

Module 3: International Experiences and Case Studies

Dutch SEA Case Studies: West Netherlands Spatial Plan

Rob Verheem

The Netherlands EIA Commission

Basic Dutch SEA Approach

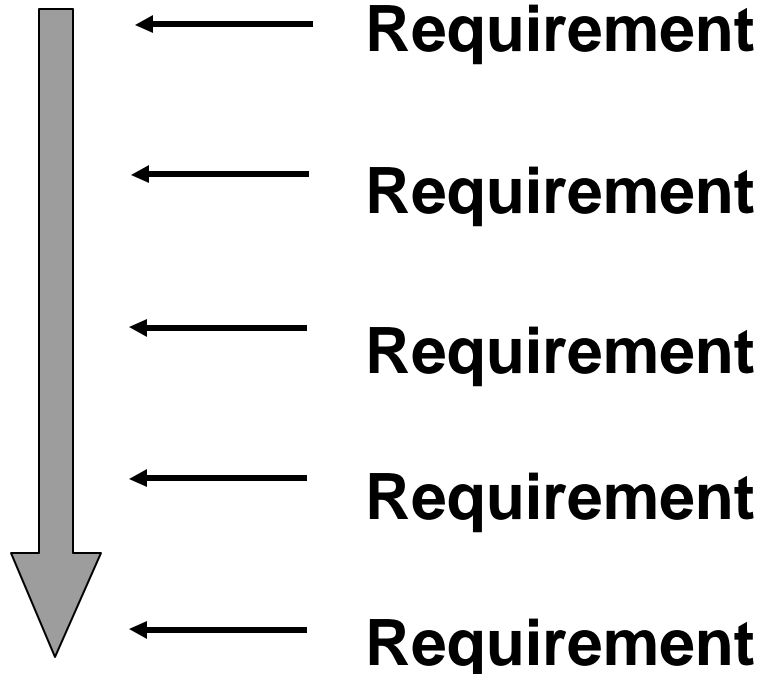
SEA to safeguard ‘good governance’:

- **To involve all relevant stakeholders**
- **To make planning transparent**
- **To have the best information possible**

SEA improves both planning process and the information used in this process

SEA Improves the Planning Process

SEA is not a separate process



Main Requirements in Dutch SEA

Participation requirements:

- All stakeholders involved in both scoping & reviewing

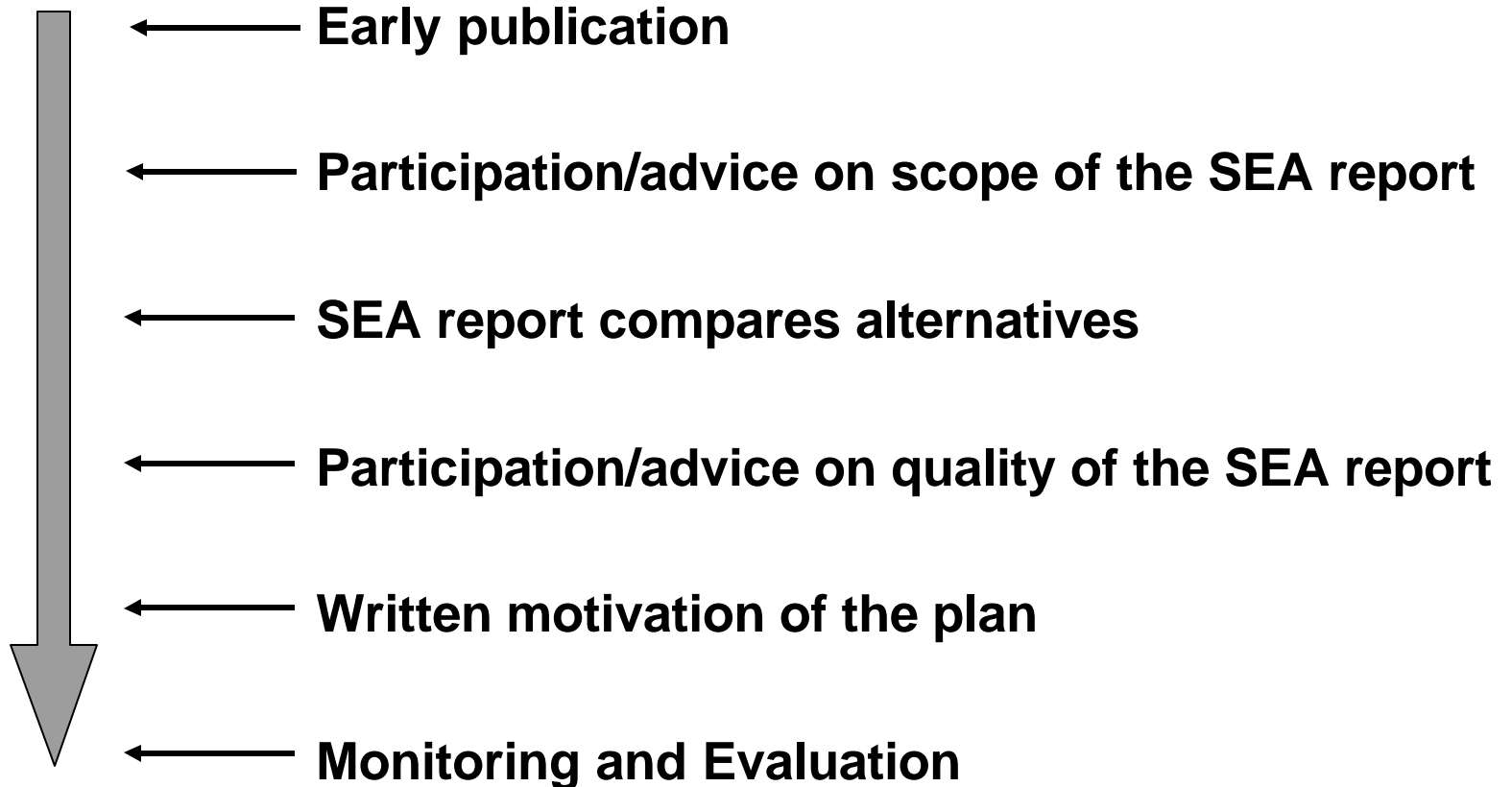
Transparency requirements:

- Start of the plan process is published
- Alternatives are compared in the SEA report
- Decisions are motivated in the final plan

Information requirements:

- Independent quality control in scoping & reviewing
- Monitoring and evaluation mandatory

SEA in the Planning Process

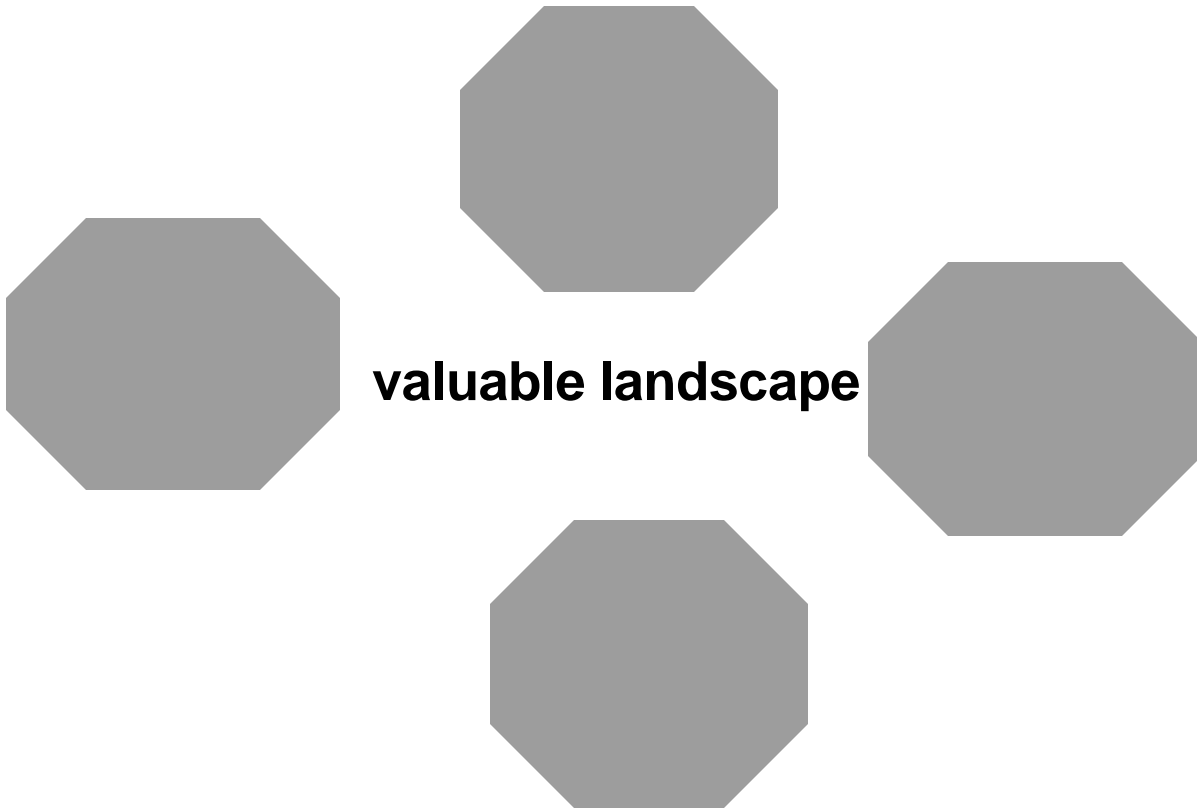


West Netherlands Spatial Plan

Objective of plan:

- **To stimulate economic development**
- **Four cities molded into one metropolitan area**
- **Through infrastructure and urban development**

Existing Situation



Main Elements of the Plan

To make choices in:

- **Type and location of new high speed railway system between cities**
- **Location of new urban and industrial areas**
- **Location of new 'green' and 'water' areas**

Purpose of SEA

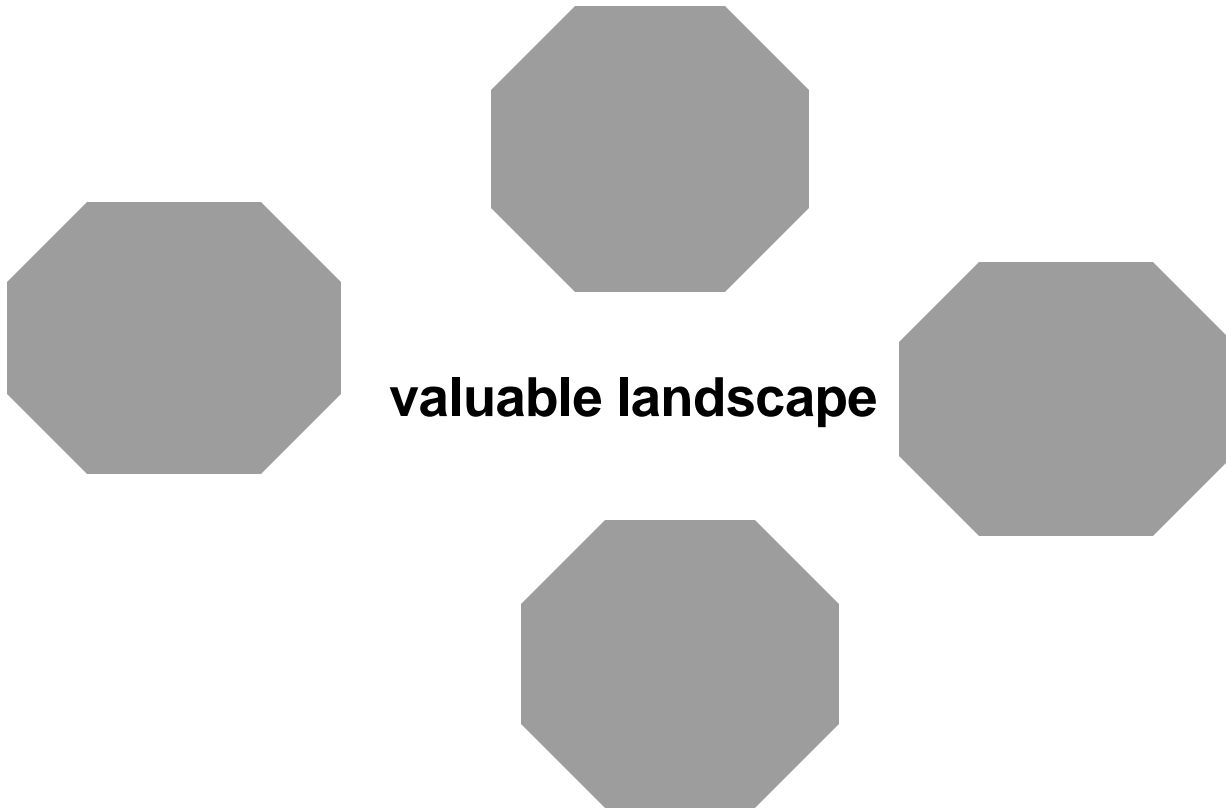
- **To show range of potential options**
- **Integrated assessment of options:
environmental, social, economic**

Alternatives

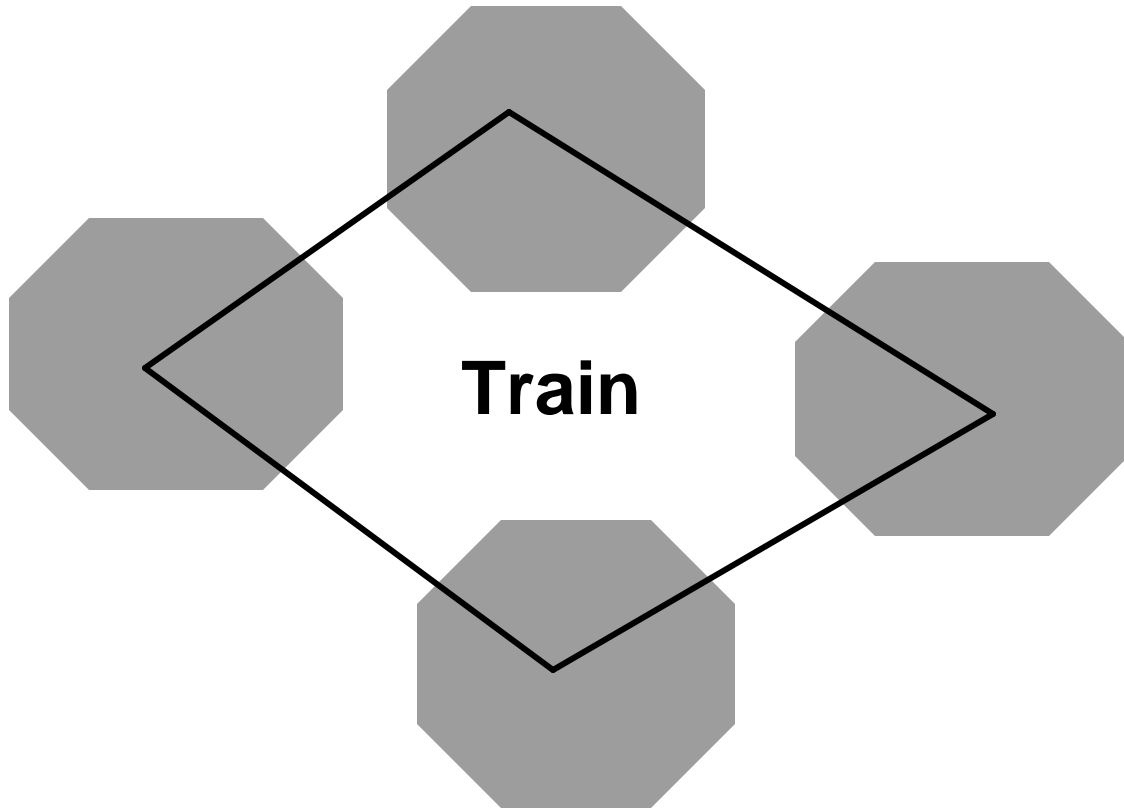
Developed in three steps:

- **First: design of green & water areas**
- **Then: design of infrastructure**
- **Finally: design of housing & industry area**

Existing Situation

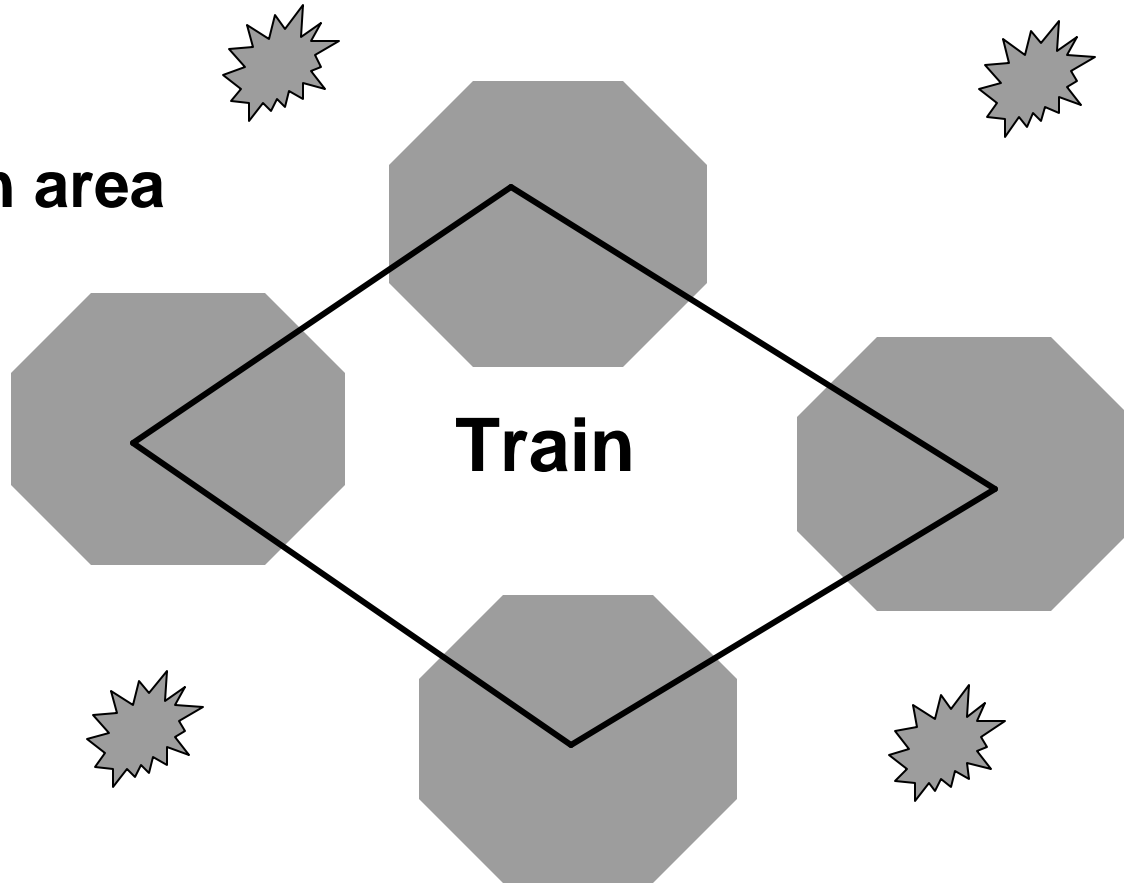


Alternative 1

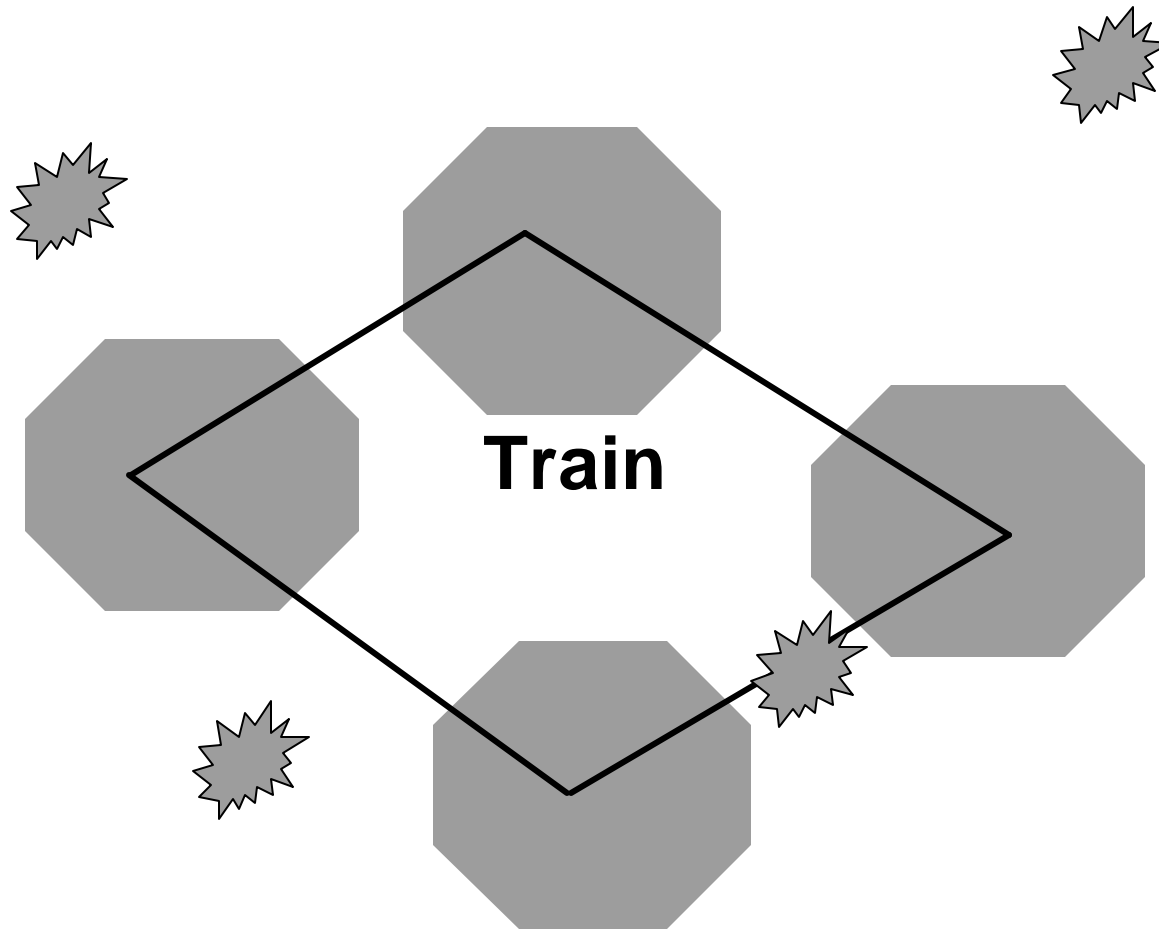


Alternative 1

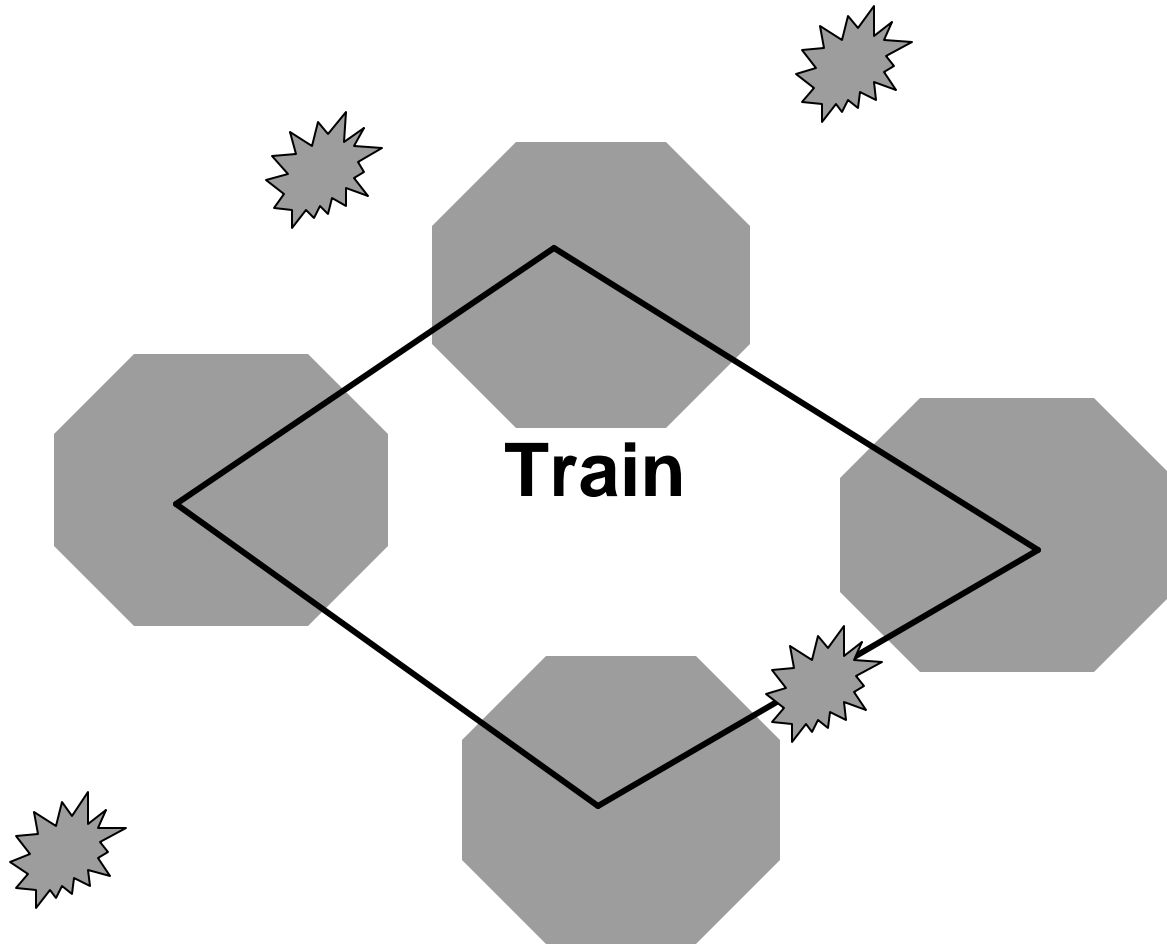
New urban area



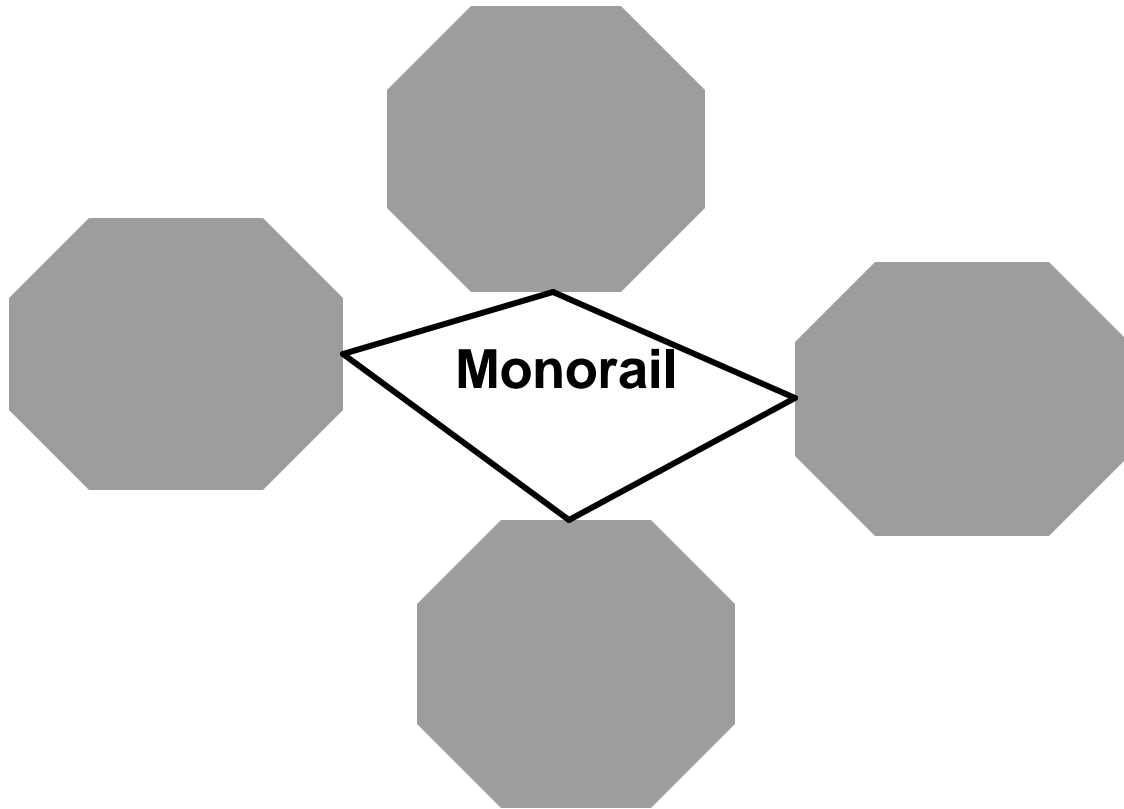
Alternative 2



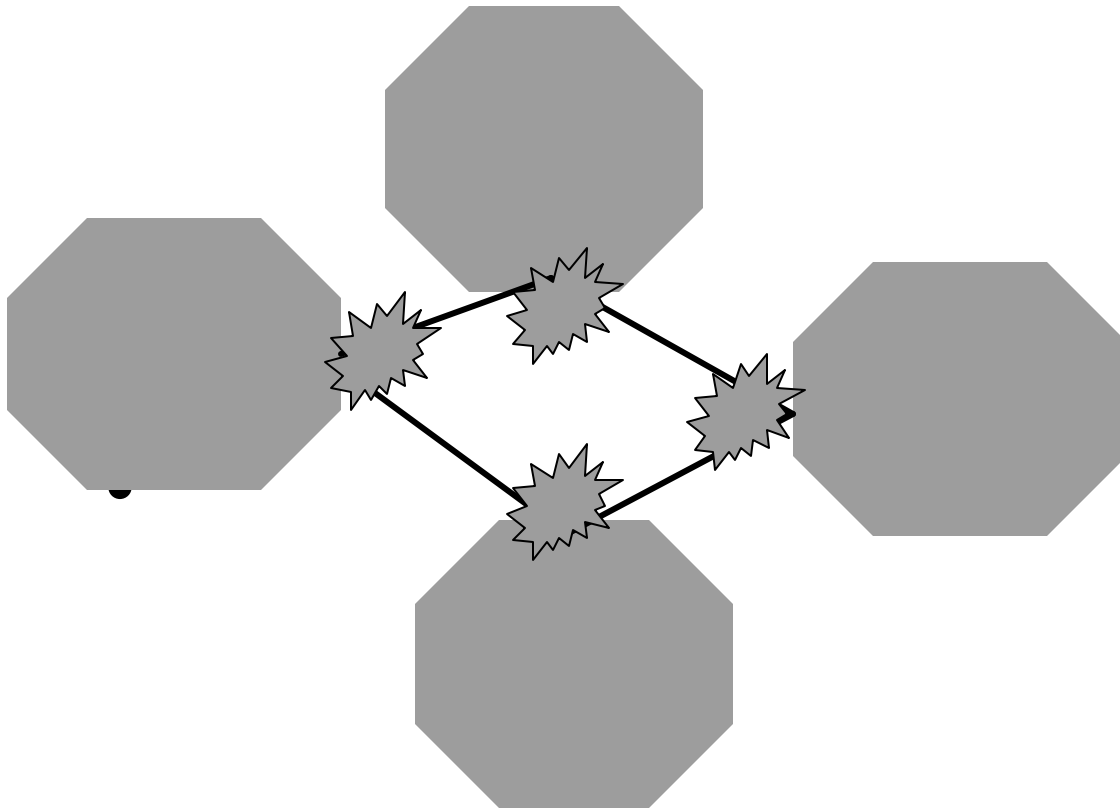
Alternative 3



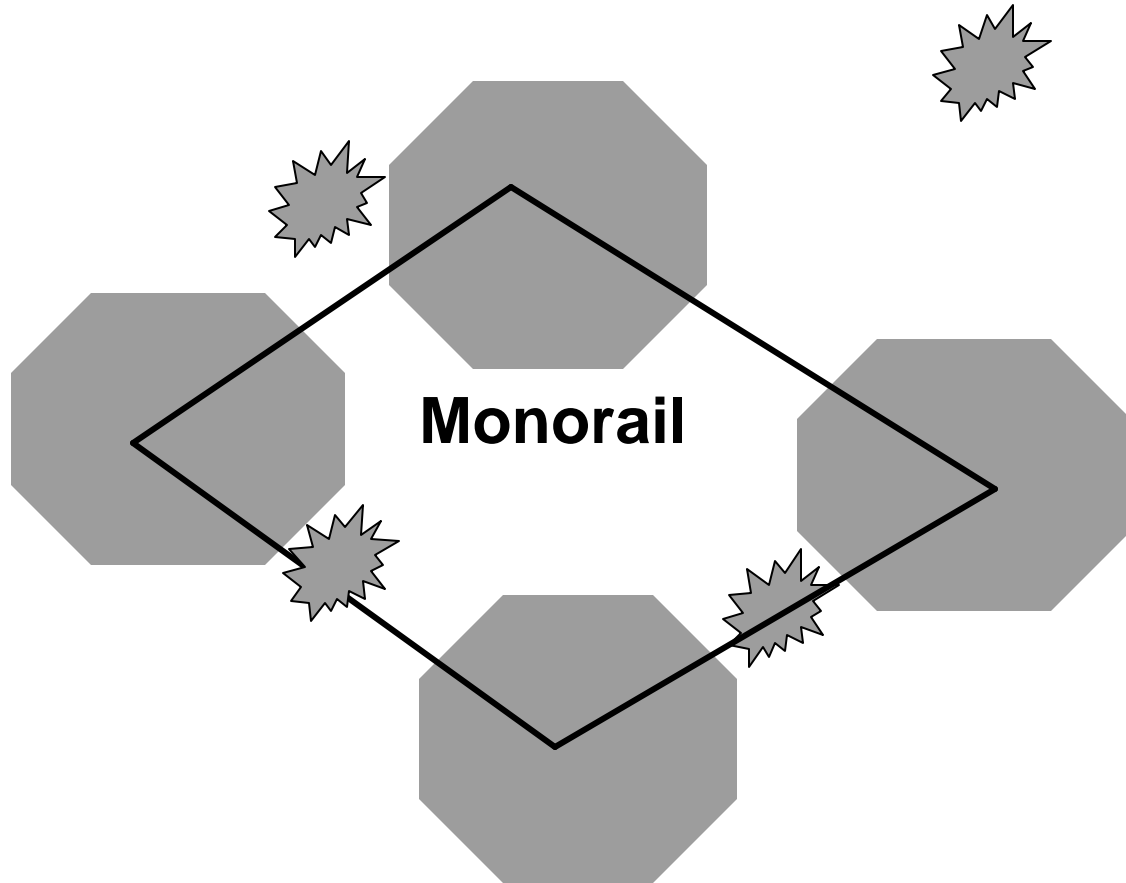
Alternative 4



Alternative 4



Alternative 5



Methodology

Step 1: identification of issues to examine

- **Spatial diversity**
- **Economic & social efficiency**
- **Cultural diversity**
- **Social justice**
- **Sustainability**
- **Attractiveness & human scale**
- **Flexibility & robustness**
- **Costs & transport effects**

Indicators

Step 2: appropriate indicators for each issue

- **Extracted from existing policies**
- **Complemented by:**
 - **Indicators suggested by NGOs**
 - **Indicators from expert judgment**

Example: Indicators for Spatial Quality

- **Amount of urban and rural areas**
- **Surface area open landscape**
- **Surface area valuable landscape**
- **Surface area historical valuable area**
- **Green belts between major cities**

Methods for Impact Assessment

- **Most effects: GIS**
- **Some social impacts: transport models**
- **Economic impacts: monetarisation**
- **Expert workshops on methods & results**

Methods for Comparison of Alternatives

Not one, but multiple methods were used:

- **Quantitative score per indicator**
- **Ranking per indicator**
- **Matrix: 'best' & 'worst' model per indicat.**
- **Contribution to policy objectives**
- **Economic cost benefit analysis**
- **Qualitative discussion end results**

Methods for Public Participation

- **Information meetings**
- **Discussion meetings**
- **Written comments**
- **Web site**

Quality Review

Independent EIA Commission concluded:

- **Positive: good SEA in short time**
- **Negative: no alternatives for:**
 - **green and water area**
 - **regional transport alternative**
- **Neutral: social & economic assessment not (yet) good enough**

Results of the SEA

- **Alternative 1: good for environment, but inflexible and costly**
- **Alternative 4: bad at almost all points**
- **Alternative 3: best one overall**
- **All alternatives: costs higher than benefits**

Final Decision

- **Government decided for alternative 3**
- **However, with a modified transport option to improve cost benefit ratio:**
 - **High speed train between major cities**
 - **Metro between medium sized cities**
 - **Bus and light rail for small towns**

Lessons Learned

- **Overall: methodology & information useful**
- **Time & cost effective because of previous SEA**
- **Assessment could have been less quantitative**
- **SEA started too late**