1 Overview

The data model can (and must) extend beyond the smallest common denominator obtained with the partners. The model must therefore contain two levels of information: mandatory data (black boxes) and optional data (grey boxes). Data homogeneity will thereby be ensured by a minimum set of data. Beyond the minimum level, the model serves as a target for all partners. Over the years, we will therefore work towards raising the minimum and redefining new targets. Minimum content will be defined for attributive and geometric data (see Figure 1 – Specifications expansion).

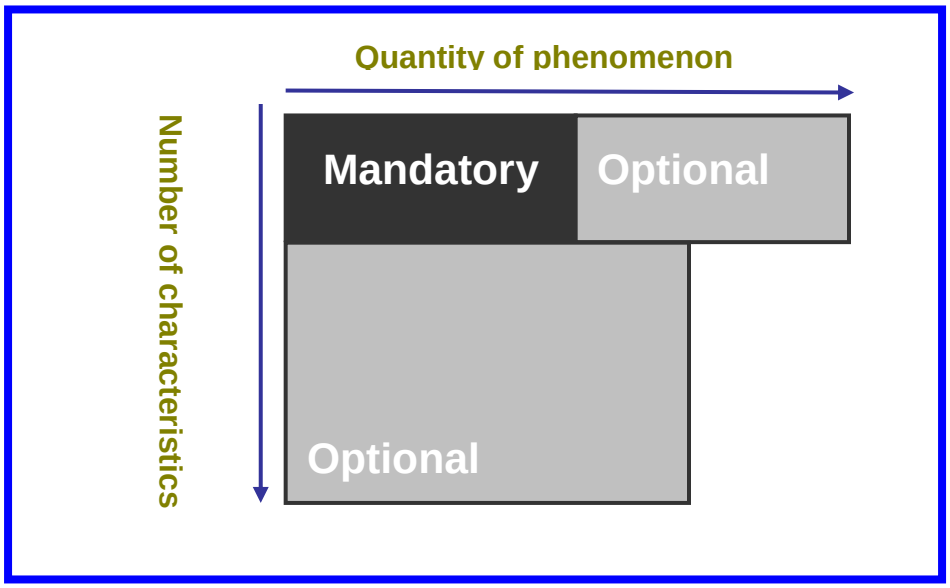

Figure 1 – Specifications expansion

2 LRS

The Linear Reference System (LRS) is considered the most viable approach for managing and distributing geospatial information when several distinct organizations are involved (distributed approach).

This method makes it possible to divide a standard spatial object into two parts: the geometric and attribute parts. The geometric part (Network Linear Component in the NHNC1) describes the position of the feature without describing its nature. The attribute part (or event) describes specific information observed along its linear geometric representation. Event information does not alter the geometric representation in any way. The event's position is given relatively from the beginning of the linear geometric representation. A Point Event is determined by a specific location, while a Linear Event is defined by a starting and ending measurement. Several Linear Methods (LRMs) can be used. (They are not discussed in this document). By using this approach we can share a common geometry while each application can add their set of attributes (events) in relationship with the Water Network geometry.