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## **TRANSBOUNDARY HYDRO-METEOROLOGICAL AND ENVIRONMENTAL MONITORING SYSTEM OF DNIPRO RIVER (THEOREMS-DNIPRO)**

Starting from November 30, 2017, by the First Program of territorial cooperation for the countries of the Eastern Partnership "Belarus–Ukraine", which is funded by the European Union, a project «THEOREMS-Dnipro» (Transboundary Hydrometeorological and Environmental Monitoring System of Dnipro river) is developing. The main result of the project should be to improve the efficiency of the management of transboundary water resources of the Dnipro river.

Overall objective of project is increasing the efficiency of the integrated management of transboundary water resources of Dnipro River.

Specific objectives of project:

1. Improving the efficiency of the monitoring system of hydro-meteorological and environmental parameters of transboundary water resources of Dnipro River Basin.
2. Expansion of cooperation between Ukraine and the Republic of Belarus organizations, that control and share the information of hydro-meteorological and environmental conditions of transboundary water resources.
3. Raising public awareness and understanding of international water resources problems in transboundary areas of Dnipro Basin.

The project provides for development and implementation of two unified Automated HydroMeteorological / Ecological Station (AHMES) with wireless connection to the web-server, PV power supply and alarm system for target group information, creation web-page and web-application with interstate database for hydro-meteorological and environmental parameters of river. AHMES stations will include the necessary set of measuring, information and telecommunication facilities and work with the use of natural energy sources. Under the terms of the project, AHMES stations should be place at the sites of long-term hydrological observations of the transboundary zone of the Dnipro River. At the moment such places are: on the Belarusian side the Loyew hydropost, on the Ukrainian side – the Lyubech hydropost.

The measuring system of the complex station AHMES will consist of several elementary measuring stations (water temperature, water level, speed of wind, wind direction, atmospheric pressure, air temperature, air humidity, complex of water ecology parameters) connected together on the central server, from which the already processed information would flow both to the Web-server, to inform the population about measured parameters, and to dispatching areas of the emergency services of Belarus and Ukraine.



The project is co-funded by the European Union

### **List of sources used**

1. Integrated Water Resources Management for River Basin Organizations: Training Handbook. CapNet; June 2008. – 205 p.