

# CERTIUM SERVICE

## Description of service level agreements

Service Levels Description | Version 01.00

**ROHDE & SCHWARZ**

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# 1 OVERVIEW

Rohde&Schwarz provides innovative solutions for the safe operation of airports and national air traffic control systems. Along with high-quality systems, Rohde&Schwarz offers service level agreements (SLA) with end-to-end support to maintain the operation of the system throughout its lifecycle.

This document describes the available service packages and relevant service elements. The described service packages are valid for the standard CERTIUM product family and exclude third-party products. The document covers all functional units, such as all software licenses. For consistent support, the same scope of service applies for all system components.

The hardware and software components covered by the SLA are documented in the equipment list, which is provided as an appendix to the SLA.

Users are highly recommended to attend a service briefing when concluding an SLA to ensure efficient collaboration with the Rohde&Schwarz service organization.

For systems already in operation, the user agrees to undertake any necessary upgrades to the latest serviceable software version (if requested by Rohde&Schwarz) before the SLA comes into effect.

Unless agreed otherwise, the service period (operational phase) begins with the successful acceptance of the system by the user. For systems already in operation, the SLA starts on an agreed date.

The SLA for systems already in operation must be signed six months before the warranty expires so that the SLA can start at the end of the warranty period.

If the warranty period has already expired, Rohde&Schwarz may, at its own discretion, undertake a product performance check on existing systems before any SLA comes into effect.

## 2 SERVICE PACKAGES

To optimally meet user needs, Rohde&Schwarz offers three service package options: Basic, Advanced and Premium. These options differ in the scope of service and response times. The individual services are described in detail in section 3 and the relevant subsections. The following services are included in the packages:

**Table 1: SLA packages**

	Basic	Advanced	Premium
24/7 support center	✓	✓	✓
Technical support <sup>1)</sup>	8 hours × 5 days	8 hours × 5 days	24 hours × 7 days
Software maintenance	✓	✓	✓
Obsolescence management	✓	✓	✓
Repair commitment	✓	✓	✓
Test and reference facility	–	✓	✓
Repair coverage	–	✓	✓
Regular service meeting	–	✓	✓
Dedicated service delivery manager	–	✓	✓

**Table 2: Response times**

Severity level	Basic	Advanced	Premium
Critical	–	2 business days (48 to 96 hours) <sup>2)</sup>	1 calendar day (24 hours)
High	–	5 business days (168 hours) <sup>2)</sup>	4 calendar days (96 hours)
Medium	–	10 business days (336 hours) <sup>2)</sup>	10 calendar days (240 hours)
Low	–	30 business days (1008 hours) <sup>2)</sup>	30 calendar days (720 hours)

<sup>1)</sup> See table 2 for response times.

<sup>2)</sup> National holidays might affect such values.

# 3 SERVICES

Depending on the service package, Rohde&Schwarz provides some or all of the following services.

## 3.1 24/7 support center

Within the duration of the SLA, the user can submit any support request to the Rohde&Schwarz Support Center via an online portal. The Rohde&Schwarz Support Center is the primary entry point at Rohde&Schwarz, where all user issues and support requests for hardware and software are received, documented and processed. Details are provided to the user during the service transition phase.

Users need to complete registration to access the online portal. Subsequent logins requires an email address and password.

## 3.2 Technical support

Support requests are received by the Rohde&Schwarz support team either during business hours (Basic and Advanced) or 24 × 7 (Premium). A qualified service technician handles the request within a timeframe defined by the user's service package and allocated severity level. Upon receiving a support request, the support team performs initial analysis and contacts the user to clarify details if necessary. Rohde&Schwarz reserves the right to change the severity level and inform the user accordingly, providing relevant justification. As soon as the severity level is changed, the relevant key performance indicators (KPI) restart in line with the new severity level.

Depending on the type of problem, the technician initiates additional measures to find a solution. If no solution can be achieved at the first instance, the support request is forwarded to the next support level up. It may be necessary to carry out remote error analysis as part of further problem analysis.

For software-related support requests, the support service covers all software developed/ approved by Rohde&Schwarz and licensed by the user. If the analysis shows that the software is outdated, Rohde&Schwarz may request that the user updates the software to the latest version.

If an initial analysis reveals that an issue is not caused by any of the components covered by the SLA, any effort in performing troubleshooting is charged separately.

For the Premium SLA, the technical support is only provided in English.

### 3.3 Remote error analysis

As part of the technical analysis, a Rohde&Schwarz service technician may need to access user systems and carry out remote error analysis in consultation with the user. Rohde&Schwarz typically uses TeamViewer for remote support access, but can also support alternative secure remote access solutions provided by the user, which are evaluated during the service transition phase.

Any additional effort to implement such alternative solution is agreed separately. For this purpose, the user enables Rohde&Schwarz to gain secure remote access to the infrastructure.

To perform system analysis, Rohde&Schwarz needs to access the device under maintenance. The detailed specification of the IP addresses and ports is determined by the system configuration and data sheets, and is documented together with the user during the transition.

Rohde&Schwarz does not make any changes to system configurations during remote error analysis. Once the analysis is complete, Rohde&Schwarz informs the user about possible solutions and their potential effects.

Any access is documented by Rohde&Schwarz. After each access, the user receives information about the activities performed.

### 3.4 Software maintenance

Software updates refers to minor (maintenance) releases for Rohde&Schwarz products that specifically aim to fix bugs and may include minor enhancements to improve overall system performance.

Software updates are provided to resolve support requests that have been raised as a result of a critical, high or medium failure in software functionality.

Before delivering software updates to users, Rohde&Schwarz performs appropriate testing in its own environment in accordance with Rohde&Schwarz quality management processes. Software updates are made available to users on read-only media (e.g. CD-ROM, DVD-ROM or USB flash drive) or via secure file transfer services.

The user is responsible for installing these updates and if required can separately order on-site software deployment support performed by Rohde&Schwarz experts. The deployment costs are not part of this service.

Before installing new software versions, the user must independently check for possible dependencies with other systems in use. It is strongly recommended to perform a backup of the current software version before any software update. Rohde&Schwarz is not responsible for any system downtime or interruptions resulting from a new software installation.

Rohde&Schwarz reserves the right to limit technical support for older and obsolete software versions.

### 3.5 Obsolescence management

Within the scope of the SLA, Rohde&Schwarz takes responsibility for checking the serviceability status of the products in the equipment list. If items are no longer supported by Rohde&Schwarz, the user is informed and receives a recommendation for a suitable change. The implementation of the change is not covered by the SLA.

If this change is not implemented, Rohde&Schwarz reserves the right to exclude the equipment that is no longer supported from the services described in the SLA.

### 3.6 Repair commitment

Rohde&Schwarz performs repairs on the products covered by the SLA for the duration of the SLA. Rohde&Schwarz makes available the required materials, test and measurement equipment and employees.

If spare parts are needed for repairs due to improper use (see section 5.1, "Operation in line with specifications"), Rohde&Schwarz is only required to provide the parts to the extent possible or reasonable with regard to the existing stock. For components that are no longer supported, refer to section 3.4, "Obsolescence management".

For the efficient handling of repairs, a support request needs to be opened via the Rohde&Schwarz Support center before sending the products to be repaired. Rohde&Schwarz technical support opens a return material authorization (RMA) if necessary.

### 3.7 Test and reference facility

Rohde&Schwarz maintains a general test and reference system for the various CERTIUM subsystems in their standard configuration.

By customizing a reference system, certain workflows and observations by the user requesting support can be efficiently verified to reproduce the behavior and solve incidents. Such customized reference systems allow solutions to be found faster and more efficiently.

### 3.8 Repair coverage

As part of the repair coverage, Rohde&Schwarz bears all the labor and material costs for repair activities. This does not apply to damage as described under section 5.1, "Operation in line with specifications".

If analysis reveals that a repair is needed, the user must remove the affected item and send it for repair to Rohde&Schwarz or to a subcontractor designated by Rohde&Schwarz. The transport of the affected item is handled via the RMA process.

If hardware is replaced or repaired, Rohde&Schwarz does not perform a backup of the current configuration. The user is responsible for this task and for reinstalling the repaired item.

An on-site visit by a Rohde&Schwarz technician is also possible; this is not covered by the SLA and therefore requires a separate agreement.

### **3.9 Regular service meeting**

To ensure sustainable operation, Rohde&Schwarz holds annual service meetings with the user to analyze the current service performance. This includes discussing open and closed support requests and issues. The review meeting can be conducted at the premises of the user, of Rohde&Schwarz or virtually.

The date and agenda are agreed at least four weeks in advance. The appointed service delivery manager is responsible for arranging and coordinating such meetings.

At the end of the minimum contract term, continuation of the SLA for components that will become obsolete in the subsequent years is discussed during the review meeting. Rohde&Schwarz will propose a migration concept to the user as described in section 3.4, "Obsolescence management".

### **3.10 Dedicated service delivery manager**

To ensure that all services included in the SLA are monitored and delivered in accordance with the agreed parameters, Rohde&Schwarz designates a dedicated service delivery manager.

The service delivery manager manages the user interface, remains in close contact with all essential stakeholders and serves as the central point of contact for escalations.



# 4 DEFINITIONS

## 4.1 Support request

In order for Rohde&Schwarz to resolve an incident, the user needs to submit all support requests through the Rohde&Schwarz Support Center. These support requests are then logged, confirmed and assigned. To facilitate tracking, the user receives a ticket number by the ticket system or by the support team.

The diagnostic process for finding the cause of the incident, including the proposal for a solution or way to proceed, is controlled by Rohde&Schwarz. During this process, Rohde&Schwarz might require user assistance, such as describing the circumstances surrounding the incident as well as providing log files, measurement files and any other information requested by Rohde&Schwarz to solve the incident.

## 4.2 Priority (severity)

The severity level provides a measurement of how product usability is impaired by the incident. A severity level is assigned to each support request.

**Table 3: Severity level**

Level	Description
Critical	<p>Describes an incident that causes total loss of functionality. The product or a major component of the product is inoperable or the inability to use the product has a critical impact on operation. No workaround exists.</p> <p>Examples from air traffic control (ATC) operations: total loss of air-to-ground communications system components, loss of non-redundant essential system components.</p>
High	<p>Describes an incident that seriously affects product operation. The product is usable and a workaround exists, but an essential component of the product is malfunctioning and substantially impacts operation.</p> <p>Example from ATC operations: repetitive loss of non-redundant system components that can be solved either by resetting or replacing a single component, reloading software or resetting the entire functional unit.</p>
Medium	<p>Describes an incident that, although inconvenient, does not affect the basic operation of the product.</p> <p>Example from ATC operation: loss of redundant components.</p>
Low	<p>Describes any other kind of incidents.</p>

## 4.3 Service hours

The service hours for handling support requests depend on the selected service package.

- ▶ 24 × 7: around the clock, including weekends and public holidays
- ▶ 8 × 5: Monday to Friday from 8 am to 4 pm CET, excluding public holidays in Germany and Romania

#### 4.4 Response time

Starts with the submission of a support request to the Rohde&Schwarz Support Center and ends with the proposal for a solution or way to proceed. The response time excludes any delays caused by to the user.

"Way to proceed" means that the user receives a workaround or information about the next steps needed to solve the incident. The response time depends on the selected service package, the priority of the service request and the contractually specified service hours.

The target response time will be adjusted if, following verification by Rohde&Schwarz, the initially assigned severity level is changed.

## 5 USER COLLABORATION

### 5.1 Operation in line with specifications

Problems and delays resulting from product modifications or operation that is not compliant with specifications (in particular improper use and/or damage due to external influences) are not covered by the SLA and therefore require a separate agreement.

In particular, the following cases are excluded from repair coverage:

- ▶ Where the deviation from the agreed quality is only minor and/or where the usability is impaired only insignificantly
- ▶ In case of damage occurring after transfer of risk (e.g. following incorrect or negligent handling, excessive stress, unsuitable operational facilities, deficient construction work, inappropriate construction site) or in case of usual wear and tear of the objects
- ▶ In case of damage that results after transfer of risk from particular external influences (e.g. chemical, electrochemical, electrical or atmospheric) that are not provided for in the SLA
- ▶ Where the defect is caused either by use not foreseeable to Rohde&Schwarz or by the user or third parties modifying or repairing the deliveries and/or services or using them together with products not delivered by Rohde&Schwarz

### 5.2 Ticket and problem analysis

When raising a support request via a ticketing system, the user must provide a detailed, comprehensive problem description and information about the equipment. On request, the user makes additional data available to Rohde&Schwarz for the analysis such as log files and traces.

The user supports Rohde&Schwarz by providing information to the technical contact person where required. If necessary, e.g. for more detailed problem analysis, the user collaborates on problem analysis and troubleshooting in a timely manner.

### 5.3 Access to systems

Access to the systems is granted to perform problem analysis. In case of support that requires remote access, a sufficiently secure data connection must be assured. In case of on-site support, access to the user's premises for Rohde&Schwarz or the personnel employed by Rohde&Schwarz must be granted.

#### 5.4 Export license/export control

Some of the services may be subject to current export restrictions. To obtain the necessary export license, the user must provide a duly signed end-user certificate within 30 calendar days of signing the SLA or when requested by Rohde&Schwarz, stating that the services will remain in the end user's country.

#### 5.5 Data backup and configuration management

The user updates the product to the latest officially released Rohde&Schwarz software version when requested to do so by Rohde&Schwarz. Support can only be granted if the product is running the supported officially released software version.

The user generates backups after updates and configuration changes.

The user informs Rohde&Schwarz of changes to the system configuration to enable Rohde&Schwarz to take the software and configuration into account when providing services.

## 6 ORDERING INFORMATION

Description	Type	Order No.
ATC service level agreement – Basic	R&S®ATCSLA	5930.3766.02
ATC service level agreement – Advanced	R&S®ATCSLA	5930.3772.02
ATC service level agreement – Premium	R&S®ATCSLA	5930.3789.02

## **Rohde & Schwarz**

The Rohde & Schwarz technology group is among the trailblazers when it comes to paving the way for a safer and connected world with its leading solutions in test & measurement, technology systems and networks & cybersecurity. Founded 90 years ago, the group is a reliable partner for industry and government customers around the globe. The independent company is headquartered in Munich, Germany and has an extensive sales and service network with locations in more than 70 countries.

[www.rohde-schwarz.com](http://www.rohde-schwarz.com)

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