

A National Building Information Model Standard Project Fact Sheet
Construction to Operations Building Information Exchange
(COBIE)

NBIMS Overview

The National Building Information Model Standard (NBIMS) is a set of interoperable standards for exchange of facility and infrastructure data through the life-cycle of a project. NBIMS is a joint project coordinated by National Institute of Building Sciences (NIBS) in conjunction with the International Alliance for Interoperability (IAI) and many other facilities-related associations and software companies.

Business Case

Following the completion of capital projects, a truck load of paper or large electronic files are typically provided to the facility manager. These documents describe everything needed for effective maintenance, operations, and asset management.

Transforming paper or electronic images into useful information may require as much as \$50,000 per project. The vital information needed for effective facility maintenance, operation, and asset management is not being efficiently captured as it is created.

Objectives

COBIE will create both an IFC reference standard supporting the direct software information exchange and a spreadsheet that can be used to capture COBIE data for both small renovation and capital projects.

Implementation

COBIE may be directly incorporated into existing post-construction data exchanges using existing contract specifications.

COBIE data could also be captured during the design and construction process by adding information as it is created. Capturing COBIE data during the project and eliminating paper exchange is expected to significantly decrease existing paper-based exchange costs.

Owners and construction managers' implementation instructions will allow COBIE data to integrate within existing maintenance, operations, and asset management systems.

Results to Date

- U.S. Army, Corps of Engineers, Seattle District has incorporated COBIE contract language and NASA is planning use of COBIE on renovation projects at several centers.
- Several Computerized Maintenance Management System (CMMS) are currently considering COBIE adoption.
- An operational demo of is planned for Nov 06, 2006 at the IAI Industry Day.

Future Applications

A 'smart spreadsheet' and 'IFC Model View' are planned. The 'smart spreadsheet' will assist small contractors to provide COBIE required data in a simple format. The 'IFC Model View' will assist IFC-supporting software vendors to directly export COBIE data.

A follow-on project to document product attributes for design, quality control, and operations is planned.

Contact Information

- Bill Brodt - wbrodt@nasa.gov
- Bill East - bill.east@us.army.mil

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