



ACQUISITION OF 12 SIRENS FOR EARLY WARNING

As part of the « relèvement post-catastrophe » project, the UNDP provides support to the Grand 'Anse department municipalities to strengthen the prevention and management of natural risks and disasters. Therefore, specific action is being taken to strengthen the early warning system by providing the 12 municipalities of the Grand'Anse departement sirens that will be activated in times of crisis.

The applicant, in addition to supplying the siren and all necessary equipment, will be responsible for the installation and training of UNPD local technical frameworks on use and maintenance of sirens. Some sirens can be installed with a pole, other no.

These sirens must be equipped with full auto diagnostic functions and supports a wide range of control methods and communications channels. Sirens must also be equipped by built-in backup batteries, to be fully operational in case of a power failure and to fulfill the following characteristics:

ITEMS	Quantity	SIREN SPECIFICATION	DESCRIPTION / SPECIFICATIONS OF THE ITEMS
Outdoor sirens	12	Performance specifications	Robustness and good resistance to weather and other hazards such as insects or birds;
			Easy installation and transportation (light weight);
			Remote recording of alarms in memory;
			Basic auto diagnostic functions.
			Audio stream via COM port only.
			Wi-Fi, X-Bee, and GPRS options
			Ability to connect tracking sensors directly into the siren;
			Fully programmable inputs
			High acoustic pressure at long distance. Sound between 110 to 120 dB;
			Asynchronous messages.
			Full self-diagnosis function of the siren and communication channels;
			Use of the siren up to 72 hours following the fall of the electric current including the emission of some messages in full performance;
			Agent-logger & Real Time Clock
			iButton Dallas authorization.
			Optional built-in FM radio tuner
			Optional Door tamper /magnetic contact/
			Impressive performance: high acoustic pressure combined with good intelligibility and a possibility of reproducing any sound including built-in alarms or live announcements.
			Control: local control unit connected by cable to the siren located in the roof and on the other hand a remote control connected wirelessly to the siren by Xbee, so the sirens could have 2 ways of activation.
			Communications: each siren will have its own control and that operator will control that only siren and no others.
			Combine a number of control methods, from a single push-button to an advanced operator's control panel, to achieve optimum investment costs and effectiveness.
			Fully autonomous control through sensors directly connectable to the siren.
			Local on-site control
			A great selection of communications channels: radio, Ethernet, X-Bee, RS232/RS485.
Siren box IP rating: Material: Stainless Steel, IP54, IP66			
Binary inputs/outputs: 16 inputs / 4 outputs			

		Technical Parameters	Maintenance-Free Batteries: Minimum Required Stand-By Time: 72 hours and Full-Power Time: 45 minutes Recommended Battery Capacity: 75 Ah; Voltage: 2x 12 V
			Power Supply: 110 V / 230 V AC.
			Solar panels mixed with local power source 110VA.
			Batteries with 2 power supply sources (local power and solar panels).
			Language Menu: French / English
			Configuration Capacity System: Power output 1200 W.
			Optional functionalities: ADIO11 (Analogue input and binary input and output module) MAG15 (Ethernet interface module) GPRS15 (GSM communications network module) RDM02 (Radio modem module; an analogue radio station required) RDS03 (RDS radio receiver; Radio Data System) LCU15-I (Internal local control module) INT11 (External local control interface module)
			All installation accessories must be included in the Offer to have a complete system (license, software, cables, microphone, SD card configuration, materials, equipment and others)