## **SABEN Service Level Indicators**

Service Level Indicator (SLI)	Service Level Target
SLI Name: SA-NREN Availability	
<u>SLI Description</u> : The percentage of time over a calendar month for which "Layer 3" (IP) connectivity is present along node to node paths within the SA-NREN. It denotes a Site's capacity to transmit and receive datagrams in volumes consistent with the Site's ordered bandwidth (and, where appropriate, the ordered bandwidth of a destination site).	
<u>SLI Measurement</u> : A single path is unavailable for a given duration if "Layer 3 connectivity" is not present for the given duration, as reported by a Monitoring System or Service Desk. The aggregate availability of this single path in a given month is the percentage of time that "Layer 3 connectivity" was present.	≥ 99%
Where a period of unavailability is followed within four business hours or less by another period of unavailability that is demonstrably related to the preceding period then the intervening period of availability will be ignored for purposes of calculation.	
SLI Name: SA-NREN Reliability	
<u>SLI Description</u> : The average number of periods of SA-NREN unavailability per month,	≤ 2
SLI Measurement: As for SA-NREN Availability, but counted as number of service breaks rather than percentage of downtime.	
SLI Name: National Latency	
<u>SLI Description</u> : The average time, measured across a significant sample, for the transmission of IP datagrams from any node on SA-NREN to any other node on SA-NREN and back again. This is sometimes called the "round-trip latency", as opposed to the "one-way latency".	≤ 50 ms
<u>SLI Measurement</u> : Normally measured by ICMP "echo request" and "echo reply" messages, appropriately graphed.	
<u>SLI Name</u> : SA-NREN Reachability	
<u>SLI Description</u> : The percentage of time over the calendar month for which "Layer 3" (IP) connectivity is present between all Customer Edge (CE) nodes on SA-NREN and External Gateway via paths through the SA-NREN.	
"Layer 3" IP connectivity refers to the ability of the network to forward IP (or ICMP) packets from the CE of a Participating Institution to an External Gateway on the SA-NREN.	≥ 99%
<u>SLI Measurement</u> : A single such path is unavailable for a given duration if "Layer 3 connectivity" is not present, as reported by a Monitoring System or Service Desk.	
The aggregate availability of this single path in a given month is the percentage of time "Layer 3 connectivity" was present.	
The Service Availability of "Commodity Internet Access" for a given month is the average of the aggregate availabilities for each such path.	

Service Level Indicator (SLI)	Service Level Target
SLI Name: Mean Time to Restore (MTTR)	
<u>SLI Description</u> : The average time as measured in hours (regular weekday business hours) over the given month taken to restore full services to the CE router of the INSTITUTION after a break in such service.	
<u>SLI Measurement</u> : The TTR is the time taken to restore full services to the CE router of the INSTITUTION following a service break that was confirmed by a designated site contact. For the purposes of this SLI, a loss of service is confirmed if SABEN's Help Desk has obtained confirmation from a site contact of the loss of service.	≤ 8 hours urban areas ≤ 14 hours rural areas
The MTTR is the average of TTRs for service outages occurring in the given month.	
SLI Name: Call ResponsivenessSLI Description: Proportion of service desk calls within a calendar month that are responded to within 30 minutes of being placed.SLI Measurement: A call is deemed to have been responded to if either SABEN or its appointed service desk operator have provided acknowledgment of and feedback to the caller via email or telephone within 30 minutes of the call having 	≥ 99%
<ul> <li><u>SLI Name</u>: Help Desk Availability</li> <li><u>SLI Description</u>: The proportion of time in a given month for which the Help Desk was available for call placement.</li> <li><u>SLI Measurement</u>: The Help Desk is deemed to be Available if a call may successfully be placed (via email or telephone) with no more than 5 minutes spent "On Hold" in the Service Desk PABX queue or the Service Desk Mail System queue.</li> <li>Service Desk Availability is subject to the following exclusions, w.r.t. which the availability target will not be affected.</li> <li>a) Loss of Availability due to a Force Majeure Event</li> <li>b) Downtime due to scheduled and announced maintenance.</li> </ul>	≥ 99%