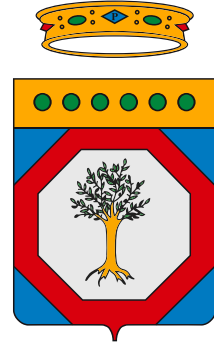


Maintenance and Modernization of the Puglia Agro-Hydrometeorological Network



The monitoring network managed by the **Civil Protection Section of the Puglia Region** represents a strategic infrastructure supporting regional hydro- and agrometeorological monitoring activities. To ensure continuous operation, data quality and long-term reliability, the network requires ongoing maintenance, technical management and technological upgrades. The regional infrastructure consists of **219 hydrometeorological stations** together with **84 agrometeorological stations** distributed throughout the territory. Originally developed by the Autonomous Civil Engineering Department (Genio Civile), the network was subsequently transferred to the Puglia Regional Administration together with the responsibilities previously assigned to the former Hydrographic and Mareographic Office of Bari.

Summary

Location: Puglia

Conclusion: 2028

Focus: Agro-hydrometeorological risk

Challenges:

- Maintaining and managing a monitoring network built with third-party technology
- Upgrading the regional network

CAE Solutions:

- Preventive, corrective, and extraordinary maintenance
- Service continuity
- Management software support
- Increased cybersecurity
- Upgrade of 219 dataloggers
- Communication system improvement

FEATURES

Maintenance and management activities have been entrusted to CAE following the award of a public tender. For the first time since 1917 (year of the creation of the network), CAE will contribute its expertise and technological know-how to the regional hydro- and agrometeorological monitoring network, supporting the activities of the Regional Civil Protection Authority throughout the three-year contract.

CAE has ensured the service **continuity of a network built with third-party technology**, performing all necessary activities to guarantee **maximum operational efficiency of the equipment**, both in terms of data quality and real-time data acquisition. Throughout the contract, **technological upgrades** have been offered **in order to increase operating performance, data acquisition percentages, and cybersecurity**.



COMPOSITION

During the 2025–2028 contract period, CAE will provide the Regional Civil Protection Authority with maintenance and management services, including:

- **Preventive maintenance**, including three scheduled maintenance campaigns per year;
- **Corrective maintenance** ensuring rapid restoration of the network;
- **Extraordinary maintenance** including remote diagnostics, telephone support and a 24/7 on-call assistance.

In addition to the web software already used by the regional Civil Protection, CAE has made available the **Datalife Platform** central station software.

CAE will **upgrade the dataloggers** on all 219 stations of the hydro-meteorological network and on all 84 stations of the agro-meteorological network with the CAEtech Compact Plus model, which guarantees maximum openness and programmability. The project also includes improvements to the communication infrastructure, particularly at 34 sites currently affected by critical UHF radio coverage.

Whenever sensors require replacement, they will be substituted with **original spare parts or upgraded using modern technologies**, including radar water level sensors and PG10 rain gauges, further improving the performance, reliability and long-term sustainability of the monitoring network.

