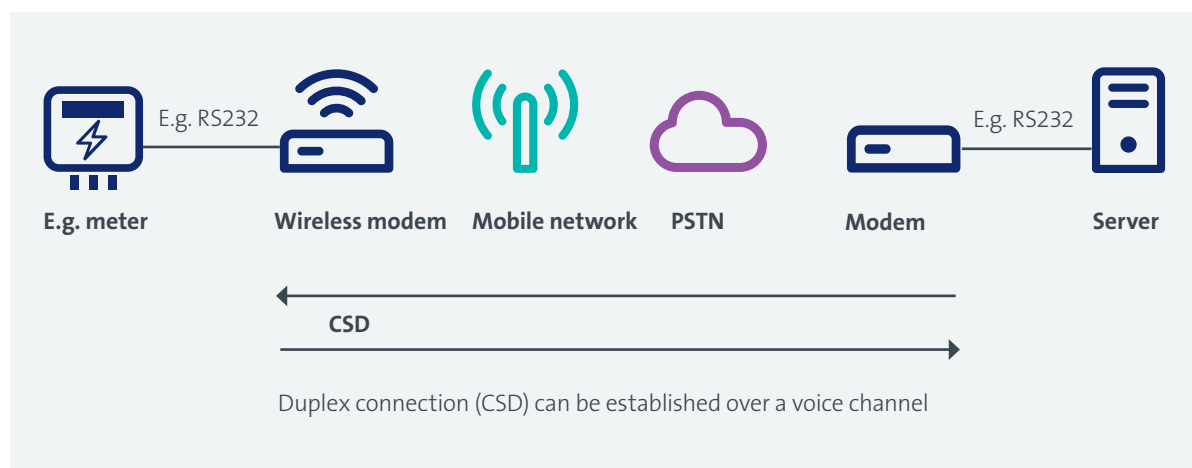




# Cessation of Circuit Switched Data (CSD) service by end of 2019

## Circuit Switched Data (CSD)

CSD is a circuit-switched transmission technology on the 2G mobile network with a data rate of 9.6 and 14.4 kbit/s. It involves a GSM modem, which calls a remote station over the 2G mobile network and transmits the data to an analogue modem, an ISDN adapter or a mobile device.



A mobile subscription that supports CSD calling is required to establish a CSD connection over Swisscom's 2G mobile network. The CSD service also needs an operational, conventional fixed network (TDM: time-division multiplexing) since CSD traffic must be routed centrally over the conventional fixed network infrastructure. This fixed network infrastructure is currently being dismantled and phased out from 2019. Swisscom's current mobile subscriptions no longer support this service and many older subscriptions will have to be migrated to new mobile subscription generations this year.

Swisscom can therefore only guarantee continued service nationwide until the end of 2019.

Today, CSD is considered an inefficient data service because the radio channel remains reserved even when no data is being sent or received. As a result, a large number of applications have been using packet-switched technologies for a number of years instead. Some CSD-based applications are still found in the areas of security, remote maintenance and monitoring, and these now need to be replaced urgently.

For the reasons outlined above, Swisscom will only support the CSD service until the end of 2019 at the latest. CSD service users need to upgrade their applications as soon as possible.

## Possible alternatives for CSD-based applications and devices

CSD users are advised to contact their service provider or solution supplier to discuss retrofitting or modernising these applications. The following options can be considered:

Option	Modernisation with 3G/4G	Use of a gateway	Business IoT solution from Swisscom
<b>Solution</b>	A retrofit set or a successor product from the manufacturer or supplier.	Direct export and transmission of the application data over a fixed IP network or 3G/4G mobile connection via a gateway. A server would also be required to function as an interface between the outside world and the device.	Swisscom's IoT Connectivity Management platform and the associated IoT SIM cards offer customers a wide range of solutions with a large number of devices <a href="http://www.swisscom.ch/iot">www.swisscom.ch/iot</a> .
<b>Implications</b>	Typically, some of the hardware will have to be replaced and the application reprogrammed. In some cases, the entire system will have to be replaced.	Gateways will have to be purchased and an infrastructure with a server is required for connecting to the devices. The application will need to be reconfigured rather than completely reprogrammed.	Typically, the application will need to be completely reprogrammed. Depending on the type of application, an IoT service may be required for communication.
<b>One-off charges</b>	Average to very high, depending on system.	Average to high	Average
<b>Running costs</b>	None to low	Low	Average to high
<b>Suitable for</b>	Lower-cost products and solutions. GSM modems with a permanently built-in communication component.	Applications that establish both the device and server connection. Equipment that would be very expensive to modernise.	Suitable for customers running at least 50 or more identical devices or applications.

We recommend that the successor solution is 4G-enabled if it is being used for a mobile connection.

**More information about the 2G phase-out:**  
[www.swisscom.ch/2g](http://www.swisscom.ch/2g)