SD-WAN Services







Thank you for choosing Zen for your SD-WAN solution. This pack provides you with all the information and guidance you need to order any new and manage your existing SD-WAN services with Zen.

Ordering services o o & product enquiries

Service offering

SD-WAN use cases vary in the deployment approaches taken to achieve the customer's desired business outcomes.

It is important to note that within this document there may be some delivery and management differences as per the individual solution requirements.

Underlay: Underlying connectivity services can be provided in parallel with the initial build stages of the SD-WAN solution. Existing connectivity services can also be used for the enablement of SD-WAN services.

Service	Description
Zen Underlay	Responsibility of Zen to ensure service is delivered and working as intended. See <u>CSP Library</u> for details relating to delivery and management of underlay services.
3 rd Party Underlay	Sole responsibility of the customer.
Overlay	Responsibility of Zen to ensure the SD-WAN solution is operational. Overlay is managed 24/7/365

Service pre-requisites

Connectivity (underlay) must already be in place and operational for the SD-WAN overlay to operate.

Where Zen underlay is required, SD-WAN services can be delivered to align with the delivery and deployment of the underlay service.

Where non-Zen connectivity is used the following requirements must be met:

Requirement	Description			
Outbound Ports	UDP 12346, UDP 12366, UDP 12386, UDP 12406, UDP 12426, UDP 12946[DTLS], UDP 123[NTP], UDP/TCP 53[DNS], TCP 443[PNP/Vbond].			
NAT	To be consulted at point of on-boarding a SD-WAN site behind a NAT device to ensure service will operate to the desired standard.			

Note: Where non-Zen supplied connectivity or CPE utilises NAT, Zen cannot guarantee service operation. It is recommended that the use of NAT should be avoided or configured to support one-to-one NAT operation.

SD-WAN new solution build

To order new overlay or underlay SD-WAN service(s) or to enquire about product specific information, availability and pricing:

Stage	Contact		
Order enquiry and placement	Zen Account Manager		

Core business hours

Monday - Friday 9:00am - 5:00pm (exc. Bank Holidays) Weekend / Bank Holidays - Closed

Order placement – key stages

- Requirements capture and design stage:
 - A Customer Solution Architect (CSA) assigned to review and capture your requirements as part of the Zen SD-WAN Managed solution.
- Project management:
 - Depending on the complexity of the solution being deployed, a Project Manager will be assigned to initiate and co-ordinate the build, deployment and testing activities.
 - Requirement for the activity to be project managed will be identified by Zen at the requirement capture stage.
- Quote generated (including project management, licencing and supporting network integration where appropriate).
- Quote accepted and Order form completed by the Customer.

Order acceptance and delivery

Data validation is completed prior to acceptance of an order. Incorrect / missing data will lead to a delay in order acceptance and service provision.

Following receipt of an order, the Zen Order Management team will process the order within 3 working days.

An order acceptance email, containing a unique order reference number will be emailed to the predesignated customer order contact.

Build activities will be carried out in collaboration with the customer as per solution requirements. Target lead times will vary and are subject to the complexity of the requirements for the SD-WAN service.

Service provision enquiries & updates

For order updates on Zen underlay connectivity services

Service	Description		
Zen Underlay	See <u>CSP Library</u> for details relating to delivery and management of underlay services.		

SD-WAN appliance delivery

Hardware	Lead Times	
Delivery	Next Working Day +1 from order acceptance	
Deployment	Self-install	

Note:

- Lead times apply for stock hold items only. Lead times may vary for models not held in local stock.
- Workind connectivity (Underlay) needs to already be in place [refer to Service pre-requisits].
- Connectivity services are ordered and delivered separately.

Stage	Contact		
Order updates – SD-WAN Hardware	Zen Engineering Logistics 01706 902 650 engineering.logistics@zen.co.uk		

Core business hours

Monday - Friday 9:00am - 5:00pm (exc. Bank Holidays) Weekend / Bank Holidays - Closed

▼ Target response time for queries – 8 working hours

Escalation matrix Order Management

If you are having problems with your order progression, you can escalate through the following stages using the escalation criteria specified below:

Considered response time 4 working hours CC Level 4, Level 1 & Zen Account Manager	Level 5	Customer Experience Director		Senior Manager	Escalate via Manager
Considered response time 8 working hours CC Level 3, Level 1 & Zen Account Manager	Level 4	Head of Order Management		Senior Manager	Escalate via Manager
Considered response time 8 working hours CC Level 2, Level 1 & Zen Service Manager	Level 3	Senior Escalation Manager	Customer	Manager	Maintain escalation Level 3 contact Escalate to Level 4 if Escalation Criteria met at Level 3
Considered response time 6 working hours CC Level 1	Level 2	Order Management Team Manager		Service Desk	Maintain escalation Level 2 contact Escalate to Level 3 if Escalation Criteria met at Level 2
Escalation Entry, Qualification and Acceptance Preferred method: Telephone	Level 1	Order Management Desk solutioncustomerservices@zen.co.uk 01706 902 650		Service Desk	Escalation Request Preferred method: Telephone

Escalation Criteria:

- Poor quality of updates
- Customer is not satisfied at the way that the incident is being managed
- Agreed plan of action or timescales at a specific escalation level are not met
- The support team have not responded to an email within target response time of 8 working hours
- Frequency of updates does not meet what has been agreed with the customer

Note: Escalations can only be raised by the Customer contacts who are registered as named contacts against the Order for which the escalation is being requested on Escalations will be accepted and managed: Mon – Fri 09:00-17:00 (Escalations outside of these hours will be managed on a best endeavours basis)



In-life service issues Incident & change management

Stage	Contact		
In-life service issues	Zen Service Desk 01706 902 030 managed.support@zen.co.uk		

Core business hours

Monday - Friday 9:00am - 5:00pm (exc. Bank Holidays) Weekend / Bank Holidays - Closed

Stage	Contact
P1 - Critical	24/7/365
P2 - High / P3 - Normal / P4 - Low	Monday — Friday 9:00am — 5:00pm (exc. Bank Holidays)

Note:

- Fault Fix target lead-times may be subject to change where a Force Majeure or MBORC is in effect.
- P1 or P2 incidents reported by customers must be followed up by a telephone call to the Zen Service Desk.

Proactive incident logging

SD-WAN services are monitored and managed 24/7/365. Any monitoring alerts will be proactively managed by the Zen Service Desk team who will endeavour to contact the customer's pre-agreed inhours / out-of-hours order specific technical contact at the earliest opportunity.

Exceptions: For non-Zen underlay services and/or unmanaged Zen underlay connections, Zen will only notify the designated customer contact. Customers are responsible for the underlay issue resolution where 3rd party connectivity is being used.

Reactive incident logging

The customer must:

- Be a Named Contact on the account and compliant with GDPR requirements.
- Be able to provide the Zen reference pertaining to the service affected by the issue.
- Provide the description of the issue being experienced and any (additional) reasonable information requested by the Service Desk.

Underlay Service	Zen Responsibility	Customer Responsibility
Zen Broadband (xDSL)	Up to the Distribution Point or NTE (Main Internal Phone Socket).	Beyond the Distribution Point or NTE (Main Internal Phone Socket).
Zen FTTP	Up to the ONT (Optical Network Termination) Unit. (ONT is Openreach installed equipment)	Beyond the ONT Unit
Zen Ethernet	Up to the ADVA (termination end for the Ethernet service).	Beyond the ADVA
3 rd Party Connectivity	N/A	Fully responsible

Note: Zen will be responsible for any devices which operate under the Zen Managed service offering but not responsible for any cabling leading up to / connecting the managed devices.

Incident acceptance and resolution

Once a service fault has been established and to support timely resolution, the customer must provide a Named Contact who will be responsible for;

- Receiving incident updates via email or phone and sharing that internally to the affected site users,
- Owning the problem from a customer's perspective,
- Consenting to any potential charges that may be applicable,
- Providing site availability should Zen need to dispatch an Engineer to the customer's premises,
- Providing a site contact who can provide site access for supplier engineers (if required),
- Testing service post resolution,
- Confirming that service has been resumed in order for the incident to be closed.

Priority	Impact Definition	Target Response Time
P1 – Critical	Service unavailability, or severe operational fault with no workaround, e.g. Total loss of service affecting multiple sites.	1 working hour
P2 — High	Operational fault resulting in partial service availability, e.g. degraded performance, operation of the service is severely affected.	4 working hours
P3 — Normal	Operational faults that result in partial service availability, e.g. degraded performance but operations not severely impacted.	8 working hours
P4 – Low	No operational impact, e.g. change request.	24 working hours

Service SLA

Service	Target Fix Time	Incident Cover
Zen Underlay	CSP Library	CSP Library
Managed Hardware	4 hours following acceptance of Hardware fault by Zen and a case reference being issued.	24 / 7 / 365

Managed Routers: Customers outside of mainland UK (Jersey, Guernsey, Isle of Man, Isle of Sky, Orkney and the Isle of White) are:

- Required to arrange delivery of the replacement Managed Router from the nearest UK mainland port as well as installation at the destination address.
- Responsible for the cost of returning any Managed router to Zen.



You can escalate through the following stages using the escalation criteria specified below:

Considered response time 4 working hours CC Level 3, Level 1 & Zen Service Manager	Level 4	Customer Experience Director		Senior Management	Escalate via Manager
Considered response time 3 working hours CC Level 2, Level 1 & Zen Service Manager	Level 3	Head of Customer Engineering	ımer	Manager	Maintain escalation Level 3 contact Escalate to Level 4 if Escalation Criteria met at Level 3
Considered response time 2 working hours Initial acknowledgement 1 working hour CC Level 1	Level 2	Service Desk Team Leader support.escalations@zen.co.uk	Customer	Service Desk	Maintain escalation Level 2 contact Escalate to Level 3 if Escalation Criteria met at Level 2
Escalation Entry, Qualification and Acceptance Preferred method: Telephone	Level 1	Service Desk managed.support@zen.co.uk 01706 902 030		Service Desk	Escalation Request Preferred method: Telephone

Escalation Criteria:

- Poor quality of updates
- Customer is not satisfied at the way that the incident is being managed
- Agreed plan of action or timescales at a specific escalation level are not met
- The support team have not responded to an email within target response time of 8 working hours
- Frequency of updates does not meet what has been agreed with the customer

Note: Escalations can only be raised by the Customer contacts who are registered as named contacts against the Order for which the escalation is being requested on Escalations will be accepted and managed: Mon – Fri 09:00–17:00 (Escalations outside of these hours will be managed on a best endeavours basis)



Stage	Contact
In-life change & Information requests	Zen Service Desk 01706 902 030 managed.support@zen.co.uk

Core business hours

Monday - Friday 9:00am - 5:00pm (exc. Bank Holidays) Weekend / Bank Holidays - Closed

Request for change

Any customer-initiated Request For Change (RFC) for the Managed SD-WAN environment will need to be requested via the Zen Service Desk by either telephone or email. When making contact the customer must;

• Ensure that the requested is submitted by designated / authorised change approver on the account and compliant with GDPR requirements.

When requesting a change, the customer must provide:

- Relevant RFC document(s) to provide clear and comprehensive details of the requested change.
- The customer lead contact name(s), contact details and availability (Working hours and outside working hours if applicable) for the purposes of;
 - ✓ Authorising change implementation,
 - ✓ Authorising change window for non-standard changes,
 - ✓ Testing and post change success validation.

All requests are logged as a P3 priority as standard. Should there be a requirement to escalate the prioritisation level of the request, the Zen Service Desk will need to be contacted via telephone.

*See Service Desk Prioritisation Target response Times.

A Zen Engineer will agree appropriate change priority levels depending on customer urgency and impact statement.

Any change request work required to be completed outside of core business hours will be subject to a Professional Service charge.

Change categorisation

Category	Change Description	Examples
Routine	Low impact operational changes and additions which do not affect the state of the overlay but can be considered as everyday administrative tasks which make use of the existing policies and templates that are in use without changing them.	Adding addresses, objects or applications to policy lists which are already in place, changing the variables which exist in a template to add a specific capability such as adding a DNS server, DHCP Options, GPS coordinates, adding a whitelist or blacklist entry.
Minor	Changes which require additional variables or policy manipulation within the framework of the existing master template library and are restricted in scope to affect a subset of the environment (e.g. certain sites).	Changes to existing policy such as QoS classification, adding a new firewall policy element, changing the template type for a device to add a new (but existing) template capability such as enabling the firewall or cloud on-ramp.
Major	Changes to design which require a template addition or a new policy configuration which could affect the overlay as a whole and should be subject to a design change. Likely to have an impact on the operation of the customer network.	Capabilities or features which do not currently exist within the template library or a re-configuration of the topology such as adding a new overlay network and were not part of the original proposal but will require re-design or could have a significant impact.

Note:

- Professional Service charges may apply where further Solution Design is required to carry out the requested change or is considered complex in nature.
- Changes requested outside of business hours will be subject to professional service charges.

Change approval

Changes are subject to an element of approval across all change levels. It is important to note that approval is sought to confirm the holistic impact of a change. As such, changes may be initially rejected by either party and subject to further consultation.



Any inter-site moves that require Managed hardware to be relocated will need to be requested via the following methods.

Site moves

Stage	Contact
Move of Hardware and Underlay service	Account Manager

Core business hours

Monday - Friday 9:00am - 5:00pm (exc. Bank Holidays) Weekend / Bank Holidays - Closed

For site moves where Zen underlay is not used:

Stage	Contact
In-life change & Information requests	Zen Service Desk 01706 902 030 managed.support@zen.co.uk

Core business hours

Monday - Friday 9:00am - 5:00pm (exc. Bank Holidays) Weekend / Bank Holidays - Closed



Zen-led maintenance activities

Planned maintenance: At times Zen may be required to schedule maintenance activities which may cause some disruption to service. Zen will endeavour to perform routine maintenance activities during the specified window as agreed during the onboarding process.

Where work is required to take place outside of the specified window, Zen will endeavour to provide notification 10 working days prior to the maintenance activity.

Exceptions: Emergency Maintenance (but not limited to) resolve an incident, resolve a known error, to ensure Regulatory compliance etc.

Emergency maintenance: maintenance activities may be deemed as a mandatory emergency requirement to resolve (but not limited to) compliance and/or security advisories.

Zen reserve the right to apply an emergency maintenance window to carry out these maintenance activities. We will endeavour to provide as much notice as possible but this may not be possible in all situations.

Customer-led maintenance activities

On occasion, customers may need to carry out on-site maintenance activities that may impact connectivity within the managed solution. (e.g. on-site power maintenance). It is recommended that the customer informs.

Zen of the maintenance at least 24 hours in advance to ensure monitoring alarms and subsequent call outs are suppressed.

Stage	Contact
Customer-led maintenance	Zen Service Desk 01706 902 030 managed.support@zen.co.uk