

Connected Automated Transport Together Driving rather than Self Driving

Stefan Myhrberg
Ericsson



5th Ave New York City, April 15, 1900

1900:
Where
is THE
CAR?

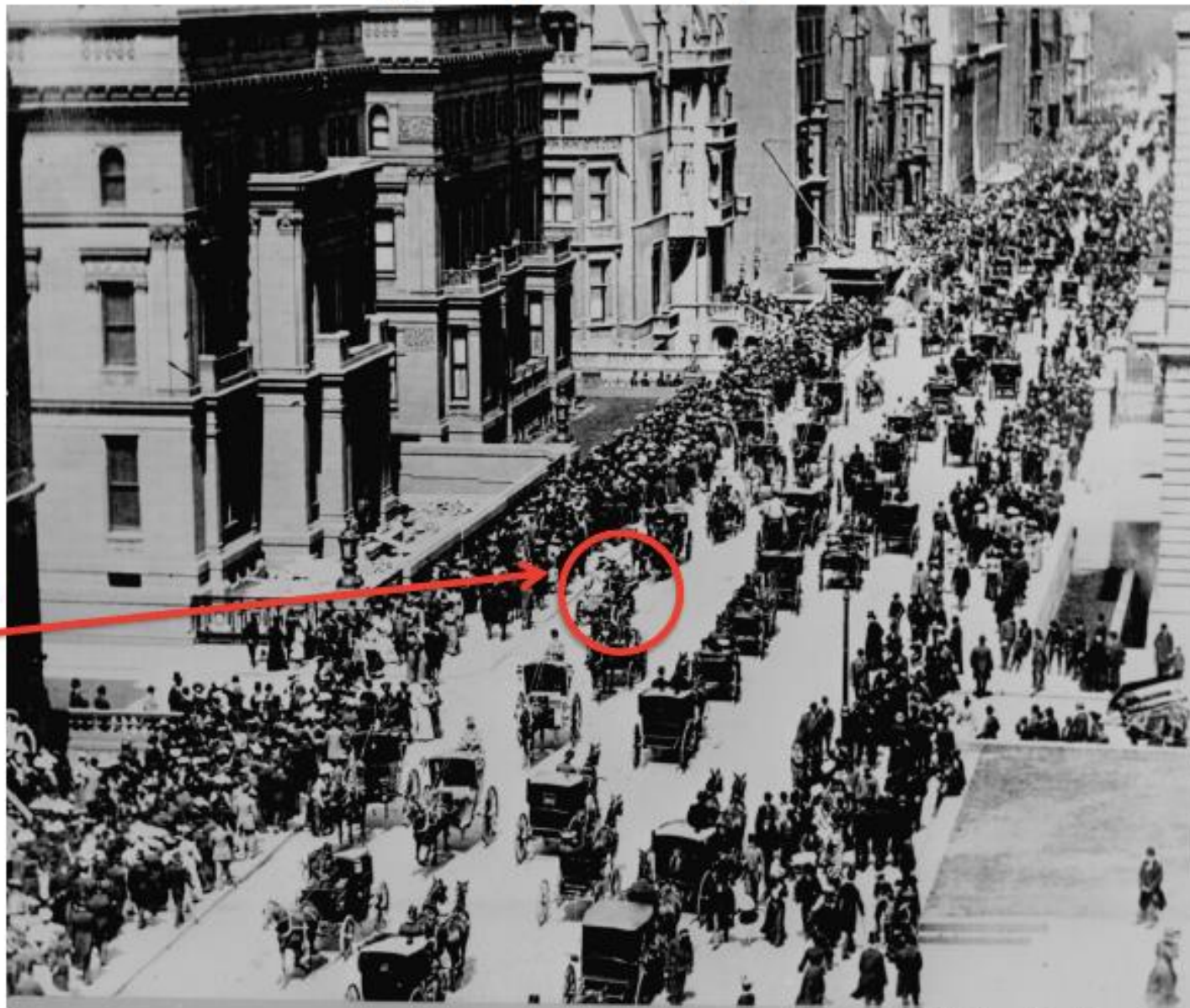


Photo: Fifth Ave NYC on Easter Morning 1900

Source: US National Archives from
(Wikipedia)

5th Ave New York City, March 23, 1913

1913:
Where is
THE
HORSE?



Photo: Easter 1913, New York. Fifth Avenue looking north. George Grantham Bain Collection



Major transformation of Transport



Connected



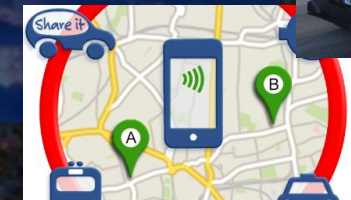
Electrified



Automated



Shared



5G enables new IoT use cases



Massive IoT



Critical IoT



LOW COST, LOW ENERGY
SMALL DATA VOLUMES
MASSIVE NUMBERS

ULTRA RELIABLE
VERY LOW LATENCY
VERY HIGH AVAILABILITY



Enhanced MBB
MORE CAPACITY, LOW LATENCY

Automated Vehicles need to be connected to reach their full potential in being safe, efficient and sustainable





Automated Vehicles need to be connected to reach their full potential in being safe, efficient and sustainable



Connected Vehicles
Automated Vehicles



Enhanced Connectivity



Connected Services

Drive Sweden – Innovation program on Connected Automated Mobility



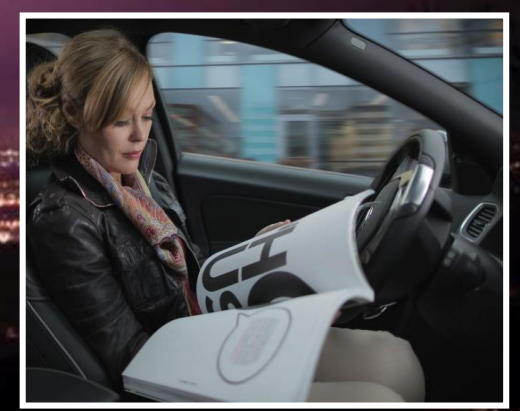
LTE 5G



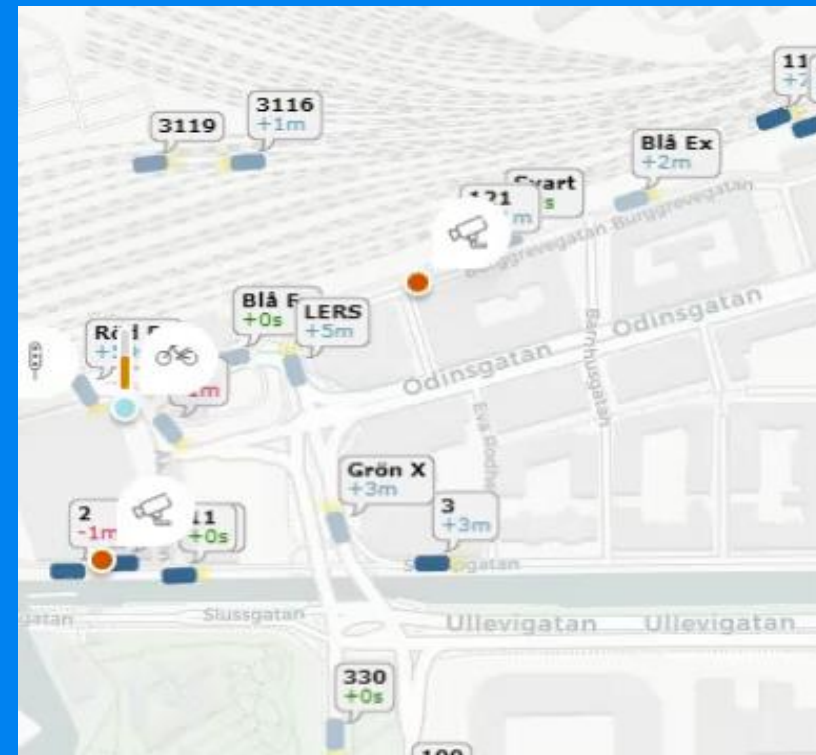
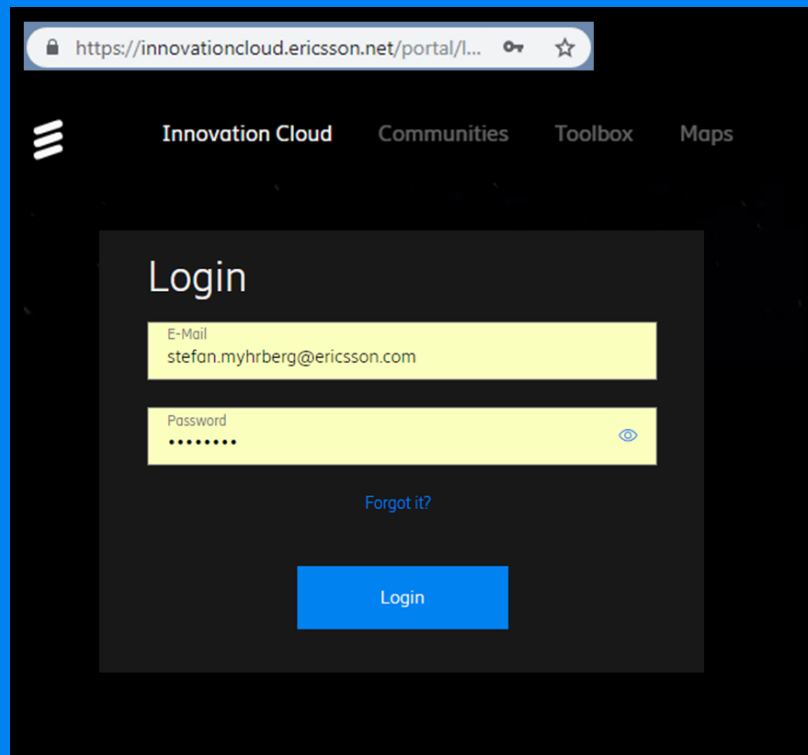
More vehicles, more data, more partners, more functions...



DRIVE SWEDEN



Connected Transport Live Demonstration





VOLVO



SCANIA

NEVS



Göteborgs Stad



Stockholms stad



vti

CHALMERS



HÖGSKOLAN I HALMSTAD

RISE



ERICSSON



SAAB



Autoliv



RideCell



BESTMILE THE MISSING LINK



Technolution



MINDCONNECT

CONSAT



LITOLE



veridict



carmenta superior situational awareness



swarco



dønning energising mobility



ApParkingspot



WSP



Norconsult



SWECO



ATKINS



ch2m



Trivector



Telia



telenor | connexion

TELE2

ASTAZERO

ACTIVE SAFETY TEST AREA



True testing since 1973



Sustainable Innovation



GOOGOL



Forum for transport innovation



blue advisory group



LINDHOLMEN SCIENCE PARK



Nobina



Samtrafiken



CABONLINE



Hertz

UBER

Mekonomen Group

UbiGo

Freelway



AUTONOMOUS MOBILITY



transdev

postnord



DRIVE SWEDEN

Drive Sweden Roadmap (simplified)



2017

2018

2019

2010

2021

2022

Connected Public Transport

Selfdriving buses

Connected Traffic Lights

5G Remote Control

Automated Truck

Connected MaaS

Connected IoT Platform

Partner Portal

Extended functionality

Traffic Tower

Innovation Cloud

Kista

GBG

ASTA

KTH

5G

Highway

4G



Mobility as a Service






Whats next?



Quest for Safe and Efficient Automated Fleets

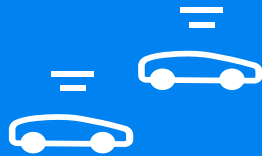


-  443 vehicles in Connected Automated Mode
-  7 vehicles requesting Connected support
-  1 vehicle incident requiring immediate action



4G/5G Cellular Connectivity and Connected Services Gamechangers for Connected Transport

Increased
Transport
Safety



Increased
Transport
Efficiency



Increased
Transport
Automation



Connected Vehicles
Automated Vehicles

5G

LTE

Network Slicing

Edge Computing

V2X Interchange



Enhanced Connectivity

Connected
Traffic Tower



Connected Automated Fleet

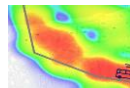
CAV support

Remote Driving

Connectivity Management

V2X Management

Connected Ecosystem



Traffic

Traffic Management

Logistics

Goods Management

Traveler Management

Connectivity Management

V2X Management

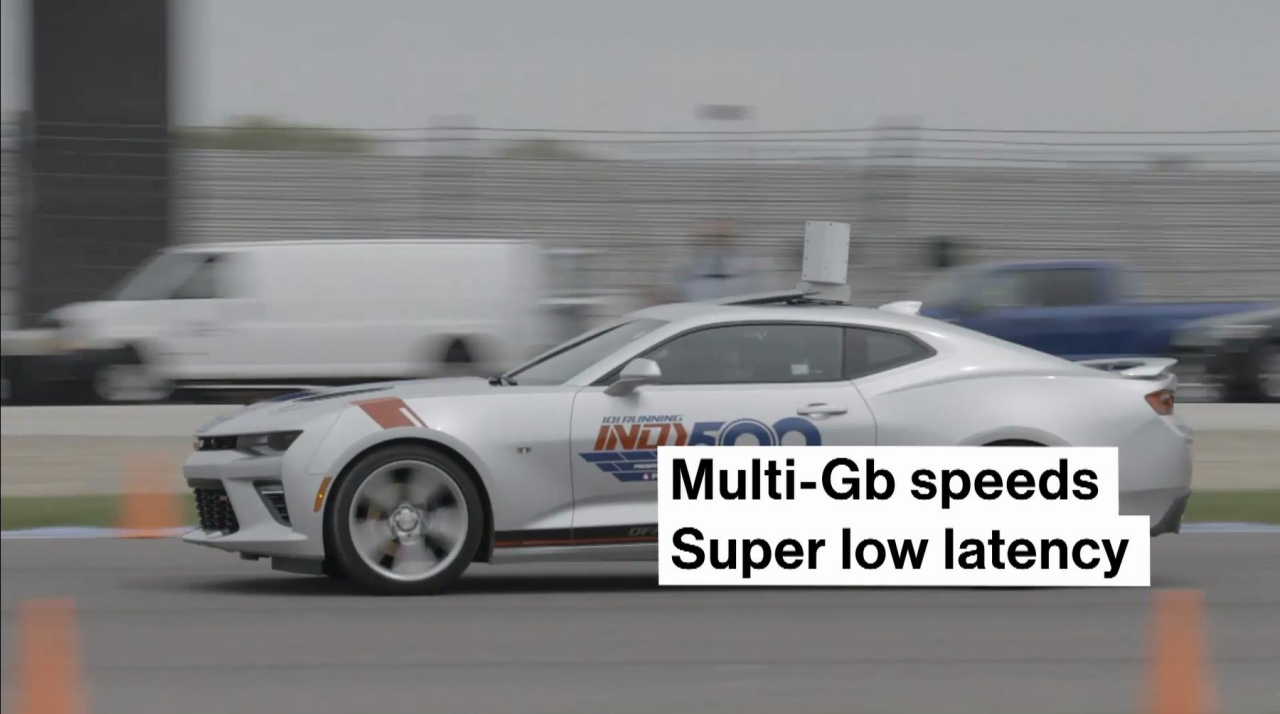
Connected Ecosystem

Billing

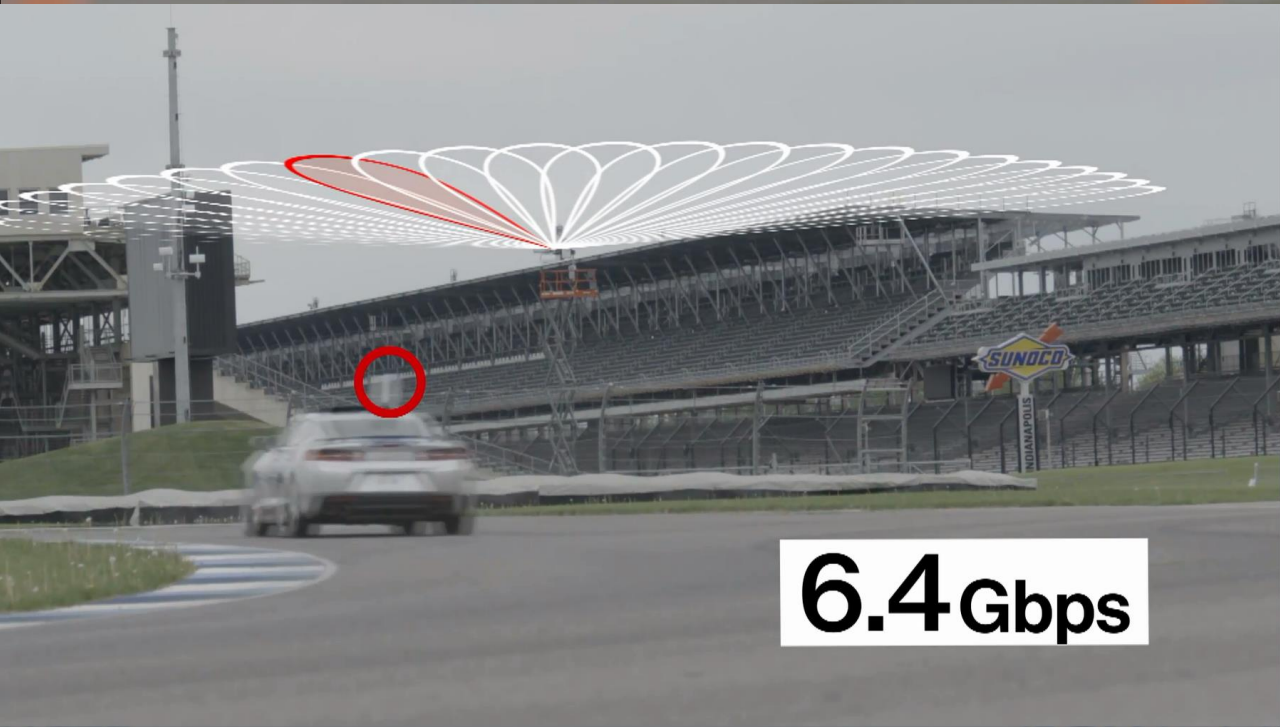
Analytics

Connected Services





Multi-Gb speeds
Super low latency



6.4Gbps

The 5G race is on



- Ericsson and Verizon tested a 5G network at the historic Indianapolis Motor Speedway
- The tests prove what's possible when you combine super low-latency with download speeds that exceed 6Gbps.

[Watch Ericsson and Verizon test the limits of 5G](#)

[Press release - Verizon and Ericsson test 5G technology in a home in the shadow of Indianapolis Motor Speedway](#)



5G
Connected
Mobility

The logo is a blue arrow pointing right, containing icons for a road, cars, and a train, and the text '5G Connected Mobility'.



© Ericsson GmbH 2018 | 5G-ConnectedMobility Public Presentation | August 2018

www.5G-ConnectedMobility.com

Members of the consortium are:



Supported by:



Ericsson and Swisscom

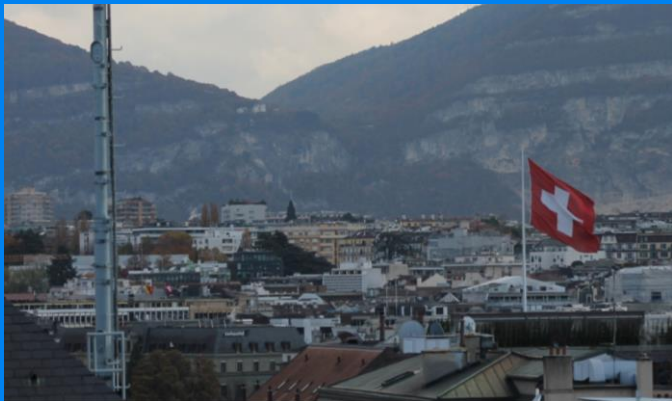


Ericsson strategic Swisscom supplier of Gigabit LTE and 5G

Completed Europe's first multivendor 5G data call (5G NR data call on 3.5 GHz band)

5G network rollout in Switzerland has started - targeting to offer 5G access in selected areas end of 2018

Collaboration on network slicing for critical communications



Swisscom zeigt weltweit ersten 5G-Smartphoneprototyp im 5G-Netz

8.11.2018 - 07:15, Swisscom-Medienteam



Mit Prototypen wie diesem laufen Tests im 5G-Netz von Swisscom.

Together Driving



Mobility revolution happening now!

- Connected, Automated and Shared Mobility
- 5G and IoT key enablers

Connected cooperation between actors
is key to success!

Ericsson, your transformation partner for
connected mobility

www.ericsson.com

