

 Minutes date
 Our reference
 Project
 Made by

 June 17, 2019
 11203626-004-ZWS-0002
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 Marcel Ververs

Meeting date Number of pages

June 4, 2019

Meeting

Delft-FEWS CSB #14 (2019-2)

Present

A. Tavendale, M.E. Philippart, M. Ebel, T. Flowers, E. Welles, N. Slootjes, M. Ververs, J. Robinson,

R. de Crook, I. ten Broeke

Absent

G. Boot

Introduction and attendance

On June 4th 2019 the 14th Delft-FEWS Community Strategy Board (CSB) meeting was held.

At the time of the meeting the CSB consists of the following members:

Organisation	Represented by	Present
Bureau of Meteorology in Australia (BoM)	Justin Robinson	Yes
Bureau of Meteorology in Australia (BoM)	Adam Smith	Apologies
Dutch Waterboards (DWB)	Roger de Crook	Yes
Federal Office for the ENvironment in Switzerland (FOEN)	Martin Ebel	Yes
Rijkswaterstaat in the Netherlands (RWS)	Marc Philippart	Yes
Scottish Environment Protection Agency (SEPA)	Amy Tavendale	Yes
Deltares-USA	Edwin Welles	Yes
	Nadine Slootjes	
Deltares NL	Marcel Ververs	Yes
	Ilonka ten Broeke	
National Weather Service (USA)	Trey Flowers	Yes

Agenda

The agenda was as follows:

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12:00 (CET)	Opening	Welcome, presence and apologies		
12:05 - 12:35	Delft-FEWS software review	Presentation by Marcel Ververs		
12:35 - 13:00	Delft-FEWS 2025 Vision Organisation Financing	Presentation by Nadine Slootjes on results from sessions at North American and Australian user days		
13:00 - 13:05	Confirmation of minutes previous meeting	Minutes CSB #13		
13:05 - 13:15	News from the community	Input from all CSB members		
13:30 - 13:40	Any other business	All		
13:40 - 13.45	Next meeting	Date and topics		
13.45 - 13.50	Closure	Summary and actions		



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Opening

Nadine Slootjes opens the 14th CSB meeting by welcoming everyone and a special welcome to Justin Robinson who replaces Jeff Perkins as he has changed position within the BoM.

Bruce Quiq announced before the meeting that he takes up a new role within the BoM, and will be replaced by Adam Smith.

Delft-FEWS vision for 2025

Nadine gave an overview of the feedback that she received on her presentation about a vision for Delft-FEWS for the year 2025 at the Australian International User Days. She highlighted many topics that were brought up during the discussion sessions.

The Delft-FEWS vision for 2025 will also be discussed at both user meetings in June (Dutch and German). After that Deltares will advise on the outcome and come up with a plan to be discussed at the CSB.

An important question will be how to make decisions and choose the most relevant topics? Based on what is important and what is related to the scope of Delft-FEWS? Let's prioritize together for the following 5 years. Another consideration could be 'how much time will it cost to implement the necessary changes?'

One of the things listed was to have a light version of Delft-FEWS. Marc indicates that RWS is already working on that. Amy indicates that SEPA is interested.

Martin: There is overlap with topics that are already discussed, like a mobile version of Delft-FEWS. Data section - including social media is interesting, but how? Data is ingested in processed form in Delft-FEWS. Delft-FEWS only shows the outcome. A combined approach could be an option. Marc thinks that Deltares should not modify Delft-FEWS for this, but Deltares should know how to combine data streams and how to harvest the data. There should be a knowledge platform (with advisors from Deltares), rather than one technical solution. Deltares should probably have the role to know how to combine the info from social media with existing information and to know what can you do we do with the info. The new Delft-FEWS portal should contain information that Deltares has this expertise and we could also use the Delft-FEWS forum on the new portal for that!

Roger: A GUI to create configuration for Delft-FEWS has already been a topic for last ten years. At the moment there are several tools available, like excel spreadsheets to generate a basic set of configuration files or a set of python scripts that generate xml -files from a specific database structure. When to use which option is maybe too vague. Roger thinks that a GUI based solution might be the best way forward. Marcel: Building a GUI based tool to create all sorts of configuration is extremely costly.

Justin: Do not get rid of xml. The Bureau of Meteorology thinks that Testing is a very important topic. Invest in tools that enable us to easily test the changes potentially supported by others? For example provide support for automatic workflow testing. The BoM has a 2 month release cycle for changes and all testing is done by hand, so a lot of effort has to be put into this. It would be good to have tools to make that easier and quicker. Amy confirms that there is never enough time to do all the necessary testing. It was recommended that developing a strategy for this for the next couple of years is the best approach. Clients that need support with their testing strategy should express interest to get funding in place. Nadine mentioned that her idea



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is to have a roadmap with an annual cycle of topics to be addressed, which is reviewed every year.

Amy: It would be helpful to have a list of experts with their specialism. This is planned to be added to the new portal! There is also a space on the portal to add new ideas. It is even possible for all organisations to vote on those new ideas.

The Delft-FEWS 2025 vision will also be on the agenda for the next meeting with the idea to try to bring some focus and consensus on the topics to be addressed in our vision for 2025.

External Software Review (by Marcel Ververs)

Marcel gave a presentation about the software release review performed by a company named Software Improvement Group (SIG). His presentation contained a summary of the outcome of this review and some first actions identified by Delft-FEWS Product Management. During and after the presentation many questions were raised and there was a lively discussion. The next paragraphs will contain a summary of the questions and the discussion.

Amy: When rolling out the FEWS 2015.01 version, SEPA experienced a similar situation as described in the presentation (rolling out the software took longer than expected due to the issues that were discovered on their system). She wants to know where the line is between what Deltares will do and what the client will do. What is the position of Deltares in this? To make that clear it would help to know what is expected of the client. This should be described in a Delft-FEWS testing strategy document.

Roger had three points he wanted to raise with respect to testing:

- 1. If clients know what has been tested and how, the user community can give feedback on what possible extra testing is needed. The main objective is to get insight. Marcel: There was still an action from one of the previous meetings to share this information (action 11.2).
- 2. Each year before the release clients have been asked to test the new software version. This has not been repeated the last two releases. It is important to involve the community. Marcel: It has been difficult to plan this due to the delay in the release date and to find the right time to organize it. He will discuss this with Gerben. **Action** for Marcel.
- 3. There have been occasions after a software release that they find a bug, when going through the user interface, that could have been found before. Marcel: Explains that with all the available options and possible combinations in the user interface, that some elements are missed in our testing. If you have examples, then please provide that to us and we will extend our testing in that area in the future.

Justin: It might be useful to know which clients have already gone through a testing process. If big agencies have already tested that could have impact on the process in other organisations. It is good to get involvement of the community!

Marcel: Deltares organises joined software release testing for North American clients. Edwin explains that having everyone together and having all clients test at the same time helps. Many hands make light work. There are differences, but having the whole group communicating (8 agencies) makes testing a lot more efficient. Working together on testing is really a big advantage. Conference calls prevent double work. Communication is very important! Getting everyone together was a challenge. At Deltares each developer has its own expertise (specific Modules of the Delft-FEWS code that he has knowledge of). Focussing on specific parts of the code helps prioritizing the work and to get a faster response from the development team. Marcel: For developers in this way it is easier to repeat tests, which speeds up the process of fixing bugs. This focus helps to discover the issues. Edwin: However there are also some



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inconveniences, if one group gets stuck (can't get through the gate), it can slow down the process for others as well.

Amy: Would it be good to have a new international testing strategy and have an international group to coordinate software release testing? Maybe change participants of this group each year? Edwin: Having regional groups would be very efficient as in his experience this is time zone driven. Marcel: Deltares will share information from North American clients about how they have organised their joined beta testing activities. A similar kind of European group is potentially also something that could be arranged. Within that group users can share information about what has been tested. Action: Deltares

Edwin: With respect to the software release date it makes sense to delay if the internal acceptance criteria are not met. But everything is bound in contracts. There is tension between the documented schedules versus the notion of being driven by quality. We will have to acknowledge that that is going to persist. What helps is having a statement from clients about whether they have a preference for delivering on time or quality of the software.

Marcel: tune testing effort. Focus on items that have to be tested more than foreseen. But hold on to contract as much as possible.

Amy: Due to a change in culture it becomes more and more difficult to justify the delays. Marcel: In conclusion it is important to communicate in time when schedule may not be met and then jointly make a decision on that. Marc indicates that as a trial Deltares regularly shared information about the amount of issues reported and resolved for the 2018.02 release. He found it very useful to see the status of the software release was. Marcel: Deltares will share that information in the future.

On one of the slides the introduction of the Boy-scout-rule was mentioned as a rule to leave the code cleaner after you have touched it. The question came up whether this was new. Deltares states that it is good to make it a standard as it is not always applied. Roger suggests making this aspect part of the FEWS 2025 vision, by defining components (parts of Delft-FEWS) that can be isolated to improve and clean over time (take a modular approach). They would be different when testing. Marcel explained with respect to monitoring the maintainability of the Delft-FEWS code there is a discussion with RWS on monitoring Delft-FEWS code on a continuous basis, which will help in monitoring maintainability and see improvements.

After the presentation Edwin asks to CSB members 'where do you want Delft-FEWS to reside? One approach is more costly than the other. It should be clear what your preference is on what we aim for in relation to quality characteristics. What strategy would you like to see us follow? Marc thinks that when the maintainability of the Delft-FEWS code is higher, then changes become cheaper, but at first it will cost more. It is important to rely on release date, for him more important than the score for the maintainability of the code. Amy agrees on that. Trey: It is important to be able to be confident that we get what we are contracted for. For the NWS it has to be high quality and in time. For the NWS the scope, the timeframe and costs are to be agreed upfront, but can be tuned beforehand. We will have to live up to obligations. Marc: For RWS functionality is important too. Marcel: If we look at the scope of what is part of a release, there is a lot to gain. Decreasing the scope of a new release could improve the quality and the agreed deadlines could be better met. With respect to the amount of features in a release it is important to get a better picture of what is possible and what not? Quality and timeliness are main issues. Martin says that more stable is generally more expensive. Software testing is very expensive. But of course more stable in the end is more reliable. For new features it is important to take more time for testing.

Marcel: In summary a timely communication about potential complications with adding all new features is needed and if necessary selling 'no' in time. Less functionality with higher quality is



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better and meeting the agreed release date is more important than the amount of features implemented.

Justin: I would like to give a compliment for sharing all this information and for showing that Deltares takes it seriously. Others agree with that.

Minutes & Actions previous meeting

Since we have changed the order of the agenda for this meeting due to the availability of Nadine only in the first hour of the meeting, this item was supposed to be discussed at the end of the meeting, but time did not allow for that. We agreed to handle this part through e-mail.

Action 10.2: This action on Edwin Welles from Deltares-USA will be kept open for the next meeting. This is about a general overview on what has been tested. Additionally, it is discussed that it would be interesting for every client to know more specifically what is tested for their own system. Deltares can organise this through the project lead.

Action 11.2: Share details of what has been tested, share general overview what has been tested and an overview of systems that have been used for testing. This action is still outstanding.

Action 13.1: Share list of potential developments with other clients. This action is still outstanding.

Action 13.2: Send an e-mail with info about EVS to be used for verification for forecasts. This action is still outstanding.

News from Deltares

This item was not covered in this meeting.

Feedback from the community

This item was only partly covered in this meeting. We only talked about the Australian User Days.

Australia (Justin):

Australian User Days was very useful and nice to have both Nadine and Gerben from NL to attend. The community is growing in Australia. With Delft-FEWS they managed to get smoother machine to machine communication, but the User Days is all about getting better communication between people and that is what they now need to focus on. A summary of the User Days can be found on the <u>Delft-FEWS OSS Portal</u>.

Status update of the Delft-FEWS 2020 roadmaps

This item was not covered in this meeting.

Any other business

There was nothing to report.

Summary, actions and closure



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Marcel thanked everyone for their contributions. Next meeting will be on September 10th 2019. The dates of the other meetings in 2019 are:

4th meeting Tuesday 5 November (Delft)

Action list

Action			Due by	Completion date	Status
10.2	Collate testing experiences into one document	Edwin Welles	September 2018		Open
11.2	Share details of what has been tested, share general overview what has been tested and an overview of systems that have been used for testing	Deltares	March 2019		Open
13.1	Share list of potential developments with other clients	Deltares	December 2019		Open
13.2	Send an e-mail with info about EVS to be used for verification for forecasts	Edwin Welles	June 2019		Open
14.1	Organise Delft-FEWS release beta testing workshop in Delft for (Dutch) clients	Deltares	November 2019		Open
14.2	Share information to CSB how North American clients have been organised into a joined beta testing schedule	Deltares	September 2019		Open
14.3	Share information to CSB about status of software release.	Deltares	November 2019		Open

Attachment(s)

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