

Automotive Council Technology Group

Report to Automotive Council 1st July 2010

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Automotive Technologies: the UK's Current Capability

The report was published on 2nd June.

Extract from the press release; "New data has been published that demonstrates the current capability of the UK automotive industry. The Government, business and academia now have access to information that enables them to see an accurate snapshot of the state of the industry, including its ability to meet existing carbon reduction targets in road transport through the development of Low Carbon Vehicle Technologies.

The new report, commissioned by the Government-backed Technology Strategy Board at the request of the New Automotive Innovation and Growth Team (NAIGT), has revealed for the first time the areas of the automotive industry where the UK thrives, and where capability could be developed."

Automotive Council and Technology Group Promotion

Technology Group members have presented the activities of the Automotive Council and the Technology Group at three events:

Low Carbon Vehicle Partnership on 23rd March [Tony Harper (JLR)] Carbon Trust on 19th April [Simon Wood (Lotus)] Transport KTN on 27th May [Jerry Hardcastle (Nissan)]

Technology Group Meeting

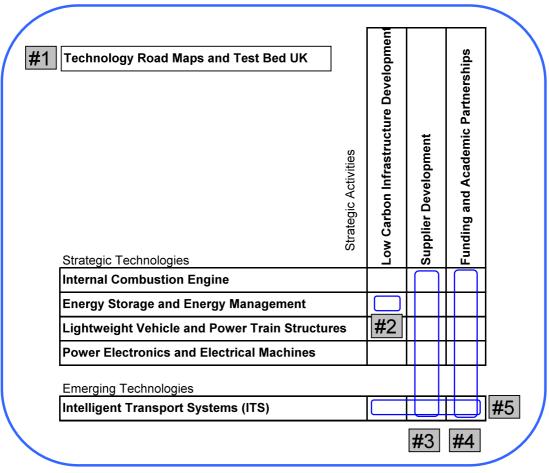
The second Technology Group meeting was held on 22nd April 2010. 26 members attended with new members including Andrew Graves – University of Bath and Dr Bernhard Blattel - BMW

Pilots from each of the 5 proposed work streams presented the progress of work to date and received feedback from the group members. Additional volunteers to join the crews were proposed, both from within the Technology Group members and also from other specialists from related companies. Each work stream was asked to further clarify their objectives and to ensure that they are adding value and not duplicating the work of SMMT, TSB, Cenex, EPSRC etc. The work stream members agreed to hold further workshop activities to progress each activity.

The Technology Group will hold two further review meetings in July (13th) and September (28th) and the result of the work stream activity will be reported to the next full Automotive Council (Informal) meeting in October (20th).



Technology Group Work Streams



Technology and Strategy Matrix

#1 Technology Roadmaps and Test Bed UK

Pilots: N Jackson (Ricardo) & J Whewell (BIS)

Objective – Technology Road Map

To extend the idea of an industry consensus road map beyond passenger car towards commercial and off-road vehicles

To establish a process on how these consensus road maps are created, how we can keep them relevant and how to make them widely available

Progress Report

Focus and scope of road map agreed between workgroup members Team members supplied internal positions and presentation material to Ricardo to incorporate into initial consensus view

Ricardo collated internal and workgroup supplied material into initial roadmap Meeting of workgroup held on 16th June to review and modify initial roadmap – Modification of initial roadmap is in progress

Objective – Test Bed UK

Define in simple terms what "Testbed UK" means



Define & produce well structured material to promote Testbed UK & make this widely available

Research & collate information on activities planned/underway internationally

Progress Report

Meeting of workgroup on 16th June to discuss scope of work Feedback sought on initial definition but little progress so far Information on capabilities/interactions/UK offerings produced by BIS Plan for next period is to put more focus on Testbed UK when initial Commercial/Off-road Roadmap defined

#2 Low Carbon Vehicle Energy and Infrastructure Development

Pilots: J Batterbee (ETI) and R Haycock (ARUP was OLEV))

Objective

Create the link between the Automotive Industry and Infrastructure providers to develop the necessary low carbon infrastructures to support the Low Carbon Technology Road Map (electricity, hydrogen, bio-fuels etc)

Progress

Four meetings have been planned for the Work-stream during 2010. Development of a generic methodology for creating joint energy/auto industry process maps for transitioning to 'new' energy vectors is progressing. The methodology will be tested with two different energy vectors, to be agreed with the Technology Council; one of these will be electrification. The output, at the end of 2010, will be a short report to the Technology Council covering the generic methodology and the initial process maps produced for the first two energy vectors.

#3 OEM and Supplier R&D Inward Investment

Pilots: G Hoare (Ford) and J Beasley (GKN) (Jon will provide link to Supply Chain Group)

Objective

Create the link with the Supplier Chain Working Group to develop the supply chain to develop the four strategic technologies and to create a case to encourage inward investment for R&D by OEMs and Tier1 suppliers

Progress Report

Meeting held 29th June, Dave Greenwood (Ricardo) presented greater details with respect to the UK Capability report. Discussions held regarding the apparent lack of transition vehicle, between SME / Inventor and large OEM's (the valley of innovation death), could the UK create a virtual tier 1 or a unique mechanism that could bring partners together to work on crossing the valley. SME's may have great ideas, but not the robustness of development or ability to scale to industrial production and the associated customer compliant quality systems and after sales competency that many Tier 1's already have established. OEM's do not have the time and resources to provide SME's with this capability (normally relying on Tier 1's to support the supply chain



development). What could be created to bring this together, that would encourage Tier 1's to build capability using such a vehicle? Roy Williamson (LCVP) was also present at the meeting, and it was agreed that in principle the development of TRL and MRL (Technology and Manufacturing readiness levels) explanations be created in order that SME's can better understand the different levels of development and what is expected at each stage. This would also then help to map on Academic and funding engagements, and individual OEM's should be able to use this scale to identify to suppliers where there own / unique quality systems apply.

#4 Funding and Academic Partnerships

Pilots: A Harper (JLR) & B Collins (DfT)

Objective

Create the link between Academic Institutions, Industry and Funding Bodies to establish the technology and funding environment to promote collaboration activities to develop the four strategic technologies

Progress Report

1) Survey Auto Council Technology Group for the key universities that they fund/work with in the 5 priority areas. - Supplement the EPSRC Spend data. Complete

2) TSB to pull together spend data on 5 key priority areas (Similar to EPSRC) Projects are identified

3) Collate picture with regard to planned 'centres' with relevance to the 5 key priority areas.

Projects are identified

4) Convene a workshop with representatives of the Top 3-4 Universities (defined by spend on priority areas) to:

- Conduct a show and tell of current and previous activity relative to the 5 key areas.

- To get their perspective on the 7 TQM questions relevant to the workstream. In Progress

#5 Intelligent Transport System Development

Pilot: John Miles (ARUP)

Objective

Define the customer or societal problem that ITS solutions will resolve, considering the three faceted aspect of information presentation, infrastructure to car, car to driver, infrastructure to driver. Proposal for ITS Technology Road Map to supplement the Low Carbon Technology Road Map

Progress Report

The ITS working group held its first meeting on May 12th. At this meeting the purpose and scope of the report was considered and a methodology for delivering the final document to the Automotive Council meeting in October was agreed. At that meeting, principal authors were appointed and

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requested to prepare first drafts of key chapters within the document. First draft were due for return by June 25th.

The working Group held its second meeting on June 29th. All of the first drafts requested at the first meeting were produced and the working group spent time looking at the material and discussing its content. John Miles/Tim Gammons will now act as editors with a few to producing an improved draft for the document in advance of the next meeting which is scheduled for July 27th.

The agenda for the next meeting will include a review of the document to date and a road mapping workshop.

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