

North Carolina
Department of Information Technology
Transportation



Enterprise SDLC Mapping Instructions

Version 2.1

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Document Version Control

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1 Overview

1.1 Purpose

The purpose of this document is to define how DIT-Transportation (DIT-T) teams map their development methodologies to the DIT-T Enterprise SDLC Deliverables and maintain the maps.

1.2 Introduction

It is recommended that you review the DIT-T Enterprise Quality Management Plan before mapping your team's development methodology.

A Systems Development Lifecycle (SDLC) is a description of the phases, tasks, and deliverables that provide a framework for developing and managing a project from the receipt of the work request through the completion of the project. DIT-T uses a deliverable based SDLC model. A deliverable based approach is not specific to any one SDLC (i.e., Agile, Waterfall, etc.).

The key deliverables are the most important deliverables and may have multiple tasks or smaller deliverables included in their production. For example, a key deliverable is Requirements; Tasks involved in completing this key deliverable include requirements gathering, requirements definition, peer reviews, etc. Because the tasks are different depending on the development methodology used, tasks are defined by the DIT-T teams' development methodology.

Key deliverables are assigned to the four (4) DIT-T project types identified by IT Senior Management as representative of the most frequently use DIT-T project sizes. The key deliverable assignments are based on the size and risk associated with the project type.

2 Enterprise SDLC Deliverables List

The picture below shows the columns included in the DIT-T Enterprise SDLC Deliverables list.

A	B	C	D	E	F	G	H	I	J	K	L
							PMO		Operational		
Phase	ID	Key Deliverable	Minimum Requirement	Req'd for Audit	Audit Control		Enterprise (High Risk)	Lite (Medium Risk)		Non-PMO Project (Medium Risk)	Change Request (Low Risk)

The content of the columns is summarized below. For more details, See the DIT-T Enterprise Quality Management Plan on the DIT-T Enterprise SDLC Connect site for details.

Column	Column Header	Column Description
A	Phase	Phase name the deliverable is initiated in.
B	ID	Deliverable reference number.
C	Key Deliverable	Name of the deliverable.
D	Minimum Requirement	Minimum requirements when completing the deliverable.
E	Req'd for Audit	Indicates the deliverable is required for audits.
F	Audit Control	Indicates the audit control satisfied by the deliverable.
H	*PMO - Enterprise	'Y' indicates the deliverable is required for PMO – Enterprise projects. Blank indicates the deliverable is not required.
I	*PMO - Lite	'Y' indicates the deliverable is required for PMO – Lite projects. Blank indicates the deliverable is not required.
K	*Operational - Non-PMO Project	'Y' indicates the deliverable is required for Operational – Non-PMO projects. Blank indicates the deliverable is not required.
K	*Operational - Non-PMO Project	'Y' indicates the deliverable is required for Operational – Non-PMO projects. Blank indicates the deliverable is not required.
L	*Operational - Change Request	'Y' indicates the deliverable is required the Operational – Change Request projects. Blank indicates the deliverable is not required.

***Project Types**

3 Development Methodology Mapping

3.1 Initial Mapping

If a DIT-T unit has one or more development methodologies they follow, ex. Agile, Iterative, etc. that are different from the DIT-T Enterprise SDLC Deliverables, they are required to map their development methodology to the DIT-T Enterprise SDLC Deliverables. See Appendix B for a sample mapped methodology for the PMO Enterprise project.

The picture below should be used as reference for the steps following it: There is more detail picture in Appendix A.

A	B	C	D	E	F	G	H	I	J	K	L
DIT-T Unit:			Methodology Owner/Contact:					Date Methodology Initially Added:			
Methodology Name:			Quality Management Plan Used:					Date Last Updated:			
Methodology Type:			Deliverable Repository:					Comments:			
								PMO		Mapping Red Text = Differences from E-SDLC	
Phase	ID	Key Deliverable	Minimum Requirement	Req'd for Audit	Audit Control	Enterprise (High Risk)	Req'd	Phase	Key Deliverable		

The following steps are required to map a development methodology:

1. Review the work performed by the DIT-T unit and select the project type used to map their development methodology.
2. Select the template for the project type to use for mapping.
3. Enter the information below at the top of the template:
 - a. DIT-T Unit: the unit that owns the mapped methodology.
 - b. Methodology Name: name the unit refers to the methodology by.
 - c. Methodology Type: industry type of methodology mapped, such as Agile, Iterative, Waterfall, etc.
 - d. Methodology Owner/Contact: person to contact if there are questions about the mapped methodology.
 - e. Quality Management Plan Used: name of the Quality Management Plan used; units may use the DIT-T Enterprise Quality Management Plan. If not, provide the name of your plan and include in that plan that you are following the DIT-T Enterprise Quality Management Plan and this plan includes additional quality requirements.
 - f. Deliverable Repository: location where deliverable artifacts are stored.
 - g. Date Methodology Initially Added: date approved and added to the DIT-T Enterprise SDLC site on Connect.
 - h. Date Last Updated: date the methodology was last updated and approved.
 - i. Comments: additional information about the methodology.
4. For the process to be mapped, review the DIT-T SDLC Key Deliverable (c) to determine if the deliverable is listed. Deliverables required on all projects and required for audit (e) should be included in the mapped methodology. Enter the following in the columns shaded in blue and use red text to indicate differences from the DIT-T Enterprise SDLC:

- a. Req'd: deliverable is required. The column is prepopulated with the project type values (h) to be mapped to. If additional deliverables in the Key Deliverables column (c) are required by the mapped methodology, enter a 'Y' in this column, enter phase name and key deliverable name. Use red text to indicate different from the DIT-T Enterprise SDLC Deliverables.
 - b. Phase: Enter the phase name for the phase the deliverable is initiated in.
 - c. Key Deliverable: Enter the name of the deliverable. This is the name that will be used for the deliverable artifact name found in the Deliverables Repository specified above (f). If the deliverable is located in another system, such as a Work Request is located in ServiceNow, indicate how to find the deliverable and the System Name where it can be found. Examples can be found in the 'Approved Methodologies' folder, document name 'PMO_Enterprise Project (Waterfall)'.
 - d. A 'Y' in the project type column (column H) indicates that this deliverable is required. A different name may be used.
 - e. If a deliverable is needed that is not in the SDLC Deliverables list, contact PMO Support via ServiceNow to have it added.
5. Obtain approval from the Senior Manager responsible for the unit, ex. Al Roethlisberger, Brian Williford, Brian Watkins, Craig Barber, Mark Clifford, Marnie Lockard, Rena Henry, Carolyn Broadney, etc.
 6. Send a request to PMO Support via ServiceNow to add the mapping document to the DIT-T Enterprise SDLC Connect site.
 7. Save a copy of the approved mapped methodology in a location of your choice. You will use this document as the starting point for future changes.

3.2 Changes to Mapping Documents

1. Update the current mapping document in the location designated by the Unit.
2. Make changes as needed.
3. Obtain approval from the Senior Manager for your unit.
4. Send a request to PMO Support via ServiceNow to add the mapping document to the DIT-T Enterprise SDLC Connect site.

Appendix A - Mapping Template Sample

DIT-T Unit:		Methodology Owner/Contact:					Date Methodology Initially Added:		
Methodology Name:		Quality Management Plan Used:					Date Last Updated:		
Methodology Type:		Deliverable Repository:					Comments:		
							PMO		
							Mapping Red Text = Differences from E-SDLC		
Phase	ID	Key Deliverable	Minimum Requirement	Req'd for Audit	Audit Control	Enterprise (High Risk)	Req'd	Phase	Key Deliverable
Business Concept	1	Work Request		Y	ITGC03	Y	Y		
Business Concept	2	Alternatives Analysis	If required		ITGC03	Y	Y		
Business Concept	3	Preliminary Business Case	Min: Scope of Work, Resource Plan, Cost Plan, Start/End Dates		ITGC03	Y	Y		
Business Concept	4	Business Concept Exit Quality Review				Y	Y		
Initiation	5	Scope of Work	Min: Work Definition, Resources, Estimated Cost, Start/End Dates	Y	ITGC03	Y	Y		
Initiation	6	Scope of Work Approval	DOT Business & DIT-T approval required	Y	ITGC03	Y	Y		
Initiation	7	Business Case			ITGC03	Y	Y		
Initiation	8	Benefits			ITGC03	Y	Y		
Initiation	9	Business Case Quality Review				Y	Y		
Initiation	10	EPMO Business Case DP Approval	DIT EPMO & OSBM approved required			Y	Y		
Initiation	11	Cost Plan			ITGC03	Y	Y		
Initiation	12	Schedule			ITGC03	Y	Y		
Initiation	13	Change Management Plan			ITGC03	Y	Y		
Initiation	14	Procurement Plan	If procuring resources, products, services		ITGC03	Y	Y		
Initiation	15	Communication Plan			ITGC03	Y	Y		
Initiation	16	Organization Chart			ITGC03	Y	Y		
Initiation	17	Enterprise Quality Management Plan		Y	ITGC03	Y	Y		

Appendix B – Mapped Methodology Sample

DIT-T Unit: PMO		Methodology Owner/Contact: Cheryl Ritter					Date Methodology Initially Added: 3/16/2020		
Methodology Name: Enterprise Project		Quality Management Plan Used: Enterprise					Date Last Updated: 7/14/2020		
Methodology Type: Waterfall		Deliverable Repository: Project's Team Site in '_Key Project Documentation' folder					Comments:		
							Mapping Red Text = Differences from E-SDLC		
Phase	ID	Key Deliverable	Minimum Requirement	Req'd for Audit	Audit Control	Enterprise (High Risk)	Req'd	Phase	Key Deliverable
Business Concept	1	Work Request		Y	ITGC03	Y	Y	Business Concept	Business Project Request
Business Concept	2	Alternatives Analysis	If required		ITGC03	Y	Y	Business Concept	Alternatives Analysis
Business Concept	3	Preliminary Business Case	Min: Scope of Work, Resource Plan, Cost Plan, Start/End Dates		ITGC03	Y	Y	Business Concept	Preliminary Business Case
Business Concept	4	Business Concept Exit Quality Review				Y	Y	Business Concept	Business Concept Stage Exit Checklist
Initiation	5	Scope of Work	Min: Work Definition, Resources, Estimated Cost, Start/End Dates	Y	ITGC03	Y	Y	Initiation	Project Charter
Initiation	6	Scope of Work Approval	DOT Business & DIT-T approval required	Y	ITGC03	Y	Y	Initiation	Approval contained in Project Charter
Initiation	7	Business Case			ITGC03	Y	Y	Initiation	Business Case
Initiation	8	Benefits			ITGC03	Y	Y	Initiation	Benefits SharePoint List on project site
Initiation	9	Business Case Quality Review				Y	Y	Initiation	Business Case DP Checklist
Initiation	10	EPMO Business Case DP Approval	DIT EPMO & OSBM approved required			Y	Y	Initiation	EPMO Business Case Approval
Initiation	11	Cost Plan			ITGC03	Y	Y	Initiation	Cost Estimate Workbook
Initiation	12	Schedule			ITGC03	Y	Y	Initiation	Schedule available in MS Project
Initiation	13	Change Management Plan			ITGC03	Y	Y	Initiation	If no plan on site, Change Management Plan on DOT PMO site is used with no changes.
Initiation	14	Procurement Plan	If procuring resources, products, services		ITGC03	Y	Y	Initiation	Procurement Plan
Initiation	15	Communication Plan			ITGC03	Y	Y	Initiation	Communication Plan
Initiation	16	Organization Chart			ITGC03	Y	Y	Initiation	Project Organization
Initiation	17	Quality Management Plan		Y	ITGC03	Y	Y	Initiation	Project Quality Management Plan and includes Enterprise Quality Management Plan
Initiation	18	Risk Assessment/Mitigation Plan			ITGC03	Y	Y	Initiation	Assessment Type PDP
Initiation	19	Issues Log			ITGC03	Y	Y	Initiation	Risks List on project's SharePoint site
Initiation	20	Privacy Threshold Analysis (PTA)	Required if application not previously documented and/or if changing any privacy information. DIT-T Security & DIT	Y	ITGC01	Y	Y	Initiation	Issues List on project's SharePoint site
Initiation	21	Initiation Exit Quality Review			ITGC04	Y	Y	Initiation	Privacy Threshold Analysis (PTA)
Planning & Design	22	Project Change Request Log				Y	Y	Planning & Design	Initiation Stage Exit Checklist
Planning & Design	23	Project Change Request	DIT-T and Business Approval		ITGC03	Y	Y	Planning & Design	Change Request Log Name: Change_Request_Log
									Change Request Name: CRnn_DOT_Signed (see Change Management Plan for other documents associated with the change)