

Project Properties				
Topic:	Noise			
Type of prediction:	Noise (national methods)			
Rating following::	Lden			
Project notes				

Work area				
Coordinate system:	Latvian Transversal Mercator coordinates			
Coordinate datum:	LKS92 (LV), geozentral, GRS80			
	from ...	to ...	Dimensions	Area
x /m	614850.00	623770.00	8920.00	72.79 km²
y /m	397130.00	405290.00	8160.00	
z /m	-10.00	180.00	190.00	
Terrain height in the corners				
xmin / ymax (z4)	0.00	xmax / ymax (z3)	0.00	
xmin / ymin (z1)	0.00	xmax / ymin (z2)	0.00	

Attribution of element groups to variants					
Element group	Variant 0	VES VALKA	Lmax	Fons	
Group 0	+	+	+	+	
3 m/s	+	+			
4 m/s	+	+			
5 m/s	+	+			
6 m/s	+	+			
7 m/s	+	+			
8 m/s	+	+			
9 m/s	+	+			
10 m/s	+	+			
11 m/s	+	+			
12 m/s	+	+			
13 m/s	+	+			
14 m/s	+	+			
>=15 m/s	+	+			
Lmax	+		+		
Autoceli	+			+	
Dzelzcels	+			+	

Available calculation areas											
Name	x min /m	x max /m	y min /m	y max /m	dx /m	dy /m	nx	ny	Reference	Height/m	Range
Grid 0	614861.35	623756.46	397139.38	405253.25	10.00	10.00	890	812	relative	4.00	Land-use only

Calculation parameters	Copy from "Reference Setting"		
Calculation model: General	Point calculation	Grid calculation	
Adapt assessment area seamlessly to the receiver position			
L /m			
Terrain triangulation edges are obstacle	Yes	Yes	
consider negative loop way at terrain triangular lines	Yes	Yes	
Improved interpolation in boundary areas	Yes	Yes	
Free field in front of refl. surfaces/m			
acc. to sources	1.0	1.0	
acc. to immission points	1.0	1.0	
House: white border in grid	No	No	
Intermediate messages:	No	No	
Calculation model: Parameters	Optimised	Optimised	
Limiting range of sound sources:			
* Limit the search radius (distance source-IP):	No	No	
* minimum level difference /dB:	No	No	
Projection of line sound sources	Yes	Yes	

Projection of area sound sources	Yes	Yes		
Limit projection	No	No		
* Radius /m around source:				
* Radius /m around IP:				
Minimum length for sections /m	1.0	1.0		
Variable min. length for sections:				
* in percent of the distance from the IP source	No	No		
Add. factor for distance criterion	1.0	1.0		
Barrier attenuation differing from guideline:	No	No		
* Cut-off limit for insertion loss:				
* Limit /dB for single screens:				
* Limit /dB for multiple screens:				
Calculate attenuation for VDI 2720, ISO9613				
* Lateral pathway	Yes	Yes		
* Lateral pathway for image sources	No	No		
Reflection				
Reflection (max. order)	1	1		
Limit the search radius (distance source-IP):	No	No		
* Search radius /m				
Limiting range of reflecting surfaces /m:				
* Radius around source or IP /m:	No	No		
* minimum level difference /dB:	No	No		
Image source from projection	Yes	Yes		
No refl. if entirely screened	Yes	Yes		
Save rays as help lines	No	No		
section control				
Section control acc. Schall 03 [2012]:	Yes	Yes		
Section control for other calculation methods, too:	No	No		
Accelerated iteration (approximation):	No	No		
Requested accuracy /dB:	0.1	0.1		
Show intermediate results:	No	No		

Global parameters	Copy from "Reference Setting"					
Default for G outside DBOD-elements	1.00					
Temperature /°C	10					
Relative humidity /%	70					
Living area per inhab-/m² (=0.8*gross)	40.00					
Average storey height /m	2.80					
Simplified meteorology (Guideline Int. Comp. Methods):	Day	Evening	Night			
Simplified meteorology (Guideline Int. Comp. Methods):	2.00	1.00	0.00			

Parameters of library: CNOSSOS-EU	Copy from "Reference Setting"					
Selection of meteo parameters						
Day (12h)	100 % favourable					
Night (8h)	100 % favourable					
Evening (4h)	100 % favourable					
lateral pathway at point sources	Yes					
improved algorithm for double diffractio	Yes					
Accounts for vegetation	No					
Accounts for housing	No					
Accounts for ground effect	Yes					

Parameters of library: XP S 31-133	Copy from "Reference Setting"					
Vertical offset of the sound source /m	0.50					
Selection of meteo parameters according to appendix 1						
Day (12h)	Riga					
Night (8h)	Riga					

Evening (4h)	Riga
Accounts for vegetation	No
Accounts for housing	No
Accounts for ground effect	Yes

Parameters of library: SRM II	Copy from "Reference Setting"
Road traffic following	RMV 2000
Accounts for vegetation	No
Accounts for housing	No
Accounts for ground effect	Yes

Emission spectra (Internal database)													
Name	Σ dB(A)	Type		16 Hz	32 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Vestas 172-7.2 ST 3 m/s	100.8	A	dB(A)	45.7 50.9 56.2	62.2 67.4 71.5	78.8 84.5 85.5	86.6 87.7 87.1	89.4 91.0 90.6	89.4 87.8 88.2	88.6 89.0 88.2	87.4 86.6 85.7	84.8 84.0 80.6	77.3 74.0 70.6
Vestas 172-7.2 ST 4 m/s	100.8	A	dB(A)	44.6 50.0 55.5	61.9 67.3 71.4	79.2 84.8 85.8	86.9 87.9 87.8	90.3 91.9 91.2	89.7 87.9 87.9	87.9 87.9 86.9	85.8 84.7 84.6	84.4 84.2 80.8	77.4 74.0 70.6
Vestas 172-7.2 ST 5 m/s	100.9	A	dB(A)	45.6 51.0 56.5	62.9 68.3 72.4	79.7 85.3 86.3	87.4 88.4 88.0	90.3 91.8 91.2	89.8 87.5 87.5	88.1 88.1 87.3	86.2 85.3 84.6	84.3 83.5 80.3	75.8 72.6 69.3
Vestas 172-7.2 ST 6 m/s	102.7	A	dB(A)	50.0 55.1 60.3	66.5 71.6 75.2	81.1 86.7 87.7	88.5 89.5 89.9	91.4 92.5 92.4	91.8 90.2 90.5	91.3 91.5 90.4	88.7 87.6 85.9	84.1 82.4 80.1	77.6 75.3 73.0
Vestas 172-7.2 ST 7 m/s	105.4	A	dB(A)	51.6 56.6 61.6	67.4 72.4 76.1	82.3 87.5 88.7	90.2 91.6 92.9	94.5 95.8 95.7	95.2 93.3 93.4	94.0 94.1 92.8	91.2 89.9 87.9	85.7 83.6 80.8	77.5 74.6 71.8
Vestas 172-7.2 ST 8 m/s	108.2	A	dB(A)	55.2 60.0 64.7	70.0 74.8 78.8	83.9 88.7 89.9	91.9 93.9 95.3	97.1 98.5 98.6	98.3 96.2 96.4	97.1 97.3 96.0	94.3 93.1 90.8	88.4 86.1 82.7	78.6 75.1 71.7
Vestas 172-7.2 ST 9 m/s	110.3	A	dB(A)	55.8 60.7 65.5	70.8 75.6 79.8	85.4 89.6 91.5	93.4 95.3 96.7	98.4 99.8 100.2	100.4 98.8 99.1	99.9 100.2 98.8	97.0 95.7 93.2	90.3 87.8 83.9	79.0 75.1 71.2
Vestas 172-7.2 ST 10 m/s	111.1	A	dB(A)	57.4 62.1 66.9	72.2 77.0 80.9	86.2 90.2 91.9	93.4 95.1 96.6	98.3 99.7 100.2	100.5 99.1 99.8	101.1 101.8 100.6	99.0 97.8 95.2	92.2 89.7 85.1	79.3 74.7 70.1
Vestas 172-7.2 ST 11 m/s	111.1	A	dB(A)	57.4 62.1 66.9	72.2 77.0 80.9	86.2 90.2 91.9	93.4 95.1 96.6	98.3 99.7 100.2	100.5 99.1 99.8	101.1 101.8 100.6	99.0 97.8 95.2	92.2 89.7 85.1	79.3 74.7 70.1
Vestas 172-7.2 ST 12 m/s	111.1	A	dB(A)	57.4 62.1 66.9	72.2 77.0 80.9	86.2 90.2 91.9	93.4 95.1 96.6	98.3 99.7 100.2	100.5 99.1 99.8	101.1 101.8 100.6	99.0 97.8 95.2	92.2 89.7 85.1	79.3 74.7 70.1
Vestas 172-7.2 ST 13 m/s	111.1	A	dB(A)	59.2 64.0 68.8	74.2 78.9 82.7	87.6 91.4 93.1	94.6 96.2 97.4	98.7 99.9 100.2	100.2 98.7 99.4	100.9 101.6 100.4	98.8 97.6 95.2	92.4 89.9 85.8	80.6 76.4 72.3
Vestas 172-7.2 ST 14 m/s	111.1	A	dB(A)	58.7 63.6 68.6	74.3 79.3 83.0	87.7 91.4 93.2	95.0 96.8 97.9	99.3 100.4 100.5	100.1 98.4 99.1	100.6 101.3 100.2	98.7 97.5 94.9	91.9 89.3 84.9	79.4 75.0 70.6
Vestas 172-7.2 ST 15 m/s	111.1	A	dB(A)	62.5 67.0 71.6	76.4 81.0 85.1	90.9 95.0 96.1	97.0 98.0 97.9	97.1 98.0 97.8	98.9 97.9 99.0	101.2 102.4 100.9	98.6 97.2 95.0	92.3 90.1 88.6	87.4 85.9 84.4