

# Direct Internet Access DIA

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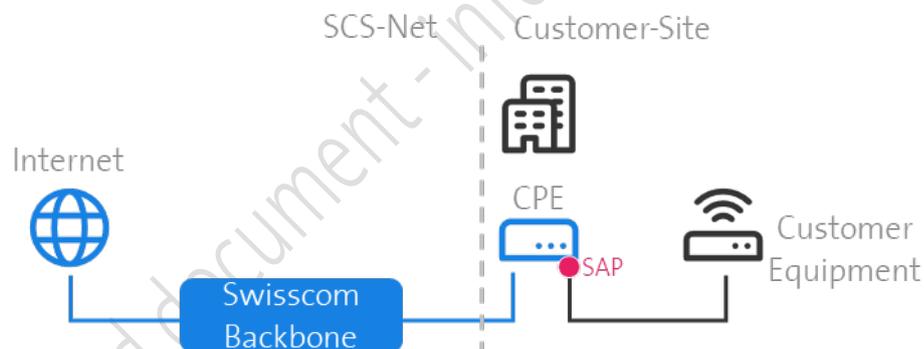
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## 1 Introduction

- 1.1 This document describes the services offered by Swisscom in relation to the Direct Internet Access (DIA) product.
- 1.2 This document also governs the DIA procedures between the ISP and Swisscom used for ordering, production and operation.
- 1.3 This document sets the prices for the services offered by Swisscom in connection with the DIA product. Prices are listed in Swiss francs (CHF) without value-added tax (VAT).
- 1.4 Billing takes place monthly together with the data invoice. The modalities according to the Accounting Handbook in the Data Contract apply.

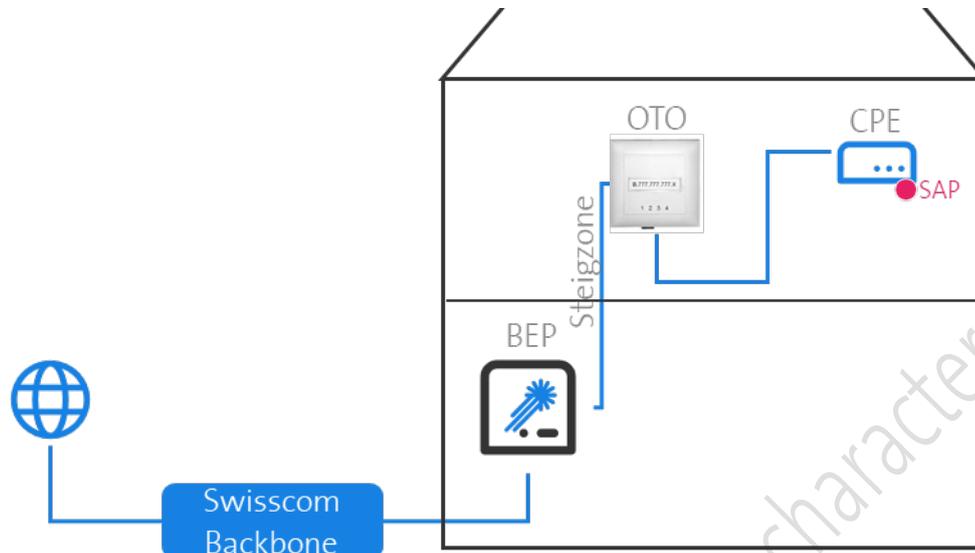
## 2 Service overview DIA

- 2.1 DIA is provided via the Swisscom network and via the end customer's internet access, which they obtain from Swisscom. DIA is available over copper or optical fibre (FTTH), depending on Swisscom's network availability.
- 2.2 The handover point (SAP) is located on the LAN-side Ethernet port of the Customer Premises Equipment (CPE).
- 2.3 The service always includes an IP address from Swisscom. This can be ordered either dynamically or, depending on the CPE configuration and subject to surcharge, statically.
- 2.4 To meet the different availability requirements, Swisscom DIA offers **Basic Light, Silver Light and Premium Silver** quality parameters.



## 3 Prerequisites and limitations

- 3.1 The prerequisite for ordering DIA is an existing Swisscom copper or optical fibre connection.
- 3.2 If optical fibre is available all the way to the OTO, the order is executed immediately.
- 3.3 If optical fibre is available uninterrupted to the BEP (and not up to the OTO), access to the riser shaft is automatically ordered in the control centre, in parallel to the transfer. An order is only possible if in-house connection is permitted (In House Allowed "YES").



- 3.4 All values given are max profiles, the defined bandwidths are therefore not guaranteed. If a max profile is defined, the line can upstream and downstream at the respective highest possible bandwidths. The maximum achievable transfer rate depends on the total length of the connection between the Swisscom exchange and the end customer's location, as well as the quality of the existing infrastructure.
- 3.5 The ISP is responsible for the legal and contractual use of its services. The following in particular are considered illegal or contrary to the contract:
- > Improper mass advertising (spam)
  - > Harassment or disturbance of third parties
  - > Obstruction of third parties in the use of telecommunications services
  - > Hacking (penetration attempts etc.), spying on other internet users or their data and fraudulent attacks (phishing)
  - > Damage or endangerment of the telecommunications infrastructure or the equipment of third parties using harmful software
  - > Transmission of or making accessible illegal content
- If any signs of illegal use or use that is in breach of contract exist, the ISP is obliged to inform Swisscom of this use.
- 3.6 If use deviates considerably from normal use (see section 3.5) or if there are signs of behaviour contrary to the law or the contract, Swisscom may hold the ISP liable for illegal and non-contractual use, change, restrict or cancel its service provision without advance notice and without compensation, cancel the contract without notice and without compensation and, if necessary, claim damages and demand release from third-party claims. The same shall apply in the event of incorrect or incomplete information given by the ISP upon contract conclusion or when placing an order.

**4 Technical service attributes CPE**

4.1 Swisscom uses Centro Business 2.0 (CB2.0) as the CPE.



**Technical Specifications CB 2.0**

Mains adapter	Input: 100 - 240V 1.2A Max Output: 12V AC 3.5A
Router input	12V AC 3.5A Max
Consumption (watts)	Fibre 7.8 W VDSL 9.2 W
Sleep mode (inactive)	< 0.06 W
Ethernet (RJ45) switch:	4 x 10/100/1,000 Mbit/s with autosensing
Mass of the device WxDxH/ Weight	71 x 183 x 258 mm 0.7 kg (W: without stand 42mm)
NAT	Yes
PPP pass-through connections	Yes
	4x Ethernet (RJ45) Switch 1x fibre (P2P 1Gbps) <b>1 x xgsPON (1 Gbps)</b> 1x DSL signal connection 2x FXS ports (ATA) 2x ISDN port (ITA) 2x USB 1&2

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4.2 The following CPE configurations are available to the ISP when ordering:

**CPE configurations**

Standard operation -

DMZ	Dokumentation: <a href="https://documents.swisscom.com/product/1000260-Connectivity_Geraete_/Documents/Spezifikationen/Centro_Business2_Mail_Webserver_SecurityGateway_in_der_DMZ_betreiben-de.pdf">https://documents.swisscom.com/product/1000260-Connectivity_Geraete_/Documents/Spezifikationen/Centro_Business2_Mail_Webserver_SecurityGateway_in_der_DMZ_betreiben-de.pdf</a>
IP pass-through	Documentntation: <a href="https://documents.swisscom.com/product/1000260-Connectivity_Geraete_/Documents/Spezifikationen/Centro_Business2_IP_Passthrough-de.pdf">https://documents.swisscom.com/product/1000260-Connectivity_Geraete_/Documents/Spezifikationen/Centro_Business2_IP_Passthrough-de.pdf</a>
PPP pass-through	Dokumentation: <a href="https://documents.swisscom.com/product/1000260-Connectivity_Geraete_/Documents/Spezifikationen/Centro_Business2_PPPE_Passthrough-de.pdf">https://documents.swisscom.com/product/1000260-Connectivity_Geraete_/Documents/Spezifikationen/Centro_Business2_PPPE_Passthrough-de.pdf</a>

4.3 The ISP can adapt or change the CPE configurations listed above at any time in the Wholesale Portal.

**5 Service fulfilment**

**5.1 Availability check and order**

- 5.1.1 To check availability, the ISP submits a request via the Wholesale Portal.
- 5.1.2 The ISP receives in Wholesale Portal the available technologies or maximum available bandwidth as well as the price for the selection made. The ISP places the order based on this information.
- 5.1.3 The order will be carried out on the date requested by the customer. Activation dates can be a maximum of three months in the future. Earliest activation depending on development status.
- 5.1.4 The given guideline values are only valid if sufficient resources are available. In the event of extensions, the Activation date will be postponed by the corresponding extension time. The order status is available for the ISP at any time under Orders in the Wholesale Portal.
- 5.1.5 The ISP finds the line identification in its order under Orders in the Wholesale Portal.
- 5.1.6 Unless the ISP revokes its order within 24 hours of ordering it in the Wholesale Portal, this is deemed to have been concluded as an individual agreement on the corresponding DIA.
- 5.1.7 The ISP is responsible for the ordinary termination of any existing services (e.g. TAL/ALO, BBCS, internet supplied by a third-party provider, etc.) to ensure the proper takeover of an existing connection.
- 5.1.8 Swisscom sends the ISP installation instructions with the interconnection points (SAP).
- 5.1.9 The ISP is responsible for ensuring that the appropriate infrastructure (ISP infrastructure in areas under the ISP's responsibility, such as rooms and in-house installation) is available in a timely manner.
- 5.1.10 Commissioning shall be carried out by the ISP. Optional installation by Swisscom can be ordered on request.

## 5.2 Commissioning

- 5.2.1 Swisscom sends the CPE and an installation instruction directly to the **delivery address** noted by the ISP when the order was placed.
- 5.2.2 If DIA has been ordered on FTTH and an in-house installation is required for commissioning, Swisscom shall carry this out – subject to subsection 3.3 – within four weeks of receipt of the order. Swisscom shall notify the ISP that the in-house installation has been completed. The completion date of DIA is based on the date of the in-house connection.
- 5.2.3 If the DIA runs over copper, the ISP is responsible for the installation, maintenance and operation of the building access (in-house installation) from the HP. Should there be no copper installation, Swisscom shall ensure the functionality of DIA on the house connection (HP).
- 5.2.4 If a location cannot be commissioned on the agreed commissioning date, the Service Agreement under the Data Contract shall govern any resulting claims of the ISP and/or Swisscom.
- 5.2.5 The ISP must put the connection into operation within 30 days of the commissioning date. In the event of later commissioning, a subsequent CPE configuration from Swisscom is necessary, whereby the claims of the ISP in accordance with the Service Agreement under the Data Contract are no longer applicable until the initial commissioning has been completed.
- 5.2.6 Following commissioning of the service, Swisscom will carry out a line test to check functionality and also the ability to achieve the quality parameters. Swisscom will determine the measurement duration and measurement procedure in line with recognised technical criteria.
- 5.2.7 Swisscom shall document the individual agreement concerning the respective service and make it available to the ISP via the Wholesale Portal following commissioning of the service. This includes the following information, among other things:
- Service description with addresses and all required specifications
  - Identification of the service
  - Actual commissioning date
  - Contract term, if a contract term longer than the minimum duration of one year is agreed upon
  - Recurring and one-time charges

## 5.3 Change of location:

- 5.3.1 A change of location is treated as a cancellation and new order.
- 5.3.2 The commissioning time for a change of location is the same as for an order.

## 6 Options

- 6.1 Optionally, up to 64 fixed IPv4 addresses can be ordered per connection.
- 6.2 Fixed IPv6 addresses are also available as an ordering option.
- 6.3 The CPE offers four different CPE configurations for scheduling internet traffic and the fixed public IP addresses of the internet connection on a private router or security gateway.
- 6.4 If the option "On-site installation" is selected when ordering, Swisscom shall have the on-site installation carried out by a Swisscom technician. In this case, the CPE is brought directly to the site by the technician. The date for the installation is determined by the ISP when the order is placed.
- 6.5 The verification of a possible fiber optic extension within the FTTS Turf may be ordered when ordering in the Wholesale Portal. Swisscom then clarifies with the landlord whether it is possible to connect the building with fibre optics FTTS/xgsPON. The contact details of the landlord must therefore be provided when ordering.  
After the consent of the landlord, the order processing starts and the service activation takes place, which takes about 14-16 weeks. The ISP will be informed of the progress of the work in the event of status changes.  
If the landlord does not agree to connect the building with fibre, the DIA order is automatically cancelled in the Wholesale Portal.

## 7 Service assurance

- 7.1 Service assurance services include, in particular, fault acceptance and fault repair.
- 7.2 The ISP shall only contact Swisscom once it has confirmed that the fault is not in its device or in-house installation.
- 7.3 An order for fault repair can be placed with Swisscom 24 hours a day, seven days a week. Fault acceptance takes place via the Wholesale Portal.
- 7.4 Swisscom's responsibility for fault repair extends up to the handover point (SAP). Fault reporting by the ISP outside of Swisscom's sphere of responsibility is subject to a charge.
- 7.5 SLA Basic Light does not contain service monitoring. The fault repair takes place reactively after fault acceptance and is carried out by the ISP.
- 7.6 SLA **Silver Light and** Premium Silver includes proactive service monitoring. Fault repair is carried out proactively by Swisscom.
- 7.7 If the ISP detects a fault that is within Swisscom's sphere of responsibility, the ISP must immediately notify Swisscom of this fault.

## 8 Fault reporting and rectification

### 8.1 Conduct in the event of faults

- 8.1.1 The ISP shall only contact Swisscom once it has confirmed that the fault (in the case of SLA Basic Light) is not in its equipment or in-house installation. If, following receipt and review of the fault notification, it can be proven that the fault lies within the area of responsibility of the ISP, the ISP must reimburse Swisscom for any costs incurred.

- 8.1.2 Swisscom is authorised to take measures to avoid or rectify faults, and to demand that the ISP takes appropriate precautions at its location. If the fault cannot be rectified as such, the ISP must change its installation or the installation of its customers or suspend operation at its expense.
- 8.1.3 The ISP will provide Swisscom employees with access to its premises within the scope of service delivery and activities for fault avoidance and faults rectification. If Swisscom is not granted access and the fault therefore cannot be rectified in good time, all guarantee claims shall lapse.
- 8.1.4 If an event is identified as a fault, Swisscom will open a trouble ticket. The trouble ticket is updated on an ongoing basis with information on the measures completed in relation to this event. With regard to the trouble tickets, a differentiation is made between faults determined by Swisscom and those identified by the ISP.

## **8.2 Faults identified by Swisscom (for Premium services with CPE)**

- 8.2.1 If the management system of Swisscom identifies a fault, a trouble ticket shall be created for DIA services with Premium quality of service and CPE. Directly after opening the trouble ticket, fault repair measures are initiated and a confirmation is sent to the ISP, if possible within the time defined in the service agreement.

## **8.3 Faults identified by the ISP**

- 8.3.1 If an end customer of the ISP identifies a fault, they contact the “End User Helpdesk” of the ISP. After reviewing the relevance of the fault, an authorised employee of the “End User Helpdesk” of the ISP reports the fault to Swisscom. A trouble ticket is opened as soon as the event is reported. The authorised points of contact are the persons named in the points of contact list. Fault repair measures are initiated as soon as the trouble ticket is opened, and the ISP is notified as soon as possible.

## **8.4 Service restoration**

- 8.4.1 Once the trouble ticket has been created and the confirmation has been sent to the ISP, Swisscom shall work actively on fault repair and provide the ISP with regular status updates.

## **9 Maintenance: Coordinated Maintenance Window (CMW)**

- 9.1 To ensure quality can be maintained, periodic network maintenance is required. Reconfigurations, hardware and software changes shall be carried out during the CMW whenever possible.  
**The CMW is always on a Sunday between 2.00 a.m. and 6.00 a.m.**
- 9.2 If the planned interruption is expected to last more than three minutes, Swisscom shall inform the affected ISPs at least ten working days beforehand.
- 9.3 If the planned interruption is expected to be less than or exactly three minutes, the work shall still be carried out during the CMW, but the ISP will not be informed about it.
- 9.4 In special cases, work may be needed outside the CMW, about which the ISP will also be informed at least ten days in advance.
- 9.5 Swisscom reserves the right to adjust the CMW. Swisscom shall inform the ISP in good time about any such changes.

## 10 Quality parameters DIA

10.1 The availability services provided in connection with DIA are regulated in this Addendum in addition to the Data Contract (in particular the Service Agreement). The overview for MIA concerning the differences between the quality parameters can be found in the table below:

Parameter	Basic Light	Silver Light	Premium Silver
<b>Access type</b>	Single Access	Single Access	Single Access
<b>End-to-end VLAN availability (annually)</b>	≥ 99.50% CPE typical value, not guaranteed	≥ 99.80% CPE guaranteed	≥ 99.95% CPE guaranteed
<b>Recovery time (TTR) per fault</b>	≤ 10 hours, typical value, not guaranteed	≤ 8 hours, guaranteed	≤ 4 hours, guaranteed
<b>Max. number of faults (annually)</b>	≤ 8 faults, typical value, not guaranteed	≤ 6 faults guaranteed	≤ 4 faults guaranteed
<b>Fault analysis</b>	24 hours / 365 days	7x24 hours	24 hours / 365 days
<b>Fault repair</b>	Mon-Fri 8 a.m. to 5 p.m.	Mo-So 7-22 hours	24 hours / 365 days
<b>Service monitoring</b>	Reactive	Proactive	Proactive
<b>Quality of service reports</b>	None	Yes	Yes
<b>Guarantee claim</b>	None	Yes	Yes

10.2 The same guarantee claims apply For DIA Premium Silver as for Carrier Ethernet Service CES Premium pursuant to the Data Contract (Service Agreement).

## 11 One-time charges

### 11.1 General information

- 11.1.1 One-time prices are charged for rectifying faults outside Swisscom's sphere of responsibility. Prices on request depending on outlay.
- 11.1.2 For the provision of DIA and service adjustments, one-time charges are added to the invoice. These one-time charges are dependent on the specific business case in question.
- 11.1.3 If multiple adjustments are made to a service at the same time (combination of multiple adjustments), these are added to the invoice as if they were a new installation.

### 11.2 Provision and service adjustments (access)

Description	Price per case (CHF)
Add single-access - Commissioning DIA access	250
On-site installation by Swisscom - On-site installation (OSI)	450
Bandwidth Downgrade	250
Bandwidth Upgrade	Free

### 11.3 Adjusting quality of service

Description	Price per case (CHF)
Downgrade (e.g. Premium Silver → Basic-Light)	100% of the installation price of the new quality of service
Upgrade (e.g. Basic → Premium Silver)	Free

### 11.4 Fault rectification

Description	Price per case (CHF)
Fault rectification outlay for faults outside of Swisscom's area of responsibility	800
Fault rectification hindered by the behaviour of the ISP or its customers	800
Disproportionately high costs for fault repair, caused by the ISP or its customers	acc. to outlay.

### 11.5 Change or cancellation of order prior to commissioning

Description	Price per case (CHF)
Change or cancellation of the order 24h after the ordering (according to the individual agreement)	50% of the installation price

### 11.6 Cancellation following commissioning and prior to expiry of the minimum contract term

11.6.1 If a DIA is cancelled following commissioning and prior to expiry of the minimum contract term or contractually agreed term (utilisation period), the ISP shall owe Swisscom the following:

Agreed utilisation period	Percent age	Definition
1 year (standard)	40%	of the monthly recurring charge for the rest of the remaining duration
2 years	35%	of the monthly recurring charge for the rest of the remaining duration
3 years	30%	of the monthly recurring charge for the rest of the remaining duration
4 years	25%	of the monthly recurring charge for the rest of the remaining duration
5 years and more	20%	of the monthly recurring charge for the rest of the remaining duration



12 Recurring charges

12.1 DIA Basic Light with CPE

Zone				
Symmetrical	Asymmetrical	Top-City	City	Regio
10/10		50	50	50
50/50	50/10	75	75	75
100/100	100/20	110	110	110
200/200	200/50	120	120	120
500/500	400/80	130	130	130
1000/1000		160	160	160

12.2 DIA Silver Light with CPE

Zone				
Symmetrisch	Asymmetrisch	Top-City	City	Regio
10/10		120	120	120
50/50	50/10	155	155	155
100/100	100/20	160	160	160
200/200	200/50	175	175	175
500/500	400/80	200	200	200
1000/1000		225	225	225

12.3 DIA Premium Silver with CPE

Zone				
Symmetrical	Asymmetrical	Top-City	City	Regio
10/10		225	225	225
50/50	50/10	375	375	375
100/100	100/20	450	450	450
200/200	200/50	510	510	510
500/500	400/80	638	638	638
1000/1000		750	750	750

#### 12.4 Fixed IP addresses (options)

IP addresses	Usable addresses	MRC
1	00	CHF 10
4	1	CHF 20
8	5	CHF 30
16	13	CHF 45
32	29	CHF 65
64	61	CHF 85

### 13 Discounts

#### 13.1 General information

13.1.1 Through additional agreements, such as for longer contract terms, the ISP can benefit from additional discounts by using the following two discount options:

- Duration discount
- Quantity discount

13.1.2 All discounts will be agreed for each individual service.

#### 13.2 Duration discount

13.2.1 The ISP can benefit from duration discounts if the service contractual commitment is made for a period longer than the minimum contract term of one year. The contract term discount is determined during the order process based on the utilisation period entered.

13.2.2 An overview of the duration discounts is given in table below.

Contract duration (utilisation period)	Discount Percentage (%)	
	MRC	OTC
2 years	5	50
3 years	10	100
4 years	15	100
5 years	20	100

13.2.3 The duration discount is applied to the gross price (MRC and OTC) of each service.

13.2.4 The agreed contract term may increase at any time. If the contract term is extended, it starts again from the beginning, which means the previous utilisation period is not taken into consideration. Thus, the conditions to be adjusted (higher duration discount) are applied from the date of the contract term adjustment.



**13.3 Quantity discount**

- 13.3.1 Swisscom provides an additional quantity discount on block or project orders.
- 13.3.2 The quantity discount is calculated by the total number of DIA orders placed at once.
- 13.3.3 The quantity discount is applied to the gross price (MRC) of each service.
- 13.3.4 An overview of the quantity discount is provided in table below.

Quantities (DIA)	Discount Percentage (%)
11-50 services	5
51-100 services	10

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