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*Information Exchange*

**THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA  
NATIONAL INSTITUTE OF BUILDING SCIENCES**

**agcXML**

**CHANGE ORDER  
USE CASE**

**VERSION 1.0  
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## **The agcXML Project**

### **The Associated General Contractors of America**

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## **agcXML Use Case: Distribute Change Order**

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### **1. Name**

Distribute Change Order

### **2. About This Use Case**

This use case exchanges a change order to an existing construction contract. It does not include any transactions prior to the issuance of the change order (e.g., request for change order, etc.).

### **3. Desired Outcomes**

The transaction described in this use case distributes all of the user-defined content of a change order document and constitutes a change to the terms of the contract that exists between the parties.

### **4. Summary Classifications**

#### **4.1. Type of transaction**

Distribute the terms of a change order to the appropriate project parties.

#### **4.2. Stage of project**

Any stage after the associated contract has been formed.

#### **4.3. Disciplines**

Typically distributed by the owner or their representative. Any party to the project may be a recipient.

#### **4.4. Data content**

References to the project, the associated contract, and the relevant parties;  
Description of the change to the terms of the contract and the resulting impact on cost and time; approvals.

### **5. Purpose**

#### **5.1. Description of the business processes (context)**

A change to the terms of an existing construction contract can arise from a number of sources. For example, a client may decide to request additional scope of work,

an error or omission may be discovered in the design that requires additional scope of work by the contractor, etc. The initiation of the change may be an informal discussion, or may take the form of a request for quotation, a request for information, a request for change order, a field order, etc. This process is outside of the scope of this use case and the agcXML.

After an owner and a contractor have agreed to the terms of a change to their existing contract, a change order document is completed and then distributed to the relevant parties for approval or for notification.

A similar pattern exists for changes to the contract between a general contractor and a sub-contractor.

## **5.2. Purpose of the transaction**

This transaction provides for the exchange of the terms of a change order for the purpose of obtaining approvals from the parties to the change order, to convey the formal change order to the contract parties, or to notify appropriate parties (such as relevant consultants) of the change.

## **6. Actors and Roles**

The transaction will have a sender and a receiver. In the typical owner/contractor case, the owner will be the sender and the contractor will be the receiver.

## **7. Preconditions and Start point**

A contract will previously exist between the parties, and the terms of the change order will have been agreed upon prior to this change order distribution use case.

## **8. End point**

The transaction is complete once the receipt of the change order has been acknowledged, or the approval of the change order received and acknowledged.

## **9. Measurable Result**

Receipt of the change order constitutes a formal change to the terms of the contract.

The transaction should be able to be electronically entered into any project management systems that track contract amounts, log change orders, etc.

## **10. Flow of Events/Activity Descriptions**

Having described the terms of an agreed-upon change, the owner (or their representative) may send the change order for approval to the contractor or to a consultant. The approvals will be added and the document will be returned.

The fully executed document may then be distributed to various parties as notification of the change.

This use case follows the “Information Distribution” transaction pattern: An information provider sends the data to the receiver, who then sends an acknowledgement.

### **11. Alternative Flow of Events**

The use case may be appropriate for other parties, e.g., for changes between the general contractor and the sub-contractor.

### **12. Use Case Relationships: Inclusion and Extension**

This use case references the associated agreement.

This use case extends the Generic Information/Document Distribution use case.

This use case excludes any use cases involving transactions used to initiate and negotiate the change order, such as requests for quote, etc.

### **13. Controls**

The change order has significant legal and financial significance and should have all appropriate transaction controls (security, non-repudiation, etc.).

### **14. Data**

The Change Order transaction references the project, the associated agreement, and the parties to the change order.

It contains a description of the changed terms, and their impact on the project cost and time.

The transaction should provide for option references to objects in a BIM model associated with this change.

It contains the approval information from the parties involved.

### **15. Outstanding Issues**

There is still an outstanding issue that this transaction can't have legal standing without also transmitting the “boilerplate” text (there isn't much, but there is some).

How can BIM references be included?

How might this link to “initiating documents” such as RFQ's, RFI's, etc.?