

## Flow of Events for Use Case – Set Construction Status

Change Log	
17/10/2004	Renamed from UC-SetConstructionStatus
01/11/2004	Finalized for pre-integrated model

### Overview

Sets the status of a building or construction in terms of whether it is existing, proposed new construction, proposed modification to an existing construction or planned for removal.

### Process

#### Preconditions

The construction is shown either on the base map or the situation map or the situation plan through the 'Show Construction' Use Case. In the case of a proposal to modify an existing construction, the existing construction may be retained until the proposal is accepted and may then be recorded for historical reasons.

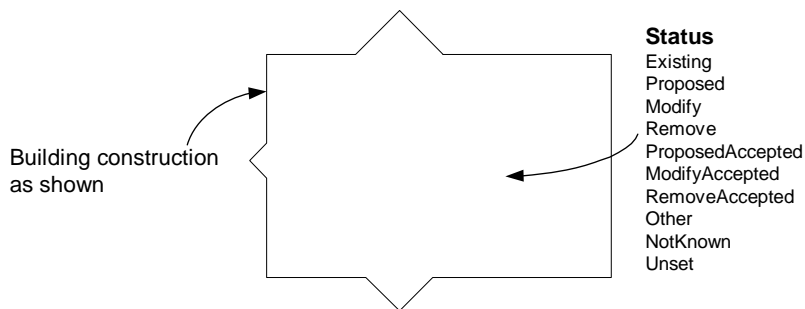
#### Actors

Applicant (for proposal)  
Authority (for acceptance)

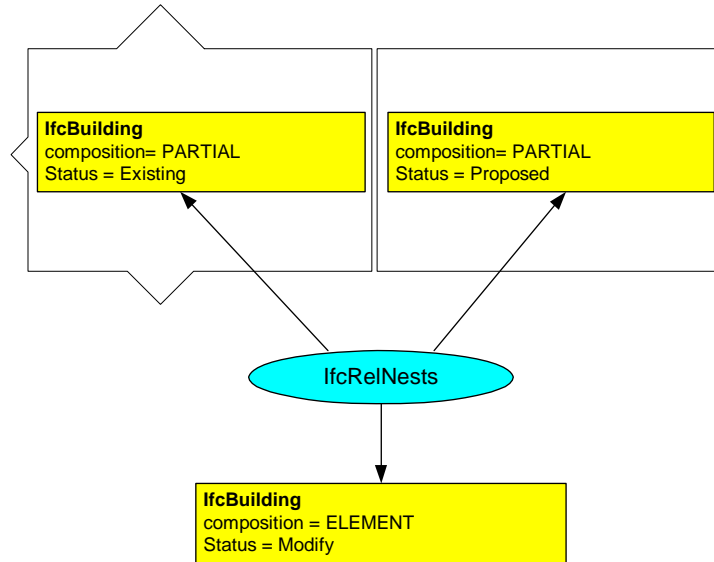
#### Main Flow

Flow	Entity
1. Select the instance of IfcBuilding that defines the construction of interest	IfcBuilding
2. Determine and assign the status through IfcProjectOrder.PredefinedType.PLANNINGAPPLICATION	IfcProjectOrder.PredefinedType.PLANNINGAPPLICATION
3. Associate the planning application with IfcBuilding	IfcBuilding
4. Assign the planning application status using IfcProjectOrder.Status <ul style="list-style-type: none"> <li>For an existing construction (base map), set status to EXISTING</li> <li>For a proposed new construction, set status to PROPOSED</li> <li>For a construction that is to be modified, set status to MODIFY</li> <li>Note that a proposal to modify a construction may show separate instances of IfcBuilding for the part that is EXISTING and not to be modified and the part that is PROPOSED for modification. Both sub-parts should have their composition set to PARTIAL. Aggregation may be used to bring together the two parts into a single instance of IfcBuilding whose composition is ELEMENT and whose status is MODIFY.</li> <li>For a construction that is to be removed, set status to REMOVE</li> </ul>	IfcProjectOrder.Status

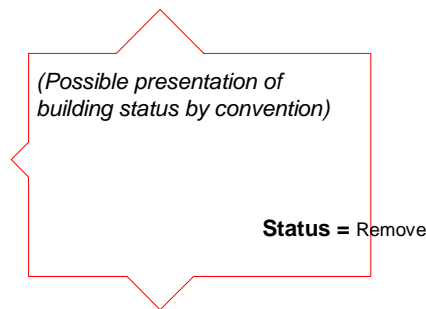
<p>5. On acceptance of a proposal, status should be changed:</p> <ul style="list-style-type: none"> <li>• For a proposed new construction, set status to <b>PROPOSEDACCEPTED</b></li> <li>• For a construction that is to be modified, set status to <b>MODIFYACCEPTED</b></li> <li>• For a construction that is to be removed, set status to <b>REMOVEACCEPTED</b></li> </ul>	
<p>6. On completion of any actions, the instance of IfcBuilding that is proposed as new or to be modified should have its status changed to <b>EXISTING</b>. Any prior instances of IfcBuilding that relate to the same construction should be deleted and recorded in archive as necessary.</p>	IfcBuilding
<p>7. Constructions that are proposed as new, proposed as modified or proposed to be removed may also be visually identified using presentation annotation methods according to system capabilities. Assignment of annotation methods may be subject to convention adopted in local circumstance. Annotation is proposed as a possibility purely for visual purposes and <b>NOT</b> for semantic reference. Presentation annotation may include:</p> <ul style="list-style-type: none"> <li>• Use layering</li> <li>• Use of colour for geometric representation items</li> <li>• Use of textual annotation</li> <li>• Use of line styles and weights</li> </ul>	



**Figure 1: Status allocations**



**Figure 2: Aggregating constructions for setting planning status**



**Figure 3: Presentation of building status by convention**

### Post Conditions

Status of construction is identified through a property set  
 As appropriate, status may be visually presented according to a set of presentation conventions.

## IFC Usage and Extension Requirements

### Existing Entity/Class Usage

Entity Class Name	Usage
IfcBuilding	Property set is defined for the building so that its planning status can be identified
IfcProjectOrder	Used to capture the planning application associated with a building and its status.
IfcStyledItem	Potential usage for annotation of status. Note that specific subtypes of IfcStyledItem would be required under particular conditions. A full breakdown of possibilities is not identified here.

### Issue List

Question	Answer