Memo

Deltares

Date
23 April 2024

Number of pages
1 of 3

Contact person
Marcel Ververs

Direct number
+31(0)6 1019 8917

E-mail
Marcel.Ververs@deltares.nl

Subject
Delft-FEWS Support and Maintenance Services

Delft-FEWS Support and Maintenance Services

Services
The proposed maintenance and support contract includes the following services according to the Delft-FEWS Professional Service package complemented with some additional modules:

- Access to our helpdesk.
- 1st Level support: limited support (in total 137 hours for calls in category 1 to 4). Calls by the client will be classified and resolved within time scales associated with the priority of the call.
- Annual upgrades of the software (including improvements, new features, bug fixes, etc.).
- Provision of patches (3) to solve urgent bugs in the software.
- Support with the upgrade of your Operational systems on site.
- Additional support for weekend days (between 9:00 and 18:00 CET). This service is optional.
- Maintenance of Test System in Delft. This includes the following tasks (based on exchange of information every quarter):
  - Updating FEWS configuration based on config package delivered by the client
  - Aligning the Delft-FEWS software version and patches
  - Aligning the supporting software version (e.g. OS, Flood Modeller pro, Tomcat, java)
- 3 days of on-site development (one person)
- Quarterly management meetings.

When supporting an operational system, it is recognised that not all calls for Support & Maintenance need the same type of response. In the table below, a categorisation of severity of calls is presented. Per call, the classification of the call will be decided upon mutual agreement.

Category	Type of call	Description	Priority
1	Standard	Due to an error in the system, no forecasts can be generated at all. System is down.	High
2	Severe fault call	The users are unable to undertake their core business efficiently but are able to work around the problem.	Medium
3	Fault call	A fault is noted having no impact on core business. A workaround is available.	Standard
4	Support request	A request is made for assistance in running or configuring the system.	

The table below presents the target response, analysis and resolution times. All times are in business hours as opposed to elapsed time.

Category	Response time (hours)	Analysis time (hours)	Resolution time (hours)
1	1	8	8
2	1	8	40
3	4	40	80
4	8	-	-

Within the response time, the reception of a support call will be acknowledged by the Delft-FEWS Helpdesk.

Within the target analysis time, the reported fault will be analysed and a resolution strategy will be defined. If, after investigation, the responsibility for resolving the problem is outside the scope of the support & maintenance agreement, this will be reported to the client's primary contact and the call will be considered as a Category 4 call. The time already spent on the call (i.e. the Analysis time) will be debited from the available annual support hours.

Within target resolution time, the fault will be attempted to be repaired. If the supplier feels they will not be able to repair the fault within the resolution time, prior to the expiry of the resolution time the supplier will contact the client, and as early as possible, to agree an action plan for dealing with the fault and a target date for resolution.

Helpdesk support hours

The helpdesk is available on working days from 9:00 until 18:00 CET. During these hours a duty support officer is always available by (mobile) phone, as well as e-mail. The phone will be answered in English by the duty support officer.

Calls for support can be made by phone or email and should also be accompanied by a written account (via e-mail) of the problem encountered or the type of advice needed.

Delft-FEWS software maintenance upgrade

All support & maintenance contracts include the right to obtain new releases of the Delft-FEWS software free of cost. New releases of the Delft-FEWS software are issued twice annually. A new release includes the resolution of category 3 calls and upgraded and additional functionality (implemented in other assignments).

The Delft-FEWS software upgrade will be carried out during the period of Support & Maintenance specified and the version will be decided with the client.

Support Environment and access to the system.

Deltares believes that effective support and maintenance requires extensive knowledge and testing facilities. In all the operational systems Deltares supports the approach taken is that a "shadow" operational system is run within the Deltares environment.

This "shadow" system has a number of key features.

- It allows updates, fixes, new developments and releases to be tested within the same

environment as at the client's offices, without requiring these to be tested in-situ.

- It provides a platform on which problems can be analysed in detail, without interrupting the operational forecasting process at the client.
- It provides a platform for training support staff at Deltares, meaning they are up-to-date with the system running in the offices of the client and can answer questions knowledgeably.

To allow this 'shadow' system provide this service, operational data should be transferred to a specifically created dedicated FTP service, from where it can be imported into the system running at Deltares.

Please note that Deltares should be granted remote access to the system running within the chosen environment of the client to enable remote implementation of maintenance releases, as well as being able to analyse issues with the operational system within the environment is it running in if necessary.