

## Deliverable D52-3

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## Summary on dissemination activities during project run time

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# **1** Outline

This report updates deliverable D52-2 with respect to the recently performed dissemination within the last project period and covers the project communication for the project months M1-M48.

# 2 Information material for use by partners

### 2.1 Project One- and Two-pager

Presentation-formats have been provided that allow partners to easily introduce information on the UHURA project into overview presentations. This information is available as One-pager or Two-pager allowing highlighting the key mission of UHURA to be presented within public presentations, conferences, and other public relation activities

### 2.2 Fiche Projet

A short public description of the project has been provided on request to INEA, which is used in the agency's communication of H2020 projects. The Fiche project contains the background, objectives and expected results of the project. The Fiche Projet has been updated with the achievements of the first and second reporting period.

### 2.3 Presentation template

A common template has been created that is used by the partners for internal and external communication of the project.



Figure 1: common presentation template

# 3 Scientific publications

A major part of dissemination of the UHURA project is the deployment of the scientific results to the community, majorly by contributions to scientific conferences and articles in peer reviewed journals. A significant number of contributions to scientific conferences has been provided in the scope of the



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first and second reporting periods. In total 11 contributions are counted, six of them within a special session at the 10<sup>th</sup> EASN International Conference.

#### Table 1: list of contributions to scientific conferences

Author(s)	Title	Event / Journal/ Book	
Wallin S, Hanifi A, Bagheri F	Meshing and CFD strategies for large scale turboprop WT model integrating morphing high-lift devices"	10th Aerospace Technology Congress, October 8-9, 2019, Stockholm, Sweden	
Ponsin J	Experiences of using LBM Xflow in the EU H2020 Project UHURA	3DExperience Conference Design, Modeling & Simulation, March 11-12, 2020, Barcelona, Spain	
J. Wild	Unsteady High-Lift Aerodynamics – Unsteady RANS Validation	10 <sup>th</sup> EASN International Conference, Sep 2, 2020,	
	An Overview on the UHURA Project	virtual	
H. Maseland, J. Wild, H. van der Ven	Progress in Meshing for Dynamic High-Lift CFD	10 <sup>th</sup> EASN International Conference, Sep 2, 2020, virtual	
A. Prachar, R. Heinrich, A. Raichle, J.C. Kok, F. Moens, T. Renaud	Progress towards numerical simulation of the dynamic Krueger motion with Chimera methods	10 <sup>th</sup> EASN International Conference, Sep 2, 2020, virtual	
S. Chen, F. Bagheri, S. Wallin	Hybrid RANS-LES simulation of a deflecting Krüger device	10 <sup>th</sup> EASN International Conference, Sep 2, 2020, virtual	
F. Capizzano, T. Sucipto	A dynamic Immersed Boundary method for moving bodies and FSI applications	10 <sup>th</sup> EASN International Conference, Sep 2, 2020, virtual	
J Ponsin, C. Lozano	Progress towards simulation of Krueger devices motion with Lattice Boltzmann Methods	10 <sup>th</sup> EASN International Conference, Sep 2, 2020, virtual	
J. Wild	Unsteady High-Lift Aerodynamics – Unsteady RANS Validation An Overview on the UHURA Project	AEROSPATIAL 2020, Oct 15, 2020, virtual	
Wallin S, Cappizano P, Prachar A, Ponsin J	Unsteady CFD Results for Deflecting High-Lift Systems	8th European Congress on Computational Methods in Applied Science and Engineering (ECCOMAS 2020), January, 11 – 15, 2021	
Wild J, Schmidt M, Vervliet A	A 2D Validation Experiment for Dynamic High-Lift System Aerodynamics	8th European Congress on Computational Methods in Applied Science and Engineering (ECCOMAS 2020), January, 11 – 15, 2021	
F. Capizzano, T. Sucipto	A dynamic Immersed Boundary method for moving bodies and FSI applications	IOP Conf. Ser.: Mater. Sci. Eng. 1024 012049	
		doi:10.1088/1757- 899X/1024/1/012049	

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Author(s)	Title	Event / Journal/ Book
J Ponsin, C. Lozano	Progress towards simulation of Krueger devices	IOP Conf. Ser.: Mater. Sci. Eng. 1024 012050
	motion with Lattice Boltzmann Methods	doi:10.1088/1757- 899X/1024/1/012050
F. Capizzano, T. Sucipto	Studying the deployment of high-lift devices by	Aircraft Engineering and Aerospace Technology, Vol. 94 No. 1, pp. 99-111
	Using dynamic inimersed boondaries	DOI 10.1108/AEAT-12-2020- 0325
Wild J,	Unsteady High-Lift Aerodynamics - Unsteady RANS Validation	ECCOMAS CM3 conference November 22nd 2021,
	Progress of the UHURA Project	Barcelona, Spain
		To be published in:
Wild J, Schmidt M, Vervliet A, Tanguy G	A 2D Validation Experiment for Dynamic High-Lift System Aerodynamics	"Advances in Computational Methods and Technologies in Aeronautics and Industry" (Editors: D. Knoerzer, J. Periaux and T. Tuovinen)
Wild J, Strüber H, Moens F, van Rooijen B, Maseland H	A Validation Program for Dynamic High-Lift System Aerodynamics	9th European Congress on Computational Methods in Applied Science and Engineering (ECCOMAS 2022), 5 – 9 June 2022, Oslo, Norway
lulioano E, Quagliarella D, Wild J	Krueger High-Lift System Design Optimization	9th European Congress on Computational Methods in Applied Science and Engineering (ECCOMAS 2022), 5 – 9 June 2022, Oslo, Norway
Hasabnis a, Maseland H, Moens F, Prachař A, Wild J	Lessons Learnt from Chimera Method Application to a Deploying Krueger Device	9th European Congress on Computational Methods in Applied Science and Engineering (ECCOMAS 2022), 5 – 9 June 2022, Oslo, Norway
Wallin s, Montecchia M, Eliasson P, Prachař A	Scale-resolved simulations of the deployment and retraction of a Krueger high-lift device	9th European Congress on Computational Methods in Applied Science and Engineering (ECCOMAS 2022), 5 – 9 June 2022, Oslo, Norway
Ponsin J, Lozano C	Lattice Boltzmann simulation of a deploying Krueger device	9th European Congress on Computational Methods in Applied Science and Engineering (ECCOMAS 2022) 5 – 9 June 2022, Oslo, Norway



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Author(s)	Title	Event / Journal/ Book
Tanguy G, Monnier JC, Verbeke C, Jochen Wild	Experimental aerodynamic investigation of a Krueger flap device using Particle Image Velocimetry	9th European Conference for Aeronautics and Space Sciences (EUCASS 2022), 27 June–1 July 2022, Lille, France
Wild J, Strüber H, Moens F, van Rooijen B Maseland H	The UHURA project at a glance – motivation and objectives	12th EASN International Conference, Oct 18 - 20, 2022, Barcelona, Spain
Strüber H Wild J, Verviet A	Krueger Design and Motion Requirements	12th EASN International Conference, Oct 18 - 20, 2022, Barcelona, Spain
Moens F, Wallin S Maseland H	CFD methods for unsteady high-lift simulation	12th EASN International Conference, Oct 18 - 20, 2022, Barcelona, Spain
Tanguy G, van Rooijen B Schröder A Wild J	Validation Experiments	12th EASN International Conference, Oct 18 - 20, 2022, Barcelona, Spain
Maseland H, Andreutti G, Prachař A, Strüebr H	CFD method validation & Lessons Learnt	12th EASN International Conference, Oct 18 - 20, 2022, Barcelona, Spain

# 4 Contributions to exhibitions and fairs

### 4.1 AeroDays 2019

The exhibition of UHURA together with the AFLoNext Ground Based Demonstrator has been proposed to the organizing committee of the AeroDays 2019 conference & exhibition. Unfortunately due to complexity of the setup it was only able to show the demonstrator during specific visits to the local research institute INCAS, where the demonstrator is stored.

## 4.2 ILA 2020

For the exhibition of H2020 projects at the INEA booth at the International aeronautics Fair ILA '20 in Berlin, an animated 2 minutes presentation of the project has been provided to INEA. It covers the objectives, the experimental approach as well as highlighting CFD animations of WP2.

# 5 Presence in World Wide Web

### 5.1 Public web-site

For the project UHURA a web site at the location <u>http://uhura-project.eu</u> has been created. The website is designed (Figure 2) and hosted by beneficiary IBK within the server environment available form Task 5.3. The content of the web-site is filled with the substantial progress achieved. The most recent update was provided after the wind tunnel test in DNW-LLF in May 2022.





Figure 2: public web-site of the UHURA project http://uhura-project.eu

### 5.2 Presence on partners and funding entities web-sites

The following entities have introduced references to the project on their domestic web-sites:

EU (CORDIS sytem): https://cordis.europa.eu/project/id/769088

INEA: https://ec.europa.eu/inea/en/horizon-2020/projects/h2020-transport/aviation/uhura

IBK: <u>https://www.ibk-innovation.de/projects/212-uhura</u>

KTH: https://www.flow.kth.se/sv/projects/eu-projects/uhura

VZLU: <u>https://www.vzlu.cz/en/uhura-unsteady-high-lift-aerodynamics-unsteady-rans-validation-c710.html</u>

### 5.3 Presence in Social Media

In the scientific communication platform ResearchGate.net, a project entry has been created that links researchers and the publications to the project and allows to announce dissemination activities within the scientific community.

Web-URL: <u>https://www.researchgate.net/project/UHURA-Unsteady-High-Lift-Unsteady-RANS-Validation</u>

Further on, partners announced project results and events through their company channels on LinkedIn or similar, e.g.:

Bruno Mialon | ONERA Deputy Director

https://www.linkedin.com/posts/bruno-mialon-6b759212\_projet-uhura-activity-6923276714257088512-yQ-i?utm\_source=share&utm\_medium=member\_desktop

DNW - German-Dutch Wind Tunnels

https://www.linkedin.com/posts/dnw-german-dutch-wind-tunnels\_uhura-wind-tunnel-testsuccessfully-completed-activity-6933015006007468032-92Ar?utm\_source=share&utm\_medium=member\_desktop