

Stockholm 23 June 2011

To:  
 Mr Gerd Kellermann (UN RESS Chairman)  
 Cc: Mr Thomas Goldbach (UN RESS Secretary)

**Re: Swedish stakeholders' concerns with RESS Safety Requirements Proposal**

The purpose of the UN ECE Informal Working Group is to develop and define specific requirements aimed to ensure safety of rechargeable energy storage systems (RESS) which provide electric energy for electrical propulsion installed in hybrid and electric vehicles (HEV, PHEV and EV) during normal, recharge and post crash conditions. Whereas the Swedish stakeholders do not question the necessity of RESS requirements concerning functional, mechanical, chemical and electrical safety, we have concerns regarding the short time frame that the working group has at its disposal for completing this task. The document proposed for RESS requirements reflects only batteries and battery systems based on Lithium-ion technology. It will require significant effort to rework the test specifications so that they can be applied to any RESS battery technology and ensure that there are no design limitations imposed by the test methodology and acceptance criteria in order to fulfill the agreement from the Washington DC meeting 31 August-2 Sept 2010 (ref. ELSA-8-7).

There is a lack of harmonization between the current RESS safety requirements proposal and existing and emerging international industry standards in this area. ISO 12405 "Electrically propelled road vehicles – Test specifications for lithium ion traction battery packs and systems" is used as normative reference although the safety performance requirements of ISO 12405 are still in working draft format. UL (UL 2580) and SAE (SAE J2929) have come further in finalizing safety requirements for RESS and should also be included as references for the continued work. There may also be other relevant industry standards that need to be considered in order to formulate general requirements that can be applied to any RESS regardless of battery technology.

In order to make the safety requirements document more comprehensive we propose defining two categories of tests: tests designed to verify safe performance under normal operating conditions and tests designed to evaluate safety in out of normal conditions. We believe this will make it easier to design test conditions and define relevant acceptance criteria that are generally applicable and not limited to Lithium-ion technology.

Regards on behalf of,

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