

Impact assessment of scale choices

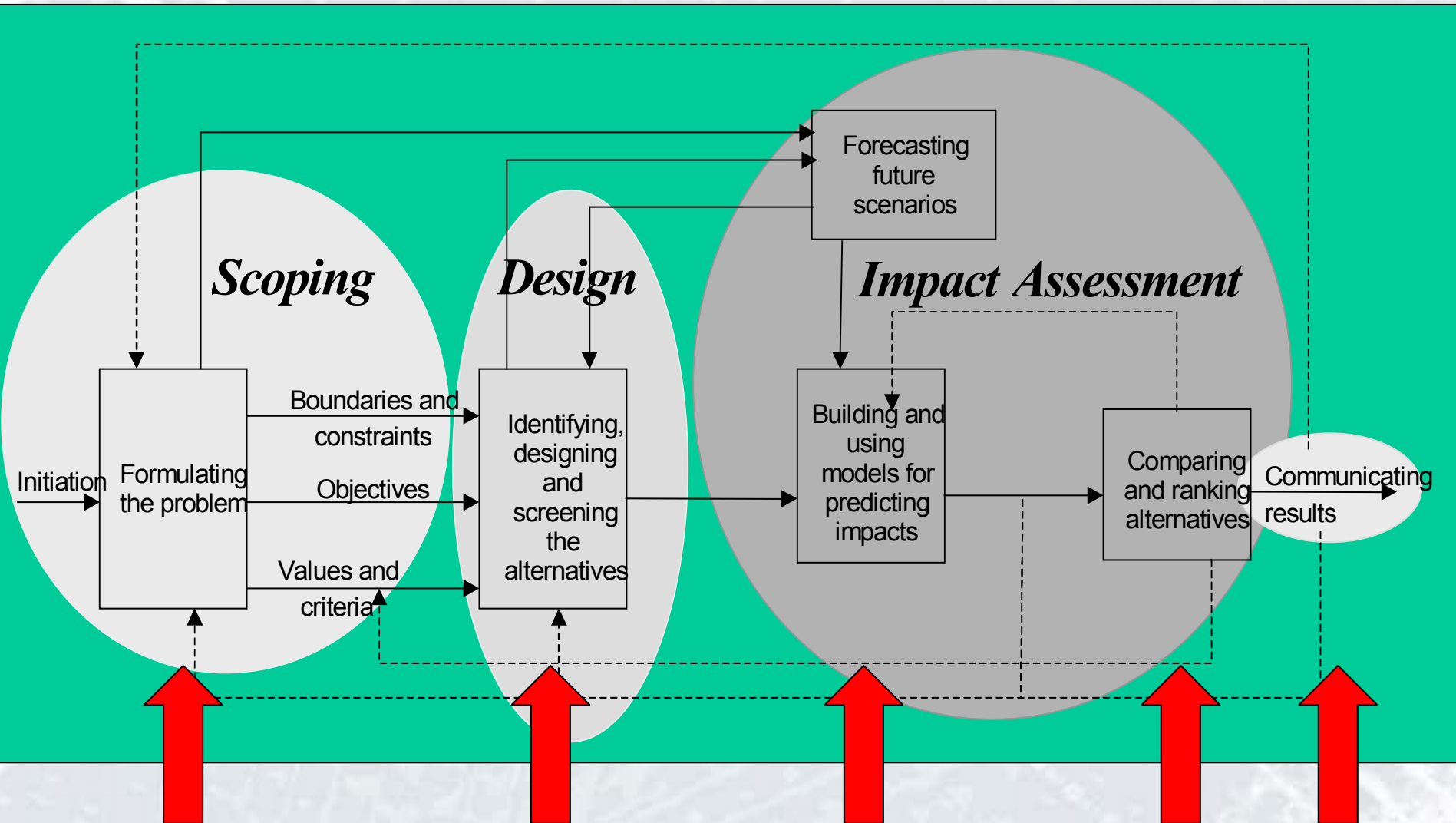
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Scale choices

- Selection of spatial scale
- Selection of time scale
- Selection of level of aggregation

EIA study/Policy analysis study



Long Term Vision study of The Scheldt Estuary



Port of
Antwerp



Objectives

- **Resolve issue of deepening the navigation channel**
- **Bilateral long term vision building between Belgium and the Netherlands**
- **Stimulate joint collaboration**

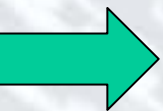
Some important aspects of study

- **Economic (accessibility)**
- **Environmental (unique ecosystem)**
- **Morphological (tidal channels)**

Selected spatial scale = Scheldt Estuary

Why?

“accurate boundaries of the system”



**The system boundaries are set from a
*morphological perspective***

- **Other possible perspectives:**
 - **Economic**
 - **Ecological**

Economic perspective on scale

- Scale of the economic system does not coincide with the scale of the water system



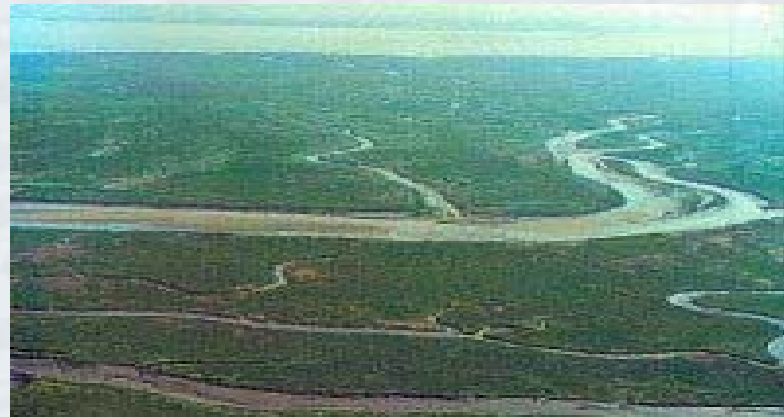
- Deepening the navigation channel will have effects on a larger scale than the Scheldt itself (f.e. port of Rotterdam, Zeebrugge)

Preferential scale:

1. Western European region
2. At least: inclusion of sea ports of Belgium

Ecological perspective on scale

- Water quality issues can not be taken into account
 - they do not fit the selected scale
 - they play in the entire river basin: point sources of pollution mainly located upstream



- Preferential scale: Scheldt river basin

Consequences

For the study:

- Deepening prominently on the agenda
- Limiting other policy options
- Other issues fade into the background

Aftermath:

- No internal issue trade-offs feasible
- The Dutch have no interest in the progress of this project

Impact table

Process Impacts	Scheldt Estuary	Including Zeebrugge	Scheldt River basin
Number of policy options	-	++	0
Costs & time needed for study	0	>	>>
Progress of the study	++	--	0
Possibilities for trade off	--	+	++

1. Different perspectives on scale choices

- **political versus scientific**
- **ecological versus economic**

2. No ideal scale

- **Scale is always a trade-off**
- **Several dilemmas playing a role in the trade-off:**
 - long term vs short term
 - large scale vs small scale

3. Scale choices do have a large impact

- On the problems addressed
- On the solutions/ policy options to be found
- On the impacts to be evaluated

➔ **Therefore scale has a strategic value and is not politically neutral**