Planning a Project

A comprehensive guide to project management planning, from defining objectives and baselines to risk management and plan integration.

ISO 21502 FRAMEWORK

Presentation Overview

2.1

Planning a Project - Overview

A project management plan is a comprehensive compilation of subsidiary plans that must be aligned with each other. Planning is never a solo endeavor; it involves the project manager, a core team, and subject matter experts. The team begins by gathering stakeholder requirements, reviewing constraints and assumptions, and defining SMART objectives tied to the project goal.

Special attention must be given to the **project baseline**, which encompasses the approved scope, budget, and schedule. This defines what the project will deliver, when, and at what cost. Once all elements are integrated and balanced, approval from the governing body is obtained, and a second kickoff meeting transitions the team from planning to execution.

Purpose of Project Planning

Clear Direction

Provides guidance to stakeholders on how to achieve project objectives.

Reduce Complexity

Breaks the project into manageable tasks and milestones.

Minimize Uncertainty

Early identification of potential risks and mitigation measures.

Optimize Resources

Ensures efficient allocation of time, budget, personnel, and materials.

Improve Communication

Keeps all stakeholders informed and activities aligned with project goals.

Enable Monitoring

Creates a foundation against which actual progress can be measured.

Project planning is an **iterative process** repeated at the start of each project phase, allowing flexible response to challenges and changes throughout the lifecycle.

2.2

Requirements, Assumptions, and Constraints

Project Management Requirements

Stakeholders specify how the project should be managed. Key areas include: scope, resources, schedule, cost, risk, quality, communications, change, reporting, procurement, and document management.

Examples: How progressive vs. predictive should planning be? Does a PMO or standard method apply? Are there cultural or HR considerations?

Revisiting Assumptions and Constraints

Assumptions are statements believed to be true. Some may turn out to be risks and should be moved to the risk log for further analysis. **Constraints** are limitations beyond the team's control. New constraints may emerge as the project is defined in detail, such as mandatory milestone dates or required technologies.

Both assumptions and constraints must be captured and regularly updated throughout the entire project lifecycle.

2.3

Defining SMART Objectives Leading to the Goal

A **goal** is a broad statement of the desired outcome. **Objectives** are the bundled, specific actions that lead to achieving that goal. During planning, the overall project goal must be transformed into actionable objectives.

Specific

Clearly defined, not vague or general.

Measurable

Defined with KPIs to verify achievement.

Achievable

Challenging yet attainable given available resources.

Realistic

Grounded in the organization's actual capabilities.

Time-based

Tied to a specific completion date.

Example: "Train personnel and suppliers to use the solution by [date], as measured by a capability test with a minimum score of x%."

2.4

Defining the Development Lifecycle

The project lifecycle refers to the set of phases or iterations into which a project is organized. The choice of lifecycle depends on how well requirements are understood at the outset.

Predictive (Waterfall)

All requirements are known upfront. Work follows sequential phases. Changes are exceptions. Best when scope is fully defined.

Iterative

Requirements are refined through repeated cycles. The entire scope is gradually improved with feedback before each next iteration.

Incremental

Functionalities are delivered one by one. The customer receives value early and provides continuous feedback throughout.

Agile

Combines iterative and incremental approaches. The customer actively decides priorities each sprint. Best for complex, evolving requirements.

Lifecycle Approaches: Practical Example

Using the example of an **online system to increase transaction transparency**:

Predictive

All requirements known; deliver a complete online solution at the end of sequential phases.

Iterative

Start with a basic design; refine through iterations until the final product is ready, ensuring integration across all modules.

Incremental

Deliver full visibility for one product line first; add new product lines in subsequent increments.

Agile

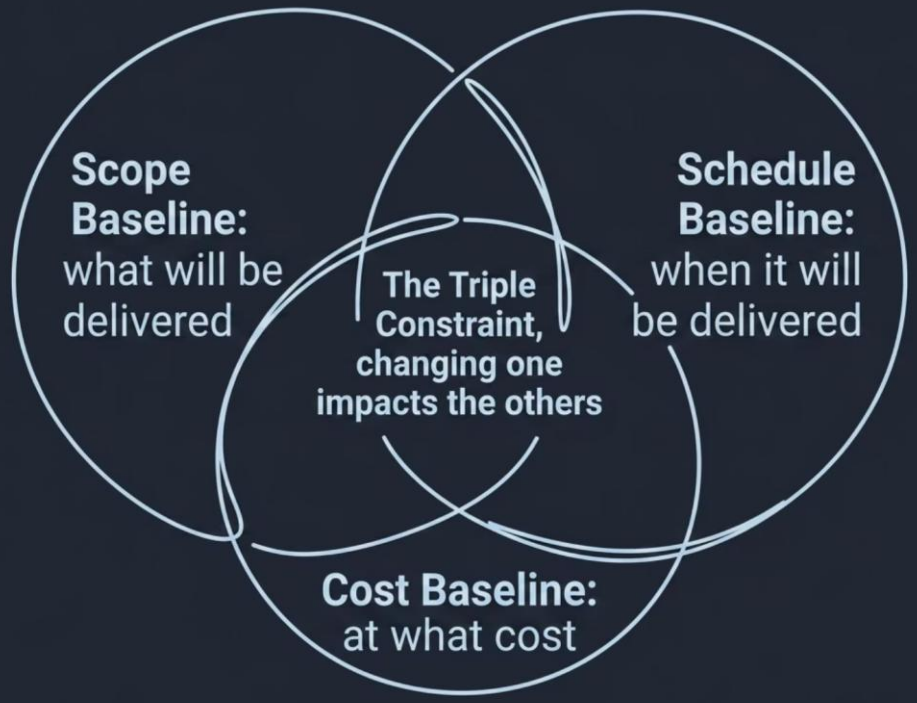
Customer decides each sprint: expand to a new product line, or deepen existing functionality (e.g., adding detailed delivery statuses).

⚠ Physical products and those nearing mass production are often **less suited** to incremental or agile approaches due to the difficulty of incorporating late-stage changes.

2.5

Develop the Project Baseline - Overview

The project baseline is the cornerstone of the project plan. It defines what the project will deliver, when, and at what cost. Without it, the project has no clear reference point for measuring progress.



These three elements form the **triple constraint**. Expanding scope without adjusting time and cost, or cutting budget without reducing scope, will inevitably create imbalance. Effective integration of all three provides better oversight of the project's core aspects.

2.5.1

Functional Requirements and Quality Attributes

Key Challenges

- Ensuring completeness of the initial requirement list
- Not all requirements carry equal importance
- Stakeholders may have contradictory needs
- Avoiding forgotten requirements discovered too late

Elicitation Techniques

- One-on-one and group interviews
- JAD sessions (Joint Application Development)
- Questionnaires and surveys
- Prototyping (aligned with Agile principles)
- Observation of processes in use

Functional vs. Quality Attributes

Functional requirements define what the system should do.
Example: "The user shall be able to log in through a web interface."

Quality attributes (non-functional) define how the system should perform.
Example: "The system must respond to login requests within 1 second."

MoSCoW Prioritization

- **Must have:** Critical for success
- **Should have:** Important but not essential
- **Could have:** Desirable enhancements
- **Won't have:** Deferred to future cycles

Requirements Traceability

Traceability ensures that every requirement has corresponding design, build, and test components, and that nothing is built outside the agreed requirements. A **traceability matrix** is used in predictive approaches to track this linkage.

Requirement	Source	Design	Build	Test
R-001	Sales Group xx	Dxx1-R001	Bxx1-R001	Txx1-R001
R-002	Finance Group xy	Dxy1-R002	Bxy1-R002	Txy1-R002, Txy2-R002
R-003	Sponsor	Dxz1-R003, Dzz1-R003	Bxz1-R003, Bzz1-R003	Txz1-R003

In incremental lifecycles, complete requirement-design-build-test cycles per increment minimize the risk of overlooking requirements. Special software packages are available to manage traceability at scale.

2.5.2

Scope Statement

A scope statement is a detailed description of the product and the project work needed to create it. It answers: **what will be done?** It enables further planning of costs, effort, and time.

Product Description

Major deliverables and their acceptance criteria. In predictive projects this is detailed; in iterative projects it covers the high-level vision plus detail for the next iteration only.

Exclusions

Explicitly states what is out of scope to manage stakeholder expectations and avoid misunderstandings.

Updated Assumptions and Constraints

Incorporates revised assumptions and constraints from the planning stage, along with additional management requirements.

Project Scope (Work Needed)

Describes the work required to accomplish the defined product, distinct from the product scope itself.

Scope Statement Example: Online Transaction System

Product Scope

A web system with dedicated hosting for real-time transaction status tracking. Customers can place orders, track payment and delivery statuses, and access past transactions. Initial release covers one product line, in German and English only.

Major Deliverables

- Interface with upgraded finance system
- CRM and sales system upgrades
- Integration with supplier order management
- New customer homepage and performance reports

Acceptance Criteria

- 100% of all Must-Have Requirements met
- 80% of all Should-Have Requirements met

Exclusions

- Marketing campaigns for end users
- Other product lines (except those selected during analysis)
- Languages other than German and English

Key Constraints

- Compatible with iOS, Android, and Windows
- Logistics system external costs not to exceed xx Euros
- IT-Consulting XX as consulting provider

2.5.3

Work Breakdown Structure (WBS)

A WBS breaks down the project work into smaller, manageable components. It is an essential document for organizing and understanding project scope. There are two main types:

Deliverable-Based WBS

Level 1 elements are summary deliverable descriptions. Level 2 elements are specific deliverables. The most common approach, focused on what must be produced.

Phase-Based WBS

Level 1 elements represent project phases. Level 2 elements are the deliverables within each phase. Useful for schedule-driven projects.

A practical approach: start with a deliverable-based WBS to identify all work, then transfer elements to a phase-based WBS to prepare the project schedule.

Building a WBS is a **collaborative team effort**. Subject matter experts break down their respective deliverables, minimizing overlooked work and increasing team buy-in. Work packages typically require between 40 and 80 hours of effort.

WBS and Agile Lifecycles

A common misconception is that a WBS is unnecessary in agile projects. In reality, agile teams also decompose work, using a **product backlog** as a dynamic, continuously prioritized WBS equivalent.

Roadmap

Provides a high-level overview of functionality implementation across releases, equivalent to a summary WBS.

Product Backlog

A dynamic list of outstanding tasks, constantly updated and prioritized before each iteration. Backlog items are broken down further as they approach development.

Rolling-Wave Planning

In traditional projects, work is defined more precisely up to the next milestone, mirroring the agile backlog refinement approach. Details are added gradually as the project progresses.

2.5.4

Work Packages

A work package is the lowest level of the WBS for which cost and duration are estimated and managed. It clearly defines scope of work, delivery dates, costs, and how aspects like communication, reporting, and changes will be handled.

Work Package Definition Includes

- Work Package Name, ID, and Leader
- Product description and work description
- Assumptions and constraints
- Milestones and due dates
- Progress reporting frequency
- Acceptance and completeness criteria
- Activity-level effort, resource, and cost breakdown

Work Package Leader Responsibilities

- Lead the team to deliver with required quality, on schedule, within budget
- Plan, control, and report progress to the project manager
- Manage risks, issues, and escalations
- Control changes to work scope

Detailed definition of work packages is typically done using **rolling wave planning**, defining only those packages due in the next stage in full detail.

Work Package Example: Obtain Vendor

Field	Details
Project Name	Online Solution to Track Transactions
Work Package	Obtain Vendor (ID: 3.2.1) - Leader: John Purchase
Product	Selected vendor for the online solution
Milestones	Short list by date xx-30 days; Contract signed by date yy
Completeness	Multicriteria selection matrix, vendor recommendation, rationale
Correctness	At least 3 weighted criteria agreed with PM; at least 3 potential vendors
Total Effort / Cost	45 hours / EUR 4,000

2.5.5

Scope Baseline

A **baseline** is the approved version of a work product that can only be changed through formal change control procedures. It serves as the reference point for comparing actual results.

Scope Statement

Describes the product and the work needed to create it, including exclusions, assumptions, and constraints.

WBS

Hierarchical decomposition of all project work into manageable components.

Work Packages

The lowest-level WBS elements with defined scope, cost, duration, and acceptance criteria.

Together, these three elements form the **scope baseline**, defining "what" will be done. Neither the project manager nor team members can alter the approved scope without following the formal change control process.

2.5.6

Estimating Duration and Costs

The two central project questions are: **"How long will it take?"** and **"How much will it cost?"** Accurate estimates are crucial because project approval decisions are based on them, and they form the baseline for performance measurement.

Top-Down

Quick rough estimates based on analogies to similar past projects. Useful for portfolio selection without extensive planning.

Bottom-Up

Estimates each WBS element individually and sums results. More time-consuming but more accurate.

Parametric

Calculates cost or duration based on a known parameter. Example: if 1 sq. meter costs EUR 1,000, then 100 sq. meters costs EUR 100,000.

Expert Judgment / Delphi

Multiple experts estimate independently; results are shared anonymously and refined iteratively until consensus is reached.

Estimation: Contingency and the Bell Curve

Choosing the Right Estimate Value

Estimates follow a Bell Curve (normal distribution). The average gives a 50/50 chance of success. The worst-case is too conservative. The best-case creates unrealistic expectations.

The recommended approach: select a value **midway between the average and worst-case**, then add a contingency reserve. This provides an approximately 85% certainty level.

Contingency Reserve Rule

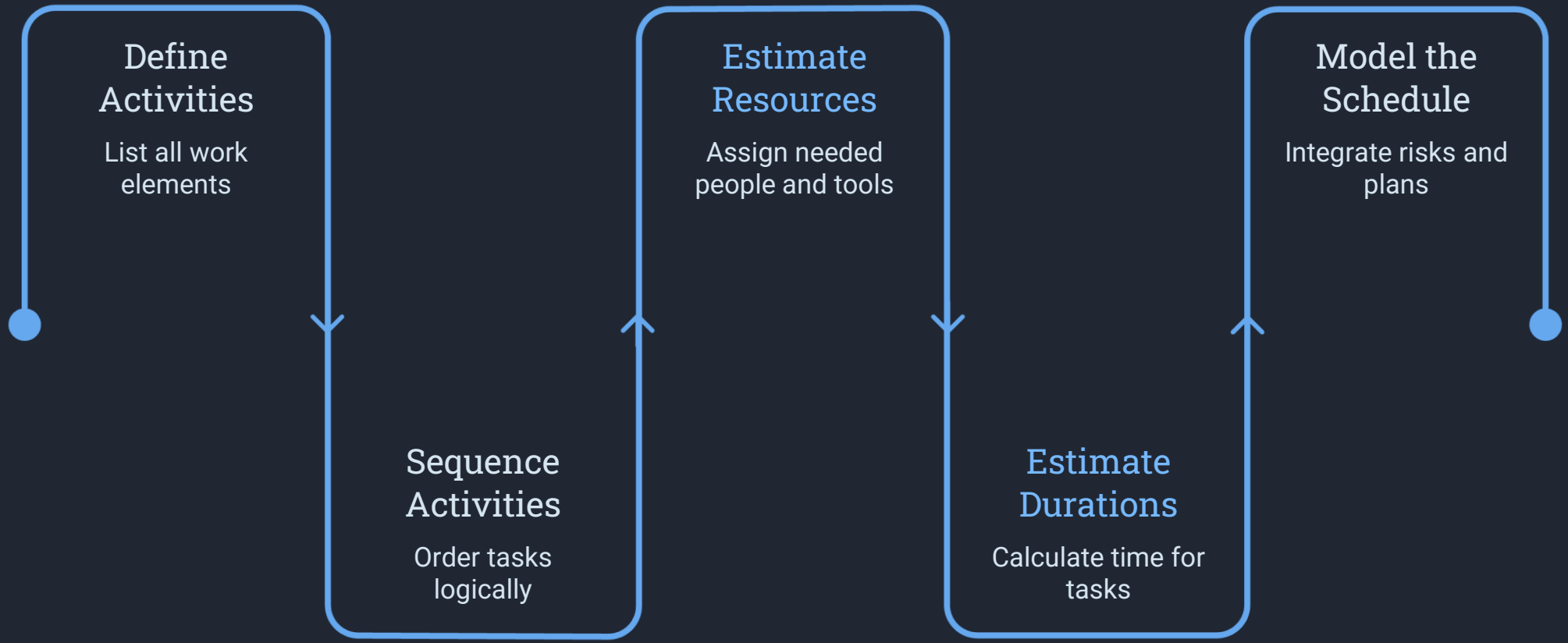
The less reliable the estimate, the larger the contingency reserve should be. A 10% reserve implies 90% confidence, requiring a highly predictable project.

Vendor Estimation Example

Step	Cost (EUR)	Duration (mo.)
Avg. typical (V1+V2)	825,000	10.5
Avg. extensive (V1+V2)	1,050,000	12.5
Midpoint estimate	937,500	11.5
+15% contingency	1,078,125	13.2
Rounded estimate	**1,000,000**	**13**

2.5.7

Developing a Project Schedule



The schedule is built progressively. Only after integrating risk responses, communication plans, quality measures, and team activities does the schedule become the final approved **schedule baseline**.

Schedule Steps in Detail

1 Define and Sequence Activities

Decompose WBS work packages into activities. Establish dependencies: finish-to-start (most common), start-to-start, or finish-to-finish.

2 Estimate Resources and Durations

Determine resource types and quantities. Account for productivity rates (typically 70% in high-performing environments). Non-effort-driven work has fixed duration regardless of resources added.

3 Model, Level, and Baseline

Create the initial schedule, address resource over/under-allocation through leveling, verify against constraints, and establish milestones. Aim for approximately 85% certainty in the duration estimate.

Milestones are significant points with no duration, marking completion of key deliverables. They enable management to assess schedule status at a glance in summary reports.

Agile Schedule Considerations

Agile teams use different terminology but follow a comparable logic when a completion date is required by stakeholders.

01

Create Requirements List

Collaborate with the product owner to define and record all requirements in a product backlog.

02

Prioritize Backlog

Product owner ranks items by importance and urgency.

03

Estimate Effort

Use story points, relative sizes (T-shirt sizing), or hours. Fibonacci sequence (1, 2, 3, 5, 8) is common for sizing.

04

Define Iterations

Based on team velocity, determine the number of iterations (sprints) needed to fulfill the initial requirements.

05

Monitor and Adjust

Track progress each iteration; refine backlog estimates and priorities in backlog refinement meetings.

2.5.8

Developing a Project Budget

The project budget is a realistic estimate of the cost to complete all project work. It must be neither too high (risking cancellation) nor too low (guaranteeing overrun). The WBS and schedule serve as the foundation.

Labor Costs

Typically the largest portion. Includes burdened rates for employees (fringe benefits, fixed cost allocation) and direct charges for vendors/contractors.

Material Costs

Purchasing or renting equipment such as computers, servers, and networks. May be accounted for at full purchase value or via depreciation rates.

Other Costs

Travel expenses, training costs, fees, and any expenses not fitting labor or material categories.

Budget Components and Structure

Building the Cost Baseline

Activity cost estimates are aggregated into work package costs. Work package costs are consolidated into control accounts. The sum of all control accounts forms the **cost baseline (BAC - Budget At Completion)**.
The cost baseline is time-phased, reflecting when funds are needed throughout the project timeline to prevent cash flow issues.

Reserves

Contingency Reserve: Managed by the project manager. Covers identified risks and residual risks. Included within the cost baseline.
Management Reserve: Outside the cost baseline and the project manager's direct control. Managed by the project sponsor. Covers unknown risks and unforeseen events.

The approved cost baseline establishes the project manager's level of financial responsibility.

2.6

Develop Subsidiary Management Plans

Subsidiary plans answer: *how do we want things to happen in this project?* They are called "subsidiary" because they form part of the overall project management plan. Their level of detail depends on project size, complexity, and organizational requirements.

Communications Plan

Defines when and how the team meets and reports. May include a project website, communication events, and collaboration tools.

Quality Management Plan

Outlines standards applied to develop the solution and defines the desired quality level for project management itself.

Scope, Schedule, and Cost Plans

Define the level of WBS detail, currency for cost calculations, cost overrun thresholds, and schedule reporting triggers.

Risk Management Plan

Establishes common definitions of probability and impact, and a scoring system to compare different types of risk events.

Resource Management Plan

Addresses how to acquire specialized resources, what happens to team members upon project completion, and recognition/reward criteria.

Issue and Change Management

Specifies how changes to scope, schedule, and budget are managed. Changes to baselined elements require project board approval.

Impact of Subsidiary Plans on the Baseline

Subsidiary management plans are not just administrative documents. As they are developed, they may introduce new costs and activities that require updates to the scope, budget, and schedule.

Communication Events

Workshops, stakeholder briefings, and project websites add activities and costs to the plan.

Risk Responses

Selected risk mitigation actions become new work packages with associated effort, duration, and cost.

Quality Assurance

Audits, reviews, and testing activities must be scheduled and budgeted.

Team Incentives and Travel

Recognition programs and travel for training or procurement activities add to project costs.

⚠ Effective communication is a **critical success factor**. When communication flows smoothly, it sets the foundation for all other project areas to function well.

2.7

Risk Management

Risk management is a systematic process for identifying, analyzing, and addressing risks that could affect a project. Its purpose is to recognize potential problems before they occur so that preventive measures can be taken.

The first four steps are planning activities. Implementation occurs during execution, and continuous monitoring is part of project control. At the start of each new phase, emerging risks must be identified and existing strategies reviewed.

2.7.1

Plan Risk Management

Before identifying risks, three essential components must be prepared to ensure the team assesses risks on a consistent basis.

Risk Register

A central document (spreadsheet or database) where risks are recorded as soon as identified. Captures probability, impact, strategy, measure, and risk owner.

Generic Risk Categories

A structured starting point covering: Technical (scope, requirements, technology), Management (PM, resourcing, communication), Commercial (contracts, suppliers), and External (legislation, weather, competition).

Probability and Impact Definitions

A matrix defining 5 levels of probability (1% to over 70%) and impact on time, cost, and quality. Ensures consistent risk scoring across the team.

Probability and Impact Matrix

Scale	Probability	Time Impact	Cost Impact (EUR)	Quality Impact
5 - Very High	Over 70%	Over 6 months	Over 500K	Very significant impact on overall functionality
4 - High	51% to 70%	3 to 6 months	100K to 500K	Significant impact on overall functionality
3 - Medium	31% to 50%	1 to 3 months	50K to 100K	Some impact on key functional areas
2 - Low	11% to 30%	1 to 4 weeks	10K to 50K	Minor impact on overall functionality
1 - Very Low	1% to 10%	1 week	Under 10K	Minor impact on secondary functions

These scales must be tailored to the specific project context. In a time-sensitive project, a one-month delay may be rated "high." In a cost-critical project, EUR 200,000 could be rated "very high."

2.7.2

Identify Risks

Risk identification is a collaborative effort. The sponsor's perspective is particularly valuable as they can identify organizational obstacles not visible to the project team. The process has two steps:

1

Step 1: Inherent Risks

Identify generic risks based on the project's characteristics using risk category checklists and lessons learned from past projects.

2

Step 2: Project-Specific Risks

Identify unique risks through brainstorming sessions with key stakeholders. Examples: a key supplier going out of business, weather-related delays, or difficulty finding specialized resources.

All identified risks are recorded in the risk register. For the online transaction system example, identified risks include: vague functional requirements, an unfamiliar tracking tool supplier, e-Payment challenges in certain regions, online help language scope creep, optimistic travel budget estimates, and an overcommitted sponsor.

2.7.3

Analyze Risks

Risk analysis assigns each risk a **criticality score = Probability x Sum of Impact scores** (time + cost + quality). This enables prioritization of which risks require active responses.

Risk Name	Nr	Probability	Impact	Criticality	Notes
Sponsor not committed	6	5	12	**60**	Affects resources, schedule, quality
Functional requirements vague	1	5	12	**60**	High probability, broad impact
Status tracking tool supplier	2	4	10	**40**	Unfamiliar supplier, low-cost selection
e-Payment in region X	3	5	5	**25**	Hard currency authorization issues
Online help languages	4	3	7	**21**	Sales dept. may demand more languages
Training travel budget	5	4	4	**16**	Estimates appear overly optimistic

2.7.4

Plan Risk Responses

Active responses are developed for risks with a criticality level of **25 or higher**. The four standard strategies are:

Avoid

Eliminate the risk by changing a project objective or the management plan. Drastic but effective. Example: removing a scope element or replacing a supplier.

Mitigate

Reduce the probability and/or impact of the risk. Example: creating a prototype to clarify vague requirements, or using a collaboration tool to reduce communication risk.

Transfer

Shift the risk to another entity. Example: purchasing insurance, outsourcing to a more capable party, or imposing contractual penalties for delays.

Accept

Take no specific action. Suitable for low-criticality risks. Active acceptance involves building time and cost reserves to cover potential impacts.

Risk Responses: Case Study Application

Risk	Nr	Prob.	Impact	Criticality	Strategy	Measure
Sponsor not committed	6	5	12	60	Mitigate	Nominate delegated sponsor
Functional requirements vague	1	5	12	60	Mitigate	Conduct requirements workshops
Tracking tool supplier	2	4	9	36	Avoid	Replace the supplier
e-Payment difficulties	3	5	5	25	Transfer	Hire triangular payments supplier
Online help languages	4	3	7	21	Accept	Reserve: 2 weeks and EUR 25K
Training travel budget	5	4	4	16	Accept	Reserve: 1 week and EUR 35K

Advanced Risk Concepts

Contingency Plan (Plan B)

For highly critical risks, pre-select fallback alternatives in case the primary strategy fails. Example: pre-identify a replacement supplier while monitoring the current one.

Secondary Risks

Risk responses can introduce new risks. Example: replacing a supplier may introduce transition risks. All secondary risks must be analyzed and added to the risk register.

Cost Consideration

The cost of a risk response should not exceed the expected monetary value of the risk (probability x cost impact). If it does, accepting the risk with a reserve is more efficient.

Residual Risk

After mitigation, a residual risk remains. Probability and impact are reduced but not eliminated. Contingency reserves must cover both accepted and residual risks.

Risk Escalation

Risks outside the project team's sphere of influence must be escalated to the sponsor or steering committee. Escalation criteria must be defined in the risk management plan.

Unknown Risks

Risks not detected during identification are covered by the **Management Reserve**, which is outside the project baseline and managed by the project sponsor.

Risk Management Plan Updates

After selecting risk responses, the project management plan must be updated. Each selected response that involves work must be defined as a new work package and integrated into the schedule and budget.

Appoint Delegated Sponsor

Ensures dedicated governance and decision-making capacity for the project.

Requirements Workshops

New work package: potentially costly and time-consuming, impacting both schedule and cost baselines.

Replace Tracking Tool Supplier

New procurement work package required to find and engage a reliable replacement.

Triangular Payment Provider

Transaction fees may impact cash flow. If absorbed by the project, the business case must be revisited.

⚠ A **risk owner** must be assigned to each identified risk to oversee its management throughout project execution and control.

2.8

Integrate the Project Management Plan

Integration means that every element of the plan is harmoniously connected. No activity in the communications plan, no risk response, and no work package in the WBS should be missing from the schedule or the budget.

Project Charter

Starting point: goal, key deliverable, and initial constraints.

Subsidiary Plans

Communications, risk, quality, resource, and change management plans.

Scope Baseline

Scope statement, WBS, and work packages define what will be done.

Schedule Baseline

Approved project schedule with milestones and gate reviews.

Cost Baseline

Approved budget with contingency reserves, time-phased across the project.

Obtaining Approval and Informing Stakeholders

Approval Process

Once all elements are well integrated and balanced, approval must be obtained from the governing body, typically the project sponsor and the client (if different). Upon approval:

- The scope statement and WBS become the **scope baseline**
- The estimated schedule becomes the **schedule baseline**
- The estimated costs become the **cost baseline**

These three baselines together form the **project baseline**, the foundation for all performance measurement.

Second Kickoff Meeting

After approval, the project manager informs all stakeholders about the approved plan. A second kickoff meeting transitions the team from planning to execution.

The meeting summarizes the project management plan elements (rather than the charter), ensures those who need to start first are prepared, and officially begins execution activities.

The completed plan is **not shelved**. It is actively used throughout the project to guide work, monitor progress, and communicate with stakeholders.

The Living Project Management Plan

The project management plan is not a one-time document. It is updated iteratively throughout the entire project lifecycle.

Approve Plan

Execute Phase

Close & Replan

Monitor & Control

Deviations from the plan due to issues, risks, and unforeseen circumstances require corrective and preventive measures that naturally affect the plan. After each phase closure, the next phase is initialized with potentially new stakeholders, risks, and detailed planning. This constitutes a dynamic, iterative process rather than a linear progression.

Key Takeaways: Planning Foundations

Planning is Iterative

Not a one-time activity. Repeated at the start of each phase, adapting to changing conditions and new information throughout the project lifecycle.

SMART Objectives Drive the Goal

Transform the broad project goal into Specific, Measurable, Achievable, Realistic, and Time-based objectives with defined KPIs.

Choose the Right Lifecycle

Predictive for well-understood requirements; iterative or incremental for evolving scope; agile for complex, uncertain environments.

The Triple Constraint is Interconnected

Scope, schedule, and cost baselines are interdependent. Changing one always impacts at least one of the others.

Key Takeaways: Scope and Estimation

Requirements Drive Scope

Functional requirements (what the system does) and quality attributes (how it performs) must be prioritized using MoSCoW and agreed upon by stakeholders.

WBS Organizes All Work

Deliverable-based or phase-based, the WBS ensures all work is identified. Work packages (40 to 80 hours) are the lowest manageable level.

Estimates Improve Over Time

Start with rough top-down estimates; refine bottom-up as more information becomes available. Combine techniques for greater accuracy and credibility.

Reserve for Uncertainty

Contingency reserves cover identified and residual risks (managed by PM). Management reserves cover unknown risks (managed by sponsor).

Key Takeaways: Risk Management

Prepare Before You Identify

Establish the risk register, generic risk categories, and probability/impact definitions before starting risk identification sessions.

Prioritize by Criticality

Criticality = Probability x Sum of Impacts. Focus active responses on the highest-scoring risks; accept lower-scoring ones with reserves.

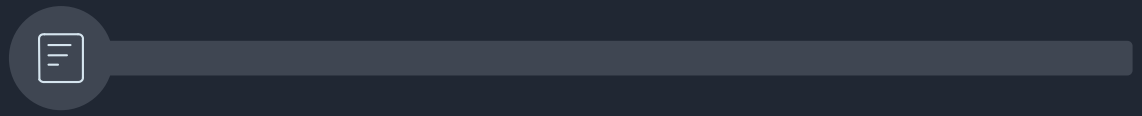
Four Response Strategies

Avoid, Mitigate, Transfer, or Accept. Each response may introduce secondary risks that must also be analyzed and managed.

Update the Plan

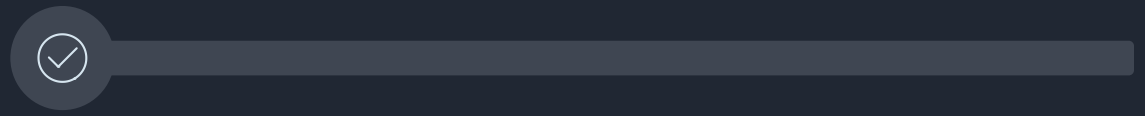
Risk responses that involve work become new work packages. They must be integrated into the schedule and budget before final baseline approval.

Key Takeaways: Integration and Approval



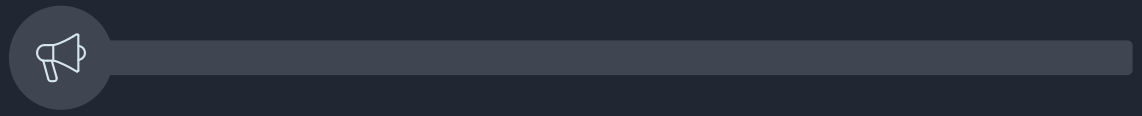
Integrate All Elements

Every activity, cost, and deliverable from all subsidiary plans must appear in the schedule and budget. No orphaned elements.



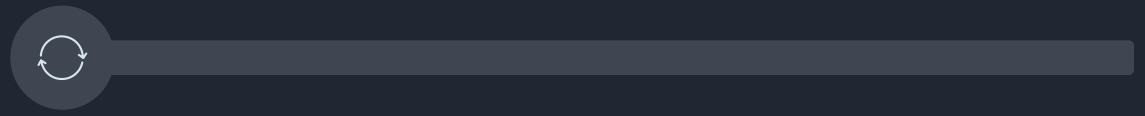
Obtain Formal Approval

The sponsor (and client if different) must approve the integrated plan. This converts estimates into the official project baseline.



Communicate the Plan

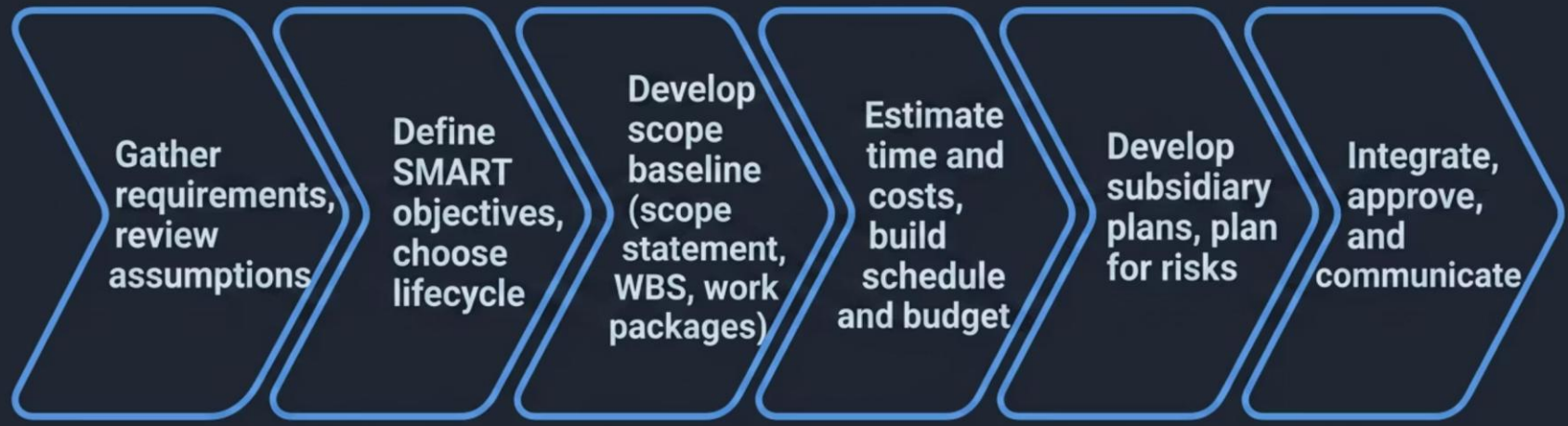
A second kickoff meeting briefs all stakeholders on the final plan and officially transitions the project from planning to execution.



Keep the Plan Alive

The plan is actively used and updated throughout the project. It guides work, enables monitoring, and supports stakeholder communication at every phase.

The Planning Process at a Glance



Each step builds on the previous one. The process is iterative, not linear. As new information emerges, earlier elements are revisited and refined, ensuring the project management plan remains accurate, integrated, and actionable throughout the project lifecycle.

End of Section 2: Planning

This section has covered the full spectrum of project planning, from defining objectives and choosing a development lifecycle, through building the project baseline, to risk management and plan integration.

Next Steps

With an approved project management plan and a second kickoff meeting completed, the project transitions to the **Execution Phase**.

Remember

The plan is a living document. Monitor progress, respond to deviations, and update the plan iteratively at each phase throughout the project lifecycle.

SECTION 2 COMPLETE

PROCEED TO EXECUTION