Bridge design EC

esa.32

A bridge design requires specific calculation rules which are only needed for the analysis and design of this type of civil engineering structures. A bridge is subjected to specific types of loads like traffic loads, foot travel by pedestrians, conduits used for the movement of goods and materials, and so on.

The module allows the user to define bridge combinations according to Eurocode 0 for 3 types of bridges:

- Road bridges,
- Footbridges and
- Railway bridges.

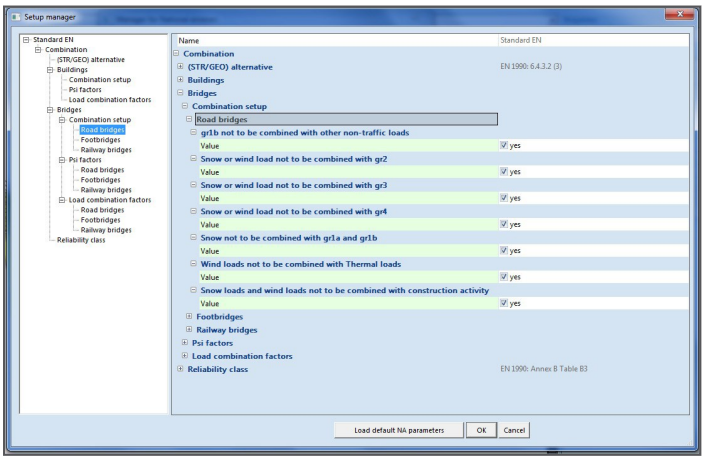
Highlights

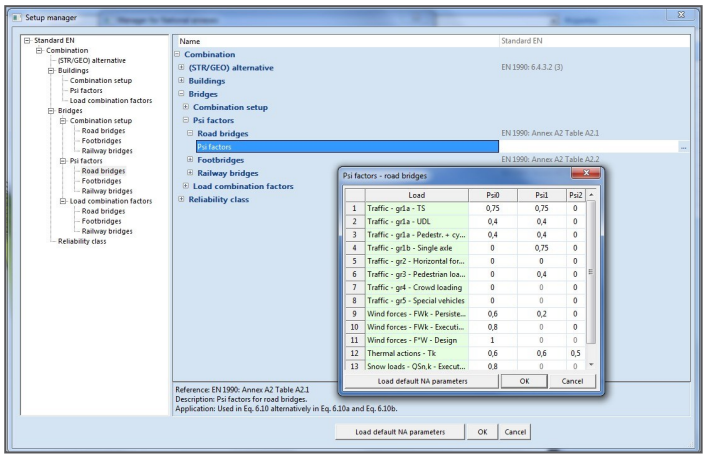
To prevent mistakes during the input of the combination, a filter has been added which facilitates the user to create either a combination for buildings or for bridges.

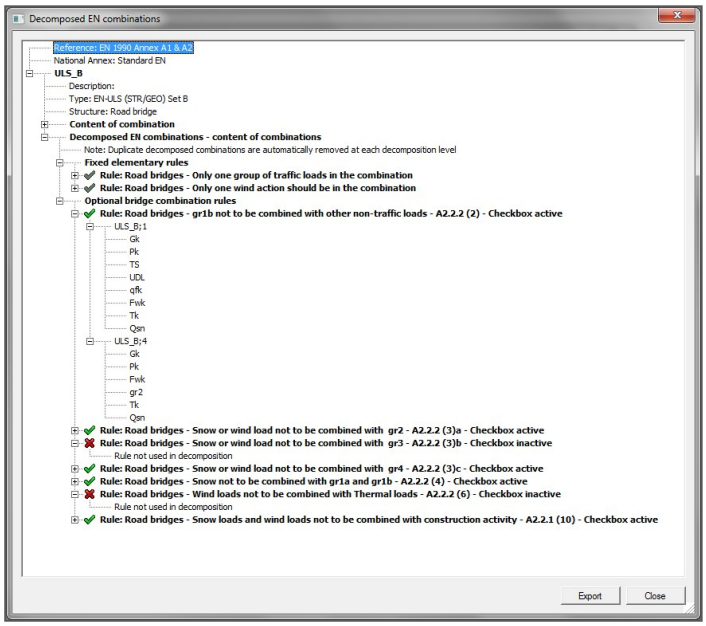
Bridge combinations are rather complex due to the big range of Psi factors (safety factors) and the numerous combination rules for the specific types of loads. To make this more transparent for the user, a dialogue shows the decomposed EN combinations.

Bridge combinations are automatically generated according to rules and factors as prescribed by Eurocode 0.

Predefined load groups for each bridge type are available.







Extended information can be found in Technical Article: Bridge combinations and design.

Required modules

esa.00