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<b>Change Request #:</b>	70
<b>Assigned OGC Document #:</b>	10-053
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<b>Document Name/Version:</b>	*City Geography Markup Language (CityGML) Encoding Standard / 1.0.0
<b>OGC Project Document:</b>	*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:

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<b>Title:</b>	*Thematic module for walls in cities
<b>Source:</b>	*Special Interest Group 3D (SIG 3D)
<b>Work item code:</b>	
<b>Category:</b>	* B (Addition of feature)

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<b>Reason for change:</b>	<p>* The semantic data model of CityGML 1.0 lacks a model for the representation of walls in cities. However, walls are essential features of cities and it should be possible to adequately represent them in virtual 3D city and landscape models. "City wall" should be broadly defined to not only comprise ancient fortifications, but also smaller walls such as garden walls or fences. As for CityGML 1.0, the only possibility to model and exchange walls in cities is to use a GenericCityObject as proxy or to define a corresponding ADE. Both approaches face disadvantages.</p> <p>First, GenericCityObjects are simple in structure. However, the representation of city walls requires a semantically rich model. Comparable to buildings, walls can be decomposed into individual parts. Each part may contain interior structures such as rooms, interior installations like pipes, or room furniture. The boundary</p>
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surfaces of city walls can be further classified as, for example, wall or roof surfaces. Outdoor built structures such as staircases or balconies might be attached to the city wall. Further thematic classes are needed, for example, to represent gates or towers. Second, city walls are not specific to just a single application domain. Several ADEs could emerge proposing different semantic models. What is required is a common and standardized thematic module on city walls in CityGML.

**Summary of change:** ⓘ

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Incorporate a new thematic module providing a data model for the representation of walls in cities into the CityGML standard. "City wall" should be broadly defined to not only comprise ancient fortifications, but also smaller walls such as garden walls or fences. This extension can be realized without breaking backwards compatibility.

**Consequences if not approved:** ⓘ

City walls as relevant features of urban and regional models cannot be modeled and exchanged in a standardized way. This leads to a significant lack in semantic interoperability since either GenericCityObjects as proxies or several non-standardized ADEs will have to be used for modeling city walls.

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**Clauses affected:** ⓘ

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7, 10

**Additional Documents affected:** ⓘ

**Supporting Documentation:** ⓘ

**Comments:** ⓘ

**Status:** ⓘ

Assigned

**Disposition:** ⓘ

Referred