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Deliverable 1.8

Final Dissemination Report

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1.1	25/11/2016	Minor update (book chapters)	Matthias Scharrer
1.2	26/11/2016	Minor update (conferences)	Holger Schmidt

Content

1 Introduction

This report presents the public communication and presentation activities carried out during the final year of the iCOMPOSE project. Details on the dissemination activities during the first and second project years can be found in deliverables D1.3 and D1.6.

2 Coordination of dissemination activities

The dissemination activities of the iCOMPOSE consortium were discussed and ratified during the formal consortium meetings in Mladá Boleslav, Czech Republic, on 3 May 2016 (Figure 2-1).

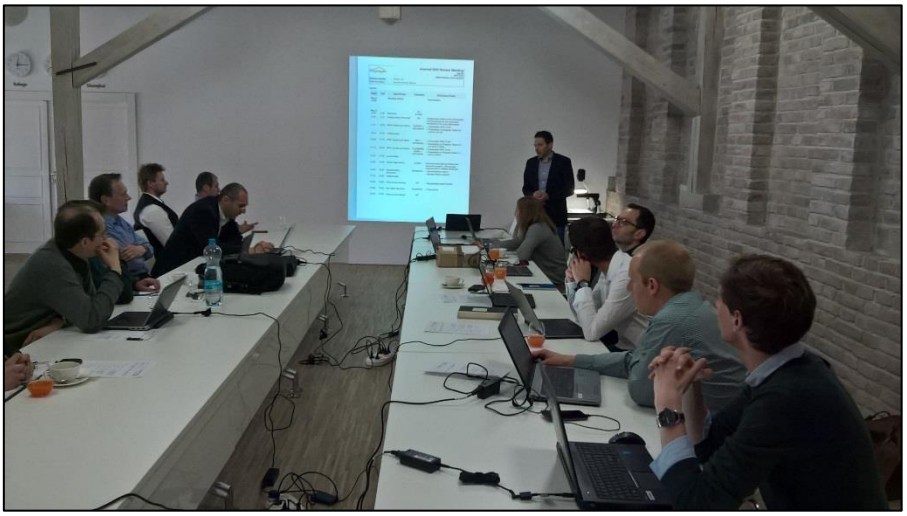

Figure 2-1: iCOMPOSE Face2Face Meeting in Mladá Boleslav, 3.5.2016

In the final year, the dissemination activities were intensified to promote the project results to researchers and experts from industry and academia. The main communication channels included:

- presentations at international conferences and workshops
- research papers
- contributions to a technical book (see also section 4)

Full details on these activities are provided in section 3.

3 Research and technology dissemination activities

Table 1 summarises the conference contributions, journal papers and book chapters published during the final year of the iCOMPOSE project.

Table 1 Conferences, journal papers and book chapters produced during the final year

No.	Authors, Title	Event and status	Partners involved
1.	J. De Smet, “Demonstration iCOMPOSE Evoque”	Open Bedrijvendag, 4.10.2015, Belgium	FMAKE
2.	J. De Smet, “Range Rover Evoque FEV as Rapid Prototyping Platform”	Link Sic workshop, 9.11.2015, Leuven, Belgium	FMAKE
3.	H. Schmidt, “CCU Working Group 4th Generation Electric Vehicles”	3CCAR Vision 2016, 9-10.12.2015, Málaga, Spain	INF
4.	D. Watzenig, “Fail-operational automated driving architectures – challenges in development and testing”	Automotive Tech. Ad 2016, 24-25.02.2016, Berlin, Germany	VIF
5.	D. Watzenig, “Comprehensive energy management and vehicle automation”	Story-Telling, 25-26.02.2016, Brussels, Belgium	VIF
6.	S. Grubmüller, “New control software architecture for comprehensive energy management in EV/PHEV vehicles”	Energy Management & Battery Technology for EV/PHEV, 19.4.2016, Berlin, Germany	VIF
7.	R. Bartholomäus, T.Lehmann, “Enhancement of battery lifetime using model predictive control of hybrid energy storage system”	Kraftwerk Batterie, 26.-27.04.2016, Münster, Germany	IVI
8.	W. De Nijs, “iCOMPOSE Evoque demonstrator”	Limburgs autosalon, 4.5.2016, Lommel, Belgium	FMAKE

No.	Authors, Title	Event and status	Partners involved
9.	D. Watzenig, “Improved energy management and emission reduction using for automated systems”	Active Safety Europe 2016: ADAS to Autonomous, 18.05.2016, Munich, Germany	VIF
10.	R. Bartholomäus, T.Lehmann: “Model predictive control of a dual mode energy storage system”	GSVF 2016, 23.05.-25.05.16, Graz, Austria	IVI
11.	R. Bartholomäus, U. Schneider, W. Helfer: “Fast current control in bidirectional buck-boost converters for electric vehicles”	GSVF 2016, 23.05.16-25.05.16, Graz, Austria	IVI
12.	D. Watzenig, “Automated driving – challenges and opportunities for transport applications”	Imagine 2016, 7-8.6. 2016, Innsbruck, Austria	VIF
13.	S. Kuitunen, R. Kratzing, M. Hütter, D. Horvat, W. König, “Simulationsgestützte Entwicklung eines modellprädiktiven Thermomanagements auf Basis des Lotus Evora 414E“	Wärmemanagement des Kraftfahrzeugs X, 9.-10.6.2016, Potsdam, Germany S. 244-261, ISBN 978-3-8169-3347-2	IVI, AVL
14.	Lenzo B, De Filippis G, Sorniotti A, Gruber P, Sannen K. “Understeer characteristics for energy-efficient fully electric vehicles with multiple motors”	EVS29 International Battery, Hybrid and Fuel Cell Electric Vehicle Symposium, 19-22.6.2016, Montreal, Canada	SURREY, FMAKE
15.	D. Watzenig, “Technische Herausforderungen der Evolution von Assistenzsystemen zum fahrerlosen Fahren“	Sommerakademie: Von Fahrerassistenz bis Fahrerlos, 8.9.2016, Graz, Austria	VIF
16.	Gruber P, Sorniotti A, Lenzo B, De Filippis G, Fallah S. “Energy efficient torque vectoring control”.	13th International Symposium on Advanced Vehicle Control (AVEC'16) 13-16.9.2016, Munich	SURREY
17.	De Filippis G, Lenzo B, Sorniotti A, Gruber P, Sannen K, De Smet J. “On the energy efficiency of electric vehicles with multiple motors”	IEEE VPPC2016, 17-20.10.2016, Hangzhou, China	SURREY, FMAKE

No.	Authors, Title	Event and status	Partners involved
18.	J. De Smet, “iCOMPOSE results presentation”	VOKA visit to Flanders Make, 21.10.2016, Lommel, Belgium	FMAKE
19.	H. Schmidt, „CCU Working Group 4th Generation Electric Vehicles”	eDAS Meeting, 25. – 27.10.2016, Cherasco, Italy	INF
20.	D. Watzenig, ”Methode zur umfassenden und durchgängigen Absicherung von aktiven Sicherheits- und Fahrerassistenzsystemen“	Aktive Sicherheit und Automatisiertes Fahren - Methodenentwicklung im Expertendialog, 26-27.10.2016, Essen, Germany	VIF
	W. De Nijs, “iCOMPOSE results presentation”	Flanders Make symposium, 22.11.2016, Mechelen, Belgium	FMAKE
21.	H. Schmidt, iCOMPOSE CCU and poster exhibit	European Nanoelectronics Forum, 23. – 24.11.2016, Rome, Italy	INF
22.	D. Watzenig, ”From fail-safe to fail-operational – challenges in development and testing”	21. SafeTrans - Architekturen hochautomatisierter Systeme, 29.11.2016, Munich, Germany	VIF
23.	Dizqah AM, Lenzo B, Sorniotti A, Gruber P, Fallah S, De Smet J. “A Fast and Parametric Torque Distribution Strategy for Four-Wheel-Drive Energy-Efficient Electric Vehicles”	IEEE Transactions on Industrial Electronics, 63 (7), pp. 4367-4376, 2016	SURREY, FMAKE
25.	S. Grubmüller, M. K. Scharrer, B. Herbst, A. Tengg, H. Schmidt and D. Watzenig, “Predictive Energy Management on Multi-Core Systems”	in Comprehensive Energy Management (SpringerBriefs in Applied Sciences and Technology - Automotive Engineering: Simulation and Validation Methods), to be published (2017)	VIF, INF

No.	Authors, Title	Event and status	Partners involved
26.	S. van Aalst, B. Boulkroune, S. Dixit, S. Grubmüller, J. De Smet, K. Sannen and W. De Nijs, “Semi-autonomous driving based on optimized speed profile”	in Comprehensive Energy Management (SpringerBriefs in Applied Sciences and Technology - Automotive Engineering : Simulation and Validation Methods), to be published (2017)	FMAKE, VIF
27.	D. Szymanski, M. Scharrer, G. Macher, E. Armengaud, H. Schmidt, “Model-based functional safety engineering”	in Comprehensive Energy Management (SpringerBriefs in Applied Sciences and Technology - Automotive Engineering : Simulation and Validation Methods), to be published (2017)	FMAKE, VIF, AVL, INF
28.	Z. Herda, P. Nedoma, J. Plihal, “The Design of Vehicle Speed Profile for Semi-Autonomous Driving”	in Comprehensive Energy Management (SpringerBriefs in Applied Sciences and Technology - Automotive Engineering : Simulation and Validation Methods), to be published (2017)	SKODA
29.	R. Bartholomäus, T. Lehmann, U. Schneider, “Model predictive control of highly efficient Dual Mode Energy Storage systems including DC/DC converter”	in Comprehensive Energy Management (SpringerBriefs in Applied Sciences and Technology - Automotive Engineering : Simulation and Validation Methods), to be published (2017)	IVI
30.	M. Hütter, W. König, S. Kuitunen, “Holistic thermal Management Strategies for Electric Vehicles“	in Comprehensive Energy Management (SpringerBriefs in Applied Sciences and Technology - Automotive Engineering : Simulation and Validation Methods), to be published (2017)	AVL, IVI

4 Promotion and outreach activities

To target wider audiences, including the general public and media, the iCOMPOSE consortium continued playing a key role in the 4th generation electric vehicle cluster (see Figure 4-1).

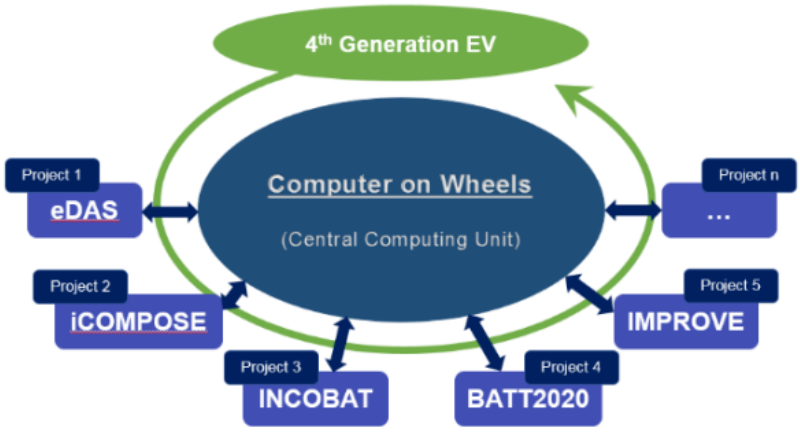

Figure 4-1: 4th Generation EV – Project Cluster “Computer on Wheels“

Also, several consortium partners presented and demonstrated results in workshops. For example, Flanders MAKE showcased the vehicle demonstrator full electric Range Rover Evoque during the Flanders MAKE Symposium in Mechelen, Belgium on 22.11.2016. This event attracted over 300 attendees.

Figure 4-2: Flanders MAKE Symposium on 22. November 2016

To ensure that the wider project results can be accessed also by future generations of engineers, several consortium participants contributed to the SpringerBriefs in Applied Sciences and Technology book series related to Automotive Engineering: Simulation and Validation Methods (see Figure 4-3 and Table 1). The book will be published in 2017.

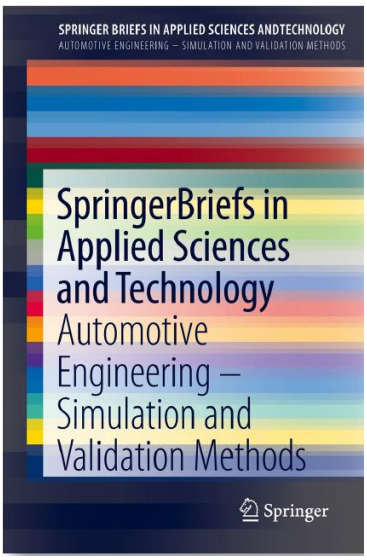

Figure 4-3: Cover of SpringerBriefs in Applied Sciences: Automotive Engineering - Simulation and Validation Methods

5 Future dissemination activities

Although the iCOMPOSE project has successfully completed, the consortium participants are committed to continue the dissemination of research results at conferences and through high-profile journal papers. At the time of writing of this report, several journal papers are under review/in preparation, see Table **2**. In addition, the University of Surrey has been invited to present project results at the 2017 Vehicle Dynamics and Control seminar in Cambridge.

Table 2 Dissemination activities beyond the project

No.	Authors, Title	Event and status	Partners involved
1.	B. Lenzo, G. De Filippis, A.M. Dizqah, A. Sorniotti, P. Gruber, S. Fallah, W. De Nijs, “Torque Distribution Strategies for Energy-Efficient Electric Vehicles with Multiple Drivetrains”	ASME Journal of Dynamic Systems, Measurement and Control Status: under review	SURREY, FMAKE
2.	B. Lenzo, A. Sorniotti, P. Gruber, K. Sannen, “On the experimental analysis of single input single output control of yaw rate and sideslip angle”	International Journal of Automotive Technology Status: under review	SURREY, FMAKE
3.	A. Tota, B. Lenzo, A. Sorniotti, P. Gruber, S. Fallah, M. Velardocchia, E. Galvagno, J. De Smet, “Yaw Rate and Sideslip Control through Integral Sliding Modes”	Control Engineering Practice Status: under review	SURREY, FMAKE
4.	A. Sorniotti, P. Gruber, B. Lenzo, G. De Filippis, S. Fallah, Energy efficient torque vectoring for electric vehicles with multiple drivetrains	Vehicle Dynamics and Control 2017, 21.3.2016, Cambridge, UK	SURREY