



# IT Project Management

## Lecture 3-3 – Classical Approach Realization

Uwe Gühl

# Classical approach – Realization



# Contents

1. Introduction
2. Objective/Results
3. Summary of Tasks
4. Milestones
5. Project Monitoring and Control
6. Trend Analysis
7. Summary

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# Introduction

- Project stage: Realization phase  
Synonyms: *execution phase* or *implementation phase*.
  - Covers all the activities to achieve the defined project objectives..
  - Together with planning the central function of a project manager

# Introduction

- **Project controlling:**  
covers the data collection, the analysis and evaluation of deviations of the plan, the preparation and planning of corrective measures, as well as the management and implementation of these measures  
[DIN 69901-5:2009-01]

# Introduction

- Project controlling comprehends:
  - Target-actual comparison
    - If any deviations have taken place, especially concerning budget and resources used, a cause analysis is required.
  - Evaluation of the consequences of new findings and events influencing the course of the project (positive and negative)
  - Corrective actions to be planned, developed, executed, and controlled
  - Update of the planning  
Analysis of the further course of the project

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# Objective/Results

- Goal is the achievement of the project objective(s) by a successful approval by the principal
- The result is depending on the project goals, it could be
  - a service,
  - a product,
  - a document, or
  - something else.
- Abstractly consolidated the result is:
  - Project success
  - Partial project success
  - Project cancellation

# Objective/Results

- Project control covers all activities to ensure that the project goals could be reached
- A project manager has to
  - know the current status of work,
  - know how much has to be done until the end of project,
  - support good working in the project team,
  - have an up-to-date plan.

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# Summary of Tasks

- Executing the project controlling  
to ensure that the project objectives are achieved.
- Completing work packages  
The tasks should be completed with the resources made available within the agreed period.
- Updating the planning (dates, work packages)  
Continually, the deadlines and work packages are to be adjusted.
- Controlling deviations  
Caused by deviations in the project, new tasks can emerge or given tasks can change.

# Summary of Tasks

- **Continuous communication**
  - Regular meetings with the principal
  - Regular project meetings
  - Meetings of working groups
  - Regular meetings with the project members and individual meetings as needed

2.3



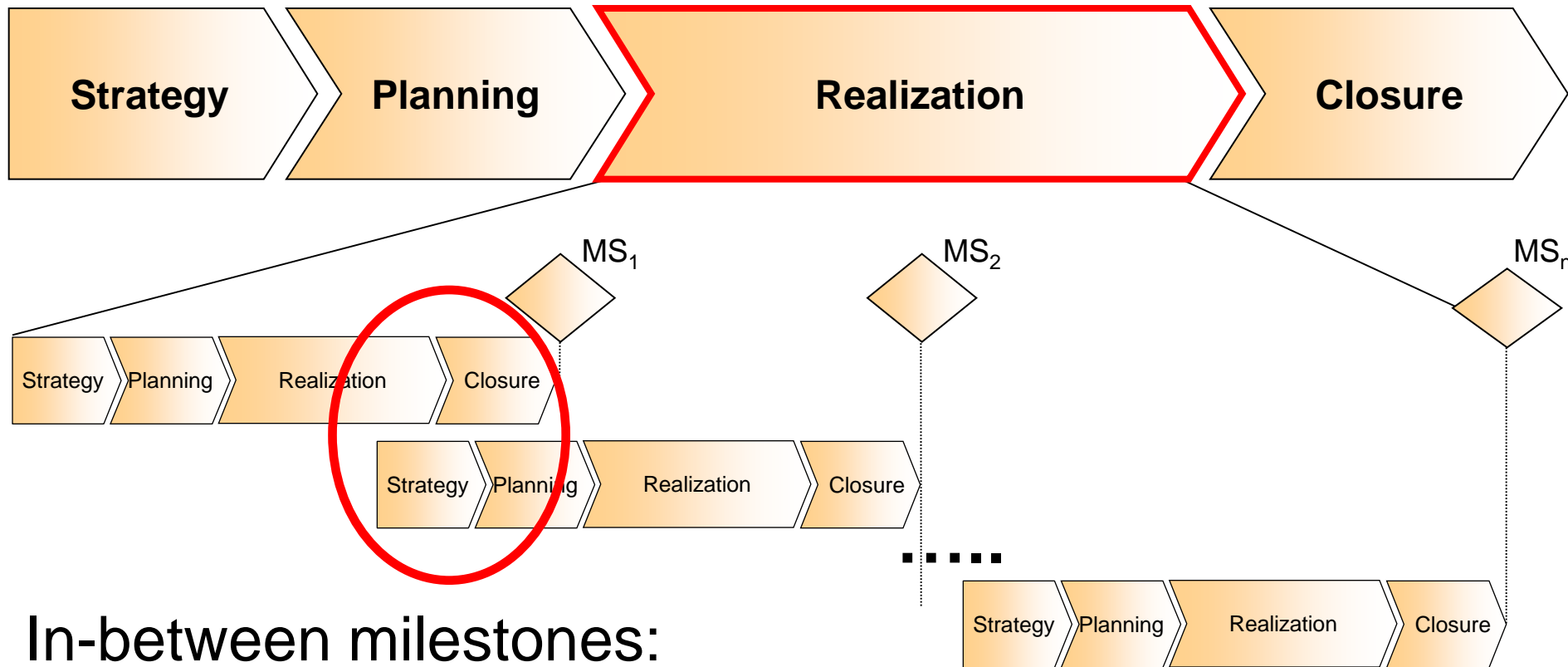
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# Milestones

- Structuring the realization phase results in milestone cycles
- A milestone cycle represents again a project in miniature

# Milestones



In-between milestones:

“Projects in project”

→ Consider overlapping of phases



# Milestones

- Milestone meeting
  - Project manager reports to principal
  - Working products and current project status are presented
  - Principal gives feedback concerning acceptance of milestone results

# Milestones

- Milestone management covers:
  - Preparation of milestone meetings
    - Ensure that all the planned working results or the corresponding status are delivered up to the respective milestone.
  - Execution of milestone meetings
  - Post-processing of milestone meetings
    - The minutes are to be finished and distributed
    - Any action item arising from the milestone meeting to be completed

# Milestones

- Milestone management covers:
  - Update of milestone plan
    - Planning next milestone concerning contents
    - Planning next but one milestone concerning dates and headlines
    - In case: update of overall plan
    - In case: considering changes, especially related to changed requirements

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# Project Controlling

- Project controlling covers
  - Project monitoring **Past**  
understanding the current status, still on track?
  - Project control **Present**  
Reaction to the current project situation,  
troubleshooting, taking decisions
  - Trend analysis **Future**  
Further course of the project

# Project Monitoring

- Project monitoring as prerequisite for an efficient project control
- Scope
  - Target-performance comparison
    - Use of key figures / key performance indicators
    - Objective progress – in terms of content against the goals
    - Dates – based on Time schedule
    - Cost control
  - Milestone management (Activities, if necessary)
  - Presentation of the project status

# Project Monitoring

## Objective progress

- Most important control task, but the most difficult as well
- How to determine the degree of completion of a working package?
- Example: Measuring of the degree of completion in percent → 90-percent-complete trap
- Progress control should be based on technical facts – professional know-how needed!
- Proposal:
  - Common definition of indicators and criteria
  - Judging of quality with maturity levels

# Project Monitoring

Presentation of project status

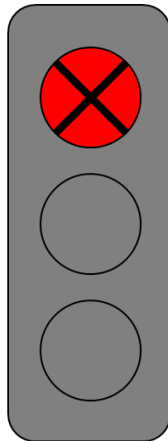
... is done typically by status reports

- Goals
  - Information for principal
  - Feedback and validation for the project team:  
Are we still on the right way?
  - Target-performance comparison,  
depicting of project management ratios
- Use of traffic lights logic
- Proposal: Every two to four weeks  
... depending on size, duration and project phase



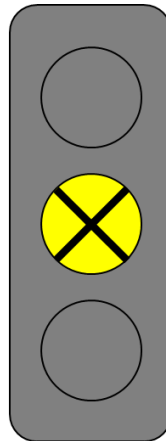
# Project Monitoring

## Meaning of traffic light colors



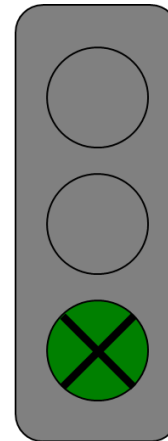
*Red*

Escalation  
required



*Yellow*

Critical



*Green*

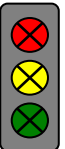
Okay

# Project Monitoring

## Template Example (1/2)

### Project status

Project name	<Name of project>	Project No.	<Number of project>
Project manager	<Name of project manager>		
Report period	<CW05>	Version / Date	<0.0.1 / dd.mm.yy>
Author	<Name of author>		



### 1. Status

Result	<1. First result achieved> <2. Second result achieved> <3. Third result achieved>
Activities	<1. First activity description> <2. Second activity description> <3. Third activity description>

# Project Monitoring

## Template Example (2/2)

### 2. Forecast

<b>Planned activities</b>	<i>&lt;1. Most important planned activity until next status report&gt; &lt;2. Second planned activity until next status report&gt; &lt;3. Third planned activity until next status report&gt;</i>
<b>Planned activities until end of project (Backlog)</b>	<i>&lt;1. Most important planned activity until end of project&gt; &lt;2. Second planned activity until end of project&gt; &lt;3. Third planned activity until end of project&gt;</i>
<b>Risks</b>	<i>&lt;1. Highest risk description and planned measures&gt; &lt;2. Second highest risk description and planned measures&gt;</i>
<b>Open points, issues</b>	<i>&lt;1. Highest rated issue, comments, proposals&gt; &lt;2. Second highest rated issue, comments, proposals &gt;</i>

# Project Control

## Main activities

- Declaring the (successful) end of the project or applying for cancellation of the project
- Applying/accompany a project review/audit
- Dealing with work packages
  - Starting
  - Accompanying (changes)
  - Finishing
  - Approval of (partial) work packages results
- Regular update of plans (dates, work packages)
- Control activities, if deviations occur

# Project Control

## Main activities

- Management of project members
- Ensuring communication, e. g., with regular meetings
  - Principal/steering committee
  - Project team/core project team
  - to the outside world
- Presentation of results/status, status reports
- Conflict management in case of trouble
- Change management

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# Trend Analysis

- Statements concerning the further project progress
- Contents
  - Forecast project progress
  - Considering cognitions and communicating them  
Looking for solutions, deciding, and realizing
  - Continuous updating and correction of the project plan as reaction on interfering events and new knowledge  
→ Continuous process

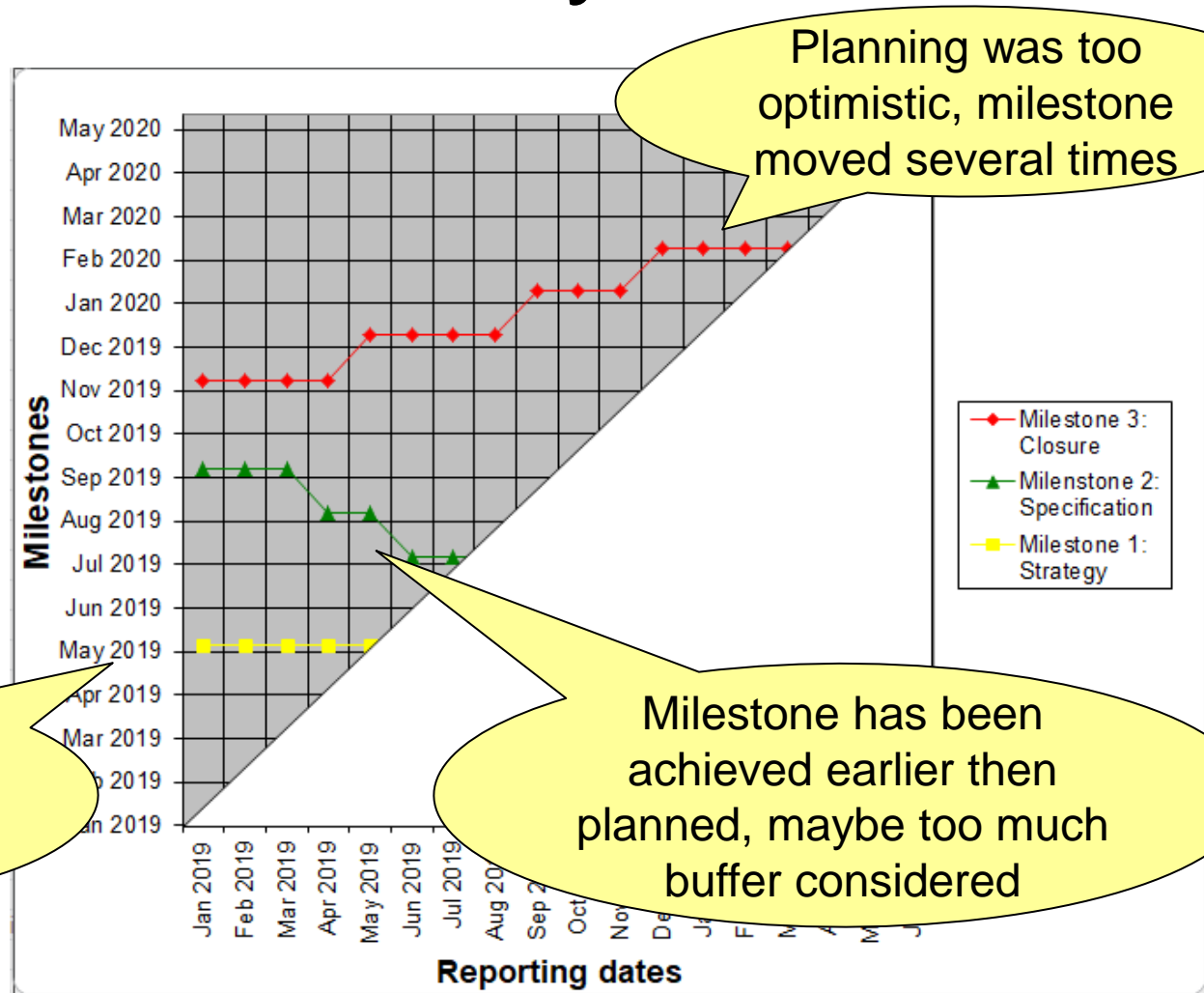
# Trend Analysis

- Milestone trend analysis (MTA)
  - Special form of trend analysis based on milestone plan
  - Monitoring the progress of the project and detection of possible delays in time
  - To be considered in regular meetings to discuss the status of the milestones



# Trend Analysis

- Example



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- The execution phase is used to achieve the project objective(s)
- Splitting execution phase with milestones
- Regular target performance comparisons, management activities in case of derivations, issues
- Milestone trend analysis to predict future course
- Comprehensive topics to be considered
  - Project documentation  
Minutes and project status reports including documentation of decisions and agreements
  - Project communication, marketing
  - Advancement of project culture