

## Call: HORIZON-CL5-2021-D5-01

# Hyperconnected simulation ecosystem supporting probabilistic design and predictive manufacturing of next generation aircraft structures

#### CAELESTIS

## **Deliverable D8.2**

MAC Plan

## Work Package 8

Dissemination, exploitation, communication, and collaboration

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16/11/2022	1	Initial draft. Requires input from consortium to ch. 7.3
28/11/2022	2	Updates made by RTDS to 7.1 (Invitation Letter). Ch. 7.3 input still pending.
19/12/2022	3	Additional inputs from the consortium for Ch 7.3 included





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# **LIST OF ABBREVIATIONS**

DECDissemination, Exploitation and CommunicationDETDistributed Engineering TeamsDoADescription of ActionD-SOPDissemination - Standard Operating Procedure(s)ERAEuropean Research AreaE-SOPExploitation - Standard Operating Procedure(s)FTOFreedom To OperateGAGrant AgreementHPCHigh-Performance ComputingIPIntellectual PropertyIPRIntellectual Property RightsISEInteroperable Simulation EcosystemITFInnovation Task ForceKERKey Exploitable ResultKPIKey Performance Indicator(s)M&SModel & SimulationMROMaintenance, Repair, OverhaulNDANon-Disclosure AgreementOCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling PropositionsWPWork Package(s)	AB CA	Advisory Board Consortium Agreement
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IPRIntellectual Property RightsISEInteroperable Simulation EcosystemITFInnovation Task ForceKERKey Exploitable ResultKPIKey Performance Indicator(s)M&SModel & SimulationMROMaintenance, Repair, OverhaulNDANon-Disclosure AgreementOCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	HPC	High-Performance Computing
ISEInteroperable Simulation EcosystemITFInnovation Task ForceKERKey Exploitable ResultKPIKey Performance Indicator(s)M&SModel & SimulationMROMaintenance, Repair, OverhaulNDANon-Disclosure AgreementOCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	IP	Intellectual Property
ITFInnovation Task ForceKERKey Exploitable ResultKPIKey Performance Indicator(s)M&SModel & SimulationMROMaintenance, Repair, OverhaulNDANon-Disclosure AgreementOCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	IPR	Intellectual Property Rights
KERKey Exploitable ResultKPIKey Performance Indicator(s)M&SModel & SimulationMROMaintenance, Repair, OverhaulNDANon-Disclosure AgreementOCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	ISE	Interoperable Simulation Ecosystem
KPIKey Performance Indicator(s)M&SModel & SimulationMROMaintenance, Repair, OverhaulNDANon-Disclosure AgreementOCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	ITF	Innovation Task Force
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MROMaintenance, Repair, OverhaulNDANon-Disclosure AgreementOCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	KPI	Key Performance Indicator(s)
NDANon-Disclosure AgreementOCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	M&S	Model & Simulation
OCPOriginal Component ProducerOEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	MRO	Maintenance, Repair, Overhaul
OEROther Exploitable ResultOGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	NDA	Non-Disclosure Agreement
OGVOutlet Guide VanePSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	OCP	Original Component Producer
PSMProtectable Subject MatterRPReporting PeriodRTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	OER	Other Exploitable Result
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RTOResearch & Technical OrganisationSDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	PSM	Protectable Subject Matter
SDGSustainable Development GoalSHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	RP	Reporting Period
SHMStructural Health MonitoringSOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	RTO	Research & Technical Organisation
SOPStandard Operating Procedure(s)TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	SDG	Sustainable Development Goal
TRLTechnology Readiness LevelUQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	SHM	Structural Health Monitoring
UQ&MUncertainty Quantification and ManagementUSPUnique Selling Propositions	SOP	Standard Operating Procedure(s)
USP Unique Selling Propositions	TRL	Technology Readiness Level
	UQ&M	Uncertainty Quantification and Management
WP Work Package(s)	USP	
	WP	Work Package(s)





## **1 PUBLISHABLE SUMMARY**

This deliverable presents a plan and common guidelines for the CAELESTIS consortium to execute activities relevant to the Multi-Actor Approach to Collaboration (MAC) throughout the development of the project.

Within this plan, partners can find details regarding the MAC activities envisaged to take place throughout the course of CAELESTIS, wishing to draw upon the input and experience of experts from relevant industries, related Horizon Europe / Horizon 2020 Projects, and representatives of key stakeholders. This input will be sought into two thematic areas: i) technological areas (seeking to define requirements and needs for technical features of the virtual prototyping ecosystem), and ii) non-technological areas (regarding barriers/opportunities to usability, e.g., work processes, gendered workplace, etc.)

One of the key factors for securing successful input from MAC activities is in the creation of the CAELESTIS Network, a dedicated channel for coordinating and communicating MAC activities involving actors in relevant fields such as aviation, additive manufacturing, green transition, computer simulations, smart manufacturing, and more. The different actors in the consortium are requested to call upon their technical expertise and pre-existing networks to maximise the impact of MAC activities. Consortium partners will take responsibility for leading respective MAC activities, facilitating co-creation and knowledge sharing with members of the CAELESTIS Network through interactive means, including workshops, surveys, and interviews.

The project has identified ideal representatives to join the CAELESTIS Networks, able to provide useful inputs to the project, and qualified to receive the practical information that will produced during the project. Finally, an initial list of expected activities and interactions foreseen in each technical Work Package has been drafted and is included in this MAC Plan.