Automotive Aftermarket
Telematics & Diagnostics solutions for Electric Vehicle

September 2013
ACTIA Group in brief

- Listed on the French stock exchange
- Founded 25 years ago
- Today 21 companies (15 Countries)
- 3,028 employees (730 engineers)
- Turnover 290 M€ (2012)
- Core competencies in Diagnostics and Telematics (Connectivity)

Philippe GUYARD
Telematics & Diagnostics solutions for Electric Vehicle

1. Market trend
2. Specific testers
3. Connected diagnostics
EV growing market:

Slow…

Very slow!
Smart EV environment
New services:
iHMI

AUTOLIB', L'ESSAYER C'EST L'ADOPTER
The complexity of vehicles:
- hybrid communications
- software

Various technical training:
- expert
- confirmed
- beginner

More effective diagnosis methods

ACTIA®
Telematics & Diagnostics solutions for Electric Vehicle

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3. Connected diagnostics
New Equipment for Micro-Hybrid battery test

Distributed by VARTA

Yearly update for S&S vehicle
New Equipment for Micro-Hybrid battery test

All in one compact rugged solution
- ARM Cortex-A8 OMAP 3503 processor (600MHz),
- Windows CE 6.0 with ACTIDIAG authoring tool
- Wireless LAN WIFI,
- Integrated VCI compatible with Multidiag coverage
- **Physical measurement, A, V, mΩ**
- Camera
- Bar code reading,
- LCD touchscreen 4,3"
- Standard stick battery
Telematics & Diagnostics solutions for Electric Vehicle

1. Market trend
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ACTIA participate in the harmonized eCall implementation pilot (HeERO)

EU legislation seems to be coming thru for all new type approved cars as from 2015

Russian eCall is targeted for introduction in new type approved cars as from 2014

Brasil Tracking legislation as from 2012 (ACTIA already supply units for Volvo Cars)
Market situation

Legislation

Remote Services

Connected Diagnostics

Car2Car, Car2X

Diagnostics & Telematics @ 2013 ACTIA
Remote Diagnostics “for any vehicle type”

Connection management
Data collection
Data aggregation
Data interpretation

LAN, WLAN, mobile broadband

3G/4G (LTE) mobile broadband

Offboard VCI for development and remote diagnosis
Aftermarket tracking / asset management solutions
Vehicle with integrated telematics
Telematics & Connectivity Infrastructure example

The Cloud

Provisioning interface

Dealer interface

Mobile apps interface

Customer portal

GSM/3G network

Validate & decode message

WirelessCar

National PSAP And Call Centers

Voice communication

On-Board Unit

Dispatched service, command or content

WirelessCar Call center tool
ACU-II Vehicle integration example

Internet via 3G/4G(LTE)

Infotainment System
- ECU z
- ECU x
- ECU y

ACU-II Connected Platform
- Connectivity
- Diagnostics
- Telematics
- AUTOSAR

DLC/OBD Ethernet: ISO 13400 Road vehicles — Diagnostic communication over Internet Protocol (DoIP)

DLC/OBD CAN: ISO 15765 (Road vehicles — Diagnostics on Controller Area Networks (CAN))

Wired

Test

Backend
Distributed diagnostic
OK for EV
Telematics

Diagnostics ready

ACTIA Diagnostic software production
(Authoring tool)

Acti Diag Authoring tool

Aftersales Diagnostic tool

Manufacturing plant Diagnostic tool

Telematics integrated Diagnostics
Current Vehicle integration VCC

Airbag Control Unit
- Crash detection
- Crash recording
- Threshold design is optimized

Vehicle network: CAN
- VIN
- Belt use
- DR sensors (GNSS)
- Power modes

Antenna System
- GNSS
- Cellular

Telematics User Interface
- SOS (eCall) Button
- On Call (bCall) button

Telematics Control Unit
- NAD + in-band
- GNSS
- Backup Power
- Backup Audio
- Applications (eCall etc.)

Infotainment System
- HMI
- Settings
- Audio

Vehicle network: CAN
- VIN
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TELEMATICS for Cars
Actia’s solutions

Feature capabilities

OEM native telematics

Post equipment telematics

Advanced engineering
Validation process
Functional analysis
Existing models fleets

Enhanced telematics systems
Compliance with all current regulations

ACUII platform

iCAN solution
Connected Diagnostics “use cases”

- Remote download of diagnostic mission script into the connected diagnostics unit
- Over the air software download to vehicle ECU’s
- Monitor vehicle behavior during development
- Health care monitoring (recall avoidance)
- Upload diagnostic data to OEM server or cloud services
Merci de votre attention