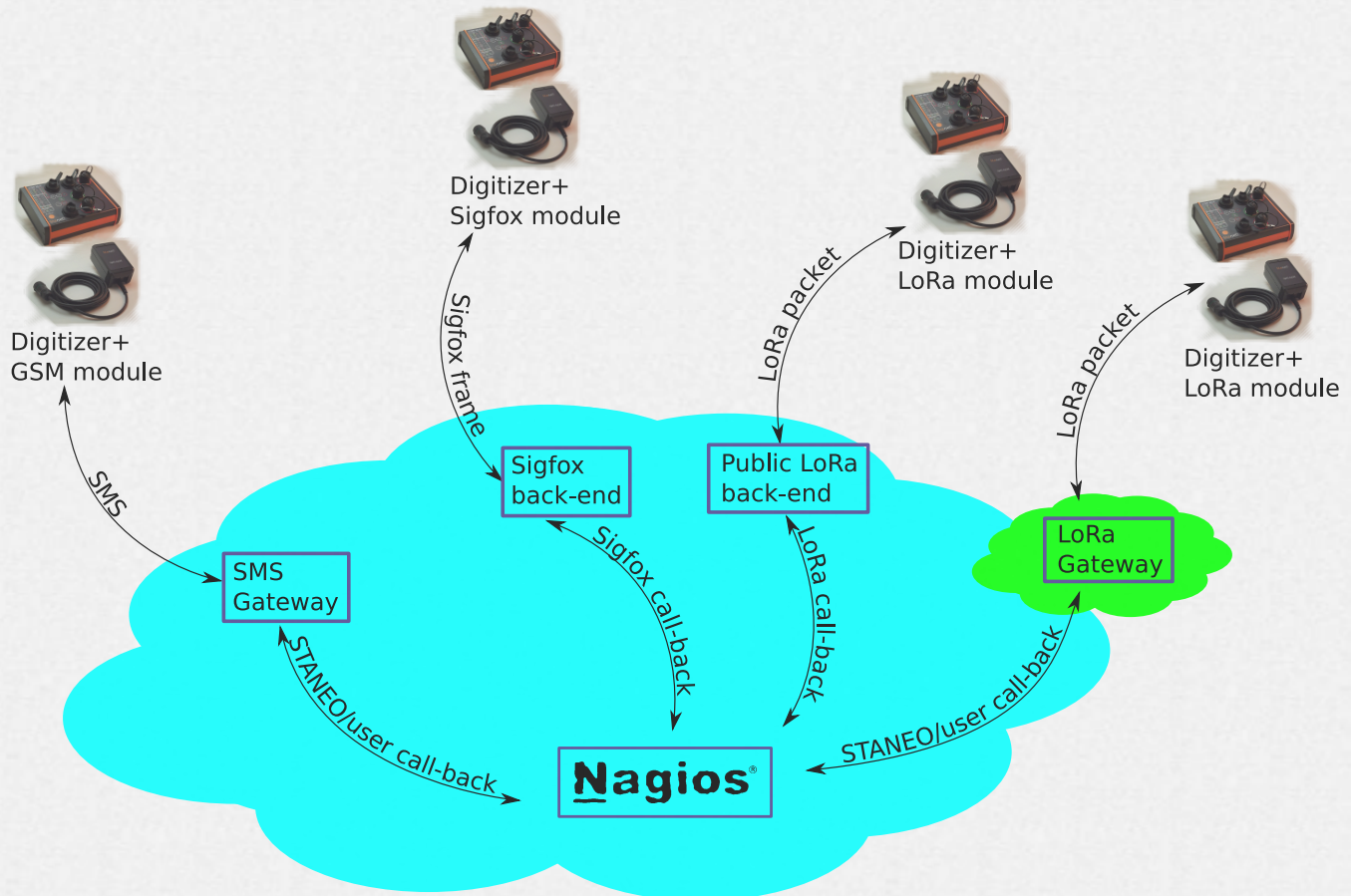


Health state and event detection in seismic monitoring based on IoT solutions

Key benefits: **reduce the operating costs** ! Get the essential information that let you optimize the tours in the field and send basic commands (setup, mass centering).

Visit the stations only when necessary, but as soon as necessary !



IoT includes **wireless solutions** designed to **transfer small messages** for **small budgets** (when budget matters).

- power: low
- throughput: low
- cost: low
- range: few km

These solutions are very efficient for dissemination of **state-of-health** (SOH) information and qualified **event detections**.

In many situations of the *real life*, Internet connections over GPRS/UMTS/LTE, DSL, or VSAT are not technically possible or out of budget. **It's time for IoT technologies**: operated and private networks combine for agility !

STANEO proposes **SMS**, **Sigfox™** and **LoRa®** based communication solutions (DIN/MOB devices, software, and services) that **fill the gap** between the **basic stand-alone station** and the **permanently online observatory station**.

DIN and MOB digitizers periodically transfer SOH including state of **power**, **timing**, **storage**, and **communication sub-systems**, and also some essential sensor information : **mass positions**, **RMS** and **peak-to-peak amplitude**.

What about data ?

DIN and MOB digitizers also send triggered event parameters including **event time** and **duration**, **peak-to-peak amplitude**... as soon as the event is detected.