Evonik: Risk Assessment with **aimPort**

Evonik's Geoportal GEOISIS is based on g.on aimPort and has been in productive use at Marl Chemical Industry Park since 2010, mainly for the administration of the factory premises' infrastructure.

Stefan Sander, ERIS (Evonik Risk and Insurance Services GmbH), Essen

As an internal insurance department and broker, ERIS (Evonik Risk and Insurance Services GmbH) handles the insurance-related risk assessment of all Evonik sites.

We are talking to Stefan Sander from ERIS in Essen. The division takes care of all insurance related issues within the Evonik group.

Mister Sander, when did you first think about also using the GEOISIS portal for the purposes of ERIS?

Sander: I was immediately interested, when I learned from a colleague about the existence of the system within the group. When insurance providers consider possible risks related to an industrial site, its location is always an additional issue. Systems based on geographical data are therefore interesting. They help visualize relevant data for own analyses - and also for the insurance providers. The impact of a graphical presentation of geodata is obviously very helpful during meetings with new business partners.

By now, GEOISIS is an important tool for us. It supports us by providing a detailed view on site and sometimes even on building level. Simultaneously, it enables us to look at the site from high above on a global scale. We also use GEOISIS for the detailed preparation of insurance providers' on-site visits. With its professional presentation qualities, it also supports us during debriefing meetings when evaluating the visited locations.

What are the main considerations for the use in the insurance department?

Sander: Insurance companies have been working with geodata for a long time already, especially when carrying through so-called controls of accumulation of risk with regard to natural hazards in certain geographical regions or countries by means of hazard maps. We focus more on our industrial sites,

aimPort User Meeting
Muenster, May 6 – 7, 2014

aimPort in Denmark
AutoCAD Data in aimPort

FRA Map
Interactive Aircraft Noise Map

Editorial

Dear Readers,

Economic forecasts for the year 2014 are optimistic. Also, there are new investments in the industry.

Already in the second half of the past year, we at g.on felt, that our philosophy „GIS without GIS" captured the mood of our clients. Providing cost-effective and standardized tools for the infrastructure administration of real estate and industry sites has been a true success story. These tools can be used at any time at any place within the organization - easy to use and without any previous knowledge.

Besides real estate managers, industry park operators and energy suppliers, additional airports recognized the multiple possibilities offered by g.on aimPort. This issue presents Fraport's aimPort-based internet application for passive noise protection as well as Evonik's insurance-related risk assessment and the documentation of water and district heating pipes in Denmark.

Enjoy reading!

Uwe Meyer

Impressum

for which the information depth of GEOISIS is perfect. We think, that the systems of the insurance providers and our GEOISIS, combined with a natural hazard analysis, are a perfect match. In meetings with insurance providers, we can now also present our position in a professional way and are on equal terms from the start. To be honest: Making a good impression is nearly as important as the systems' ease of use.

Where does GEOISIS get the data for the presentation of natural hazards from, like earthquakes, storm or Tsunami?

Sander: We had already gathered quality data for our sites via a consulting company. These were transferred to GEOISIS.

The objective is the capture and analysis of all Evonik sites worldwide. Is this task carried through centrally or on-site?

Sander: The consolidated data for the insurance-related risk assessment are centrally administrated. There are contact persons on-site in each country, in important regions even more than one. But our team at ERIS is the central interface for the global insurance program providers.

How does the three-phase damage analysis work and when is it used?

Sander: Let's take the example of a gas cloud explosion in a chemical plant, a worst-case scenario for industrial property insurers. Starting at an arbitrary explosion point, we can use the analysis tool to simulate three radiuses with different extent of damage. A certainly fictitious example for stage 1 would be a radius of 50m and 80% damage of the assets within, in stage 2 a radius of 80m with a damage of 50% and stage 3 a radius of 150m with a damage of the assets of 20%. Basically, the system combines the analysis data of the insurer with the site-related infrastructure data of our GEOISIS system.

How would you summarize your experience with GEOISIS?

Sander: Only positive, in fact. The time frame has been met right from the start, which is not always the case with migration and merger projects. The cooperation with the experts and the support team has always been and still is just great. And working with the system is fun, too.

As GIS is already a big issue in the insurance industry, we are truly proud to have such a system as one of their clients. Recently, we organized an information event for insurance providers, the so-called „Insurance Day". For the first time, I used GEOISIS for my presentation. It has been discussed very positively thereupon.

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aimPort User Meeting 2014

On **May 6 and 7**, the annual user meeting for existing and future aimPort customers will again take place in Muenster.
Industry and airport applications as well as latest development news from Oracle and aimPort will be presented by our team as well as by selected customers.

CeBIT 2014

From **March 10 to 14**, you will find us again in Hanover, Hall 06, Stand F18 (Ministry of Commerce of North-Rhine Westphalia). See you there!

CeBIT

Guest Article: 120 Danish Water Suppliers use aimPort

Jesper Thvilum, Owner and CEO at Thvilum A/S about the use of aimPort by his clients in Denmark

We have been using AutoCAD applications for more than 20 years for the documentation of water supply pipes and system components. AutoCAD offers comfortable design tools, that make data implementation easy. Still, AutoCAD is a desktop solution, but many customers want to be able to edit and present their data in the field or at the end user. Our aim was therefore to develop a web-based solution, allowing to access DWG data, the prevalent format at our customers. These, local district heating and water suppliers, manage and edit their maps with AutoCAD LT and our application Thvilum GIS. The software is based on an AutoCAD menu and an Access database. The AutoCAD menu ensures a continuous data structure in all drawings. The application also offers a variety of functions such as advanced printing and data export to Excel.

With g.on experience, we found the ideal partner for our web solution. They have a wide experience in developing web solutions and handling different data formats, including DWG. g.on is using the converter FME to implement data in different formats into the Oracle database.

The workflow from reading DWG data with FME and convert them into the Oracle database within the existing structure makes sure that all information remains complete and is ready for further processes. We receive a log-file for each DWG conversion process. FME makes a distinct assignment of text and attribute information for each individual object. Pipes and other objects can now be searched for in the database. The above process converted simple drawings into intelligent objects. Now, the objects transferred to the Oracle database can be accessed, edited and linked to other objects, by means of aimPort functions. It enables advanced search functions and calculations, such as pipe lengths. For this, we generally use the aimPort Alpha module. The results are then visualized in the GIS module.

We developed a routine that enables our customers to upload their DWG data directly to our server. The FME conversion will then start automatically, so that the customer can retrieve his recently edited AutoCAD data with aimPort after a couple of minutes already. By using aimPort, we not only offer our customers to retrieve their data by means of familiar registration tools, but also provide them with all advantages of a state-of-the-art web portal. Employees benefit from the portal by being able to access data on mobile devices at any time and place. Also it is a service to subcontractors requiring information details and last but not least for the inhabitants of the suppliers district.

Currently, 120 water and heating suppliers benefit from the advantages of aimPort: The result of a good cooperation between g.on experience and Thvilum A/S of which we are proud.
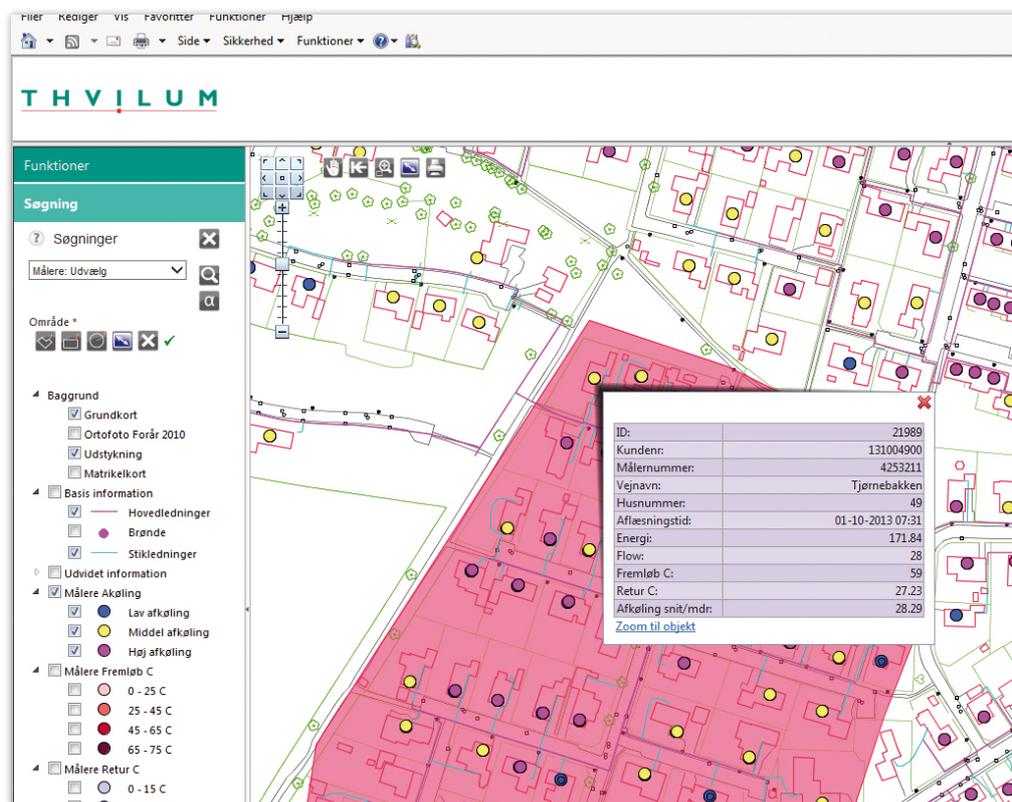
As-built map water pipes over aimPort/Thvilum GIS (detail). *www.aimport.de/thvilum-webgis*

Routing Function deluxe

The routing module in the latest aimPort version
features numerous improvements.

High Performance

As from Version 2.6.4.0, g.on aimPort has been adapted to .NET Framework 4.0. This release includes a series of new functionalities and options. A new routing module generation comes with major improvements, like a significant performance increase in route calculation. In addition, users may define arbitrary stopovers for a route. The respective target points can be moved via „drag&drop".

Navigating without unpleasant surprises

A truck driver navigating in foreign factory premises not only has to find his destination. Also, he should better know exactly, where his vehicle can pass without problems - and where not. aimPort_Route makes it happen:

Trucks are guided through the premises in such a way, that the drivers are never forced to reverse the truck within limited space. The respective conditions of the road network are taken into consideration by the system. The user can even enter different destinations at the same time.

A typical example: At the factory gate, the driver receives a route that conducts him via a weighing machine to a loading site and back again. The guidance can include individual conditions for different vehicles (not only trucks).

Routing Constraints

Site managers are free to implement specific routing constraints according to individual requirements, like:
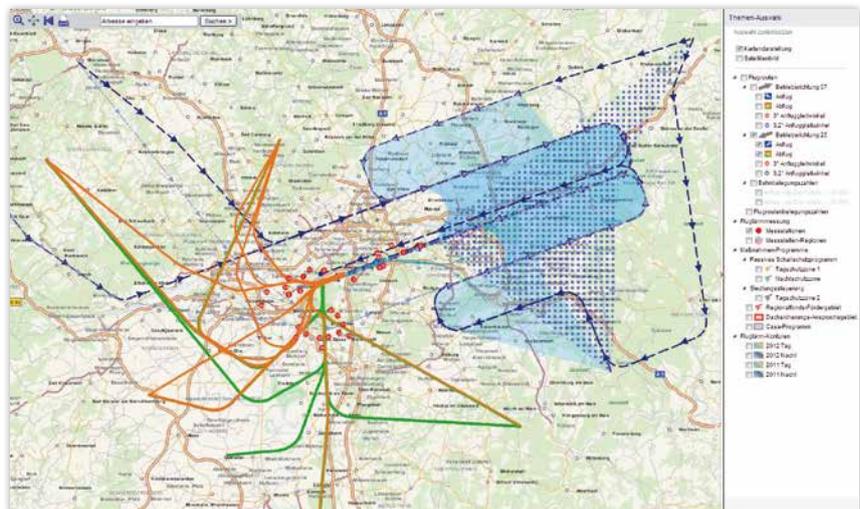
· Maximum passage heights in specific route sections
· Individual weighting of each single edge within the factory road network
· Definition of direction parameters
· Opening or blocking routes for specific vehicle types

Among many others, these applications turn the new routing module into a most dynamic tool.

Fraport: Interactive Noise Map for Airport Residents

Fraport released „FRA map", its aimPort-based interactive map for visualizing aircraft noise.

Information and dialog with residents in the direct neighborhood of Frankfurt International Airport are of major importance for Fraport, the airports' operating company. On November 15, 2013, Fraport published its new website. Apart from optimized navigation functions and user interface, the site provides now a customized geoportal based on g.on aimPort. „FRA Map" allows users to get an individual view on their personal situation in terms of aircraft noise – by entering a specific address. Residents can get a better impression of how much they are affected by noise and how to get support for noise prevention measures. This is yet another example of the many and complex applications of g.on aimPort.

www.framap.fraport.de