Service Description

Enterprise SIP

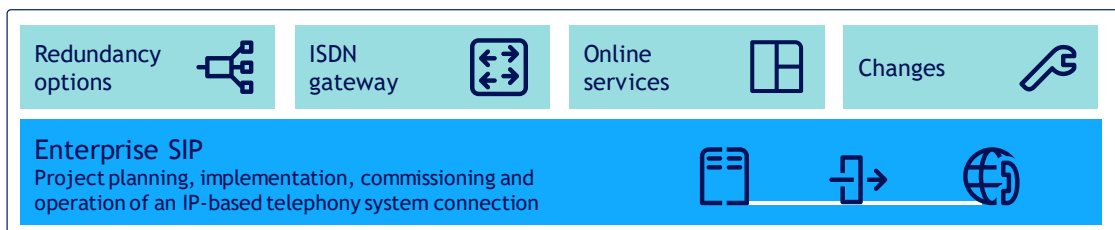# Contents

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1 Service Overview

The Enterprise SIP (Session Initiation Protocol) service, hereinafter referred to as «Service», offers access via suitable data networks to the public telephony system with central network functions.

Enterprise SIP is used to connect the customer's existing private branch exchange (PBX) to the public switched telephone network. Enterprise SIP is only offered for locations in Switzerland and only via a Swisscom IP-based WAN connection. At the customer site, the connection is made either directly via the VoIP protocol (SIP trunking) to an Ethernet interface or via an ISDN media gateway provided using an ISDN-based interface. The service with the corresponding telephone numbers and approved functions is provided at this interface.

The standard variant of Enterprise SIP contains in the service variant «Standard» an eSBC (enterprise session border controller) as well as a Swisscom IP access. With the variant «Unbundled» (without eSBC and without the additionally required Swisscom IP access), the service is provided centrally at a logical VoIP interface (SIP trunking). The connection for «Unbundled» is carried out via a separate Swisscom IP Access or via a Swisscom data centre. The service variant «WAN» also includes an eSBC, but Swisscom IP Access is a prerequisite and is not part of Enterprise SIP. The «Cloud» service variant allows the use of the breakout of a cloud telephony provider. Currently supported: Direct Routing Services of Microsoft Teams Phone System.

Redundancy options	ISDN gateway	Online services	Changes

Enterprise SIP
Project planning, implementation, commissioning and operation of an IP-based telephony system connection

2 Definitions

2.1 Service Access Interface Point (SAIP)

The Service Access Interface Point (SAIP) is the contractually agreed, geographical and/or logical point at which a service is delivered to the service user. It is also the point at which a service is monitored and the service levels provided are documented.

The following purely schematic diagrams serve to illustrate the services and service components of Enterprise SIP in the various service variants with a dedicated Swisscom IP access, via either an existing Swisscom IP access or a cloud connection to cloud telephony providers.

- With a dedicated Swisscom IP access (service variant Enterprise SIP Standard):
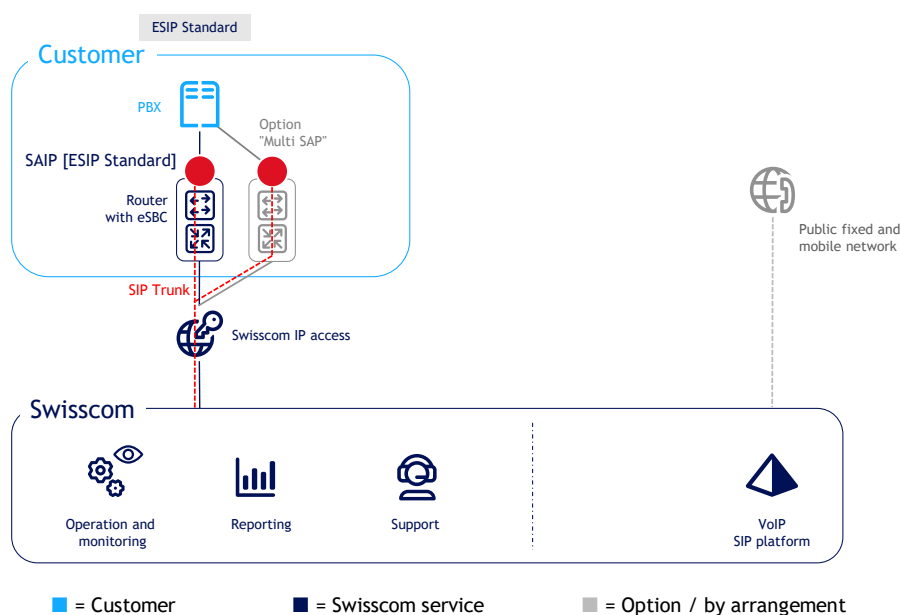
- Via an existing Swisscom IP Access (service variants Enterprise SIP WAN and Enterprise SIP Unbundled) or as a connection to a cloud telephony provider (service variant Enterprise SIP Cloud):
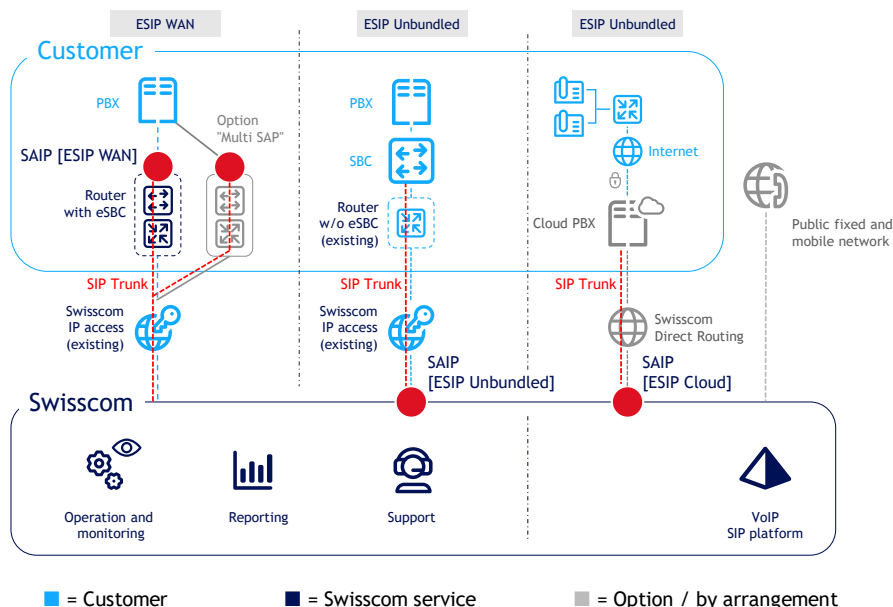
2.2 Service-specific definitions

Term	Description
Basic service level category	Fault analysis and processing are reactive and triggered by faults reported by the customer. The availability of a service is given as a non-guaranteed reference value. This is an average that is based on empirical values. No service level report is provided.
ESIP	Enterprise SIP
Premium service level category	Swisscom actively monitors the availability of the service, so fault analysis and processing are initiated in response to network management alarms. The customer may also report faults. Swisscom indicates the parameters for the measurement of service quality defined in this Service Level Agreement per SAIP and applies the applicable compensation regulations in the event of non-compliance with them. Service availability at the SAIP is documented and provided in a service level report.
Use of the term "Service Access Point" (SAP)	The term "Service Access Point" (SAP) is used synonymously with the term "Service Access Interface Point" (SAIP) in relation to the Enterprise SIP service.

3 Variants and options

Standard variant	Incl. Swisscom IP access	Via an existing Swisscom IP access		
	Enterprise SIP Standard [incl. eSBC]	Enterprise SIP WAN [incl. eSBC]	Enterprise SIP Unbundled [without eSBC]	Enterprise SIP Cloud [incl. virtual eSBC]
SIP trunk connection	●	●	●	●
Swisscom IP access included	●	–	–	–
eSBC	●	●	–	–
Standard emergency number routing	●	●	●	●
Dynamic emergency number routing E112	●	●	●	–
ODS only User	●	●	●	●

Options				
ISDN media gateway	○	–	–	–
Redirection scenarios	○	○	○	○
API for redirection scenarios	○	○	○	○
Multi SAP	○	○	–	–
Multi PBX	●	●	–	–
Multi server	●	●	○	–
Trunk Failover	○	○	○	–
Advanced Monitoring	○	○	○	○
Channel Split	○	○	○	○
Bursting	○	○	○	○
Antispoofing	○	○	○	○
Call Filter	○	○	○	○

Standard variant	Incl. Swisscom IP access	Via an existing Swisscom IP access		
	Enterprise SIP Standard [incl. eSBC]	Enterprise SIP WAN [incl. eSBC]	Enterprise SIP Unbundled [without eSBC]	Enterprise SIP Cloud [incl. virtual eSBC]
Blocking outgoing calls	●	●	●	●
Shared Connectivity	−	−	●	−
Individual emergency number routing	○	○	○	○
SNMP Read Access	○	−	−	−
Traffic measurements	○	○	○	○
Service requests (minor and major changes)	○	○	○	○

● = **Standard** (included in the price)   ● = **Optional** (included in the price)   ○ = For an additional fee
− = Not available

The following table shows what combinations of service variants to service level variants (see section 5.1) are possible:

Service level variants	Incl. Swisscom IP access	Via an existing Swisscom IP access		
	Enterprise SIP Standard [incl. eSBC]	Enterprise SIP WAN [incl. eSBC]	Enterprise SIP Unbundled [without eSBC]	Enterprise SIP Cloud [incl. virtual eSBC]
Basic				
▪ SDT8	✓	✓	✓	✓
Premium				
▪ SDT1	✓	✓	✓	✓
▪ SDT1 Light	✓	x	x	x
▪ SDT8	✓	✓	✓	✓

✓ = Combination supported)   x = Combination not supported

3.1 Definitions of the service variants

The service is provided in the following service variants:

Service variant	Definition
Enterprise SIP Standard	Enterprise SIP Standard is an SIP trunk connection via a suitable and dedicated Swisscom IP connection for the transfer of voice channels. The SAIP forms the LAN interface of the router at the customer site. The service includes access to the public switched telephone network via the VoIP platform as well as the Swisscom IP access.
Enterprise SIP WAN and Enterprise SIP Unbundled	Enterprise SIP WAN and Unbundled require a suitable Swisscom IP connection agreed via a separate contract at a minimum of one customer site; this must have the bandwidth defined in the Enterprise SIP annex and prioritised for voice traffic. With Enterprise SIP WAN, the SAIP is the LAN interface of the router at the customer site.

Service variant	Definition
	With Enterprise SIP Unbundled, the SAIP is on Swisscom's SIP core platform. A dedicated session border controller (SBC) at the customer site is connected to Swisscom's SIP core directly via an SIP trunk. Only SBCs certified by Swisscom may be used. Communications systems on the customer's side (e.g. PBX and SBC) as well as the Swisscom IP access are not part of the service in these variants.
Enterprise SIP Cloud	Enterprise SIP Cloud provides access to the public telephony network from the environment of a cloud telephony provider such as Microsoft Teams. Access by the end user to the cloud telephony provider is not part of the service and must be provided by the customer. The SAIP is located at the interface of the virtual SBC in the Swisscom SIP Core. This is connected to the cloud telephony provider via the Internet.

3.2 Definition of the service specifications and options

Specification/Option	Definition
SIP Trunk connection	A SIP trunk connection enables access to the public telephone network via an IP based data network.
Swisscom IP Access included	A Swisscom IP access at the customer site is used to establish the SIP trunk connection.
eSBC	The eSBC is a network component which enables interoperability between the customer's communications system (PBX) and the Swisscom SIP infrastructure.The eSBC can also be configured as a virtualised component.
Standard emergency number routing	Freely definable location allocation for every single telephone number to ensure the correct termination of emergency calls. Configurable by the customer in the customer portal, incl. the recording of new locations.
Dynamic emergency number routing E112	Identification of the location using a location ID inserted in the SIP header by the customer's PBX. This requires support for this function by the customer's PBX as well as maintenance of locations and IP addresses allocation by the customer.
ODS only User	This user role allows a My Swisscom Business user of the customer to configure only the redirection scenarios.
ISDN media gateway	To use the Enterprise SIP functions at an interface based on a time division multiplex (TDM), ISDN media gateways (PRI and BRI) are installed and maintained by Swisscom at the relevant customer site in Switzerland. The ISDN media gateway option, in conjunction with a TDM-PBX, permits only a limited selection of existing ISDN connection functionalities. The list of ISDN functionalities available at the connection can be obtained separately on request. There is no entitlement to the use of a particular ISDN media gateway.
Redirection scenarios	Redirection of incoming calls to random, pre-defined individual destination numbers.
API for redirection scenarios	The redirection scenarios can be activated by the customer's service management system using this API, thus independently of any maintenance window of My Swisscom Business.
Multi SAP	Termination of an SIP trunk service at multiple locations (SAP). All connections are active and can be used simultaneously.
Multi PBX	Connection of multiple PBX systems or fax servers at one location. Calls are allocated by the customer in the customer portal based on telephone numbers.

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Specification/Option	Definition
Multi server	Switching mechanisms for calls from a primary communications system to a secondary system or further systems. These can be defined and activated by the customer in the customer portal.
Trunk Failover	In addition to the primary voice system, phone numbers can be assigned to a 2nd voice system from another SIP trunk. If the primary voice system cannot be reached, calls are automatically forwarded to the failover trunk. The failover trunk must be in the same SIP trunk group as the primary trunk.
Advanced Monitoring	The telephony connection between the customer voice system and the public telephone network is proactively and continuously monitored for the correct behaviour of the SIP signalling. In the event of a fault, measures are taken to resolve the problem.
Channel Split	For each SIP trunk, a limit can be set for incoming and outgoing calls to determine the maximum number of voice channels that can be used simultaneously. This ensures reachability in both directions.
Bursting	"Bursting" is possible on SAIPs with SDT1 availability, i.e. twice the number of contractually agreed voice channels can be used. Bursting is permitted for a total of max. 1 hour and 4 events per month. The prerequisite for bursting is that both connections are available without restriction in the case of a redundant connection. No service guarantees are applicable for the Bursting option.
Anti Spoofing	Anrufe von Dritten, welche missbräuchlich eine Rufnummer des Kunden als Caller ID verwenden und welche in den Netzwerken von Swisscom als solche erkannt werden, werden dem Angerufenen mit der Caller ID "unavailable" (anstelle der missbräuchlich verwendeten Rufnummer des Kunden) signalisiert. The anti-poofing option can be configured separately for each number block.
Call Filter	Undesired calls, such as anonymous calls, calls with the caller ID "unavailable", advertising calls recognized by Swisscom and calls from up to 200 caller numbers configured by the customer as unwanted are rejected.
Blocking outgoing calls	Outgoing national and international calls can be specifically blocked by means of lists, which can be configured in part.
Shared Connectivity	Under the "Shared Connectivity" variant of Enterprise SIP, the logical connection of the customer to the Swisscom SIP core platform is provided via the SBC of an Application Service Provider (abbreviated to "ASP", a third party or Swisscom), with which the customer concludes an independent contract for the use of the SBC (incl. connectivity). Provision of services to the customer is dependent on the ASP connecting its SBC to the Swisscom SIP core platform via a Swisscom IP connection. The SAIP is on the Swisscom SIP Core Platform. In this case, the Service Desk is provided by the ASP: if faults occur, the customer contacts its ASP only, which also receives feedback from Swisscom on them and communicates it to the customer.
Individual emergency number routing	Individual phone numbers or blocks can be assigned to sites per Enterprise SIP Service or for several together. If the customer maintains the locations himself via Selfcare, this option is free of charge. If the customer submits the location data for registration to Swisscom, one-off and monthly fees will be charged.
SNMP Read Access	With SNMP Read Access the customer gets SNMP read access to the customer router.
Traffic measurements	The customer receives a one-off report about the utilisation of the Enterprise SIP connection for a definable period.

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Specification/Option	Definition
Service requests: minor and major changes	Minor changes are easy modifications which can be made without on-site deployment or adjustments to hardware. Major changes are modifications which require more than a minor change. It may be necessary to perform an additional feasibility study on a case-by-case basis. Swisscom performs minor and major changes and documents them during and after implementation for an additional charge.

4 Service provision and responsibilities

Non-recurring services

Activities (S = Swisscom/C = Customer)	S	C
Provision of the service		
1. Coordination of the activities on the part of Swisscom and service documentation	✔	
2. Provision of the SIP signal at the Ethernet port of the router / at the SAIP	✔	
3. Provision of the ISDN signal at the BRI/PRI port of the ISDN media gateway on the router / at the SAIP (with the corresponding option)	✔	
4. With Enterprise SIP via an existing Swisscom IP connection, this must have been delivered and prepared for voice data traffic		✔
5. Complete number portability forms and check whether the information is correct		✔
6. Porting in accordance with number portability forms	✔	
7. Provisioning of installations at the customer site (e.g.: in-house cabling, racks, mains supply)		✔
8. Provision of a technical expert with decision-making authority for installations and deinstallations on the customer's premises		✔
9. Correct configuration and connection of the customer's installations (e.g. PBX, SBC) to the SAIP in question		✔
10. Enter and promptly update correct contacts for fault reports in the customer's My Swisscom Business Account. Under the "Shared Connectivity" variant, these are the ASP contacts		✔
11. Performance and confirmation of commissioning tests with the test numbers supplied by Swisscom (see Section 7.3)		✔
12. Performance of a switching test in collaboration with the Swisscom engineer for redundant connections (see section 7.4)		✔
13. Acceptance		✔

Recurring services

Activities (S = Swisscom/C = Customer)	S	C
Standard services		
1. Operation and maintenance of the Enterprise SIP service	✔	
2. Service Desk, except where Shared Connectivity is via a third party (ASP)	✔	
3. Incident management in accordance with the agreed service levels	✔	
4. Immediate and sufficiently detailed report of faults to the Swisscom Service Desk		✔
5. Configuration required for the service in the customer's systems (e.g. PBX, SBC) in accordance with Swisscom's specifications		✔

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5 Service Level and Service Level Reporting

5.1 Service Levels

The following service levels generally relate to the agreed Support Time. Definitions of terms (Operation Time, Support Time, Availability, Process, Security and Continuity) and the description of the measurement procedures and reporting are set out in the other contract elements.

The following service levels are available for the service variants (see section 3). If more than one service level is available for a variant, the required service level is selected in the individual contract.

In the case of the service level variant "SDT 1 light", the access lines are in non-physically separated channels. In the event of an incident that would not have resulted in the outage of the service had the lines been separate, the provisions for the Premium service level category SDT 8 apply.

Service levels & target values			Enterprise SIP		
			SDT1	SDT1 light	SDT8
Operation Time					
Operation Time	Mo-Su	00:00-24:00	●	●	●
Provider Maintenance Window	PMW-DC	PMW Data Center Swisscom	●	●	●
	PMW-S	Su 02:00-06:00			
Support Time					
Support Time	Mo-Fr	07:00-18:00	●	●	●
	Mo-Sa	06:00-22:00	○	○	○
	Mo-Su	00:00-24:00	○	○	○
Fault Acceptance	Mo-Su	00:00-24:00	●	●	●
Availability					
Service Availability	99.0 %		—	—	●
	99.9 %		●	●	—
Service Outages	2		—	—	●
	1		●	●	—
Process					
Service Fulfillment					
Ready for Service	Committed		●	●	●
Security					
	Basic (ITSLB)		●	●	●
Continuity					
ICT Service Continuity (ICTSC)	RTO Best Effort | RPO Best Effort		●	●	●

● = Standard (included in the price)   ○ = For an additional fee   — = Not Available

Notes:

- Planned service interruptions within the Provider Maintenance Window, during probably longer than 3 minutes and all extraordinary maintenance windows will be announced to the customer at least 5 days in advance.

5.2 Service Level Reporting

Within the scope of the service, the customer receives the following standard service level reports.

Service Level Report		Basic service level category	Premium service level category	Reporting period
Availability				
Service Availability	Availability in % of the service at the SAIP during the measurement period	—	●	Monthly
Service Outages	Number	—	●	Monthly

● = Standard (included in the price)   — = Not Available

The customer is provided with the service level report on a monthly basis in My Swisscom Business[1].

5.3 Compensation regulation

SLA basic value

The SLA basic value is the value contractually agreed for each SAIP that serves as the basis for calculating compensation in the event that the agreed service quality is not achieved. The basis for the penalty calculations are the monthly recurring net costs of the Enterprise SIP service.

An SLA violation exists if the customer no longer has access to the public switched telephone network due to an SAIP fault (complete system outage).

The following rules apply to compensation:

- Compensation is based on the Premium service level values listed in the service level reports.
- Compensation is calculated and reported per calendar month.
- The month to which the compensation is allocated is dependent on the date on which the corresponding incident ticket is closed.
- Compensation is paid in the form of credit on the invoice in the month following the end of the reporting period.
- All other forms of compensation or remuneration are excluded.

Calculation of compensation:

Compensation in % of the SLA basic value for failure to meet the service level targets

Number of service level targets not met	Compensation in % of the basic value
0	0%
1	50%
≥2	100%

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6 Billing and quantity report

6.1 Billing

Services are billed retroactively for the previous month.

The following details are shown on the bill or are relevant for billing purposes:

Price item	Unit/period	Minimum purchase/ invoicing	Maximum purchase/ invoicing
Customer profile	Quantity/month	1	1
Location	Quantity/month	1	Unlimited
Services	At cost	1	Unlimited

6.2 Quantity report

The following inventory information can be viewed online at any time in the Enterprise SIP My Swisscom Business application:

- Locations
- Emergency addresses
- Redirection scenarios
- Telephone numbers
- SIP trunks
- Locks
- Voice systems

7 Special provisions / requirements

7.1 General

The commissioning, decommissioning or modification of paid services, and therefore the start or end of the billing for them, is confirmed to the customer by delivery note. If the customer does not object to the delivery note in writing and citing reasons within 10 working days of the dispatch date, the delivery note is deemed to have been accepted.

If it emerges during commissioning of a location or at a later date that the line for the location in question cannot carry the contractually agreed number of voice channels or that the service is no longer available due to reasons not attributable to Swisscom, Swisscom shall attempt to rectify the problem within 28 working days or seek an alternative solution. The customer is not obliged to pay for a non-operational location during this period.

If Swisscom fails to rectify the problem during the above period or to find an alternative solution that is acceptable to the customer, the contractual obligations on the part of Swisscom shall be considered null and void with immediate effect at the location in question. In this case, the customer shall have neither entitlements under the Service Level Agreement (SLA) nor the right to any other forms of compensation. Furthermore, the remaining contractual provisions shall continue to apply irrespective of the corresponding event if the customer cannot prove that without the location in question the remainder of the contract is no longer of use.

All networks and network elements used for the VoIP traffic and not provided by Swisscom must meet the conditions for VoIP traffic and indication. In particular, data traffic must be allowed on the following ports and firewalls configured accordingly: RTP, RTCP Traffic, SIP Trunk 5060 UDP/TCP. If necessary, Swisscom shall provide a corresponding configuration guide.

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7.2 Service elements installed at the customer site (CPE)

In the absence of any agreement to the contrary, Swisscom (or partners working on Swisscom's behalf) shall be and remain the owner of the installation and equipment (Enterprise SIP CPE).

The customer shall take such measures and precautions within its control as may be required in order to protect the property of Swisscom or its subcontractors, and undertakes not to remove any components relating to the applicable services from the specific location at which they have been installed. Any relocation of such equipment to another location shall require the prior written consent of Swisscom. Any expenses incurred in connection with the relocation of components without Swisscom's prior consent shall be charged to the customer.

The customer may not carry out any modifications, repairs, maintenance work or other interventions to or on components and/or configuration data for the applicable services. In addition, the customer may only use components for the agreed purposes.

Swisscom may replace any of the hardware or software in use at any time with components that have the same level of functionality or higher provided that this is expedient for operation of the service.

To avoid or remedy hazardous situations or faults caused by the customer or any third parties, Swisscom has the right to take measures and to oblige the customer to take necessary precautions at the customer site at its own cost.

7.3 Commissioning tests

Swisscom shall provide the Customer up to 100 test numbers that can be used in conjunction with a Swisscom test document to carry out the commissioning tests. In the event of erroneous tests, the Customer must contact the Swisscom engineer. The productive numbers shall only be migrated once the Customer has confirmed that the tests have been successful and the duly signed test document has been submitted.

During the test phase of a maximum of three months, the Enterprise SIP connection is free of charge. Invoices shall start being sent out for the Enterprise SIP connection once the commissioning test has been successfully completed or after three months at the latest. Calls made using test numbers shall be billed in accordance with Section 7.7.

7.4 Function control in the case of redundant connections

During commissioning, Swisscom shall carry out a function control of redundant connections and shall check the technical function of switching to the secondary connection in the event of an outage of the primary connection as well as switching back. In particular, Swisscom shall verify the correct routing of inbound calls by the SIP core (first step of the function control). At the time of commissioning of the redundant connection by the customer, the customer shall be responsible for also checking its network and server configurations for outage of the primary connection and switching to the secondary connection together with the Swisscom engineer (second step of the function control). The customer shall be responsible for the correct configuration of its network and server components from the commissioning date. In the event of non-performance or delayed performance of the second step of the function control, the customer shall bear sole responsibility for the consequences resulting from faulty switching. The customer shall have a maximum period of two (2) months from the ready-for-service (RFS) date to subsequently carry out this second step of the function control with the Swisscom engineer without being subject to an additional surcharge. Once this period has expired, the customer shall be billed at cost at the applicable standard hourly rates for the work involved in a function control. The customer shall provide reasonable notice of its intention to carry out the function control and agree a date for carrying out the function control with Swisscom.

7.5 Telephone numbers

For the duration of the contract, the customer expressly and irrevocably authorises Swisscom to port the telephone numbers agreed in the Enterprise SIP annex to Swisscom. It shall implement all measures necessary for successful porting unprompted, in full, in good time and free of charge.

7.6 Telephony service provider

With fixed-line telephony provided based on the Internet Protocol - as opposed to conventional fixed-line telephony - carrier preselection is not available (the customer cannot specify a telecommunications service provider other than Swisscom).

7.7 Voice traffic

The generated traffic volume is charged either according to the tariffs in a separate Flexnet-Contract agreed between customer and Swisscom, the tariffs published on Swisscom's website or the channel flat tariff.

7.8 Voice quality

The subjective acoustic perception of speech transmitted via VoIP is comparable with the voice quality of traditional (TDM) telephony if suitable data networks are used and depending on the coding and compression applied.

7.9 Emergency calls

The handling of emergency calls is regulated in a separate annex to the service contract.

7.10 Service options

The functions available with Enterprise SIP are defined in corresponding service options. The current service options can be changed by Swisscom at any time and without prior announcement. Information on reductions to functions is generally provided with a lead time of three months.

Swisscom also reserves the right to modify the technical platform (retaining at least equivalent service options).

The availability of functions can be restricted or even excluded by the customer's own PBX (private branch exchange) connected. Details of which PBX is supported with which service option can be found in the relevant documentation on the Swisscom website.

7.11 Data protection regulation

7.11.1 Data processing by third parties in Switzerland or abroad

This service is regulated by telecommunications law. The data transmitted by the Customer in connection with the use of the service are subject to telecommunications secrecy. There is no contracted data processing within the meaning of Swiss and European data protection law.

If the transmission of customer data serves to fulfil a contractual obligation (e.g. roaming/international calls, linking customer sites abroad or providing information via third-party network infrastructures, namely also cloud services or the use of Internet services), the customer is responsible for observing and complying with the applicable data protection provisions. The customer is aware that, from the point of handover of a transmission process to another network infrastructure (interconnection), that infrastructure's provider or operator is exclusively subject to the law applicable to it.