

Keysight Technologies 5G Solutions Support

Network Emulation Solutions (NES)

Keysight recognizes that our test solutions are business critical to customers' R&D programs.

A NES Solutions Support Agreement will provide you with regular software enhancements at every stage of your development lifecycle ensuring your solutions remain up-to-date with the latest industry technology developments to help you develop, test and launch new products more quickly and more efficiently. Direct access to a team of technical specialists provides you with rapid problem analysis and resolution. Our managed repair service helps minimize test system downtime. This document details Keysight Technologies Solutions Support Agreement services for Keysight Network Emulation Solutions.

Technical Support

Customers with an NES Solutions Support Agreement have personalized, secure access to the **myKeysight** customer extranet.

myKeysight provides a wide range of services, including:

- Keysight Software Manager (KSM)
 - Download new software product versions
 - Download user guides and support documentation
- Infoline Asset List
 - View hardware assets
 - View hardware repair and calibration information
- NES Wireless Solutions Help Desk
 - Create Help Desk Requests (HDRs) online
 - View the status of your HDRs
 - Update HDRs and receive progress updates



Phone / Email / Chat

Report and track issues

Keysight expertise for full solution support

NES Wireless Solutions Help Desk

Registered users can report and track Help Desk Requests (HDR), via the NES Wireless Solutions Help Desk link on the **myKeysight** internet page. HDRs are designed to track questions, suspected defects and enhancement requests. Status updates are provided via the on-line interface by email notification.



Direct Technical Support

Access direct technical support via WebEx or GoToAssist (service may be delivered remotely from another Keysight location).

Local-region support is available during normal local business hours, and remote support is available outside of local business hours.

On-Site Support

Available for critical/blocking issues where solutions cannot be delivered remotely. On-site support response times depend on the proximity of Keysight resources to the customer site.

Quick Access to Self-Service Material

Access to knowledge base articles, FAQs and known issue lists (KIL).

Installation Support

Installation support is subject to availability and prior arrangement with Keysight.

Assistance with installation and configuration of new versions of software. Such assistance can be provided on-site or via a web-based GoToAssist session.

Customer Care Visits

Customer Care Visits are subject to prior arrangement with Keysight.

On-site visits are made by Customer Support engineers to review any current issues, demonstrate new functionality, discuss priorities for future enhancements and receive feedback.

The frequency of these visits is typically once a year or as agreed as part of the NES Solutions Support Agreement. In addition, visits may be requested to address specific problems or requests.

Software Maintenance

Keysight regularly issues new versions of NES application software and test cases. These releases are made available to all customers who have a valid NES Solutions Support Agreement at the time of software issue.

The schedule of these releases is normally defined in the relevant solutions roadmap, available from your Keysight representative.



- Product enhancements
- New features
- Maintenance updates

Software Updates - Standard Software Releases

Access to standard releases, via KSM, which include:

- **Defect fixes:** Correction of issues that have been reported to Keysight via the NES Wireless Solutions Help Desk or identified by Keysight through development or quality assurance processes.
- **Enhancements:** Product improvements following customer feedback and requests for minor new functionality (not subject to additional licenses).
- **New Features:** New features result from evolutions of the 3GPP specifications, which provide new product capabilities (note: major new features may require an additional license to be purchased).

Engineering Releases

Keysight may make engineering releases available to enable early access to new functionality or specific defect fixes. Engineering releases are made available at the discretion of Keysight.

Release Notifications

Release Notifications are proactively distributed to subscribed users and offer an overview of new features, enhancements and updates included in the release. These also include instructions on how the release can be downloaded from KSM and installed.

Defect & Enhancement Request Submission and Status Tracking

Access via the NES Wireless Solutions Help Desk or local NES Technical Support team. A Help Desk Request (HDR) will be created for each issue and status updates will provide progress from analysis, through planning and implementation to target release. Fixes for verified defects and accepted enhancements are delivered in standard releases.

Software Technical Support Reaction Times

Reaction times (time to initial analysis and response by NES Technical Support team) for software issues depend on the 'Severity' classification of the issue:

- **Critical:** Test system is non-operational. Unable to run any test scenarios or test cases.
- **High:** Test system is partially (<50%) operational. Possible to run some test scenarios or test cases but some major aspects of functionality are non-operational.
- **Normal:** Test system is operational but some specific test scenarios are non-operational.
- **Minor/Low:** Test system is operational, tests can be run using a workaround.

The target reaction times are listed below and provided on reasonable efforts basis.

Classification	Reaction Time*
Critical	1 business day
High	2 business days
Normal	3 business days
Minor/Low	5 business days

* Local business hours

Known Issues

Documented in the Known Issue List (KIL) available on KSM.

Temporary workaround solutions are provided where possible. Alternatively, a date (or product release number) is provided indicating when the problem is expected to be resolved.

Hardware Maintenance

When hardware support is required, please contact your NES 5G Wireless Solutions support contact to arrange diagnosis and to schedule the service. A unique Help Desk Request (HDR) will be assigned, and Keysight will arrange return delivery.

Standard Keysight Instrument Calibration Service

Return to Keysight Service Center.

5 working day target turn-around-time* (TAT) from receipt of unit at a Keysight Service Center*, not including shipment time.

*Service expected to be available during H2 2019 at select Service Centers. Prior to this date a Return to Factory (RtF) process will operate and Functional Test Certificates will be issued. Please contact Keysight for an estimated TAT. For Propsim F64 units, the RtF process will operate until further notice.

Repair Service

Return to Keysight Service Center.

15 working day target TAT from receipt of unit at a Keysight Service Center*, not including shipment time.

Repair service includes calibration where necessary.

*Service expected to be available during H2 2019 at select Service Centers. Prior to this date a Return to Factory (RtF) process will operate. Please contact Keysight for an estimated TAT. For Propsim F64 units, the RtF process will operate until further notice.

Application of Service Notes

All recommended service notes are applied during service events.

Delivery (with packaging)

Return to Customer included. Pickup and Delivery may be available dependent on customer site location.

Loan Units

When requested by a customer, and where a service exceeds the target TAT of 15 working days from arrival at the Keysight Service Center, Keysight will facilitate a loan unit on a reasonable effort basis.

Service expected to be available during H2 2019.



Repair & Calibration
Maintenance
Troubleshooting
Enhanced Uptime

Hardware Technical Support Reaction Times

The reaction times (time to initial analysis and response by NES Technical Support team) for hardware issues depend on the “Severity” classification of the issue:

- **Critical:** The test system is non-operational. Unable to run any test scenarios or test cases.
- **High:** Test system is partially (<50%) operational. Possible to run some test scenarios or test cases but some major aspects of functionality are non-operational.
- **Normal:** Test system is operational but some specific test scenarios are non-operational.
- **Minor/Low:** Test system is operational, tests can be run using a workaround.

The target reaction times are listed below and provided on reasonable efforts basis.

Classification	Reaction Time*
Critical	1 business day
High	2 business days
Normal	3 business days
Minor/Low	5 business days

* Local business hours

Enhanced Services Available at Additional Cost

Onsite Calibration

Keysight will offer Volume on-site calibration (VoSCAL) in select countries* designed to enable calibration of large numbers of units in a single event or to minimize downtime where important.

* Service expected to be available from Q4 2019. Please contact Keysight to discuss your requirements and to receive a quotation.

Uptime Service

Exclusive loan units, stored within easy reach on customer sites, to help optimize uptime.

* Service expected to be available H2 2019. Please contact Keysight to discuss your requirements and to receive a quotation.

Service Coverage

Solutions support covers following components:

<i>E7515B</i>	<i>UXM 5G</i>
<i>E7770A</i>	<i>Common Interface Unit (8 Remote Radio Head support)</i>
<i>M1740A</i>	<i>Dual 28GHz & 39GHz Remote Radio Head (RRH)</i>
<i>F8800A</i>	<i>Propsim F64 Radio Channel Emulator</i>

Keysight supplied PCs and Switches

Coverage will be extended to the following additional components at a date to be confirmed:

<i>E7760B</i>	<i>Transceiver base-box</i>
	<i>Keysight Branded Chambers</i>

Learn more at: www.keysight.com

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list of offices is available at: www.keysight.com/find/contactus

