

Jarmo Franssila, M.Sc. (Eng.)  
Product Manager (AUTOSONDE)  
Upper Air Division  
Vaisala Helsinki  
Finland

# AUTOSONDE Service and Maintenance Contract for Germany

Comprehensive aftersales service has always been one of the key aspects of Vaisala's operations. Vaisala and DWD (the German Meteorological Institute) have signed an AUTOSONDE Service and Maintenance Contract. The service benefits are short turnaround times, high data availability and extensive service options.



**V**aisala's high-quality customer support is an essential part of the service concept, which aims to offer complete solutions for customers' measurement needs. Vaisala's new service concept is exceptionally well suited to remote-controlled AUTOSONDE systems installed at distant sites and operating in harsh weather conditions.

## Customer cooperation

The first AUTOSONDE delivered to Germany was purchased by DWD (Deutscher Wetterdienst), the German Meteorological Institute, in 1997. It was field tested in two locations, Quickborn and Lindenberg, before arriving at its final site in Essen. The customer set quite demands on the quality of the soundings before accepting the system for operational use.

The RS80-30GA GPS radiosondes and 600-gram balloons with internal parachutes proved to be ideal for high altitude soundings combined with high data availability.

Due to the good results achieved with the first unit, DWD decided to order two more units as part of their "MESSNETZ 2000" project. These additional AUTOSONDEs were installed at Stuttgart in 1999 and in Halle in 2000.

*The AUTOSONDE system in Halle, Germany.*



The DWD representatives visiting Vaisala (from left): Mr. Gerhard März, Mr. Gerhard Limberger, Mr. Klaus-Jürgen Schreiber and Dr. Eckhard Lanzinger.

**Remote service available**

A remote control station is a standard part of each AUTOSONDE system. The remote station provides remote control and monitoring features, and receives both data and messages from the AUTOSONDE sounding stations. DWD has located all of its remote stations in Munich in order to centralize the control of their AUTOSONDES. In practice this means that the functions of all three AUTOSONDE stations can be controlled by one person in one place.

ISDN routers have been used to provide a fast ISDN connection between the sounding station and the remote station. These stations are an integral part of the DWD Intranet. From the beginning, Vaisala has had access to the AUTOSONDE stations, through

the DWD access server, for maintenance purposes. Using this remote access the Vaisala Technical Support Team has been able to track down problems and assist the customer in solving them.

**Extensive service levels**

The maintenance contract between DWD and Vaisala started at the beginning of this year. The contract includes all three levels of maintenance, tailored to customer requirements. Level 1 includes software upgrades and a remote diagnostics service. Level 2 includes level 1 plus a 24-hour hot line and a spare parts stock at Vaisala, while level 3 includes the previous two levels plus annual maintenance.

If the customer selects level 1, he can take advantage of the latest modifications and improvements to the software. Sounding is a 24-hour opera-

tion. As routine soundings are performed on a regular and continuous basis, it is important to get help immediately it is needed in order to keep downtime to a minimum. This help can be in the form of instructions on the phone, remote diagnostics or a spare parts service.

Level 2 covers all the services of level 1, plus the additions mentioned above.

The purpose of level 3 is to ensure reliable functioning and high data quality. The annual maintenance procedure performed by Vaisala has been planned to take advantage of earlier experience, feedback and information collected over several years. In addition to the content of the previously mentioned levels, and as specified in the contract, Vaisala also guarantees specific response times for sending spare parts or a service technician to the site when needed.

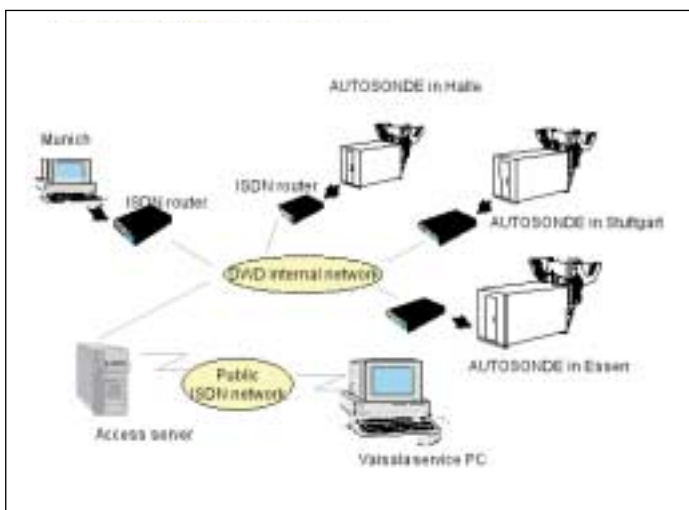
**Expertise for maintenance service**

AUTOSONDE is a technically advanced automation system consisting of many different subsystems – a sounding system, pneumatic system, data transmission, gas system, etc. It is a complex task to thoroughly understand the functions of these subsystems and their interaction.

Customers can have difficulty keeping the technical knowledge of their service personnel at a sufficiently high level, in order to solve problems that seldom occur. Instead, they can release their personnel for other productive tasks and rely on the assistance of Vaisala's technical support. We have the expertise to control the whole chain from the first screw up to the latest data level.

**Automated upper air observations**

The AUTOSONDE provides full automation of upper air observations from pre-launch radiosonde preparation and radiosonde launching to data acquisition, processing and meteorological message generation. The Vaisala AUTOSONDE performs up to 24 radiosonde observations without operator intervention. ■



The network configuration and remote diagnostics of the DWD AUTOSONDE system.



Jarmo Franssila, giving a training session to Eckhard Lanzinger (left) and Gerhard Limberger.