DETASAD

Detecon Al Saudia Co. Ltd.

Internet Services

Service Level and Operation Agreement

Tomorrow Starts Today

Deutsche Telekom · T-Systems · DETECON

Service Level and Operation Agreement

between

……..
……
……
Kingdom of Saudi Arabia

(hereinafter "Customer")

and

Detecon Al Saudia Co. Ltd.
P.O. Box 22135
Riyadh 11495
Kingdom of Saudi Arabia

(hereinafter "DETASAD", both together hereinafter "Contracting Parties")

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Content of this Agreement

This Service Level and Operation Agreement describe the scope of service for the operation of Internet communication services by DETASAD for the Customer. A description is also provided of measures to reduce any loss of use by the Customer to a minimum, as well as clear procedures for treatment of fault and customer support.

1 OPERATION, SUPERVISION, FAULT CLEARANCE AND MAINTENANCE

DETASAD operates for the Customer an own help desk center in Riyadh, hereinafter referred to as "UHD" (User Help Desk) which is responsible for the operation and maintenance of all DETASAD services.

DETASAD shall operate, supervise and maintain the DETASAD service in accordance with the service level agreed on in the performance term sheet (see 2.1.3) on the basis of a 24 hour service.

DETASAD shall inform the Customer regarding the maintenance windows which are necessary for the DETASAD Service as a rule at least one week prior to their commencement. During the periods of the maintenance windows, DETASAD may stop the operation of technical components. Maintenance work shall be carried out in consultation with the Customer and where possible during low traffic times.

2 PERFORMANCE INDICATORS FOR DETASAD SERVICES

2.1 Definitions

2.1.1 Standards

As far as nothing else was agreed between the Contracting Parties, the following ITU recommendations are determinative subject to the existing technical and operational capacities of DETASAD:

- ITU-T G.821 recommendations regarding “Error Second” (ES) and “Severely Error Second” (SES)
- ITU-T M.2100 recommendations regarding outage intensity and “Mean Time Between Outage”

2.1.2 Link

A link is defined as the sum of the technical components and the resources that are necessary in order to create a connection between the customer interface and the public Internet.

The quality of a link is expressed by the bit error rate (BER), which can be measured over a certain time period.

- **Accepted** - a link is deemed to be accepted if the BER does not exceed the committed BER for at least eight consecutive hours. (Such a measurement is for example a part of the Customer acceptance test.)
- **Unavailable** - a link is deemed to be unavailable if a transmission is not possible due to an event which has led to a loss of synchronization in a modem and/or which is based on the breakdown of technical components for which DETASAD is responsible. Such a measurement is part of the error reduction process with the help of which DETASAD and the Customer coordinate the analysis of a service problem.

2.1.3 Service Levels

Depending on the service levels specified in the service contract between the Contracting Parties, the parameters link availability (**LA**), reaction time, on site service times and start time are determined according to the following table:

Service Level	Link Availability (LA)	Reaction Time	On Site Service Times	Start Time
Standard	99 %	≤ 2 hours	Saturday to Wednesday except for holidays from 7:00 h to 16:30 h local time	≤ 6 hours in Riyadh, Jeddah, Dammam, ≤ 12 hours in all other locations
Enhanced	99.3 %	≤ 1 hours	Saturday to Thursday except for holidays from 7:00 h to 18:30 h local time	≤ 4 hours in Riyadh, Jeddah, Dammam, ≤ 10 hours in all other locations
Premium	99.5 % (will require HW redundancy at least at hub site)	≤ 30 minutes	Saturday to Thursday except for holidays from 7:00 h to 18:30 h local time	≤ 4 hours in Riyadh, Jeddah, Dammam, ≤ 10 hours in all other locations
			other times	≤ 10 hours

An extension of the on-site service time can be agreed on in exchange for additional compensation in a separate agreement.

2.1.4 Link Availability

The measurement is made on an annual basis. Availability measurement restarts at the start of each completed contract year.

The measurement of availability starts with the day of in-service. The month of in-service is deemed to be a full month.

The calculation of the availability is based on the fault reporting system of the UHD and takes into account the duration of all relevant events (also referred to as non-availability / down times, meaning the measured time period between the non-availability determined by or reported to the UHD and the reestablishment of the service). The measurement value is expressed as a percentage of the committed time interval (CTI). Downtimes due to planned scheduled maintenance (SMT) or for other reasons for which the Customer is responsible (e.g. no personnel at his premisses) are **not** included in the calculation of the non-availability with regard to the guaranteed service level.

The link availability (**LA**) results from the following formula:

LA = [Total CTI – Total SOT] / Total CTI %

The link availability is calculated on the basis of the following measurement categories:

- "Committed Time Interval" (CTI) defines the time period; the standard CTI amounts to **525,600 minutes** (=60*24*365 minutes)
- The number of minutes from the CTI, excluding the scheduled maintenance time (SMT), corresponds to the "Total Link Service Minutes" (**Total CTI)**

For each relevant event, the duration of the events (in minutes) constitutes the service outage time (SOT). The total duration (in minutes) of all relevant events constitutes the "failed link service minutes" (**Total SOT).**

2.1.5 Reaction Time

The reaction time is the time calculated between the earliest time at which a fault is reported by the Customer and the beginning of the first measure which is taken for removal of the fault by DETASAD.

2.1.6 On-Site Service

Fault clearance at the relevant locations shall as a rule take place during on-site service times.

If faults arise outside the "on-site service times", or if it is not possible to start with service during the on-site service times, the start time shall be interrupted. This means that the start times of the service technicians are extended by the hours which lie outside the "on-site service times".

2.1.7 Start Time

The start time is the time measured between the point in time at which the fault is registered or reported and the arrival of a DETASAD technician on site. The start time excludes travel time. If on the basis of external circumstances (e.g. availability of train or flight connections or street conditions, permit procurement) the trip cannot be commenced immediately, this will not be taken into account in the calculation of the start time. On-site visits for the removal of faults shall be carried out within the agreed service times pursuant to 2.1.3.

3 RESPONSIBILITIES UPON BREAKDOWN

The following table shows possible grounds for breakdowns with an attribution of the corresponding responsibility and states whether the downtime is taken into account in the calculation of the non-availability of the agreed service level.

Cause of Event	Responsible	Calculated
Failure of technical components on remote	DETASAD	yes
Failure of power supply on remote	Customer	no
Failure of technical components at IP backbone	DETASAD	yes
Maintenance work and/or test of the transmission lines	DETASAD	no
Force majeure	N/A	no

4 FAULT CLEARANCE AND ESCALATION

4.1 Fault Clearance

In the event of a failure of a transmission line, the fault clearance shall occur by the staff of the UHD according to the following stages:

Stage 1: In the event of an identified failure of a technical component, the UHD shall access the system via its NMS systems and shall carry out corresponding measurements. Faults which are identified shall then either be removed

- by the reconfiguration carried out through a remote
- by the restart of the system carried out through a remote.

Stage 2: If through the measures described in Stage 1 the fault cannot be cleared, a service team of the UHD or an authorized partner company shall go to the location, shall determine the fault-causing component and shall exchange these against replacement components. Depending on the Agreement, the Customer shall provide these components at the location or the procurement shall be organized by the service team of the UHD.

4.2 Fault Category and Escalation Level

DETASAD shall clear faults in the service in accordance with the service levels agreed on in the performance term sheets. Faults shall be pursued from their detection until their clearance, while they are allocated to a category with a respectively fixed escalation procedure in the UHD depending on the degree and scope of the problem. The classification shall be made by the employees of UHD.

DETASAD shall inform the Customer (at most two yet to be named persons/places) in regular intervals regarding the progress in the clearance of the faults. If the agreed reaction or start time cannot be

kept, a fault shall be escalated to a higher level in the UHD management.

The fault shall be classified with regard to its severity. Handling of all faults will go through 4 escalations levels until the fault is finally cleared. Promotion to next escalation level is done automatically if fault clearance exceeds determinate periods of time.

Severity Codes

SC 1: Total failure of the IP backbone or at least 5 links of the Customer are affected

SC 2: Partial failure of the IP backbone or at least 2 links are affected

SC 3: Disturbances on IP backbone (e.g. degradation of IP throughput) but no interruption

SC 4: Failure on single link or remote

SC 5: Disturbances on single link or remote (e.g. degradation of IP throughput) but no interruption

SC 6: Deficiency but transmission not affected

Escalation Levels

EL 1: Hotline

EL 2: Network Operations Engineer

EL 3: Head of Network Operations Center

EL 4: Director of Business Unit ICT

After identifying the fault and determining its severity the fault handling will go through the following escalation levels as long as the fault has not been cleared.

EL vs. SC	EL 1	EL 2	EL 3	EL 4
SC 1	5 min	30 min	1h	3h
SC 2	5 min	30 min	2h	6h
SC 3	15 min	1h	4h	12h
SC 4	30 min	3h	12h	1d
SC 5	3h	1d	2d	4d
SC 6	1d	3d	7d	14d

DETASAD shall inform the Customer in regular intervals regarding the progress in the clearance of the faults as well as regarding the escalation level reached.

In order to contact our User Helpdesk / Hotline please use the following numbers / email address:

- NOC operator: Riyadh-2485253 (24h/365d)
- NOC Fax: Riyadh-2485339
- NOC email: vsat-helpdesk@detasad.com.sa

4.3 Duties of the Customer for the Clearance of the Fault

The Customer agrees to support the service staff of the UHD with its best efforts in the finding and clearance of the fault. It shall in particular provide to the employees secure access to the installations at any time. The Customer shall ensure a sufficient energy supply (USP systems) at all times. Further cooperation duties are indicated in the STC.

5 CREDIT NOTES

In the event that the annual network availability noted in clause 2.1.3. is not achieved, a credit note will be issued from DETASAD to the Customer for the transmission lines that were not available in the amount of:

- 1/30 of the monthly recurring charge for the respective transmission line / remote for each day that starts with the transmission line / remote not available (according to the definition of availability).