

Remote Technical Support Supplement

1. BRONZE REMOTE TECHNICAL SUPPORT PACKAGE

A. Coverage Hours Options

- **Bronze Standard:** 8am – 6pm EST Monday through Friday, except holidays
- **Bronze Plus:** 24 hours per day, 7 days per week, 365 days per year *

B. Telephone Assistance and Coverage

Zhone's Technical Assistance Center (TAC) is available to the Customer Monday through Friday 8am – 6pm EST. Zhone's TAC is staffed by trained technical experts capable of answering technical questions, diagnosing and resolving Zhone system problems and providing workarounds where necessary.

Phone Support includes the following:

- Telephone assistance for bug fixes, patch management consultation, and consultation during initial patch loading for supported and authorized Software.
- Technical support for bug reporting and troubleshooting hardware failures.
- Configuration, upgrade and general technical support issues.
- Emergency TAC 24 X 7 support for all service affecting outages and critical issues with prioritized response.

Repair/RMA for a HW is a best effort only under Bronze SLA. With Bronze Plus, Zhone will ensure repair can be done on the HW. The customer is liable for the HW to be shipped to Zhone and provide a PO for the repair work once the cost for the repair has been assessed by Zhone technical support team.

Zhone Professional Services are available at an additional charge to provide services beyond those covered in the Technical Support Packages such as Training, Network Health Check, Remote Configuration and Turn up, Installation Services, Installation/Management of software upgrades.

C. E-Mail and Website Access to TAC

The Customer can email support@zhone.com to request for support and access to support resources. Zhone website on support resources can be found here: <https://zhone.com/support>

D. Latest Software and Firmware Updates

Zhone will provide the Customers, that have an active SLA, with online access to current software and firmware releases including product release notes.

E. Documentation Updates

Customers can access the support portal for online access to technical documentation including product user guides and admin guides for new releases of system software and firmware.

2. SILVER REMOTE TECHNICAL SUPPORT PACKAGES

A. Coverage Hours Options

- **Silver:** 24 hours per day, 7 days per week, 365 days per year *

B. Silver Coverage

This package includes all the services provided in the BRONZE Plus Remote Technical Support Package detailed above plus extended HW warranty coverage.

Silver SLA provides HW repair at no cost to the customer. Customer is in charge of shipping the product to Zhone. Once the HW is repaired, it will be shipped back to the customer. If the product cannot be repaired, then a suitable effort will be made to replace the product.

3. GOLD REMOTE TECHNICAL SUPPORT PACKAGES

A. Coverage Hours Options

- **Gold:** 24 hours per day, 7 days per week, 365 days per year *

B. Gold Coverage

This package includes all the services provided in the SILVER Remote Technical Support Package detailed above plus advanced HW replacement.

Gold SLA provides HW advanced replacement repair at no cost to the customer. Customer is in charge of shipping the product to Zhone. Once the HW is repaired, it will be shipped back to the customer. If the product cannot be repaired, then a suitable effort will be made to replace the product. In the event of hardware failure, this support package provides a hardware replacement unit shipped within one (1) business day of receiving the request.

If the product(s) covered are not returned to Zhone within 30 days after an advanced replacement is provided by Zhone, the Customer shall be deemed to have purchased the product(s) at Customer's then current contracted price and Zhone will invoice the Customer for the price of the product(s). The Customer agrees to pay such price, and any applicable taxes, within thirty (30) days of the invoice date.

4. CUSTOMER RESPONSIBILITY

It will be the Customer's responsibility to:

A. Access to Customer Systems

Customer must take all reasonable steps to ensure access to systems by Zhone TAC or their representative (e.g., Zhone Authorized Service Provider personnel). This may include, but not be limited

to, remote internet-based access, a dedicated telephone line for dial-up access, and an operator ID and password. Should on-site access be required, Customer shall ensure Zhone personnel have physical site access where necessary.

B. Connections to Zhone Systems

Customer must take all reasonable and prudent precautions to ensure that equipment connected to the Zhone Systems conforms to necessary electrical and environmental standards, and that all interfaces to Zhone Systems (power, telco, DTE, etc.) employ appropriate protection measures to ensure a stable operating environment. If, in the opinion of Zhone technical support personnel, additional measures should be taken at a particular remote site, the Customer will take reasonable and necessary steps to implement such measures.

C. Authorized Personnel to Contact the TAC

Customer must ensure that all contact with Zhone TAC personnel is initiated only by Customer personnel that have been trained on Zhone equipment.

D. Supported Release of System Software or Firmware

Customer is not required to install every new release of System software or Firmware as it becomes available from Zhone; however, Customer must always maintain a supported release of System Software or Firmware on all Systems. Software Support is provided for the Production and Active Releases. Each release falls into one of three categories: Production, Active, or Retired. When a new software release becomes generally available, it is referred to as the Production Release until the next release is generally available. When a new release becomes generally available, the previous Production Release is frozen at the then-current release and is designated as an Active Release. Technical support is provided to resolve Critical, Major, and Minor SRs for Production & Active Releases. A Retired Release is not recommended for use. Technical support is limited to emergency outage situations only. Fixes will not be provided on Retired Releases. Customer may be required to upgrade to latest release to overcome any problem not fixed in prior releases.

E. Uniform Service Coverage

All sites in the Customer network must be covered by this Agreement. Additionally, all Zhone Systems at each site must be covered, including any additions made to the Customer network during the Agreement period. For each item of equipment for which Customer orders a Maintenance Program following a gap in coverage, or if the equipment has never had maintenance or warranty coverage at Customer, Customer certifies that such Equipment is in good operating condition at current specified revision levels as of the date of the order ("Functional") and that excess, unrepaired product will not be entered into this program.

F. Software or Firmware Upgrades

Customer shall be responsible for upgrading Customer sites with the latest software or firmware upgrade. Hardware upgrades necessary to accommodate Software or Firmware upgrades are the responsibility of the Customer.

G. Coverage of New Hardware and/or Software

Remote Technical Support for all products will begin immediately upon shipment and is only available on a customer-wide basis. For Customers purchasing equipment through Resellers, the Customer must provide the following information on a quarterly basis via Appendix A which shall be submitted no later than ten (10) days after the last day of the calendar quarter: Zhone model number, Zhone serial# and sale date of the equipment.

5. DEFINITIONS

A. Critical, Major, and Incident Severity Level

- **Outage:** System or service platform has a complete or partial failure resulting in a critical impact to more than 100 end user services. Zhone will work around the clock (7x24) to resolve the problem.
- **Critical:** System or service platform has a complete or partial failure resulting in a critical impact to less than 100 end user services. Zhone will work around the clock (7x24) to resolve the problem.
- **Major:** system or service platform has a severe service interruption, loss of functionality, or maintenance visibility issue affecting normal use.
- **Minor:** minimal impact to system performance or functionality or customer requires information on the capabilities of the Zhone product.

B. Resolution of Service Requests

The type of severity determines how Zhone will attempt resolve the problem.

- Critical service requests ("SR") are deemed resolved when Zhone:
 - Restores the system/service to pre-incident status.
 - Opens a follow-up SR to determine the cause of the outage; and
 - To the extent that the Critical SR relates only to Zhone Hardware and Software, implement reasonable measures to prevent reoccurrence of the Critical SR. If the Critical SR relates to Zhone Hardware or Software and other vendor hardware and software, the Parties shall discuss resolution measures to prevent a reoccurrence
- Major and Minor SRs are deemed resolved when Zhone provides:
 - An update or revision of the affected element which corrects the fault or problem; or
 - A temporary bypass of the affected Hardware and/or Software and corrected in a later Regular Software Update Release (RSUP) or Special Software Update Packages (SSUP); or
 - A statement that the fault or problem is not of sufficient magnitude to warrant immediate correction but that it will be corrected in a later Software Release (Zhone may provide an advance application of the correction at Customer's request, the charge for which will be in addition to amounts otherwise payable under this Agreement and as specified by Zhone); or
 - A Software Release which corrects the fault or problem; or
 - A statement, with supporting documentation, that the System operation meets design intent and/or an item will be considered for implementation as an improvement incorporated in a future Software Release; or
 - A statement that the fault or problem is not due to a defect in the System and identifying the source of the fault or problem where possible; or
 - In the case of SRs considered as minor degradation of system or service performance, a statement that the problem will not be corrected.

C. Zhone Internal Escalation Process

Below escalation process is used if the give issue is not resolved within the allowed SLA level time window.

Severity/Notification	Minor	Major	Critical	Outage
Support Manager Notified	8 Hours	4 Hours	60 Min	Immediate
Account Manager/SE Notified	None	8 Hours	4 Hours	30 Min
VP GSS, VP Eng & VP Sales Notified	None	None	8 Hours	60 Min
CEO, CTO Notified	None	None	Same Day	4 Hours

D. Zhone SLA Level KPI

Service Provider SLA KPIs

Technical Assistance Center - Support Services to assist during Break/Fix situations - Support by phone, e-mail, online portal		Online Customer Support Portal provides 24x7 access to: - Case Creation or Case Status review ¹ - Software maintenance (Fix Content) - Documentation and Product Bulletins - Knowledge and Basic Training				
Priority		Length Of Term	Critical (Outage)	Critical	Major	Minor
Definition		Period of Time Technical Support is available	System Down with more than 100 Subscribers out of Service	Critical impact to less than 100 subscribers /Resiliency lost / Service severely Degraded	Some Service Degradation / Intermittent Issue	Non-Service Affecting / Documentation / Query
Std Warranty	Available Support Hrs First Response Restoration or Workaround Resolution	90 Days ²	8x5 (Regional Office) Best Effort ¹ Best Effort ¹ Best Effort ¹	8x5 (Regional Office) Best Effort ¹ Best Effort ¹ Best Effort ¹	8x5 (Regional Office) Best Effort ¹ Best Effort ¹ Best Effort ¹	8x5 (Regional Office) Best Effort ¹ Best Effort ¹ Best Effort ¹
Bronze	Available Support Hrs First Response Restoration or Workaround Resolution	Defined by Contract	8x5 (Regional Office) Best Effort ¹ Best Effort ¹ Best Effort ¹	8x5 (Regional Office) Best Effort ¹ Best Effort ¹ Best Effort ¹	8x5 (Regional Office) Best Effort ¹ Best Effort ¹ Best Effort ¹	8x5 (Regional Office) Best Effort ¹ Best Effort ¹ Best Effort ¹
Bronze Plus	Available Support Hrs First Response Restoration or Workaround Resolution (if SW Fix)	Defined by Contract	24x7 15 Mins 4 Hours 2 Days (30 days)	24x7 15 Mins 8 Hours 7 Days (30 days)	8x5 (Regional Office) 4hours 7 Days 15 Days	8x5 (Regional Office) 1 Business Day 30 Days Next Release
Silver	Available Support Hrs First Response Restoration or Workaround Resolution (if SW Fix)	Defined by Contract	24x7 15 Mins 4 Hours 2 Days (30 days)	24x7 15 Mins 8 Hours 7 Days (30 days)	8x5 (Regional Office) 4hours 7 Days 15 Days (30 Days)	8x5 (Regional Office) 1 Business Day 30 Days Next Release
Gold	Available Support Hrs First Response Restoration or Workaround Resolution (if SW Fix)	Defined by Contract	24x7 15 Mins 4 Hours 2 Days (30 days)	24x7 15 Mins 8 Hours 7 Days (30 days)	8x5 (Regional Office) 4hours 7 Days 15 Days (30 Days)	8x5 (Regional Office) 1 Business Day 30 Days Next Release

Notes:

Note¹

Note²

Note³

Telephone assistance for Std Warranty and Bronze customers contains "best effort" support based on priority of tickets and availability of engineers.

Std Warranty Technical support is 90 Days. An accompanying SLA would be required should Tech Support beyond 90 days be required.

24x7 Critical Issues must be called in via the support number - 1-877-946-6320 or 510-777-7133, prompt #3, #1.

E. OUT OF SCOPE SUPPORT ENGAGEMENT PRICING

The price of such Service(s) will be at Zhone's standard published rate or special custom quote as attached. Service requested by Customer outside the scope of this Agreement shall be billable at Zhone's standard Time & Material rates. If Customer desires any Time and Material Service, which occurs during after-hours warranty coverage, Zhone requires written authorization from Customer to proceed. Reference the Master Service Agreement for additional billing terms. Pay-per-use incremental Services are only available to customers with an existing and active Service Agreement.

Service Contract Customer Pay-per-Use Chart for Out-of-Scope Billing:			
Out of Scope	Monday –Friday 8:00 am – 6:00 pm	Monday –Friday 6:00 pm – 8:00 am	All weekend days and holidays
	US\$ 250 per hour	US\$ 350 per hour	US\$ 450 per hour
	Minimum 3 hours with 1 hour increment	Minimum 3 hours with 1 hour increment	Minimum 3 hours with 1 hour increment

F. ZHONE SUPPORT ACCESS DETAILS

Access Type	Location
Zhone Services	https://zhone.com/support
Software/Firmware/Documentation	https://zhone.com/support
HW RMA Request	https://zhone.com/support (Once logged in, select the RMA Request button)
Technical Assistance Center (Phone)	1-877-946-6320 1-510-777-7133