New Features of CadnaA Version 2020 MR2

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

*The new features of **CadnaA** 2020 MR1 are in Italics.*

Calculation|Configuration

- RLS-19 (D): new road guideline (for sources types Road, Crossing, Parking Lot) - German only

- migration assistant for conversion of RLS-90 project files to RLS-19 procedure (for roads and parking lots) - German only

- dialog **Reflection Type** (for objects Building, Barrier, Cylinder, 3D-Reflector): new options for calculations accord. to RLS-19

- Nordic Pred. Model (Rail): string variable per railway object to suppress the extrapolation with Lmax calculations (LMAX_NO_EXTRAPOL_PFIRST, LMAX_NO_EXTRAPOL_PLAST)

- *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

- industrial sources (PLA): new default directivities for reflecting or absorbing tunnel openings and for line arrays according to the "Supplement to the Saxonian study on noise from recreational activities" (translated from German title, 2019)

- objects Building, Barrier, Cylinder, 3D-Reflector: new options on dialog **Reflection Type** for calculations accord. to RLS-19

- object Symbol: new symbols according to DIN 45682 available

- object Railway: new object attribute JOINTS, no. of rail joints per 100 m

- *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

- Color Palette library: new default color palettes according to DIN 45682 (import to "Local" from "Default" using the Library-Manager)

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

Miscellaneous

- new menu command **What's New** (**Help** menu): displays a website with product information using the system-selected web browser

- *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

- new option PRO: includes all options from former option 64, includes new migration assistant RLS90->RLS19, all existing LUA Presets (removed from option X), features "Thin out height points" and "Close Polygons" (the latter both also part of option X)

- options X & XL: new LUA commands to read and write input to the file CADNAA.INI (cna.get_ini_entry(s,k) and cna.set_ini_entry(s,k,v)

- *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*