

Solid state sulfide Based LI-Metal batteries for EV applications

Deliverable 2.3 Report on test protocols for small and large cells

Baran Çelikten
Ford Otosan

Ozan Eren
Ford Otosan

Yusuf Selim Karataş
Ford Otosan

Özgür Ali Aktaş
Ford Otosan



Publishable summary

The aim of this deliverable is to identify test protocols for the planned cell development stages. For the SUBLIME project, test protocols of large cells (10Ah) are explained in detail. SUBLIME partners who should execute tests are defined according to the capability of the partners. Furthermore, the number of cells needed and data to be obtained from these tests are also defined in this document. The definition of the test protocols is carried out mainly from the viewpoint of the automotive industry. Type of tests, capabilities of the executors of the tests and the numbers of cell needed for the tests have been mutually agreed with the partners.

Tests are grouped into five main type categories as Electrical, Mechanical, Life, Abusive and End-User tests. Within those categories, tests are also grouped again according to 2nd usage of cells for other tests. For instance, for electrical tests the same cell can be used multiple times because no damage is expected from these tests. The tests which can damage the cell (abusive tests) are obtained from WP6 and the protocol was created directly with what is declared in WP6. Execution of mechanical tests is depending on whether close-to-serial production of the cells will be possible. These tests are more relevant to usage in vehicles and are somewhat less linked to the properties and electrochemical performance of cell components but rather their internal design and assembly.