### **CERC**

# airTEXT forecasting and alert system for London

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Cambridge Environmental Research Consultants
Clearer Future Conference, 2008, Sheffield

15 September 2008

airTEXT CERC

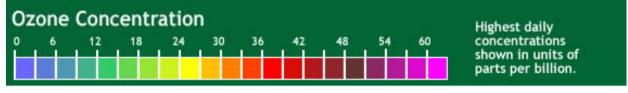
- Cambridge Environmental Research Consultants have produced daily forecasts for councils for 10 years
- The ADMS-Urban dispersion model is at the heart of CERC's forecasting system
- Acknowledgement: Stephen Potter of London Borough of Croydon, Chair of the airTEXT Consortium

### airTEXT: the service

- Free air pollution alert and health advice service for people vulnerable to pollution
  - Asthma
  - Emphysema, bronchitis (COPD)
  - Heart disease and angina
- Forecasts as maps on internet
- Alerts sent by
  - SMS (text message); Voice message to home landlines; email
- Started with London Borough of Croydon pilot



# airTEXT pilot: Croydon



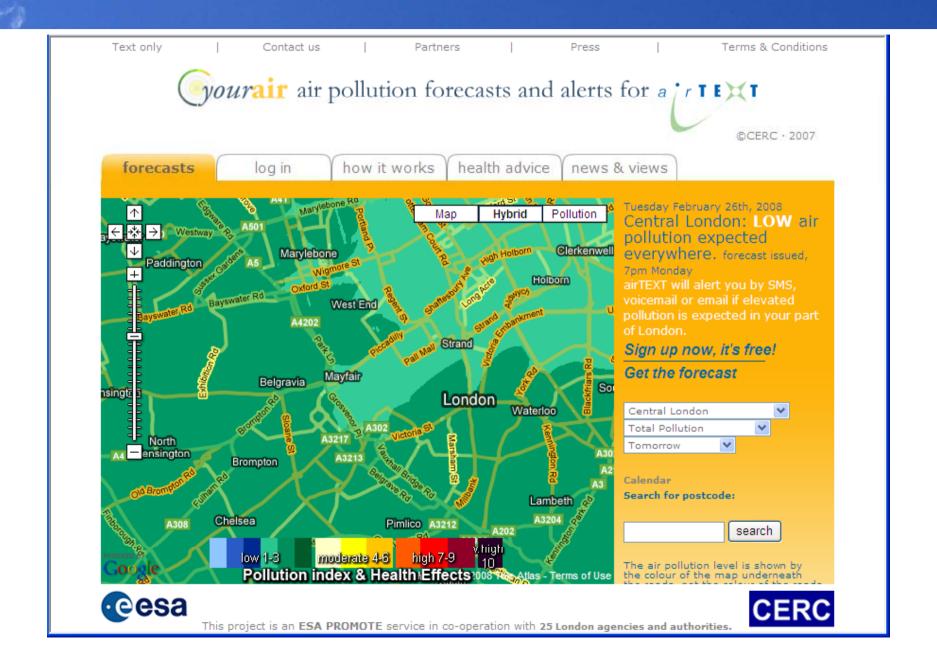


### airTEXT: the service

- Launched London-wide (+ Slough) in March 2007 at City Hall
- Supported by GLA,
   DEFRA, EA, HPA, 26
   London Boroughs
- Currently 3000 subscribers
- Web site uses GoogleMaps



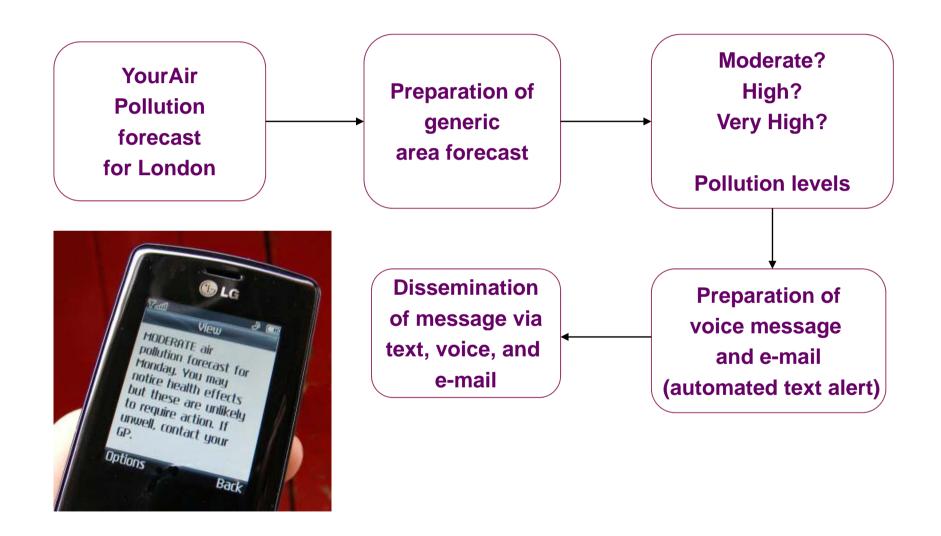
### airTEXT: the service



### airTEXT: motivation

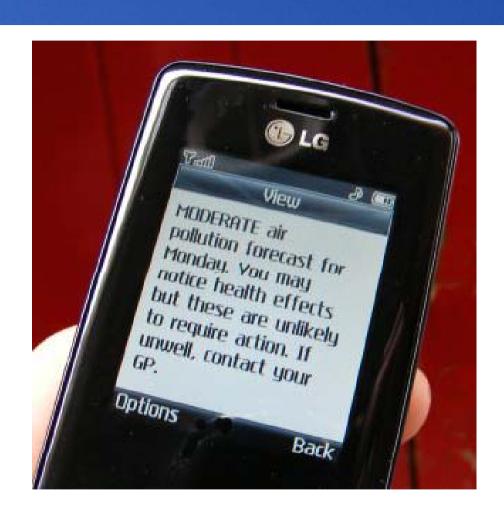
- Air pollution information and health advice widely available, but passively, not actively, disseminated and take-up rates were low.
- Need to improve access to air quality information by vulnerable groups.
- Target information in a timely way directly to those most at risk.
  - enable patients to self-manage their symptoms & reduce exposure
  - reduce acute impacts of air pollution (accident and emergency treatment – visit to doctor)
  - improve patient quality of life and address health inequalities
  - reduce resource implications on National Health Service
  - evaluate health intervention

## How airTEXT works

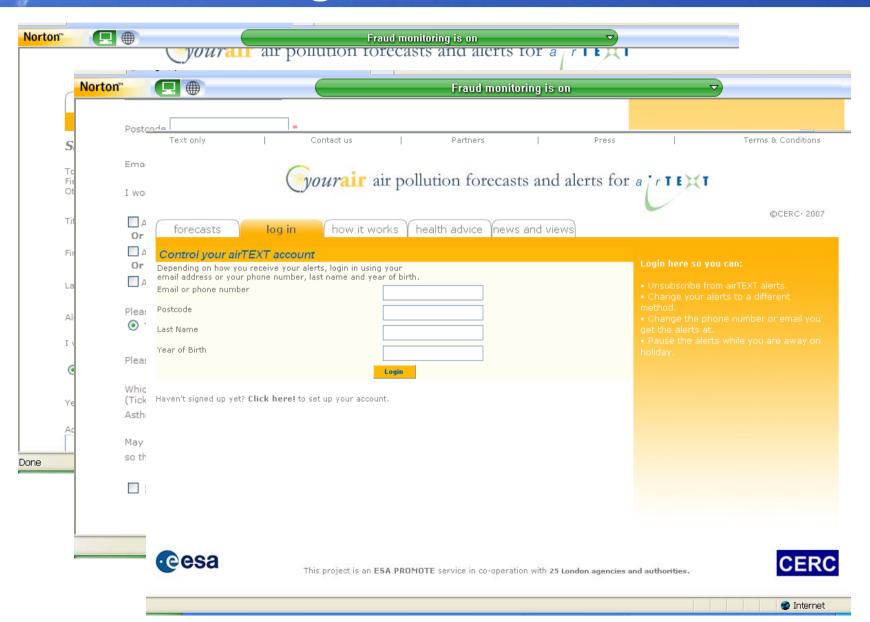


### airTEXT: dissemination

- Currently free subscription for any member of the public
- Select to receive messages the evening before or the morning of an alert
- Alert sent if MODERATE, HIGH or VERY HIGH pollution predicted (COMEAP bands)
- Uses can login and change their details



# airTEXT - Users sign up to receive alerts & manage their account



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- Current advertising campaign: newspaper, tube and bus
- A study started in June, being undertaken by the University of Brighton, to assess the epidemiological effects of receiving air quality forecasts and to assess the service provision



# Forecasting for other cities: Beijing



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# Poor air quality - a cause of concern

DN2\Documents and info\Smog may stop Beijing Olympics marathon - Telegraph.htm

Business TV. News Sport

### Smog may sto

By David Bond, Chief Spor Last Updated: 10:39pm GMT 17/



Olympic athletes whose eve effects of pollution, heat an International Olympic Commi

BOA change tack again

Following a study of the Chi August, the IOC have conclu conditions.

But endurance athletes, suc world-record holding marath Radcliffe, could be hit by the with competitors in road cyd biking, triathlon and race wa

In a further blow, Professor head of the IOC's medical co revealed vesterday that ast Radcliffe were likely to suffe

The IOC are now preparing to monitor the pollution in Beijing on a daily basis during the Games and are drawing up plans to postpone events if nollution and humidity nose a threat to competitors.

#### marathon

e at risk from the combined Beijing, according to an

hendent scientists last. I be unaffected by the

Pollution threat: the National Stadium in Beijing, also known as the Birds Nest, is shown engulfed by smog

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# Poor air quality - a cause of concern

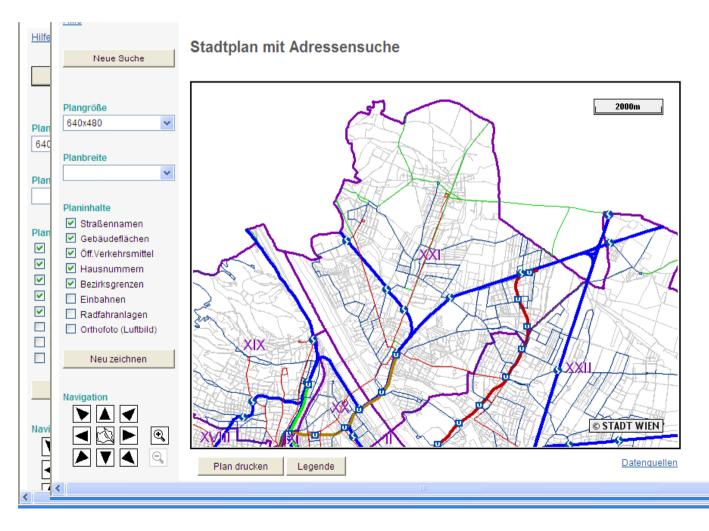
 Beijing forecasts under the DRAGON cooperation project between **ESA** (European **Space Agency)** and China's **MOST (Ministry** of Science and **Technology**)



# Forecasting – ViennAir, Austria

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 Working with Robert Höller of UBA (Austrian Environment Agency) and City of Vienna



# Forecasting – Vilnius, Lithuania

### **CERC**

Working with Vilnius City Municipality

