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| **Analysis and Design Standard  for Vendor Executed Software Implementation Projects** | |

# Purpose

The purpose of this standard is to establish project analysis and design requirements for all vendor executed software implementation projects and activities.

# Scope

This standard applies to all vendor executed software implementation projects. Individual companies shall use their own internal analysis and design methodology, tools and templates.

This standard specifies the core requirements with respect to analysis and design deliverables for software implementation projects, leaving significant flexibility for vendors to determine how to meet these requirements.

# Standard

## Industry Standards and Specifications

* 1. For analysis activities and documentation, this standard adopts by reference the *Business Analysis Body of Knowledge® (BABOK®)* published by the International Institute of Business Analysis (IIBA®). IIBA is an independent non-profit professional association serving the growing field of Business Analysis. The *BABOK®* is the collection of knowledge within the profession of Business Analysis and reflects current generally accepted practices. As with other professions, the body of knowledge is defined and enhanced by the Business Analysis professionals who apply it in their daily work role. The *BABOK®* describes Business Analysis areas of knowledge, their associated activities and the tasks and skills necessary to be effective in their execution.
  2. For business process modeling, this standard adopts by reference specifications created and maintained by the Object Management Group (OMG™). OMG™ is an international, open membership, not-for-profit computer industry consortium. OMG Task Forces develop enterprise integration standards for a wide range of technologies. OMG’s modeling standards enable powerful visual design, execution and maintenance of software and other processes. The OMG maintains a catalog of specifications organized by domain. The OMG business process modeling specifications are documented in the *Catalog of OMG Business Strategy, Business Rules and Business Process Management Specifications.*
  3. For design activities and documentation, this standard adopts by reference specifications created and maintained by the OMG™ Modeling and Metadata Specifications found in the *Catalog of OMG Modeling and Metadata Specifications*.
  4. For design of XML and Web Services, this standard adopts by reference specifications created and maintained by Organization for the Advancement of Structured Information Standards (OASIS) and the recommendations of the World Wide Web Consortium (W3C).
  5. For structured analysis and design methods, this standard adopts by reference the framework set forth in the Institute of Electronics and Electrical Engineers (IEEE) Standard 830:1998 and the Software Engineering Institute (SEI) Software Engineering Body of Knowledge (SWEBOK), as well as the analysis phase of the software development life cycle as defined in IEEE/EIA 12207:2008.

## Required IT Project Analysis and Design Deliverables

The following section identifies required analysis and design deliverables that shall be included in any contract requiring system analysis and/or design activities. Additional analysis and design deliverables may be required, depending on the type, size, scope and complexity of the project.

1. Analysis Strategy document – Vendor must supply a summary of its project Analysis Strategy to DEP for review and approval prior to contract execution. The summary must include, at a minimum, a list of methods, tools, and documentation file formats, sample copies of analysis documentation deliverables as well as those items that specifically address the known project business requirements. Any vendor-specific project analysis methodology must be consistent with the BABOK® or the SWEBOK as appropriate.
2. Verbose textual deliverables must be provided in structured MS Word 2003 or above (or compatible) format.
3. UML models must be provided in one of the following formats:

* Sparx Enterprise Architect .EAP files
* Visio UML models in UML 1.1 or 1.3 format
* XMI 1.0, 1.1 and 1.2 from XMI compliant tools in UML 1.1 or 1.3 format

# Deviation from Use

Any deviation from this standard shall be documented in associated project and contract documentation. For contracts, deviation from standard shall be documented and approved by the DEP contract manager. For non-contract work, deviation from use shall be documented in the project plan/scope of work and approved by the project manager.

# Definitions

1. **DEP IT Project**: any temporary endeavor undertaken on behalf of the Florida DEP, having a defined start and end date and resulting in a unique product or service dealing with an IT subject area. Examples of IT projects include:

* Planning, analysis and feasibility studies for IT projects
* Design, development and implementation of a software application
* Purchase and installation of a commercial software product
* Systems hardware and network installations, modifications or upgrades

1. **Institute of Business Analysis (IIBA®).** IIBA is an independent non-profit professional association serving the growing field of Business Analysis. The *BABOK®* is the collection of knowledge within the profession of Business Analysis and reflects current generally accepted practices. As with other professions, the body of knowledge is defined and enhanced by the Business Analysis professionals who apply it in their daily work role.
2. **Business Analysis Body of Knowledge (BABOK®)** – The *BABOK®* is the collection of knowledge within the profession of Business Analysis and reflects current generally accepted practices. As with other professions, the body of knowledge is defined and enhanced by the Business Analysis professionals who apply it in their daily work role. The *BABOK®* describes Business Analysis areas of knowledge, their associated activities and the tasks and skills necessary to be effective in their execution.
3. **Object Management Group (OMG™)** - OMG™ is an international, open membership, not-for-profit computer industry consortium. OMG Task Forces develop enterprise integration standards for a wide range of technologies, and an even wider range of industries. OMG’s modeling standards enable powerful visual design, execution and maintenance of software and other processes.
4. **Organization for the Advancement of Structured Information Standards (OASIS)** - is a not-for-profit consortium that drives the development, convergence and adoption of open information. The OASIS consortium produces more Web services standards than any other organization. Founded in 1993, OASIS has more than 5,000 participants representing over 600 organizations and individual members in 100 countries.

## Institute of Electronics and Electrical Engineers(IEEE) – an international non-profit, professional organization directed toward the advancement of the theory and practice of electrical, electronics, communications and computer engineering, as well as computer science, the allied branches of engineering and the related arts and sciences.

## Electronic Industries Association (EIA) - The Electronic Industries Association (EIA) is an alliance of individual trade organizations in the United States that together have agreed on certain data transmission standards such as EIA/TIA-232 (formerly known as RS-232). EIA is accredited by [the](http://en.wikipedia.org/wiki/American_National_Standards_Institute) American National Standards Institute (ANSI) to help develop [standards](http://en.wikipedia.org/wiki/Standards_organization) on [electronic components](http://en.wikipedia.org/wiki/Electronic_component), [consumer electronics](http://en.wikipedia.org/wiki/Consumer_electronics), electronic information, [telecommunications](http://en.wikipedia.org/wiki/Telecommunications), and [Internet](http://en.wikipedia.org/wiki/Internet) security.

8. **Software Engineering Institute (SEI)** – a federally-funded research and development center at the Carnegie Mellon University. The SEI has advanced software engineering principles and practices and has served as a national resource in software engineering, computer security, and process improvement. As part of its work, SEI identifies and codifies technological and methodological solutions related to software engineering and disseminates these solutions through published best practices.

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ISO/DIS 9241. These will be available from the International Standards Organization website [http://www.iso.org.

Object Management Group. *Catalog of OMG Business Strategy, Business Rules and Business Process Management Specifications.* OMG website URL: http://www.omg.org/technology/documents/br\_pm\_spec\_catalog.htm

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Object Management Group. *UML® Resource Page.* OMG website URL: http://www.uml.org/

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Usability Net. A project funded by the European Union to promote usability and user centered design. Website provides a list of international standards for Human Centered Interaction (HCI) and Usability - URL: http://www.usabilitynet.org/tools/r\_international.htm.

World Wide Web Consortium. W3C Technical Reports and Publications. W3C website URL: http://www.w3.org/TR/

**Approved by R. John Willmott, CIO \_\_\_\_\_\_\_\_\_6/18/09\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Approval Date**