





# Technological donation to the international water community: HpO Collect<sup>®</sup>, the free mobile app to achieve the full efficiency of drinking water network replacement

On the occasion of the 9<sup>th</sup> World Water Forum to be held in Dakar from March 21<sup>st</sup> to 25<sup>th</sup> of 2022, the French Water Partnership (FWP), the Mediterranean Water Institute (IME) and Altereo are donating to the international community HpO Collect<sup>®</sup>: a free mobile app that allows field agents to collect data in 20 seconds on leaks in drinking water networks. Equipped with the application, every agent becomes the best of "smart sensors", able to collect failure data (material, type, location, etc.) which are necessary to build a failure history database. Although it is essential to design a fully efficient network replacement strategy, this data is often missing for water utilities around the world. The HpO Collect<sup>®</sup> initiative is supported by the Solar Impulse Foundation.

# Leaks: an ecological, economic and sanitary disaster

Worldwide, half of the water injected into drinking water networks is lost through leaks. This is an unacceptable situation while **people's access to water** is already compromised by rampant urbanization and the **depletion of natural water resources**. Because of the electricity wasted in producing water that never reaches the customer, leakage also contributes to **the acceleration of climate change**. Leaks are estimated to be responsible of the emission of **55 million tons of CO<sub>2</sub> per year**. Finally, while the price of energy continues to rise, such unnecessary energy expenses significantly impact water utilities' budget, compromising their ability to invest in network replacement operations. HpO Collect<sup>®</sup> was designed to meet the major challenges of our century alongside water utilities.

### The incredible power of data

The origin of this aberrant situation is already known: the lack of precise knowledge that water utilities have regarding their own network. The example of France is striking, since despite **2 billion euros invested** in networks replacement every year, **the volume of leaks does not decrease** and still represents **1 billion m<sup>3</sup> per year**. There is no doubt: we do not invest in the right place because we don't know our networks well. To overcome this **lack of data**, the FWP and the IME have decided to support Altereo in the launching of HpO Collect<sup>®</sup>.

Free, fast and above all user-friendly, this app is the first step towards a **fully efficient and responsible asset management**. For a long time, leaks and poor performance of drinking water networks were synonymous with an **acquired powerlessness**. Today, **innovation and technological progress have changed the rules of the game**. Altereo's work on artificial intelligence has led to the development of HpO<sup>®</sup> AI, a tool for decision-makers, able to learn from past data of water networks to calculate their future risk of failure. Powered by the data collected through HpO Collect<sup>®</sup>, HpO<sup>®</sup> AI is able to avoid up to 50% of leaks by replacing only 5% of pipes. By optimizing replacement operations, the efficiency of each investment is guaranteed. Its performance has earned HpO<sup>®</sup> AI the French Grand Prix for Engineering and the Solar Impulse label.

# To face the emergency: act now!

In front of our time's climate emergency, the 9<sup>th</sup> World Water Forum aims to be the **forum of solutions**. HpO Collect<sup>®</sup> is definitely one of them. Already deployed in **France**, **Mexico and Uganda**, this free mobile app will be launched and donated to the rest of the international water community during the thematic session "Leveraging Knowledge Sharing Platforms" of the Group 4 "Means and Tools". Tools for a fully effective and responsible asset management already exist. Adopt them is our **responsibility towards the next generation**.



# Contact

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#### About Altereo:

Altereo has been active for more than 30 years in France and abroad in the fields of water and environmental engineering, public policy support, sustainable development of cities and territories, as well as in the development of geographic intelligence solutions for these same fields. Present in 4 continents (Europe, Africa, Asia, and Oceania), Altereo is an independent group controlled by its founding chairman, Christian Laplaud, its CEO Gilles Brunschwig, its managers and the IXO fund. Altereo is constantly growing and currently employs 192 people. To catalyse its development, the group relies on internationalization and innovation with more than 5% of its annual turnover dedicated to R&D.

https://altereo.fr

https://hpo.ai/collect