AIR QUALITY MONITORING PROJECT – DONATION FROM KE /ECLO (IPA FUNDING PROJECT)

EU –IPA Project: Supply of Air Quality Monitoring Stations, Analytical Laboratory and Calibration Laboratory equipment

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Scope of this Project was the supply of an ambient air quality monitoring system equipment, including:
-5 monitoring stations,
-calibration laboratory, other supporting equipment
-laboratory for sample preparing
- analytical laboratory
-Software for data collection and acquisitions and
-1vehicle for field

The monitoring system is to assess the air quality in Kosovo within the parameters and requirements set by the European Community regulations and in particular the EU directive 2008/50/EC and 2004/107/EC.

The air quality monitoring stations are located at the following municipalities:
1. Hani i Elezit;
2. Peja/Pec;
3. Prizren;
4. Gjilan/Gnjilane;
5. Brezovica.

The monitoring stations that are located in Hani i Elezit, Peja, Prizren and Gjilan are set in function but Brezovica's station hasn't been started yet, because of some problems we had with locations and power electricity supply. During this month it will start working (set in function). These stations consist analyzers for SO2, CO, NOx (NO, NO2), O3, monitor for PM10 /PM2.5, ,sampler for PM10 and PM2.5, sampler for BTX and meteorological sensors for air pressure, air temperature, air humidity, wind direction and wind speed.
The view of one of the stations may be seen in the following picture.

Fig.1. One of the five stations

Note:During 2012 we collected datas for air quality in our country in those stations. These datas are reported in MSPE and Integration Office.

The calibration laboratory equipments are installed at the Hydro-meteorology Institute (HMIK), located in Prishtina.

This laboratory consists :

-Volumetric system to produce standard gas

-Reference analyzers for SO2,*CO, NOx (NO, NO2) and O3* .

-Zero air generator

See pictures bellow:

Fig.2.Volumetric system to produce standard gas

Fig.3. Reference analyzers for SO2, CO, NOx (NO, NO2) and O3

Note:During 2012 we achieved to calibrate analyzers set in the stations mentioned using some equipments of this laboratory.

Laboratory for sample preparing consists:

- Three Rotavapory
- Ekstraction system and
- Microwave for digestion

See pictures bellow:

Fig.4. Rotavapory

Fig.5. Microwave for digestion

Note: We have done some testing to see whether these equipments are functional or not.

Laboratory for air analyses consists:

-ICP-MS (Inductive couple Plasma with Mass spectrometry)

- IC (Jon Chromatography)

-GC-MS(gas chromatography) and

-GCMS with Thermo desorption

See pictures bellow:

Fig.6 Equipments for inorganic compounds determination- ICP-MS and IC

Fig.7. Equipments for organic compounds determinations- GC-MS and GC-MS with TD

Note: We have done some testing to see whether these equipments are functional or not.

During 2012 our staff has taken some short trainings for operating ,maintenance and calibration of equipments, also we have profited a two-day training of using the central software.

Considering complexity of the equipments and their sensitivity we need for some longer trainings to develop the standard operation procedure for air analyses.