

Global Common Methodology Agile Standard Process Training Material

Global IS Process Management Team

Objectives for GCM Agile Methodology Training

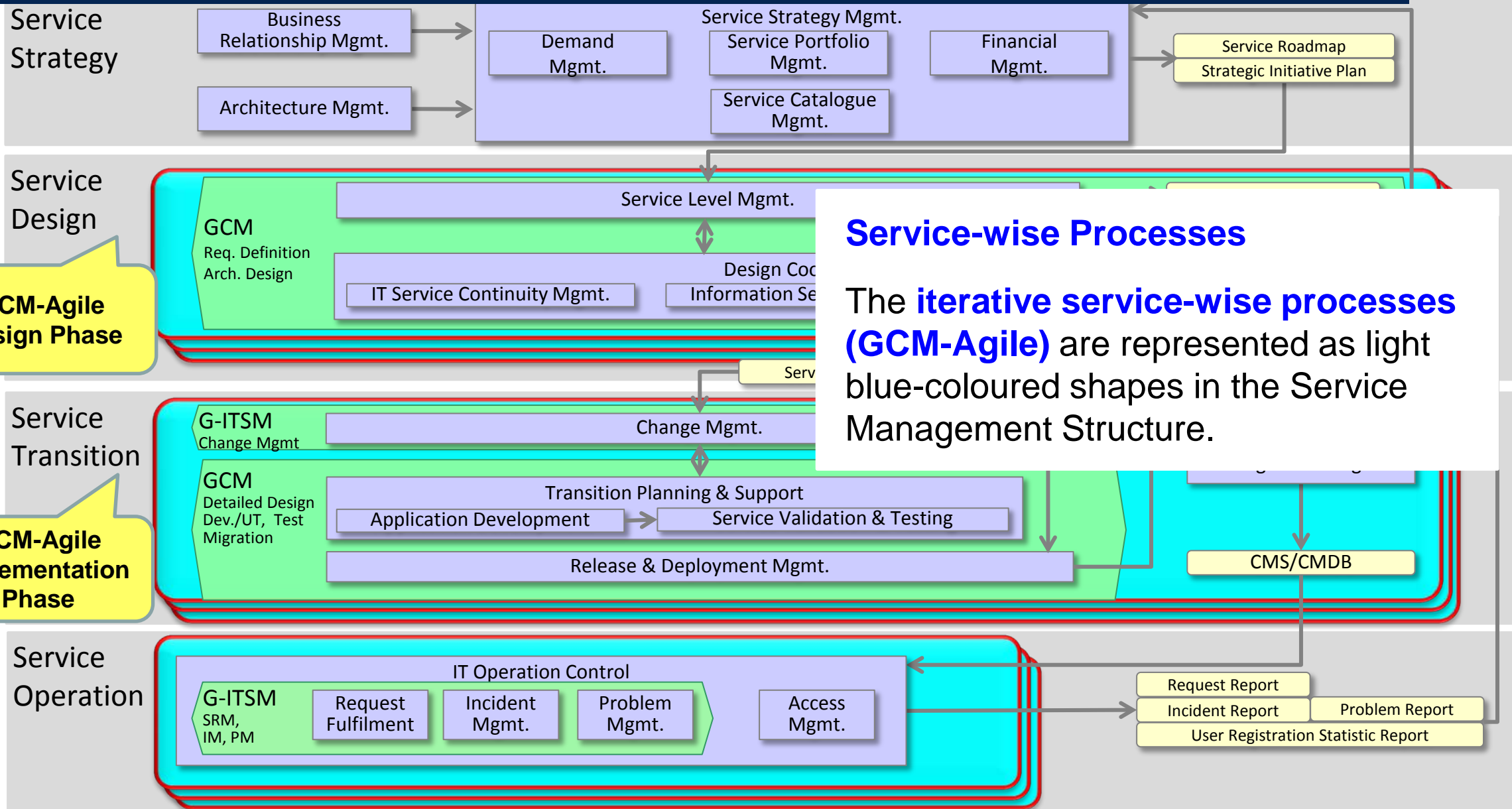
The Global Common Methodology (GCM) for Agile software development was designed to provide the basic foundation on the understanding of what Agile methodology means to the GIS organization. The training aims to familiarize participants with the phases, stages, tasks and deliverables of GCM-Agile.

By the end of the session, the participants will be able to:

- ✓ Know the underlying Agile concepts and clarify the differences between the other implementation method (ie. Waterfall)
- ✓ Have a common language, framework and perspective on the concepts and implementation tactics of Agile development

- GCM-Agile Methodology Website
- Background of Agile Development
- GCM-Agile Methodology (Map View - Tasks & Deliverables)
- Distinctive Process in Agile Development
- Roles & Responsibilities in Agile Development
- GCM-Agile Development Processes
- RACI Chart

Service Management Structure (Recap)

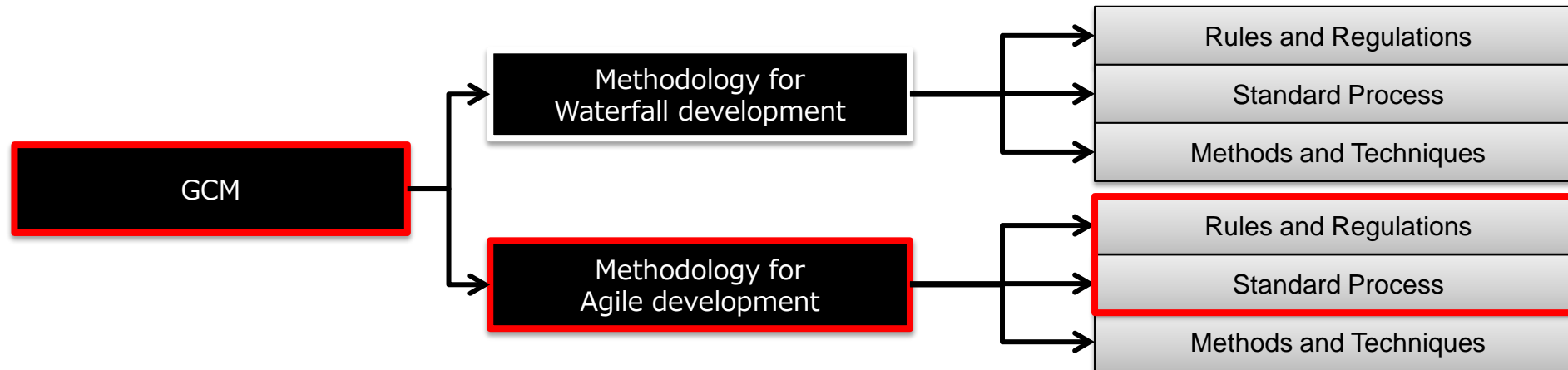


Service-wise Processes

The **iterative service-wise processes (GCM-Agile)** are represented as light blue-coloured shapes in the Service Management Structure.

Introduction to GCM-Agile Methodology Website

This training material aims to explain the Global Common Methodology for Agile Development.



GCM-Agile link:

[https://shs03.jp.sony.com/sites/PMG/GCM/SitePages/Methodology\(Agile\).aspx](https://shs03.jp.sony.com/sites/PMG/GCM/SitePages/Methodology(Agile).aspx)

Contact:

Enquiry regarding GCM-Agile Methodology website, please contact SGS/GCM/Support <sgs-gcm-support@jp.sony.com>



- Home
- Guidelines
- Methodology W/F
- Methodology Agile**
- Associated Activities
- Training
- Support Tools
- Glossary
- Access Authorization Policy
- Contact Us
- Public Comment

Methodology for Agile Development [evaluation purpose]

<Tier-1> Rules and Regulations

This tier shows the following activities required in a project along with timeline.

- Events to be held
- Documents to be created
- Tasks to be performed
- Rules to be referred

Category	Demand Review	Planning Phase		Design Phase	Implementation Phase
IS Initiative Review Process	Apply for DRP		Apply for RP1/MP1		
	Attach the required documents		Attach the required documents		
Corporate Internal Control Review				Plan CICR documents preparation	
Global Information Security Standard		Design and develop in accordance with GISS			
Enterprise Architecture		Plan and design in accordance with EA			

Tier-1: Rules & Regulation

- Tier-1 specifically points out “Rules and Regulations” - what a project should follow or consider.
- “Rules and Regulations” consists of the rules of Sony IS.
- This tier shows the following activities required in a project along with the timeline:
 - Events to be held
 - Documents to be created
 - Tasks to be performed
 - Rules to be referred

Category	Demand Review	Planning Phase		Design Phase	Implementation Phase	System Management Phase	
IS Initiative Review Process	Apply for DRP		Apply for RP1/MP1			Apply for RP3/MP3	Apply for RP4/MP4
	Attach the required documents		Attach the required documents			Attach the required documents	Attach the required documents
Corporate Internal Control Review				Plan CICR documents preparation			
Global Information Security Standard		Design and develop in accordance with GISS					
Enterprise Architecture		Plan and design in accordance with EA					
GADC			Refer to the GADC global rules				

Associated Activities

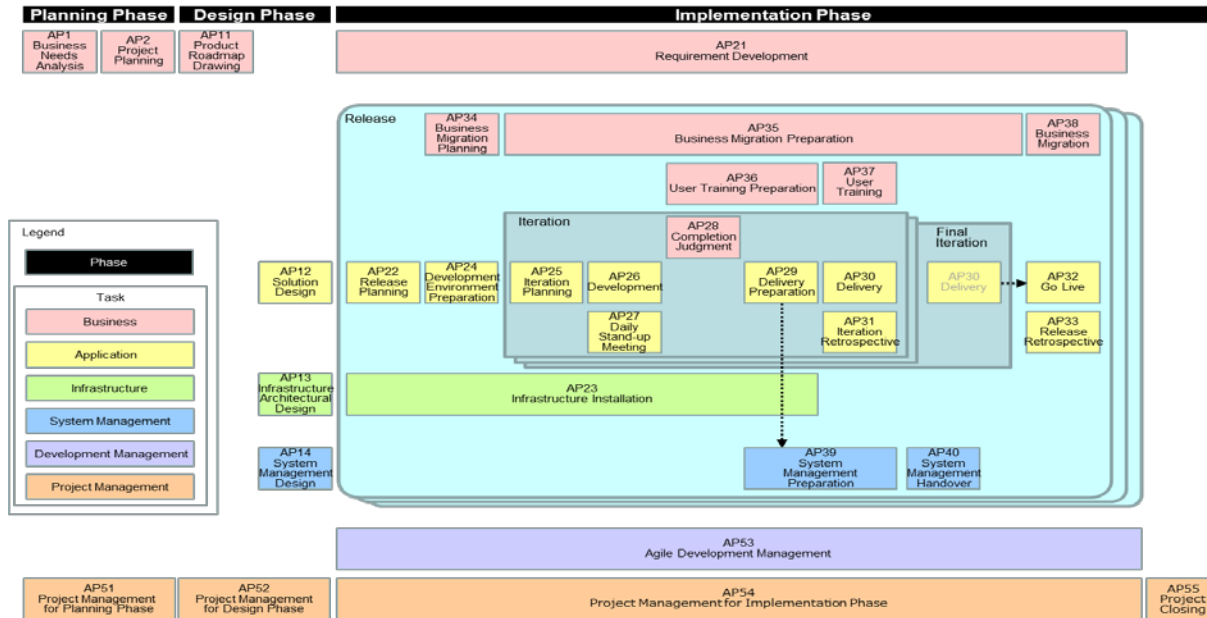


INTERNAL
USE ONLY

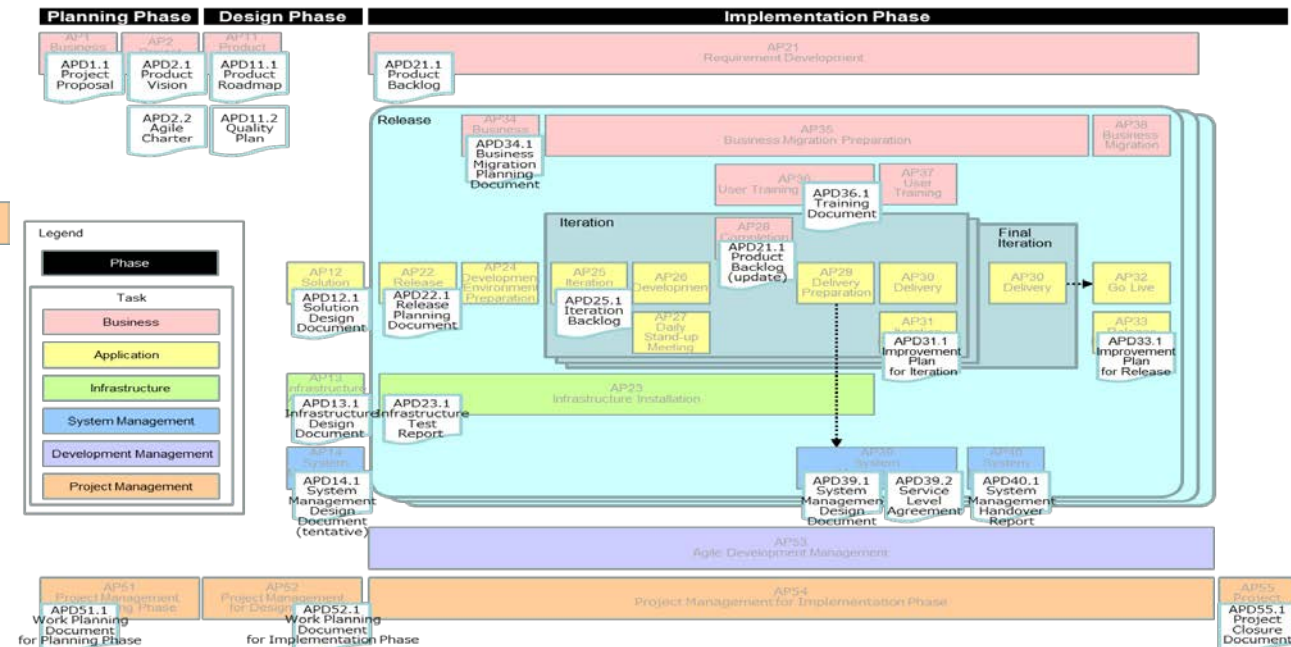
Tier-2: Standard Process

- Defines common tasks and deliverables which are used by a project for tailoring.

TASKS



DELIVERABLES



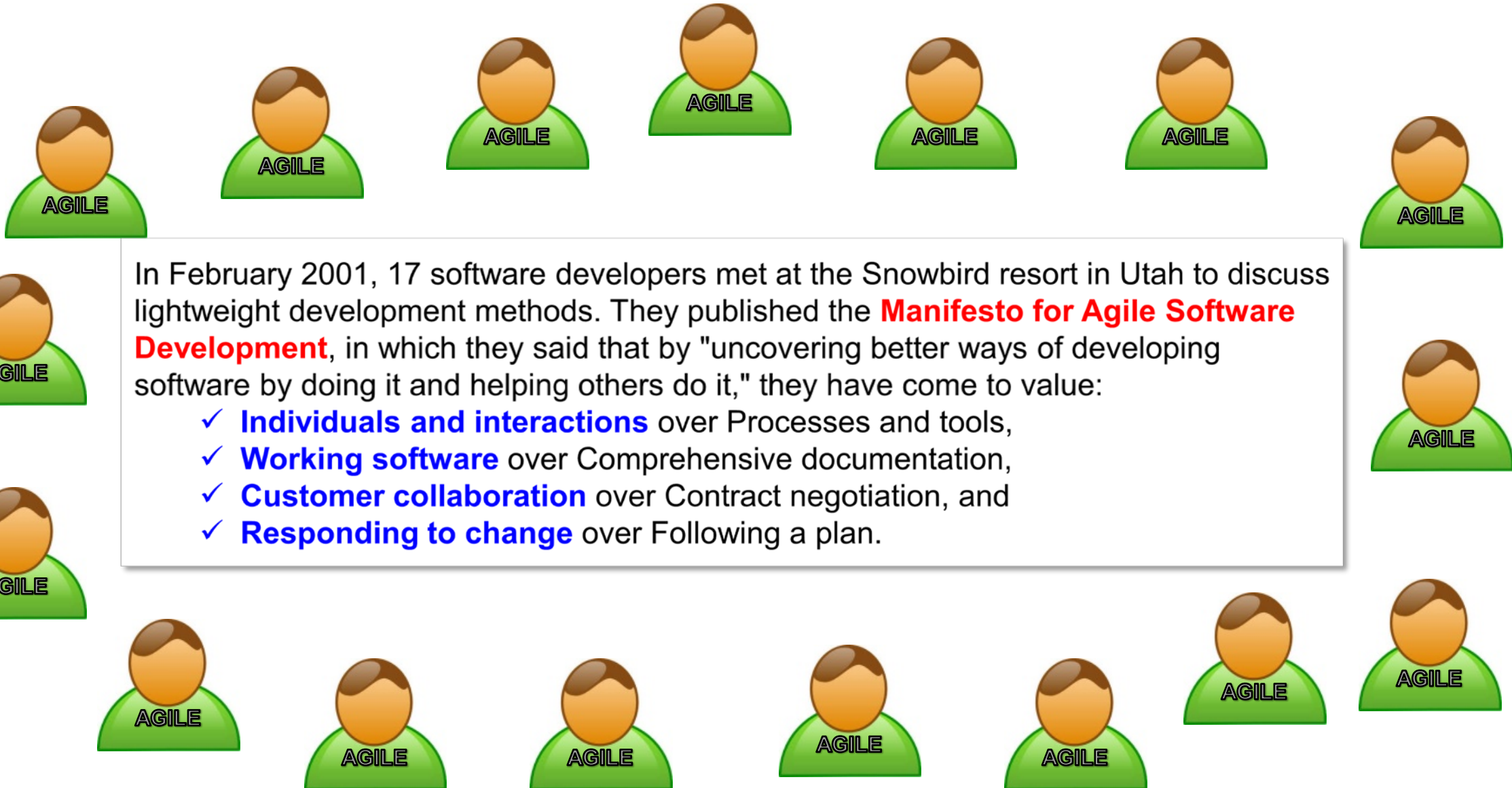
Background of Agile Development

“Agile Development” is a software development method that enable quick implementation and release of small increments of working software for customers who have urgent requirements to meet changing needs of market and end users.



Manifesto for Agile Software Development

SONY



We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

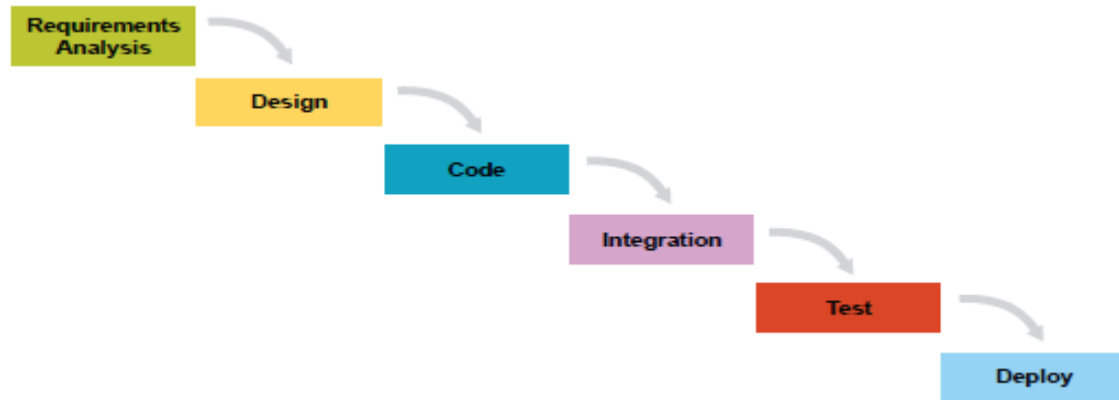
That is, while there is value in the items on the right, we value the items on the left more.

KentBeck MikeBeedle ArievanBennekum AlistairCockburn
WardCunningham MartinFowler JamesGrenning JimHighsmith
AndrewHunt RonJefferies JonKern BrianMarick RobertC.Martin
SteveMeller KenSchwaber JeffSutherland DaveThomas

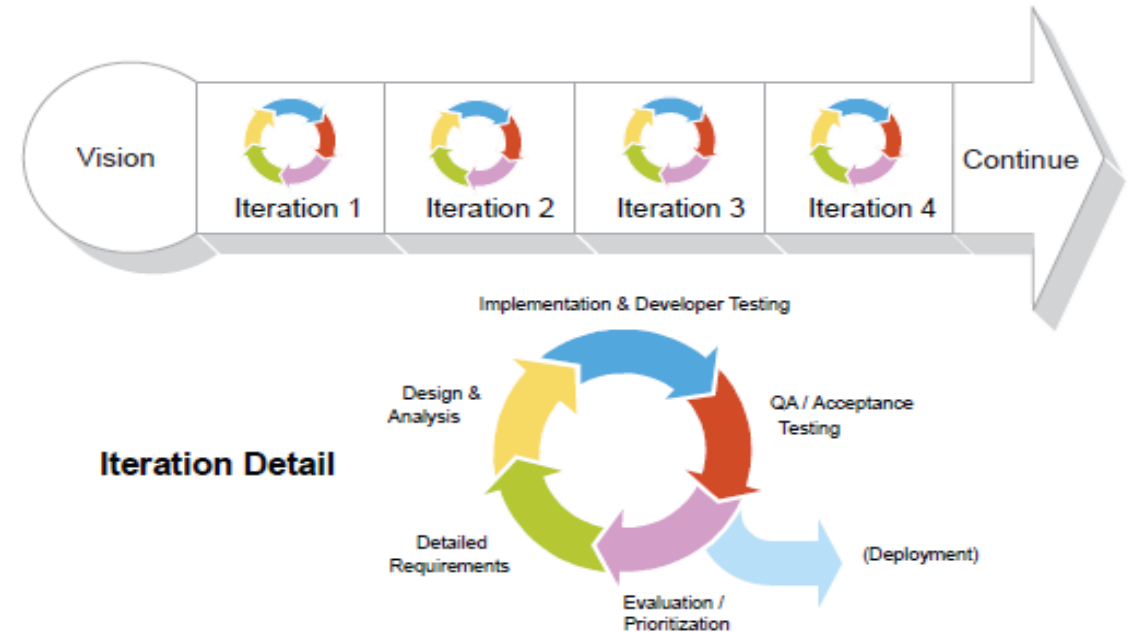
12 Principles of Agile Software

- 01** Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
- 02** Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
- 03** Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
- 04** Business people and developers must work together daily throughout the project.
- 05** Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
- 06** Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- 07** Working software is the primary measure of progress.
- 08** The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
- 09** Continuous attention to technical excellence and good design enhances agility.
- 10** Simplicity—the art of maximizing the amount of work not done—is essential.
- 11** The best architectures, requirements, and designs emerge from self-organizing teams.
- 12** At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Agile's incremental, iterative approach trades the traditional phases of "waterfall" development for the ability to develop a subset of high-value features first, incorporating feedback sooner.



Traditional “waterfall” development depends on a perfect understanding of the product requirements at the outset and minimal errors executing each phase.



Agile blends all development activities into each iteration, adapting to discovered realities at fixed intervals.

Source: <http://scrumtrainingseries.com/>

When a project team is considering to apply Agile Development, it is necessary to confirm the following items and decide whether to adopt Agile Development or not:

- ✓ Mission of project are quick response to changes and prompt release of product to the market and the business.
- ✓ Agile Development Group is established.
- ✓ Software tool environment for Agile Development is established (e.g. requirement management, continuous integration and test automation).
- ✓ Corporate Internal Control Review (CICR) is not required for that system.

Check the above items carefully whether to apply Agile Development to projects and more so for mission-critical system development.

For more details on Adoption Criteria, please refer to the following link:

<https://shs03.jp.sony.com/sites/ADSC/G-ADC/Delivery%20Competency/Agile/Shared%20Documents/Adoption%20Criteria.pdf>



Agile Adoption Criteria Definition (by GADC Taskforce)

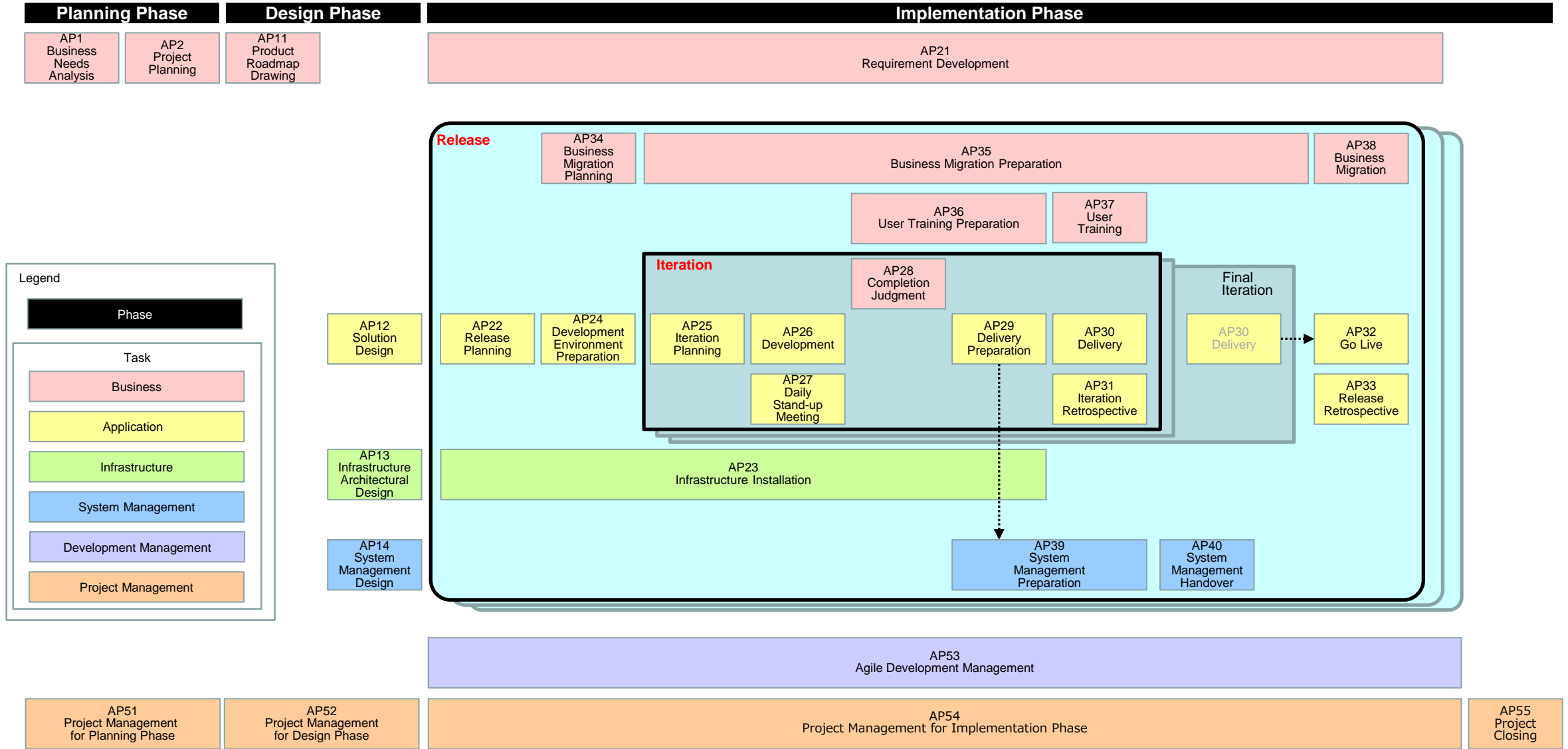
No	Category	Factors	Agile	Waterfall	Type
1	External factors	Customer involvement	High *Customer can involve development actively.	Low *Customer don't involve development	recommendatory
2		Dynamic business need	High *Lack of clear definition of project *Lack of business requirements of project *Lots of changes, business priorities changes a lot per market demand or due to a technological advance for an innovative, creative or new project which require a lot of research and changes to it before launching the final product, needs flexibility	Low *highly detailed definition *highly detailed requirements *for building large scale items, following a proof of concept or prototype	recommendatory
3		Customer flexibility for schedule and cost changes	High *Customer can tolerate the reality that dynamic business need would lead to schedule or cost changes.	Low *Customer can't tolerate schedule or cost changes.	recommendatory
4		Need for rapid time to market	High *Need to release products as soon as possible.	Low *Full package within a determined timeline	recommendatory
5		Resolution capability of business	High *Business can be divided into some parts as iterations	Low *Fit into any kind of business	recommendatory
6	Internal factors	Level of integrations with external systems	Low *Less in number, straightforward, easy or known	High *Numerous, unknown, complex	recommendatory
7		Decision power of the project team	High *Rapid development, repetitive, trusted	Low *Subcommittees, steering committees, micromanaging executives	recommendatory
8		Documentation need	Low *System enhancements, doing a repetitive work	High *Regulatory, legal, operational critical	recommendatory
9		Project management constraint (Tracking, Control, Reporting)	Low *Complexity is low, budget and time constraints you have to calculate for changes in the project are low	High *Large budget or timeline constraint, finite resource timing, legal	recommendatory
10		Software tool environment necessity	High *Need rapid release and cost down by automation tool.	Low *In the case of quality and final delivery, do not care whether to use tools.	recommendatory
11		Necessity of knowledge about related methodology or support roles	High *Members need to know agile knowledge or project can get enough support from others.	Low *Members only need to know about part of water fall flow.	mandatory
12		Necessity of Corporate Internal Control Review (CICR)	Low *System which is not in CICR scope can apply in Agile.	High *System which is in CICR scope should apply in water fall.	recommendatory

<https://shs03.jp.sony.com/sites/ADSC/G-ADC/Delivery%20Competency/Agile/Shared%20Documents/Adoption%20Criteria.pdf>

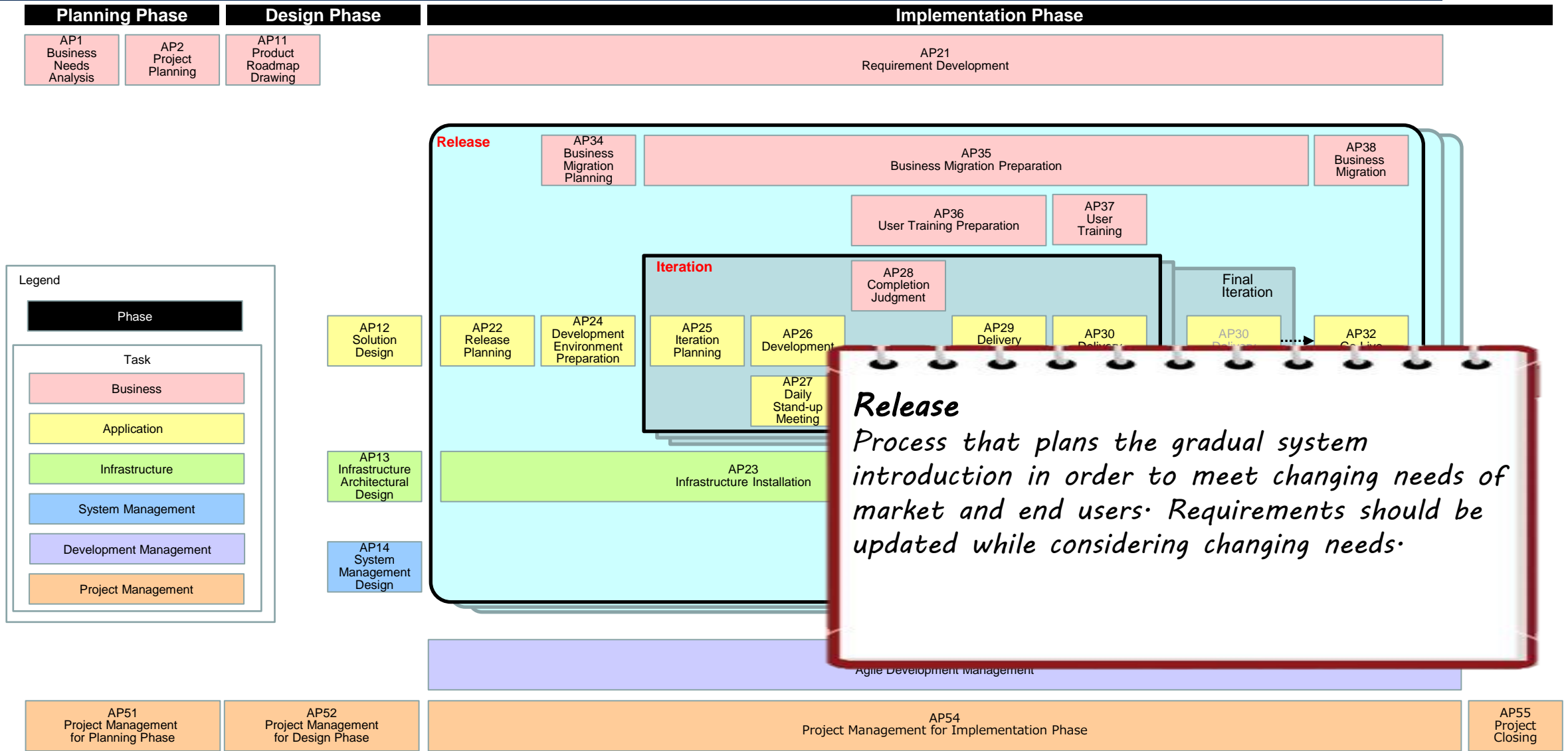
GCM-Agile Methodology

Map View - Tasks & Deliverables

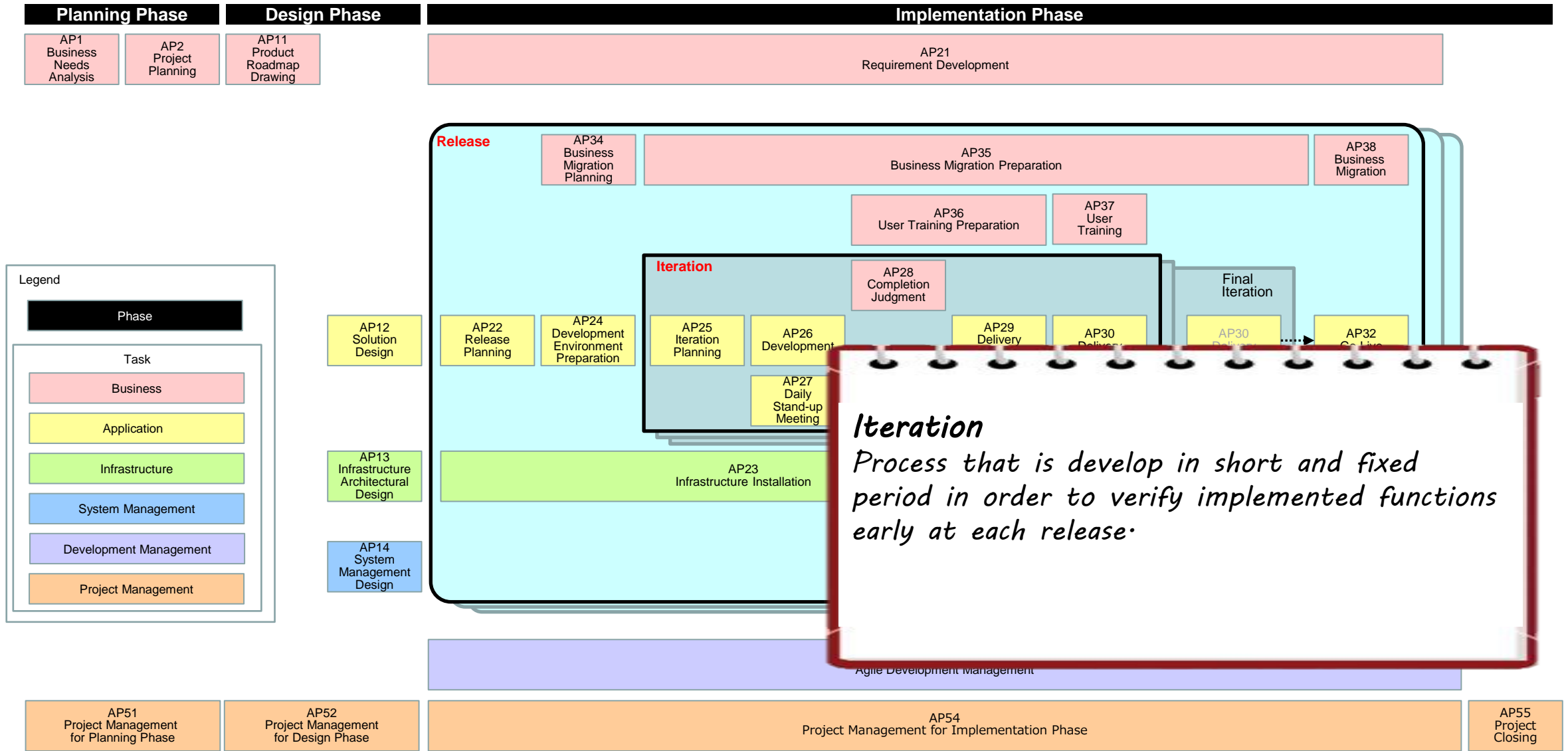
Map View – Common Task



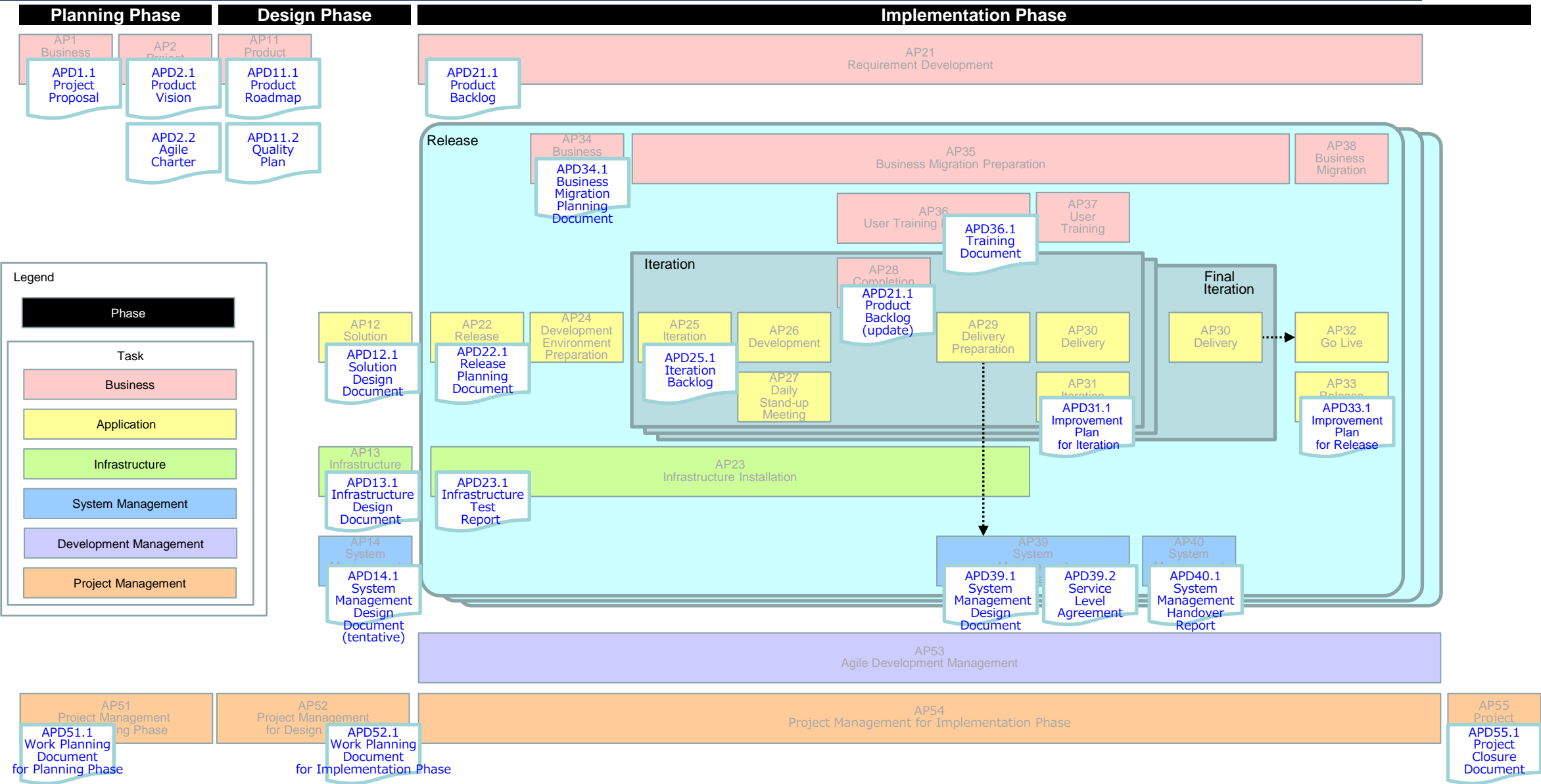
Map View – Common Task



Map View – Common Task



Map View – Deliverable



Distinctive Process in Agile Development

Distinctive Process in Agile Development

“Agile Development” is a software development method to enable quick implementation and release of small increments of working software for customers who have urgent requirements to meet changing needs of market and end users. The distinctive processes between requirement and implementation are the following:

- A) Break down the high level requirements of the relevant release into the system requirements and specifications.
- B) Estimate the development man-hour and make the iteration plan from the requirements which are matched to the release date.
- C) Postpone the items which are not implemented to the subsequent requirements to be implemented.
- D) Update the implementation items from the requirements of relevant release, the new requirements and the postponed requirements.

- repeat the above processes -

- E) When reaching to the limit of project cost or period, the project is terminated even if the requirements remain.

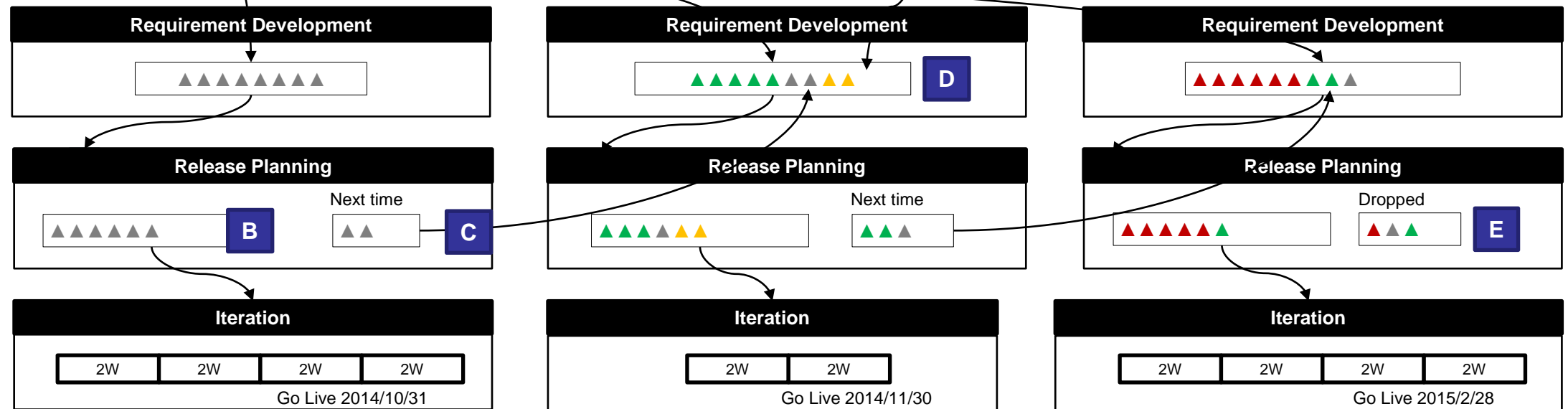
Initial Requirements

Release Date	Requirements
2014/10/31	■ ■ ■ ■ ■
2014/11/30	■ ■ ■
2015/2/28	■ ■ ■ ■

New Requirements

Release Date	Requirements
2014/11/30	■




□ High Level Requirement
△ Detailed Requirement



Some distinctive processes between requirement and implementation:

A. Break down the high level requirements of the relevant release into the system requirements and specifications.

Initial Requirements

Release Date	2014/10/31	2014/11/30	2015/02/28
Requirements			

Product Backlog Refinement

- ✓ Focus is on large items that will be worked on soon
- ✓ We split these items into smaller slices, and get a better understanding of the details

Some distinctive processes between requirement and implementation:

B. Estimate the development man-hour and **make the iteration plan** from the requirements which are matched to the release date.

Initial Requirements

Release Date	2014/10/31	2014/11/30	2015/02/28
Requirements			



Product Backlog Refinement

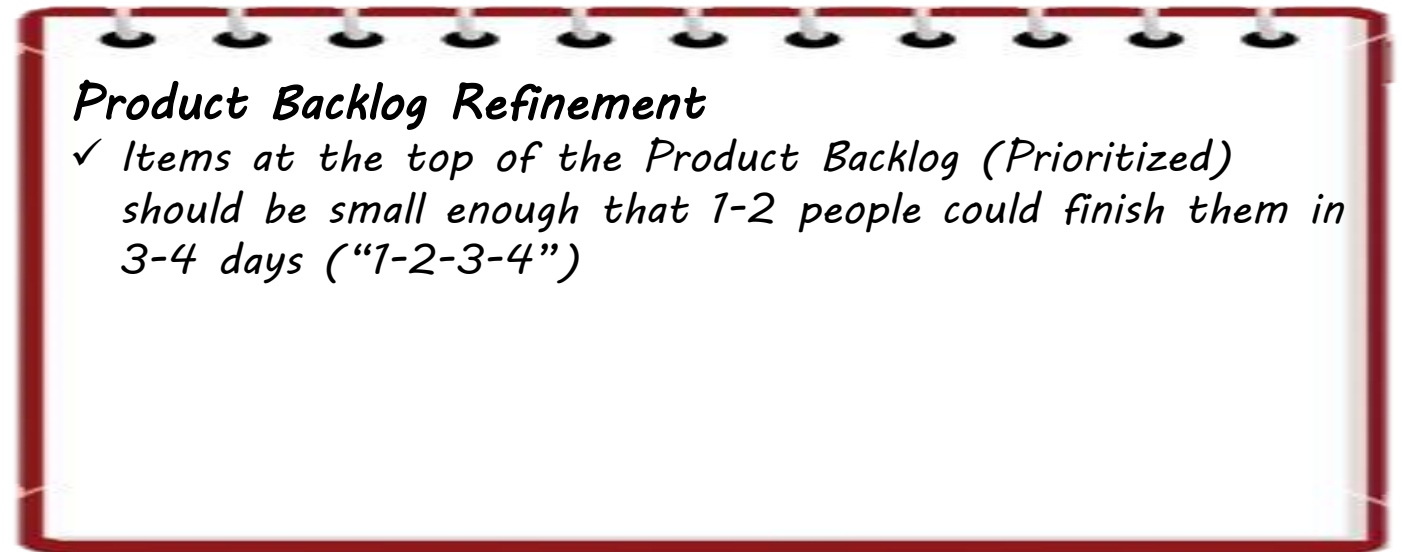
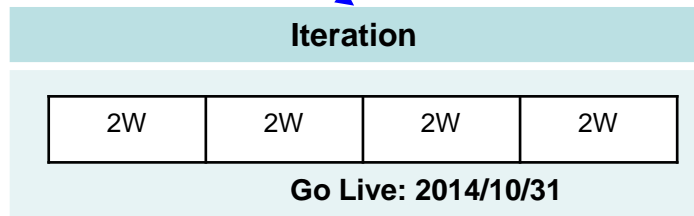
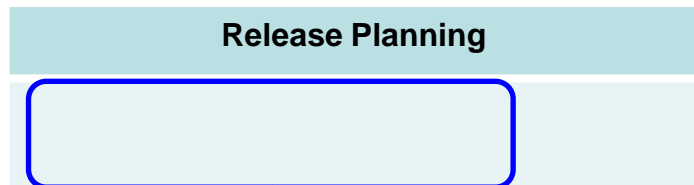
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Some distinctive processes between requirement and implementation:

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Initial Requirements

Release Date	2014/10/31	2014/11/30	2015/02/28
Requirements			

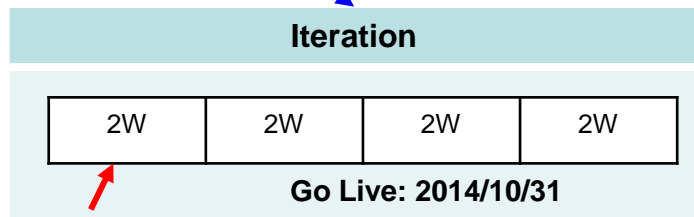
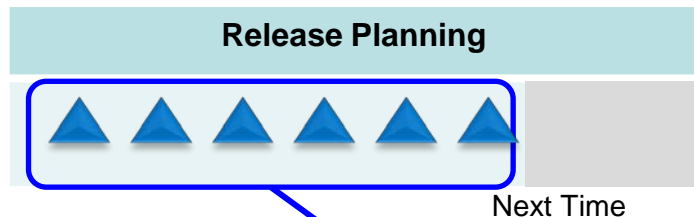


Some distinctive processes between requirement and implementation:

C. Postpone the items which are not implemented to the subsequent requirements to be implemented.

Initial Requirements

Release Date	2014/10/31	2014/11/30	2015/02/28
Requirements			



SPRINT

"Done" Increment

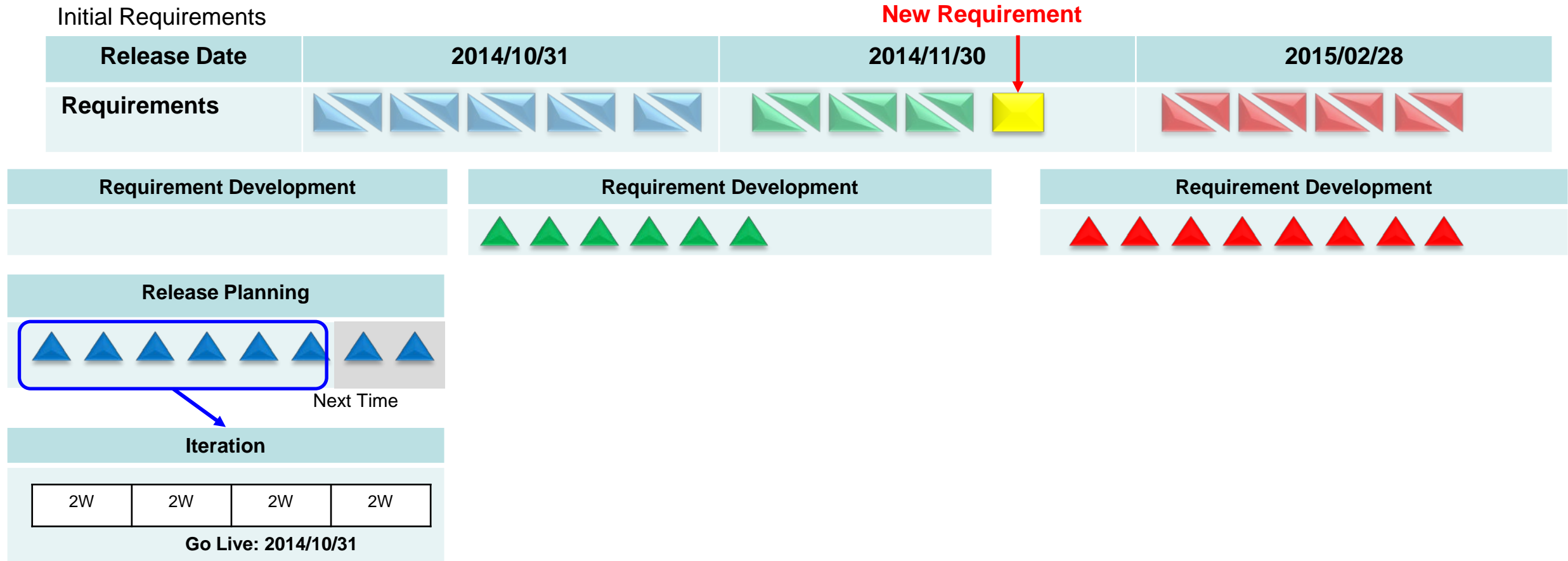
- ✓ At the end of each Sprint, the Dev Team aims to have a "Done Increment" of the Product
- ✓ This means: a useful subset of the functionality, meeting agreed acceptance criteria and built to an agreed-upon level of quality and "doneness" (the Definition of Done)

[https://en.wikipedia.org/wiki/Scrum_\(software_development\)](https://en.wikipedia.org/wiki/Scrum_(software_development))

Distinctive Process in Agile Development

Some distinctive processes between requirement and implementation:

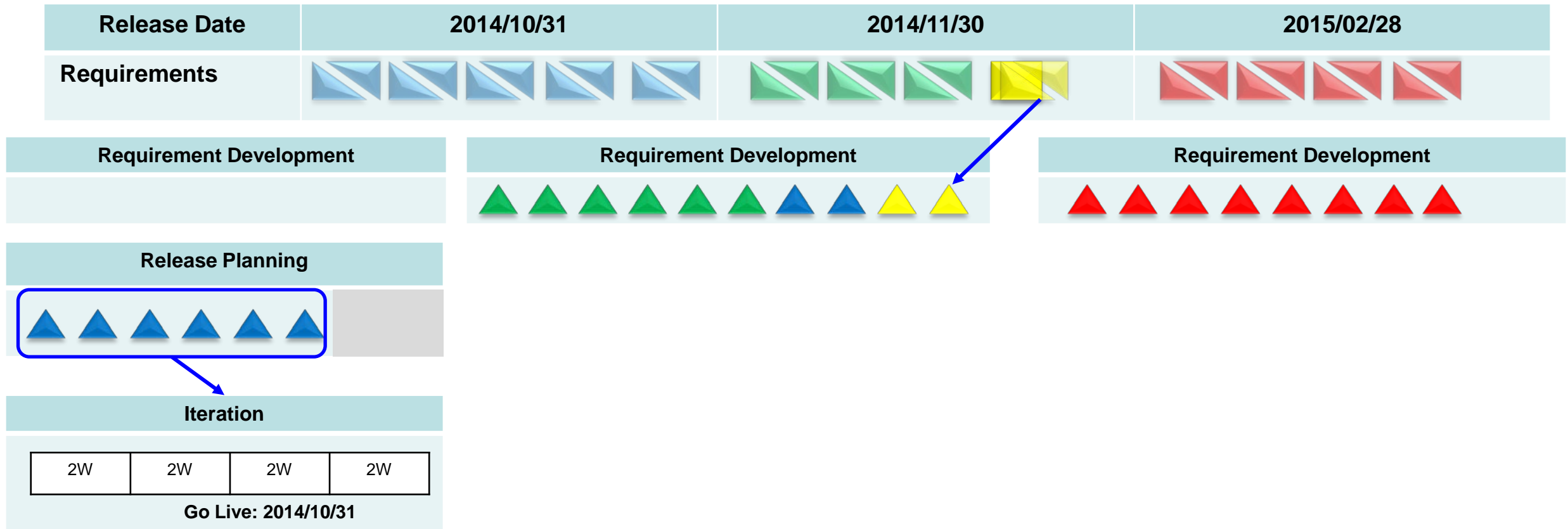
D. Update the implementation items from the requirements of relevant release, the **new requirements** and the **postponed requirements**.



Distinctive Process in Agile Development

Some distinctive processes between requirement and implementation:

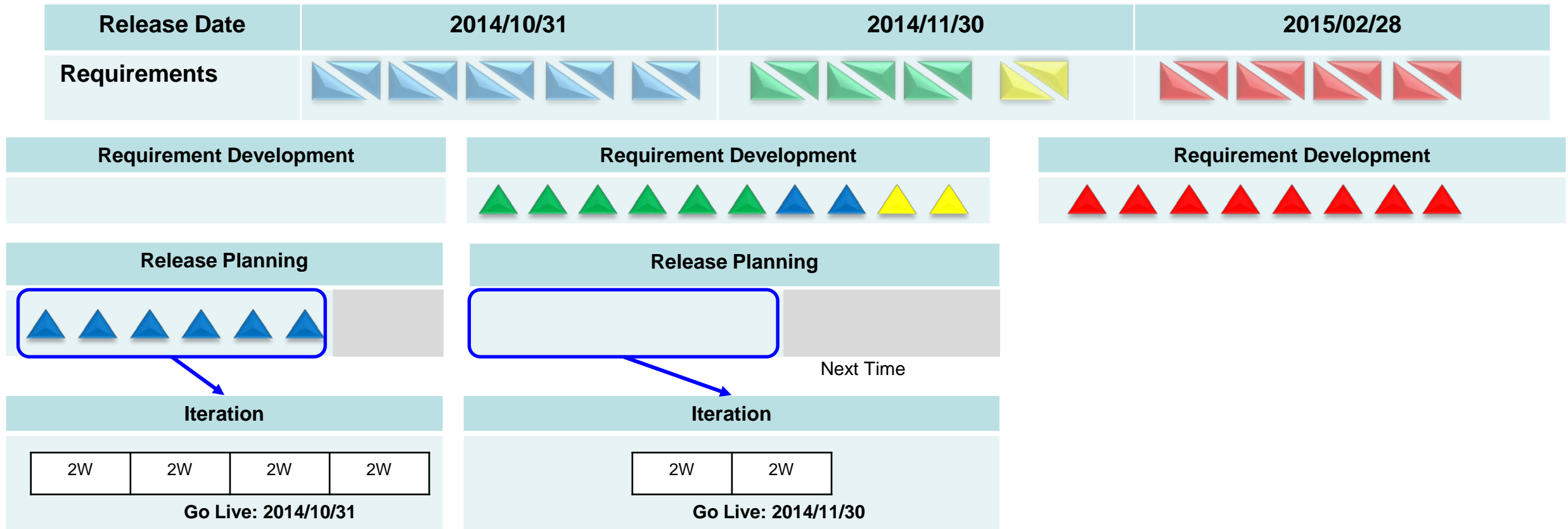
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Distinctive Process in Agile Development

Some distinctive processes between requirement and implementation:

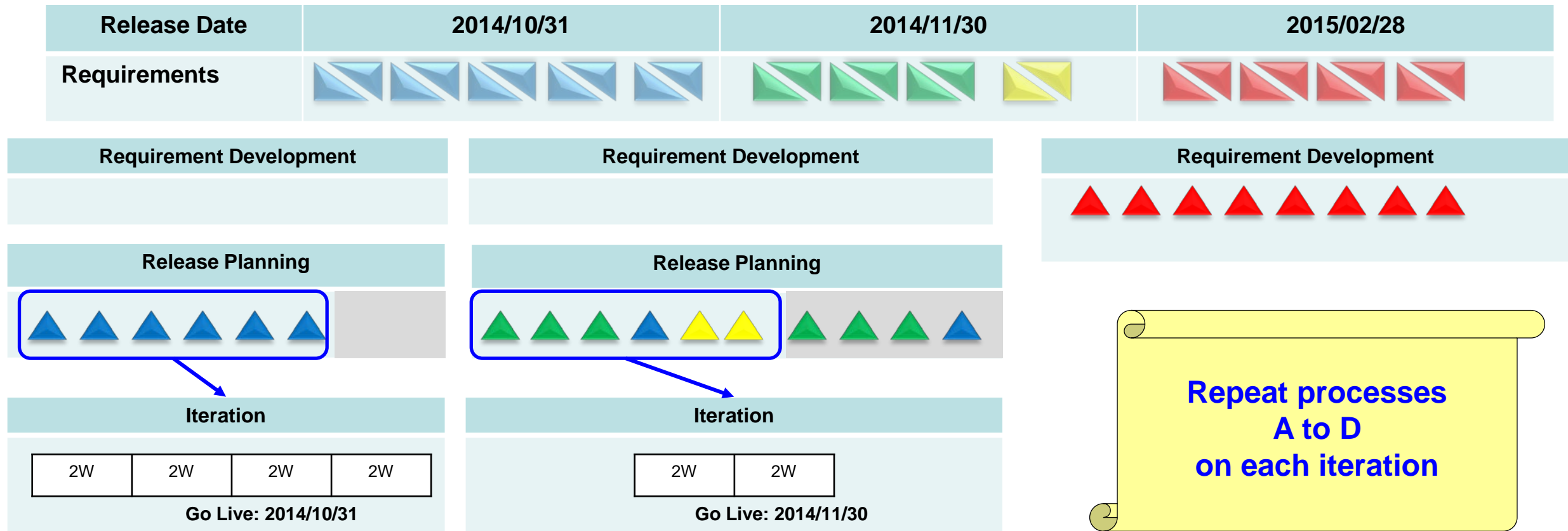
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Distinctive Process in Agile Development

Some distinctive processes between requirement and implementation:

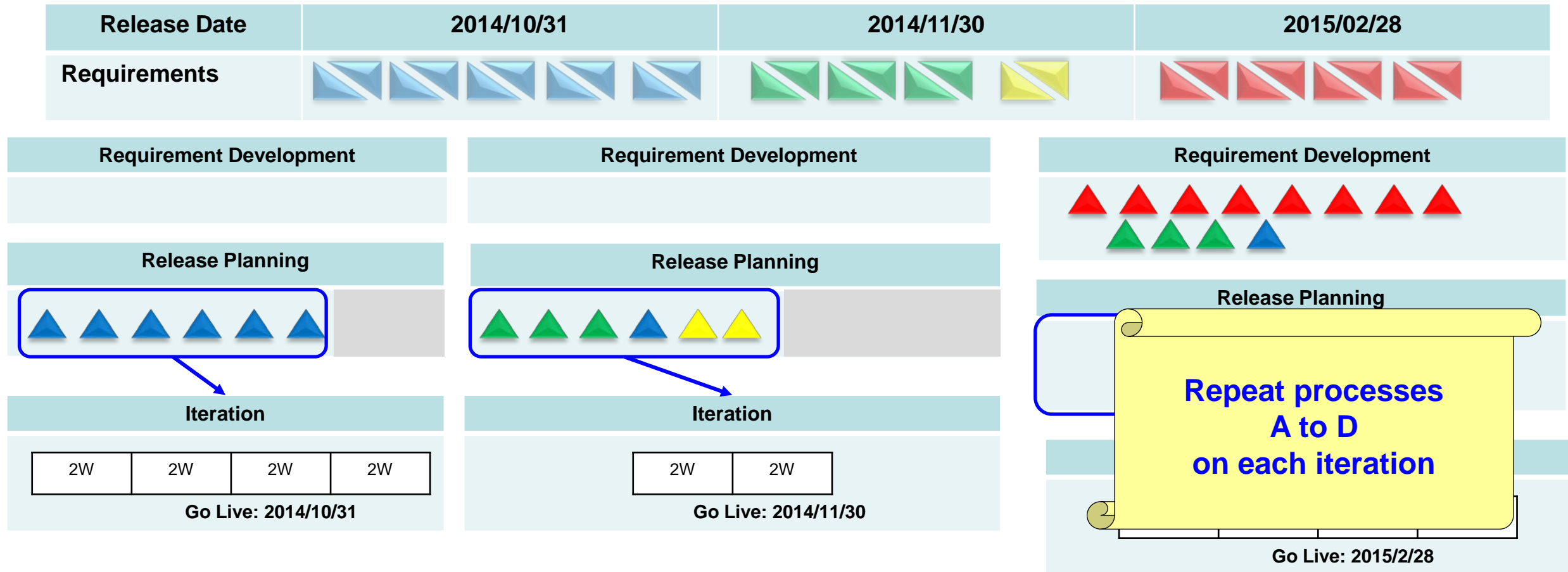
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Distinctive Process in Agile Development

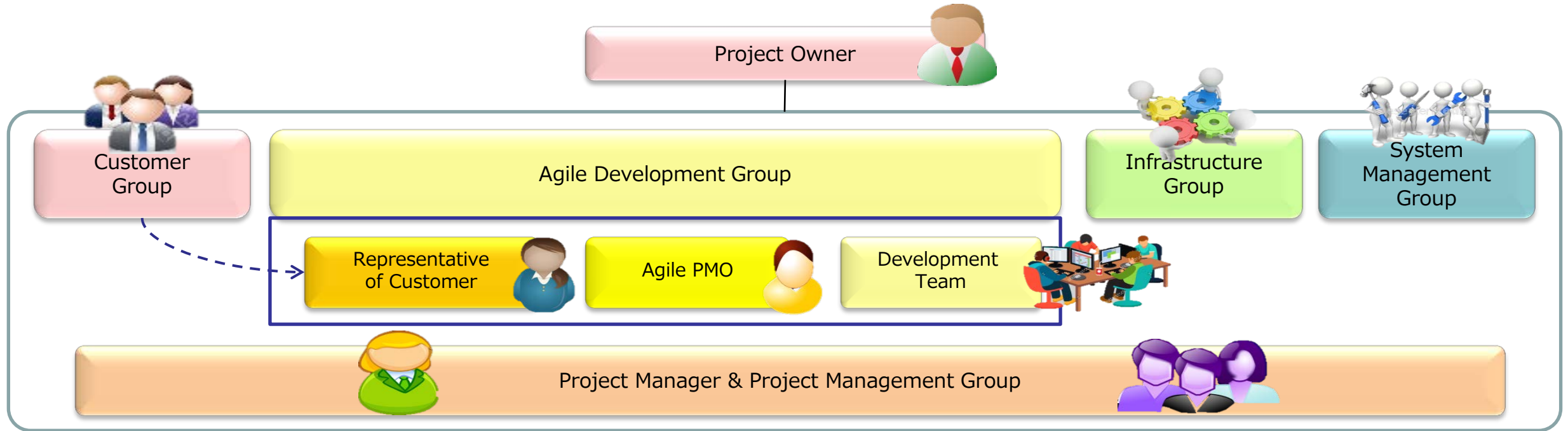
Some distinctive processes between requirement and implementation:

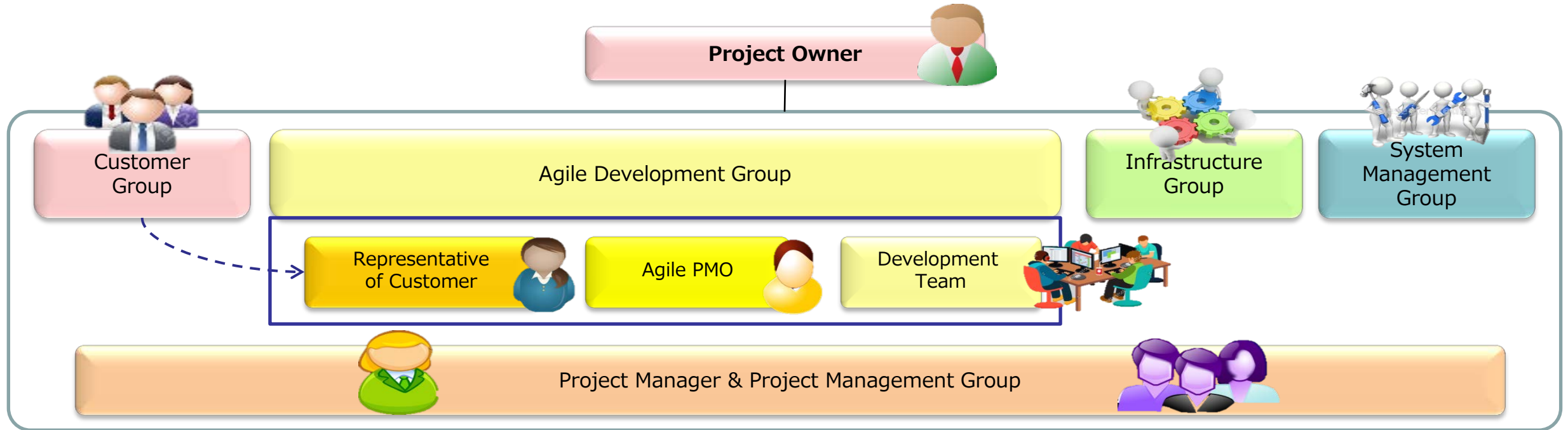
E. When reaching to the **limit of project cost or period, the project is **terminated** even if the requirements remain.**



Roles & Responsibilities in Agile Development

Roles & Responsibilities in Agile Development

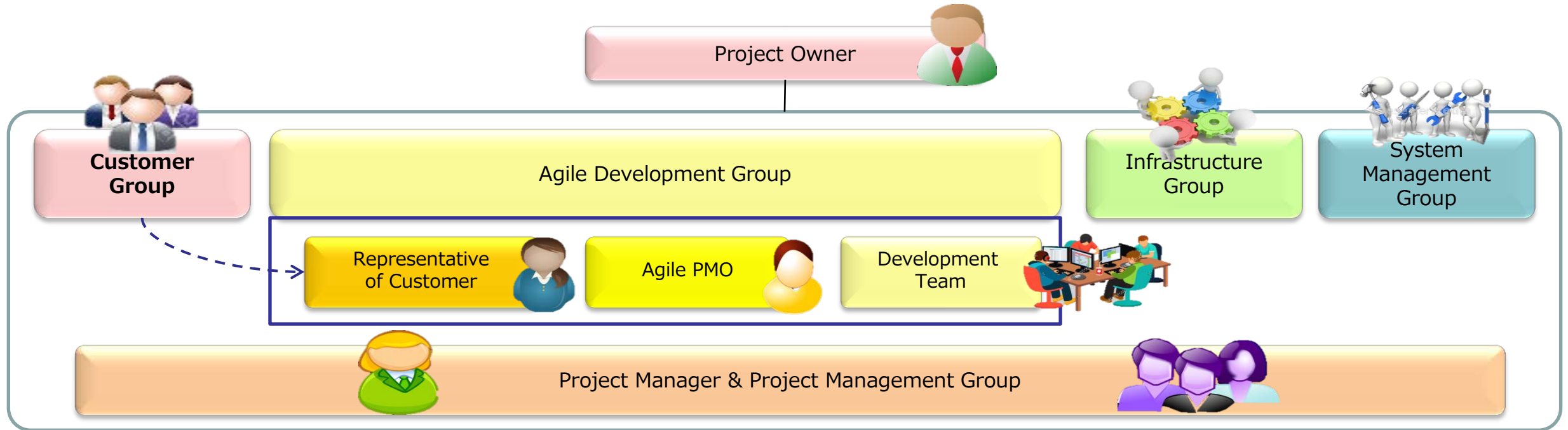




Project Owner



- ✓ Approves the plan of business transformation and IT adoption.
- ✓ Manages the fund raising and the budget controlling.

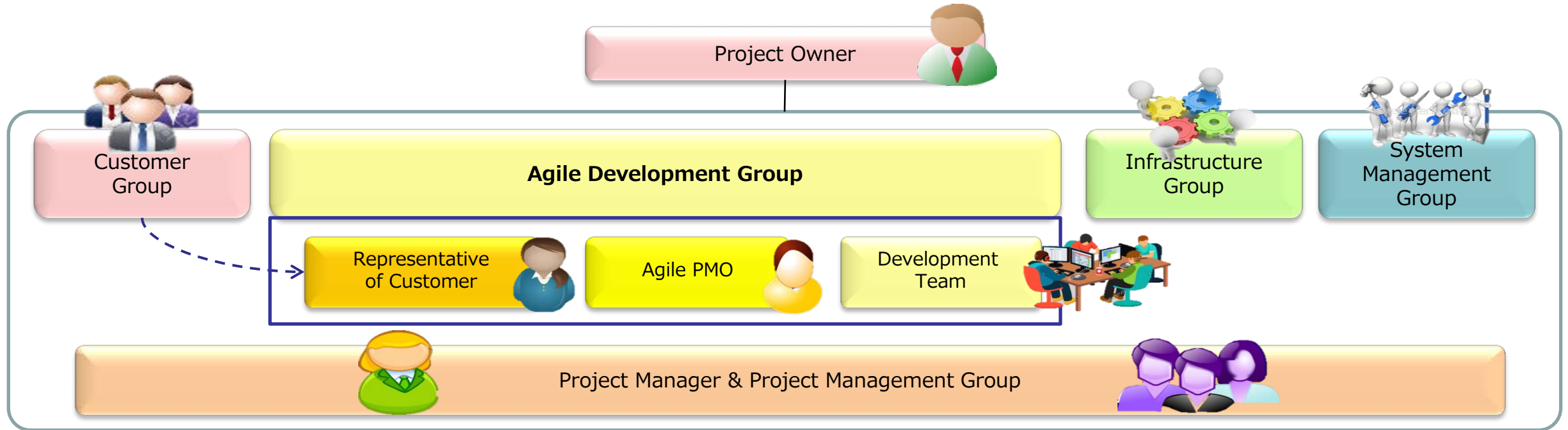


Customer Group



- ✓ Plans and executes the business transformation and the system development to meet needs of market and business.
- ✓ Prepares the environment for training and migration, and migrate the new business smoothly.

Roles & Responsibilities in Agile Development

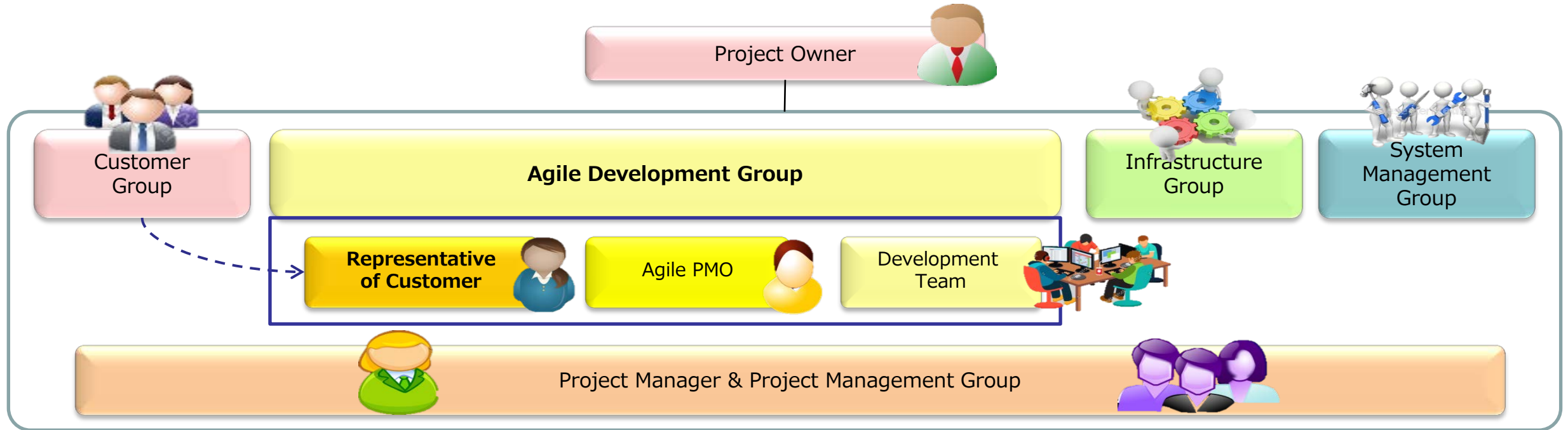


Agile Development Group:

✓ Representative of Customer

✓ Agile PMO

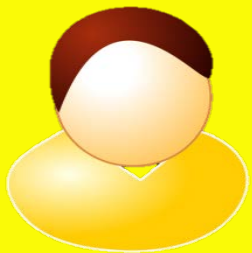
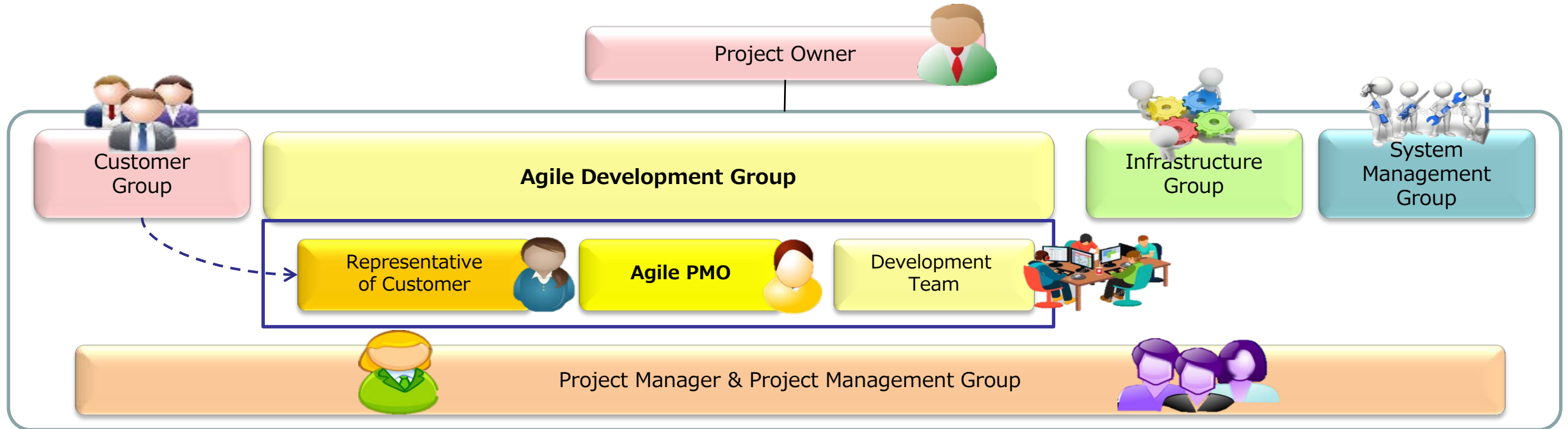
✓ Development Team



Representative of Customer

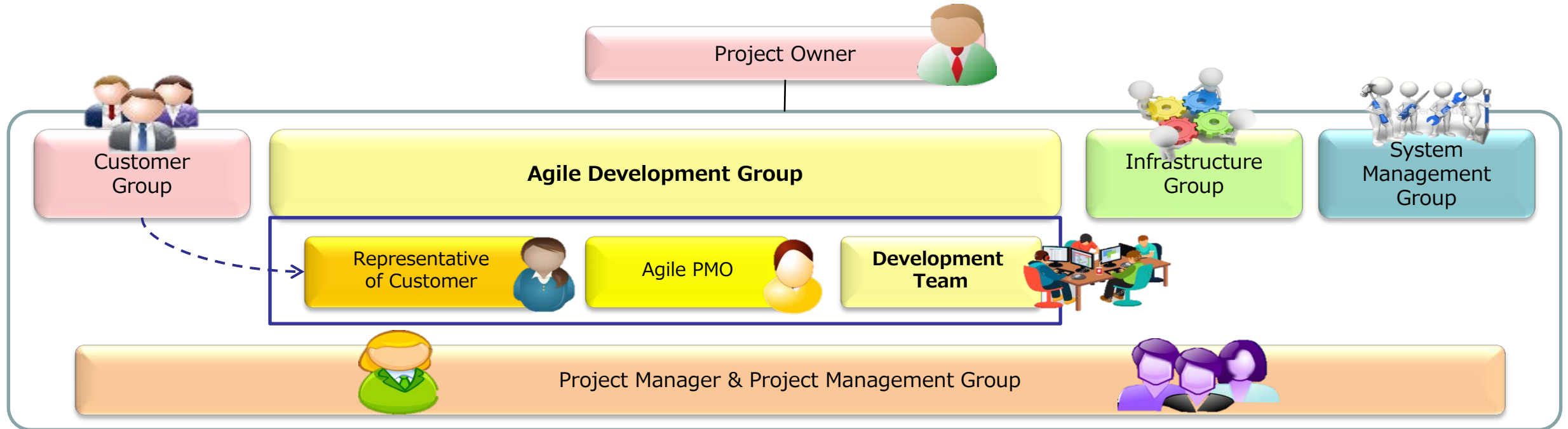


- ✓ Develop the requirements continuously while considering the changing needs of market and users.
- ✓ Control the priority of implementation while communicating with development team.
- ✓ Accept the system which is implemented at the each iteration.
- ✓ Similar to 'Product Owner' defined in SCRUM



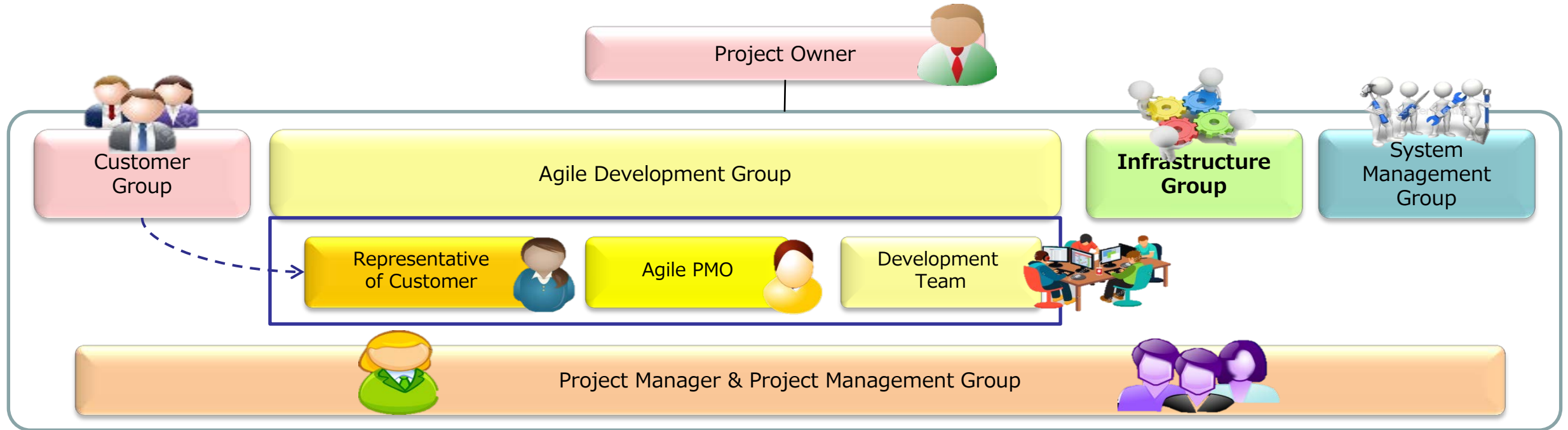
Agile Project Management Office (PMO)

- ✓ Support the Representative of Customer in requirements development.
- ✓ Maintain and Improve the communication environment for Agile Development Group.
- ✓ Maintain and Improve the development support tools for Agile Development Group.
- ✓ Similar to 'SCRUM Master' defined in SCRUM



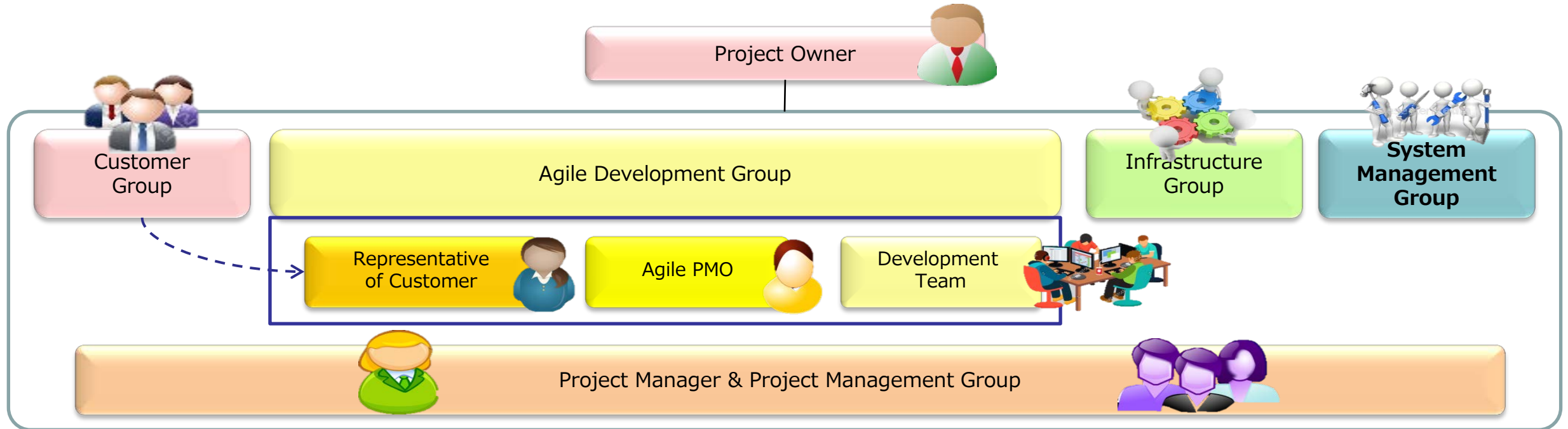
Development Team

- ✓ Make the release plan and the iteration plan.
- ✓ Develop and release the system according to the plan.



Infrastructure Group

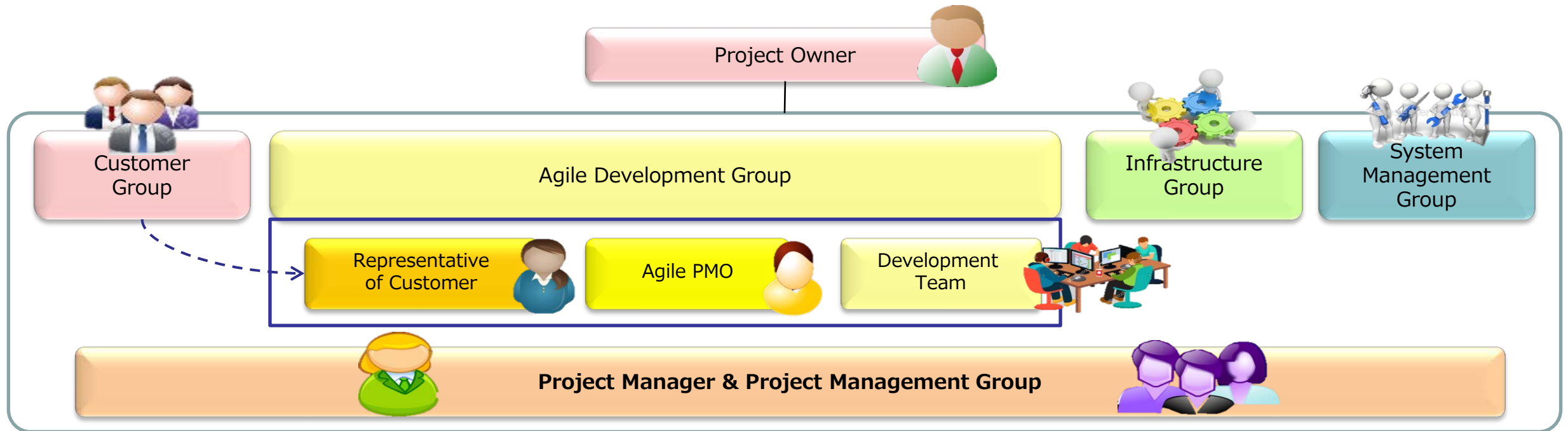
- ✓ Design, implement, test and provide the following system environments: application development environment, test environment, training environment, migration environment and production environment.



System Management Group

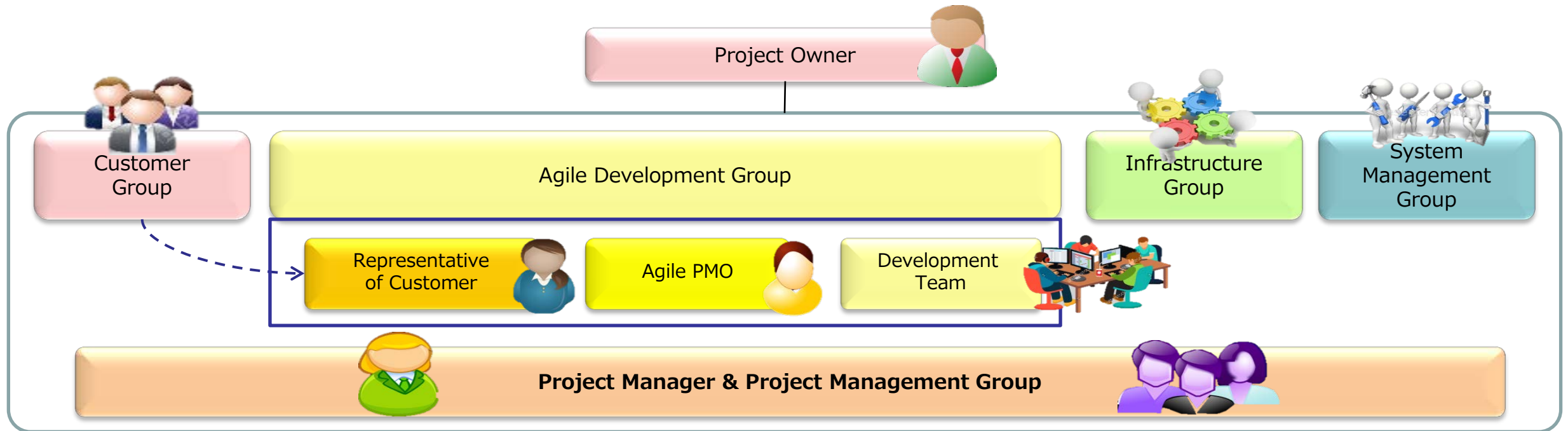
- ✓ Define the service requirements for system management.
- ✓ Implement the organization and the detailed procedures to provide services.





Project Manager

- ✓ Lead and manage project.
- ✓ Bear the ultimate responsibility of project execution.



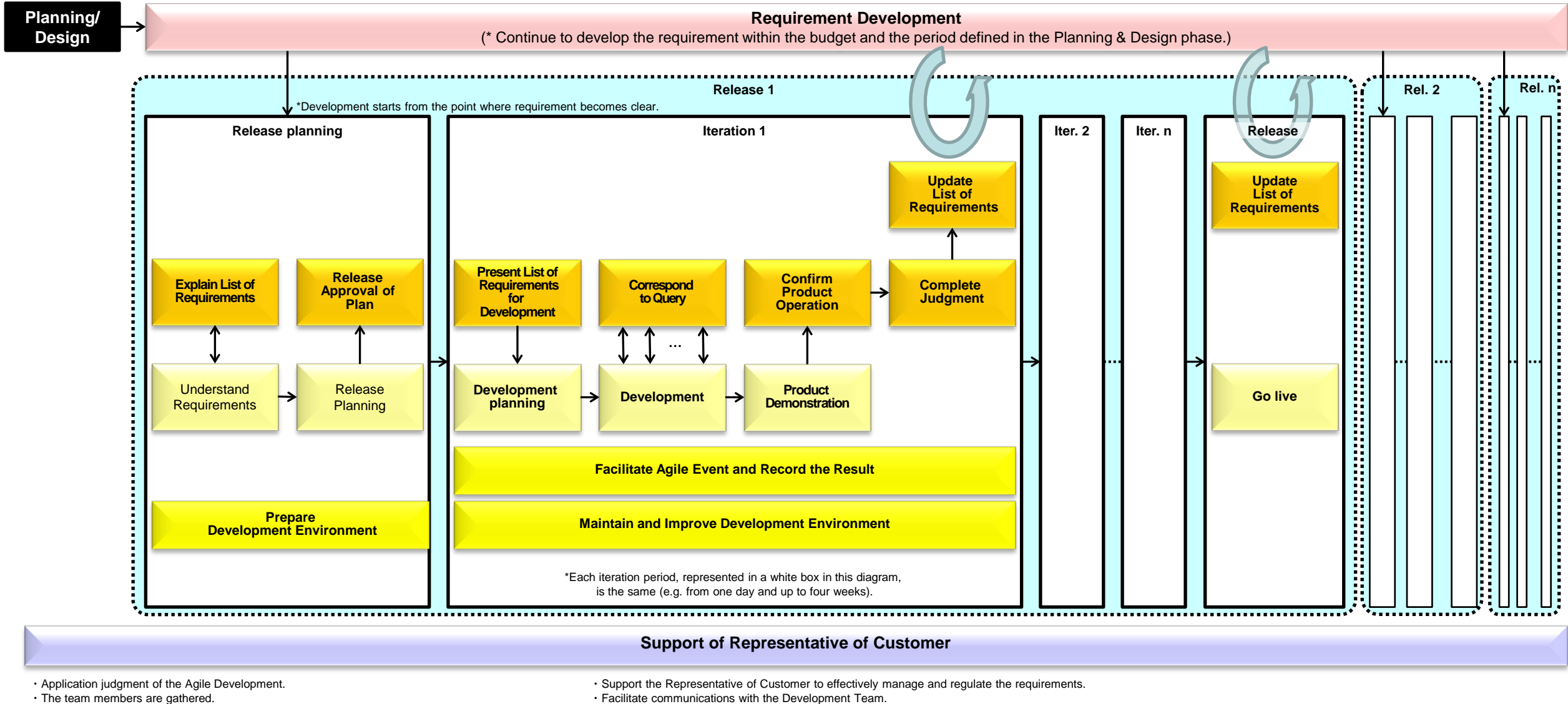
Project Management Group

- ✓ Define the management rules to achieve the project goal and manage the project.

Responsibilities of Agile Development Group

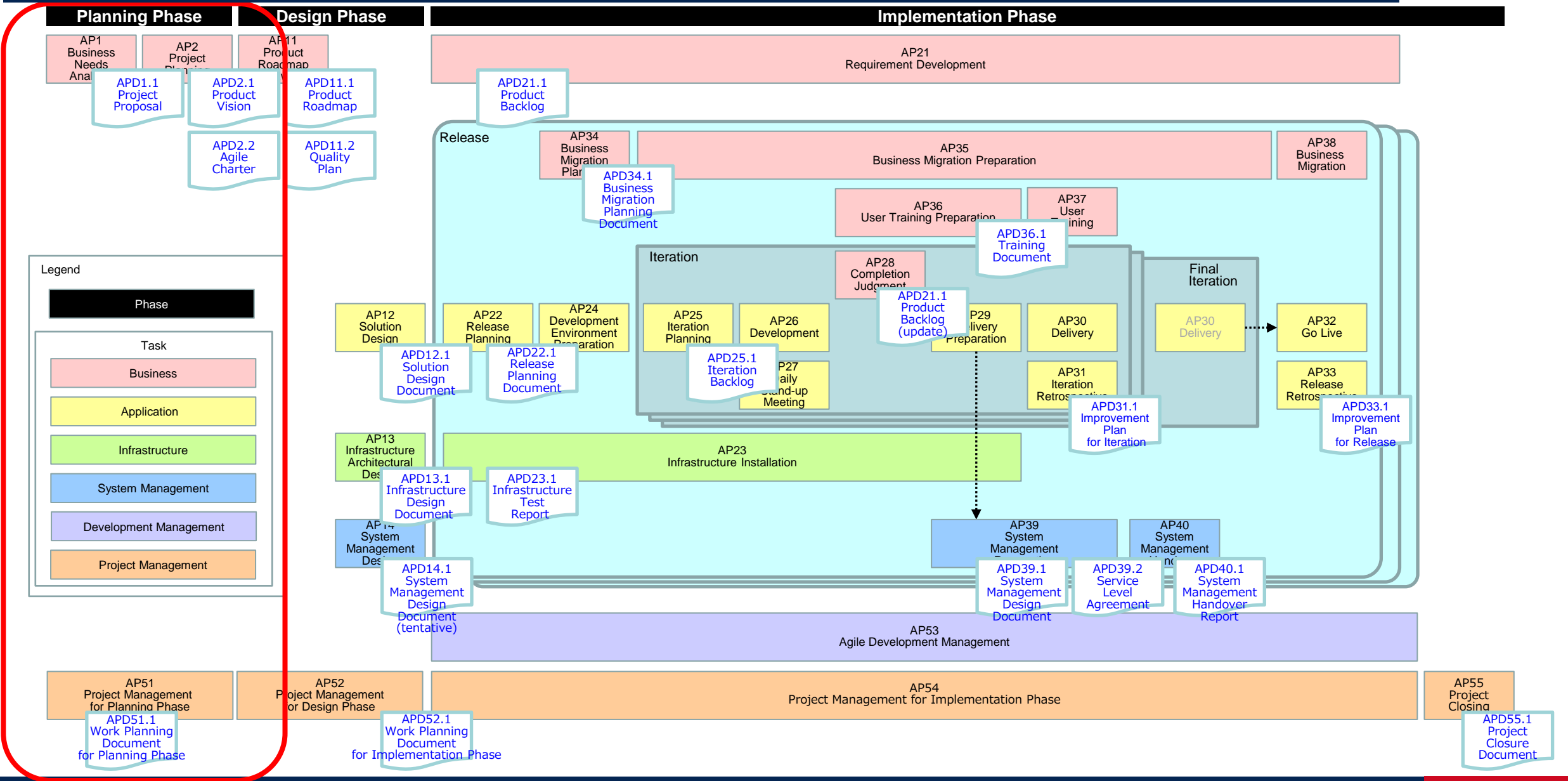
- Define a product image.
- Define a budget and a period.
- Build a team.

- Analysis and prioritization of requirements (create requirement list)



GCM-Agile Development Processes

GCM Agile - Planning



Planning Phase

AP1
Business
Needs
Analysis

AP2
Project
Planning

APD1.1
Project
Proposal

AP1 Business Needs Analysis

Input	Process	Output
<ul style="list-style-type: none"> Various planning materials 	<p>Collect information about needs on business improvement & IT adoption and make a proposal for developing the systemization plan.</p> <p>[Primary activities]</p> <ul style="list-style-type: none"> Clarify needs on business improvement & IT adoption. Clarify the purpose, goal and applicable area. Propose a plan and get approval for detailing the systemization plan. 	<ul style="list-style-type: none"> [APD1.1] Project Proposal

APD1.1 Project Proposal

Outline

Document to specify information necessary for determining business improvement / IT adoption.

Composing Elements

- Background
 - Business direction
 - Business goal
- Initial project plan for system investment
 - System overview
 - Pre-conditions/restrictions
 - Summary schedule (milestones)
 - Approximate cost

AP51
Project Management
for Planning Phase

Planning Phase

AP1
Business
Needs
Analysis

AP2
Project
Planning

AP2 Project Planning		
Input	Process	Output
<ul style="list-style-type: none">[APD1.1] Project Proposal	<p>Clarify the overall of project.</p> <p>[Primary activities]</p> <ul style="list-style-type: none">Assign Representative of Customer.Prepare the purpose, background of the systemization, priority, and direction of system into the Product Vision.Clarify initial requirement, initial technology strategy, risks, schedule and costs.Assign Agile PMO.Assign Development Team members.Assign other members of project.Draft the above information into Agile Charter.Get approval of the Agile Charter as official document of the project.	<ul style="list-style-type: none">[APD2.1] Product Vision[APD2.2] Agile Charter

AP51
Project Management
for Planning Phase

Planning Phase

AP1
Business
Needs
Analysis

AP2
Project
Planning

APD2.1
Product
Vision

AP2 Project Planning

APD2.1 Product Vision

Outline

Document to clarify the perspective of the system to develop.

Composing Elements

- Background
- Perspective of the system
 - Background/Problem to be settled
 - Customer/User
 - System name
 - System category
 - ✓ Business domain
 - ✓ Software domain
 - Important advantage, persuasive reason appropriate to the value
 - Substitute means/Competing system
 - Decisive points of differentiation
- Features of the system (List an effect, not a function)

AP51
Project Management
for Planning Phase

Planning Phase

AP1
Business
Needs
Analysis

AP2
Project
Planning

APD2.1
Product
Vision

APD2.2
Agile
Charter

AP2 Project Planning

APD2.1 Product Vision

APD2.2 Agile Charter

Outline

Document to clarify the perspective of the project (purpose, background, priority and direction, etc.).

(similar to 'Project Execution Planning Document' defined by GCM (Waterfall development))

Composing Elements

- Background and goal of the project
- Product Vision (Refer to APD2.1)
- Scope of the project:
 - In-scope
 - Out of scope
 - Unresolved
- Project stakeholders
- Summary of technical solutions
- Risk of the project
- Schedule
- Precedence of the important items of the project
- Project organization
- Communication methods (how to manage backlog, how to organize daily stand-up, how to get feedback from biz users)
- Cost

(APD2.2 Agile Charter contains the WBS for Design Phase)

AP51
Project Management
for Planning Phase

Planning Phase

AP1
Business
Needs
Analysis

AP2
Project
Planning

AP51 Project Management for Planning Phase

Input	Process	Output
<ul style="list-style-type: none"> Various planning materials 	<p>To execute Planning Phase smoothly, monitor regular activities of project team and coordinate all project team activities with the plan.</p> <p>[Primary activities]</p> <ul style="list-style-type: none"> Plan the necessary activities for the Planning Phase. Control human and other resources to execute project activities based on the plan. Monitor and control the task execution and deliverable completion based on the plan. Exercise communication management among the teams. Confirm if exit criteria of phase have been achieved and evaluate their progress. 	<ul style="list-style-type: none"> [APD51.1] Work Planning Document for Planning Phase Status report Procurement-related document Phase evaluation

APD51.1 Work Planning Document for Planning Phase

Outline

Document to describe the execution plan for the Planning Phase.

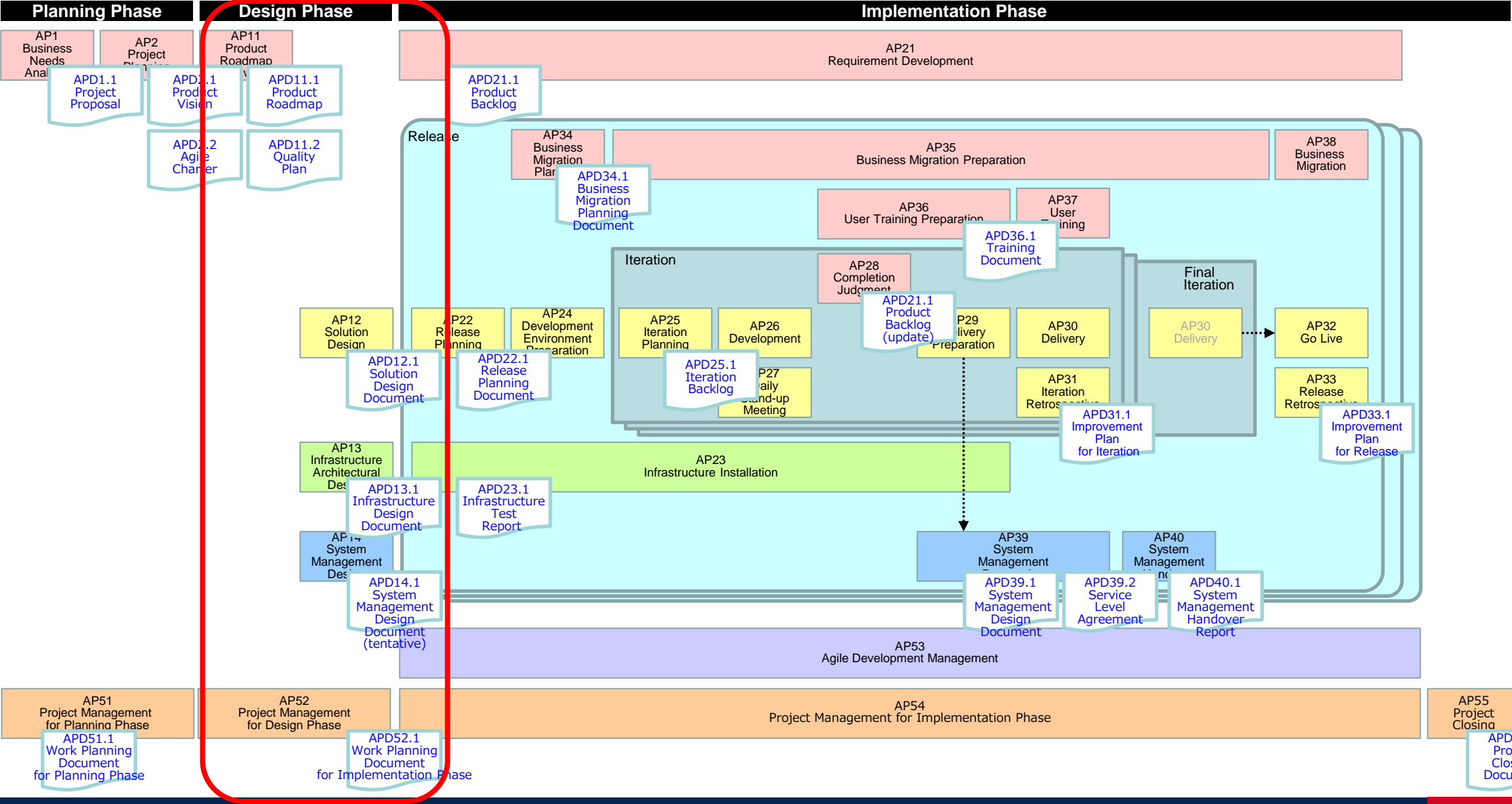
Composing Elements

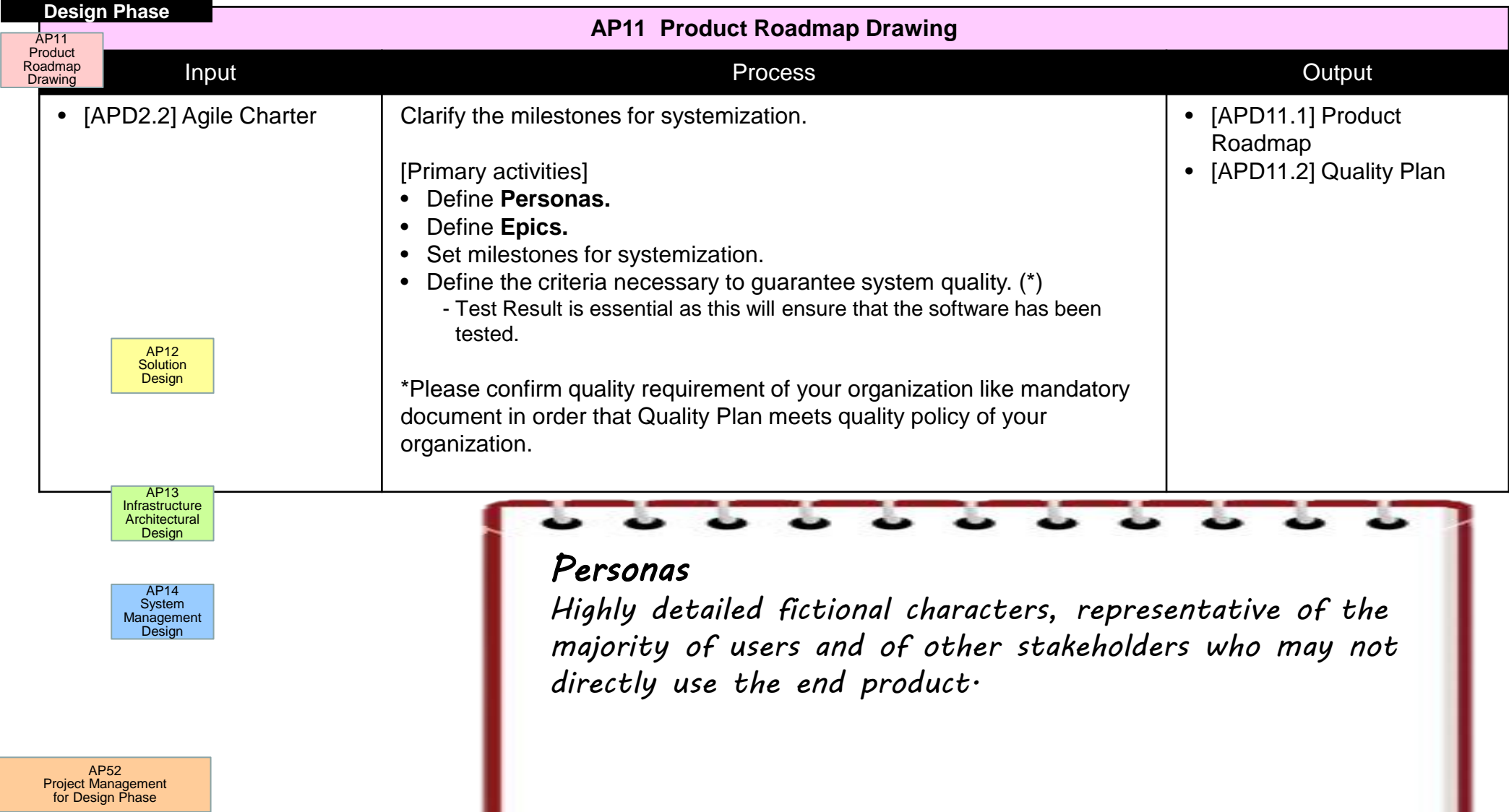
- Stakeholders and systems to be investigated in the Planning Phase
- WBS (activities and deliverables)
- Project organization
- Detailed schedule, milestones and phase completion criteria
- Initial risks
- Human resource/Cost plan
- Management plan (cost, schedule and issue)

AP51
Project Management
for Planning Phase

APD51.1
Work Planning
Document
for Planning Phase

GCM Agile - Design





Personas

Highly detailed fictional characters, representative of the majority of users and of other stakeholders who may not directly use the end product.

Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP11 Product Roadmap Drawing		
Input	Process	Output
<ul style="list-style-type: none">[APD2.2] Agile Charter	<p>Clarify the milestones for systemization.</p> <p>[Primary activities]</p> <ul style="list-style-type: none">Define Personas.Define Epics.Set milestones for systemization.Define the criteria necessary to guarantee system quality. (*)<ul style="list-style-type: none">- Test Result is essential as this will ensure that the software has been tested. <p>*Please confirm quality requirement of your organization like mandatory document in order that Quality Plan meets quality policy of your organization.</p>	<ul style="list-style-type: none">[APD11.1] Product Roadmap[APD11.2] Quality Plan

Epics

Written in the initial stages of the project when most User Stories are high-level functionalities or product descriptions and requirements are broadly defined.

Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP11 Product Roadmap Drawing		
Input	Process	Output
<ul style="list-style-type: none">[APD2.2] Agile Charter	<p>Clarify the milestones for systemization.</p> <p>[Primary activities]</p> <ul style="list-style-type: none">Define Personas.Define Epics.Set milestones for systemization.Define the criteria necessary to guarantee system quality. (*)<ul style="list-style-type: none">- Test Result is essential as this will ensure that the software has been tested. <p>*Please confirm quality requirement of your organization like mandatory document in order that Quality Plan meets quality policy of your organization.</p>	<ul style="list-style-type: none">[APD11.1] Product Roadmap[APD11.2] Quality Plan

User Story

List of specific requirements and needs from the viewpoint of the user.

Notation:

- As <user>
- I want to <requirements>
- so that I can <business values>

Design Phase

AP11
Product
Roadmap
Drawing

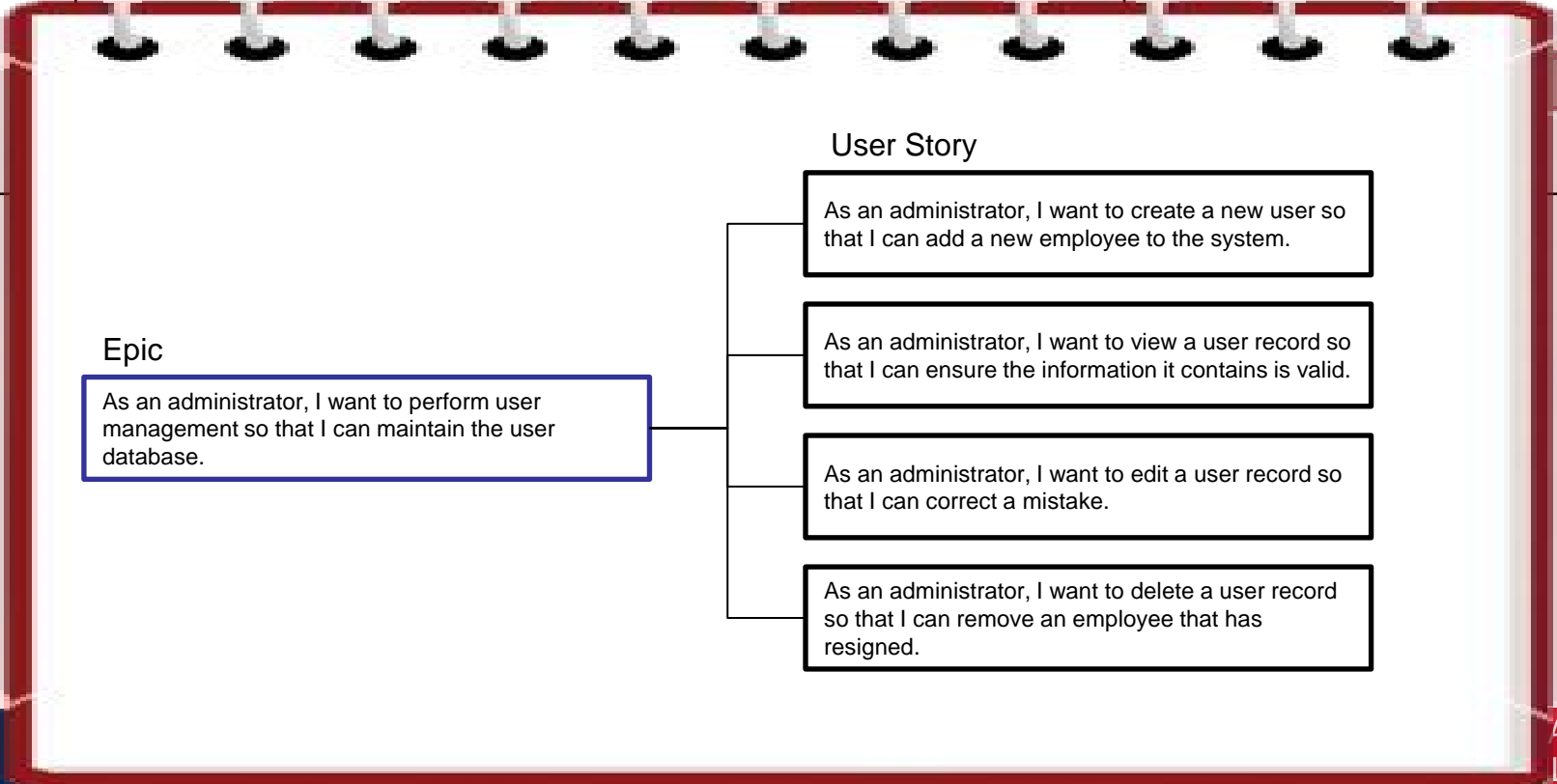
AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP11 Product Roadmap Drawing		
Input	Process	Output
<ul style="list-style-type: none">[APD2.2] Agile Charter	<p>Clarify the milestones for systemization.</p> <p>[Primary activities]</p> <ul style="list-style-type: none">Define Personas.Define Epics.Set milestones for systemization.Define the criteria necessary to guarantee system quality. (*)<ul style="list-style-type: none">- Test Result is essential as this will ensure that the software has been tested.	<ul style="list-style-type: none">[APD11.1] Product Roadmap[APD11.2] Quality Plan



Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP11 Product Roadmap Drawing		
Input	Process	Output
<ul style="list-style-type: none">[APD2.2] Agile Charter	<p>Clarify the milestones for systemization.</p> <p>[Primary activities]</p> <ul style="list-style-type: none">Define Personas.Define Epics.Set milestones for systemization.Define the criteria necessary to guarantee system quality. (*)<ul style="list-style-type: none">- Test Result is essential as this will ensure that the software has been tested. <p>*Please confirm quality requirement of your organization like mandatory document in order that Quality Plan meets quality policy of your organization.</p>	<ul style="list-style-type: none">[APD11.1] Product Roadmap[APD11.2] Quality Plan

Design Phase

AP11
Product
Roadmap
Drawing

APD11.1
Product
Roadmap

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP11 Product Roadmap Drawing

APD11.1 Product Roadmap

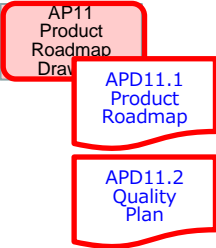
Outline

Document to clarify the release target of a system to develop or the function.

Composing Elements

- List of Release date and Release contents
- Theme
- Release date
- Prioritized Epics
- Persona

Design Phase



AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP11 Product Roadmap Drawing
APD11.1 Product Roadmap
APD11.2 Quality Plan
Outline
Document to clarify the criteria to guarantee system development quality.
Composing Elements
<ul style="list-style-type: none">List of the criteria to carry outFor example:<ul style="list-style-type: none">All code (test and mainline) checked-inAll Unit Tests passedAll acceptance tests identified, written & passedFunctional tests passedInstallation packages createdStress testingPerformance testingSecurity pass validatedDisaster recovery plan tested

Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP12 Solution Design		
Input	Process	Output
<ul style="list-style-type: none">• [APD2.2] Agile Charter• [APD11.1] Product Roadmap• Enterprise Architecture	<p>Confirm restrictions on system requirements and system construction, and prepare the systemization policy, architecture policy and solution overview.</p> <p>[Primary activities]</p> <ul style="list-style-type: none">• Confirm restrictions (delivery date, cost, etc.) on system requirements and system construction.• Examine application policy, data policy and technology policy referring to the road map of Enterprise Architecture (Application Architecture/Data Architecture/Technology Architecture).	<ul style="list-style-type: none">• [APD12.1] Solution Design Document

Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

APD12.1
Solution
Design
Document

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP12 Solution Design

APD12.1 Solution Design Document

Outline

Document to define application architecture.

Composing Elements

- Solution policy
 - "Custom build"/"Package-based" solution
 - Design method
 - Adopting technique for development/authentication
 - Development policy & plan overview
- Architectural policy
 - Architectural design approach
 - Pre-conditions/restrictions
 - Application design approach
- Solution overview:
 - System overview (system conceptual diagram, relationship diagram between other systems, system service descriptions)

Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP13 Infrastructure Architectural Design		
Input	Process	Output
<ul style="list-style-type: none">• [APD2.1] Product Vision• [APD2.2] Agile Charter• [APD11.1] Product Roadmap• [APD12.1] Solution Design Document• Enterprise Architecture	<p>Translate the requirement of the IT infrastructure into the feasible technical requirements for the Infrastructure Design work.</p> <p>Prepare the IT architecture physical design and system management design for the system platform.</p> <p>[Primary activities]</p> <ul style="list-style-type: none">• Analyze functional requirements of the IT infrastructure.• Analyze non-functional requirements of the IT infrastructure.• Design IT architecture and landscape of the system (development environment, QA environment, production environment, etc.).• Design system management for infrastructure.• Evaluate validity of infrastructure architectural design.• Design the development/test environment, educational environment, migration environment and production environment.	<ul style="list-style-type: none">• [APD13.1] Infrastructure Design Document

Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

APD13.1
Infrastructure
Design
Document

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP13 Infrastructure Architectural Design

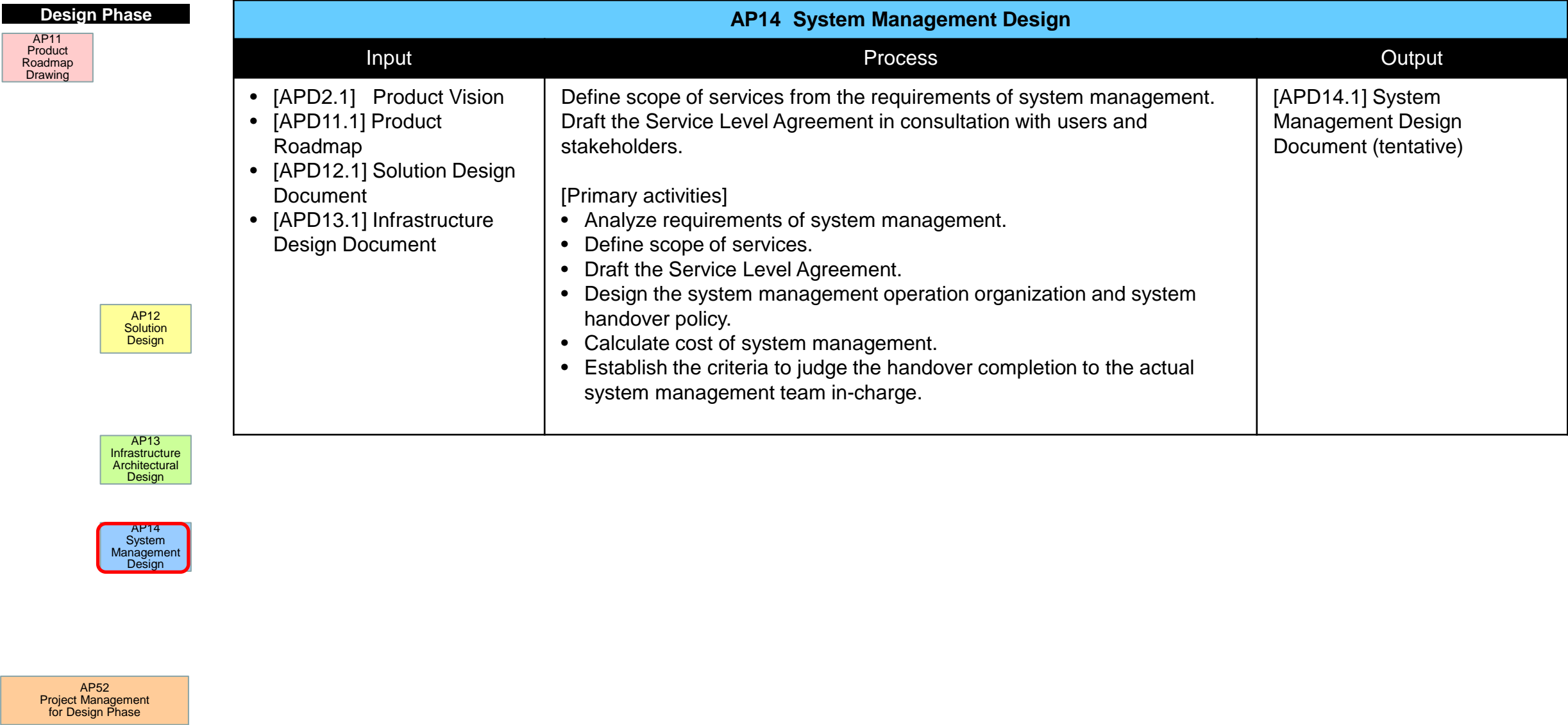
APD13.1 Infrastructure Design Document

Outline

Document to define detailed elements of system infrastructure and necessary process for maintenance.

Composing Elements

- IT architecture specifications
 - Hardware details (list of hardware, detailed information)
 - Software details (list of software, configuration details)
- System management specifications
 - List of operational procedures
 - Housekeeping process
 - Operated jobs (job list, job-Net/batch job scheduling)
 - Planned shutdown
 - Backup operation (backup and recovery)
 - Report
- Other information as a base of design (for sizing, etc.)



Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

APD14.1
System
Management
Design
Document
(tentative)

AP52
Project Management
for Design Phase

AP14 System Management Design

APD14.1 System Management Design Document (tentative)

Outline

Document to define the service items, contents and operation organization structure of the system management activity.

Composing Elements

- System management plan
 - Prerequisite condition
 - System management organization
 - Outsourcing plan
 - Meeting
 - Year-round schedule
 - Resource/Cost plan
 - Office environment
- Service level management plan
 - Service level (service item, target value, priority definition, service hour)
 - Monitoring and reporting method against service items
- Service procedures/System specifications
 - Configuration item identification for documents and system management handover completion criteria
 - Service procedure outline (procedure of application operations and maintenance, procedure to handle inquiries, procedure of troubleshooting, procedure of change management, etc.)
- System management environment

Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

AP14
System
Management
Design

AP52
Project Management
for Design Phase

AP52 Project Management for Design Phase		
Input	Process	Output
<ul style="list-style-type: none">[APD2.2] Agile Charter	<p>To execute Design Phase smoothly, monitor regular activities of project team and coordinate all project team activities with the plan.</p> <p>[Primary activities]</p> <ul style="list-style-type: none">▪ Control human and other resources to execute project activities based on the plan.▪ Monitor and control the task execution and deliverable completion based on the plan.▪ Exercise communication management among the teams.▪ Create Work Planning Document for Implementation Phase.▪ Confirm if exit criteria of phase have been achieved and evaluate their progress.	<p>[APD52.1] Work Planning Document for Implementation Phase</p> <ul style="list-style-type: none">• Status report• Procurement-related document• Phase evaluation

Design Phase

AP11
Product
Roadmap
Drawing

AP12
Solution
Design

AP13
Infrastructure
Architectural
Design

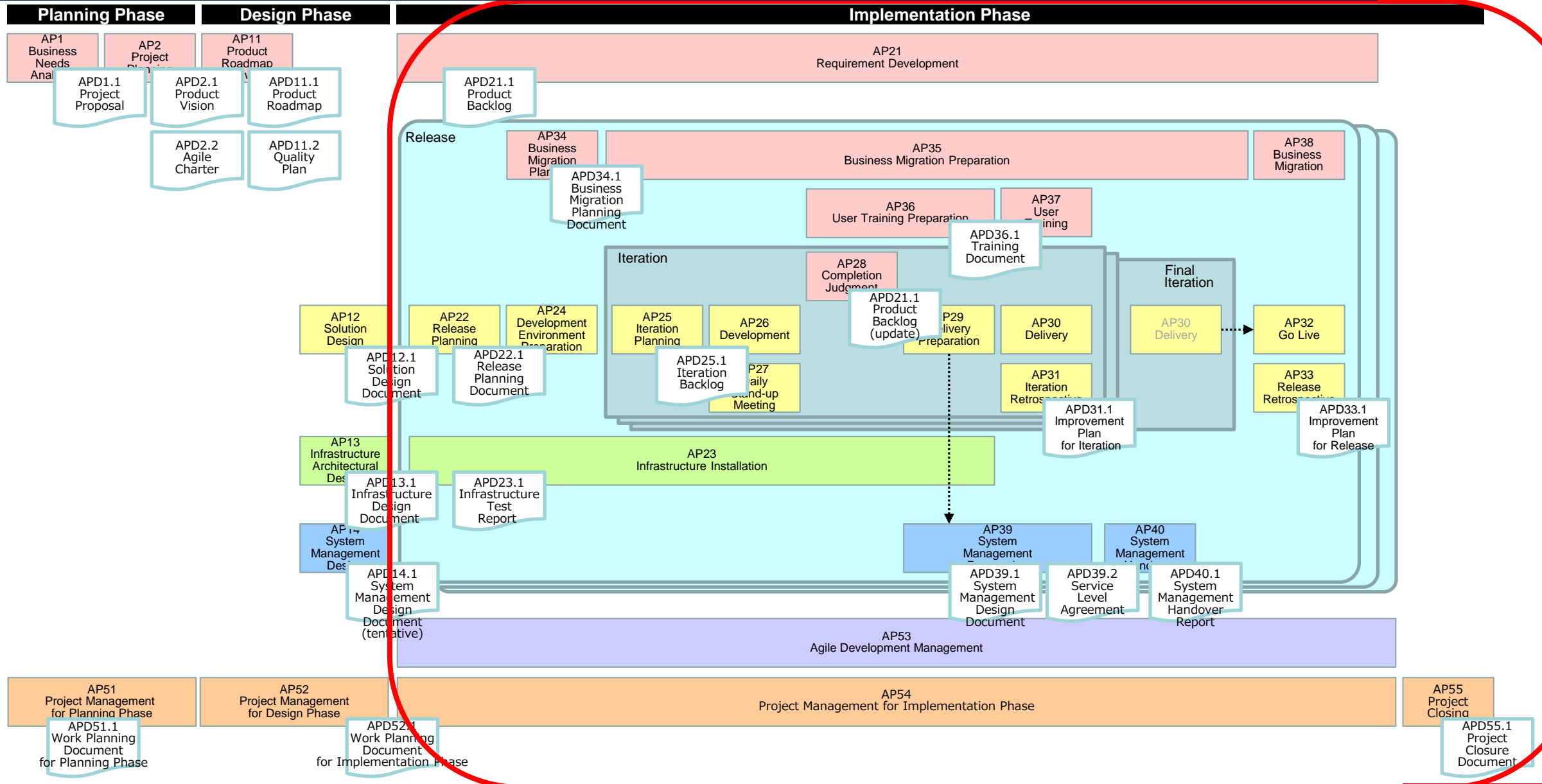
AP14
System
Management
Design

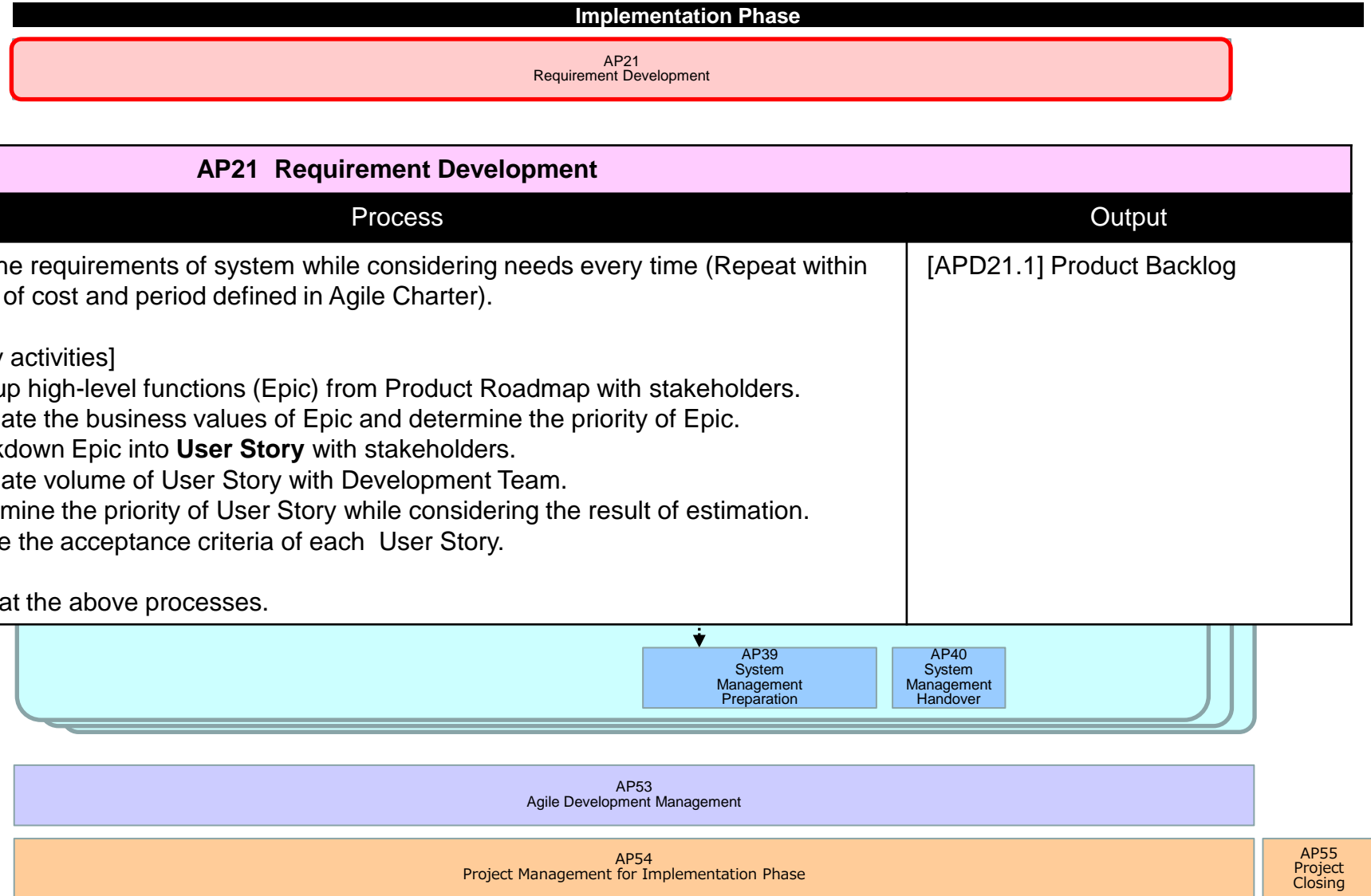
AP52
Project Management
for Design Phase

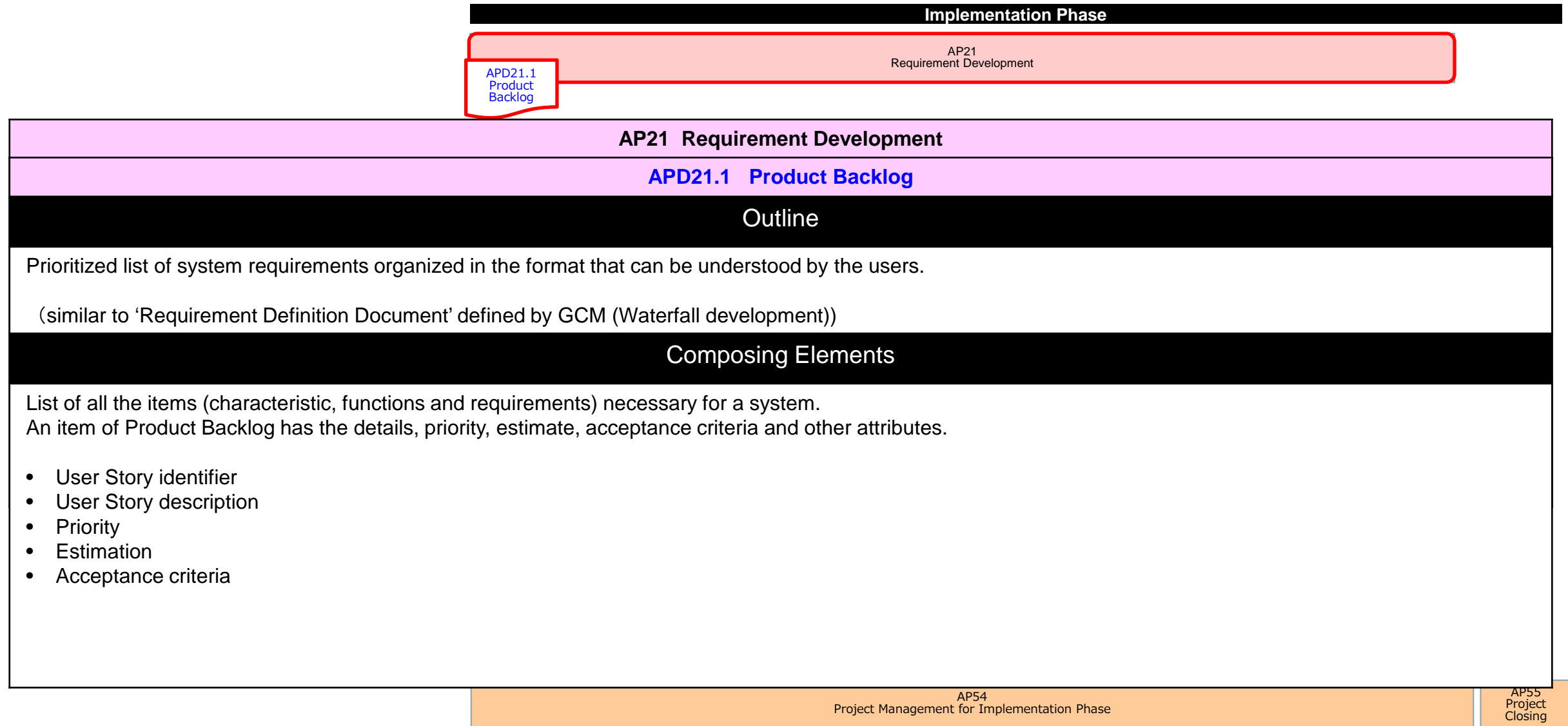
APD52.1
Work Planning
Document
for Planning Phase

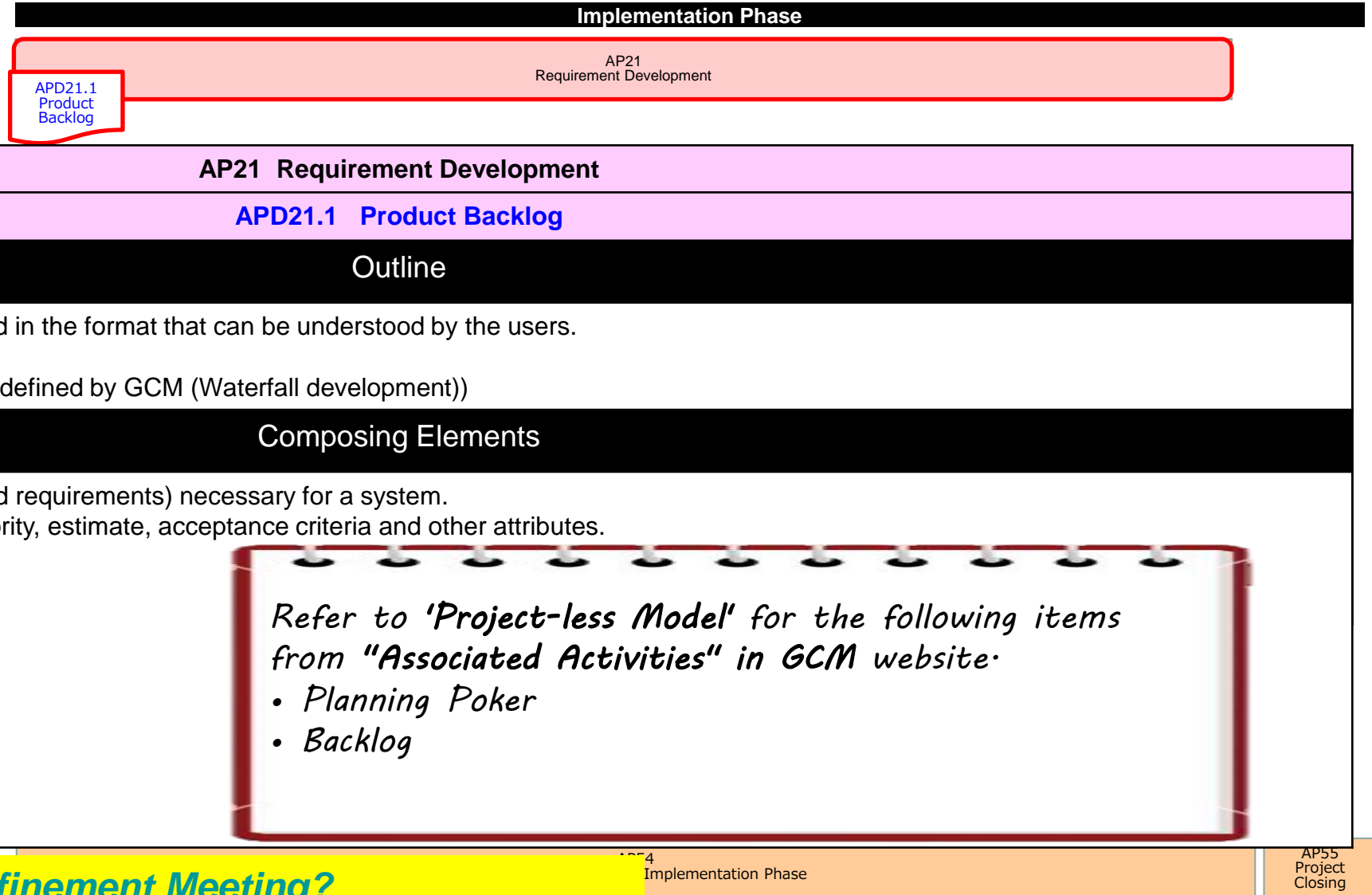
AP52 Project Management for Design Phase
APD52.1 Work Planning Document for Implementation Phase
Outline
Document to describe the execution plan for the Implementation Phase.
Composing Elements
<ul style="list-style-type: none">For all groups except Agile Development Group.<ul style="list-style-type: none">WBS (activities and deliverables)Project organizationDetailed schedule, milestonesHuman resource planManagement plan (cost, schedule and issue)

GCM Agile - Implementation



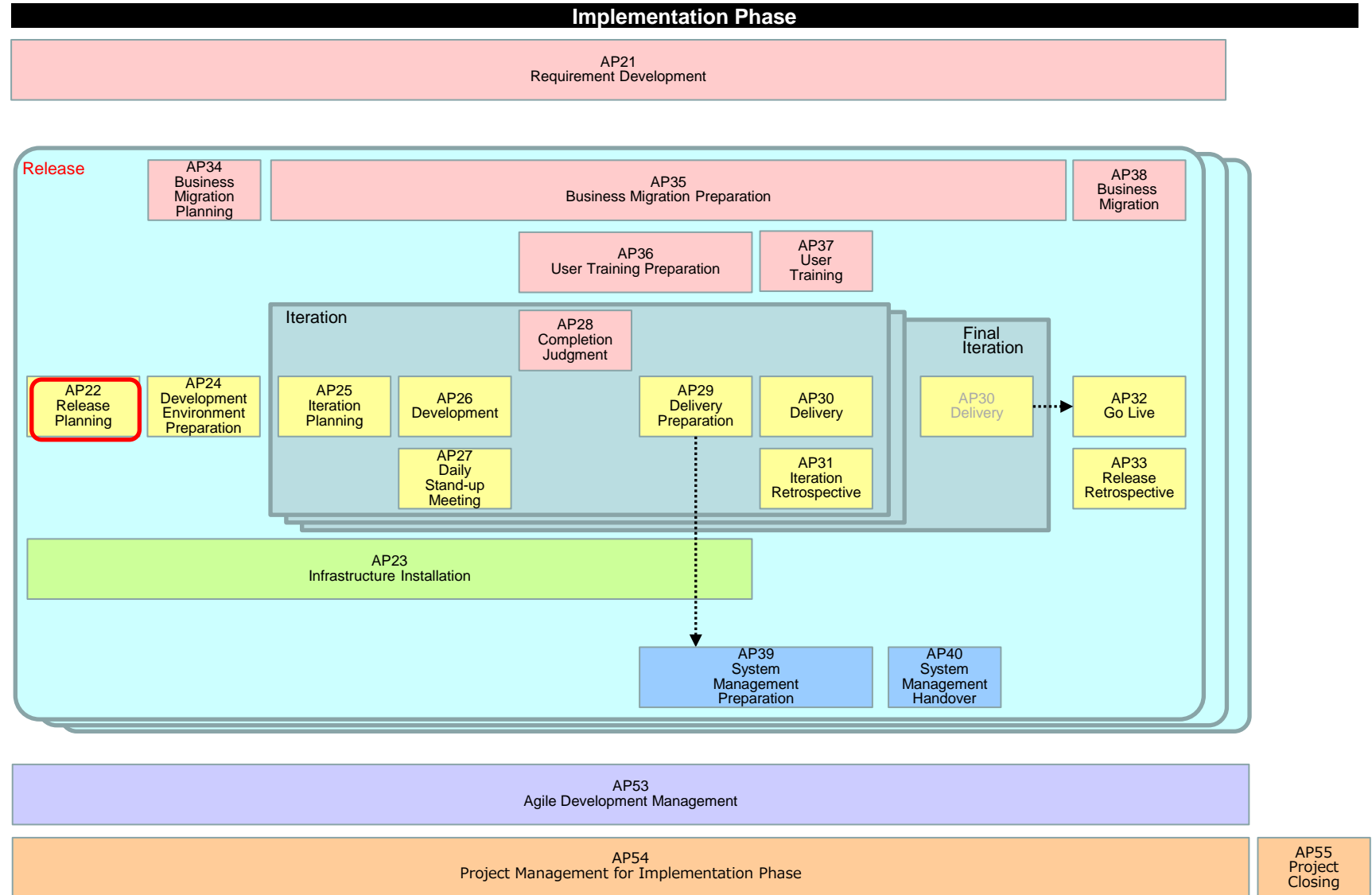






[How to do Backlog Refinement Meeting?](#)

By Scrum Training Series (Michael James)



AP22
Release
Planning

Implementation Phase

AP21
Requirement Development

AP22 Release Planning

Input	Process	Output
<ul style="list-style-type: none"> [APD21.1] Product Backlog 	<p>Determine the implementation items of relevant release.</p> <p>[Primary activities]</p> <p><i>Representative of Customer:</i></p> <ul style="list-style-type: none"> Explain User Story which is target of implementation to Development Team using Product Backlog. <p><i>Development Team:</i></p> <ul style="list-style-type: none"> Understand User Story and confirm the unclear points with Representative of Customer. Estimate the development man-hour. Determine the unit period of Iteration. Allocate User Story to each box of Iteration based on their priorities. Confirm that Release Plan matches with the release date. Push the items which are not matched to the release date to the subsequent requirements to be implemented. <p><i>Agile Development Group:</i></p> <ul style="list-style-type: none"> Agree on the Release Plan. 	<p>[APD22.1] Release Planning Document</p>

Agile Development Management

AP54
Project Management for Implementation Phase

AP55
Project
Closing

Implementation Phase

AP21
Requirement Development

AP22
Release
Planning

APD22.1
Release
Planning
Document

AP22 Release Planning

APD22.1 Release Planning Document

Outline

Document to specify the User Story which is the target of relevant Release from Product Backlog.

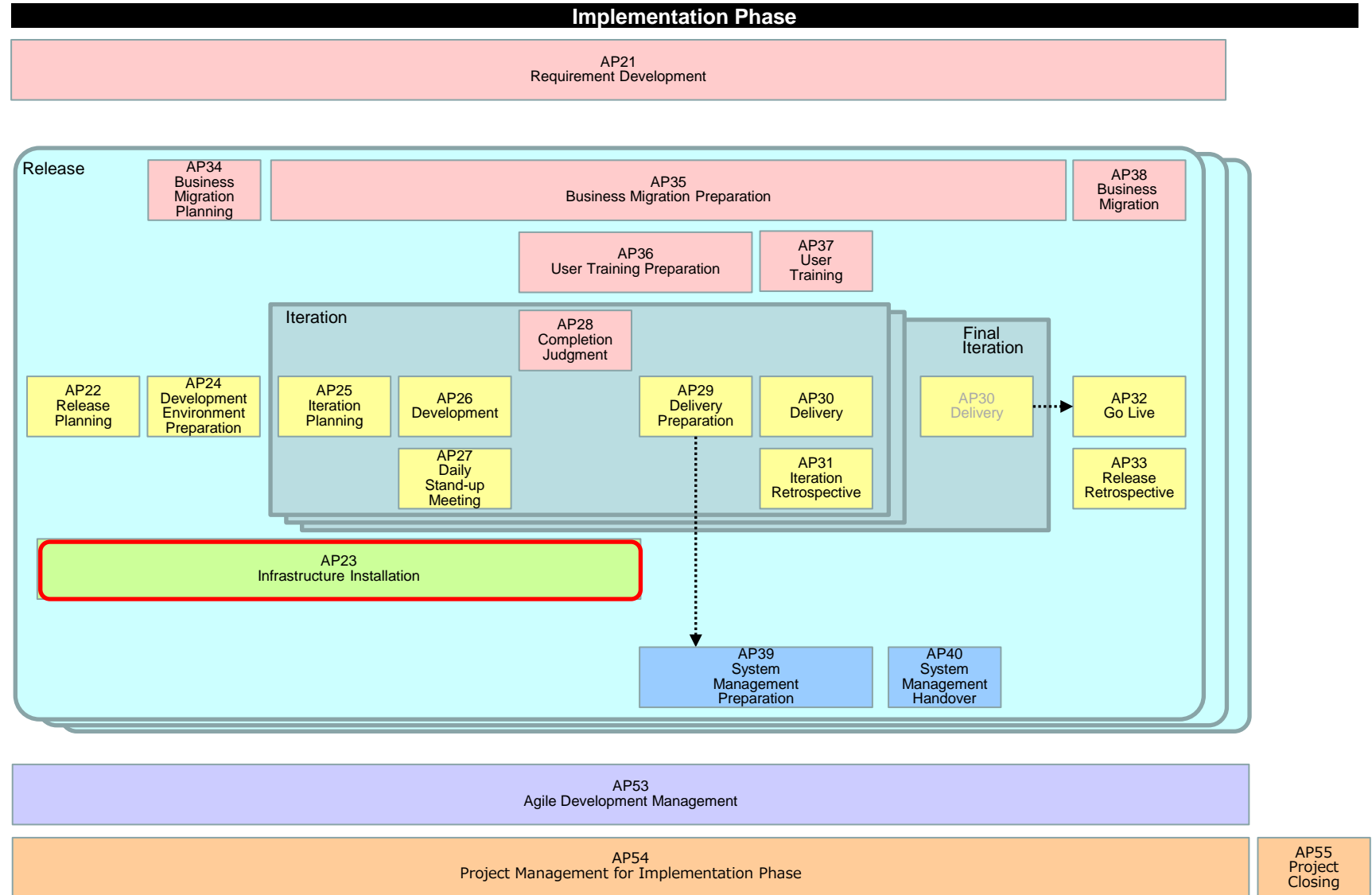
Composing Elements

- Release date
- Length of one period of Iteration
- Number of times of Iteration
- User Story allocated to the Iteration



[How to do Sprint Planning Meeting?](#)

By Scrum Training Series (Michael James)



Implementation Phase

AP23
Infrastructure Installation

AP21
Requirement Development

AP23 Infrastructure Installation		
Input	Process	Output
<ul style="list-style-type: none"> [APD13.1] Infrastructure Design Document 	<p>Set up infrastructure for production environment and confirm that the installed system platform is supplying stable services.</p> <p>[Primary activities]</p> <ul style="list-style-type: none"> Order and accept infrastructure environment. Set up infrastructure environment and do operational and connectivity test. Execute infrastructure test case. Evaluate and analyze test results. Tune system appropriately. 	<ul style="list-style-type: none"> [APD23.1] Infrastructure Test Report Development environment/Production environment (Infrastructure)

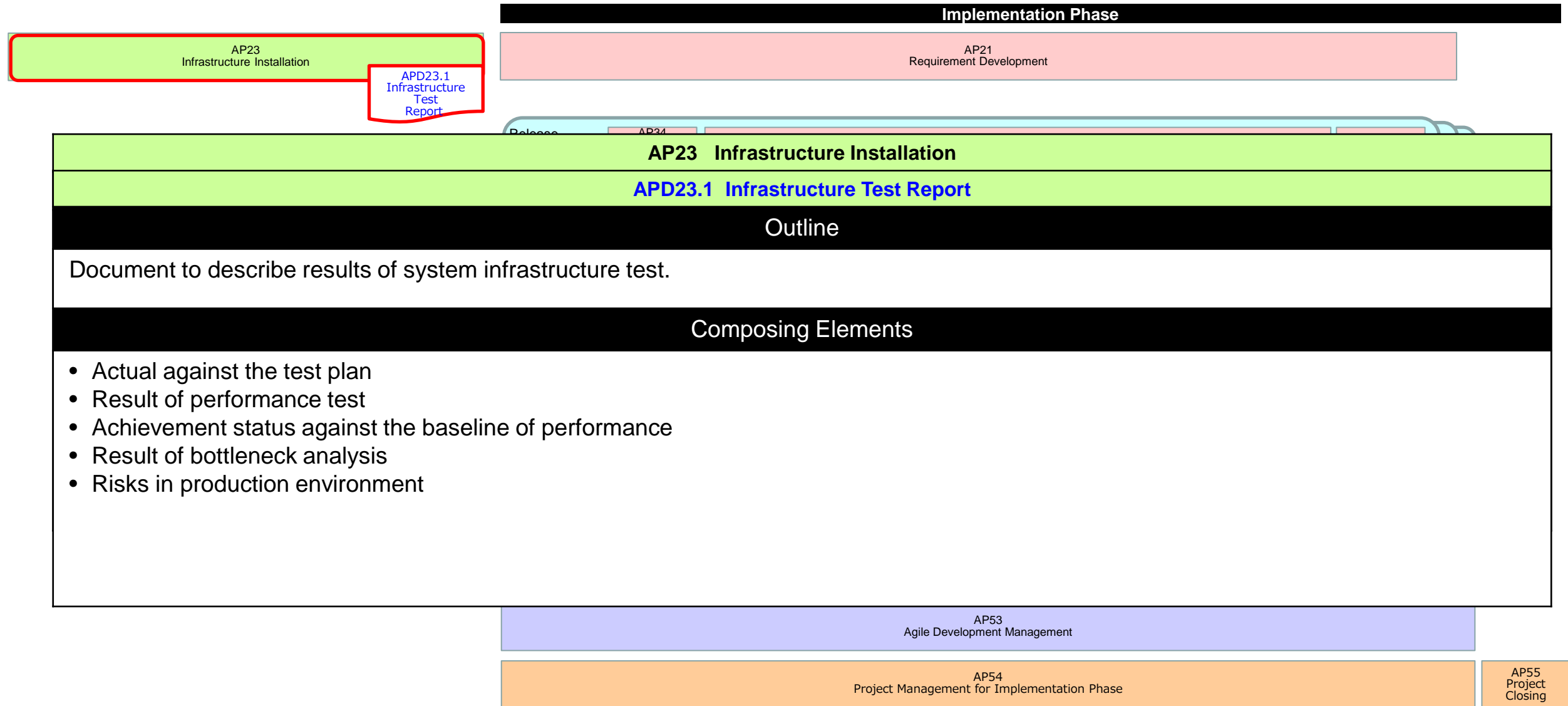
System
Management
Preparation

System
Management
Handover

AP53
Agile Development Management

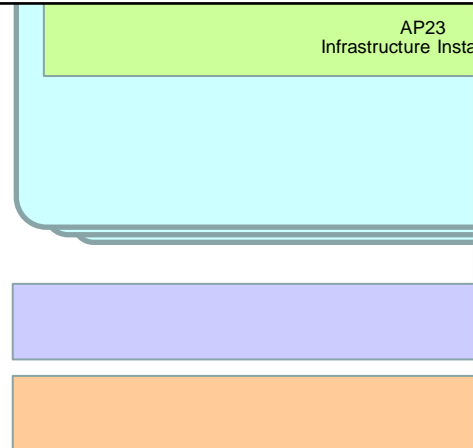
AP54
Project Management for Implementation Phase

AP55
Project
Closing





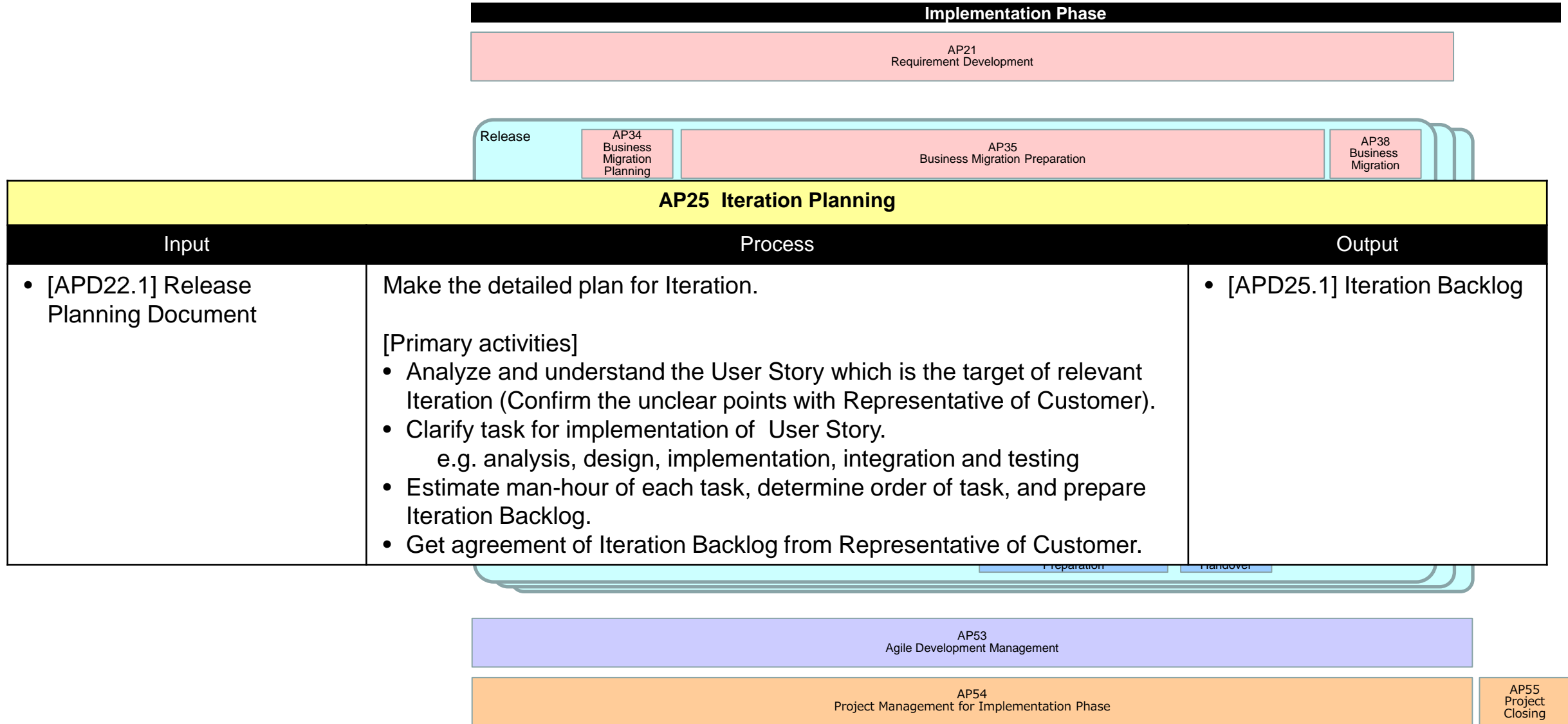
AP24 Development Environment Preparation		
Input	Process	Output
<ul style="list-style-type: none"> [APD12.1] Solution Design Document [APD13.1] Infrastructure Design Document 	<p>Prepare development environment for Iteration (except hardware and middleware).</p> <p>[Primary activities]</p> <ul style="list-style-type: none"> Prepare the environment for building, testing and source code management. Prepare the environment for management of tasks and issues. 	<ul style="list-style-type: none"> Development environment (Software/ Configuration)

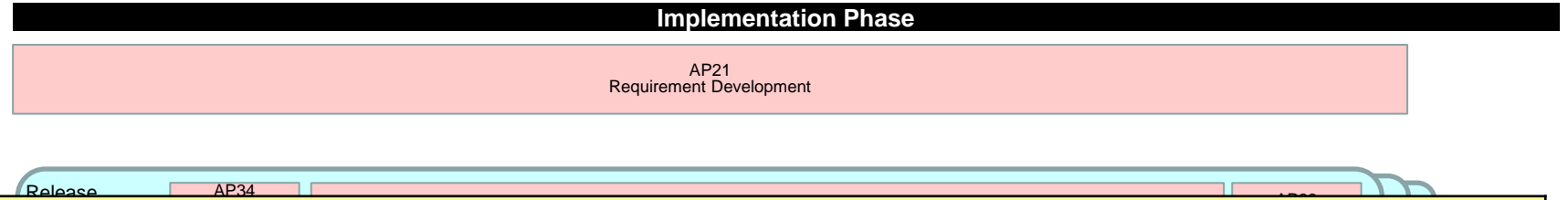


Refer to 'Project-less Model' for the following items from "Associated Activities" in GCM website.

- Service regarding CI environment
- User Guide for CI environment
- Installation Guide for CI environment
- Redmine Guidelines

AP55
Project
Closing





AP25 Iteration Planning

APD25.1 Iteration Backlog

Outline

List to describe tasks for implementing User Story which is the target of the relevant Iteration.

Composing Elements

- List of task to implement User Story.

For example:

- Modify database
- Create webpage (UI)
- Create webpage (Javascript logic)
- Write automated acceptance test
- Update buyer help webpage

In Iteration Backlog, it is common to express with "wall and tag" (Task Board).

The **Task Board** is helpful to grasp the situation visually to share the latest situation in a short time.

AP25
Iteration
Planning

APD25.1
Iteration
Backlog

Release

List to describe tasks for implementing User Story

- List of task to implement User Story.

For example:

- Modify database
- Create webpage (UI)
- Create webpage (Javascript logic)
- Write automated acceptance test
- Update buyer help webpage

In Iteration Backlog, it is common to express with
The **Task Board** is helpful to grasp the situation v









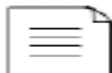











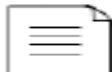

Implementation Phase

Task Board

Iteration Backlog visualized by tags attached on walls in order to share latest information immediately.

Notation:

- *ToDo <items>*
- *InProgress <items>*
- *Done <items>*

Committed Backlog Items	Tasks Not Started	Tasks In Progress	Tasks Completed
	  	 	 
	  		
	     		
			

Implementation Phase

AP21
Requirement Development

AP26 Development

Input	Process	Output
<ul style="list-style-type: none"> [APD25.1] Iteration Backlog 	<p>Execute all activities necessary to create the increments of the system e.g. analysis, design, implementation, integration and testing</p> <p>[Primary activities]</p> <ul style="list-style-type: none"> Execute task based on Iteration Backlog. 	<ul style="list-style-type: none"> Increment of system

Daily
Stand-up
Meeting

Iteration
Retrospective

Release
Retrospective

Refer to 'Project-less Model' for the following items from "Associated Activities" in GCM website.

- Unit Test Guidelines
- Test Case Design Guidelines
- Agile Test Templates
- Selenium Test Automation Framework
- UFT Test Automation Framework
- Agile Test Plan Template

AP55
Project
Closing

Implementation Phase

AP21
Requirement Development

AP27 Daily Stand-up Meeting

Input	Process	Output
<ul style="list-style-type: none"> Progress of all Development Team members Issues of all Development Team members 	<p>Share current status of Iteration every day.</p> <p>[Primary activities]</p> <ul style="list-style-type: none"> Share the information that is necessary for Development Team in a face-to-face meeting. <p>Items to be shared are as follows:</p> <ul style="list-style-type: none"> What were the completed items after last meeting? What should be the completed items before next meeting? What are the delayed items or defects? 	<ul style="list-style-type: none"> Shared progress Shared issues

AP39
System
Management
Preparation

AP40
System
Management
Handover

AP53
Agile Development Management

AP54
Project Management for Implementation Phase

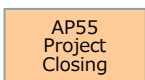
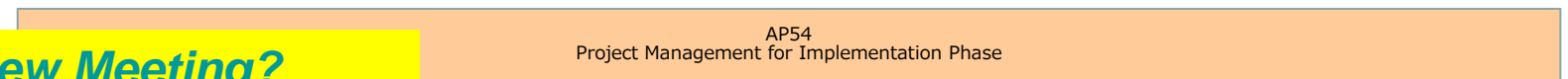
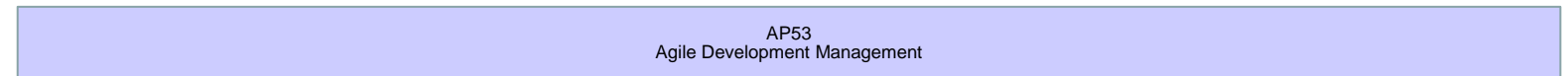
AP55
Project
Closing



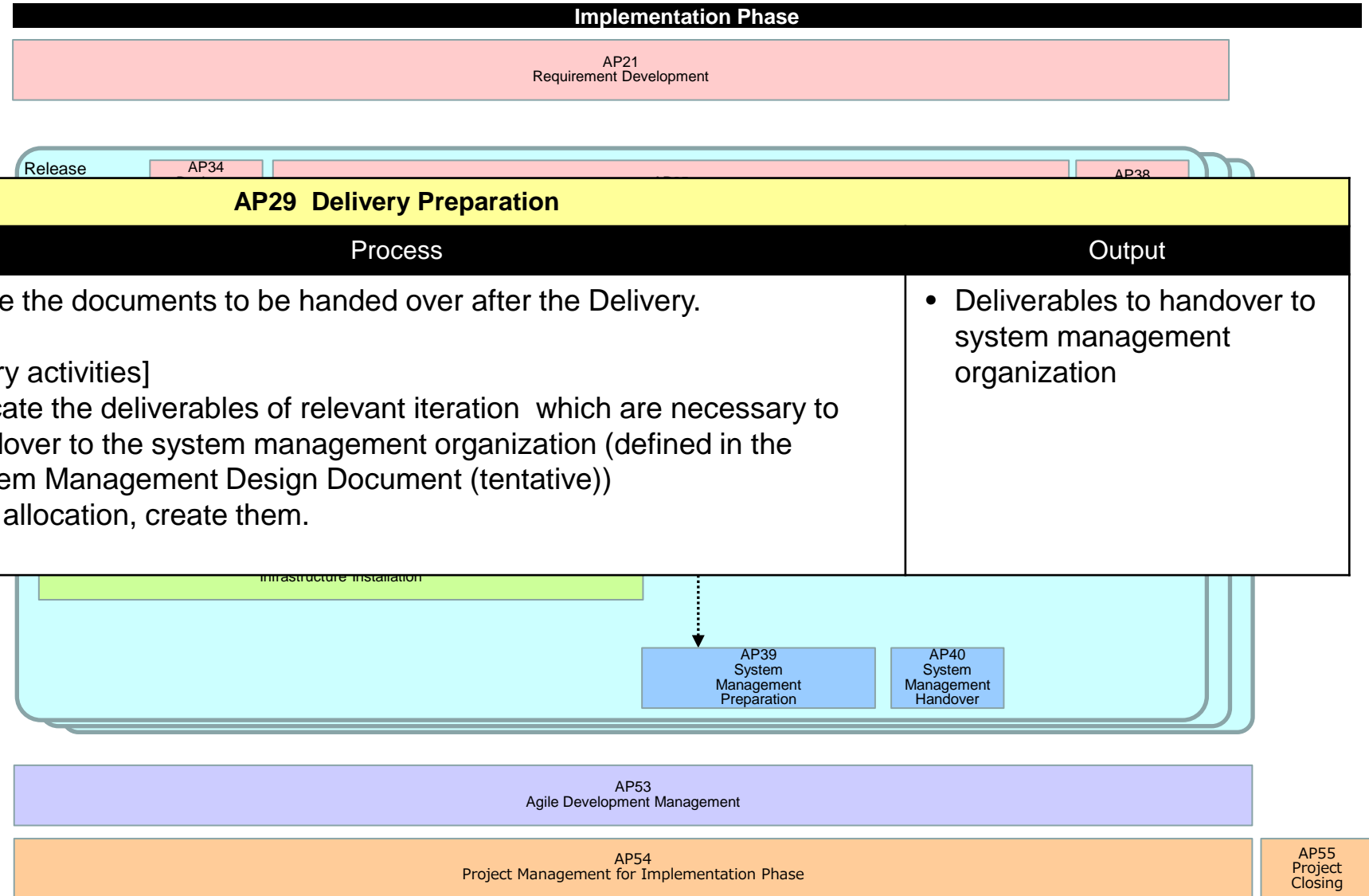
How to do Daily Scrum Meeting?
By Scrum Training Series (Michael James)

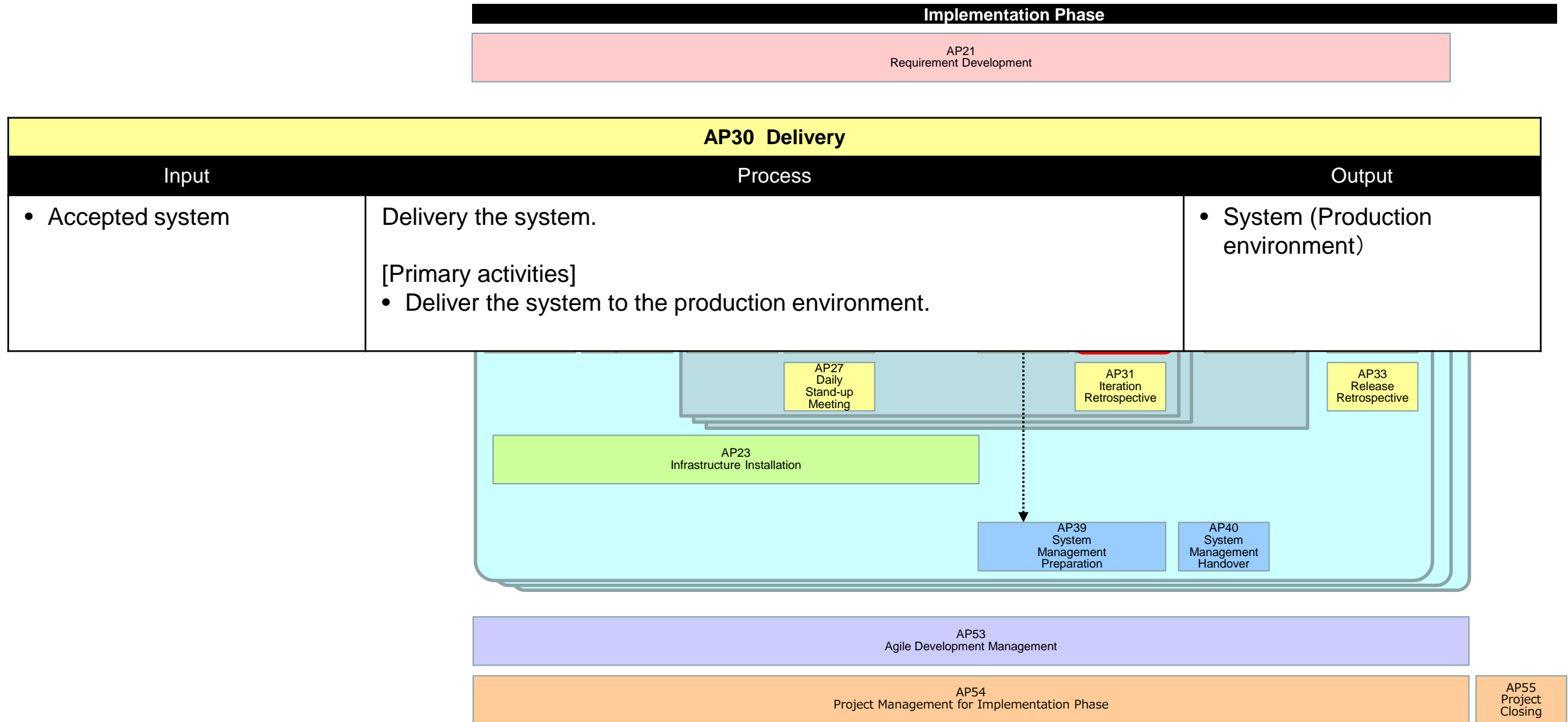


AP28 Completion Judgment		
Input	Process	Output
<ul style="list-style-type: none"> • [APD21.1] Product Backlog • [APD11.2] Quality Plan • Increment of system 	<p>Validate the increments of system and judge the completion of Iteration.</p> <p>[Primary activities]</p> <p><i>Development Team:</i></p> <ul style="list-style-type: none"> • Demonstrate the increments of system to Representative of Customer. <p><i>Representative of Customer:</i></p> <ul style="list-style-type: none"> • Inspect the increments of system with Quality Plan and acceptance criteria of each User Story. • Judge the completion of Iteration. • Feedback the completion status to Product Backlog. 	<ul style="list-style-type: none"> • [APD21.1] Product Backlog (update) • Accepted system



How to do Sprint Review Meeting?
By Scrum Training Series (Michael James)





Implementation Phase

AP21
Requirement Development

AP31 Iteration Retrospective

Input	Process	Output
<ul style="list-style-type: none"> Performance of Iteration 	<p>Retrospect the Iteration and identify the items to be improved during the next Iteration.</p> <p>[Primary activities]</p> <ul style="list-style-type: none"> Identify the following items and their reasons: <ul style="list-style-type: none"> Things the team tried Things the team has done well Things the team didn't do well Identify things the team needs to keep doing. Specify the items to be improved and required during the next Iteration. Prepare the Improvement Plan and execute. 	<ul style="list-style-type: none"> [APD31.1] Improvement Plan for Iteration

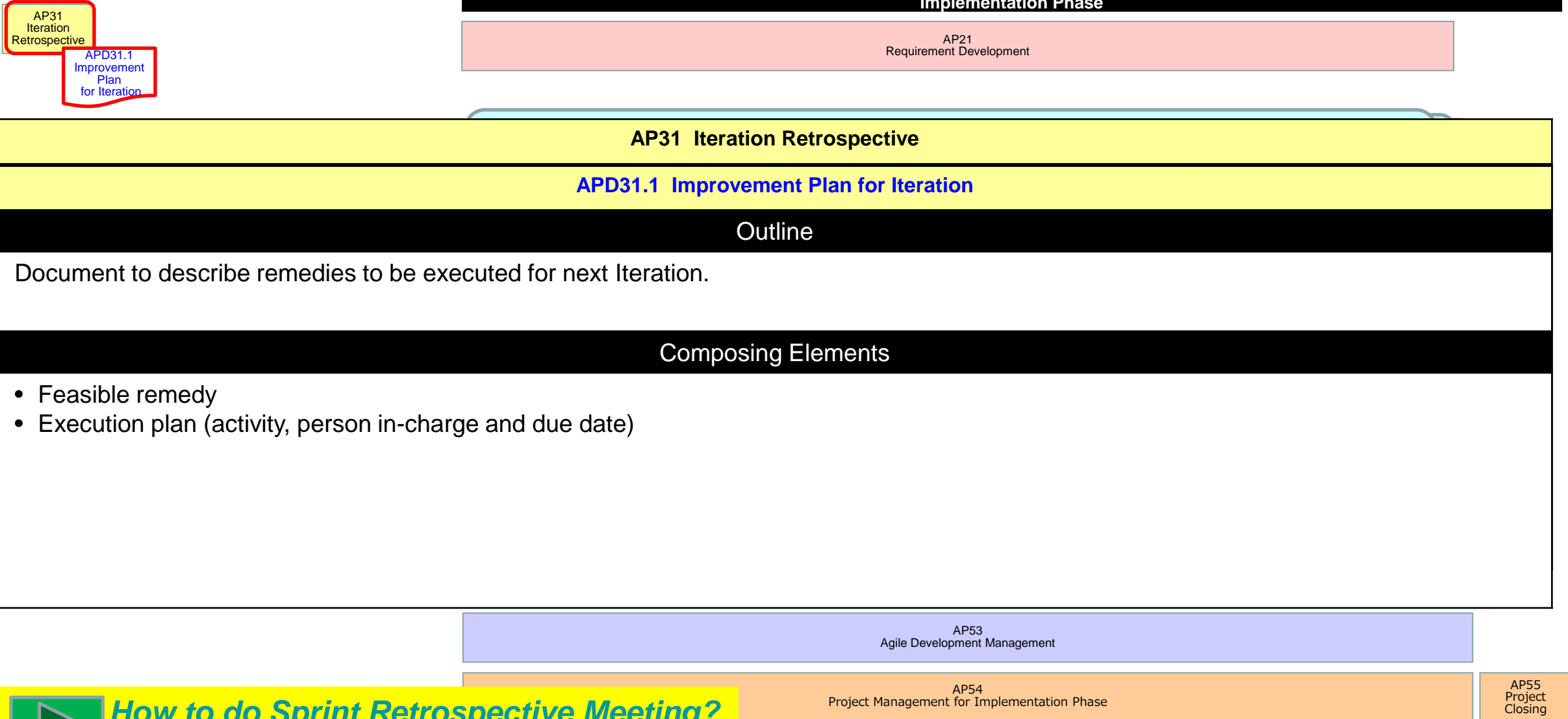
AP53
Agile Development Management

AP54
Project Management for Implementation Phase

AP55
Project Closing

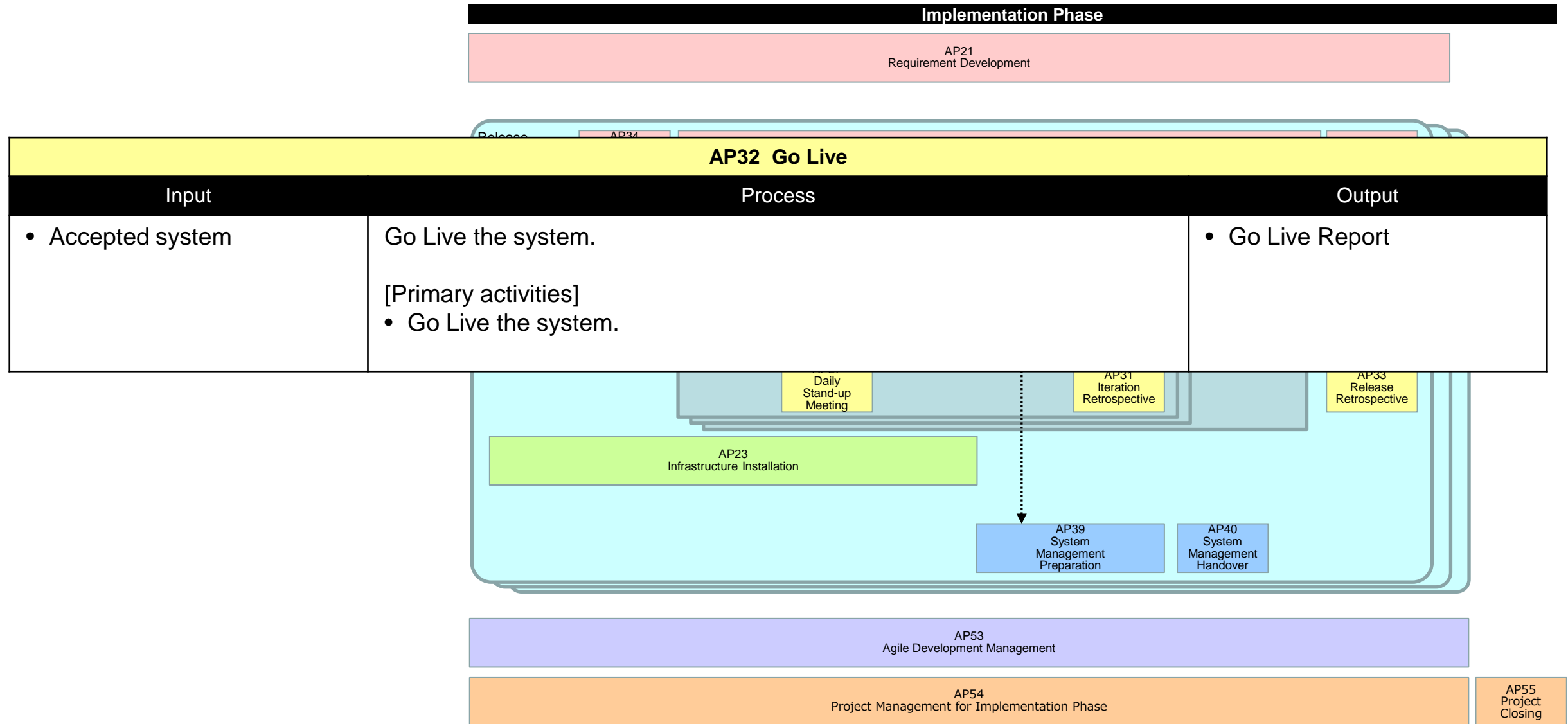


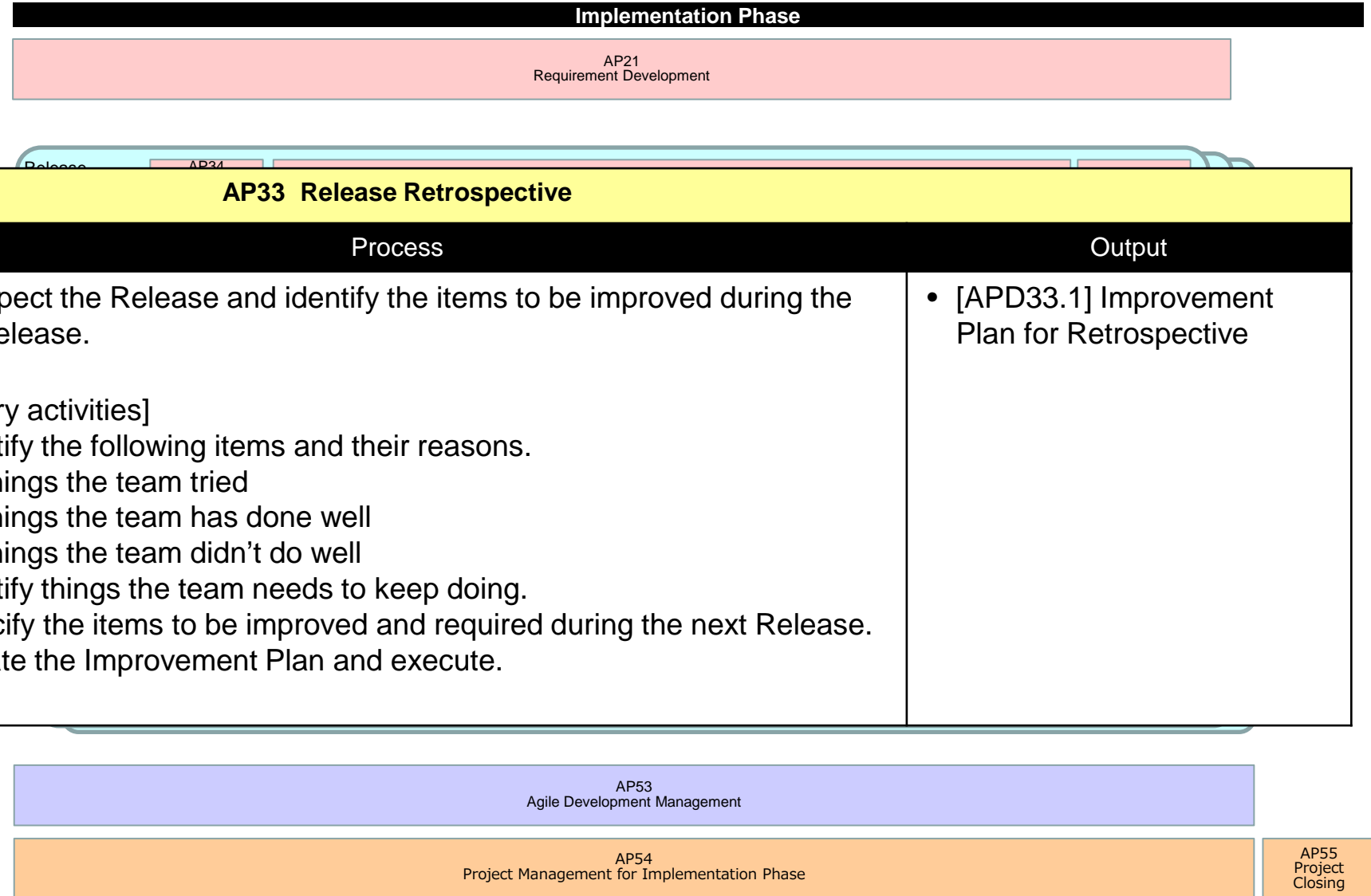
How to do Sprint Retrospective Meeting?
By Scrum Training Series (Michael James)

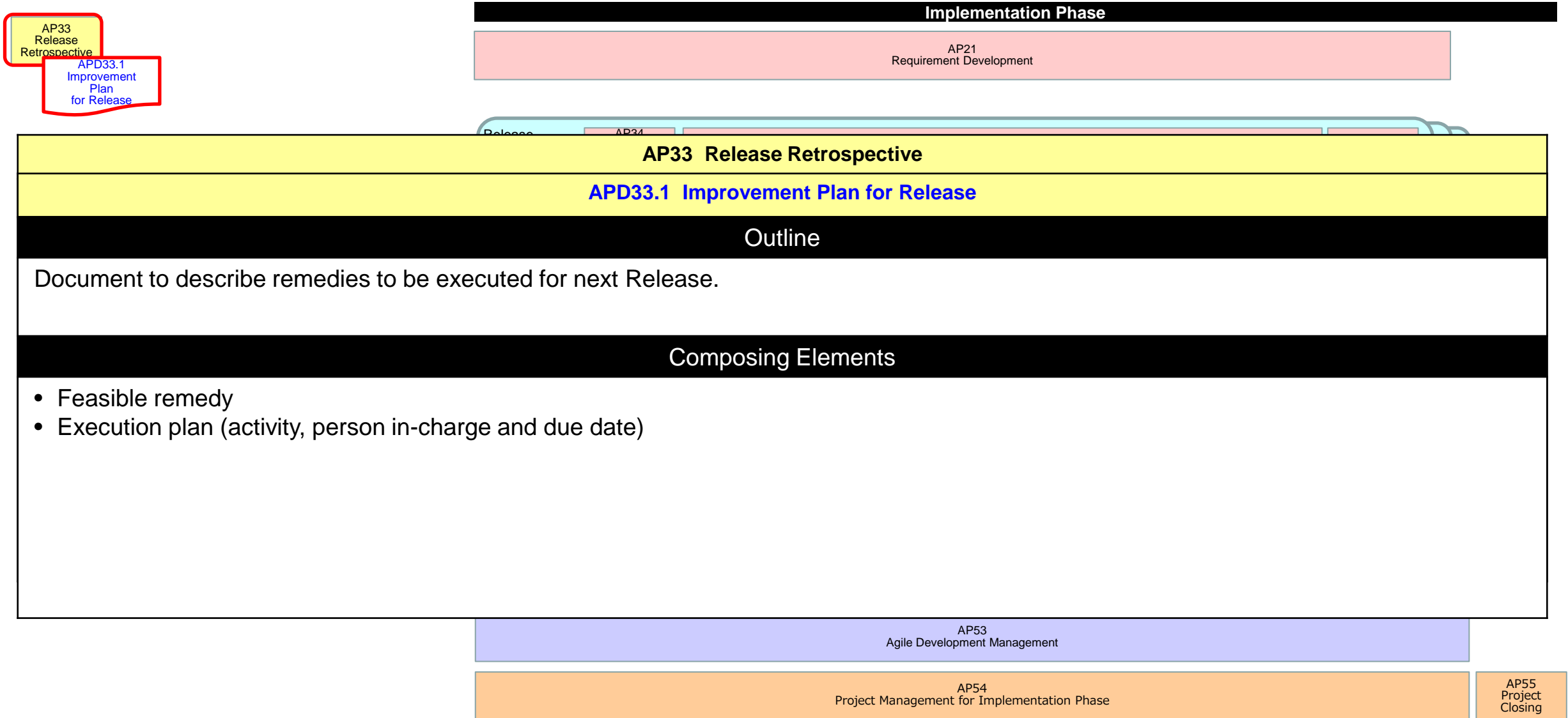


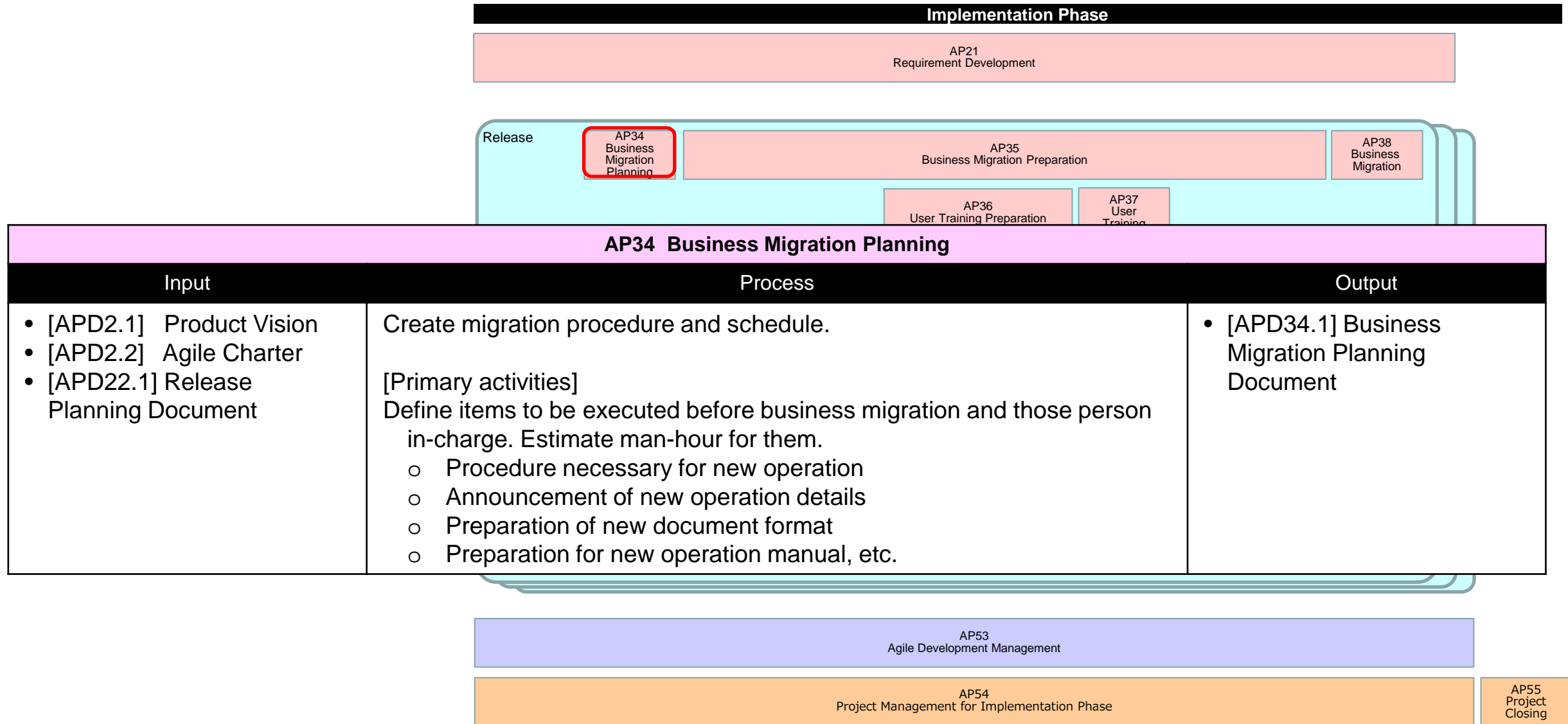
How to do Sprint Retrospective Meeting?

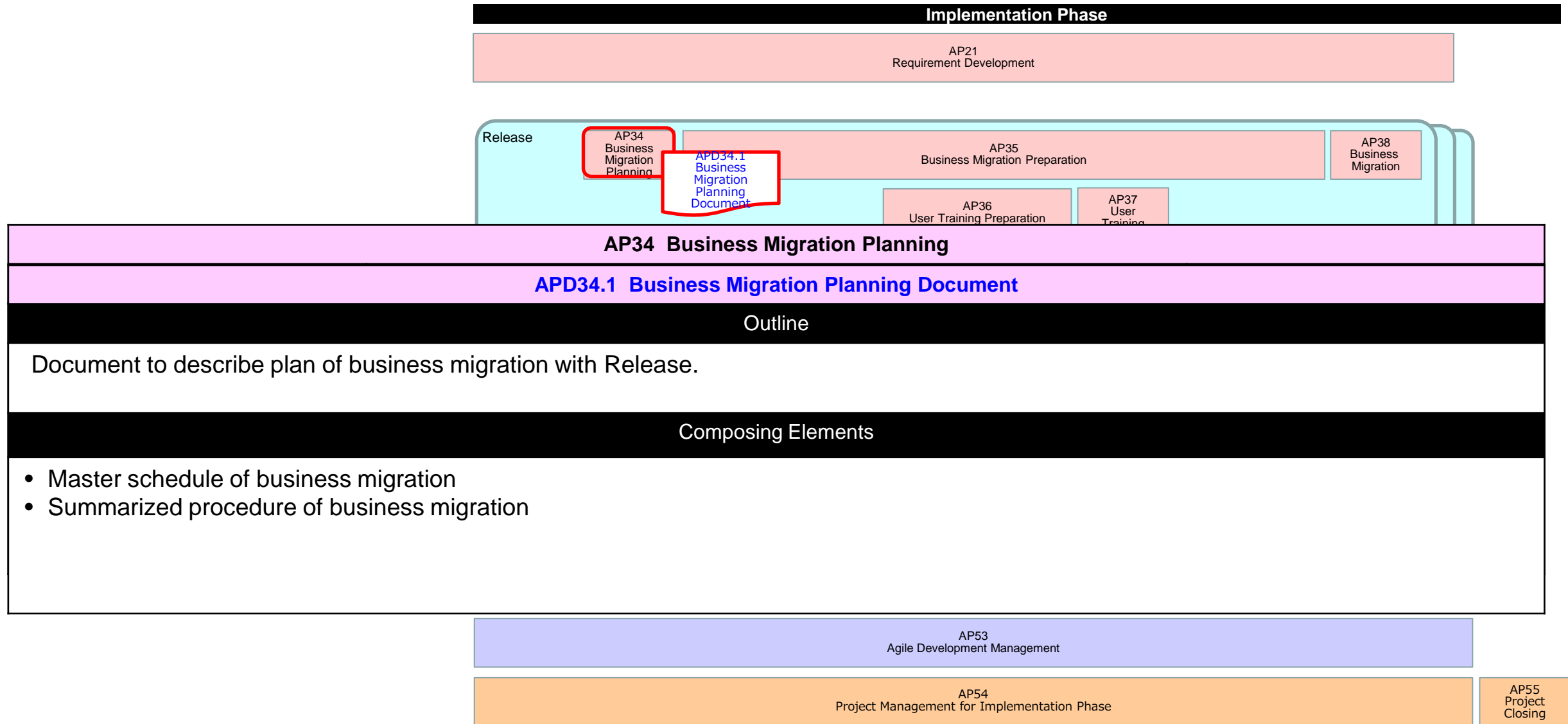
By Scrum Training Series (Michael James)

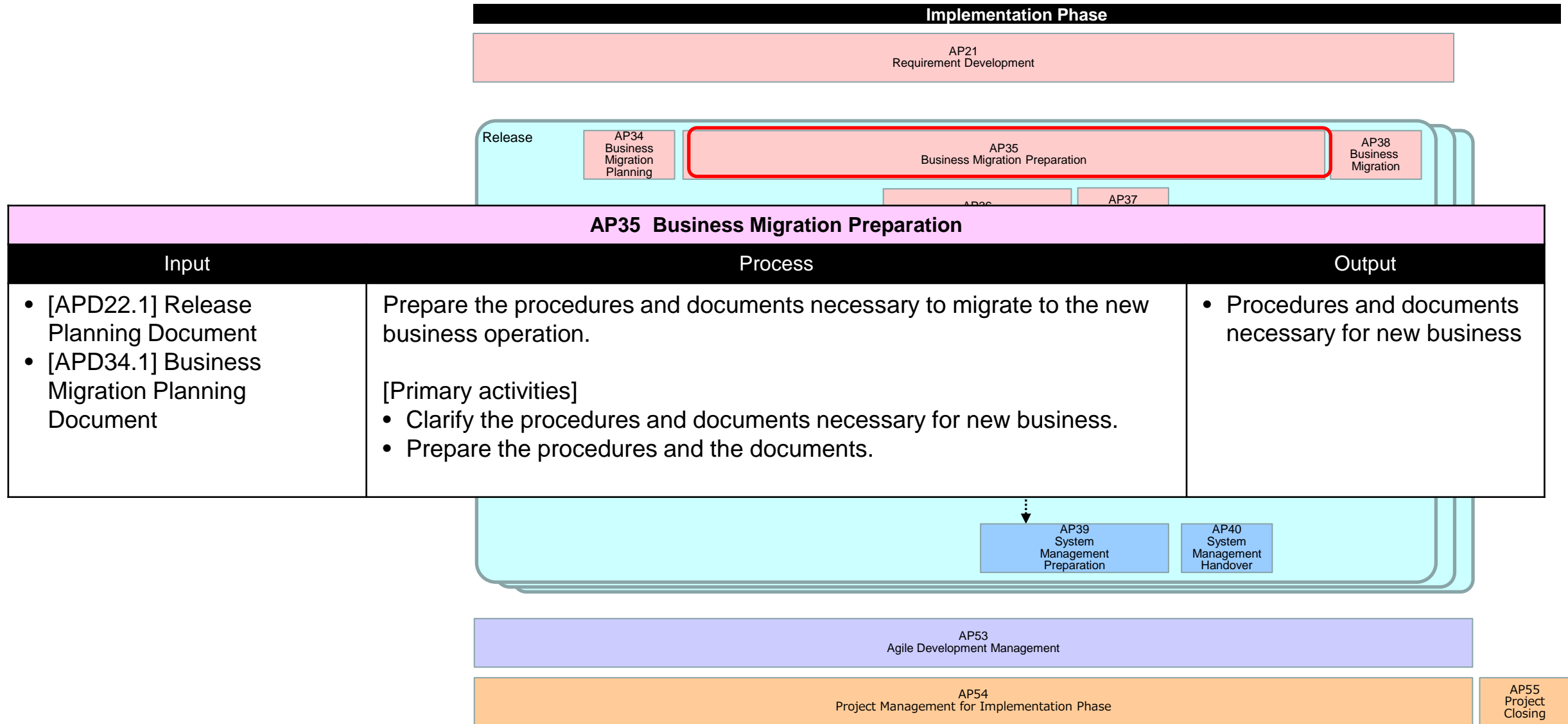


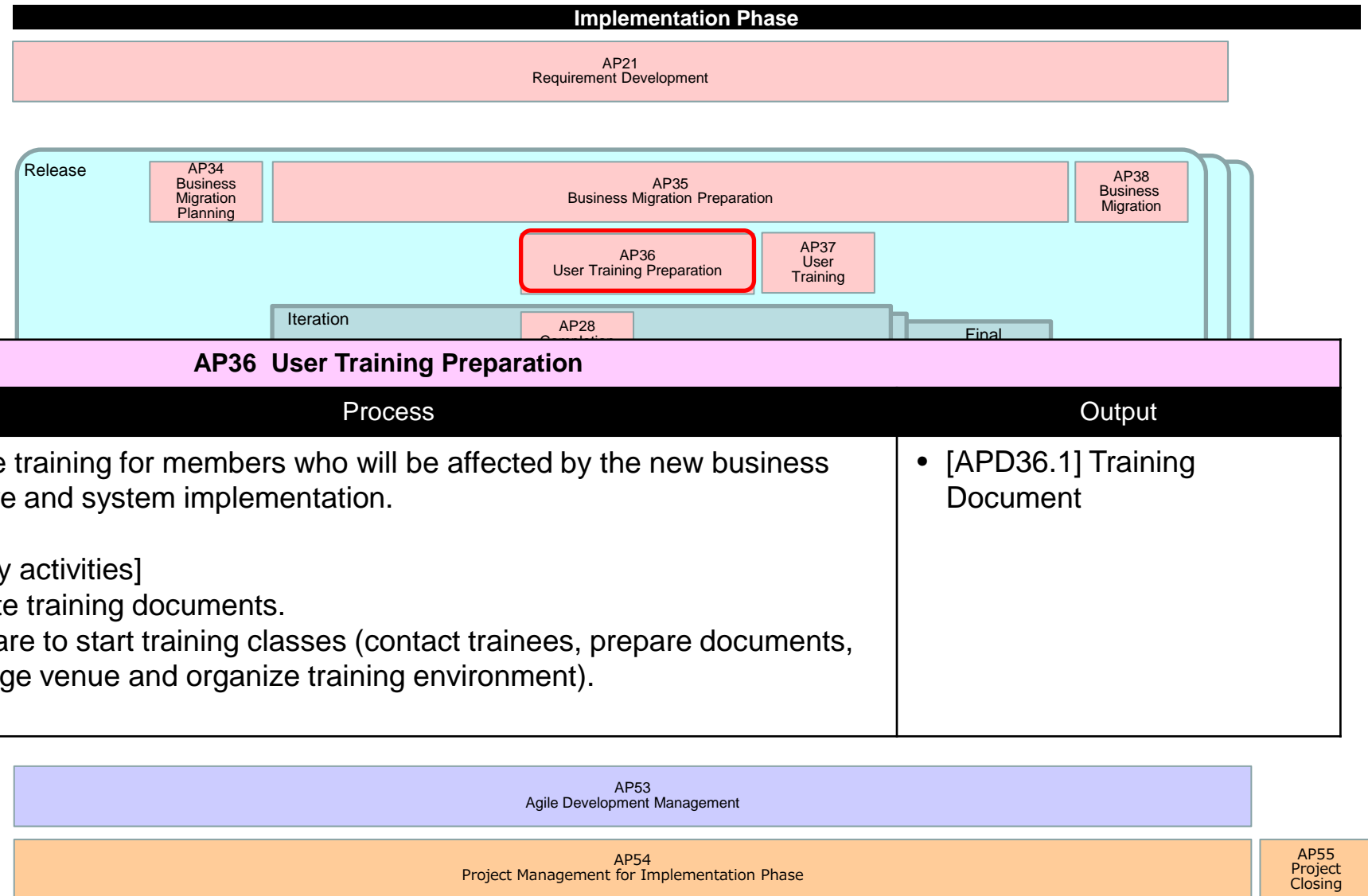


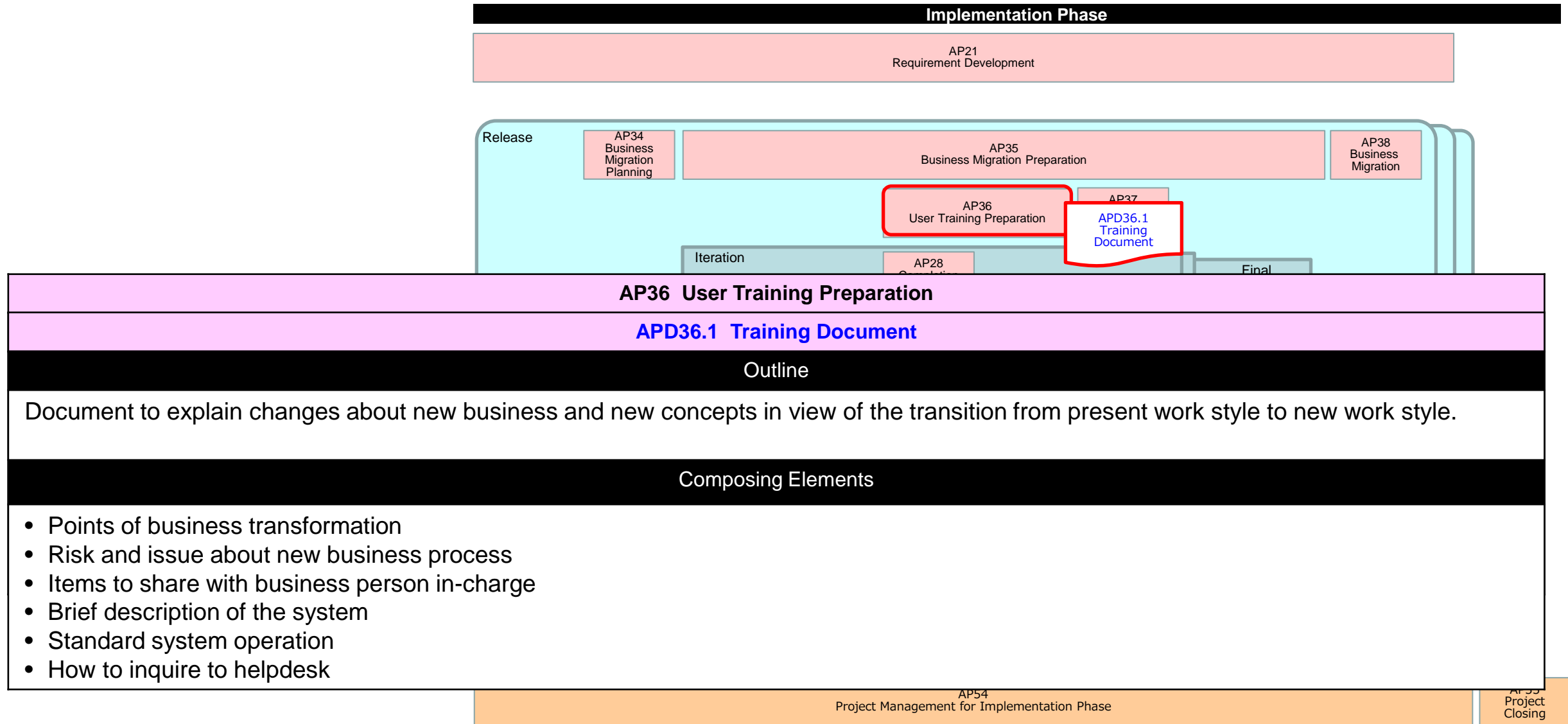


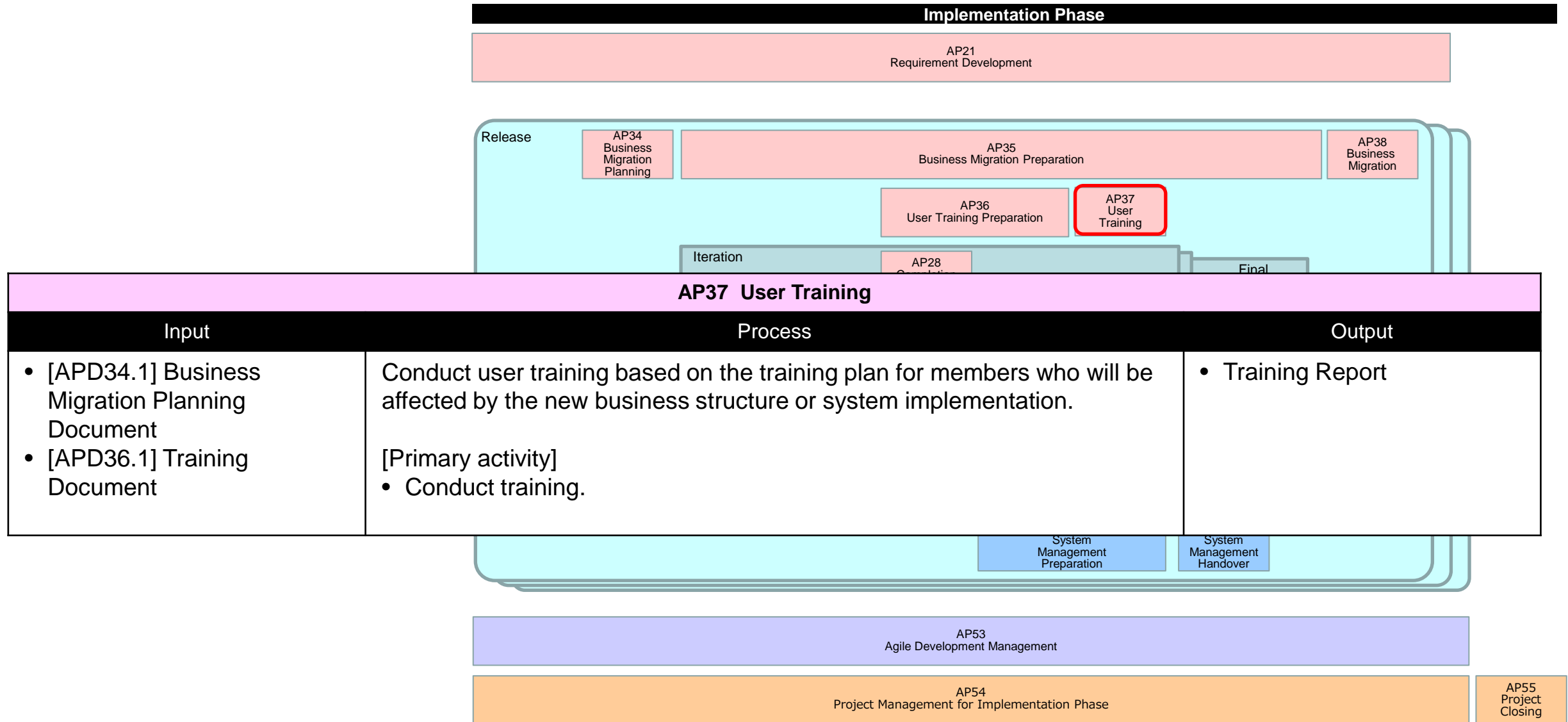


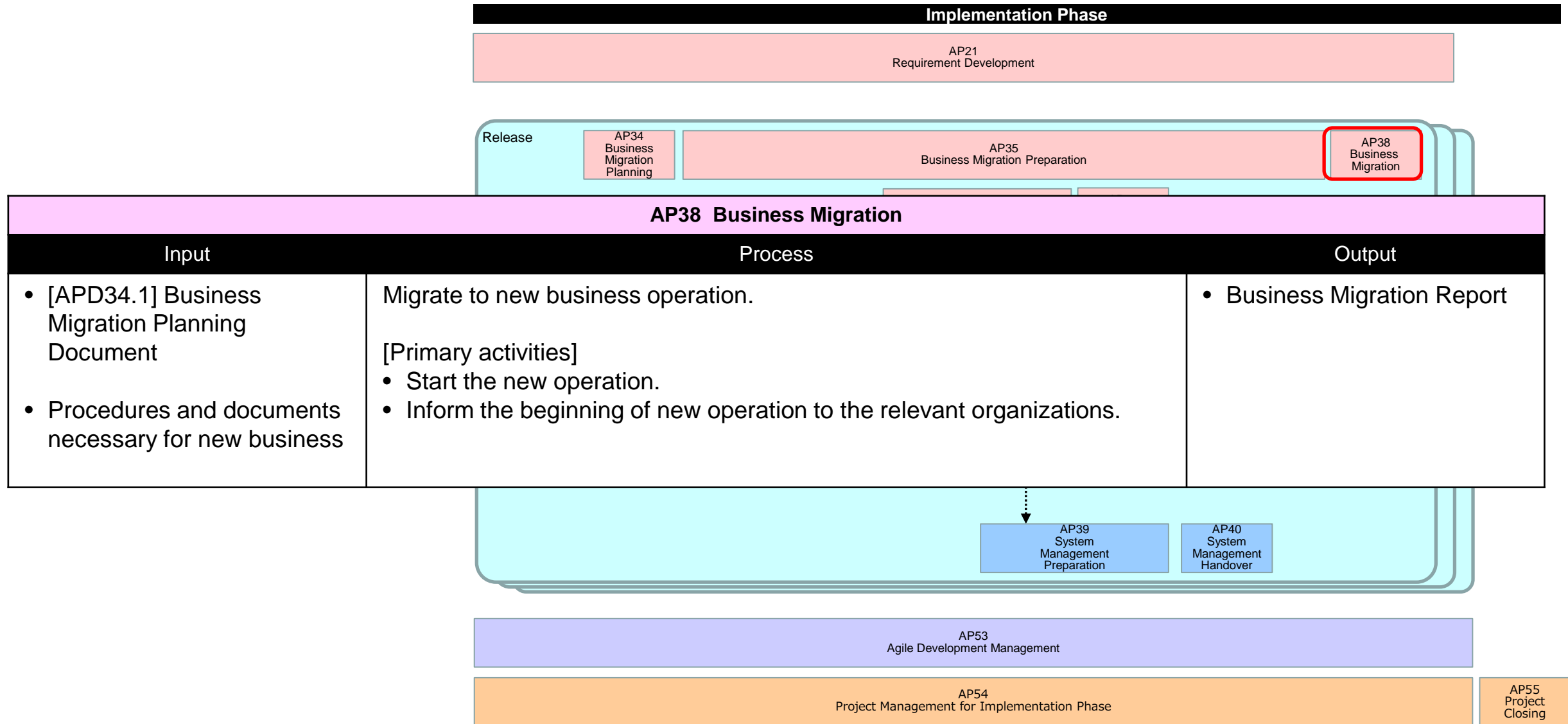


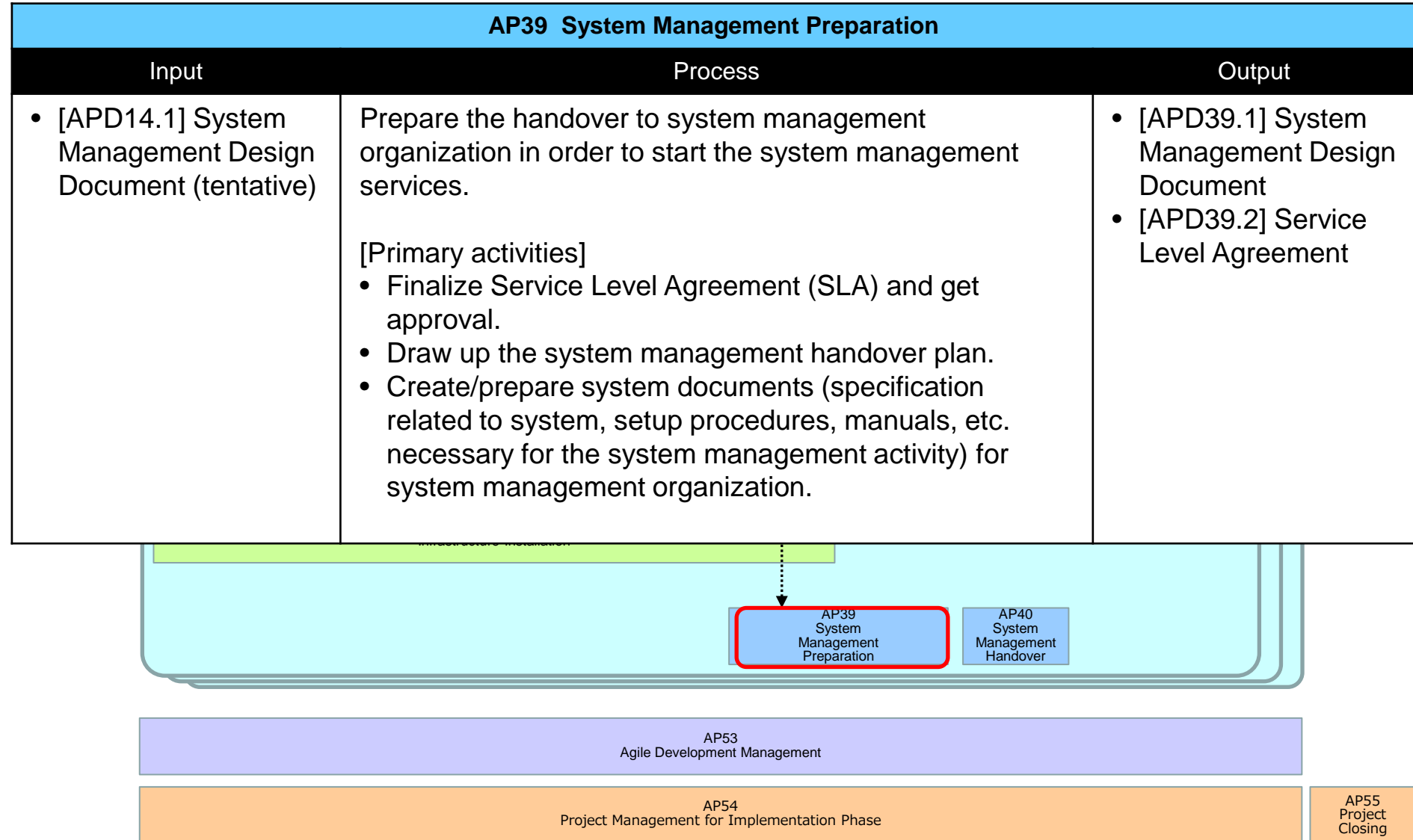


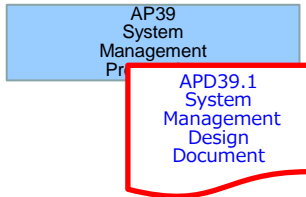












AP39 System Management Preparation
APD39.1 System Management Design Document
Outline
Document which defines the service items, contents and operation organization structure of the system management activity.
Composing Elements
<ul style="list-style-type: none">• System management plan<ul style="list-style-type: none">○ Prerequisite condition○ System management organization○ Outsourcing plan○ Meeting○ Year-round schedule○ Resource/Cost plan○ Office environment• Service level management plan<ul style="list-style-type: none">○ Service level (service item, target value, priority definition, service hour)○ Monitoring and reporting method against service items○ Review method, process improvement procedure in the system management phase○ How to revise the SLA• Service procedures/System specifications<ul style="list-style-type: none">○ Configuration item identification for documents and system management handover completion criteria○ Service procedure document (procedure of application operations and maintenance, procedure to handle inquiries, procedure of troubleshooting, procedure of change management, etc.).○ System specification document• System management environment

AP39
System
Management
Pr

APD39.1
System
Management
Design
Document

APD39.2
Service
Level
Agreement

AP39 System Management Preparation

APD39.1 System Management Design Document

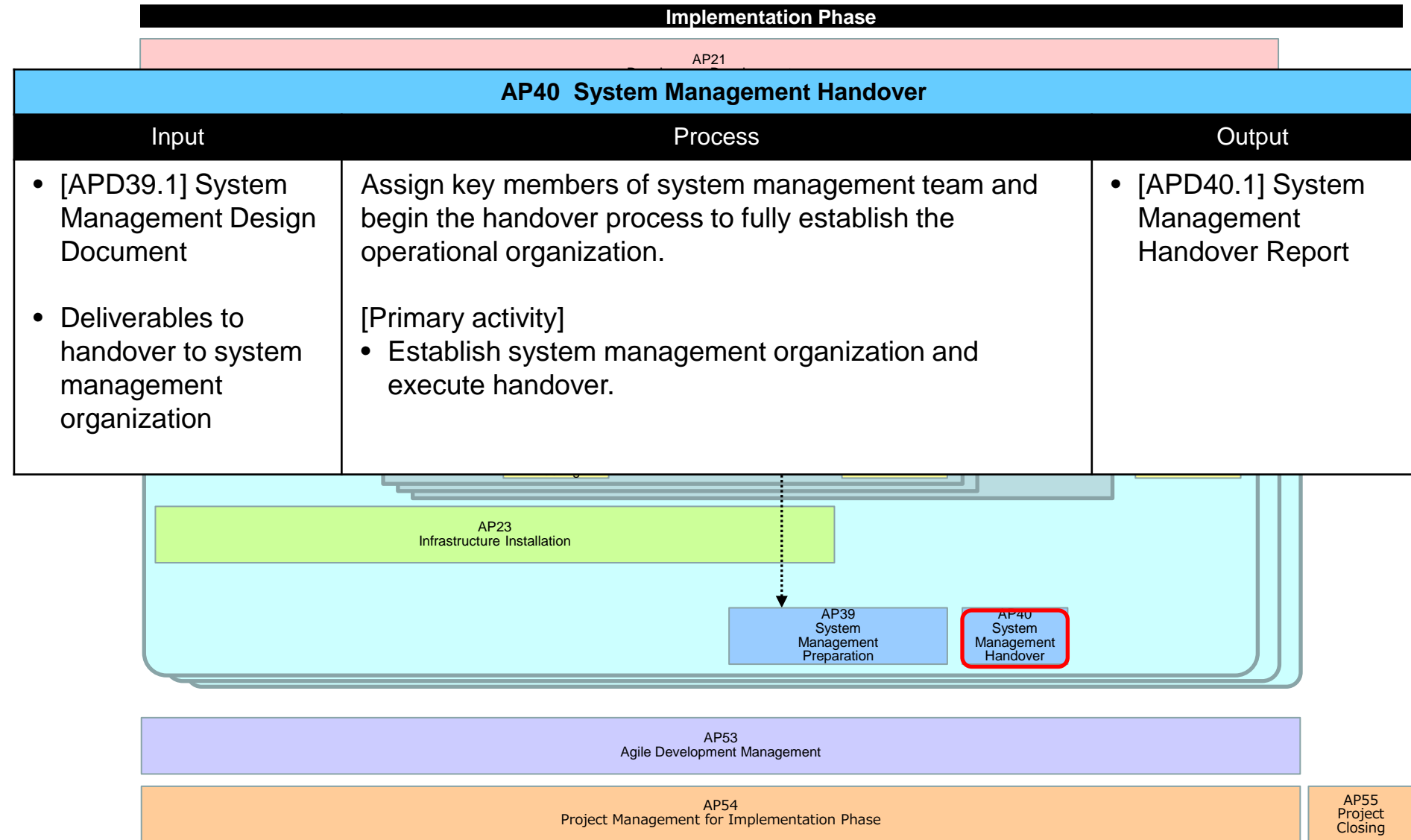
APD39.2 Service Level Agreement

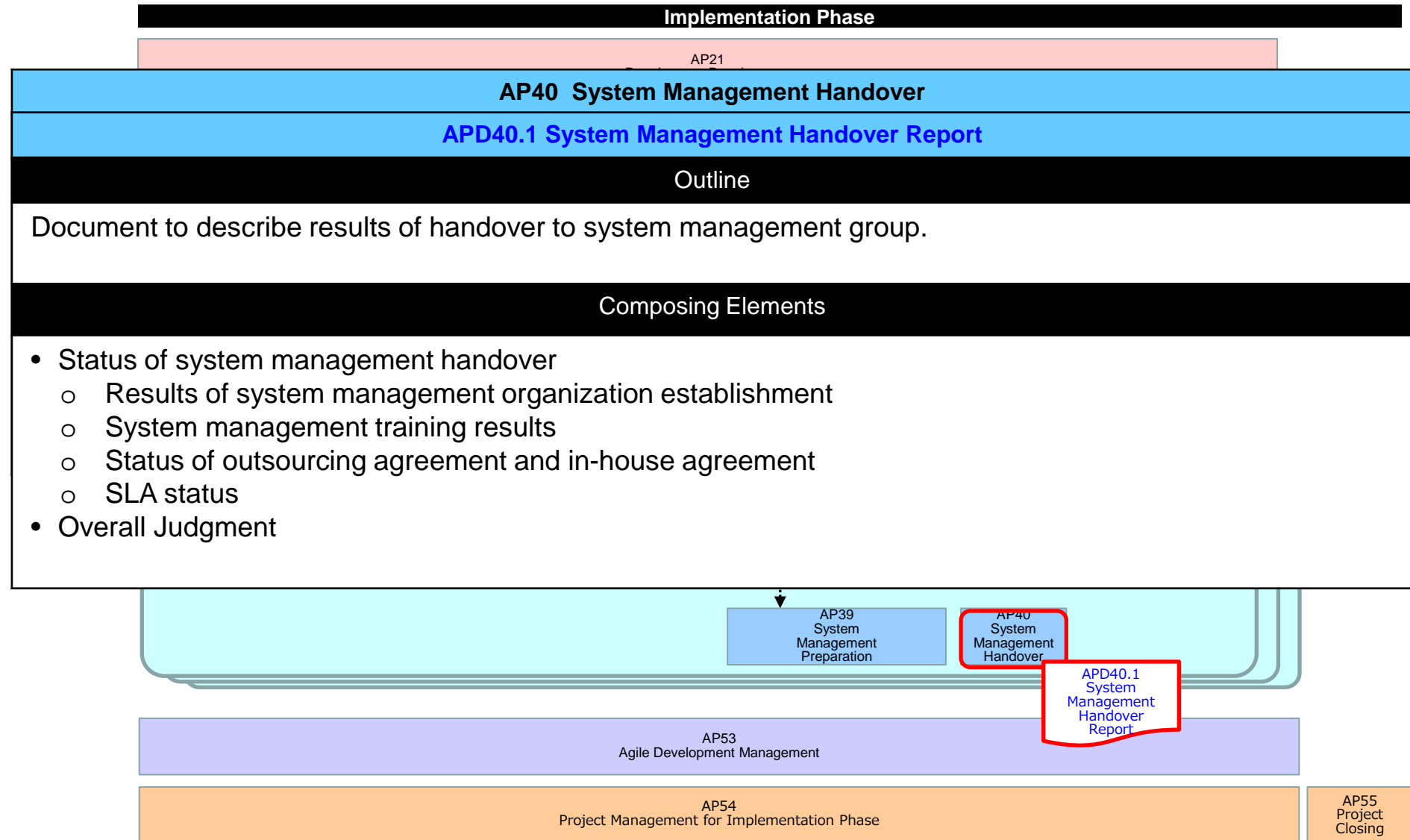
Outline

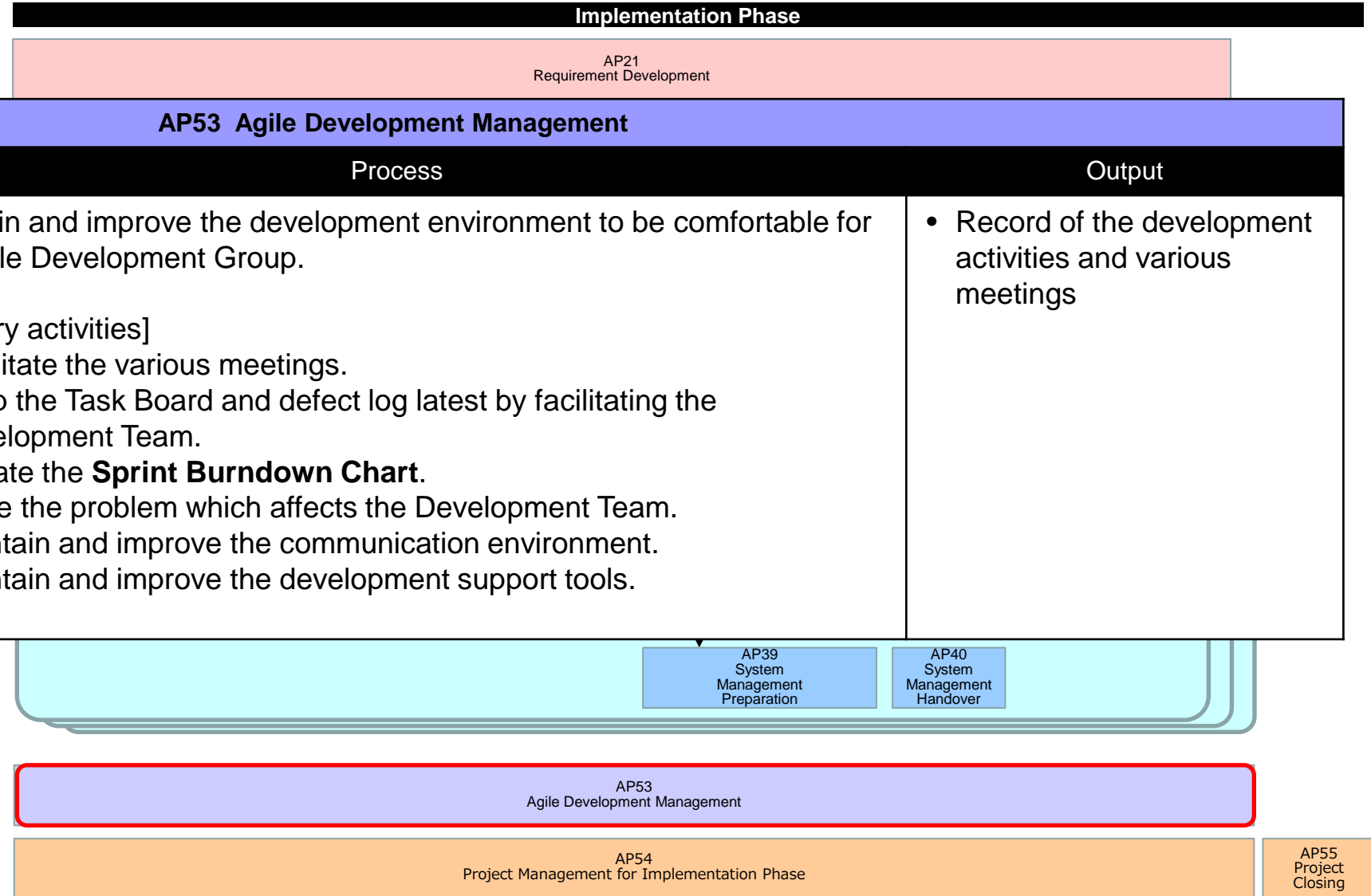
Document to formalize the agreement with users on the service contents of system management.

Composing Elements

- Scope and responsibility sharing of system management
- Service level (service item, target value, priority definition, service hour)
- Support and maintenance service procedure (overview):
 - Application operations and maintenance
 - Procedure to handle inquiries
 - Troubleshooting
 - Change management, etc.
- Management rules (management system, performance reporting method, review method, process improvement procedure in the system management phase)
- Evaluation of support and maintenance activities (resources and costs)





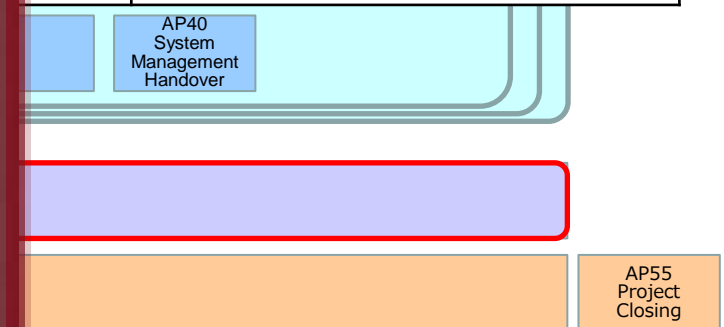
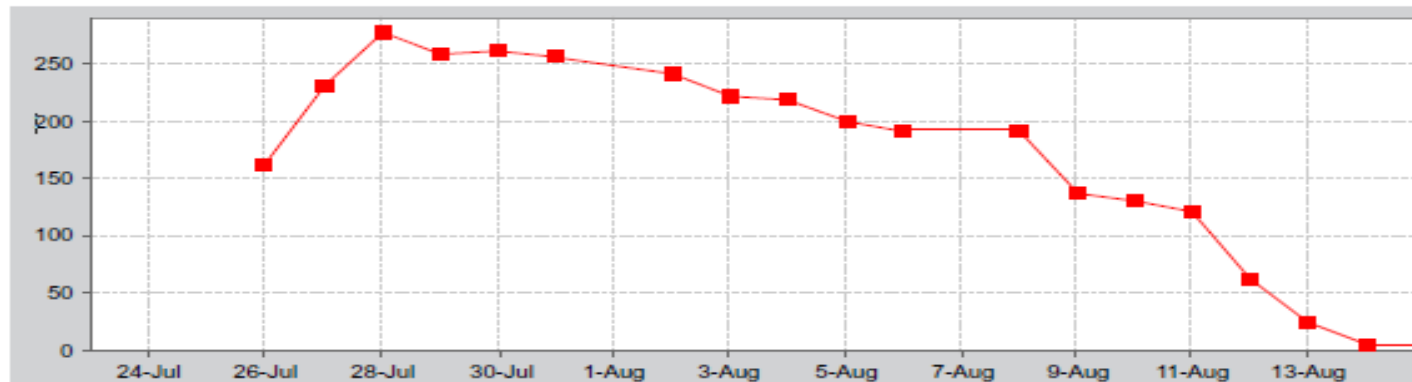


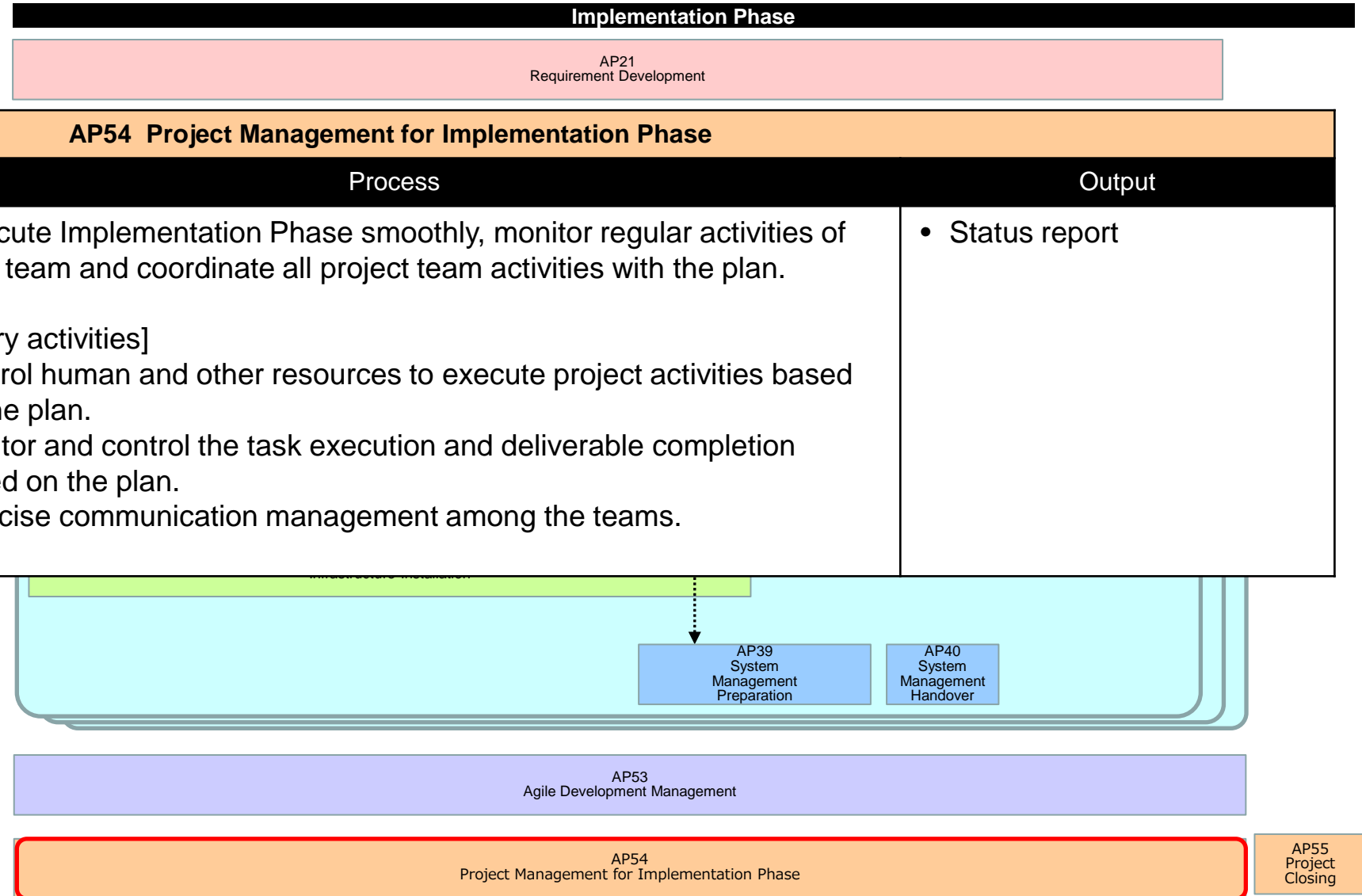


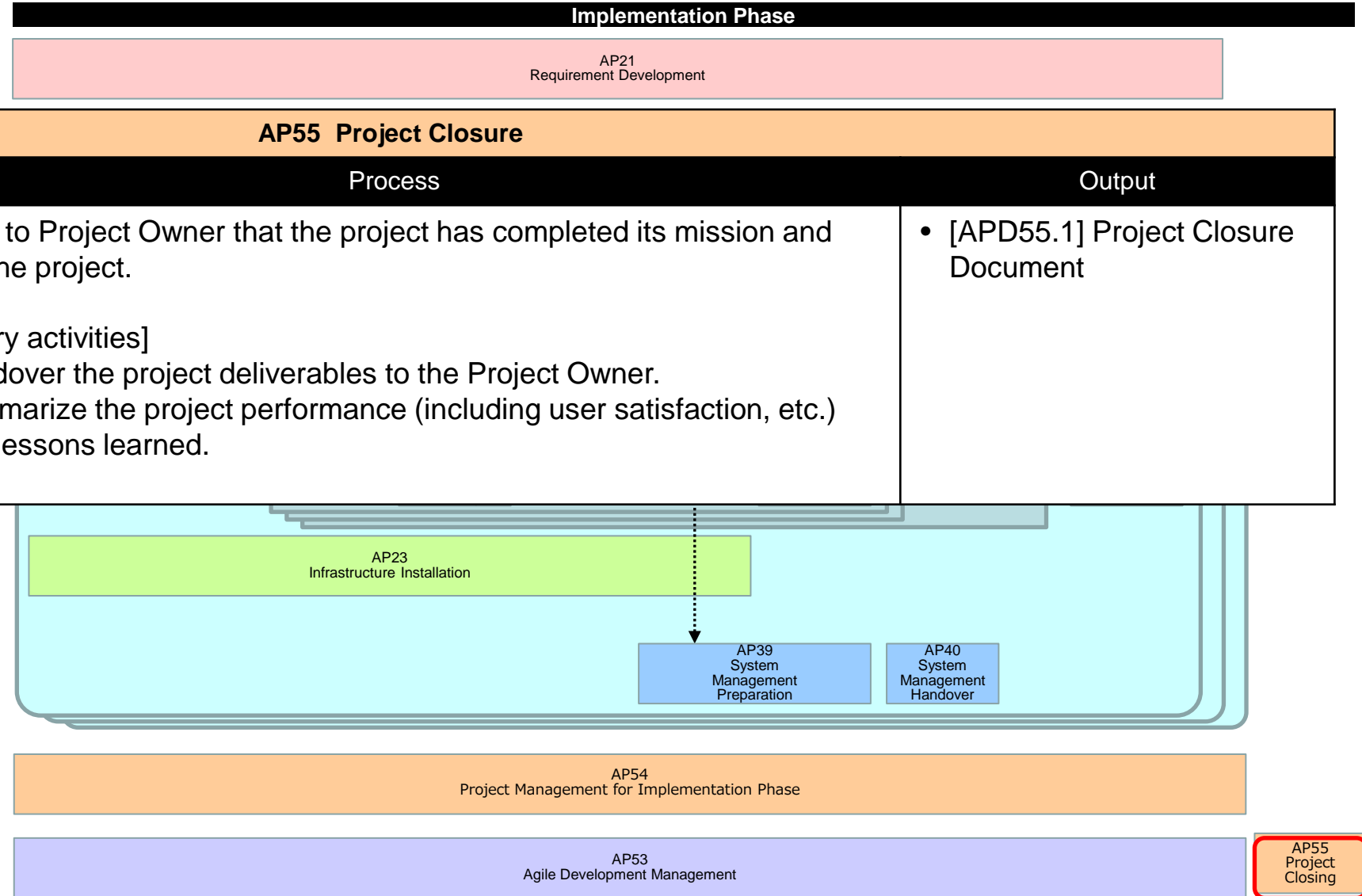
AP53 Agile Development Management		
Input	Process	Output
<ul style="list-style-type: none"> [APD2.2] Agile Charter 	<p>Maintain and improve the development environment to be comfortable for the Agile Development Group.</p> <p>[Primary activities]</p> <ul style="list-style-type: none"> Facilitate the various meetings. Keep the Task Board and defect log latest by facilitating the Development Team. Update the Sprint Burndown Chart. 	<ul style="list-style-type: none"> Record of the development activities and various meetings

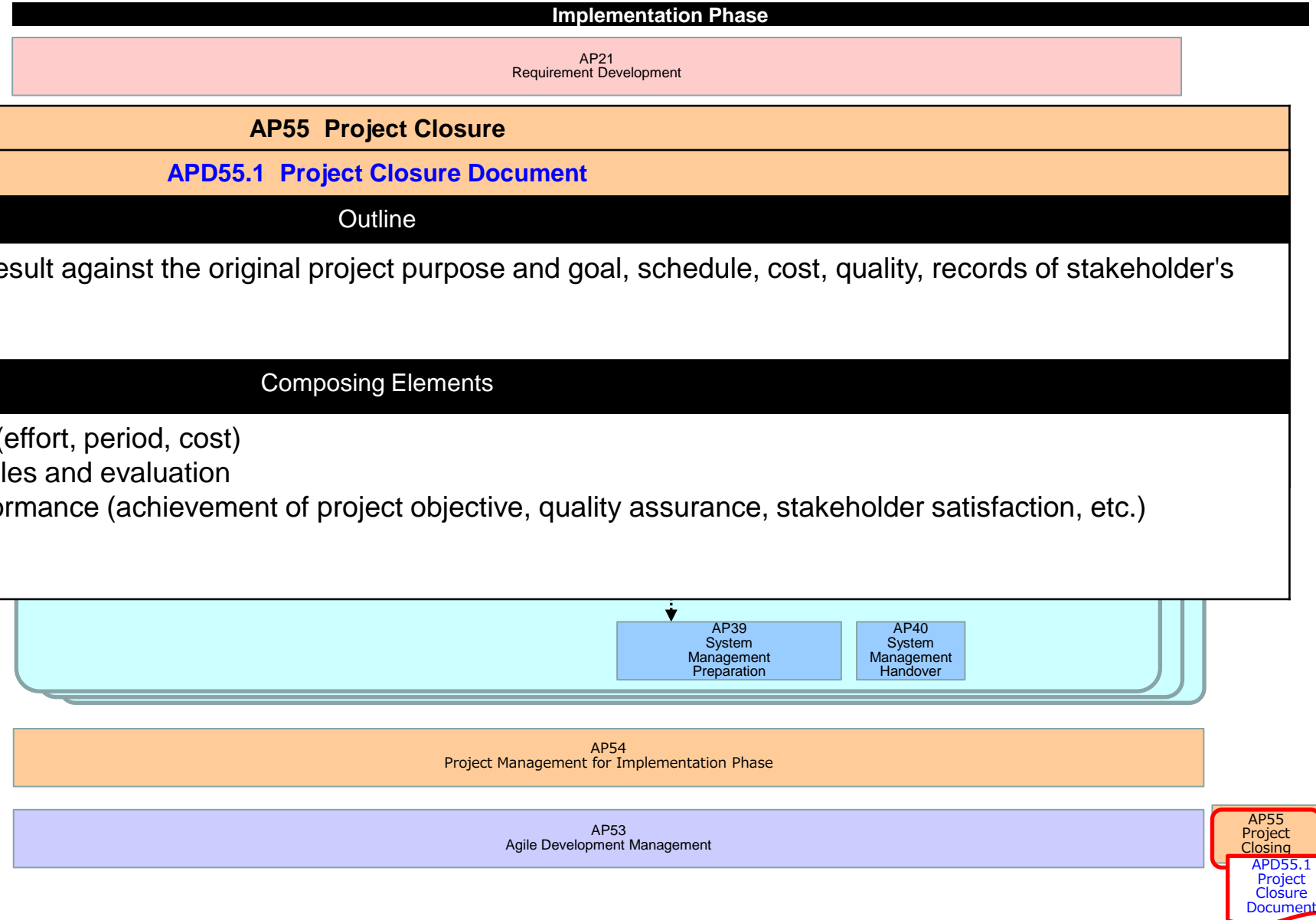
Sprint Burndown Chart

Graph to indicate remaining work items in Iteration.









Relation between Common Task and Role (RACI Chart)

Phase	Task	Project Manager	Project Management Group	Customer Group	Representative of Customer	Agile PMO	Development Team	Infrastructure Group	System Management Group
Planning	AP1 Business Needs Analysis			R / A					
	AP2 Project Planning	R	C	C	R / A	C	I	I	I
	AP51 Project Management for Planning Phase	A	R						
Design	AP11 Product Roadmap Drawing			C	R / A				
	AP12 Solution Design				C		R / A	C	C
	AP13 Infrastructure Architectural Design				I		C	R / A	C
	AP14 System Management Design				I		C	C	R / A
	AP52 Project Management for Design Phase	A	R						
Implementation	AP21 Requirement Development			C	R / A	C			
	AP22 Release Planning				A	C	R		
	AP23 Infrastructure Installation					C		R / A	
	AP24 Development Environment Preparation					C	R / A		
	AP25 Iteration Planning						R / A		
	AP26 Development						R / A		
	AP27 Daily Stand-up Meeting					C	R / A		
	AP28 Completion Judgment				R / A	C	R		
	AP29 Delivery Preparation						R / A		
	AP30 Delivery				A		R		
	AP31 Iteration Retrospective					C	R / A		
	AP32 Go Live				R / A				
	AP33 Release Retrospective					C	R / A		
	AP34 Business Migration Planning		I	R / A					
	AP35 Business Migration Preparation		I	R / A					
	AP36 User Training Preparation		I	R / A					
	AP37 User Training		I	R / A					
	AP38 Business Migration		I	R / A					
	AP39 System Management Preparation		I						R / A
	AP40 System Management Handover		I						R / A
	AP53 Agile Development Management					R / A			
	AP54 Project Management for Implementation Phase	A	R						
	AP55 Project Closure	A	R						

Legend: R=Responsible for, A=Accountable, C=Consulted, I=Informed

End of Document

Appendix

Record of Changes

SONY

Date	Description
2016/08/15	New Version

Associated Activities (GADC Global Rules – Project-less Model)



Global Common Methodology (GCM) ▶ Associated Activities

Global Common Methodology (GCM)

- Home
- Guidelines
- Methodology W/F
- Methodology Agile
- Associated Activities**
- Training
- Support Tools
- Glossary
- Access Authorization Policy
- Contact Us
- Public Comment

Associated Activities

GADC Global Rules

- **Project-less Model (a.k.a DevOps Model)**

- A Project can refer to "[Project-less Home Page](#)", when developing system with "Project-less Model (a.k.a DevOps Model)" and also when developing system with Cloud solution or Agile way. Because Project-less could be realized by adopting them, a project can refer to it.

- **Document Standardization**

- A Project can refer to the document templates for component of "[GPD18.1] Architectural Design Document".
 - [Solution Architecture Document Template \(non-SAP\)](#)
 - [Solution Design Document Template \(non-SAP\)](#)
 - [Function Specification Document Template \(non-SAP\)](#)

- **Testing Competency**

- A project should judge the application for "[Feasibility Check for Testing](#)" when executing "[GP23] Test Planning".
- A Project can refer to "[Test Case Design Guidelines](#)" when executing "[GP23] Test Planning".
- A Project can refer to "[Unit Test Guidelines](#)", when executing "[GP37] Coding and Unit Test".

Associated Activities (link to GADC Global Rules – Project-less Model)



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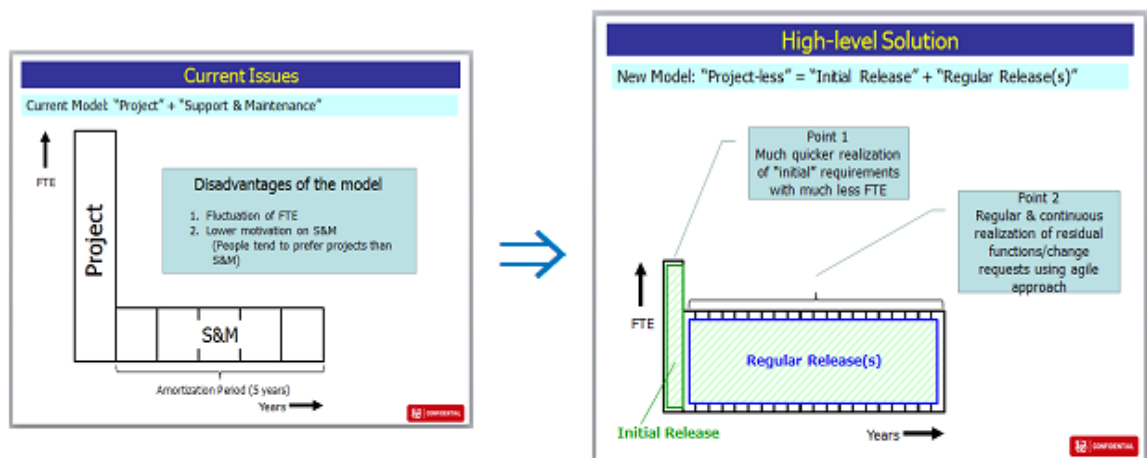
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Associated Activities (link to GADC Global Rules – Project-less Model)

Project-less Homepage

<https://shs03.jp.sony.com/sites/ADSC/G-ADC/Delivery%20Competency/Project-lessmodel/SitePages/Home.aspx>



What's Project-less Model?

Project-less Model is composed of "Initial Release" and "Regular Release(s)".

Features of Project-less Model:

- Much quicker realization of "initial" requirements with much less FTE
- Regular & continuous realization of residual functions/change requests using agile approach

Common (Initial Release, Regular Release(s))

No	Document Name	Competency Domain	Document Type	Category	Related GCM Process	Abstract
1	Agile Adoption Criteria	Agile Methodology	Guideline	Mandatory		12 factors which help team to think whether their project is suitable to Agile model or not.

Associated Activities (link to GADC Global Rules – Project-less Model)

Regular Release(s)

No	Document Name	Competency Domain	Document Type	Category	Related GCM Process	Abstract
1	Do's & Don'ts	Agile Methodology	Checklist	Mandatory	All Processes	Which help projects to judge what should do or should not do.
2	Planning Poker	Agile Methodology	Best Practice	Recommended	[AP12] Solution Design, [AP21] Requirement Development	Introduced a kind of estimation method named Planning Poker.
3	Solution Architecture Document(SAD) template guideline for Agile	Agile Methodology	Guideline	Recommended	[AP12] Solution Design	Guide PJ to how to define SAD in Agile PJ
4	Solution Architecture Document(SAD) Template	Agile Methodology	Template	Mandatory	[AP12] Solution Design	Template that PJ can utilize it to define SAD.
5	Agile documentation Best practice	Agile Methodology	Best Practice	Recommended		Introduced some best practice method for Agile document.
6	Backlog	Agile Methodology	Best Practice	Recommended	[AP21] Requirement Development, [AP25] Iteration Planning	Provided excel templates of product backlog ,iteration backlog and burndown chart.

Contact:

Enquiry regarding deliverables related to project-less <GADC-ITSM-QA-Planning@ap.sony.com>



GCM Agile eQuiz

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