

Continental 
The Future in Motion



Telematics Future and Legislation

Geneva

05.03.2015

www.continental-corporation.com

Interior Division
BU I IC

Continental – Telematics Leadership

Continental

A Leading Supplier for Telematics

Connecting you to what matters



Extensive know-how in integrating consumer technology into vehicles



Tailor-made products for worldwide use



International footprint, local-for-local development



Partnerships for wide range of services



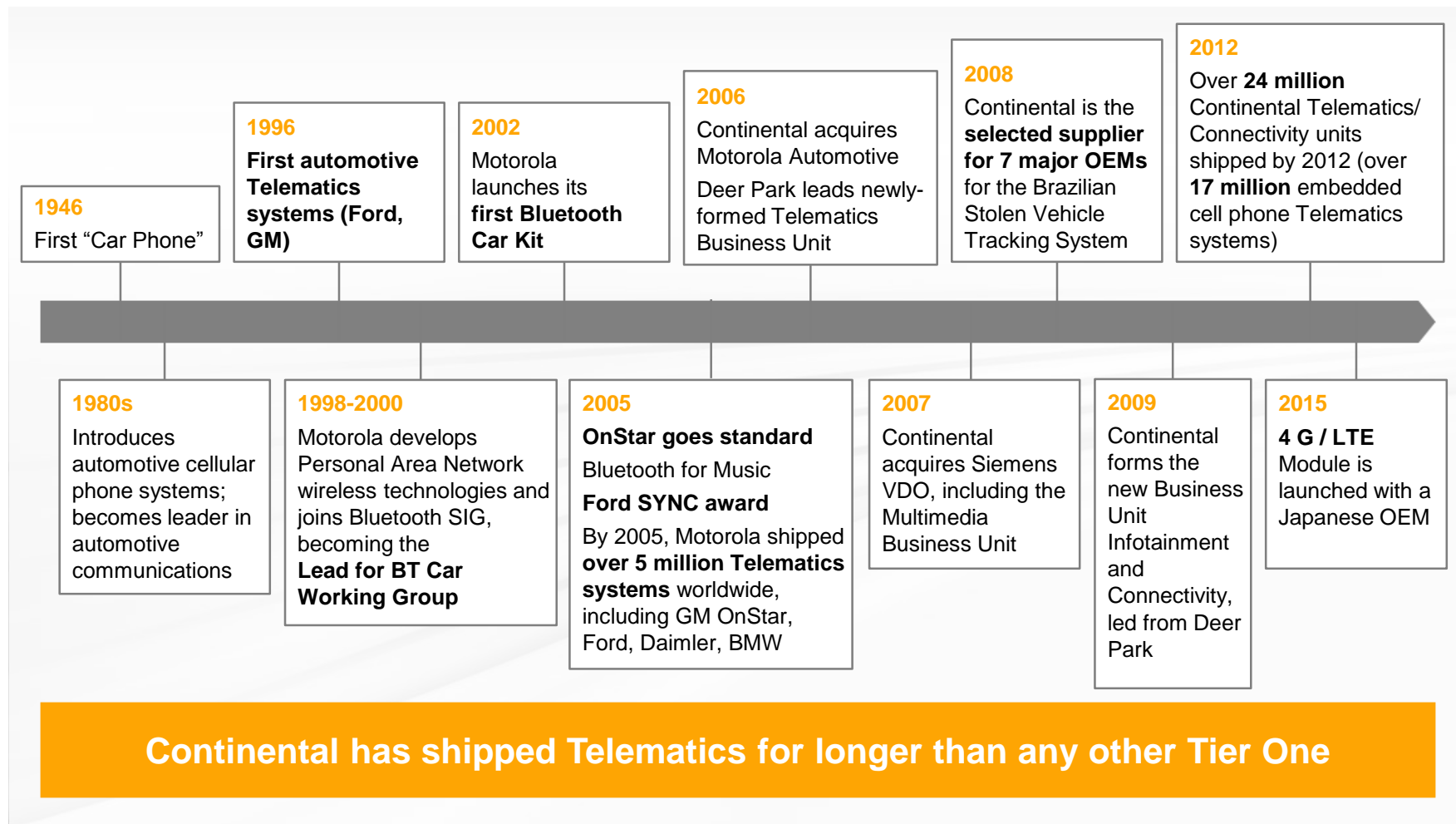
Upgradable and future-proof systems with latest LTE technology



Delivering revolutionary functions for the daily driving experience!

Continental

A History of Telematics Competence



Continental

Leading Technologies on Worldwide Markets

- › Daimler mbrace (TeleAid)
- › Daimler Connectivity Module
- › Ford SYNC
- › Ford EV
- › Hyundai Blue Link
- › Nissan Leaf EV
- › SGM eDrive
- › PAYD Insurance
- › Hyundai Brazil SVT
- › Honda Brazil SVT
- › Ford Brazil SVT
- › GM Brazil SVT
- › Toyota Brazil SVT
- › VW Brazil SVT
- › Nissan Brazil SVT
- › BAIC TCU, and others

Successful Telematics shipments worldwide

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Strong Partnerships

Proven Successful Launches



- › Long history of collaboration in successfully deploying multiple Telematics systems
- › Continental has direct access to network operator subject matter experts for fast problem resolution
- › Continental's expertise with both modem and product level certification results in faster time to market
- › Continental has in-depth knowledge of network operator features and requirements for proper definition of critical tests applicable to automotive Telematics applications



- › Proven performance of existing systems in the field
- › Strong partnerships resulted in successful deployments under tight time constraints
- › Continental often consulted as subject matter expert in analyzing complex system issues to root cause



- › Qualcomm has been a partner for over 20 years (e.g., DS-CDMA license agreement signed in 1990)
- › Strong collaboration on roadmap definition of future products and technologies for Automotive
- › Integration of multiple generations of Qualcomm's CDMA technology from DS-CDMA to 3G EVDO

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Continental – eCall and ERA

European Emergency Call

Dates

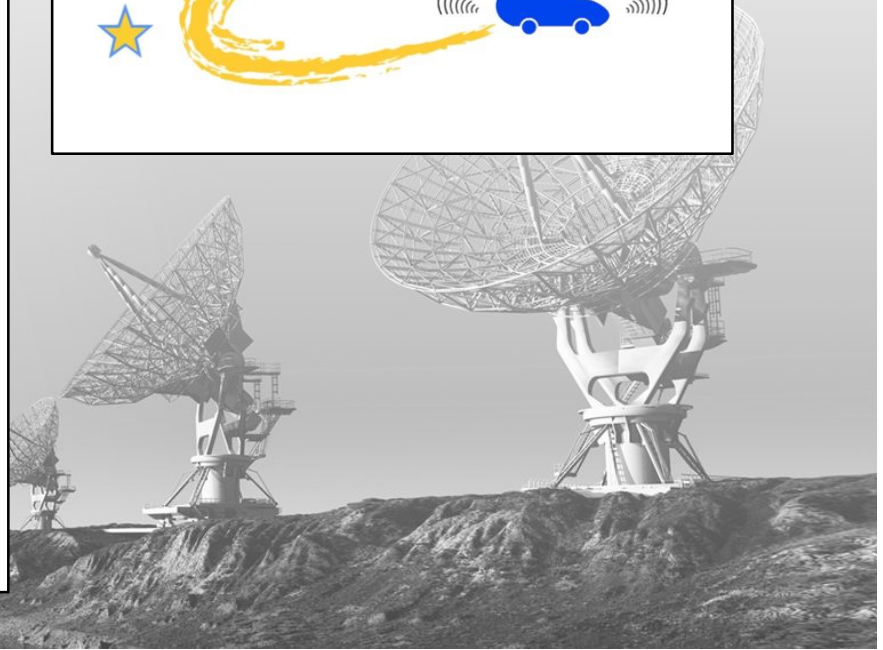
- › Current PSAP (infrastructure) date – Oct 1st 2017
- › Current vehicle mandate date – Mar 31st 2018
- › **To be confirmed by law – Mar 2015**

Technical Issues

- › LTE: New project, I_HeERO starting up to plan eCall + LTE
- › TSP: (Third Party Services) to be allowed in parallel with eCall

Continental already has an eCall capable platform and is actively participating in Plug Test Fests to ensure eCall readiness

- › 4Q 2014: Result 95% Test Pass Rate – Above Average



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ERA GLONASS

Russian Emergency Response System

Dates

- › New vehicles and New Type Approved Vehicles
- › Starting Jan 1st 2015

Status

- › Previous certification issues have been fully or largely resolved:
- › Accredited certification houses now exist for both component and vehicle level
- › Infrastructure support for ERA is rolled out across all regions

Current Projects

- › **Continental will submit two different OEM programs to ERA certification in 2015**



ERA emergency
response system
GLONASS

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Telematics – The Future

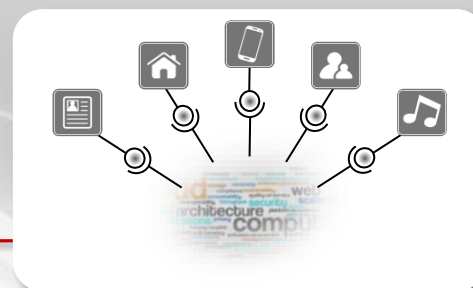
Evolution of the Connected World

The Vehicle is becoming part of the Internet

In the past, vehicles had no access to the Internet.



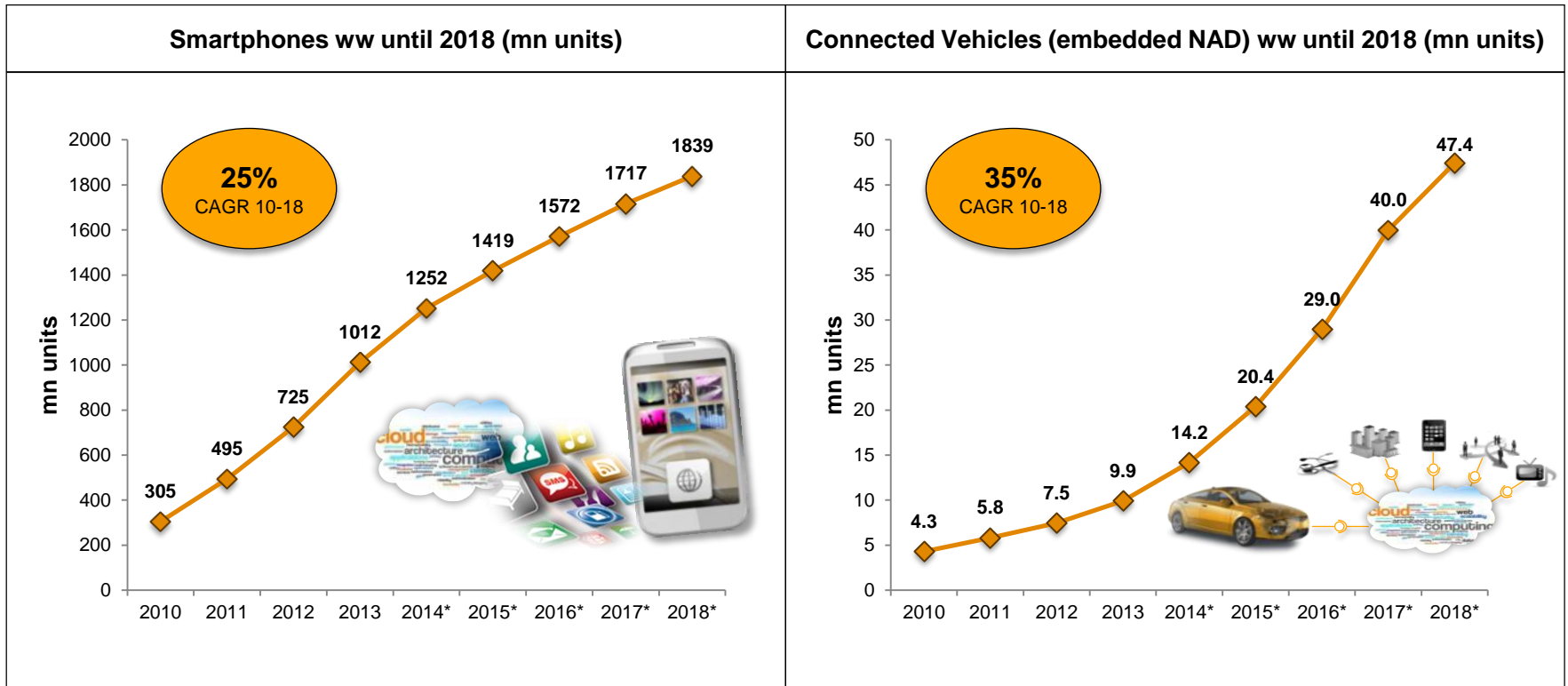
Today, more and more vehicles have Internet access.



In the future, the vehicle will be part of the Internet.

The World of Connected Objects

Growth of Connected Vehicles stronger than Smartphones



In average Smartphone volumes are doubling every 16 months (and increasing), Connected Vehicle volume every 9 months

* = Forecast, Source: Statista July 2014

* = Forecast, Source: IHS April 2014, NAD = Network Access Device

Connectivity Helps - Increase Comfort, Safety and Efficiency

Comfort



A driver in Germany spends about 1,5 Days in traffic jams each year.

Safety



90% of all accidents are due to human error.

Efficiency



The style of driving can influence fuel consumption by up to 20%.

Vehicle Networking and Partnerships

Strong Partners in the IT industry



- › Network Connectivity
- › Data compression and data security



- › Big Data processing
- › Stream computing
- › Analytics
- › Infrastructure
- › Platform as a service



- › Highly precise digital map data
- › Map based cloud services



- › System Integrator
- › ITS Applications and ITS services
- › In-car systems
- › In-car components



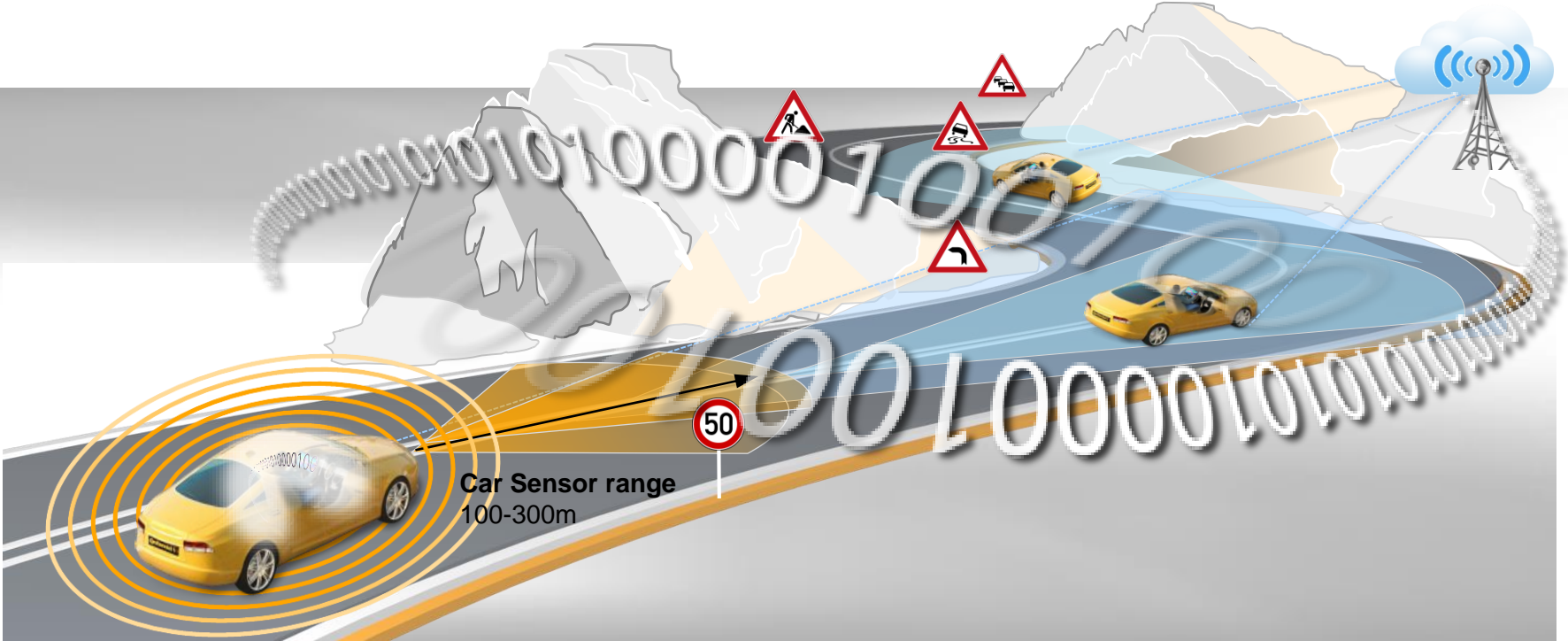
Connected Vehicle



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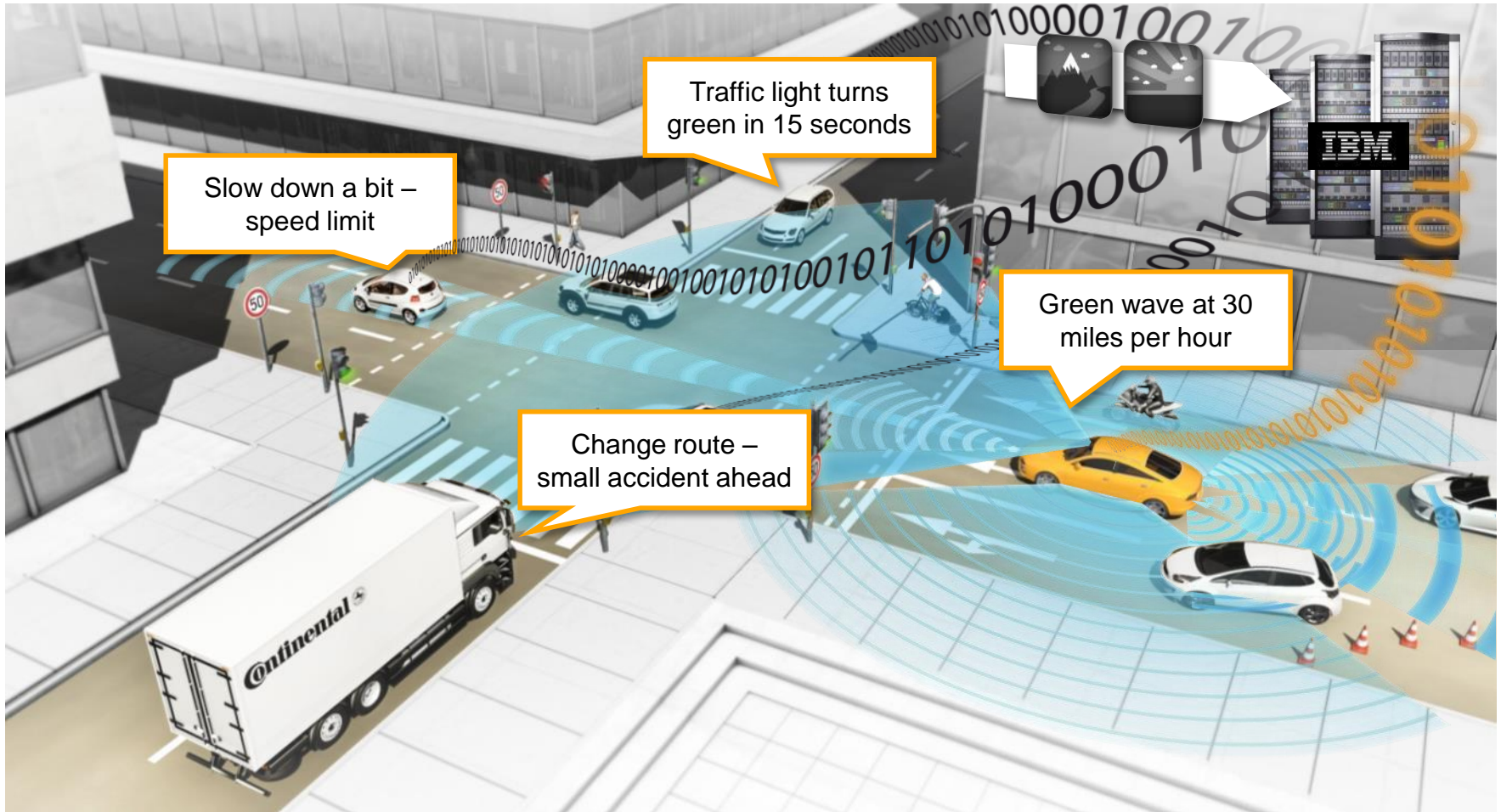
Electronic Horizon

Increases the Visual Range beyond Vehicle Sensors



The future is starting now

eHorizon paves the way to Automated Driving

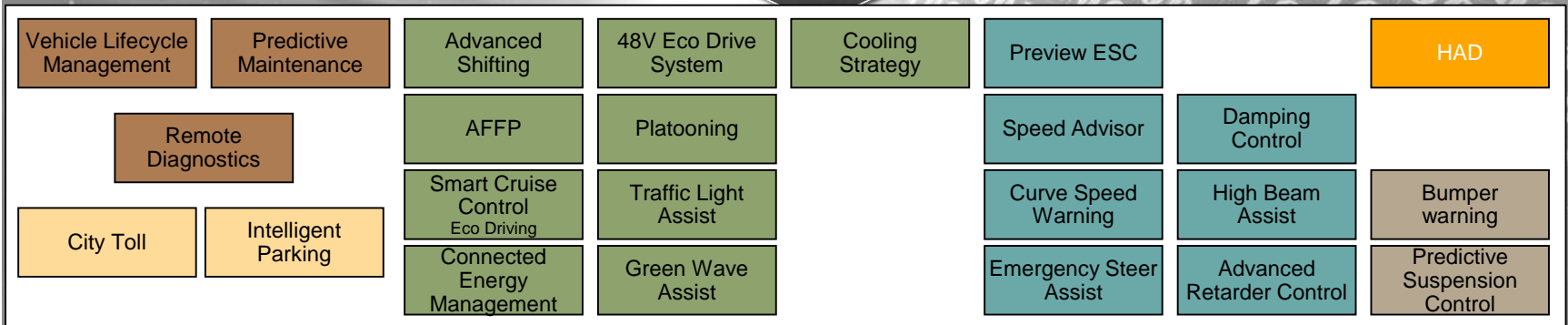


Electronic Horizon Use Cases

New services to increase the benefit of Connected Vehicles

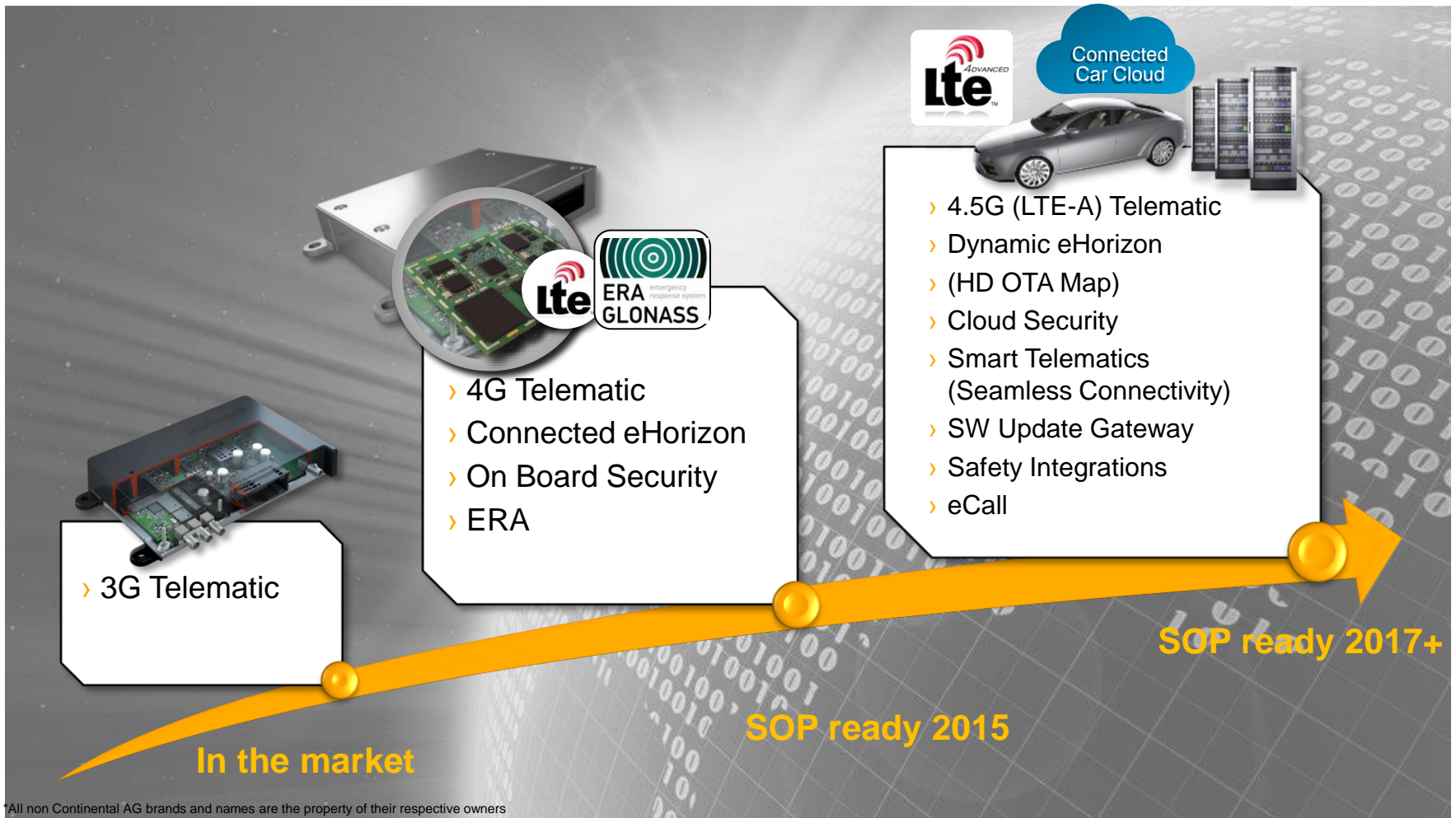
Goal is the improvement of

- > Comfort
- > Efficiency
- > Safety



Evolution of Telematics

Faster, more Secure and consistent Connections + Safety



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Continental – Pushing through the Challenges

Innovative Solutions for the future networked car



**Smart Telematics for
consistent and seamless
connectivity**

**eHorizon providing
PROACTIVE safety
measures**

**Telematics with
eCall/ERA providing
REACTIONS to safety**



Backup

Continental – Ensuring Consistent Connectivity

A Telematic Unit Becomes a Secure Mobile Router

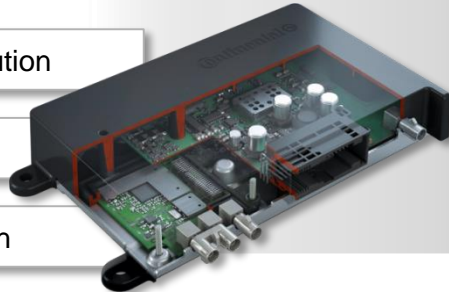
Today: 4G Telematics

3G/4G world wide solution

Up to 100MBPS

WLAN, USB, Bluetooth

Over-the-Air Update



In Future: Advanced Mobile Router

LTE Advanced

Up to 300Mbps

Seamless net-work switching

Gateway for all SW Updates

Safety Integrations – eHorizon, C2X

Cloud Security

eCall/ERA



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