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**A PROJECT REPORT ON
SMART WATER SUPPLY MANAGEMENT FOR
METROPOLITAN CITY**

**Submitted in partial fulfillment of the
requirement for the award of the Degree of
BACHELOR OF ENGINEERING
IN
ELECTRONICS AND COMMUNICATION**

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2013-14

Abstract

In urban areas the water supply to residence and commercial establishments are provided at a fixed flow rate. There are incidents of excess water drawing by certain customers/users by connecting motor-pump sets to the water lines which is considered as water theft. In this project it is proposed to develop an embedded based remote water monitoring and theft prevention system by recording the flow rates at the consumer/user end. In order to implement the proposed water supply system, each consumer end should be provided with an embedded based water flow monitoring system consisting of a microcontroller to record the flow rate using a flow sensor and to transmit the same to a remote monitoring station using wireless transmitter and it is also provided with an electrically operated solenoid valve to supply water to the consumers. The valve turns on/off by the central processing station PC to stop the water supply whenever the flow rate exceed a predefined limit. It is proposed to employ a GSM MODEM for wireless communication so that the information can be passed to many responsible officers cell phone for immediate action.