# Echipament pentru monitorizarea calităţii apei de irigaţie la staţiile de pompare de la sursă

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In Romania the irrigated surface with high economic efficiency it is estimated at 3,5 mil. ha. On national scale there is no integrated approach of the quantity and quality values of the irrigation water, as a resource, as well as an equipping of the pumping station. On international scale, in the developed countries the pumping stations are provided with equipment for monitoring, on real time, the quality or the pumped water and with for warning about critical situations (emergencies).
The technical solution consists of an equipment which monitors the following parametres: turbidity, pH, CE at 250C, Na+, Cl-. The lapse of time for monitoring is of 10 – 60 min. The main components are the following: the prelevation pump (submersible) the monitoring board, the repression pipe of the analysed water. There are made warnings about tue exceeding of the programmed level for each monitored parameter, about tue fact that the pump and agitator don't work or about any other source of damage.
The testing of the equipment in the ground was made at the base pumping station Manta, from the Danube Meadow, Giurgiu county. The water is from the Danube and it is in most of the cases mixed with the water originating from drainage mixed with the drainage water. The economic effects of the solution consist of the following issues: the decrease of the total content of soluble salts from the soil; the removal of the negative impact of the mineralized water upon the production level; the decrease of the alluviation degree of the irrigation arrangement site; the increase of the economic efficiency of the irrigation by including the water quality on the price. The research is in accordance with the technological platform (PT)25 suits the tech. Plat the sectoir WSSTP – TWG4 water in agriculture. The problem was approached in the project 624/2005 from CEEX.