



# Methods for dissemination of air quality information

## The APNEE-TU project

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### Air Pollution Network for Early warning and on-line information Exchange in Europe - Take Up



#### Background

The APNEE project (1999-2001) established a dissemination platform for communicating information on air quality to the European citizen. The project employed several communication channels in order to disseminate this information. APNEE-TU (Take Up) (2002-2004) was a continuation and expansion of the previous project with respect to content, technology and user sites.

#### Field trials

The services and various contents were tested in two field trials. The national tests were carried out at different times due to the difference in air pollution situation. The trials covered a great variety of test sites with respect to environmental problems, cultural diversity, the end-users prior knowledge on pollution, technological infrastructure etc. Thus, different aspects of the services have been tested at different locations.

The purpose was to:

- Test and validate the various solutions
- Fine-tune the various contents towards efficient information dissemination to citizens, ensuring that they will:
  - ♦ use the services
  - ♦ understand Air Quality information
  - ♦ gain knowledge (as basis for individual actions)
- Evaluate
  - ♦ which methods work best
  - ♦ under which conditions it worked or did not work

#### Information content:

- Current air quality status
- Forecasts
- Air Quality Index (AQI)
- Historical data (day, month, year)
- Statistics
- Background information

#### Presented as:

- Text & numbers
- Colours/icons
- Graphs
- Maps
- Sound
- Animations
- Photos



A set of indicators were used as a measure of how successful the different APNEE-TU solutions were. The indicators cover both technical aspects, the success of the field trials and the usefulness of the different information content distributed by the different information channels. The latter were provided through questionnaires to the test users.

#### AQI (Pollution level)

- Low
- Moderate
- High
- Extreme

#### Conclusions

- New dissemination techniques enhances information effect.
  - ♦ SMS/email and Internet is a good push/pull combination.
  - ♦ MMS might become more popular in the future, too expensive at the moment.
  - ♦ There are differences in terms of what the users in differences countries want and like.
- On-line data must not be more than 1 or 2 hours old.
- Georeferenced data well received.
- Forecasts are the most popular content.
- Simple colour symbols and text always works

#### What services were tested where?

<b>Internet</b>	A vital part of any Air Quality dissemination system. Supports all other services in terms of more detailed information and background material. <i>Germany, Greece, Norway, Spain</i>
<b>WAP</b>	Currently not widely used for AQ information. Could become more popular in the future, e.g. for tourists. <i>France, Germany, Greece, Norway, Spain</i>
<b>PDA</b>	No clear conclusions. Functionality may be incorporated in mobile phones in near future. <i>Germany, Greece, Spain</i>
<b>E-mail</b>	Well received by end users. Recommended for low cost and easy distribution. <i>Greece, Norway, Spain</i>
<b>SMS</b>	The overall most popular service. <i>France, Germany, Greece, Norway, Spain</i>
<b>MMS</b>	Received with interest, but still too costly. Must contain information not available by SMS. <i>Norway, Spain</i>
<b>Voice</b>	Limited request, but well received in France. <i>France</i>
<b>Street panel</b>	Well received by the public in Spain. <i>Spain</i>

