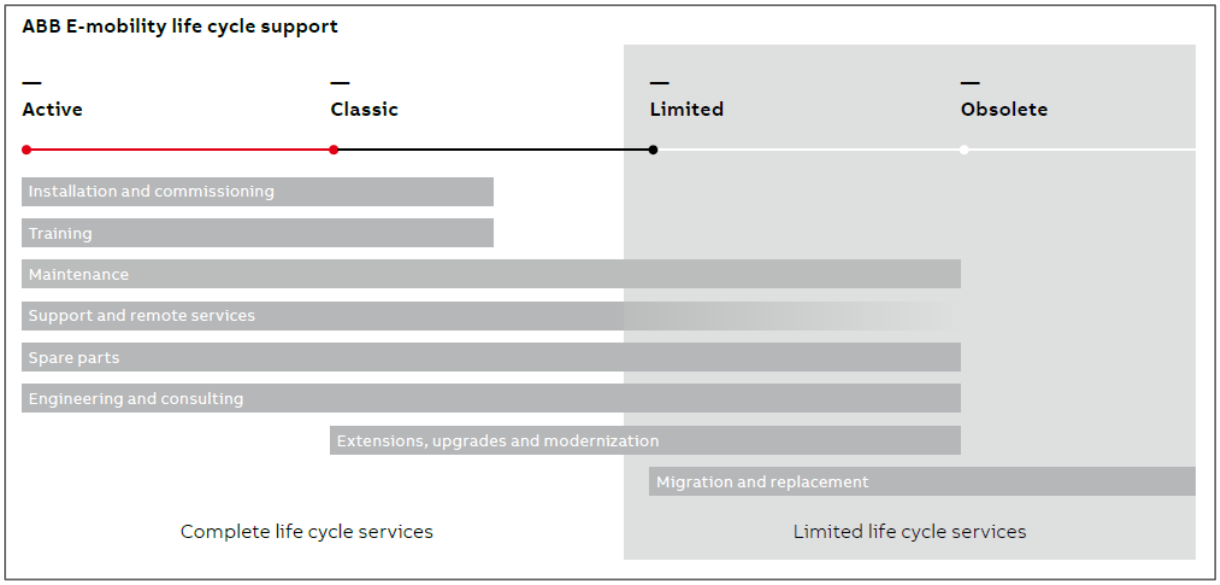
INFORMATION LETTER

Product life cycle announcement

Limited phase for Terra 53 product line

The Terra 53 product line will change from **Classic** to **Limited** per **2022-01-01.**

In accordance with the ABB global policy, this product follows the ABB Life Cycle Management process. For details, please refer to Life Cycle Management or the summary below.



Due to the continuous improvement of control hardware (HW) and software (SW) generations, some Classic products cannot be upgraded anymore with the latest SW updates after a couple of years. Without the regular SW updates, the product's (cyber)security will get 'inadequate' or 'limited', which will also limit ABB's possibility to offer remote monitoring, diagnostics, and service support. In case no control HW upgrade is done, the product will go from Classic to Limited phase.

The customer may choose to continue receiving regular SW and security updates by investing in a control-HW upgrade. Such continued support can be offered with an SLA (Service Level Agreement) including control HW and SW upgrades to keep the product secure and connected to the Cloud. The product will in that case remain in the Classic life cycle phase.

In the Limited life cycle phase, the product cannot be securely, continuously connected to the ABB Cloud ecosystem, which is a prerequisite to remote monitoring of the charger's status, performing remote diagnosis about the charger and its major components, implementing remote repairs and SW updates over-the-air, and collecting charge session and technical data for diverse analyses. Obviously, this will affect the speed and level of service support in case the charger doesn't function as expected.

Limited products may get no or restricted support with software updates for interoperability with (new) electric cars; for bug fixes (if any); and for potential software feature enhancements.

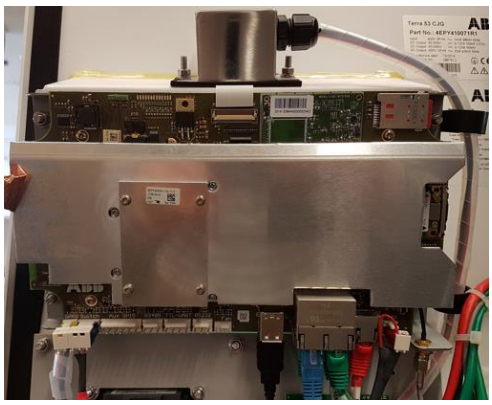
The Limited phase will be valid until 2029-01-01, after which the products will enter in the Obsolete phase. In the Obsolete phase, replacement of products and spare parts will be possible only with new products/parts (if specified and available).

How to upgrade the Terra 53 product line

The following table shows the part(s) making the Terra 53 product line not anymore state-of-the-art (cyber)secure, and the parts to replace them in order to make the product (cyber)secure again.

Non secure part	Secure replacement part
Q7 control board	ARMXL control board
touch-display (8”)	high-brightness touch-display (7”)
3G modem	4G modem

There are two ways to check whether a Terra 53 is equipped with the legacy Q7 or new ARMXL control board: visually inspect your charger or request the ABB service team. The differences are shown in the pictures below.



Q7 control board (Terra 53)

ARML control board (Terra 54)

8“ touch-display (Terra 53)

7“ high-brightness touch-display (Terra 54)

The core software that runs on the Q7 control board has reached end of life, and support will be terminated from January 1st, 2022. Terra 53 chargers received their last software update (version 4.5) in 2021 providing several new features improving the user experience and the serviceability of the charger. Minor software updates might be provided in the future, for maintenance purposes only.

The table below informs about the difference between the software features that will be available with the last software update on the Q7 control board versus features available on a charger with ARMXL.

	Charger with Q7 control board (Terra x3)	**Charger with ARMXL control board (Terra x4, Terra 54HV)**
Human machine interface		
HMI 2.0 Software, with enhanced customization capabilities via web tool		✓
Local Service Portal, onboard software tool for configuration and maintenance		✓
Serviceability		
Enhanced service log via OCPP and ABB webtools	✓	✓
Connection to the ABB Servicelink	Active until June 1st 2022	✓
OCPP 1.6		
Base Support (Core, Authorization)	✓	✓
Smart Charging	✓	✓
Connector values for power/current/voltage	✓	✓
Remote trigger and reservation		✓ (In future release)
Security extension for Web socket TLS connection with certificates		✓
ISO 15118 implementation		
Basic support	✓ [1]	✓
Transport Layer Security (TLS) support Plug & Charge authentication and certificate handling		✓
Power profiles		✓ (In future release)
Renegotiation		✓ (In future release)
OCPP 2.0		
Basic support		✓ (In future release)

OPC UA	
Support of OPC UA protocol	✓ (In future release)
Hardware capabilities	
High contrast touchscreen	✓
Support of 4G cellular network connectivity [2]	✓
Replacement of the 8” touch display	✓
MID and PTB compliant DC meter support	✓

1 – ISO 15118 support without TLS for EV – EVSE communication

2 - New 4G modem and related modem manager in SW is not only enabling 4G but also improves overall connectivity behavior such as reconnection time after network glitches.

3 – The ArmXL board always comes with the new 7” touch screen

ABB recommends considering the cyber security of the control board in the decision to either maintain the Q7 or upgrade to the ARMXL control board. Like all products connected to the Internet or external network, the cyber security risk increases from the moment that devices stop receiving software updates and patches. The transition to the end of active software development for the Q7 based chargers corresponds with the official end of maintenance and improvement actions, by freezing the software to a stable state, but not protecting the charger from potential future threats. Therefore, ABB recommends upgrading the Q7 to the ARMXL control board, to gain access to the latest cyber security features and improvements.

Alternatively, the non-secure Terra 53 product line can be replaced by the secure Terra 54 product line with the advantage of providing the following benefits.

Terra 54 product line

Key benefits of the Terra 54 product line compared to the Terra 53 product line:

- The Terra 54 product regularly receives the newest platform software releases, including improved charge control, interoperability with newest EV releases, more stable (modem) connectivity, and latest state-of-the-art cyber security.
- The Terra 54 product line offers increasing interface functionality, for OCPP, ISO 15118, Plug & Charge, and OCP UA (for local energy management solutions).
- Terra 54 chargers follow the latest improvements in user interaction and customizable graphical user interface functionality.

More information about the Terra 54 product line and all other ABB EV fast chargers can be found on the ABB eMobility website.

The replacement product is the Terra 54 product line.

Legacy product/line	**Replacing new product/line**
Terra 23 (20 kW chargers)	Terra 24
Terra 53	Terra 54, or Terra 54HV (up to 920 V)

What will happen next

The local ABB Sales organization will inform the relevant owners of chargers about this upcoming life cycle phase change so that they can adapt their operational strategy accordingly. ABB will offer owners of chargers the opportunity to upgrade their chargers with new hardware and/or software, as explained above. In case the owner doesn't want to (co)invest in new, secure hardware/software, the product will go into Limited phase.

Charger owners can also choose to replace the Terra 53 product line with the Terra 54 product line.

The Life Cycle phase status in the ABB Products database and ERP/SAP system will be updated accordingly.

Inventory levels will be actively managed to reduce and eliminate stock of products and materials.

The ABB product return policy will be valid during the Classic or Limited phase. Any returns after Classic or Limited will only be accepted with approval of the undersigned.

For any further questions, please contact your local ABB Sales representative or local ABB Service group.

On behalf of the ABB E-mobility,

Diego Pareschi	*Louis-Francois Bernard*
Global Product Manager	**Global Service Manager**
DC fast chargers	