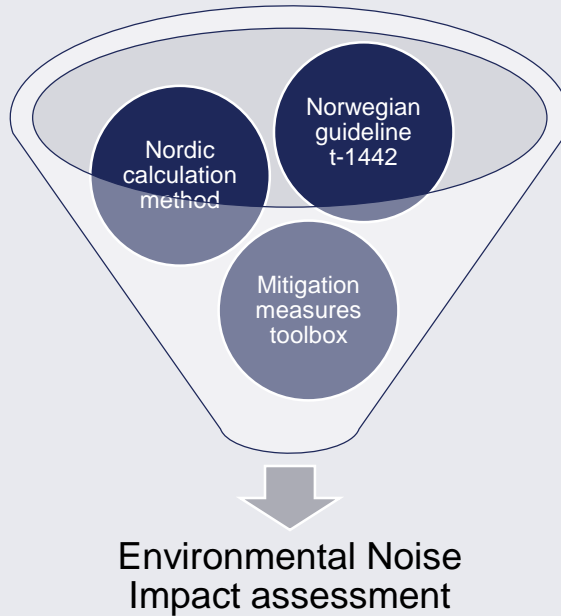
- **Refining strategy for NOI TSI**
- **Improving environmental noise impact assessments**
 - Revision of national noise guidelines
 - Revising/changing national noise prediction method
 - Improving mitigation measure toolbox for railways

Refining strategy for NOI TSI

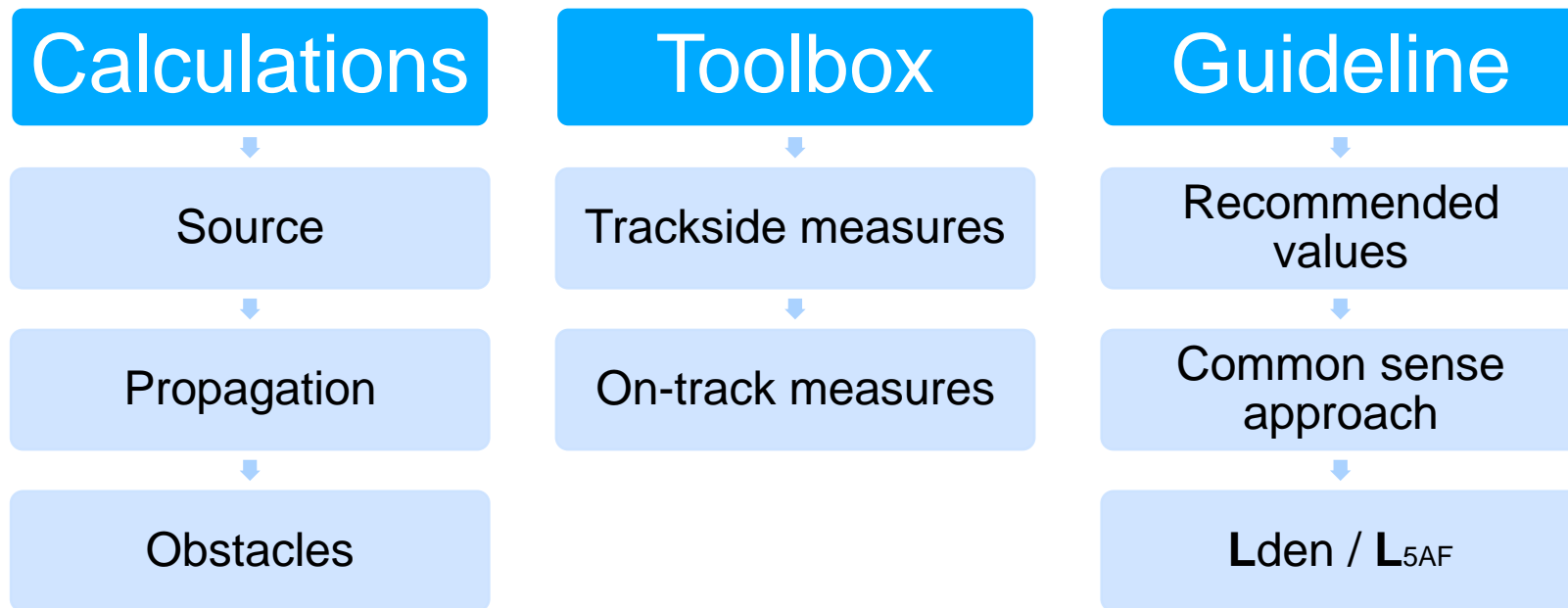
- **Original strategy approved summer of 2017**
 - CBB estimated on all 'quieter routes' by 2027

- **Refined strategy to be approved spring of 2019**
 - CBB on all 'quieter routes' by 2032 (at the latest)
 - Stricter requirements for rail roughness
 - CBA for financing mechanisms, incentivizing retrofit
 - Support research on the use of CBB in severe winter conditions
 - UIC CBB-W
 - UIC CBB/Wheels
 - Cooperation with NSA NO & nordic freight operators

Improving environmental noise impact assessments



Improving environmental noise impact assessments



Revision of national noise guidelines

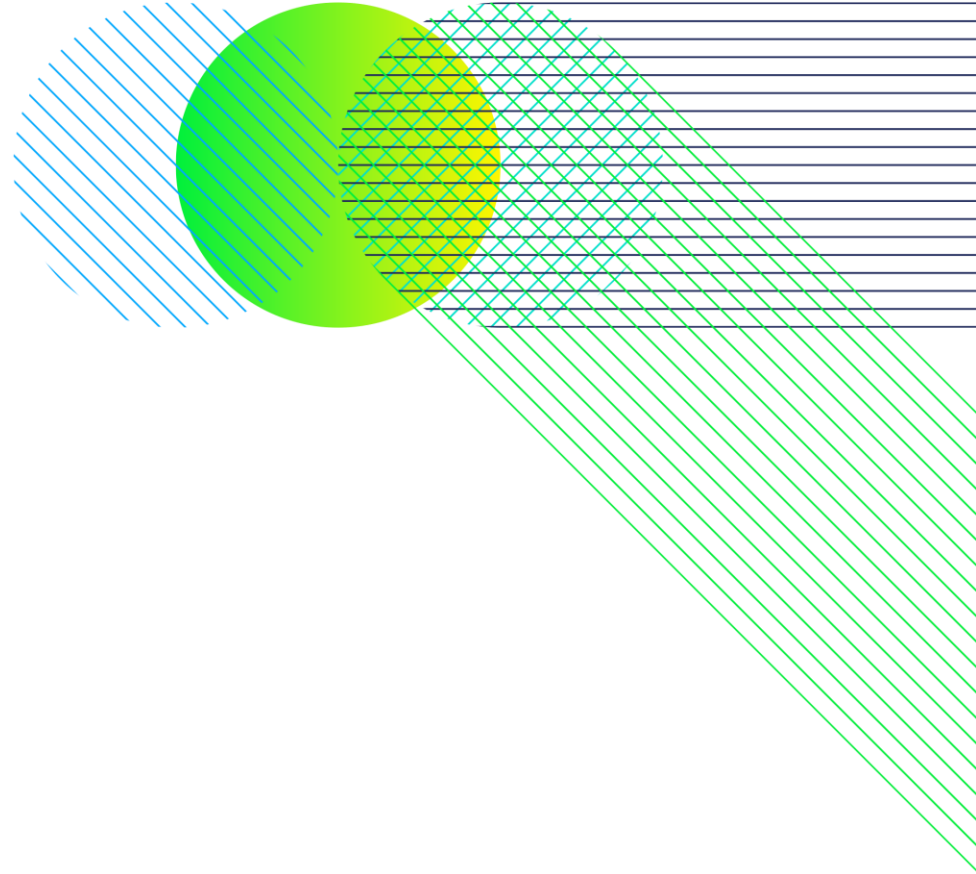
- **Current version was primarily made for road noise**
 - Practice rooted in fulfilling recommended limit values
 - Zoning plan requirements > common sense solutions
 - Rigid, limited room to opt for on-track mitigation measures
 - **National revision in 2019, aim:**
 - Common sense approach for railways
 - Mitigation measure principle; avoid, reduce, abate
 - Include vibrations
- ❖ We should always strive for common sense solutions to remove or reduce annoyance, not just 'blindly' fulfill limit values

Revising/changing national noise prediction method

- **Joint Nordic cooperation**
 - Nordic workshop group aimed to facilitate for selection of national calculation models
 - CNOSSOS will be used for the END strategic noise mapping in 2022
- **Current calculation method for railways, Nord96**
 - No aerodynamic noise contribution
 - Overestimation at speeds > 120 mph for steep terrain
 - No correction for curve squeals
 - Insufficient noise emission data

Improving mitigation measure toolbox for railways

- **Increase ease-of-use on-track noise mitigation and preventative maintenance measures by:**
 - Classification of track quality correction factors
 - Mapping of singularities, bridges, switches and sharp curves
 - Revision of technical rulebook to ensure sensible on-track solutions



Thank you for your time.