

METEOROLOGICAL INFRASTRUCTURE & CAPABILITY DEVELOPMENT: The process and outcomes explained

Background: A time of urgency

The number of weather and climate related disasters has more than doubled over the past 40 years. This trend is truly global.

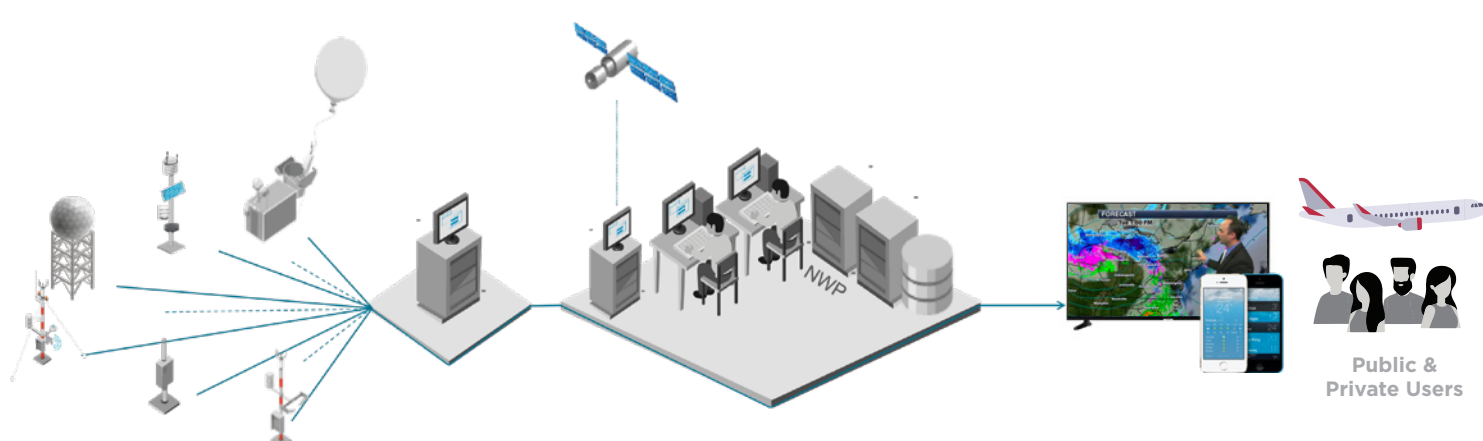


Areas that are used to natural disasters have to scale and adjust for increased severity and frequency.



Areas that are not used to natural disasters now have to build a forecasting and management infrastructure quickly.

The process and value of meteorological infrastructure & capability development



Observation system Network management Forecast production system Forecasts and warnings

Ongoing training throughout the project lifecycle: technology, meteorology, etc.

Scaling up and integrating the national observation network

- Observation systems, both old and new, complement each other
- All networks managed with one centralized software

Integration into a single forecasting and service production system

- All observations used in the forecasting process
- Users correctly trained for operating and maintaining systems

Value delivery and system sustainability for all stakeholders

- Outputs tailored to meet specific needs (aviation, air quality, disaster response, etc.)
- Automatic dissemination of outputs/insights; outputs drive concrete interventions

\$1 invested = **\$10** of socio-economic benefits

(Source: WMO. Return is even higher in countries with low existing service provision capacity.)

The value of meteorological infrastructure & capability development



For the meteorologist and the meteorological service provider, the value is in **creating accurate and reliable forecast and services for the different customer groups.**



For the end user, the stakeholders, businesses and the public, the value is in the **actions that help them to avoid disaster, to facilitate growth and to support their way of living.**

Meteorological capability leads to societal action

There is **no public value** if only the meteorologist has the information.

There is **no public value** if the user has the information but cannot act on it.

There is **massive public value** in observation combined with integration and action.

Tomorrow's uncertainties are inevitable. Being caught unprepared is not.

For decades, Vaisala's meteorological innovations have turned observation into human impact. We are the industry's trusted leader — not just for our sensors and technologies, but for our partnership and guidance.