IoT Mission Ideas

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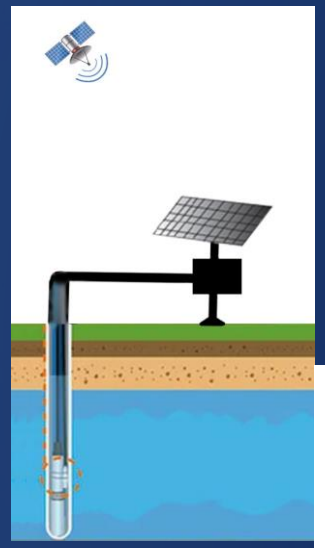
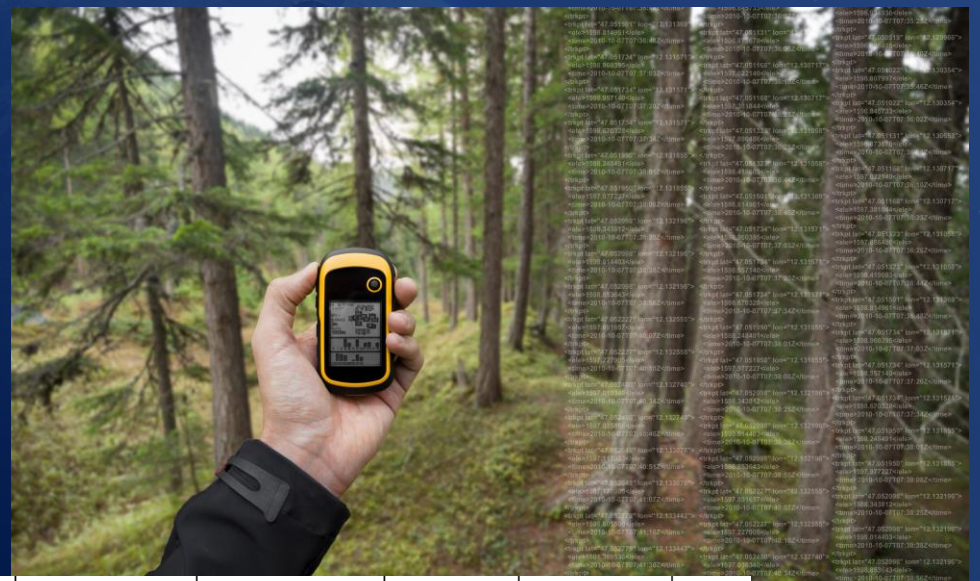
Water level and quality detection and monitoring



Water level and quality detection and monitoring	Among the available market solutions, the most suitable will be selected	Local and central government.	Monitoring of ground water levels and quality in correlation to changes in the weather and affects of agricultiral industry.	During summer months in specific areas in our country drought can occure and water regime gets established.This project will allow for better resources management and taking preventive measure for water destribution and usage. Furthermore the usage of cemicals in agricultural industry can affect the quality of ground water and introduce poisonos elements in the ecosystem. This will allow for better management of water resources and establishing preventive measures in correlation to agricultural affects on the environment	In moments of drought 3 times per day; in normal days once per day	depending of the terrain case: 1 communication base to collect the data from n number sensors or n number sensors will send the invormation to the satellite directly. 16 bites per sensor.	In moments of drought 3 times per day. In normal environment once per day	Depending on the region. For base proposal 10 sensors on key points.	5

SOS signal tracking



SOS signal tracking	The are readily available products on the market; it is possible to develop our own	Logal and central government and life saving organizations.	Save lives of people who are in dangerous situations, have experiensed accidents, fallen uncountious or gone missing in regions without proper GSM coverage. The device will monitor the life markers and allow automatic sending of SOS signal in case of health related accident. It allows life saving organizations to localize faster the people in need and prepare in advance for the life saving actions that need to be taken on site.	Occasionally people go to the mountains and fall into a situation of distress. Othen it takes hours for the life saving organizations to rescue them. Kids and elders with mental disability can go for a walk and lose themselves. The police, life saving organzations and many citizens go searching for them for days. It not only costs huge amonth of money but more importantly in most situations time is crucial and localizing them fast is the difference between life and death. It is a global problem.	As often as possible. The device will send data for the relative position of the person. When in need the human will start an SOS signaling and detailed information about location and altitude will be sent for easier finding. When the life markers reach crucial levels, the device will send automatic SOS signals, even if the human is not in a state to do so.	In situations that don't require emergency only basic location will be sent - 32 bits. When the SOS signal is sent the exact location with altitude data will be sent - 64 bits. The life markers tracking will need additional 64 bites. Total of 128 bits per sensor during necessaty.	As soon as possible. In necessaty it will send the full information.	For every person using the device	4

Smart Farming, soil moist and quality monitoring

Smart Farming, soil moist and quality monitoring	There are readily available products on the market; it is possible to be further improved.	Farmers, local and central government	Soil moisture, mineral composition and nutrients monitoring on different soil levels.	agriculture is among the main economy braches. Furthermore the total global population is constantly rising and a more efficient soil productivity is necessary to be reached. This idea helps farmers	once per day in general conditions; 2 or 3 times during crop growth season	Sensor ID - 1 bit; time 1 bit; moistur- 2 bits (per 3 levels), a total of 6 bits; mineral and nutrient composition 6 bits; A total of 14 bits per sensor.	In most cases once per day is enough but during necessaty it is best to send the signals at least 3 times a day.	propose 10 000 in 10 km x 10 km area. It may be necessary more or less per square acre depending on different factors such as terrain accents, crop type, soil type,	3

Landslides monitoring

Landslides monitoring	Among the available market solutions, the most suitable will be selected	Local and central government.	Monitoring of earth mass movement and moisture. Monitoring of rock integrality on dangerous areas ,especially slides near mountain roads and villages.	In our country during spring and autumn heavy rain often triggers landslides and there are roads and villages within dangerous zones of rock slides. Othen leaving roads, sometimes main roads, closed for a day or more.	When the slope is rocky or there is heavy rain in areas of landmass monitoring, as often as possible. In other times once per day.	10 bits per sensor	In general once per day; In rainy meteorological conditions every hour; in potential disaster conditions as often as possible.	depending on the region	2


Thank you for your attention