

Service Description

1&1 Glasfaser Connect

1&1 Glasfaser Premium



V200 2144/0922/01. Subject to change
Valid from 09/01/2022 – Page 1/5

Translation from German original - in case of doubt the German version prevails.

1 General Information

In line with the technical and operational means, 1&1 Versatel offers the 1&1 Glasfaser product – hereinafter also 'Product' – with the following product variants:

- 1&1 Glasfaser Connect 300
- 1&1 Glasfaser Connect 600
- 1&1 Glasfaser Connect 1000
- 1&1 Glasfaser Premium 300
- 1&1 Glasfaser Premium 600
- 1&1 Glasfaser Premium 1000

With the Voice and Internet services, the product allows the transmission of voice and data over the 1&1 Versatel landline network. A requirement to use the product to the full extent is the deployment of the Customer Premises Equipment (CPE) procured from 1&1 Versatel, with the default settings configured by 1&1 Versatel. A CPE provided by 1&1 Versatel at the customer location for the duration of the contract remains the property of 1&1 Versatel. On the LAN side, the CPE has an Ethernet interface for delivery of the Internet service, and, in accordance with IEEE 802.3, with one of the following physical interface types depending on the bandwidth:

- Interface: 100/1000BaseT (in acc. with IEEE 802.3)
- Connector type: RJ 45

1.1 CPE Management (not with 1&1 Glasfaser Connect 300)

1&1 Versatel takes care of CPE management. Only 1&1 Versatel may change CPE configurations. The network connection is monitored up to the WAN port of the CPE.

2 Internet service

With the product, 1&1 Versatel provides the customer with an access to the 1&1 Versatel IP backbone for the transmission of IP packets to and from the Internet. Data volume is billed at a flat rate.

2.1 Service bandwidth

The bandwidth of the Internet service varies depending on the commissioned product variant.

Product variant	maximum net bandwidth		net bandwidth usually available		minimum net bandwidth	
	Download	Upload	Download	Upload	Download	Upload
gross bandwidth (download/upload)						
1&1 Glasfaser Connect 300 (300/100 MBit/s)	287 Mbit/s	96 Mbit/s	270 Mbit/s	90 Mbit/s	258 Mbit/s	86 Mbit/s
1&1 Glasfaser Connect 600 (600/200 MBit/s)	574 Mbit/s	191 Mbit/s	540 Mbit/s	180 Mbit/s	517 Mbit/s	172 Mbit/s
1&1 Glasfaser Connect 1000 (1000/300 MBit/s)	957 Mbit/s	287 Mbit/s	900 Mbit/s	270 Mbit/s	862 Mbit/s	258 Mbit/s
1&1 Glasfaser Premium 300 (300/300 MBit/s)	287 Mbit/s	287 Mbit/s	270 Mbit/s	270 Mbit/s	258 Mbit/s	258 Mbit/s
1&1 Glasfaser Premium 600 (600/600 MBit/s)	574 Mbit/s	574 Mbit/s	540 Mbit/s	540 Mbit/s	517 Mbit/s	517 Mbit/s
1&1 Glasfaser Premium 1000 (1000/1000 MBit/s)	957 Mbit/s	957 Mbit/s	900 Mbit/s	900 Mbit/s	862 Mbit/s	862 Mbit/s

By default, the product comes with a bandwidth that falls within the minimum and maximum download/upload speeds listed in the table above. Customers have no claim to a certain bandwidth within the respective bandwidth range.

The transmission speed reached by the product during use significantly depends on, among others, the following factors:

- the transmission speed of the accessed server of the service or content provider in question

- the network capacity utilisation of the overall Internet backbone, i.e. the core Internet infrastructure
- the end devices used by the customer (Internet modem, router, computer incl. software used)

1&1 Versatel does not restrict volumes on the landline network. However, in actual use, speeds or other service quality parameters can have the following effects on Internet access services and, above all, the use of content, applications, and services:

Significant deviations between the actual Internet access speed and the advertised speeds might result in services with high bandwidth consumption (e.g. streaming music or video, video chats, receiving or sending larger files) only being available with restrictions. Downloads might take longer to complete as well.

Other services – which are not Internet access services – over which the end user concludes a contract, have the following effects on the Internet access services provided to the end user:

With the product variants 1&1 Glasfaser Connect 1000 as well as 1&1 Glasfaser Premium 1000, the speed that can be reached for Internet services is reduced for the voice service in acc. with Section 4.5. Service bandwidth.

Any traffic management measures applied by 1&1 Versatel will not affect the quality of the Internet access services, the privacy of end users, or the protection of the personal data of end users.

Note: You can determine the bandwidth available on your line by carrying out a broad-band measurement (<https://breitbandmessung.de>). The basis for broad-band measurements is the Regulation to Promote Transparency on the Telecommunications Market (TK-Transparenzverordnung – TKTransparenzV). This measurement tool is provided by the German Federal Network Agency and does not fall under the scope of performance of this product. Various technical factors influence the results determined by the broad-band measurement. These include server performance and utilisation of the broad-band measurement tool, performance of the Internet router and your end device, performance of your browser, as well as technical performance factors (e.g. cable length, number of participants on a bundle of lines). 1&1 Versatel has no influence on these factors.

2.1.1 Upgrade options

The following bandwidth upgrades are offered as upgrade options:

Product variant	Maximum bandwidth (download/upload)	Option bandwidth upgrade
1&1 Glasfaser Connect 300	300/100 Mbit/s	600/200 Mbit/s
1&1 Glasfaser Connect 600	600/200 Mbit/s	1000/300 Mbit/s
1&1 Glasfaser Connect 1000	1000/300 Mbit/s	-
1&1 Glasfaser Premium 300	300/300 Mbit/s	600/600 Mbit/s
1&1 Glasfaser Premium 600	600/600 Mbit/s	1000/1000 Mbit/s
1&1 Glasfaser Premium 1000	1000/1000 Mbit/s	-

The minimum, maximum, and generally available download and upload speeds correspond to the bandwidths listed under 2.1.

The IP transport performance is the net bandwidth available on the protocol layer 3 when using an underlying packet size of 1,500 bytes. The actual throughput that can be achieved depends on the packet size used by the customer and the services that run on the IP protocol.

Control mechanisms of the customer that are based on services that run on the IP protocol (e.g. TCP), can reduce the actual throughput.

2.2 IP addresses

1&1 Versatel supplies the product with the following IP address types.

Product variant	IP addresses
1&1 Glasfaser Connect 300/100	1 fixed public IPv4 WAN address, private LAN addresses (NAT*)
1&1 Glasfaser Connect 600/200	1 fixed public IPv4 LAN address or up to 5 fixed public IPv4 LAN addresses on request + 1 IPv6 network (dual stack)
1&1 Glasfaser Connect 1000/300	
1&1 Glasfaser Premium 300/300	
1&1 Glasfaser Premium 600/600	
1&1 Glasfaser Premium 1000/1000	

* NAT (Network Address Translation)

Service Description

1&1 Glasfaser Connect

1&1 Glasfaser Premium



V200 2144/0922/01. Subject to change
Valid from 09/01/2022 – Page 2/5

The following properties of IP addressing apply to the relevant product variant, depending on the availability listed in the table:

2.2.1 Fixed IP address

A fixed IP address (NAT) is assigned to the CPE on the WAN side. These fixed IP addresses cannot be used on other network devices. The use of NAT (Network Address Translation) and port forwarding allows for WAN-side access to LAN-internal network devices over the fixed IP address.

With all product variants, 1&1 Versatel only initially configures port forwarding on the CPE or makes changes to the existing configuration if commissioned by the customer. The product variant SIP single connection is excluded. No port forwarding can be set up for the following ports:

1&1 Glasfaser Connect 300 (only Internet & SIP telecommunications point-to-point connection)		
Protocol	Description	Port Incoming (WAN)
		none

1&1 Glasfaser Connect 300 (SIP single connection)		
Protocol	Description	Port Incoming (WAN)
TCP	SIP	5060
UDP	SIP	5060

2.2.2 Provision of IP networks

2.2.2.1 RIPE assignment policies

As a member of the Réseaux IP Européens Network Coordination Centre (RIPE NCC), 1&1 Versatel can assign its customers public IP addresses on request, following the rules prescribed by the RIPE NCC. These public IP addresses are IP addresses from the Provider Aggregatable Address Space (PA address spaces) of 1&1 Versatel.

1&1 Versatel is strictly bound to the assignment policies. When providing public IP addresses, the names, addresses, phone numbers, fax numbers, and e-mail addresses of the administrative (Admin-C) and technical (Tech-C) contact are published in the public register of the RIPE (RIPE Database – Whois). The customer has to immediately inform 1&1 Versatel of any changes to the RIPE handle.

IP network assignments are valid for as long as the criteria for original assignment are met, and only for the duration of the contractual relationship between 1&1 Versatel and the customer. 1&1 Versatel reserves the right to reassign the address space to another customer after termination of the contractual relationship or another agreed period.

Whenever a larger IP address space than a /30 IPv4 network is required, 1&1 Versatel provides an appropriate IPv4 network. There must be a justification and the customer must substantiate their requirement in writing. If the customer does not provide valid justification, RIPE NCC can reject the assignment of additional IP addresses. In this case, it is not possible for 1&1 Versatel to assign additional IP addresses to the customer.

2.2.2.2 /30 IPv4 network

The customer receives a /30 IPv4 network with 4 addresses, of which 1 address is a public IPv4 address that can be used by the customer.

2.2.2.3 /29 IPv4 network

The customer receives a /29 IPv4 network with 8 addresses, of which 5 addresses are public IPv4 addresses that can be used by the customer.

2.2.2.4 /28 IPv4 network

The customer receives a /28 IPv4 network with 16 addresses, of which 13 addresses are public IPv4 addresses that can be used by the customer.

2.2.2.5 Provision of an IPv6 network

The customer additionally receives an IPv6 network in the form of a /56 network. With the DualStack method, IPv6 can be used for the Internet service in parallel to IPv4.

2.2.2.6 Provider-independent (PI) IP addresses

If the customer has provider-independent (PI) IP addresses, they can use them. The use of backup products via DSL supply lines together with PI IP addresses is not possible.

3 Voice service

The voice service can either be used via ISDN or via WIP with an IAD provided by 1&1 Versatel. Parallel use of ISDN and SIP is not supported.

3.1 ISDN service variant

The voice service is provided using an IAD on the basis of ISDN protocol DSS1. No performance guarantee is given for modem and data transmission (e.g. for card terminals and alarm systems).

The following ISDN service variants are offered:

Product variant	Voice service
1&1 Glasfaser Connect 300	1 x S ₀ ISDN SIP single connection with 2 voice channels
1&1 Glasfaser Connect 600 1&1 Glasfaser Connect 1000 1&1 Glasfaser Premium 300 1&1 Glasfaser Premium 600 1&1 Glasfaser Premium 1000	2 x S ₀ with 4 voice channels 4 x S ₀ with 8 voice channels 1 x S _{2M} with 30 voice channels 2 x S _{2M} with 60 voice channels

With product variant 1&1 Glasfaser Connect 300, the use of individual SIP terminal devices on the connection of the 1&1 Versatel CPE is possible as an alternative, if the voice service is configured as an SIP single connection. In this case, 2 SIP voice channels can be used.

The customer handles SIP configuration of the terminal devices.

3.2 SIP service variant (telecommunications point-to-point connections)

The voice service is provided using an IAD on the basis of the SIP protocol, in acc. with RFC 3261, and IPv4. The customer must provide an IP telecommunications system for use.

With product variant 1&1 Glasfaser Connect 300, the use of individual SIP terminal devices on the connection of the 1&1 Versatel CPE is alternatively possible, which provides a simple telecommunications system function for SIP phones.

An IP telecommunications system must always register with the SIP proxy of 1&1 Versatel and authenticate itself in acc. with RFC2617. The customer is responsible for customer-side infrastructure and the VoIP-capability of the telecommunications system.

The following SIP product variants are offered:

Product variant	IP addressing
1&1 Glasfaser Connect 300	<ul style="list-style-type: none"> For SIP terminal devices: see 4.1. SIP single connection For SIP telecommunications systems: 10 SIP voice channels with one phone number block
1&1 Glasfaser Connect 600 1&1 Glasfaser Connect 1000 1&1 Glasfaser Premium 300 1&1 Glasfaser Premium 600 1&1 Glasfaser Premium 1000	With one phone number block each: <ul style="list-style-type: none"> 10 SIP voice channels 20 SIP voice channels 30 SIP voice channels 40 SIP voice channels 50 SIP voice channels 60 SIP voice channels 70 SIP voice channels 80 SIP voice channels 90 SIP voice channels 100 SIP voice channels 120 SIP voice channels 150 SIP voice channels 200 SIP voice channels

3.3 Access to emergency services

Access to emergency services with information on the caller location is generally possible, unless there is a restriction on the part of the emergency service itself. Making emergency calls via 110 and 112 is not possible during a blackout and when disconnected from the Internet. Using the dial-in option to the voice service on an address which is not the address stored with 1&1 Versatel for the connection (nomadic use), is generally prohibited, as this might make it impossible to make an emergency call and/or trace an emergency call and have the caller location determined by the recipient of the emergency call (a so-called "Röchelruf"), or only possible if the emergency call centre could previously be informed of the exact location and name of the caller. The same applies to any unauthorised alterations to the configuration of the CPE used by 1&1 Versatel for the service.

Service Description

1&1 Glasfaser Connect

1&1 Glasfaser Premium

3.4 Service characteristics voice connection

The customer can make use of the following service characteristic, on the condition that these are also supported by the terminal facilities (phone, telecommunications system) of the customer. Individual features are under certain circumstances provided by the customer telecommunications system or telephony terminal device.

Service characteristic	SIP single connection	ISDN telecommunications point-to-multipoint connection	SIP telecommunications point-to-multipoint connection
CLIP no screening (not guaranteed across network borders)		X	
Restriction of the number of simultaneously possible calls	X	X	X
Calling Line Identification Presentation (CLIP)	X	X	X
Case-by-case suppression of call number transmission (CLIR – on request)	X	X	X
Permanent suppression of call number transmission (CLIR)	X	X	X
Presentation of the line actually connected to the caller (COLP)	X	X	X
Case-by-case suppression of the line actually connected to the caller (COLR – on request)		X	X
Permanent suppression of the line actually connected to the caller (COLR)		X	X
Identification/Tracing (MCID)		X	X
Permanent call forwarding (S-) CFU	X	X	X
Call forwarding when occupied (B-) CFB	(not by the exchange)	X	X
Automated call forwarding (N-) CFNR	X	X	X
Manual call forwarding CD		X	X
Call forwarding partial routing CD (PR)		X	X
Call waiting (CW)	X	X	X
Call hold CH / HOLD	X	X	X
Three-Party Conference (small conference) 3TPY	X	X	X
Direct dial in (DDI)-capability, also with different extension number lengths		X	X
Fax transmission (Group 3)	X	X	
Fax transmission in acc. with G.711 with fall-back possibility in acc. with T.38			X

The following voice codecs are supported:

- G. 711a
- DTMF signals: Inband G.711, RTP-Event in acc. with RFC 2833

3.5 Service bandwidth

Upload and download bandwidths of at least 100 kbit/s are reserved per voice channel. The reserved bandwidth is available exclusively for voice connections in the voice service.

Number of voice channels	Reserved bandwidth
10	5 Mbit/s
20	5 Mbit/s
30	5 Mbit/s
40	5 Mbit/s
50	5 Mbit/s
60	10 Mbit/s
70	10 Mbit/s
80	10 Mbit/s
90	10 Mbit/s
100	10 Mbit/s
120	20 Mbit/s
150	20 Mbit/s
200	20 Mbit/s

With the product variants 1&1 Glasfaser Connect 1000 as well as 1&1 Glasfaser Premium 1000, the download transmission speeds achievable for the voice services are reduced by the reserved bandwidth; with 1&1 Glasfaser Premium 1000, the upload speeds are reduced as well.

4 Phone number blocks for ISDN and SIP point-to-point connections

4.1 SIP single connection

Unless agreed otherwise, 3 phone numbers are included. The assignment policies of the German Federal Network Agency allow the assignment of a maximum of ten Multiple Subscriber Numbers (MSNs) per connection. These phone numbers are billed in line with the Price List Comfort & Service Performances for Telephony and Internet Connections.

4.2 ISDN and SIP service variants with point-to-point connection

If required, 1&1 Versatel assigns a phone number block to the customer within the phone number space available to 1&1 Versatel. The foundation for calculation of the phone number demand to be certified is generally the number of terminal facilities to be connected to a telecommunications system. The customer has to apply with the Federal Network Agency for any additional demand for phone numbers beyond the assignment shown in the table below. Certification of the Federal Network Agency constitutes the foundation for the assignment of additional phone numbers by 1&1 Versatel.

Number of voice channels	Standard number of phone numbers
2	10
4	30
6	70
8	100
10	300
20	300
30	500
40	500
50	500
60	1000
70	1000
80	1000
90	3000
100	3000
120	4000
150	4000
200	5000

5 Optional voice module Landline Flat Rate, Mobile Calls Flat Rate, National Flat Rate, Euro Flat Rate

5.1 A Landline Flat Rate (connections to the German landline network are included), a Mobile Calls Flat Rate (connections to the German mobile networks are included), a National Flat Rate (connections to the German landline and mobile networks are included), and a Euro Flat Rate (connections to the landlines of Euro Flat Rate Countries listed in the price list are included) can optionally be commissioned.

Connections to special numbers are not included in the relevant flat rates and are billed on the basis of the respectively valid price list.

Service Description

1&1 Glasfaser Connect

1&1 Glasfaser Premium



V200 2144/0922/01. Subject to change
Valid from 09/01/2022 – Page 4/5

5.1.1 A condition for billing of the relevant flat rate is the customer solely using the services provided by 1&1 Versatel to cover the telephony needs resulting from the customer's business operations.

5.1.2 A condition for billing of the relevant flat rates is the customer refraining from being a customer with any other provider of telecommunications services, value-added services, or mass communications services, above all of fax broadcasting, call-centre, or phone marketing services, or using the product for such mass communication or to perform its services vis-à-vis third parties using telecommunications services.

5.1.3 Telephone systems, telephone system networks, and voice network services, which allow for the internal routing of phone traffic to one or more locations, and thus the bundling of demanded connection services onto individual collections, are excluded from the product, unless an optional flat rate is agreed for all the voice connections connected to the system network or voice service network in the 1&1 Versatel coverage area.

5.1.4 Connections established by the caller to perform telecommunications services for third parties, or connections which are transferred to third parties against a fee or against other benefits, are excluded from the pricing of the relevant flat rate. Connections that do not serve the establishment of direct voice or fax connections to other subscribers are excluded as well, above all connections that the customer uses to receive access to the Internet or for dialling-in. Connections that are established using call-back processes are furthermore excluded. Any connections that should provide the customer or a third party with pecuniary benefits relative to the duration of the connection do not fall under the pricing of the relevant flat rates either, this particularly includes access to advertising hotlines.

5.1.5 If the abovementioned conditions are not met or if connections are excluded from the pricing of the product in line with the preceding regulations, these connections are billed at the minute prices specified in the price list of the product. In the event of fraudulent use of the 1&1 Versatel subscriber network, 1&1 Versatel is entitled to – after unsuccessfully issuing a warning with a notice period – bill the connections established in the relevant networks/to the relevant destinations after issuing of said warning in acc. with the applicable rate specified in the price list of the product, to block the fraudulently used product or modules, and/or to terminate the contractual relationship without notice. 1&1 Versatel reserves the right to claim additional damages relating to the connection fees incurred as part of the fraudulent use.

5.2 Mobile minutes packages

1&1 Versatel offers the customer the opportunity to book minutes packages for connections to German mobile communications networks. The applicable valid price list of the product specifies the number of minutes included in the mobile minute packages. The minute packages cannot be transferred from one month to the next. Any unused minutes will expire by the end of the month. If a minute package expires during a conversation, the connection prices specified in the relevant price list are billed from the first second after expiry.

6 Invoice and itemised bill

1&1 Versatel additionally provides the customer with a bill listing all the connections (itemised bill) on request. An itemised bill contains a list of all conversations with the date, time, caller phone number (calling party), destination phone number, destination, charged duration/minutes, and €/net. Conversations are listed in line with the 1&1 Versatel rate zones. The destination phone numbers of the customer are either truncated by the last three digits or shown in full length, in line with the customer wishes. The invoice and itemised bill are provided in electronic form, or if agreed in text form with pricing based on the relevant price list. No itemised bill is provided for phone and Internet connections that are billed under a phone or Internet flat rate; however, calls abroad, to mobile communications networks, to special numbers, and Internet dial-ins are listed.

A special regulation applies to billing of 0900 special numbers. Customers who use this service receive a separate paper bill from our service provider. The customer has a choice to elect a storage procedure for its connection data within the legal possibilities. If the customer fails to make use of this elective option, their connection details are stored for up to six months after dispatch of the bill, without truncation of the destination phone number, to serve as evidence that the fees were calculated correctly.

7 Phone book entry

On request of the customer, 1&1 Versatel applies for an entry of the standard customer dataset into the communications directory of Deutsche Telekom, which is the foundation for printed directories and electronic media as well as for the operation of telephone information services. On request of the customer, the family name, first name, street, house number, phone number, and/or fax number of the customer can be published free of charge in the customer dataset. With a point-to-point connection with extension numbers, up to 15 additional terminal equipment numbers can be included per entry as sub-entries for the customer dataset. Unless requested otherwise by the customer, the lowest phone number is entered into subscriber directories on new assignment of phone numbers.

The customer can at any time object to disclosure of their phone number to third parties through the telephone information service. The same applies to disclosure of their name and address after specifying the phone number (reverse search).

8 Provisioning

Provisioning of the customer requires a network termination connection in the customer building (demarcation point, demarc).

1&1 agrees an appointment with the customer for provisioning of the product. Provisioning is carried out on weekdays (Mondays through Fridays), or as agreed with a written confirmation of order.

The product is provisioned by providing the operational CPE in the immediate vicinity of the demarc. If the customer wishes to have a different provisioning location for the CPE, the customer undertakes to provide suitable building wiring for use of the commissioned service from the demarc to the desired location of use of the CPE.

Operational provisioning is realised if a connection to the CPE is either established directly on the demarc or to the demarc using existing building wiring. The CPE will also be deemed to have been provisioned operationally if a functioning demarc is available in the building of the customer, but the CPE could not be put into operation due to reasons for which the customer is responsible. Reasons include: Lack of access to the demarc premises or a demarc installation site away from a CPE without the necessary building wiring being available.

9 Service availability

The annual average service availability of the Internet and voice services amount to 99.5%.

Availability is the actually determined availability time of the service in question in relation to the theoretically possible annual availability time for an evaluation period of 12 months from the beginning of the contract. It concerns the connection section between the CPE provided by 1&1 Versatel and a central measurement point in the 1&1 Versatel network.

9.1 Calculation of availability:

Availability in % = $(8760 \text{ hours} - \Sigma \text{ of the downtimes in hours}) \times 100 / 8760 \text{ hours}$. Downtimes are calculated down to the hours and minutes.

Downtime is defined as the time during which there is a disruption.

10 Service Level Agreement (SLA)

10.1 Disruption

A disruption is a temporary, significant impairment of the scope of performance of the agreed services, which can be resolved by 1&1 Versatel within the scope of the technical and operational means of 1&1 Versatel. The customer has to report disruptions to 1&1 Versatel. 1&1 Versatel accepts disruption reports every day, from 00:00 to 24:00. If 1&1 Versatel interprets the disruption report to concern an actual disruption, a trouble ticket is created. All disruptions are monitored continuously and all measures related to the service as well as all contact with the customer are documented in the trouble ticket.

10.2 Response time

In line with the technical and operational means, 1&1 Versatel shall inform the customer of an initial disruption status within the response time. One condition is that the customer specifies an available contact when reporting the disruption.

10.3 Disruption clearance

During the disruption clearance process, 1&1 Versatel takes all measures to help resolve the disruption. The disruption is deemed resolved as soon as the agreed scope of services is restored. The date and time of disruption clearance is documented in the trouble ticket. After resolving the disruption, the customer receives a final report and the trouble ticket is closed.

10.4 Appointment scheduling

If necessary for disruption clearance, 1&1 Versatel schedules an appointment for a service technician visit with the customer. A time frame no larger than six hours is specified for the appointment (e.g. between 12:00 and 18:00).

10.5 Service availability

Disruptions are only cleared and trouble ticket status reports are only made during the service availability.

10.6 Maximum disruption time

The maximum disruption time is the period in which a disruption is resolved. The maximum disruption time is always deemed to be met if disruption clearance is not possible for reasons for which the customer is responsible.

Service Description

1&1 Glasfaser Connect

1&1 Glasfaser Premium

10.7 Maintenance works

1&1 Versatel carries out maintenance works within the regular maintenance window. Emergency maintenance works can be carried out at any time. Maintenance works might result in interruptions of the agreed services. The customer is informed of maintenance works before these are carried out. This is only possible if the customer informed 1&1 Versatel of their contact details incl. e-mail address.

10.8 SLA overview

The following SLA are available for the product.

Product variant	1&1 Plus	1&1 Profi
1&1 Glasfaser Connect 300	included	-
1&1 Glasfaser Connect 600	included	optional
1&1 Glasfaser Connect 1000	included	optional
1&1 Glasfaser Premium 300	-	included
1&1 Glasfaser Premium 600	-	included
1&1 Glasfaser Premium 1000	-	inklusive

The SLA variants come with the following performances:

Service Level	1&1 Plus	1&1 Profi
Max. problem resolution per disruption for the service	8 hours	8 hours
Service availability	Mon.–Fri. 08:00–18:00	24 hrs/365 days
Response time	2 hours	1 hour Mon.–Fri. 08:00–18:00 2 hours Mon.–Fri. 18:00–08:00 Saturdays, Sundays, and on federal and state holidays.
Maintenance window	Mon.–Sun. 00:00–06:00, Emergency maintenance works as required	

11 Possible restrictions of availability and disruption clearance time

The following restrictions are particularly not considered as disruptions or outages in calculating the service times agreed with the customer (e.g. availability times, disruption clearance times), unless 1&1 Versatel is responsible for these restrictions as a result of its own conduct that is contrary to the contract.

- Outages/disruptions as a result of force majeure.
- The customer explicitly refuses on-site troubleshooting.
- The customer premises are not available for on-site troubleshooting.
- The service will temporarily be established through a back-up line, up to troubleshooting (possibly with restrictions).
- Restrictions as a result of scheduled or mutually agreed disruptions because of maintenance works on the part of 1&1 Versatel or the customer (Mon.–Sun. from 00:00 to 06:00 and as needed).
- Restrictions as a result of decommissioning or deactivations attributable to rerouting measures or official/court orders/decisions.

12 Optionally, up to the day of commissioning of a "1&1 Glasfaser Connect/Premium" product, a voice/Internet connection technologically based on VDSL can be used as an interim solution. For additional details, please refer to the Performance Description of 1&1 Schnell-Start.