Enterprises that plan to enable highly mobile Internet of Things (IoT) solutions, such as connected vehicles, face multiple challenges. Vehicle manufacturers need seamless global connectivity and smooth integration with relevant ecosystems.

Currently, in order to have global connectivity, manufacturers are burdened by separate integrations with each of the mobile network operators chosen to provide only a part of their needed geographic footprint. There is no standard approach. Each integration requires monitoring, maintenance and lifecycle management, with different virtual private networks (VPNs), access point names (APNs) and credentials, to name a few.

Vehicle manufacturers also face problems with:

- Achieving reliable global coverage
- Protracted global connectivity procurement
- Managing multiple platforms and dealing with their associated service level agreements (SLA)
- Predicting connectivity costs due to lack of understanding and/or transparent analysis of connectivity behavior
- Fragmented approach to service introduction hindering ROI

To help combat these problems for vehicle manufacturers, Ericsson has produced a new service offering called Universal Connectivity for Automotive (UCA), which solves the complexity of global connectivity in the age of the connected vehicle.
A seamless and unified experience with Universal Connectivity for Automotive

From vehicle development through to end-of-life, manufacturers have to embrace and invest in the new connected vehicle service paradigm. UCA provides the capability to support end-to-end management as well as deliver improved time-to-market and cost efficiency.

A seamless, unified experience for automotive manufacturers to manage global and domestic connectivity with greater flexibility, UCA’s dedicated automotive service operations are able to spot and correct potential issues with proactive network management. When issues do occur efficient root cause analysis ensures speedy resolution and reduces impact on overall performance.

UCA is built on the foundation of Ericsson’s IoT connectivity management platform, IoT Accelerator, which is available to operators as-a-service. Present in more than 100 countries, including China, the platform is used by more than 6000 enterprises and 35 operators globally. IoT Accelerator also benefits from a partnership with the Bridge Alliance, which further extends the reach of the solution.

Additionally, UCA integrates with non-IoT Accelerator operators, offering an effective solution for global connectivity including highly regulated markets like India, Russia, Brazil, UAE, Turkey, etc.

A customized approach can be taken to optimize the number of operator partners required to meet the global connectivity needs of vehicle manufacturers. This is based upon the volumes of vehicles sold within the respective countries, understanding the geographical reach of the mobile network operators, and the relationships they have to support cost-effective connectivity through resell and roaming in addition to their own networks.

If vehicle manufacturers concentrate operator candidate selection to those using IoT Accelerator and exploit the partnerships that exist between those operators, then they can optimize the number of operators selected to deliver the most “local” service and operational excellence.

Ericsson’s specific competence in both connected vehicle services and connectivity management, and deep knowledge of mobile network operators, allows any gaps to be bridged quickly and effectively to ensure excellent collaboration across all parties.

Our approach to tackling global connectivity challenges is transparent for all parties involved and based upon delivering continuous improvement.
UCA offers two key components: connectivity management orchestration and a global service operations center.

With connectivity management orchestration, UCA provides a uniform set of APIs to the vehicle manufacturer, acting as an intermediary layer between as many different mobile network service providers as necessary to fulfill the manufacturer’s global connectivity needs. The uniform set of APIs provide “a single pane of glass” for ease of global connectivity management. Ericsson takes care of the integrations to the underlying platforms from different vendors.

As a result of the global service operations center, vehicle manufacturers can rely on Ericsson to more cost effectively monitor and manage their global connectivity, avoiding the need to allocate valuable internal resources. This leaves manufacturers with more time to focus on brand enhancing activities. Ericsson will provide

24/7/365 support for operational monitoring and performance management. The global service operations center acts as a single point of contact for connectivity management, working on behalf of the manufacturer and interfacing with all underlying mobile network operators and embedded universal integrated circuit card (eUICC) platforms.

Two premium services are also available for manufacturers: these include Subscription Management as-a-Service, enabling full flexibility to change service providers as needed (subject to the necessary commercial arrangements), and Unified Networking, which allows easy configuration of private networks and security controls to protect the cellular edge of their digital business.
As the leading telecom vendor, Ericsson has the competence, portfolio and global relationships with the mobile network operators worldwide to mitigate any challenges that arise in a global deployment of connected vehicle services and facilitate an efficient solution for the vehicle manufacturers.

Ericsson provides vehicle manufacturers with reduced total cost of connectivity. Vehicle manufacturers can also innovate and deploy new connected vehicle services, all over the world, quickly and efficiently.

A part of Ericsson’s connected vehicle cloud, UCA utilizes the rich functionality and services within the platform to enable vehicle manufacturers to further evolve their connected services, and spend less time managing them. The future of the car is a connected one; new services, capabilities and updates are at the forefront of manufacturers’ agendas but managing the complexity of global connectivity doesn’t have to be.

For more information on how Ericsson can help, schedule a personal consultation.

An expert friend making global connectivity easy
Ericsson enables communications service providers to capture the full value of connectivity. The company’s portfolio spans Networks, Digital Services, Managed Services, and Emerging Business and is designed to help our customers go digital, increase efficiency, and find new revenue streams. Ericsson’s investments in innovation have delivered the benefits of telephony and mobile broadband to billions of people around the world. The Ericsson stock is listed on Nasdaq Stockholm and on Nasdaq New York.