

Capability Maturity Model Integrationsm



CMMIsm Level 2 thru 5 IDEF0 Diagrams

David F. Rico

sm Capability Maturity Model Integration and CMMI are service marks of Carnegie Mellon University.

Used At:

Author:

Project:

Notes:

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Date: 7/29/2002

Rev:

Time: 22:44:29

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Working

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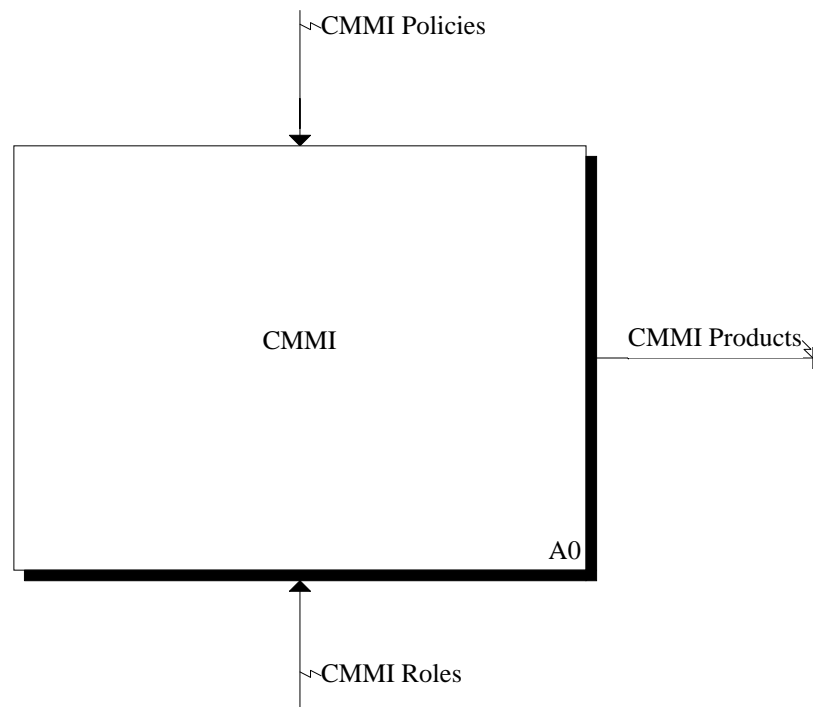
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DATE

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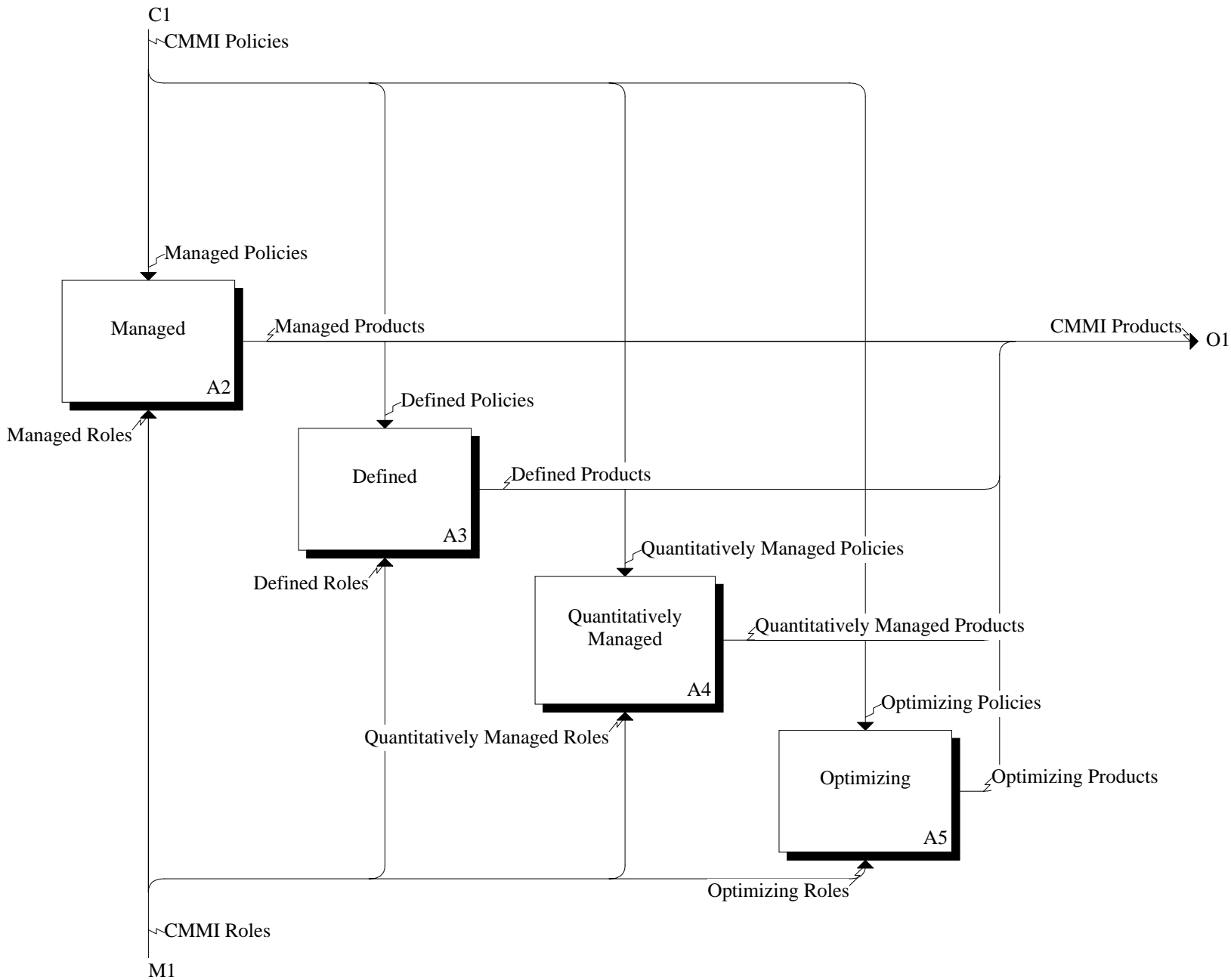
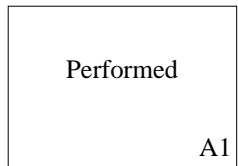
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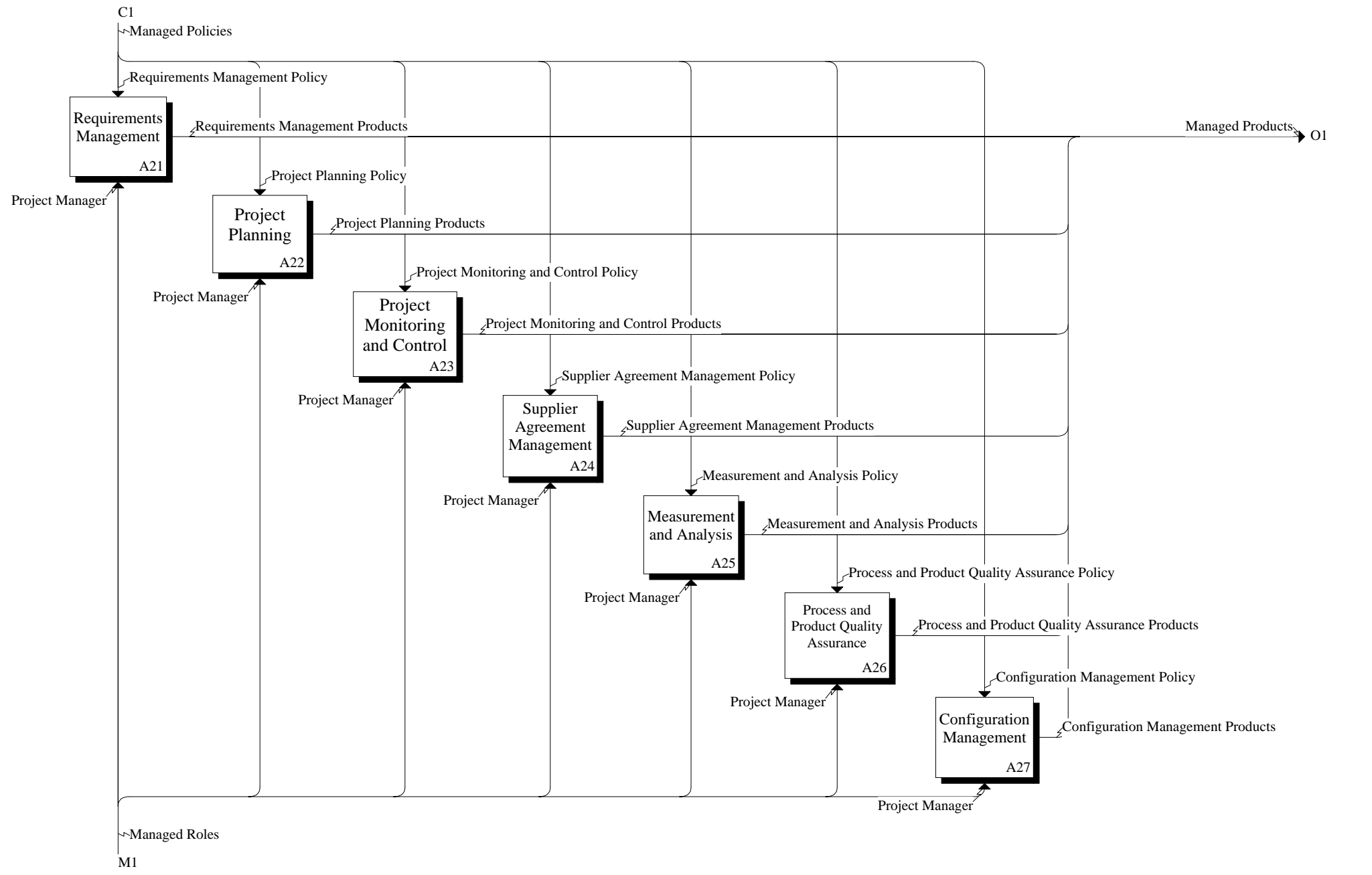


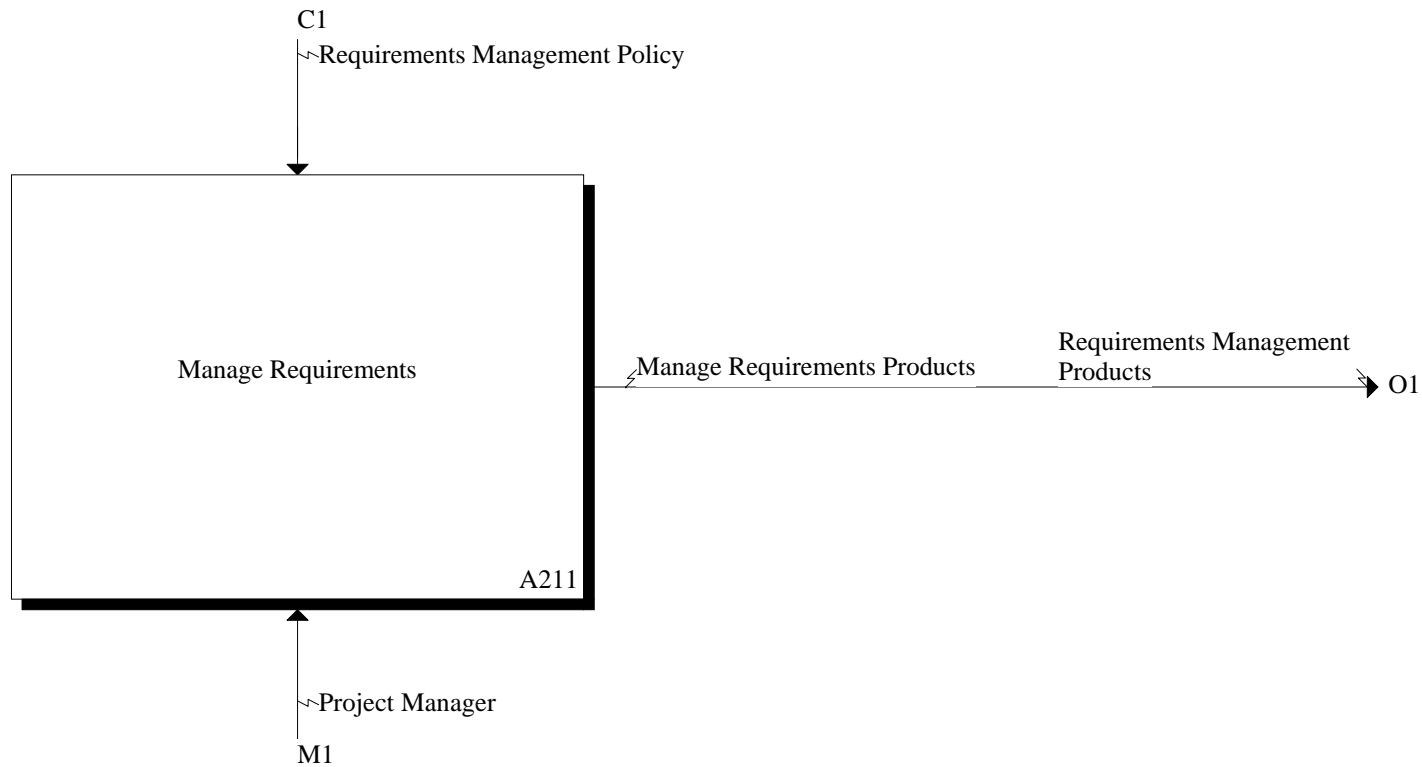
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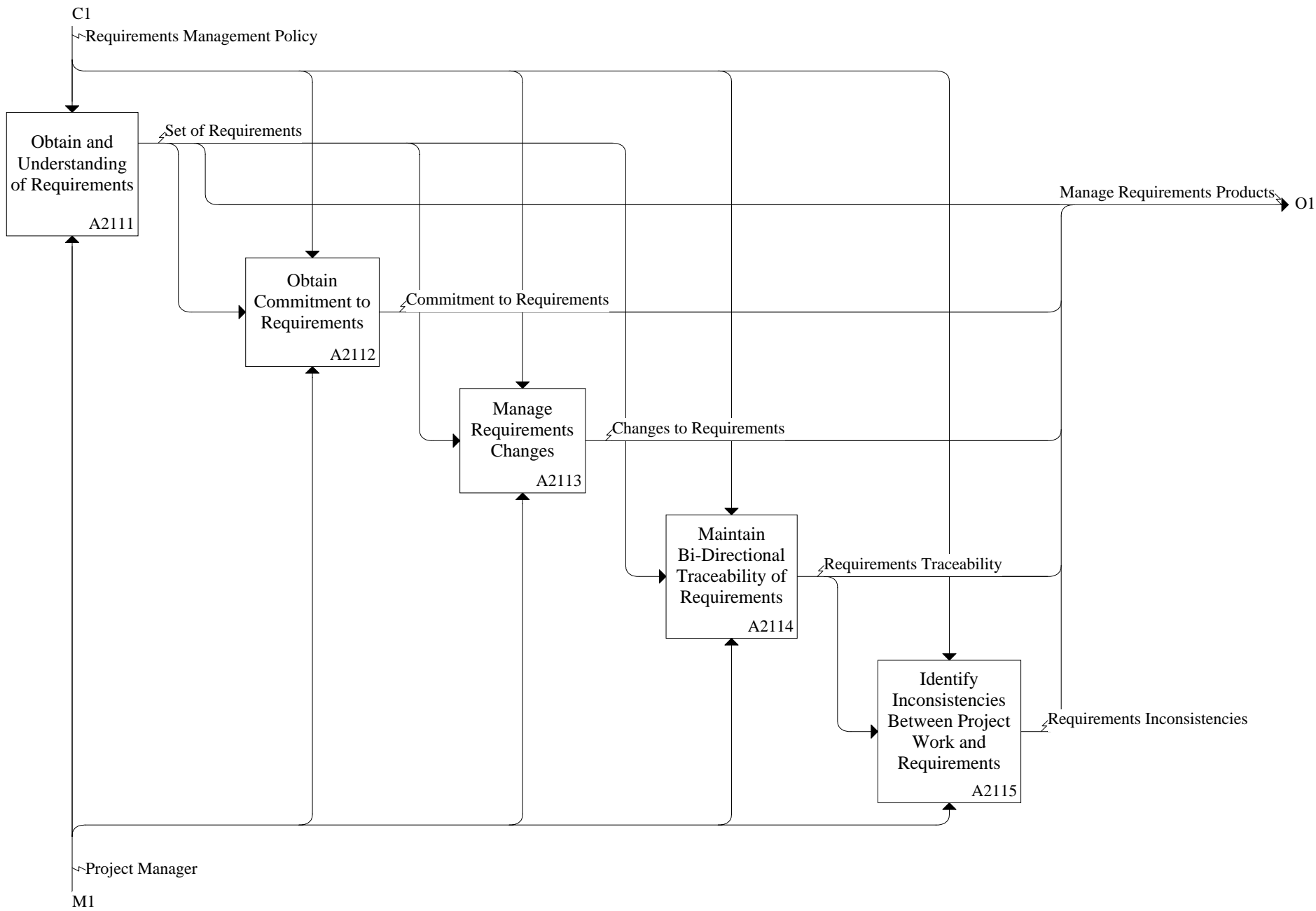
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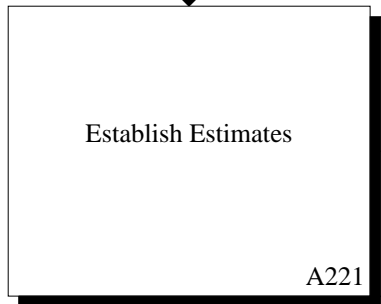






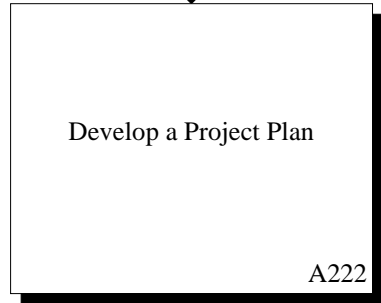
C1

Project Planning Policy

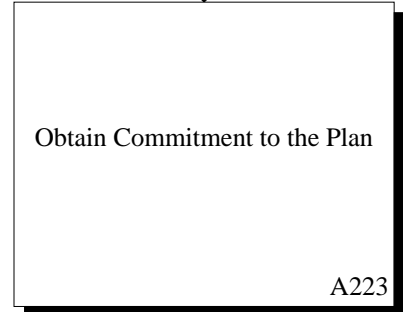


Establish Estimates Products

Project Planning Products O1



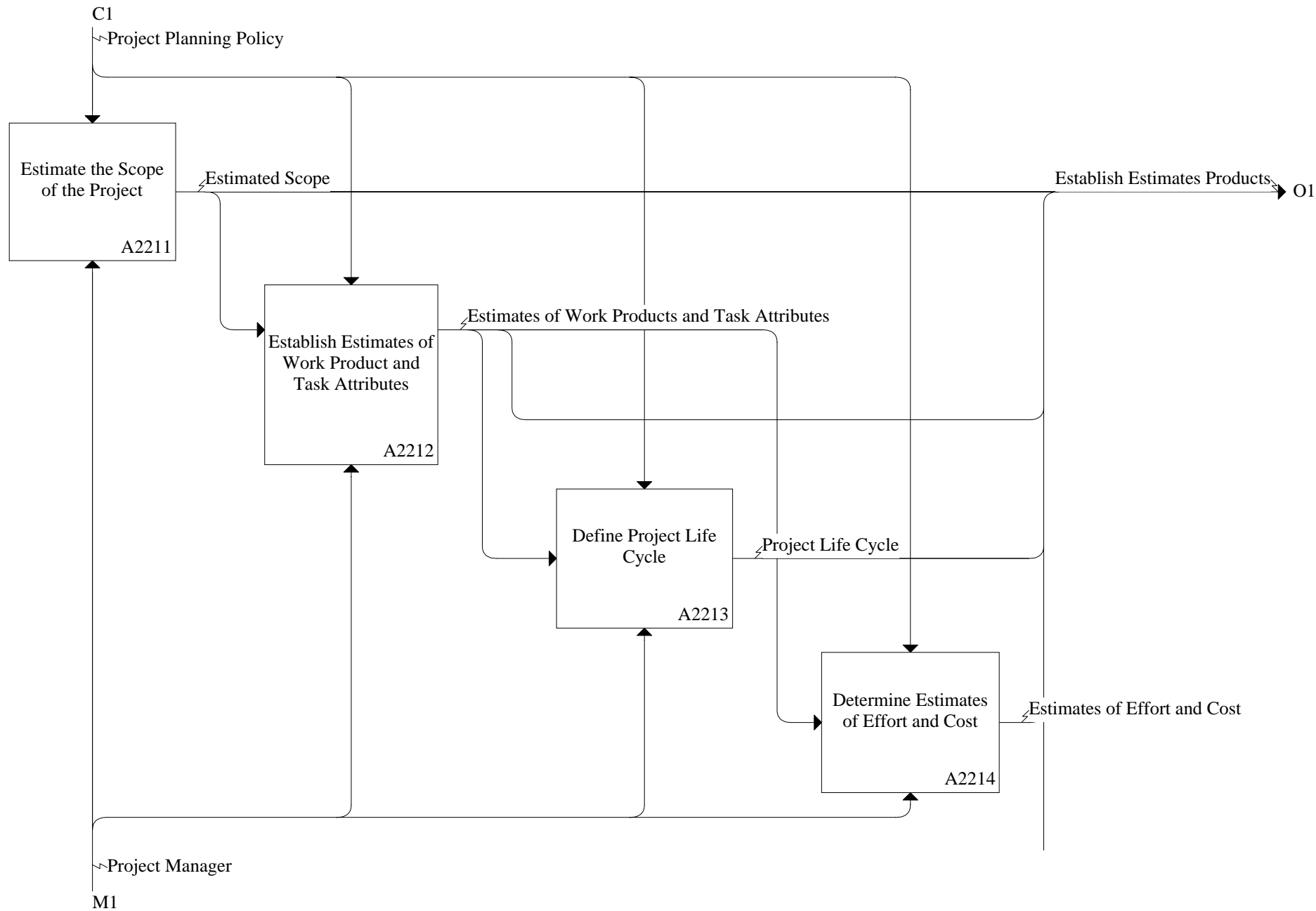
Develop and Project Plan Products

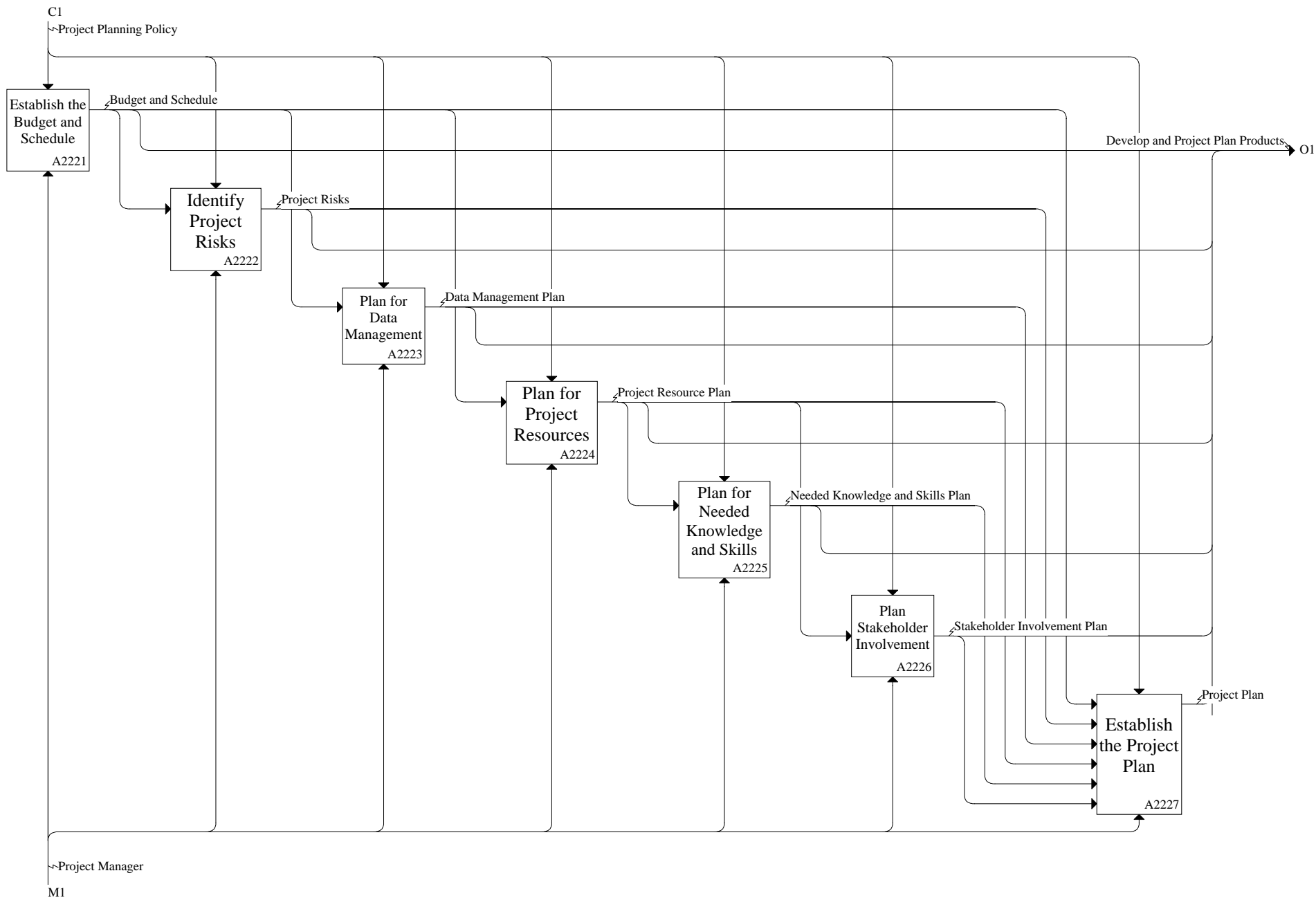


Obtain Commitment to the Plan Products

Project Manager

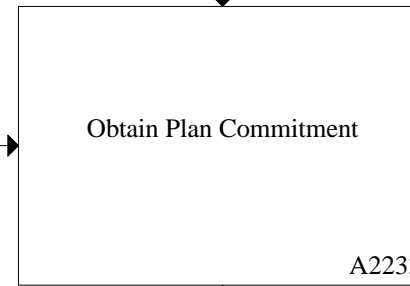
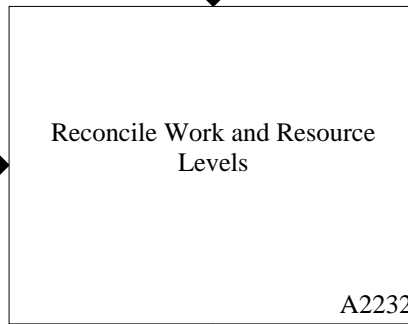
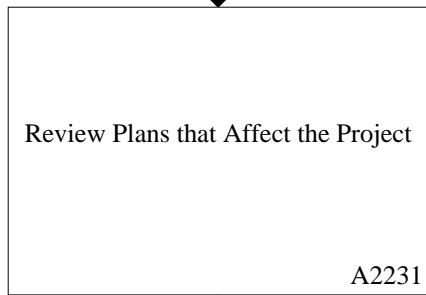
M1





C1

Project Planning Policy



Project Manager

M1

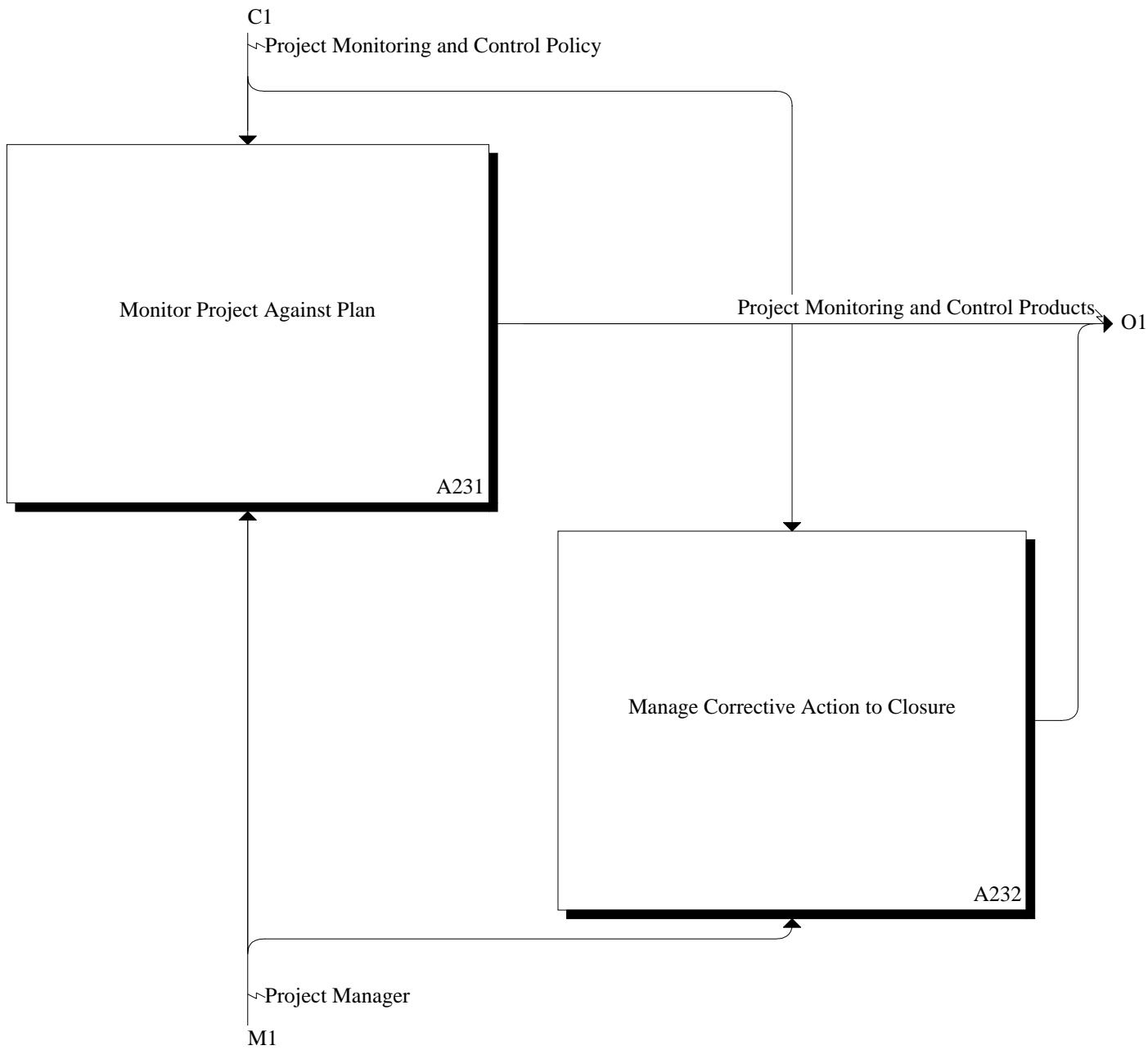
Project Plan Review Results

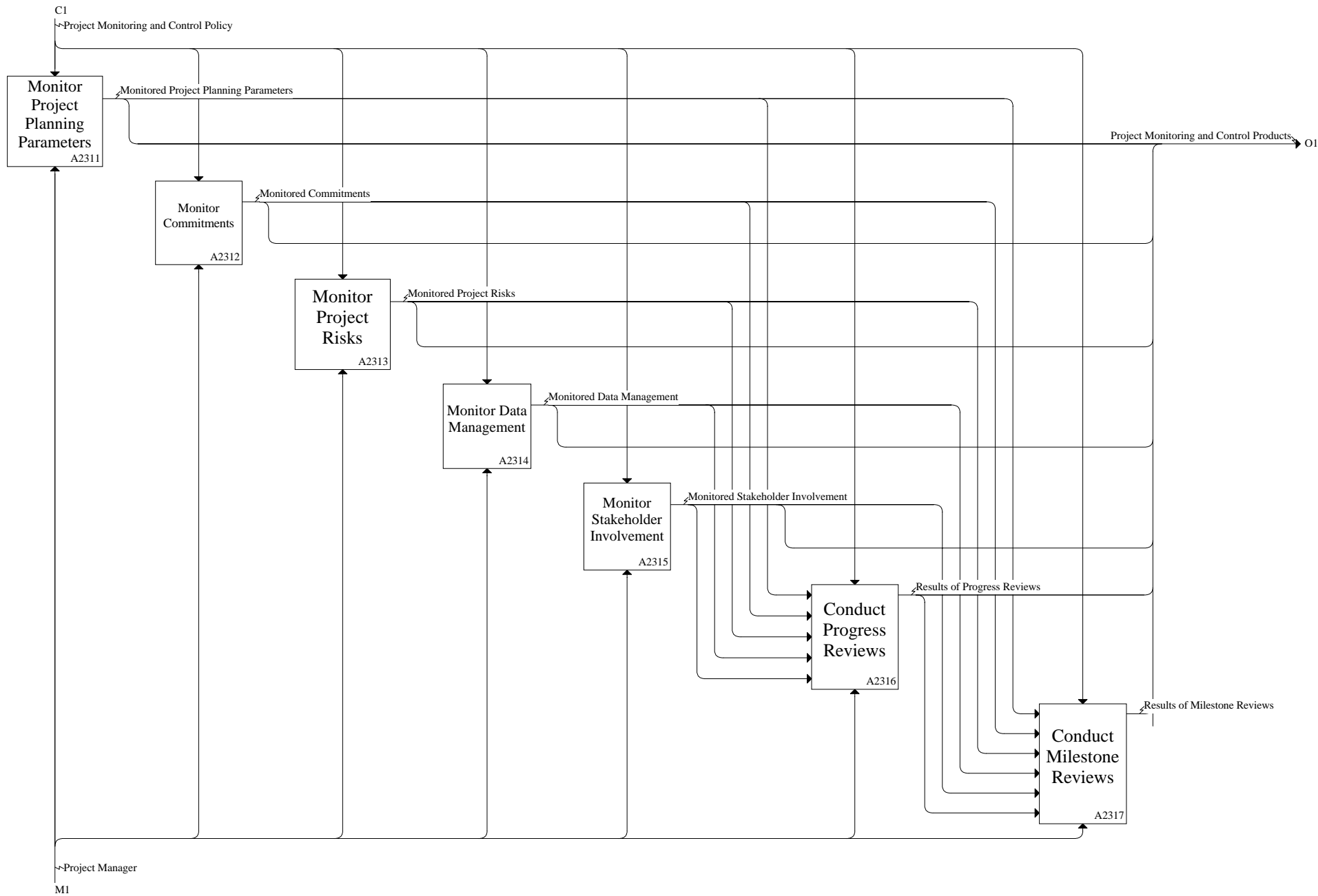
Obtain Commitment to the Plan Products

O1

Reconciled Work and Resource Levels

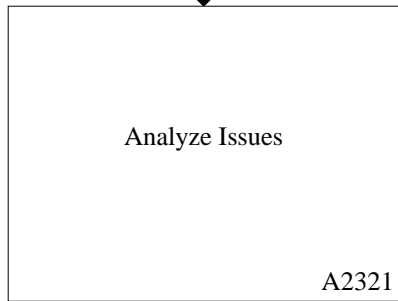
Commitment to Plan





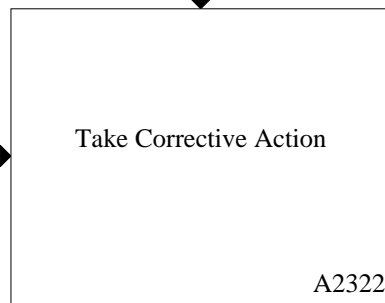
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Project Monitoring and Control Policy

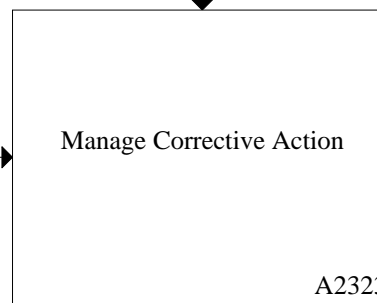


Analyzed Issues

Project Monitoring and Control Products O1



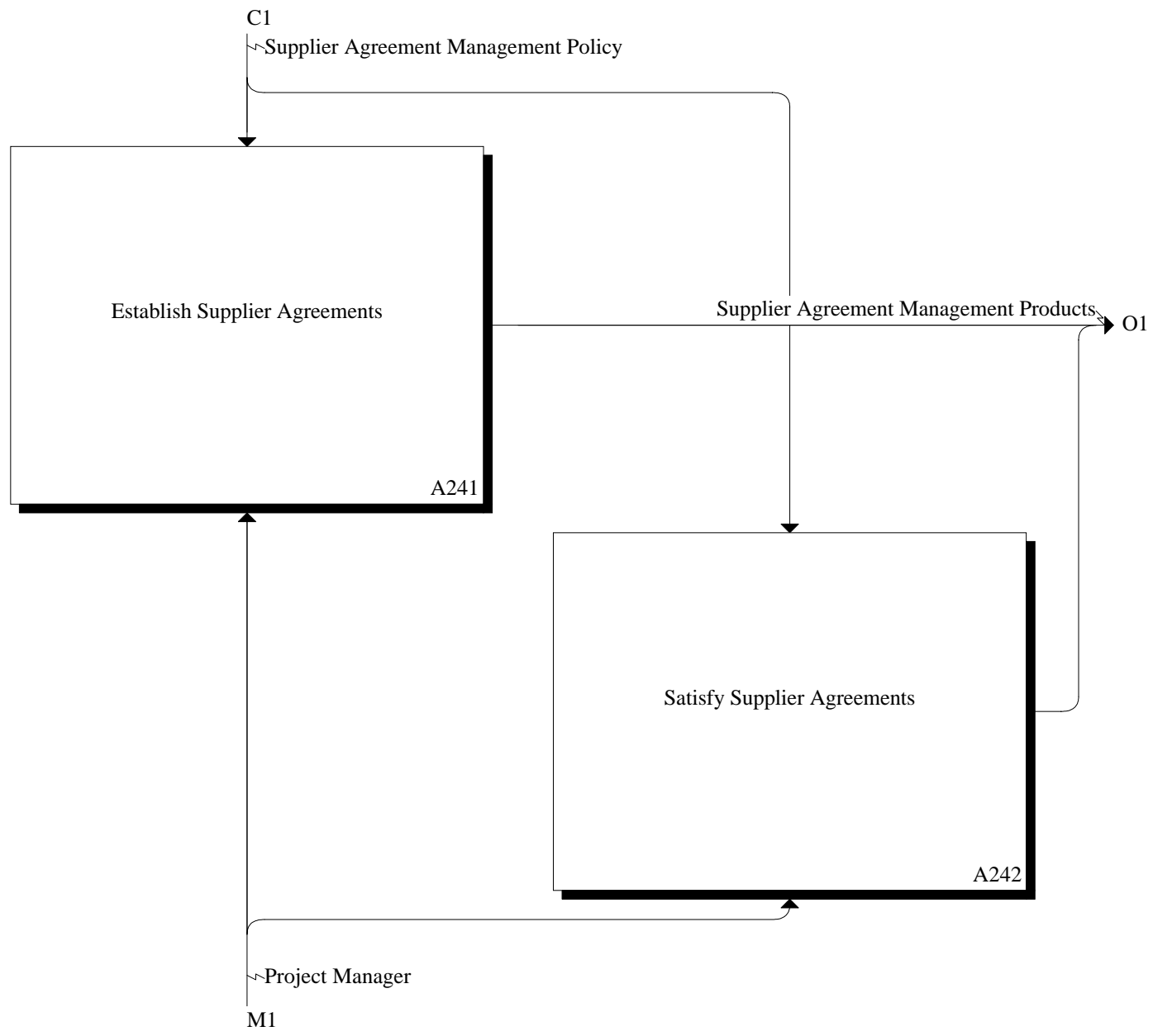
Taken Corrective Actions



Managed Corrective Actions

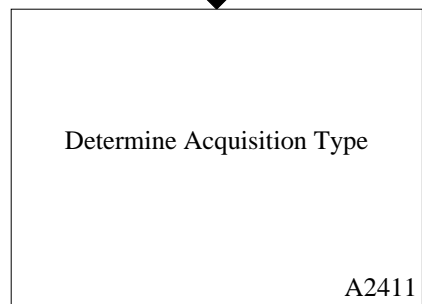
Project Manager

M1

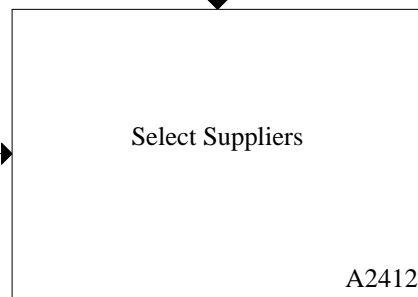


C1

Supplier Agreement Management Policy



Acquisition Types



Selected Suppliers

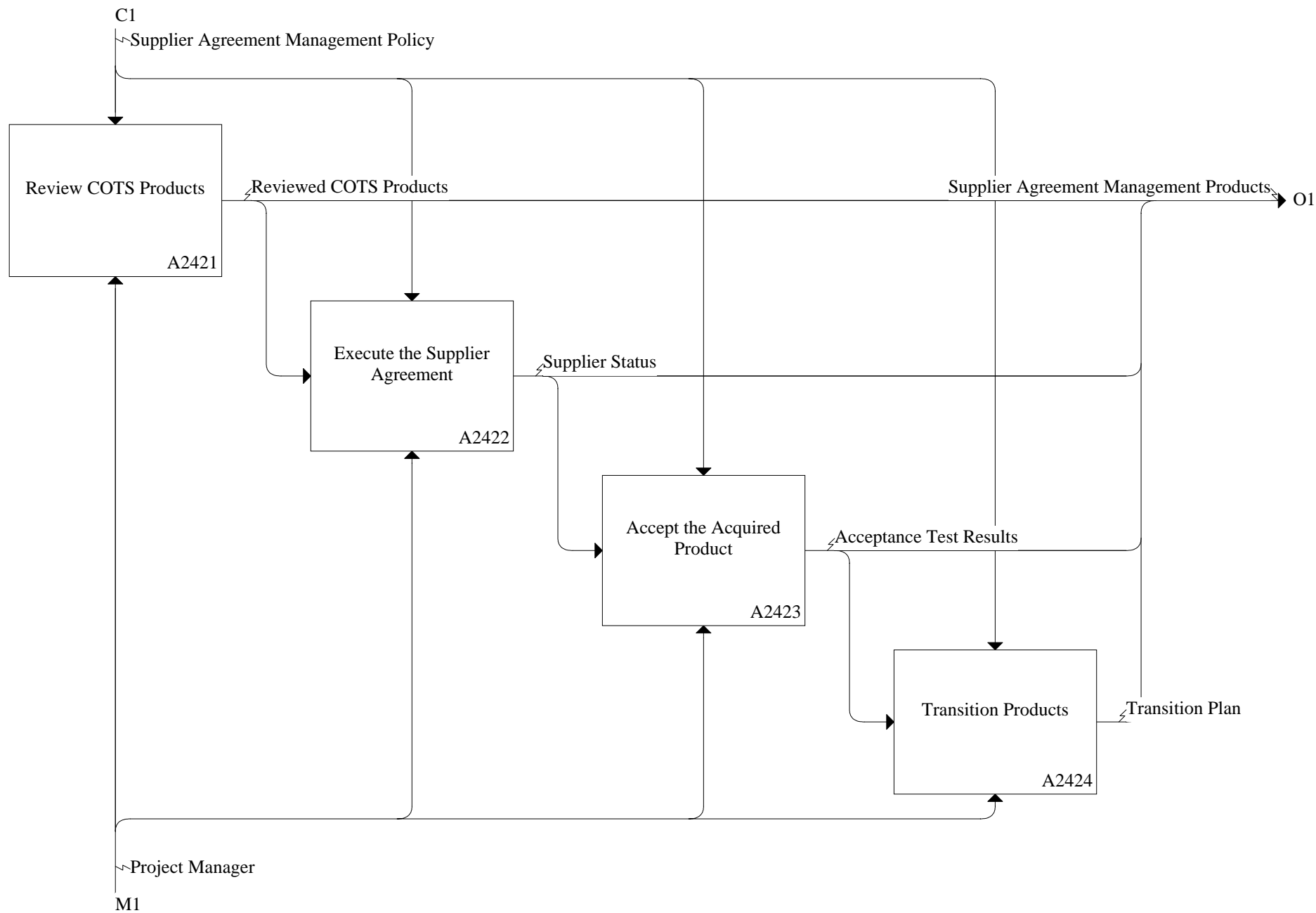


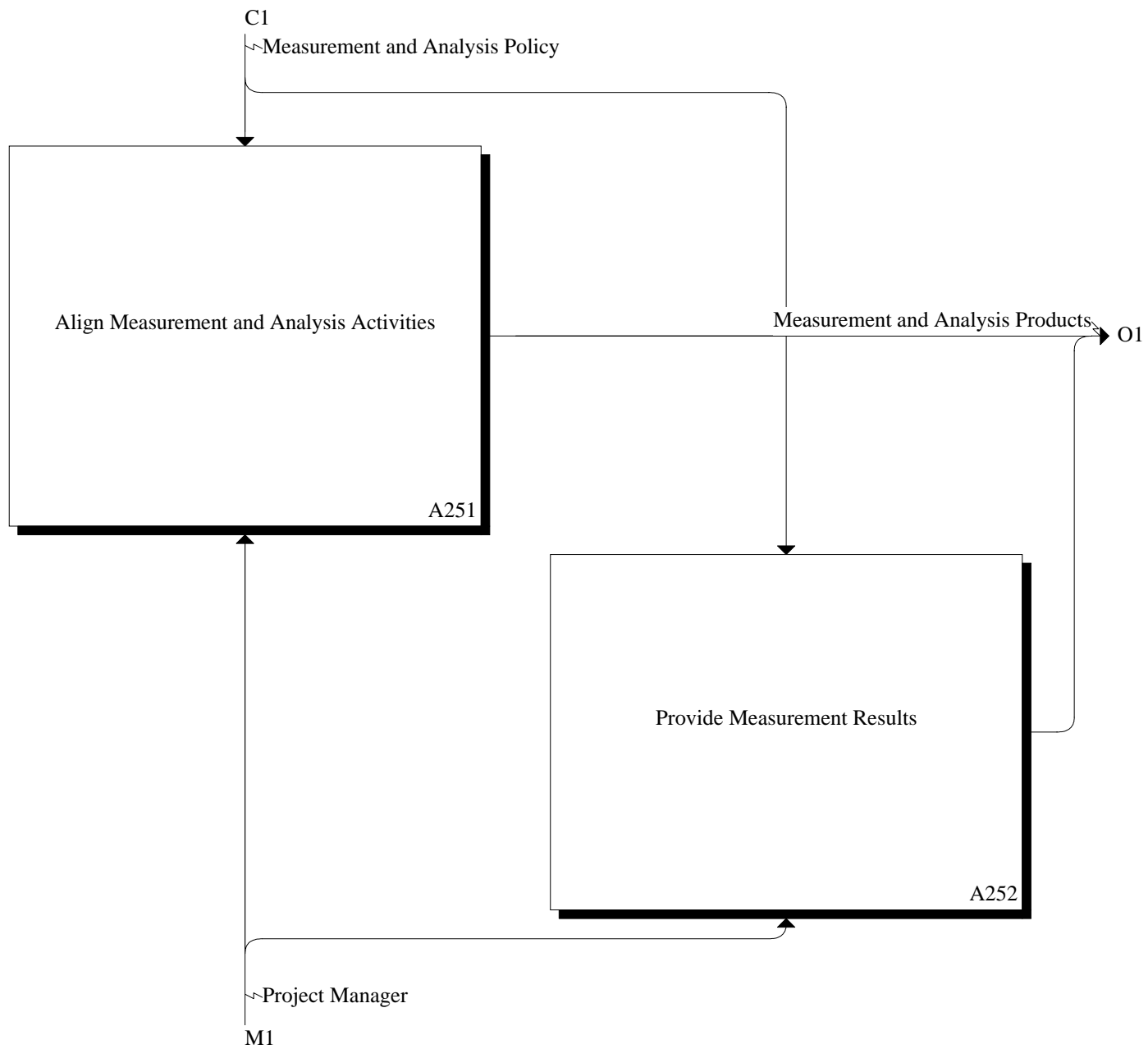
Supplier Agreements

Supplier Agreement Management Products O1

Project Manager

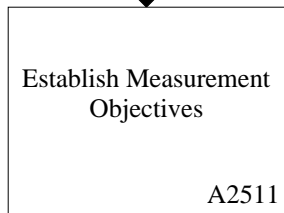
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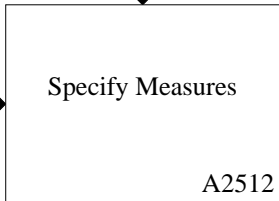


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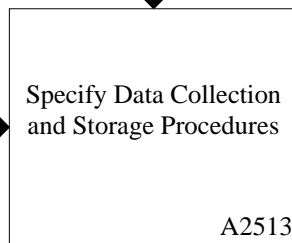
Measurement and Analysis Policy



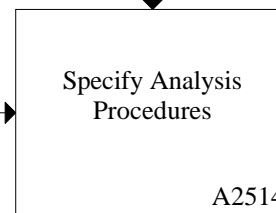
Measurement Objectives



Specified Measures



Data Collection and Storage Procedures



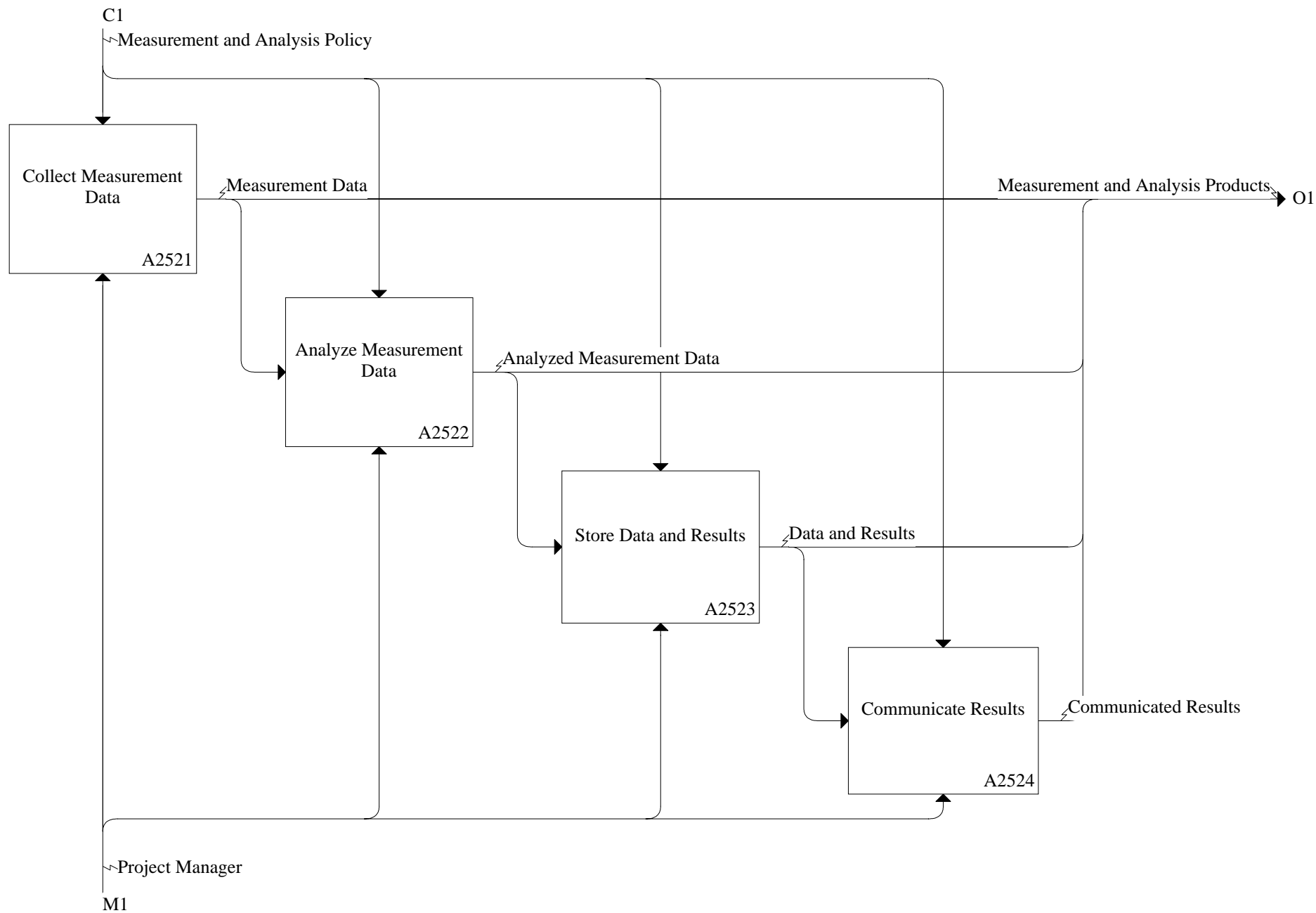
Analysis Procedures

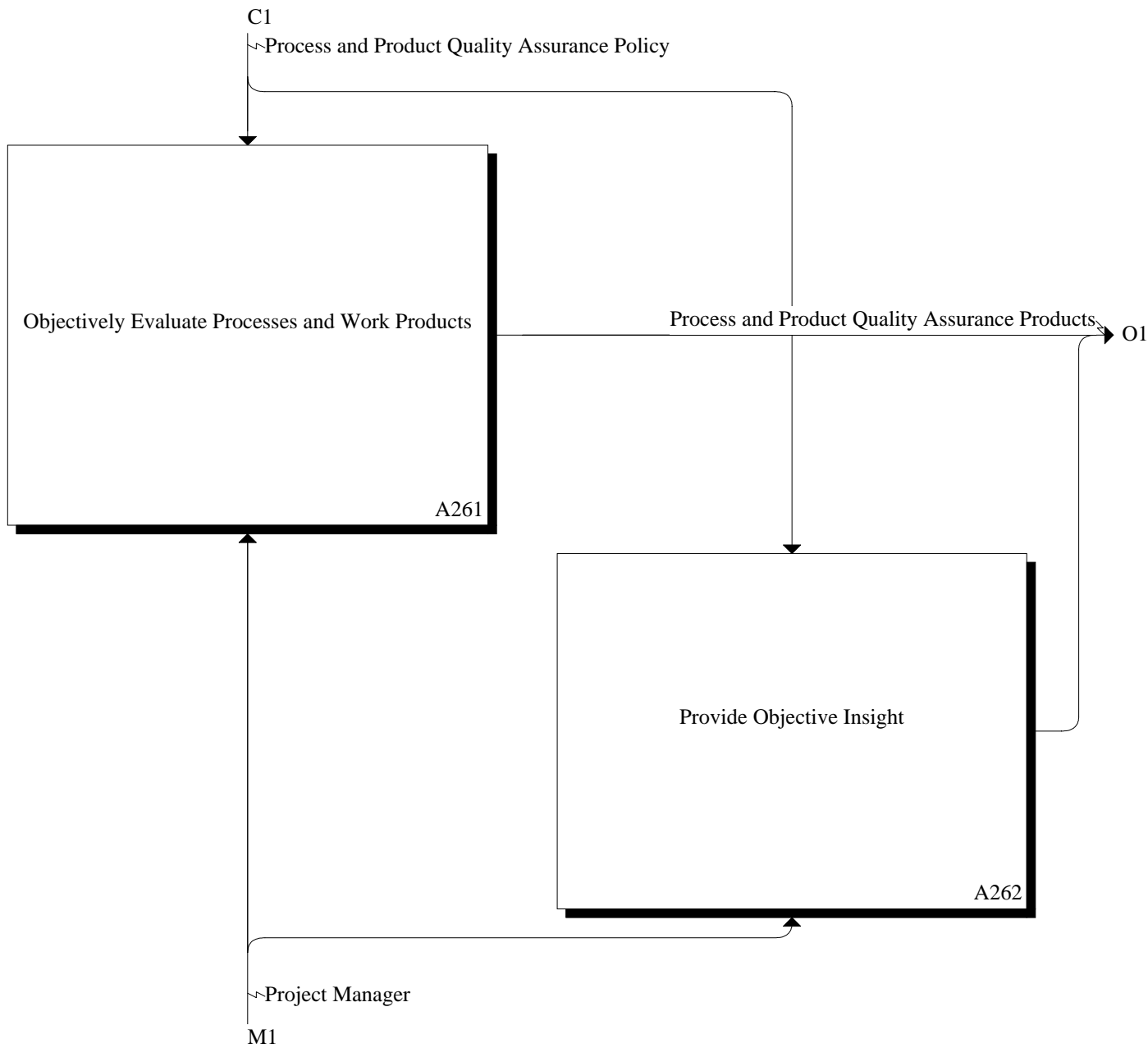
Measurement and Analysis Products

O1

Project Manager

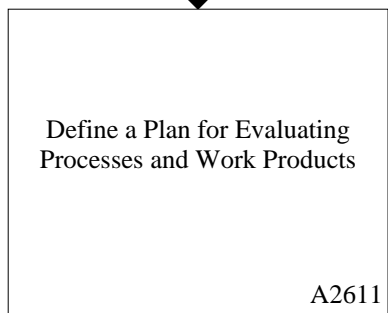
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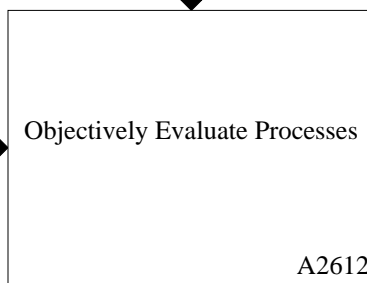
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Process and Product Quality Assurance Policy

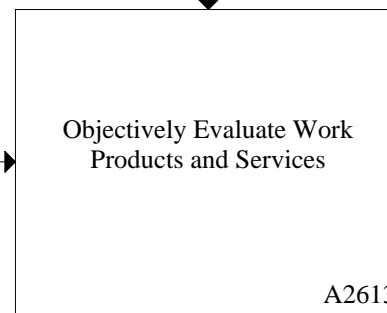


Plan for Evaluating Processes and Work Products

Process and Product Quality Assurance Products O1



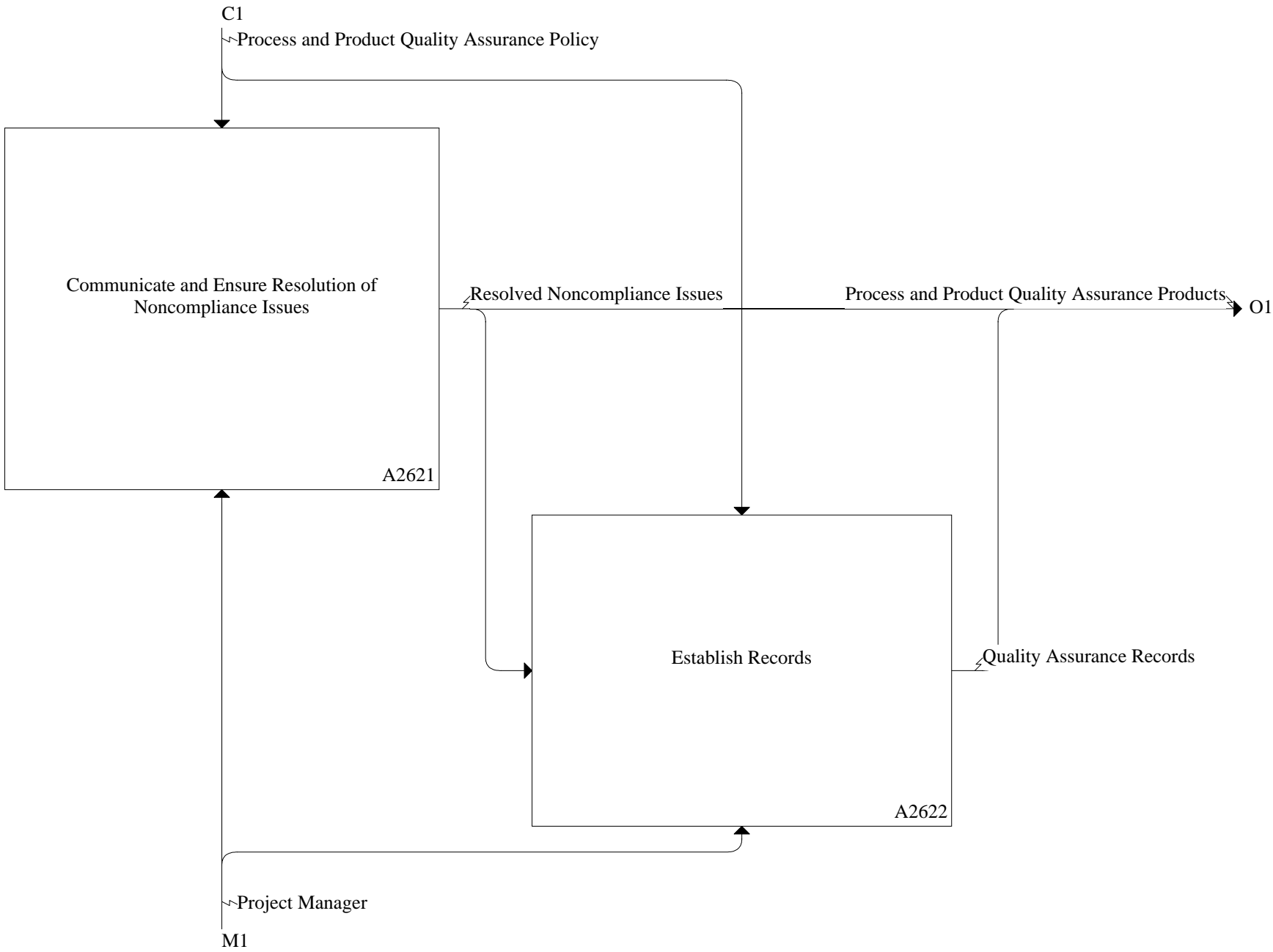
Process Evaluations



Work Product Evaluations

Project Manager

M1



C1

Configuration Management Policy

Establish Baselines

A271

Track and Control Changes

A272

Establish Integrity

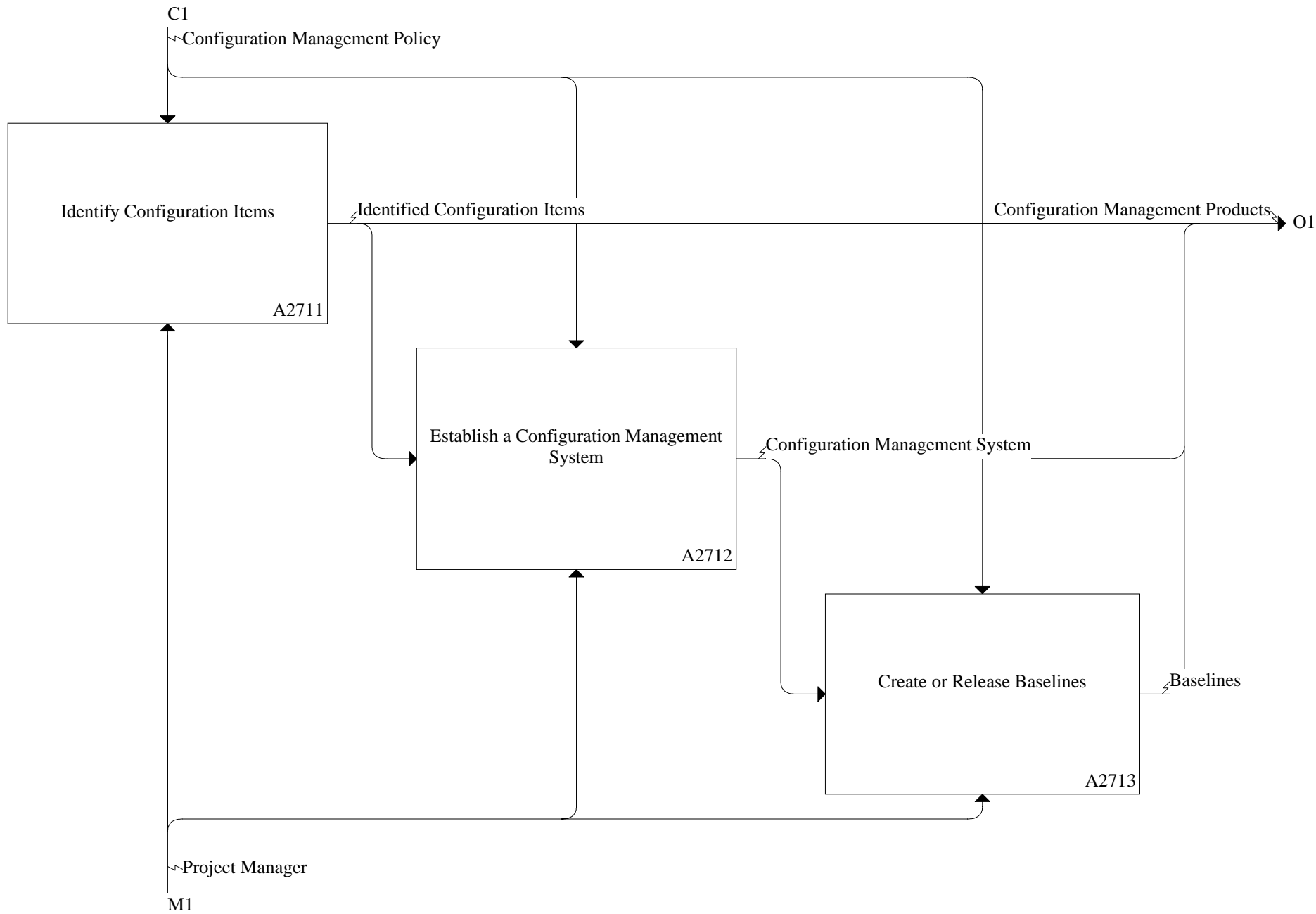
A273

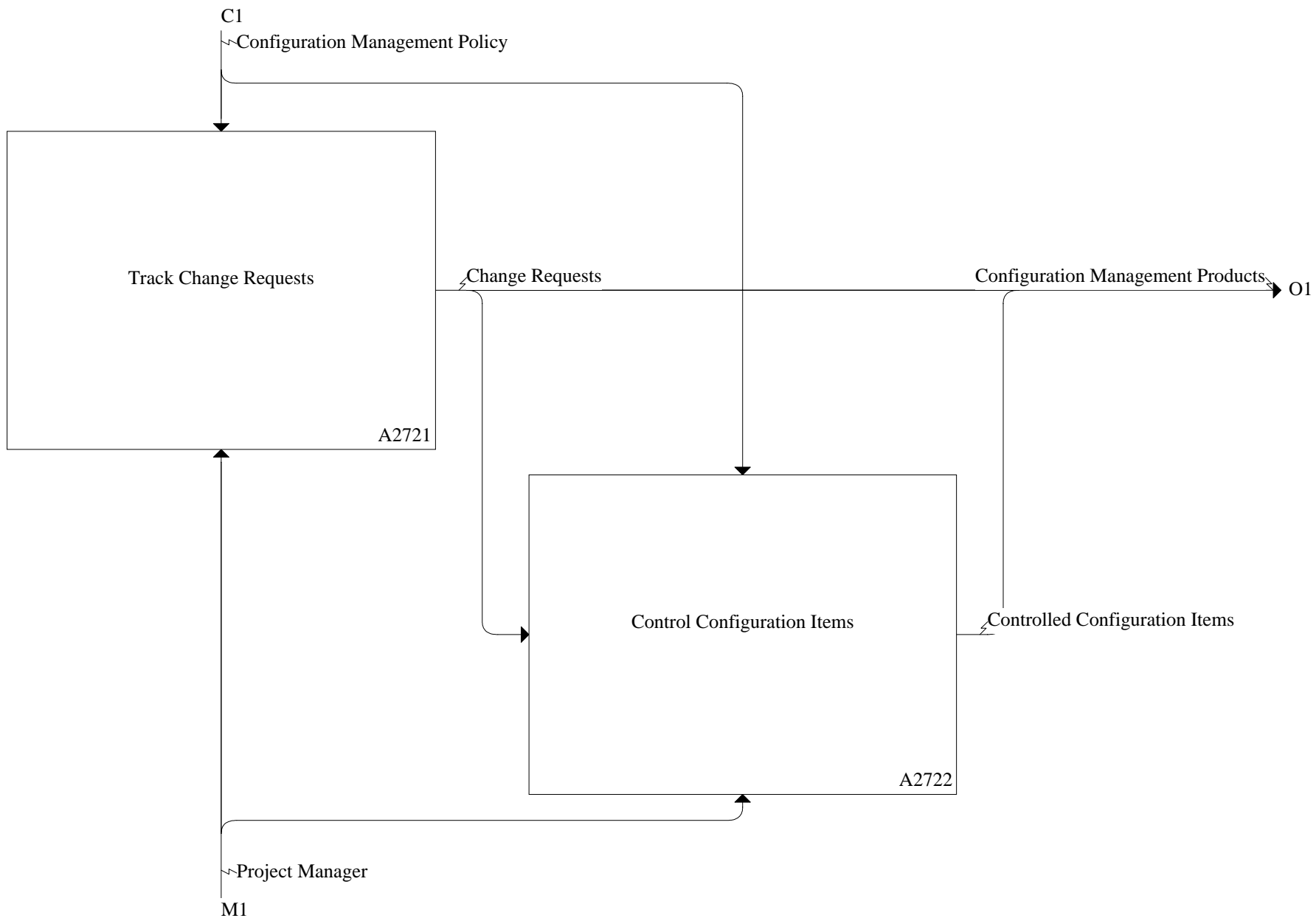
Configuration Management Products

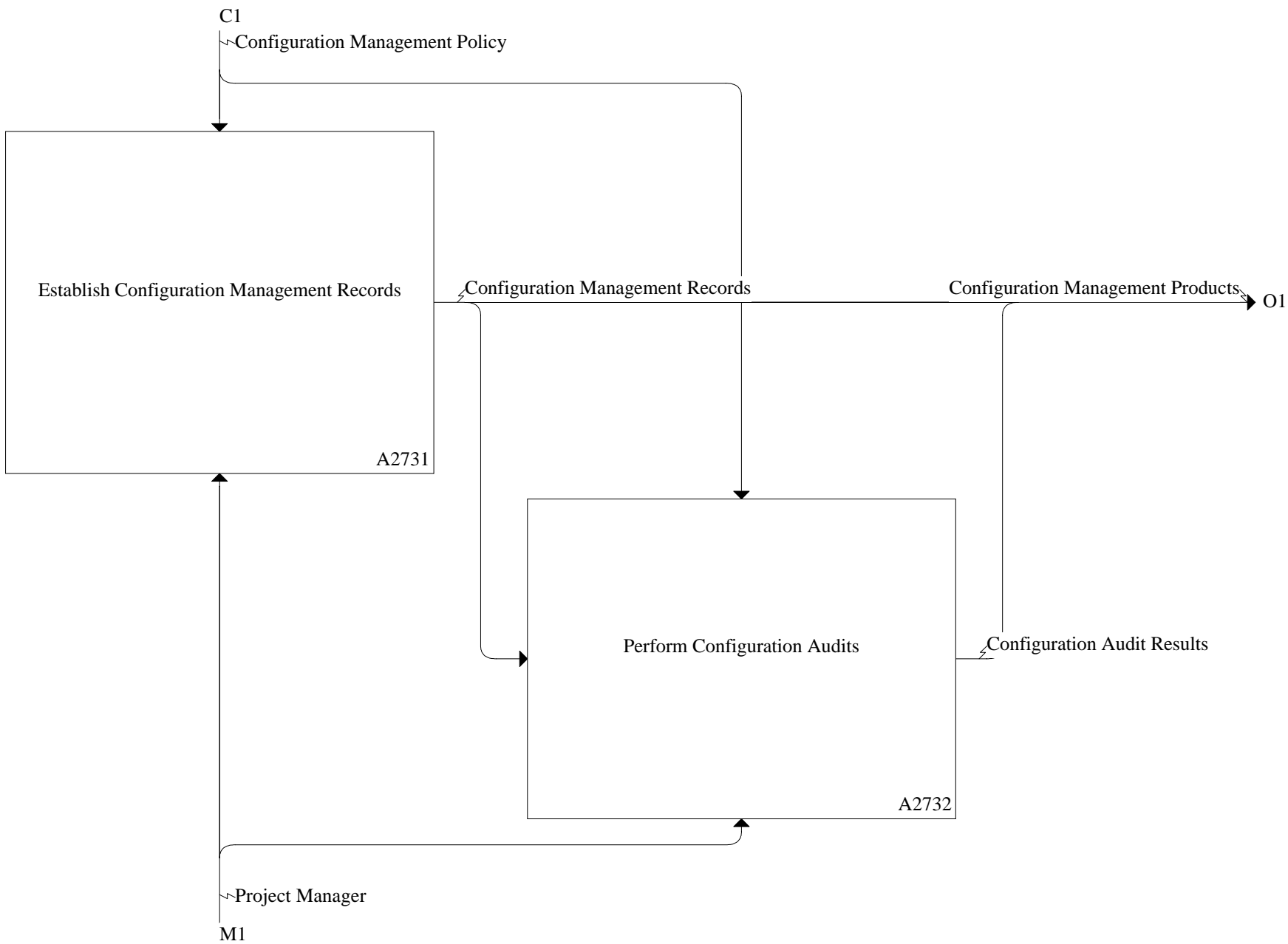
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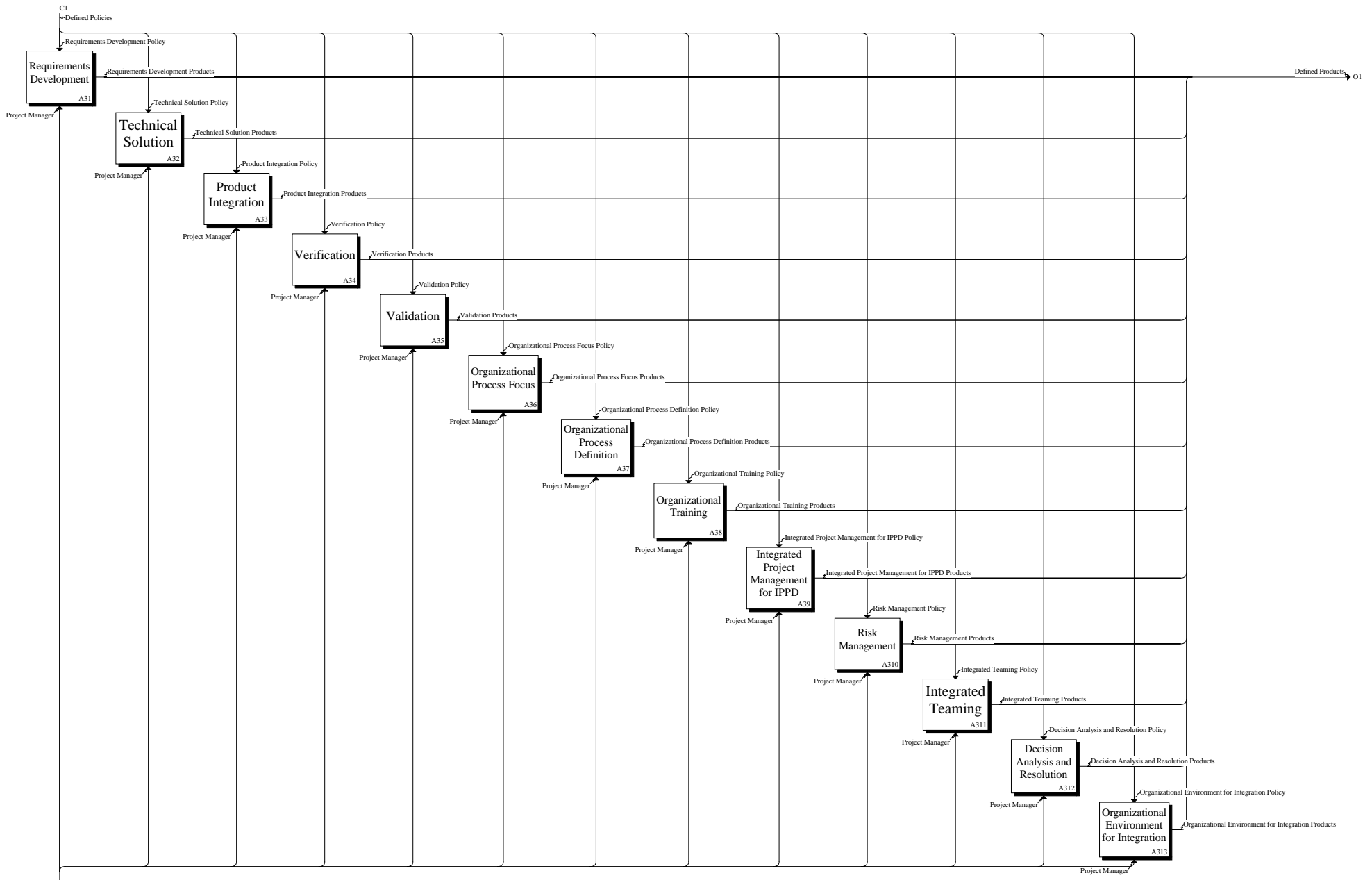
Project Manager

M1





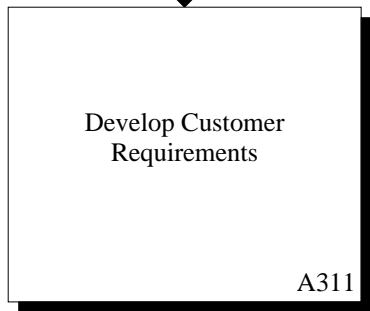




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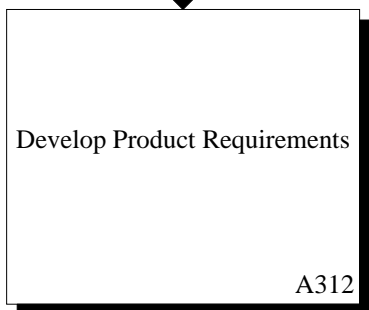
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Requirements Development Policy

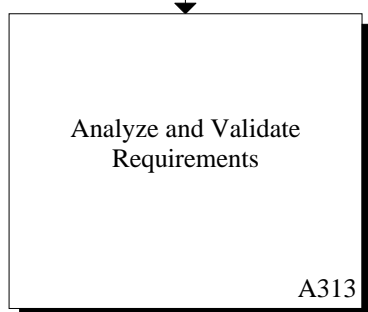


Develop Customer Requirements Products

Requirements Development Products O1



Develop Product Requirements Products



Analyze and Validate Requirements Products

Project Manager

M1



C1

Requirements Development Policy

Elicit Needs

A3111

Elicited Needs

Collect Stakeholder Needs

A3112

Stakeholder Needs

Develop the Customer Requirements

A3113

Customer Requirements

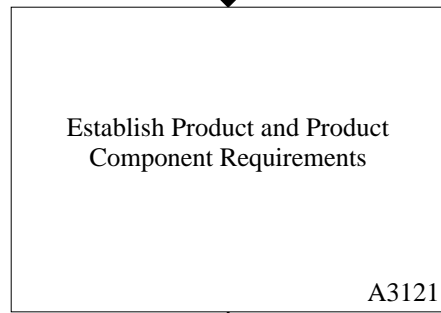
Develop Customer Requirements Products O1

Project Manager

M1

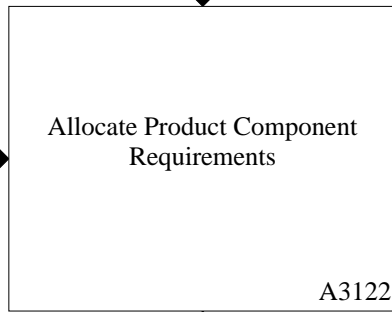
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Requirements Development Policy

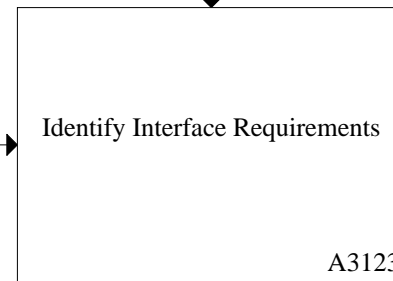


Product and Product Component Requirements

Develop Product Requirements Products O1



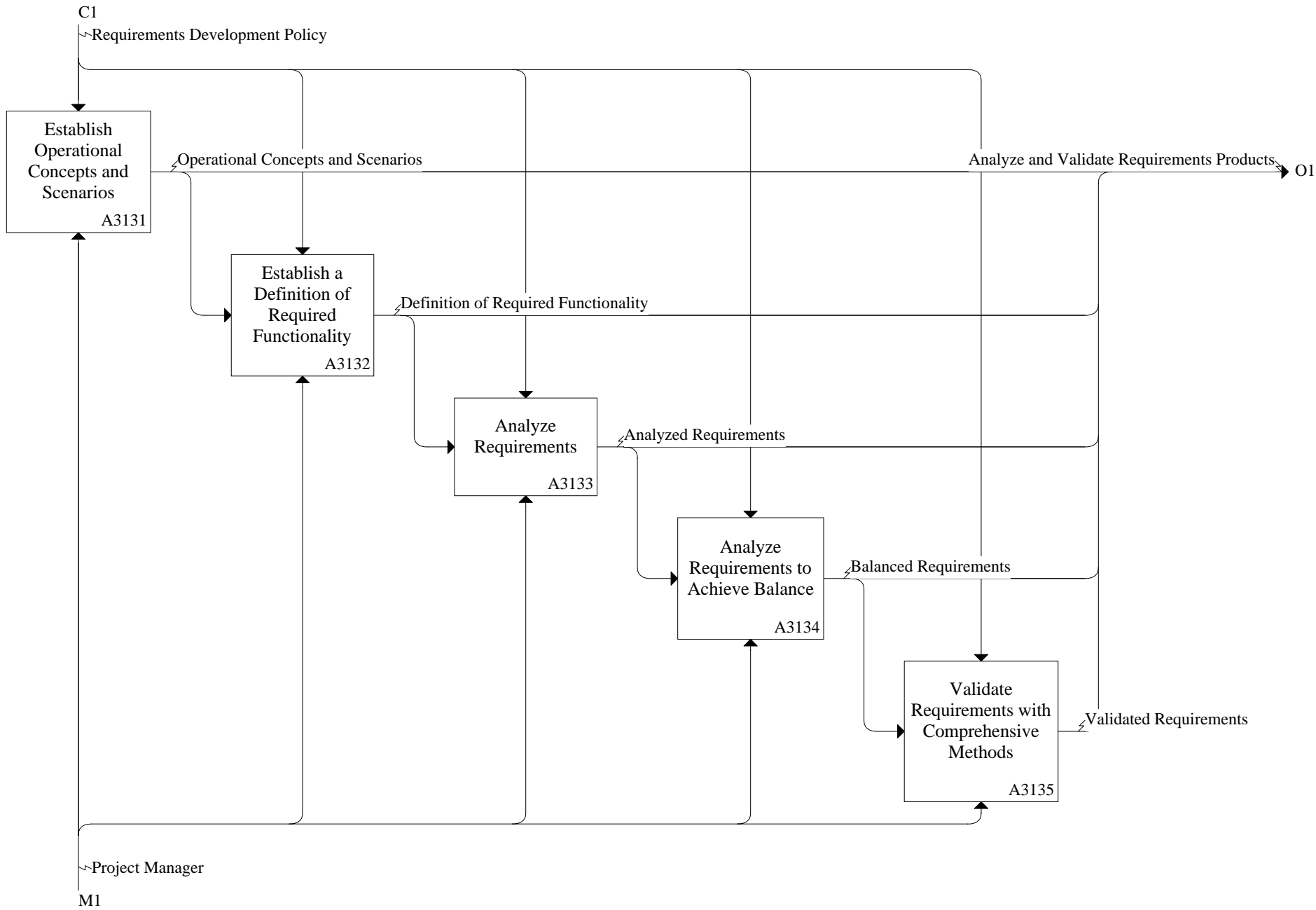
Allocated Product Component Requirements



Interface Requirements

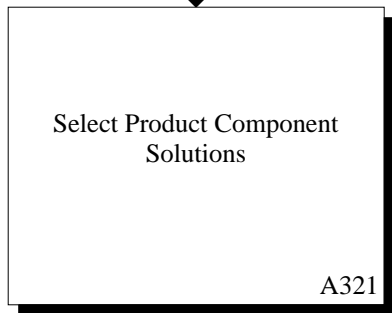
Project Manager

M1



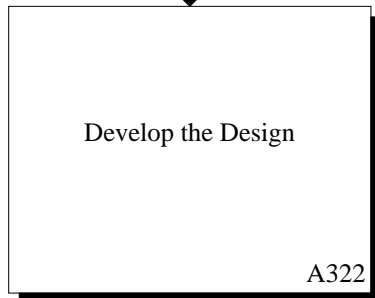
C1

Technical Solution Policy

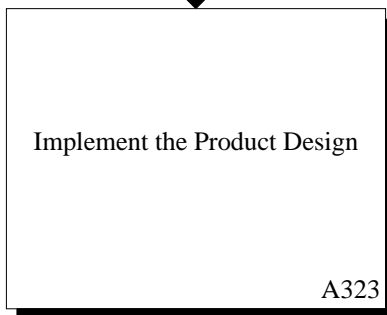


Select Product Component Solutions Products

Technical Solution Products O1



Develop the Design Products



Implement the Product Design Products

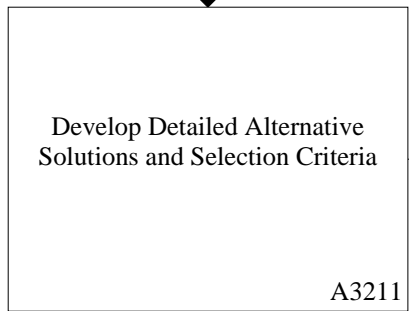
Project Manager

M1



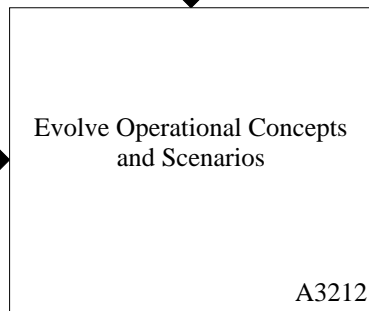
C1

Technical Solution Policy

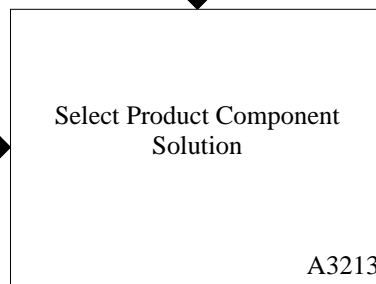


Detailed Alternative Solutions and Selection Criteria

Select Product Component Solutions Products O1



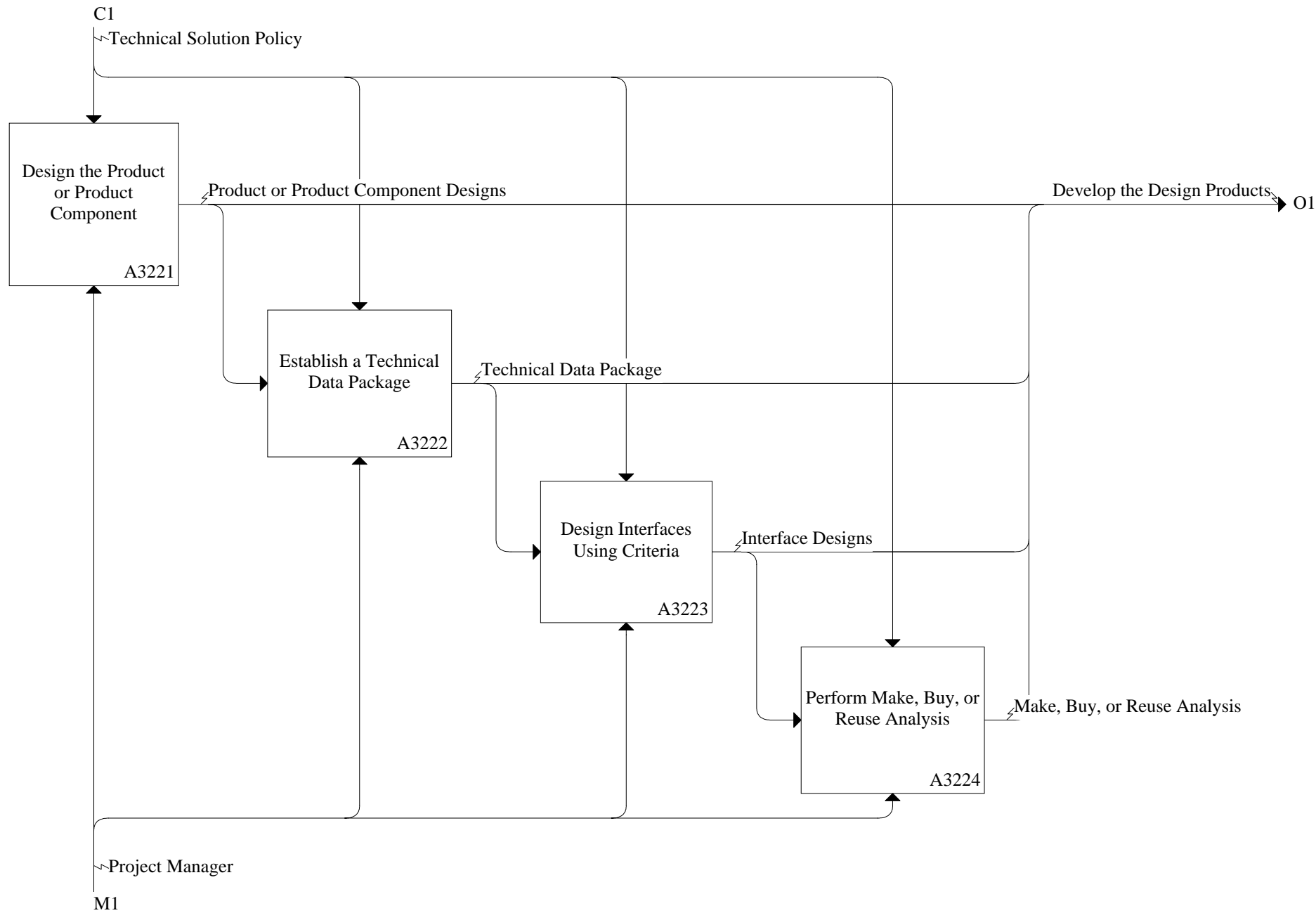
Evolved Operational Concepts and Scenarios



Product Component Solutions

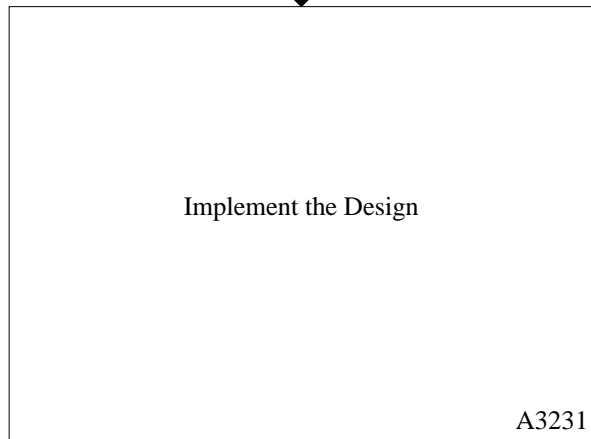
Project Manager

M1



C1

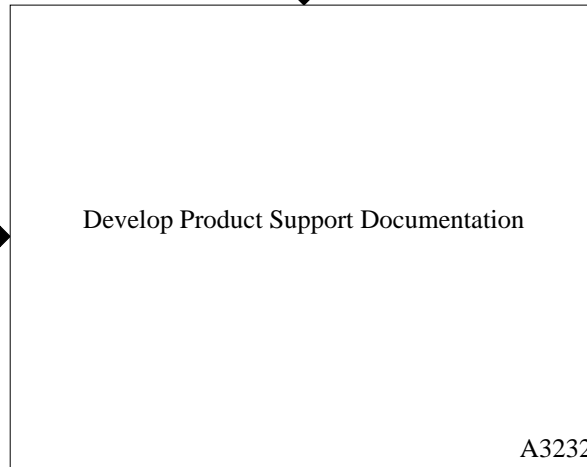
Technical Solution Policy



Product or Product Components

Implement the Product Design Products

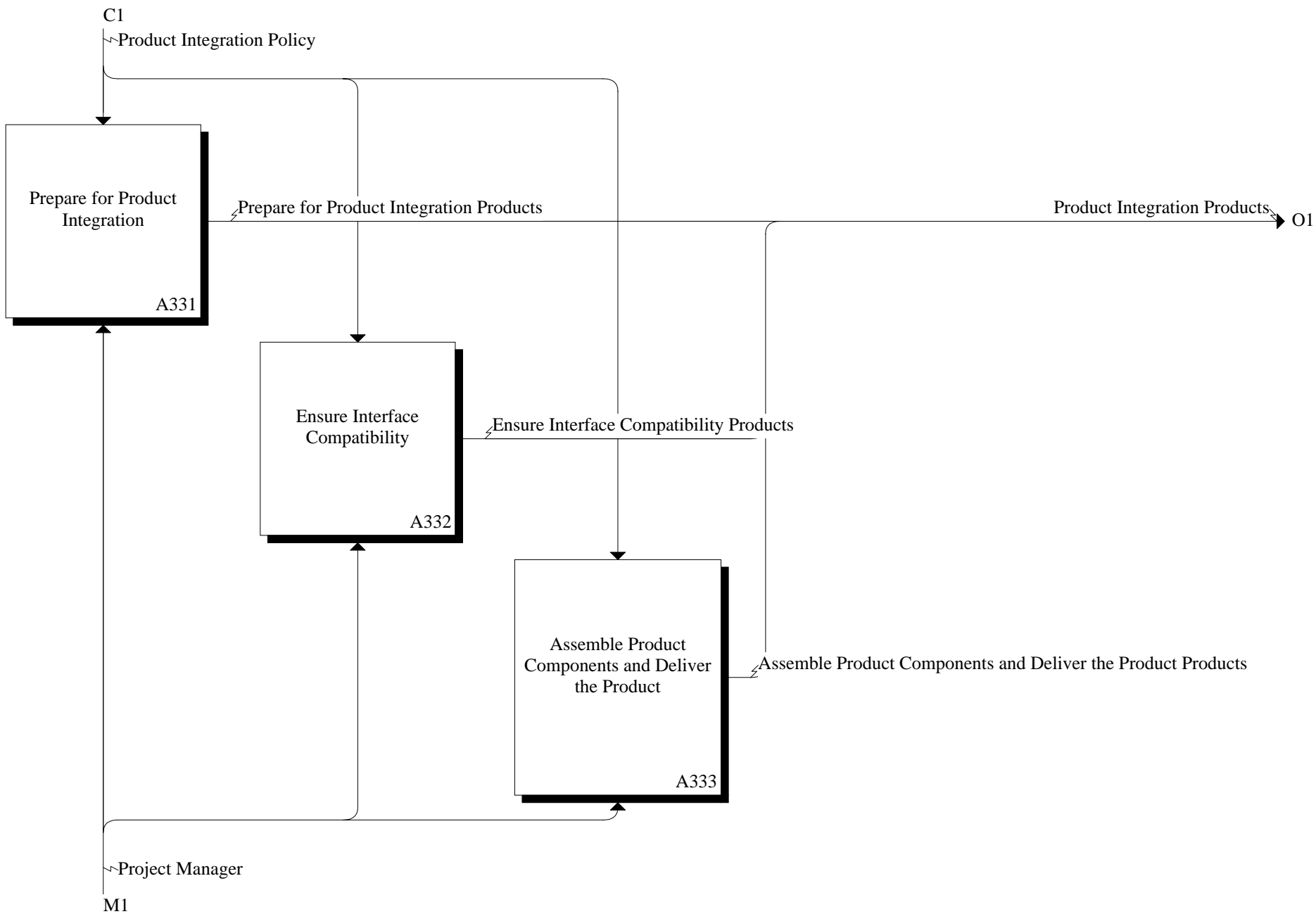
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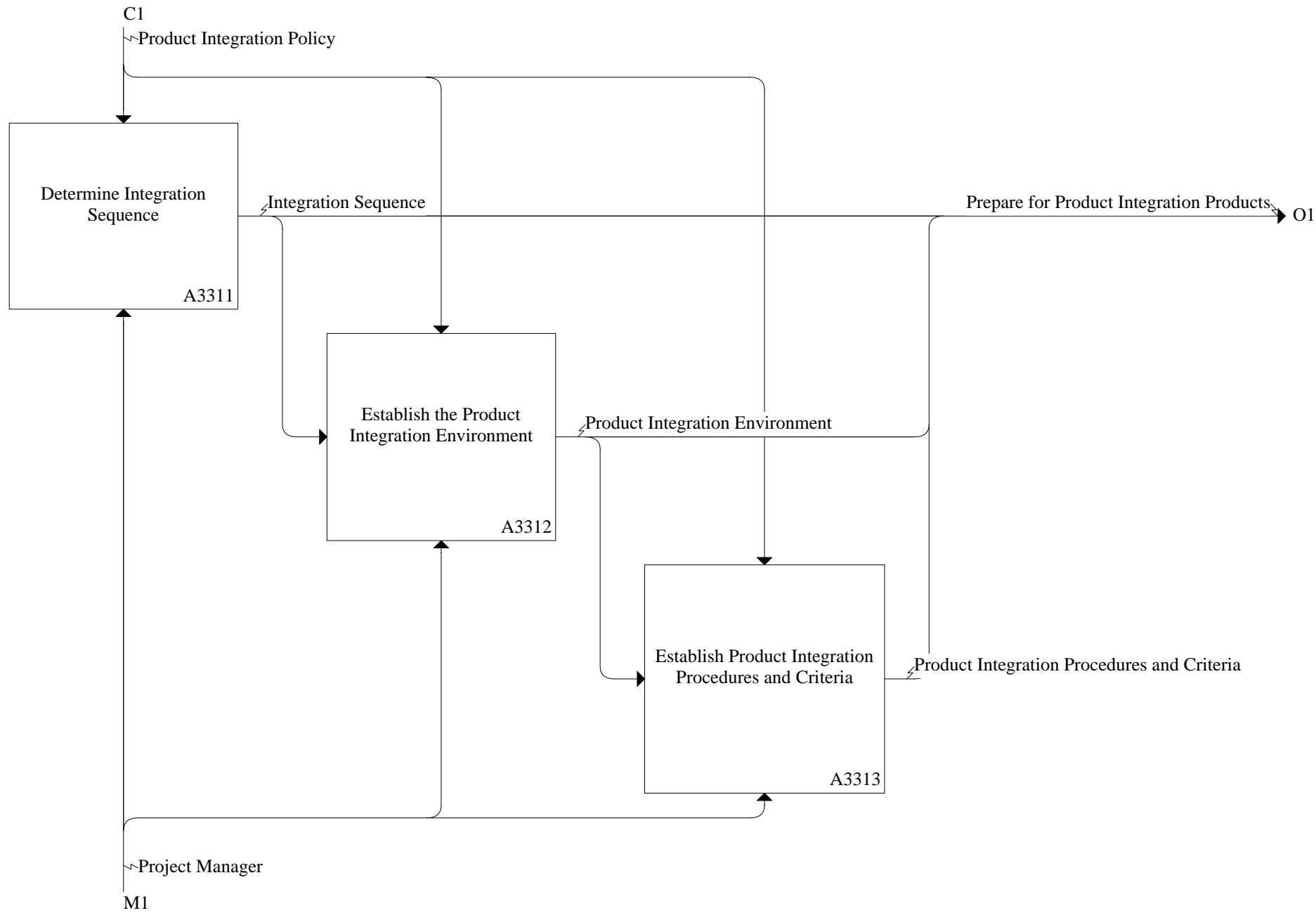


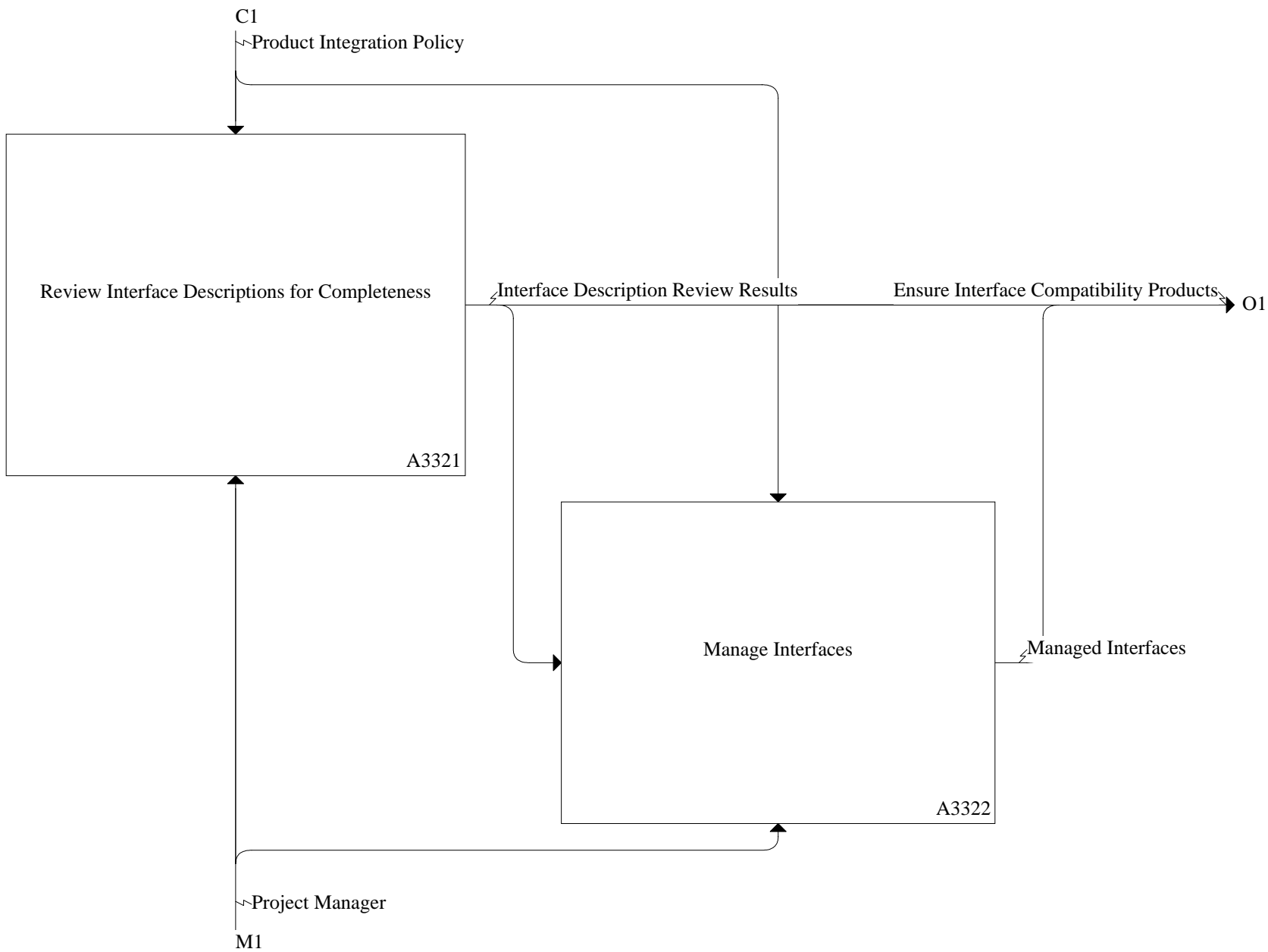
Product Support Documentation

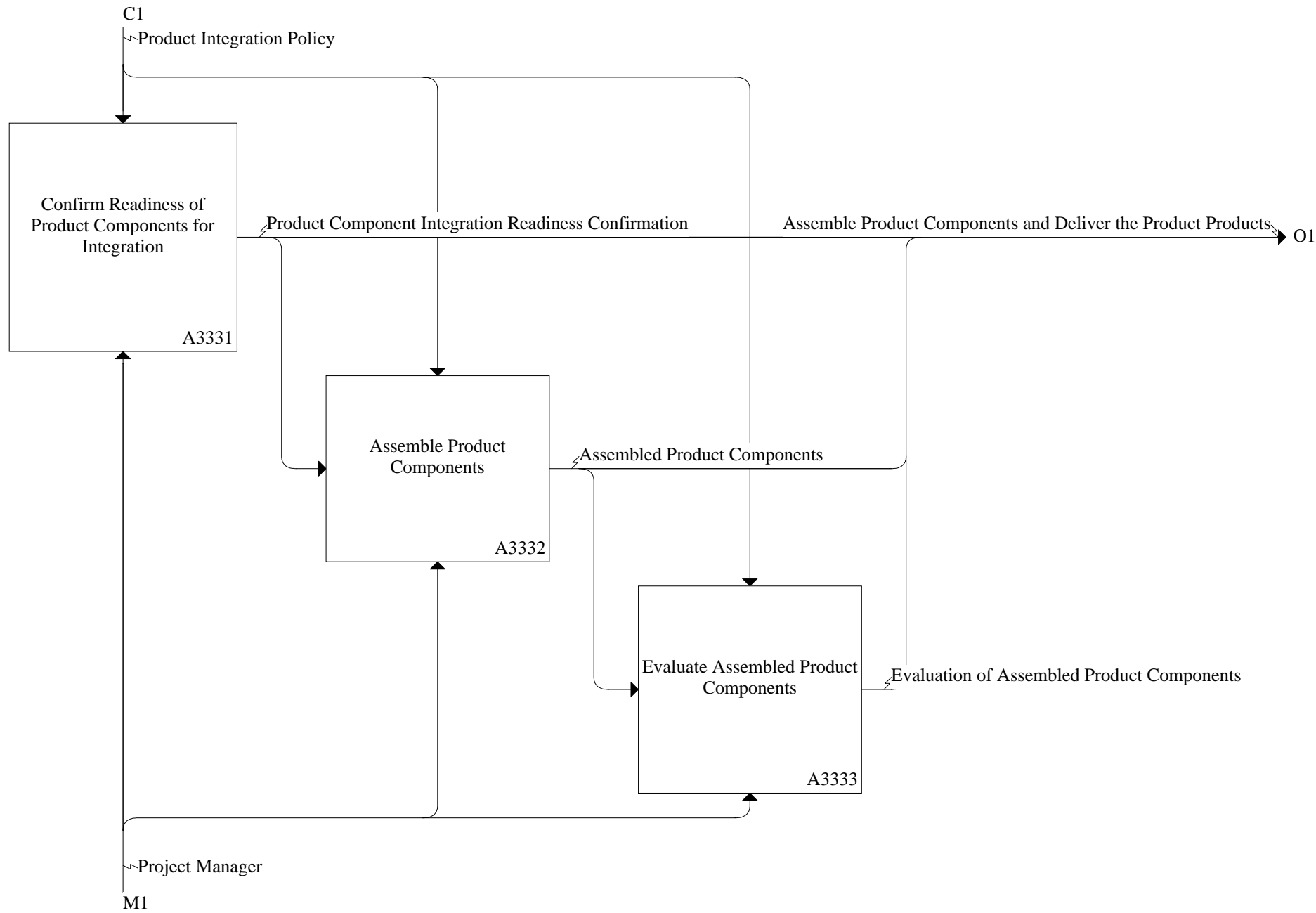
Project Manager

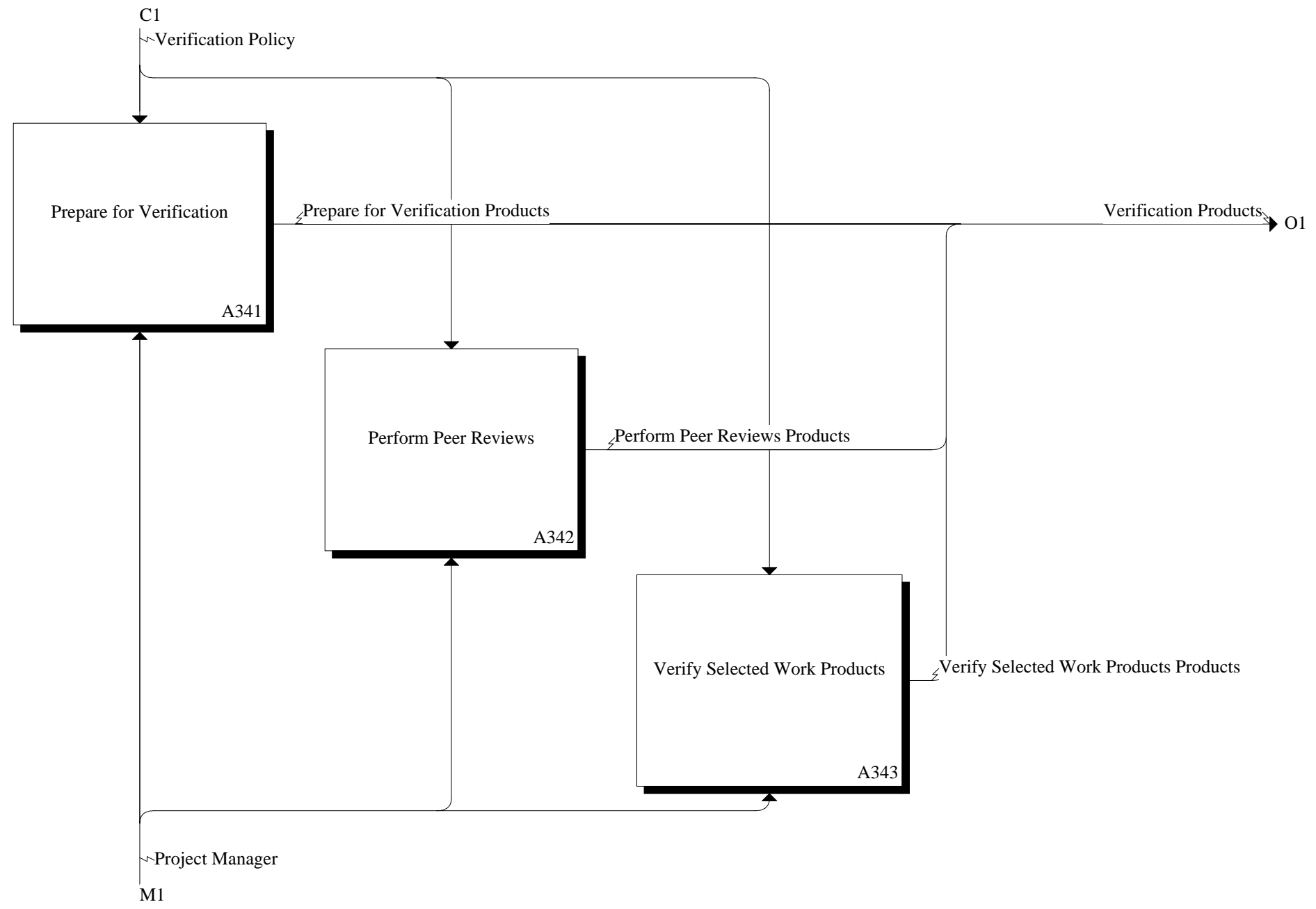
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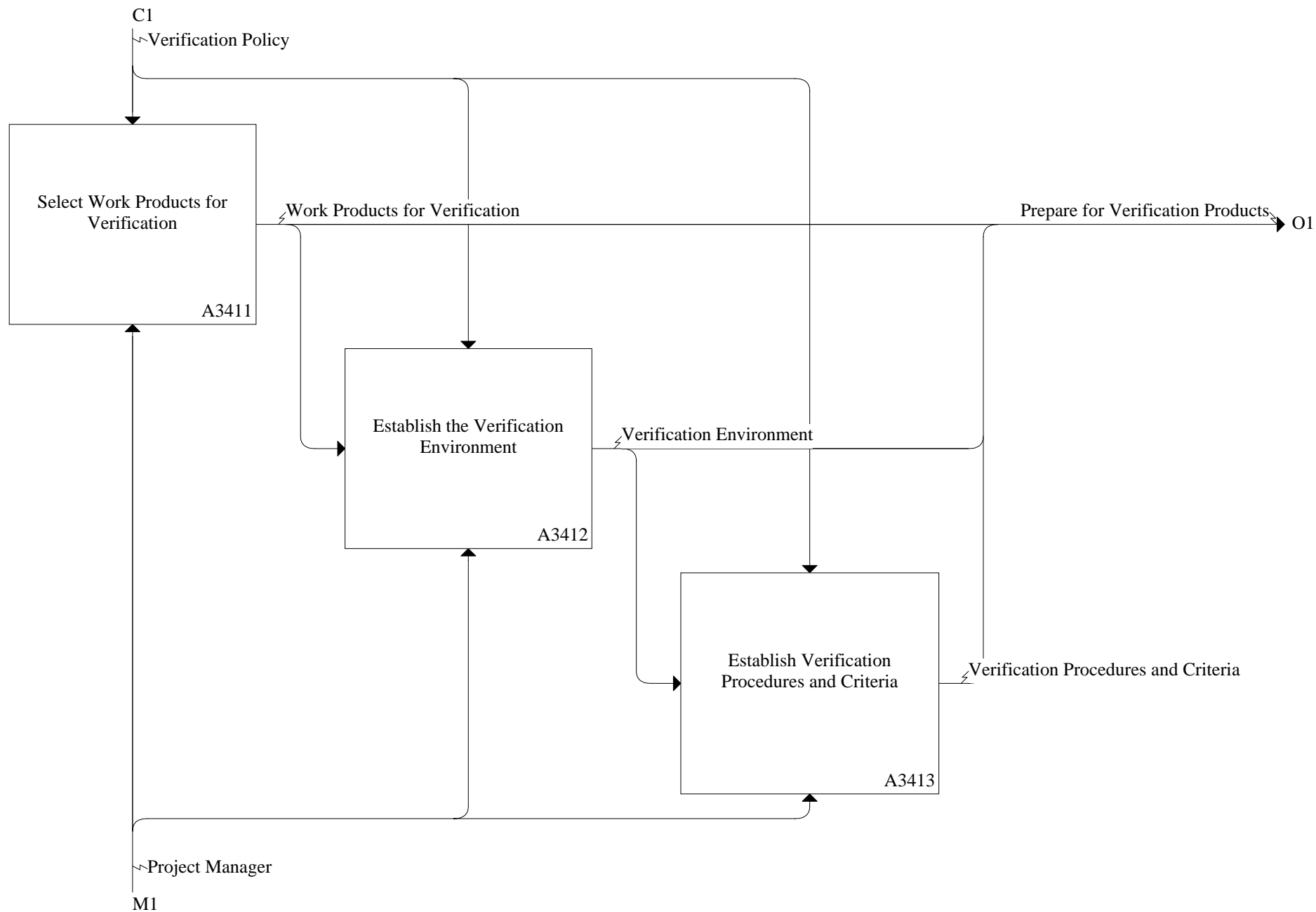






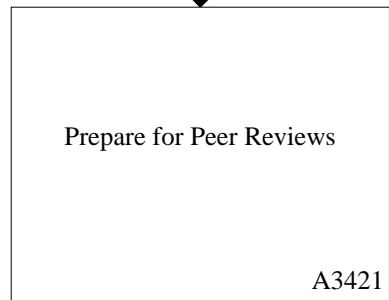




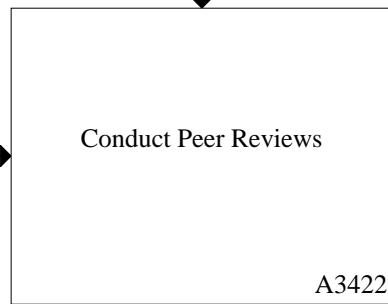


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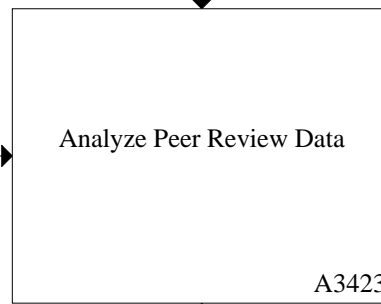
Verification Policy



Peer Review Preparations



Peer Review Results

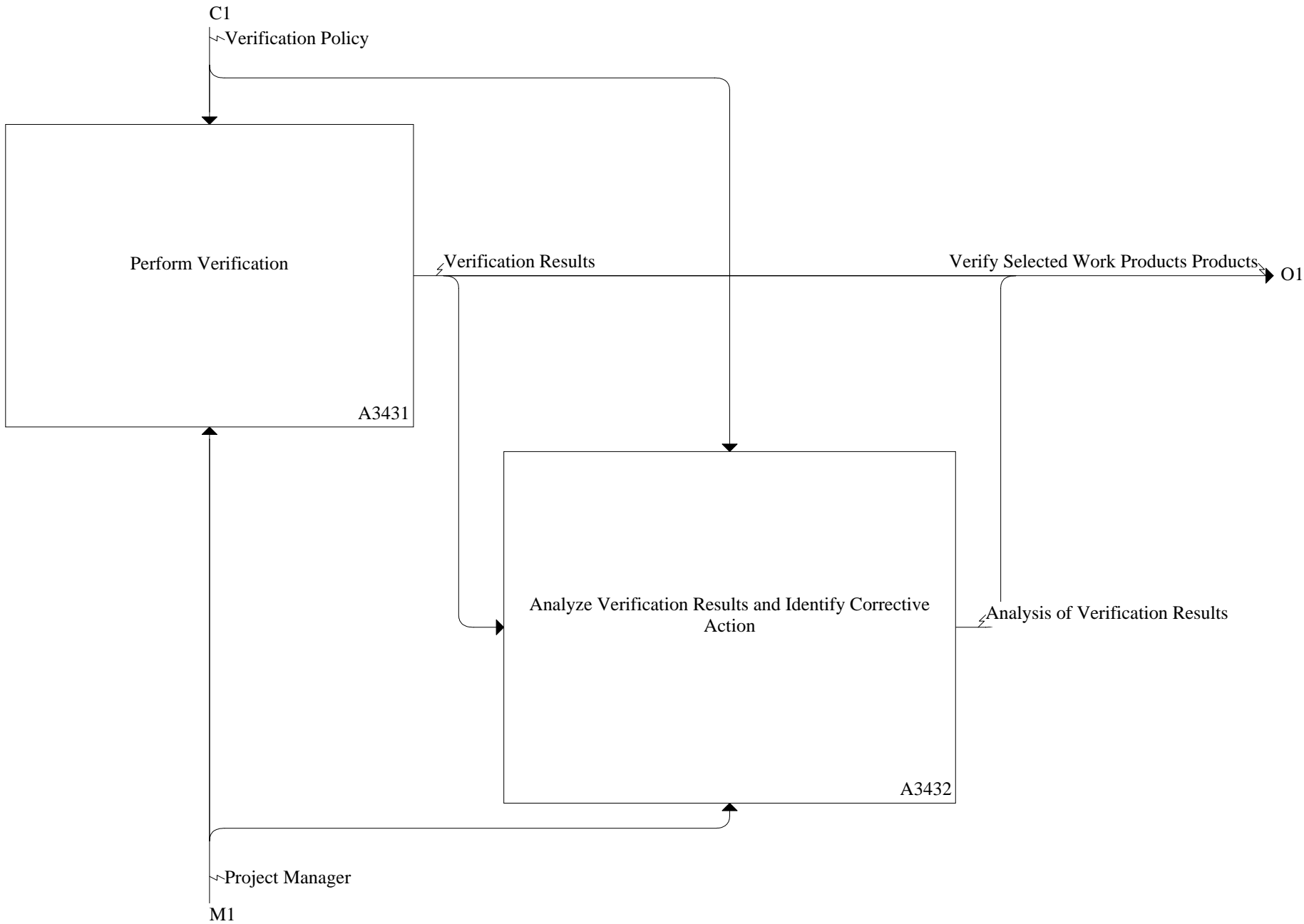


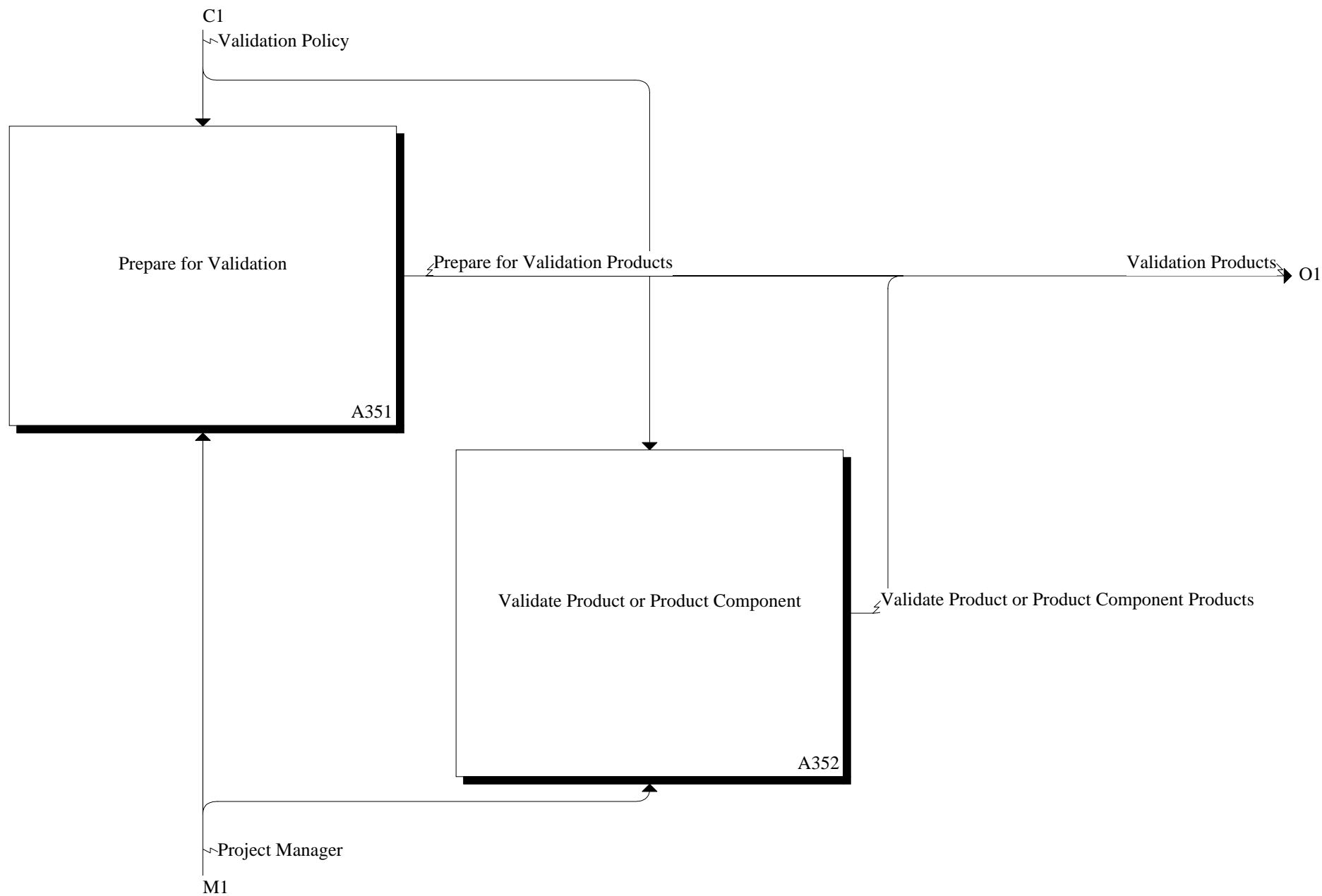
Analysis of Peer Review Data

Perform Peer Reviews Products O1

Project Manager

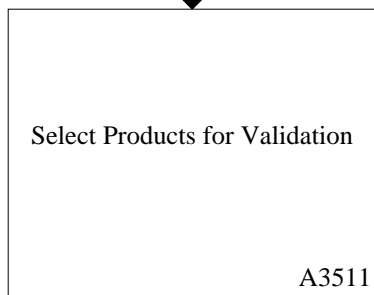
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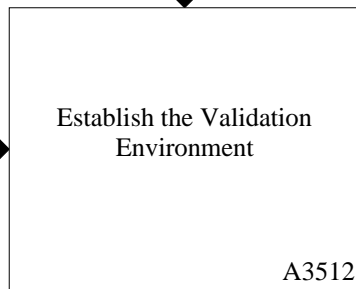
C1

Validation Policy

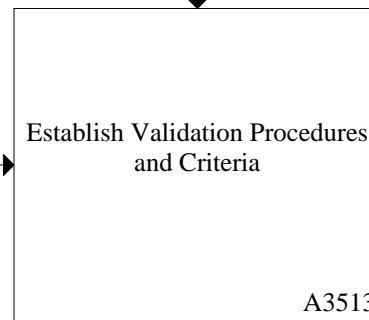


Products for Validation

Prepare for Validation Products O1



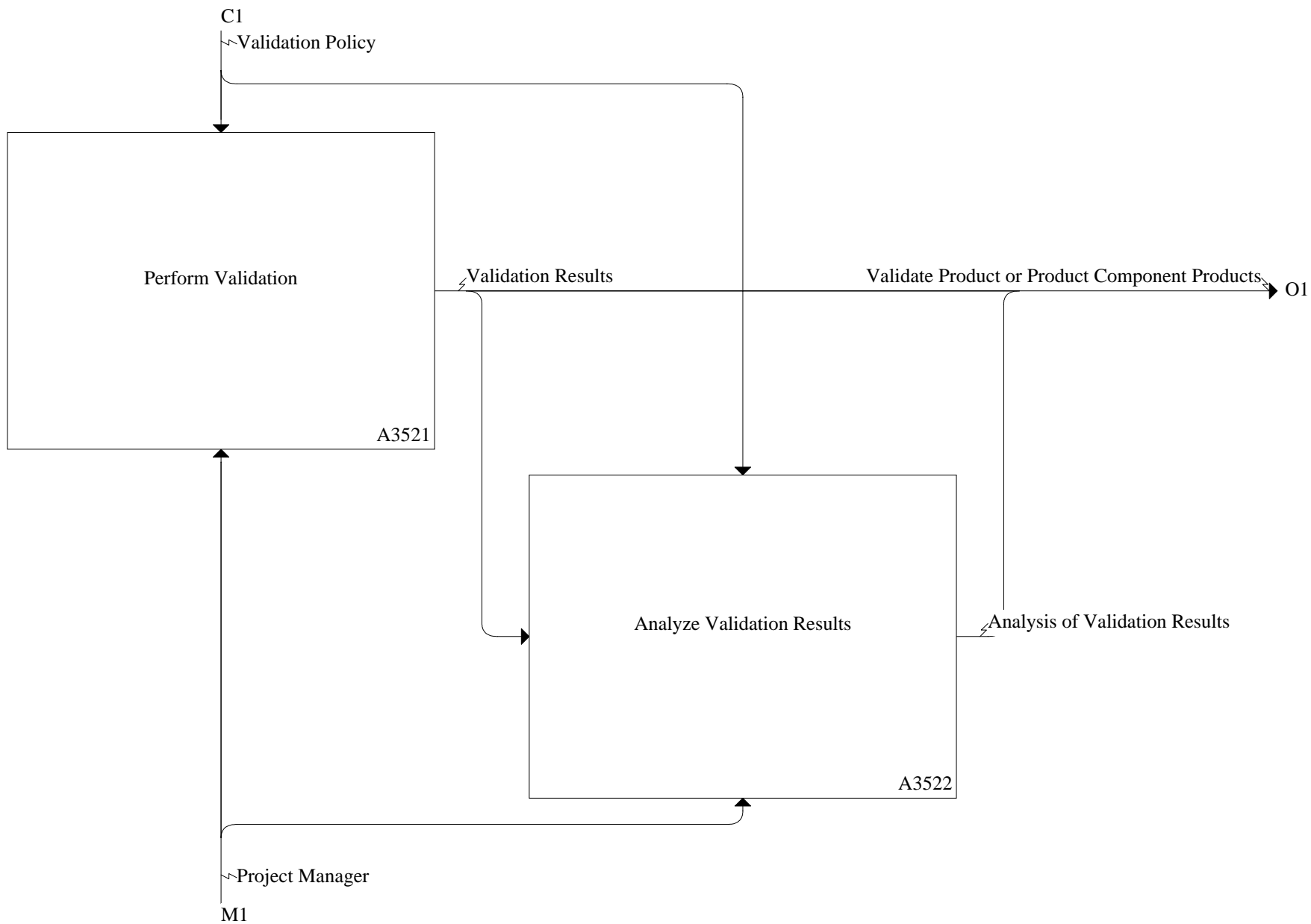
Validation Environment



Validation Procedures and Criteria

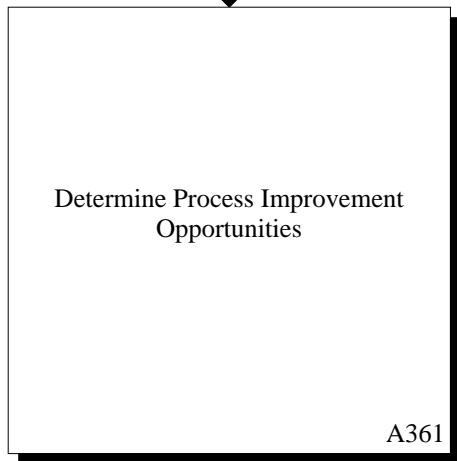
Project Manager

M1



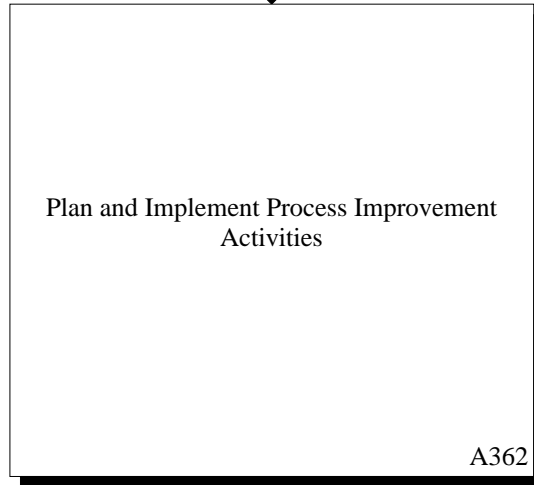
C1

Organizational Process Focus Policy



Determine Process Improvement Opportunities Products

Organizational Process Focus Products O1



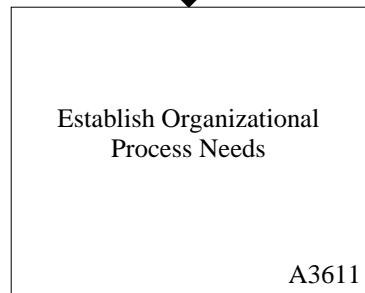
Plan and Implement Process Improvement Activities Products

Project Manager

M1

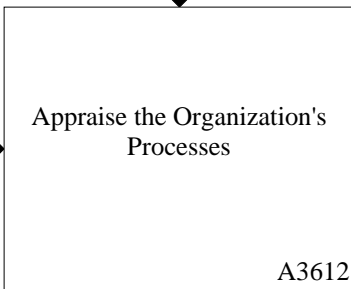
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Organizational Process Focus Policy

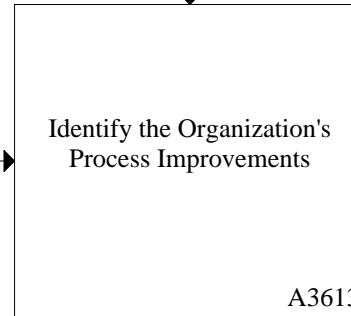


Organizational Process Needs

Determine Process Improvement Opportunities Products O1



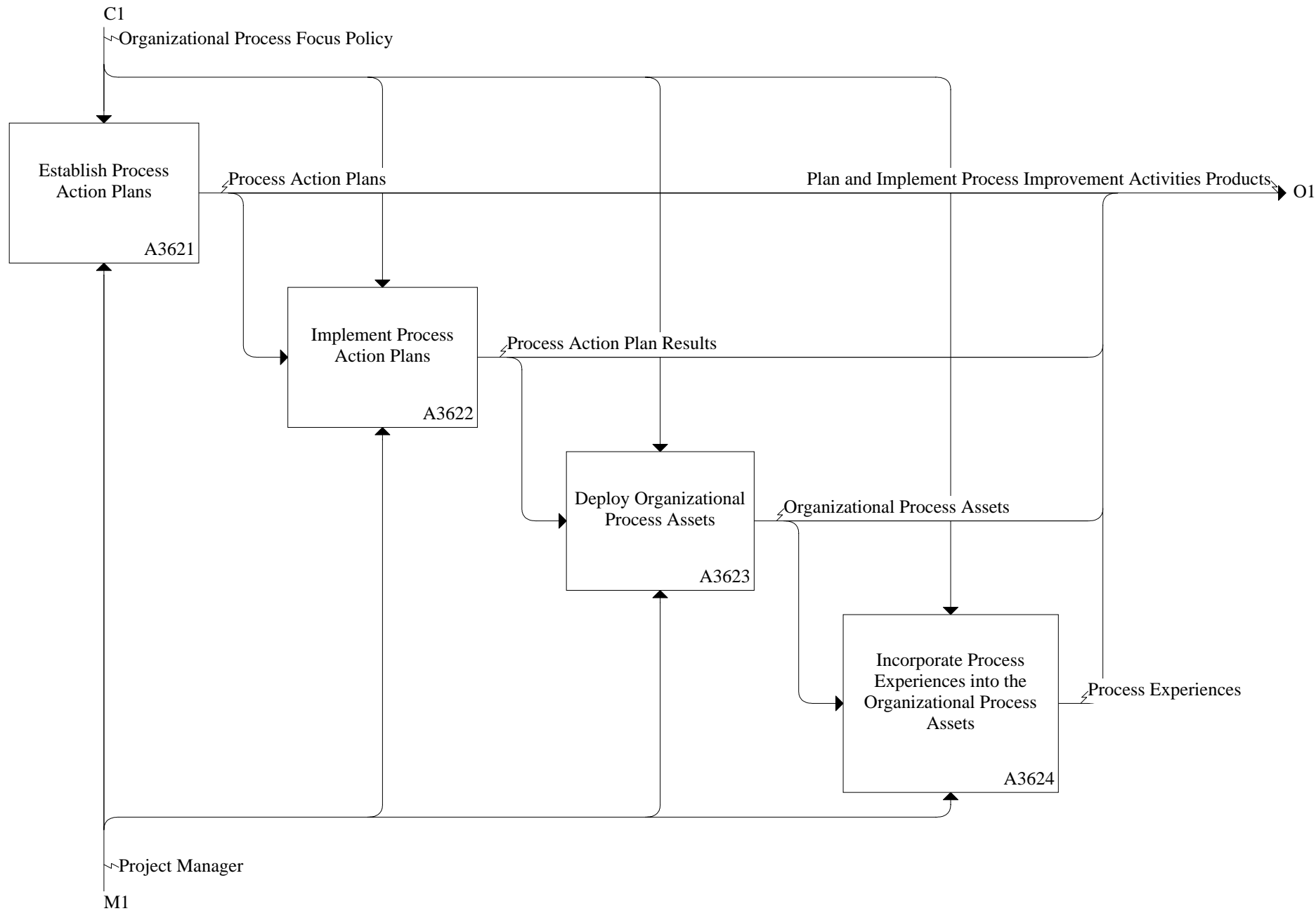
Appraisal of Organization's Processes

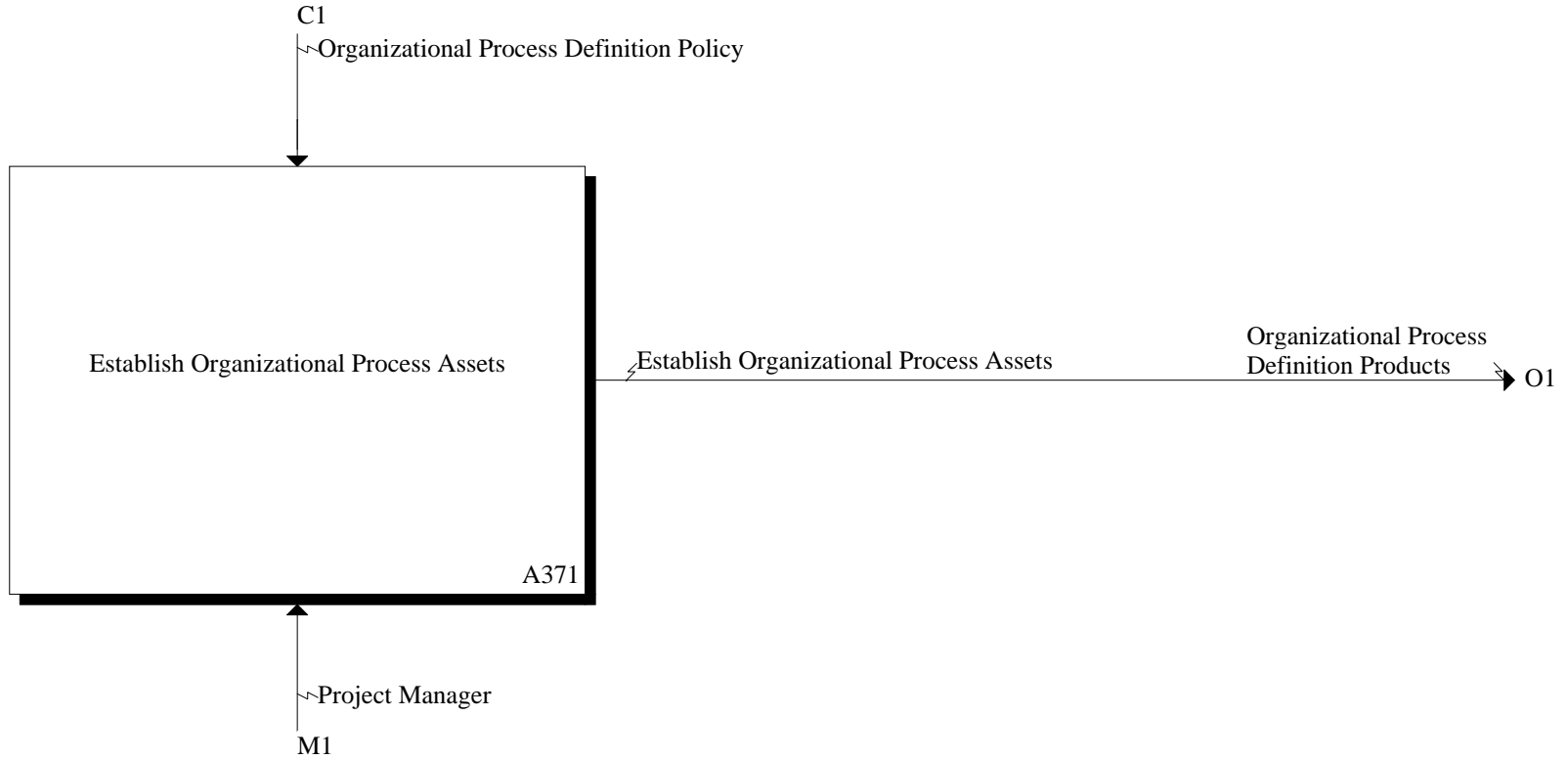


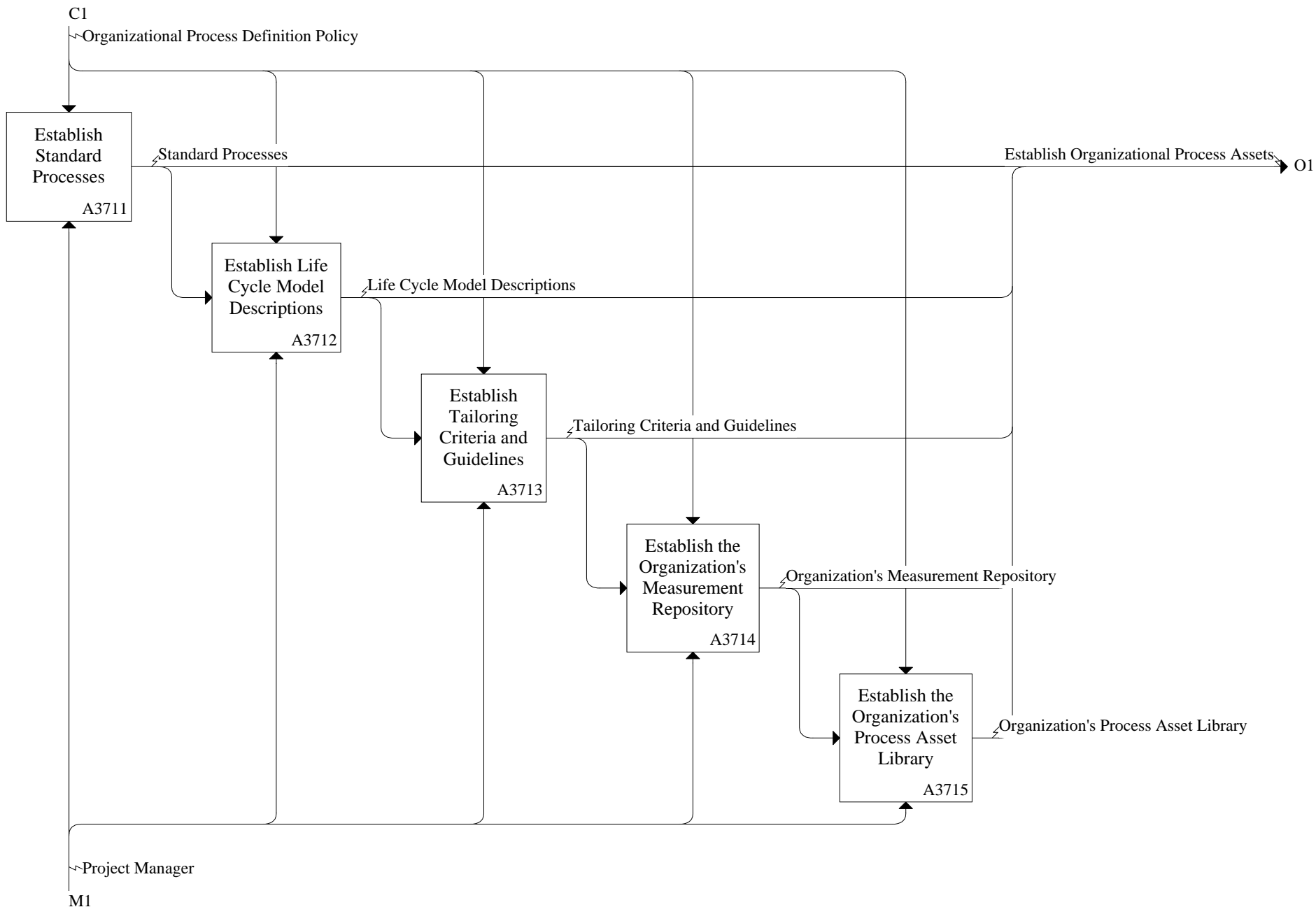
Organization's Process Improvements

Project Manager

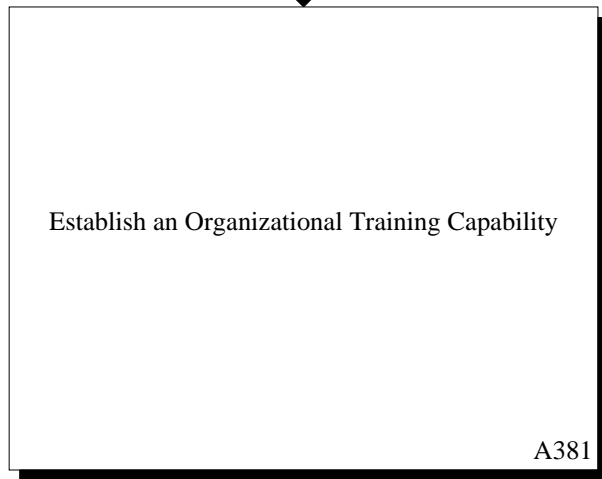
M1







C1
Organizational Training Policy



Establish an Organizational Training Capability Products

Organizational Training Products → O1

Provide Necessary Training

A382

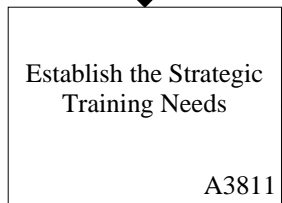
Provide Necessary Training Products

Project Manager

M1

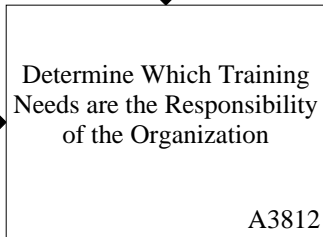
C1

Organizational Training Policy



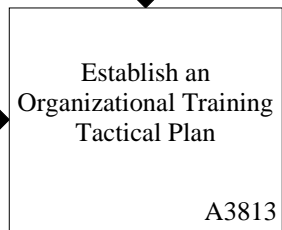
A3811

Strategic Training Needs



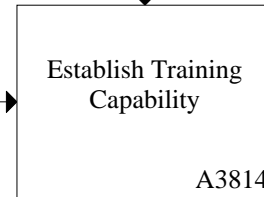
A3812

Organizational Training Needs



A3813

Organizational Training Tactical Plan



A3814

Training Capability

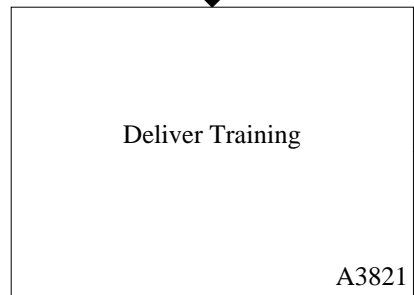
Establish an Organizational Training Capability Products O1

Project Manager

M1

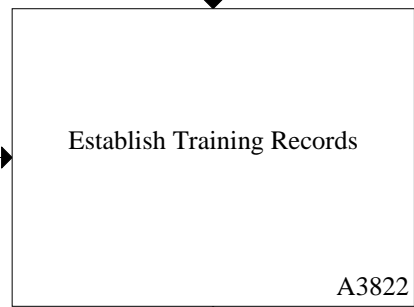
C1

Organizational Training Policy

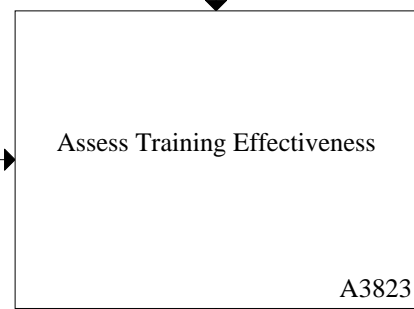


Training

Provide Necessary Training Products O1



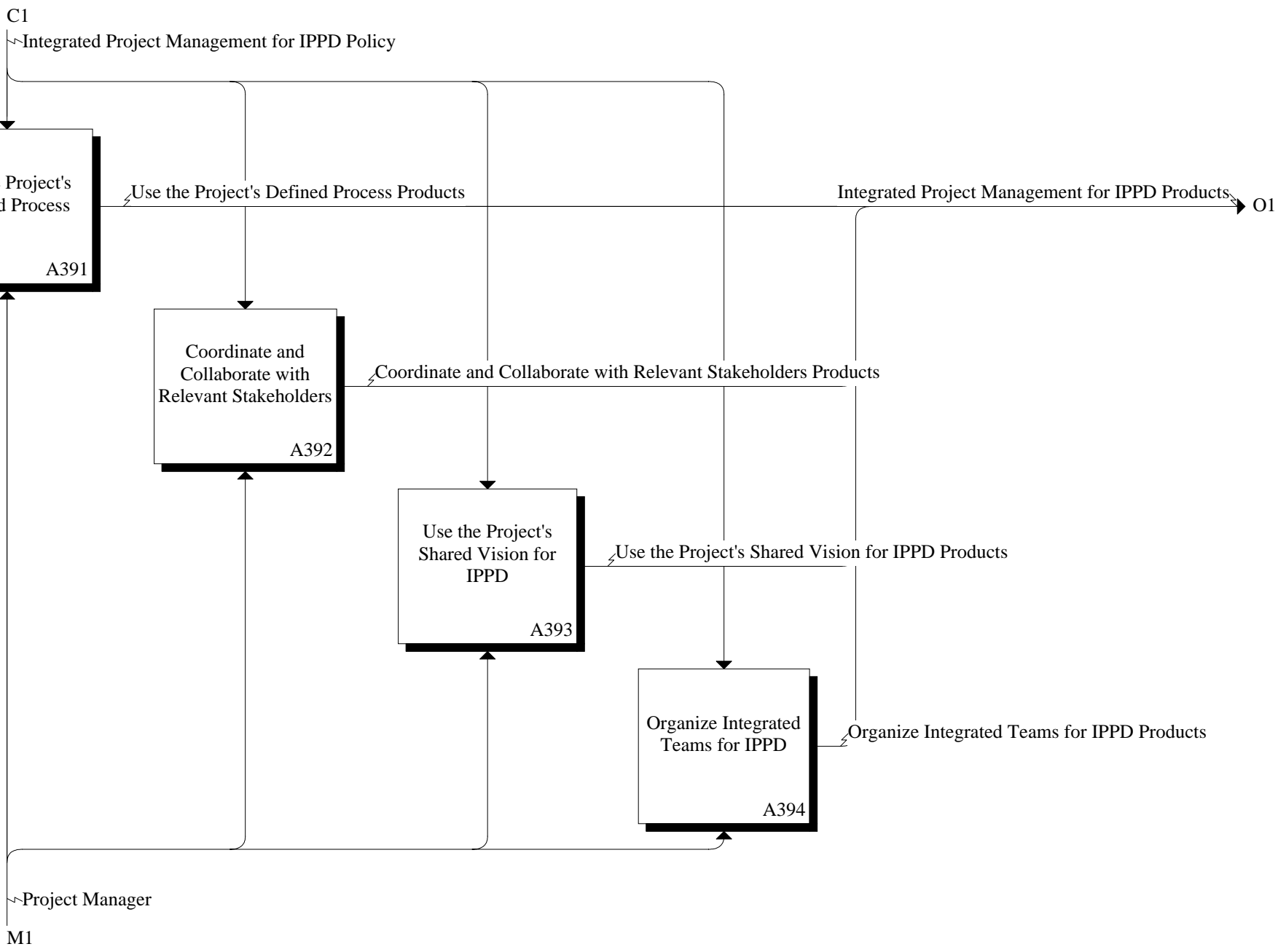
Training Records

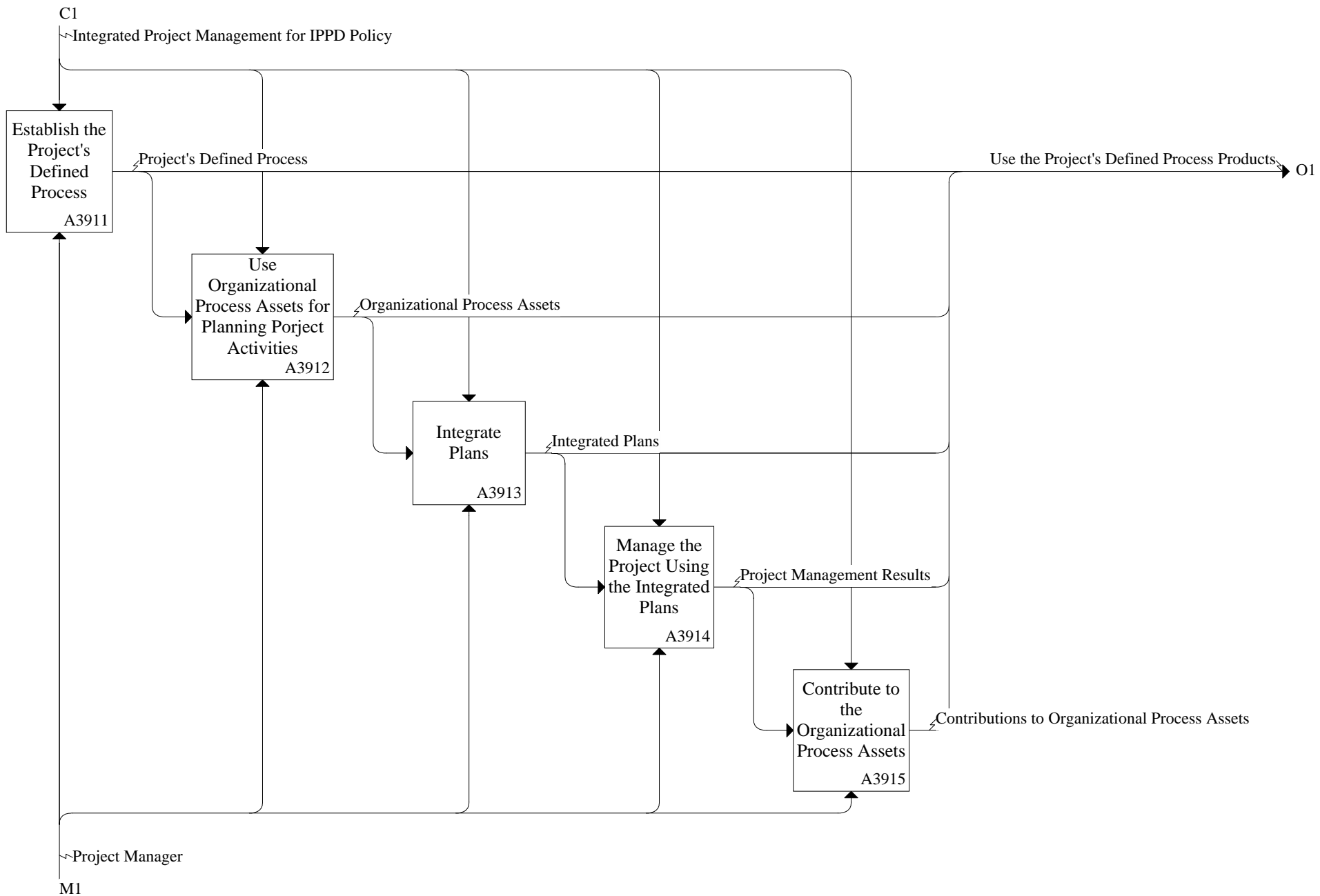


Assessment of Training

Project Manager

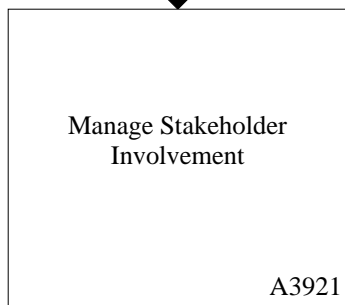
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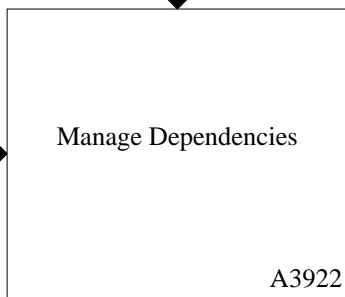
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Integrated Project Management for IPPD Policy

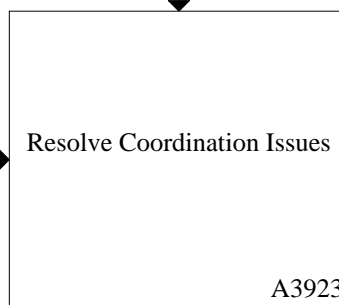


Results of Managing Stakeholder Involvement

Coordinate and Collaborate with Relevant Stakeholders Products O1



Results of Managing Dependencies



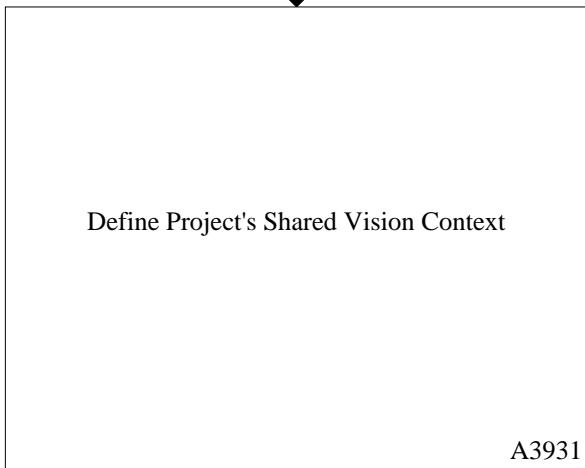
Results of Resolving Coordination Issues

Project Manager

M1

C1

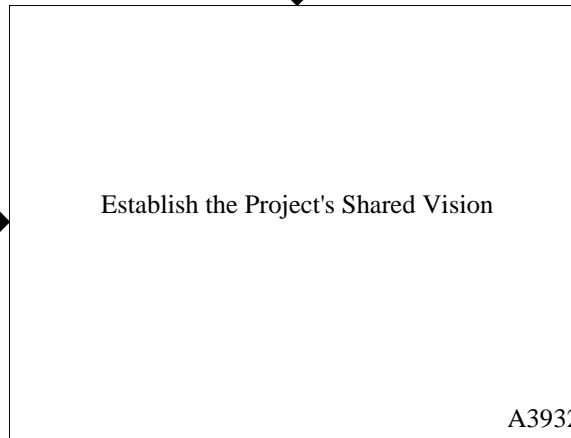
Integrated Project Management for IPPD Policy



Project's Shared Vision Context

Use the Project's Shared Vision for IPPD Products

O1



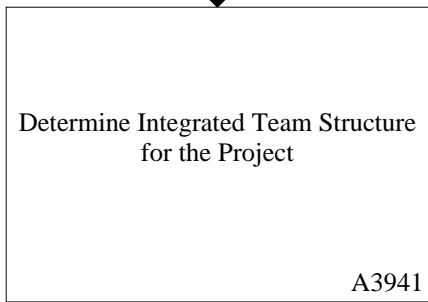
Project's Shared Vision

Project Manager

M1

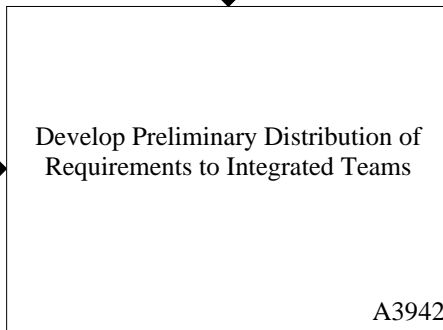
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Integrated Project Management for IPPD Policy

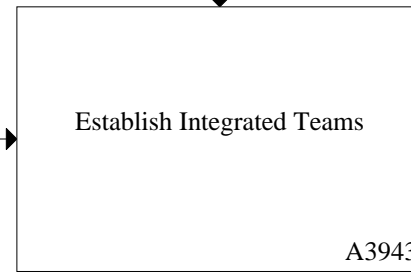


Integrated Team Structure

Organize Integrated Teams for IPPD Products O1



Requirements for Integrated Teams



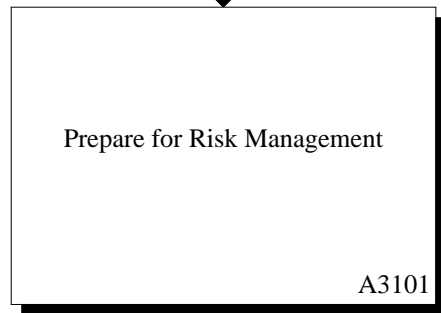
Integrated Teams

Project Manager

M1

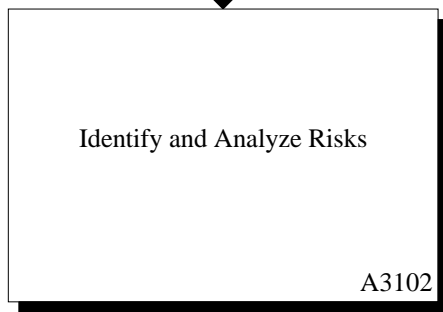
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Risk Management Policy

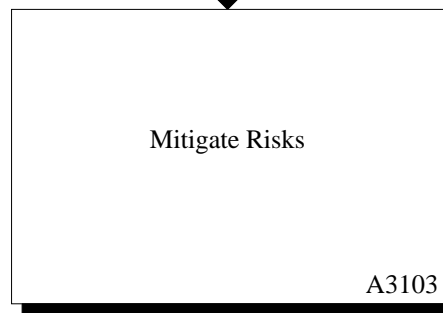


Prepare for Risk Management Products

Risk Management Products O1



Identify and Analyze Risks Products



Mitigate Risks Products

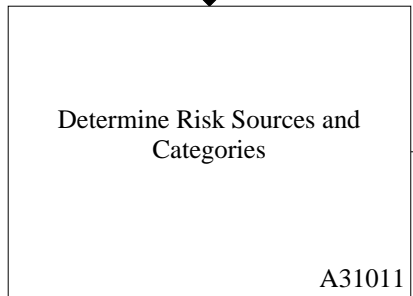
Project Manager

M1

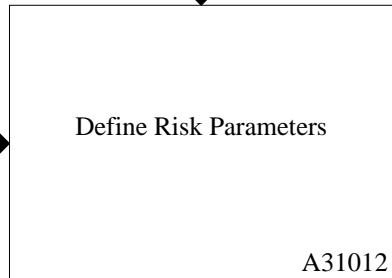


C1

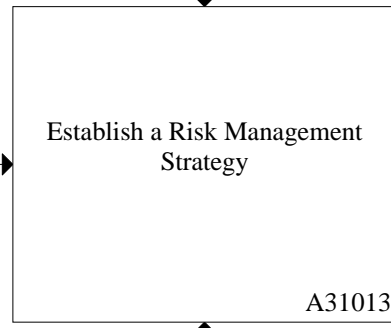
Risk Management Policy



Risk Sources and Categories



Risk Parameters

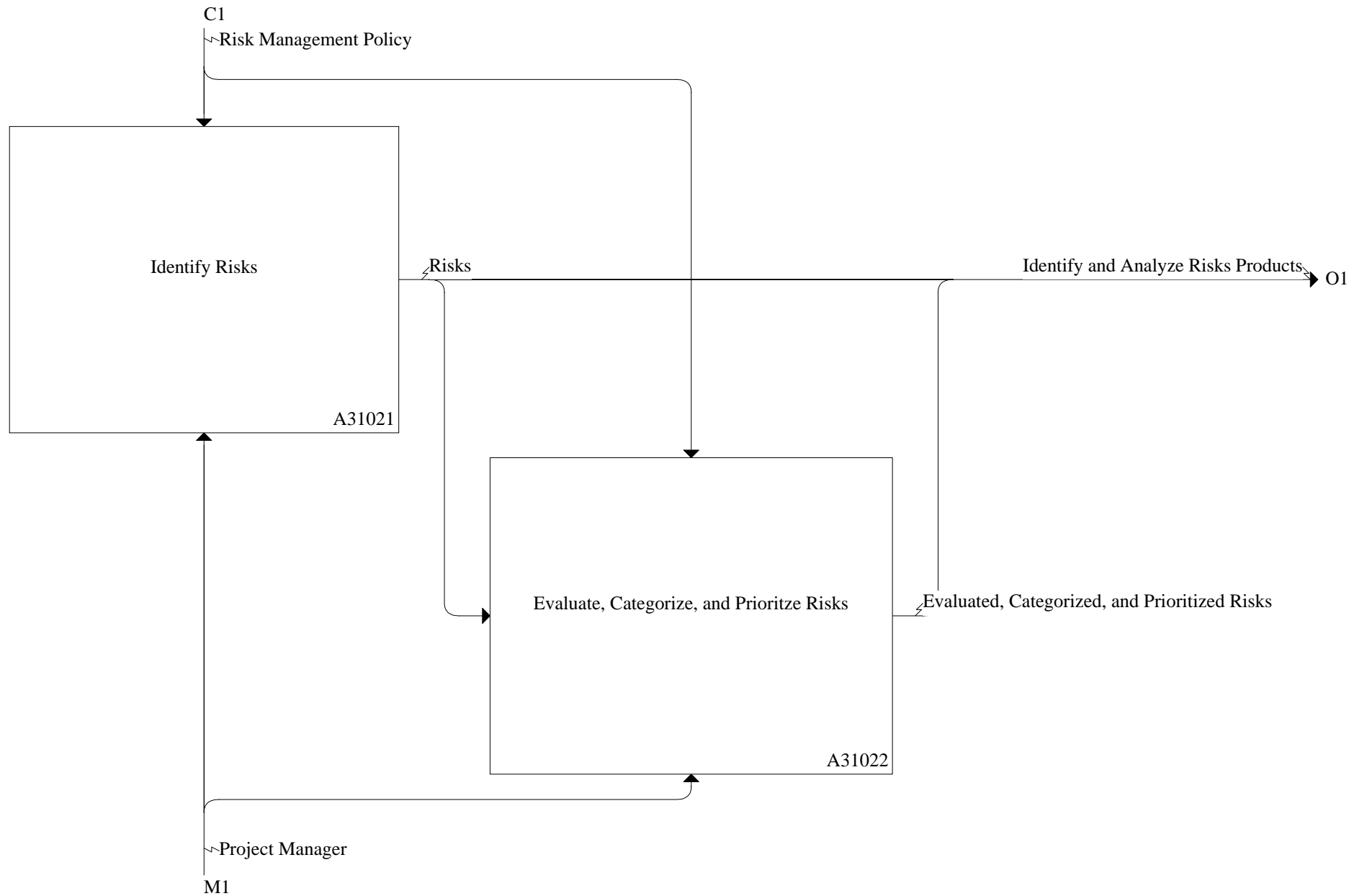


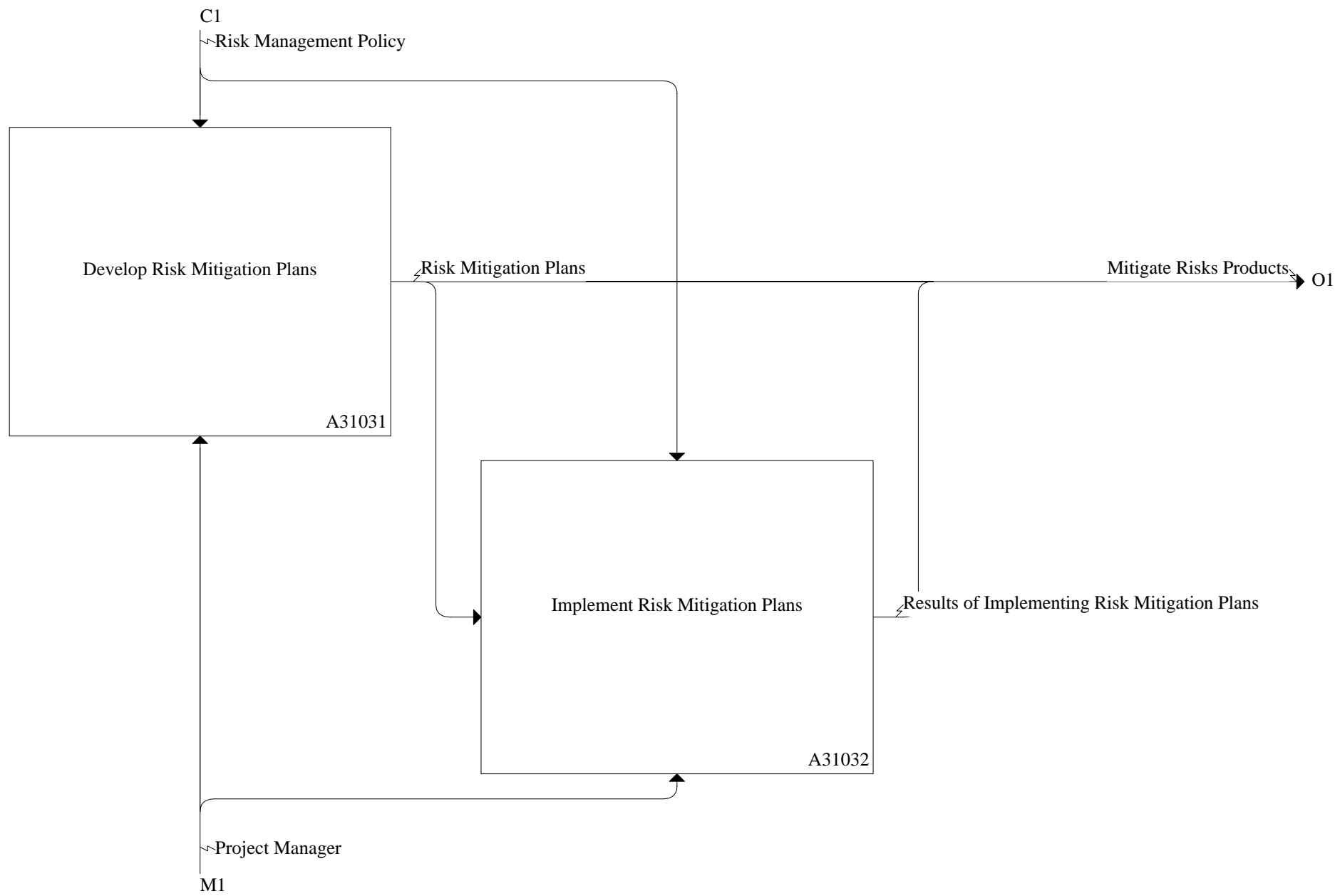
Risk Management Strategy

Prepare for Risk Management Products O1

Project Manager

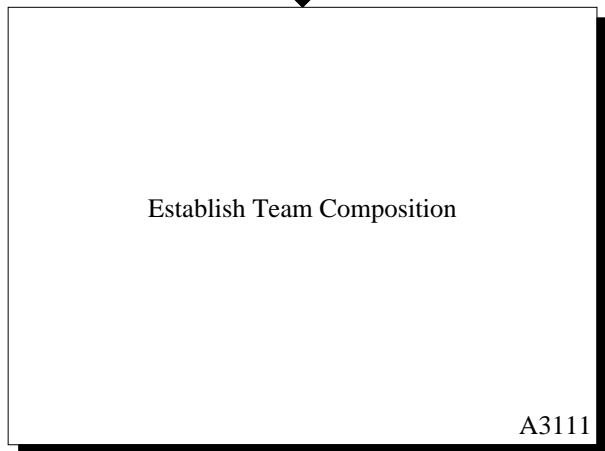
M1





C1

Integrated Teaming Policy



Establish Team Composition Products

Integrated Teaming Products → O1

Govern Team Operation

A3112

Govern Team Operation Products

Project Manager

M1

C1

Integrated Teaming Policy



Identify Team Tasks

A31111

Team Tasks

Identify Needed Knowledge and Skills

A31112

Needed Knowledge and Skills

Assign Appropriate Team Members

A31113

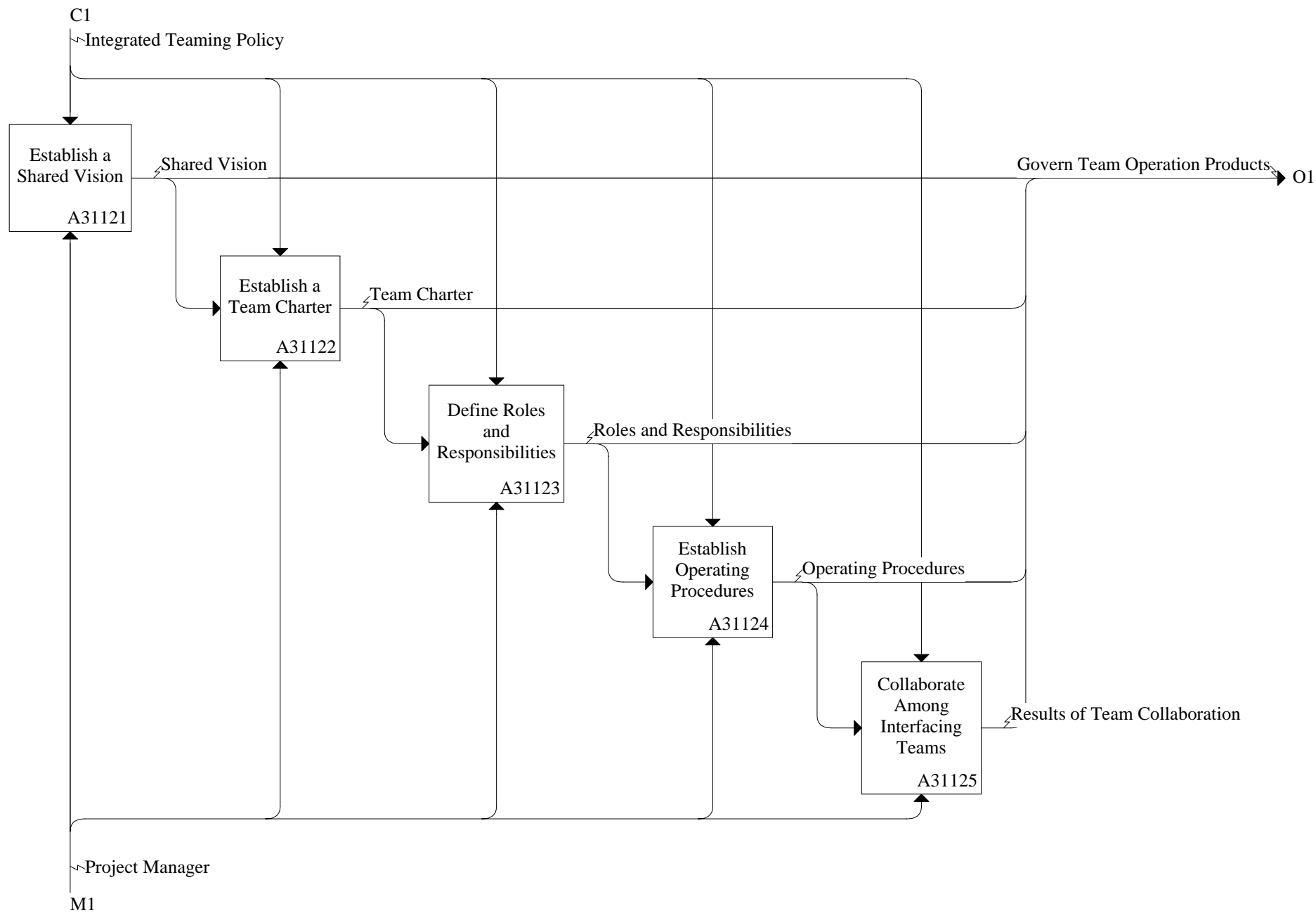
Assigned Team Members

Establish Team Composition Products

O1

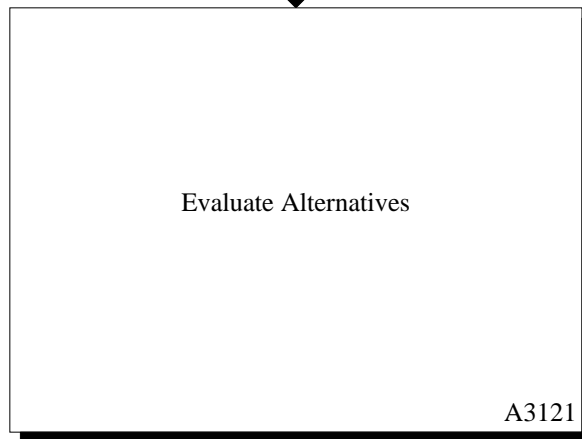
Project Manager

M1



C1

Decision Analysis and Resolution Policy



Evaluate Alternatives

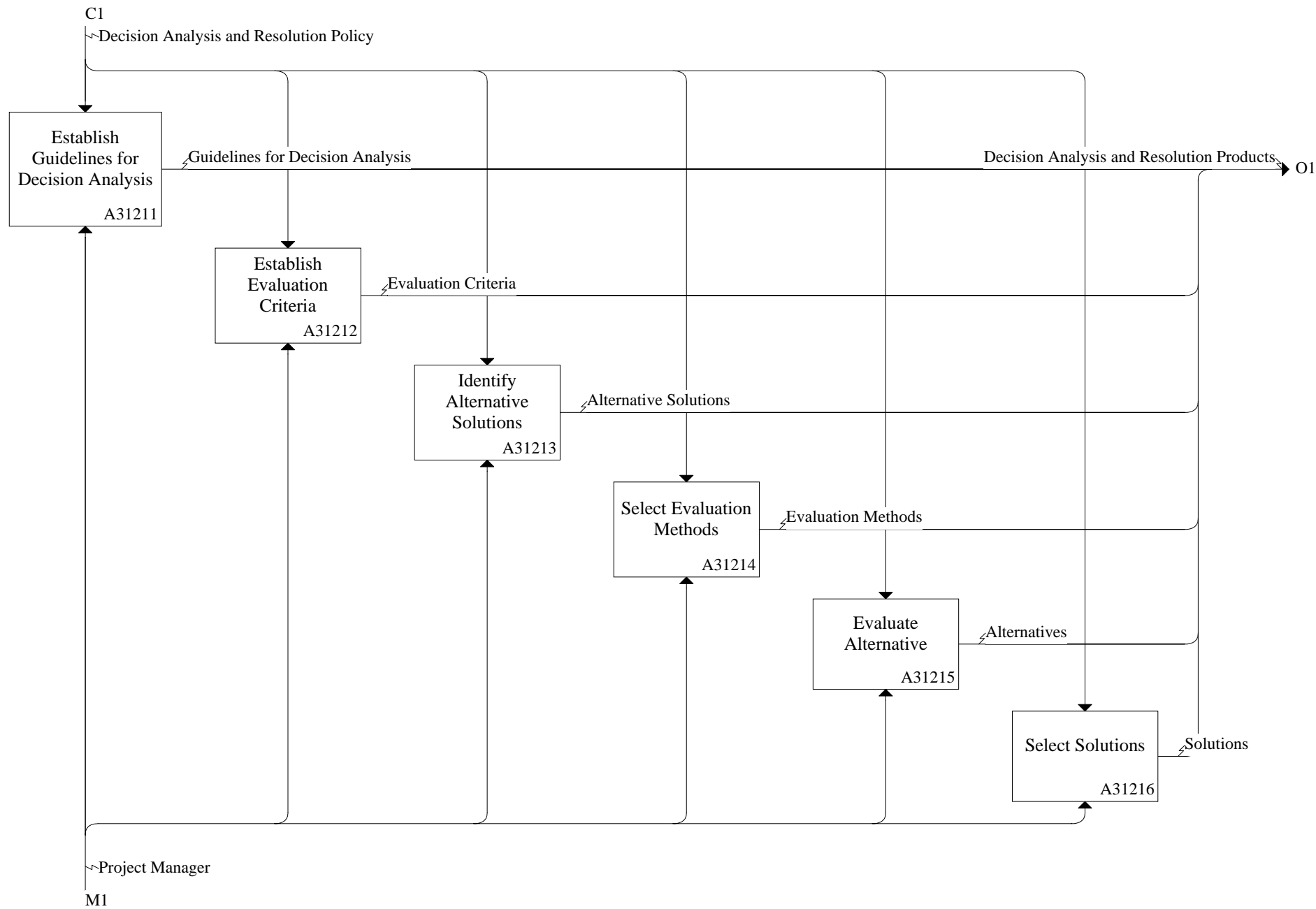
A3121

Decision Analysis and Resolution Products → O1

Project Manager

M1

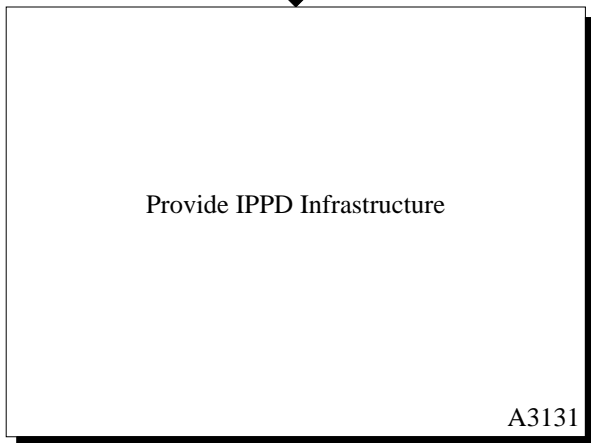






C1

Organizational Environment for Integration Policy



Provide IPPD Infrastructure Products

Organizational Environment for Integration Products

O1

Manage People for Integration

Manage People for Integration Products

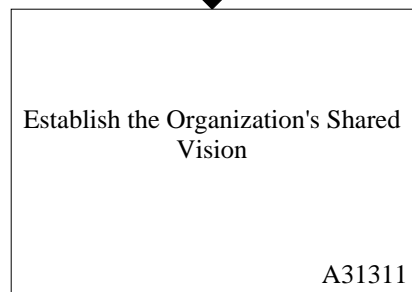
A3132

Project Manager

M1

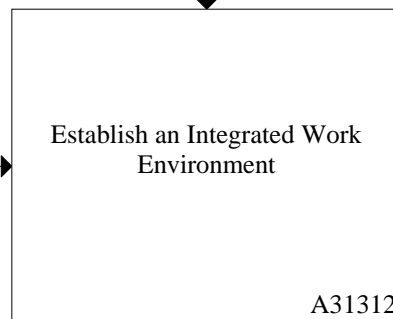
C1

Organizational Environment for Integration Policy

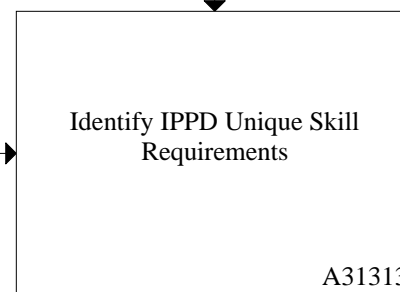


Organization's Shared Vision

Provide IPPD Infrastructure Products O1



Integrated Work Environment



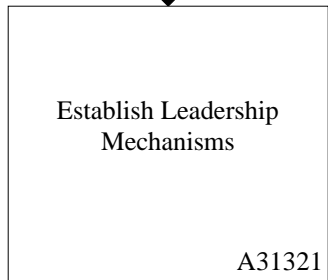
IPPD Skill Requirements

Project Manager

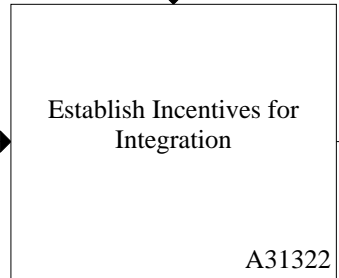
M1

C1

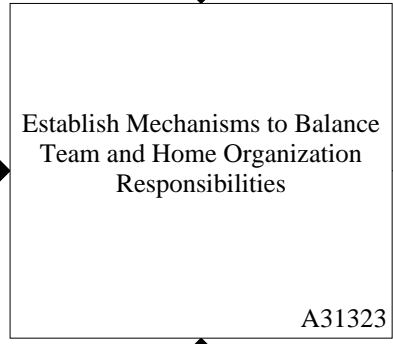
Organizational Environment for Integration Policy



Leadership Mechanisms



Incentives for Integration

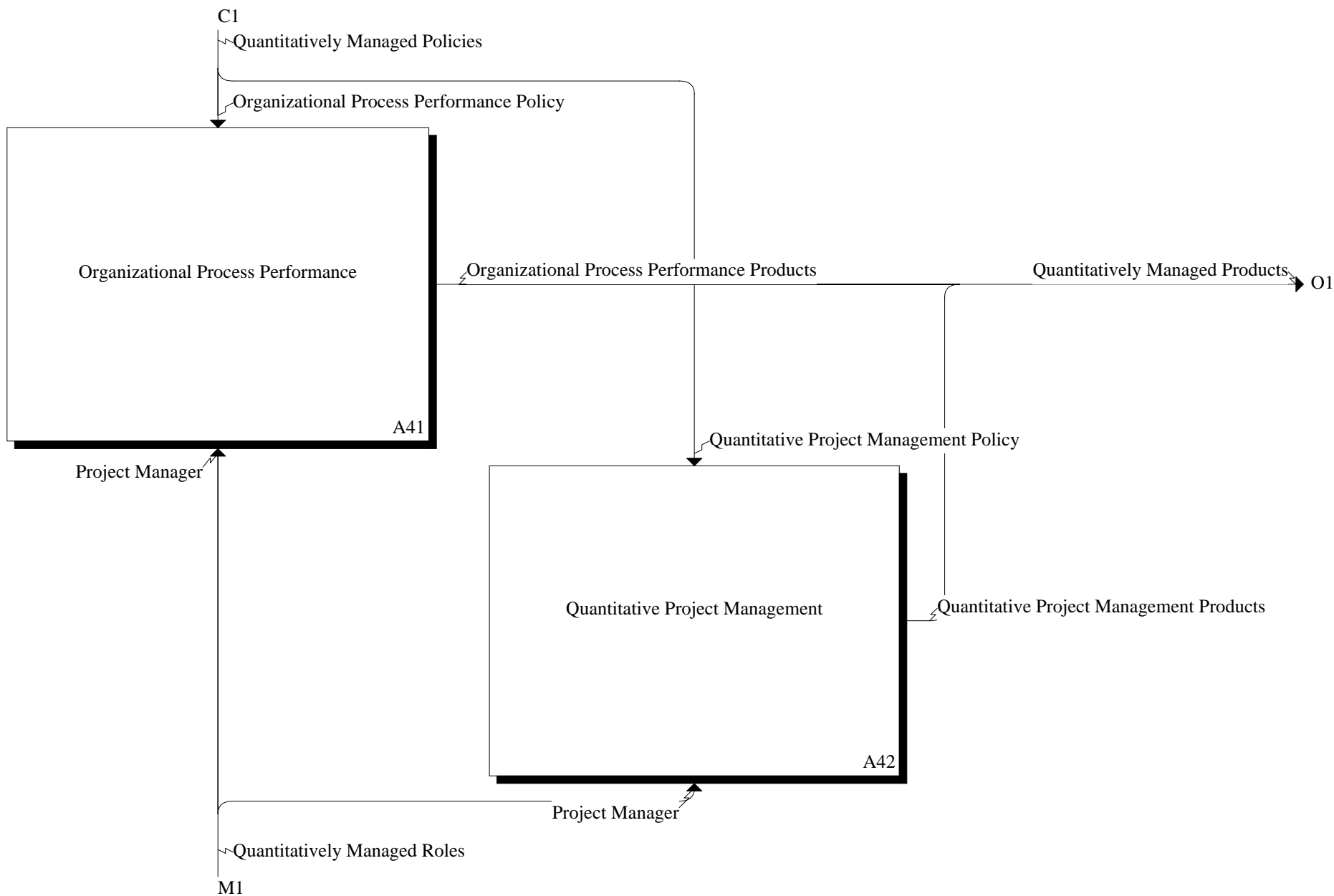


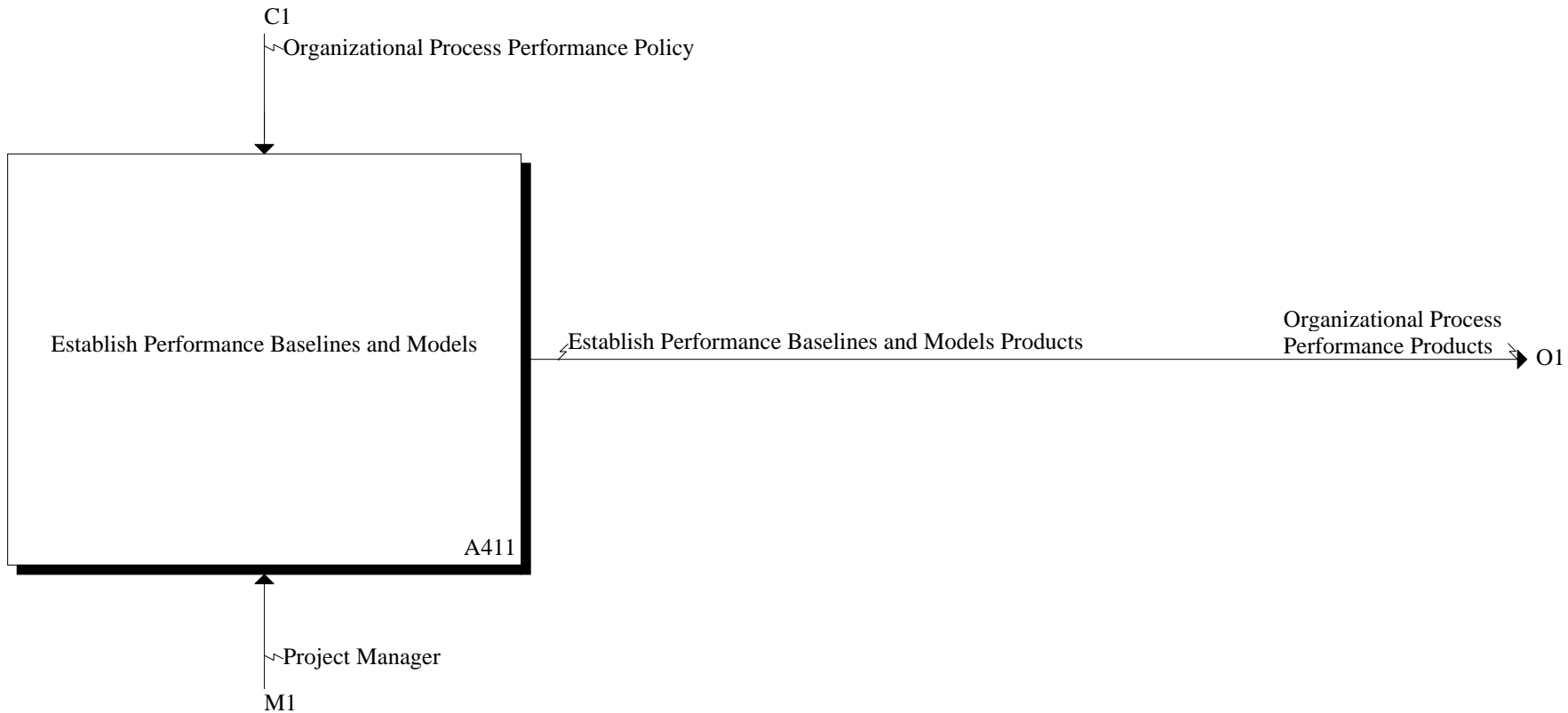
Mechanisms to Balance Responsibilities

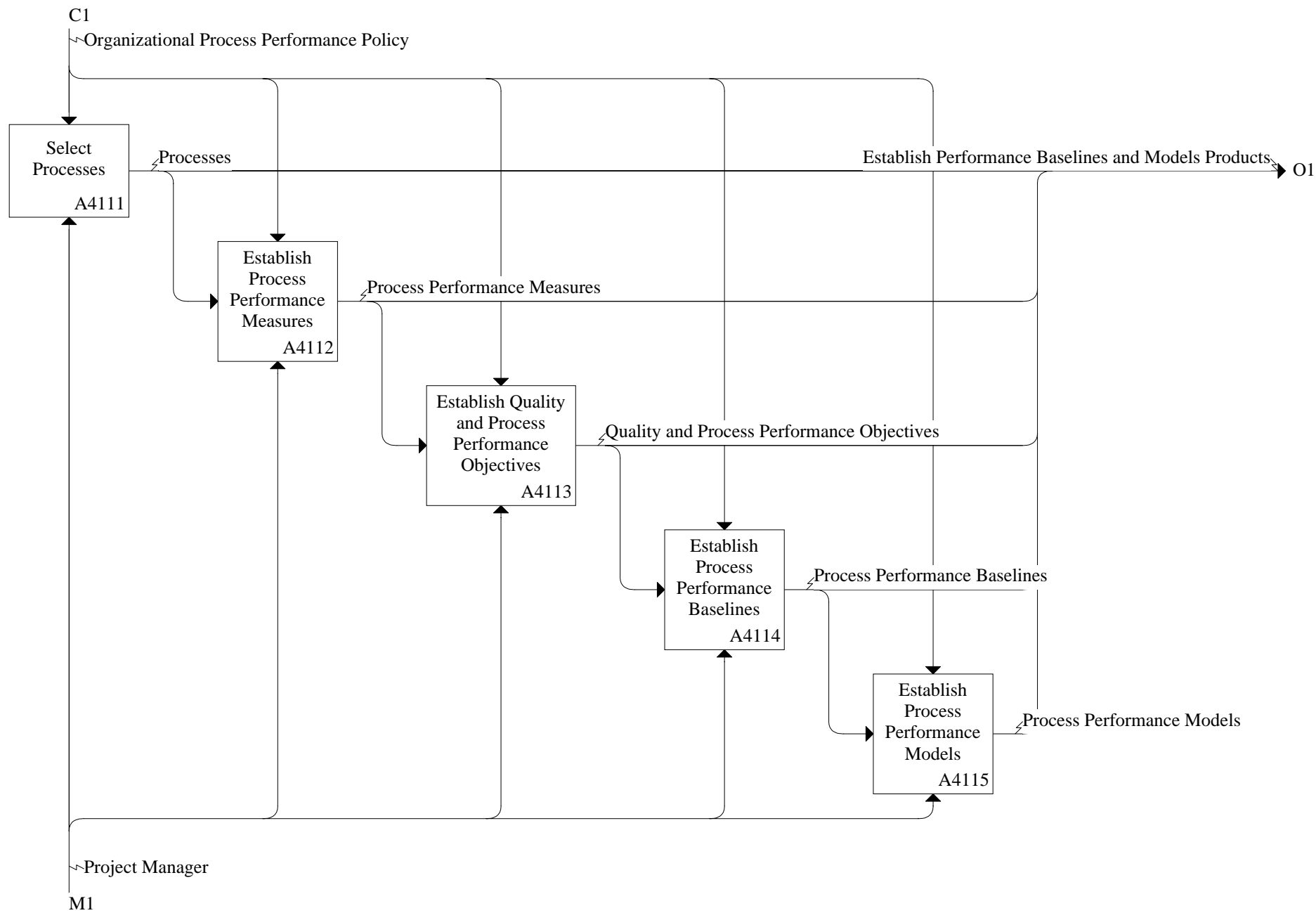
Manage People for Integration Products O1

Project Manager

M1

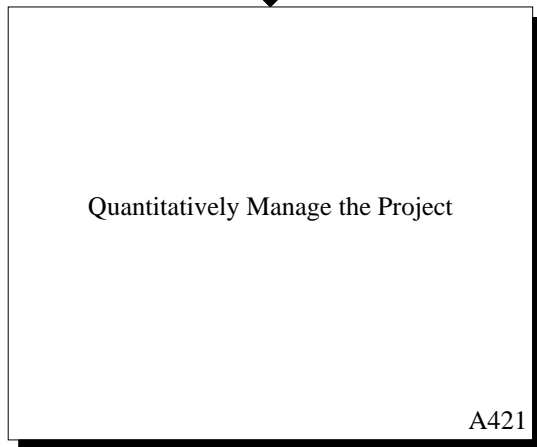






C1

Quantitative Project Management Policy



Quantitatively Manage the Project Products

Quantitative Project Management Products O1

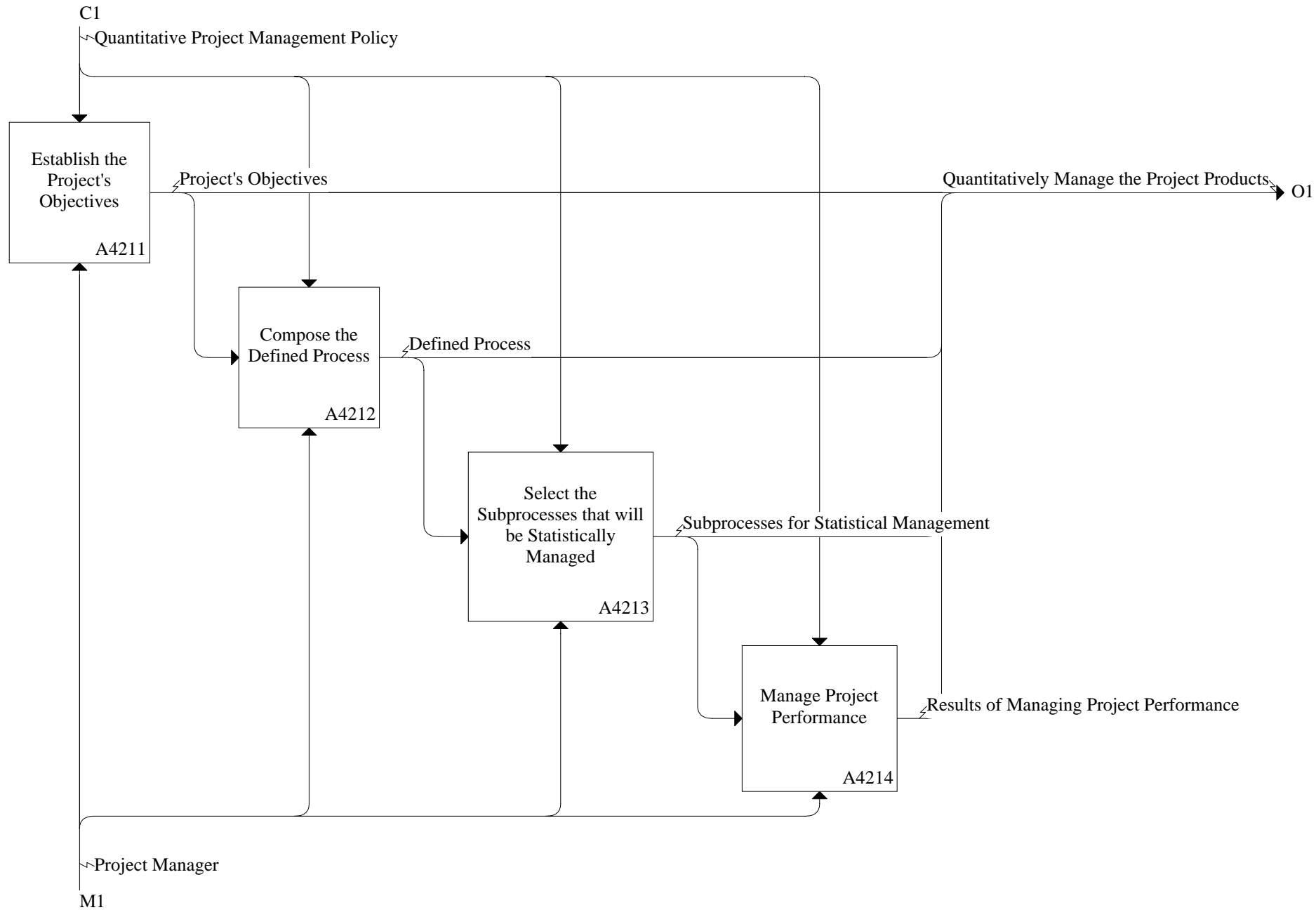
Statistically Manage Subprocess Performance

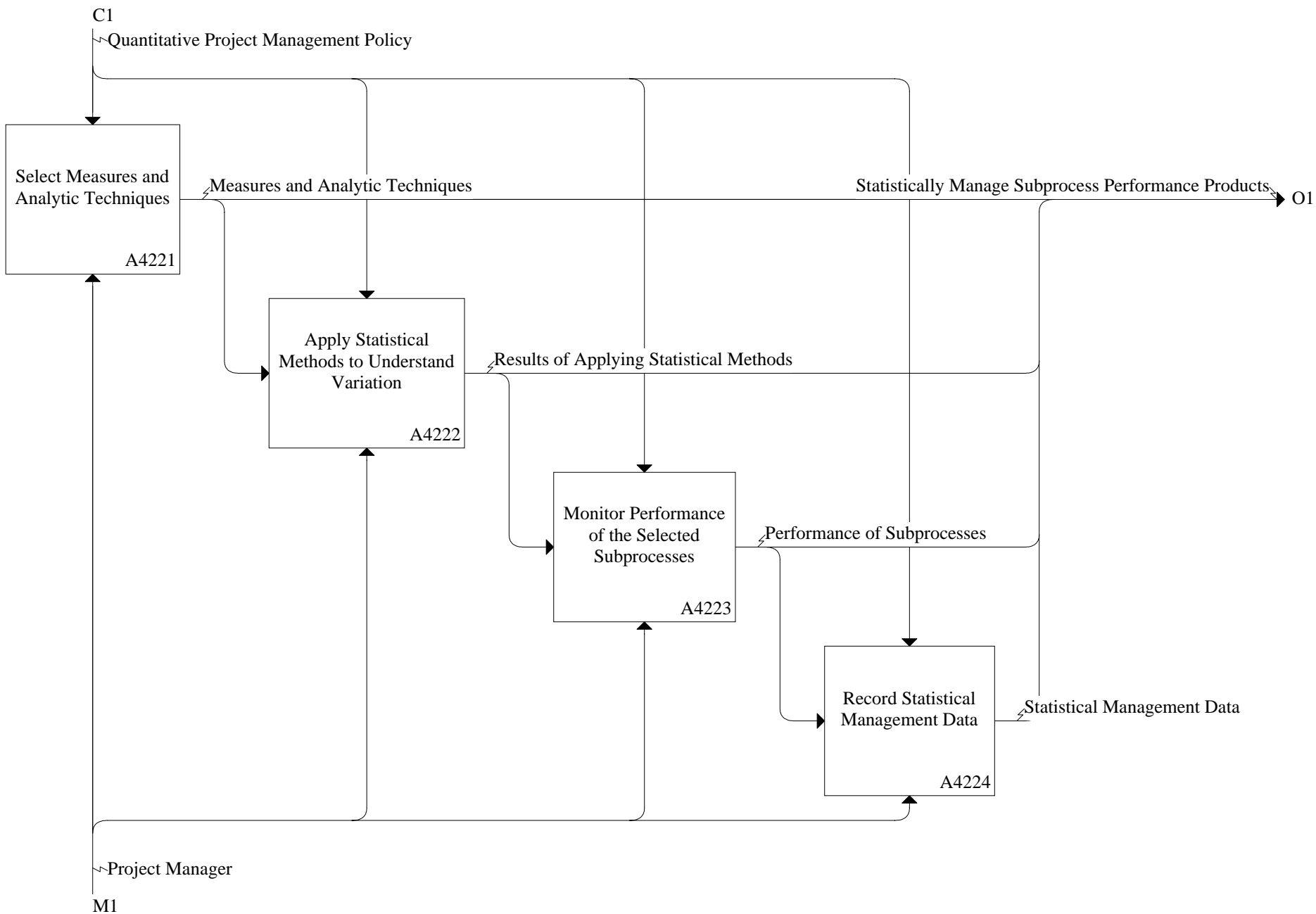
Statistically Manage Subprocess Performance Products

A422

Project Manager

M1

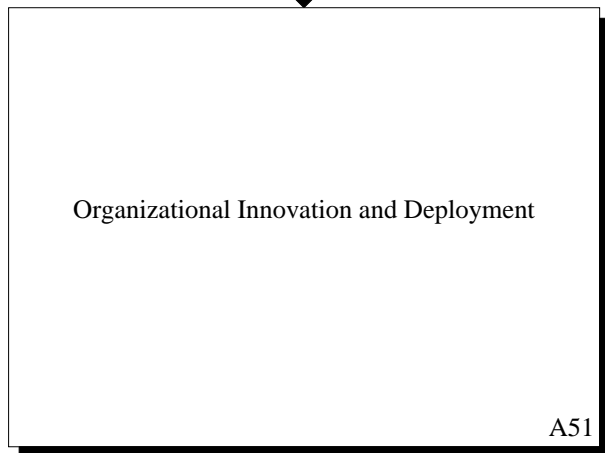




C1

Optimizing Policies

Organizational Innovation and Deployment Policy



Organizational Innovation and Deployment

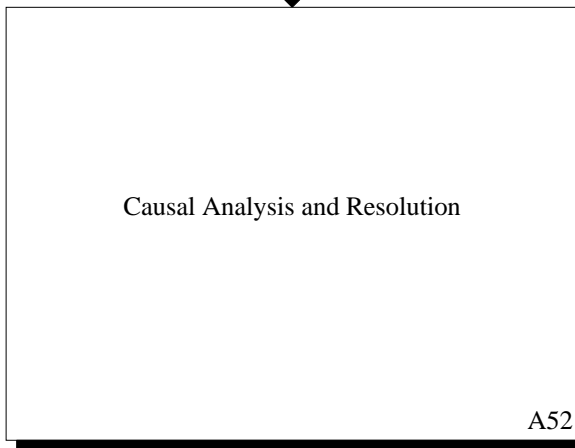
A51

Project Manager

Organizational Innovation and Deployment Products

Optimizing Products O1

Causal Analysis and Resolution Policy



Causal Analysis and Resolution

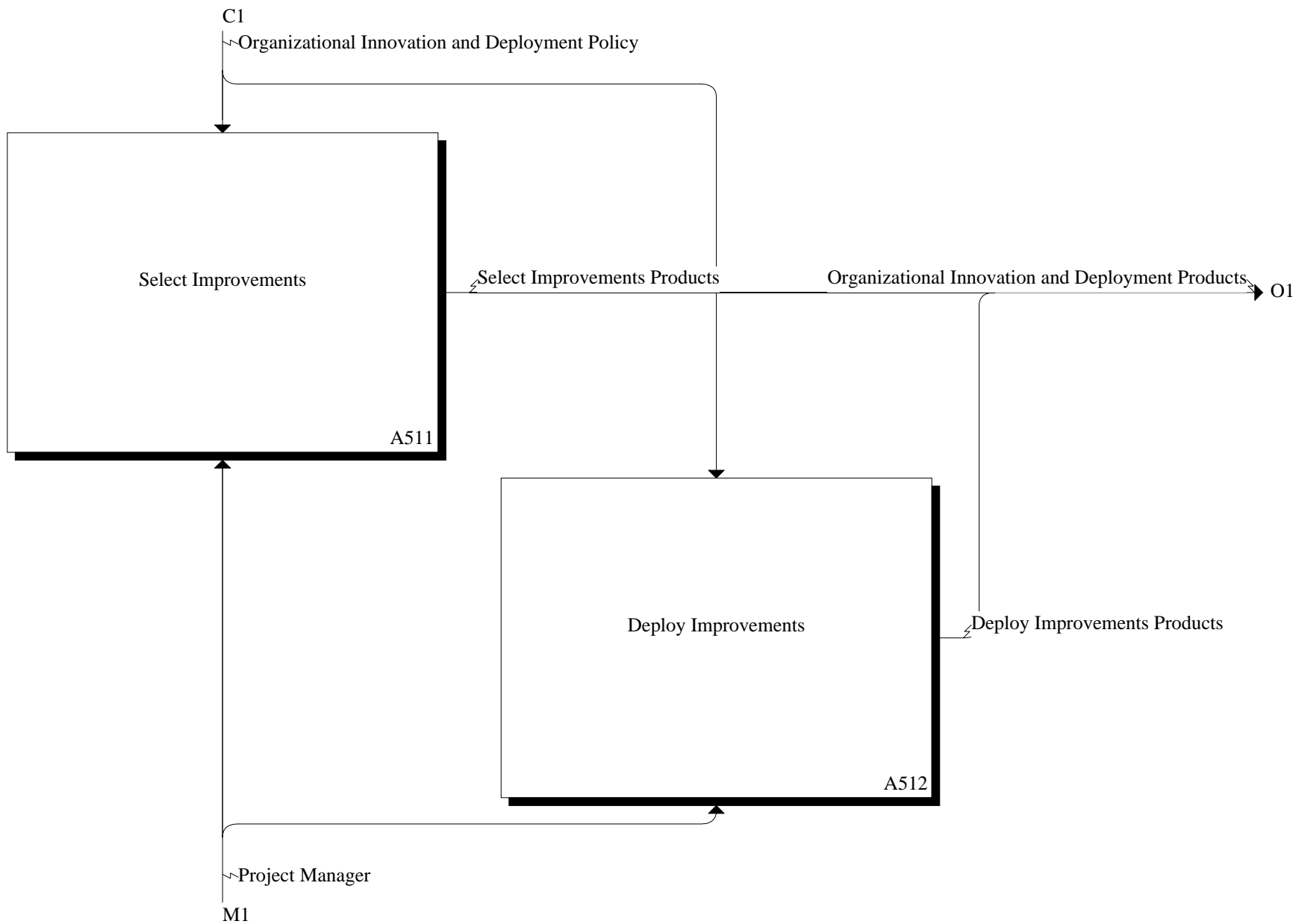
A52

Project Manager

Causal Analysis and Resolution Products

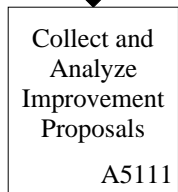
Optimizing Roles

M1

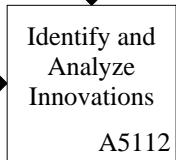


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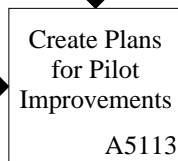
Organizational Innovation and Deployment Policy



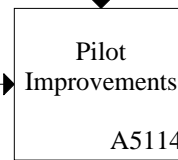
Improvement Proposals



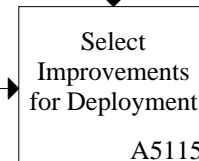
Innovations



Pilot Plans



Results of Piloting Improvements



Improvements for Deployment



Project Manager

M1

O1

C1

Organizational Innovation and Deployment Policy



Plan the Deployment

A5121

Deployment Plans

Manage the Deployment

A5122

Results of Deployment

Measure Improvement Effects

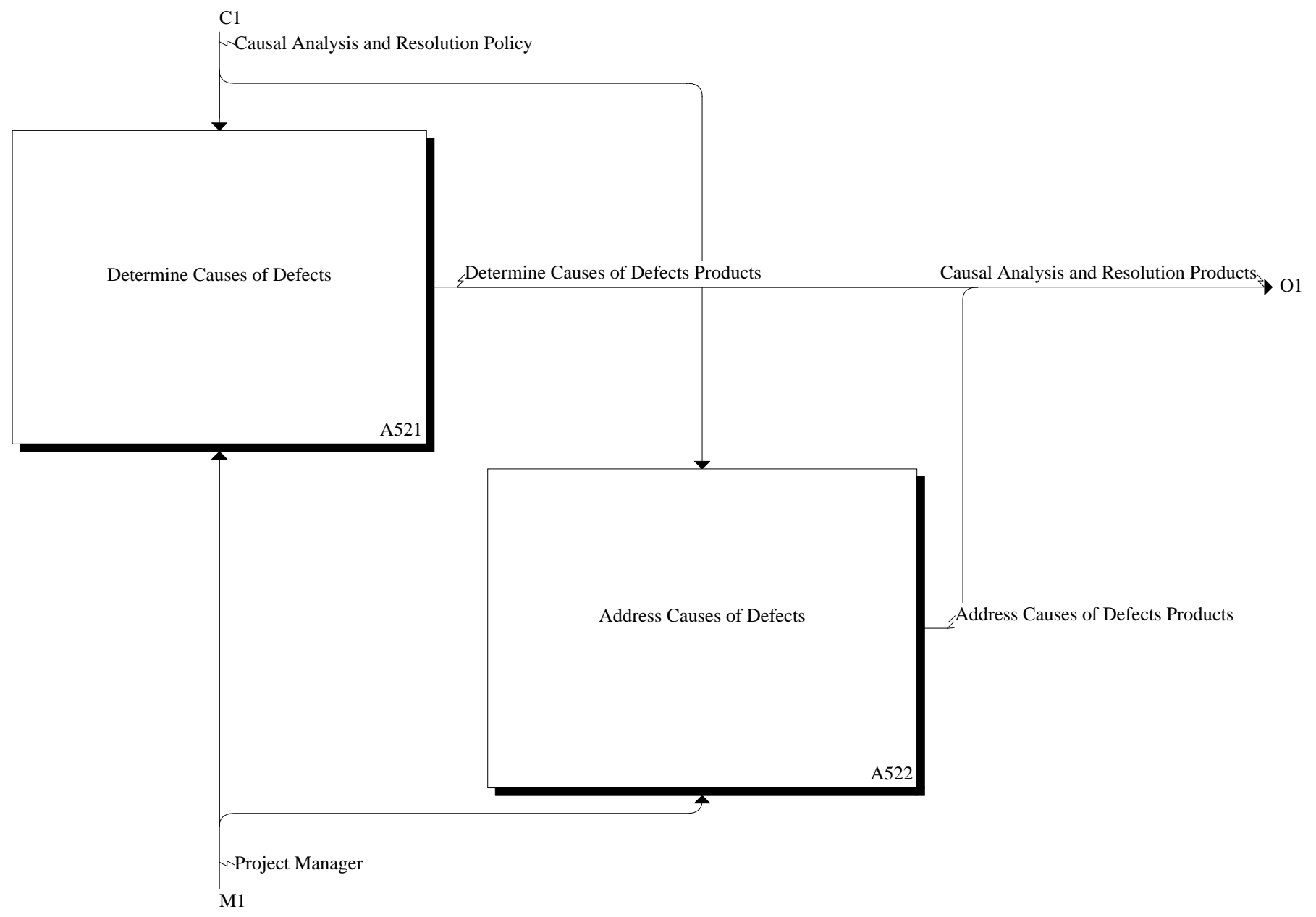
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Improvement Effects

Deploy Improvements Products O1

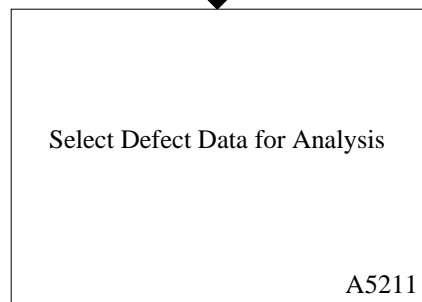
Project Manager

M1

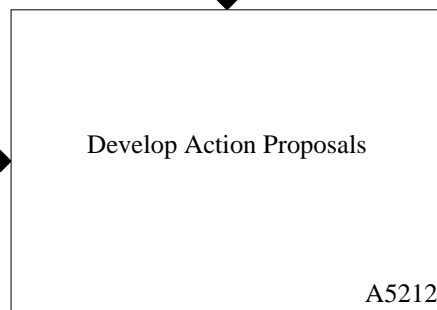


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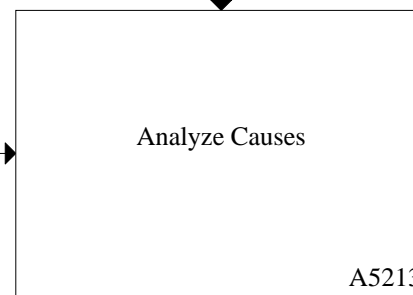
Causal Analysis and Resolution Policy



Defect Data



Action Proposals



Analysis of Causes

Determine Causes of Defects Products O1

Project Manager

M1

C1
Causal Analysis and Resolution Policy

Select Action Proposals for Eliminating Defects
A5221

Selected Action Proposals

Create Plans for Implementing Action Proposals
A5222

Action Proposal Plans

Implement the Action Proposals
A5223

Results of Action Proposals

Evaluate the Effect of Changes
A5224

Effects of Changes

Record Data
A5225

Recorded Data

Address Causes of Defects Products
O1

Project Manager

M1