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Developing and Implementing Training Programme

Development and Implementation of an Action Plan

Lecture
Introduction

- This workshop “Emergency Preparedness and Response for Research Reactors” is part of a PROJECT RER 9/058 “Safety Review of Research Reactor Facility”

- Therefore, this is one step in a project management process
  - It is a beginning, not an end
Introduction (1)

- You need to define what comes next
  - That will become YOUR action plan

- And you need to define how it will be implemented
  - That is your project management plan
Content

- What is an action plan?
- Project management fundamentals
  - What is project management?
  - Project management contents
  - Project management process
- Generic action plan
Overview

- What is an action plan?
  - It is the steps to get from here to there
    - It is a project, or part of a project
    - It should be defined, developed and implemented according to good project management procedures and guidelines
  - Your mission after this workshop
    - Define what needs to be done (action plan)
    - Define how it will be done (project management plan)
What Is Project Management?

- It is a way to develop, implement, control and monitor the implementation of an action plan
- Without a good project management framework, actions plan implementation will not be effective
Components of the Project Management Plan

- Objectives
- Scope
- Milestones
- Tasks
- Responsibilities

- Schedule
- Budget
- Project control
- Risk management
Project Management Plan
Objectives

- What do you want to achieve - the overall results
- Objectives should be
  - Specific
  - Measurable
  - Realistic and achievable
  - Agreed
- Example
  - Adapt and implement new response procedures for research reactor emergencies
Project Management Plan

Scope

- Clarifies the extent of the objectives
- Defines the boundaries of the project:
  - What is included?
  - What is not included?
- Example
  - This project will address the radiological aspects of emergency management. It does not include conventional training for emergency response personnel, which is assumed to be well covered by other programs.
Project Management Plan
Milestones

- Define the intermediate results that must be achieved to get to the final objective
- **Example**
  - Generic plan modified
  - Generic procedures adapted
  - Training program defined
  - Training schedule promulgated
  - Training completed
  - Validation completed
  - Project evaluation completed
Project Management Plan

Tasks

- Define the work breakdown required to achieve individual milestones
- Example: to adapt procedures
  - Distribute generic procedures for review
  - Review generic procedures
  - Collect comments from reviewers
  - Produce draft 1 of adapted procedures
  - Send for review
  - Meetings of reviewers
  - Produce final draft
  - Distribute final draft
Project Management Plan
Responsibilities

- Defines who is responsible and accountable for which task

- Designates support persons or organisations
## Project Management Plan
### Responsibility Matrix

<table>
<thead>
<tr>
<th>Activity</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
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<tbody>
<tr>
<td>Send invitations</td>
<td>P, X</td>
<td></td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>Procure equipment</td>
<td>C</td>
<td>P</td>
<td>X</td>
<td>D</td>
</tr>
<tr>
<td>Train technicians</td>
<td></td>
<td>X</td>
<td>P</td>
<td></td>
</tr>
</tbody>
</table>

- **P**: Manages Progress  
- **X**: Does  
- **D**: Decides  
- **d**: Decides jointly  
- **I**: Must be informed  
- **C**: Must be consulted  
- **A**: Available to assist
Project Management Plan
Schedule

- Define the time available for each task and the dates at which milestones must be achieved

- Baseline vs actual
  - Schedule may change but milestones and tasks do not normally change
Project Management Plan
Schedule (Example)

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<th>ID</th>
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<th>Qtr 1, 2001</th>
<th>Qtr 2, 2001</th>
<th>Qtr 3, 2001</th>
<th>Qtr 4, 2001</th>
<th>Qtr 1, 2002</th>
<th>Qtr 2, 2002</th>
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<td>Jun Jul</td>
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</table>

- Milestone 1: 4/26
- Milestone 2: 8/9
Project Management Plan

Budget

- Identifies the cost of the project
  - Total budget available
  - Estimated cost of each task
  - Management budget
  - Contingency fund
- Depending on the budget available, the scope may need to be adjusted
- Consider “real” cost
  - Cost of people
  - Travel, equipment and other expenses
Project Management Plan

Project Control

- A way to track progress and determine if corrective actions need to be taken

- Project schedule tracking:
  - Is the project on time?

- Project cost tracking:
  - Is the project within the initial budget estimate
Project Management Plan
Project Control (Schedule Tracking)

- Compare actual task achievement with project schedule
- If tasks are late, determine the impact on the other tasks
- Determine impact on overall project
- Make adjustments:
  - Adjust schedule OR
  - Adjust level of efforts
Project Management Plan
Project Control (Cost Tracking)

- Once a month:
  - Estimate actual spending so far: this is the “actual cost of work performed” or ACWP
  - Estimate degree of completion of each task:
    - 0, 25%, 50%, 75% or 100%
  - Calculate “budgeted cost of work performed” or BCWP = SUM (task budget x degree of completion)
  - If ACWP > BCWP, you may have a problem. Make adjustments!
### Project management plan

**Project control (Cost tracking)**

<table>
<thead>
<tr>
<th>Task</th>
<th>Planned budget</th>
<th>Percent completed</th>
<th>BCWP</th>
</tr>
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<tbody>
<tr>
<td>Task 1</td>
<td>$10 000</td>
<td>0%</td>
<td>$0</td>
</tr>
<tr>
<td>Task 2</td>
<td>$5 000</td>
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<td>$2 500</td>
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<td>Task 3</td>
<td>$20 000</td>
<td>75%</td>
<td>$15 000</td>
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<td><strong>Total</strong></td>
<td><strong>$35 000</strong></td>
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<td><strong>$17 500</strong></td>
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</table>

**ACWP = $20 000**

**ACWP/BCWP = 1.14**

In this example, the project is about 14% over budget.
Project Management Plan
Risk Management

- Defines what could go wrong and how to deal with it:
  - What could delay the project or make it more expensive?
  - What can we do to prevent these things from happening?
  - What do we do if these things happen?
Project Management Process

- Determine the objectives
- Appoint a project manager
- Develop a preliminary project plan and budget estimate
- Get funding
  - You may need to scale up or down the project objectives and scope
Project Management Process

- Develop project management plan
- Communicate project management plan
- Discuss responsibilities with main project organisations and personnel
  - Adjust project management plan as required
  - Get their formal agreement on their responsibilities
- Implement
- Monitor and adjust
- Evaluate
Generic Action Plan
TECDOC-953

- National policy review
- Determine level of preparedness
- Develop planning basis
- Allocate responsibilities
- Write National Plan
- Inform all organizations
- Form and train interim response group
- Develop and implement detailed plans
- Coordinate and test plans and procedures
- Develop and implement ongoing updating and training programmes
Potential Problems

- Insufficient support for project
- Poor project definition
- Planning tools are too complex
- Planning time scale is too long (or too short)
- Planning of time and cost are over-optimistic
- Distribution of responsibility is not defined
- Principles of co-operation are not clear
More Potential Problems

- Key resources are not available, not motivated when needed
- Line managers are not committed
- Project leader is a specialist and not a manager
- Project leader has responsibility but no authority
- Changes to the plan are uncontrolled
- Activities are not completed and documented before others begin
Summary

- This lecture presented the way how to develop and implement an action plan
- The main points important to note are:
  - You must develop an action plan based on what you learned in this workshop
  - Carry out the action plan based on sound project management principles
  - Remember the contents of a project management plan
  - Project management also includes validation, control and evaluation
- Comments are welcomed
Where to Get More Information

- Other lectures
- Books, articles, electronic sources