

ALIS

Transparent Environmental Policy:
The Canton of Zurich's Online Information System



Groundbreaking Contaminated Site Management

With the online database for the contaminated site management of the Canton of Zurich, Netcetera has created an integrated, future-oriented management and information platform (ALIS). The web-based system not only meets the service requirements of the Canton of Zurich Building Authority according to Swiss Federal Law, it also provides public access to the register of contaminated sites.

The Project

The comprehensive contaminated site information system (ALIS) was created by Netcetera on commission of the Canton of Zurich Building Authority. In accordance with the revised Waste Disposal Law of the Canton of Zurich, the Building Authority must keep a register that records and assesses the contaminated sites using uniform criteria, monitors and documents their clean-up and specifies who bears the cost. Data is to be organized in such a way that it can be administered, updated and used by various interested parties from any point of access. In addition, an adequate case management unit must monitor compliance with the law. By doing so, the Canton of Zurich aims to protect scarce resources in the Canton and to clean up previous contaminated sites in such a way that they can be used again for building.

The Challenge

Based on the law, the Canton of Zurich Building Authority commissioned the Office for Waste Management, Water, Energy and Air (AWEL) to create a register of contaminated sites.

The goal is to be able to record, process and manage information for over 13,000 sites, using appropriate software, from any point of access and without redundancies. The process to be observed for the assessment of sites must be displayed in the system as a workflow in compliance with the law.

Since contaminated site information and assessment comprise highly sensitive data, the IT solution was also required to meet very high standards with respect to security, reliability and controlled access.

The Solution

The core of the modular solution consists of Java components developed by Netcetera. The data is stored in the central ALIS database. The integrated geographical information system (GIS) is based on a standard product by ESRI. In order to meet the specific AWEL requirements, Netcetera's project partner Geocom Informatik and the GIS Center of the Canton of Zurich expanded the standard solution, so that the graphic depiction of the sites is also integrated in the GIS browser of the Canton of Zurich.

The Benefits

Netcetera's iterative process proved to be successful once again: In close cooperation with the experts of the Cantonal Office for Waste Management, Water, Energy and Air (AWEL), the system was built step by step so that all processes and interactions were integrated in the software solution in a user-friendly manner. An intensive exchange with prospective users simplified and accelerated the operational start of the system. Since April 2006, ALIS has been fully operational. It supports all compliance tasks of the contaminated sites division and the register of contaminated sites is updated continuously.



“Through the optimal integration of existing solutions, we developed a cost-effective and modular system. Thanks to its proven user interface, AWEL experts and the general public can access and use it easily with a Web browser.”

Gabriele Brechbühl

ALIS Project Manager, Engineer & Consultant, Netcetera

Most Important Characteristics

The key task of the contaminated site information system is defined by the compliance duties to the corresponding Federal Law and the Cantonal Waste Management Law. The purpose of the platform is to record data about the contaminated sites and assess them, as well as to provide business support for legal compliance, thereby ensuring that the data is available on the Internet for professionals and the general public. In order to achieve this, the following conditions had to be met:

- A central database selects, secures and monitors access by authorized internal and external individuals
- All contaminated site business processes are optimized and displayed
- Support for document filing is provided
- Study, assessment and clean-up costs and services are recorded electronically
- Data are also available for statistical evaluation
- The updating process of the registry is organized and optimized
- Outside experts can process their allotted data on a protected Internet site
- The targeted search for individual sites and their representation is based on an interactive cartographical interface using digital survey maps

In addition, the overall solution was integrated into existing systems and applications or partially replaced them so that it could become the sole collaboration system for the involved government offices and branches as well as outside contractors.

“Thanks to ALIS, we now have a central database documenting public information on the register of contaminated sites of the Canton of Zurich and on existing entries in the register of suspected sites, as well as the classification of the sites without redundancies. This information is available to various interested parties.”

Joachim Hanke

ALIS Project Manager; Office for Waste Management, Water, Energy and Air (AWEL), Canton of Zurich





“Because ALIS also shows the business processes of legal compliance in connection with contaminated sites, it has become an indispensable tool for case handling. In addition, it provides support to case managers, enabling them to answer inquiries about information policy concerning polluted sites in compliance with legal requirements.”

Christoph Schneller (left)

Case Manager, Enforcement; Office for Waste Management, Water, Energy and Air (AWEL), Canton of Zurich

“Thanks to the new ALIS System, it is now possible to manage contaminated site registry and business data from legal enforcement jointly via a central database. This ensures that the available information is updated continuously.”

Jean-Claude Hofstetter (right)

Division Manager; Office for Waste Management, Water, Energy and Air (AWEL), Canton of Zurich

Project Facts

Client

Canton of Zurich Building Authority (main office),
Organization + IT

Implementation and Overall IT Project Management

Netcetera, Zurich & Skopje

Project Duration and Milestones

- Start: October 2003
- Approval of basic concept: June 2004
- Detailed concept and approval: November 2004
- Operational start of ALIS Light 1.0 and ALI 1.0 Desktop GIS: May 2005
- Operational start of ALIS Light 2.0 and ALIS 2.0 (case management GEKO and VFK) and ALIS 2.0 Desktop GIS: January 2006
- Operational start of ALIS Light 2.1 and ALIS 2.1 as well as ALIS 2.1 Desktop GIS: April 2006

Associated Partners

- Professional support: Office for Waste Management, Water, Energy and Air (AWEL); Waste Management and Plants Department; Canton of Zurich
- Project management and development of GIS browser integration: GIS-Zentrum, ARV, Canton of Zurich
- Project management interface GEKO-BW: Ategra AG
- Hosting: Abraxas AG
- Geo IT modules: GEOCOM Informatik, Burgdorf

Employed Technology

- Java/J2EE web-based solution for the central modules for the creation and management of contaminated sites register
- Netcetera standard components: Webis, WAKE, etc.
- Dynamic creation of criteria catalogue for the evaluation of a site via XML
- Web service interface (SOAP-based) for interaction with case management of the Canton of Zurich Building Authority
- Central Oracle database
- Various data migrations of the former Access databases for intermediate site register storage and GEKO/VFK using Oracle Migration Workbench
- Apache, Tomcat, Linux
- Geometric part based on ESRI ArcView with additional features by GEOCOM

Netcetera AG
Zypressenstrasse 71
P.O. Box
8040 Zürich
Switzerland

etcetera.com
info@netcetera.ch

T +41 44 247 70 70
F +41 44 247 70 75