



Finance IPNet

Version 1.9
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1. General

Finance IPNet is a communication service provided by SIX Group Services AG. (SGS). Finance IPNet enables access, separated from the Internet, to the payment, transaction and financial information services offered by the companies of the SIX Group (SGR)

- ✚ Finance IPNet enables access to all SGR services through a managed MPLS-VPN (Multiprotocol Label Switching-Virtual Private Network) and forms an alternative to the Internet through guaranteed Service Level Agreements (SLA), bandwidth and privacy.
- ✚ Finance IPNet enables simple or redundant communications connections with guaranteed availability (end-customer connections), optionally over a single or multiple carriers.

2. Finance IPNet ordering and contacts

On behalf of the carrier, SGS is the representative for consultation regarding, orders for, mutations and terminations of Finance IPNet connections.

SIX Group Services AG
Carrier Management
CIT OEP
Hardturmstrasse 201
8021 Zurich

Phone: +41 58 399 33 33
E-mail: comm.admin@six-group.com

3. Application service provider contacts

For questions pertaining to the services please contact the representatives of the respective companies within the SIX Group (SGR)

SIX Interbank Clearing AG
ZIBO/SIC-Operations Center
Hardturmstrasse 201
Postfach
8021 Zürich

Kontaktstelle: SIC Operations Center
Telefon: +41 58 399 41 57
E-Mail: sic.keyman@six-group.com

SIX Payment Services AG
Worldline
Hardturmstrasse 201
8021 Zürich

Kontaktperson: Mission Management FS Team
Telefon: +41 58 399 62 82
E-Mail: mno-service@six-group.com



SIX Financial Information AG
Customer Administration
Hardturmstrasse 201
8021 Zürich

Kontaktperson: Customer Administration
Telefon: +41 58 399 55 77
E-Mail: salesadmin.ch@six-group.com

SIX Group Services AG
File Transfer Services
Hardturmstrasse 201
8021 Zürich

Kontaktperson: Oliver Galliker
Telefon: +41 58 399 47 20
E-Mail: ccfts@six-group.com

SIX Paynet AG
Hardturmstrasse 201
8021 Zürich

Kontaktperson: Paynet Support
Telefon: 41 58 399 95 77
E-Mail: paynet-support@six-group.com

SIX SIS AG
BUSP / Product Management
Pfingstweidstrasse 110
8021 Zürich

Kontaktperson: Andreas Wellauer
Telefon: +41 58 399 44 82
E-Mail: andreas.wellauer@six-securities-services.com

SIX SIS AG
SOON / Solutions & OnBoarding
Pfingstweidstrasse 110
8021 Zürich

solutions.onboarding@six-securities-services.com

SIX
Banking Services
ATM Debit Services
Pfingstweidstrasse 110
8021 Zürich

Telefon: +41 58 399 51 00
E-Mail: integration.debit@six-group.com

4. Problem Management, Help Desk

For problems related to the service please contact the help desk of the respective company within the SIX Group (SGR)

4.1 SIC Operations Center

- 🇨🇭 Telefon +41 58 399 42 00 für SIC
- 🇪🇺 Telefon +41 58 399 47 00 für euroSIC

The SIC Operations Center is staffed on bank working days from 6:00 am to 9:00 pm (CET). Outside this period, calls are forwarded to the SIX Group Service Help Desk, which offers the appropriate stand-by service according to need.



4.2 SIX Payment Services / WorldLine Info Center

P R I M A S (Problemanalysis, Information Management Services)
Availability and support 365 days a year, 24 hours a day

- ☎ Telefon +41 58 399 46 66
- ✉ Email ic-primas@six-group.com

Your call will be received by a voice mail box from 06:45pm to 07:00am and then immediately processed by a stand-by staff member. You will be called back immediately upon playback of the voice mail.

4.3 Client Support SIX Financial Information Ltd.

- ☎ Telefon +41 58 399 55 55
- ✉ Email clientsupport.ch@six-financial-information.com

The Service Desk is staffed on bank working days from 7:30 am to 6:00 pm (CET). Outside this period calls are forwarded to the SIX Group Service Help Desk, which offers the appropriate stand-by service according to need.

4.4 SIX Group Services AG Help Desk

7 x 24 hours for file transfer services customers
SCC System Control Center

- ☎ Telefon +41 58 399 26 41
- ✉ Email carrierinfo@six-group.com

4.5 SIX Paynet Support

- ☎ Telefon: +41 58 399 95 77

The Paynet support hotline is staffed on bank working days from 8am to 12pm, and then from 2pm to 5pm (CET). From 5pm to 8am calls are forwarded to the SIX Group Services Help Desk, which offers the appropriate stand-by service according to need.

4.6 Service Desk SIX SIS AG

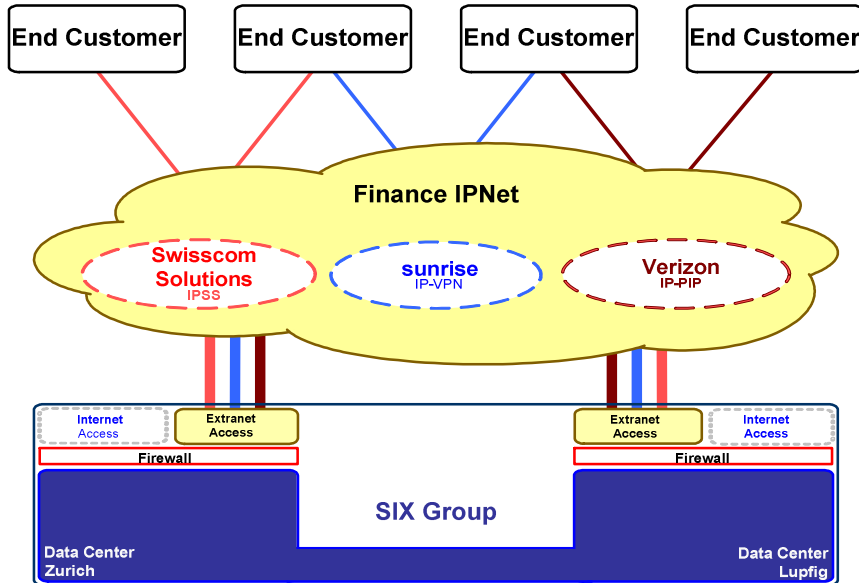
- ☎ Telefon +41 58 399 48 48
- ✉ E-Mail: servicedesk@sisclear.com

The Service Desk is staffed on bank working days from 7:00 am to 6:00 pm (CET). The Help Desk is not staffed outside of these times.

5. Which carriers offer Finance IPNet connections?

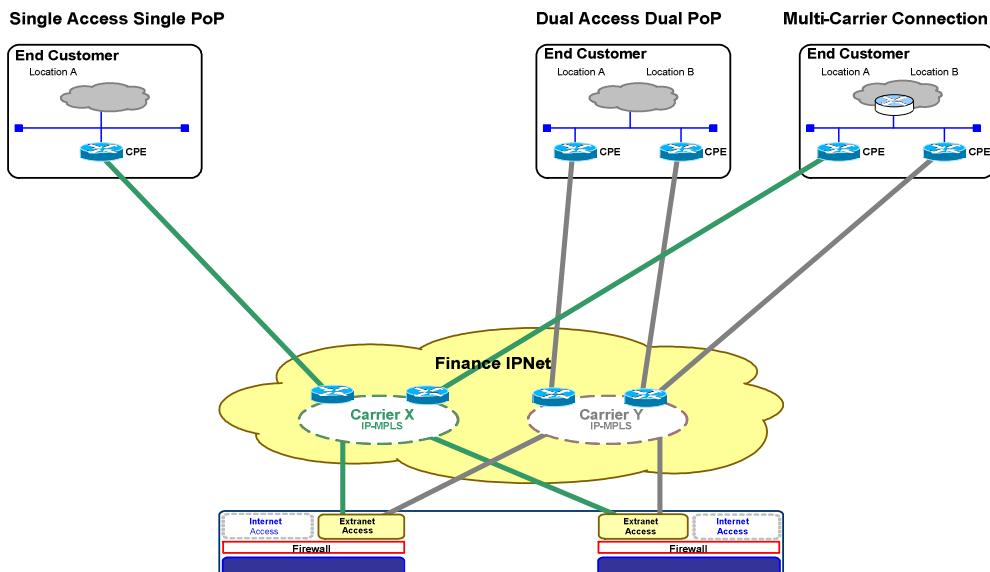
Finance IPNet connections can be realized with the following carriers:

- ✚ Sunrise
- ✚ Swisscom Solutions
- ✚ Verizon
- ✚ OBS
- ✚ COLT



6. Potential connection profiles

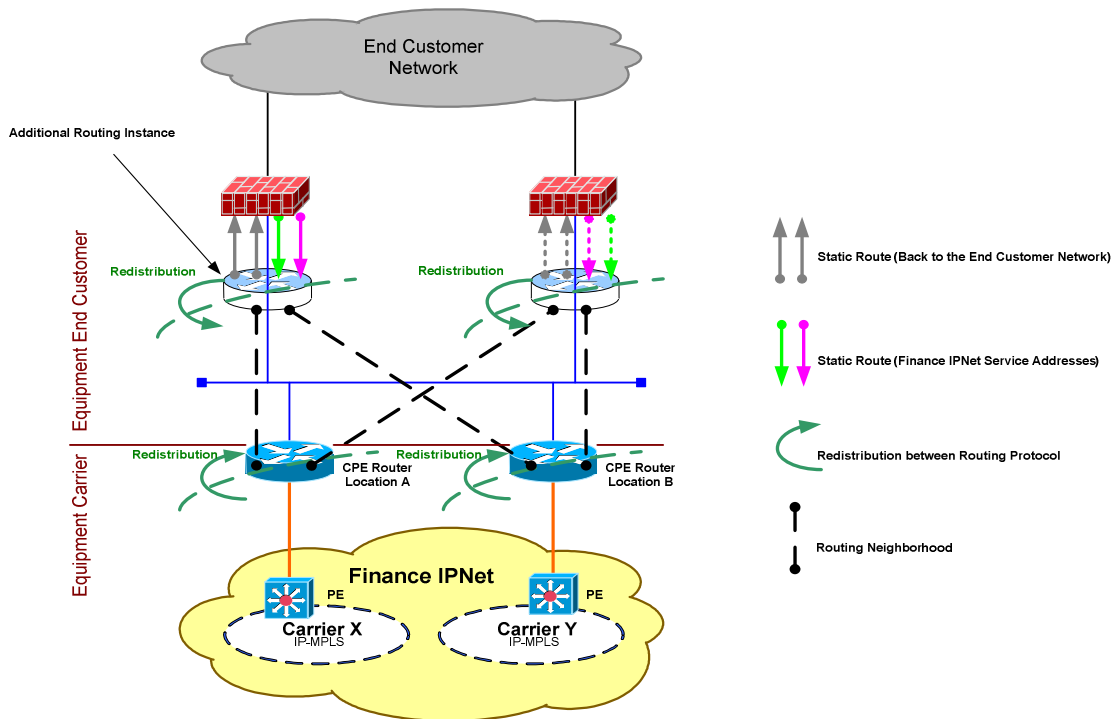
Depending on the requirements regarding availability, the following options can be used to connect the end customer to Finance IPNet. Communication is only possible between the end customer and SIX Group. No communication is possible between end customer A and end customer B (hub and spoke).



6.1 Example: Multi-carrier connection

SGS recommends a multi-carrier strategy to achieve the best possible availability for an end customer connection, ideally divided over two separate locations.

A multi-carrier connection is realized with two or more Single Access Single PoP connections from different carriers. To be considered during the implementation is that the carriers cannot support any HSRP/VRP between them. The follow example shows how the redundancy on the customer side is solved with an additional routing instance.



7. Consultation and implementation by SGS

Provided by SIX Group Services AG upon request by the end customer. Costs will be billed separately.

SIX Group Services AG
 Carrier Management
 CIT OEP
 Hardturmstrasse 201
 8021 Zurich

Phone: +41 58 399 33 33
 E-mail: comm.admin@six-group.com



8. Possible options

The following options are possible in Finance IPNet depending on the carrier and connection profile:

8.1 Quality of Service

If multiple services are obtained over the same Finance IPNet end customer connection, then the “Quality of Service (QoS) function ensures that the corresponding services can be transmitted with a defined, guaranteed and checkable quality.

8.2 Encryption

Encryption is an option for the Finance IPNet service. With encryption the data is protected with proven encryption and authentication algorithms. The key configurations are made by the carrier. To date, only shared key encryptions are offered.

8.3 Multi-VPN

This enables multiple VPN (Virtual Private Networks) to operate over the same access line of the same carrier.

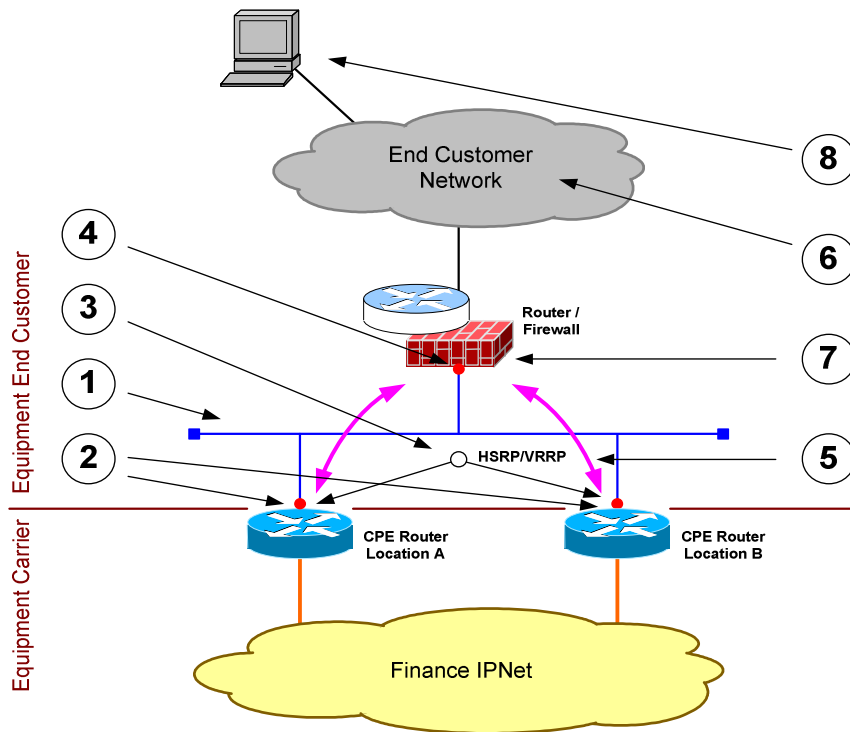
9. The individual carriers’ services, prices and SLA’s

The service ranges, prices, SLA’s and contract of the individual carriers can be found at:

✚ [Please contact comm.admin@six-group.com](mailto:comm.admin@six-group.com)

10. Technical implementation

The following example illustrates a possible implementation of a dual access Finance IPNet connection. A single access connection will correspondingly only be implemented with one CPE router.



10.1 Carrier router LAN segment

- ① Network and subnet mask of the carrier router LAN segment.
e.g. 192.168.1.0 255.255.255.0

The following address sectors may not be used for the addressing of the carrier router LAN segment:

Swisscom Solutions : 10.208.0.0 / 14

There is no limitation among the other carriers.

- ② IP address and subnet mask of the CPE router LAN interface.
e.g. Location A 192.168.1.1 255.255.255.0

For dual access

IP address and subnet mask of the CPE router LAN interface of location B and details of the HSRP address.



e.g. Location B 192.168.1.2 255.255.255.0

③ HSRP/VRRP address 192.168.1.3

10.2 Routing in the carrier router LAN segment ⑤

IP addresses from the following address sectors cannot be routed in the customer network:

🇨🇭 Swisscom Solutions: 10.208.0.0 / 14

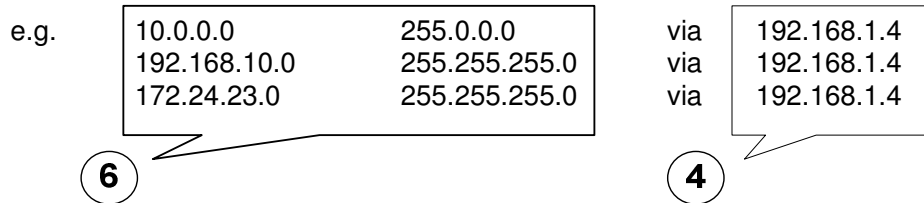
There is no limitation among the other carriers.

Communication from a directly connected LAN segment

If the communication occurs from the carrier router LAN segment, then no additional routing entries are necessary on the CPE router.

Static routing

For static routing we need the details of the end customer network that is located behind the next hop.



Dynamic routing

For dynamic routing we need the details of the preferred routing protocol.

e.g. OSPF

10.3 ARP request

⑦ If the customer's router / firewall suppress the CPE router's ARP request, then an ARP entry must be placed on the CPE router.

④ e.g. 192.168.1.4 0010.7a03.c0a1

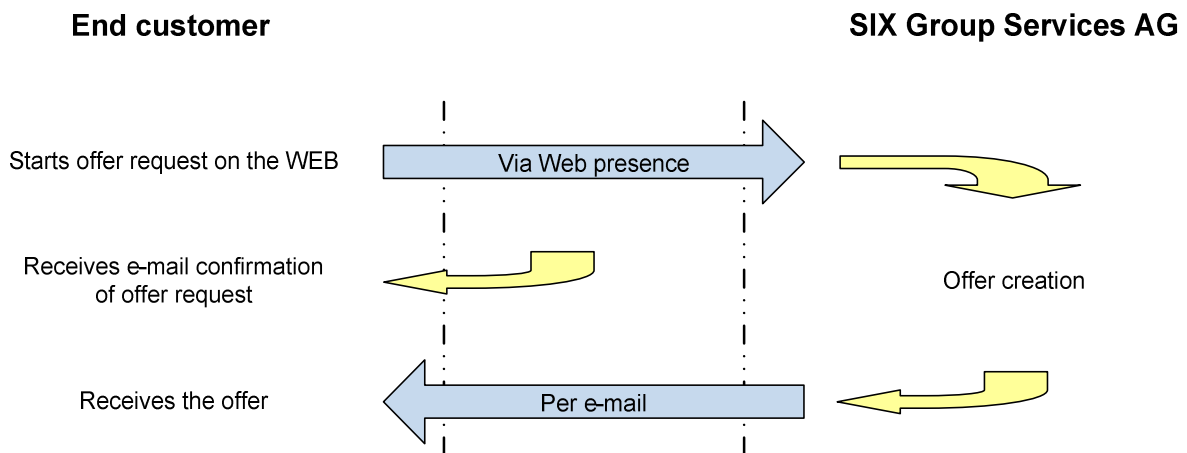


10.4 Outbound services

- ⑧ A TCP session is established by TK or SIS to the end customer for an outbound service. There is a 1:1 NAT at the CPE router (Telekurs destination IP address: the end customer's destination IP address). If the end customer obtains an outbound service, then we need the IP address of the target system.
e.g. 172.24.23.7

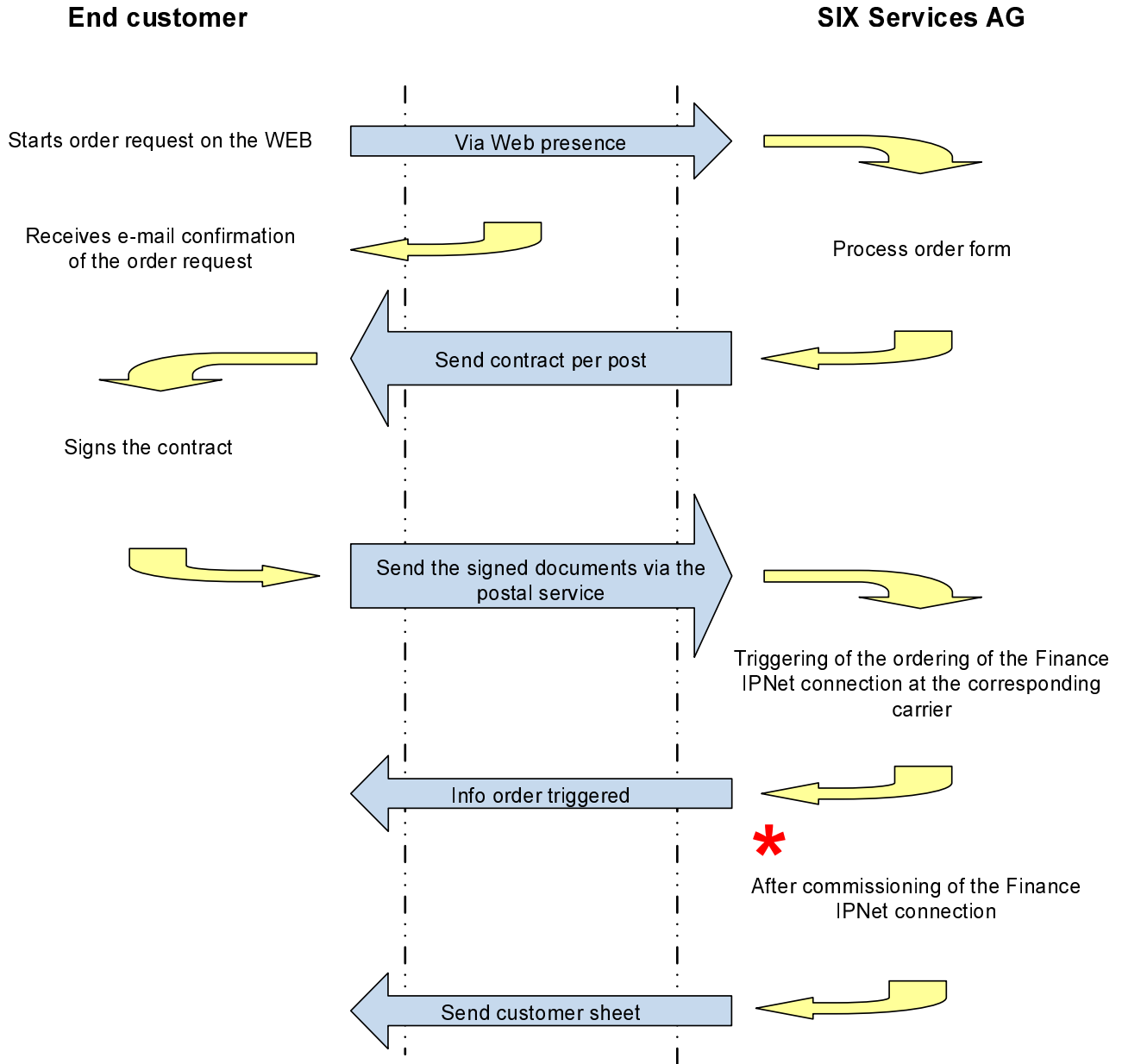
11. Handling offers, orders, mutations and terminations

11.1 Offer



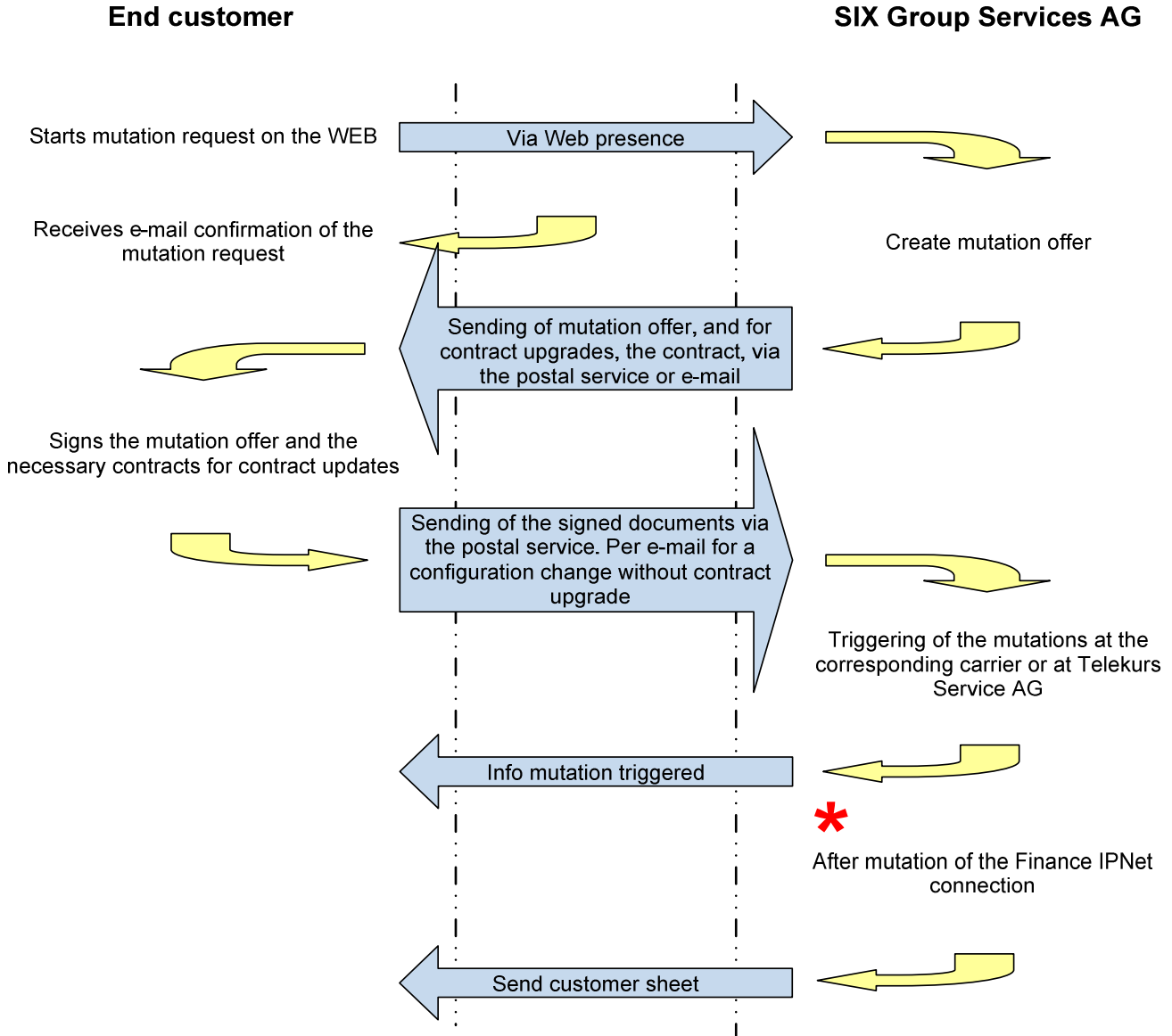


11.2 Ordering



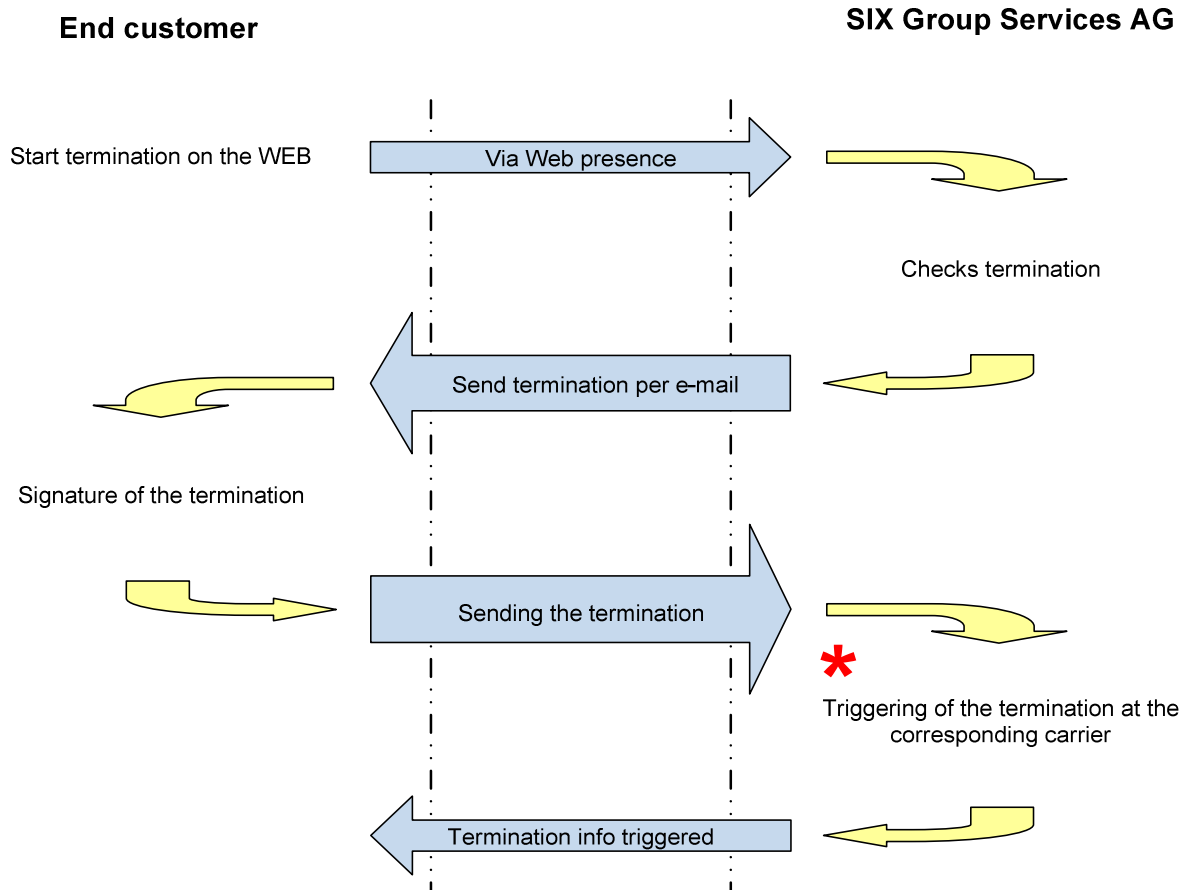
* The carrier contacts the end customer directly for the installation and activation

11.3 Mutations



* If necessary, the carrier contact the end customer directly to carry out the mutation

11.4 Termination



* The carrier contacts the end customer directly to dismantle the hardware