

CUSTOMER HANDBOOK



CUSTOMER SUPPORT CENTER CONTACTS



+46 (0) 771 191 170



www.teliacarrier.com



carrier-csc@teliacompany.com



www.teliacarrier.com/portal/home

CONTACT US - ON YOUR TERMS

Our 24/7 Customer Support Center is here to help you out whenever you need us through the channel of your choice. We offer support in English, Russian and Spanish and our Support Engineers are all skilled and certified technicians ready to provide support and resolve any issues you may have.

Call us, email us, open a ticket through our customer portal or chat directly with our support engineers, the choice is yours:



+46 (0) 771 191 170



www.teliacARRIER.com



carrier-csc@teliacompany.com



www.teliacARRIER.com/portal/home

This handbook is available in Arabic, English, Russian and Spanish. All available languages in their latest versions can be found through at teliacARRIER.com or through My Carrier.

USE OUR TOLL-FREE NUMBERS

Canada	1833 248 9234	Poland	00800 461 22 68
France	0800 917 453	Russia	+7 495 788 5708 (local rate)
Germany	0800 182 7111	Singapore	800 461 10 55
Hong Kong	800 965 559	Spain	900 984 631
Italy	800 789 798	Turkey	008 004 696 496
Mexico	01800 123 9599	United Kingdom	0800 028 7406
The Netherlands	0800 022 9500	United States	888 436 1133

MY CARRIER - YOUR CUSTOMER SERVICE PORTAL

We give you access to the information you want, when you want it, through our easy-to-use portal. My Carrier lets you report and track ongoing or historical sold services, deliveries, incidents, inquiries, planned works and invoices, giving you full access to and control over the services you buy from us.



MY CARRIER <https://www.teliacARRIER.com/portal/home>.



To register to any of our portals, drop us a line at carrier-csc@teliacompany.com.

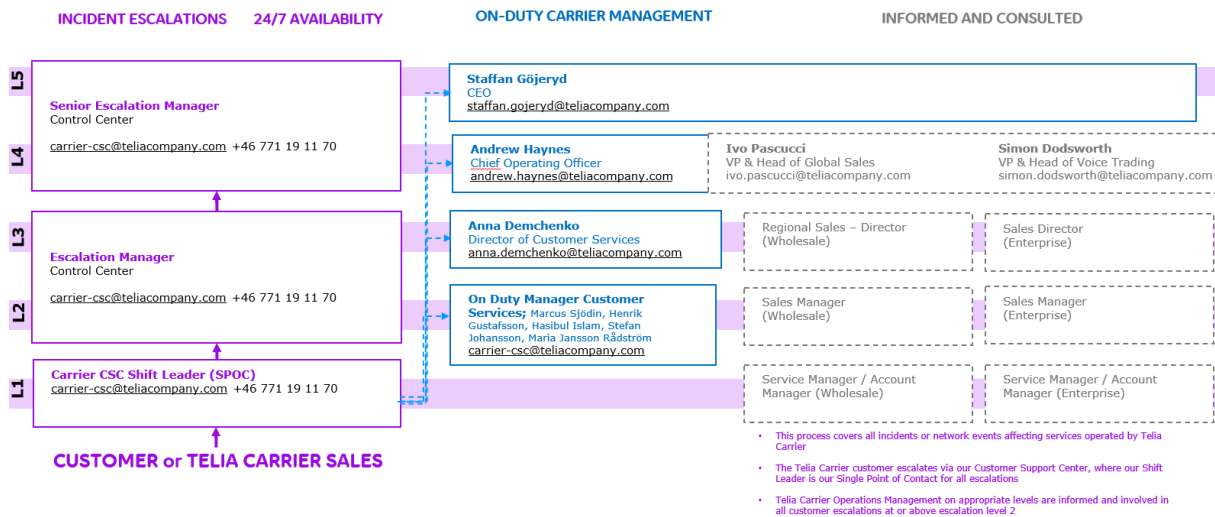


Having problems? [Chat](#) with us and we'll guide you.

INCIDENT ESCALATION MATRIX

We aim to solve any identified incident as soon as we possibly can. If at any time our incident resolution speed or communication frequency does not meet your expectations, you can escalate the case and we will handle the escalation as described in our Incident Escalation Matrix.

INCIDENT ESCALATION MATRIX



Our Customer Support Center's Shift Leader is always your point of contact during the escalations. The shift leader coordinates all escalation activities and communications, in close dialogue with the Control Center Escalation Manager and any involved 3rd party providers.

For all cases escalated to level 2 or above, we also inform and involve our on-duty Customer Service Manager and Senior Management, ensuring the best possible support and attention for the ongoing incident.

WELCOME ONBOARD

When you join us for the first time, your Account Manager and supporting Service Manager will reach out to you and introduce you to our way of working. In our Welcome Onboard presentation, we describe who we are, how we work, how you get in touch with us and anything else you need to know to get started using our services.



Our Welcome Onboard presentation can be found through our portal:
MY CARRIER <https://www.teliacarrier.com/portal/home>.

INCIDENT MANAGEMENT – CUSTOMER CASES

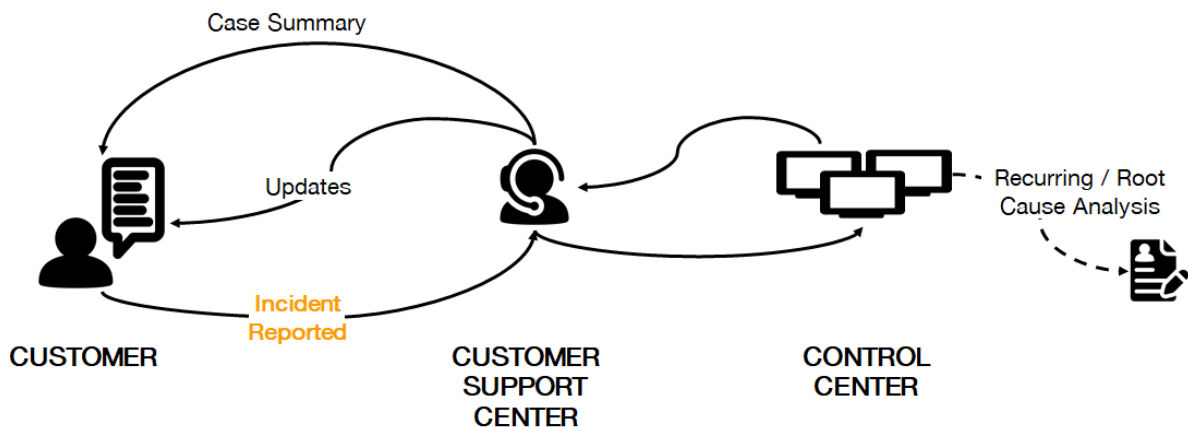
If you experience an issue, please contact us at CSC through the channel of your choice: portal, chat, email or phone. To help us help you we need you to state the following:

- Your legal company name
- Your contact details
- Your Service ID (IC-xxxxxx) for the affected service(s)
- Any other service or disturbance information that may help us identify the issue quicker

You will receive a Telia Carrier incident case reference number to confirm that your case has been received and fault resolution has been initiated.

We will provide updates throughout the entire incident duration and will provide a Case Summary immediately when the service has been restored. An extended Reason For Outage (RFO) report is available upon request if the Case Summary does not provide all the details you require.

INCIDENT MANAGEMENT



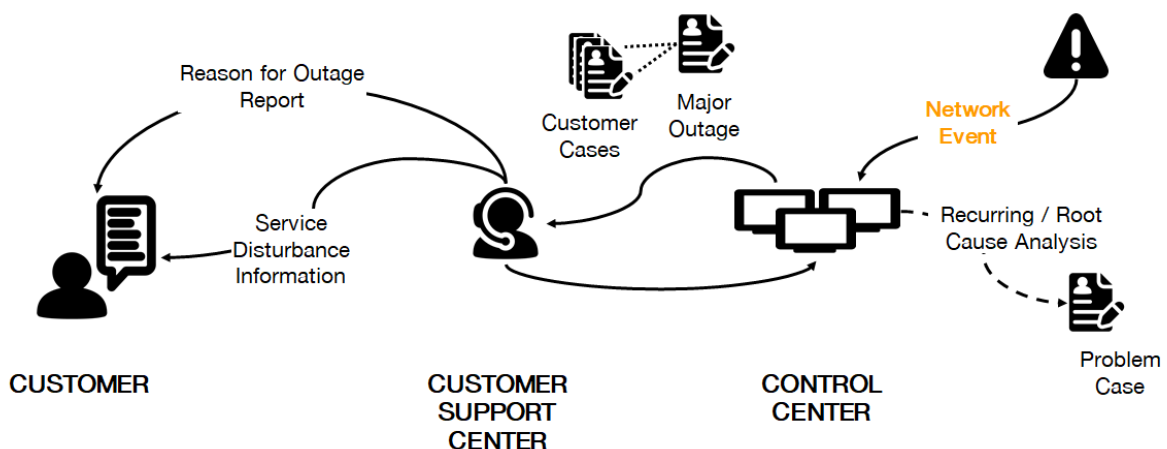
INCIDENT MANAGEMENT – NETWORK EVENTS

If we detect a major outage in our network that is affecting your service, we will inform you of the outage by sending out Service Disturbance Information (SDI) via email to the contact person(s) you have provided. Disturbance information is also visible through [My Carrier](#).

The SDI describes the nature and expected duration of the fault and an evaluation of the possible service interruption. We will send you updates throughout the entire fault duration and when the outage has been resolved we will provide a full Reason For Outage (RFO) report within 3 business days.

Our main objective is to solve the immediate outage and restore your services as quickly as possible. This means that we may implement a temporary solution followed by a planned maintenance work for the full solution.

NETWORK DISTURBANCES



CHANGE MANAGEMENT

Telia Carrier, or any of its underlying providers or contractors, will be required from time to time to carry out routine maintenance, upgrades or improvements to the network or network equipment. This is known as a Planned Work (PW).



Telia Carrier aims to perform traffic affecting maintenance work during low traffic hours: 00:00-06:00 local time (local time refers to the location where the work is taking place).

Telia Carrier will notify you of any PW at least 10 business days beforehand, or as much notice as Telia Carrier receives from underlying providers, unless otherwise stated in the SLA.



If there is a need to manually restore or reset your equipment as a consequence of planned work then this is outside the responsibility of Telia Carrier.

Telia Carrier reserves the right to inform you about PW with less lead time due to factors outside of Telia Carriers control.

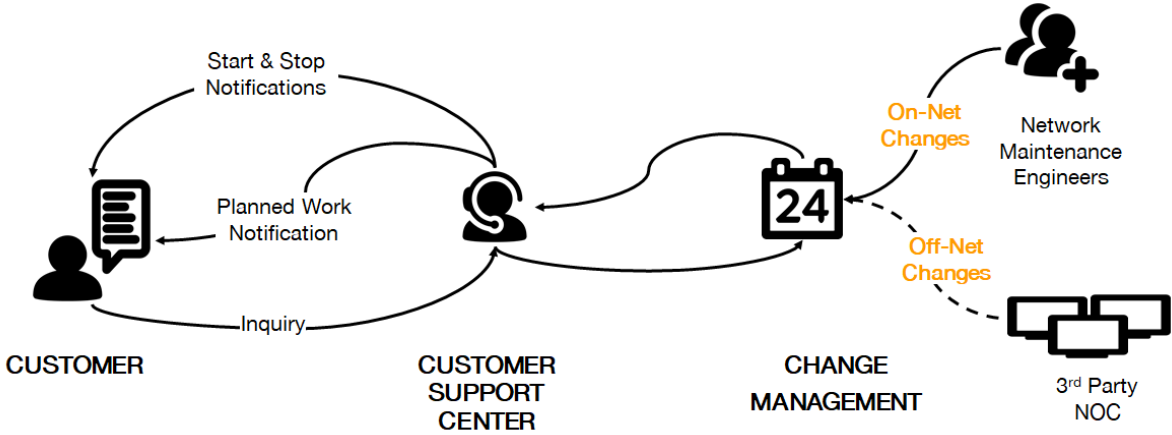


For any questions regarding a Planned Work please contact us.

The notification may include a request to access to your premises. If necessary, you will need to provide Telia Carrier and any of our contractors with access to your premises, or third-party premises, to carry out the PW.

Traffic-affecting maintenance work may need to be performed outside of the standard service window, e.g. to allow for work governed by civil authorities, work related to troubleshooting, work to mitigate urgent risks to our network or customers or work originated by a 3rd party supplier.

CHANGE MANAGEMENT



SERVICE MANAGEMENT

SERVICE MANAGEMENT, QUALITY ASSURANCE & PROBLEM MANAGEMENT

Starting when you onboard, our Service Managers are here to serve as the voice of you, our Customer, into our organization. Our Service Managers follow-up the quality of your services through trend analysis and statistics, they address recurring issues and raise problem cases ensuring we find and resolve underlying root causes and generally ensures that our services meet your expectations.

If you are not satisfied with our overall quality or service experience, please don't hesitate to reach out to your Account Manager and ask for an update from one of our Service Managers.

SERVICE DELIVERY

ONGOING DELIVERIES

For delivery inquiries please contact your Telia Carrier Delivery Coordinator. Contact details should have been provided during the delivery process. You are also welcome to view delivery information and updates in My Carrier.



MY CARRIER <https://www.teliacarrier.com/portal/home>.

SERVICE DELIVERY ESCALATIONS

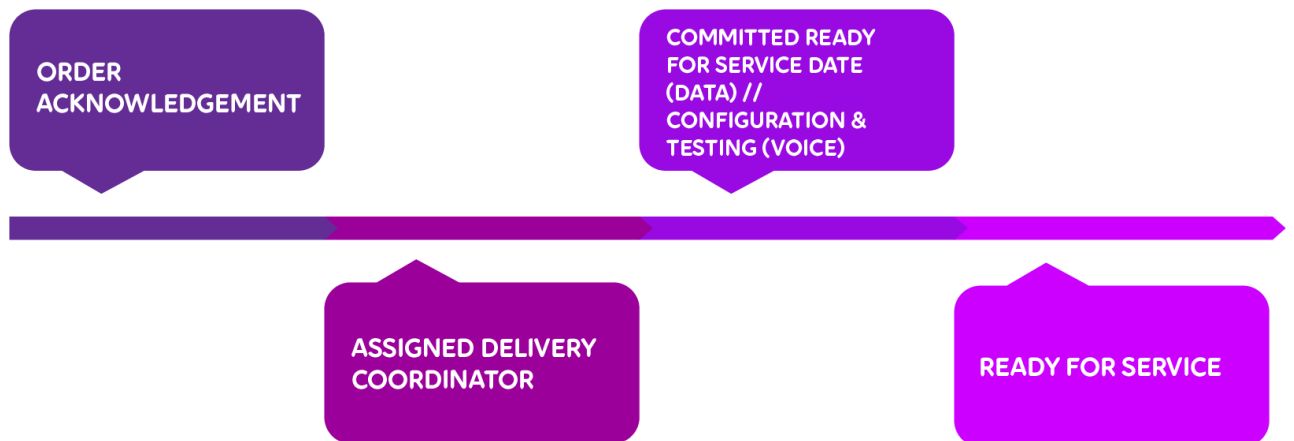
Should you, at any time in the service delivery process, feel that you are not satisfied with the delivery progress of your service, the communication or any other matter, please feel free to use the Service Delivery escalation process that you can access through our support pages at [teliacarrier.com](http://www.teliacarrier.com).



Service Delivery Escalation Process: <http://www.teliacarrier.com>

SERVICE DELIVERY PROCESS

Our Service delivery process follows four distinct written communication touch points. Your Service Delivery Coordinator will pick-up and manage your order through to the installation and handover, providing concise communication throughout the process. To ensure the best possible service delivery experience our focus is on transparency and communication to ensure that we deliver right first time – every time.



INVOICES OR CREDIT CLAIMS

For any inquiry you have relating to an invoice or a credit claim, please contact us through My Carrier, or send an email to Customer Support, providing the following information:

- Legal Customer name
- Contact name, contact telephone number and email address
- Invoice number
- Product relating to the inquiry (Voice, Capacity or IP)
- Detailed description of the nature of the inquiry



MY CARRIER <https://www.teliacARRIER.com/portal/home>.



carrier-csc@teliacompany.com

OUR SERVICES AND COMMERCIAL INQUIRIES

For any inquiry relating to our services, offering or commercial discussions you find up-to-date information on www.teliacARRIER.com where we are also available through chat for any additional questions you may have. You can also contact your Account Manager directly.



For assistance on Buying our Cloud Connect service through our portal, contact us through [chat](#) and we'll assist with [My Carrier](#) access and the ordering process if needed.

ENABLE US TO CONTACT YOU

For us to be able to help you we need your help with your contact information. You need to provide Telia Carrier with accurate contact information, including email addresses and telephone numbers for fault management, planned works, service disturbance and escalations.

It is important to specify the role of each contact so that we know who to contact for specific issues or information. Possible contact points may include:

- Escalation of a technical problem
- Fault handling
- IP configuration
- Planned work
- Service disturbance
- Commercial reasons



You can easily provide and update your contact information in our portal, [My Carrier](#).

APPENDIX 1 - DEFINITIONS

BUSINESS DAY	A day (not being a Saturday or a Sunday) when clearing banks are open for the transaction of normal business.
SERVICE	The service that is specified in the Service Order Form.
SERVICE LEVEL AGREEMENT (SLA)	A document specifying the levels of targeted Service quality.
SERVICE ORDER FORM (SOF)	A document stating the exact technical and commercial properties of the order.

APPENDIX 2 – INCIDENT CASE CATEGORIES

To allow the best possible service at all time we will prioritize incident cases based on the severity of the technical issue. The categories we use are illustrated by the examples provided. For each category we also provide a target resolution time and update frequency.

		IP, ETHERNET, CLOUD, SDH, WAVES, OPTICAL FIBER, IX CONNECT*	VOICE
CRITICAL SERVICE AFFECTING	1	Service not available Target resolution time: 4 hours* Update Frequency: 1 hour (IP & Ethernet) 2 hours (SDH, Waves, Optical)	Service not available Target resolution time: 8 hours Update Frequency: 2 hours
	2	Service available but degraded within SLA <i>E.g.: Packet loss, packet delay, bit errors, frequent pointer adjustments, abuse issues, increase of attenuation, etc.</i> Target resolution time: 4 hours* Update Frequency: 1 hour (IP & Ethernet) 2 hours (SDH & Waves)	Service available but degraded <i>E.g.: Unable to reach multiple destinations, Serious degradation of call quality</i> Target resolution time: 24 hours Update Frequency: Daily
NON-CRITICAL SERVICE AFFECTING	3	Redundant path or equipment down Target resolution time: 12 hours	Degradation of call quality <i>E.g. Unable to call fax numbers, loss of CLI, single number failures, audio quality, etc.</i> Target resolution time: 72 hours Update Frequency: Daily
	4	Reports, Inquiries & General Support Questions Response time: 3-5 days depending on type of inquiry	

* For Optical Fiber the target resolution time for critical service affecting faults is 16 hours; with the exception of cuts on undersea cables where repairs are vessel and weather permitting.

APPENDIX 3 – REPORTING AN INCIDENT

REQUIRED INFORMATION

In order for us to quickly analyze and resolve incidents, it is important that you share vital information with us when you report the incident.

FOR ALL INCIDENTS

- Legal customer name
- Contact details, e.g. your NOC
- Your incident case ref. number
- Telia Carrier Service ID
- A short description of the fault including any error messages
- Date & Time (also time zone) of the incident
- Results of any tests you have undertaken

IP & ELAN SERVICES

- Trace routes showing all the hops with source and destination address and if possible
- for both directions
- Ping log with source and destination addresses
- Ping log over the interface
- Are you able to reach the address via another carrier?

IP ABUSE REPORTS

- Attacked IP addresses or range
- Type of attack (e.g. DDoS)
- Related information, e.g. trace routes
- Owner of the attacked addresses

CAPACITY/ WAVES/ EPL/CLOUD/ SDH/IX CONNECT

- Circuit down (please specify fault type i.e. line protocol down, connectivity down)
- Circuit flapping
- Latency
- Current and historical alarm (i.e. AIS, LOS) including on which locations
- Light levels on both locations
- Current and historical errors (i.e. bit errors, ES/SES, CRC) including on which locations
- Logs (date and time, including time zones when incident started)
- Contact information for customer technician
- Is it acceptable to break the service for testing?
- Loss of signal (LOS) and direction

IPX BASED SERVICES

- The latest IR.21 both for customer and their roaming partner
- IMCP trace route showing all the hops with source and destination address and if possible for both directions, if the issue is about not being able to reach a certain route or destination
- Both A and B IP addresses if the issue is related to not being able to reach a certain destination
- Routes and prefixes related to the issue reported
- Other details of the fault (GRX carrier services the site, symptoms)
- Roaming Mobile Network Operator domain/DNS details (if applicable)

DRX SIGNALING SERVICES

- Originating and Destination IP Address
- Realm name
- IMSI number for the roaming mobile phone
- A trace if the issue is related to a routing issue
- What roaming number range should apply
- A diameter trace or transaction log record

VOICE SERVICES

For Signaling Links Down or Blocked CICs

- Originating and Destination Point Codes

For Voice Termination

- Originating and Destination Point Codes (OPC/DPC) (TDM) or Originating and Destination IP Address (VoIP)
- B-number (called party number or roaming/MSRN number), minimum 3 for multiple numbers failing/destination faults. If an MSRN is reported, please provide an MSISDN as well.
- A-number (calling party number)
- If multiple numbers are reported, can these numbers be used for testing purposes?
- Does the B-number work with any other carrier? With which carrier?

ROAM CONNECT

If a call fails during call set-up towards a roaming number provided by the roaming network or there is a location update issue:

- Visited mobile network (the network that the mobile is trying to roam into)
- Home mobile network (the network that the mobile belongs to)
- Is this a destination established in a roaming relationship?
- MSI number for the roaming mobile phone
- C7 trace or other transaction log record
- MSISDN number for roaming mobile phone

Please note that provisioning matters for roaming (ordering new roaming relationships, SCCP and NDC changes) are not faults and should be logged through My Carrier.

ROAMING NUMBER / MSRN FAILING

- Visited mobile network
- Home mobile network
- A-number
- B-number (MSISDN)
- MSRN number or what roaming number range should apply?
- A C7 trace of transaction log record
- IMSI number for called party
- Is the failing destination SIM card available for test calls and switched on?

IoT / M2M SERVICES

- IC number of the remote/HUB end connection (when available)
- Stream within the M2M backhaul, such as data, signaling, etc

MMS GATEWAY SERVICES

- Customer domain name
- Destination MMS hub
- IP address of customer MMSC/MTA
- Test numbers and details of any testing done

APPENDIX 4 – COLOCATION

EMERGENCY ROUTINES



In the case of fire please contact the local fire and rescue service first and then contact us.

In the event of temperature changes at the site or similar kinds of emergency situations please contact us at carrier-csc@teliacompany.com

SITE ACCESS, REMOTE HANDS AND SHIPMENT ASSISTANCE

Remote Hands services are offered in the locations specified in the Customer Agreement. Site Access is available to authorized individuals only. Site access is only allowed for installation, operation and maintenance of equipment within the customers own space and only for the duration of those tasks.



For security reasons, all Site Access (SA), Remote Hands (RH) and Shipment requests must be opened through our portal, [My Carrier](#), or be sent from an authorized email address to carrier-csc@teliacompany.com.



For questions regarding ongoing requests, please contact us through chat, email or phone (+46 771 19 70). For toll free numbers see the second page of this handbook or at our web teliacarrier.com.

REGULAR AND ON-DEMAND ACCESS

Type 1: for most Telia Carrier sites, you will be provided with permanent means of access, such as a card, keys and code.

Type 2: for third-party sites and some Telia Carrier sites, authorized personnel will be listed on the site access information system for permanent access. On some sites authorized personnel are required to pre-announce their visit.

Type 3: for a few sites you must contact CSC to request access.

For sites where regular access is provided, you may contact Telia Carrier to request access on a one-time basis for persons who are not on your authorized personnel list. On-demand access will be granted on a best-effort basis and you are encouraged to provide at least forty-eight (48) hours' notice before visiting a site.

SHIPPING ASSISTANCE

Shipment assistance includes receiving packages, moving the packages to a proper area within the site, and removing packaging materials. It is not available at all sites, and we reserve the right not to accept certain shipments. Since we do not have storage capacity or handling tools (e.g. fork lifts) at all sites, you must confirm availability and make reservations (if available) in advance. You will be required to reimburse us for any costs incurred, charged to you as Remote Hands service.

If possible, please send notification in advance about when someone will pick up the package. Shipment notifications must be made five (5) business days in advance.

REQUIRED INFORMATION

SITE ACCESS

- Legal customer name
- Telia Carrier Service ID
- Date, time, time zone and expected duration of visit
- Name of the colocation facility
- Visitor's name and company
- Visitor's contact number (mobile)
- Visitor's ID type and number
- Purpose of visit
- Information about equipment/tools brought to site
- Requesting person's name
- Requesting person's contact number

REMOTE HANDS & SHIPMENT REQUESTS

- Legal customer name
- Telia Carrier Service ID
- Name of the colocation facility
- Requesting person's name
- Requesting person's contact number
- Indicative time when the customer is available
- Job description, tools needed, equipment position (row and rack)
- Customer reference number

SHIPMENT REQUESTS ADDITIONAL DETAILS

- Always open a Remote Hands inquiry case with CSC for all packages before sending them to our sites. This is to avoid the packages being refused entry at the site.
- Date including time zone and time of delivery
- Name of delivery company
- Number of shipped boxes, their weight and sizes
- Tracking number(s)
- Content of shipment
- What should be done with the package (stored in customer cage, stored in general storage)
- Whether storage is requested
- Who will pick up the shipment and when