Thoughts about CityGML 3.0 WP03
- the Reviewer's Perspective

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Motivation

► The LOD concept is a **„trade mark"** and **unique selling point** of CityGML

► Modifications of the LOD concept have a **very high impact on the adoption of CityGML** by data providers, users and software vendors

► **WP03** therefore is the **most invasive** of all CityGML 3.0 WPs

► **Argumentation** and **documentation of the discussion** is of major importance

► We suggest that the following **questions must be thoroughly answered** before we decide about any modification

1. What are the problems of the current LOD concept?

► All points must be described individually and precisely

- we suggest to provide stable IDs for the points which can be used for referencing in the discussion and when the new / modified concept is presented

- Preliminary work has been done by SIG 3D but points should be described individually

► It will be of great importance to prove precisely that the weaknesses we describe will be solved completely

- E.g. a little gain in precision does not justify a huge increase in complexity

- We should always keep in mind that the LOD concept is like a trade mark of CityGML and therefore there must be very strong reasons to justify a modification which implies a modification of all data sets, products and standards based on CityGML

2. Which problems are solved by the new / modified LOD concept?

► We have to work out answers to this question precisely

► How can / should be verified that the new / modified concept solves the problems?

► This is the data modeler's perspective. Of course we need to take into account the user's perspective as well → Question 3

3. Which applications require a modified / new LOD Concept?

► What are the requirements in detail?

► We have to collect use cases.

► We have to adopt a users' perspective. We assume that there is no 1-to-1 mapping between the user requirements and the problems to be solved from a data modeler's perspective.

4. Did we take into account all the related work? /
Which related work did we look at?

► What suggest to collect and provide the related papers on github (private area because of copyright restrictions).

► We suggest a short written discussion of the relevant concepts:

- What is good?

- What is not good?

- This will be helpful when we have to argument and defend the new / modified concept.

5. What is the relation between the original and the modified / new LOD concept?

► Again, we have to keep in mind that the current LOD concept is widely adopted, also beyond the CityGML standard and that many stakeholders have invested in data sets and products. Discussion with stakeholders show that they are following what is going on in the CityGML 3.0 development with mixed feelings (innovation vs. protection of investment, innovation vs. rise in complexity)

► There must be a simple upgrade path:

- fully automatic data migration must be possible

- a simple and convincing communication strategy must be provided that data providers and software vendors can adopt when talking to their clients