

Programma  
Managing  
Public Space



# STAKEHOLDER PARTICIPATION AND RISK COMMUNICATION IN THE MONITORING ACTIVITIES OF BRIDGES AND QUAY WALLS IN PUBLIC SPACE

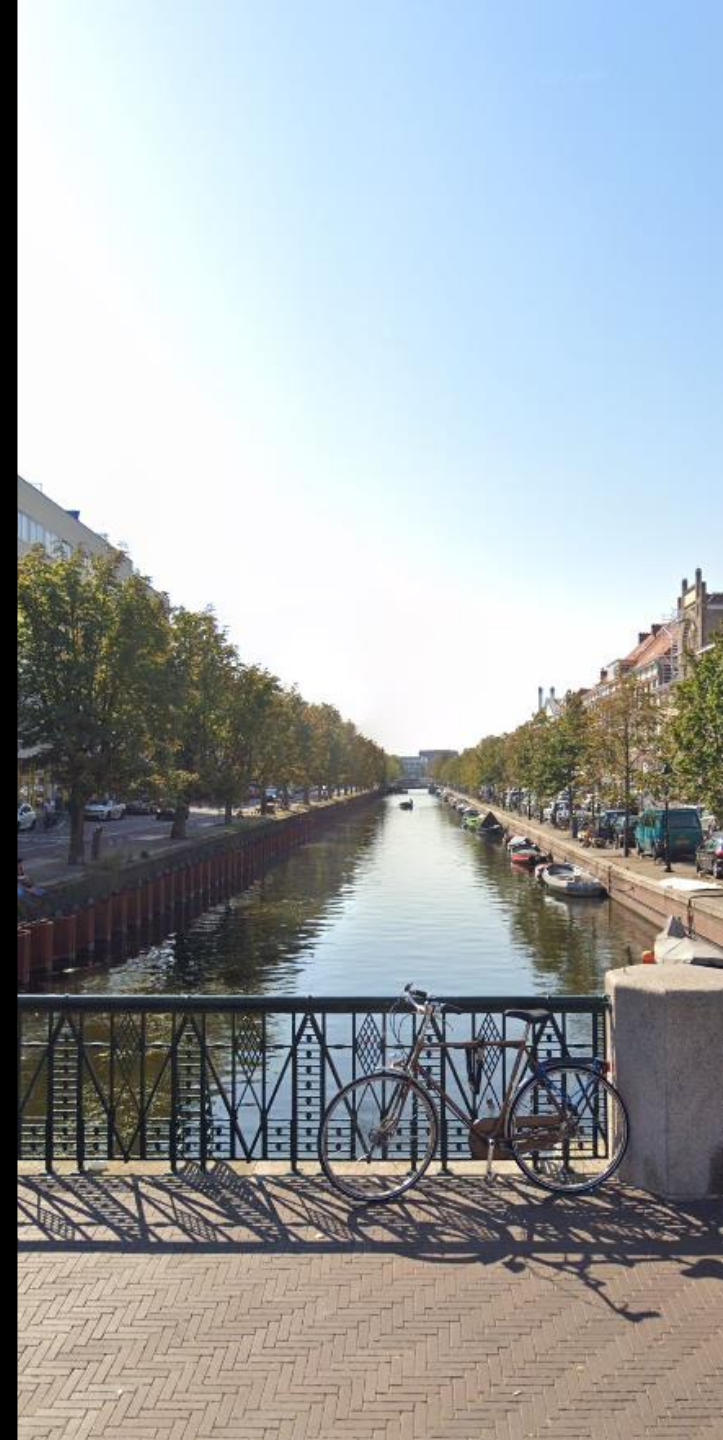
AMSTERDAM AND THE HAGUE

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# INTRODUCTION



Source: [Kademuur in centrum Amsterdam deels ingestort \(nos.nl\)](https://nos.nl/nieuws/story/2020-09-01-kademuur-in-centrum-amsterdam-deels-ingestort)

- Municipalities in NL started to pay deeper attention to the conditions of the urban bridges and quay walls (UBQs).
- Planning strategies were created to improve the conditions of the UBQs.
- Attention is given to extending their lifespan.
- A collapse event of a UBQ in 2020 ringed alarms







Source: [Bridge Builders](#) | [NWO](#)



Source: [Althen developed a first...](#) | [Althen Sensors & Controls](#)

- Monitoring activities are conducted to know their current conditions.
- Physical checkups and sensors are used to collect data about the UBQs.
- However, stakeholder participation is seen as one of the main conditions for a successful renovation program in asset management strategies.



Source: <https://www.amsterdam.nl/verkeer-vervoer/bruggen-kademuren/bezoekerscentrum-bruggen-kademuren/>

In Amsterdam, the Program Bridges and Quay Walls promote a strategy to improve their conditions through different activities, among them studying the UBQs physical condition through different **monitoring activities**.

In The Hague, to strengthen, replace, renovate and maintain the UBQs, the Gemeente located these tasks within the Long-term Program for Structures initiated in 2011 and the Multi-Year Programme for Artworks (MJPK).



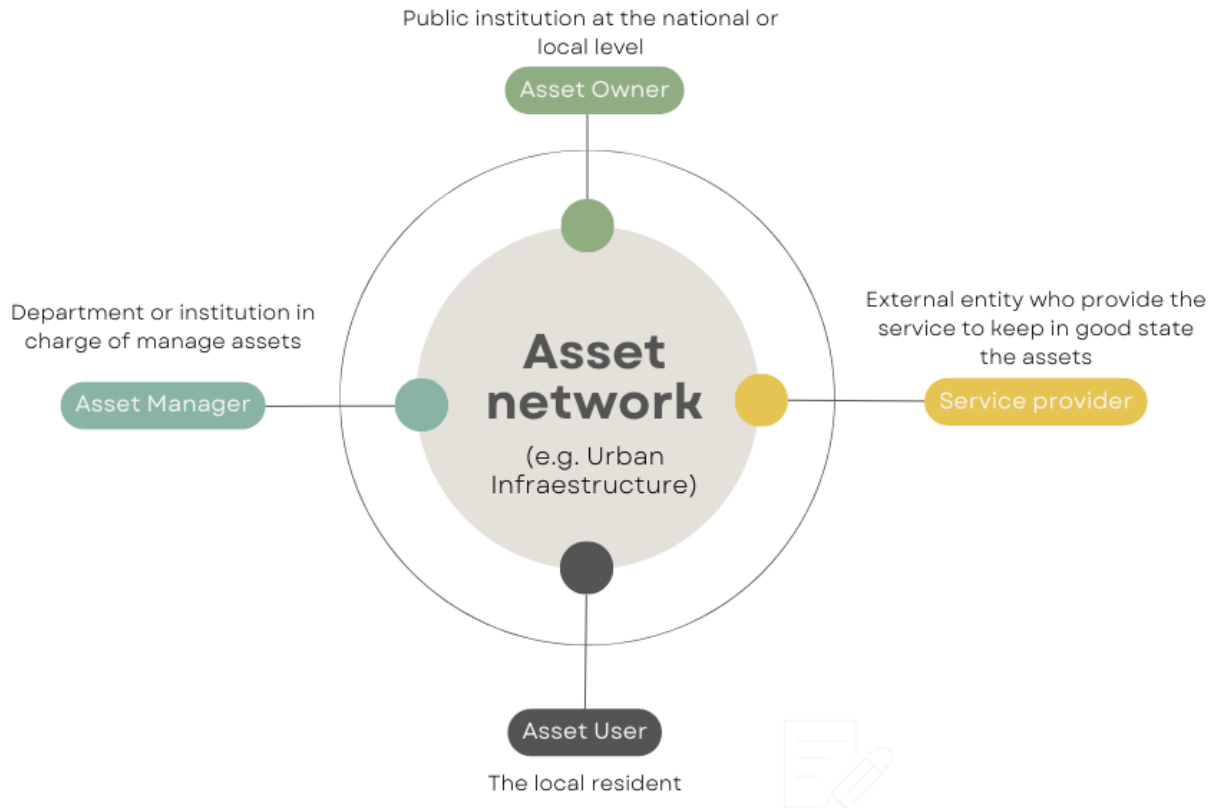
Source: [What is the Multi-Year Programme for Artworks \(MJPK\)? - How to get to The Hague \(denhaag.nl\)](https://denhaag.nl/en/what-is-the-multi-year-programme-for-artworks-mjpk)



Source: [Voortgangsrapportage Bruggen en Kademuren april 2023 - openresearch.amsterdam](https://openresearch.amsterdam.nl/voortgangsrapportage-bruggen-en-kademuren-april-2023)



# CHALLENGES



- Studies have emphasised the **need to involve stakeholders in asset management strategies** to improve the long-term planning of urban water infrastructure.
- Nevertheless, there are challenges perceived between asset managers and stakeholders, such as **ambiguous and indistinct points of view of stakeholders' ambitions**.

This makes successful participation challenging to achieve.



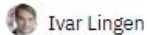
Source: [De Amsterdamse bruggen voor de toekomst - What if Lab](#)

# CHALLENGES



[News](#) [Region](#) [Sport](#) [Podcast](#) [Team West](#) [Weather](#) [Culture](#) [Files](#)

## Quay problems Noordwal cost The Hague 1.5 million extra



Ivar Lingen

11 April 2019, 13:34 • 4 minutes reading time

The original article was created in Dutch (NL) by our editorial staff. This article is automatically translated by an algorithm and might contain errors due to this.



Source: [Kadeproblemen Noordwal kosten Den Haag 1,5 miljoen extra - Omroep West](#)

- There is **limited research** on integrating stakeholder participation and monitoring of the UBQs to improve risk communication.
- The government align and manages emergency risk strategies based on **expert advice**, not considering residents' input.
- This leads to **ignoring the local residents' input**, causing a failure to translate strategies that consider societal needs and **creating conflict among asset users** (residents) **and asset owners** (local governments)
- How various stakeholders perceive monitoring information and how risk communication is conducted and associated with the UBQs is unknown.





NOS News • Monday, July 6, 2020, 2:49 PM •  
Amended Monday, July 6, 2020, 5:52 PM

## Some of Amsterdam's bridges and quays are on the verge of collapse

Some Amsterdam bridges are in such bad shape that they are in danger of collapsing. "Not enough maintenance has been done for too long," says councilor Sharon Dijksma in *Nieuws en Co* on NPO Radio 1.

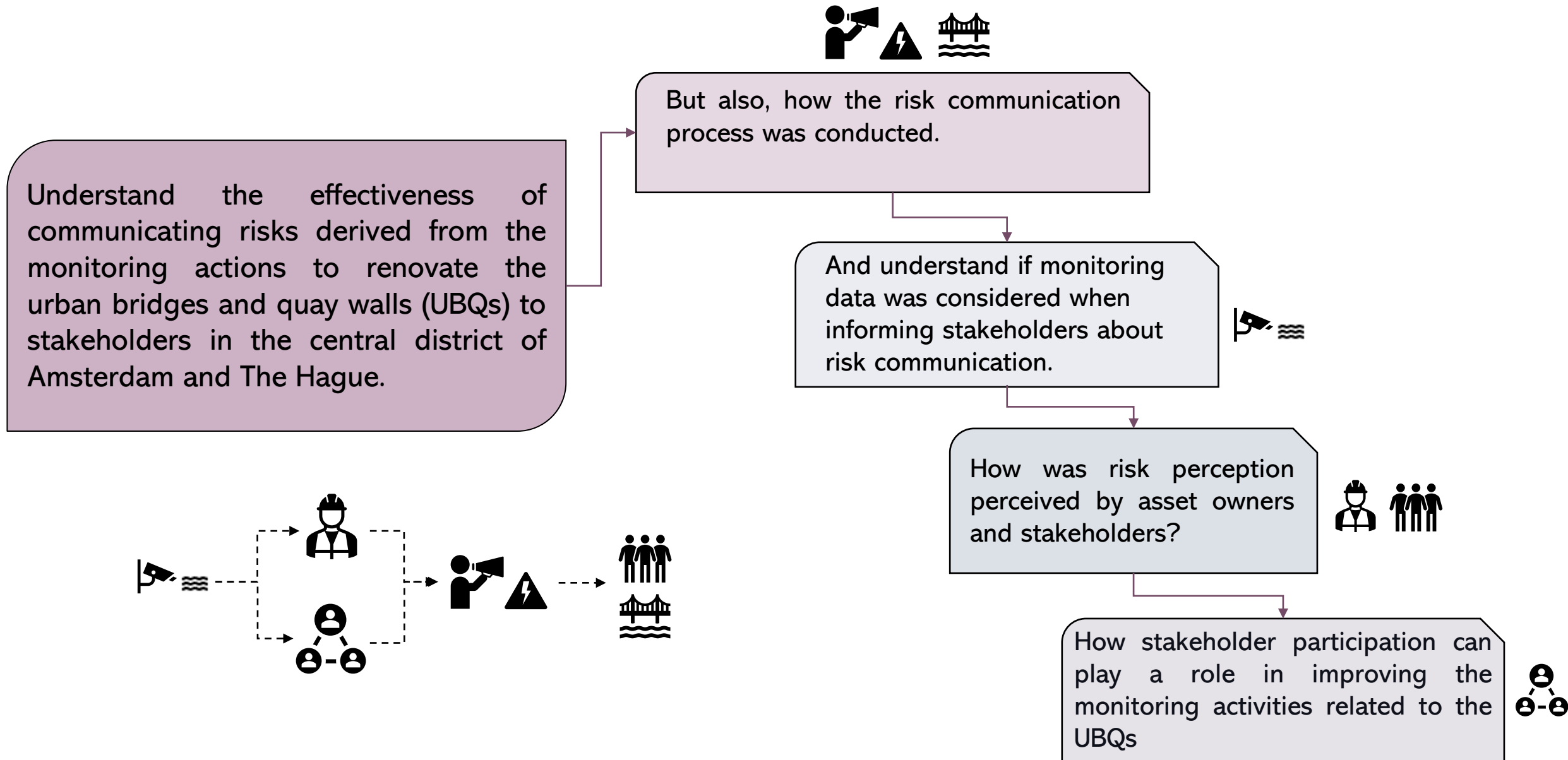
# Opinion: 'Panic about quays and bridges is unnecessary'

The quay walls of the Amsterdam city center are not all in good condition, but there is no reason to panic, say Ernst de Beaufort and Walther Schoonenberg of the Association of Friends of the Amsterdam City Center. The recovery does not have to be nearly as expensive as is currently assumed.

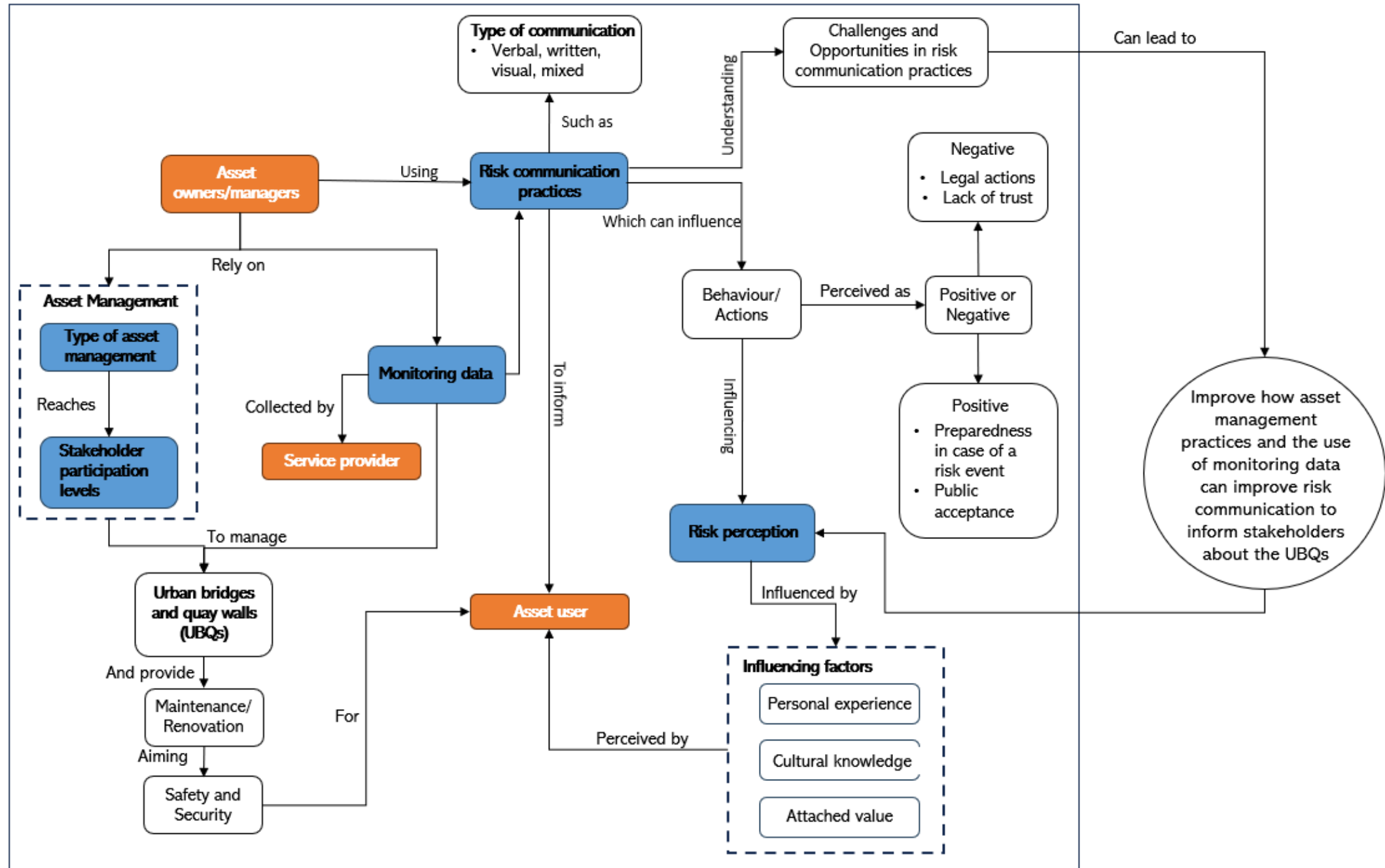
[Ernst de Beaufort](#) and [Walther Schoonenberg](#) July 20, 2021, 6:29 PM



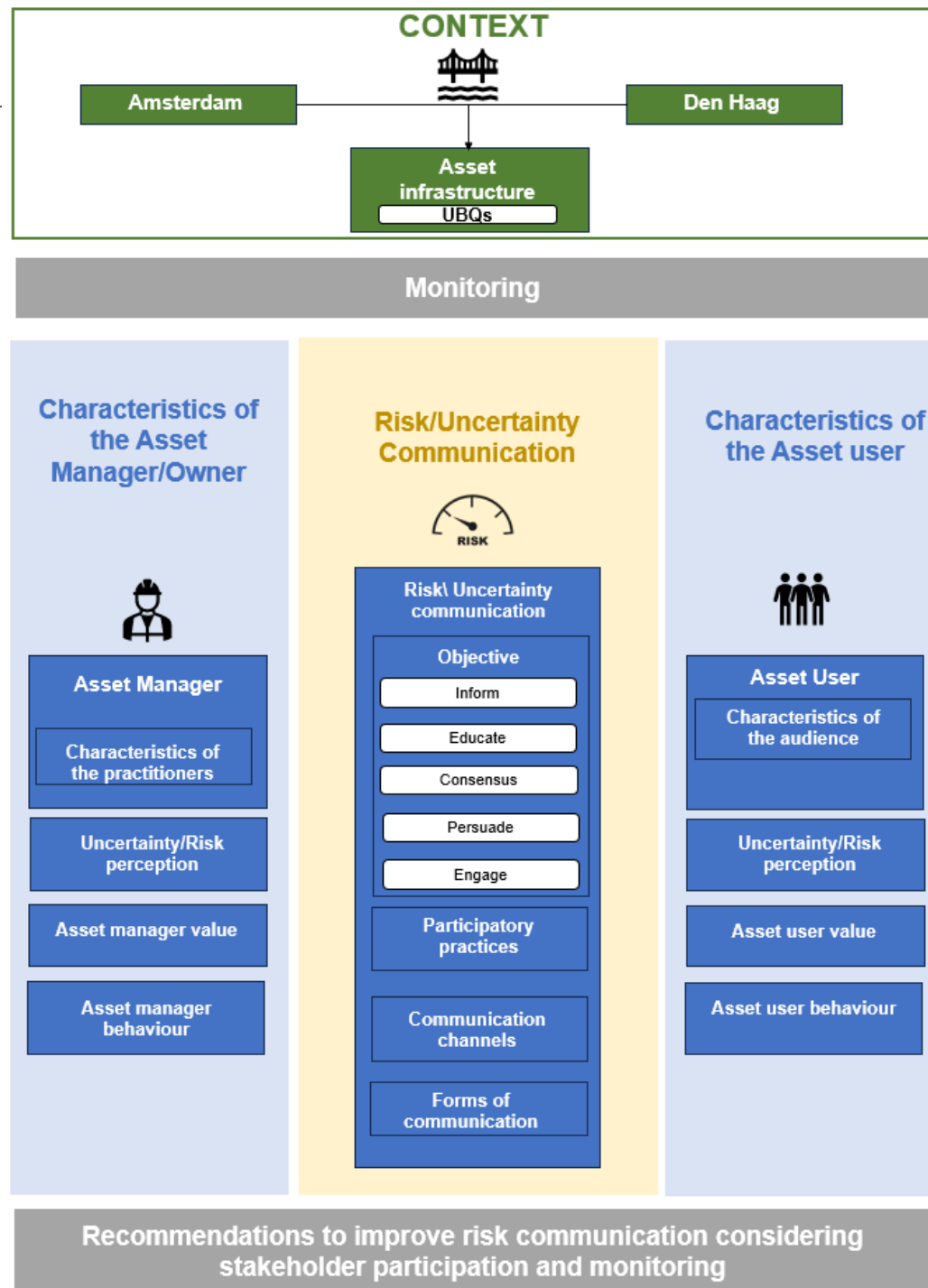




# Influencing Risk Perception through risk Communication

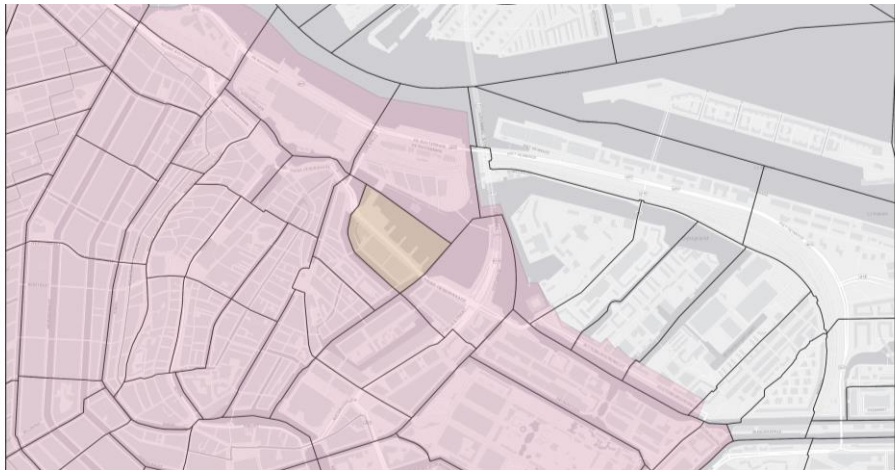






# CASE STUDY LOCATIONS

✗ Gemeente  
✗ Amsterdam  
✗ Waalseilandsgracht



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Legend

- Waalseilandsgracht
- UNESCO buffer
- Neighbourhood division

Project:

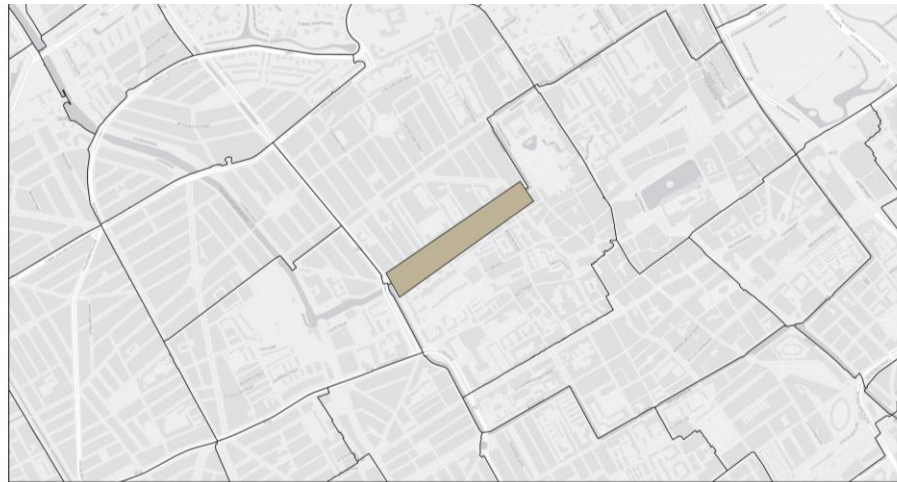
Elaboration: Sergio Alvarado Vazquez  
Location: The Netherlands, Amsterdam  
Data Source: Open Street Maps standart

0 250 500 750 1.000 1.250 m



Den Haag

Noordwal



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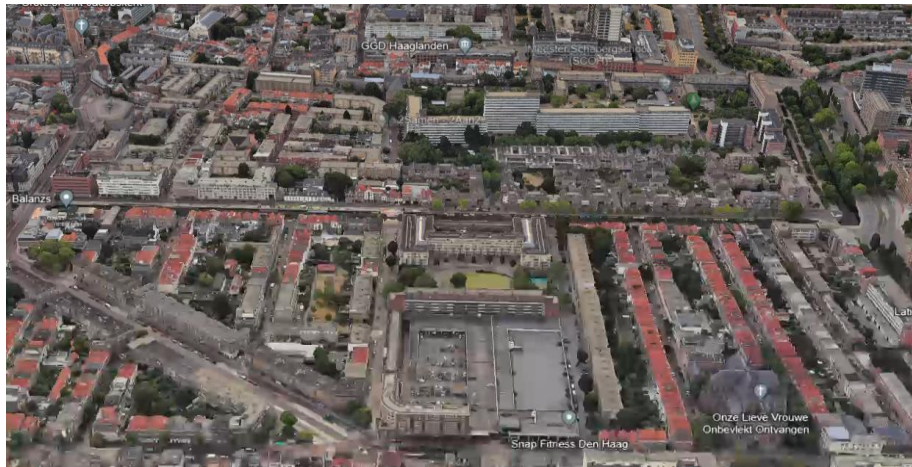
Legend

- Noordwal quay wall
- Neighbourhood division
- ESRI Gray (light)

Project: Livequay

Elaboration: Sergio Alvarado Vazquez  
Location: The Netherlands, Den Haag  
Data Source: Open Street Maps standart

0 250 500 750 1.000 1.250 m





A wide-angle photograph of a canal in Amsterdam, the Waalseilandgracht. The canal is filled with water, reflecting the sky and the surrounding buildings. On the left bank, several boats are moored, including a prominent blue and white boat in the foreground. The right bank is lined with tall, multi-story Dutch houses with many windows. In the distance, a church spire is visible against a blue sky with light clouds. The overall atmosphere is peaceful and historic.

200km UBQs

Waalseilandgracht





62km UBQs

Noordwal

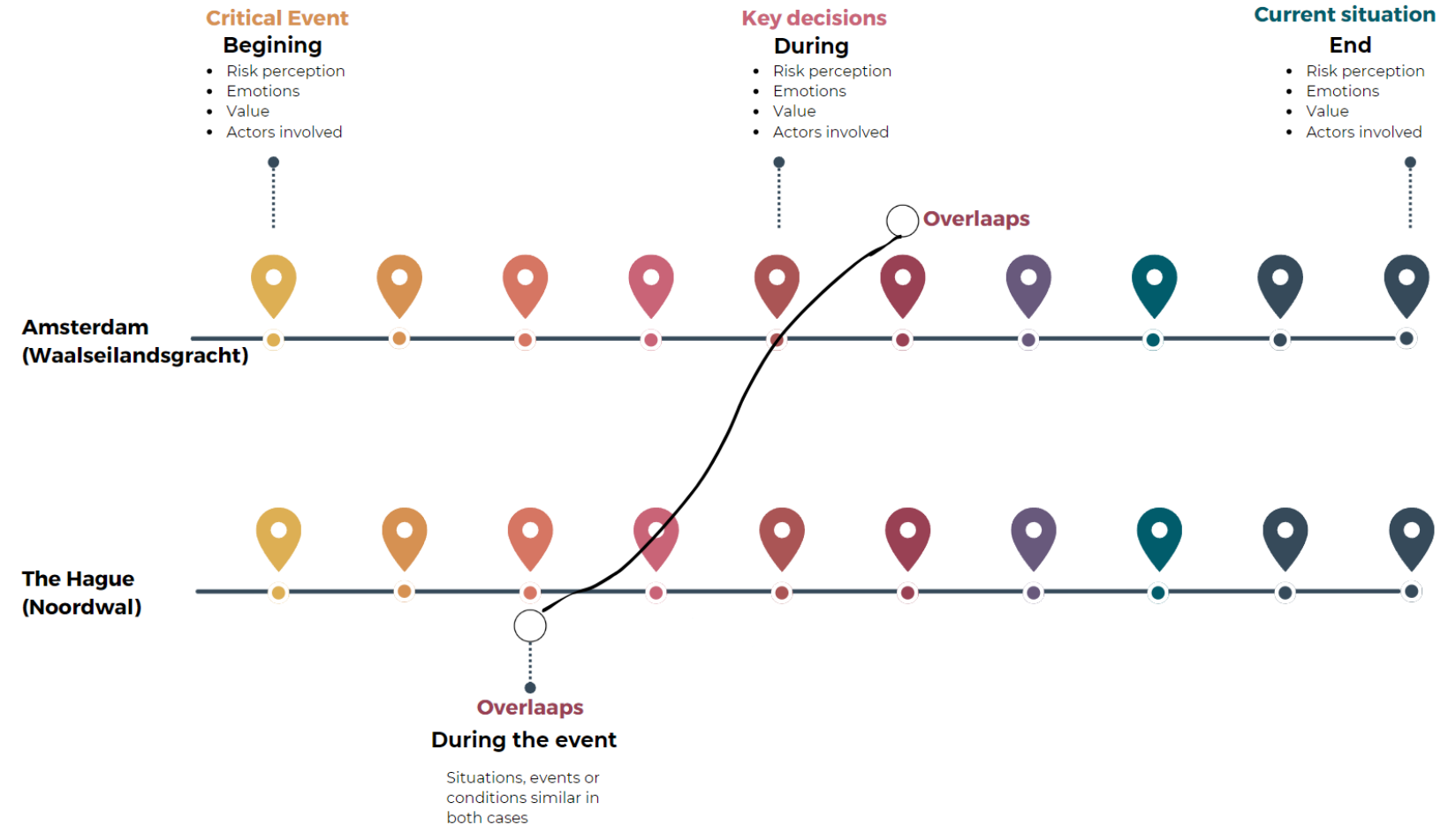


# HOW

We will conduct a comparative case study using a retrospective process analysis.

URBAN BRIDGES AND QUAY WALLS

## TIMELINE

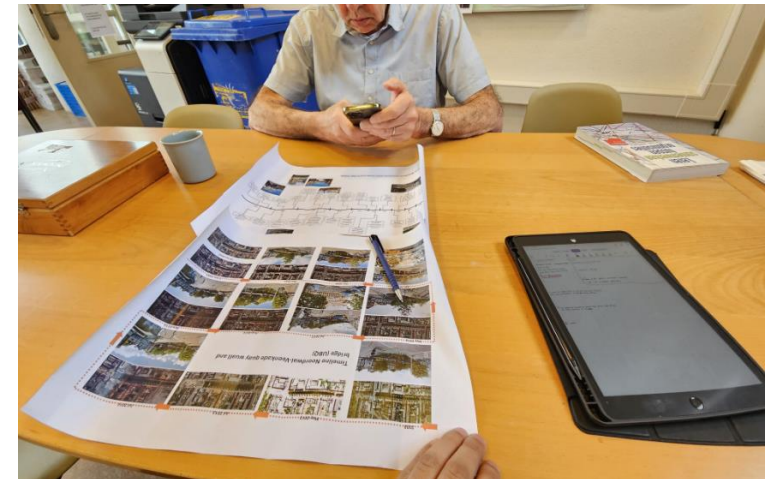


# DATA COLLECTION

## Primary data



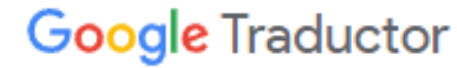
## Secondary data



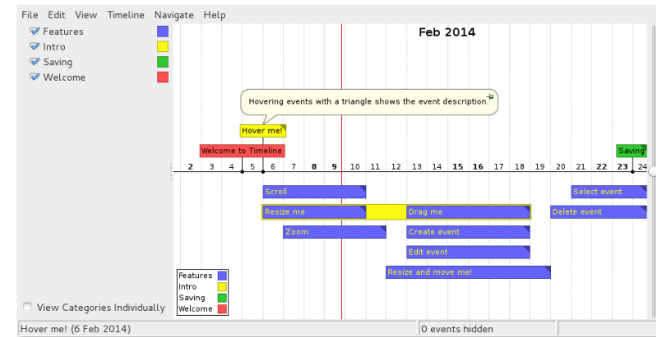
Den Haag



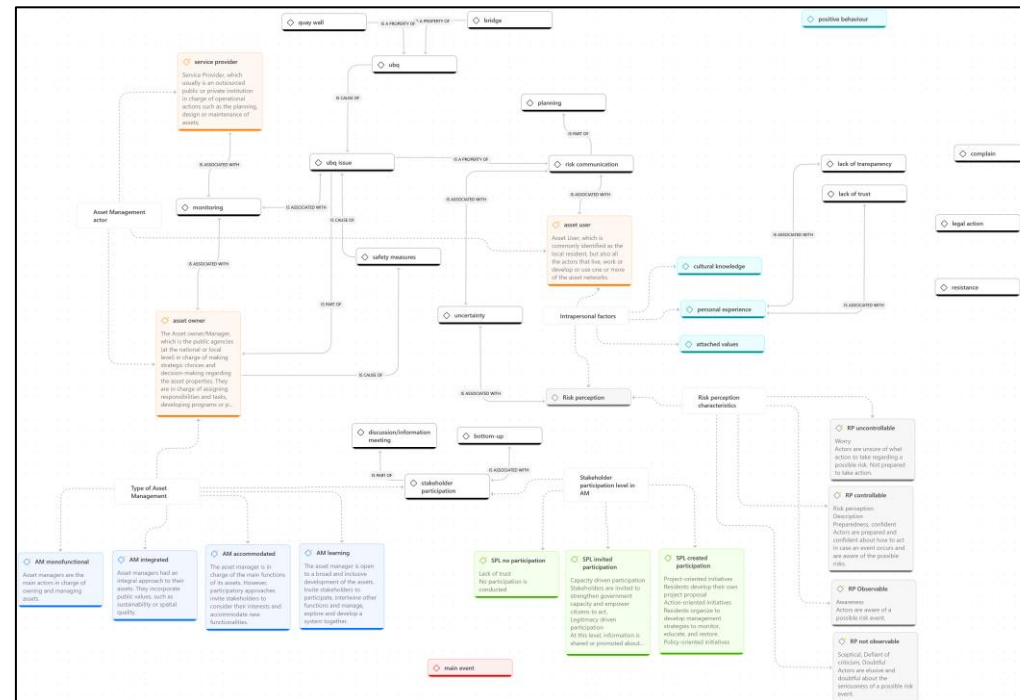




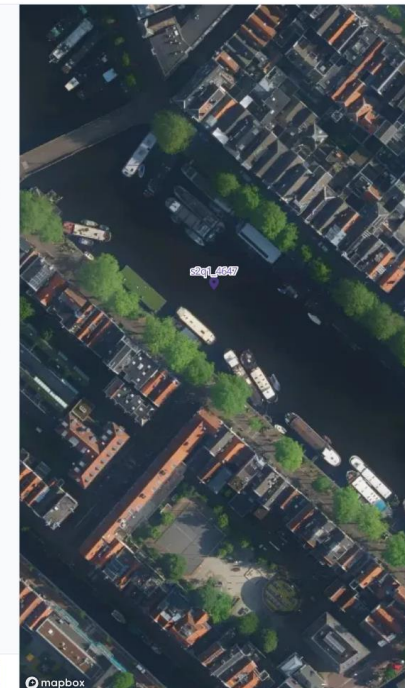
Timeline is [free software](#), distributed under the [GNU General Public License version 3](#).



- Scroll and zoom with mouse wheel
- Different representation depending on zoom level
- Go to a specific date
- Search events
- Organize events in hierarchical categories
- Move and resize events with the mouse
- Duplicate events
- Export to image
- Available in multiple languages (supported languages)

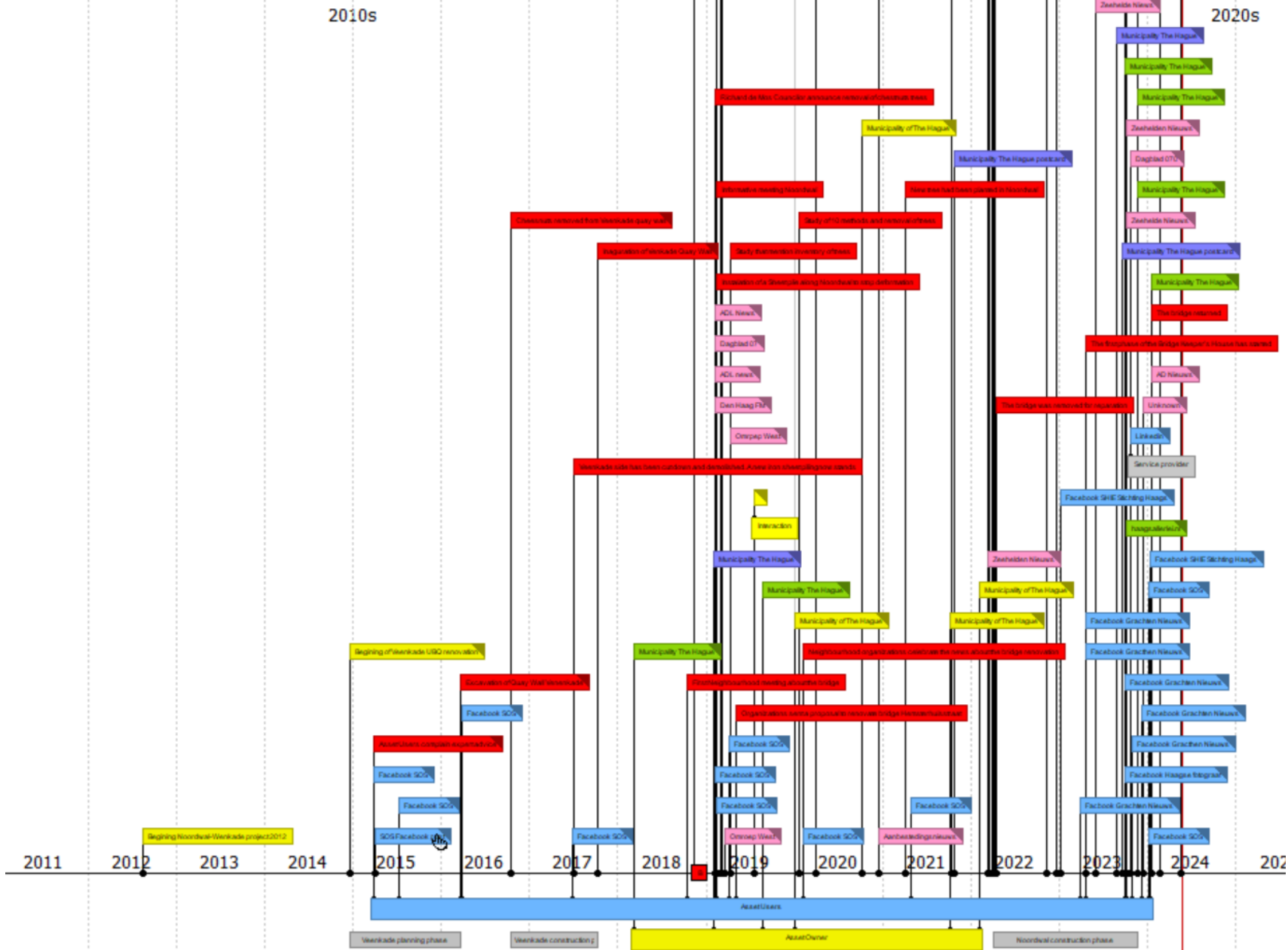


## English ▼



# TIMELINE

Type of communication channel	Colour
Social Media	
Official Newstellers/Reports	
Newspapers	
Websites	
Printed mail	
E-mail	
Digital tools (e.g. de BouwApp, dashboard)	
Online video (Youtube, Vimeo)	
Discussion Meetings	
Unknown	







- Remove the sign
- DECIDE NOT TO REMOVE
- TREES WERE IN BAD CONDITIONS
- PEOPLE THINK THEY WILL DIE (currently)

(TREES ARE INFESTED)  
GROW

- MONITORING
- DIVING INSPECTION
- FIRST TIME DIVING INSPECTIONS

LESSON LEARNED FROM GROWING!  
2016-2018  
NOODBOUW WJ & SPECIAL CASE

ADD METAL COVER



PROPOSAL!  
RETURN PROCESS

NEIGHBOURS WENT FOR COURT AS A NATURE PLAN WILL REMOVE THE TREES.

(CLOSE PARKING WITH A FENCE FOR SAFETY)

COMMUNITY CENTER (Groene Elend)

SEND LETTERS

- WEBSITES OFFICIAL
- LOCAL NEWSPAPERS/MAGAZINES

STAKEHOLDER MEETINGS → SERGEA  
ASR LATER! THEY ORGANISE

- INFORMATION SHEETS

NOODBOUW

3 STAGES

- DOING THE WORKS
  - CONTRACTORS
- as BOW APP

BEFORE

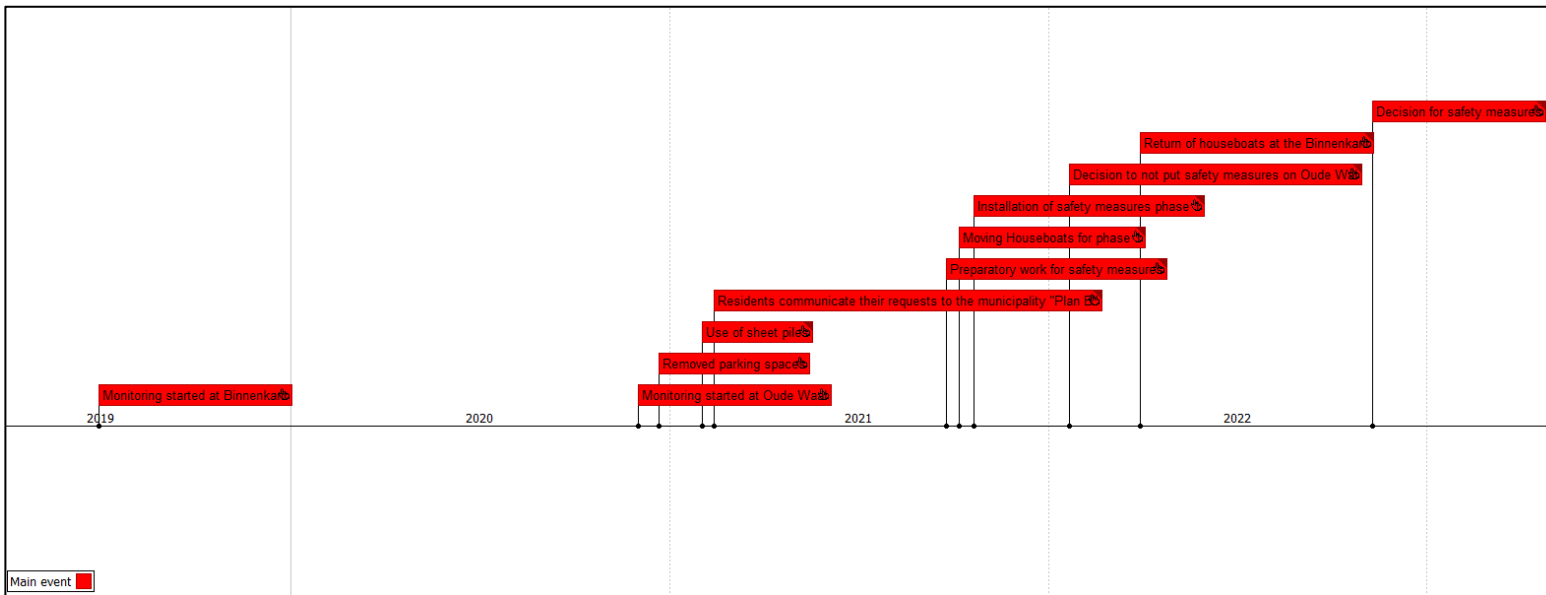
DECISION AND CHOICES

- INFORMATION SESSIONS WITH PEOPLE
- DEPENDS SPECIES OF THE PROJECT





# PRELIMINARY FINDINGS AMSTERDAM

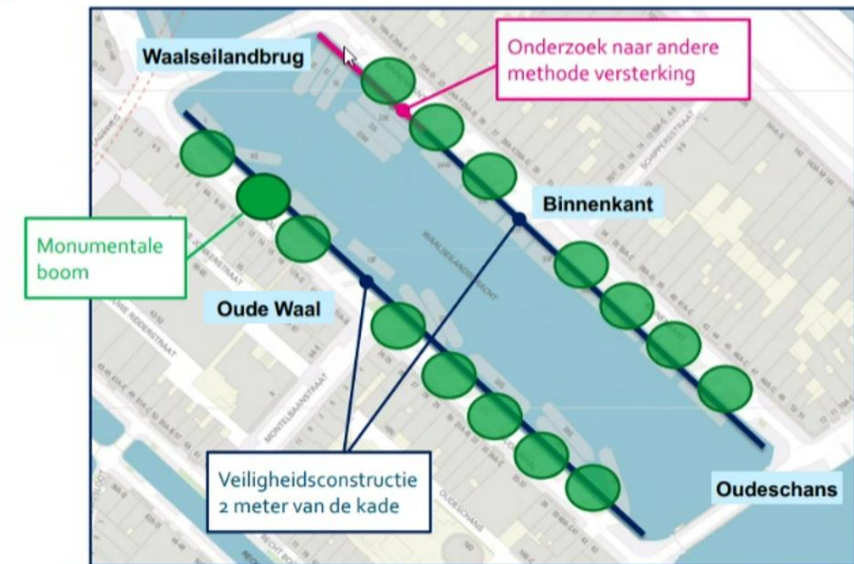


2019-2023

However, works will be concluded in 2029



## Veiligheidsconstructies



Source: Gemeente Amsterdam,  
<https://www.amsterdam.nl/projecten/kademuren/maatregelen/waalseilandsgracht/>



# FINDINGS



## Waalseilandsgracht: versterken kademuren



Gemeente Amsterdam

Started on November 6, 2023 • 196 followers

Unfollow this project



Overview

Updates

Participate

Contact

Con

### About us

Show translation

De kademuren ter hoogte van Binnenkant 14 tot en met 51 en Oude Waal 1 tot en met 44 zijn in slechte staat. Dat zijn de kademuren langs de Waalseilandsgracht, tussen de Waalseilandbrug (brug 283) en brug 280 bij de Oudeschans. We nemen maatregelen om de kades veilig in gebruik te houden tot aan het herstel. Op

- **de BouwApp was suggested** to inform about the works being conducted.
- Social media groups were not that relevant.
- Newspapers provided several information to the residents.
- Asset owners contacted directly the residents around the canal through **printed mail**.
- **The visiting centre worked** as a space for information meetings.



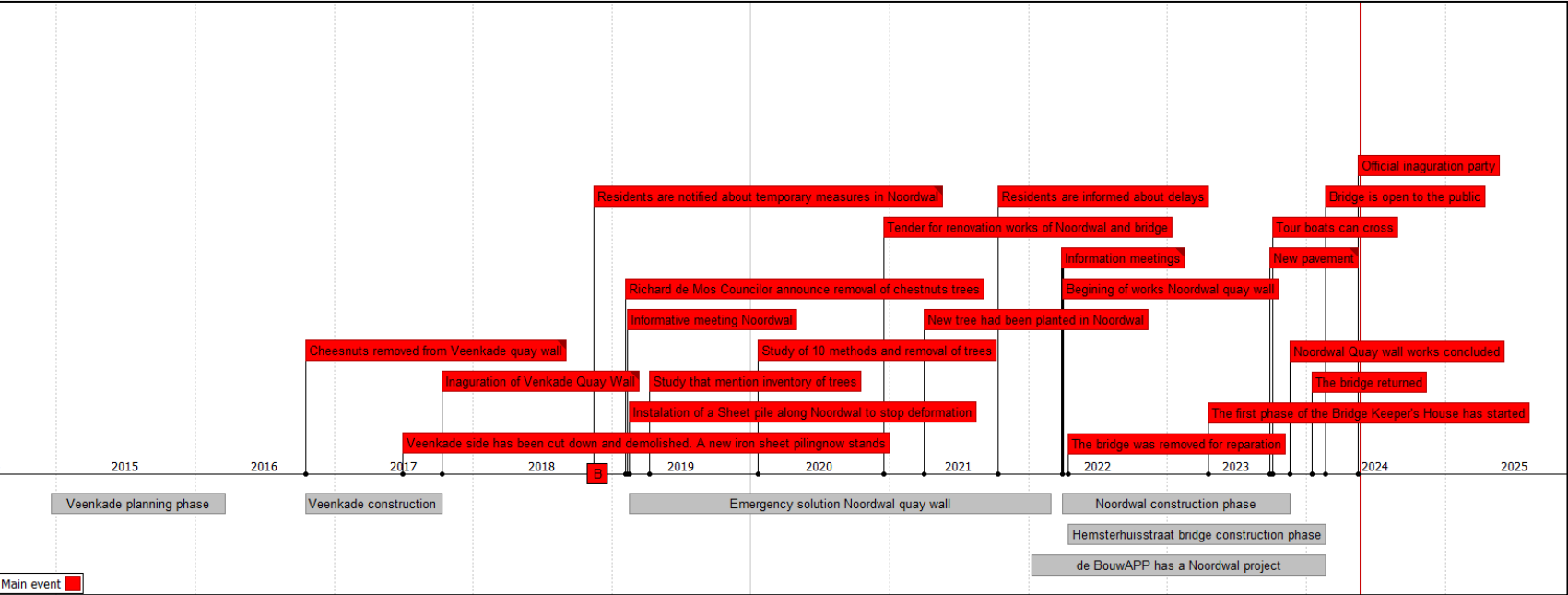






# PRELIMINARY FINDINGS THE HAGUE

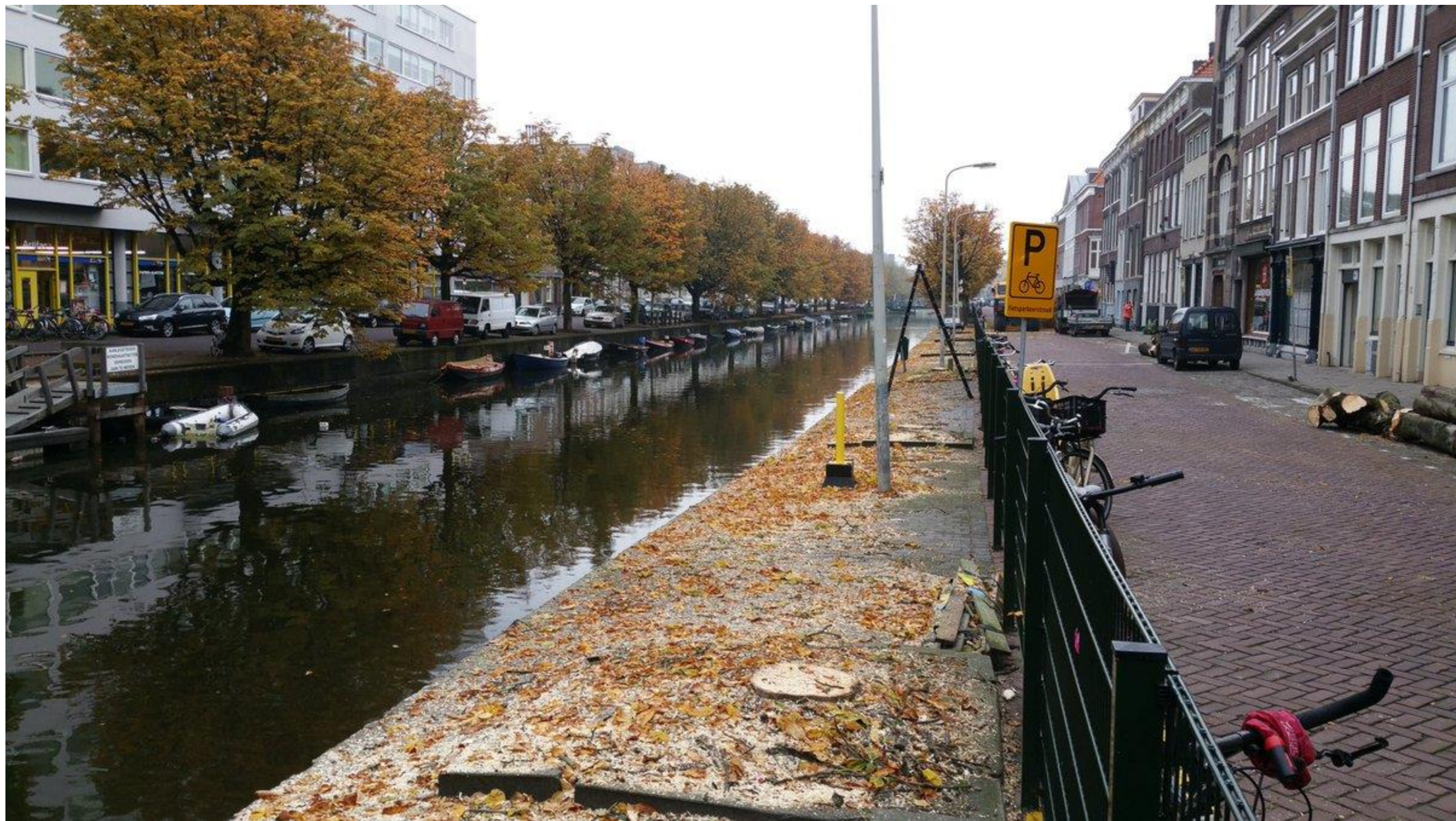
Social media: Facebook













# INAUGURATION NOORDWAL/VEENKADE UBQ, 14 MAY 2024





# FINDINGS



Residents discuss official decisions and propose solutions using social media channels



- **There is no visiting centre** to inform about the works being developed or future actions.
- **Printed mail** with advice and postcards from asset owners to asset users.
- **De BouwApp is recommended** by asset owners to be installed to know information about the works in progress.
- Informational videos, reports, and news are posted on the municipality's website. Difficult to find.
- A better graphic design is mentioned that could improve communication, as suggested by asset owners.



# MAIN FINDINGS

## Safety first – Government position



Photo: Jimmy Miltenburg / NH News



"Sheet piling for ten years is shockingly ugly and polluting"

Jim Klinkhamer, 'the good shore'



- Actions were taken first to improve the conditions of the UBQs.
- Collecting data for monitoring the UBQs is made by service providers; they do not collect residents' input.
- Information about the maintenance working process is shown through the BowApp.
- Information meetings were conducted to present information about the works developed; nevertheless, in previous stages, asset users were not involved.
- Some asset users have a high education level, which has made the acceptance of solutions provided by asset owners.
- The asset users were not involved in planning or design stages, just informed about already taken actions.
- Some residents present their own solutions developed by retired experts.



# RESEARCH RECOMMENDATIONS

- Translate statistical information into more digestible forms for the ordinary citizen
- Stakeholder participation and discussions can bring awareness and acceptance of UBQ maintenance
- Visual and graphic information is essential. Even interactive information.
- Monitoring data can also inform asset users if it is translated properly



# THANK YOU

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