# The BwN Essay project

Introduction to the project

## Program

- 9.00 Introduction
- 9.30 Discussion on content and approach within groups
- 10.30 12.15
  - 10min presentation/discussion per group
  - group 1 starts at 10.30
  - group 5 starts at 11.30

# Integrated Coastal Zone Development via Building with Nature.

 The flexible integration of land-in-water and of water-in-land, using materials and forces & interactions present in nature

#### Problem

- In densely populated coastal areas there are many existing and future problems in need of solutions, but they also present challenging opportunities to create added value.
- The Netherlands is a good example of this situation. The Netherlands have a high population density, as well as a high motorcar density, a high waste production and a high energy usage per capita.
- The need for new building sites for living, working, recreation & tourism, for an adequate infrastructure, for a continued town renovation process is clear; at the same time the need for preservation and expansion of valuable environment, nature and landscape are present.

## Challenge

 How can the multitude of existing and future problems be solved in relation to each other and in relation to the hinterland on the interior and the bordering sea on the other, while creating added value?"

#### **Applications**

- In the coastal zones stretching from Hoek van Holland to Scheveningen, the extension of the Port of Rotterdam, and near the extension to the ports of IJmuiden/Amsterdam, integrated coastal projects have been successfully completed.
- RvR project Noordwaard
- In addition, the principle has also been applied, albeit to a lesser degree, on other continents including Asia, Africa and the Americas.

#### Spatial solutions

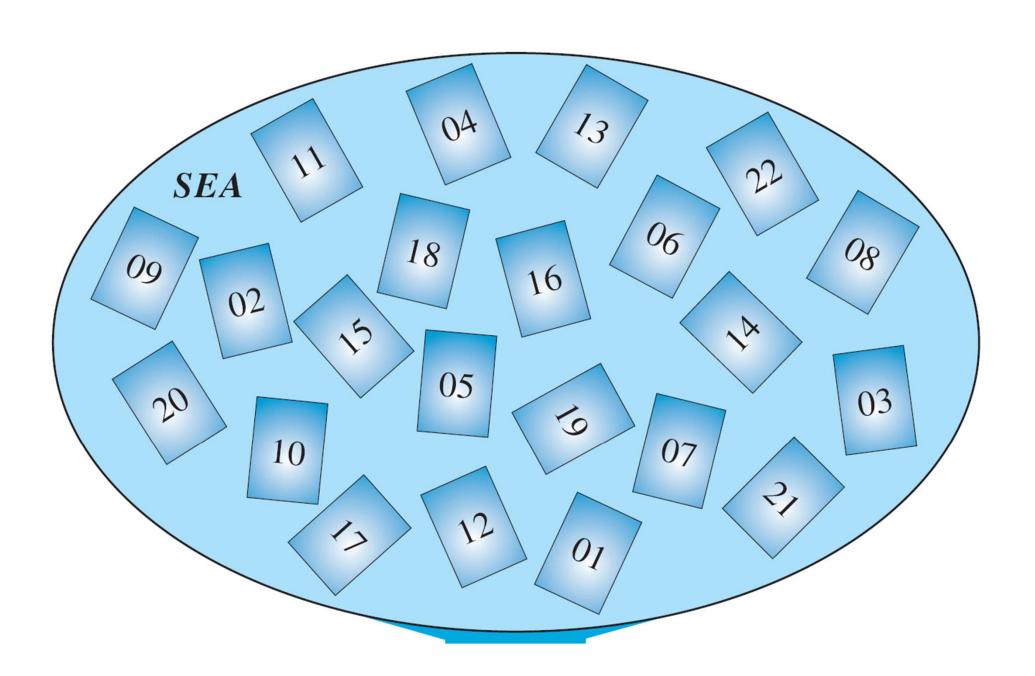
- Making better use of the 3rd dimension (sky-scraping & underground development) and of the 4th dimension (recycling of functions) and multifunctional use within the present available space;
- Using space in the existing hinterland;

#### Spatial solutions

 The seaward option with flexible integration of land in water (sea, estuary, lake and/or river) and of water into the new and old land (tidal lagoons, lakes, harbour basins, canals, waterways and/or fresh water lenses under dunes), making use of materials and forces & interactions present in nature, with special attention to the intensive relation water-land.

#### Consider functions

- Many functions, using many different disciplines, have to be considered carefully.
- The final development should be such that the overall economy is strengthened and the environment is improved.





#### Climate change

 Concerning climate change, which results in rising sea levels and increased frequency and intensity of storm surges, this method provides an instrument for improving safety against flooding.

#### Scope

- An essay is:
  - a short literary composition dealing with a subject analytically or speculatively
- We want you to write an essay of minimum 5 A4, excluding introductory pages (title, summary, index) and closing pages (literature, annexes)

#### Content of essay

- 1. Describe concepts
- 2. Select and describe integrated coastal zone development case that uses BwN
- 3. Describe socio-economic development and other autonomous trends in the Dutch Delta of Rhine and Meuse or choose international example.
- 4. Describe relevant functions and conflicts between functions
- Analyse (lessons learned, added values) the benefits of integrated coastal zone development with BwN
- 6. Analyse some possible influences of future autonomous trends on coastal zone development

#### Groups

23 students, 5x3, 2x4

- 1. Wessel, Vera, Benjamin
- 2. Lotte, Joost, Eva, Jan-Kees
- 3. Marijn, Bob, Rik, Raymon
- 4. Martijn, Fabian, Pim
- 5. Babette, Bas, Joao, Jan
- 6. Anne, Stephanie, Jasper
- 7. Tao, Michael, Daan

## Planning

- Each Thursday possibility for interaction with lecturers
- deadline 11 november for product+English summary
- per group: Selection of functions and case
- Starting point: Terra et Aqua, 107, June 2004, on VLD