



# IOT CUSTOMER HANDBOOK

A guide for easier support



# WHAT IS A CUSTOMER HANDBOOK?

The purpose of Telia's IoT Customer Handbook is to make your experience with us smooth and simple. Here you can find information about how to contact us, what information we need to support you in the best way, what you can expect from us, and much more.

To ensure you have the latest version of the IoT Customer Handbook, please download it from <https://business.teliacompany.com/contact>.

Depending on your IoT service the process for incident reporting varies. There may also be customer specific promises in your agreement. If such KPI's exist these are specified in a separate contract appendix.

In this handbook you will find information about Managed IoT Connectivity, IoT Platform & Solutions and Smart Public Transport. The IoT Portals are available for our Connectivity and Platform Solution customers, and are you are using a Smart Public Transport service we are available for bus manufacturers and technicians via phone and email.



## **IoT Platform & Solutions:**

Includes customers who has purchased any of the following services and solutions: Telia IoT Platform, Telia Asset Tracking, Telia Building Climate Monitoring and Global IoT Connectivity.



## **Managed IoT Connectivity:**

Includes customers who has purchased only connectivity from Telia, including our connectivity starter packs (NB-IOT and LTE-M starter kit, IoT Connect Starter Kit) as well as pre-packaged connectivity packs.



## **Smart Public Transport:**

Includes customers who has purchased any of the following services and solutions: Journey Information, Ticket validation, Internet onboard, Voice over IP (VoIP), Eco-Driving, Passenger count, Driver alarm, Video surveillance, Driver ID, Tachograph data management, Breathalyzer, Vehicle climate manager, Message push and Positioning.



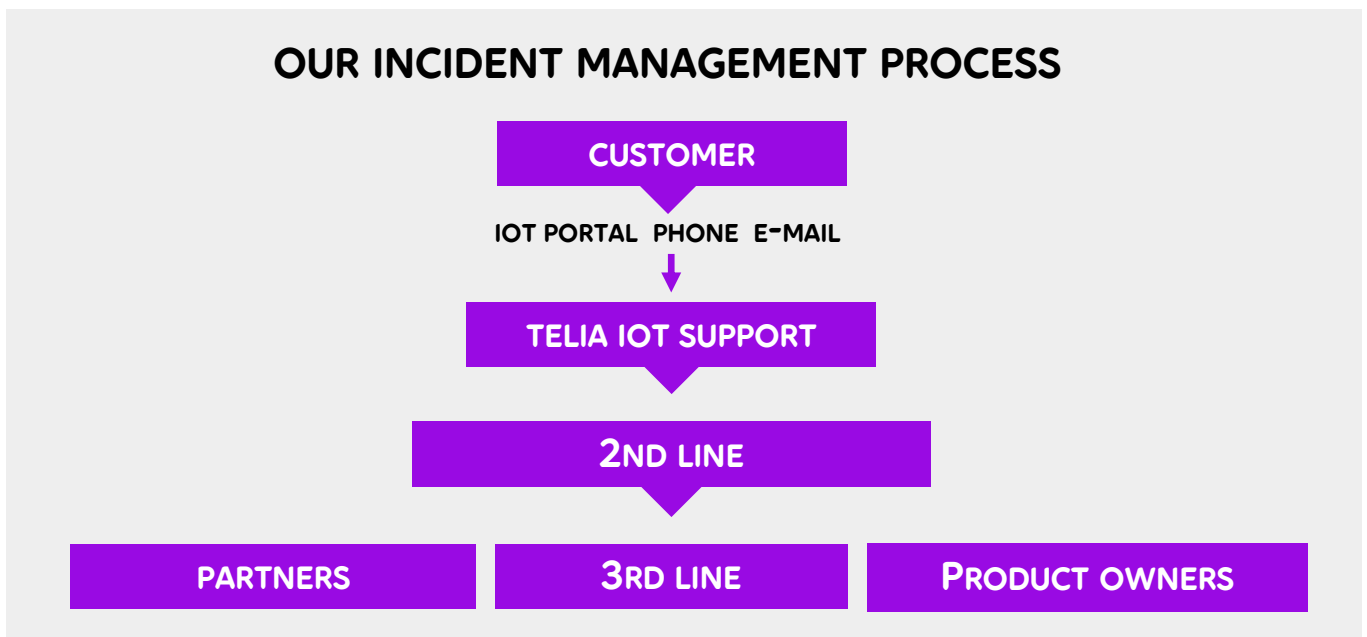
# INCIDENT MANAGEMENT

Providing proactive customer support is vital within IoT, just as much as enabling you to conclude self-troubleshooting via your IoT Portal. We monitor our services 24/7 and you can contact us around the clock. Below you can read more about the different ways to contact us and how we work to support you.

## HOW TO REACH US

You can always reach us by sending us an email or call us. For certain services you can also reach out through a Portal. Further down in this handbook, under Checklists, you can read more on what information we need from you when you need to report a ticket to us. We provide support in English and Swedish.

### OUR INCIDENT MANAGEMENT PROCESS



Tickets can be submitted 24/7 through IoT portal or by email. You will receive a ticket acknowledgement upon ticket creation. If the character of the ticket is critical it is important to follow up with a call, see number for each service below. A tip is to copy the checklist to fill in as much information as possible regarding the incident. The more we know the quicker we can start trouble shooting and find a solution for you.

#### IoT Connectivity, Platform & Solution:

 **PHONE:** +46 (0)771 100 235  **EMAIL:** [global-iot-support@teliacompany.com](mailto:global-iot-support@teliacompany.com)

 **OPENING HOURS:** MONDAY TO FRIDAY 8AM to 18AM CET

#### Smart Public Transport (SPT):

 **PHONE:** +46 (0)90 183 928  **EMAIL:** [enterprise-iotsupport@teliacompany.com](mailto:enterprise-iotsupport@teliacompany.com)

 **OPENING HOURS:** MONDAY TO FRIDAY 8AM to 17AM CET



If you are a Managed IoT Connectivity customer and need to report a ticket with critical severity, we are here to work with your ticket 24/7. Contact your Key Account Manager for more information about what is included in your particular support agreement.



## DISTURBANCE INFORMATION

When we find major incidents on our services, we want to keep you informed. Information around Telia mobile network disturbances are shared country by country on below websites:

-  **Sweden** <https://www.telia.se/foretag/driftinformation/mobiltelefoni>
-  **Finland** <https://www.telia.fi/yrityksille/asiakastuki/viat-ja-hairiotilanteet/hairiotiedotteet>
-  **Denmark** <https://www.telia.dk/privat/hjalp/dakning-og-drift/driftsinformation/>
-  **Norway** <https://www.telia.no/dekning/dekningsutfall/>

## MANAGED IOT CONNECTIVITY

If you're a Managed IoT Connectivity customer with a Telia IoT Service Portal account, we will inform about incidents in the Telia IoT Service Portal. Depending on the incident severity we may also send information to the email address you have provided. You can always contact our support team if you want to have more information around what we've communicated.

## IOT PLATFORM & SOLUTIONS

The Telia IoT status site gives you an overall view of the availability of the IoT Platform's components. You can subscribe to notifications on component status changes and have the notifications delivered according to your preference. We support email, SMS, webhooks, and RSS feeds.

You can reach the site by going to <https://status.teliaiot.com>.



SUBSCRIBE TO UPDATES

All Systems Operational

### About This Site

Welcome to the status site for Telia IoT. The status site gives you an overall view of the availability of the platform's components. You can subscribe to notifications on component status changes and have the notifications delivered according to your preference. We support email, SMS, webhooks and RRS feeds.

Customer Portal	Operational
Management Portal	Operational
Public REST API	Operational

SUBSCRIBE TO UPDATES



Get email notifications whenever Telia IoT **creates, updates** or **resolves** an incident.

Email Address

SUBSCRIBE VIA EMAIL

This site is protected by reCAPTCHA and the Google [Privacy Policy](#) and [Terms of Service](#) apply.



## SEVERITY MATRIX

Once you have reported your support ticket to us, we prioritize the incident according to the general severity matrix, as seen below. If the severity changes during the lifecycle of an incident, the first set severity level can change.

Severity Level	Description		
Critical	<b>IoT Platform &amp; Solutions</b> The Service is down or is subject to a major malfunction, resulting in all or substantially all users or related systems being unable to perform normal tasks.	<b>Managed IoT Connectivity</b> Complete breakdown or outage of the Service or a critical function that renders the system unusable.	<b>Smart Public Transport</b> The Service is down or is subject to a major malfunction impacting at least 20% and a minimum of 15 vehicles within the same traffic area, resulting in work stop. The reported issues need to relate to the same fault type.
High	<b>IoT Platform &amp; Solutions</b> Critical loss of Service functionality or performance resulting in majority of users or related systems being unable to perform normal tasks.	<b>Managed IoT Connectivity</b> Significant degradation of the Service or a critical function that, while not rendering the system completely unusable, considerably limits one or more of its critical functions.	<b>Smart Public Transport</b> Loss of Service functionality or performance resulting in more than 10% and a minimum of 10 vehicles within the same traffic area being unable to perform normal task. The reported issue need to relate to the same fault type.
Medium	<b>IoT Platform &amp; Solutions</b> Moderate loss of Service functionality or performance resulting in multiple users or related systems being impacted when performing normal tasks	<b>Managed IoT Connectivity</b> A moderate degradation of the Service or some functionality that causes some loss of service and does limit its functions.	<b>Smart Public Transport</b> Loss of Service functionality or performance resulting in more than 5% and a minimum of 5 vehicles within the same traffic area being impacted when performing normal tasks. The reported issue need to relate to the same fault type.
Low	<b>IoT Platform &amp; Solutions</b> Minor loss or deterioration of Service functionality.	<b>Managed IoT Connectivity</b> A minor degradation of the Service or some functionality that causes no or minimal loss of service and does not limit its functions.	<b>Smart Public transport</b> Minor loss or deterioration of Service functionality.

If you are a Smart Public Transport customer and want to report an incident for a traffic area smaller than specified above, Telia Support will set the priority in dialogue with you.

## RESPONSE AND UPDATE FREQUENCY

We will continuously inform you on the progress of your tickets and measures taken. The notifications are sent to you either through your IoT portal, by email, text message, or by phone. The higher severity of the ticket, the higher we will prioritize it.

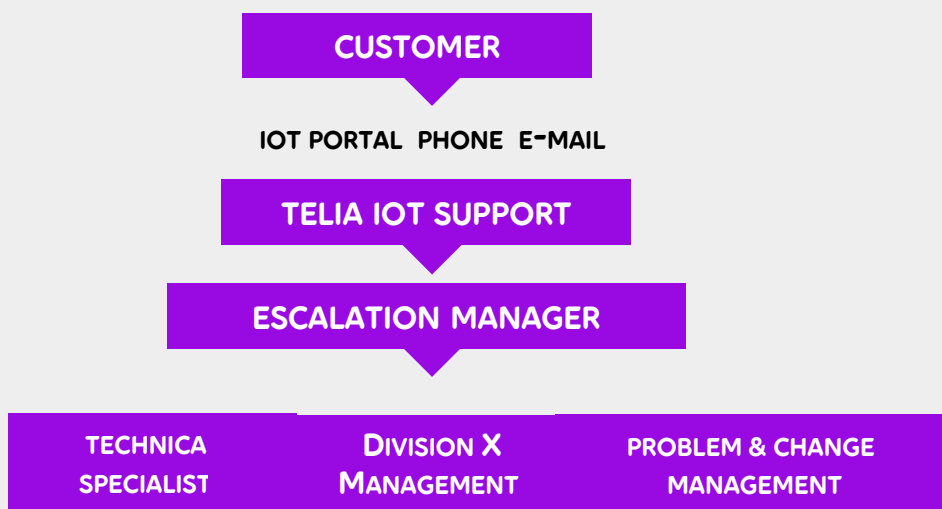


## ESCALATIONS

If you are not satisfied with the service, how the troubleshooting is progressing or is prioritized you can always request for an escalation. All communication connected to the escalation goes via Telia IoT Support.

You ask for an escalation request in the ticket you want to escalate. Please provide us with the reason for the escalation request and other relevant information. If the escalation request is fulfilled the Escalation manager will be assigned to your ticket with the purpose of ensuring a speedy progress and incident resolution.

### OUR ESCALATION MANAGEMENT PROCESS



## AVAILABILITY

Depending on your IoT service, there might be certain availability promises in your agreement with us. If such KPIs exist, you can read more about them in your agreement.



## PROBLEM & CHANGE MANAGEMENT

The Telia Company network is subject to numerous changes on daily basis which might have minor impact on the connectivity of the devices hence not all changes can be communicated to our IoT customers. All changes to functions and services in operation shall be implemented in a controlled process.

If we encounter recurring incidents, we strive to find the actual root cause and solve it in the best way possible, sometimes temporarily with a workaround. All problems are documented and evaluated for continuous improvements.

## IOT PLATFORM & SOLUTIONS

IoT Platform is subject to regular updates and maintenance and there is no active notification of the planned changes.



Service window for new software release of the IoT Platform: Tue 10.00 – 14.00 CEST

Service window for service-affecting infrastructural changes: Wed 00.00 – 04.00 CEST

## MANAGED IOT CONNECTIVITY

Changes with risk of service impact are announced in advance on Telia IoT Service Portal.

Depending on the impact of the change we may also send information to the email address you have provided.

## SMART PUBLIC TRANSPORT

Changes to functions and services in operation shall be implemented in a controlled process.

Changes are documented and, where applicable, tested before deployment.

We always strive to inform you as a customer when a change might cause severe disturbance.





# CHECKLIST

The more information you can provide on the incident already when registering your ticket with us, the quicker we can come up to speed with your incident and resolve it as quick as possible.

If you choose to contact us through your IoT portal, you'll get guidance on what information to add directly in those.



A tip is to copy the questions or information below into your ticket or an email and give your answers to the text in cursive.

## MANAGED IOT CONNECTIVITY

### All types of issues

<b>Contact person:</b>	<i>(E-mail / phone)</i>
<b>Fault description:</b>	<i>(Be as detailed as possible)</i>
<b>Location of the device(s):</b>	<i>(If possible exact address or GPS coordinates)</i>
<b>Type of device(s):</b>	<i>(Specify brand and model)</i>
<b>Date &amp; time of attempt(s):</b>	<i>(Including time zone)</i>
<b>Has the service been working before?:</b>	<i>(Yes or no)</i>
<b>Action taken to resolve the issue:</b>	<i>(Describe what you have already tested; such as restarting devices, checking coverage, try SIM in another device, check APN or configuration settings)</i>

### Data related

<b>IMSI(s):</b>	<i>(Can be found in Telia IoT Service Portal)</i>
<b>IP address:</b>	<i>(Can be found in Telia IoT Service Portal)</i>
<b>APN:</b>	<i>(Can be found in Telia IoT Service Portal)</i>
<b>Fixed or moving device(s)?</b>	<i>(Specify if fixed or moving)</i>

### SMS related

*(In general, sending operator should be Telia Company as the sending number should raise the ticket)*

<b>Sending number / Short code:</b>	<i>(Eg, 1234)</i>
<b>Sending MSISDN:</b>	<i>(Eg 45371xxxxxxxxx)</i>
<b>Sending operator:</b>	<i>(Eg Telia Company)</i>
<b>Sending from account:</b>	<i>(Yes or no)</i>
<b>Target MSISDN:</b>	<i>(Eg 45371xxxxxxxxx)</i>
<b>Target operator:</b>	<i>(Eg Telia Company)</i>





# IOT PLATFORM & SOLUTIONS

<b>All types of issues</b>	
<b>Contact person:</b>	<i>(E-mail / phone)</i>
<b>Fault description:</b>	<i>(Be as detailed as possible)</i>
<b>Action taken to resolve the issue:</b>	<i>(Describe what you have already tested; such as restarting devices, checking coverage, try SIM in another device, check APN or configuration settings)</i>
<b>Connectivity related</b>	
<b>Type of connectivity:</b>	<i>(Specify if the problem affects data, SMS or Voice)</i>
<b>How many SIMs are affected?</b>	<i>(Add quantity)</i>
<b>Last time service worked:</b>	<i>(Add date and time including time zone)</i>
<b>Location:</b>	<i>(If possible exact address or GPS coordinates)</i>
<b>Fixed or moving device(s)?</b>	<i>(Specify if fixed or moving)</i>
<b>Type of device(s):</b>	<i>(Specify brand and model)</i>
<b>IMSI or Device ID:</b>	<i>(Eg 45371xxxxxxxx)</i>
<b>Invoice related</b>	
<b>Invoice reference ID:</b>	<i>(Eg R6-xxxxxxxx)</i>
<b>API related</b>	
<b>Type:</b>	<i>(Specify if REST (HTTP), Webhook (HTTP), Push to AWS IoT Core (MQTT), Push to Azure Event Hub (AMQP), or other)</i>
<b>Managed VPN related</b>	
<b>VPN:</b>	<i>(Specify what VPN is affected)</i>
<b>Portal</b>	
<b>Type of issue:</b>	<i>(Specify if performance, access, or other)</i>



# SMART PUBLIC TRANSPORT

## All types of issues

<b>Title:</b>	<i>(Severity, Company, Vehicle number and short description)</i>
<b>Company:</b>	<i>(Name)</i>
<b>Contact person:</b>	<i>(E-mail / phone)</i>
<b>Fault description:</b>	<i>(Be as detailed as possible)</i>
<b>Service affected:</b>	<i>(specify service)</i>
<b>Incident start:</b>	<i>(Date and Time Including time zone)</i>
<b>Incident end:</b>	<i>(Date and Time Including time zone, or state "still ongoing")</i>
<b>Specify the last time service worked:</b>	<i>(Date and time incl time zone)</i>
<b>Action taken to resolve the issue:</b>	<i>(What has been done, i.e device restart, coverage check, put SIM in another device, APN check, configuration settings)</i>
<b>Type of device / MIIPS:</b>	<i>(Specify brand and model)</i>
<b>How many MIIPS devices are affected?</b>	<i>(Add quantity)</i>
<b>How many MIIPS devices are in the traffic area?</b>	<i>(Add quantity)</i>
<b>Traffic area?</b>	<i>(Specify the traffic area)</i>
<b>MAC address:</b>	<i>(0009d80XXXXX)</i>
<b>Inventory number:</b>	<i>(customer specific)</i>

## Invoice related

<b>Invoice reference ID:</b>	<i>(Eg R6-xxxxxxxx)</i>
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# APPENDIX 1 – DEFINITIONS

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<b>Change</b>	The addition, modification, or removal of anything that could have a direct or indirect effect on services
<b>Incident</b>	An unplanned interruption to a service or reduction in the quality of a service
<b>Life cycle</b>	The full set of stages, transitions, and associated statuses in the life of a service, product, practice, or other entity.
<b>Monitoring</b>	Repeated observation of a system, practice, process, service, or other entity to detect events and to ensure that the current status is known
<b>Problem</b>	A cause, or potential cause, of one or more incidents
<b>Support team</b>	A team with the responsibility to maintain normal operations, address users' requests, and resolve incidents and problems related to specified products, services, or other configuration items

