

Minutes

Date minutes 8 November 2016	Our reference 1230042-002-ZWS-0015	Project 1230042-002	Made by Ulrich Förster
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Meeting

1st Dutch-German exchange of knowledge and experience
Coming from forecasts to effective flood defending emergency measures

Present

Daniel Bachmann, Wijnand Evers, Ulrich Förster, Eric Huijskes, Hans Knotter, Bärbel Koppe, Georg Johann, Patrick Kluding, Dirk de Lange, Geert Lehmann, Lena Lankenau, Niels Robbemont, Michael Schaper, Jasper Stam, Eric Sprokkereef, Maya Sule, Hans de Vries, Wout de Vries, Henning Werker, Marlene Willkomm

Objectives for this exchange

For both Germany and The Netherlands flood event management is high on the agenda! This concerns e.g. monitoring, forecasts, warnings, response and aftercare. There is potential that both countries can learn from each other!

To explore what we can learn from each other, this exchange of German and Dutch professionals has been organised. In this exchange we have focussed on the (inter)action of and between forecasters and responders.

More specifically this exchange is aimed at inspiring each other, identifying actions aimed at sharing common areas of interest and ideally also at achieving a long term joint agenda for future co-operation.

Presentations and introductions

The following presentations were held:

- Wout de Vries (RWS): Opening and introduction
- Eric Huijskes (Deltares): Knowledge Management in Emergency Response Measures in The Netherlands and international ambitions to join forces

From forecasts to appropriate emergency measures:

- Georg Johann (Emschergenossenschaft): From flood forecast to flood fighting – tools of flood risk management
- Daniel Bachmann (Deltares): Real-time monitoring and forecasting of dike strength

Emergency measures for the flood defence line:

- Michael Schaper (LSBG): Dike Defence & Training Centre in Hamburg
- Bärbel Koppe (City University of Applied Sciences Bremen): Development of new techniques and constructions for the use in Emergency Flood Control

Education, Training and Practical Exercises:

- Hans Knotter (Water Board Rivierenland): National professionalizing in dike inspection during high water
- Geert Lehmann (THW), Lena Lankenau (City University of Applied Sciences Bremen): Enhancements in education concerning dike defending

Discussion and actions

The presentations provided an excellent basis for the discussions. The presentations are available via the Wiki website.

In the following some of the reactions of the participants are given:

- Marlene Willkomm appreciates the possibility of getting access to all programmes, guidelines, etc. concerning training and education by putting it on one platform (the Wiki).
- According to Niels Robbemont there are developments on the same area. He identifies a common need for training and for a platform to share and to get it on an international level. The same counts for the English and the Americans. We have to benefit from each other!
- The forecasters Erik Sprokereef and Jasper Stam of the Watermanagement Centrum Nederland (WMCN) are interested to exchange data with the Emschergerossenschaft. They also want to know which information concerning organisation and logistics the crisis teams need from forecasters and how this is translated in handbooks.
- Georg Johann (Emschergerossenschaft) is interested in an exchange of used methods in terms of fragility curves, flood forecasts and predicting the safety of the dike. What are the possibilities, restrictions and solutions and how to deal with uncertainties?
- Daniel Bachmann is interested in the communication chain from forecasting team (government) tot crisis management (water boards / volunteers).
- There is a pool of experienced people in Germany due to all the flood events in recent years. Bärbel Koppe is keen to see how we can make use of this valuable experience.
- Geert Lehmann (THW) notifies that evaluation reports of the experience with actual floods during the last flood events in Germany are accessible. The Dutch side asks if it would be possible to receive this information.
- Wout de Vries indicates the importance and advantages of "looking into each other's kitchen" for the various phases: preparation/forecasting, cold phase concerning exercises and of course in the warm phase.
- The Dutch side would like to see the test site in Bremen. The Dutch have test sites in Delft and Groningen. It would be fine to organize an excursion to these sites and to use each other's facilities.
- Emschergerossenschaft and Hamburg would be open to welcome the Dutch for their exercises and doing these exercises together. It is proposed to make a calendar of all exercise agendas.
- It is also appreciated if experts from abroad could be present in crisis situations to help and learn. It is also feasible to learn from regular dike inspections (before storm season).
- Both sides embrace an exchange of the content of the dike books in order to highlight the differences.
- Patrick Kluding is interested in possible damages to stop-logs. What kind of damage is dangerous and what is not? What experiences do we have and what are the do's and don'ts?
- Bärbel Koppe suggests to exchange information and data on meetings, courses etc. so that it is possible to join. This could be very interesting to learn more. Collect useful websites and deliver "off-the-shelf" knowledge.
- Wout de Vries remarks that a lot of research results are available on the STOWA website, for example concerning the use of drones.
- Another point of interest is the way how certification (i.e. the validation and accreditation concerning the application) of measures works in Germany.

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- Bärbel Koppe is also interested in the financing scheme for emergency response and the organisation of flood control in the Netherlands. In Germany this is very complicated and not very effective due to the federal state system.
- There is also a need for standardisation and harmonisation concerning procedures, instructions and designations. Therefore an overview of facilities, educations and trainings and access to existing knowledge is needed.
- Geert Lehmann emphasizes the necessity of a glossary in Dutch, English and German with words used in crisis management. Such a glossary is already drawn up in Germany, because many different words with the same meaning are often used which can often lead to confusion. The Netherlands are in the same position! Try to only use one term.
- Working with volunteers is often a topic in Germany. Volunteers are keen to help but do not have the knowledge to do the right things. This can result in more damage than occurring without the help of volunteers. Therefore it is important to teach them what to do and not to do in case of emergency by doing tailored exercises and to provide an unambiguous, but general guideline.
- Nowadays, people come together via social media. It is a challenge to deal with social media and make use of the involved big data in flood fighting.
- Stadtentwässerungsbetriebe Köln train people (consultants) with serious games developed by the RWTH Aachen. In the Netherlands the use of game-based learning and training such as Levee Patroller (Dijk Patrouille) is also common.
- Bärbel Koppe states that we are all living from research funds. Hamburg, Emschergerossenschaft, Deltares, STOWA and Rivierenland are interested in co-operating in such a prospective research with the City University of Applied Sciences in Bremen.

Overview of actions

Based on the previous, the following actions were recorded on flipovers:

No	Action	German input	Dutch input
1	Access to each other's knowledge, experience and tools. Deltares will prepare the Wiki for this. Including links to useful websites	All, please provide "content" and we are happy to upload.	Ulrich Förster (Deltares)
2	Access to training & education. See item 1.	All, please provide "content" and we are happy to upload.	Ulrich Förster (Deltares)
3	Exchange of data / experience for forecasters.	Georg Johann (Emschergerossenschaft)	Erik Prokereeef, Jasper Stam (WMCN)
4	Needs of responders translated to forecasters	Georg Johann (Emschergerossenschaft)	Erik Prokereeef, Jasper Stam (WMCN)
5	Share experience re forecasting loads & strengths, fragility curves.	Georg Johann (Emschergerossenschaft)	Erik Prokereeef, Jasper Stam (WMCN); Hans Knotter (WSRL), Daniel Bachmann (Deltares)
6	Experience with actual floods (evaluation reports)	Geert Lehmann (THW)	Ulrich Förster (Deltares)
7	Provide an exercise calendar, including dike inspections	All	Ulrich Förster (Deltares)
8	Assistance during real floods (provide a list of experts that can be mobilised at short	All	Eric Huijskes (Deltares), All

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No	Action	German input	Dutch input
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9	Compare Dike books of NL and Germany and summarize in short memo		Eric Huijskes (Deltares)
10	How to deal with damage to stop-logs. Share experiences.	Patrick Kluding (Stadtentwässerungsbetriebe Köln)	Wijnand Evers (Waterboard DOD)
11	Validation and accreditation of measures, what can we learn from each other	???	Hans Knotter (WSRL), Wijnand Evers (WDOD), Ulrich Förster (Deltares)
12	Provide a glossary of terms	Geert Lehmann (THW)	Ulrich Förster (Deltares)
13	Description of the financing and organisation scheme for emergency response in The Netherlands		Eric Huijskes (Deltares)
14	Overview of facilities in Germany and NL.	All	Eric Huijskes. Ulrich Förster (Deltares)
15	Experience with and ideas for Serious Games		Ulrich Förster (Deltares)

In the actions above, in various cases this will result in a document that can be uploaded. In other cases it may involve organising a separate visit or a Skype meeting. Please provide feedback from such meetings, such that others can learn from this.

Final remarks

Both sides are enthusiastic to do a follow-up meeting next year. The idea would be to organise a follow-up event in say 5-6 months. This event could focus on discussing progress / outcomes of the actions above + additional related topics.

The output from the actions above will be put on the Wiki.

From the German side, the option to organise a follow-up event in Germany were given by Bremen, Cologne and Hamburg. The German side indicated the wish to also invite other German parties. No doubt this is very welcome!

In particular regarding the German participants, the Dutch participants would like to thank them for all the trouble taken to come to Tiel and for their input in the enjoyable and fruitful discussions!

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André Baak, Patrizia Bernardini, Wilfried Hausmann, Ludolph Wentholt



Participants from Germany:

- Prof. Dr. Bärbel Koppe (City University of Applied Science Bremen, Institute for Hydraulic and Coastal Engineering)
- Dipl.-Hydr. Georg Johann (Water Board Emschergenossenschaft + Lippeverband)
- Dipl.-Kfm. Patrick Kluding (Stadtentwässerungsbetriebe Köln)
- Dr. Geert Lehmann (Federal Agency for Technical Relief - THW Bundesschule Hoya)
- Dipl.-Ing. Lena Lankenau (City University of Applied Science Bremen, Institute for Hydraulic and Coastal Engineering)
- Dipl.-Ing. Michael Schaper (Landesbetrieb Straßen, Brücken und Gewässer / Schulungszentrum der Freien Hansestadt Hamburg, Fachbereichsleitung Deichverteidigung und Deichaufsicht)
- Dipl.-Ing. Henning Werker (Stadtentwässerungsbetriebe Köln, Hochwasserschutzzentrale)
- Dr. Marlene Willkomm (Stadtentwässerungsbetriebe Köln, Hochwasserschutzzentrale)

Participants from the Netherlands:

- Dr.-Ing. Daniel Bachmann (Deltares)
- ing. Wijnand Evers (Water Board Drents Overijsselse Delta)
- Dipl.-Ing. Ulrich Förster (Deltares/organizer)
- ir. Eric Huijskes (Deltares)
- ing. Hans Knotter (Water Board Rivierenland)
- ir. Dirk de Lange (Deltares)
- ir. Niels Robbemont (Water Board Hollandse Delta)
- Jasper Stam (Rijkswaterstaat, Centre for Water Management, Crisis Advice Group)
- ing. Eric Sprokkereef (Rijkswaterstaat, Centre for Water Management, Crisis Advice Group)
- dr.ir. Maya Sule (Deltares)
- ing. Hans de Vries (Coordinating Advisor Watermanagement & Crisismanagement / LCO & LCW)
- ir. Wout de Vries (Rijkswaterstaat WVL)

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- ir. Patrizia Bernardini (Rijkswaterstaat GPO)
- Wilfried Hausmann (Head Fire Brigade City of Neuwied)
- ir. Ludolph Wentholt (STOWA)
- Luitenant Kolonel André Baak (Water Risk Training Expertise Centre / Water Board Aa & Maas)