



DECIVIL

DEPARTAMENTO DE ENGENHARIA
CIVIL, ARQUITETURA E GEORRECURSOS

TÉCNICO LISBOA

Área Científica de Sistemas Urbanos e Regionais

Mestrado em Ordenamento do Território e Urbanismo
Master in Territorial Management and Urban Studies

Avaliação Ambiental / Environmental Assessment

Methodology. Strategic thinking for sustainability (ST4S) in SEA

Critical decision factors

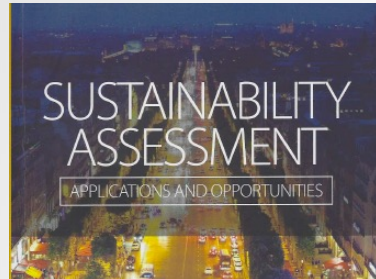
Prof. Doutora Maria do Rosário Partidário

Bibliography

Strategic Environmental Assessment - a spectrum of understandings

Maria Rosário Partidário

Ch2, in Handbook of EIA, Kevin Hanna (Ed) (in press)

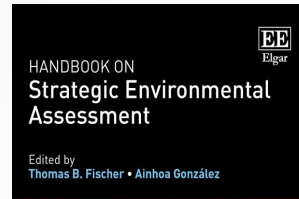
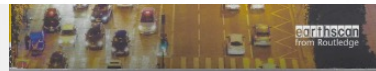


Chapter 10

Using strategic thinking and critical decision factors to achieve sustainability

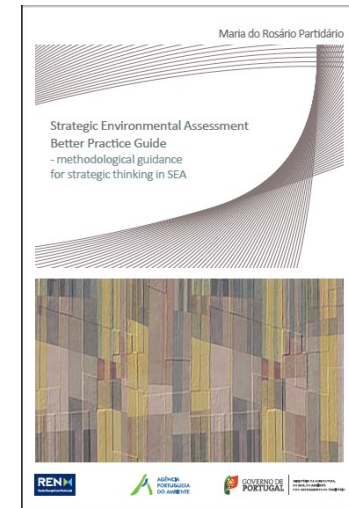
Three cases in Portugal

Maria Rosário Partidário



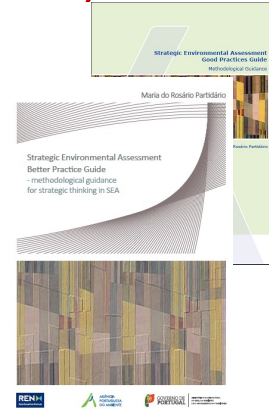
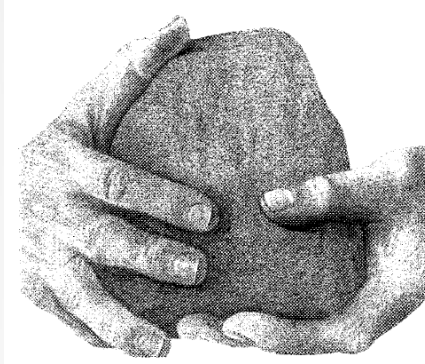
4. Strategic thinking for sustainability (ST4S) in strategic environmental assessment

Maria R. Partidário



Framework for Strategic Thinking for Sustainability (ST4S)

(Partidário 2007, 2012)



To help create contexts for sustainable development

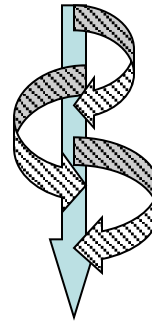
Through SEA or through other strategic approaches to sustainability

ST4S – three combined components

Communication and Engagement
- governance

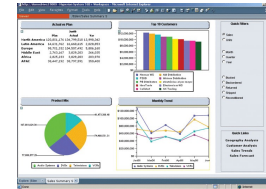


Process



SEI/SA/IA – framework of
structural elements

Technical
analysis



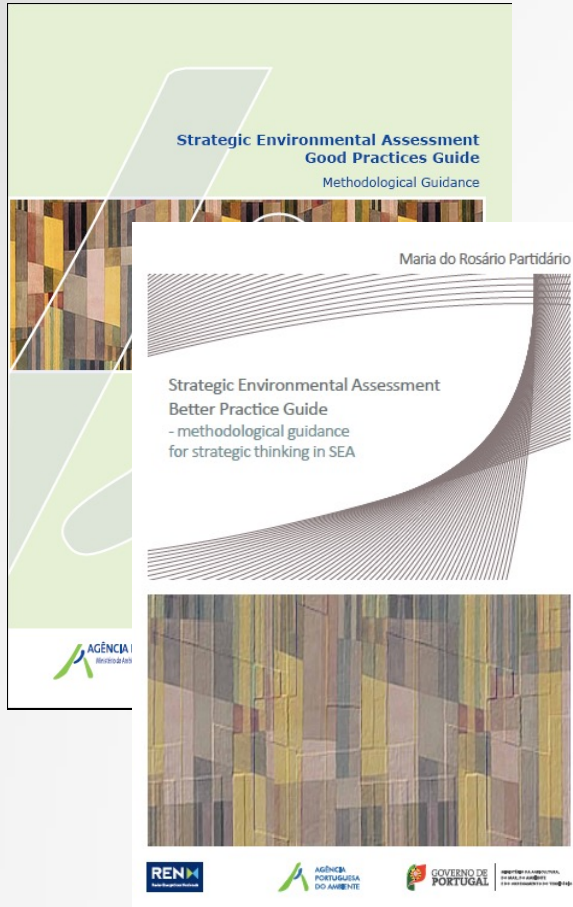
ST4S - Three functions

Three functions make the strategic thinking SEA:

- Integration – at least 60% of effort
- Assessment – 25-30 % of effort
- Validation – 10-15% of effort

In SEA if assuring good integration, assessment will be easier and validation only a formality, to sign off

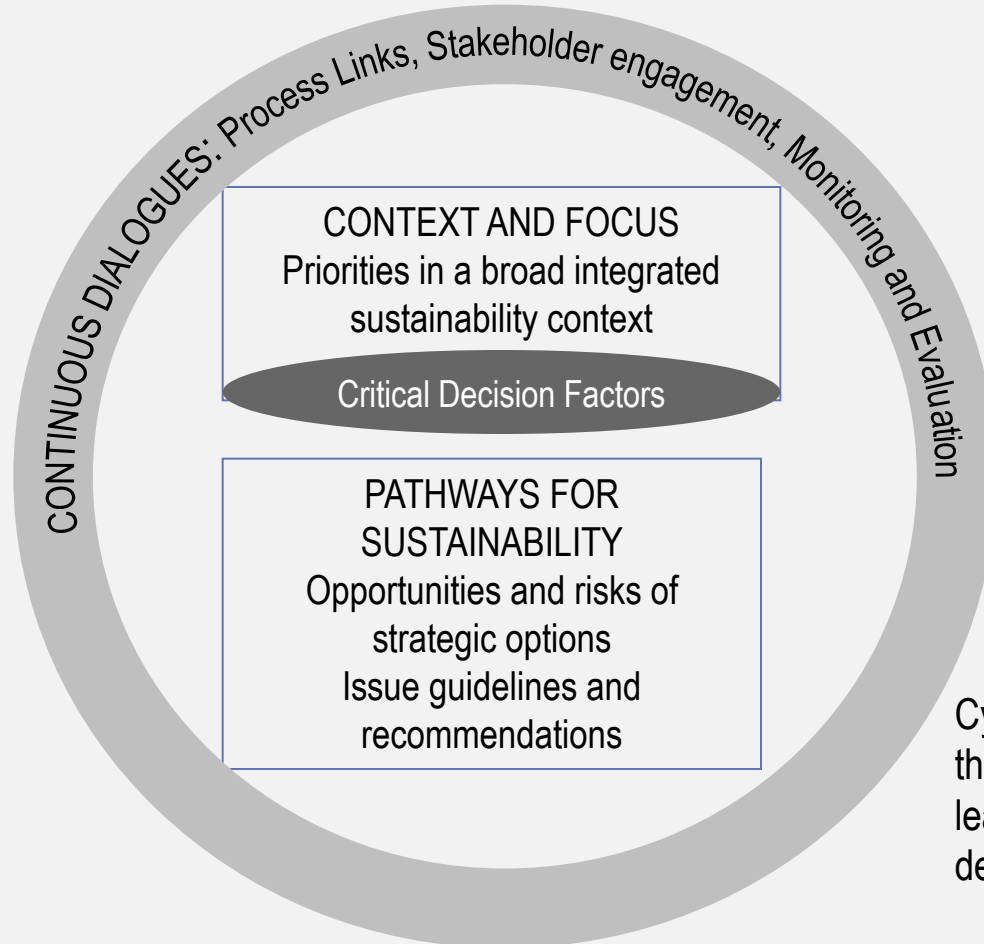
(Partidário, 2007, 2012)



ST4S - Three distinguishing features

1. Critical decision factors – the pinpoints in the assessment framework
2. Pathways for sustainability – options assessment (risks and opportunities)
3. Continuing dialogues between processes and people (actors networks), throughout decision cycles

ST4S - Creating contexts for sustainable development



Cyclical re-assessment as the context change and learning takes place with development unfolding



4. Strategic thinking for sustainability (ST4S) in strategic environmental assessment
María R. Partidário



Object of assessment in SEA

What will be assessed with the SEA?

The strategies for development, associated to a futures vision and long-term objectives, in particular public policies, sectorial and territorial planning, investment programmes

e.g. strategy for multi-purpose water management,
strategy to enhance renewable energy use

Vision



Understanding the problem

What are development priorities

What are the driving forces

What are environmental and sustainability priorities

What are leading macro-policies (Strategic reference framework)

What are the powers in place

Who are the winners and losers

Strategic issues

The strategic development (PPP) objectives and priorities

Policy choices that address critical challenges to achieve a vision – requires positioning in the future, rather than simply reacting to problems

Criteria to define strategic issues:

- Relates to long-term objectives
- Is a priority issue
- Covers broad range of issues

Problem framework

What are the key problems?

What are development, environment and sustainability:

- Problems
- Sensitivities
- Potentials

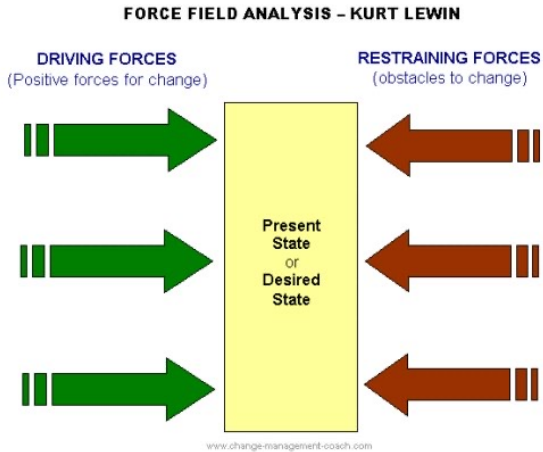
What are the underlying (root) causes of stress and the drivers of change

Explanatory
indicator



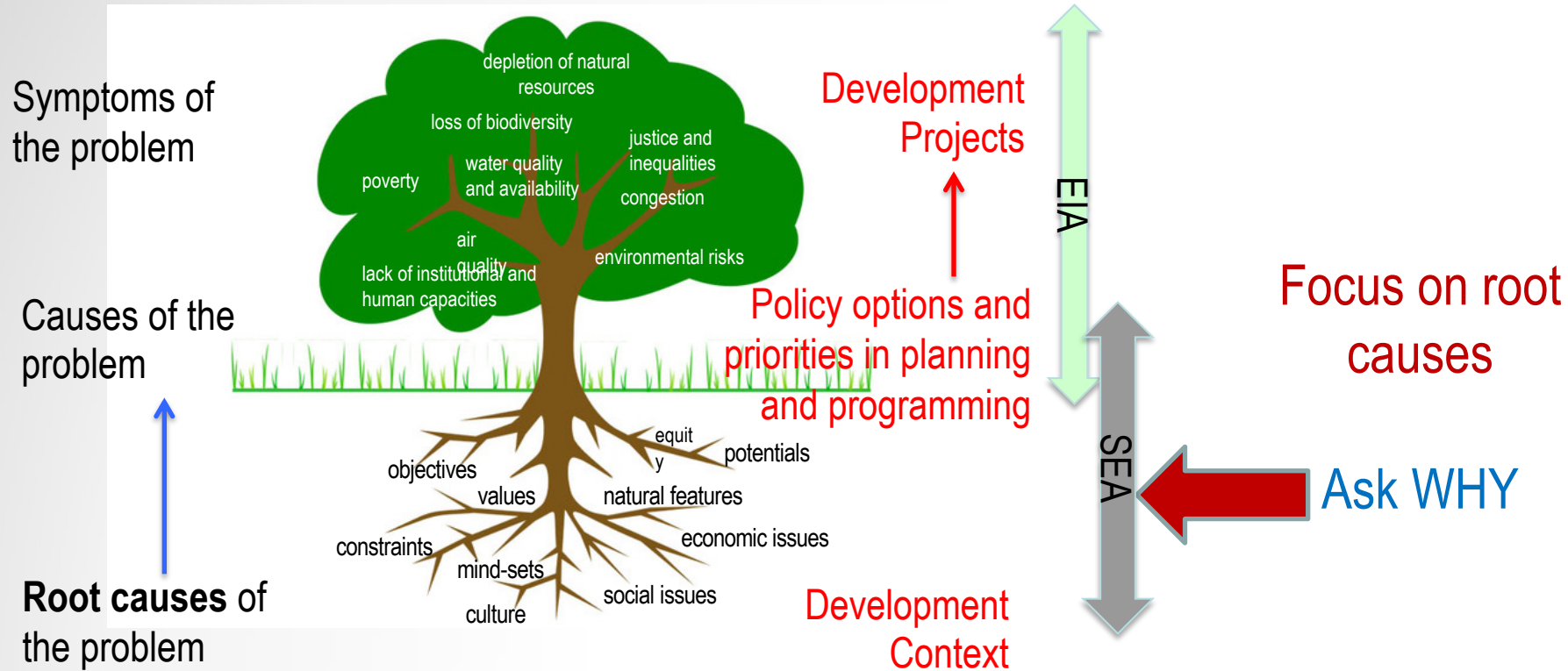
Descriptive indicators

Driving forces - megatrends



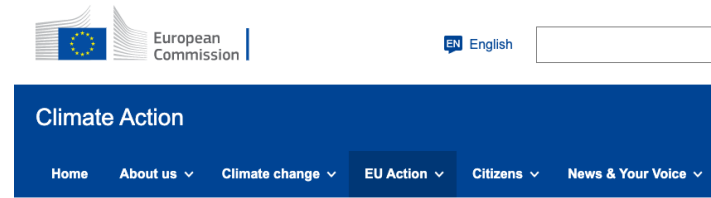
Seek the root causes

Problem tree



Strategic Reference Framework

The macro policy context (agenda for priority setting - directions for the future)
– macro-policies that set the reference for strategic assessment



2030 climate & energy framework

The 2030 climate and energy framework includes EU-wide targets and policy objectives for the period from 2021 to 2030.

Strategic Environmental Assessment (SEA)

As a strategic assessment framework for achieving sustainable development

SDG set the reference for strategic assessment

Questions

- Which SDG / targets are relevant for this strategic assessment?
- How can strategy S contribute to achieving SDG X, Y and Z?



Governance framework



Who are the stakeholders and their linkages?

Engagement for creativity and governance

Institutional analysis – look for intersectoral links and coordination.

Public engagement practices.

Stakeholders' perceptions

Stakeholder analysis tools – analyse power balances

Participatory assessments to prioritize environmental issues

Build a **problem framework** – strategic environmental and sustainability (ES) issues that are a priority in the context (with multi-actor and multi-sector perspectives)

Need to focus on:

- Priorities (key strategies)
- Problems, sensitivities, potentials
- Driving forces (enablers or inhibitors)
- Macro-policies (Strategic reference framework)

To get us to the **Root causes** – the problem, rather than the symptoms

Get focused to identify Critical Decision Factors

FOCUS

Priorities in a broad integrated
sustainability context

Visioning

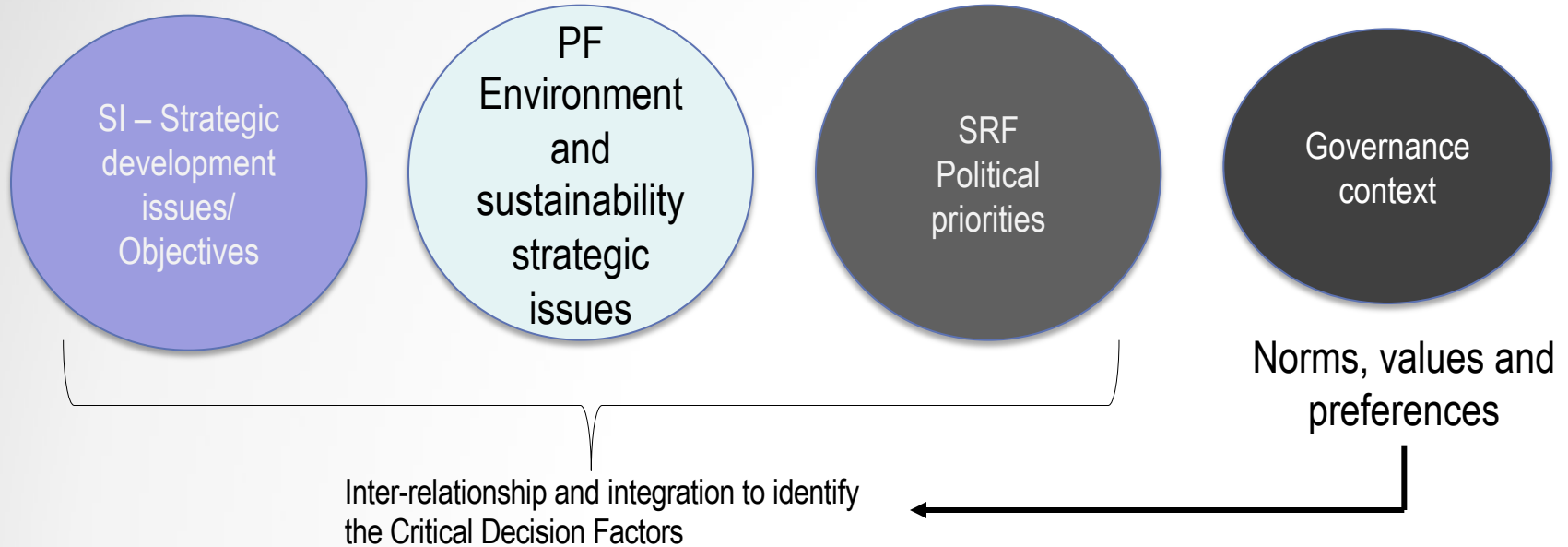
Priority setting

Focus on what is relevant

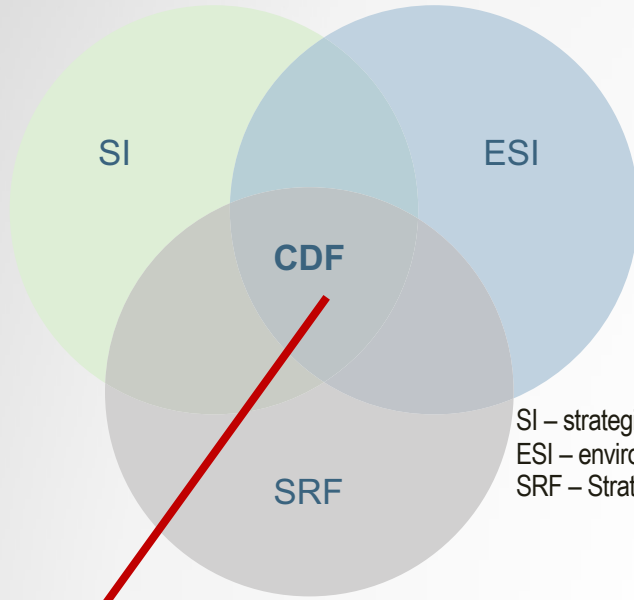
Perceptions – mind-mapping

Critical Decision Factors

Understand the context



Mapping Critical Decision Factors



SI – strategic development issues
ESI – environmental and sustainability issues
SRF – Strategic Reference Framework (macro-policies)

$(3 < CDF < 7)$

CDF – assessment criteria - indicators

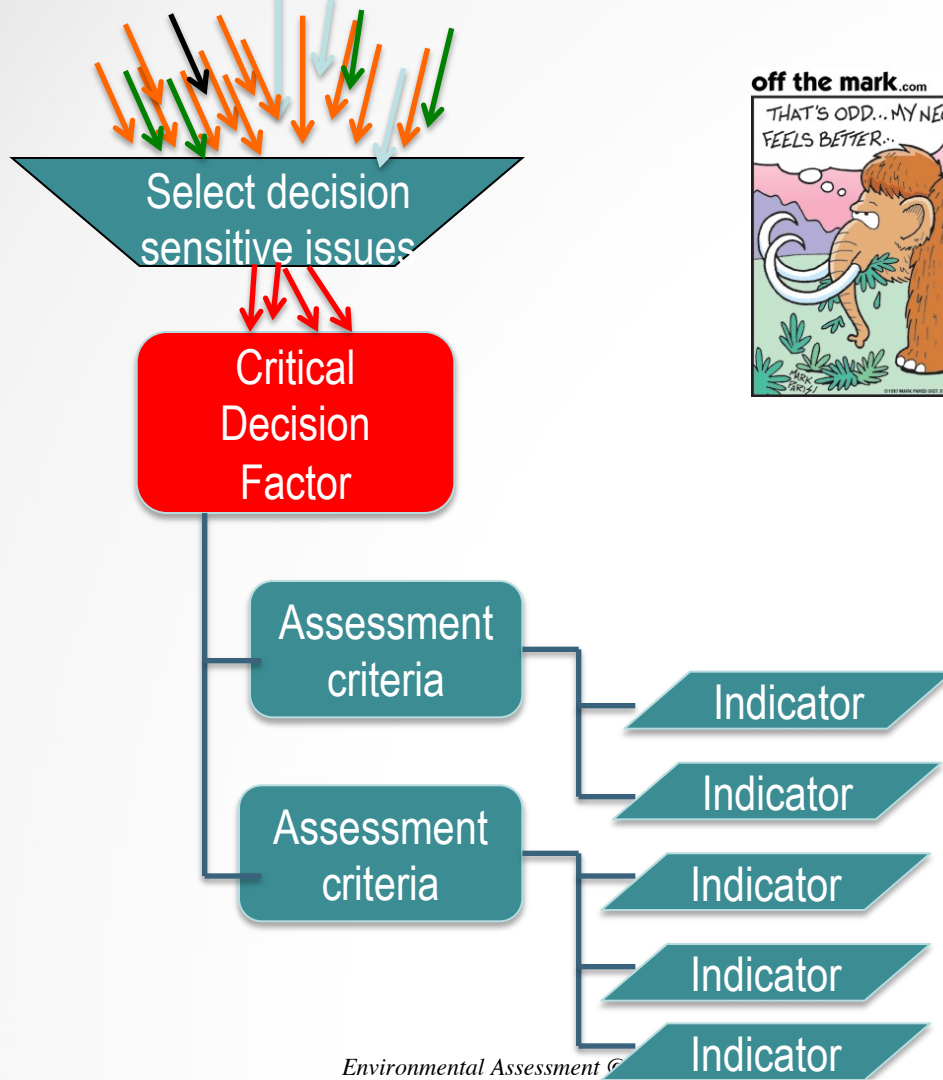
The Diamond



**Get focused and identify
Critical Decision Factors (CDF)**

CDF are integrated/holistic factors that represent priorities for strategic decisions to ensure sustainable outcomes in the long-term

Critical Decision Factors



Mapping CDF and generating the assessment framework

Problem framework (ESI)

Conflicts	Sensitivities	Potentials	Drivers of change

Strategic issues

Strategic reference framework

Macro-policies	Objectives	Targets

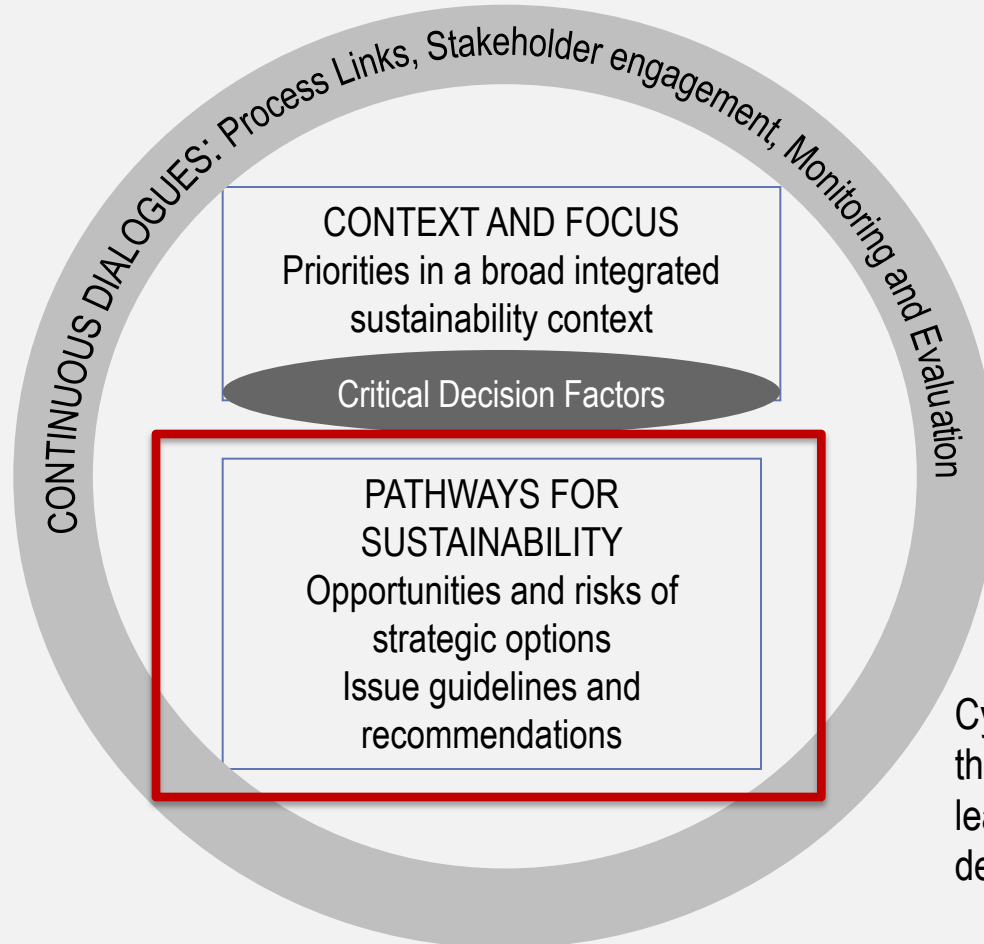
Governance framework

	Stakeholders (relational matrix)	
Roles and responsibilities	links	links

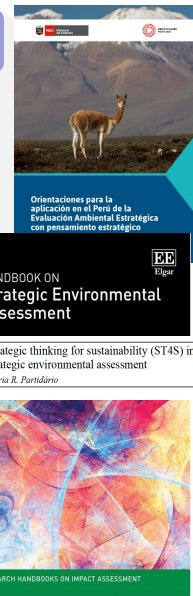
Assessment framework

Critical Decision Factors	Assessment criteria	Indicators

ST4S - Creating contexts for sustainable development



Cyclical re-assessment as the context change and learning takes place with development unfolding



Pathways for sustainability

Use Trend analysis

Identify Strategic Options

Assessment - What may be risks and opportunities of strategic options

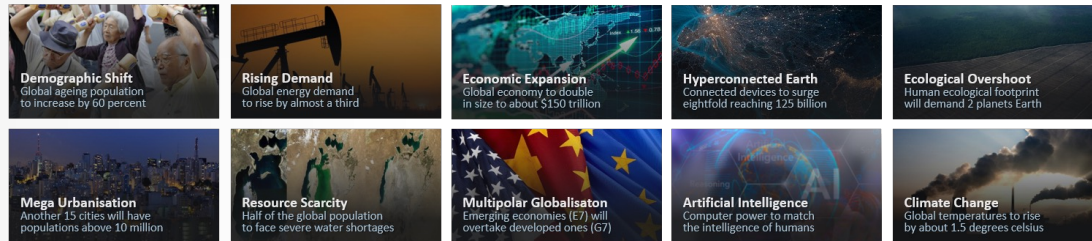
Provide guidelines as orientations (governance, management and monitoring)

Trend Analysis

Trend Analysis

- The collection of facts, over a period of time, to spot a pattern, or trend, in relation to a given theme / situation.
- Trend analysis need to consider the driving forces that may eventually change current trends.
- In trend analysis we observe patterns of change and relate to driving forces.

Top 10 Global Megatrends 2020-2030



Megatrends Watch Institute | Megatrends.Watch

Synthesise

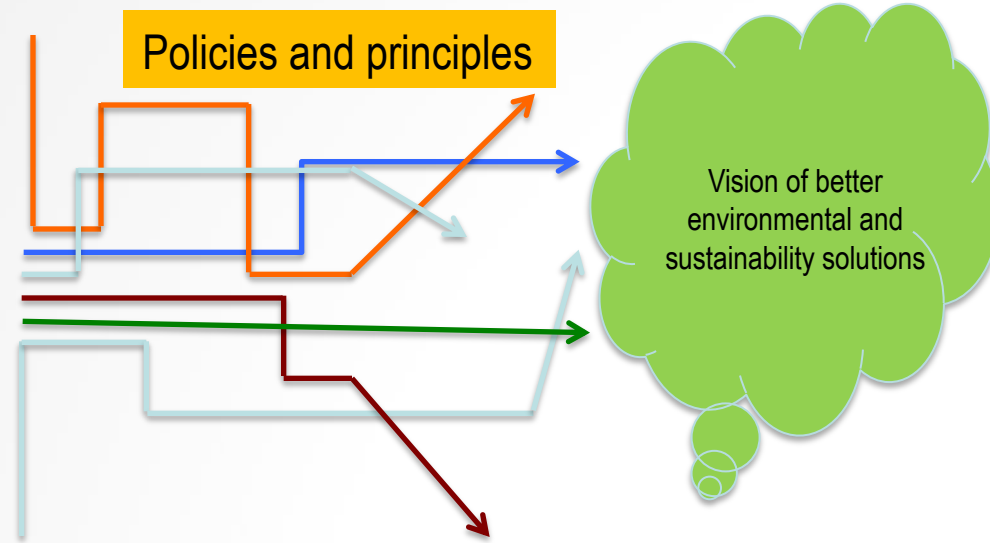
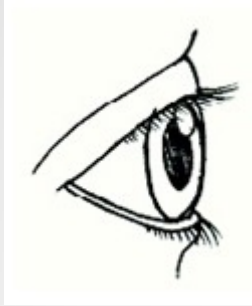
- SWOT
 - Highlights key internal issues (strength and weaknesses) and the key external issues (opportunities and threats) that should be considered in the planning or in the assessment process

	Positive	Negative
Present & internal issues	Strengths	Weaknesses
Future & external issues	Opportunity	Threats

- Stand-out critical trends: Those that MUST be read

Strategic Options

Strategic options



Optional pathways to enable strategic objectives,
towards sustainability

(Partidário, 2007, 2012)

Opportunities and Risks



Assess conditions for development

Assess benefits to the natural, social and cultural values and what this means in relation to sustainable development processes

Indicate the direction of a trend for a specific pathway



Template 9 – Identification of strategic options (SO)

(purpose: identify strategic option per policy area, or planning theme (e.g. mobility options, options in use of renewables))

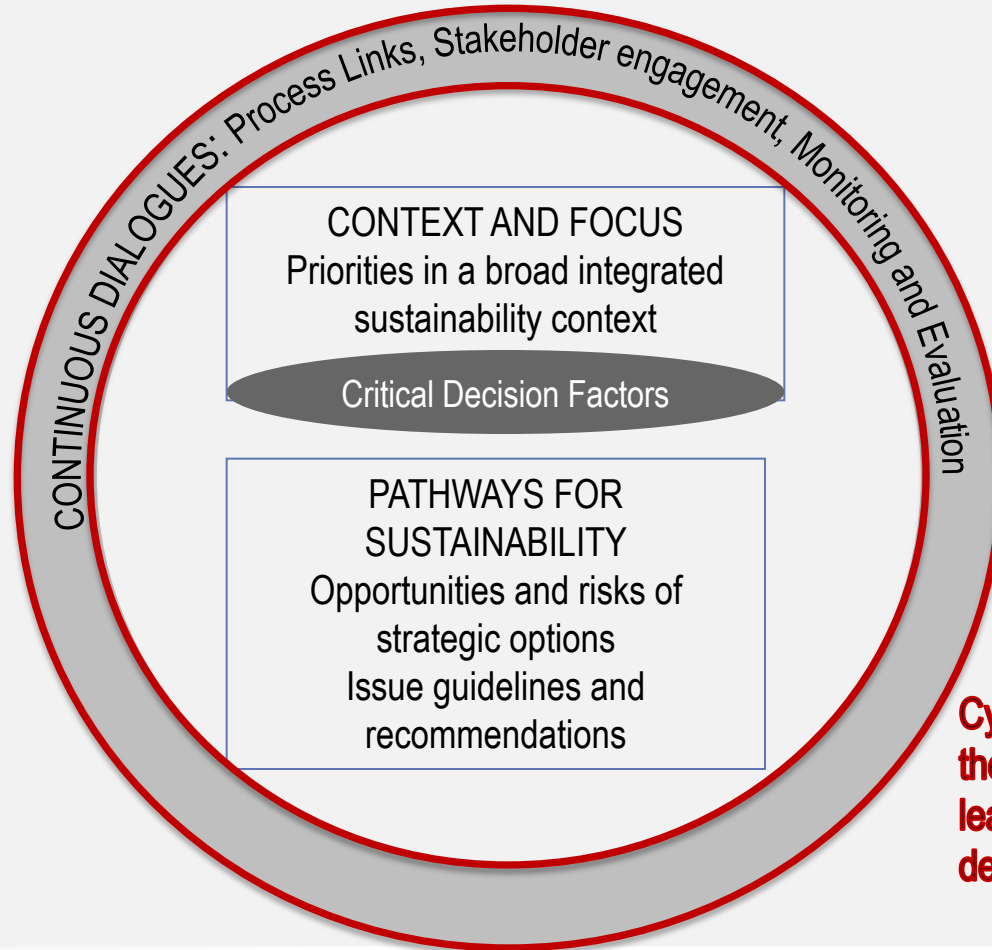
Strategic options		
Policy areas	Name	Description
Policy 1	SO1.1	
	SO1.2	
Policy 2	SO2.1	
	SO2.2	
	SO2.3	

Template 10 – Assessment of strategic options (SO)

(purpose: assess strategic options per CDF, using the assessment criteria; for assessment it is recommendable to use symbols, such as arrows or smiles, not numbers or plus and minus signs)

		CDF#1		
Policy areas	Criteria SO	Criteria#1	Criteria #2	Criteria #3
Policy 1	SO1.1			
	SO1.2			
Policy 2	SO2.1			
	SO2.2			

ST4S - Creating contexts for sustainable development

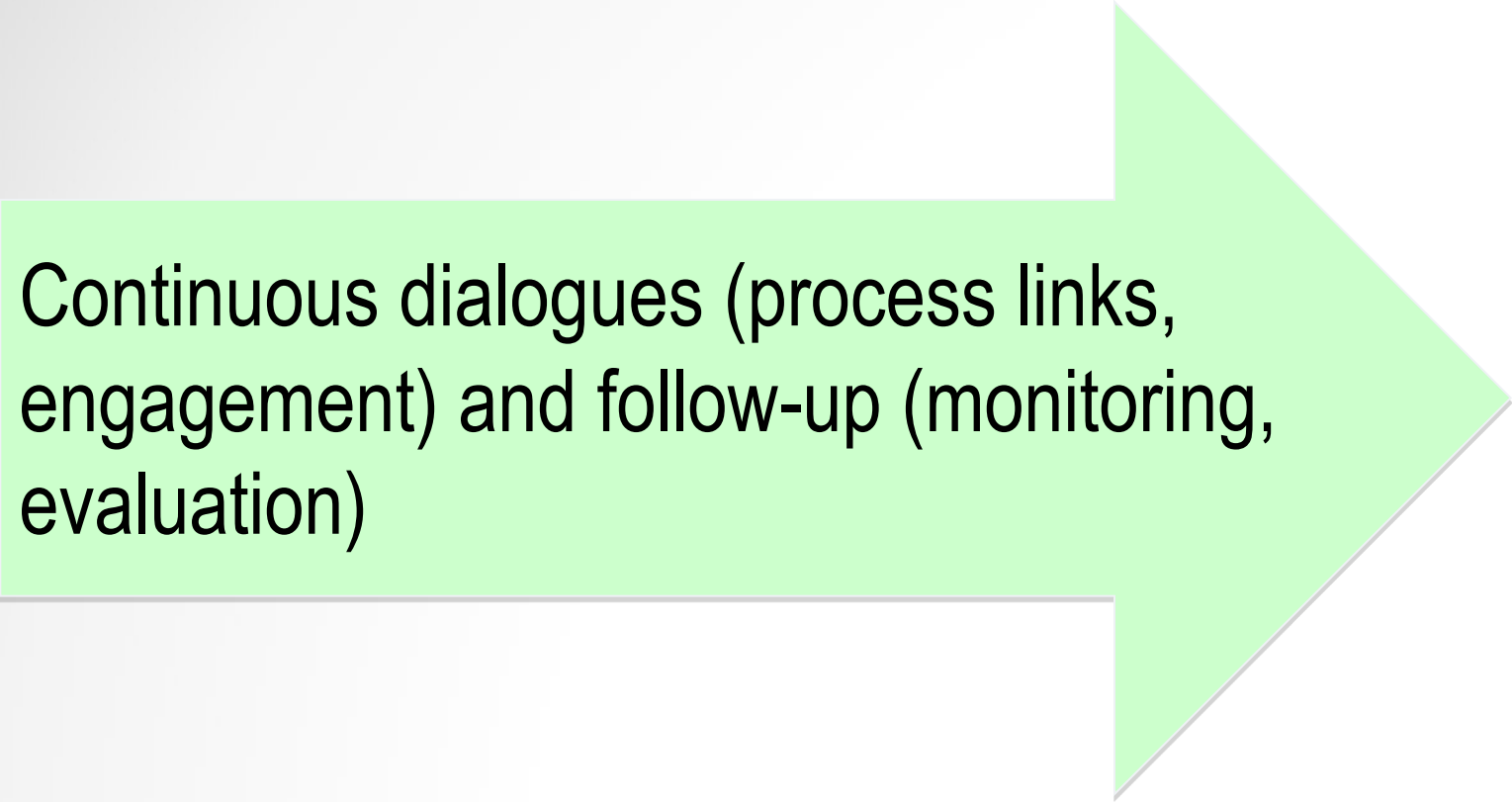


Cyclical re-assessment as the context change and learning takes place with development unfolding



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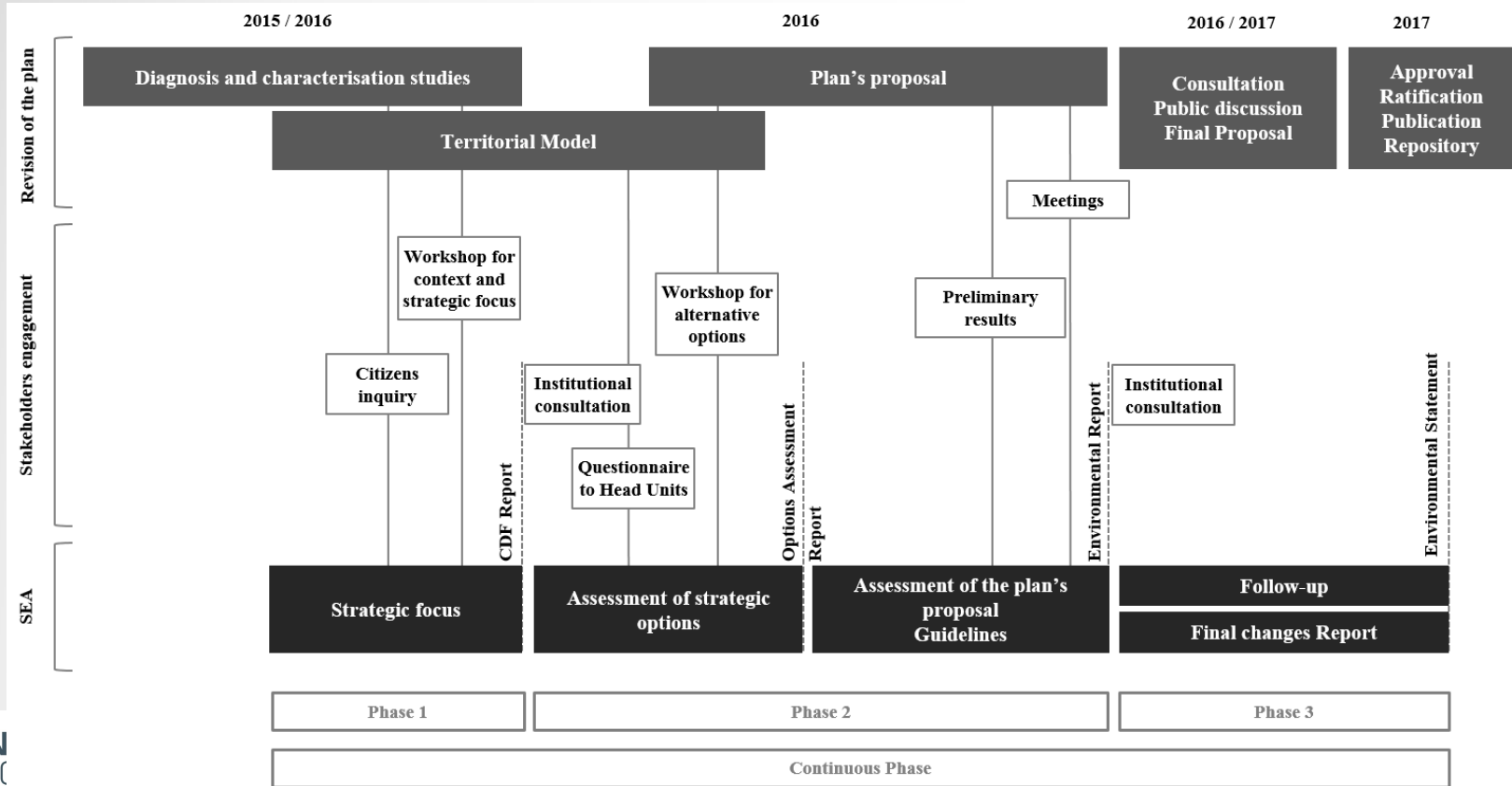


Continuous dialogues (process links, engagement) and follow-up (monitoring, evaluation)

Processes links means

Link terminology / concepts between PPP and SEA
Knowledge sharing and Information
Identifying decision points (decision windows)
Stakeholders engagement for both PPP and SEA
Communication strategy for both
Reporting (aligned)
Timeline (aligned)

Articulation of processes



Engagement for creativity and governance

Techniques

Institutional analysis – look for intersectoral links and coordination.

Stakeholder analysis tools (power vs interest)

Stakeholders' perceptions

Public engagement practices

Participatory assessments to prioritize issues

(Partidário, 2007, 2012)

Follow-up: monitoring and evaluation

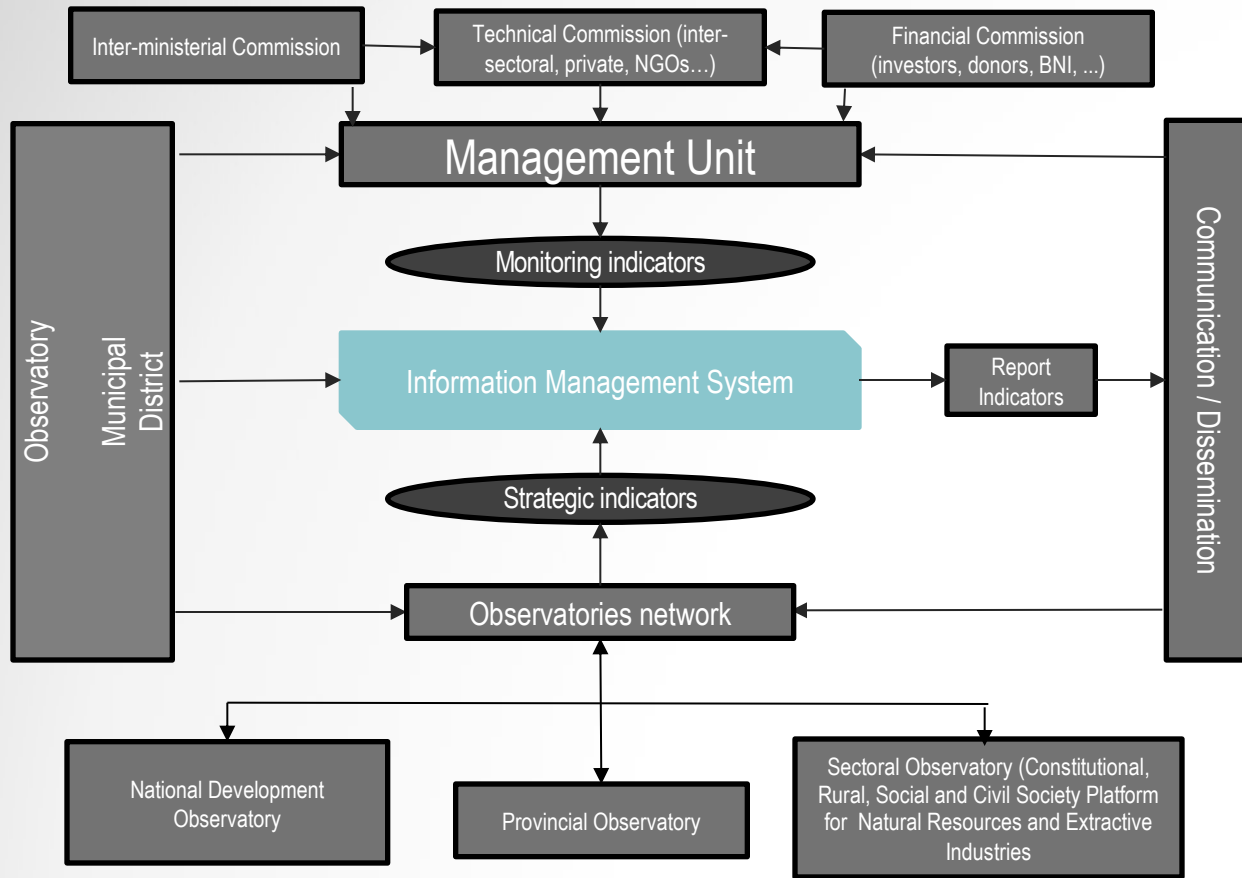
Techniques

Set mechanisms (institutional and technical) for continuous control through monitoring and evaluation

Create a database system to be systematically updated

Identify status as well risk or opportunities indicators

(Partidário, 2007, 2012)



Follow-up:
monitoring and
evaluation