

# Technical Service Bulletin



## 96 Audi connect Gen1 and Gen2 systems: Differences and troubleshooting

96 16 04 2042811/1 February 3, 2016.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
All	2013 - 2018	All	Audi connect

## Condition

The customer has a general concern related to Audi connect.

## Technical Background

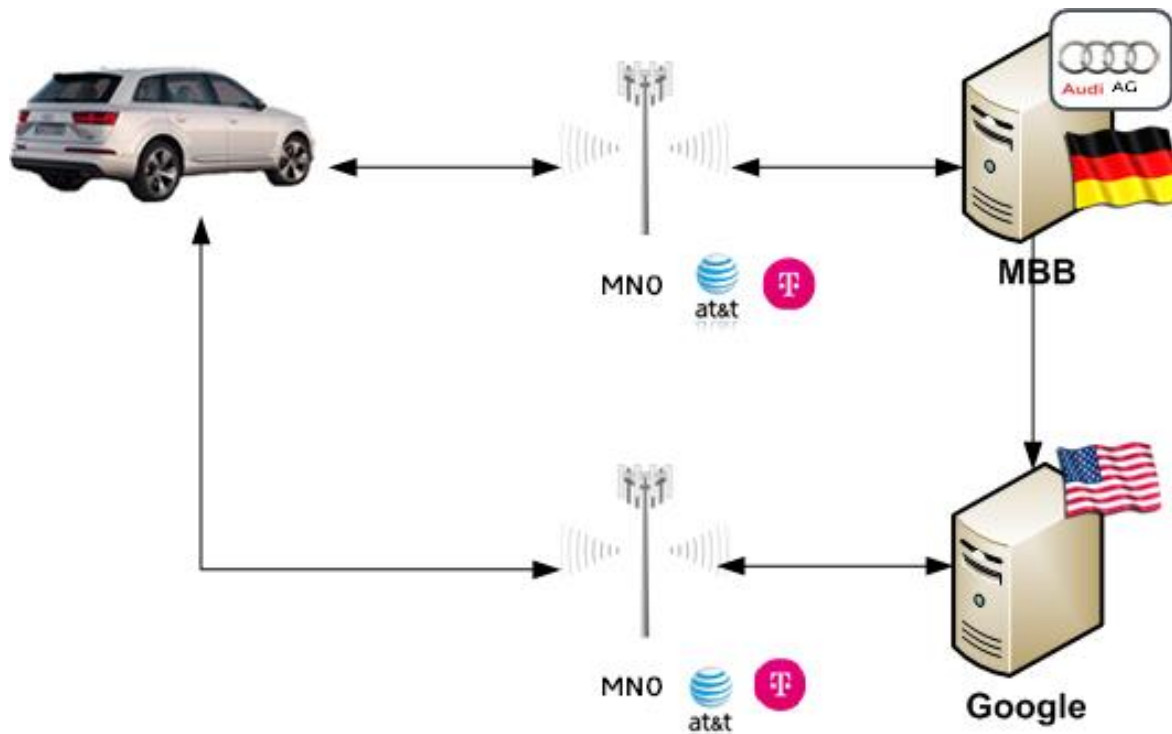
### Identify the Audi connect generation and identify the specific customer complaint

Different features are included with different generations of the Audi connect system (see the attached document "Audi connect features by generation"). When diagnosing an Audi connect system complaint, it is important to determine which features or functions of the system are working and which are not working. This information is key for determining a potential root cause.

The Audi connect Gen1 system includes all vehicles that utilize a removable plastic SIM card (MMI3G+, MIB, and MIB2). The Audi connect Gen2 system includes all vehicles that utilize an embedded SIM card (MIB2). Note that the MIB2 system has been implemented in vehicles using both Audi connect Gen1 and Audi connect Gen2, depending on model year (model year 2016 A6, A7, and TT have MIB2 with Audi connect Gen1, and model year 2017 Q7 and B9 have MIB2 with Audi connect Gen2).

### Vehicle to service provider data flow for Audi connect Gen1 and Gen2

Depending on which Audi connect service (weather, traffic, etc.) is being used, the data can either come directly from the AUDI AG backend server (called "MBB") or directly from the service provider after the communication has been allowed by MBB. The general communication flow of Audi connect is illustrated below (Figure 1). Understanding this communication flow is important for troubleshooting connectivity concerns in the vehicle.



**Figure 1.** General communication flow of Audi connect.

The root cause of all complaints cannot be attributed to the vehicle hardware because of the backend server configurations that need to be correct in order for Audi connect to work:

- For most sporadic complaints, the issue typically resides with the MBB backend server or with the source data provider (Google, INRIX, etc.), and not with the vehicle. In rare cases, the mobile network operator (AT&T, T-Mobile) can be the cause of the complaint.
- For most static complaints, the issue can be attributed to the user account subscription or possibly the vehicle hardware.

The features and functions of Audi connect rely on a stable internet data connection in the MMI (and also in the gateway for Gen2). Any disruptions or service outage due to outside RF interference (such as from construction zones, military installations, etc.), an issue by the service provider (Google, INRIX, etc.), an issue by the MBB backend server, or an issue by the mobile network operator is not a fault of the vehicle. Such issues are almost impossible to diagnose at the dealership. The only way to diagnose such issues at the dealership is to compare the same service in a similar vehicle with the same generation of Audi connect to see if it has the same issue.

### Mobile network operators

- **AT&T:** All vehicles with MIB systems use AT&T as the data service provider. Additionally, all model year 2016 and newer vehicles with MMI3G+ use AT&T.
- **T-Mobile:** All other vehicles with MMI3G+ (model year 2015 and older) use T-Mobile as the data service provider.

## Production Solution

Not applicable.

## Service

### Understanding the customer's complaint

Before moving forward with any diagnosis, review the following questions with the customer. The details of the root cause may be revealed through the customer's answers.

1. Which Audi connect features are working and which features are not working?

If some features are working and others are not, the issue is most likely a temporary outage. Compare the vehicle to another vehicle. Contact the Audi connect dealer support center (1-888-545-9434) if a widespread outage is suspected but has not been communicated to dealers.

2. Can the customer confirm that the services ever worked correctly?

If the services have never worked, and the condition is static, verify that the customer has a valid subscription through the myaudiconnect.com registration portal.

3. Is Google Earth view working?

The MMI navigation may show a clear image of Google Earth view, but this does not necessarily mean that the vehicle is receiving data. The Google Earth view caches the data offline onto the hard drive in order to make the data available when the MMI is not connected to the internet.

An easy way to verify that Google Earth view is working is to zoom out to the state level and move the cursor to a different state, then zoom in to the lowest level. If the image remains blurry, then Google Earth view is not receiving any data and the current view is from cached data only.

4. Did the customer ever exchange SIM cards?

Verify that the SIM card matches the SIM card listed in their account on myaudiconnect.com.

5. Is the customer accidentally using a dealer demo SIM card?

Verify that the SIM card matches the SIM card listed in their account on myaudiconnect.com.

Dealer demo SIM cards are limited to 300MB/month and can easily reach this data limit when used in a car with LTE data service.

6. Is the customer's Audi connect service a trial or a paid subscription?

Verify the customer's account on myaudiconnect.com and confirm that there is an active subscription or trial and that the customer has not exceeded the data limit.

7. Did the customer recently switch subscriptions (for example, from month-to-month to yearly or to mobile share)?

Verify the customer's subscription on myaudiconnect.com. Contact the Audi connect dealer support center (1-888-545-9434) if an issue with the account is suspected.

## Detailed troubleshooting for Audi connect Gen1 system

1. Verify that the currently-installed SIM card is registered and active in the Audi connect registration web portal at myaudiconnect.com. Note that it is easiest to search the portal by VIN, but the SIM serial number (ICCID) can also be used for vehicles with the Audi connect Gen1 system.
2. Verify that the customer's account hasn't exceeded the maximum data during the current time period (does not apply to trial subscriptions). Contact the Audi connect dealer support center (1-888-545-9434) if this information cannot be confirmed through the web portal.
3. Verify that only one ICCID is assigned to the customer account.

It is possible that the customer has received multiple SIM cards for troubleshooting issues in the past. If multiple ICCIDs are assigned to the account, a service outage may be caused.

4. Verify that the correct ICCID is assigned to the customer account.

If an incorrect ICCID is listed in myaudiconnect.com, a service outage may be caused.

5. Verify that the currently-installed SIM card is compatible and is working.

AT&T SIM cards do not work in model year 2015 or older vehicles that have not had the UMTS telephone replacement & K0814 MMI update.

Customers attempting to use an AT&T (or other provider) SIM card in a T-Mobile-supported MMI system may only be able to receive 2G service because the hardware does not support the data technology being used by T-Mobile.

## Detailed troubleshooting for Audi connect Gen2 system

1. Verify that the vehicle is registered and active in the Audi connect registration web portal at myaudiconnect.com by searching with the VIN.
2.
  - **If the customer's VIN is registered:** Ensure that the customer has accepted the "Terms and Conditions" on the web site. After the terms and conditions are accepted, the licenses on MBB will be updated. The vehicle will receive the updated licenses on its next ignition sleep cycle. The customer must also start the "Audi 6-month trial" if the vehicle is a new retail-sold vehicle.
  - **If the customer's VIN is not registered:** Ask the customer to register it, accept the terms and conditions, and start the trial. Note that this is easy to do when connected to the vehicle's hotspot because the VIN will automatically populate in the landing page. If the VIN cannot be registered, contact the Audi connect dealer support center (1-888-545-9434).
3. Verify that the service is licensed by temporarily adding the VIN to the dealership's or technician's personal myAudi portal web site account (my.audi.com). Remember to delete it from the account after troubleshooting is complete.

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In the myAudi portal, view the list of services that apply to the vehicle (Figure 2). If the vehicle does not have the affected service, it is possible that the vehicle is not licensed for the service or that the vehicle was not built with the feature.

Check the license status for each service by clicking on each service icon (Figure 3).

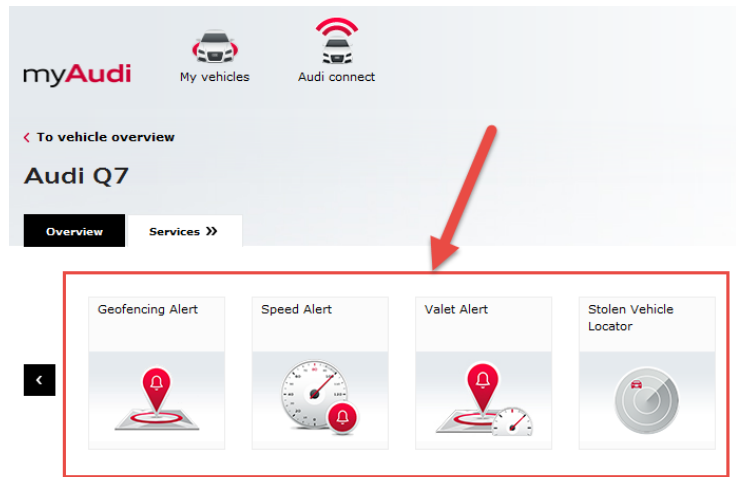


Figure 2. Service list in myAudi portal.

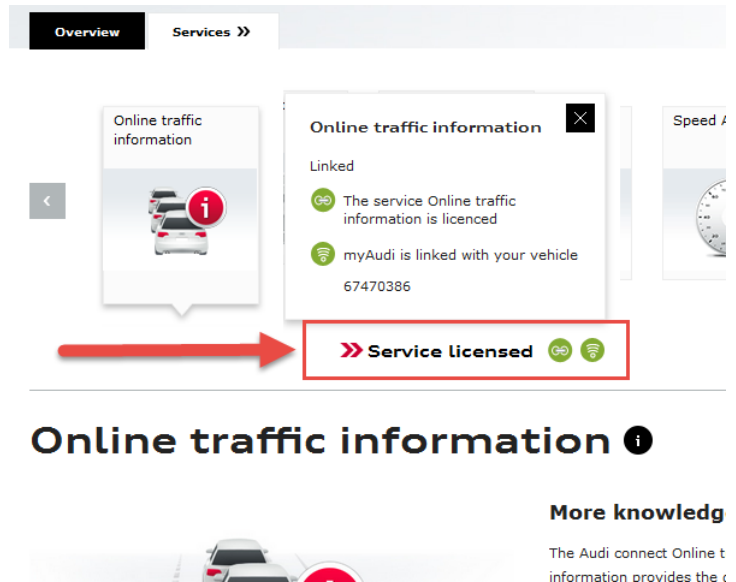


Figure 3. Checking license status in myAudi portal.



**Tip:** For issues related to remote services requiring a “Key User” for Audi connect Gen2, refer to TSB 2043037.

## Warranty

This TSB is informational only and not applicable to any Audi warranty.



## Additional Information

All parts and service references provided in this TSB (2042811) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

Feature Name	Audi connect Gen 1	Audi connect Gen 2	System Utilized
Removable plastic SIM	Yes	No	MMI
Embedded non-removable SIM	No	Yes	MMI & Gateway
T-Mobile service provider	only MMI3G+	No	MMI
AT&T service provider	only MIB1/2	Yes	MMI & Gateway
Wi-Fi hotspot 3G-capable	Yes	Yes	MMI
Wi-Fi hotspot 4G LTE only	only MIB1/2	Yes	MMI
myAudi destination retrieval	Yes	Yes	MMI
Google Online Destination/POI search (Google, Inc.)	Yes	Yes	MMI
Google Earth view (Google, Inc.)	Yes	Yes	MMI
Google Street view (Google, Inc.)	Yes	Yes	MMI
Weather (MeteoGroup)	Yes	Yes	MMI
Online traffic (INRIX)	only MIB2	Yes	MMI
Fuel prices (INRIX)	Yes	Yes	MMI
Facebook (discontinued by Facebook)	No	No	MMI
Twitter	Yes	Yes	MMI
Travel & City Events Information	Yes	Yes	MMI
Parking Lot Availability Information	Yes	Yes	MMI
News Information with personalized RSS feeds	Yes	Yes	MMI
Navigation Map database update in MMI (TBD)	only MIB2 (TBD)	TBD	MMI
Navigation Map database update from myAudi	only MIB1/2	Yes	myAudi Portal
Online radio stations (Internet music stream)	Yes	Yes	MMI connect App
Aupeo! or Rhapsody online radio	only MIB2	Yes	MMI connect App
Roadside Assistance call	No	Yes	Gateway
Emergency SOS call	No	Yes	Gateway

Vehicle parking position	<i>No (available only using the MMI connect App when connected to vehicle Wi-Fi hotspot)</i>	Yes	Gateway/MMI connect app
Online service reminder	<i>No</i>	Yes	Gateway/myAudi Portal
Vehicle status report	<i>No</i>	Yes	Gateway/MMI connect app
Remote lock and unlock	<i>No</i>	Yes	Gateway/MMI connect app
Geofencing, speed, valet, and curfew alert	<i>No</i>	Yes	Gateway/MMI connect app

**MMI = Multimedia Interface, diagnostic address 5F, Information electronics control module 1 (J794).**

**Gateway = Diagnostic interface, diagnostic address 19, Data bus on board diagnostic interface (J533).**