



Learning structure for skills and knowledge

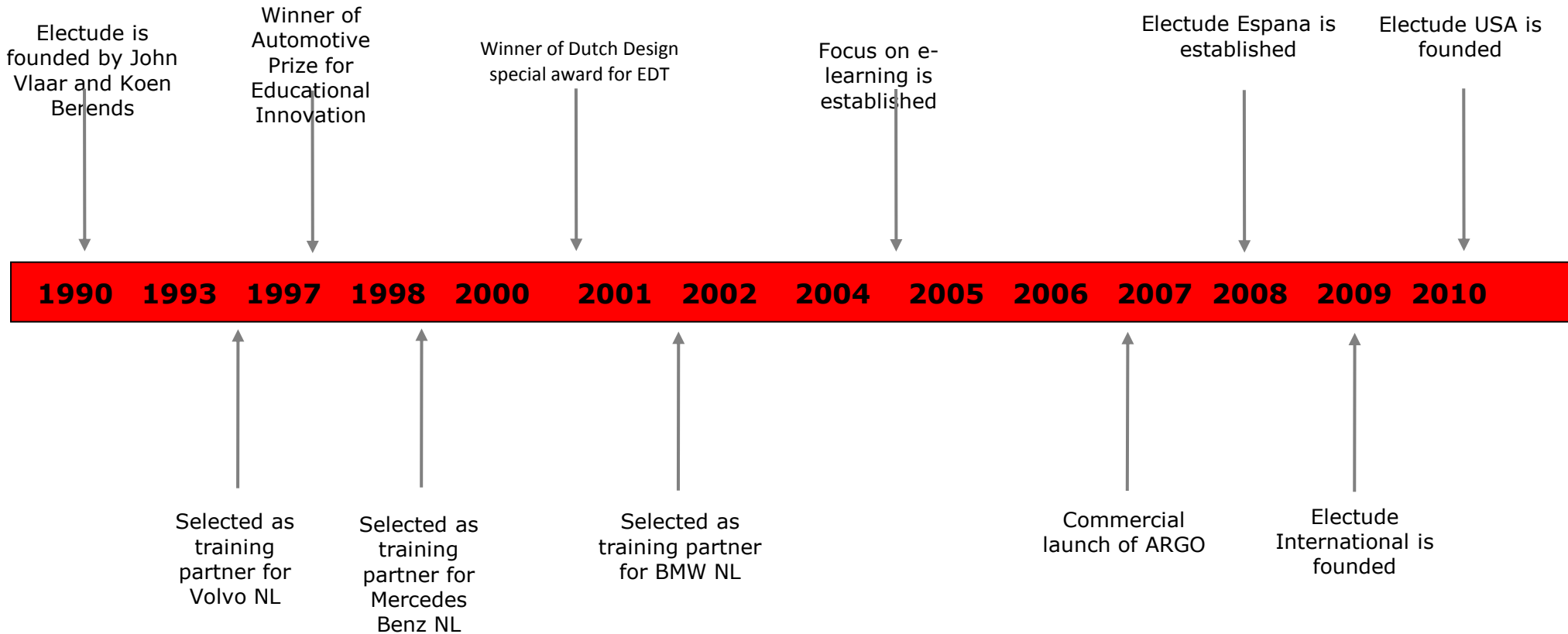
ELECTUDE

History

- It began in a garage...by two students...
- Electude was founded by John Vlaar (L) and Koen Berends (R) in 1990, while studying at University.
- Electude was set up to apply a new approach to automotive training.
- The first e-learning development began in 1999.
- After almost 15 years of developing automotive training programmes and content, Electude shifted its focus to e-learning.
- In 2007, Argo te e-learning product was launched commercially.



Company milestones



Facts & Figures

- Servicing hundreds customers in more than 30 countries
- Over 30,000 users world wide
- 5 sales offices and more than 10 resellers
- R&D based in Eindhoven, The Netherlands



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ELECTUDE

Some Key Corporate, Trade & Governmental Customers



People's Liberation Army
of China



Mercedes-Benz

Mercedes



AES Training



Mantra Learning



DAF Trucks



Volvo



ANWB



Ikas Auto



Kwikfit



SVOB



SEAT



CarXpert



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Mitsubishi



Prins



InstallersNed



Nissan

Key resellers and distributors:



Edutech



iGroup



Wuerth



Meca



Innovam



Access Dunia



Lucas Nuelle



Training Systems Australia



Eins Verlag



Group Auto Nederland



Beijer Automotive



Daesung

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Management team

John Vlaar, Chief Vision Officer

John is one of the two founders of Electude. John studied both Electrical Engineering and Didactics. He founded Electude with his university friend, Koen Berends. An avid pilot, John was one of the first people to see the potential of automotive e-learning in a flight-simulator-like, gaming environment. A frequent speaker at major industry events, John is widely seen as leading visionary in automotive education.

Koen Berends, Chief Development Officer

Koen is the other of the two founders of Electude. After graduating with an Electrical Engineering degree he specialized in automotive electronics and the impact of electronics on the automotive technician profession. He is currently one of the main Dutch thought leaders on the training and testing of automotive mechanics. Within Electude, Koen is responsible for the didactical method and content of Argo.

Hans van de Riet, Chief Technology Officer

Hans joined Electude in 1994 and developed the company's first simulation based e-learning platform. Later on he also became the software architect of Electude's automotive data products. He has been instrumental in transforming the e-learning technology to a fully web based SaaS model. Hans graduated with a MSc from the Delft University of Technology after studying Industrial Design Engineering and Applied Mathematics, specializing in user interface design and 3D graphics.

Thomas Snyder, Chief Commercial Officer

The former CCO of Royal Swets & Zeitlinger, Thomas joined Electude in 2009. His experience includes being Director of the Business Unit E-Media for European Directories and as European Vice President for Marketing and Sales at Priority Telecom. Earlier in his career, he worked for VNU where he founded Tutch, the mobile portal and content provider. Thomas earned his BA from the Claremont Colleges in California and his MBA from the Solvay Business School in Brussels.

Vision & Mission

Our vision to create highly effective e-learning materials & tools for the automotive market which make full use of today's and tomorrow's technologies.

Our mission to make excellent automotive education accessible and affordable for all.



What was going on in 2003?

One year after launching the E-class (W211) in the Netherlands, many customer complaints were noticed.

The number of warranty claims was excessive.

The dealer organisation lost faith in the manufacturer and the product.

Is there anything wrong with one of us?



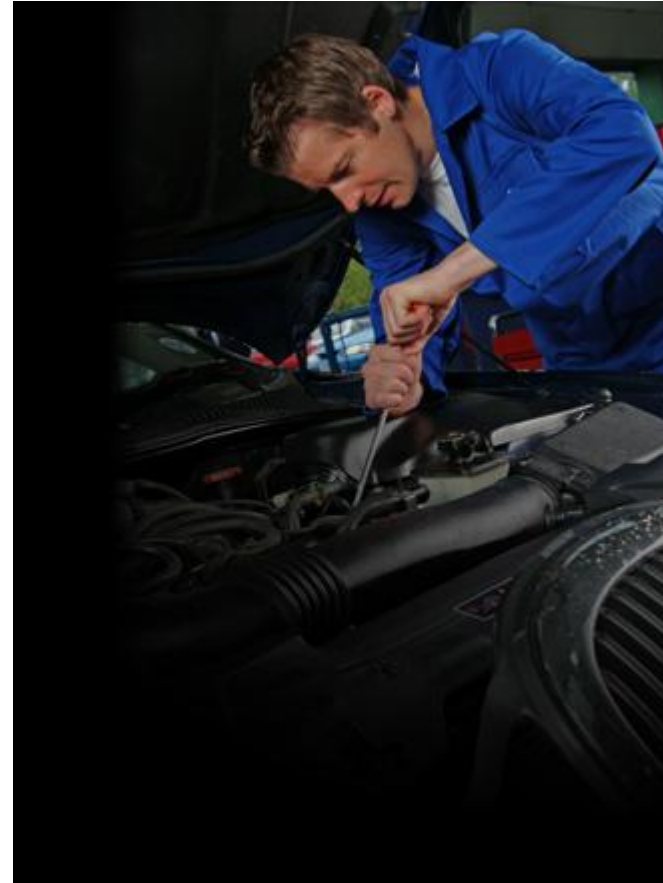
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The Mercedes mechanics In the Netherlands

Maintenance technician (European level 1-2)

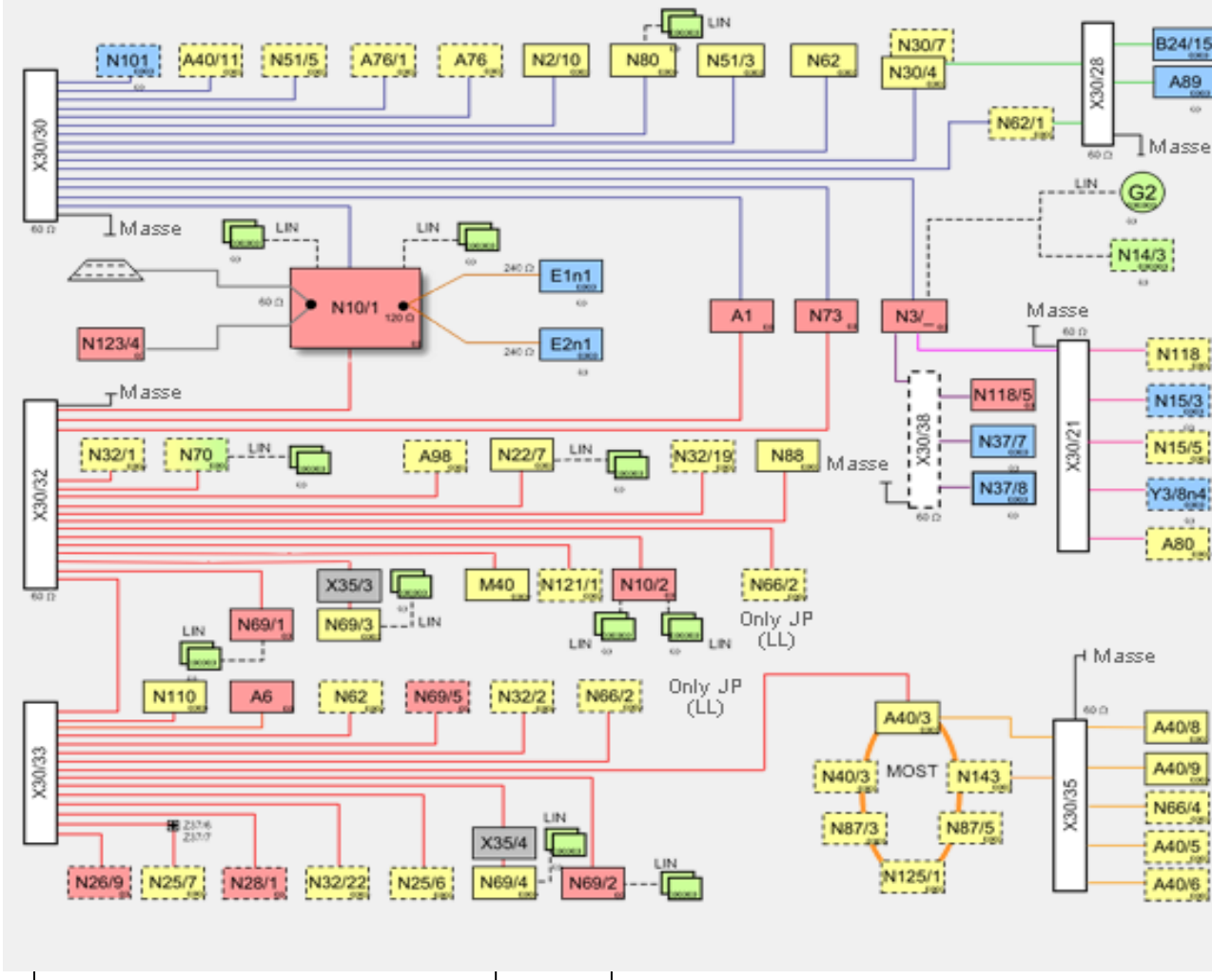
Repair technician (EU level 3)

Diagnostic specialist (EU level 4)



The Car W211

Gesamtvernetzung E-Klasse



Telematik-CAN (CAN A)

Innenraum-CAN (CAN B)

Antriebs-CAN (CAN C)

Diagnose-CAN (CAN D)

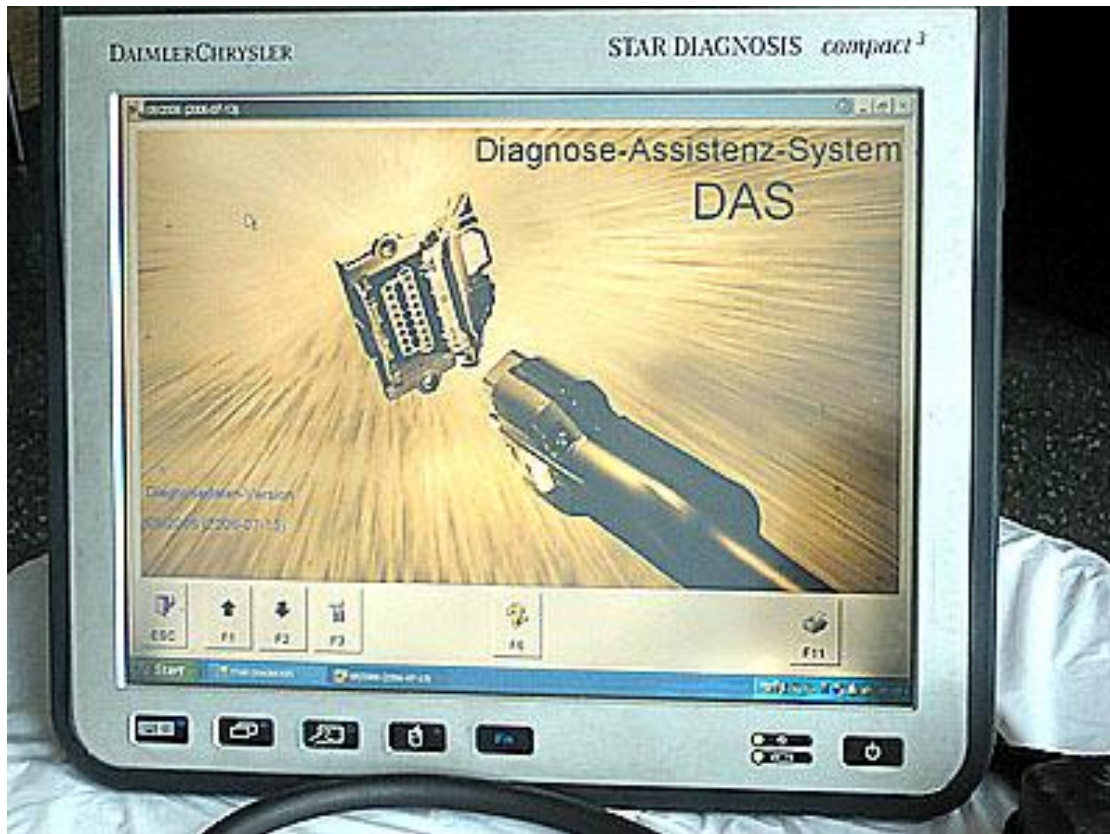
Fahrwerk-CAN (CAN E)

Frontbereich-CAN (CAN G)

Fahrdynamik-CAN (CAN H)

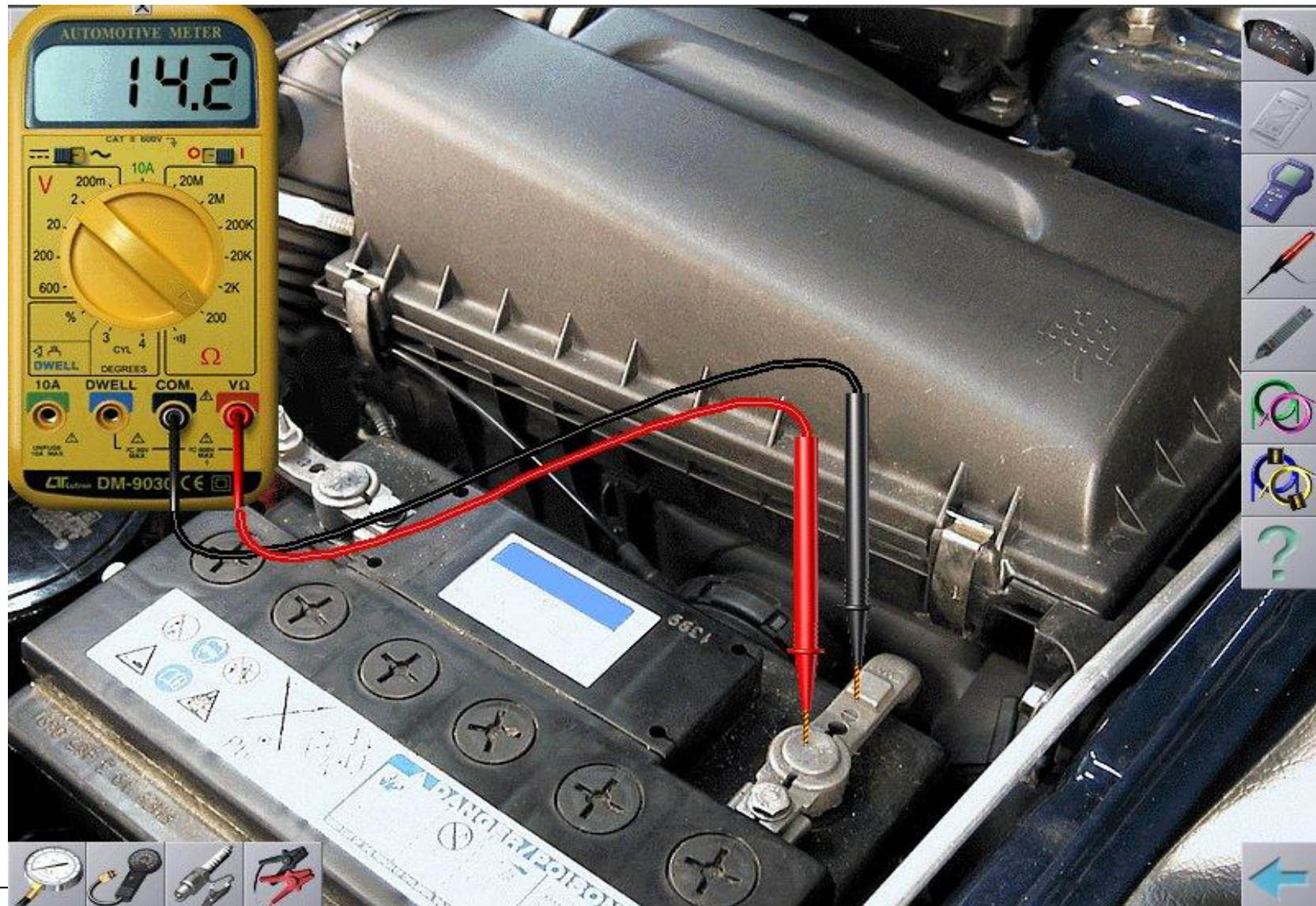
Sensor-CAN (CAN I)

The tools, Star Diagnose & DAS



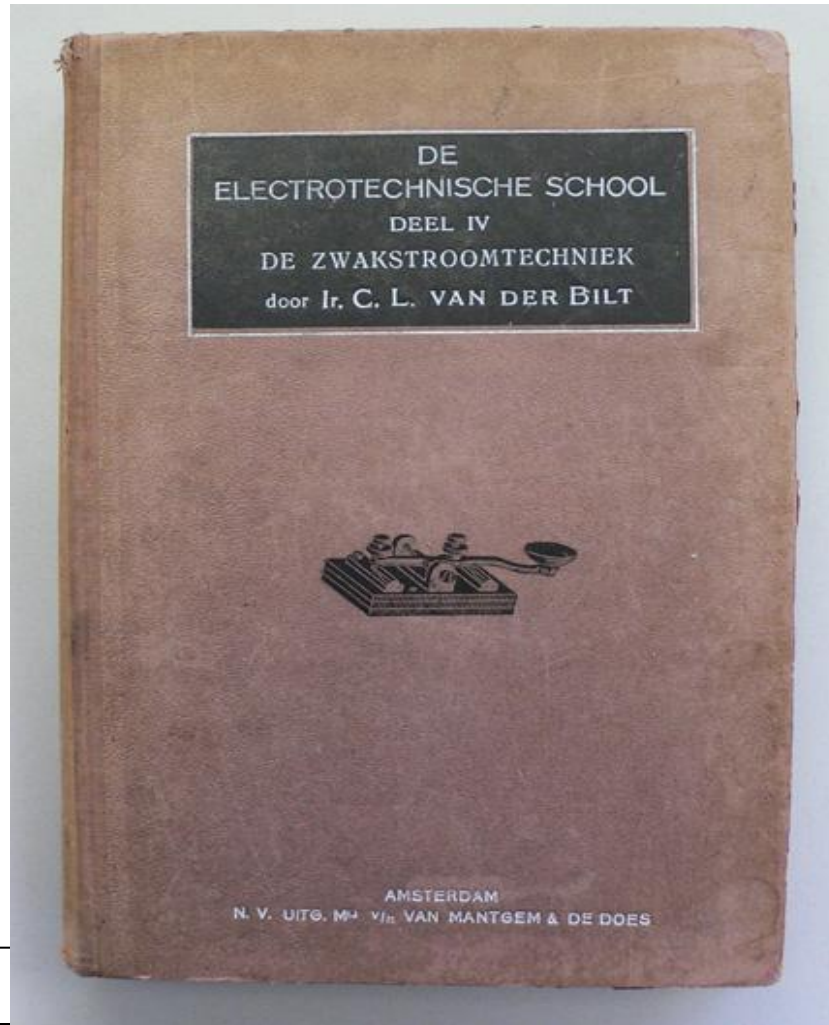
Cases and their influence on the learning plan:

- Command
- Gateway-BSG
- Ground connectors
- Bus Overload
- Diesel Injector
-



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Canbus, how to deal with it.



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Canbus how to deal with it

§ 6. Eenvoudigste verbinding met Morse-toestellen.

Op de eenvoudigste wijze worden twee plaatsen *A* en *B* telegrafisch verbonden op de manier in fig. 10 aangegeven. Men spreekt dan van eindtoestellen in die plaatsen.

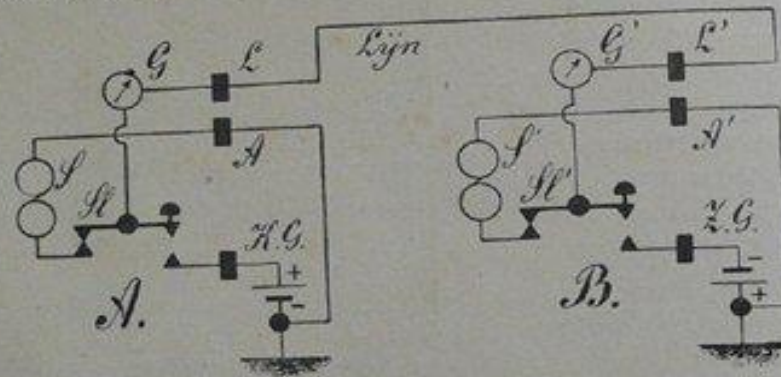
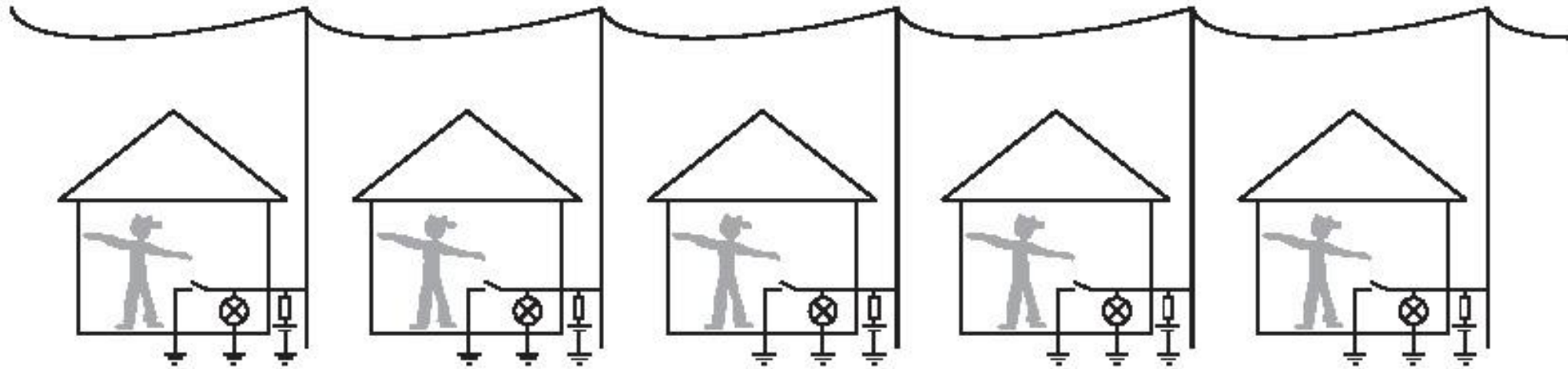


Fig. 10.

Als de sleutel wordt neergedrukt, wordt de daaronder aangebrachte batterijpool met de lijn verbonden, de andere aan aarde gelegd.

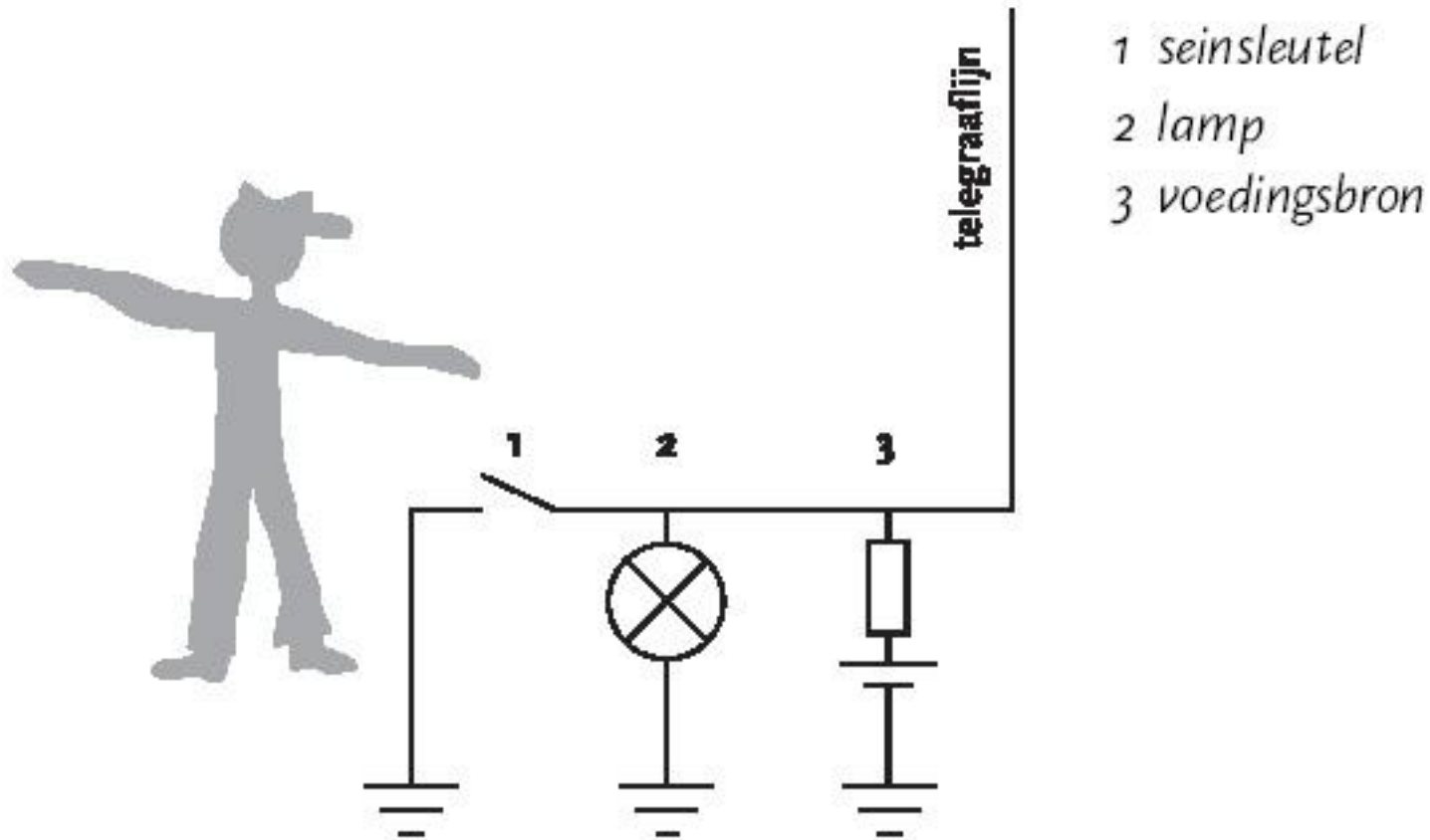
De aardverbinding wordt verkregen met eene z.g. aardplaat, eene koperen plaat, die onder het zomerpeil wordt ingegraven.

Canbus, the principle

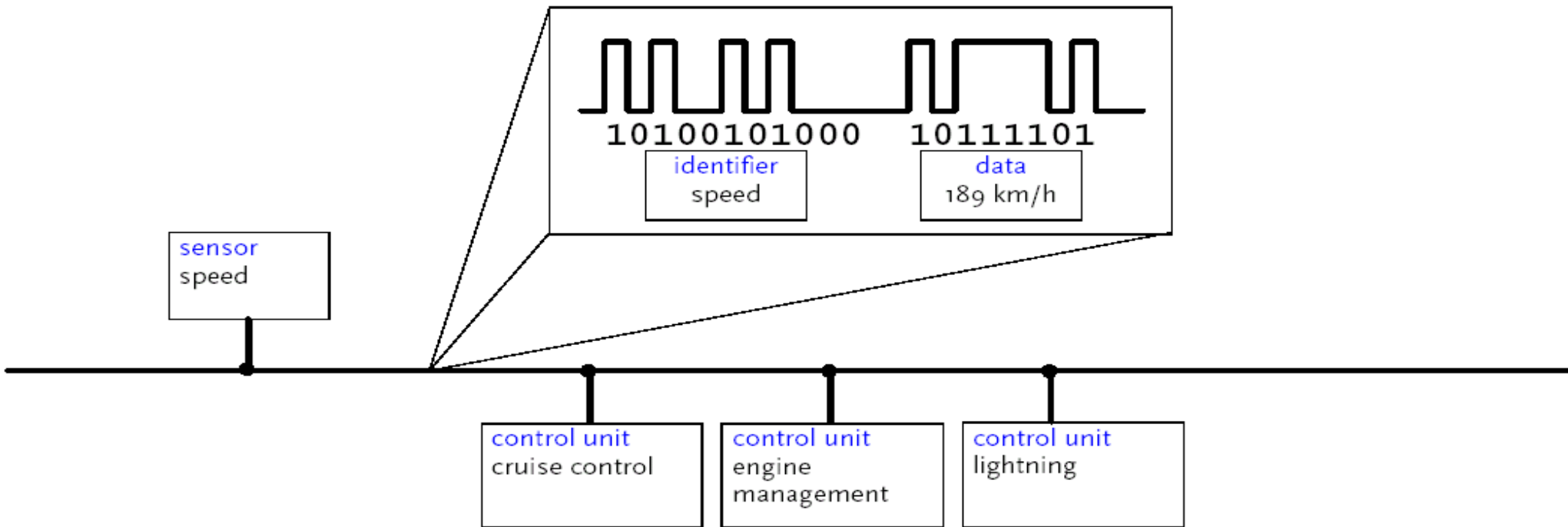


Telegraaflijn met postkantoortjes

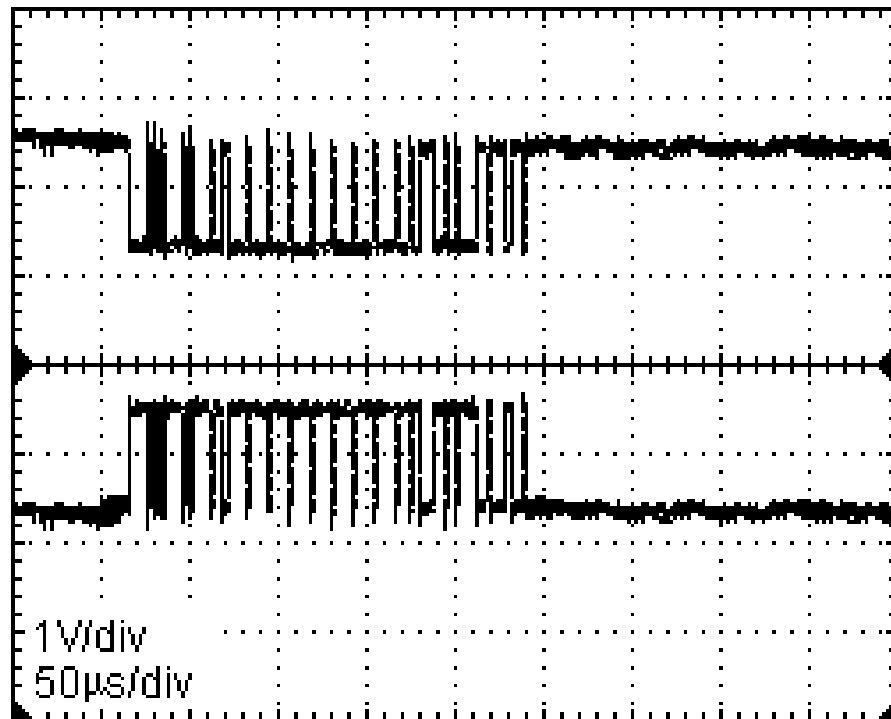
Canbus, the principle



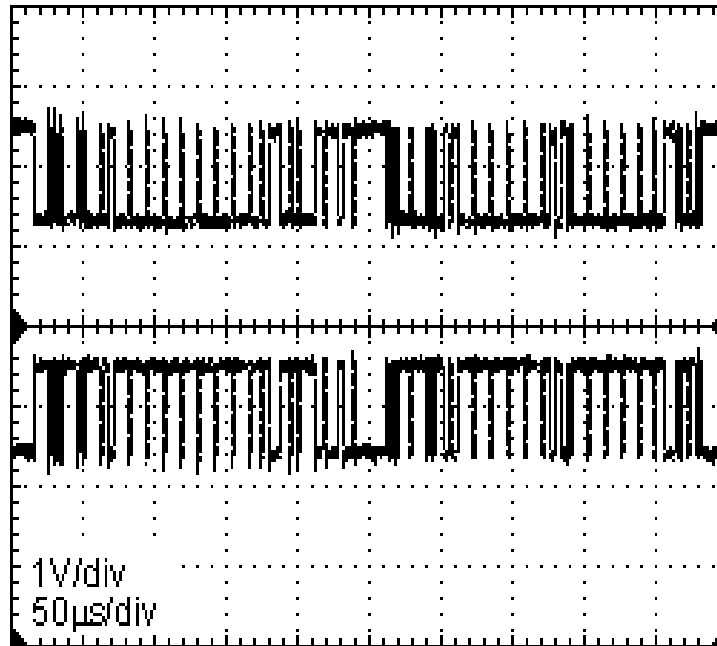
Canbus, the principle



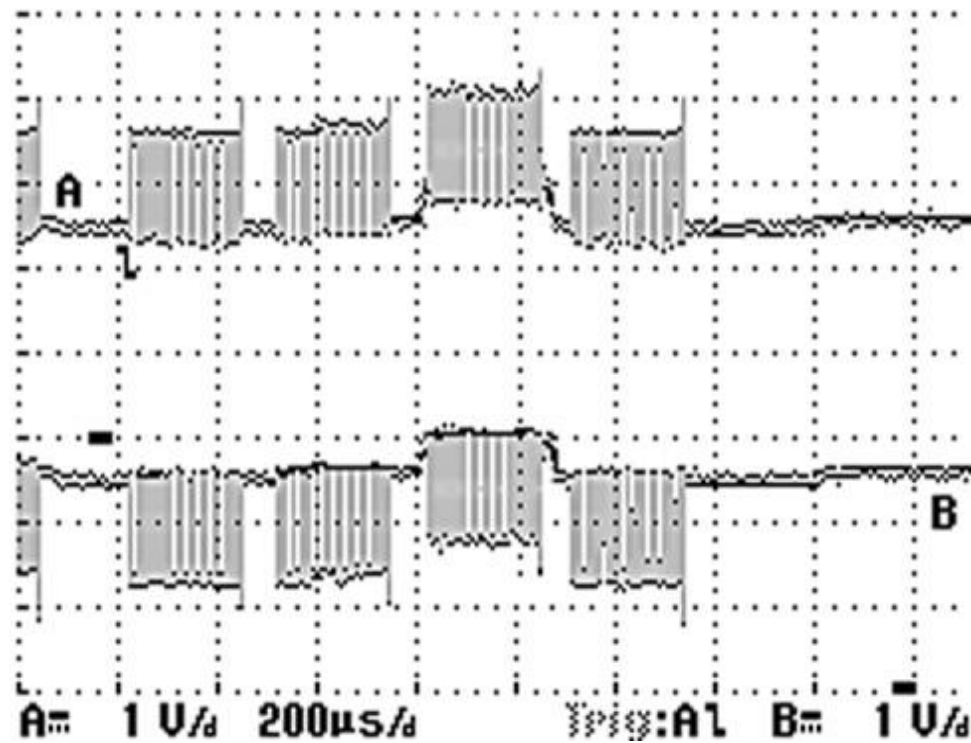
Canbus, the principle



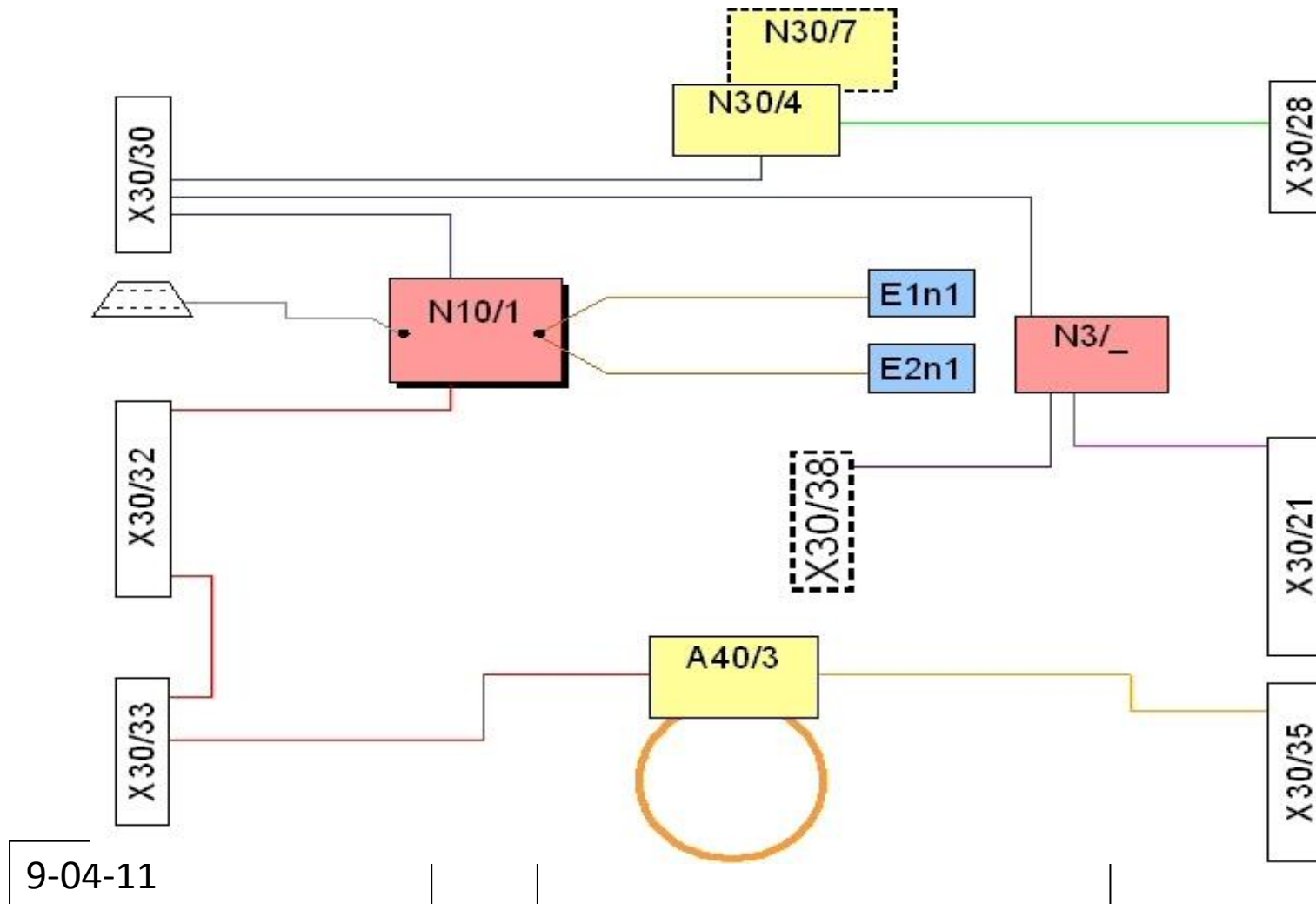
Canbus, the principle



Canbus, the principle



Canbus, the principle



Conclusions

