

Applying CNOSSOS propagation model for the region of Grand Douche de Luxembourg

Hardy Stapelfeldt Isabelle Naegelen Douglas Manvell

ABSTRACT

The CNOSSOS propagation method is applied on the 3rd round of END noise modelling data to estimate the influence of the propagation method on the mapping results and exposure statistics. The method implemented in in the Predictor-LimA software suit so far follows the German recommendations for CNOSSOS interpretation. A version agreed upon on EU level was not ready for discussion in November 2018. The Luxemburg END noise propagation model for road noise includes challenging abrupt terrain formations and significant bridge constructions.

Thus applying the CNOSSOS implementation on this model will give an insight in the stability of the method and potential extra requirements for test case scenarios.Comparison against EU END mapping results will cover grid results and population exposure aspects. As the study focuses on the propagation aspect of the regulation, emission data is kept unchanged. The required calculation effort is compared as well.