**SITA RFB 3086/2025 Responses**

**Q:**

**If I interpret the bold paragraph on 3.1 each DMZ site's breakout bandwidth is 40GB and must be capable of breaking out to 100G, meaning the total bandwidth pool will be 180GB?**

**A:**

The RFB requests a physical connection to the ISP terminated at each DMZ POP (x3) of 100G on our Hauwei equipment (NE8000).

THE physical connection has to be 100G implemented and capable from implementation date. This is to cater for our current equipment port specification and future expansion.

The Combined ISP bandwidth ( Active Internet Traffic)  provided to SITA at any point in time according to SLA will be current 40 G.
NO distinction i.t.o billing must be made where this bandwidth is distributed between the DMZ POP (x3) as mentioned on the Internet links.
A COMBINED total traffic utilisation graph will be used for both billing and monitoring.
It may effectively and purely at SITA's discretion allow any portion or the complete total of the SLA (40G) and billed for bandwidth to exit in any ratio from these three POPS.
It may even transpire that with SITA traffic engineering ALL of the current SLA bandwidth may exit at only ONE of the DMZ POPs at any point in time for SITA purposes.

The 3x Triangulation links will NOT be internet breakout links and are installed and will be used by SITA for inter DMZ POP (x3) triangulation purposes at the full 100 G. The triangulation links duplication is required purely from a local SITA router to the on-site Service provider router for redundancy purposes localised per DMZ POP (x3). We do not currently require these triangulation links to be duplicated between the 3 POPS. We do however expect the service provider to have redundant paths inherent in their infrastructure to failover should there be ISP related and localised problems.

**Q:**

**Please confirm if a single link or dual links are required per site for the triangulation to be able to protect it?**

**A:**

The 3 x Internet links duplication per DMZ POP (x3) for HA is required purely from a local SITA router to the on-site Service provider router for redundancy purposes localised per DMZ POP. We do however expect the service provider to have redundant paths inherent in their infrastructure for failover should there be ISP related and localised problems to the ISP on site equipment..

**Q:**

**Please advise which size link you want to connect to Nap Africa, 10G or 100G?**

**What capacity do you require to NAP Africa for each SITA Site?**

**A:**
The Peering links to Teraco for public peering purposes is required at 10G per DMZ POP ( Total 3 links).

**Q:**

**Please confirm the LAN bandwidth subscription on each site, looking at the requirement of 6x 100GB ports per CE**

**A:**
3.1.1 Has been addressed in the description of requirements mentioned above, but in addition for clarification. 4xlocal CE ( excl 2xlocal Internet) links will be for the local HA redundancy to the 2 distant pops, however only 100G of throughput is required to be supplied as NON-Internet related traffic purely for the use of SITA in triangulation traffic between an POP and its two neighbors. There will be no traffic management in terms of data bandwith on these links, they will be supplied at 100G interPOP which may or may not be used at 100% utilisation by SITA traffic engineering needs.
Attached PDF drawing for better clarity -----------Attached

 

**Q:**

**Is the 99.99% SLA per 100G link or the overall internet solution and the combined Layer connectivity or only for the complete internet solution?**

**A:**

It is a Combined service at 99.99 SLA and not per link.

**Q:**

**Will SITA supply all public IP blocks, or must the bidder allocate any (other than OOB /28)?**

**A:**

The biddermust supply their own connection IPs at the 3 POPs mentioned, Capetown ADC, Centurion SITA, PMB SITA ) ( could be /30s)

SITA owns their own AS as well as public IP blocks that will be exchanged via the appropriate routing protocols.

**Q:**

**Should the bidder supply and manage on-site routers, or is a Layer 2 hand-off expected?**

**A:**

Layer 2/3 hand-off will be expected from the on-site ISP routers to the on-
site SITA routers which will be required for the effective last mile management of the service providers links according to the document at the 3 POPs. The ISP will manage their own on-site routers and SITA will manage their own on-site routers. The bidder will fully manage all their own local links up to the interface point of the SITA router, this includes all cabling or physical errors and testing or maintenance.

Where this is of significant importance is in the case of CPT ADC center, the bidder MUST have their own entry/exit relationship with CPT ADC and not rely on SITA as an agent to gain access.

**Q:**

**Will failover routing be managed by the bidder or SITA?**

**A:**

Most of the routing changes will be via the BGP sessions and advertised
routes between the three POPs.

**Q:**

**Should OOB links be physically separate for true independence?**

**A:**

Correct, this should be separate network connections.

**Q:**

**Are there expectations for Microsoft or other private peering at TERACO?**

**A:**

Private peering is not addressed in this RFB and all connections via the
TERACO link will be BGP based public peering.

**Q:**

**Can we exclude the potential relocation to Africa Data Centre for now and focus on the sites provided?**

**Can SITA confirm the date for the move. Is the expectation to build the new infrastructure at the current SITA site in Observatory or at the Africa data centre ?**

**A:**

Please exclude Observatory from the consideration. The 3 POPs are
Capetown ADC, Centurion SITA, PMB SITA

**Q:**

**SITA uses terminology like fully redundant & protected which can have have different meanings, especially in transmission networks.**

**(a) Is the requirement for protected services, which means a single physical handoff with protection switching via dual fibre routes ? or**

**(b)is the requirement for redundant services which can mean 2 x physical handoffs in an active / active mode. (**

**c)Additionally can SITA also confirm if equipment redundancy is required ?**

**A:**

The protected service is required from an ISP perspective to the on-site ISP CE router, however then our local requirement changes to a redundant service which means two local links from ISP CE to SITA redundant routers(x2). see attached PDF. Equipment redundancy is for the ISP to decide on their CE equipment profile and SITA's required SLA 99.99% versus the ISP risk and CE equipment choice.

 

**Q:**

**Is SITA expecting the service provide to facilitate XConnects at the Teraco Facility ?**

**A:**

Yes

**Q:**

**IS SITA expecting a burstable bandwidth model (CIR /PIR) at a fixed commercial rate. In other words no additional charges for increased usage of bandwidth during the term contract. Can we provide a price book for the BW from 40Gbps to 100Gbps with 10Gbps increments.**

**A:**

SITA expects a SLA fixed and hard limit combined total bandwidth at any point in time from the distribution between the 3 POPS, however during the term of the contract due to business requirements we may need to increase the SLA BW in 10G increments. There should be no variable burst traffic billing in the solution.

**Q:**

**Please confirm if RI2 ,GIX2 and PE2 will be customer (SITA) equipment.**

**In Figure 2, we understand that GIX stands for Government Internet exchange, what does PE and RI represent?**

**A:**

Yes, the RI,GIX,PE is the functional abbreviation we use for our routers, currently based on Huawei NE8000 routers. In most cases the ISP will be terminating on the RI router ( RI = SITA ISP facing router). The Triangulation links x3 will be terminating between the GIX routers.

**Q:**

**Does SITA have their own Traffic analysis and DDOS mitigation capability which will be operated by SITA and used to send BGP flow spec routes to the Provider? While the Provider is expected to include DDoS mitigation as part of the service, in what scenarios should the Provider expect to receive BGP flow spec routes from SITA?**

**For DDOS does SITA want the bidder to include both local and international scrubbing?**

**A:**

The Provider is Primarily expected to include DDoS mitigation as part of the service. SITA is however also building their own DDOS mitigation services and the provider can expect additional BGP flow spec routes if we should pick up any additional traffic that was not caught by the supplier standard service. This may also include instantaneous and zero-day type of scenarios, especially if DDOS feeds and databases are used by the supplier that may only be updated periodically.

SITA will utilise their own in-house analysis and mitigation capability to send BGP flow spec routes to the Provider.

SITA from its ISP connection, makes no distinction between local and international traffic. SITA expects the bidder to provide all types of scrubbing for both local and international traffic, SITA does not classify or distinguish between local and international even if the scrubbing is classed differently from the bidders point of view.

**Q:**

**Will it be acceptable for the provider/bidder to offer fully diverse fibre routes without relying on a third-party fibre provider if the provider can prove diversity? Or is the use of a diverse fibre provider mandatory ?**

**A:**

It will acceptable for the provider/bidder to offer fully diverse fibre routes without relying on a third-party fibre provider if the provider can prove diversity. The use of a diverse fibre provider is not mandatory.

**Q:**

**Please confirm what these link will terminate on and please confirm if the handoff needs to be on Copper or Fibre.**

**A:**

All the links are required to be handed off to Huawei NE8000 100G fibre ports. However the 20M links mentioned for OOB management purposes may be handed off on 1,10 G UTP (preferred).

**Q:**

**Is SITA looking for the Site-to-Site links to be independent of the links to NAP and for IPT or can the provider use the same links for all service (naturally built with the required diversity)?**

**A:** Yes, these links from a SITA perspective should be separate, this is to prevent an IPT link failure from affecting our public peering to Teraco and/or our Triangulation links between the POPs which is precisely in place to mitigate primary IPT connectivity failure at a POP inclusive of any fibre diversity measures implemented locally at the POP.

**Q:**

**Please confirm if the bidder needs to provide SFP's and fibre tails for the SITA routers / equipment. Please confirm the number of SFP' s and the fibre tail quantity and lengths.**

**A:**

The current requirement is for 6 Connections per POP. The ISP CE device is in the same cabinet as the SITA Internet Router. The length requirement currently is 5m per cable , but keep in mind that our Centurion POP may require longer tails as the ISP CE location has not been determined yet. ( This is excluding the 3 OOB links as mentioned in previous point)

**Q:**

**GIX to GIX VLAN’s, and PE to PE VLAN’s does SITA want 100Gbps dedicated per VLAN, or is SITA Expecting that capacity between the sites for GIX and PE to be shared across the 100Gbps triangulation. E.g in Centurion you have VLAN 4000 connected to GIX2 which then terminates in PMB on GIX3. Does Sita want a dedicated 100Gbps for VLAN6000 between GIX2 and GIX3, and a dedicated 100Gbps between VLAN4000 for GIX2 and GIX1 as another example, or should or should all the VLAN’s between the GIX’s and PE’s be shared across the 3 x 100Gbps circuits between Centurion, Cape Town and PMB?**

**A:**

Note that the GIX-GIX triangulation links are at 100G and would be for all the traffic bundled across those links by SITA, It is a link speed and not a per-vlan speed requested. Ie shared traffic between all the vlans or routed connections.

All the vlans or routed connections will share the same triangulation bandwidth of 100G between any 2 triangulation link endpoints.

**Q:**

**Regarding the 6x 100GB requested at each SITA POP, are all VLAN active or are some vlans serving as backup?**

**A:**

All the vlans are active at all times, the vlans may not carry traffic at all times but for purposes of connectivity, keep-alives and routing sessions they should all be considered as active all the time. These vlans will also be dynamically managed by SITA and any L2 connectivity requirements must pass all vlans between any L2 end-points (POPS).

**Q:**

**Can you please confirm if you require the 100GB protect links between the SITA POP to be configured as Active Active or Active Passive?**

**A:**

The links between the SITA POPs will form part of the triangulation connectivity between the Capetown, Centurion and Pietermaritzburg POPs. As a result SITA only need this connectivity on a single connection with only local POP redundancy as explained in the protected versus redundant answer in this document. Therefore the multiple or alternate paths is for the bidder on their backend network. The SITA component requirement is for local SITA routers (x2 connections) to connect to the bidder on site equipment and then follow a single triangulation connection to the remote POP with its own local SITA routers (x2 connections). The request is not for 2 triangulation links between each POP to one of the remote POPS. We do however expect a form of fail-over protection in the bidders fibre provision environment commensurate with the SLA expectations.

**Q:**

**Would SITA like DDOS quoted as a separate line item or included in the total 40Gbps Internet charge?**

**A:**

As the costs and services could vary over time with expansion and enhancements, both from a DDOS mitigation solution as well as a Total consumed bandwidth perspective it would be prudent to have a separate line item.

**Q:**

**Please could SITA provide further clarity on this point ? “ The provider must accept /28 prefixes and propagate those prefixes across their network, to allow SITA to selectively advertise /28 prefixes to the ISP out of any one of their POPs. The ISP may however aggregate these according to Internet standards to the rest of the world.” As providers will typically re-advertise IP blocks that is announced to them but at a minimum of a /24 Block.**

**A:** The provider must honour the SITA /28 subnet mobility between the three POPs from an Internet provider perspective. This should be seen in the light that all three POPS internet links are a ISP service to SITA as one service, not three separate services. This would also align with the previous answers where the bandwidth especially the billing thereof must be a combined total of all three POPS to the Internet. In this scenario especially with our subnet requirement it is understood that the greater Internet community only accepts /24 subnets. In this regard SITA will supply the /24 and larger subnets that we own to be advertised to the Internet community from the ISP perspective. “Across their network” implies the SITA service as provided by the ISP as a combined service distributed between 3 POPs.

**Q:**

**Which NAP Africa do you want each Site Site to connect too? SITA Cape Town to NAP in CT1; SITA Centurion to NAP in JB1; SITA PMB to NAP in Teraco Riverhorse? Please confirm.**

**A:**

Correct, SITA Cape Town to NAP in CT1; SITA Centurion to NAP in JB1; SITA PMB to NAP in Teraco Riverhorse.

**Q:**

**Can we propose a connection to NAPAFRICA without going through Teraco?**

**A:**

No, the request is for the connections to the NAPAFRICA IX’s via their presence at the TERACO data centers.

**Q:**

**Can I please have a Sita SLA as per page 11 of 70 (v)**

**A:** Unknown ???

**Q:**

**What are your switching Centre Standards? Page 11 of 70 point(viii)**

**A:** Unknown ???

**Q:**

**What does this symbol represent in Figure 2? Is this SITA’s equipment or providers equipment?**

**A:** ???..Unknown question content...???

**Q:**

**Can SITA provide more details, especially on the charges that the supplier will incur. Can SITA please provide hosting pricing that needs to be used for this RFP.**

**A:**

SITA has got existing cabinet space inclusive of power feeds for the CE device, this question is rather for the supplier to provide details if the requirement of their equipment is of such a nature that it will not fit in our currently allocated (limited) cabinet space which would incur no additional costing to the supplier. However if the installation size is out of spec according to the supplier supplied details then costing could be factored in at the appropriate time.

**Q:**

**Pertaining to the requirement for the service provider to provide onsite nodes at the sites with 6 X 100Gbps ports, do the required ports include the providers WAN ports OR are the 6 required ports additional to the service provider's WAN ports?**

**A:**

Please read the requirements carefully the service request is not simplistic pertaining to nodes only, we require connectivity and ISP services as outlined, as such the bidder has to provide all the required external links as indicated with the port requirements needed for the services to be determined by the bidder. The 6 ports mentioned is purely for local hand-off to the SITA equipment at each POP. Any other connection ports for extending ( WAN related ) these services off-site is the responsibility of the bidder on their own on-site node.

**Q:**

**Pertaining to the service provider nodes at each site, does SITA require DC or AC power enabled/capable nodes?**

**A:**

The requirement is for AC powered equipment.

**Q:**

**Pertaining to the requirement service provider onsite node (CPE) per site, should we include SFPs or SITA will provide?**

**Should we quote for the SFPs for their( SITA) routers and patch leads.**

**A:**

The bidder must supply all their own SFP and tails, this in addition should include the SFP’s required on the SITA equipment for the 6 ports mentioned.

**Q:**

**SITA -Request for Co-location Quote**

**Option 1:**

**Colocation: Full Rack at SITA Pietermaritzburg**

**Power: 2kW**

**1x Cross Connect**

**Option 2:**

**Colocation: Full Rack at SITA Centurion**

**Power: 2kW**

**1x Cross Connect**

**A:** See quotation below which applies for both Centurion and PMB

**Q:**

**Please share the current hosting solution and costing for the current service.**

**Please provide the scope of work for all infrastructure and cabling and devices make and model for the purpose of assuming responsibility.**

**When does the existing connectivity end with SITA’s current service provider.**

**A:**

The current hosting solution and costing will not be provided and is not pertinent to the bidder. The bidders must present their own solution as requested in the requirements.

All infrastructure requirements for the bidder up to the hand-off port of the SITA routers will be for the bidders responsibility to either supply or assume responsibility for requesting cabinet space according to the bidder solution supplied.

The existing connectivity has no material value to the bidder.

**Q:**

**The listed certifications do not appear to directly impact on support on connectivity.**

**A:**

The MIOS certification does not directly impact this solution.

**Q:**

**Clarification is required if it is 6 weeks or 6 weekdays?**

**A:**

Aknowledgment of the error “implemented within 6 weeks days after”.

Please note that the implementation period requested is 6 weeks.

**Q:**

**Extension of submission of Tender after the 30 th of April due to short time Frame.**

**A:**

SITA is considering the extension and the new date will be published on SITA website and on the E-tender portal. The new closing date is on the 16th of May 2025

**Q:**

**Pricing Questions:**

Pricing for 3X Dedicated links to Teraco at 100Gig speed: Is this for NAP ?

**A:**

The BW to Teraco for peering at NAP is currently at 10G the hand-off link speed locally is however at 10/100G.

Pricing for 3X Internet Transit links at 100Gig speed: Is this for the link (layer1/2) and a 100GE port?

**A:**

This does refer to the link port speed at hand-off and not to the contracted and billed total bandwidth of the service.

Pricing for 60Gbs, 80Gbs and 100Gbs provisioned Bandwidth: Is this for IPT?

**A:**

This option does refer to the billed contracted total BW allocated and consumed between the 3 POPS combined. This is currently at 40G, but the options above are requested to be included in the quote for consideration purposes.

The diagram shows 100Gbps per VLAN, is this referring to a 100GE port?

**A:**

The diagram shows port speeds for hand-off, the soft limits in terms of contracted Internet throughput on the primary IPT links are not shown, which is currently at 40G. ( with options at 60,80,100G)

**Q:**

**Is the Rate of Exchange going to change?**

**A:** Bidder must provide quotation based on current ROE and indicate on their quotation that their prices are subject to fluctuations of the rate of exchange