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Challenges for ChaDeMo in Europe



ChaDeMo General Assembly
Tokyo, 22nd of May 2012

Mr. Ronald de Haas, on behalf of ChaDeMo Europe



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Agenda

- Introduction
- Quick Charging in Europe
- ChaDeMo Europe organisation
- Challenges of ChaDeMo in Europe

28th of June 2011



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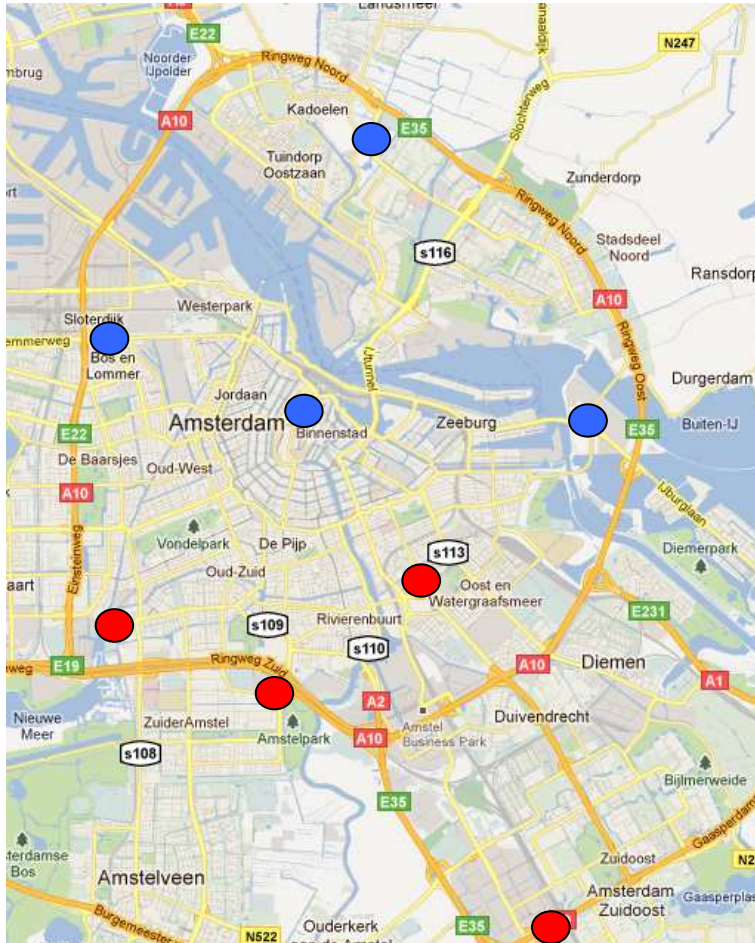
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QC's in Amsterdam

- 220km², 780.000 inhabitants
- 250.000 cars, 750 EV's (10.000 in 2015)
- 4 QC's operational 1-11-2011
- Expected total of 7-8 in 2012
- Complementary to 350 regular public chargers (now), up to 2000 (2013)
- Usage: 3500 kWh pm, 350 charges
- Tariff: € 4-12 per charge

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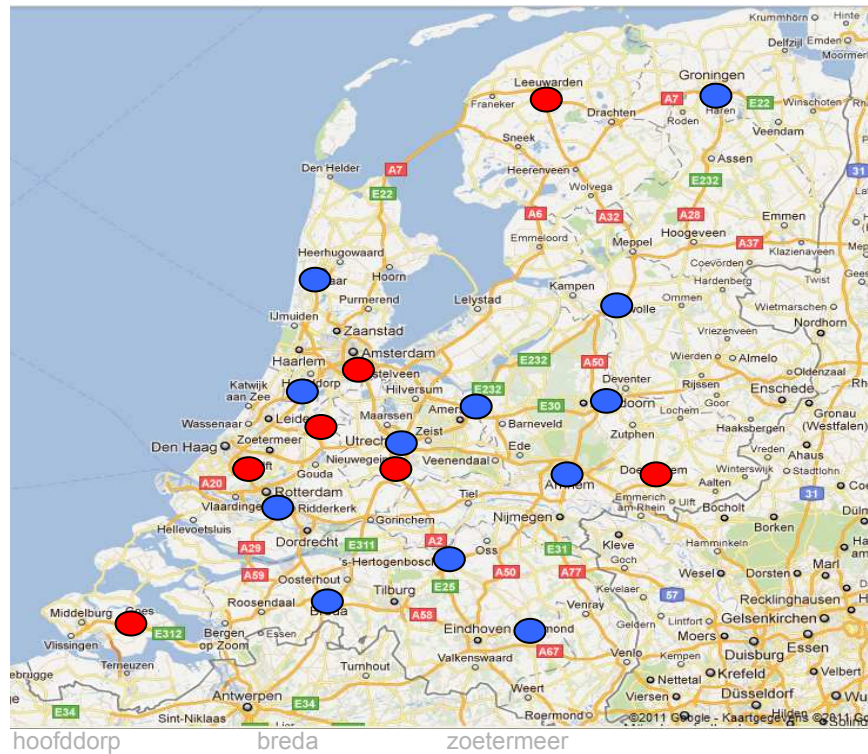
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Quick Chargers in NL

- From 30 now to 50 end of 2012
- Highway concessions for 400 QC's?
- Mostly private companies
- High cost for grid connections



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QC in Europe

Number of QC's installed:

- 175 (ACEA, march 2012)
- 207 (ChaDeMo, april 2012)

Ownership:

- 50% Nissan dealers
- 25% public bodies
- 25% private companies



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ChaDeMo Europe

Organisation:

- 2nd European General Assembly on 23-9-11 in Amsterdam
- Steering Committee, chaired by Endesa
- Close contact with ChaDeMo Japan
- Members active in European networks

- Three Working Groups:
 - Technology
 - External Affairs
 - Implementation & User



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Technology WG

- Aims to contribute to further development of ChaDeMo-standard
- Wants to develop the process of certification of European manufacturers
- Streamline installation and commissioning process for ChaDeMo chargers in Europe
- Resolve ad-hoc technical issues
- Chair: SEB (Ireland)



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External Affairs WG

- Initiate and monitor communication activities on ChaDeMo in Europe and disseminate knowledge
- Representation of ChaDeMo in different European policy making groups
- Chair: Endesa (Spain)



Implementation & user WG

- To answer questions concerning implementation issues (members, public bodies, network operators, etc.)
- To attend to the user perspective in Quick Charging and provide feedback from their point of view;
- To facilitate and aggregate knowledge and experience of business models, payment mechanisms, etc.
- Chair: City of Amsterdam (the Netherlands)



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Challenges ChaDeMo (1)

Observations:

- Home-market OEM's traditionally have a strong market position
→ strong voice of Combo-OEM's Europe
- The electricity system in Europe is generally well laid out
→ less necessity for QC
→ high cost for grid connections
- ChaDeMo has a 'Japanese' and closed image
→ no clear communication
→ possibility to create 'myths'



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Challenges ChaDeMo (2)

Recommendations (1)

- United ChaDeMo communication and PR-tour to promote ChaDeMo QC
 - already available, cars and chargers
- Formal commitment of more (Japanese) OEM's
 - enlarge the user potential
 - give more assurance for investments
- Strong position paper from ChaDeMo on 'urban myths'
 - uniform and expert communication



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Challenges ChaDeMo (3)

Recommendations (2)

- Stronger representation of ChaDeMo in European committees like ACEA, CEN-CENELEC and IEC
→ strengthen support within institutions to keep ChaDeMo accepted standard
- Continue to work on one standard or at least compatibility with Combo
→ one standard is still the best option for all players and for e-mobility



Other issues

Issues raised in Europe:

- Make the standard more open
- Possibility of changing power level during charging
- Reduction of voltage window to reduce cost of chargers
- Facilitating 3rd party certification to simplify process and reduce cost



Conclusion

- The introduction of the ChaDeMo helped tremendously to roll-out e-mobility in Europe
- European situation leads to European challenges
- Close cooperation is needed to solve these issues
- A standardized or compatible QC infrastructure can be the key to massive penetration of e-mobility



Thank you!