Automatic Production Line:
Continuous Flow Forecasting in the Netherlands

The Rhine during low discharges

Introduction

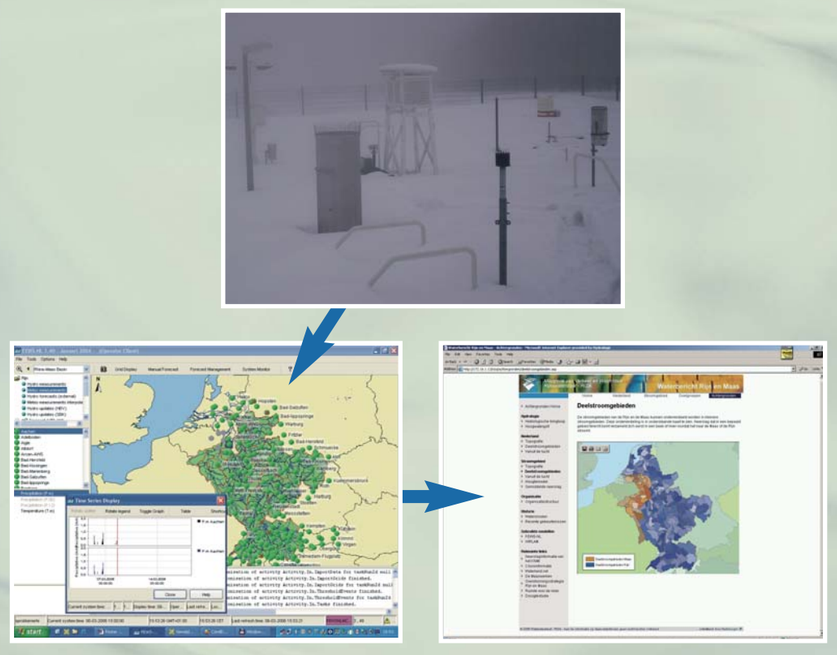
With the development of a new forecasting system (FEWS NL) for Rhine and Meuse in the Netherlands (for details see poster: Ensemble flow forecasting in The Netherlands) the path was paved to construct an 'Automatic Production Line' (APL) to perform continuous flow forecasts and give online information to a broader audience.

Nowadays every day of the year, meaning during all flow conditions, several forecasts with different weather predictions are made, including one ensemble forecast. Data is automatically collected, imported, pre-processed, used in models and presented in graphs and tables. FEWS NL aims all these tasks. FEWS NL also automatically forewards data to a website which facilitates the communication with citizens and target groups.

Website

The data from FEWS NL is automatically imported into the database belonging to the website 'Waterbericht' (Water message). The data is processed to be displayed at the website.

At the opening page warnings and messages for general use are displayed. The other main pages are: the situation in the Netherlands, the situation in the catchment, target groups and background information.



The APL: from data in the field to FEWS NL and the website

Future (2006-2007)

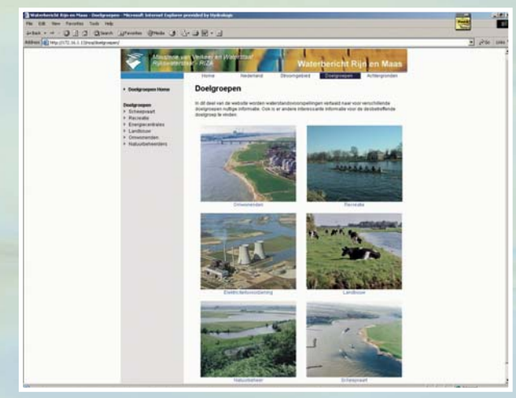
At this moment the APL is still in an experimental stage. The first section (till the output towards the website) will become pre-operational in summer 2006. The last section of the APL (website) will be protected with a password until the first section will be fully operational. It is planned to have the complete system up and running in the fall of 2007. To avoid any confusion about differences between forecasts made with different forecasting systems, until that time (fall 2007) the official forecasts will be made with the current forecasting systems and only this forecast will be carried out to managers and citizens.

Target groups

Besides general information about actual water levels and water level forecasts for the general public, target groups have been distinguished. At this moment different target groups are consulted to find out the exact needs of each specific group.

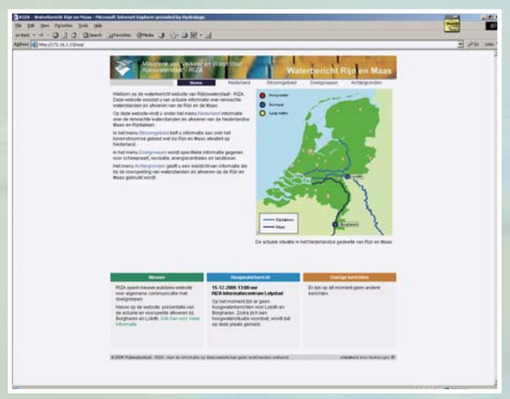
The following target groups have been distinguished:

- The people living in the neighbourhood of the rivers
- Electricity supply
- Nature managers
- Recreation
- Agriculture
- Shipping
- Provinces/Waterboards/Cities

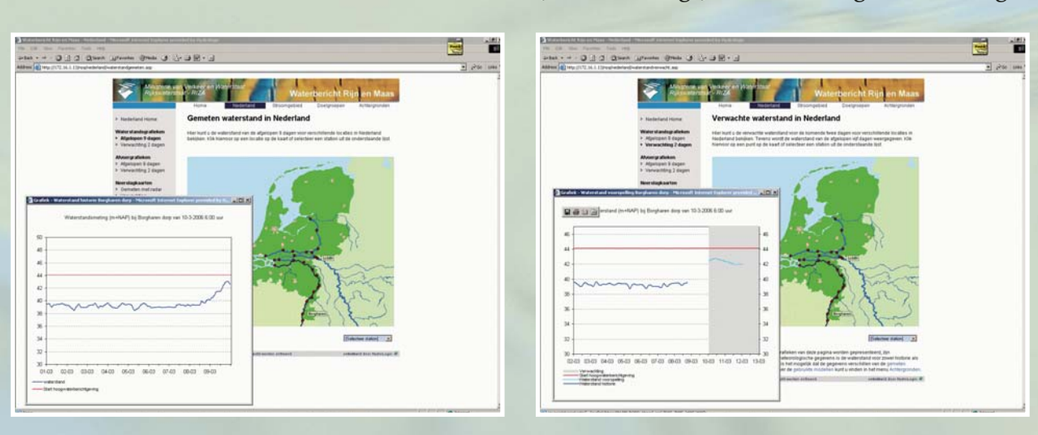


The different target groups, who receive tailor made information

Examples of cut to size information are navigation depths (Shipping), water temperature (Electricity supply), time of flooding of the floodplains (Agriculture, Nature management, People living in the neighbourhood of the rivers).



The opening page of 'www.waterbericht.nl (water message) with warnings and messages



Water level en discharge forecasts at different locations in the Netherlands

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