## ISPE Good Practice Guide: Project Management for the Pharmaceutical Industry

PROJECT TYPE MATRIX : Key Activities per Life Cycle Phase

		PROJECT TYPE						
Phase	Aspects within phase	Facility - New Build / Revamps / Upgrades	Product Transfer	Process Improvement / Development	Іт	Automation		
General	PROJECT MANAGER	Project Manager	Product Transfer Project Manager	Business Change Manager	Project Manager	Project Manager		
	PROJECT FOCUS	Engineering						
	PROJECT GOAL	Completion of a facility to a specified level	Transfer manufacture and/or packing from one site to another	Improving supply chain & equipment/process rather than product	Delivery of a new or improved IT system	Completion of automation project (H/W or S/W) to a specified level		
Initiation	INPUTS	Business Opportunity / Requirement	Business Opportunity / Requirement	Business Opportunity / Requirement	Business Opportunity / Requirement	Business Opportunity / Requirement		
		Business Sponsor	Business Sponsor	Business Sponsor	Business Sponsor	Business Sponsor		
		Project Governance	Project Governance	Project Governance	Project Governance	Project Governance		
	KEY ACTIVITIES and Deliverables	FEASIBILITY / CONCEPT DESIGN	FEASIBILITY	FEASIBILITY	REQUIREMENTS ANALYSIS	FEASIBILITY / CONCEPT DESIGN		
		User Requirements	Based on target facility capability	Based on pilot studies or data	Use Cases / User Requirements	User Requirements		
		Cost Estimate to +/-30%	Cost Estimate	Cost Estimate	Cost Estimate to better than +/-30%	Cost Estimate to +/-30%		
		Benefits Estimation	Benefits Estimation	Benefits Estimation	Benefits Estimation	Benefits Estimation		
		PROJECT PLANNING	PROJECT PLANNING	PROJECT PLANNING	PROJECT PLANNING	PROJECT PLANNING		
		Project Delivery Strategy	Project Delivery Strategy	Project Delivery Strategy	Project Delivery Strategy	Project Delivery Strategy		
		Plan for PDP Development Phase	Plan for PDP Development Phase	Plan for PDP Development Phase	Plan for PDP Development Phase	Plan for PDP Development Phase		
	OUTPUTS	Business Case	Technical Feasibility / Business Case	Technical Feasibility / Business Case	Business Case	Business Case		
	STAGE GATE	Is the project viable?	Is the project viable?	Is the project viable?	Is the project viable?	Is the project viable?		
	INPUTS	Approved pre-project funding	Approved pre-project funding	Approved pre-project funding	Approved pre-project funding	Approved pre-project funding		
		All previous development & planning	All previous development & planning	All previous development & planning	All previous development & planning	All previous development & planning		
		Appropriately resourced team	Appropriately resourced team	Appropriately resourced team	Appropriately resourced team	Appropriately resourced team		
	KEY ACTIVITIES and Deliverables	FRONT END DESIGN	FRONT END DESIGN	FRONT END DESIGN	FUNCTIONAL SPECIFICATION	FRONT END DESIGN		
		Outline drawings	Outline drawings	Scope of changes	Functional Specification	Functional Specification		
<u> </u>		PFD's	Scope of changes	PFD & P&ID modifications	Pilot / Prototyping	Hardware Architecture / Spec		
		P&ID's	PFD & P&ID modifications	Cost Estimate +/- 10%	Hardware Architecture / Spec	Cost Estimate +/- 10%		
		Cost Estimate +/- 10%	Cost Estimate +/- 10%	Specifications	Cost Estimate +/- 10%			
POP		Specifications	Specifications		:			
		PROJECT PLANNING	PROJECT PLANNING	PROJECT PLANNING	PROJECT PLANNING	PROJECT PLANNING		
		Project Execution Plan	Project Delivery Plan	Project Delivery Plan	Project Execution Plan	Project Execution Plan		
		Procurement Strategy	Procurement Strategy	Procurement Strategy	Procurement Strategy	Procurement Strategy		
		Validation Master Plan	Validation Master Plan	Validation Master Plan	Validation Master Plan	Validation Master Plan		
		Project Schedule Risk Assessment	Project Schedule Risk Assessment	Project Schedule Risk Assessment	Project Schedule Risk Assessment	Project Schedule Risk Assessment		
		QA/QC Plan	QA/QC Plan	QA/QC Plan	QA/QC Plan	QA/QC Plan		
	OUTPUTS	Defined Technical Scope	Defined Technical Scope	Defined Technical Scope	Defined Functional Scope	Defined Technical Scope		
	2311 313	Refined Business Case	Refined Business Case	Refined Business Case	Refined Business Case	Refined Business Case		
	STAGE GATE	Should this project go ahead?	Should this project go ahead?	Should this project go ahead?	Should this project go ahead?	Should this project go ahead?		
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	INPUTS	Fully approved funding	Fully approved funding	Fully approved funding	Fully approved funding	Fully approved funding
		Appropriately resourced team	Appropriately resourced team	Appropriately resourced team	Appropriately resourced team	Appropriately resourced team
		All previous development & planning	All previous development & planning			
entation	KEY ACTIVITIES and Deliverables	DESIGN	DESIGN	DESIGN	DESIGN	DESIGN
		Specifications	Specifications	Specifications	Detailed Designs	Detailed Designs/Drawings
		Detailed Designs/Drawings	Detailed Designs/Drawings	Detailed Designs/Drawings		
		PROCUREMENT	PROCUREMENT	PROCUREMENT	PROCUREMENT	PROCUREMENT
		Bid & Award Equipment	Bid & Award Equipment			
		Bid & Award Contracts	Bid & Award Contracts			
		CONSTRUCTION	CONSTRUCTION / MODIFICATION	CONSTRUCTION (modification)	CONSTRUCTION	CONSTRUCTION
e E		Building construction	Building construction	Equipment modifications	Server / Software Installation	System Build
mple:		Equipment FAT	Equipment modifications	Equipment testing	Software Coding / Configuration	Software Configuration
_ <u>≥</u>		Equipment installation	Equipment testing		Module / Unit Testing	System FAT
			Equipment installation		System Testing / User Acceptance Testing	System Installation
		COMMISSIONING	COMMISSIONING	COMMISSIONING	COMMISSIONING	COMMISSIONING
		Verification Protocols	Verification Protocols	Verification Protocols	Verification Protocols	Verification Protocols
		Verification Records	Verification Records	Verification Records	Verification Records	Verification Records
	OUTPUTS	Qualified facility ready for beneficial use	Qualified facility ready for beneficial use	Qualified facility ready for beneficial use	Qualified system ready for beneficial use	Qualified system ready for beneficial use
	STAGE GATE	Ready for handover?	Ready for handover?	Ready for handover?	Ready for handover?	Ready for handover?
	INPUTS	Completed facility	Modifications complete	Modifications complete	Completed system	Completed system
		Qualification documentation	Qualification documentation	Qualification documentation	Qualification documentation	Qualification documentation
Φ		Operating documentation	Operating documentation	Operating documentation	Operating documentation	Operating documentation
& Closur	KEY ACTIVITIES and Deliverables	HANDOVER	HANDOVER	HANDOVER	HANDOVER	HANDOVER
		Customer acceptance	Customer acceptance	Customer acceptance	Customer acceptance	Customer acceptance
		Project final documentation	Project final documentation	Project final documentation	Project final documentation	Project final documentation
٥		Project closure	Project closure	Project closure	Project closure	Project closure
Handow		CLOSURE	CLOSURE	CLOSURE	CLOSURE	CLOSURE
		Learning review	Learning review	Learning review	Learning review	Learning review
		Business case review	Business case review	Business case review	Business case review	Business case review
		Beneficial Use review	Beneficial Use review	Beneficial Use review	Beneficial Use review	Beneficial Use review
	OUTPUTS	Facility in beneficial use	Facility in beneficial use	Facility in beneficial use	System in beneficial use	System in beneficial use
	STAGE GATE	Can the project be closed?	Can the project be closed?			