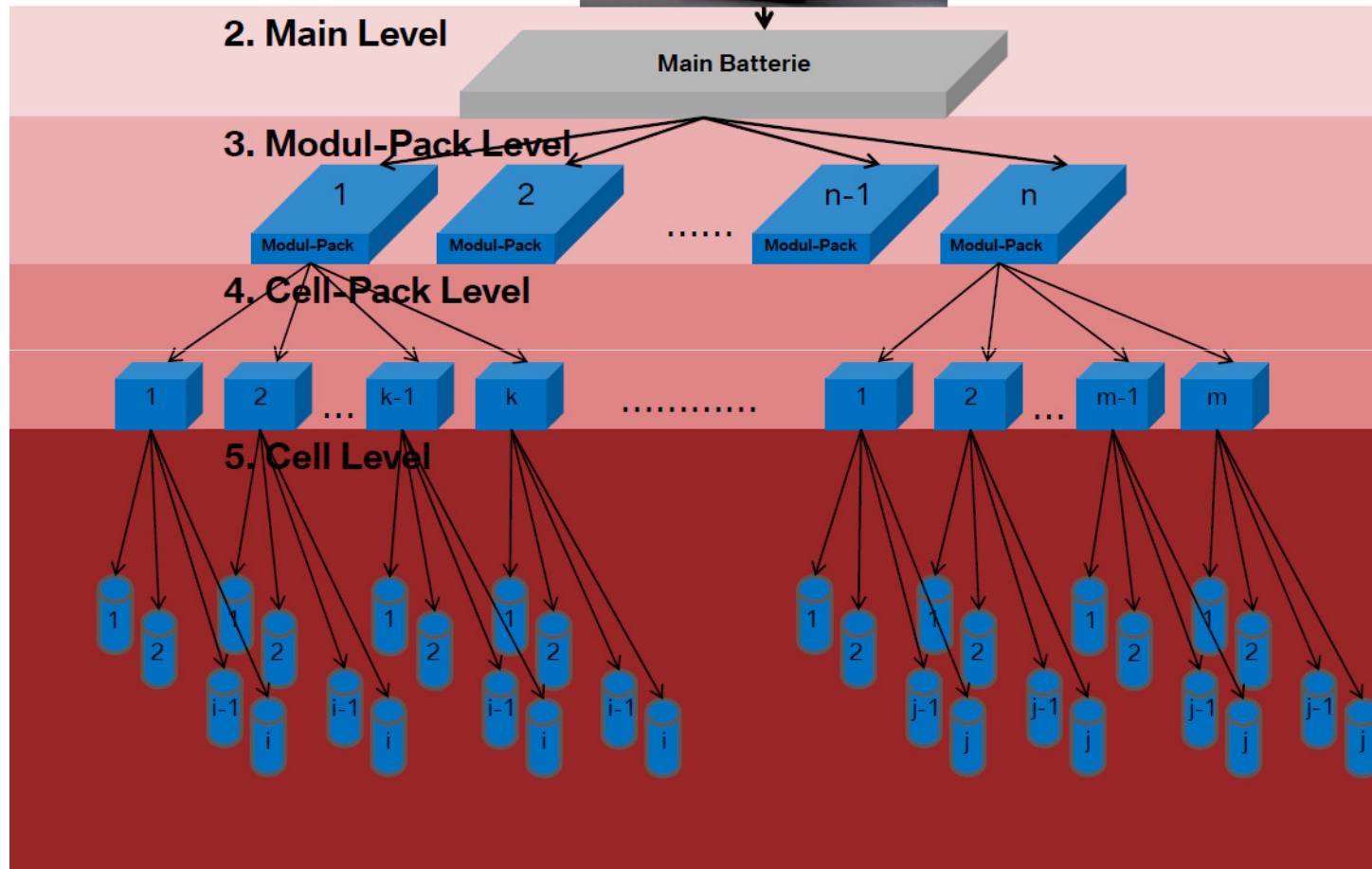


# Continental Proposal of Definitions for RESS Safety Requirements

# BMW Proposal

Task: Structure of battery  
Department: ESS  
22.02.2011  
Seite 3

## 1. Vehicle Level



# Continental Proposal of Definitions

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## 2. Main Level (BMW proposal)

### RESS - Rechargeable energy storage system

means a system providing rechargeable electric energy based on electro-chemical processes for vehicle propulsion.

The RESS includes cells, modules and/or packs. Furthermore, the necessary ancillary subsystems for physical support, thermal management, electronic control and enclosures are included in the RESS.

(based on RESS discussions)

# Continental Proposal of Definitions

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## 3. Modul-Pack Level (BMW proposal)

### Pack

means an energy storage device that includes cells or modules normally connected with cell electronics, voltage class B circuit and overcurrent shut-off device including electrical interconnections, interfaces for external systems(e.g. cooling, voltage class B, auxiliary voltage class A and communication).

(based on ISO 12405-1, ISO copyright has to be checked)

# Continental Proposal of Definitions

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## 4. Cell-Pack Level (BMW proposal)

### Module

Means an assembly of electrically connected cells with a mechanical supporting structure. In most cases, a serial electrical connection of cells will be applied. A module could contain further functionalities (or their parts) of the RESS as e.g. parts of the cooling system and/or first level cell electronics, but not the battery control unit. In a RESS, one or more modules could be used.

If the module voltage differs from the RESS voltage, a different effect to the hazard level could be expected. Thus, modules could be used in a limited number of tests described in this regulation as representatives of RESS only.

(based on ISO discussions, ISO copyright has to be checked)

# Continental Proposal of Definitions

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## 5. Cell Level (BMW proposal)

### Cell

means a single encased electrochemical unit containing one positive and one negative electrode which exhibits a voltage differential across its two terminals.

(based on RESS discussions)