

OEM CONSOLIDATED GREATER THAN 10GB/S ETHERNET TOPOLOGIES

Hideki Goto, Toyota

Dongok Kim, Hyundai

Kirsten Matheus, BMW

Nicolas Morand, PSA

Christoph Wechsler, Audi

Natalie Wienckowski, GM

May 21, 2019

IEEE P802.310G+

SUPPORTERS

Jim Lawlis, Ford

Haysam Kadry, Ford

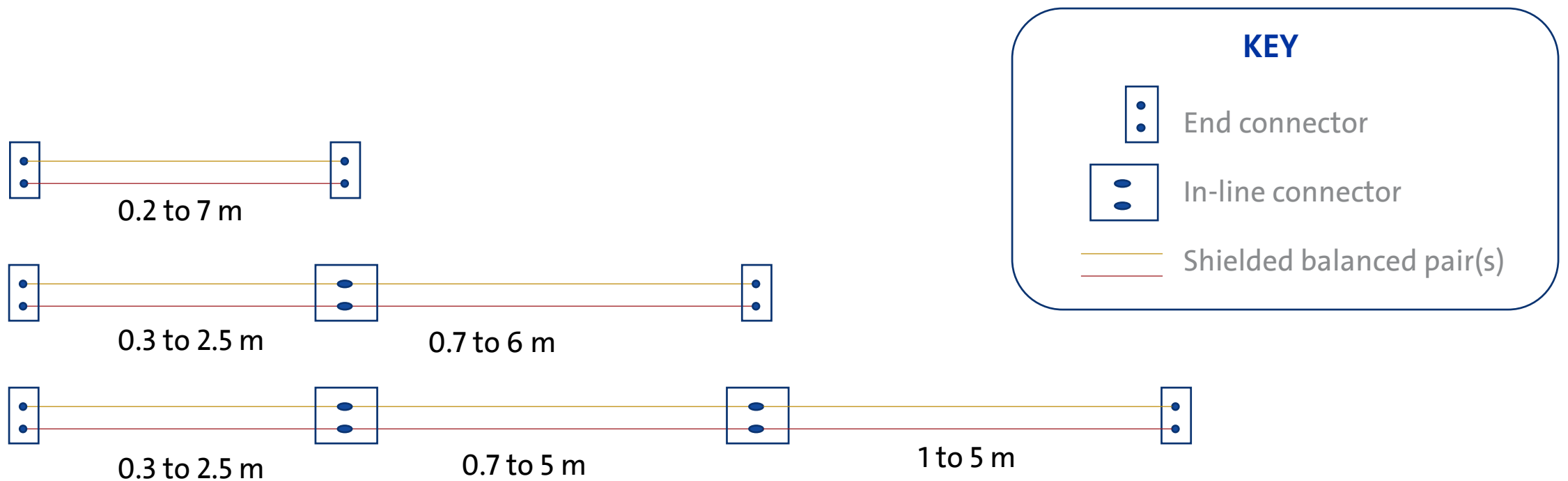
Olaf Krieger, Volkswagen

KNOWN APPLICATIONS

- There are two main application spaces for Greater than 10Gb/s Automotive Ethernet
 - Backbone / Displays
 - Located in the passenger compartment
 - Limited temperature range, -40C to 95C
 - Unsealed connectors
 - Shorter length
 - Cameras
 - Located at “edges” of vehicle
 - Expanded temperature range, -40C to 105C
 - Sealed connectors
 - Longer length

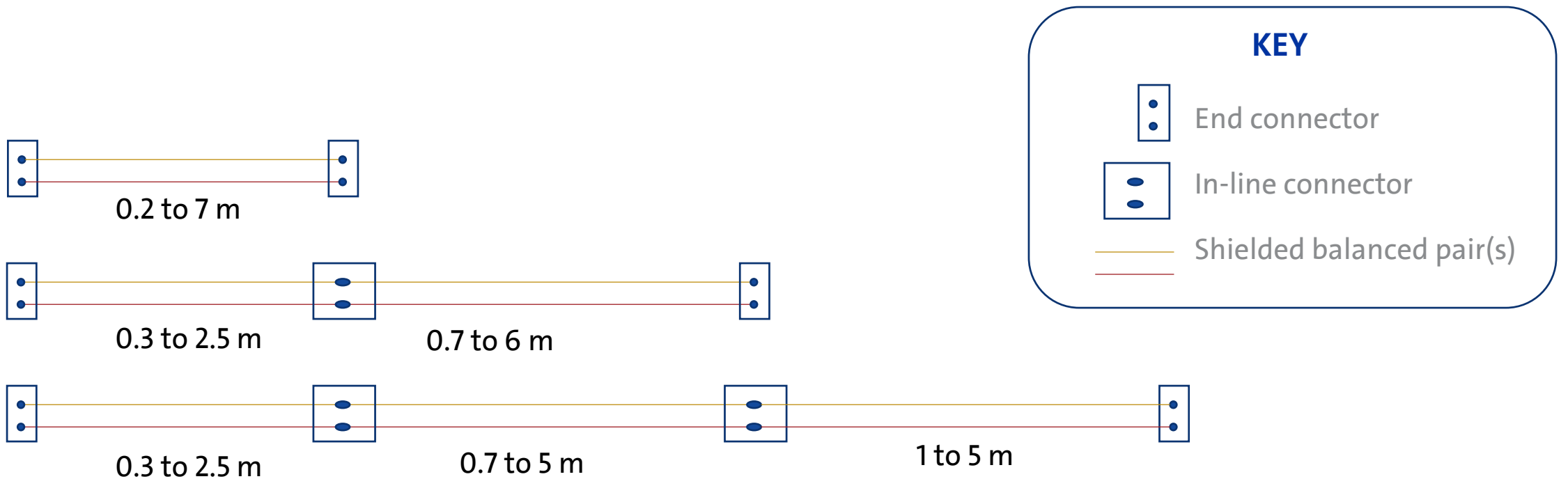
BACKBONE / DISPLAYS

- Contain 0, 1 or 2 in-line connections
- Are 0.2 m to 7.0 m in total length (not all combinations of the below lengths are possible)
 - Note: Segment lengths will vary by at least 10%



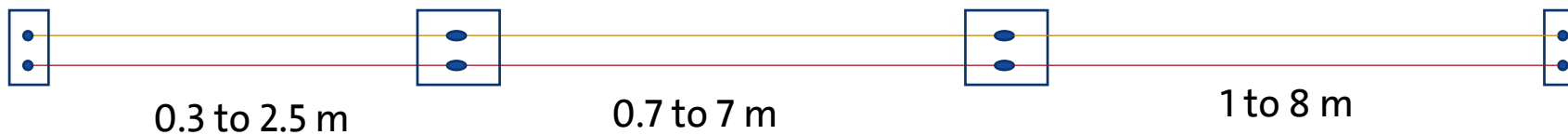
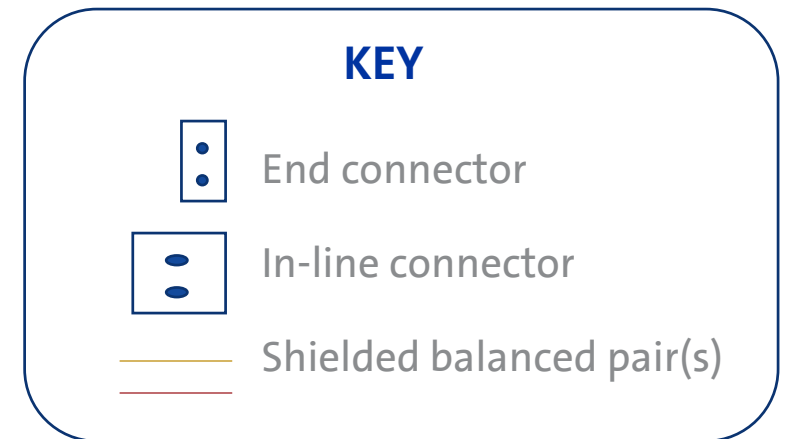
CAMERAS

- Contain 0, 1 or 2 in-line connections
- Are 0.2 m to 11.0 m in total length (not all combinations of the below lengths are possible)
 - Note: Segment lengths will vary by at least 10%



POTENTIAL NETWORKS

- Small percentage of application or requested for future flexibility
- Contain 3 or 4 in-line connections
- Are 11 m to 15.0 m in total length (not all combinations of the below lengths are possible)
 - Note: Segment lengths will vary by at least 10%
- Requested by OEMS who haven't investigated use cases



A blue-tinted landscape featuring a road that recedes into the distance towards a range of mountains under a clear sky. The entire scene is overlaid with a semi-transparent blue filter.

THANK YOU