The cities participating in the CITEAIR project:

Leicester (UK),

Paris (FR),

Prague (CZ)

Rome (I)

Rotterdam (NL),

Bratislava (SK)

Brussels (BE)

Coventry (UK),

The Hague (NL),

Munich (DE),

Transfer Region:

Emilia-Romagna Region(I)

What's on in CITEAIR?

Air quality and its impact on health has been the main drive behind implementing the existing Air Quality Directives. Experiences gained during the implementation process and ongoing research in the field of Environment & Health led to a Thematic Strategy on Air Pollution and a proposal for a new Air Quality Directive. This proposal is subject to discussions in the European Parliament, the European Commission and among stakeholders in Europe.

The CITEAIR project, co-funded through the INTERREG IIIC programme, is supporting cities and regions in developing efficient means to collect, present and compare air quality data from many European Cities. Guidance should help in developing their responses to the Air Quality Reporting and Air Quality Action Planning requirements of the European Union's Air Quality Directives, to meet the forthcoming limit values and improve the Air Quality for their citizens.

During almost three years of productive work among partners and an exchange of opinions with stakeholders including the European Commission (DG Environment) and the European Environment Agency (EEA), the project team is presenting its main products during the conference on 8th December 2006 in Prague. Supported by speakers from the European Parliament, the EEA and DG Environment, the event offers a forum to involve additional experts on Air Quality and decision makers in the discussions aiming to join forces and create synergies in abating adverse Air Quality.

Nick Hodges, Leicester City Council
Lead Partner of project CITEAIR

CITEAIR "goes on":

In summer 2006 CITEAIR received further support by INTERREG IIIC and will now run until the end of 2007. During this period the project will further develop some of the products and undertake further dissemination activities. During the coming months the project will organise additional workshops to recruit further cities to the COW and promote the products; will develop a Forecast Air Quality Index; and will liaise closely with Media. CITEAIR will seek to involve Members of the European Parliament, the Department Generale Environment and the European Environment Agency more closely with the CITEAIR initiative to strengthen the role of the Cities and Regions and encourage the embedding of the concept within the European Air Quality Management mechanisms.

CITEAIR products: The Air Quality Index CAQI and YAQACI.

The CAQI is developed as a city/country independent air quality index facilitating the comparison of real time air quality in different European cities. It resembles most existing indices: there is a calculation grid and the worst pollutant determines the index. An important feature of the CAQI is that it differentiates between traffic and city background conditions. The CAQI can be applied on an hourly and a daily basis.

The CITEAIR Air Quality Index (CAQI) has 5 levels, using a scale from 0 (very low) to > 100 (very high) and the matching colours range from light green to dark red. It is based on 3 pollutants of major concern in Europe: PM10, NO2, O_3. 2 Additional pollutants (CO and SO_2) can be taken account where data is also available. The figure below presents the practical application of the CAQI for 16 cities as they are delivering their data in real-time.

City Name	Roadside Index		Background Index	
	Now	Yesterday	Now	Yesterday
Berlin	42	40	23	30
Bratislava	>100	-	89	-
Bristol	42	18	16	31
Brussels	27	26	18	29
Coventry	24	24	>100	>100
Gdansk	-	-	22	51
Gdynia	-	-	30	44
Leicester	13	31	20	34
Munich	56	55	28	36
Paris	43	43	18	27
Prague	20	58	26	>100
Reims	-	-	-	28
Rome	-	-	-	-
Rotterdam	-	19	-	25
Sopot	-	-	28	57
Tczew	-	-	28	53

Example of the CAQI for 16 European Cities

In addition, CITEAIR developed a **Year Average Air Quality Index (YAQACI)**. The calculation of the index is completely different form the hourly and daily indices by adopting the "difference to target" principle. If the index is higher than 1,0 it means that for one or more pollutants the limit values are not met. If the index is below 1 it means that on average the limit values are met.

All details on the indices can be found in the report **Comparing Air Quality Across Borders** on the CITEAIR webpage http://citeair.rec.org

CITEAIR product: The Common Operational Website.

Public information on the environment is of increasing importance. The public should be able to assess to what extent they are affected by air quality. This is an obligation under the EU Framework Directive on ambient air quality and under the Aarhus Convention that was ratified by the EU in 2005.

The Common Operational Website (COW), **www.airqualitynow.eu** provides a platform to compare air quality in different cities in real time. The website does not aim to replace local websites but to complement them in providing a common place and a common way of presenting air quality in an easy understandable and comparable way.

To make the website attractive it is designed as a dynamic platform offering hourly or daily updated air quality concentration updates for those cities having a real time monitoring infrastructure.

Meanwhile 16 Cities and Regions link their real-time environmental data to this COW. Through this approach environmental data will be easily comparable across different sites in Europe.

However, to make city participation as broad and easy as possible, cities can also join **www.airqualitynow.eu** in the section where year average air quality is being compared, by simply giving a yearly update of their air quality in a form on the website.

CITEAIR product: Communicating Air Quality

Public information on environmental issues is of increasing importance and also an obligation under the EU Framework Directive on air quality as well as under the Aarhus Convention. Reporting, informing and communicating all deal with the production and dissemination of information. They are closely linked but different in nature and content. Furthermore these differences and the likely consequences in its practical implications are not always clear to everybody. The need for guidelines on public information became evident when five leading cities in Europe tried to compare the air quality they presented to the public. This report provides a strategy for communicating with the public on Air Quality and delivers a wealth of good practices and is made from practitioners for practitioners by applying elements from communication theories.

CITEAIR product: City annual air quality reports

The way this document uses the word "report" refers to reports generally made by cities. These reports are obviously heavily influenced by the formal EU reports but they tend to be broader in the sense that they are used to make action plans and are being used to inform the public about local air quality situation.
This guidebook comes up with a proposal for a common reporting format and a semi-automatic report generator. It is expected that this leads to standardisation of reports, make reporting easier for a city and makes reports more comparable.

CITEAIR product: Air quality management

This guidebook is intended to assist the user in completing the diagnosis of their air quality problems and identifying a selection of tools and/or measures which could help reduce the problems and improve air quality in urban agglomerations. The examples used to illustrate a theme of urban air quality management are supplemented by case studies already implemented together with signposting or links to sources where other solutions have been reported.

CITEAIR product: Transfering a traffic-environmental modelling chain

Urban traffic and its resulting emissions are dominating the air quality situation in most European agglomerations. In the context of research projects funded by the European Commission innovative tools, merging monitoring and simulation systems by means of Information- and Communication Technologies have been developed and tested under real-life conditions and forms a "toolkit" to support transferring initiatives towards other European regions and cities. This guidebook explains the transfer of experiences in developing a Decision Support System (DSS) to assess the environmental impacts of urban traffic in near-real time to a region in Italy.

For further information on the CITEAIR project and about the products please contact the lead partner **Nick.Hodges@leicester.gov.uk** or visit the following web pages: **http://citeair.rec.org** or **www.airqualitynow.eu**