



Finance IPNet

Version 1.3
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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
Telecommunication Department
Comm. Services
Hardturmstrasse 201
8021 Zurich

Phone: +41 44 279 33 33
E-mail: comm.admin@telekurs.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
SBSO/SIC-Operations Center
Hardturmstrasse 201
Postfach
8021 Zürich

Kontaktstelle: SIC Operations Center
Telefon: +41 44 279 42 00 für SIC
Telefon +41 44 279 47 00 für euroSIC
E-Mail: operations@sic.ch

SIX Card Solutions AG
Payment Systems
Hardturmstrasse 201
8021 Zürich

Kontaktperson: David Bodmer
Telefon: +41 44 279 60 92
E-Mail: david.bodmer@telekurs.com

SIX Telekurs AG
Sales Support Center
Hardturmstrasse 201
8021 Zürich

Kontaktperson: Cinzia Hunter
Telefon: +41 44 279 55 77
E-Mail: sales.tkf@telekurs.com

SIX Group Services AG
File Transfer Services
Hardturmstrasse 201
8021 Zürich

Kontaktperson: Denise Zintzmeyer
Telefon: +41 44 279 23 05
E-Mail: denise.zintzmeyer@telekurs.com

SIX Paynet AG
Hardturmstrasse 201
8021 Zürich

Kontaktperson: André Ritschard
Telefon: +41 44 832 92 34
E-Mail: andre.ritschard@six-group.com

SIX Paynet AG
Hardturmstrasse 201
8021 Zürich

Kontaktperson: Dieter Sennhauser
Telefon: +41 44 832 95 13
E-Mail: dieter.sennhauser@six-group.com

SIX SIS AG
PPMT / Product Management
Baslerstrasse 100
4600 Olten

Kontaktperson: René Eberhard
Telefon: +41 62 / 205 37 61
E-Mail: rene.eberhard@sisclear.com

SIX SIS AG
CUSI / Customer Integration
Brandschenkestrasse 47
8002 Zürich

Kontaktperson: M. Tschumper
Telefon: +41 44 288 46 31
E-Mail: martin.tschumper@sisclear.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

- ☎ Phone: +41 44 279 42 00 for SIC
- ☎ Phone: +41 44 279 47 00 for euroSIC
- ☎ Fax: +41 44 279 47 41

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 Card Solutions Info Center

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

☎ Phone: +41 44 279 46 66
☎ Fax: +41 44 279 64 12

Your call will be received by a voice mail box from 6:45 pm to 7:00 am and then immediately processed by a stand-by staff member. You will be called back immediately upon playback of the voice mail.

4.3 Telekurs Financial Information Ltd. Help Desk

☎ Phone: +41 44 279 55 55
☎ Fax: +41 44 279 56 56

The Help 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

☎ Phone: +41 44 279 26 41

4.5 PayNet Support

☎ Phone: +41 44 832 95 77
☎ Fax: +41 44 832 95 25

The PayNet support hotline is staffed on bank working days from 8:00 am to 12:00 pm, and then from 1:30 pm to 5:00 pm (CET). From 5:00 pm to 8:00 am calls are forwarded to the SIX Group Services Help Desk, which offers the appropriate stand-by service according to need.




4.6 SIX SIS Help Desk

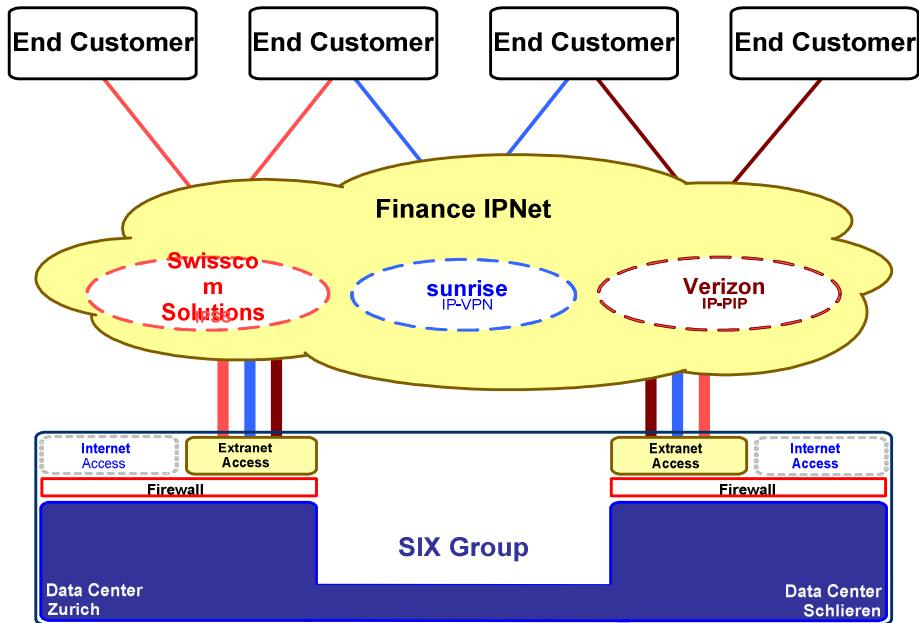
☎ Phone: +41 44 288 48 48
☎ Fax: +41 44 288 58 48

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

5. Which carriers offer Finance IPNet connections?

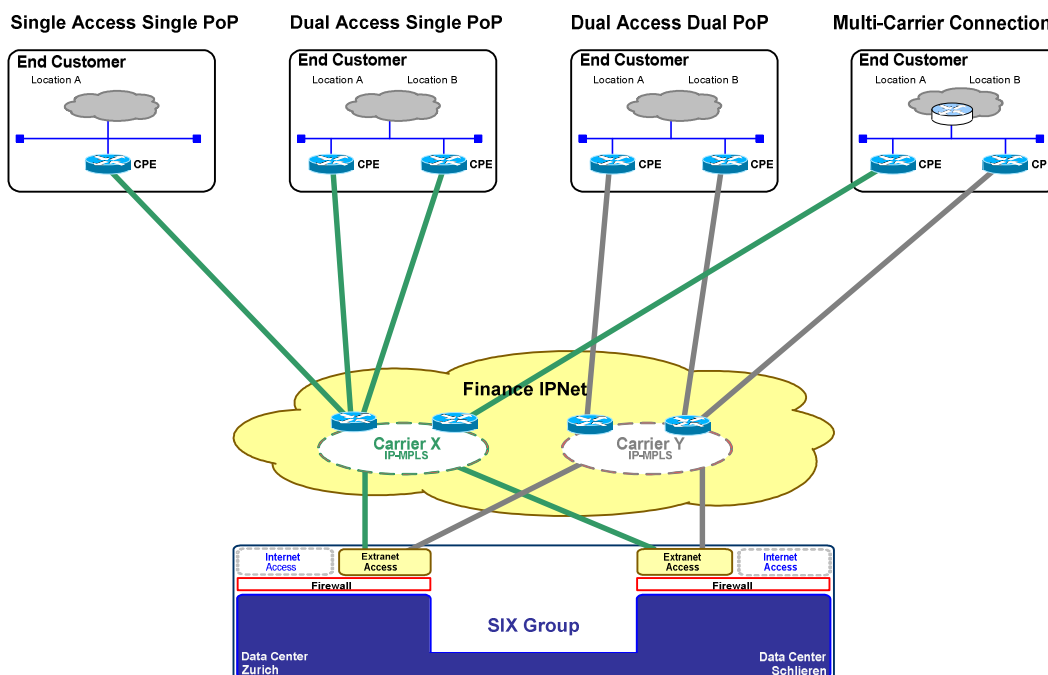
Finance IPNet connections can be realized with the following carriers:

-  sunrise
-  Swisscom Solutions
-  Verizon



6. Potential connection profiles

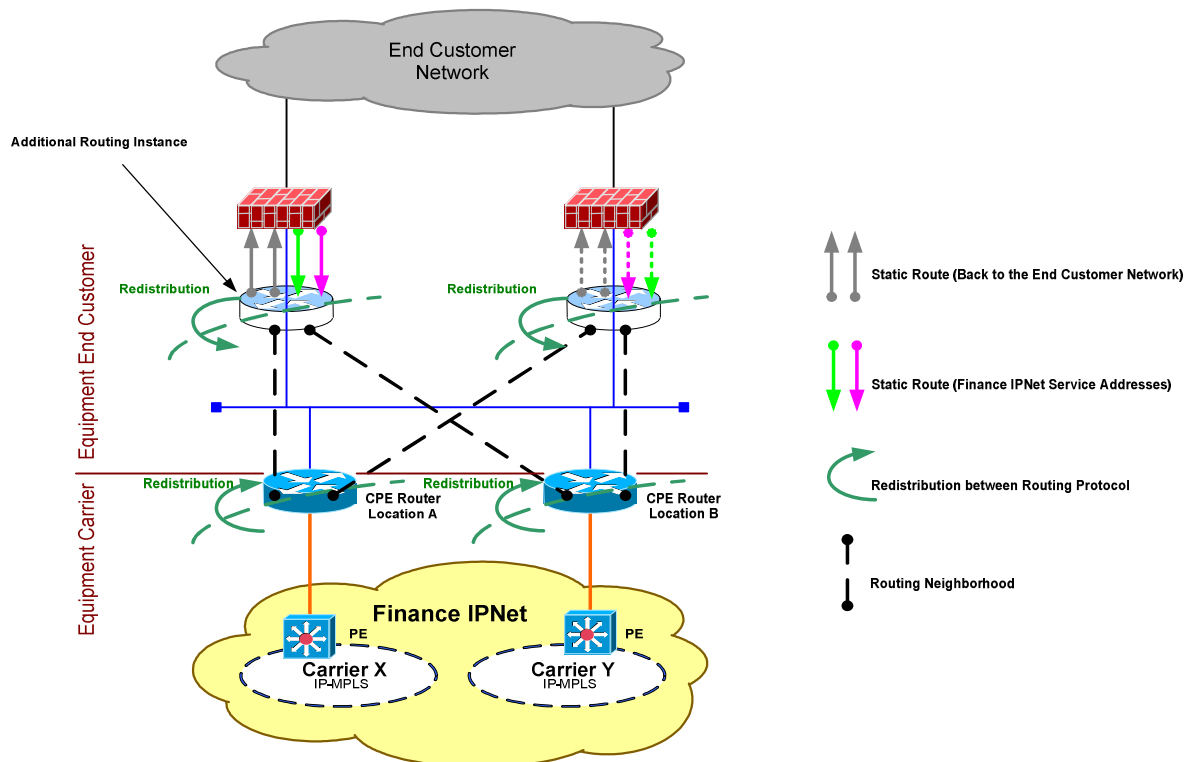
Depending on the requirements regarding availability, the following options can be used to connect the end customer to Finance IPNet. Communication is only possible between the end customer and SIX Group. No communication is possible between end customer A and end customer B (hub and spoke).



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
 Telecommunication Department
 Comm. Services
 Hardturmstrasse 201
 8021 Zurich

Phone: +41 44 279 33 33
 E-mail: comm.admin@telekurs.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:

 www.telekurs-services.com/financeipnet

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

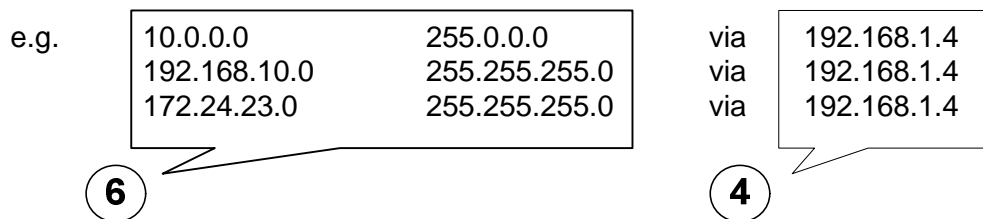
There is no limitation among the other carriers.

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.

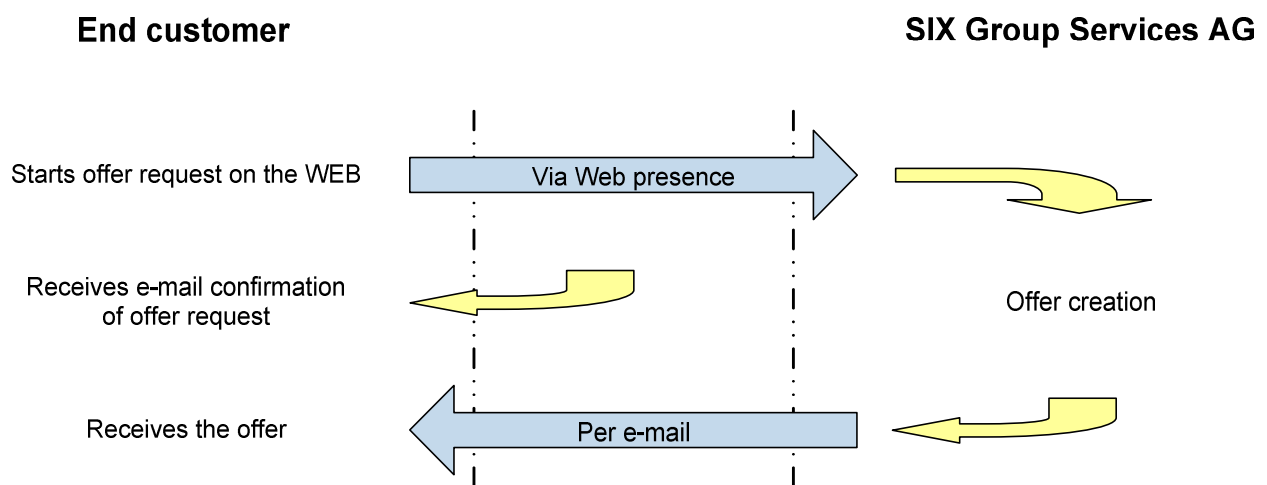
4 e.g. 192.168.1.4 0010.7a03.c0a1

10.4 Outbound services

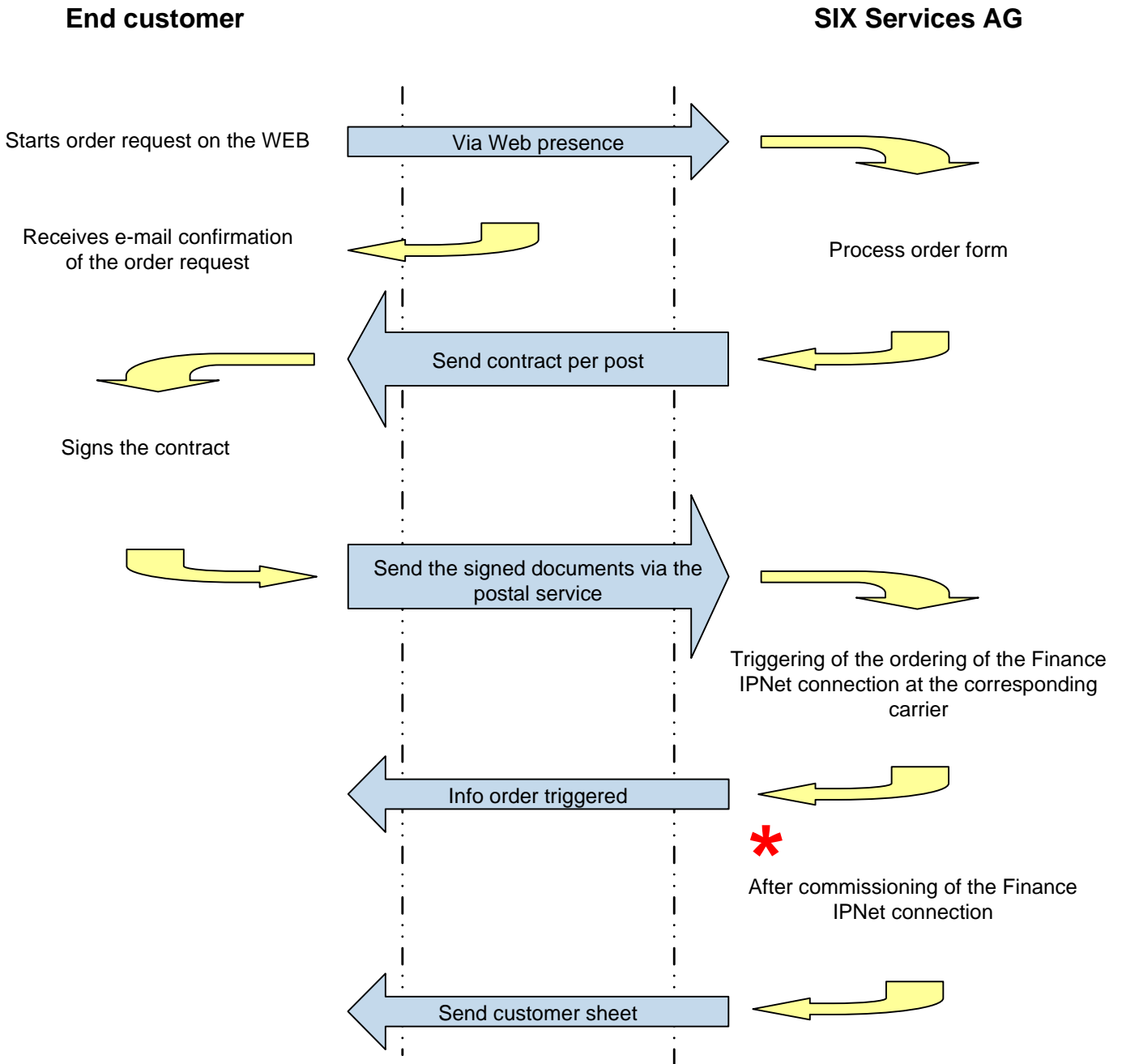
- 8 A TCP session is established by TK or SIS to the end customer for an outbound service. There is a 1:1 NAT at the CPE router (Telekurs destination IP address: the end customer's destination IP address). If the end customer obtains an outbound service, then we need the IP address of the target system.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

11. Handling offers, orders, mutations and terminations

11.1 Offer



11.2 Ordering

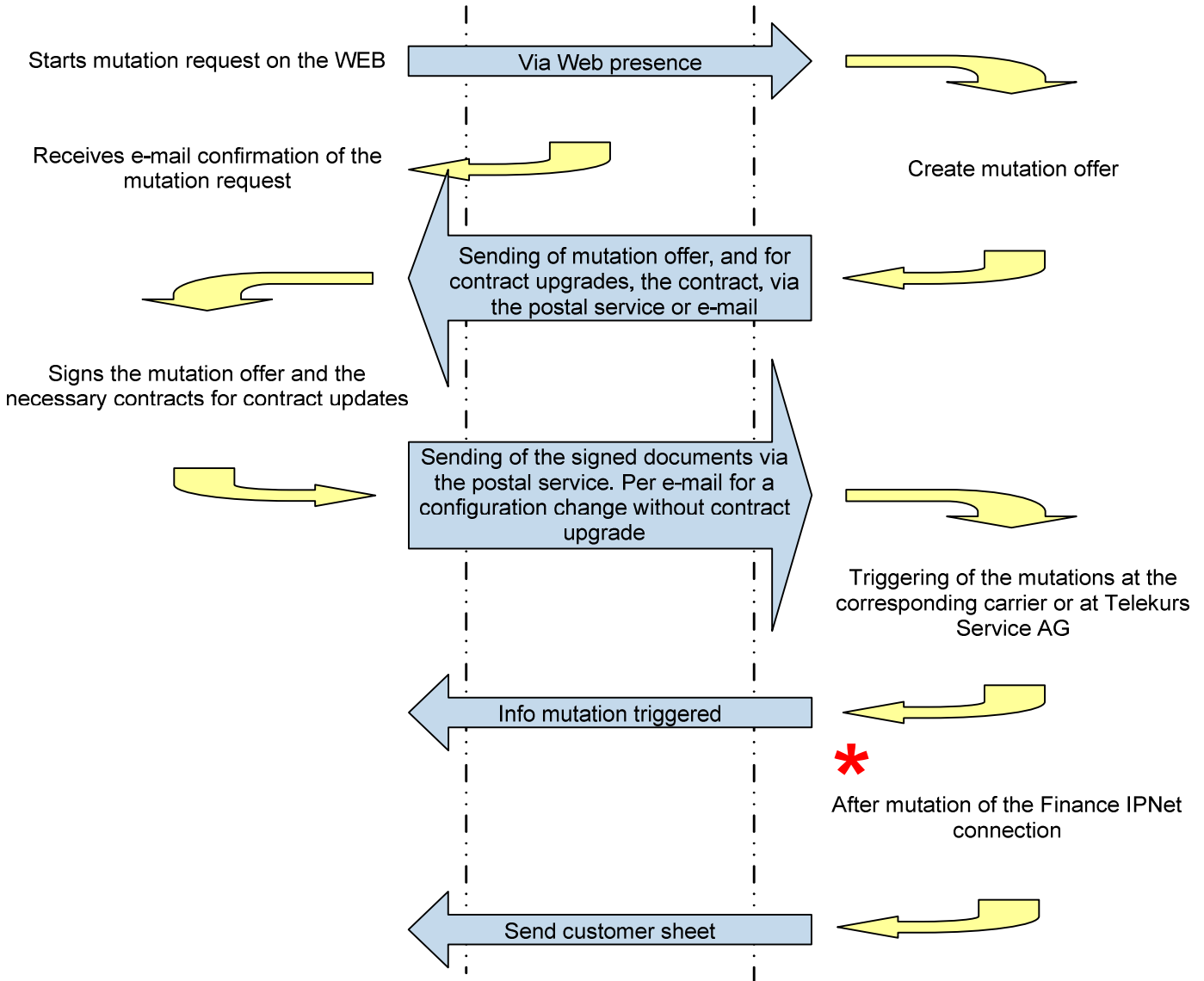


* The carrier contacts the end customer directly for the installation and activation

11.3 Mutations

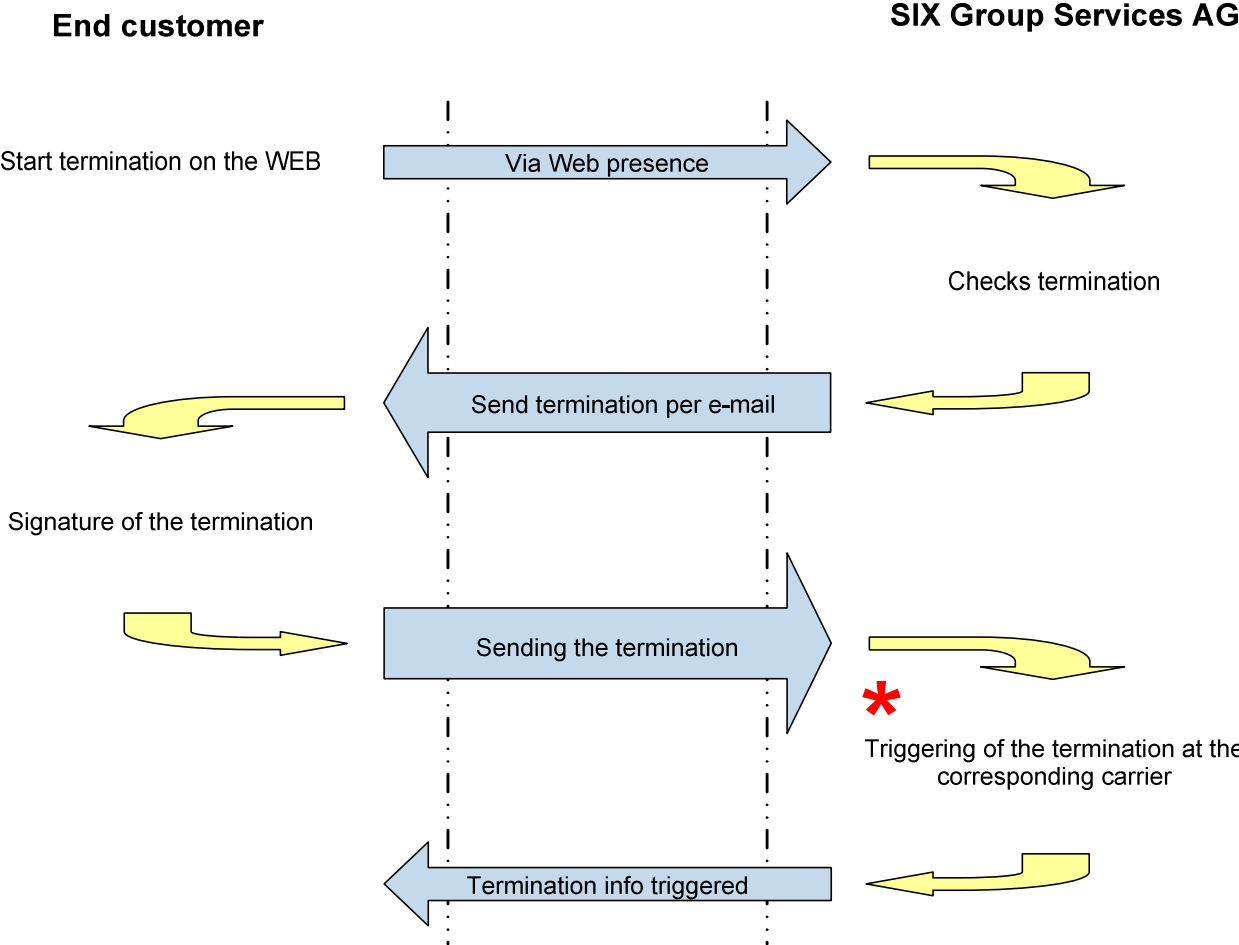
End customer

SIX Group Services AG



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

11.4 Termination



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