

# KorFin® Signal visibility

## 5D Platform for proof of signal visibility

KorFin® is a 5D platform with 3D real-time planning for road, rail, line and cable infrastructure. The platform provides a real-time environment for efficient generation of dynamic, spatial overall models for as-built data, integrated planning, visualization and coordination in applications with high model accuracy. KorFin® integrates GIS, construction process management (4D) and model-based cost calculation (5D).

**With KorFin®, you perform the numerical verification of signal visibility (guideline 819) and demonstrate assignment, visibility, and the ambient light of the signals.**

### CREATION OF A DYNAMIC 3D OVERALL MODEL

Your DTM forms the basis, supported by laser-generated triangulated surfaces or data from public sources, as well as highly accurate alignment with all railway-specific parameters. The calculation includes all objects that accompany the route, such as pylons, catenaries, noise barriers, platforms, tracks, and other specialist models with moving or stationary trains with the highest possible accuracy. Use the available component libraries from overhead contact lines (OCL), signal technology (LST), and DB Station und Service equipment for the creation. All common flat, steel lattice and concrete masts, cantilevers, multi-track cantilevers, suspension columns, signal screens, signal boxes, etc. are available with high accuracy and placed precisely by you, either absolutely or with respect to the routing.

### CALCULATIONS AND VERIFICATIONS

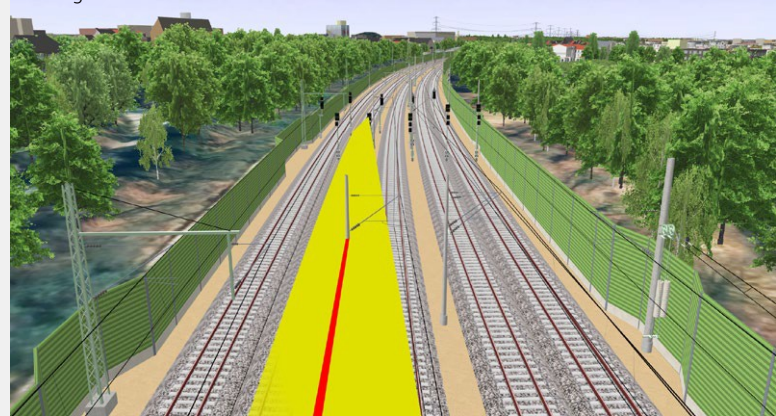
Geometric visibility – the ability of the driver's eye to see the signal – is demonstrated with numerical calculation using the cone-of-vision method. The optical visibility – light from the signal reaches the eye by being deflected by a diffusing plate – is demonstrated by a 2D or 3D penetration analysis. The risk of confusion – unambiguous assignment – is demonstrated by numerical calculation and simulation. For the demonstration of ambient light, a light simulation is carried out with all other lamps (escape signs, platform lighting).

### DYNAMIC OPTIMIZATION AND RESULT

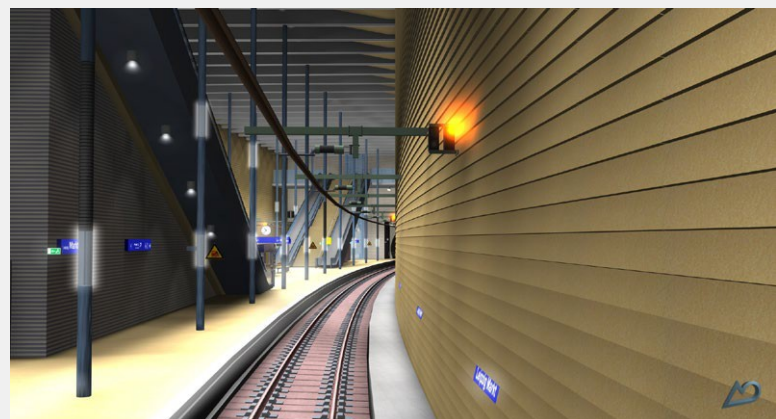
Thanks to your dynamic and intelligent specialized models, you can iteratively optimize CCS, OCL and other trades in collaboration with all planners, in a highly accurate and efficient manner. KorFin® takes care of the tracking of planned changes. Reconciliations take place in the distributed overall model and via comments via BCF.



KorFin®: Construction of dynamic specialized models of planning with the modeling of CCS, OCL, NB, and routing



KorFin®: Numerical calculation of signal visibility (geometric and optical via detectability)



Derived light simulation with real distribution and reflection (here, with normalization on screen)