

REMOTE CONTROL SYSTEM FOR THE HEBRON WATER NETWORK

UNDP/PAPP WITH A CONTRIBUTION OF US \$ 1.4 MILLION FROM THE ITALIAN GOVERNMENT FUND THE ESTABLISHMENT OF A REMOTE CONTROL SYSTEM FOR THE OPERATION AND MAINTENANCE OF THE HEBRON CITY WATER SUPPLY AND DISTRIBUTION SYSTEM. THE PROJECT WILL BENEFIT 150.000 INHABITANTS AND THIS SYSTEM WILL COVER AN AREA OF APPROXIMATELY 35 SQUARE KILOMETERS.

The project is being implemented by UNDP/PAPP with the support of an Italian consultant, Eng. Giuseppe Lo Cicero, based in Sicily, in collaboration with the Water Department of Hebron Municipality.

The initiative entails the setting up of a control room at the Municipality building, and the installation of a Supervisory Control Data Acquisition System (SCADA) featured to allow command and control of valves, water flow, water pressures, water levels etc. This system will be the first of its kind in the occupied Palestinian territory for the control of a water network by a telecommunication system.

To render such a remote control system functioning, a number of modifications and the introduction of new equipment is required, to upgrade the existing water supply network. The project will necessitate the supply and installation of 22 remote terminal units (RTUs), 36 on-off valves, 11 regulation valves, 47 flow meters and 41 pressure meters.

The system will also interface with five pumps and one Programmable Logic Controller (PLC) that is controlling two wells owned and operated by the Municipality of Hebron and two booster pumps. These installations will necessitate the construction of 13 manholes, connections to the RTUs, and custom modifications to existing hydraulic connections.



The actual implementation of the project will take 11 - 12 months and will be completed by the end of May 2008, including operational training of the Municipality staff.

Once completed, the remote control system will increase the efficiency of the operation, management and maintenance of the water supply and distribution network, improve the water delivery services to the inhabitants, and most importantly will reduce water losses. This is a pioneer project and Italy is hopeful that in the future, it will be used as a model to be emulated by donors for other Palestinian cities and towns.