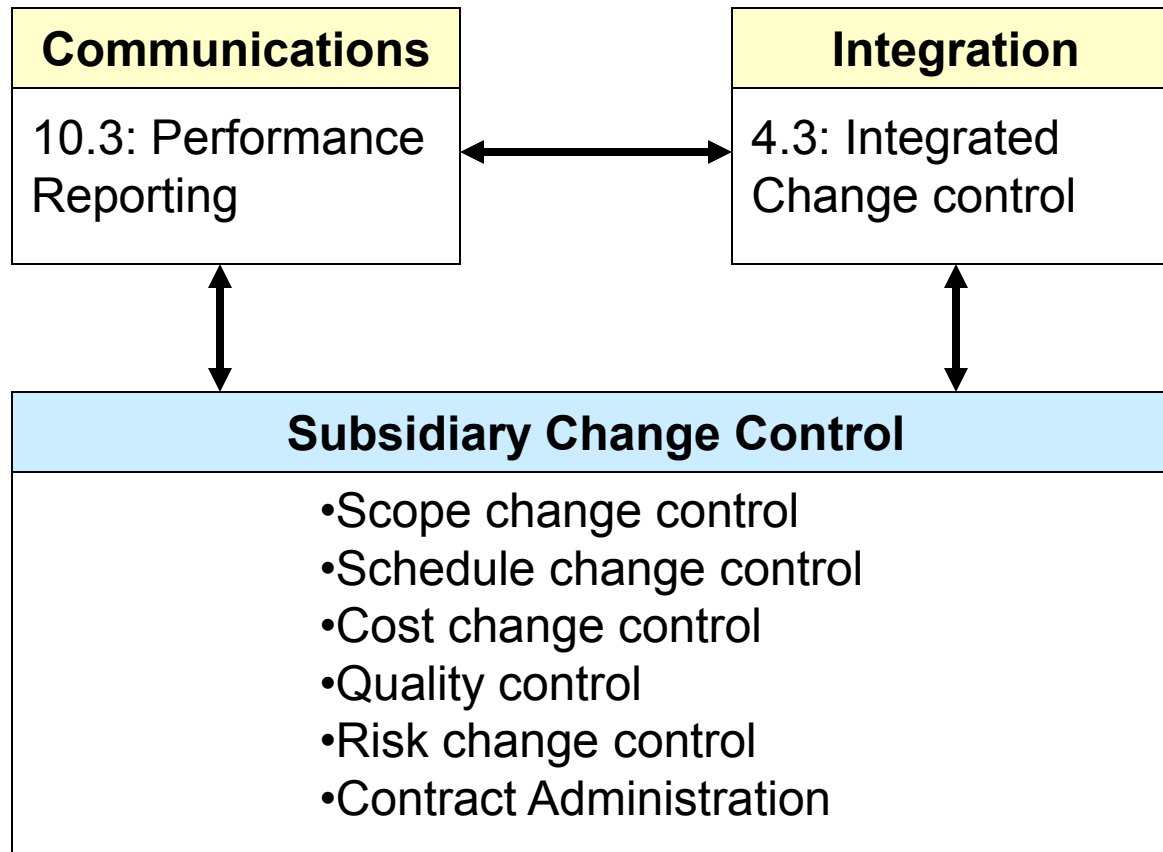# Unit IV

Quality Assurance

Integrated Change Control

- Integrated change control involves identifying, evaluating, and managing changes throughout the project life cycle (Note: 1996 PMBOK called this process "overall change control")
- Three main objectives of change control:

  - Influence the factors that create changes to ensure they are agreed upon

  - Determine that a change has occurred

  - Manage actual changes when and as they occur

Integrated Change Control

- Integrated change control requires
  - Maintaining the integrity of the performance measurement baseline
  - Ensuring that changes to the product scope are reflected in the definition of the project scope
  - Coordinating changes across the knowledge areas

Integrated Change Control -- Coordinat

Communications	Integration
10.3: Performance Reporting	4.3: Integrated Change control

Subsidiary Change Control

- Scope change control
- Schedule change control
- Cost change control
- Quality control
- Risk change control
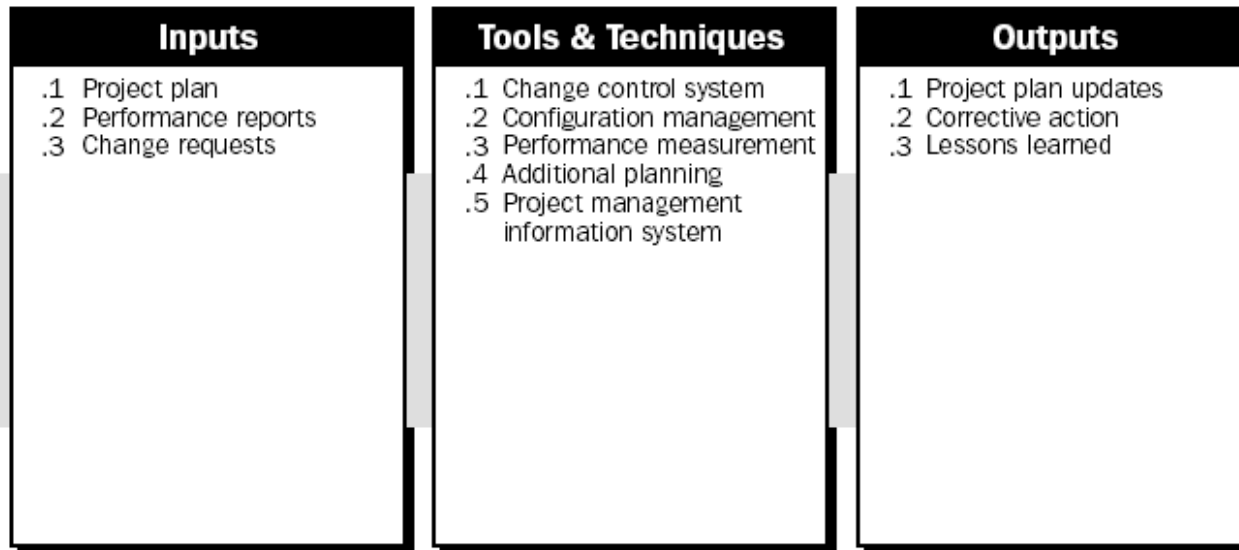- Contract Administration

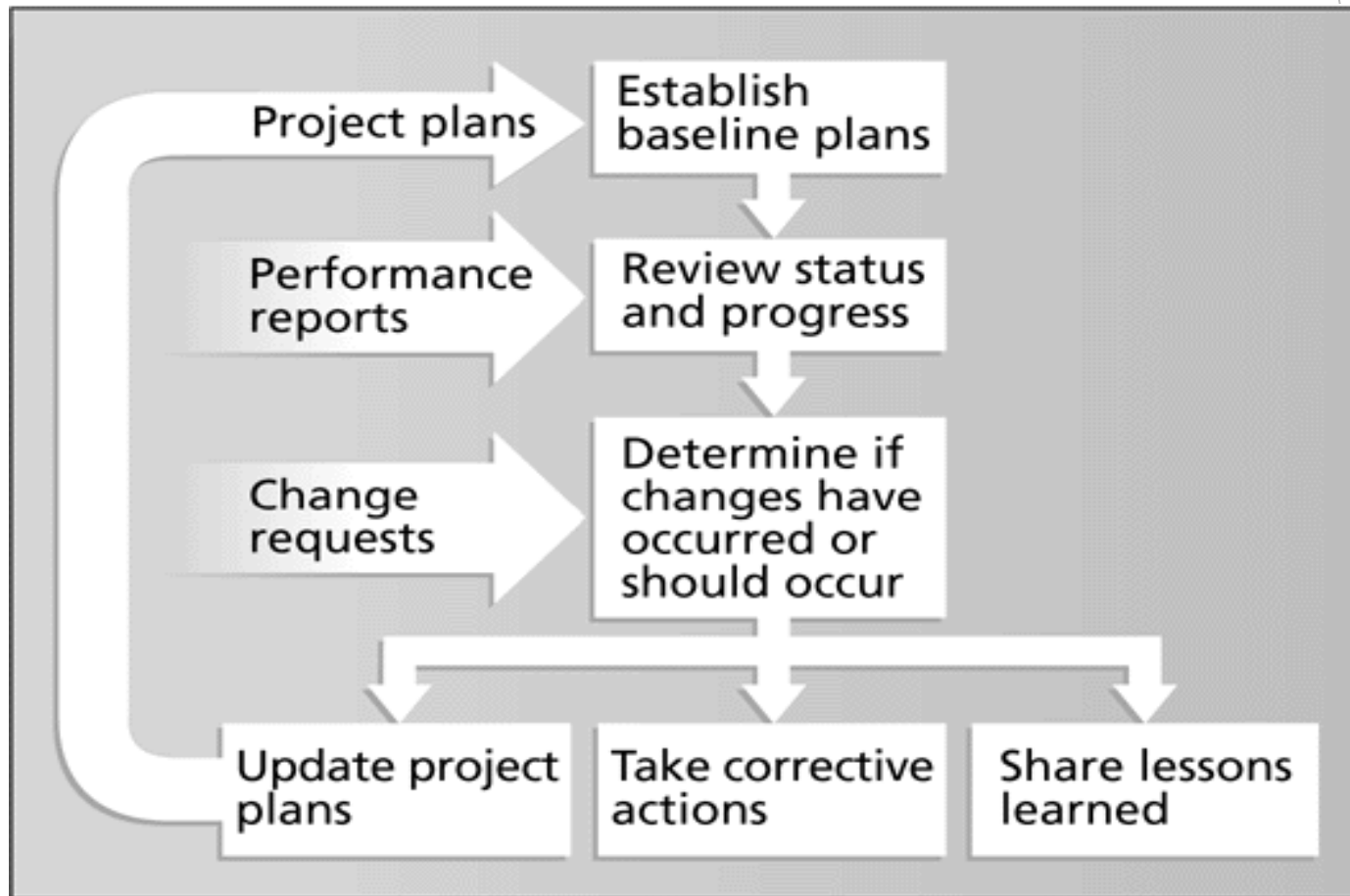Coordinating changes Across the Entire Project

Change Control on Information Technology Projects

- ► **Former view:** The project team should strive to do exactly what was planned on time and within budget

- ► **Problem:** Stakeholders rarely agreed up-front on the project scope, and time and cost estimates were inaccurate

- ► **Modern view:** Project management is a process of constant communication and negotiation

- ► **Solution:** Changes are often beneficial, and the project team should plan for them

Integrated Change Control -- Process

Inputs	Tools & Techniques	Outputs
.1 Project plan .2 Performance reports .3 Change requests	.1 Change control system .2 Configuration management .3 Performance measurement .4 Additional planning .5 Project management information system	.1 Project plan updates .2 Corrective action .3 Lessons learned

Integrated Change Control Process

Change Control System

- ▶ A formal, documented process that describes when and how official project documents and work may be changed

- ▶ Describes who is authorized to make changes and how to make them

- ▶ Often includes a change control board (CCB), configuration management, and a process for communicating changes

Change Control Boards (CCBs)

- A formal group of people responsible for approving or rejecting changes on a project

- Provides guidelines for preparing change requests, evaluates them, and manages the implementation of approved changes

- Includes stakeholders from the entire organization

Making Timely Changes

▶ Some CCBs only meet occasionally, so it may take too long for changes to occur

▶ Some organizations have policies in place for time-sensitive changes

  ▶ "48 hour policy" allowed project team members to make decisions, then they had 48 hours reverse the decision pending senior management approval

  ▶ Delegate changes to the lowest level possible, but keep everyone informed of changes

Configuration Management

▶ Ensures that the products and their descriptions are correct and complete

▶ Concentrates on the management of technology by identifying and controlling the functional and physical design characteristics of products

▶ Configuration management specialists identify and document configuration requirements, control changes, record and report changes, and audit the products to verify conformance to requirements

Suggestions for Managing Integrated Change Control

- View project management as a process of constant communications and negotiations

- Plan for change

- Establish a formal change control system, including a Change Control Board (CCB)

- Use good configuration management

- Define procedures for making timely decisions on smaller changes

- Use written and oral performance reports to help identify and manage change

- Use project management and other software to help manage and communicate changes