

# Some remarks on Resilience in Rotterdam

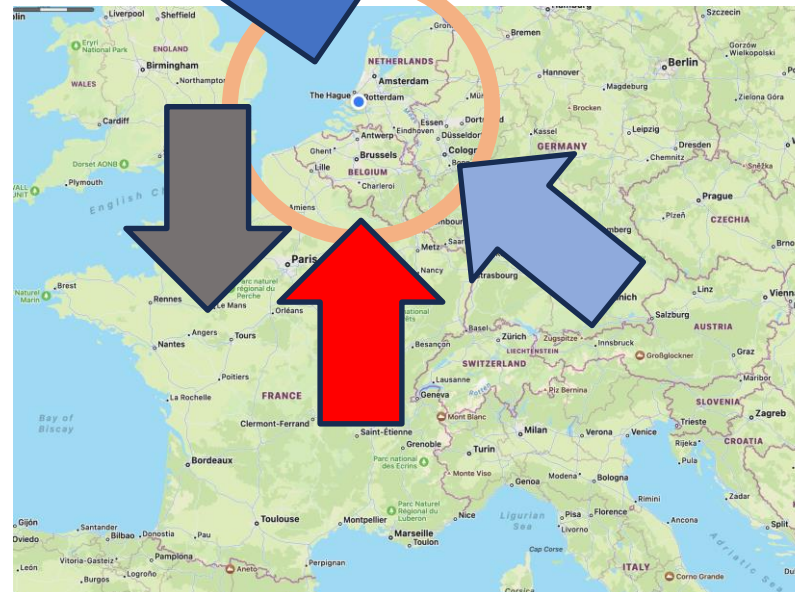


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# Rotterdam

- One of the world large port cities: Europoort
- Port, trade, logistics and industry
- 2.000.000 inhabitants
- Elevation: at or just below sea level
- Large backcountry: Halve of the EU is accessible through the Rhine
- Open access to sea and open access to backcountry
- Very reason for existence makes Rotterdam vulnerable to Climate Change

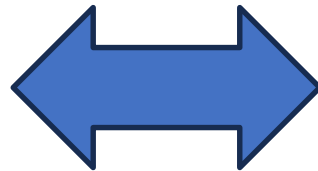


# Management Simulations and Serious Games as a metaphor for policy and planning

Multimillion dollar question:

What do we mean by winning in the game?

- How do we score points?
- What are the rules of the game? What do the players have to do?
- Where do we get penalty points?
- Where are the conflicts between the players?
- Where is the opportunity for cooperation?



- Man versus Nature

Survival games: How to optimize resources to survive in a hostile environment

Casino games: How do we manage uncertainty and complexity in knowledge and modeling

- Man versus Man

How do we make sure the right policies are in place?

How do we invite others to participate in building sustainable cities?





## Players join in the efforts of building a sustainable city

- What do we mean by winning this game?
- Players need to ask questions such as:
  - Whats in it for me? Why should I step in?
  - Can players define strategies?
  - How to deal with free riders? How to share the burden?
  - Do we have a credible referee, a credible government and authority?



Storm surge barrier

Players:

- National government
- Semi-public Port Authority
- Private Shipping companies
- Etc

How do players win points, how do players lose points





## Greening of local communities

### Players:

- Local government
- Local community
- Property owners
- Local shops and local
- Community center
- Churches, mosques and temples
- Public and private housing corporations

How do players win points,  
how do players lose points

## The Right to Challenge Adjusting the rules of the game

Local communities can take the initiative

Local communities can challenge the government: we can do better

Government support for planning, maintenance, financial