

# Improving the utilization of infrastructure Better Use Programme

Multimodal Transport in wider Amsterdam Area  
Modality Broker

Port and Corridor Cooperation Business Mission

Hans Vermij, Amsterdam, 26 November 2013

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# 1. Introduction Royal HaskoningDHV

- January 1st, 2013: **ROYAL HASKONING**  
Enhancing Society 
- Consultants, engineers, project managers, designers, environmental and technical professionals
- Turnover € 700 million
- Independent business structure
- 7,000 staff, 100 offices and 35 countries
- Proven track record in different markets
- Show leadership in sustainability and innovation
- Top independently owned engineering companies
- Leading professionals in our fields
- “Giving-back” programme (education) part of our corporate responsibility



# Our values – brightness, integrity, team spirit and excellence (BRITE)





**Royal  
HaskoningDHV**  
*Enhancing Society Together*

**World leaders in the Maritime Sector**

# Overview Maritime Business Line

- Over 650 professional staff worldwide
- 350 projects annually
- Works in 100+ countries
- Active in whole “project cycle”
- Diverse Client Portfolio



# Maritime Sectors

- Container Terminals
- Oil & Gas Terminals
- Dry Bulk Terminals
- RoRo
- Shipyards/Dockyards
- Naval Bases
- Cruise/Marinas
- Marine Resources
- Renewables





# Client Base

- National and regional governments
- Port authorities
- Terminal operators
- Mining companies
- Navy
- Oil & gas industry
- Contractors
- Shipping lines
- Banks and financial institutions



# Activities – All Phases

- Planning
- Due Diligence
- Design
- Supervision
- Operations
- Simulation
- Marine Risk
- Management
- Finance
- Economics





**Royal  
HaskoningDHV**  
*Enhancing Society Together*



**Worldwide experience in the Port sector**

## 2. Improving utilization of infrastructure

### Improving utilization of infrastructure



Government of  
the Netherlands

- The Netherlands needs a properly functioning infrastructure of roads, railways and waterways along with public transport to provide optimal mobility for travelers and businesses.
- The high concentration of mobility during the rush hour underlines the importance of a better use and better utilization of infrastructural networks.
- Achieving better utilization of existing networks in an innovative way.
- There will be more and more traffic on the roads. Road widening and new roads cannot compensate for the growth. The entire infrastructure must be better utilized.
- The government wants to reduce traffic jams by 20% in 2014.

- € 1.1 billion has allocated for 250 measures to better utilize the infrastructure in ten regions. State pays 60% of this amount, the regions fund the rest.

### Examples of better utilization:

Since 2001 LHVs (Longer and Heavier Vehicles) have been permitted on selected motorways in the Netherlands. Vehicle combinations have a maximum train weight of 60 tons and a maximum length of 25.25 m. (regular truck combinations: 50 tons, length 18.75 m).



# Metropole region Amsterdam

- Severe congestion on key motorways;
- Traffic share of road haulage: more than 10%
- Government and region will invest 131 million euro till 2015 for the Better Utilization of roads, waterways and public transport

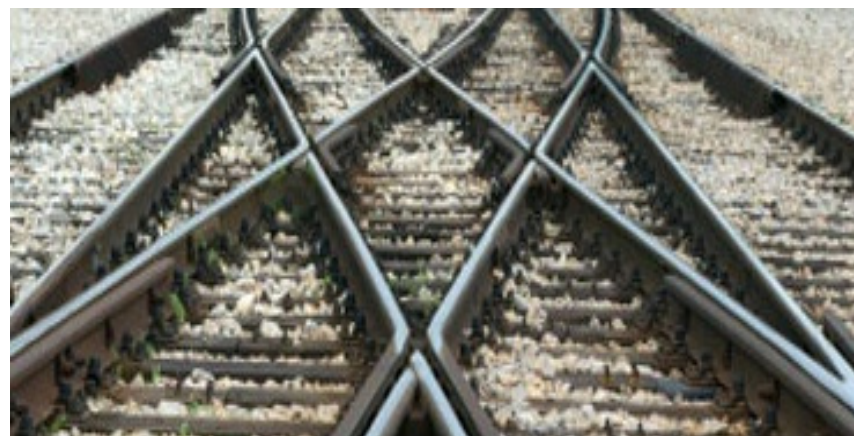


(Persbericht Ministerie van Infrastructuur en Milieu, 16-01-2013)

New Second Coentunnel,  
Amsterdam

## Scope of projects

- Overall objective: Better Utilization and smoothen the traffic flow
- Modal shift: from road haulage to inland navigation and railways
- Contribute to sustainability: Reduction CO<sub>2</sub>, No<sub>x</sub> and PM<sub>10</sub>. Do not forget noise reduction.
- Initiate proper projects to facilitate inland navigation and railways
- This is a fundamental shift in policy planning: Pro active and provoking the modal shift.



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## 2. Position of the Modality broker

- Provoke and initiate modal shift;
- Connect and unite shippers and operators
- Show added value and savings
- Reduce 15.000 trips per year on vital motorways in the Amsterdam area;





## Modality Broker

### Initiator:

- Boosting projects
- Identification stakeholders
- Conditions

### Coordinator:

- Bringing people together
- Get government involved
- Coordination of initiatives

**NEUTRAL**

### Arbitrage

- Rules of engagement
- Mediator
- Referee:

### Promoter:

- Provoking and outreach
- Marketing channels

## 3. Modality Broker Projects

### A Waterborne Transport solid waste Utrecht - Amsterdam



#### Savings:

- 100.000 ton in road haulage
- 8.000 trips by truck

#### Ongoing project:

May – December 2013

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## Pilot project, 2009

- Pilot project with inland vessel showed the feasibility and cost savings
- Incinerator site had no access to water (no berth).
- Using a pontoon with crane on platform was successful
- Savings potential: 8,000 trips by truck



## What is the validity of the pilot in 2013?

- The volume potential of solid waste is still there, slightly decreasing
- Incinerator has underutilised capacity
- Import of solid waste from UK markets is increasing rapidly to 300.000 tons



**26 AUGUSTUS 2013-08:59**

# NEDERLAND KAMPIOEN AFVAL IMPORTEREN

#VUILNIS

Afvalbedrijven laten zich betalen om  
buitenlands afval te importeren en  
te verwerken.

Twits Elders

@Greuneke: RT @Lord\_Wanhoop: Waar  
een klein land groot in is:  
[parool.nl/parool/nl/2848...#VuilInts](http://parool.nl/parool/nl/2848...#VuilInts)  
ongeveer 1 uur geleden

@petrakramer: RT @Lord\_Wanhoop:  
Waar een klein land groot in is:  
[parool.nl/parool/nl/2848...#VuilInts](http://parool.nl/parool/nl/2848...#VuilInts)  
ongeveer 1 uur geleden

@annejanbrouwer: RT @Lord\_Wanhoop:  
Waar een klein land groot in is:  
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ongeveer 1 uur geleden

**Geen land in de Europese Unie importeert zoveel afval als Nederland. Elk jaar voert ons kikkerlandje meer dan een miljoen ton vuilnis in uit andere landen.**

Nederland importeert onder andere veel afval uit Engeland, Ierland en Italië, zo schrijft het **FD** (betaalmuur). Dat afval gaat direct de verbrandingsovens in.

Volgens afvalkenneren kan de import van buitenlandse zoiel de komende jaren nog verdubbelen, aangezien de ovens meer afval aankunnen dan ze nu verwerken. Met de import van troep wordt naar schatting vele tientallen miljoenen verdiend: Nederlandse bedrijven laten zich betalen voor de verwerking en bij de verbranding wordt energie opgewekt.

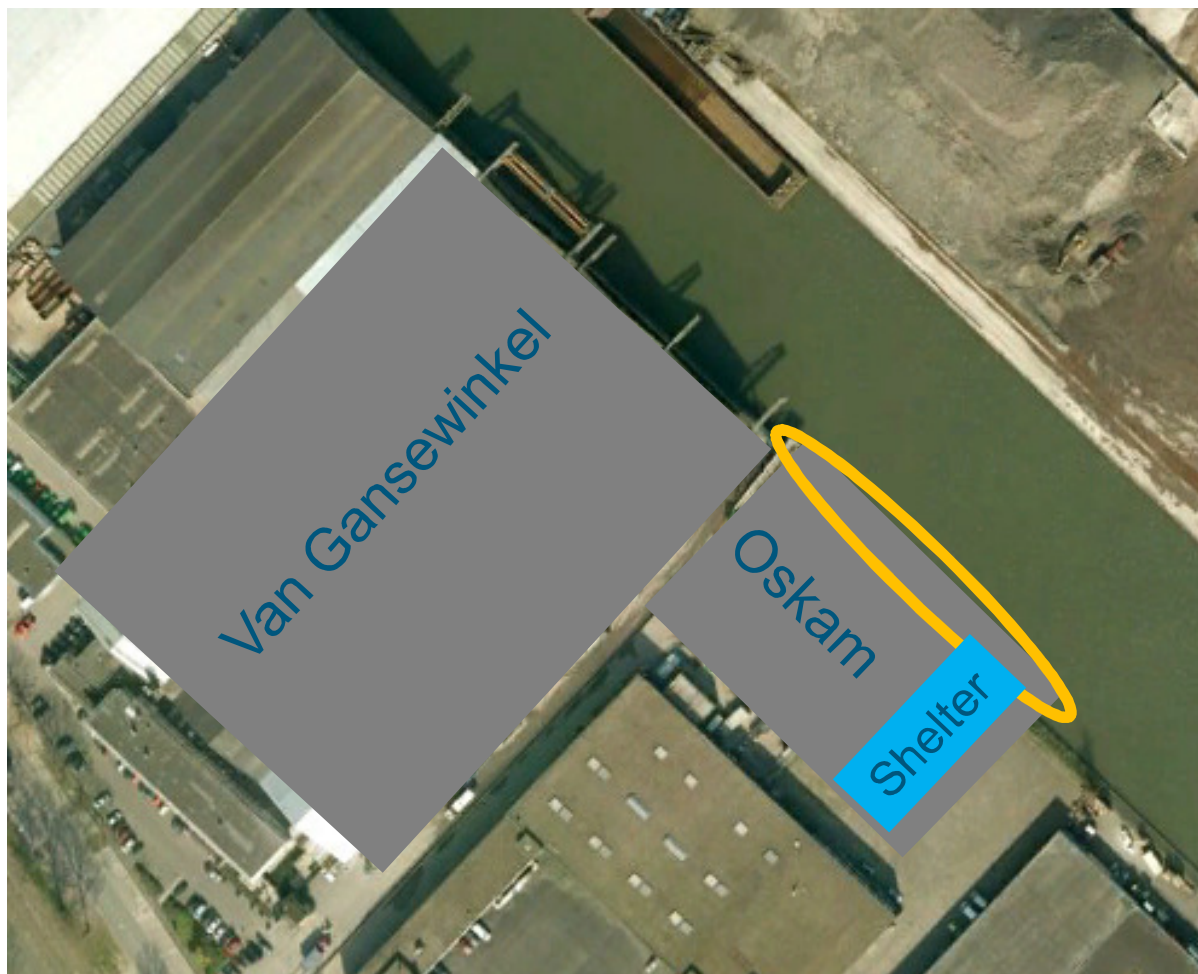
Door de crisis is de hoeveelheid Nederlands afval de afgelopen jaren teruggelopen. Ook het feit dat er steeds meer nadruk gelegd is op scheiding van afval zorgt voor een krimp van de hoeveelheid geproduceerd afval.

# Utrecht

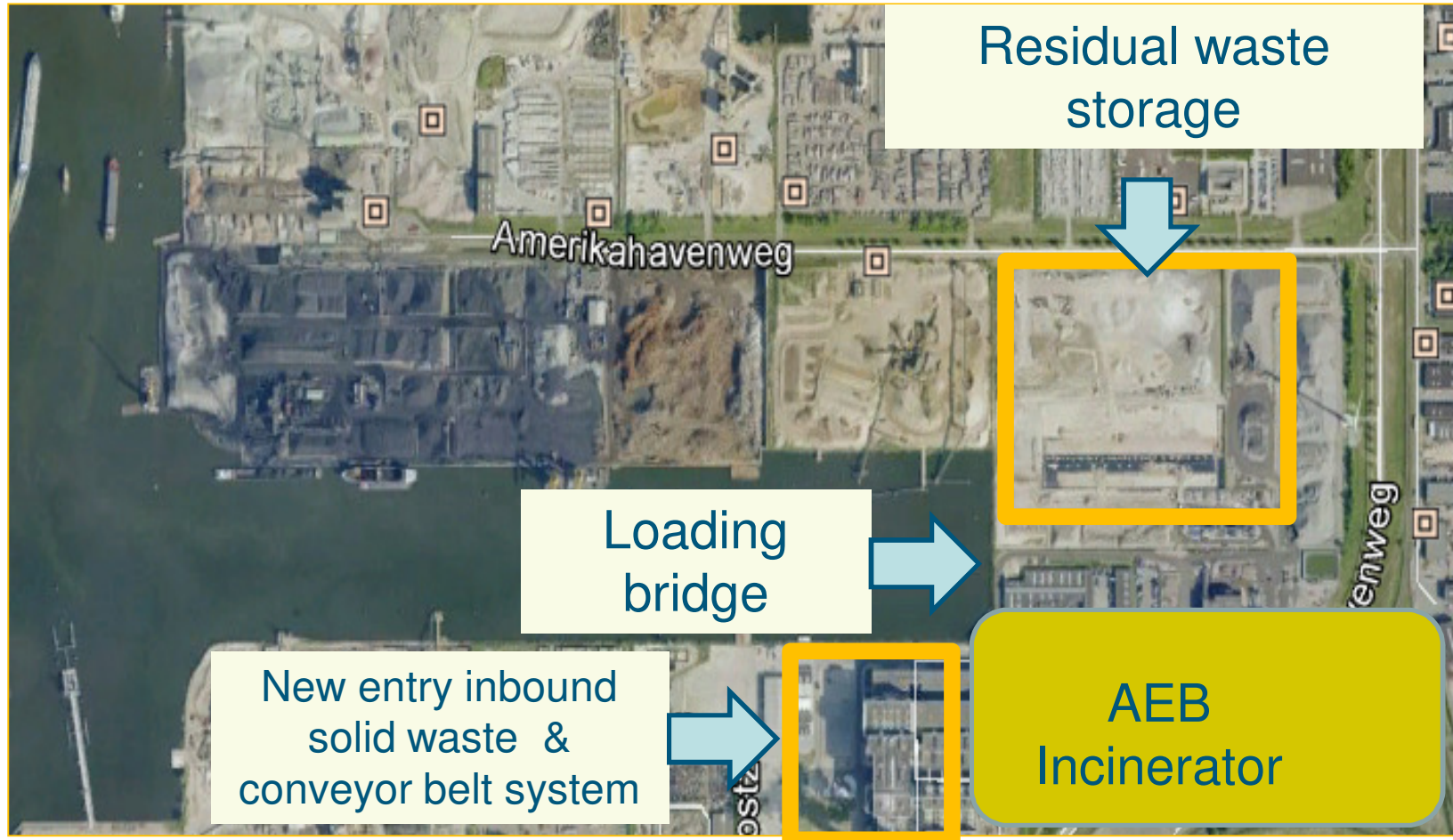
- Loading transfer station located at Amsterdam-Rijn Canal
- Distance over water: 55 km
- Potential volume at least 400 tons per day
- Maximum volume: 1,100 ton per day
- Bundling of waste flows to transfer station will need cooperation in the sector: There are win-wins
- Daily services is possible
  
- Committed flow (Nov 2013): **100,000 ton**

# Lage Weide Utrecht: Shelter

Required investment: ± € 400.000



# AEB: Amsterdam Australiëhavenweg 21

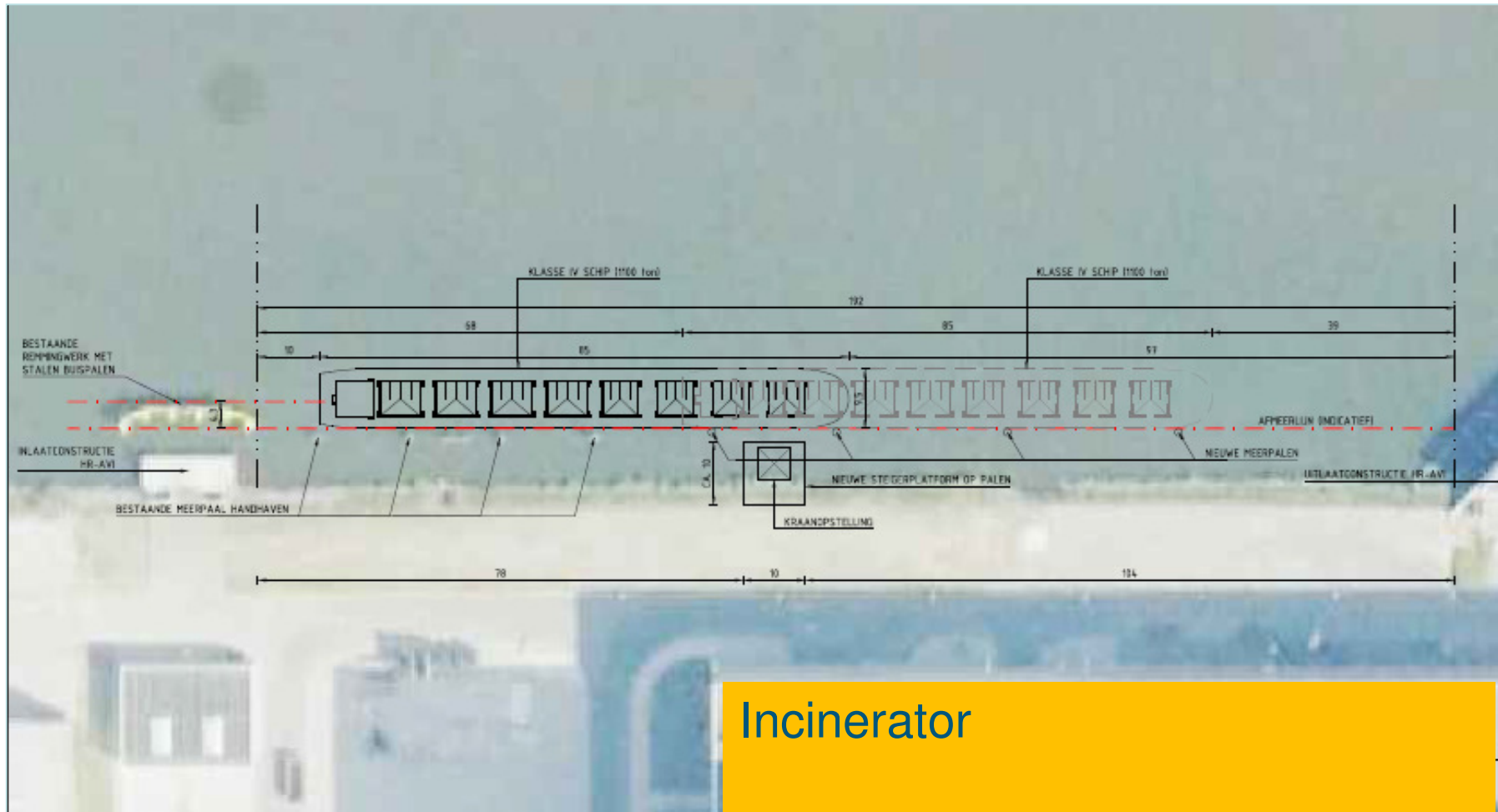


## AEB:

- Need to use rail and water transport: environmental permit
- Has a loading bridge
- Wants containers or sealed bales and bags/non perishable waste;
- Imports: 400,000 ton
- New storage area in planning 20,000 ton.
- New conveyor belt planned going straight into the bunker/holds
- Final potential Amsterdam-Utrecht: 280,000 ton, one vessel a day (1.100 ton)



# Situation



Incinerator

## Business case is under development

- Total investments: 1.5 million euro
- Transport cost savings: euro 1 to 1.5 per ton = euro 100,000 – 150,000 per year
- Payback period: approx. 10 years
- Realization of the project: 6 to 12 months

## B Night Distribution Amsterdam Port Area



Savings: 15,000 trips by truck

Planning: January – July 2014

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## C Self (un)loading container vessel



Savings: 4,000 trips by truck

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## D Inland RORO water transport



Savings:  
9,300 trips by truck

Planning:  
July- December 2014

26 November 2013

## 4. Lessons learned.

- Provoking and pro-active attitude is highly appreciated and hardly know from the policy planner's desk
- Companies are too small to undertake the adventure themselves. They cannot organize return loads, enough volume and do the investment alone
- Cooperation is the key. Find the **win – win** situation.
- Way of working is new: Both for consultants as clients.
- It is too early to promote the success, but we are on the right track
- Remember:

**1 kilometre of new road: euro 10 million.**

**Total solution waste transport project: euro 1.5 million.**

# What is the relevance for Southern Africa?

- Not comparable to Dutch situation? **WRONG**  
You do not have inland waterborne transport, but you do have multimodal transport (inland rail)
- There are congested areas: (RSA: Durban, Gauteng, Cape Town)
- There are **opportunities to consider:**
  - a. Modality Broker concept: From Policy Planning to Facilitation;
  - b. Longer and Heavier Vehicles;
  - c. Night distribution (container terminals and inland terminals)
  - d. Cooperation in the sector. Example: Competitors working together to reduce empty trips: It pays off.  
Example: Exchange import and export containers, exchange freight between own account operators

# Thanks for your attention

Hans Vermij, MSc.  
Royal HaskoningDHV  
Project Director  
Maritime & Waterways  
T: 088 348 2860 | M: 06 290 98 357  
Email: [hans.vermij@rhdhv.com](mailto:hans.vermij@rhdhv.com)  
[www.royalhaskoningdhv.com](http://www.royalhaskoningdhv.com)

