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Information Exchange

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

agcXML

**CHANGE DIRECTIVE
USE CASE**

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The agcXML Project

The Associated General Contractors of America

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agcXML Use Case: Distribute Change Directive

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1. Name

Distribute Change Directive

2. About This Use Case

This use case exchanges a Change Directive pursuant to an Owner/Contractor Agreement or other contract for construction. A Change Directive is prepared by an architect or other prime design professional (the sender), is approved by the Owner (the approver), and instructs a general contractor or construction manager (the receiver), to proceed immediately with a change in the scope of work of the contract.

The Change Directive may authorize a change to the contract sum and contract time, but the amendment of these contract terms become effective only when a corresponding Change Order transaction is subsequently completed. The Change Directive typically specifies how the proposed change in the contract sum or contract time is to be calculated, or references other contract documents where the method of calculation is specified, such as the Owner/Contractor Agreement or the General Conditions.

An element of urgency typically attaches to a Change Directive. It is used to authorize a change in the scope of work in place of a Change Order when the time normally needed to determine the change in contract sum or contract time might itself adversely affect the contract sum or contract time, or disrupt the planned sequence of the work. It represents the implicit, mutual agreement of the parties that the risk of not proceeding promptly with the proposed change in the scope of work is greater than the risk of proceeding without benefit of a Change Order.

Standard document forms currently used in the industry for the business process defined by this use case include Construction Change Directive, Interim Directed Change, and Subcontractor Interim Directed Change.

3. Desired Outcomes

The outcome of this use case is immediate action by the contractor (the receiver) to proceed with a change in the scope of work, a defined framework for calculating the change in the contract sum or contract time at a later date, and a mutual commitment of the parties to initiate a corresponding Change Order transaction.

4. Summary Classifications

4.1. Type of transaction

Notify a general contractor or construction manager to proceed immediately with a change in the scope of work of a contract for construction.

4.2. Stage of project

Any stage during the execution of a contract for construction.

4.3. Disciplines

Change Directives are typically prepared by an architect or other prime design professional (the sender), approved by an owner or owner's representative (the approver), and issued to a general contractor or construction manager (the receiver). The Change Directive may also be distributed to parties other than the principal actors to the transaction for their information only, including but not necessarily limited to the contractor's subcontractors and the architect's design consultants. The receiver generally controls distribution to subcontractor, while the sender typically controls distribution to design consultants. The sender may optionally distribute the notification directly to the receiver's field office.

4.4. Data content

The content set includes ID reference to the project, the contract for construction, the parties to the contract, and contract date; a unique Change Directive number and date; a brief narrative description of the Change in the scope of work; a list of attachments that support the description; and the authorized signature and printed name and title of both the sender and the owner or the owner's representative.

5. Purpose

5.1. Description of the business processes (context)

The need for an immediate change to the terms of a contract for construction contract may arise for any number of reasons. An owner may decide to amend the scope of work, an error or omission in the design may be discovered, or circumstances on the construction site beyond the control of any party may necessitate a change in the materials, methods, or sequence of construction. A formal or informal consultative process typically precedes a Change Directive transaction. A determination is typically made in that consultative process that a change in the scope of work must be executed immediately in order to forestall further adverse impact on the contract sum, contract time, or the planned sequence of the work. Informal and undocumented communication processes are beyond the scope of this use case and the agcXML project.

A Change Directive provides the parties with a mechanism for promptly modifying the terms of the contract for construction and for the change to be executed in the most expeditious manner possible while assuring the parties of fair and equitable methods for determining the impact of the Change on the contract sum or contract time at a later date.

A general contractor or construction manager (the sender) may execute a similar transaction with a subcontractor (the receiver) for similar reasons.

5.2. Purpose of the transaction

This transaction provides for the formal amendment of the scope of work of the contract for construction prior to the formal execution of a Change Order transaction.

6. Actors and Roles

The transaction will have a sender, an approver, and a receiver. Typically, the sender is an architect or other prime design professional, the approver is an owner or owner's representative, and the receiver is a general contractor or construction manager.

7. Preconditions and Start point

A contract for construction must previously exist between an owner and a general contractor or construction manager. That agreement must authorize an architect or other prime design professional to act in an official capacity as the owner's representative with authority to amend or initiate the amendment of the Owner/Contractor Agreement in accordance with defined transactions such as Construction Change Directives, Change Orders, or Supplemental Instructions.

One of any number of formal or informal actions results in identification of the need for Supplemental Instructions to be issued.

The architect or prime design professional has gathered the necessary information and has prepared a formal Change Directive for transmission to the receiver and (optionally) for distribution to other parties.

8. End point

The transaction is complete once the Change Directive has been received. Optionally, the transaction may terminate only upon transmission of acknowledgment of receipt by the receiver to the sender.

9. Measurable Result

Receipt of a Change Directive constitutes a formal notice to proceed with a change in the scope of work and a mutual commitment to complete a corresponding Change Order transaction at a later date. The receiver typically signifies acceptance of the Change Directive by proceeding with the work.

The transaction should be able to be electronically entered into any project management system that logs contract documents and tracks contract sums and time.

10. Flow of Events/Activity Descriptions

The sender prepares the Change Directive and forwards it to the approver. The approver returns it to the sender, who then sends it to the receiver. The sender may optionally distribute the Change Directive to other parties for their information.

The receiver signifies acceptance of the Change Directive by proceeding with the work. Optionally, the receiver acknowledges receipt of the Change Directive by reply to the sender.

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

11. Alternative Flow of Events

There is no alternate flow of events for the Change Directive transaction with the defined set of actors, but this use case may be appropriate for a different set of actors in a similar contractual relationship, such as a general contractor (acting as sender) and a subcontractor (acting as receiver).

12. Use Case Relationships: Inclusion and Extension

This use case references an associated Owner/Contractor Agreement or similar contract for construction.

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

This use case must result in a corresponding Change Order transaction.

Due to the urgent circumstances that underlie a Change Directive, this use case excludes (or bypasses) use cases that define any other transactions that may result in a Change Order, such as a Request for Quotation, a Request for Information, or a Supplemental Instruction.

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 Directive transaction references the project, the associated agreement, and the parties to the Change Directive.

It contains a unique document reference (Change Directive number) and date.

It contains a description of the change to the scope of work of the contract.

It contains a description of the method for calculating the change in the contract sum or contract time, or a reference to another contract document where the method of calculation is specified, such as the Owner/Contractor Agreement or the General Conditions. The actual changes to the contract sum and contract time are made by a subsequent Change Order transaction.

The transaction should provide for option references to objects in a BIM model associated with the Change Directive.

It contains the authorization and identifying information of the sender, the approval and identifying information of the approver, and the acceptance and identifying information of the receiver.

15. Outstanding Issues

The informal communication/business process that precedes a Change Directive transaction is undocumented and beyond the scope of this use case and the agcXML Project. The Change Directive serves as a formal instrument for compiling and documenting the information resulting from that informal process. However, there is no assurance that all of the information created in the undocumented process is documented in the Change Directive.

The business process should be modified to require acknowledgment of receipt of a Change Directive by the receiver in order for the transaction to be considered complete.