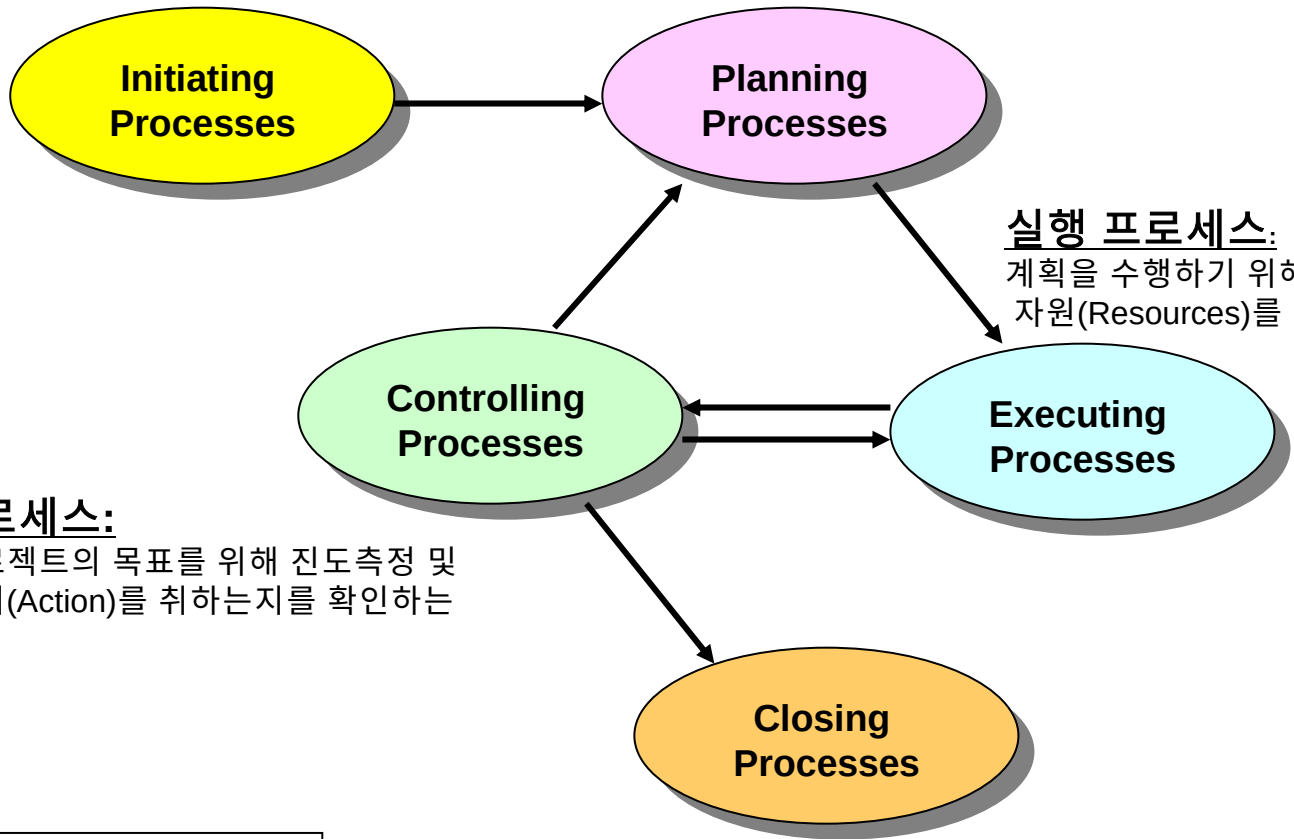
Figure - Links Among Process Groups in a Phase

개시 프로세스:
어떤 프로젝트 또는 단계(Phase)가 시작되고 착수되어야 하는가를 인식하는 프로세스

계획수립 프로세스:
착수한 프로젝트의 요구사항(Business Need)를 달성하기위한 작업개요를 작성하고 유지-관리하는 프로세스



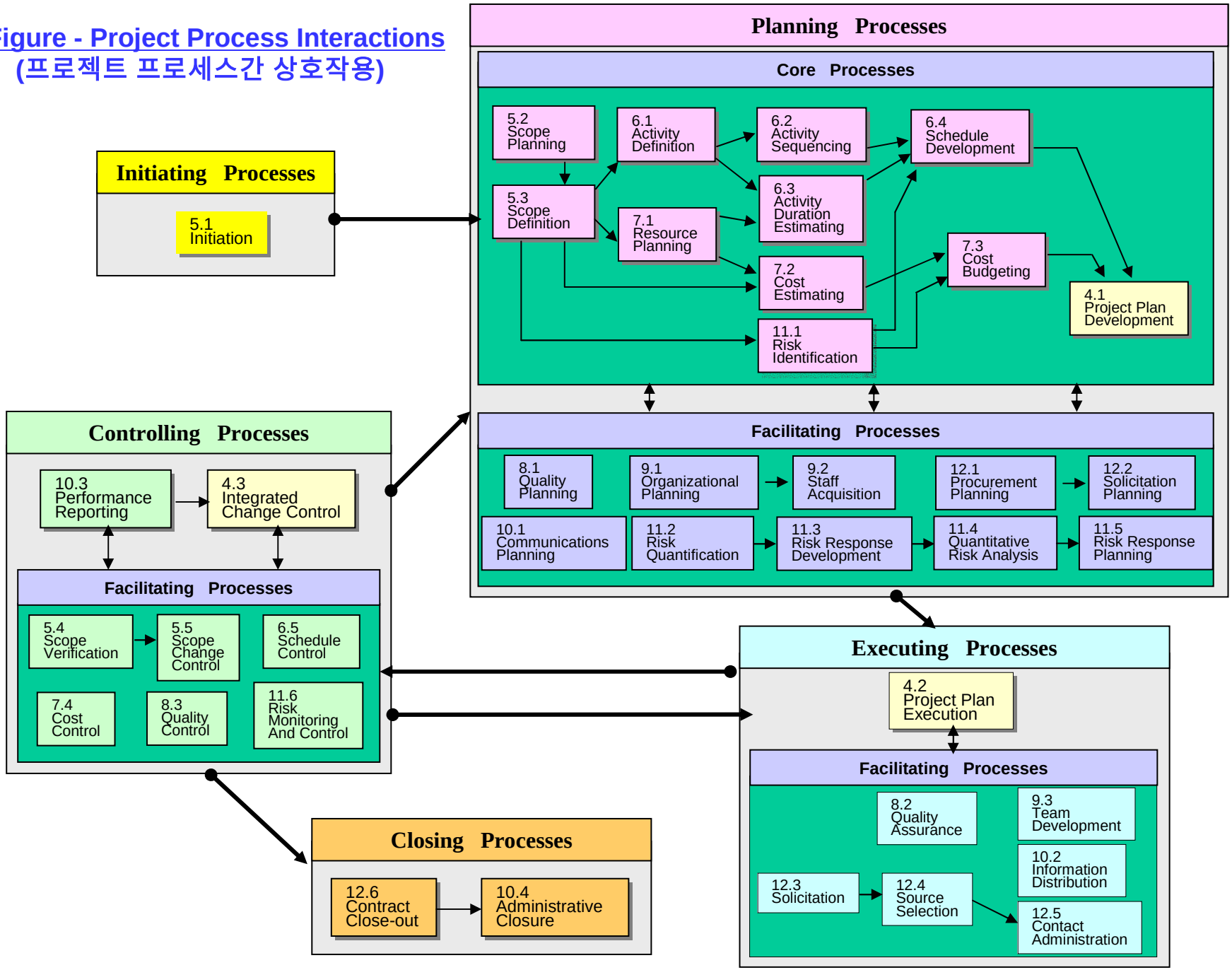
실행 프로세스:
계획을 수행하기 위해서 인력 및 다른 자원(Resources)를 조정하는 프로세스

통제 프로세스:
필요시 프로젝트의 목표를 위해 진도측정 및 올바른 행위(Action)를 취하는지를 확인하는 프로세스

(Arrows represent flow of documents and documentable items)

종결 프로세스:
프로젝트 또는 프로젝트 단계(Phase)를 승인하고 정상적으로 종결이 되도록 하는 프로세스

Figure - Project Process Interactions
(프로젝트 프로세스간 상호작용)



Initiating 프로세스

Inputs
-Product Description
-Strategic Plan
-Project Selection Criteria
-Historical Information

Tools and Techniques
-Project Selection Methods
-Expert Judgment

5.1 Initiation

Outputs
1. Project Charter
2. Project Manager Identified / Assigned
3. Constraints
4. Assumptions

Planning 프로세스의 Core Process

Inputs
-Product Description
-Project Charter
-Constraints
-Assumptions

Tools and Techniques
-Product Analysis
-Benefit / Cost Analysis
-Alternatives Identification
-Expert Judgment

5.2 Scope Planning

Outputs
1. Scope Statement
2. Supporting Detail
3. Scope Management Plan

Tools and Techniques
-Precedence Diagramming Method (PDM)
-Arrow Diagramming Method (ADM)
-Conditional Diagramming Methods
-Network Templates

6.2 Activity Sequencing

Outputs
1. Project Network Diagrams
2. Activity List Updates

Inputs
-Activity List
-Product Description
-Mandatory Dependencies
-Discretionary Dependencies
-External Dependencies
-Milestones

Tools and Techniques
-Mathematical Analysis
-Duration Compression
-Simulation
-Resource Leveling Heuristics
-Project Management Software
-Coding structure

Inputs
-Project Network Diagrams
-Activity Duration Estimates
-Resource Requirements
-Resource Pool Description
-Calendars
-Constraints
-Assumptions
-Leads and Lags
-Risk management plan
-Activity attributes

6.4 Schedule Development

Outputs
1. Project Schedule
2. Supporting Detail
3. Schedule management Plan
4. Resource Requirements Updates

Tools and Techniques
-Decomposition
-Templates

6.1 Activity Definition

Outputs
1. Activity List
2. Supporting Detail
3. Work breakdown structure Updates

Inputs
-Work breakdown structure
-Scope Statement
-Historical Information
-Constraints
-Assumptions
-Expert judgment

Output
1. Activity Duration Estimates
2. Basis of Estimates
3. Activity List Updates

6.3 Activity Duration Estimating

Tools and Techniques
-Expert Judgment
-Analogous Estimating
-Quantitatively based durations
-Reserve time (contingency)

Inputs
-Activity List
-Constraints
-Assumptions
-Resource Requirements
-Resource Capabilities
-Historical Information
-Identified risks

Tools and Techniques
-Cost budgeting tools and Techniques

7.3 Cost Budgeting

Outputs
1. Cost Baseline

Inputs
-Cost Estimates
-Work breakdown structure
-Project Schedule
-Risk management plan

Inputs
-Scope Statement
-Constraints
-Assumptions
-Other Planning Outputs
-Historical Information

Tools and Techniques
-Expert Judgment
-Alternatives Identification
-Project management software

5.3 Scope Definition

Outputs
1. Work Breakdown Structure (WBS)
2. Scope statement updates

7.1 Resource Planning

Outputs
1. Resource Requirements

Inputs
-Work breakdown structure
-Resource Requirements
-Resource Rates
-Activity Duration Estimates
-Estimating publications
-Historical Information
-Chart of Accounts
-Risks

Outputs
1. Cost Estimates
2. Supporting Detail
3. Cost Management Plan

Tools and Techniques
-Work breakdown structure Templates
-Decomposition

Inputs
-Work breakdown structure
-Historical Information
-Scope Statement
-Resource Pool Description
-Organizational Policies
-Activity duration estimates

7.2 Cost Estimating

Tools and Techniques
-Analogous Estimating
-Parametric Modeling
-Bottom-up Estimating
-Computerized Tools
-Other cost estimating methods

Inputs
-Other Planning Outputs
-Historical Information
-Organizational Policies
-Constraints
-Assumptions

4.1 Project Plan Development

Outputs
1. Project Plan
2. Supporting Detail

Tools and Techniques
-Project Planning methodology
-Stakeholder Skills & Knowledge
-Project Management Information System (PMIS)
-Earned value management (EVM)

Inputs
-Product charter
-Organization's risk management policies
-Defined roles and responsibilities
-Stakeholder risk tolerances
-Template for the organization's risk management plan
-Work breakdown structure (WBS)

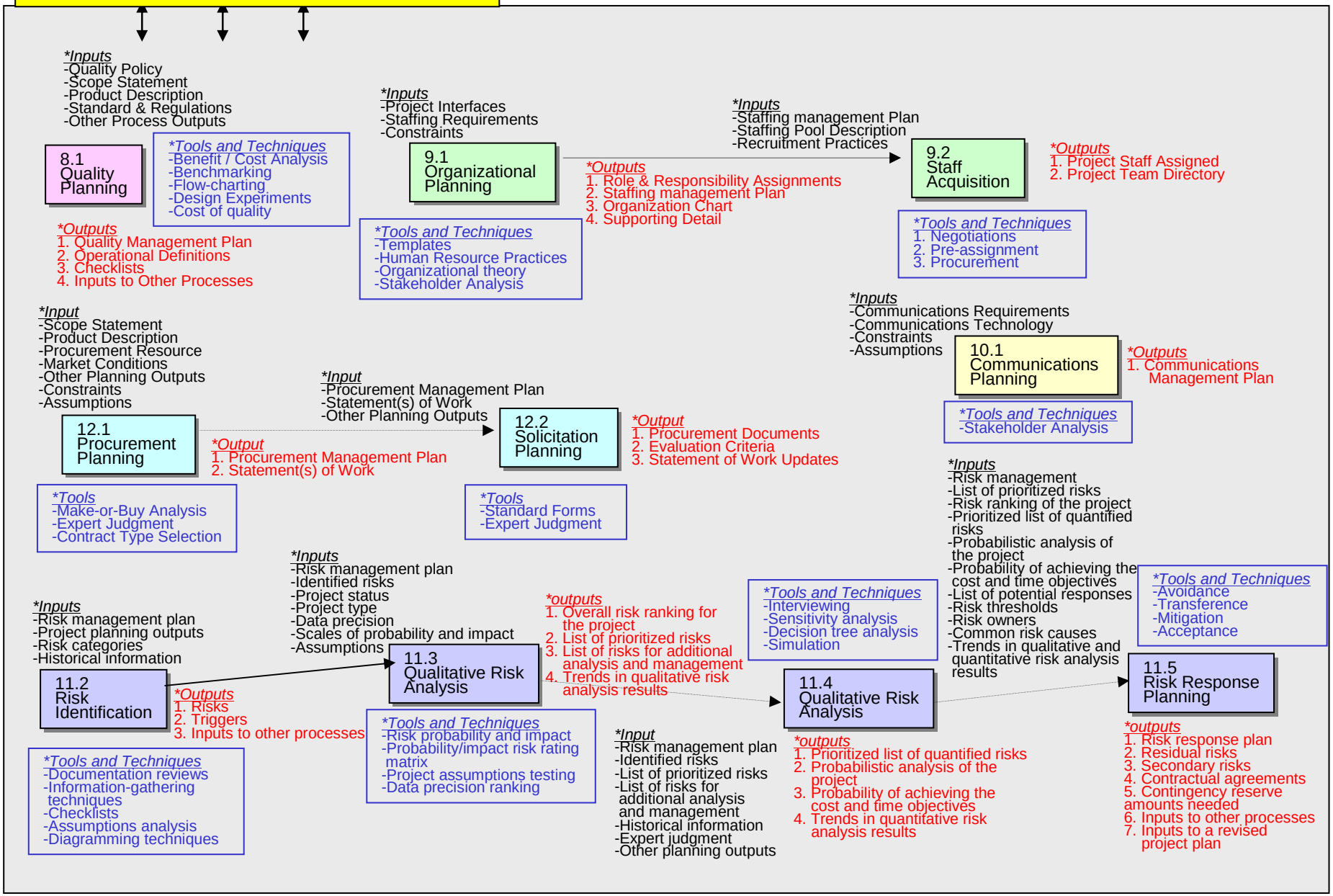
11.1 Risk Management Planning

Outputs
1. Risk management plan

Tools and Techniques
-Planning meetings

Planning 프로세스의 Core Process

Planning 프로세스의 Facilitating Process



Executing 프로세스

Core 프로세스

Inputs
-Project Plan
-Supporting Detail
-Organizational Policies
-Preventive action
-Corrective Action

4.2 Project Plan Execution

Outputs
1. Work Results
2. Change Requests

Tools and Techniques
-General Management Skills
-Product Skills & Knowledge
-Work Authorization System
-Status Review Meetings
-Project Management Information System (PMIS)
-Organizational Procedures

Facilitating 프로세스

Inputs
-Project Staff
-Project plan
-Staffing management Plan
-Performance Reports
-External Feedback

9.3 Team Development

Outputs
1. Performance Improvements
2. Input to Performance Appraisals

Tools and Techniques
-Team-Building Activities
-General Management Skills
-Reward and Recognition Systems
-Collocation
-Training

Inputs
-Quality Management Plan
-Results of Quality Control Measurements
-Operational Definitions

8.2 Quality Assurance

Outputs
1. Quality Improvement

Tools and Techniques
-Quality Planning Tools and Techniques
-Quality Audits

Inputs
-Work Results
-Communication Management Plan
-Project Plan

10.2 Information Distribution

Outputs
1. Project records
2. Project reports
3. Project presentations

Tools and Techniques
-Communications Skills
-Information Retrieval System
-Information Distribution methods

Inputs
-Procurement Documents
-Qualified Seller Lists

12.3 Solicitation

Outputs
1. Proposals

Tools and Techniques
-Bidders Conferences
-Advertising

Inputs
-Proposals
-Evaluation Criteria
-Organizational Policies

12.4 Source Selection

Outputs
1. Contract

Tools and Techniques
-Contract Negotiation
-Weighting System
-Screening System
-Independent Estimates

Inputs
-Contract
-Work Results
-Change Requests
-Seller Invoices

12.5 Contact Administration

Outputs
1. Correspondence
2. Contract Changes
3. Payment Requests

Tools and Techniques
-Contract Change Control System
-Performance Reporting
-Payment System

Controlling 프로세스

Core 프로세스

Tools and Techniques
-Performance Reviews
-Variance Analysis
-Trend analysis
-Earned value analysis
-Information distribution Tools and Techniques

Tools and Techniques
-Change Control System
-Configuration Management
-Performance Measurement
-Additional Planning
-Project Management Information System (PMIS) *

Inputs
-Project Plan
-Work Results
-Other Project Records

10.3 Performance Reporting

Outputs
1. Performance Reports
2. Change Requests

Inputs
-Project Plan
-Performance Reports
-Change Requests

4.3 Integrated Change Control

Outputs
1. Project Plan Updates
2. Corrective Action
3. Lessons Learned

Facilitating 프로세스

Inputs
-Work Results
-Product Documentation
-Work breakdown structure
-Scope statement
-Project plan

5.4 Scope Verification

Outputs
1. Formal Acceptance

Tools and Techniques
-Inspection

Inputs
-Work Breakdown Structure
-Performance Reports
-Change Requests
-Scope management Plan

5.5 Scope Change Control

Outputs
1. Scope Change
2. Corrective Action
3. Lessons Learned

Tools and Techniques
-Scope Change Control System
-Performance Measurement
-Additional Planning

Inputs
-Project Schedule
-Performance Reports
-Change Requests
-Schedule management Plan

6.5 Schedule Control

Outputs
1. Schedule Updates
2. Corrective Action
3. Lessons Learned

Tools and Techniques
-Schedule Change Control System
-Performance Measurement
-Additional Planning
-Project Management Software
-Variance analysis

Inputs
-Cost Baseline
-Performance Reports
-Change Requests
-Cost Management Plan

7.4 Cost Control

Outputs
1. Revised Cost Estimates
2. Budget Updates
3. Corrective Action
4. Estimates at Completion
5. Project closeout
6. Lessons Learned

Tools and Techniques
-Cost Change Control System
-Performance Measurement
-Earned value management (EVM)
-Additional Planning
-Computerized Tools

Inputs
Work Results
Quality Management Plan
Operational Definitions
Checklists

8.3 Quality Control

Outputs
1. Quality Improvement
2. Acceptance Decisions
3. Rework
4. Completed Checklists
5. Process Adjustments

Tools and Techniques
-Inspection
-Control Charts
-Pareto Diagrams
-Statistical Sampling
-Flow-charting
-Trend Analysis

Inputs
-Risk management plan
-Risk response plan
-Project communication
-Additional risk identification and analysis
-Scope changes

11.6 Risk Monitoring and Control

Outputs
1. Workaround plans
2. Corrective action
3. Project change requests
4. Updates to the risk response plan
5. Risk database
6. Updates to risk identification checklists

Tools and Techniques
-Project risk response audits
-Periodic project risk reviews
-Earned value analysis
-Technical performance measurement
-Additional risk response planning

Closing 프로세스

Core 프로세스