Annex 35

Answers to questions contained in the letter of 10.04.06 (information requested by independent experts)

A) Numbers 2 and 3 from the “Summary of statements.doc” for the ESPOO inquiry commission (meeting February 24)

Number 2

 Instead of detailed bathymetric maps of the in-stream section of the navigation route, we provided the tabular data on cross-sectional depths of the river channel prior to the project and thickness of excavated soil layer in the locations of dredging activities (thickness values shown as denominator). Cross-sectional depths were provided for the whole navigation route at a length interval of 500 m and section width interval of 10 m (please see appendix 17 (Ukr.) in three parts).

In addition, Appendix 16 reflects total volumes of excavated soil for each rift and for Phase 1 as a whole (in-stream dredging operations) (1880930 m$^3$).

The locations of rifts along the navigation route are shown in Appendix 15_1 (Ukr).

The total designed volume of dredging in the sandbar section for Phase 1 (construction of access channel) is 1683600 m$^3$. Dredging volume associated with the construction of protective dam is 90000 m$^3$. (see Appendix 2).

To derive the dry-weight values from the dredging volumes, the following ratios should be applied: 1.4 in case of silty and sludgy soil, and 1.6 in case of sandy soil. In general, the average ratio of 1.5 can be used.

The layout of seaward access channel and its structures in the sandbar section of the Bystre Branch is shown in Appendix 23 (Ukr), with Phase 1 development marked in blue. The Phase 1 development for the protective dam is marked in black (completed section), and unfinished section is shown in green. The Phase 2 development is marked in red.

The dredging spoils dumping site layout with echo-sounded depths (measurements taken on 31.03.06–1.04.06) is attached (new Appendix 34).

The locations of onshore storage sites for dredging spoils are shown in Appendix 15_2, with their detailed characteristics provided in Appendix 19 (Ukr). At the Ermakov Island’s storage site, current volume of stored soil is 283000 m$^3$. These concern the storages sites No 15 and 16. Total actual volumes of stored soil are 1638595 m$^3$ for the onshore storage sites and 1686842 m$^3$ for the offshore dumping site.

Number 3

Laboratory measurement data on grain-size composition, moisture and density of soil were provided in Appendices 21, 22 and 24 (Ukr). Chemical analysis data on oil products and heavy metals in soil samples were provided in Appendix 20 (Ukr).

Historical data on soil chemistry, used in the EIA study to predict changes in water quality due to dredging, and results of this exercise for Chilia Branch are provided in a new Appendix 33 (attached). This Appendix corresponds to omitted Tables 4.3.10–4.3.12 in the Impact assessment Ukraine 8-now. The description of calculation procedure and produced estimates of pollution levels
associated with dredging is provided in the Impact assessment Ukraine 8-now (before and after the tables).

**B) Request by Nico de Rooij of 22 February 2006**

**Number 1:**

1) All numbers relating to the dredging and storage volumes are far too high as compared to the design characteristics and actually completed works. Correct data are provided above, in Section A.

2) It should be taken into account that only certain part of pollutants contained in bottom sediments can be reintroduced into the water, and this assumption was used in the EIA to predict the impact of dredging on water quality (please see new Annexes 33 and 36).

3) It is our view that in the impact assessment it is important to look into relative parameters (such as exceedances in background concentrations of pollutants as a result of dredging activity) rather than absolute ones reflecting the inputs of pollutants. This approach was used in the EIA (please see Impact assessment Ukraine 8-now, section 4.3.4).

**Number 6:**

Additional information will follow shortly.

**Number 8:**

- Differences in data on Cu can be explained by different periods, during which the studies were carried out (see Annex 33).
- In Table 4.3.7, pH should be replaced with Fe.
- In Table 4.3.8., measuring units for metals are wrong. The correct unit is microgramme/gramme, or µg/g (or mcg/g) (it appears that reference to table 4.3.9 is by mistake).