



An On-line Emergency Planning Service for Facilities in the Geneva Region Susceptible to Major Hazards

- 1. Introduction
- 2. Access portal and online service
- 3. Contents of an emergency planning dossier
- 4. Technology and information flow among actors
- 5. INTERNET security
- 6. Some functionalities, examples
- 7. Conclusions

Dr Alberto SUSINI

Geneva Labor Inspectorate Environmental Affairs

1. Introduction

The on-line emergency planning system:

- is an Internet based system and infrastructure intended to aid in the collection of information about safety needs
- addresses mainly the authorities and intervention services working under the framework of the Swiss Federal Ordinance on Major Accidents (OMA)

This service was developed with the support of a partnership with the City of Geneva Fire Brigade, the Geneva Labor Inspectorate Section of the Environmental Affairs Department of the State of Geneva and a private company named Work Flow System WFS SA.

1. Introduction

This service features specific interfaces to manage emergency planning dossiers for authorities and plant owners in the Canton of Geneva:

- The owner of the site or plant assumes responsibility for the dossier.
- The authorities assume responsibility for monitoring and verifying the dossier.
- The private technical office in charge of deployment of the online service and monitoring assumes responsibility for conformity of the data with the graphic chart issued by the Geneva Fire Brigade.

Groups of information and documents are released selectively for publication.

Only identified and authorized users can access information depending on their respective accreditation levels.

This online service is known as the online emergency planning dossier.

2. Access portal and on-line service

The online emergency planning dossier is a system of safety planning and management.
The design of the portal ensures that access is secure.

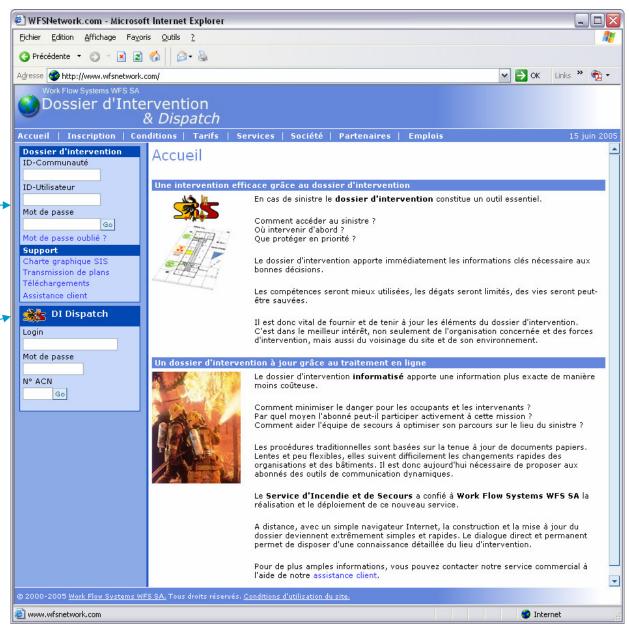
Login access is possible here:

- for registered users
- to see graphic charts
- to transmit plans
- to get support

This information is sent securely.

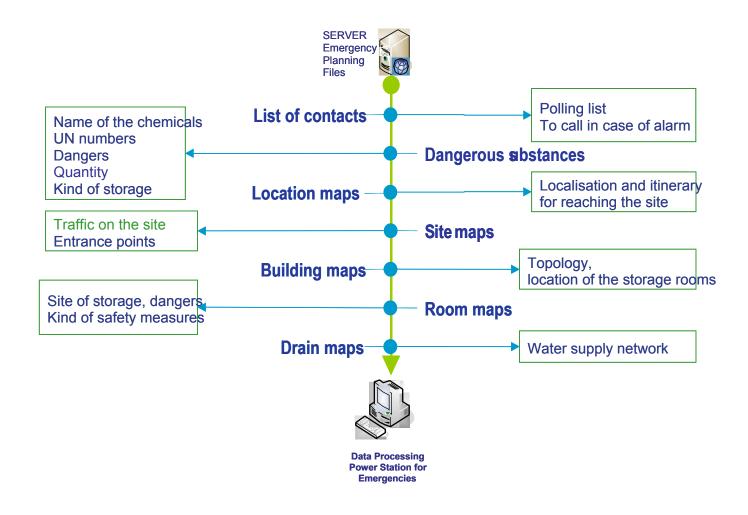
The **DI Dispatch** program managed by the fire brigade calling center allows authorized users to consult online the emergency planning dossier whenever an automatic alarm has been set off by one of the attached technical installations. It facilitates information exchange among:



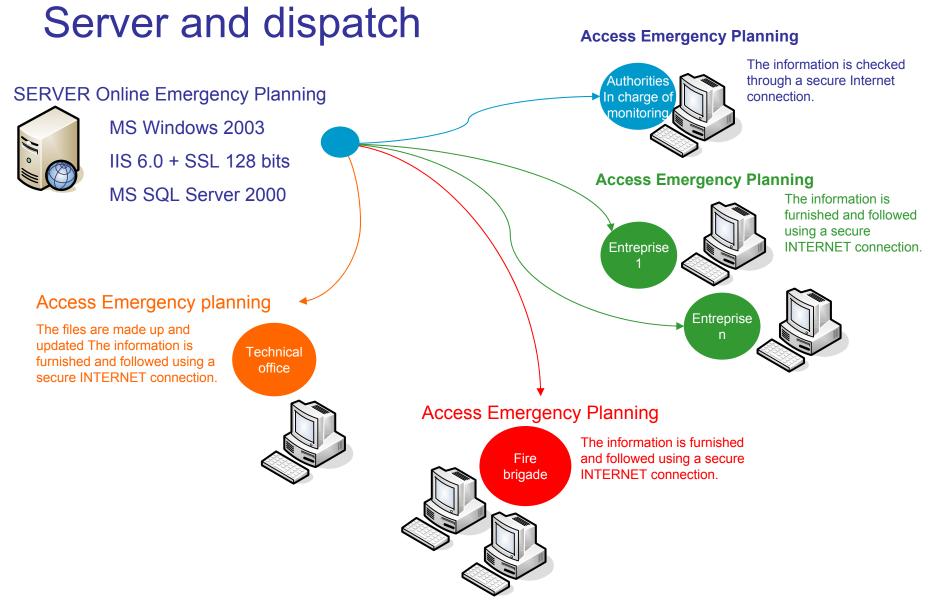


3. Content of an Online emergency planning dossier

Titles, groups and their content

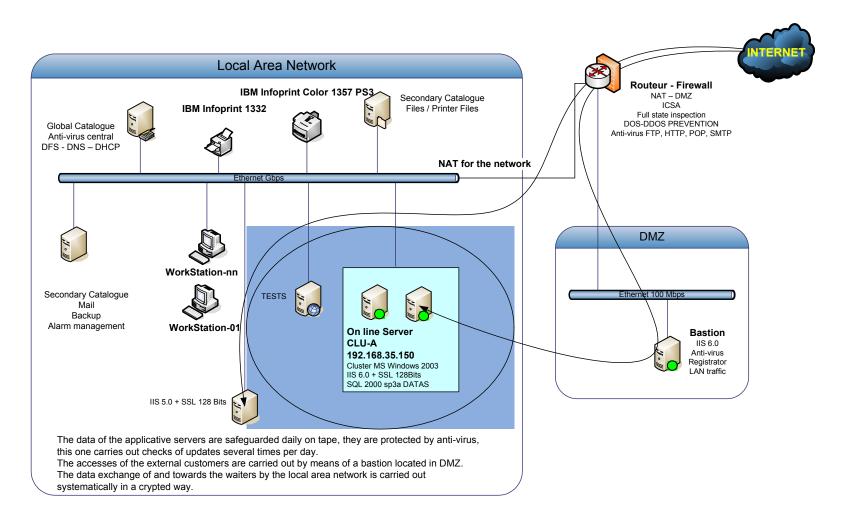


4. Technology and information flow among actors



5. The security on INTERNET

Firewall, DMZ, cluster and SGBD



Make up of the polling list

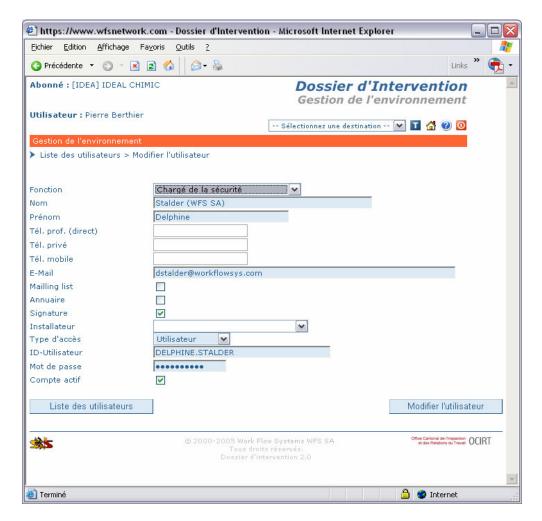
Objective:

To encourage entreprises to have an updated list of contacts that can be automatically called in case of emergency by the fire brigade central

Motivation:

- Management board
- Chemical specialists
- Safety officers

Are also competent interlocutors for the implementation and follow up of the dossier toward the authorities.



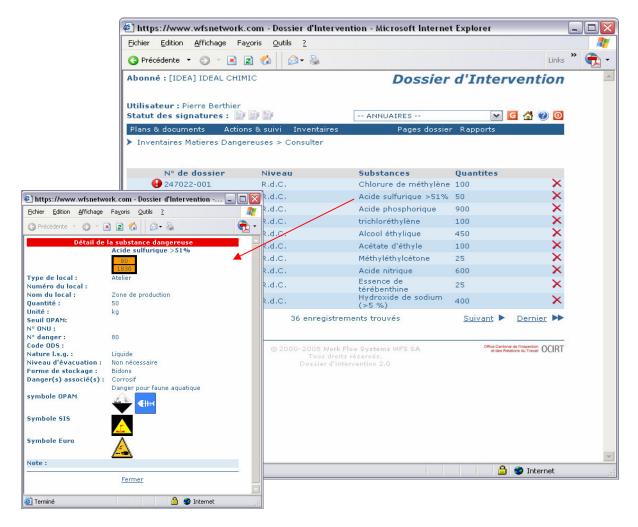
Make up of the list of dangerous substances

Objective:

To encourage entreprises to update the list of substances stored at sites.

Motivation:

The rescue forces need to know the possible dangers in order to enhance their effectivenss in case of emergencies.



Map search

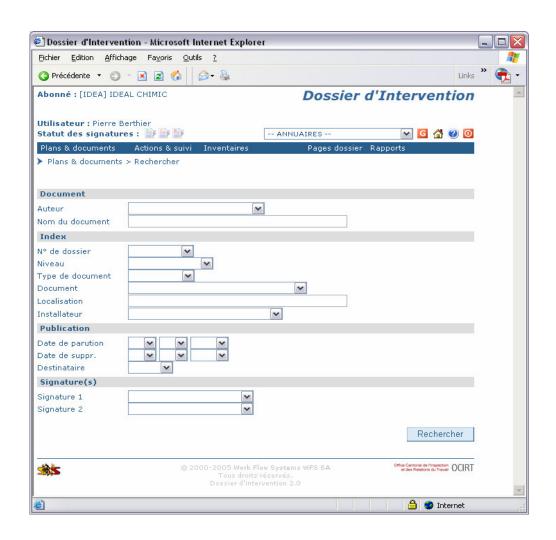
Objective:

To enable the rescue team and plant owner to have at any time maps available helping to locate the dangers and to take the appropriate protective measures

Motivation:

The rescue teams need to have:

- an access map to the site
- a general map of the site
- floor plans of the buildings with chemicals
- plans of the drains in order to avoid contamination of water and sewage systems



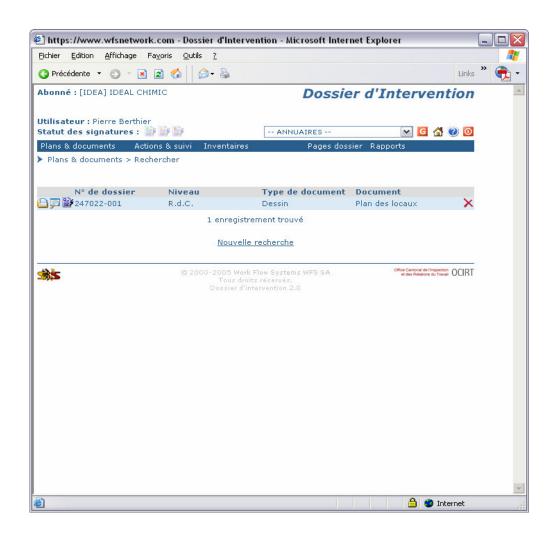
Map search: results

Display:

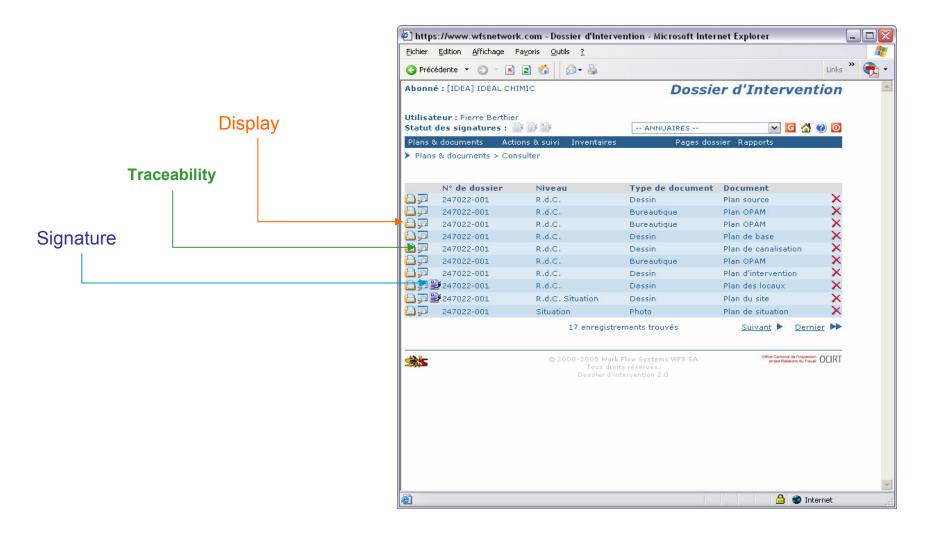
A click on the icon displays the desired map.

Traceability:

Each map comes with details conforming to high standards of quality control (date, time,...) in order to guarantee the validity of the information. Each map can be validated by electronic signatures of the persons responsible.



List of all the maps in the dossier



Publishing a map in the dossier

Function:

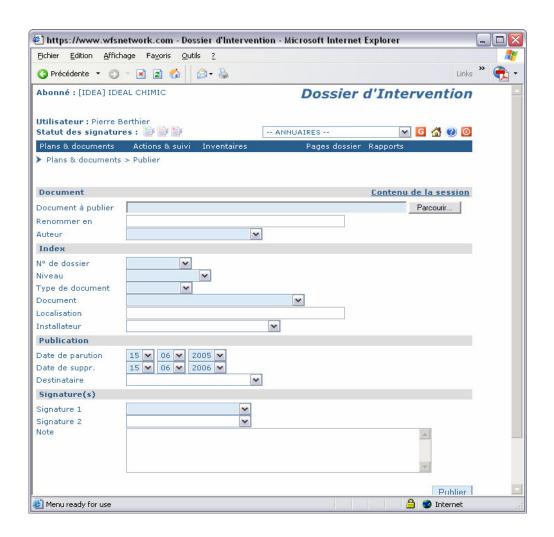
To offer downloads of maps of different origins and formats from the server.

Motivation:

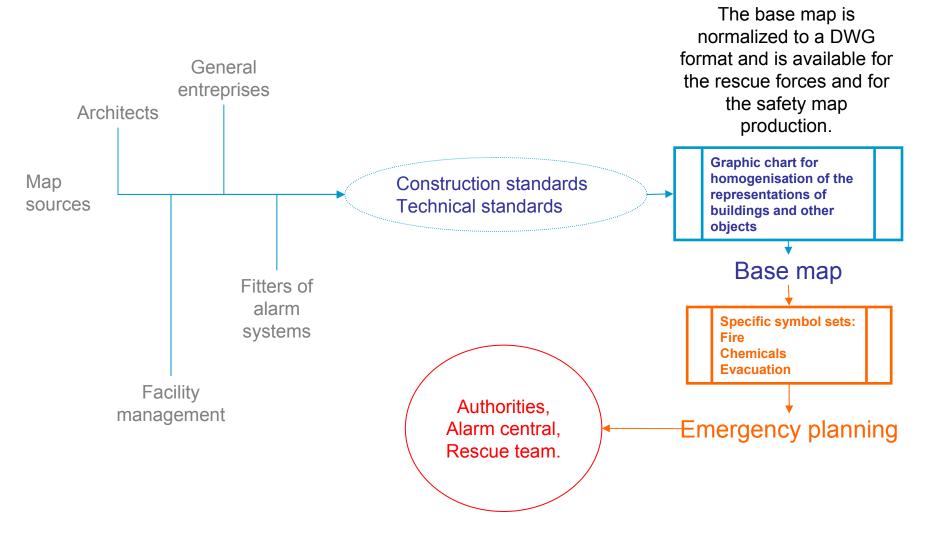
Homogenize information sources for the constitution of maps.

Reduce the costs of map production.

Accelerate the constitution and update of the dossier.



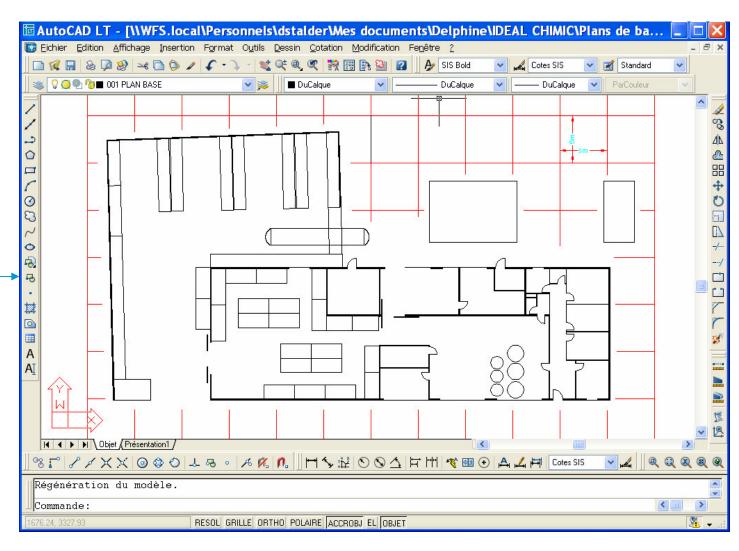
Map make up



Map base: Format DWG

Drawing a basic plan according to a graphic chart defined by the authorities and the fire brigade.

Export toward the instrument for the production of pages of the dossier.



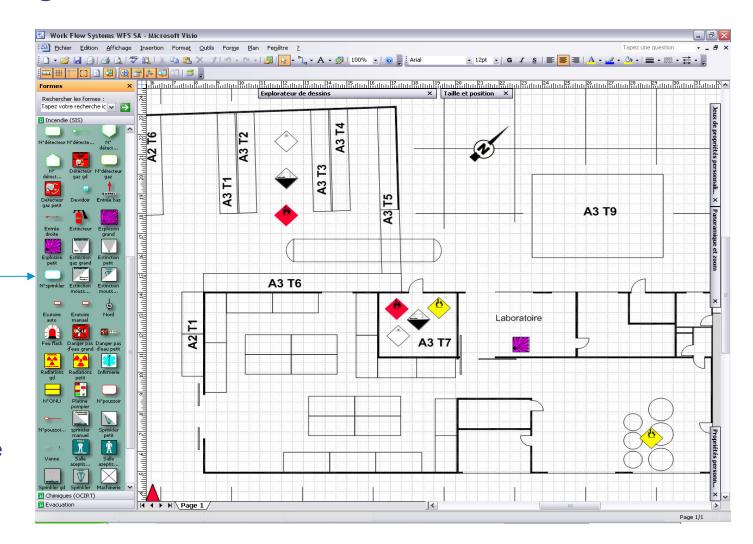
Map page of the dossier: Format PNG

Recovery of the map base AutoCAD LT.

Insertion of icons for:

- •Fire
- Chemicals
- Evacuation

A map page can be released by a moving the pictograms around on the map base.



7. Conclusions

This system will also promote teamwork among state agencies, the fire brigade and industry by sharing verified data.

This system will be part of the scientific support team following spills involving hazardous materials.

This online service enhances the preparedness of the Canton of Geneva for civil and environmental emergencies procedures.

This tool is also evolutionary and allows for the addition of new "layers" (for example radioactive materials).

It also offers possibilities for further development such as use for analysis and cartographic representations of environmental safety.