



#InvestEUresearch



Horizon 2020 Work Programme for Research & Innovation 2018-2020

EMRS Event
Warsaw, 19th September 2018

Workshop: Europe in Motion-EUMAT Session
Time: 13:45-16:10
Proponent: Robert Bosch Corporate Research (Bernhard Polzinger)
Proposal title: AM3DEM – Additive Manufacturing of 3D Electronics and Mechatronic Parts

DG Research & Innovation

Research and
Innovation

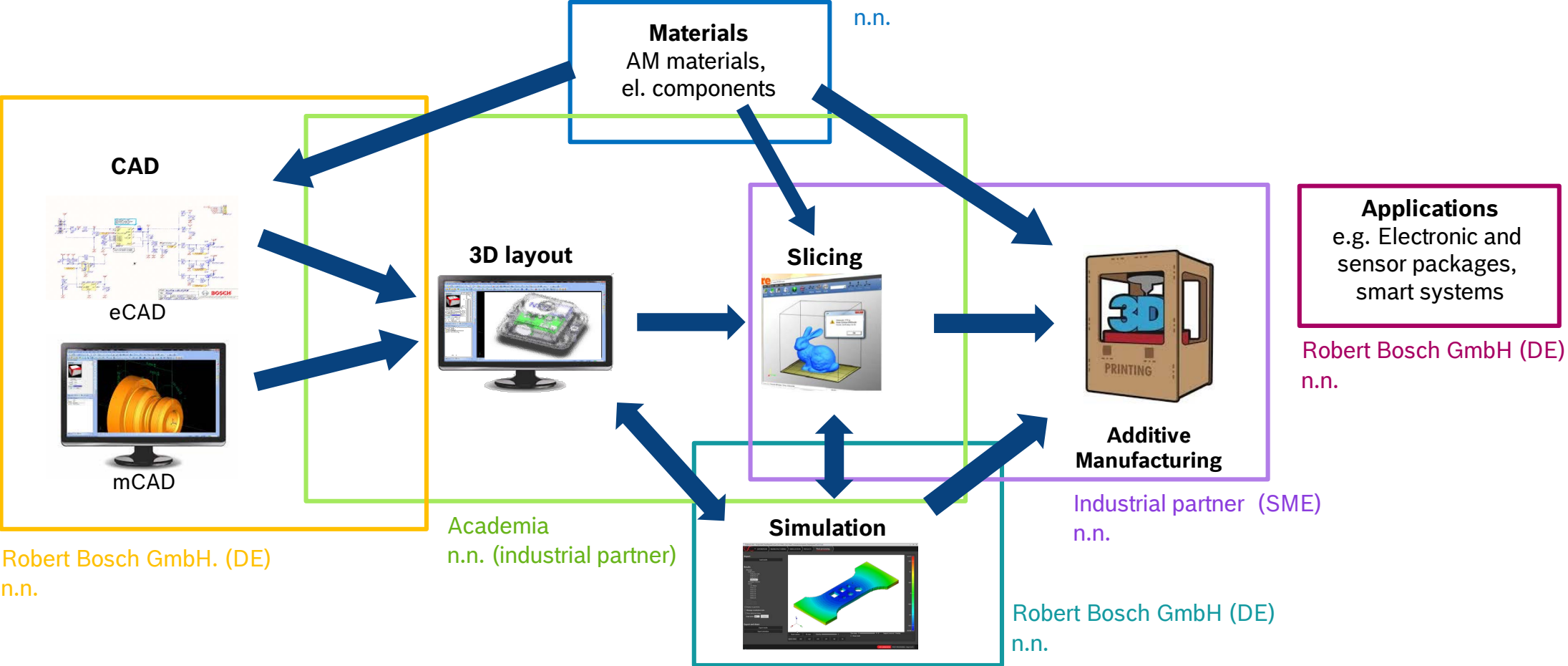
Scope AM3DEM

Vision and Research Needs

- ▶ **Vision:** Additive manufacturing of polymer-based 3D mechatronic parts and products
- ▶ **Research Needs:** New additive manufacturing technology which is combining:
 - Additive manufacturing of polymer-based multi-materials
 - Integration of electric and electronic components (e.g. sensor chips, passive electric components) and small inserts (e.g. PCB) via pick & place
- ▶ **Requirements** beyond state of the art of additive manufacturing:
 - Materials for reliable 3D printing which fulfil demands on mechanical and electrical requirements
 - Design software to combine eCAD and mCAD
 - Slicing software for CAD data of mechatronic parts
 - Automation of complete process
- ▶ **Tentative Project title:** Additive **M**anufacturing of **3D** Electronics and **M**echatronic Parts(AM3DEM)

Scope AM3DEM

Workflow and potential partners



Scope AM3DEM Brokerage:

- ▶ What we aim for:

- ▶ Project proposal for H2020
- ▶ Example: : DT-NMBP-18; DT-NMBP-19; DT-FoF-12;
- ▶ Alternate calls that fit the project idea: MOST WELCOME!

- ▶ Bosch role:

- ▶ Proposer; active participation in CAD /Design, simulation, applications (from specs to market)

- ▶ Partners wanted in all areas of the project

- ▶ Contact:

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(or optional also: Winfried.Keiper@de.bosch.com)