

## CLARIFICATION QUESTIONS AND ANSWERS

<b>TENDER DESCRIPTION</b>	<b>FOR THE PROVISION OF PROCUREMENT OF REDUNDANCY AND BACKUP CONNECTIVITY FOR SD-WAN TRAFFIC FOR A PERIOD OF THREE YEARS ON AS AND WHEN REQUIRED BASIS</b>
<b>RFP NUMBER</b>	<b>TCC/2024/09/0002/76777/RFP</b>

### BATCH 1 - CLARIFICATION QUESTIONS AND TRANSNET RESPONSES

No:	CLARIFICATION QUESTIONS	TRANSNET RESPONSE
1.	Please confirm, how many Reference letters is required. Will three (3) be sufficient.	3 is sufficient per evaluation criterion
2	Are International Bidders with absence of CSD or SARS pin allowed ??	<div>Yes Foreign bidders are allowed also Refer to 5 of 53 of the RFP.</div> <div><div><div><div>1 ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?</div><div><input type="checkbox"/>Yes<input type="checkbox"/>No</div><div>[IF YES ENCLOSE PROOF]</div></div><div><div>2 ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?</div><div><input type="checkbox"/>Yes</div><div>[IF YES, ANSWER QUESTIONNAIRE BELOW]</div></div></div></div>
3	Can you advise who are the current last_mile providers to ensure we provide redundancy or diverse routes?	Assume in all cases the OTN (OSI layer 1+2) is provided by TFR Telecoms: some of the fibre installation work are sub-contracted but ownership from maintenance/support perspective resides with TFR Telecoms
4	Please confirm Scope does not include management of any other device other than links	Only management of the backup links up to connection with the SD-WAN edge device
5	Please confirm the scope includes supply, install, provision, test and management of links only	Yes, management of links need to include regular testing/verification/reporting in line with SLA parameters





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	will be responsible for the orchestration layers to ensure that the redundancy is fully activated so when the primary shuts down their redundancy will be able to handle the traffic?	
12	Do we supply only or maintain the particular links and also maintain the location as well?	The location including hosting environment will be managed by Transnet, i.e. only SLA-managed link required.
13	Do you want this orchestration to maintain the primary network too?	No
14	Which vendor is Transnet currently using?	TFR Telecoms with some installation services provided by sub-contractors
15	Is redundancy expected to have the higher utilization compared to the current network or it should be of the same capability?	Redundancy should be of the same capability.
16	Is the current primary Network <b>Miraccy or Utella?</b>	Cisco (used to be Viptela) SD-WAN
17	Do you have fibre root map for primary links to ensure that the second links will not overlap on the primary links?	Will provide DWDM ring-topology diagram from TFR Telecoms
18	SDWAN site will you read between the lines and not fully run and act between WAN 1 and WAN 2?	The SD-WAN will control switchover between TFR-Telecoms primary link and new backup-link (to replace current TFR-Telecoms backup link)
19	Your TFR Telecoms since is the primary service provider	TFR Telecoms provide the DWDM (OEM=Huawei, OSI layer1+2) and Transnet TCC (OEM=Cisco) provide the SD-WAN (maintained by DCX): the backup-fibre



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	infrastructure are, they having an existing SDWAN where the suppliers could provide the access being the secondary service provides?	connection will terminate on the SDWAN edge devices, i.e. the same device the TFR Telecoms fibre is currently terminating on.
20	The procurement of WAN infrastructure is part of the RFP and is put under the services, will the infrastructure be owned by the service provider and be provided to Transnet as a service? So, what happens after contract ends?	The SD-WAN as well as DWDM infrastructure is owned by Transnet with Service provider maintenance either insourced or outsourced in line with Transnet network strategy(which evolves over time) The backup link contract needs be based on a Opex (leasing per month, i.e. as a service) basis.
21	Teraco will have the LN and the service provider will do the hand-off to Transnet and the routing and controlling of Traffic will be handled by the TFR?	The routing, control and failover will be handled by Transnet's SD-WAN edge device. This could include load-sharing between the TFR Telecoms and new backup-link.
22	The Teraco links are they more of providing of the 10 Gigs links or monitor and manage the links	The primary requirement is for 10 GBps links to be in an always "ready" state (Ready for immediate switchover from the primary links) in line with SLA parameters with the necessary assurance (reports, continuity/quality testing) to be provided by the backup-link SP.
23	Can Transnet please share the coordinates since the suppliers requires them or if they share them late, they should consider extension of the RFP closing Date	Co-ordinates will be provided in Excel spreadsheet
24	For the scope of this RFP are you mainly interested in the main diversity between	The tools need to provide assurance to Transnet that they are always in a "ready"- to take full traffic state while meeting all SLAs after switchover.



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	Teraco sides, or you want fully capacity tool to see if this links will be really configured in an active passive way?	
25	Any required additional interphases be provided by Transnet?	The scope of work is as per the technical requirements, no additional phases required
26	Are there any interphases that the service providers will have to provide?	As per 25
27	Will Transnet be sharing the fibre links maps so the service providers can provide additional links or two?	The TFR Telecoms fibre ring topologies will be shared
28	The required SLAs per link is 99.9% SLA is it site based, or link based?	The availability of the link between Terraco and Campus site need to be at least 99% per backup link, Combined availability SLA between primary and backup link to be at least 99.9%
29	Is TFR having a physical infrastructure and all the infrastructures belong to TFR or are there any service providers?	The OTN/DWDM equipment and hosting environment belongs to TFR/Transnet as well as the SD-WAN and all other switching/routing/firewall equipment belongs to Transnet TCC
30	Is Transnet prepared to pay the once-off radio and fibre? Or they would prefer monthly fee because the once-off is high?	Transnet would like to pay a monthly (Opex) fee. Please note that Transnet's strong preference is to limit trenching and new cable laying to an absolute minimum in particular the port areas.
31	Is Transnet willing to generally assist or have the outside approval or access of	Transnet will assist with all access approvals on Transnet-owned property. Note however it is a key requirement that construction work be kept to an absolute minimum and Transnet's strong preference is to have the proposed backup-



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	putting the infrastructure on multiple sides	links connect to the SD-WAN from day 1 (using existing transmission infrastructure) as opposed to new trenching and laying of fibre.
32	Is Transnet prepared to go to an alternative datacentre as a triangle interconnection to triangle?	Transnet will not consider alternative data centers to the 3 Terraco DCs.
33	Should the second link that need to be provided be a better performance than the existing link? Because you can't provide a different solution?	The combined (primary+backup)_ SLA objective is be 99.9 % but the backup link availability SLA to be adhered to for this RFP is 99%.
34	Will the second working in a passive mode in load shedding	If the cost model is the same whether using the backup link in loadsharing versus passive backup mode; the Preferred mode is allowing the SDWAN device to loadshare to both links at all times.
35	please clarify if all sites will have 2x CPE's 1 for the current link and 2 for the new provider to connect to?	Currently all sites have a primary and backup link configured, with this RFP the current backup link will be swapped towards the new backup link at the connectivity point.
37	Are we providing L2 links to the Teraco's since there already is internet breakout there or internet too?	Internet connectivity is currently provided by DCX (Data Centrix), only requirement is for bearer capability not additional services.
38	QoS and Link testing, since this is a SD-WAN solution wouldn't the team providing and managing the SD-WAN look after that and the new service provider to provide stats on the backup links quality of service only?	The new backup-link SP need to provide assurance (in line with SLAs) up to OSI layer 1+2, the SD-WAN assurance is managed separately with DCX (currently)



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39	Please share coordinate for sites and provide fibre route plan for us to be able to plan diversity	Will be shared
40	Please also share current last mile providers for primary links	Assume that TFR telecoms own and provide all primary link infrastructure (OSI level 1+2), although use might be made from time-to-time from external contractor's ultimate ownership transfers to TFR Telecoms.
41	Please advise on the SLA further. The RFP states that the SLA required is 99.99% which is two links, but also makes mention that only 1 link per service is required for backup and redundancy. Kindly confirm if SLA required is 99% for the links which will increase site availability to 99,99%	SLA required per backup link is 99% (backup-link SP will be measured on this), combined target SLA to be presented to SD-WAN network is 99.9% (i.e. combinations of primary+backup links: backup-link SP will not be measured on the 99.9% combined SLA)
42	Is only a fibre handover required for the link? The service will then terminate on Transnet equipment	Only fibre handover is required to the SDWAN devices - the service will terminate on the Transnet SD-WAN equipment.
43	Redundancy and Failover Responsibilities: Are we expected to provide redundancy at the ISP level, or is Transnet responsible for handling failover through their SD-WAN equipment? Specifically, does the RFP require us to implement VRRP (Virtual Router Redundancy	Transnet requires a backup link (meeting SLA requirements including 99% availability) that will terminate on its SD-WAN edge equipment ( <i>i.e. no connection from the backup link to the TFR-Telecoms DWDM which will also connect to the SD-WAN edge device as the primary link</i> ) from where all controls and failovers (between TFR Telecoms DWDM managed link and the new backup link) will be managed via the SD-WAN management system.



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	Protocol) or similar failover mechanisms on our side, or should failover be managed solely by Transnet's SD-WAN appliance?	
44	Architectural Alignment Does the RFP explicitly require us to provision multiple links to our routers before handing off a single connection to Transnet's SD-WAN device?	Just a single link (meeting SLA requirements) to be connected to Transnet's SD-WAN edge device
45	Gbps last mile links Can Transnet confirm if each link should be configured for 1Gbps, or is Transnet requesting dual 500Mbps that aggregate to 1Gbps for their backup links?	A single 1 Gbps link with 99% availability to be presented to the SD-WAN edge device
46	QoS If Transnet only requires us to provide internet connectivity without involving us in the management of their SD-WAN environment, we will not have control over functions such as load balancing, QoS (Quality of Service), or failover. These critical network management tasks would	Load balancing, failover and prioritization of traffic types will be managed by the SD-WAN. The provided link (terminating on SD-WAN edge) will still need to meet SLA requirements : including: <ul style="list-style-type: none"> <li>• Backup Link availability: 99%</li> <li>• Packet loss: &lt;=0.1%</li> <li>• Latency &lt;= 50 ms</li> <li>• Jitter &lt;= 5 ms</li> <li>• Failover time of &lt;10 ms to be measured in terms of backup link providers contribution in not being able to failover</li> </ul>





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	<p>need to be handled by the SD-WAN equipment.</p> <p>Additionally, it's important to note that traditional Internet links typically do not support end-to-end QoS due to the best-effort nature of public Internet routing, which does not guarantee prioritization of specific types of traffic.</p> <p>Given this limitation, could you please clarify how the QoS requirements should be addressed?</p>	
47	<p>If the NIPP schedule is not applicable to this tender, do we still have to submit the Job Creation schedule?</p>	<p>Yes, they have to complete the Job creation one of the specific goals for this transaction. If not completed they will score zero points for job creation.</p>