

URBIS III

Air quality, noise and external safety all in one

URBIS III supports local and provincial authorities along with their advisors to reporting and make policy in respect of spatial development, environment and external safety. The high-tech models contained in URBIS III comprehensively identify air quality, noise pollution and external safety risks. URBIS III thus offers a handle for policy in towns and cities where various aspects of the local living climate have to be considered. URBIS III is used in urban environments in which compliance with national and international directives is increasingly required, whereby safety, health and habitability are becoming more and more important.

TNO has years of experience in advising local authorities in issues relating to external safety and the environment. URBIS III enables TNO to make this expertise available. End users can make their own calculations for air quality, noise and safety risks. Added value is generated by the capacity of URBIS III as an aid in evaluating structural and mobility plans as well as for researching the impact on health in the habitat. The results gained from URBIS III can be used, for instance, to acquire a picture of the effects of noise as hindrance and in disturbing sleep. URBIS III is also suitable for informing both politicians and citizens alike about revised development plans.

Legal reporting

URBIS III is a tool that can be used for weighing up pros and cons as well as verification for local environmental policy. It complies with all the standard quality requirements:

- Air quality models comply with the Measurement and Calculation Directive (MRV).

- The Standard Mapping Method II (SKM II) is implemented for noise. This is the calculation method prescribed in the context of the EU's Environmental Noise.
- External Safety models comply with the normal calculation methods for quantitative risk analysis.

URBIS III is thus suitable for (legally prescribed) reporting.

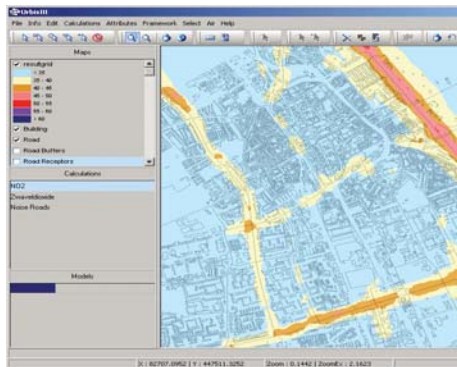
Gaining time through integration

Clustering information is facilitated by a single dataset that is built from the available municipal data. In addition to data on the intensity of the road traffic, this contains spatial overviews of the location of housing, schools and offices as well as populations, among other things. Using a single dataset does not require the same data to be entered and continuously reorganised, which means that a significant amount of time can be saved and inconsistencies prevented in different calculations. The efficient linking of the models in URBIS III is achieved without making any concessions to the accuracy of the calculations.



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Presentation of the results

The results of URBIS III can be presented in various graphical ways, with different categories, at various scales and for a range of applications:

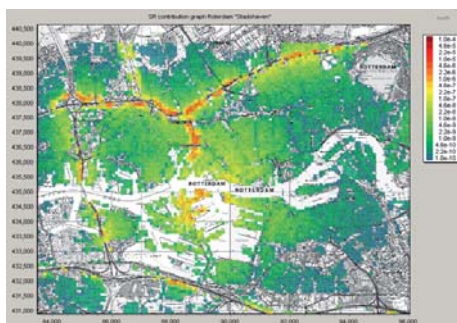
- In maps, graphics or charts;
- By source type, scenario or environmental aspect;
- From agglomeration to neighbourhood;
- For reports, information provision or internet/intranet or for (PowerPoint) presentations.

User-friendliness

Flexibility is one of the main features of URBIS III, which makes it easy for end users to use. URBIS III works independently of external Geographical Information Systems. The program has a modular structure, which allows all the models to be integrated or for the focus to lie on a single aspect (air quality, noise or external safety).

URBIS III in practice

The URBIS III models have already been successfully used by a number of Dutch local authorities. For example, Amsterdam and Rotterdam have identified the noise situation



in the context of the EU's Environmental Noise directive. In the harbour area of Rotterdam external safety has come under scrutiny through the innovative method used in URBIS III to present societal risks spatially (the area specific societal risk). In Delft the URBIS III air quality and noise models have been employed for a local environment internet page that presents the real-time air quality and noise situations. You can find out more about the projects that involve URBIS III on the website, www.tno.nl/urbis.



Environment, Health and Safety

The innovative partner of authorities and the business community for the sustainable organisation, use and management of the built environment, infrastructure and subsurface.

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