New Features of CadnaA Version 2020 MR1

The list of new features offered by CadnaA is subdivided into the following sections:

- Calculation/Configuration
- CadnaA-Objects
- Further New Features
- Miscellaneous
- Import/Export
- CadnaA-Options
- Bug Fixes

Calculation | Configuration

- CNOSSOS-EU (Rail): default allocation of hours now D/E/N=12/4/8 hours
- NMPB-Fer-08: source location for screen body interaction now shifted by half track width (source at near railhead, not on center axis)

CadnaA-Objects

- all objects: new object attribute ID_NO_TREE reads or writes the ID while ignoring the ObjectTree prefix
- barrier with cantilever (Schall03-2014): improved calculation of lateral diffraction
- Text Box: upon transformation, the point coordinate at "Draw Line to Point" gets now transformed as well

Further New Features

- PlotDesigner: acro cell now accepts also "normal" keywords (such as # (Time) etc.)

Miscellaneous

- new attributes for keyword # (SetObjAtt, CALCCONF, ...):
  - CNS_TSTUD, CNS_QSTUD (CNOSSOS-EU Road): period Ts with studded tyres (months), percentage months Q with studded tyres
  - MET_CNS_PD/E/N (NMPB and CNOSSOS-EU Meteorology): percentage favorable for D/E/N (write: sets value for all directions, read: readable only with all directions having the same value, otherwise empty result)
  - MET_CNS_PDV/EV/NV (NMPB and CNOSSOS-EU Meteorology): results in 1, if MET_CNS_PD/E/N are valid), otherwise 0 - read only
  - MET_CNS_NAM (NMPB and CNOSSOS-EU): designation/name of meteorology set
Import/Export

- import Text Box: point coordinate at "Draw Line to Point" gets now transformed as well

CadnaA-Options

- option FLG: new radar import filter Enaire (Spain)
- options X & XL: new LUA command cna.set_scale(d) sets the scale to 1: d

Bugfix

- CNOSSOS-EU (Rail): squeal noise corrected for EU, DE and AT
- CNOSSOS-EU (Rail): interpolation of the third-octave band values of the roughness using in the wavelength domain for EU + AT (before as with DE: interpolation in the frequency domain)
- NMPB-Fer-08: screen body interaction reestablished
- crash with option BPL fixed
- Nordic Pred. Method (Rail): Lmax calculation corrected (formerly, vmax of the object “Railway” not considered in all cases)
- CRTN Australia: now, the source heights from the calculation configuration are used