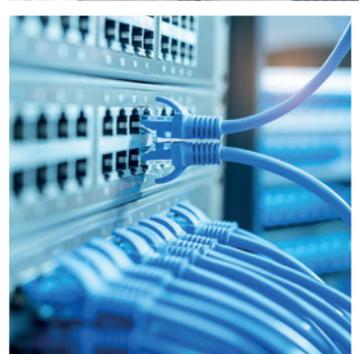
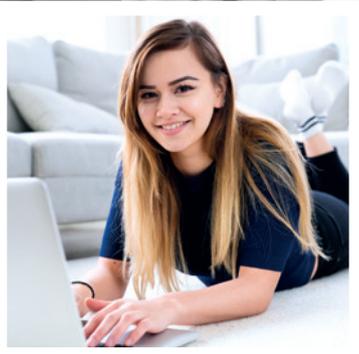
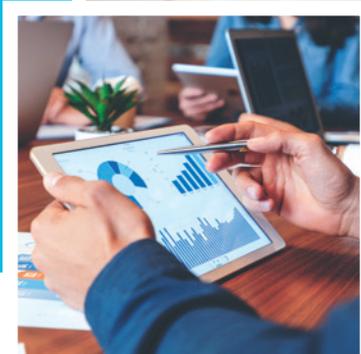


DZS Services

Support Program: Service Providers



DZS Services

The operation and maintenance of modern telecommunications networks is a complex task. A variety of network elements of different generations and configurations must be maintained.

Annual user bandwidth consumption is growing at an exponential rate and so are the demands on service provider networks. Cyber and network security issues are on the rise, with new types of hacks and attacks occurring every day. New cloud-based applications are introduced daily, and new types of networking equipment are constantly being added to the service provider's network. As a result, it is more critical than ever for broadband service providers to have 24/7 access to support resources for all network elements.

Therefore, DZS is dedicated to support their customers in maximizing the reliability and uptime of their networks.

In order to ensure reliable and high-quality network operation, DZS offers a support program with the choice of various standardized service levels, which can be individually adapted to customer requirements and defined in a Service Level Agreement (SLA).



Standard Service Levels

A Service Level Agreement is concluded between the service provider and DZS to provide a specified network operation support scope and to ensure that any faults occurring are resolved quickly and professionally.

Product Category	Std. Warranty	Bronze	Bronze Plus	Silver	Gold
Broadband access concentration switches	•	•	•	•	•
Customer premises equipment	•	•	•	•	•
Network management systems	•	•	•	–	–

According to the customer-specific requirements, four different standard service levels are available.

- Bronze (B), Bronze Plus (BP), Silver (S) and Gold (G) for the broadband access concentration switch products category that includes all central office aggregation platforms.
- Bronze (B), Bronze Plus (BP), Silver (S) and Gold (G) for the customer premises equipment.
- For network management system software applications there are two service levels. Extended hardware warranty (Silver) and advanced hardware replacement (Gold) are not applicable.

All new DZS equipment purchases include one year of hardware warranty and 90 days of Bronze level technical support.



DZS Services

The following DZS Services are available:

Support Program	Std Warranty	Bronze	Bronze Plus	Silver	Gold
Technical assistance service <ul style="list-style-type: none"> Support by phone, e-mail, DZS Service Cloud and remote access Software maintenance 	90 days ¹	limited ¹			
Support for critical incidents <ul style="list-style-type: none"> Support window Response times Corrective action 	-	<ul style="list-style-type: none"> 8/5¹ best effort Patch or next maintenance release 	<ul style="list-style-type: none"> 24/7³ Defined as per SLA Urgent patch or maintenance release 	<ul style="list-style-type: none"> 24/7³ Defined as per SLA Urgent patch or maintenance release 	<ul style="list-style-type: none"> 24/7³ Defined as per SLA Urgent patch or maintenance release
Support for major incidents <ul style="list-style-type: none"> Support window Response times Corrective action 	-	<ul style="list-style-type: none"> 8/5¹ best effort 	<ul style="list-style-type: none"> 8/5 Defined as per SLA Next maintenance release 	<ul style="list-style-type: none"> 8/5 Defined as per SLA Next maintenance release 	<ul style="list-style-type: none"> 8/5 Defined as per SLA Next maintenance release
Support for minor incidents <ul style="list-style-type: none"> Support window Response times Corrective action 	-	<ul style="list-style-type: none"> 8/5¹ best effort⁴ 	<ul style="list-style-type: none"> 8/5 Defined as per SLA Next planned release⁴ 	<ul style="list-style-type: none"> 8/5 Defined as per SLA Next planned release⁴ 	<ul style="list-style-type: none"> 8/5 Defined as per SLA Next planned release⁴
Technical online support <ul style="list-style-type: none"> www.dzsi.com/support Latest software updates Product release notes and documentation updates 	90 days ²				
E-mail notification <ul style="list-style-type: none"> Customer can be automatically notified of major releases and related product bulletins 					
Hardware repair & return <ul style="list-style-type: none"> No charge repair of products Customer pays for inbound shipping DZS pays for return shipping 20 workday turn-around on repairs 	1 year				
Advanced hardware replacement <ul style="list-style-type: none"> In the event of hardware failure DZS will ship replacement unit 1 business day after receipt of signed RMA form 	30 days				
Right to Use 3rd party ONTs⁵ <ul style="list-style-type: none"> Annual renewal of RTU licenses for homologated 3rd party GPON ONTs Bronze SLA for 3rd party ONT issues 					

The DZS support program requires a valid service contract in place. Based on the standard service levels, individual customer requirements can be considered within the Service Level Agreement.

¹ Technical assistance service for warranty and Bronze customers is "best effort" based on priority of tickets and availability of engineers.

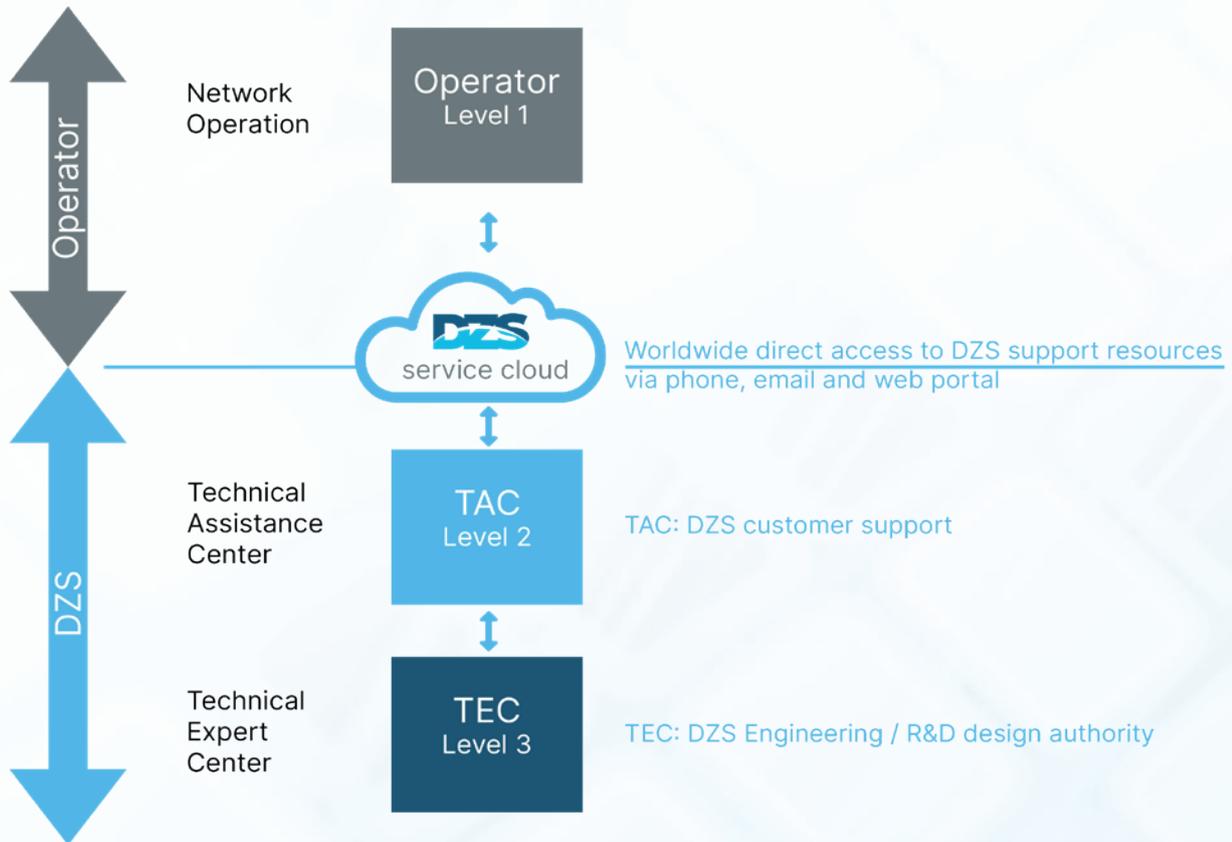
² Unrestricted firmware access is not included with the standard warranty.

³ After hours hotline must be called for all support outside of 8/5 standard hours.

⁴ DZS reserves the right not to implement software fixes for minor issues.

⁵ A chargeable interoperability / homologation program must be successfully completed prior to using 3rd party ONTs under this service program; additional maintenance fees based on the number of active subscribers using 3rd party ONTs will apply.

Support Model



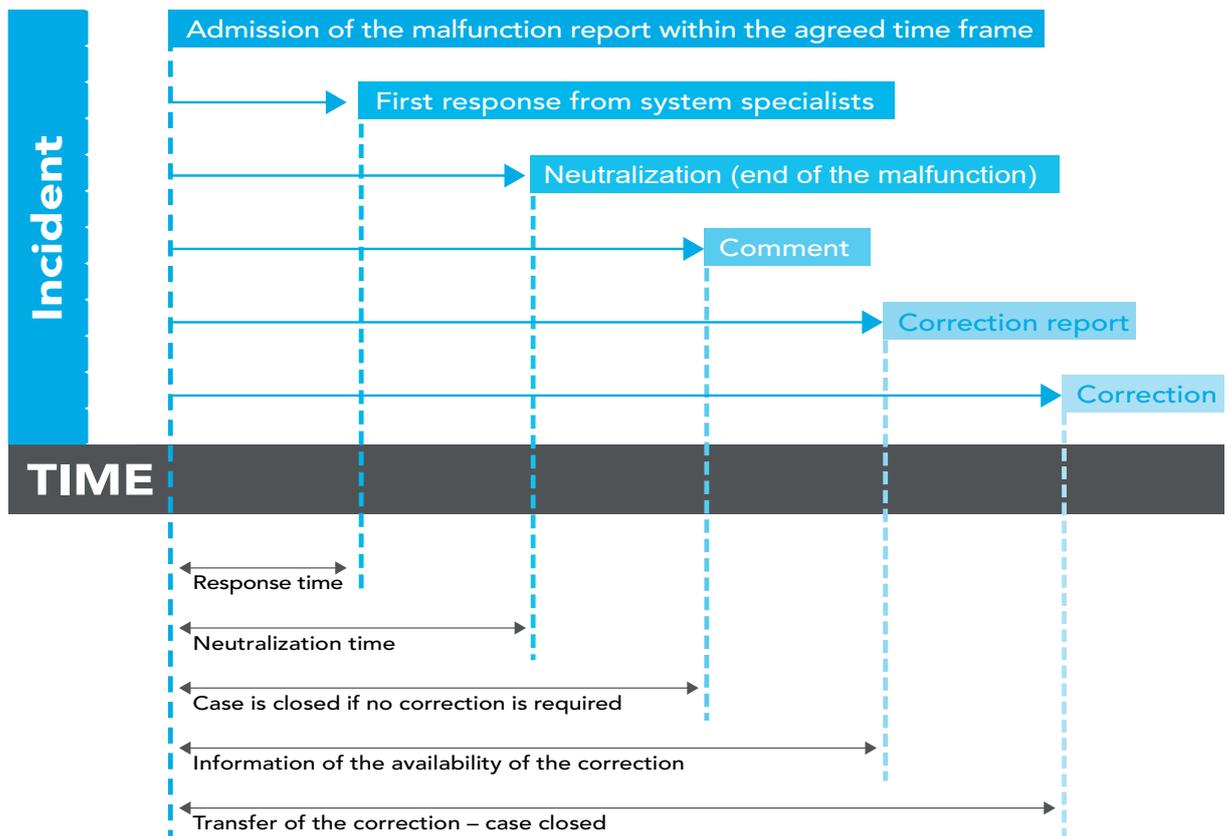
DZS guarantees that service requests are processed immediately upon receipt at the 2nd level (TAC – customer support) and, if necessary, the 3rd level (TEC – R&D/engineering) is involved so that there is direct access to the R&D and engineering resources.

The DZS service processes correspond to the quality management system ISO9001:2015 as well as the best practice methods defined by the ITIL-2011 Foundation.

Technical Assistance Service

The Technical Assistance Service provides all the technical support for the customer.

Service requests (cases) are received and processed during the agreed SLA times.



Support Program: Service Providers

- Ensuring the agreed reaction and processing times
- Advice and support in detecting the causes of the fault
- Access to the support content and case management tool via DZS Service Cloud
- Analysis of basic trace logs and error-replicas on reference systems and under real-life conditions
- Assistance in eliminating malfunctions with diagnostic tools
- Quality reviews with the customer on site or at DZS



Support Window

- The regular support window is 8/5 during office hours for direct access to the DZS customer support in the time zones of the respective service locations (regional deviations may apply).
- For emergency recovery needs, DZS extends the Technical Assistance Service for critical incidents from normal working hours to 24 hours a day via the DZS service telephone (with password for service levels Bronze Plus and higher).
- It provides direct access to system specialists with English as the primary support language.

Case Management Tool

- The web-based Case Management tool is available around the clock in the DZS Service Cloud.
- The progress of all cases can be monitored via a unique case number.
- The case number is generated automatically when a problem is reported and sent immediately by e-mail to the customer.
- Each case also contains the priority classification of the service request.



Remote Diagnosis

- Remote diagnosis enables efficient technical support. Depending on the customer's requirements, configurations can be tested, diagnostic tools used and error analyzes carried out.
- Remote diagnostics are performed via secure remote access to the customer network (e.g. VPN).

Software Maintenance

- If a software system error is diagnosed while processing an incident, it will be remedied by DZS through a software update. DZS will provide patches and hot fixes for all required immediate neutralization steps.
- DZS verifies and approves software updates before delivery according to the quality management system (QMS).
- The customer is informed that software updates are available via the DZS Service Cloud. Technical documentation and release notes are also provided. The customer installs the software updates with its own resources, but can also commission DZS as a professional service.



Technical Online Support

The Technical Online Support provides the customer with full access to all product information provided by DZS. This information can be retrieved via the DZS Service Cloud and includes for example:

- New products and software upgrades
- Complete customer documentation
- Downloads of embedded software
- Downloads of service packs
- User reports
- Technical bulletins and data sheets

In addition, the Consultancy Information Service answers customer questions about system related technical and operational issues, new product features and software releases. These topics are also processed in the case management tool for our SLA customers.

Benefits

A Service Level Agreement (SLA) offers customers the following benefits:

- Direct access to the DZS service organization, the DZS Service Cloud and the case management tool
- Agreed response and processing times – also around the clock
- Maximum availability of network services
- Cost control and efficient operational support through predictable tariffs
- Time and cost savings through high availability of the network solution
- Ensuring the fulfilment of own obligations to end customers
- Effective investment protection through the use of the DZS support program

Support Program: Service Providers

About DZS

DZS, Inc. (NASDAQ: DZSI) is a global provider of ultra-broadband network access solutions and communications platforms deployed by advanced Tier 1, 2 and 3 service providers and enterprise customers. Our solutions are deployed by over 900 customers in more than 80 countries worldwide.

Our ultra-broadband solutions are focused on creating significant value for our customers by delivering innovative solutions that empower global communication advancement by shaping the internet connection experience. Every connection matters, and the first connection to the internet and cloud services applications matters the most.

Our principal focus is centered around enabling our customers to connect everything and everyone to the internet-cloud economy via ultra-broadband connectivity solutions.

The company provides a wide array of reliable, cost-effective networking technologies, including: broadband access, mobile backhaul, Ethernet switching with Software Defined Networking (SDN) capabilities, new enterprise solutions based on Passive Optical LAN (POL), and new generation of SDN/ Network Function Virtualization (NFV) solutions for unified wired and wireless networks.





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