Internet of Things:
"The experience of the NB-IoT Telereading for water meters"

In the last 20 years, hundreds of remote reading experiences with greater or lesser
Success was accomplished, but in all of them, there was always something that did not fit at all:
- Own systems of water meter's manufacturers, water utilities or engineering ...
- It did not always cover the entire average water meter's park.
- The number of effective readings in many cases did not reach an acceptable minimum.
- The consumption of the batteries of the modules was not as long as promised.
- Most of the systems were made with Clip-on accessory, with the errors, frauds that
it entails
- They demanded to create network infrastructures with many hardware equipment in public roads.
- The associated costs were high.

CONTAZARA

At the end of 2016, peple start talking about new services of telephony operators oriented to the connectivity of millions of future equipment in the new SMART CITIES. One of these services, in low part of the transmission speed is NB-IoT.

Its MAIN CHARACTERISTICS are:

- World standard (3GPP)
- Covers 100% of a city that is illuminated with its coverage.
- Deep coverage, it is possible to read equipment in a second basement.
- The costs are lower than those already known in GPRS.
- The infrastructure is already created by telephony operators (firmware change).
- Moderate consumption of batteries, allows long periods of use.
- Available since the beginning of 2018.

Faced with this new situation that came to solve all the evils of previous technologies, CONTAZARA together with the CANAL DE ISABEL II and the 3 major Spanish operators decide to engage an ambitious pilot who shows the previous points one by one.

CONTAZARA

After several months of work and thousands of meters read, we can conclude that NB-IoT and CONTAZARA's digital water meters are the best solution of telereading proven to date.
It has been confirmed that:

The water meetrs with protocol UNE82326: 2010 installed in groups, can be read without errors
  with a single NBIoT module, which reduces its cost from 50 to 1.
- Water meters installed more than 10 years ago have worked correctly when the module was installed.
- It has been able to read 99% of the water meters every day, reaching 100% in 3.
- The cost of communications is significantly lower than GPRS.
- No extra equipment or accessory was necessary, to install the module in group of water meters and read.
- No location more complex that it might was in the selection was no negative in the result.
- The equipment installed in the Stress Test gives optimal results of battery life.
- The next step is to integrate the technology inside the meter, for individual installations.

The union of Operators of communications, Water Utilities as Canal de Isabel II
and manufacturers of water meters like CONTAZARA, have achieved to present the world
THE ULTIMATE TELECOMMUNICATION SOLUTION.

CONTAZARA