DATA
ACCOMPANYING REPORT

AIR QUALITY

The realization of the intensive monitoring program for assessment of air quality in Bulgaria was organized in 3 stationary areas. The stations are equipped with automatic devices collecting data for air quality parameters in real time. The following stations were determined:

- **Vitinia (0001)** - This area is situated in the western part of Middle Stara planina (the Balkan mountain), on the territory of Vitinia State forestry district. It is representative for the beech forests. The region is under the influence of local and regional pollution sources;
- **Staro Oriahovo (0002)** – It is situated in the eastern part of Stara planina, "Gorska baraka" area of the Staro Oriahovo State forestry station. The region is representative for oak forests. There are regional pollution sources;
- **Yundola (0003)** – This area is situated in the western part of the Rodopi mountains, in the "Starina" area, on the territory of the experimental training forest station Yundola of the University of Forestry /UF/. It is representative for coniferous forests and is far away from local pollution sources.

The monitoring activities in 2008 were prepared in compliance with the ICP Forests Manual and comprise the following activities:

- Assessment of ambient air quality – Air pollution concentrations are measured in every 1 hour. Data for automatically measured atmospheric pollutants - **SO_2, NO, NO_x, NO_2** and **O_3** are transmitted and monitored in real time;
- Validation of the data

The technical problems with some of sensors lead to lack of data for NO and NO_2 (Vitinia, Staro Oriahovo and Yundola stations), for O3 (Vitinia station) and for SO2 (Vitinia and Yundola stations).
The present submission report for air quality is based on the following % of validated data:

1. Vitinia (0001) – 96.5% for SO_2, 91.7% for NO_2 and 95.4% for O_3;
2. Staro Oriahovo (0002) – 99% for SO_2, 80% for NO_2 and 100% for O_3;
3. Yundola (0003) – 93% for SO_2, 93% for NO_2 and 100% for O_3.