

# A complete dissemination solution for ambient air quality in Norway





Britt Ann Kåstad Høiskar

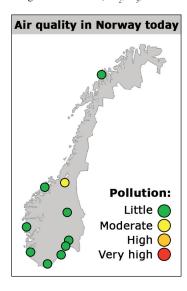
Norwegian Institute for Air Research (NILU), PO Box 100, NO-2027 Kjeller, Norway

#### Introduction

NILU has developed a comprehensive Internet solution for online dissemination and presentation of air quality data in Norway. The solution was developed for the Norwegian Public Roads Administration and Norwegian Pollution Control Authority. The solution consists of public pages as well as administrative pages. The public pages gives the public access to on-line data from the monitoring network, forecasts and the number of exceedances within each of the seven zones in Norway. The administrative pages enable the representatives of the monitoring network within each city, or at national level, to control all the information that is displayed on the public pages. Also, it contains tools for performing QA/QC of data as well as tools for reporting of data to the national data base and to EU. This management system has proven to be a powerful tool for operating and maintaining the monitoring network.

# Monitoring network for ambient air quality in Norway

- Continuous measurements of ambient air quality in ten cities (PM10, PM<sub>25</sub>, NO<sub>x</sub>, CO, O<sub>3</sub>)
- Total of 33 stations in the ten cities
- 21 background stations (SO<sub>2</sub>, O<sub>3</sub>)



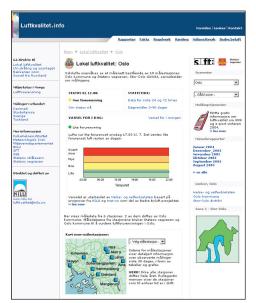
#### **Public web pages**

The public web pages consist of a national portal page, city pages and station pages. The content of the public web pages is:

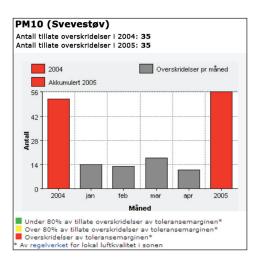
- On-line data
- Forecasts
- Health warnings
- Statistics: daily averages, exceedences of limit values
- Facts on air pollution and regulations
- Forecasts and status of air pollution levels by SMS and e-mail

## www.luftkvalitet.info

#### City pages



#### **Exceedences within a zone**

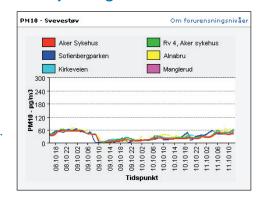


#### **SMS/E-mail forecast**

#### **Content:**

- Forecast
- · Health warning
- Recommendation
- Graphical display

#### Hourly averages



#### Administrative web pages

#### Users:

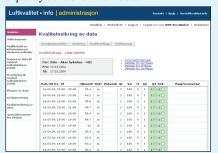
- Local authorities/operators responsible for daily operation of monitoring stations
- The Norwegian Pollution Control Authority
- The Norwegian Public Roads Administration
- The Norwegian Institute for Air Research (NILU)

#### The administrative web-pages have tools for:

- Updating public pages
- · Creating forecasts/health warnings
- · Validation of forecasts
- QC/QA of measurement data
- Reporting of data to national database and to EU
- Graphical tools
- Export to Excel

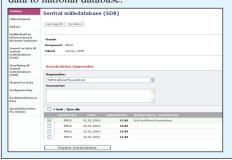
#### QC/QA of measurement data

The local authorities uses this module to perform a quality control of their data.



### Reporting to national database

The local authorities uses the module to report data to national database.



#### Reporting to EU

The Norwegian Pollution Control Authority uses this module to extract data from the national database in the exact format required by EU.

