

Final Event  
24-25<sup>th</sup> of May 2022

Industrial feedback

## BLUWAYS Feedback on PANDA



Powerful **A**dvanced **N**-Level **D**igital **A**rchitecture  
for models of electrified vehicles and their components

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Bluways



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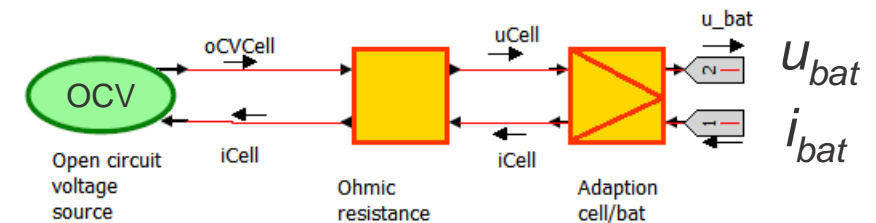
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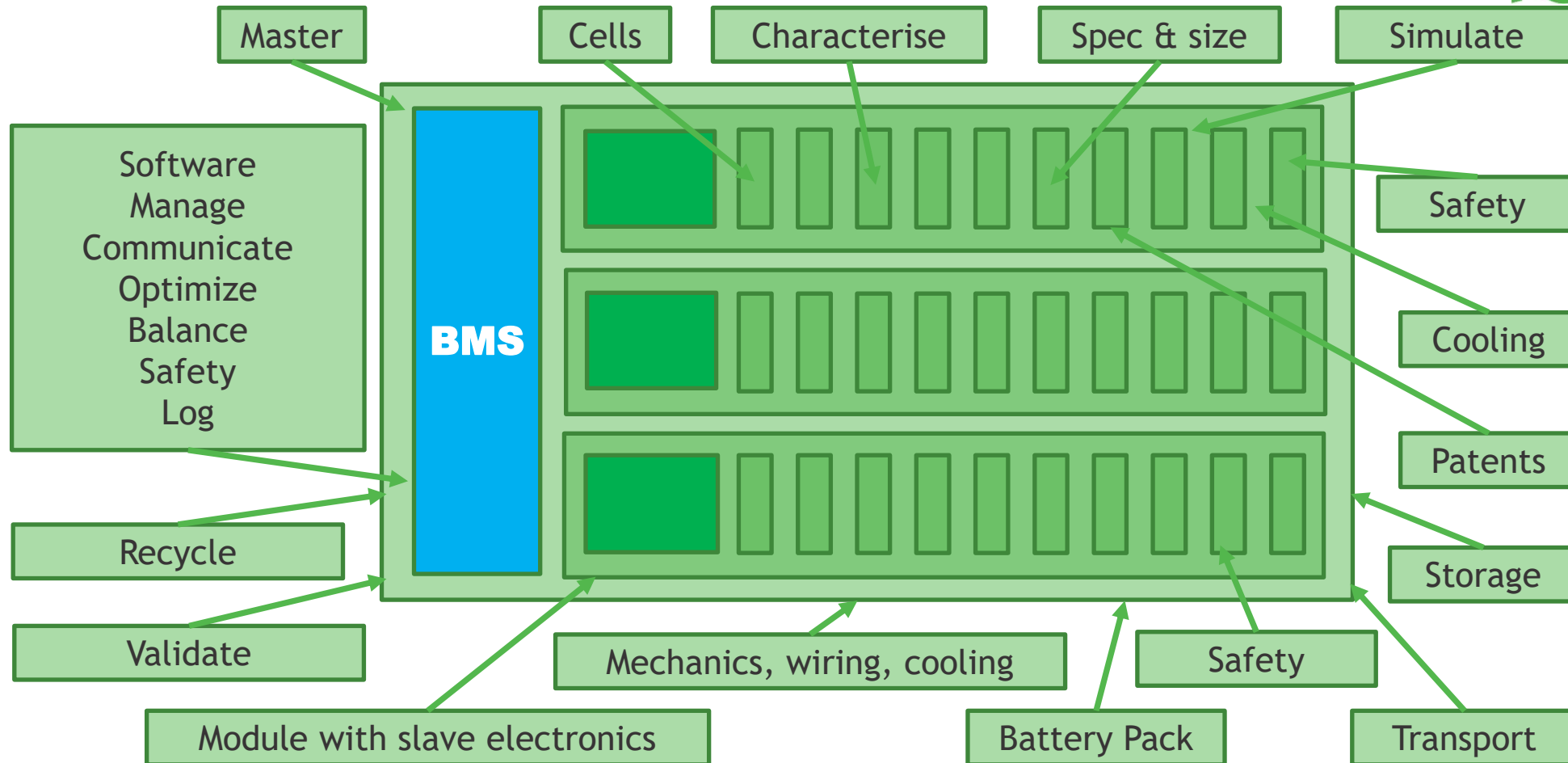
# European project benefits



- 🐼 As an industrial partner in PANDA, this project is an opportunity to:
  - Learn from academic partners in how to apply an EMR model to the design of a battery
  - Develop common methods with OEMs and suppliers
  - Share Knowledge and experience with other industrial partners
- 🐼 A boost to be able to apply this extra knowledge in the design of a next generation battery
- 🐼 To be a better supplier to our existing and future customers
- 🐼 And therefore be able to grow in a more sustainable way and a better employer



# Responsibilities of a battery pack manufacturer

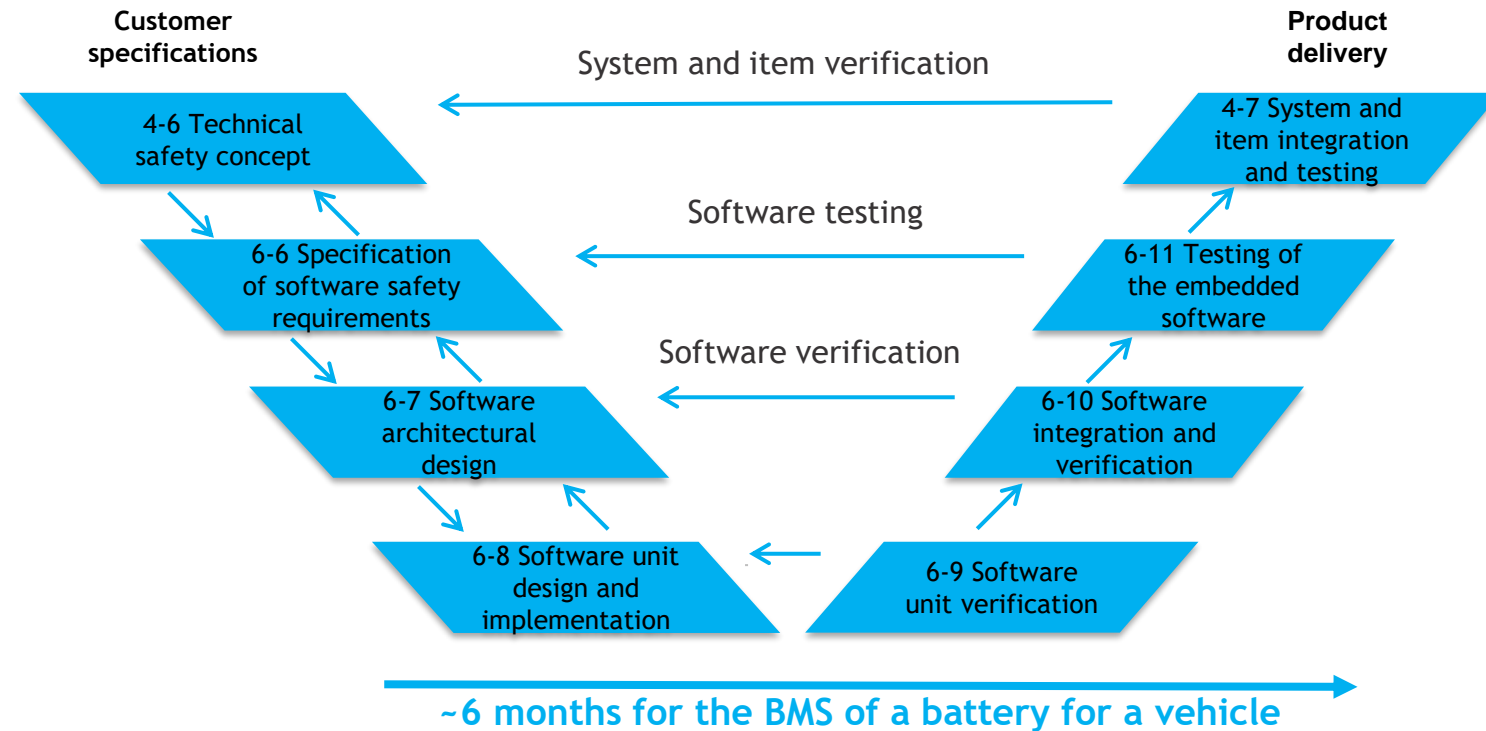


# Bluways' software design approach in PANDA



- According to the ISO26262
  - to follow the main European approach: safety first

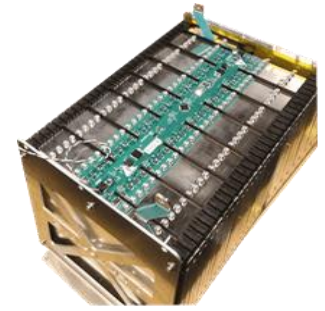
- To shorten the development time and effort of our customer
  - by showing the efficiency of using HIL testing instead of real testing in many cases.



# Conclusion



- 🐼 The battery module was developed Bluways and validated.
  - 🐼 used for model validation by ULille and VUB
  - 🐼 used for HIL testing by ULille and VUB
- 🐼 The battery model can be implemented in EMR
  - 🐼 very good representation of the battery pack
  - 🐼 creates good IP protection
- 🐼 The EMR approach adds value to modeling and control design
- 🐼 The cooperation between the academic and industrial partners generated a big success

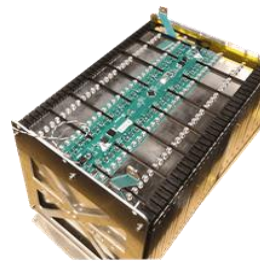


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# Thank for your attention!

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