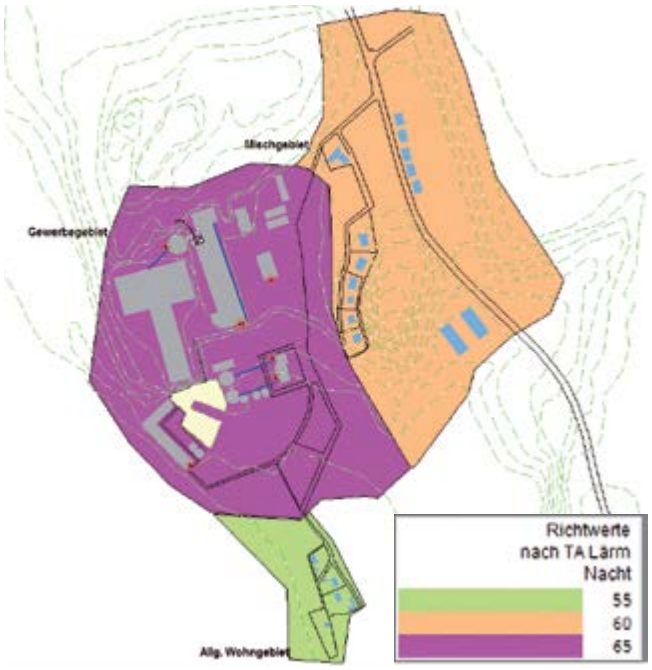
IMMI – Extended Grid Functions

Field of Application

The Expanded Grid Functions option provides many possibilities to evaluate and link grids. You can manage, save, link, edit, rename as many grids as you want – there are no limits! Furthermore, special ArcGIS data import/export formats enabling the user to effi ciently exchange grid layers of large-scale noise maps with Geographic information systems are optionally available.



Thematic maps: Display of target values

Features

- Creation of maps disclosing the exceeding of a limit value.
- Comparison of grids, e.g. to show differences between planning variants (difference maps).
- Action planning: differential maps disclose noise level differences after imposition of speed reductions, changes in road surface layers, redirection of traffi c to bypass roads, etc.
- Evaluation of polluted areas
- Editing of grid layer attributes (enter individual names, titles, etc.)
- Import and export of grid data (ASCII, DXF, ArcGIS)
- Grid Manager: create a register of all grids calculated with a given project, including your comments etc.
- Population exposure for all indicators on the basis of spatial population density distribution
- Display of the evaluated grids in the 3D Viewer

- Mathematical functions for arithmetic and logarithmic addition and subtraction, addition of a constant value, interpolation to close gaps, etc.
- Logical functions to link data, i.e. insert if not calculated, retain larger of two values, etc.
- Data handling functions to insert data, assemble large grids from partial grids, etc.

Grid Links

Operationen zum Verknüpfen von Rastern*	
R = A	Simple link
R = B	Simple link
R = A + B	Addition of numerical values
R = A – B	Subtraction of numerical values
R = B – A	Subtraction of numerical values
Energetic: R = A + B	Energetic addition (superposition of levels)
Energetic: R = A - B	Energetic Subtraction
Energetic: R = A - B	Energetic Subtraction
Set R = B in A (always)	The values in B are set in A, even if these are "not calculated". This is not an attribution, because, e.g. B can be smaller in size than A, so that a portion of A will be preserved.
Set R = A in B (always)	The values in A are set in B, even if these are "not calculated".
Set R = B in A	In R wird jeweils der größere der beiden Werte aus A und B eingesetzt.
(if calculated)	The values in B are set in A, only if these are calculated.
R = maximum (A, B)	The larger of each of the two values in A and B is set in R.
R = minimum (A, B)	The smaller of each of the two values in A and B is set in R.
R = probability (A, B)	Only for the calculation of pollutants according to "Factor 10 method": The probabilities of A and B are added.
	wR = 1-(1-wA) *(1-wB)

Noise and air pollutants

Exceeded target values

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