**Protocol van Overdracht**

**Rekenkernel DikesOvertopping versie 16.2.1**

**Versie 2.0, februari 2013**

**Status en Versie**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Project-nummer | Versie | Datum | Auteur (ontwikkelaar, PL) | Paraaf | Review beheerder Deltares / RWS-WVL | Paraaf | Goedkeuring  SLA-Managers | Paraaf |
| 1230095 | 1 | 15-12-'16 | Tom The |  | Hans de Waal |  | Gerard Blom |  |
|  |  |  |  |  | Thomas van Walsem |  | Rolf van den Hoek |  |

1. **Woord vooraf**

Doel van de software

De rekenkernel DikesOvertopping wordt gebruikt voor het berekenen van golfoploop en overslag gedrag bij specifieke lokale omstandigheden. De kernel is een deelproduct van het 2016 KPP project Waterveiligheidsinstrumentarium, zoals beschreven in het “Plan van Aanpak KPP 2016 project , Waterveiligheidsinstrumentarium” (Hans de Waal ea, 2016, versie 1.3).

Over dit protocol

Voor dit Protocol van Overdracht (PvO) is gebruik gemaakt van het daarvoor beschikbare sjabloon (versie 2.0).

1. **Onderbouwing van de verandering**

Ten opzichte van versie 16.1.1 (opgeleverd d.d. 15-6-2016) is het volgende veranderd

* Bij grondig testen van de DikesOvertopping dll in Hydra-NL zijn meerdere problemen in de omkeer variant gevonden. Deze zijn allemaal gerepareerd.
* In een Hydra-Ring berekening is een probleem gevonden in bepaling van de roughness bij een gewone debiet-berekening met weliswaar een zeer kleine golfhoogte. Dit probleem is ook gerepareerd.

1. **Modelonderdelen**

Voor het opnemen van het model in de modellenbibliotheek worden in deze paragraaf de model-onderdelen beschreven. De modellen bestaan uit een aantal verschillende onderdelen, die hieronder nader beschreven worden:

1. *programmatuur*

De kernel wordt opgeleverd in de vorm van dynamic link libraries (dll's), die door

applicaties kunnen worden gebruikt (aangeroepen). Er is geen user interface.

1. *resolutie, het te gebruiken rooster*

Niet van toepassing.

1. *schematisatie, afbeelding van de werkelijkheid op het rooster, en schematisatie-methode*

Niet van toepassing.

1. *randvoorwaarden*

Niet van toepassing.

1. *een onderbouwing van de keuze van belangrijkste modelparameters*

De toegepaste parameters zijn gesynchroniseerd met de lijst die in WTI/WBI 2017 is vastgesteld.

1. *de gebruikte proces/workflow manager*

Niet van toepassing.

1. *de gevolgde kalibratie- en verificatie-procedure en de resultaten van deze procedure*

De formules en het model zijn binnen SBW en WTI/WBI 2017 inhoudelijk vastgesteld en vastgelegd in de documenten Requirements en Functioneel Ontwerp van de kernel.

1. *voor welk doel en binnen welke grenzen het model getoetst is*

Het model is bedoeld en geschikt voor gebruik in WTI/WBI 2017 software Hydra Ring, Ringtoets en standalone tools (UI schillen om de kernels heen)

1. **Gebruik van het model**

RWS kan de module voor de volgende primaire processen gebruiken:

1. Watermanagement, operationele toepassingen

Niet van toepassing.

1. Beheer en onderhoud van het beheersgebied

Als onderdeel van het WTI/WBI 2017 instrumentarium (Ringtoets, Hydra Ring en standalone tools).

1. Aanleg

Als onderdeel van het (toekomstig) ontwerpinstrumentarium.

1. Beleidsondersteuning verkenning

Als onderdeel van het WTI/WBI 2017 instrumentarium.

1. **Uitlevering**

De module zal na acceptatie door RWS-WVL worden opgenomen in de modellenbibliotheek van RWS bij Deltares. Van hieruit kan de module aan beheerders van gebruikende RWS-applicaties (en eventueel aan derden) ter beschikking worden gesteld.

1. **Producten**

Programmatuur:

In het versiebeheersysteem is DikesOvertopping traceerbaar, namelijk in tag “16.2.2”. In de Teamcity buildserver is de build gepind onder de tag “16.2.2”.

De kernel zelf bestaat uit 1 module:

* dllDikesOvertopping.dll 16.2.2

Documentatie (digitaal):

Deze kernel bevat de volgende documenten

* Functional Design
* Technical Design
* Technical Documentation
* Test Plan
* Test Report

1. **Beheer van het model**

De ontwikkelde software van RWS wordt bij Deltares beheerd in het kader van het KPP project Waterveiligheidsinstrumentarium en staat in Subversion. Tevens zijn de documentatie en de geautomatiseerde testbank in Subversion ondergebracht. Het model (of onderdelen daarvan) wordt op aanvraag beschikbaar gesteld aan derden. Voorafgaand aan het ter beschikking stellen wordt eerst toestemming gevraagd aan RWS-WVL.

1. **Referenties**

Naast de meegeleverde documenten is het volgende achtergronddocument relevant:

• Hans de Waal, Tom The, Pieter van Geer, Kimo Slager; Plan van Aanpak KPP 2016 project, Waterveiligheidsinstrumentarium, 23 december 2015

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dllDikesOvertopping.dll

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