

# Service Level Agreement (SLA)

## 1. Purpose

This document describes the service levels to be established for the Services offered by the SI to the State. The SI shall monitor and maintain the stated service levels to provide quality service.

## 2. Definitions

- a. "Scheduled Maintenance Time" shall mean the time that the System is not in service due to a scheduled activity as defined in this SLA. The scheduled maintenance time would not be during 16X6 timeframe. Further, scheduled maintenance time is planned downtime with the prior permission.
- b. "Scheduled operation time" means the scheduled operating hours of the System for the month. All scheduled maintenance time on the system would be deducted from the total operation time for the month to give the scheduled operation time. The total operation time for the systems and applications within the Primary DC, DRC and critical client site infrastructure will be 12 hrs X 7 days X 12 months. The total operation time for the client site systems shall be 12 hours.
- c. "System or Application downtime" means accumulated time during which the System is totally inoperable within the Scheduled Operation Time but outside the scheduled maintenance time and measured from the State Government employees log a call with the SI team of the failure or the failure is known to the SI from the availability measurement tools to the time when the System is returned to proper operation.
- d. "Availability" means the time for which the services and facilities are available for conducting operations on the State Government system including application and associated infrastructure. Availability is defined as:  
$$\frac{\{\text{Scheduled Operation Time} - \text{System Downtime}\}}{\{\text{Scheduled Operation Time}\}} * 100\%$$
- e. "Helpdesk Support" shall mean the 9x6 basis support centre which shall handle Fault reporting, Trouble Ticketing and related enquiries during this contract.
- f. "Incident" refers to any event / abnormalities in the functioning of the Data Centre Equipment / Services that may lead to disruption in normal operations of the Data Centre, System or Application services.
- g. "Error" in data digitization or data migration exercise, refers to the mistakes

made intentional/ unintentional by SI which may or may not change the actual meaning of the subject.

### **3. Interpretations**

- a. The business hours are 8:30AM to 8:30PM on all working days (Mon-Sat) excluding Public Holidays or any other Holidays observed by the State. The SI however recognizes the fact that the State Government offices will require to work beyond the business hours on need basis.
- b. "Non-Business Hours" shall mean hours excluding "Business Hours".
- c. 12X7 shall mean hours between 8:30AM -8.30 PM on all days of the week.
- d. The availability for a cluster will be the average of availability computed across all the servers in a cluster, rather than on individual servers. However, non-compliance with performance parameters for infrastructure and system / service degradation will be considered for downtime calculation.
- e. The SLA parameters shall be monitored on a monthly basis as per the individual SLA parameter requirements. However, if the performance of the system/services is degraded significantly at any given point in time during the contract and if the immediate measures are not implemented and issues are not rectified to the complete satisfaction of the State Government, then the State Government will have the right to take appropriate disciplinary actions including termination of the contract.
- f. A Service Level violation will occur if the SI fails to meet Minimum Service Levels, as measured on a half yearly basis, for a particular Service Level. Overall Availability and Performance Measurements will be on a monthly basis for the purpose of Service Level reporting. An "Availability and Performance Report" will be provided by the SI on monthly basis in the suggested format and a review shall be conducted based on this report. A monthly Availability and Performance Report shall be provided to at the end of every month containing the summary of all incidents reported and associated SI performance measurement for that period. The monthly Availability and Performance Report will be deemed to be accepted by the State Government upon review and signoff by both SI and the State Government. Where required, some of the Service Levels will be assessed through audits or reports e.g. utilization reports, measurements reports, etc., as appropriate to be provided by the SI on a monthly basis, in the formats as required by audit will need to be provided by the SI. Audits will normally be done on regular basis or as required by the State Government and will be performed by the State Government or the State Government appointed third party agencies.

- g. EMS system as specified in this RFP shall play a critical role in monitoring the SLA compliance and hence will have to be customized accordingly. The 3rd party testing and audit of the system shall put sufficient emphasis on ensuring the capability of EMS system to capture SLA compliance correctly and as specified in this RFP. The selected System Integrator (SI) must deploy EMS tool and develop additional scripts (if required) for capturing the required data for SLA report generation in automated way. This tool should generate the SLA Monitoring report in the end of every month which is to be shared with the State Government on a monthly basis. The tool should also be capable of generating SLA reports for a half-year. The State Government will audit the tool and the scripts on a regular basis. HPSAMB shall assess the EMS requirements and include the same in the RFP
- h. The post-implementation of SLAs will prevail from the start of the Operations and Maintenance Phase. However, SLAs will be subject to being redefined, to the extent necessitated by field experience and the developments of technology practices globally. The SLAs may be reviewed annually / on a bi-annual basis as the State Government decides after taking the advice of the SI and other agencies. All the changes would be made by the State Government in consultation with the SI.
- i. The SI is expected to provide the following service levels. In case the service levels cannot be achieved in the service levels defined in the tables below, it shall result in a breach of contract and invoke the penalty clause. Payments to the SI are linked to the compliance with the SLA metrics laid down in the tables below. The penalties will be computed and calculated as per the computation explained in this Annexure. During the contract period, it is envisaged that there could be changes to the SLA, in terms of addition, alteration or deletion of certain parameters, based on mutual consent of both the parties i.e. the State Government and SI.
- j. Following tables outline the key service level requirements for the system, which needs be ensured by the SI during the operations and maintenance period. These requirements shall be strictly imposed and either the State Government or a third-party audit / certification agency shall be deployed for certifying the performance of the SI against the target performance metrics as outlined in the tables below.

#### **4. Service Level Agreements**

SLAs are important component of any IT tendering process. Template of SLAs is provided below. The same may be used as templates and customized. However, it may be noted that the SLAs can be of 2 types - either input-based or output-based.

The below mentioned templates are for input-based SLAs which focuses on the availability and quality of inputs. The other way of designing is on measuring the outputs. In this way of measuring the outputs, the end customer service quality parameters are measured. For e.g. what is the end-to-end time taken for processing of an application, time taken to stand in the queue, errors in the certificates and so on. Typically, these are used in PPP type of tenders.

#### 4.1 Data Digitization Activities

Sl. No.	SLA Terms	Description
1	% Accuracy	HPSAMB officials will physically verify the digitized records submitted by the SI vendor against the original records and will identify the erroneous fields in each record. The % accuracy for each batch will be calculated as follows:  Total no. of erroneous fields in the batch – X Total no. of records in the batch – Y Field per record – N Accuracy per batch (%) = $(X*100)/(Y*N)$
2	Digitization cost	Digitization cost = A*Y, where "A" is the rate per record digitized and Y is the total no. of records in the batch.

Service Category	Service Level Title/ Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Hours of Support	Target Support Level	Minimum Service Level	Service Level Dependency	Increased Impact	Severity Weight
Data Category	Accuracy of the data digitized by the SI vendor when compared against the original records	The ratio between the total no. error free records in a batch of data that were successfully digitized to the total no. of records in that batch of data	HPSAMB's appointed shall take physical count of the data that was migrated successfully into the new system as compared to that which existed in the old legacy source.	Weekly	Fortnightly	9X6	>98%	>90%	Completeness and integrity of source data	To be baselined for first 2 weeks using time and motion study on the effort made.	50% of Data Digitization Cost

**Please note:**

- Accuracy of less than 90% will be considered as a Breach of the Agreement and HPSAMB reserves the right to terminate the agreement.
- In all such cases, where the accuracy is below 100%, the SI will be responsible to carry out corrections with no additional cost to HPSAMB.
- Payment of data digitization to the SI will be made only after achieving 100% accuracy level.

## 4.2 Operation and Maintenance (O&M) Support

Sl. No.	SLA Terms	Description
1	System Uptime	<ul style="list-style-type: none"><li>- Time for which user is able to access the applications, website and other components of the IT solution during working hours. The system can be down due to any of the reasons including failure of hardware, network, system software, application etc.</li><li>- Scheduled downtime, for example, backup time, batch processing time, routine maintenance time will not be considered while evaluating the system uptime. However, the selected SI will be required to schedule such downtime with prior approval of HPSAMB. The selected SI will plan scheduled downtime outside working time. In exceptional circumstances, HPSAMB may allow the SI to plan scheduled downtime in the working hours.</li></ul>
2	Bugs/issues in the application software/Hardware device/Network Equipment	<ul style="list-style-type: none"><li>- Critical bugs/issues – Bugs/issues affecting more than one division or more than one user in a division</li><li>- Non-critical bugs/issues - Bugs/issues affecting at most one user in a division</li></ul>

Service Category	Service Level Title/ Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Hours of Support	Target Support Level	Minimum Service Level	Service Level Dependency	Increased Impact	Severity Weight
System Uptime	System Uptime	Time for which selected SI will be required to schedule such downtime with prior approval of HPSAMB. The selected SI vendor will plan scheduled downtime outside working hours.	No. of recorded hours	Weekly	Weekly	24X7	99.9%	99%			
System Uptime and Performance – Field Offices	System Uptime and Performance – Field Offices	Availability of each hardware and peripheral at each of the designated field office locations	No. of reconfirm hours on manual logs of uninterrupted usage of each hardware & peripheral by users during working hours.	Monthly	Monthly	9X6	>96%	>92%	Power backup	To be baselined for first 6 months	INR 750 per instance of violative for a drop in uptime between <92% and >=90%. Additional INR 750 per instance of violative for every 5% drop in percentage point of uptime below 90%.
Network Connectivity	Average network availability between each of the designated office locations and the nearest SWAN PoP.	The total number of hours the network was available during the working hours.	The total number of hours of network outage during working hours.	Monthly	Monthly	6X9	>99%	>95%	Telephone exchange line  SWAN	To be baselined for the first 6 months	INR 50,000 per month for every drop in percentage point of 4.2.1. uptime below 98%.
Issue resolution efficiency	Resolution time for bugs/issues in the applications	Service is considered to be disrupted when users are unable to avail services require to be provided	Call logged	Monthly	Monthly	9X6	>99%	>95%			INR 1,000 per critical incident  INR 600 per medium incident  INR 300 per low incident on the incidents which do

											not meet Service Level defined in Section 4.2.1 below individually
--	--	--	--	--	--	--	--	--	--	--	--

**Please note:**

- *Following conditions will be considered as Breach of Agreement in the case of O&M Phase and in any of the following conditions HPSAMB reserves the right to terminate the agreement:*
- *System update of less than 97% continuously for a quarter*
- *More than 3 incidents of not resolving the bugs/issues within the defined time limits in a quarter*
- *Average page loading time for application and reports to be more than 20 seconds evaluated for a quarter*
- *“Helpdesk Support” shall mean the 9 hoursX6days centre which shall handle Fault Reporting, Trouble Ticketing, and related enquiries during this contract.*
- *“Response time” shall mean the time interval between the time the incident is reported to the Helpdesk and the time an engineer is assigned to the call.*
- *“Resolution time” shall mean the time taken (after the incident has been reported at the Helpdesk), in resolving (diagnosing, fixing and troubleshooting) or escalating (to the second level or to respective Vendors, getting the confirmatory details about the same from the Vendor and conveying the same to end user), the services related troubles during the first level escalation. The resolution time shall vary based on the severity of the incident reported to the Helpdesk. The severity would be as follows:*
- ***Critical:*** *Incidents which impact the overall solution like outage of the Integration Management Application and which has a high impact on the service delivery to citizens and respective Departments. Any incident which is affecting a majority of users (over 80% of users including Department users)*
- ***Medium:*** *Incidents which impact a limited number of users. The main application at SDC is available but the productivity of a limited number of users is getting affected. E.g., the Integrated Management Application is up and running but certain users are unable to login/submit request etc. Acceptable work around is available. E.g. installation of operating system, patches etc.*
- ***Low:*** *Incidents whose resolution shall require changes in configuration of hardware or software, which will not significantly interrupt working of that component. Incidents like functionality enhancement and/or support for modifications or maintenance of source code , application version enhancement etc.*

**4.2.1 Service Levels for Helpdesk/Maintenance calls for Integrated Management Application**

Incident Type	Response Time	Resolution Time
Critical	<=15 minutes from the call logged	<=2 hour from the call logged
Medium	<=45 minutes from the call logged	<=8 hour from the call logged
Low	<=60 minutes from the call logged	<=2 days from the call logged

#### 4.2.2 Technical Services Level for Integrated Management Application

The following Technical Service Levels shall be applicable for the purpose of “Go-live” of the application and the same shall be tested during the User Acceptance Testing.

S. No.	Service Metric Parameters	Baseline Metric	Lower Performance	Basis of Measurement
1	Average page opening/loading time	<5 sec	>7 sec	Measured over 128 kbps speed
2	Average response time for retrieval of information from server	<5 sec	5 to 10 sec	Server logs
3	Scanned Document Upload	<30 sec	30 to 40 sec	Considering average 5 scanned documents of 5 MB over 128 kbps speed
4	Number of concurrent users accessing the application	300	200	There shall be no degradation of performance

#### 4.3 Training and Change Management

Service Category	Service Level Title/ Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Hours of Support	Target Support Level	Minimum Service Level	Service Level Dependency	Increased Impact	Severity Weight
Training Satisfaction	Satisfaction level of the training sessions conducted by vendor for staff member and stakeholders	The feedback shall be received by the officials of HPSAMB after each training session. HPSAMB may	Feedback ratings received from training participants, no. of participants	Monthly	Monthly	No. of training hours delivered	Feedback ratings > 8	Feedback ratings > 7	Participant turnout/attendance  Availability of HPSAMB committed training facility	>10 trained participants being able to train other member of staff in 1 month period	20% of the person cost for that type of training



		decide to use the SLA in case insufficient training sessions are conducted by the SI vendor.	ts and no. of trainings delivered								
--	--	--	-----------------------------------	--	--	--	--	--	--	--	--

**Please note:**

- *Feedback rating of less than 6 by 25% of the trainees of the batch will be considered as Breach of Agreement in that case, HPSAMB reserves the right to terminate the agreement.*
- *The bidder will be solely responsible for conducting additional training sessions for staff members providing rating less than 6.*

**4.4 Calculating Penalties as Service Credits**

**4.4.1 Service Credits and Amount at Risk**

Service Credits are calculated as provided below, but the aggregate amount of such Service Credits paid or credited for any given month will not exceed the following limitations (“Amount at Risk”):

- For Service Level Failures and Service Credits within a Service Category, twelve percent (12%) of Fees for Services (excluding pass-through expenses and other expense reimbursements, if any) within that Service Category during the relevant month.
- For Service Level Failures in all Service Categories, ten percent (10%) of Fees for Services (excluding pass-through expenses and other expense reimbursements, if any) within all Service Categories during the relevant month.

Service Credit amounts in excess of the foregoing limitations do not carry forward into subsequent months or measurement periods. Service Credits will be applied to the invoice in the month immediately following the Service Level Failure(s) or paid in cash for the final month when the Agreement expires or terminates.

**4.4.1.1 Reporting of Service Levels and Credits**

Service Level performance and (if applicable) Service Credits are measured and reported monthly (or at other mutually agreed intervals) in Service Provider’s regular reports. The monthly reports shall also describe all failures to achieve Service Levels for the

month, reasons for any excused failures, results of root cause analyses, and corrective action proposed and taken to prevent recurrence of failures to meet Service Levels.

#### 4.4.1.2 Calculation of Service Credits

Service credits are calculated as follows: Amount at Risk for the relevant Service Category times the relevant Severity Weight. Service Credits for Increased Impact Failures shall be two hundred percent (200%) of amount otherwise payable for less severe Failures.

##### *Example*

Minimum Service Level Failure

Assume that:

- Service Provider misses the Minimum Service Level Application uptime.
- Failure is unexcused.
- Monthly Fees for the relevant Service Category total INR 100,000 (in case there is a consolidated monthly fee payable to the vendor, then the entire fee has to be broken up into various elements and divided for each SLA, without exceeding 100%)
- Amount at Risk for Service Category is INR 12,000.
- Severity Weight is 30%.

Credit Calculation:

- Service Credit = Amount at Risk times Severity Weight
- INR 3,600 INR 12,000 x 30%

Increased Impact Failure

Same assumptions as above, except

- Performance below “Increased Impact” level.

Credit Calculation:

- Increased Impact Service Credit = Amount at Risk times Severity Weight times 200%
- INR 7,200 - [INR 12,000 x 30%] x2

#### **4.4.2 Earn-Backs**

Service Credits paid for Service Level Failures related to Minimum Service Levels shall be refunded if Service Provider meets or exceeds the relevant Minimum Service Levels for the six (6) consecutive months (or other reporting periods) following the relevant Service Level Failure. Service Credits for Increased Impact Failures are not refundable in any circumstances.

#### **4.4.3 Unacceptable Service**

The following Service Level Failures or combinations of Service Level Failures constitute Unacceptable Service, and grounds for termination of the Agreement, in whole or in part, if Service Provider becomes obligated to pay the following amounts of Service Credits (whether or not such Credits are actually collected):

- One Hundred Percent (100%) of the Amount at Risk for any two Service Categories within any rolling period of twelve (12) months or less; or
- Seventy-five percent (75%) of the Amount at Risk for the Agreement as a whole within any rolling period of twelve (12) months or less

Identification of the foregoing circumstances as Unacceptable Service (and subsequent identification of any other circumstances as Unacceptable Service) are without prejudice to contentions that other or different circumstances, individual Service Level Failures, or combinations of Service Level Failures may also, by themselves or in combination with other facts or circumstances, constitute material breach of the Agreement, and grounds for termination.

#### **4.4.4 Continuous Improvement**

Minimum Service Levels and Increased Impact Service Levels will be modified at twelve (12) month intervals for each Service Category promptly following the anniversary of the date related Service Levels were first effective. Upon Government entity/department's request, (i) Minimum Service Levels may be increased to the average figure for the preceding six (6) months; and Increased Impact Service Levels may be increased to the second lowest measurement within the preceding six (6) months, provided that neither increase shall exceed five percent (5%) of the difference between one hundred percent (100%) and the relevant Minimum or Increased Impact Service Level then in effect.

#### **4.4.5 General Provisions**

##### **4.4.5.1 Maximum Service Credits**

The maximum amount payable as Service Credits for any single month shall not exceed the Amounts at Risk (but this limitation does not limit Government entity/department's right to recover damages for material breach, or other remedies, subject to the notice, cure periods, limitations of liability and other applicable provisions of the Agreement).

##### **4.4.5.2 Waivers**

Government entity/department may waive any Service Level Failure or Service Credit, but no such waiver shall be binding or effective unless given in writing, and no such waiver shall constitute a continuing waiver of similar or other such Service Level Failures or other breaches of the Agreement. Government entity/department may at any time direct future compliance with any waived requirement.