

B4B, a System of System Development Based on Systems Engineering Processes

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arKItect SEA, a Systems Engineering (SE) modeler has been used by Renault and Bouygues Energies & Services to manage SE processes of a Batteries for Buildings (B4B) system. B4B is a concept reusing batteries of electric vehicles (second life), as a storage facility for energy management and renewables integration. The project started in 2012, was completely new from many viewpoints: new partnership with actors using different processes; innovative product and service offer connected and evolutive including safety concerns.

In order to overcome these challenges we have established a common SE model addressing the SE process: managing all SE data in a modeler, managing data consistency (requirements allocations, functional and system architecture), generating all specification documents toward developers and suppliers, enabling safety analysis faithfully with SE model.

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