



FIDAMC

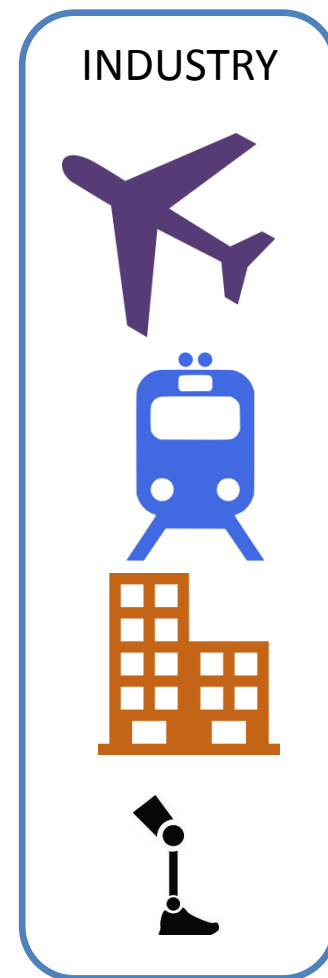
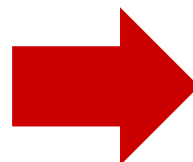
**Shift2Rail-Pivot
WP1, 2 and 6**

**Shift2Rail Dialogue on the Future of Rail
Research & Innovation. Spanish Event
Feb. 12th 2019, Madrid**

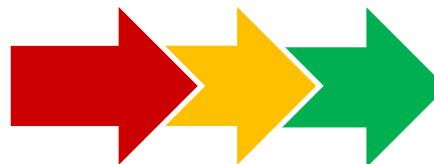
M. Ordóñez, R. Guzmán de Villoria

TECHNOLOGY TRANSFER IS A CHALLENGE ...AND OUR “CORE-BUSINESS”

FUNDAMENTAL
RESEARCH

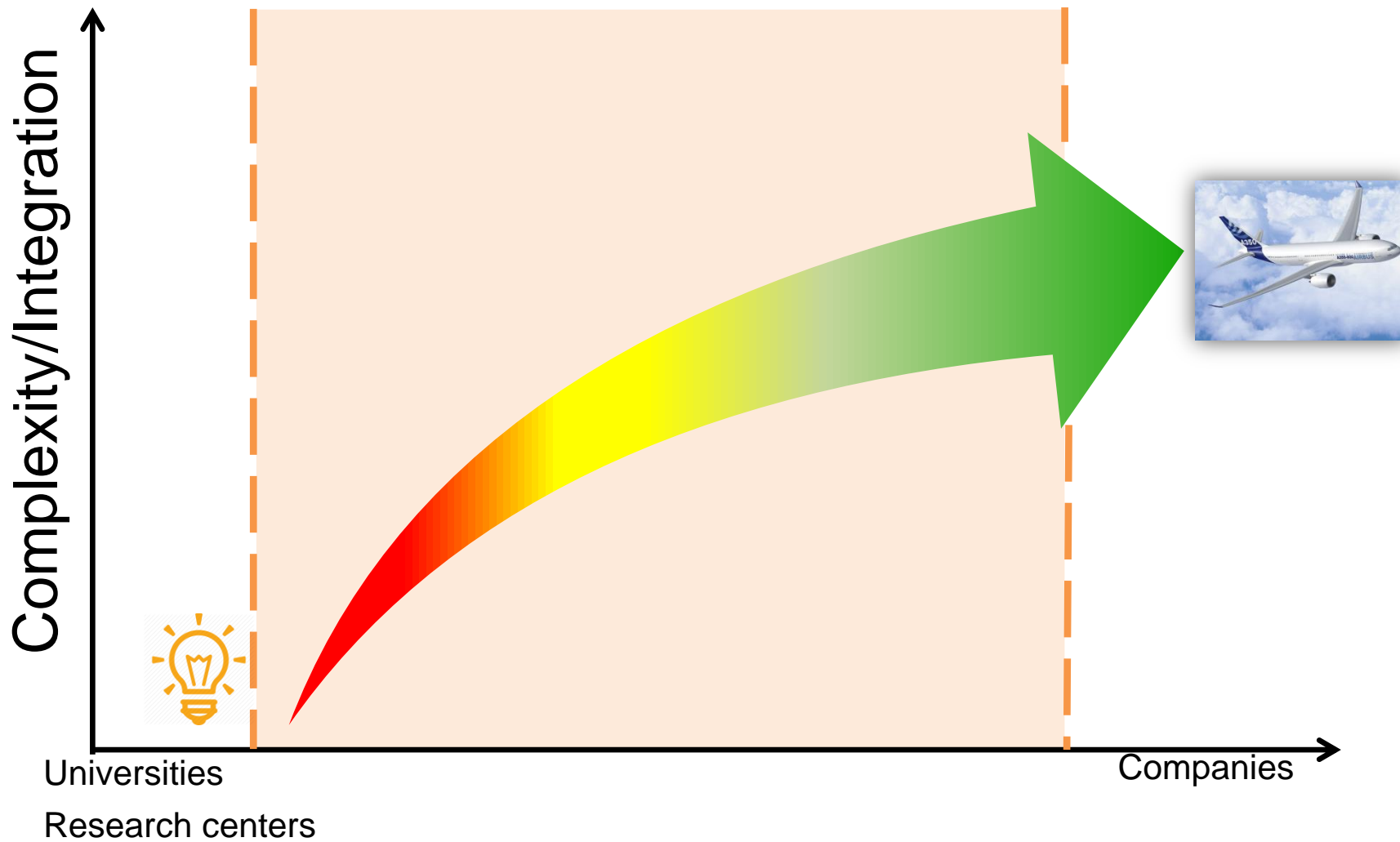


Foundation
Investigation
Development
Application
Materials
Composite



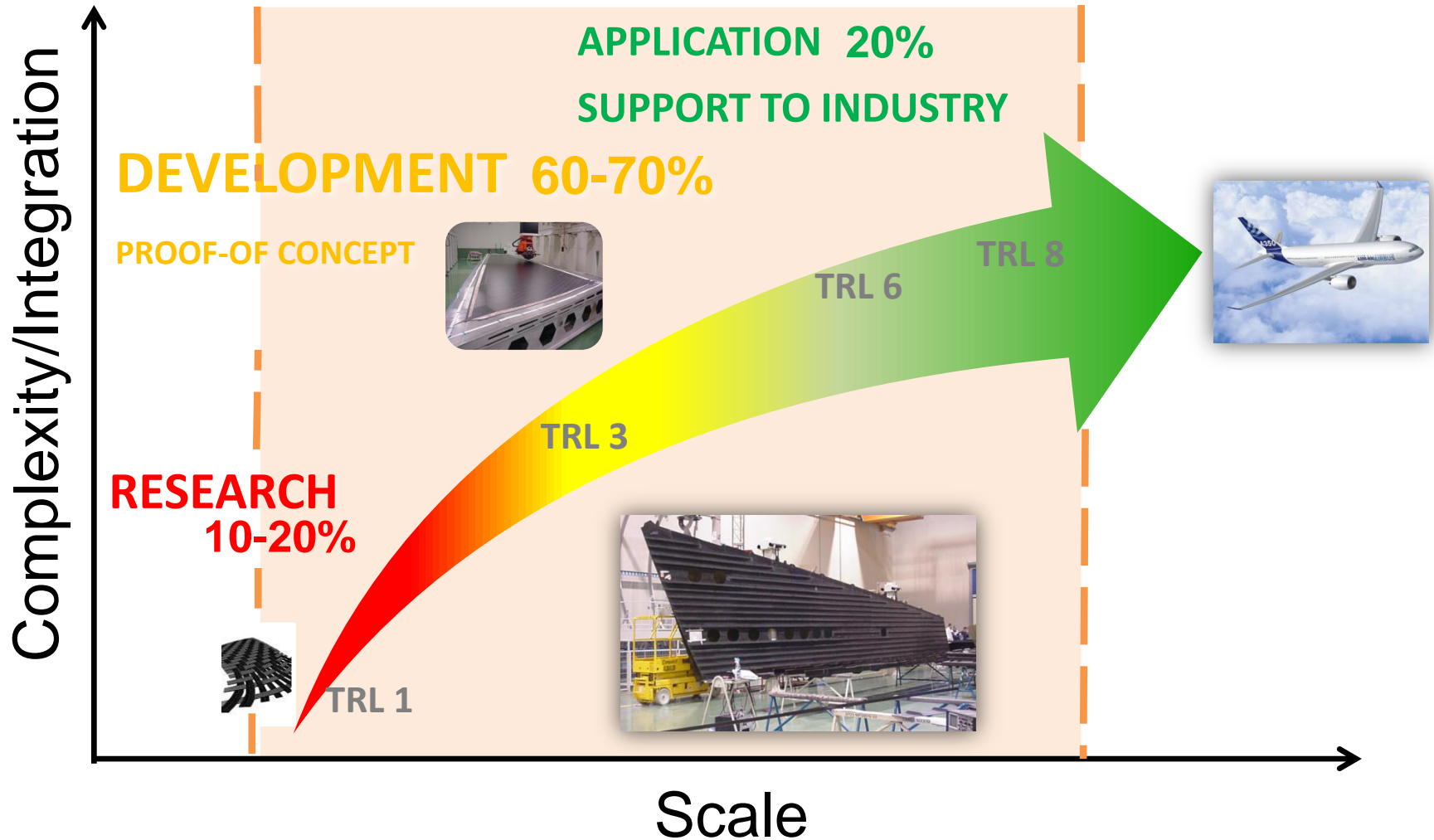
More info about FIDAMC: <https://www.youtube.com/watch?v=FT4vVrKX8qU>

GAP BETWEEN RESEARCH AND APPLICATION



FROM THE MATERIAL TO THE COMPONENT

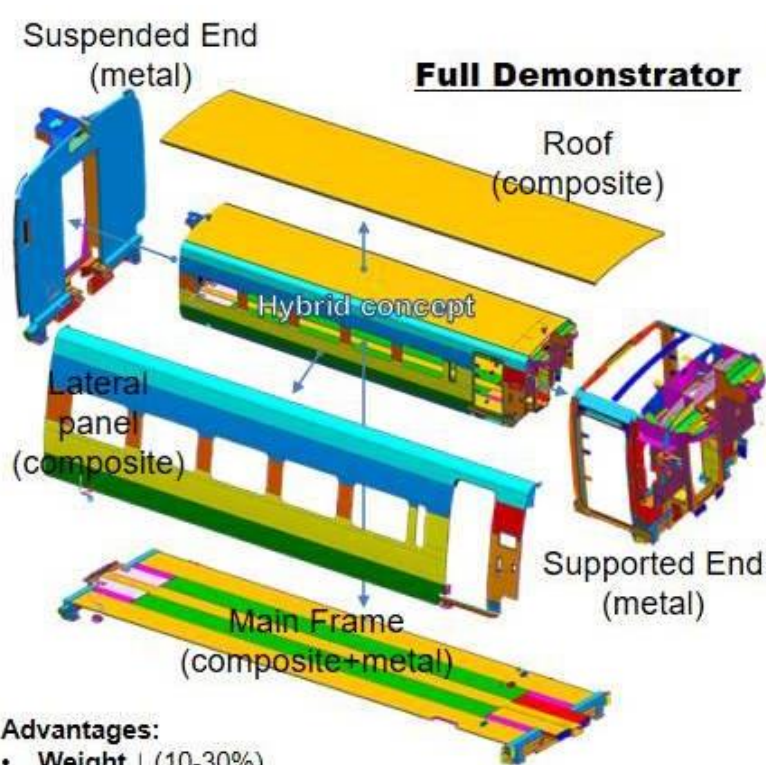
FROM THE IDEA TO THE CONCEPT



SHIFT2RAIL: PIVOT PROJECT

WP1&2. Carbody.
Leader: Talgo

WP6. Door Leaves.
Leader: Faiveley



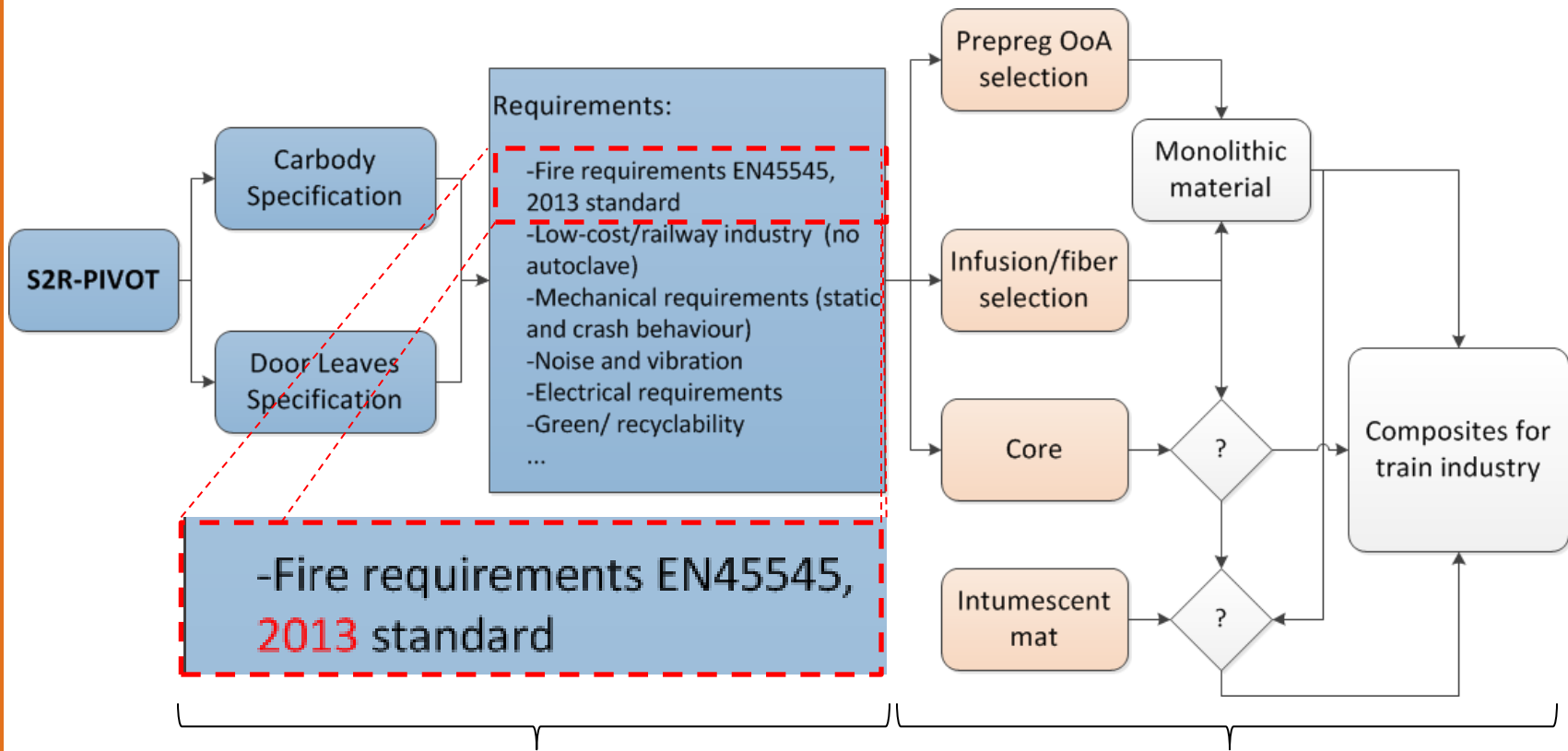
Advantages:

- **Weight** ↓ (10-30%)
- Simplify **manufacturing/assembly** process
- **LCC** ↓ (energy, maintenance, ...)



<https://solutions.wabtec.com/media/1889/rail-doors-brochure.pdf>

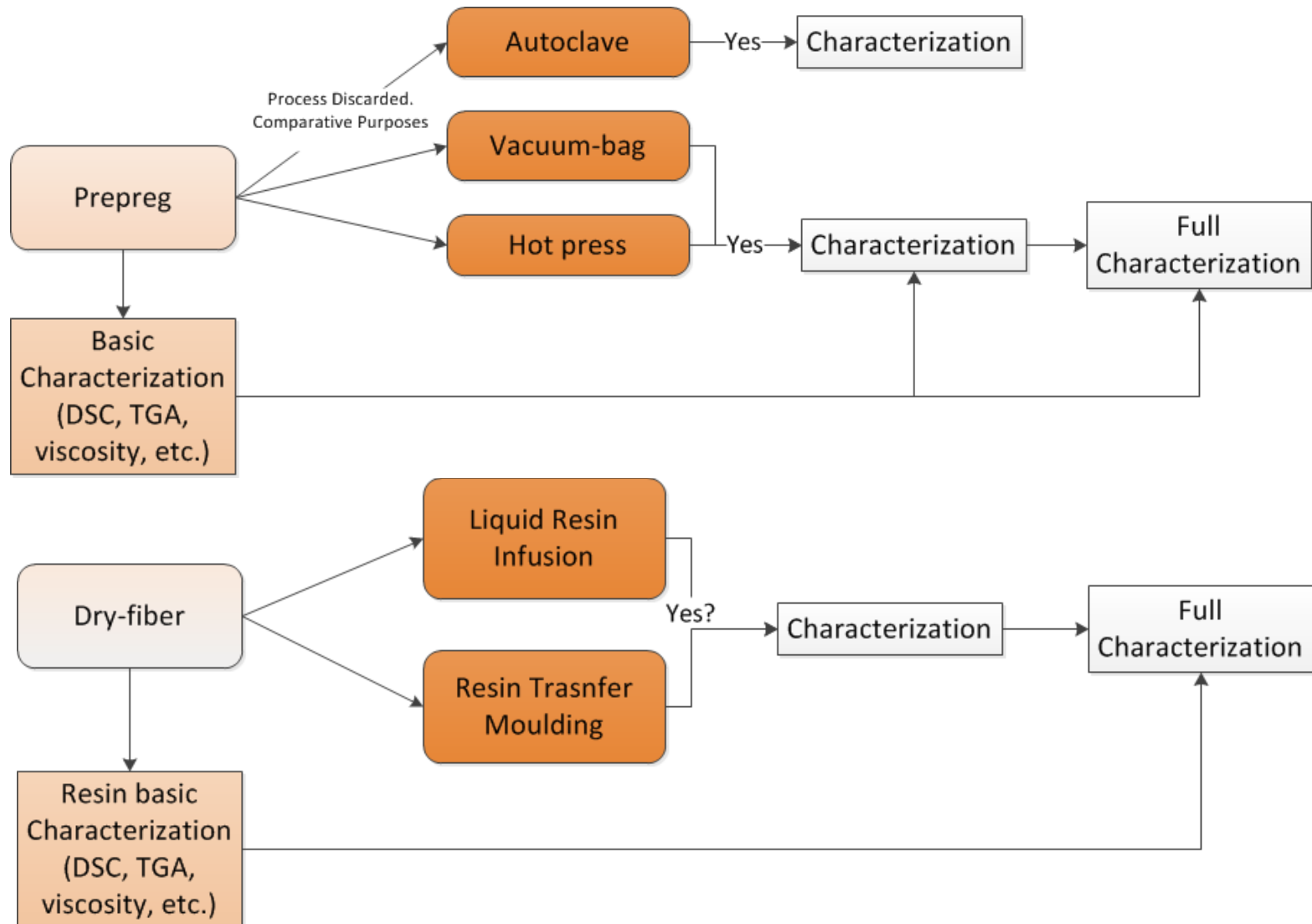
S2R-PIVOT. AERFITEC ROLE



Activities done

Ongoing Activities

FIDAMC ACTIVITES



FIDAMC ACTIVITIES

Method/Material	Materials	Fabrication tests	Laminates	Tested (micros. NDT)
Prepreg	5	19	19	12
Infusion	3	13	8	3
RTM	3	8	4	2
Sandwich	2*	4	4	2
Fire protection	2*	6	2	2
Thermoplastic (alternative)	5 (TBC)**	5	5	2
Total	15+5 (TBC)**	56	42	24

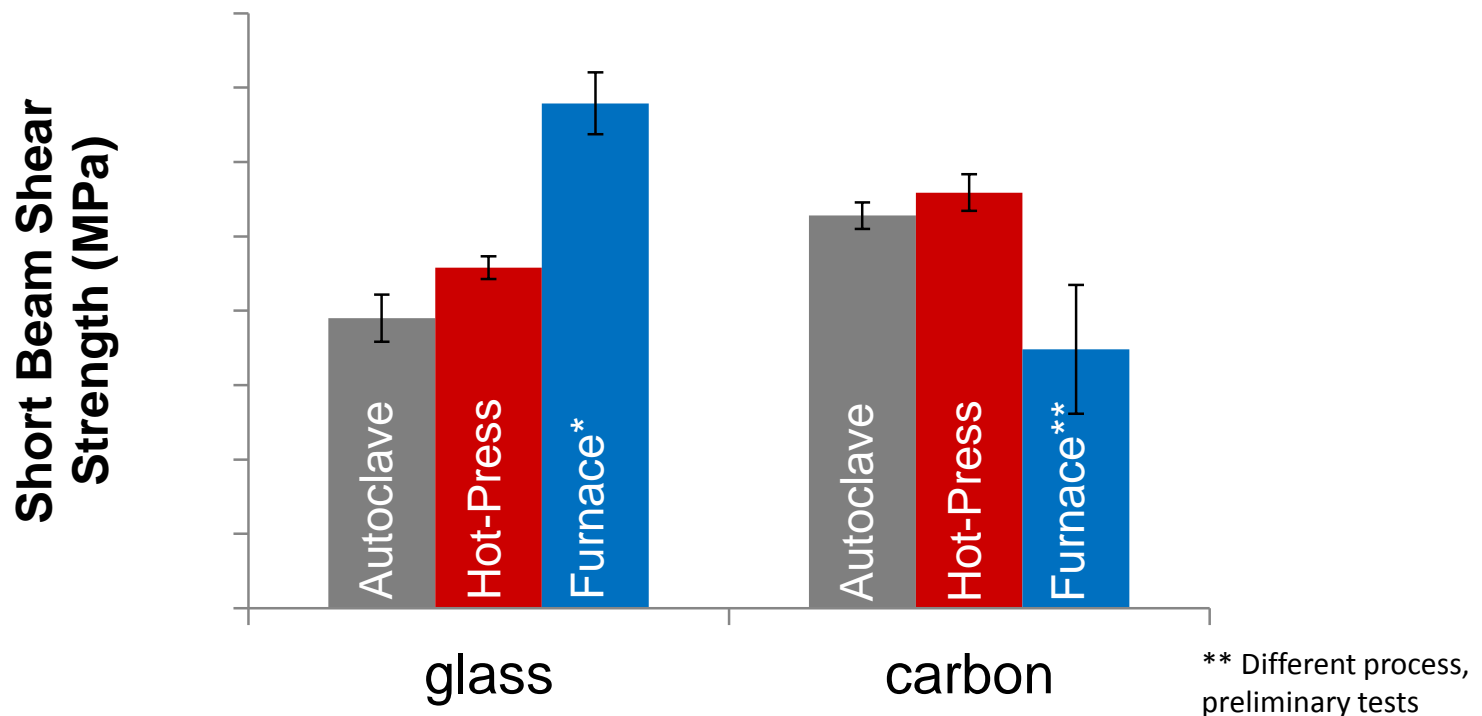
*October 2018

** Probably they won't be considered as an alternative (cost of high performance thermoplastic)

TECHNICAL RESULTS. PREPREG

Prepreg (ongoing results):

We are looking for OoA technologies, but most of the EN45545 approved materials are **only for autoclave**.



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Questions?

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