INTEGRATED PROJECT - I3
INTERDISCIPLINARY | INTEGRATED | INTERACTIVE

Summer Semester 2024 | Tuesday 12./19.03.2024 | 08:00 - 12:00

Preparatory Meeting

- Organisational issues
- Short presentation on project ideas
- Preparing the abstract

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Why meeting today?

- Project execution
- Techniques and methods in project management
- Answering questions

Remember filling time sheets!

TimeSheetTemplate.xls [Compatibility Mode] - Excel

A5 | Firstname Lastname

Monthly timesheet for MSc Geoinformatics IP

IDENTIFICATION OF THE PROJECT & PARTICIPANT(S)

Firstname Lastname	Hermann Klug
Project Acronym	RETIFEDS
Project Title	A real-time framework for environmental decision support

TIME Summer Semester 2016

Day	Project related activities: Time (from)	Time (to)	Hours	Activity (description of activity and concerned work package)
1.	8:00	12:00	4:00	Course participation (WP1 Management)
	15:00	16:00	1:00	Abstract upload to Blackboard (WP1 Management)
2.			0:00	
3.			0:00	
4.			0:00	
5.			0:00	
6.			0:00	
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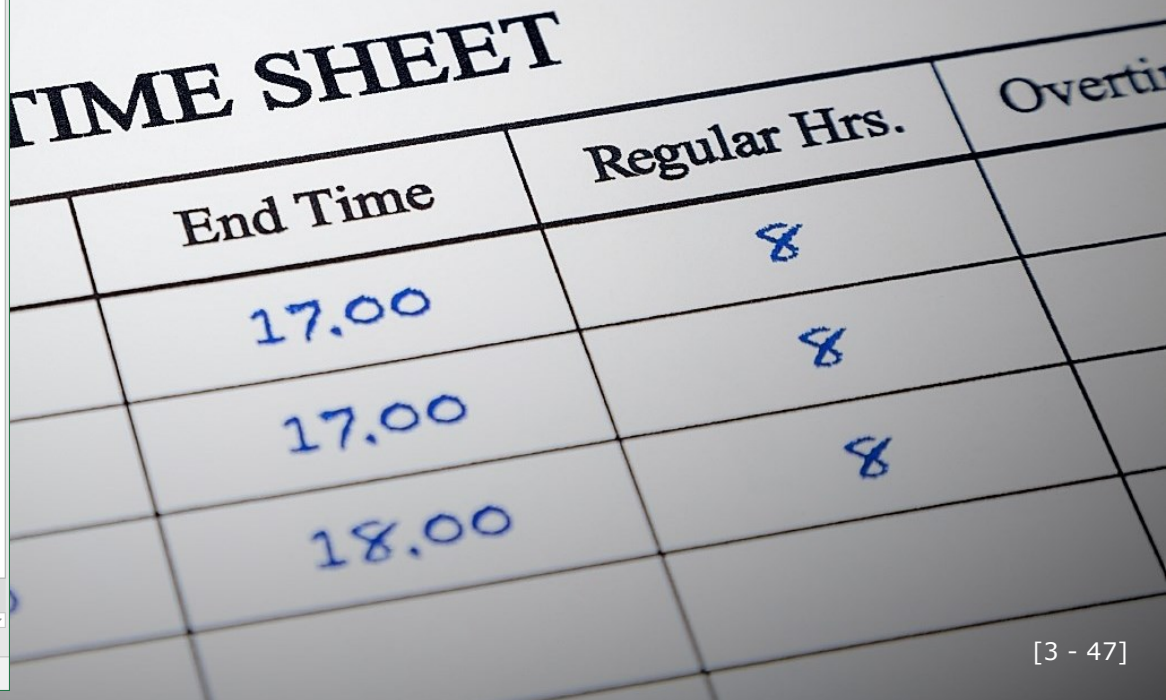
31.			0:00	
			5:00:00	

Page 1

March | April | May | June

Ready | Count: 4 | 100%



Consulting session 1

During the I3 project we will have consultancy sessions. Within these sessions you discuss your progress, challenges, difficulties and the like with the course instructor(s). Please register for each of the mandatory consulting sessions. For EACH day insert your name and your acronym ONCE.

Consulting 1 [16.04.2024] Please enter your name for ONE timeslot

Consulting 2 [23.04.2024]

Consulting 3 [14.05.2024]

Consulting 4 [04.06.2024]

Consulting 5 [11.06.2024]

Consulting 6 [25.06.2024] NON-OBGLIGATORY = ON DEMAND IF NECESSARY, ASK HERMANN

https://edupad.ch/p/3XledhSzhA

Upload Project SUMMARY

Deadline 19.03.2024

Lastname_Abstract.docx


Your Project Title

Autor(s): Firstname Lastname (Email)
Delivery date: 01.03.2016

Abstract

Write the abstract in one paragraph. Think about each word in a sentence, avoid colloquial statements and do not use filling words. Connect each sentence logically with the next on using the following rules. Sketch the general topic in a few introductory words (What the research is about?). Outline the challenges identified (Why this research?). Define your objectives (purpose/motivation of this research), hypotheses, research questions. Very briefly describe the material (data, case study) and methods (tools, approaches, formulas, cooking recipe) to be used (How to do this research?). Frame the end users of your study (For whom this research?) and explain the expected results and how they will be delivered (model, online, maps). Discuss the impact your research might have for the end users and/or science (Why for?).

Keywords

Keywords 1, keyword 2, keyword 3 (different words then in the title)

Project Abstract Template

Attached Files:

ProjectAbstract.docx (27.988 KB)

ProjectAbstractExample.docx (28.179 KB)

Please find attached the Word-Template for the project abstract due on the second meeting (08.03.2022). Please also find attached an example abstract for your information.

bigstock (c)

Abstract exercise criteria

what when where why which who

Write the abstract in one paragraph (half A4 page). Think about each word in a sentence, avoid colloquial statements and do not use filling words. Connect each sentence logically with the next one using the following rules (scientific methods). Sketch the general topic in a few introductory words (What the research is about?). Outline the challenges identified (Why this research?). Define your objectives (purpose/motivation of this research), hypotheses, research questions. Very briefly describe the material (data, case study) and methods (tools, approaches, formulas, cooking recipe) to be used (How to do this research?). Frame the end users of your study (For whom this research?) and explain the expected results and how they will be delivered (model, online, maps). Discuss the impact your research might have for the end users and/or science (Why for?).

Think about each word in a sentence

- Filling word (skip)?
- Wrong word (exchange)?
- Sentence connection (red line)?
- Compliant with main course objectives?
- Anything unclear (w-questions)?

Bring your abstract

- To **review another student's abstract**
- To **find an acronym** for the work you reviewed
- To comment on the printed sheet
- To **return the abstract** to the writer(s) for improvement
- To discuss with the author of your reviewed abstract

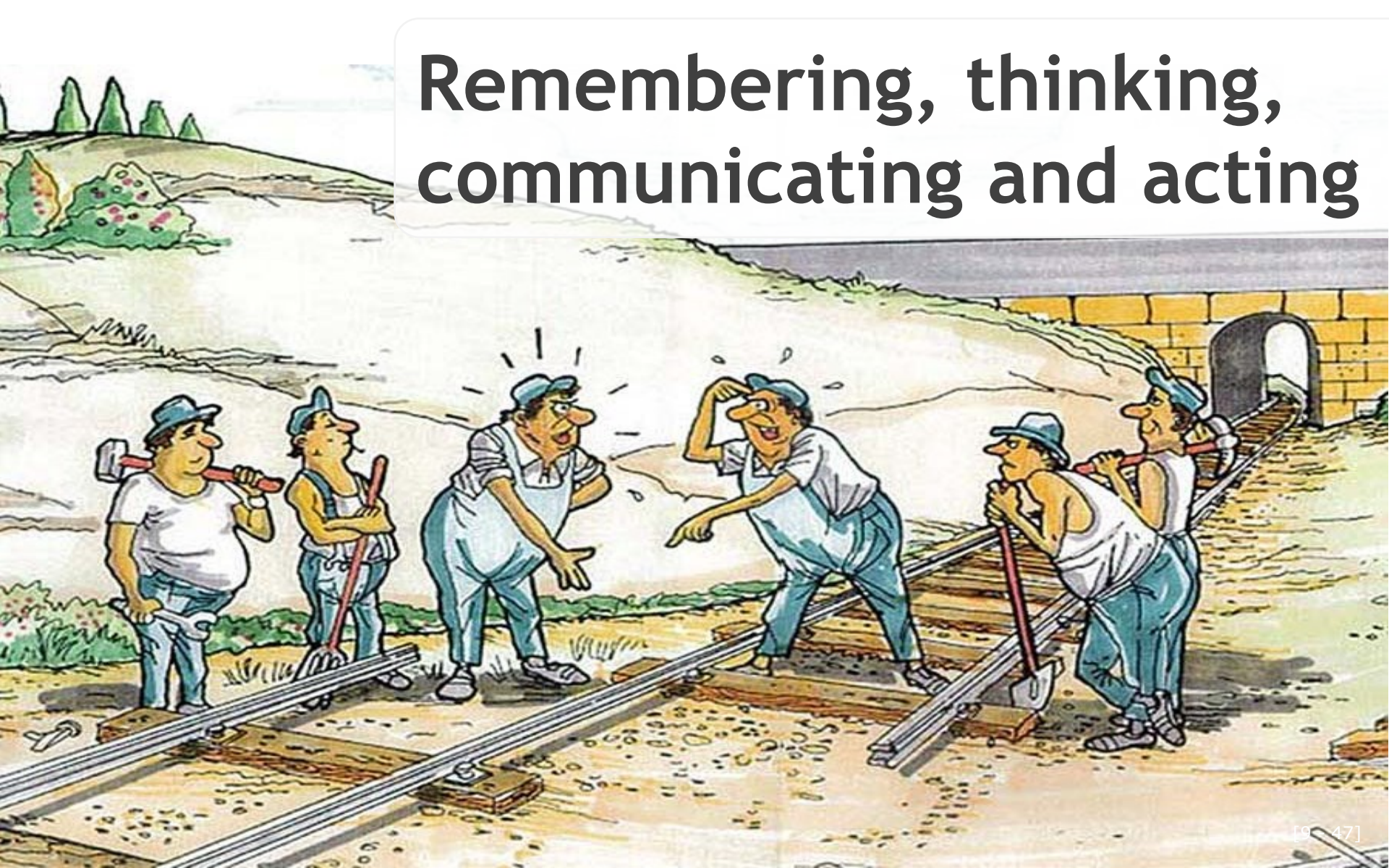
Short presentations

... today (12.03.2024)

ID	Last name	First name
1	Bochenek	Victor
2	Cao	Haoyu
3	Chen	Yuzhou
4	Greupner	Noah
5	Liu	Kaifeng
6	Lu	Dingyang
7	Lu	Fangyuan
8	Nafieva	Elena
9	Nikolova	Yana
10	Tang	Ruien
11	Tounta	Stamatina
12	Yu	Fengyize

The presentation provides a project idea on one or two PPT slides. The intention is a working presentation to get feedback from the group and to demonstrate the progress since last week. [8 - 47]

Remembering, thinking, communicating and acting



Two brain regions

Left side

- Words
- Logic
- Numbers
- Rows
- Linearity
- Analysis
- Lists

Right side

- recognition
- Multi-dimensionality
- holism
- Spatial cognition
- dreams
- Rhythm colour

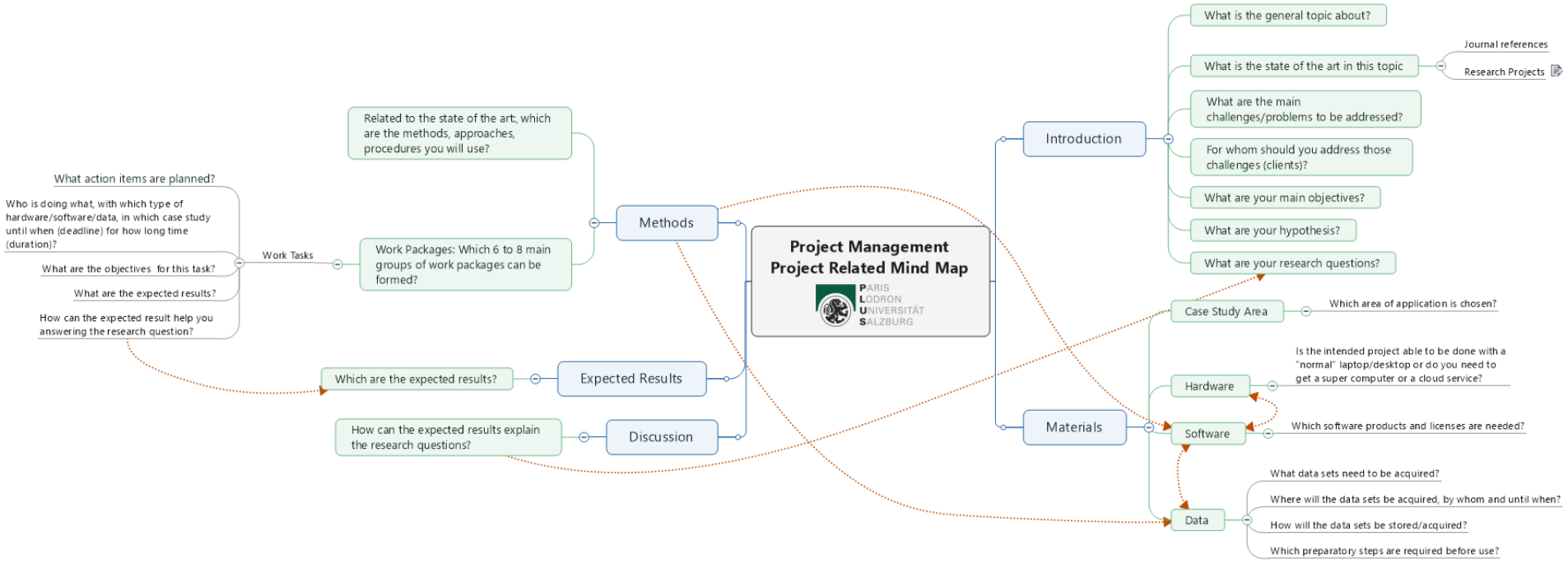
Good combinations of right and left side and belief in own power is about winning!

Disadvantages of Standard Notes

- Searching for hidden keywords
- They do not fully empower creativity of our brain (they seem to be comprehensive)
- Do not allow further extension
- Unsorted and not easy to read (bad structure)
- Consider only single thought directions versus multifunctional environments
- Monotonous and almost no highlighting key elements (usually b/w)


10 minutes
Break

Mindmapping (IMRAD)



Take home message

Structure your project in a Mind Map, not in standard notes!


Project Management is about
asking questions!

What is a project?

defined time-period

series of activities

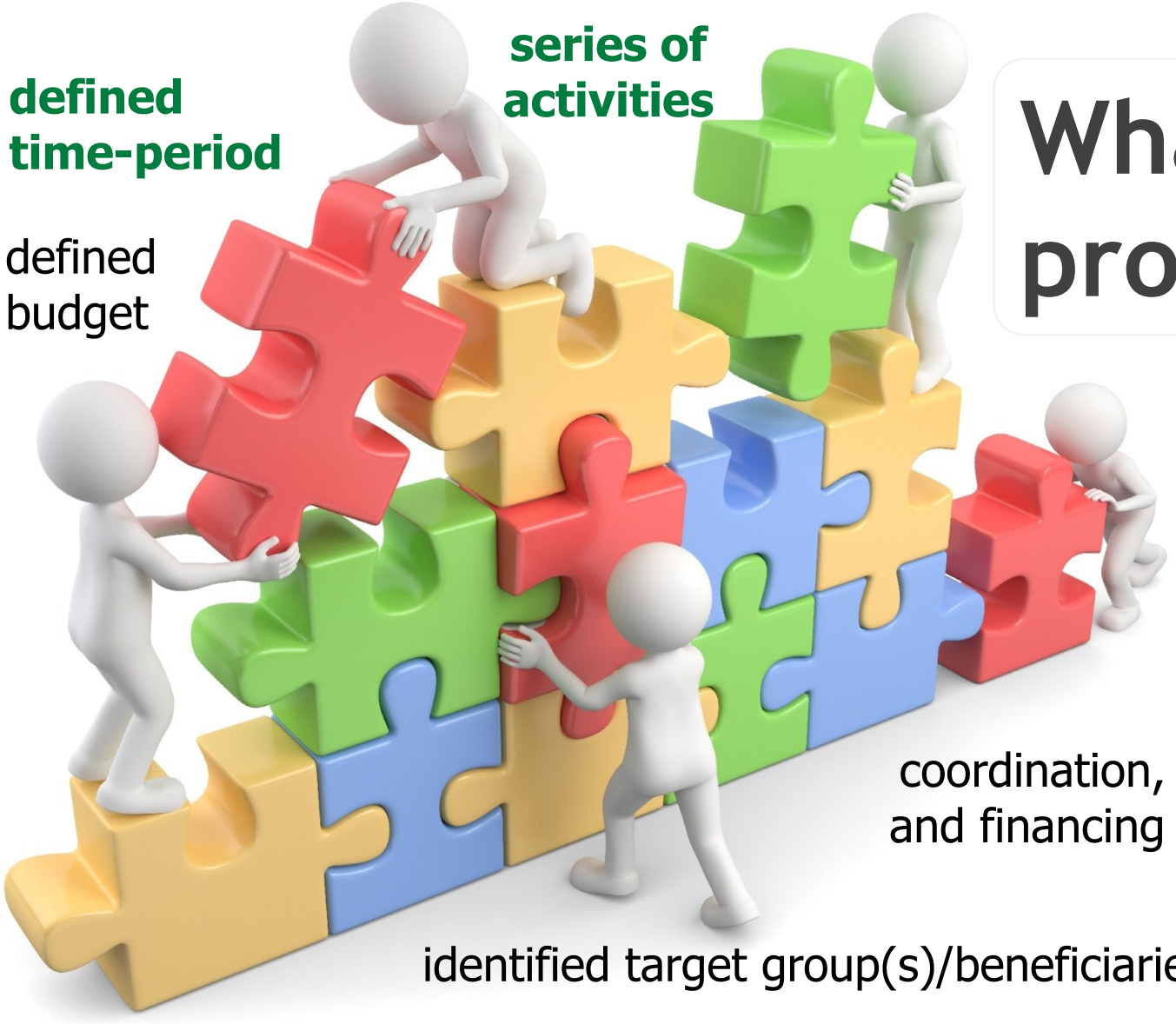
defined budget

financial and economic analysis

monitoring and evaluation system

coordination, management and financing arrangements

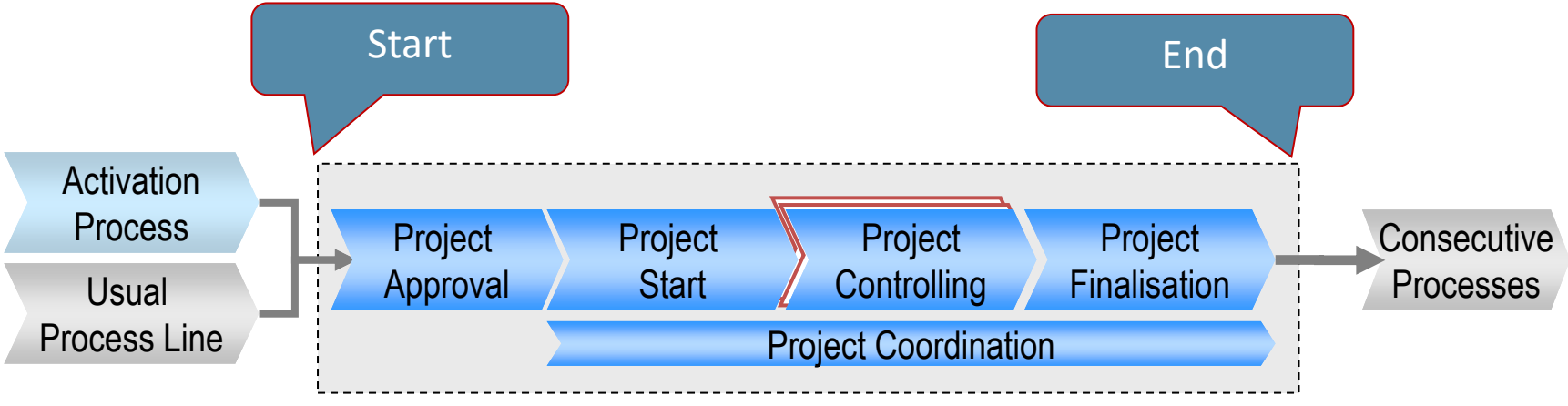
identified target group(s)/beneficiaries



What is a project?

What are the properties of a project?

- Singularity
- Defined goals and objectives
- Outline of the time, cost and personal resources available
- Separation against other projects and activities
- Project specific organisation



What is a project?

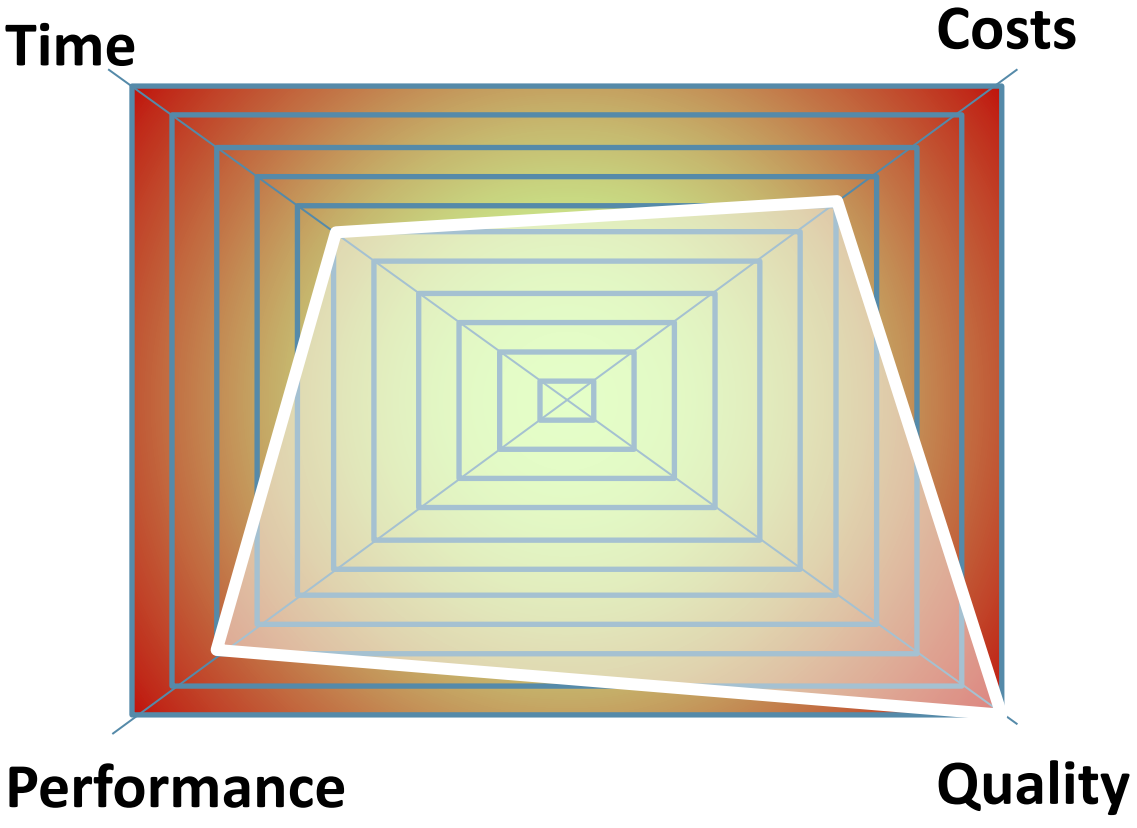
- A project is a series of activities aimed at bringing about clearly specified objectives within a defined time-period and with a defined budget.
- Clearly identified stakeholders, including the primary target group and the final beneficiaries
- Clearly defined coordination, management and financing arrangements
- A monitoring and evaluation system (to support performance management)
- An appropriate level of financial and economic analysis, wich indicates that the project's benefits will exceed ist costs

When is a project successful?

When it is OTOBOS

- On Time
- On Budget
- On Scope

What are the objectives of a project?



The pulling factor

- Projects as a transformation process towards something new, better, more advanced
- Need to be presented as clear as possible and to be understood by many

WHAT IS MANAGEMENT?

Management in all business areas and organisational activities are the acts of getting people together to accomplish desired goals and objectives efficiently and effectively. Management comprises planning, organizing, staffing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal. Resourcing encompasses the deployment and manipulation of human resources, financial resources, technological resources, and natural resources.

The starting point of project management

- Identified problem
- Solution / idea
- Call for proposals / solutions

??

Questions to be answered (in the Mindmap):

- Which problems should be solved?
- For whom to solve (clients)?
- Who is the person offering the project?
- What should be the result?
- How to solve the problems?
- What are the resources available?

Definition of project objectives

Project result

- e.g. a house

Project target

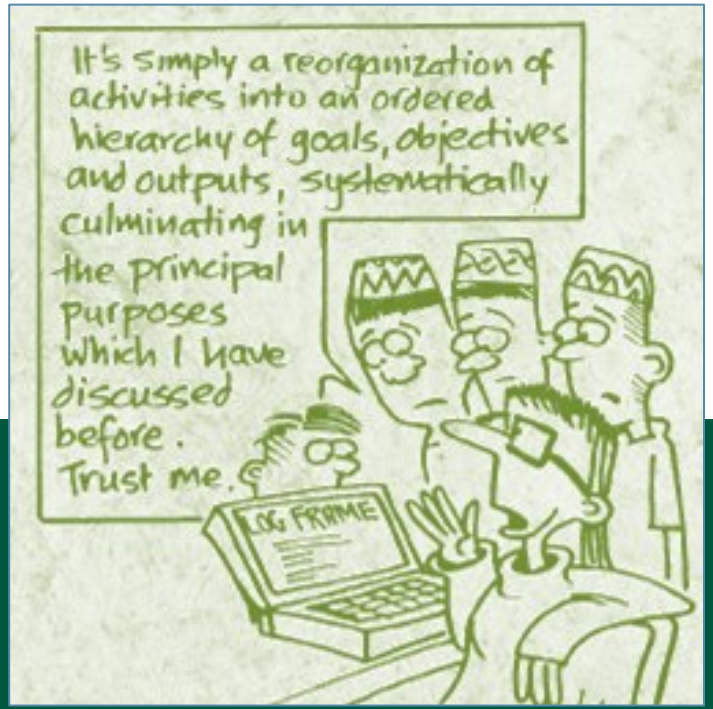
- e.g. establishment of living space

Project objective

- e.g. increasing number of well living people in their own house

Planning phases and the LogFrame Approach

PLANNING STEPS AFTER THE LOGFRAME APPROACH (LFA)



The Logical Framework Approach (LFA) is a management tool mainly used in the design, monitoring and evaluation of international development projects. It is also widely known as Goal Oriented Project Planning (GOPP) or Objectives Oriented Project Planning (OOPP).

Typical structure of a Logframe Approach (LFA)

Project Description	Indicators	Source of Verification	Assumption
Overall Objective The project's contribution to policy or programme objectives (impact) 1	▪ How the overall objective is to be measured including quantity, quality, and time? 8	▪ How will the information be collected, when and by whom? 9	
Purpose Direct benefits to the target group(s) 2	▪ How the purpose is to be measured including quantity, quality, and time? 10	▪ As above 11	▪ If the Purpose is achieved, what assumptions must hold true to achieve the overall objective? 7
Results Tangible products or services delivered by the project 3	▪ How the results are to be measured including quantity, quality, and time (QQT)? 12	▪ As above 13	▪ If the Results are achieved, what assumptions must hold true to achieve the purpose? 6
Activities Tasks that must be undertaken to deliver the desired results 4	▪ Sometimes a summary of resources/means is provided in this box	▪ Sometimes a summary of costs/budget is provided in this box	▪ If activities are completed, what assumptions must hold true to deliver the results? 5

From: EC (2004)

Example of a Logframe Approach

Project description	Indicators	Means of Verification	Assumptions
Overall objective To contribute to improved family health, particularly the under 5s, and to improve the general health of the riverine eco-system	- Incidence of water borne diseases, skin infections and blood disorders caused by heavy metals, reduced by 50% by 2008, specifically among low-income families living along the river	- Municipal hospital and clinic records, including maternal and child health records collected by mobile MCH teams. Results summarized in an Annual State of the Environment report by the EPA.	
Purpose Improved quality of river water	- Concentration of heavy metal compounds (Pb, Cd, Hg) and untreated sewerage; reduced by 25% (compared to levels in 2003) and meets established national health/pollution control standards by end of 2007	- Weekly water quality surveys, jointly conducted by the Environmental Protection Agency and the River Authority, and reported monthly to the Local Government Minister for Environment (Chair of Project Steering Committee)	- The pubic awareness campaign conducted by the Local Government impacts positively on families sanitation and hygiene practices - Fishing cooperatives are effective in limiting their members exploitation of fish 'nursery' areas
Result 1 Volume of waste-water directly discharged into the river system by households and factories reduced	- 70% of waste water produced by factories and 80% of waste water produced by households is treated in plants by 2006	- Annual sample survey of households and factories conducted by Municipalities between 2003 and 2006	- River flows maintained above X mega litres per second for at least 8 months of the year - Upstream water quality remains stable
Result 2 Waste-water treatment standards established and effectively enforced	- Waste water from 4 existing treatment plants meets EPA quality standards (heavy metals and sewerage content) by 2005	- EPA audits (using revised standards and improved audit methods), conducted quarterly and reported to Project Steering Committee	- EPA is successful in reducing solid waste disposal levels by factories from X to X tons per year

From: EC (2004)

Strength and common challenges of the Logframe Approach

Element	Strengths	Common problems / difficulties
Problem analysis and objective setting	▪ Requires systematic analysis of problems, including cause and effect relationships ▪ Provides logical link between means & ends ▪ Places the project within a broader development context (overall objective and purpose) ▪ Encourages examination of risks and management accountability for results	▪ Getting consensus on priority problems ▪ Getting consensus on project objectives ▪ Reducing objectives to a simplistic linear chain ▪ Inappropriate level of detail (too much/too little)
Indicators and source of verification	▪ Requires analysis of how to measure the achievement of objectives, in terms of both quantity and quality (and time) ▪ Helps improve clarity and specificity of objectives ▪ Helps establish the monitoring and evaluation framework	▪ Finding measurable and practical indicators for higher level objectives and for projects with 'capacity building' and 'process' objectives ▪ Establishing unrealistic targets too early in the planning process ▪ Relying on 'project reports' as the main 'source of verification', and not detailing where the required information actually comes from, who should collect it and how frequently
Format and application	▪ Links problem analysis to objective setting ▪ Emphasizes importance of stakeholder analysis to determine 'whose problems' and 'who benefits' ▪ Visually accessible and relatively easy to understand	▪ Prepared mechanistically as a bureaucratic 'box-filling' requirement, not linked to problem analysis, objective setting or strategy selection ▪ Used as a means of top-down control – too rigidly applied ▪ Can alienate staff not familiar with the key concepts ▪ Becomes a 'fetish' rather than a help

after: EC (2004)

The phases of LFA

Analysis Phase

Stakeholder Analysis
- Identifying & characterising potential major stakeholders; assessing their capacity

Problem Analysis
- Identifying key problems, constraints & opportunities; determine cause & effect relationships

Objective analysis
- Developing solutions from the identified problems; identifying means to end relationships

Strategy analysis
- Identifying different strategies to achieve solutions; selecting most appropriate strategy

Planning Phase

Developing the LFA matrix
- Defining project structure, testing its internal logic & risks, formulating measurable indicators of success

Activity scheduling
- Determining the sequences and dependency of activities; estimating their duration, and assigning responsibility

Resource scheduling
- From the activity schedule, developing input schedules and a budget

after: EC (2004)

EXERCISE

Apply the LogFrame Approach to your (extended) abstract / project mind map and fill the LFA table for your project

15 minutes 00:00 Typical structure of a Logframe Approach (LFA)

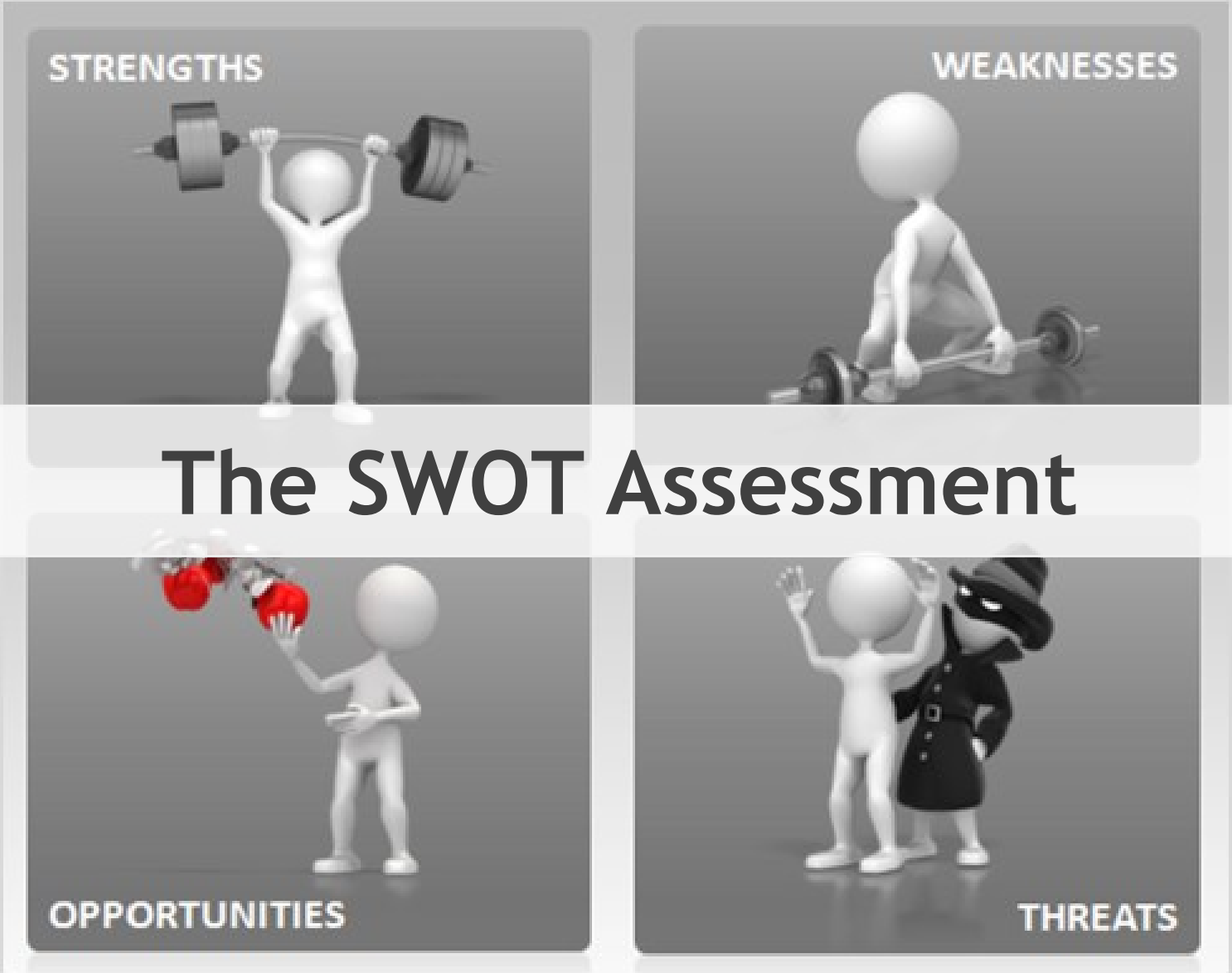
Project Description	Indicators	Source of Verification	Assumption
Overall Objective The project's contribution to policy or programme objectives (impact)			
Purpose Direct benefits to the target group(s)			
Results Tangible products or services delivered by the project			
Activities Tasks that must be undertaken to deliver the desired results			

From: EC (2004)


10 minutes
Break

Analysing project strength

- SWOT Analysis
- Stakeholder analysis matrix
- Venn Diagram
- DPSIR Approach
- Capacity Spider Diagram
- Mission Statement
- Writing objective statements
- Objectively Verifiable Indicators (OVIs)
- Quantity, Quality, Time Approach (QQT)
- SMART approach



The SWOT Assessment

The SWOT Matrix

Strengths

- Grassroots based and quite broad membership
- Focused on the specific concerns of a relatively homogenous group
- Men and women both represented
- Provide a basic small scale credit facility

Weaknesses

- Limited lobbying capacity and environmental management skills
- Lack of formal constitutions and unclear legal status
- Weak linkages with other organizations
- Internal disagreements on limiting fishing effort in response to declining fish stocks

Opportunities

- Growing public/political concern over health impacts of uncontrolled waste disposal
- New government legislation in preparation on Environmental Protection – largely focused on making polluters pay
- The river is potentially rich in resources for local consumption and sale
- New markets for fish and fish products developing because of improved transport infrastructure to nearby population centers

Threats

- Political influence of industrial lobby groups who are opposed to tighter environmental protection laws (namely waste disposal)
- New environmental protection legislation may impact on access to traditional fishing grounds and the fishing methods that can be employed

from: EC (2004)

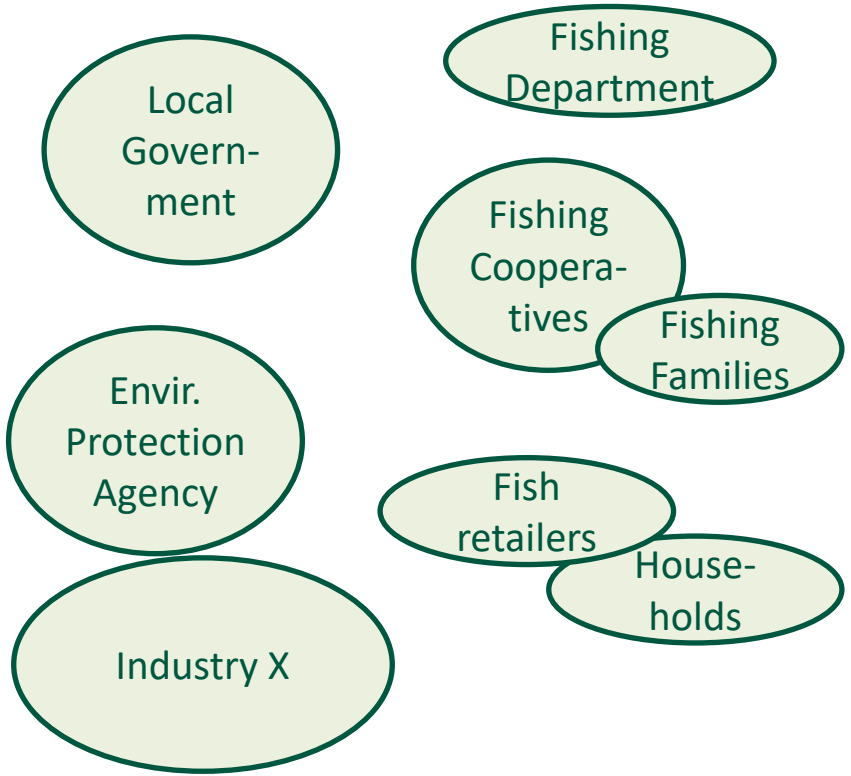
Stakeholder analysis matrix

Stakeholder and basic characteristics	Interests and how affected by the problem(s)	Capacity and motivation to bring about change	Possible actions to address stakeholder interests
Fishing families ▪ c.20,000 families, ▪ low income earners, ▪ small scale family businesses, organised into informal cooperatives, ▪ Women actively involved in fish processing and marketing	▪ Maintain and improve their means of livelihood ▪ Pollution is affecting volume and quality of catch ▪ Family health is suffering, particularly children and mothers	▪ Keen interest in pollution control measures ▪ Limited political influence given weak organizational structure	▪ Support capacity to organize and lobby ▪ Implement industry pollution control measures ▪ Identify/develop alternative income sources for women and men

from: EC (2004)

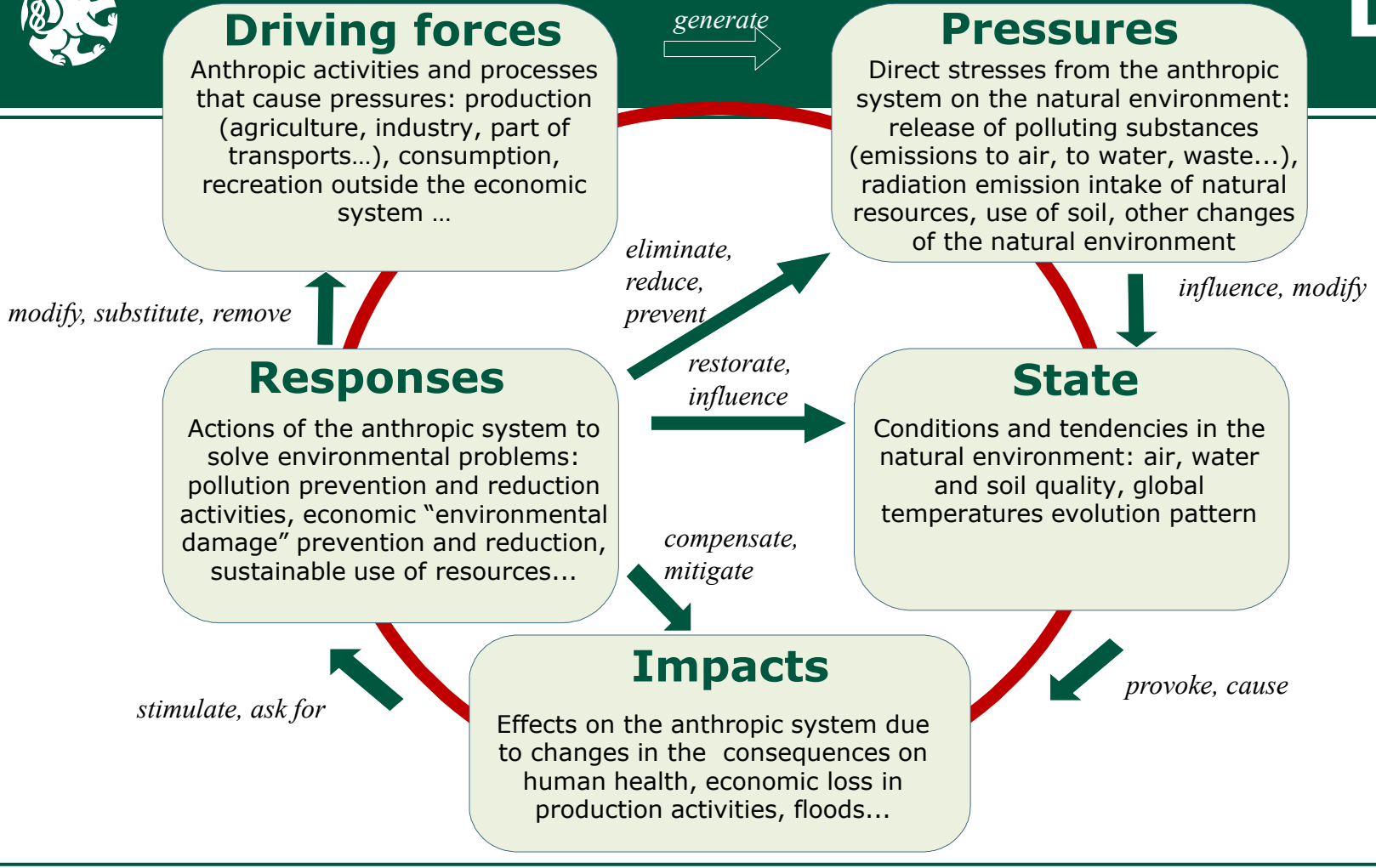
The Venn Diagram

Venn Diagrams are created to analyse and illustrate the nature of relationships between key stakeholder groups. The size of the circle used can help indicate the relative power/influence of each group/organization, while the spatial separation is used to indicate the relative strength or weakness of the working relationship/interaction between different groups/organisations.

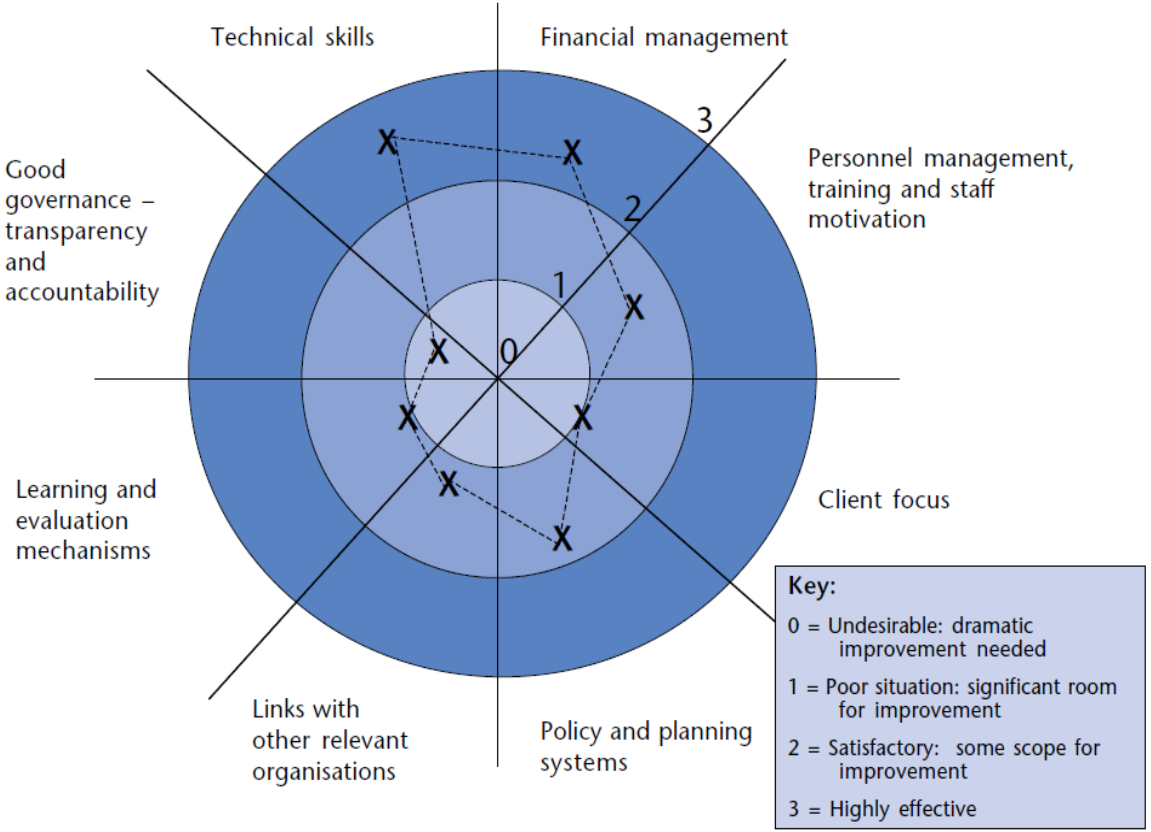


from: EC (2004)

DPSIR


Driving forces
Anthropic activities and processes that cause pressures: production (agriculture, industry, part of transports…), consumption, recreation outside the economic system …
generate
Pressures
Direct stresses from the anthropic system on the natural environment: release of polluting substances (emissions to air, to water, waste...), radiation emission intake of natural resources, use of soil, other changes of the natural environment
influence, modify
State
Conditions and tendencies in the natural environment: air, water and soil quality, global temperatures evolution pattern
provoke, cause
Impacts
Effects on the anthropic system due to changes in the consequences on human health, economic loss in production activities, floods...
stimulate, ask for
Responses
Actions of the anthropic system to solve environmental problems: pollution prevention and reduction activities, economic "environmental damage" prevention and reduction, sustainable use of resources...
modify, substitute, remove
eliminate, reduce, prevent
restorate, influence
compensate, mitigate

Spider Diagram of organisational/personal capacity



from: EC (2004)

Mission Statement

→ Place to Gitlab repository

- The process of establishing and adopting **a mission statement ensures common understanding** is reached early in the project development.
- A clear message is informative and help people to understand, relate to, and support project efforts.
  - Who are the members?
  - What the partnership/project stands for?
  - Why this partnership/project exist?

Writing objective statements

→ **Recall LogFrame Approach**

Objective Hierarchy	Example of how to write statements
Overall Objective	▪ To contribute to improved family health, particular under 5s, and the general health of the riverine eco-system
Purpose	▪ Improved river water quality.
Results	▪ Reduced volume of wastewater directly discharged into the river system by households and factories. ▪ Waste-water treatment standards established and effectively enforced.
Activities	▪ Conduct baseline survey of households and businesses ▪ Complete engineering specifications for expanded sewage network ▪ Prepare tender documents, tender and select contractor ▪ Identify appropriate incentives for factories to use clean technologies ▪ Prepare and deliver public information and awareness program ▪ Etc.

Benefits to target groups

Active Verb phrase

from: EC (2004)

Objectively Verifiable Indicators

- Objectively Verifiable Indicators (**OVIs**) describe the project's objectives in operationally **measurable terms** (quantity, quality, time → **QQT**).
- Specifying OVIs helps to check the feasibility of objectives and helps form the basis of the project's **monitoring** and **evaluation** system.
- They are formulated in response to the questions
  - How would we know whether what has been planned is happening or happened?
  - How do we verify success?
- OVIs should be measurable for everybody in a consistent way and at an acceptable cost → name information sources!

from: EC (2004)

OVIs should be SMART

eva **S** pecific to the objective it is supposed to measure

yeno **M** easurable (either quantitatively or qualitatively)

dn **A** vailable / achievable at an acceptable cost

ecude **R** elevant to the information needs of managers

emi **T** ime-bound – so we know when we can expect the objective/target to be achieved

from: EC (2004)

Indicators and means of verification

Project description	Indicator	Source of Verification
Purpose Improved quality of river water	**The Indicator:** Concentration of heavy metal compounds (Pb, Cd, Hg) and untreated sewerage **The Quantity:** Is reduced by 25% compared to levels in 2003 **The Quality:** And meets established national health/pollution control standards **The Time:** By end of 2006	Weekly water quality surveys, jointly conducted by the Environmental Protection Agency and the River Authority, and reported monthly to the Local Government Minister for Environment (Chair of Project Steering Committee).

from: EC (2004)

EXERCISE

- Take your abstract and
- integrate the most important facts for your IP work according to the slide "Writing objective statements"
- Verify your OVIs and QQT aspects are properly mentioned
- Check whether your project is SMART