

Recommended Content for Contracts with CSPs

Service Delivery Targets/Limits

Contracts should:

- Provide CSP telecommunication services 24/7.
- Provide telephone and email notifications to facilities affected by outages in real-time.
- Include an agreement for the CSP to convey the data received and transmitted by their network reliably across all interfaces.
- Include identified Key Performance Indicators (KPIs) and descriptions as to how they are to be utilized. They should include:
 - Availability - 99.99%
 - The % of hours of operation where the data link service is available, over the entire area in which service is provided.
 - Reliability - 99.9%
 - The delivery of a message within X seconds. (suggest 40 seconds)
 - Continuity of Service - X minute maximum outage (suggest 6 minutes)
 - The time between service failure and the restoration of the service.
 - Integrity - 10^{-5}
 - The bit error rate is better than 1 in 10^5 .
 - Capacity - XXX flights (suggest 1000)
 - Supported simultaneously as logged on and delivering XXX messages per minute. (suggest 400)
- Include requirements that messages shall be delivered as:
 - 95% within 4s & 99% within 8s for Up Links
 - 95% within 4s & 99% within 8s for Down Links

Reporting

- Data should be available to ANSPs in real time on a portal.
- Reports should be compiled and provided to ANSPs on a monthly basis, shorter timeline if required or requested. They should include:
 - Technical performance,
 - Communication delays,
 - Interruptions, outages, discrepancies, or
 - Any other pertinent information identified for the previous month.
 - Any resolutions and/or progress to achieve resolution.
- Outages should be reported in detail and should include statistics and metrics as part of the Monthly Status report.
- There should be a quarterly "Rolling Report" to track trends and identify declines in service.
- A report should be sent detailing when any KPIs fall below the set threshold with details of the issue.

Attachment B – Recommended minimum contract requirements

- When service is lost or interrupted and then restored, a detailed report should be provided of the investigation and resolution of the issue. This should include evidence of updates and/or changes to the system that will ensure the issue will not be repeated.

Contract Status Review

- A provision for CSPs or ANSP to call a review at any time.
- Periodic reviews should be conducted, at least annually, and should always include a detailed assessment to ensure points of contact (POC) details are current.

Communication/Notification of Details for Planned/Unplanned Outages

- For both planned or unplanned outages, the CSP should provide:
 - A 24-hour Customer Support Helpdesk with email and telephone contacts.
 - An Escalation Process, including the applicable hierarchy of responsibility/accountability.
 - Published Service Impacting Advisories
 - Monthly Traffic & Performance Reports
- Planned outages should be notified to facilities as soon as possible in writing and should include extent of services effected by the outage and metrics on the length/frequency of occurrence.
- If service delivery to a facility is compromised or at risk, the appropriate POC at the affected facility should be notified via telephone call and electronic message as soon as possible, but within fifteen (15) minutes of occurrence unless otherwise specified.
- As soon as available after an unplanned outage, metrics should be provided by telephone and email addressing:
 - The remaining availability and characteristics of the system in the failure,
 - The percentage of services lost in the failure,
 - A list categorizing the reasons for the failure,
 - A description of the present failure:
 - by population segments,
 - planned maintenance and
 - projected resolution timeline.
 - Any other pertinent or requested information.
- For either planned or unplanned outages, restoration should be reported upon resolution of occurrence.

Escalations

Levels of Service should be established with thresholds and definitions included.

These levels could include:

- Normal

Attachment B – Recommended minimum contract requirements

- Service is available throughout the Required Service Area, within agreed performance levels, and fully operational.
- Reduced Resilience
 - Network service is available throughout the Service Area, but with one or more single point(s) of failure in the end-to-end communication path.
- Degraded
 - Service Area partially has no coverage during a scheduled service window.
- Not Operational
 - Service is unavailable throughout the Required Service Area during a scheduled service window.
- Service not Scheduled
 - Service is not required to be available due to a planned outage.

OR

- Non-Operational
 - Outage, with response required between 0- 4 hours.
- Degraded
 - Severe degradation, with time to recover up to 8 hours.
- Reduced
 - Minor degradation or loss of non-critical service, response in 72 hours.
- No Impact
 - Minor degradation on non-business function, response in 7 days.

Consequences

A scale of consequences should be established with levels of reduced services based on KPIs, definitions and means of calculating and reporting outcomes.

Some examples include:

- A reduction of the monthly service charge is applicable if the service is degraded between various availability/month reported, bands are 99.99% to 99.5%, 99.49% to 99%, and <99%.
- If the service is discontinuous for XX hours in a reporting period, the monthly charge is waived.

Other Pertinent Data

Possibly a short explanation of service or flow of service information.