

## Statement on the hearing of the Commissioner-designate for DG TRANSPORT and SPACE

Inland waterborne transport (IWT) is considered to be an energy efficient, safe, and sustainable mode of transport. Earth observation from Space has become an important asset to water and environmental management, including the monitoring of the quality of flood defenses. Water, after oxygen, is also the second consumable needed by crew to stay alive aboard a spacecraft and the most critical component for the Closed Loop Life Support System.

- 1. The Commissioner should ensure that IWT is developed in a sustainable way. It needs to be further integrated into other EU policies such as Energy, Water, and Environment. Knowledge gaps need to be closed to create more win-win situations.**

Inland waterways play an important role as a source of water for domestic, agricultural, industrial and energy-related use. Waterways and their surrounding floodplains provide ecosystem services such as natural flood retention and are increasingly appreciated as places of leisure and recreation. They are also the natural environment for the flora and fauna to be protected by EU directives.

- 2. The Commissioner should promote investment in RTD to adapt all transport infrastructures to an increased frequency of extreme hydrological events.**

Current understanding emphasizes that climate change will result in a change of hydrological regimes in water ways affecting amongst others, navigation and dredging. Special sensitivity studies demonstrated that civil engineering measures and green infrastructures in estuaries can be options to adapt to climate change impact.

- 3. The Commissioner should address the problem of aging waterborne transport infrastructure and should ensure investment in sustainable inland water transport assets.**

Weirs, sluices, and harbours are major assets which throughout Europe are aging. Instead of ad hoc upgrading said infrastructures, rethinking is required regarding new approaches that address sustainability, resource efficiency, life-cycle analysis, and the creation of green infrastructures as well as new, green waterborne vessels, which may require adapted infrastructures.

- 4. The Commissioner should ensure availability of reliable and easily Earth observation data on the water cycle to support decision making on water management issues.**

Earth observation data are essential to forecast and assess the extent of floods and droughts, in data-rich but in particular in data poor regions. Society and economy will benefit from improving assessment, saving billions on damages.

- 5. The Commissioner should recognise the importance of research and innovations in water recycling for the applications in space exploration**

High efficiency of water recovery and recycling systems (e.g. by using nanofiltrations, reverse osmosis, membrane and other key enabling technologies) are critical to ensure further space explorations.

