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Compared to previous version documentation sheet (12-08-2010) the following issues were adapted:
- New section on relevant policy areas added to the documentation sheet

ECHIM Indicator name	C) Determinants of health 55. PM10 (particulate matter) exposure
Relevant policy areas	- Health inequalities (including accessibility of care) - (Preventable) Burden of Disease (BoD) - Preventable health risks - Environmental health - Child health (including young adults) - Health in All Policies (HiAP)
Definition of indicator	Annual urban population average exposure to outdoor air pollution by particulate matter (PM10).
Calculation of the indicator	The population-weighted annual mean concentrations of Particulate Matter 10 measured at urban and sub-urban background stations in agglomerations. Annual mean concentration of PM10 is the averaged over all measurements conducted in the year in question. PM10 refers to particulates whose diameter is less than 10 micrometers. Measurement unit is micrograms per cubic meter.
Relevant dimensions and subgroups	- Calendar year - Country
Preferred data type and data source(s)	Preferred data type: Emission registries and population statistics. Preferred source: Eurostat.
Data availability	Data are available for the EU-27 in the Eurostat database from year 1999 onwards, except for CY and LU (no data), and LV and MT (only for one year) .
Data periodicity	Data are being updated annually.
Rationale	Urban air pollution is responsible for substantial burden of disease and death. Very young children, probably including unborn babies, are particularly sensitive to air pollutants. Fine particulates (PM10) can be carried deep into the lungs where they can cause inflammation and a worsening of the condition of people with heart and lung diseases. The data in the indicator relate to the target and limit values as set in EC legislation.
Remarks	- This indicator is one of the EU structural indicators Environment - Particulate Matter (PM) is an air pollutant consisting of a mixture of solid and liquid particles suspended in the air. In general, smaller particles (PM10 and smaller) are more important for health effects than larger particles since they penetrate deeper into the lungs. - The European Air quality database (AirBase) is the underlying source for PM10 concentration data (data available from 1996 onwards), and Eurostat for (city) population data. - Currently (July 2010) no Eurostat metadata for PM10 exposure are available. - For the EU countries, air quality data is collected on annual basis as required by the Sixth Community Environment Action Programme (1) and the strategy developed by the Clean Air for Europe programme, adopted in September 2005 (2).Then the European Environment Agency (EEA) and the Topic Centre on Air and Climate Change (ETC_ACC) process the data and make it available. The European Air quality database (AirBase) is the public air quality database system of the EEA. It contains information submitted by the participating countries throughout Europe. AirBase is managed by the European Topic Centre on Air and Climate Change (ETC/ACC) on behalf of the EEA. - ENHIS (European Environment and Health Information System) is a project co-funded by the European Commission and coordinated by WHO/Europe. ENHIS has data on PM10 exposure, which are also based on AirBase. Data availability (time trends) in Eurostat is better

	than in ENHIS, however. Moreover, Eurostat is a more sustainable source than the project-based ENHIS database. - WHO-HfA is not preferred because data is presented only for capital cities. Their definition is "Annual average concentrations of particulate matter (PM10) in the capital city, based on daily values monitored at the urban background stations of the capital city." WHO-HfA data is compiled and calculated by the Air Quality and Health programme (AIQ) of Special Programme for Health and Environment of the WHO Regional Office for Europe. Primary data source is air quality monitoring networks and stations monitoring air quality in the capital. Secondary source is AirBase database.
References	- Eurostat database, Urban population exposure to air pollution by particulate matter 10, http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsien110&plugin=1 - the European Air quality dataBase (AirBase) data: http://www.eea.europa.eu/themes/air/airbase and http://air-climate.eionet.europa.eu/databases/airbase/ - European Topic Centre on Air and Climate Change (ETC/ACC): http://air-climate.eionet.europa.eu/ - Legal Setting of AirBase is described at: http://air-climate.eionet.europa.eu/databases/airbase/legal_setting.html - (1) Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme. Official Journal of the European Union, L242, 10.9.2002 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002D1600:EN:HTML). - (2) Directive 2008/50/EC of the European Parliament and the Council of 21 May 2008 on ambient air quality and cleaner air for Europe Official Journal of the European Union, L152/1, 11.6.2008. (http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2008:152:SOM:EN:HTML)
Work to do	- The fraction of the PM10's which are thought to be the most harmful are those that are less than 2.5 micrometres in diameter and are called PM2.5's. At present data from PM2.5 monitoring is available for a small part of the population only. Use PM10 for now because of time trends, but monitor ENHIS and Eurostat for PM2.5 data so that at some point, when enough trends for PM2.5 are available, change indicator definition to PM2.5. - Seek feedback from Eurostat on precise data processing of the AirBase data before publication in the Eurostat database.