SERVICE DESCRIPTION

Sonera Kodin Netti service description

General description of the service

The Sonera Kodin Netti subscription provides a fixed, always-on broadband connection from a flat to Sonera's data communications network and the Internet. The customer is provided with a subscription and supplementary services enabling the use of broadband and Internet services.

The subscription includes connecting the flat through an inhouse network to Sonera's backbone network and further to the Internet.

The Internet access speed depends on the transmission rate class selected by the customer. The customer has access to broadband services, information and entertainment services on the Internet, and email, homepage space and other supplementary services, some of which are paid services.

The backbone connection is shared between the subscriptions delivered to the building, and so each subscription can access the data network through the local network at most at a speed determined by the subscription's transmission rate class.

Transmission rates available

The transmission rates are indicated as bit/s from the network to the customer / from the customer to the network. The rates are given with a range of variation.

Technology / Technology used in the inhouse network	Inhouse cabling	Sonera Kodin Netti XS	Sonera Kodin Netti S	Sonera Kodin Netti M	Sonera Kodin Netti L	Sonera Kodin Netti XL	Terminal device
ADSL	CAT3	256 / 256 k ja 1 M / 512 k ja 2 M / 512 k ¹⁾²⁾	3-8 M / 512 k - 1 M	8 - 20 M / 512 k - 1 M			ADSL modem; Sonera Kodin Netti M requires an ADSL 2+ modem
-Normal transmission speed ³⁾		253 / 237 k ja 0.9 M / 465 k ja 1,9 M / 463 k	6,7 M / 0,9 M	15 M / 0,9 M			
VDSL2 -Normal transmission	CAT3		4 - 10 M / 4 - 10 M	25 - 50 M / 4 - 10 M			VDSL2 modem
speed 3)			10 M / 9 M	48 M / 9 M			
Cable	Coaxial	1 M / 1 M ja 2 M / 2 M ^{1) 2)}	5 - 10 M / 2 - 5 M	25 - 50 M / 2 - 5 M	40 - 100 M / 2 - 5 M	80 - 200 M / 4 - 10 M	Cable modem Eurodocsis 3.0
-Normal transmission speed 3)		0,9 M / 0,9 M ja 1,9 M / 1,9 M	9,1 M / 4,9 M	43 M / 4,9 M	86 M / 4,9 M	161 M / 9,6 M	
Fibre / ADSL	CAT3	1 M / 1 M ja 2 M / 2 M ¹⁾²⁾	5 - 10 M / 1 M - 2 M	10 - 20 M / 1 M - 2 M			ADSL modem; Sonera Kodin Netti M requires an
-Normal transmission speed 3)		1 M / 0,9 M ja 2 M / 1,2 M	10 M / 1,2 M	19 M / 1,2 M			ADSL 2+ modem
Fibre / VDSL2	CAT3	1 M / 1 M ja 2 M / 2 M ¹⁾²⁾	5 - 10 M / 5 - 10 M	25 - 50 M / 5 - 10 M	50 - 100 M / 5 - 10 M		VDSL2 modem
-Normal transmission speed 3)		1 M / 1 M ja 2 M / 2 M	10 M / 9 M	48 M / 9 M	68 M / 9 M		
Fibre / Ethernet	CAT5/6	1M / 1M ja 2M / 2M ²⁾	5 - 10 M / 5 - 10 M	25 - 50 M / 25 - 50 M	50 - 100 M / 50 - 100 M	500 M - 1000 M / 50 - 100 M	
-Normal transmission speed 3)		1 M / 1 M ja 2 M / 2 M	10 M / 10 M	50 M / 50 M	90 M / 90 M	600 M / 90 M	
Fibre / FTTH	Single mode fibre	1 M / 1 M ja 2 M / 2 M ²⁾	5 - 10 M / 5 - 10 M	25 - 50 M / 25 - 50 M	50 - 100 M / 50 - 100 M	500 M - 1000 M / 50 - 100 M	Fibre converter
-Normal transmission speed ³⁾		1 M / 1 M ja 2 M / 2 M	10 M / 10 M	50 M / 50 M	90 M / 90 M	600 M / 90 M	

 $^{^{1)}}$ The transmission rate is at most the maximum rate indicated but at least 40% of the maximum rate.

²⁾ Available only at specified sites covered by the frame agreement or in specified areas.
3) The transmission speed that the user can expect to get most of the time when using the service.

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Service entity

All transmission rate classes of Sonera Kodin Netti include the following services:

- user IDs: administrator + users (1+4)
- email addresses (5 mailboxes, 500 MB each).

Rules of use

The data connection provided by the subscription is not encrypted, so a third party may manage to access the information transmitted. The information security and operation of the equipment (computer and a potential router), systems and data communications used by the customer are always the customer's responsibility. The customer can improve its information security by the use of information security services.

The server to be used for outbound email is mail.inet.fi. Port 25 of the subscription is closed to outbound traffic. If, however, the user wants to use port 25 for sending email, (s)he should route the traffic through the mail.inet.fi server.

Sonera has the right to filter email messages and take other necessary action – for example, restrict the number of outbound email messages – to the extent required by the information security of the service at any given time. Sonera does not read or save the messages or message content filtered out by the service.

Spam and virus filtering cannot identify all spam and/or viruses, so it does not provide total protection against viruses, virus attacks or problems caused by them.

The filters are designed to work such that they detect and filter out only email messages containing computer viruses and/or spam. However, when spam and virus filtering is performed, other messages may sometimes also be filtered out. Sonera is not liable for damage attributable to messages that have been filtered out by a virus and/or spam filter.

A customer device connected to the subscription is allocated a public IP address for a fixed period of time from the IP space managed by Sonera. The duration of the fixed period varies depending on the network utilization rate. A subscription can be assigned a maximum of five addresses. The customer must not use the user ID on more than one subscription at a time. Not more than five (5) computers may be connected to one subscription. The user IDs of the subscription must be kept safe.

For reasons of information security, Sonera can intervene in exceptional use of the customer's subscription (including, but not limited to, any disturbance caused to the network or to other users) in compliance with the general delivery terms by shutting down the customer's connection and/or service.

The customer's service will then remain closed until the customer remedies the information security problem on account of which the subscription was shut down and notifies Sonera Customer Service to this effect. The customer is responsible for seeing to it that the subscription is used only for lawful purposes.

Insofar as possible, Sonera informs customers of any information security matters and changes to restrictions of use on Sonera's website at www.sonera.fi/tietosuoja

The customer is responsible for ensuring that the use of the ordered service does not cause any disturbance to the network, including loading the network with unusual volume of communications.

The installation and user instructions of the subscription can be found in Sonera Internet Assistant at www.sonera.fi/avustaja A list of the equipment required by the subscription, a service description, supplementary services available at any given time and valid price lists are available at www.sonera.fi/laajakaista

Requirements for introduction, and use

The customer and Sonera make a written service agreement on the introduction of the subscription. The service agreement can also be made through a self-service channel, in which case bank codes are used to identify the customer and sign the service agreement.

The delivery and use of the subscription require that a network with sufficient and suitable features is available. A preliminary check on the availability of the subscription is done when the agreement is concluded, but the availability is not finally ascertained until in connection with the delivery. If the delivery of the subscription requires network construction, Sonera is entitled to charge the customer a case-specific construction charge in addition to the connection charge indicated on the price list. In such a case, the customer is also entitled to cancel the order and/or the agreement.

The transmission rate classes specified for the subscription refer to theoretical maximum rates, and the actual data transmission rates may be lower. The data transmission rates and the other level of service may vary within the indicated range of variation for reasons related to the features of the data communications network. The transmission rates can also be affected by matters that are beyond Sonera's control, such as congestion on the Internet and in Internet services, condition of the inhouse network, the customer's modem and computer capacity, use of a WLAN connection, and the load of the antivirus and firewall services and potential other software used. The subscription can be delivered without that a telephone subscription needs to be ordered.

At the customer's request, the subscription can be transferred to another place of use, provided that this is technically possible. The customer should notify Sonera of the transfer in writing, after which Sonera will check the availability to the desired place of use. If the subscription is not available to the new place of use, the agreement can be cancelled in accordance with the terms of delivery. The charges already paid will then not be refunded.

Access impelemented with ADSL technology:

The data communications connection is connected to a house MDF, from which it is extended through the internal telephone network to the user's flat. The customer is connected to Sonera's data network with an ADSL modern plugged in to the flat's telephone socket.

The availability of the subscription may be restricted by the features of the internal telephone network, location of the building, lacking connections between house MDFs of different buildings, lacking equipment power supply or other such matters. Sonera is not responsible for the condition of the internal telephone network or for updating the network to meet the requirements set by the use of the subscription, nor for the equipment needed, unless separately compensated.

In order that the subscription could be introduced and used, the customer needs a computer, potentially an Ethernet network adapter (depending on the ADSL modem interface), a bridging ADSL modem and a patch cord. The purchase and operation of these is the customer's responsibility. The customer has to see to it in advance that the computer has a free interface for the net-

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work adapter and that an operating system installation CD or the like is at hand. The equipment and systems must be in working condition, and if there is a virus in the system, the customer has to remove it before the installation.

Simultaneous use of a telephone and the data connection may cause interference in voice traffic, which is why Sonera recommends that the user should use a noise filter.

Access implemented with cable technology:

A precondition for the delivery and use of the subscription is that bidirectional Sonera Cable TV access has been delivered to the customer's real estate company or housing area. The customer is connected to the data network by means of a cable modem.

In order that cable access could be used, the customer needs a computer, a cable modem, a coaxial cable, potentially an Ethernet network adapter and a patch cord. The purchase, installation and operation of these is the customer's responsibility. The customer has to see to it in advance that the computer has a free interface for the network adapter and that an operating system installation CD or the like is at hand. The equipment and systems must be in working condition, and if there is a virus in the system, the customer has to remove it before the installation.

Access implemented with fibre:

A precondition for the delivery and use of the subscription is that Sonera Multi-Dwelling Fibre Access has been delivered to the customer's real estate company or housing estate. Depending on the inhouse cabling, the customer is connected to the data network with an ADSL modem, a VDSL 2 modem, a fibre converter or directly with an Ethernet cable.

In order that the subscripion could be introduced and used, a customer using ADSL access needs a computer, a bridging ADSL modem and, depending on the ADSL modem interface, potentially an Ethernet network adapter and a patch cord. When VDSL 2 access is used, the customer needs a computer, a VDSL 2 modem, an Ethernet network adapter and a patch cord. A customer using fibre needs a computer, a fibre converter, potentially an Ethernet network adapter and a patch cord. A customer using Ethernet access needs a computer, an Ethernet network adapter and a patch cord. The purchase, installation and operation of the above is the customer's responsibility. The customer has to see to it in advance that the computer has a free interface for the network adapter and that an operating system installation CD or the like is at hand. The equipment and systems must be in working condition, and if there is a virus in the system, the customer has to remove it before the installation.

When ADSL access is used, simultaneous use of a fixed-line phone and the data connection may cause interference in the voice traffic, which is why the use of a noise filter is recommended.

Term of the agreement

The agreement can be concluded as a fixed-term agreement or an indefinite agreement. A fixed-term agreement is valid for a fixed term agreed on between the parties. The term of the fixed-term agreement is considered to begin when Sonera has delivered the service according to the agreement to the customer. Sonera confirms the delivery time to the customer in advance by email, by SMS or in some other way separately agreed on. After the agreement period, the fixed-term agreement continues automatically until further notice, unless it is terminated by the customer at the latest two weeks or by Sonera at the latest one month before the expiry of the agreement period, in which case the agreement expires at the end of the original agreement period. An indefinite agreement can be terminated in accordance with Sonera's General Delivery Terms concerning Services. The indefinite agreement cannot be terminated in the middle of the agreement period. This term does not limit the consumer customer's legal right to give notice of termination on the basis of a social bar to performance.

Customer communications

Sonera sends topical news about the subscription to the email address allocted to the customer when the subscription is bought. The messeges sent by email include information about changes in the subscription and marketing messages related to Sonera's new services and offers. Every marketing message sent by email includes contact information allowing the customer to communicate if (s)he no longer wants to receive marketing messages from Sonera.

Invoicing

The invoicing period is one (1) month. Invoicing begins on the day following the delivery of the subscription. Charges for the use of paid services are invoiced in arreas.

Broadband invoices are delivered in electronic format. A paper format invoice can also be provided, but it is subject to a charge. The charge is determined by the Sonera price list valid at any given time.

Cancellation right in distance selling

If the customer has ordered the subscription via distance communications – for example, by phone or over the Internet – (s) he has the right to cancel the agreement within 14 days from the reception of the order confirmation by contacting Sonera's customer service. If the subscription has been delivered and made available to the customer before the exercise of the cancellation right, Sonera has the right to charge the customer a reasonable charge for the period in question.

Other terms

With regard to matters not mentioned in this service description, Sonera's valid General Delivery Terms for Consumer Customers concerning Services or General Delivery Terms for Business Customers concerning Services – depending on the customer relation stated in the agreement – are applied. Sonera has the right to charge the customer for customer service in accordance with the price list valid at any given time.