



„Technology Roadmap for Small Aircraft Transport Mode” Workshop,
Regione Campania, Brussels, 20 July 2012

**Main conclusions
of
D4.1 Assessment of existing capabilities in Europe
D4.3 Master Plan for development of aircraft for Small Air
Transport**



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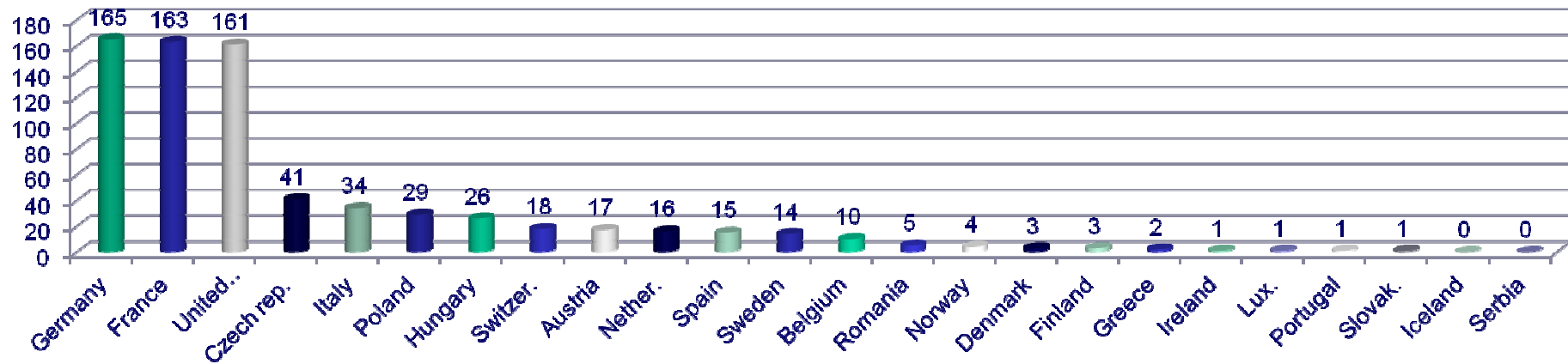
D4.1 Assessment of existing capabilities in Europe

- ❖ Four groups were created
 - **Manufacturers (with or without POA)**
 - **Design organizations (with or without DOA or ADOA)**
 - **R&T / universities**
 - **Consulting service and Others**
- ❖ Information sources
 - ✓ EASA
 - ✓ International projects from the 7th framework program
 - ✓ Individual companies
- ❖ These four groups include companies and institutions oriented on aviation industries
 - Airframe, Engine, Avionics and IT technology, Components, ATM systems, Airport systems, System manufactures, Maintenance (with or without Part 145), Training (with or without Part 147, Part 66), Safety and Security, Research and Development
 - International projects (matrix System/Technology)
 - System – Airframe(wing), Engine(propeller), Avionics, ATM/Airport, others(focused on aviation)
 - Technology – Design and Development, Manufacturing, Certification and Operation, Maintenance, Safety and Security, Environment

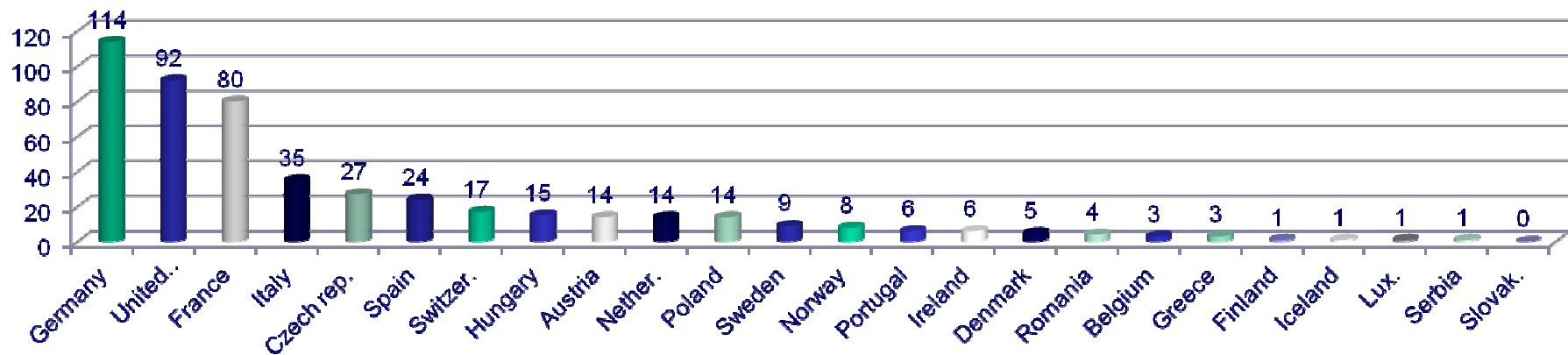
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Number of manufactures with or without POA



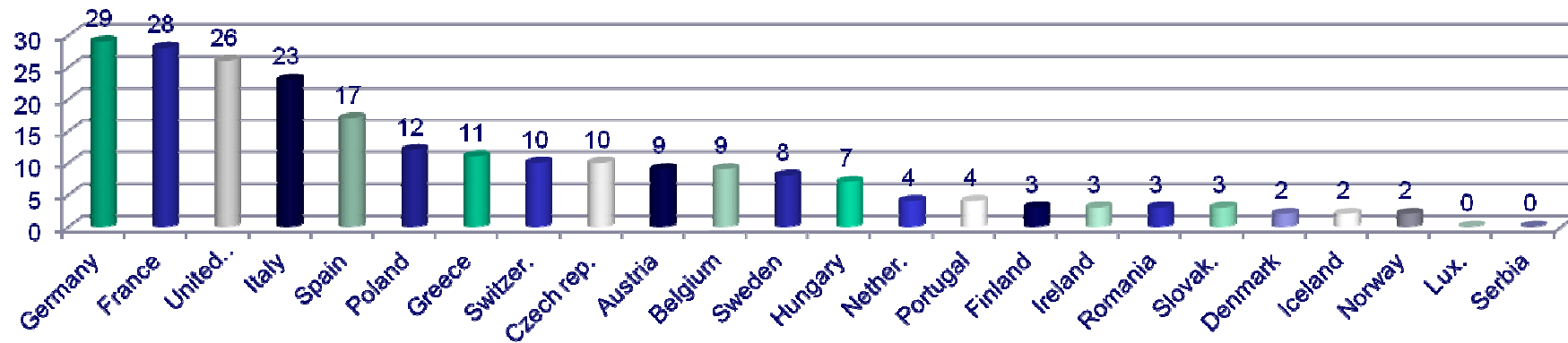
Number of Design organizations with or without DOA (Part 21) or Alternative Design Organisation ADOA



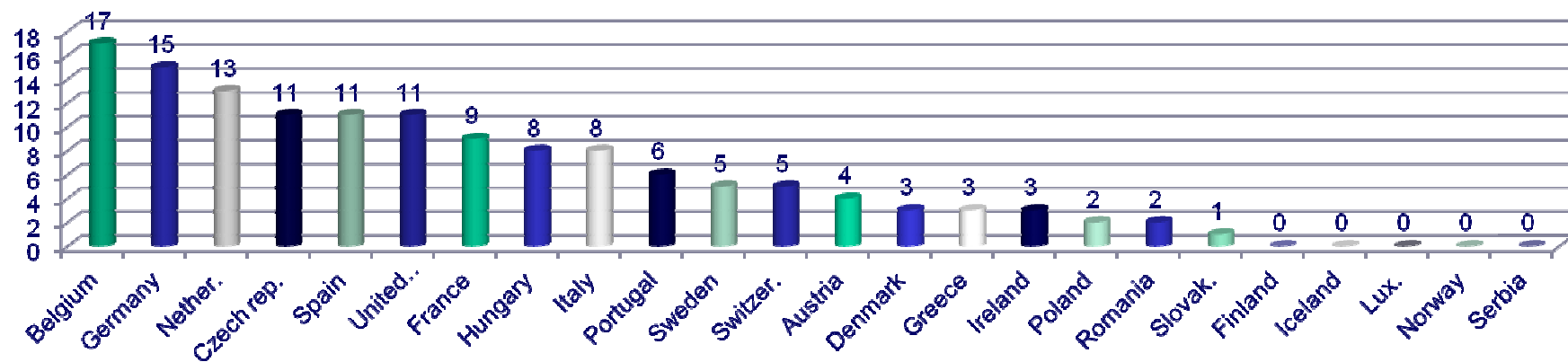
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Number of R&T / universities



Number of Consulting service and Others



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❖ From the set of acquired data of individual European countries we analysed following

Capabilities of production General aviation airplanes (airframe, wing) and engines (piston, turboprop, jet)								
Countries	Airplanes				Engines			Parts of airframe (wing), engine
	CS-23 (CS-27, CS-29)	UL	Training	Experimental	Piston	Turboprop	Jet	
Austria	1	0	0	0	2	0	0	0
Belgium	0	0	0	0	2	0	0	5
Czech rep.	2	4	1	1	2	2	1	1
France	3 (2 helicopters – Eurocopter, Guimbal)	0	0	0	2	1	0	0
Germany	1 (1 helicopter - Eurocopter)	4 (1 helicopter)	2	0	5	1	1	0
Hungary	0	4	0	0	0	0	0	0
Italy	4 (1 helicopter - AgustaWestland)	2	0	0	0	0	0	1
Poland	4 (3 helicopter – Black Hawk; SW-4; W-3A Sokol)	1	1	0	2	0	0	1
Romania	0	0	0	0	0	0	0	2
Slovakia	0	1	0	0	0	0	0	0
Spain	1 (1 helicopter - Eurocopter)	0	0	0	0	0	2	0
Sweden	0	0	0	0	0	0	1	0
Switzerland	1	0	0	0	1 (Wankel engine)	0	0	0
United Kingdom	1 (1 helicopter – AgustaWestland)	0	0	0	1	1	1	1
Total	17 (5 helicopters)	16 (1 helicop.)	4	1	17	5	6	11

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❖ In the SAT project the capabilities for small aircraft production, airframes (wings) and small engines , exploitable within the scope of door-to-door transport, are assessed.

The analysis shows:

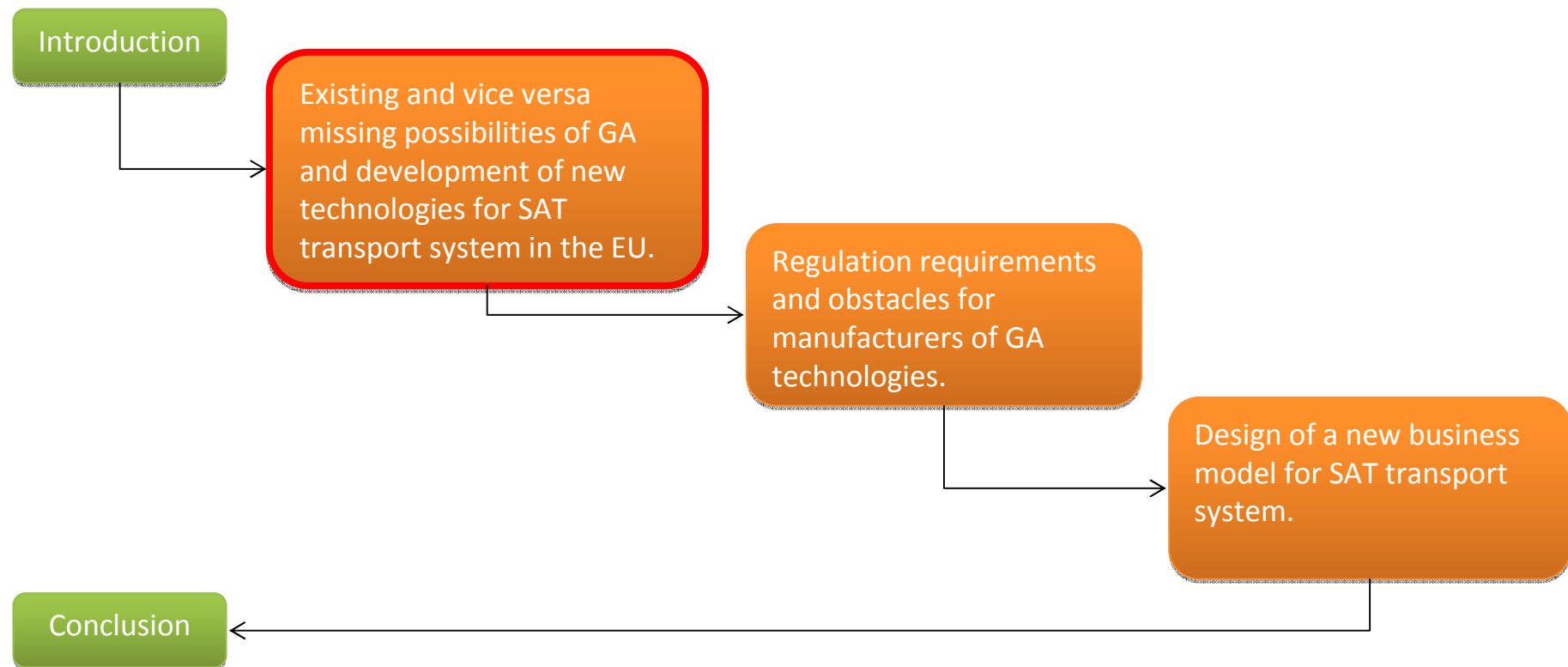
- 17 manufacturers of small aircraft according to CS-23, CS-27 and CS-29 (including 5 manufactures of helicopters),
 - 16 manufacturers ultra-light aircraft (including 1 manufacture of UL helicopter),
 - 17 manufacturers of piston engines (including 1 manufacture of Wankel engine),
 - 5 manufacturers of turboprop engines,
 - 6 manufacturers of jet engines,
 - 11 manufacturers focused on production of airframe parts for GA aircraft,
 - 2 manufacturers focused on production of engine parts for GA aircraft
- ❖ SAT consortium (14 Partners) include following industrial Partners:
- **Evektor, spol. s r. o (EV) – Czech Republic**
 - **Piaggio Aero Industries (PIAGGIO) – Italy**
 - **Polskie Zakłady Lotnicze sp. z o.o. w Mielcu (PZL M) – Poland**

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D4.3 Master Plan for development of aircraft for Small Air Transport

- ❖ Purpose - overview of information from individual SAT reports, so that the reader can get an idea about possibilities of new SAT system implementation within the EU
- ❖ Document structure



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Main difficulties of aircraft development for Small Air Transport

- ❖ Adaptation of European legislation to SAT demand
- ❖ Ratio of the certification costs vs. the final price of customer's aircraft
- ❖ Bureaucratic barriers related to fees
- ❖ Not strong support of European Union and European Commission



Thank You

