The current set of thematic classes representing the boundary surfaces of buildings has to be extended in order to be able to semantically classify the entire exterior shell of a building. For example, the floor surface of a loggia/balcony cannot neither be modeled as bldg:GroundSurface (which may only be used for the ground plate of the building) nor as bldg:FloorSurface (restricted to floor surfaces of interior rooms in LOD4). Further additional boundary surface types are required.

Extend the CityGML building model by additional boundary surface types, at least by thematic classes representing outer floor surfaces.
and outer ceiling surfaces starting from LOD2. This extension can be realized without breaking backwards compatibility.

**Consequences if not approved:**

1. The exterior shell of buildings cannot be completely modeled and described by thematic boundary surfaces.

2. Analyses of the exterior shell of a building (e.g., area calculation or identification of visible surfaces) might be incorrect due to missing surface descriptions.

**Clauses affected:**

* 10.3, A.3

**Additional Documents affected:**

**Supporting Documentation:**

**Comments:**

**Status:** Assigned

**Disposition:** Referred