TECH 3361-2

SERVICE LEVEL AGREEMENT FOR MEDIA TRANSPORT SERVICES

GLOSSARY OF TERMS

Geneva
September 2014
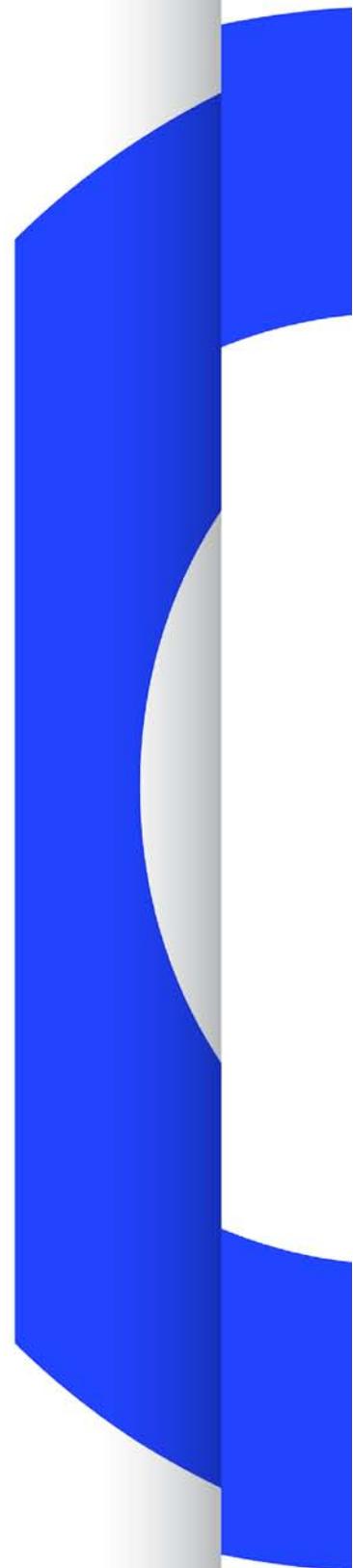
Service Level Agreement for Media Transport Services

Glossary of terms

EBU Committee	First Issued	Revised	Re-issued
FNS-SLA	2014		

Keywords: SLA, Service Level Agreement, BMO, Broadcast Media Organisation, Media Transport, Glossary.

This document shall be read in conjunction with EBU Tech 3361-1 where 'Service Level Agreement for Media Transport Services - High Level Guidelines' has been specified. The purpose of this document is to help Broadcast Media Organisations and Service Providers to using the same technical language when preparing a SLA. This glossary can be reused as a basis for common vocabulary in a Service Level Agreement, however please note that it is common for pre-prepared SLA documents to be used as a starting-point for negotiation by Service Providers, and these documents may contain subtle differences in meaning for the words described here. In this case, this is the definitions from the pre-prepared SLA that has to be taken into account.

Anomaly	The smallest discrepancy which can be observed between the actual and desired characteristics. The occurrence of a single Anomaly does not constitute an interruption in the ability to perform a required function.
Availability [Target]	Also often referred as **Service Availability**. It is the ability of a *Service* to perform its agreed function when required. It is the usual way for a *NSP* to indicate the level of reliability of the *Service* provided. It is normally measured as a percentage e.g., 99.9%.
Backup Link	A second *Link* delivered to a single *CPE* router for the protection of the traffic path in the event of the *Primary Link* failing.
Booking System	A system that allows *Users* to book required network capacity for a predefined period. This system can either be online, or arranged via the *Service Desk*.
Change Freeze	A period when scheduled work which affects *Services* or increases the risk of a *Fault* is suspended to reduce the risk of side effects of the work. Repair may still occur as normal.
Content	Information that provides value for *Users* and Consumers. In a broadcast media context, *Content* is typically audio, video and associated data (for consumption and for system control).
[Mission] Critical Times	Refers to the time period before and during prime-time that is high profile or a high audience event such as the Olympics, a Royal

	wedding, etc.
Customer	Someone who buys *Services*. The *Customer* of a *BMO* is a person or group that defines and agrees the *Service Level Objectives*. As opposed to the *User*, the *Customer* does not use the *Service* on a regular basis. For example: the CIO from the *BMO* signs the contract and *SLA* with the representatives from the *NSP*, but will not personally switch *Content* on a leased line.
Customer Commit Date	The date that the *Service* will be available to the *Customer* as set out in a written notice form by the *Service Provider*.
Customer-Premises Equipment, or Customer-Provided Equipment (CPE)	All equipment, systems, cables and facilities located at a *Customer* premises that enable it to access the *Service*.
Data Transport Service	A *Service* that is based on physical, data link or network, which are layers 1 to 3 of the *OSI* model.
Defect (or incident)	When the density of *Anomalies* has reached a level where the ability to perform a required function has been interrupted.
Disaster Recovery Plan	How a *NSP* and *BMO* ensure that appropriate means of handling emergency situations are in place.
Diversity	A *Resiliency* feature where a *Service* is made up of two or more *Paths* which run parallel to each other. The *Paths* normally take separate routes, however there may be instances where the *Paths* converge for reasons such as geography, cost or a *Failure*. The same *Content* is typically sent down each *Path*, ensuring minimal disturbance to the *Service* should a *Failure* occur.
End-to-end Service	Generally describes a *Service* between *Customer* premises (including any third party *Services* that may have been provisioned) to connect the *Service Provider's* network to the *Customer's* location(s).
Escalation	Obtaining additional resources when these are needed to meet *Service Level Targets* or *Customer* expectations. *Escalation* can be functional, such as transferring a *Fault*, problem or change to a technical team with a higher level of expertise. It can also be hierarchical, such as informing or involving more senior levels of management.
Failure	The state of affairs if a prioritized *Defect* can't be resolved in the contractually specified target time. *Failure* usually triggers *Penalties* and can lead to contract termination.
Fault	Inability of a function to perform a required action.
Fault Fix Time (or Time to Restore)	The time period between the *Fault Report Time* and its resolution.
Fault Report Time	The time of the day when the *Fault* is declared. This can be defined as either the time when the *Fault* is detected by a management system or the time when the customer reports the Fault to the *Service Provider*.
Fixed Contribution Networks	Dedicated *Links* and/or *Networks* used by *Media Organisations* for *Live*, or *Near Live*, transmission of *Content* from fixed locations such as regional studios or sports grounds to the *Media Organisation's* main studios, editing and/or production suites.
Force Majeure Event	Any delay or failure to perform as required by this *SLA* as a result of any causes or conditions which are beyond such party's reasonable control and which such party is unable to overcome by the exercise of reasonable diligence, including but not limited to

	Acts of God, sabotage, war, natural disaster, etc.
Information Technology Infrastructure Library (ITIL)	A set of practices for IT *Service* management (ITSM) that focuses on aligning IT *Services* with the needs of business.
International Telecommunication Union - Telecommunication Standardization Sector (ITU-T)	A United Nations specialized agency coordinating standards for telecommunications.
Jitter	Generally the time or phase variation in a signal at a measurement point. When applied to packet networks, it is used as a statistical measure for variation in packet arrival time, i.e. **Packet Delay Variation (PDV)**.
Link	A transport entity connecting two adjacent *Nodes*. It could be virtual or physical. It could be done over fibre, satellite, microwave, etc.
Loss of Resilience	Refers to when some of the redundant equipment or *Link* is lost, and as a consequence the *Service* cannot be switched to an alternative route.
Loss of Service	Loss or corruption of the BMO's signals by the network, with no working *Backup Link* available. *Loss of Service* is also known as Unavailability.
Mean Time Between Failure (MTBF)	The predicted elapsed time between inherent failures of a *System* during operation.
Mean Time To Restore (MTTR)	The average time that a *Service* will take to recover from any *Failure*.
[Broadcast] Media Organisation (BMO)	An organization engaged in disseminating media *Content* to the general public through radio, television, cable television or other media of mass (broadcast) communication. A *BMO* is often called a **Broadcaster**.
Media Service, sometimes termed **Managed Service**	A *Service* where the *NSP* provides the media interface at both end *Nodes* and is therefore responsible for media output quality, regardless of the underlying transport technology.
Network Operating Centre (NOC)	One or more locations from which network monitoring and control is exercised over a telecommunication network by a *Network Service Provider*.
Node	A connection point, a redistribution point or a communication endpoint.
Non Real-Time (NRT) Service	*Services* that have no requirement for constant delay, such as file transfer of *Content*.
Notice	Notification or warning of *Service* disruption to provide the *Customer* time to instigate alternative arrangements.
Occasional Use (OU)	A *Service* on a pay-per-usage basis, e.g. for limited duration one-off transmissions.
Open Systems Interconnection (OSI) Model	A widely accepted prescription for characterising and standardising the functions of a communications system in terms of abstraction layers. Similar communication functions are grouped into logical layers and each layer serves the layer above (higher numbers) and is served by the layer below (lower numbers).
Outage	The time period when a *Fault* is occurring. It does not necessarily imply a *Failure*.
Path	A known physical sequence of *Links* sending signals between

	location A and location B. **Parenting** of a *Service*, e.g., if you have dual instances of a *Service* at a *Customer* site, parenting can either be "Single" (i.e. both connected to the same network device) or "Dual" (i.e. each *Service* is connected to a different device).
Penalties	Events usually triggered by *Failures*. Such penalties can be defined as a pecuniary refund of a percentage of the cost of the *Contract* or some other non-financial compensation.
Penalty Scheme	The arrangements describing how *Penalties* will be applied.
Permanent Service	A long-term *Contract* provided by a *NSP*.
Planned Work	Repair or maintenance work agreed between *NSP* and *BMO*.
Post Incident Review	A debriefing carried out after a major *Defect* or *Failure* has occurred. This can happen alongside routine network performance meetings between *BMO* and *NSP* or it may be separately convened, as appropriate.
Primary Link	A *Link* delivered to a site that provides the preferred *Path* for traffic. A *Primary Link* may be supplemented with either a *Resilient Link* or a *Backup Link*.
Private Network	A self-contained network that can only be accessed by an organisation and authorized third parties. This is a dedicated *Network Service* that *Media Organisations* can purchase and negotiate an *SLA* with the *Service Provider*.
(Re-route) Protection	A Resiliency feature where a network *Service* is equipped with a mechanism to re-route traffic in the event of *Failure* of a *Link*. As such a re-route would depend on capacity being available in the network when the *Failure* occurs it is a less guaranteed form of *Resiliency* than *Diversity*.
Protocol	In the field of telecommunications it is a system of digital message formats and the rules for exchanging those messages between *Nodes* and devices.
[Network] [Service] Provider (NSP)	An organization that develops and maintains a network infrastructure to provide *Data Transport Services* over a large geographic area.
Public Network	A general purpose network without controls on usage, so it may suffer from congestion and may not include *Service* guarantees. The Internet is a *Public Network*.
Quality of Service (QoS)	In the field of telecommunications, *QoS* refers to achieved *Service* quality and comprises requirements on all the technical aspects of a *Service*. In the field of packet-switched networks, the traffic engineering term refers to resource reservation control mechanisms rather than the achieved *Service* quality. Quality of Service The ability to provide different priority to different applications, *Users*, or data flows, or to guarantee a certain level of performance to a data flow.
Real-Time (RT) Service	*Content* (such as media or control) delivery with a constant delay. A live production requires a *Real-Time Service* with a minimal and controlled delay.
Redundancy	A means of providing *Resiliency* where a *Link* or item of equipment used in a *Service* is provided with one or more identical spares or *Standby Items* that are set up to take over in the event of *Failure*.
Resiliency	A *Service* equipped with features to increase its tolerance to degradation. Such features include *Redundancy*, *Diversity* and

	Separacy, together with other mechanisms such as Forward Error Correction or error concealment. Note that the word 'protection' is commonly used interchangeably with the word 'resiliency'.
Satellite News Gathering (SNG) vehicle	A vehicle used by a *BMO* to originate a live outside broadcast (television) contribution, typically a news report.
Separacy	A special case of *Diversity* where the *Paths* are physically separated from each other by a defined minimum distance, and where this separation is maintained by the *NSP* during the life of the *Service*. *Separacy* is typically more costly than *Diversity*.
Service Access Point (SAP)	The physical interface where the *Service* is handed over to the *Customer*. It defines the border of responsibility for the installation, maintenance of wiring and equipment. It is also the point where measurement of *Service* quality is carried out. This also known as the Demarcation Point, Interaction Point, Service Delivery Point or Point of Presence (PoP).
Service Contract	The contractual elements of the purchased *Service* specifying details such as cost, legal clauses and signatory parties. It may also include functional specifications such as *Service* descriptions, interfaces, speed, *Protocols* and static parameters.
Service Desk	Single point of contact available during the operation of the *Service*. The primary purpose of a *Service Desk* includes Fault Management and provisioning. 'Help Desk', 'Call Centre', 'Operation and Maintenance Center (OMC)' are synonyms. For many *NSPs* the *Service Desk* function is part of the *NOC*. Also BMOs may have their *Service Desk*, as an interface with NSPs and/or with their customers.
Service Level Agreement (SLA)	Part of a *Service Contract* negotiated between the *Customer* and the *Service Provider* for a *Service*. It defines in quantitative terms the target levels of quality that a *Service* must meet. It also defines how these targets shall be monitored and what procedures shall be instigated to mitigate problems when a *Service* is disrupted. Other operational aspects such as delivery conditions and the *Penalties* to be applied in case of *Failures* also form part of a *SLA*.
Service Level Objective (SLO)	Agreed targets made of measureable parameters selected to achieve the most important business requirements.
Standby Item	A spare item of equipment. The spare may be 'hot' (carrying a service duplicate), 'warm' (powered-up and ready to take over service), or 'cold' (unpowered but available if required).
Unprotected	Any *Service* that does not include a *Re-route Protection* scheme that would allow traffic to be re-routed in the event of a *Link* cut or equipment *Failure*.
User	A person or entity that uses the *Service* on a regular basis. *Users* are distinguishable from *Customers*, as some *Customers* do not use the *Service* directly.
Voice over IP (VoIP)	A method of transporting voice traffic across a packet network.