

UML-Based Approach to model Application Domain Extensions of CityGML

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The presentation explains the key aspects of the UML-based approach of modeling the Dutch 3D standard IMGeo as a CityGML ADE. The ADE is modeled using UML class diagrams. Since the OGC CityGML specification does not provide clear rules on modeling an ADE in UML, we had to choose our own approach. The presentation explains several alternatives for modeling ADEs in UML that we investigated and discussed within the OGC SWG CityGML and SIG3D. Open issues and challenges are discussed in the conclusions.

OGC adopted our approach in 2012 as best practice paper. We also submitted a related change request saying that “The guidelines (or rules) for extending CityGML should be described more fully and clearly so that an extension of CityGML (i.e. supported by CityGML software) can be created by relying on these rules and/or guidelines.”

In the presentation we will underline our request and propose to move the method inside the specifications of CityGML 3.0.