

## GTX NAMED AS THE 'NAM' STANDARD

A major GTX customer, the Nederlandse Aardolie Maatschappij (NAM) was established by Esso and Shell in 1947. The NAM's core business is the exploration and extraction of mineral oil and natural gas in the Netherlands and on the Dutch part of the Continental Shelf.

The NAM is the leading producer of natural gas in the Netherlands. The yearly output of the NAM averages some 50 billion cubic metres of natural gas. One third is extracted at the Groningen gas field. The rest comes from gas reserves elsewhere in the country and in the North Sea. The NAM supplies about 70 percent of the total Dutch gas demand. The oil production of the NAM is located in fields in the west of the Netherlands and in the North Sea, and averages about 1.2 million cubic metres a year.

*"How can we modernize a drawing archive that has 1 million drawings, of which only 10 percent are digital, with a 30 year history and spread over several locations?"*

This question was the central issue at the start of an extensive project at the NAM. As a result of the historical situation, searching for documents and answering queries had become very time consuming. The combined effect of a huge number of drawings that were manually retrieved incurred high management costs. Also the cycle of modifying the drawings to "As Built" was taking too long.



"Our oldest offshore plants were established about 30 years ago. A set of drawings of each plant is stored at Velsen-Noord, our Engineering H.Q.", the Project Manager explains. "Until recently our archive consisted mostly of polyester drawings of varying quality. To convert this analogue set of drawings into a digital format it was necessary to prioritize the drawings. Our most important drawings are those which reflect the "As Built" situation. The storage of the "As Built" engineering drawings is not only a legal requirement, it is also essential for the integrity of the plants and for their safe operation.

Initially these important drawings were scanned in using high quality scanners. The higher the quality of the scanned drawing, the more efficiently future digital adjustments to the drawing can be made. The remaining drawings, which do not have to be stored "As Built", have been digitized in a simpler way."

The NAM uses an electronic document management (EDM) system with web functionality as a storage medium for the drawings.



Every user with access to the NAM intranet can log on to the EDM system. As a standard, every user gets 'minimal' privileges. For drawings, these privileges include querying, viewing and printing of information. In addition, the CAD designers have specific updating privileges. Finally the maintenance group has extra privileges required for system maintenance.

Important requirements for adequate maintenance are the use of and adherence to standards. "As a standard we use AutoCAD® 2000 in combination with 18 seats of GTXRaster CAD® PLUS on a network", the Project Manager added.

Traditionally digital drawings were edited and stored in a vector format. Vectorizing all (raster) scanned drawings is very expensive and time-consuming. Instead the NAM has opted for a reliable solution with proven technology, namely hybrid editing.

In hybrid editing, both raster and vector information are used. These two files make up the drawing. Adjustments to the drawings are made with AutoCAD 2000 and GTXRaster CAD PLUS. Use of GTXRaster CAD PLUS enables adjustments to the vector and raster file inside AutoCAD. The advantages of combining AutoCAD and



GTX are, amongst others, the clear cut user interface and the high degree of integration of the two products.

For many companies the storage of drawings is essential. The NAM Asset Offshore attaches even more importance to the efficient and controlled adjustment and editing of the drawings, as well as their easy retrieval. As the Project Manager explained, "Most employees of NAM plants are located not very far from their bases on shore, but for us it means a long commute to the offshore plants. Moreover, before every visit we have to go through all kinds of procedures, for example, security. This probably explains why we were the first of the NAM plants to see the benefits of

this project. Now we have permanently at our disposal up-to-date drawings for which we can keep track of all the adjustments at all times."

The AutoCAD and GTXRaster CAD PLUS solution was provided by TRIADE, who specialise in scanning and data management solutions.

For more information on the companies involved in this Case Study visit:

[www.nam.nl](http://www.nam.nl)

[www.triade.net](http://www.triade.net)

[www.gtx.com](http://www.gtx.com)



GTX Corporation Company Profile:

*GTX Corporation is the leading supplier of scan-conversion and editing products that provide complete integration and interfacing between scanned drawing archives and Computer Aided Design/Drafting CAD systems.*

*GTX was founded in 1984 by Dr. Marvin T. Ling, to bridge the gap between paper engineering drawings and electronic format (CAD) and to solve the time-consuming problems of storing, retrieving and editing paper drawings.*

*GTX is a privately held corporation headquartered in Phoenix, Arizona with offices in Basingstoke, England and Taipei, Taiwan. GTX sells its products through a network of authorized distributors and resellers throughout the Americas, Europe, Asia, the Pacific Rim, the Middle East and Africa. The Company also licenses its technology to third-party CAD vendors for integration and sale under their own private label.*

*GTX technology brings intelligence to manually created drawings and allows companies to gain productivity and lower costs to effectively maintain, revise and store their engineering documents.*

## Intelligent Paper to CAD Solutions®

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