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Change Request #:	167
Assigned OGC Document #:	11-102
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Document Name/Version:	*City Geography Markup Language (CityGML) Encoding Standard / 1.0.0
OGC Project Document:	*08-007r1
If this is a revision of a previous submission and you have a Change Request Number, then check here: ☐ Enter the CR number here: Enter the Revision Number that you are revising here:	
Title: 	*LOD0 footprints for all CityGML classes
Source: 	*Geonovum; the 3D pilot held 2010-2011 in the Netherlands.
Work item code: 	
Category: 	* C (Functional modification of feature) 
Reason for change: 	* LOD0 footprints for all CityGML classes are required in order to integrate the full range of possible geometries of semantic objects in one model, i.e. 2D, 2.5D and volumetric geometries. This enables to use 2D topographic data with a DTM and to upgrade 2D data to 3D.
Summary of change: 	* This issue is partly addressed by an earlier change requests, which asks for planimetric building footprints in LOD0 (CR10-007, 2010). This change request asks to give all CityGML semantic object classes that (can) have a footprint on the terrain an LOD0 geometry. This means that LOD0 geometry should be added to: Abstract Buildings

	- AbstractBuilding - BuildingInstallation, for objects that have a footprint on the terrain - LOD0 multisurface for TransportationComplex, TrafficArea and AuxiliaryTrafficArea - SolitaryVegetationObject and PlantCover - CityFurniture All geometries at LOD0 including these footprints must ideally have a topological structure. Because this structure contains also the footprints, no specific Terrain Intersection Curves are necessary to locate the LOD1-LOD3 representations in the terrain. This principle extends the CityGML topological structure for LandUse (page 94 of CityGML specifications) to other classes at surface level which as per this proposal would be additional LOD0 classes. At the same time the class LandUse should be limited to those objects which do not represent the other classes, such as water, road, railway, vegetation.
Consequences if not approved: 	Utilisation of 2D data in 3D models is not possible.
Clauses affected: 	* 6.2, 6.5, 10.3, 10.5.10.6, 10.7, 10.8, C3
Additional Documents affected: 	
Supporting Documentation: 	
Comments: 	
Status: 	Assigned 
Assigned To: 	CityGML SWG 
Disposition: 	Referred and Posted 