ASSET MANAGEMENT AT THE RIJNLAND DISTRICT WATER CONTROL BOARD

Insight into conditions and costs with Long-Term Asset Management software

The Rijnland District Water Control Board nowadays uses a smart software tool to make, both financially and technically, well-founded choices in terms of asset management, and to extend the life span of assets. Because of the Maintenance Management software, which contains a Long-Term Asset Planning module, the district water board can now more easily answer important questions such as: What assets do we have, what is the current condition and life span of these assets, and when will we be confronted with new investments? The software replaced the old Excel sheets, which resulted in better insight into, and a better overview of, the entire area and the potential risks. The software also offers support on an operational level, causing significant efficiency gains.

DRY FEET, CLEAN WATER

'Dry feet, clean water'. This slogan, used by the District Water Control Board, excellently describes the essence of the District Water Control Board's activities. On the one hand, the board ensures the right water level in polders and urban areas, and offers protection against the sea and floods. And on the other hand, they ensure clean and healthy water in ponds, canals, and ditches. The District Water Control Board also purifies households' and companies' waste water within their work area. This work area consists of over 1,100 square kilometres and extends from Wassenaar to Amsterdam, and from IJmuiden to Gouda. Every day, thousands of assets make sure that the 1.3 million inhabitants of the work area actually keep their feet dry and can enjoy clean water. Thorough and professional asset management is an absolute must in order to guarantee this.

SEPARATE MAINTENANCE DEPARTMENT

Nevertheless, there was still a lot to be gained in that area. The number of the board's assets increases, partly because centralisation took place and enclosed district water boards were combined. The Rijnland District Water Control Board became a process-driven organisation. These organisational changes were implemented in order to give maintenance and professional asset management a quality boost. Peter van Leijenhorst, functional manager at the district water board:
'A separate maintenance department has been set up, which only concerns itself with maintenance. Because of this, more attention can be paid to maintenance and providing insight into the area.' The department has been set up following the 'Value Driven Maintenance' (VDM) methodology. This method focuses on gaining the maximum added value from infrastructure. The detailed (maintenance) costs, however, were not comprehensible until that time. 'We realised that we needed tools in order to provide detailed insight; Excel sheets were no longer sufficient.' Thus, the district water board started to shop around for an Enterprise Asset Management system (EAMS).

SOFTWARE CHOICE & IMPLEMENTATION

This decision was not made overnight. Various parties were approached using a tender with preselection, during which process different components were examined. The look & feel of de application, user-friendliness, and flexibility were important factors in this process. Furthermore, the district water board was looking for a company with experience in implementations at similar organisations. Therefore, a demonstration of the software in the actual situation of the referent was part of the selection. After this selection process, the choice was made to start using Ultimo Infra Asset Management software, supplied by Ultimo Software Solutions bv. 'In today's market, the look & feel and flexibility of the system are par excellence,' Van Leijenhorst explains. 'Obviously, we also took into account the price and technical specifications, which were also in line with our possibilities. Additionally, we also took into consideration the development of the supplier when we made our choice. Ultimo is a growing organisation where the application is constantly refined based on developments in the market. As an organisation, we can benefit from this.'
The Rijnland District Water Control Board called in the help of an external consultancy firm to guide the implementation of the software and setting up the internal structures. We had a lot to do; it not only concerned the implementation of the software, but also setting up internal processes and structures. Additionally, many P&IDs (Piping & Instrumentation Diagrams) had to be drawn up, which we needed for setting up the decomposition. 'A decisive project team was eventually formed, existing of the maintenance team leader/functional manager, a representative of the external consultancy firm, the software supplier's consultant, and a number of important key users.'

ULTIMO
SOFTWARE SOLUTIONS

SETTING UP THE DECOMPOSITION

Setting up the decomposition was given long and careful consideration. 'Of course, when you start setting up the software, you want to get it right the first time.' The District Water Control Board deals with two separate worlds: on the one hand the assets that go with 'dry feet', namely the water systems, and on the other hand the assets that ensure clean water, namely the treatment plants. Peter van Leijenhorst: 'We are one district water board, and we have one way of doing maintenance. Despite the fact that these are totally separate worlds, we chose a uniform decomposition set-up.' In doing so, the choice was made to divide the area into regions, such as, for example, a polder region with all corresponding assets within that region. This way, it is immediately clear what happens in which region.

FAILURE REGISTRATION & MOBILE WORKING

For the purpose of knowing what happens in a certain region, a clear registration of failures is crucial. Therefore, the Rijnland District Water Control Board has carefully thought out how failures should be clearly registered in the software. What is the minimum amount of information we should know? Who will be responsible for registering? Van Leijenhorst: 'We made the choice that everyone should be able to register a failure. The Maintenance Management system does, however, require the reporter to answer a number of mandatory questions. Additionally, we built in an approval step with which the responsible process operators maintain grip on the registrations.' Many of the district water board's assets are located 'in the field'. Significant efficiency gains can be obtained when technicians can actually receive and process the registration while in the field. In order to meet this desire, Ultimo GO+, the software supplier's app with which real-time, mobile working is possible, is currently being tested. With this, writing down the technician's findings and the subsequent processing of the data at a later time is a thing of the past. With this app, the registrations and required actions are immediately visible. Subsequently, the executed activities can be immediately registered, and the status of the registration can be changed. The first findings from the testing phase a very positive.

LONG-TERM ASSET PLANNING

Now that maintenance is better manageable, the next step can be taken. 'We want to be transparent in what we spend the money on, to better substantiate which investments we have planned (and to be able to move these around), and to show the consequences to the board. We want to anticipate what is coming, and be able to engage in the conversation.' The Ultimo Long-Term Asset Planning (LTAP) module offers a suitable solution for the Rijnland District Water Control Board. The tool offers the possibility to draw up a long-term budget for assets, based on costs, conditions, and risks (based on NEN 2767). This way, the district water board gains more insight into the financial consequences of keeping the condition of certain assets above the minimum condition. Koen Mooij, trainee at the district water board, has concerned himself with setting up the LTAP module: 'The module makes you look further ahead: When will the maintenance have to be executed, and when are my investment peaks? Do we have any wetland plans for it in the future, or are there any expanding municipalities?' Thus, well-founded choices based on facts can be made from both a financial and practical perspective. Maintenance is regarded from a higher level of abstraction. The LTAP module is very compatible with the VDM model, according to which the maintenance department is set up, because this software module allows for the actual demonstration of the added value of Maintenance & Asset Management.

BUSINESS INTEGRATION

The thousands of assets that the Rijnland District Water Control Board maintains are, as stated before, mostly located 'in the field'. It is easy to determine where the larger assets are located, but for the smaller assets, such as weirs, this is more complex because many assets are placed closely together, and do not, of course, have nameplates. The interface between Ultimo and ESRI (GIS application) makes sure that the area is indicated by a dot on the map. By using the geo-data in the Maintenance Management software, mistakes can be prevented. 'Right away, it will be clear next to which object you are standing.' Furthermore, the map can provide insight into where activities have been executed or planned, how activities can be planned more efficiently, and what the maintenance condition is of the asset in question.

Even more efficiency can be gained through an interface with the financial software of the district water board (All Solutions). This interface entails that worked hours, orders, and contracts will be exported from Ultimo to All Solutions. Because of this, current data is available in both systems without having to enter data twice.

FUTURE

The Rijnland District Water Control Board can picture plenty of other future possibilities concerning the use of the Maintenance Management software. The actual commission of the app is of high priority for these future possibilities. Additionally, the use of the LTAP module needs to be intensified and optimised further, and the interfaces need to be fine-tuned further in terms of technicality and functionality. The district water board would also like to do more in terms of registering line objects (such as waterways with a larger surface) in the software. 'Of course, we will also monitor the developments of the supplier. We will definitely look into interesting developments.'

Rijnland District Water Control Board - Key Figures

A few examples of The Rijnland District Water Control Board's assets:

Culverts	1598
Basin pumping stations	4
Polder pumping stations and other specific pumping stations	809
Treatment facilities	99
Water treatment plants	25
Sewage pumping stations	74

Ultimo Software Solutions bv
Waterweg 3
8071 RR Nunspeet
The Netherlands
T +31(0)341 - 42 37 37

Ultimo Belgium bvba
Schaliënhoevedreef 20 A
2800 Mechelen
Belgium
T +32(0)15 - 44 41 44

Ultimo Software Solutions GmbH
Steigerstraße 13
46537 Dinslaken
Germany
T +49(0)2064 - 828 47 54

General
E sales@ultimo.com
I www.ultimo.com

ULTIMO
SOFTWARE SOLUTIONS