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# Managing Input Data Uncertainty within Strategic Noise Mapping by Utilising Data Schema Specifications

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With the proclamation of the Directive on Environmental Noise (2002/49), the process of noise mapping and action planning has begun around Europe. Large scale wide area noise modelling requires an extensive range of data inputs. The requirements for these inputs are driven by several factors, including the noise calculation methodologies, noise mapping software system, GIS and the deliverables set out within the Directive and recommended Reporting Mechanism. Utilising a staged approach to project design led to the development of detailed noise mapping data schema specifications prior to the collation of input datasets for the calculation process. The data schema may be used throughout the mapping project as a framework to manage dataset concatenation, data capture or the use of defaults and GPGv2 Toolkits to infill data gaps. They also enable data pre-processing guidelines to be passed to non-acoustic GIS specialists, and help to guide and catalogue data processing steps. This paper presents experience gained whilst developing a number of noise mapping data schema specifications and their implementation within successful projects during the first round of mapping. Railway noise mapping is used as an example of how a data schema may be used to develop solutions to technical problems as well as coordinate data capture.