



The Sigmaplan: policy-integration and stakeholder management

1/07/2014

ir. Maarten Jans commissioned by ir. Wim Dauwe
Waterways and Sea Canal (W&Z)
Sea Scheldt Department

NWRM – workshop 1.07.2014

Agenda

- **Waterways & Sea Canal**
- **the Sigmaplan**
Introduction
- **Policy-integration and preparation**
Safety, Nature and Economic growth for Flanders
- **Stakeholder management**
Participation and public support

NWRM – workshop 1.07.2014

Agenda

- **Waterways & Sea Canal**
- **the Sigmaplan**
Introduction
- **Policy-integration and preparation**
Safety, Nature and Economic growth for Flanders
- **Stakeholder management**
Participation and public support

Waterways & Sea Canal

Flemish Government agency (Belgium)

- **Stimulate multifunctional use of the waterways**
- **Ensure safety and manage flood risk (Sigmaplan)**
- **Manage living on and around the waterway**
 - Stimulate recreation, tourism and nature experiences
 - Enhance the link between water & city



NWRM – workshop 1.07.2014

Agenda

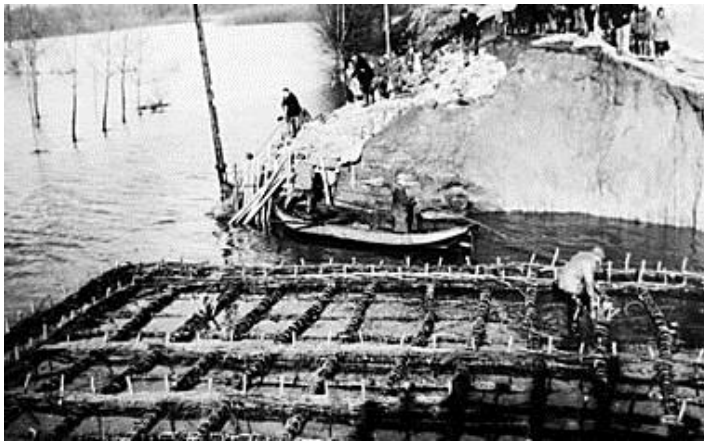
- **Waterways & Sea Canal**
- **the Sigmaplan**
Introduction
- **Policy-integration and preparation**
Safety, Nature and Economic growth for Flanders
- **Stakeholder management**
Participation and public support

the Sigmaplan Why?



the Sigmaplan Why?

Wintam



Baasrode



Wintam



Antwerpen



the Sigmaplan What?

- **Sigmaplan 1976**
 - Higher and stronger dikes: 512 km
 - 13 Flood Control Areas
 - Tidal Barrier

the Sigmaplan What?

- **Sigmaplan 1976**

- Higher and stronger dikes: 512 km
- 13 Flood Control Areas
- Tidal Barrier

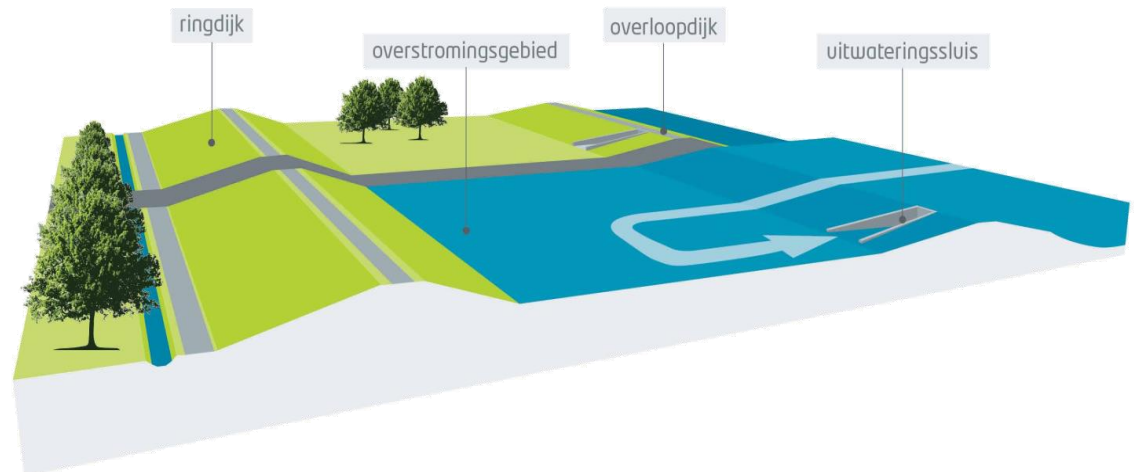
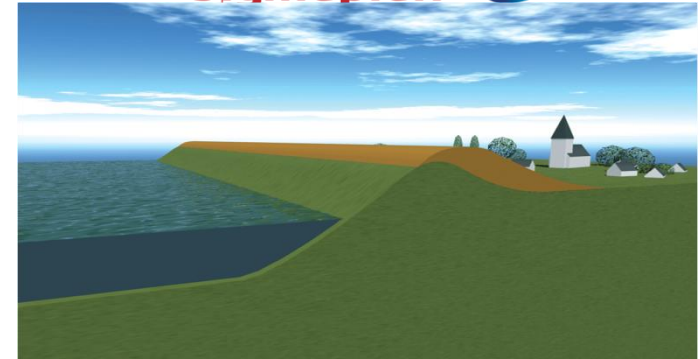


the Sigmaplan What?

■ Sigmaplan 1976

- Higher and stronger dikes: 512 km
- 13 Flood Control Areas
- Tidal Barrier

Sigmaplan

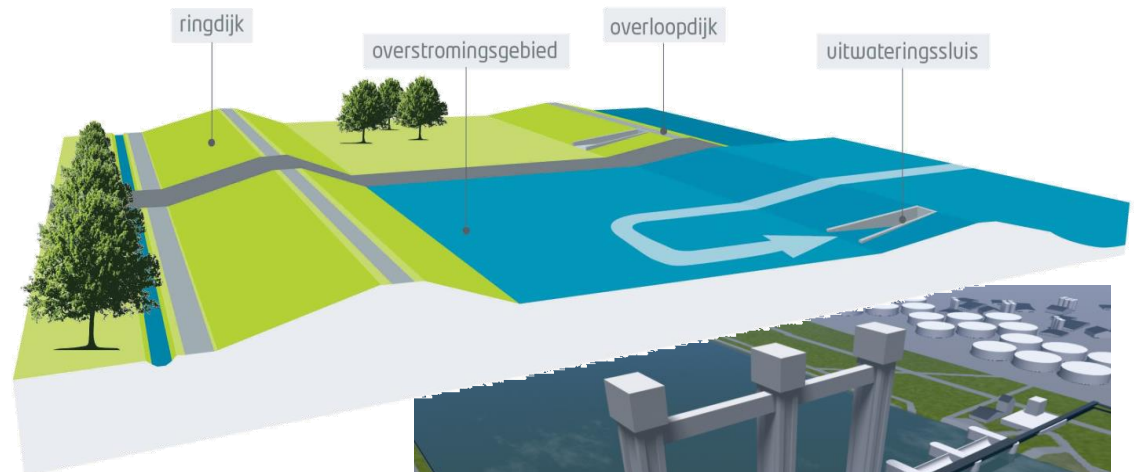
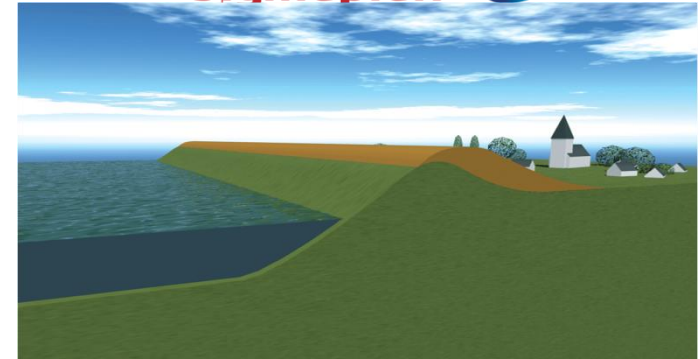


the Sigmaplan What?

■ Sigmaplan 1976

- Higher and stronger dikes: 512 km
- 13 Flood Control Areas
- Tidal Barrier

Sigmaplan



NWRM – workshop 1.07.2014

Agenda

- **Waterways & Sea Canal**
- **the Sigmaplan**
Introduction
- **Policy-integration and preparation**
Safety, Nature and Economic growth for Flanders
- **Stakeholder management**
Participation and public support

Policy integration and preparation

Safety, Nature and Economic growth for Flanders

■ Updated Sigmaplan dd. 2005, necessity:

- Endangered Aquatic and marine fauna and flora (natura 2000 – habitat directive)
- Reassessment of flood risk (climate change – spatial planning)
- Economic value of the river Scheldt



Policy integration and preparation

Safety, Nature and Economic growth for Flanders

project areas of the Sigma Plan



- 1976 (start) – 2005 (actualisation) – 2030 (completion)
- 500+ kilometers river dykes
- 5,000 hectares flood control and nature areas

NWRM – workshop 1.07.2014

Agenda

- **Waterways & Sea Canal**
- **the Sigmaplan**
Introduction
- **Policy-integration and preparation**
Safety, Nature and Economic growth for Flanders
- **Stakeholder management**
Participation and public support

Stakeholder management

Stakeholders

- **Multiple goals, several win-win's, many stakeholders**
 - Optimizing **Safety**: waterway managers, local residents, ...
 - Developing **natural** quality: environmental organisations, ...
 - **Economy**: port companies, farmers, boatmen...
 - **Recreation** : cyclists, hikers, canoeists, pleasure craft operators
 - **Overall**: resident, local municipalities (politicians)
- **Difficult choices need to be made**
Room for the river
= less space for humans
need to expropriate or purchase soils
and develop compensation measures

Stakeholder management

Different levels

- **Program level**

- Planning Phase
- Implementation Phase

- **Project level**

- Planning Phase
- Construction Phase

Stakeholder management

Different levels

- **Program level**

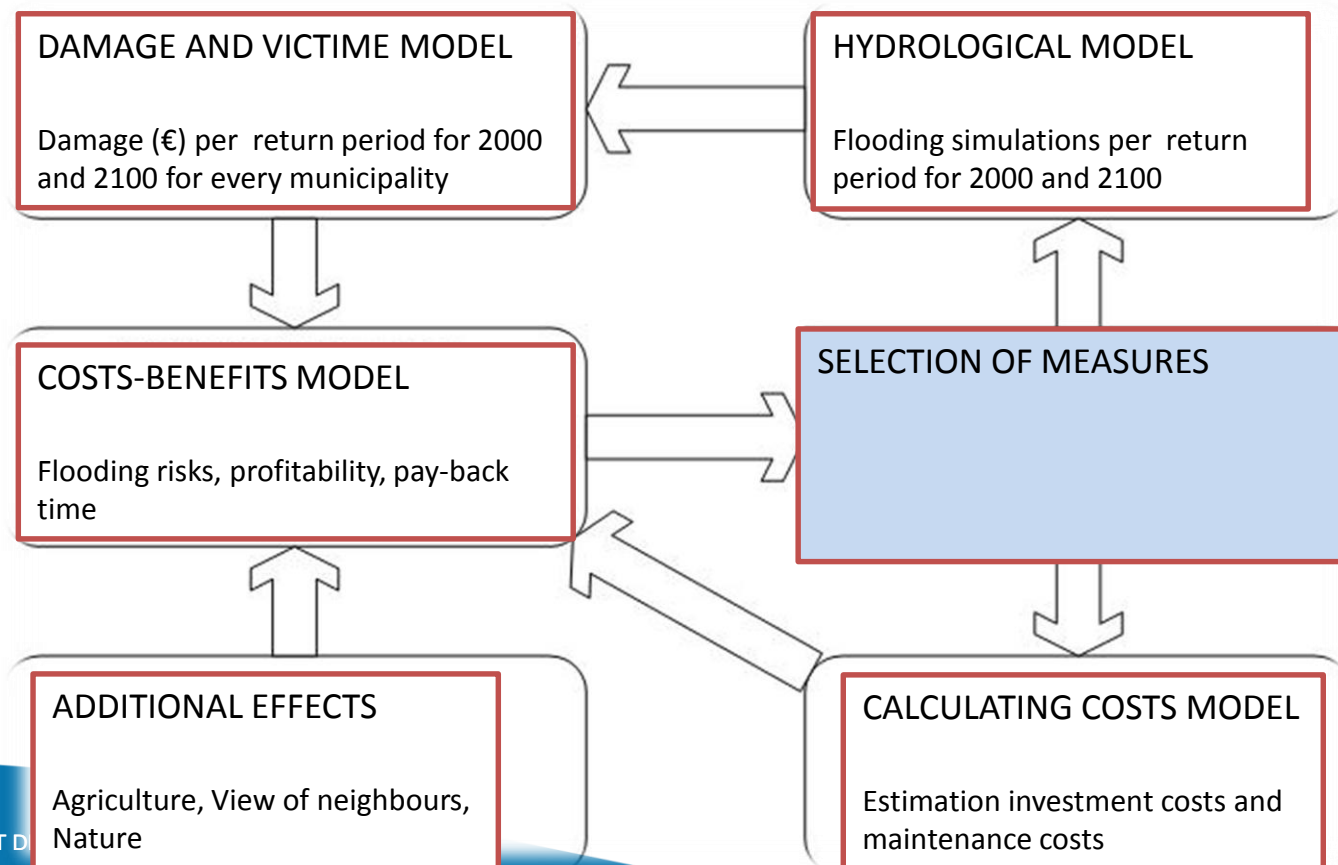
- Planning Phase
- Implementation Phase

- **Project level**

- Planning Phase
- Construction Phase

Stakeholder management planning phase

comprehensive studies



Stakeholder management

planning phase

- **Intensive consultation before en during decision making**
 - *government departments*
 - *civil society organisations*
 - *Agricultural*
 - *Nature*
 - *(recreation)*
 - *Politicians*
 - *...*
 - *Last phase: via environmental assessment report*
 - *Local municipalities, residents*
- ➔ **Resulted in optimisations of the plan + support on program level (= macro)**

Stakeholder management

Different levels

- **Program level**

- Planning Phase
- Implementation Phase

- **Project level**

- Planning Phase
- Construction Phase

Stakeholder management

Different levels

- **Program level**

- Planning Phase
- Implementation Phase

- **Project level**

- Planning Phase
- Construction Phase

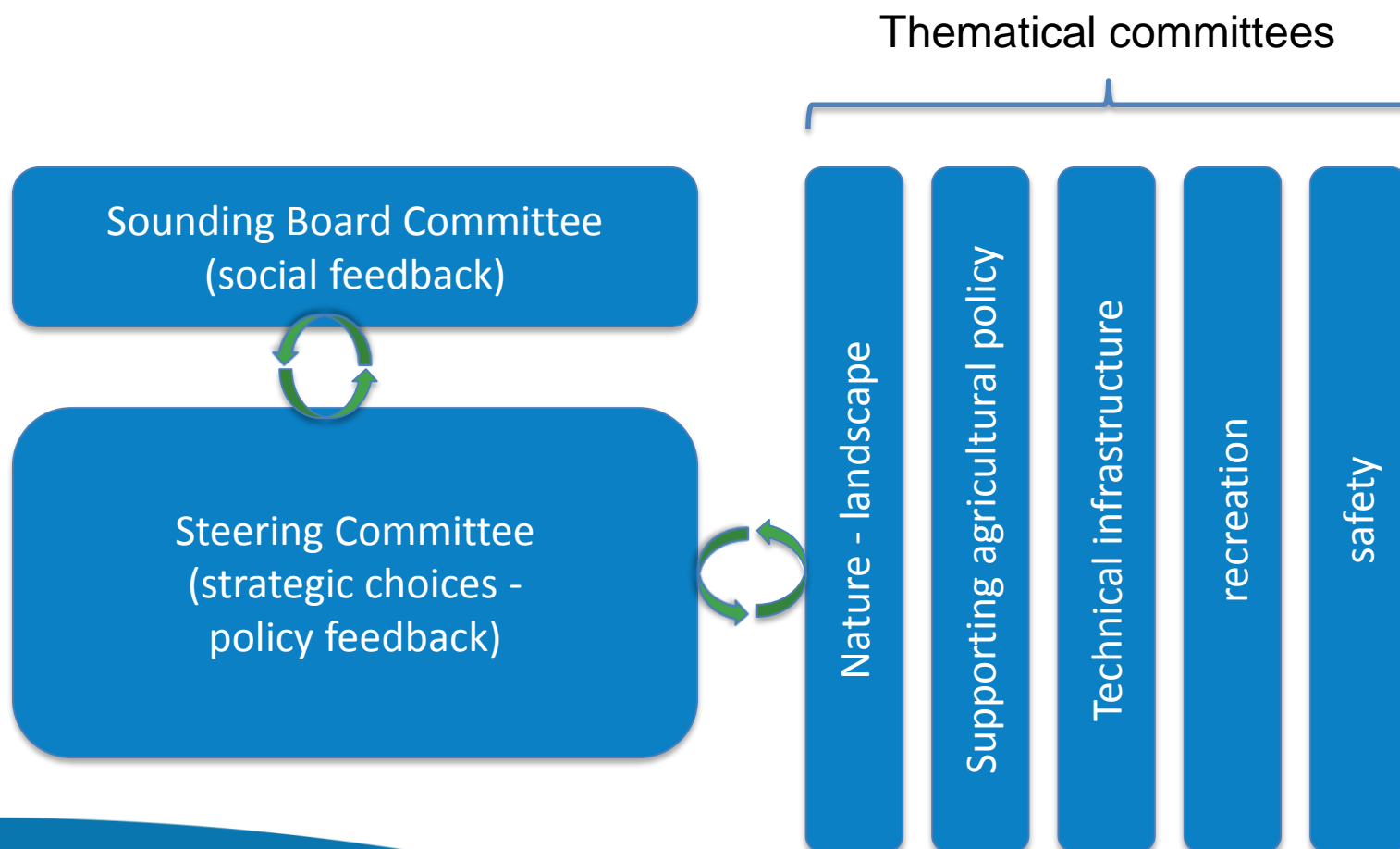
Stakeholder management

Program Level - Implementaion Phase



Stakeholder management

Program Level - Implementaion Phase



Stakeholder management

Different levels

- **Program level**

- Planning Phase
- Implementation Phase

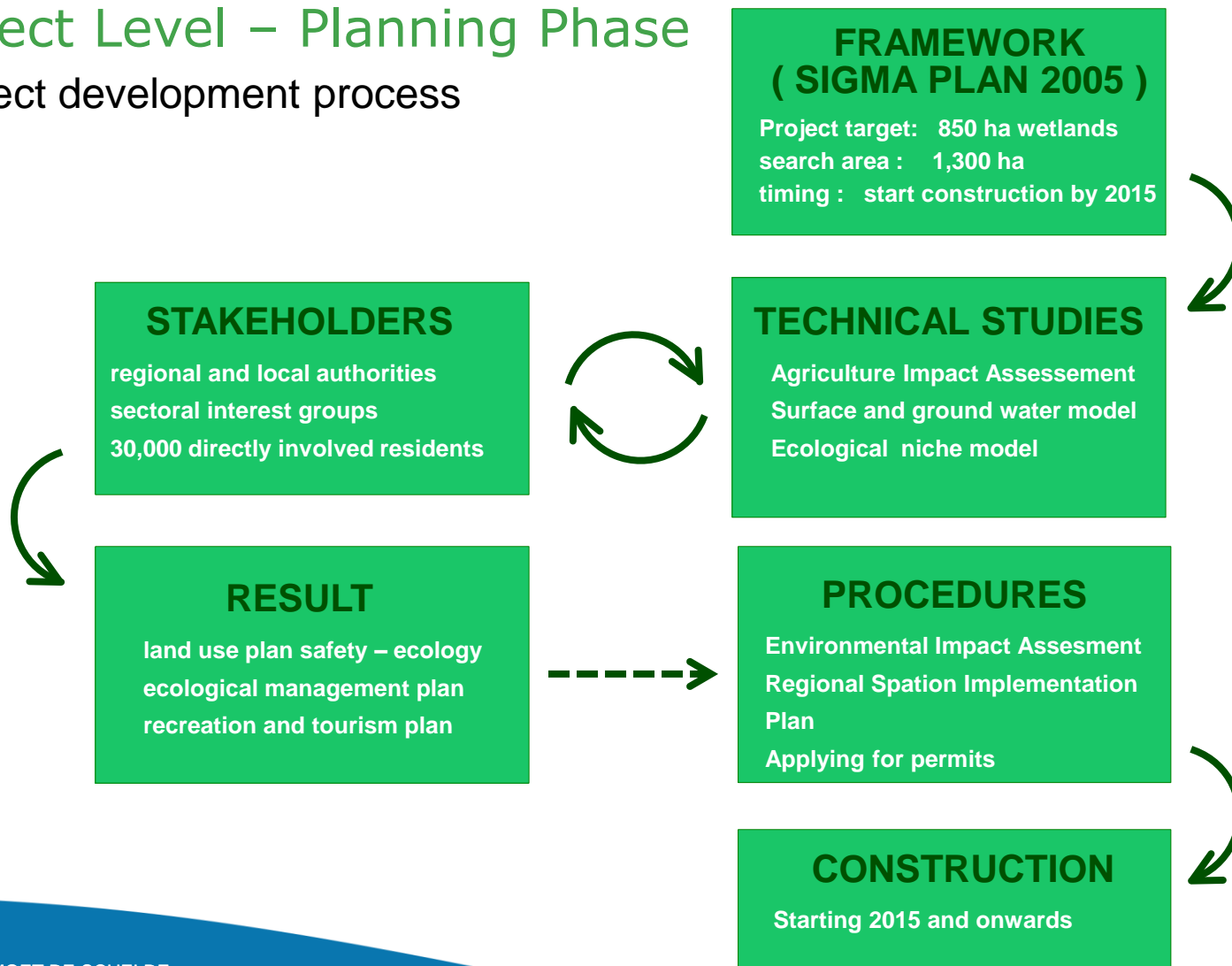
- **Project level**

- Planning Phase
- Construction Phase

Stakeholder management

Project Level – Planning Phase

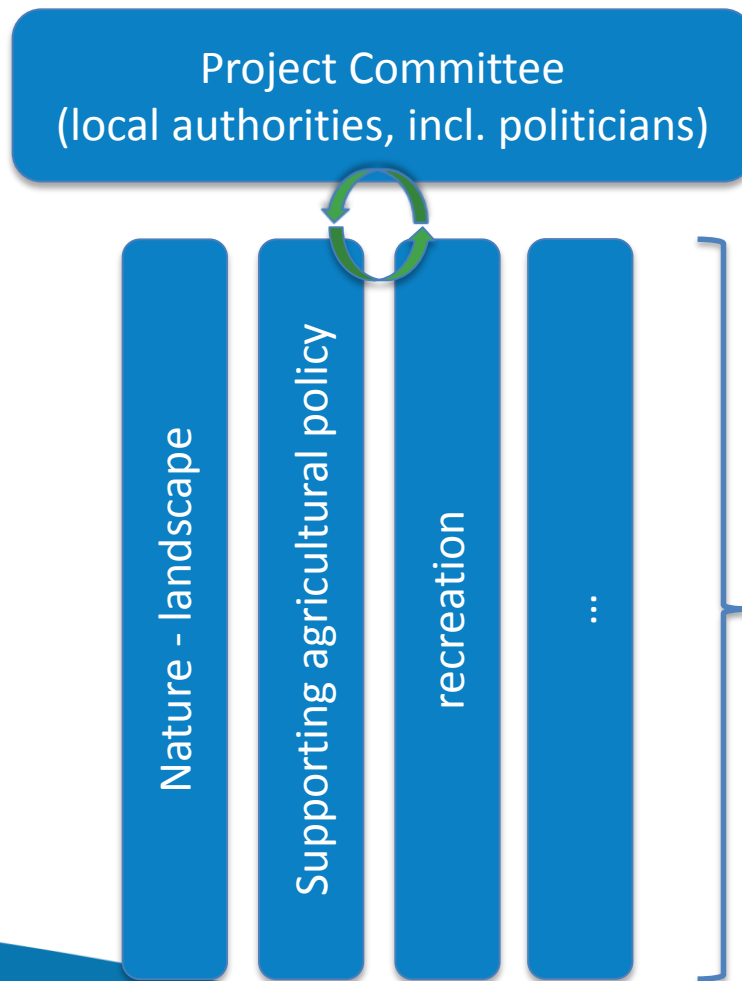
Project development process



Stakeholder management

Project Level – Planning & Implementation Phase

Communication
Management:



Thematical committees

Stakeholder management

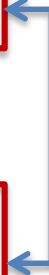
Different levels

- **Program level**

- Planning Phase
- Implementation Phase

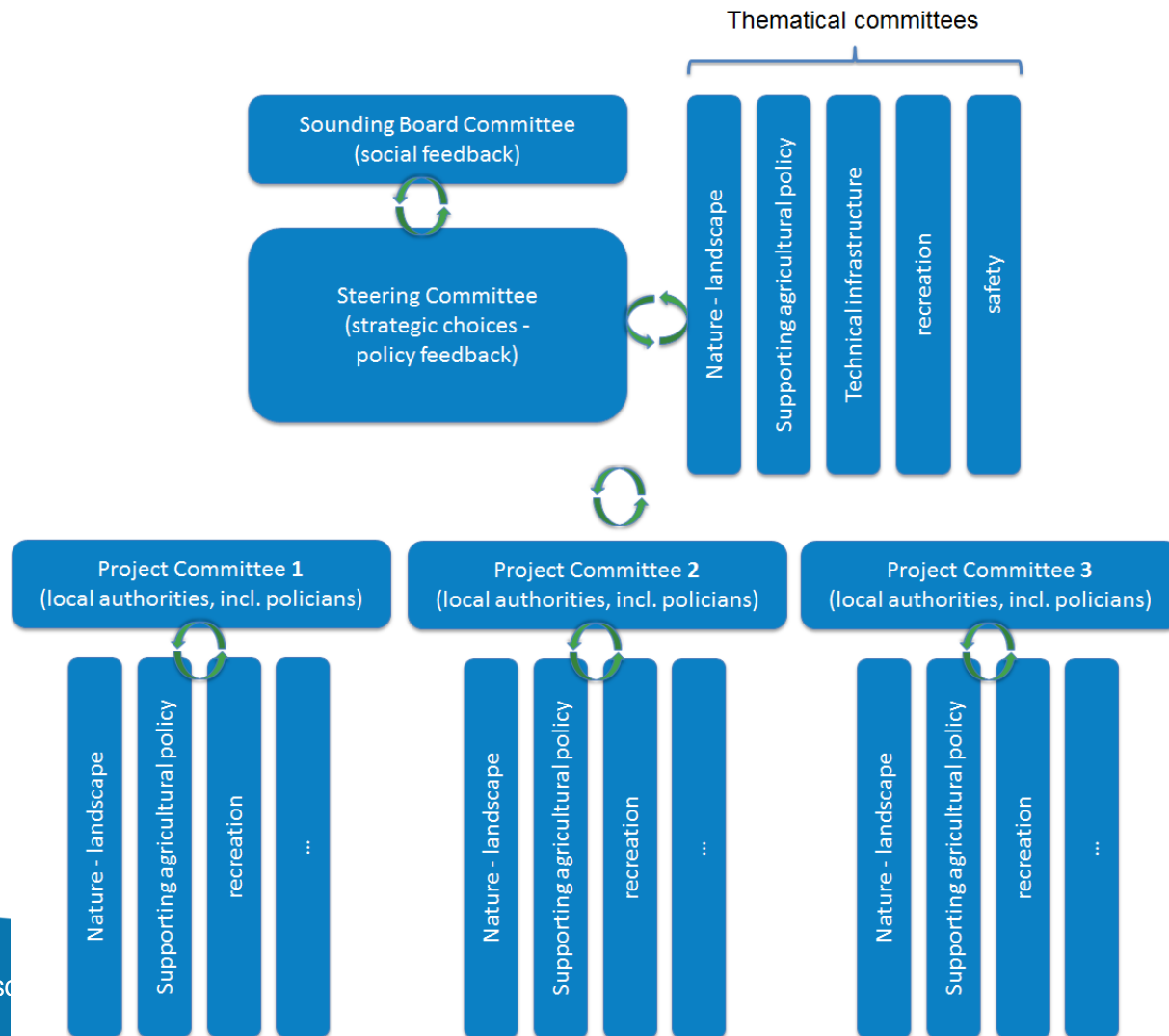
- **Project level**

- Planning Phase
- Construction Phase



Stakeholder management

Program Level - Implementaion Phase



Conclusion key elements

▪ **Firm basis**

- extensive multidisciplinary system studies
- legal policy decision

▪ **Uniform process lay-out**

- preparation
- consultation
- formal procedures
- realisation

▪ **Main goal**

- Safety & Nature in Scheldt estuary
- robust and self-sustaining ecosystem

➔ With minimal social impact & maximal social support



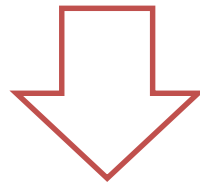
The Sigmaplan: policy-integration and stakeholder management

1/07/2014

ir. Maarten Jans commissioned by ir. Wim Dauwe
Waterways and Sea Canal (W&Z)
Sea Scheldt Department

Policy integration and preparation more sustainable approach

- **Deeper insight in the estuary's many functions**
- **Integral water management**
 - Respect the various functions of the water system;
 - Avoid negative consequences for the environment;
 - Seek added value and synergies



ROOM FOR THE RIVER APPROACH

- Moving dykes landward (de-poldering)
- More complex 'controlled reduces tides' (GGG)
- New river areas (new alignment of the embankment)

Policy integration and preparation

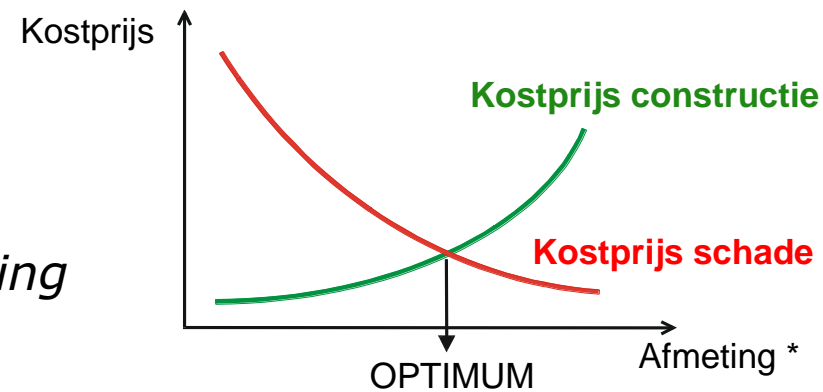
Safety, Nature and Economic growth for Flanders

■ PAST

- Decisions based on high water levels;
- Basic rule: water can be suppressed;
 - taller, stronger dykes
 - flood control areas

■ 2005

- Decisions based on potential damage (costs – benefits);
- 'Floods are also part of the Scheldt';
- Safety vision: *Better protection by giving the river more room to breathe*



* Afmetingen waterbeheersingsinfrastructuur