

# THE UNECE CONVENTION ON ACCESS TO INFORMATION, PUBLIC PARTICIPATION AND ACCESS TO JUSTICE IN ENVIRONMENTAL MATTERS (AARHUS CONVENTION)

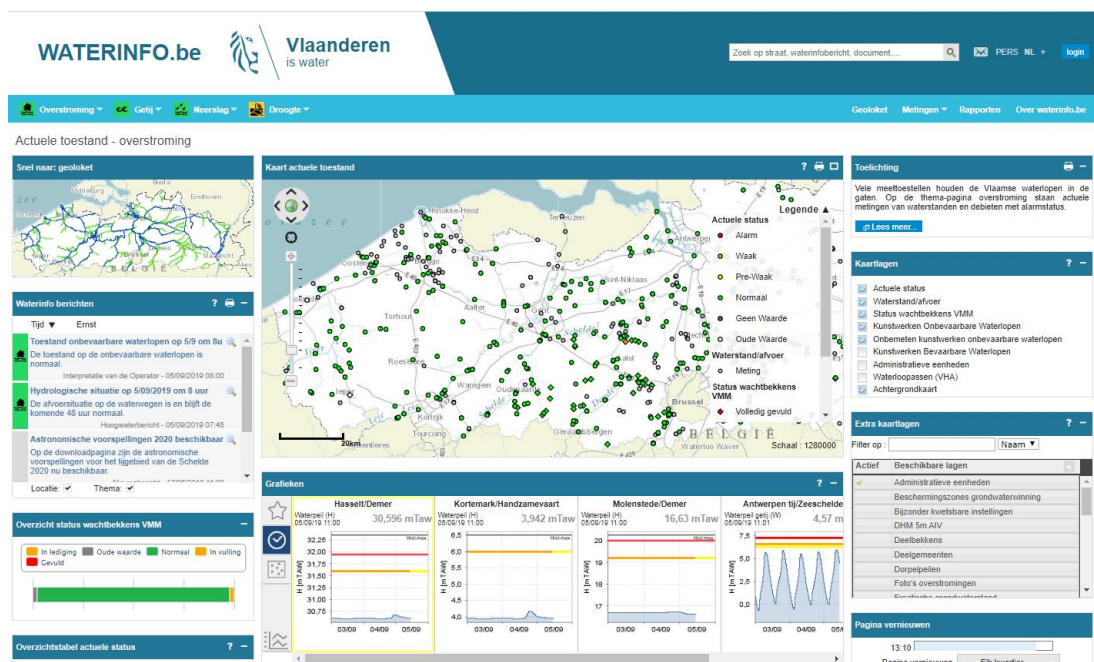
## TASK FORCE ON ACCESS TO INFORMATION

### ELECTRONIC INFORMATION TOOLS: CASE STUDY BY BELGIUM (FLANDERS)

**WATER-PORTAL FOR FLANDERS (N-BELGIUM):** <https://www.waterinfo.be>

## I. Description

- 1. **Brief description:** Interactive web-application including geoportal. The Waterinfo.be portal allows you to consult all available and official geographical and temporal water information in Flanders. It comprises real time observations and forecasts of hydrological information (rainfall, river flow, water levels, ...) of all major watercourses in Flanders, flood hazard and flood risk maps and all derived maps from the Flemish Hydrographic Atlas, that can be queried in several ways. Also real-time and historical hydrological time-series can be viewed and downloaded or re-used via webservices. The real-time maps display various data such as Standard Precipitation Indices (reflecting general drought and flood conditions), radar-based rainfall animations and accumulation products, real-time flood forecast maps, ... . Map reports are generated automatically and published online with frequencies ranging from 15' till 3 hours.



- 2. **Type:** Official Governmental website
- 3. **Scope:** sub-regional, local
- 4. **Working language(s):** Dutch and English
- 5. **Target users:** general public, research and advisory services, local governments including emergency services, regional and local water managers, agriculture, nature management, ...
- 6. **Starting year:** 2014
- 7. **Budget and funding source:** 2.0 mio EUR investment budget, +/- 150 kEUR/y maintenance budget provided by public funding via Water Management Department within Flemish Government.
- 8. **Contact:**

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## II. Implementation

- **9. Policy, legal and institutional context:** project was implemented by consortium of technology providers, following a public procurement.
- **10. Partner organizations involved:** different organizations within the Flemish Government concerning water management
- **11. Stakeholders involved, their expected benefits:** regional and local water managers, fire brigade...
- **12. User needs and methods of their assessment:** internet
- **13. Technology choice:** GIS-technology from Esri (<http://inspirepub.waterinfo.be/arcgis/rest/services>) is combined with the Wiski-Kiwis technology of Kisters-AG and has been integrated seamless in a dedicated .net CMS (Alsic bvba).

## III. Evaluation

- **14. Results:**
  - One portal integrating all official hydrological information (only surface water) in Flanders
  - 24/24 7/7 access to all data-sources
  - Free of charge data-access, for all users
- **15. Efficiency gains:**
  - Information from several data-providers within Flemish Government has been integrated into one solution.
  - Fully automated provisioning to external clients of all spatial and temporal information of the watersystem in Flanders, without need to interact with government staff (no mail requests, ...).
  - All information available in waterinfo.be can be re-used for third-party purposes via webservice
  - Information Systems has been configured allowing easy scaling up (clustering), so the portal can easily expanded with other water information (groundwater, water quality, air quality, ...).
- **16. Risks:**
  - By integrating all types of data there is a challenge to maintain a good overview (easy access) for all type of users. A risk of overcomplexity arises by adding more and more information, so a data-hierarchy is of importance.
- **17. Challenges encountered (please indicate resolved or not):**
  - Data-integration from several government agencies was resolved.
  - Real-time geoprocessing (merging, analysis, ...) of high resolution flood maps was resolved
  - Integration of spatial and temporal data (time-series) via two different technology providers was resolved.
- **18. Lessons learned:**
  - More involvement of end-users, would allow for reaching broader user groups. Now portal is fine for professional users, but to complex for general public.
- **19. Conditions for successful replication:**
  - Need for solid technology providers during implementation
  - Need for staff with both IT-experts and water-experts, working closely together during implementation and also production period as many maintenance (both on technology and information products) is needed in these information systems.
- **20. Overall assessment of the tool:**
  - Positive evaluation, as the tool is used daily & widely over 5 years now and it is considered by many users as an reference asset for the watermanagement in Flanders.
  - On system-side: overall very stable solution reaching +99% availability.