COMMERCIAL VEHICLE’S NEED FOR JA 6268 AND HEALTH READY COMPONENTS

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ATA/TMC “The Future Truck Committee shall promote activities that fulfill its mission, which shall be: To improve transport equipment, its maintenance and maintenance management by efforts to influence future equipment design.”
Tractor (Power Unit)
Trailer (Dry Freight, Refrigeration, Flat Bed, Chassis)

Interoperability?  One System?  SAFETY?

E-Commerce

TL, LTL, Long Haul, Regional Last Mile  Fleets, OEMs, Tier 1s, Enterprise and Mission Modifications
One Unit

Interoperability?  One System?  SAFETY?

E-Commerce

Data  Auto Coupling
Tractor And Trailer Today

Interoperability? NO

One System? No

SAFETY? No

Tractor Level 2-3?
Health Ready

Trailer Level -1 to 0
Health Ready

Wheel End
REF Unit
Lift Gate
Temp Sensor
Beacon Nomad
Tire Inflation

Local? and Wide Area Communications?
Wired or Wireless

Trailer Stability
Trailer ABS

Power Generation
3 axes Sensor
Actuators
Load Sensor
Cameras

Eng 1
ADAS
Brakes
Instrumentation
Transmission

LAN and WAN

SAE INTERNATIONAL
Electrification, Platooning, ADAS, Autonomy, Electro-Mechanical Braking

Interoperability

SAFETY

Wheel End, REF Unit, Lift Gate, Temp Sensor, Beacon Nomad, Tire Inflation, Power Generation, 3 axes Sensor, Actuators, Load Sensor, Cameras, Aero Dynamics, Trailer ABS

J1939-1? 250, 500, FD, XL, Ethernet, Wireless

Tractor Gateway ↔ Trailer 1 Gateway ↔ Trailer 2 Gateway

Non-Braking Command and Control Braking
ATA/TMC PROPOSED RECOMMENDED PRACTICES

STUDY GROUP S1 ELECTRICAL: NEXT GENERATION TRACTOR/TRAILER INTERFACE
FOCUSED ON THE WIRED AND WIRELESS CONNECTIONS BETWEEN THE TWO PARTS OF THE COMBINATION VEHICLE.

STUDY GROUP S7 TRAILER: NEXT GENERATION TRAILER ELECTRICAL ARCHITECTURE
FOCUSED ON THE WIRED AND WIRELESS CONNECTIONS ONLY ON THE TRAILER.
CLOUD TO SENSOR

ENABLE USE OF FLEET OWNED TRACTOR/TRAILER DATA BY ALL STAKEHOLDERS, AS REGULATED BY FLEET, VIA STANDARD/SECURE INTERFACES AND SUPPORTED BY INDUSTRY ADOPTED TECHNICAL INFRASTRUCTURE.
JA 6268 HEALTH READY

• COMMON AND EVOLVING STANDARD THAT ALSO LEVERAGES THE BEST OF WHAT EXISTS.

• DEFINED TERMS AND METHODOLOGY

• STRUCTURE FOR SHARING DATA AT DESIGN TIME AND RUN TIME FOR ADVANCING SAFETY AND MAINTENANCE

• ADVANCE CORE MISSION: “TO IMPROVE TRANSPORT EQUIPMENT, ITS MAINTENANCE AND MAINTENANCE MANAGEMENT BY EFFORTS TO INFLUENCE FUTURE EQUIPMENT DESIGN.”