agcXML

SCHEDULE OF VALUES
USE CASE

The agcXML Project

The Associated General Contractors of America

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agcXML Use Case: Exchange Schedule of Values (Owner/Contractor Agreements)

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1. Name

Exchange Schedule of Values (Owner/Contractor Agreements)

2. About This Use Case

This use case describes the electronic exchange of a schedule of values associated with an Owner/Contractor agreement.

The schedule of values is a list that decomposes a project's total scope of work into distinct work items and associates total costs and related information for each work item. This schedule of values is associated with a specific owner/contractor agreement as part of the definition of work.

This use case does not describe a specific work process for the schedule of values (e.g., processes for preparing, negotiating, or approving the schedule of values). Rather, it describes a generic process for exchanging a completed schedule of values between two project participants for any un-specified purpose.

This transaction implements the generic document distribution use case. Other types of schedules of values may also exist during the project, such as a schedule of progress payment values (thus the title of this use case explicitly refers to the owner/contractor agreement). The relationships between this schedule of values and associated documents such as a schedule of progress payments values, bills of quantities, etc. are described in greater detail in section 12 of this use case.

3. Desired Outcomes

The standardization of electronic, structured data for schedule of values (owner/contractor agreement) documents using agcXML will improve project data interoperability among project participants, particularly in the areas of project progress control and payment claim processing.

4. Summary Classifications

4.1. Type of transaction

Exchange a schedule of values (scope of work breakdown) associated with a specific owner/contractor agreement.

4.2. Stage of project

During or after contract formation, prior to initial application for progress payment.

4.3. Disciplines

Owner and Contractor (parties to the owner/contractor agreement); distribution to consultants.

4.4. Data content

Reference to a specific owner/contractor agreement; breakdown of work items that make up the agreement's scope of work, along with name, description, and expected cost.

5. Purpose

5.1. Description of the business processes (context)

When a project owner and contractor enter into an agreement (construction contact), they will negotiate a specific owner/contractor agreement document (see the related owner/contractor agreement use case), which will define the specific scope of work and price. Optional, they may further refine the scope of work and price by decomposing the scope of work into a set of work items with their associated descriptions and prices. This work decomposition is described in the schedule of values document.

The primary purpose of the schedule of values is to provide a basis for project control—in particular, progress payment claims (although the schedule of values may serer other purposes as well such as adding clarification to the scope of work, etc.).

The schedule of values will typically be developed by the contractor, and may be developed during the negotiation of the owner/contractor agreement, or at a later time (generally prior to the first progress payment claim).

The schedule of values may be closely related to other work decompositions on the project, such as bills of quantities, project budgets, etc. However, the schedule of values (owner/contractor agreements) is intended to be a specific document supporting a specific legal requirement associated with the agreement.

5.2. Purpose of the transaction

This transaction involves the distribution of a complete schedule of values (owner/contractor agreement) document, without specifying the specific purpose of the transaction. The following are some of the possible reasons for such as transaction:

- A contractor wishes to submit a schedule of values to the owner in order to fulfill the requirements of their owner/contractor agreement.

- An owner, having received a schedule of values from a contractor, wishes to distribute it to their consultants for review.

- An owner may wish to distribute a schedule of values to contractor as the basis upon which the contractor should submit a progress payment claim.

6. Actors and Roles

The information contained in this transaction originates from the agreement between the owner and the contractor. The transaction itself involves an information provider and an information receiver, who would typically be either the owner or contractor.

7. Preconditions and Start point

The schedule of values has been fully developed prior to their exchange in this transaction (although further changes to the schedule of values may still occur after this point).

8. End point

The transaction is complete once the schedule of values has been received (and possibly acknowledged).

9. Measurable Result

Completion of this transaction should allow the receiver to incorporate the information into the appropriate system, e.g., to import the schedule of values into their progress payment claims system.

10. Flow of Events/Activity Descriptions

This transaction implements the "Information Distribution" transaction pattern (as defined in the document distribution use case): An information provider sends the data to the receiver, who may (but is not required to) send an acknowledgement.

11. Alternative Flow of Events

Alternatively, this transaction could involve several of the other transactions types defined in the document distribution use case, such as a "Request/Response" transaction pattern is the transaction begins with a request for the schedule of values, or an approval transaction pattern is a specific approval is being sought.

12. Use Case Relationships: Inclusion and Extension

This use case extends the Generic Information/Document Distribution use case. The owner/contractor agreement distribution process can be quite flexible, and all of the alternative flows described in the Generic Information/Document Distribution use case are possible. Specific configurations may be subject to the judgment of the participants due to the confidential nature of some of the information.

Since the schedule of values (owner/contractor agreement) is a component of the owner/contractor agreement, this use case supports the owner/contractor agreement use case.

Since the schedule of values (owner/contractor agreement) can form the basis for progress payment claims, this use case supports the progress payment claims use case.

The schedule of values (owner/contractor agreement) is a specific type of a more general class of "cost schedule" documents. This class of documents may include schedules of progress payment values, bills of quantities, cost estimates, etc. However, the development of this overall class of cost schedule documents is outside of the scope of the current agcXML initiative and will not be further developed at this time.

13. Controls

The schedule of values (owner/contractor agreement) contain information—particularly financial information—that the parties may regard as confidential, so transaction controls should allow appropriate control to access of information.

The schedule of values fulfills specific legal requirements arising from the owner/contractor agreement, thus the transaction controls should allow appriate controls such as confirmation of receipt, non-repudiation, time-stamping, etc.

14. Data

The generic information/document distribution use case defines generic document and distribution data requirements.

The schedule of values will include data to link it with a specific owner/contractor agreement (reference to the project, agreement, parties to the agreement, etc.)

For each item in the schedule of values, the transaction will describe the work item and contain a total price for the item.

15. Outstanding Issues

Should the transaction allow the schedule of values to be organized hierarchically?

Should the schedule of values allow the parties to include quantities, unit prices, or other information for any item?