

Specifications for Service and Work Contracts Version 3.3

Description	T1- Projectmanagement		
Data classification	confidential		
Author	Marcus Kloss		
Dept./OU	T1		
Phone / mobile	+49	173 3890929	
Email	marcus.kloss@cariac	l.technology	
Creation date	15.11.2023		
Revision status	19.12.2023		
Specifications version	V03		

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	2 of 41

Change documentation

Version dated	Description of change	Created by / edited by (name, OU)	Specifications version
15.11.2023	Original Creation	Marcus Kloss (T1-1Z)	V1
14.12.2023	Final Input OE2	OE2 Stakeholder	V2
15.12.2023	Finalization	Marcus Kloss (T1-1Z)	V3

Specifications

T1- Projectmanagement

Data classification:

confidential

Place of performance 22.03.2023
3 of 41

Table of contents

1	Basic	princip	oles	5
	1.1	Introd	uction	5
	1.2	Struct	ured offer	5
2	Speci	ific ord	er contents	6
	2.1	Descri	ption of the project environment	6
		2.1.1	T1-1 content	7
		2.1.2	T1-3 content	14
		2.1.3	T1-4 content	19
		2.1.4	T1-5 content	21
		2.1.5	T1-6 content	23
		2.1.6	T1-8 content	28
	2.2	Object	tives	30
	2.3	Respo	nsibilities	30
	2.4	Servic	e composition	30
	2.5	Syster	n knowledge	31
	2.6	Sched	ule and project documents	31
	2.7	Frame	work conditions to be complied with, standards, technical guidelines	31
	2.8	Servic	e provision	32
	2.9	Transi	tioning phase	32
3	Gene	ral orde	er contents	34
	3.1	Scope	, conclusion of contract	34
	3.2	Respo	nsibility, obligations regarding information, co-operation	34
	3.3	Servic	e deadlines	35
	3.4	Chang	e to service	35
	3.5	Evider	nce of service / approval	35
	3.6	Remu	neration	36
	3.7	Gener	al legal relations	37
		3.7.1	Warranty and liability	37
		3.7.2	Third party rights	37
		3.7.3	Confidentiality and data protection	37
		3.7.4	Open source	37

Specifications

T1- Projectmanagement

Data classification:

confidential

Place of performance 22.03.2023 4 of 41

		3.7.5 Cyber security	.37
	3.8	Termination	
4	Gene	eral information	38
	4.1	Other applicable documents	.38
	4.2	Software	.38
	4.3	Special characteristics	.38
	4.4	Processing personal data	.39
		4.4.1 Evaluation of information security of partner companies	.40
	4.5	Applicable documents	.40

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	5 of 41

1 Basic principles

1.1 Introduction

These specifications for requesting Development Services describe technical stipulations.

This document describes the affected interfaces, processes and requested service as a basis for awarding the contract.

The tendering party must take account of these specifications in full when submitting the offer. In their offer, they shall make allowance for all services required for fulfilment of the requirements from the specifications. The offer must be strictly in relation to these specifications and accompanying documents and assess the execution of services in a plausible manner. Deviations from the specifications must be explicitly identified as such in the offer with reference to the respective section.

As a Contractor, the person/company submitting the offer shall ensure that the service described in the specifications can be provided for CARIAD SE (a Volkswagen Group company).

CARIAD SE reserves the right to implement cost plausibility measures before and after the nomination and renegotiate accordingly. The prices and deadlines offered must not be exceeded.

The contents of the specifications are subject to a non-disclosure agreement and must not be shared with third parties unless written consent has been given by CARIAD SE.

The services shall be performed under the Contractor's own responsibility according to the technical and organisational requirements of the Client under the supervision and sole managerial authority of the staff in charge as appointed by the Contractor.

1.2 Structured offer

Based on the request, the Contractor shall create an offer free of charge and structured accordingly. This offer shall include all details for definition of the offer value and the plausibility check. Should CARIAD SE require additional details in relation to the offer, the Contractor shall undertake to provide these without delay and free of charge.

Travel expenses within a country and to CARIAD SE sites must be included in the offer price. Travel expenses for trips outside the country are settled according to the currently valid contractual conditions for order-related travel expenses (these can be found at www.vwgroupsupply.com).

Please send any questions concerning this request in writing to the author mentioned above (page 1). The questions will be answered accordingly and the answers will be made available to all potential contractors in anonymised form.

Specifications
T1- Projectmanagement
Data classification:
confidential

Place of performance 22.03.2023 6 of 41

2 Specific order contents

2.1 Description of the project environment

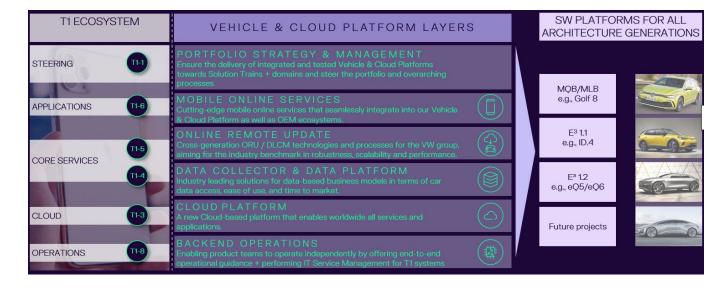
The project can be defined as follows in terms of the overall context (process, technology, organization).

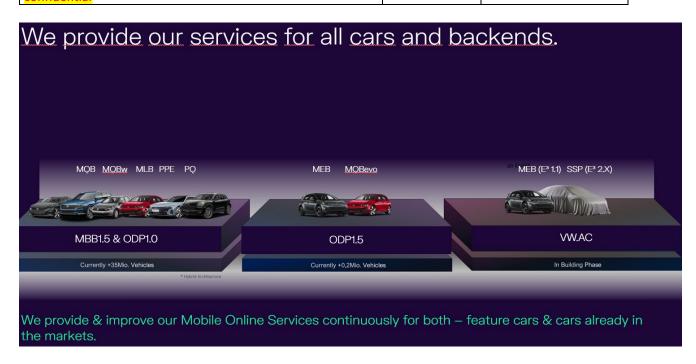
The T1 domain, within CARIAD SE, builds the digital platform that is the foundation for all other domains, markets, brands, and 3rd Parties. With a rich and powerful platform the T1 empowers fast development and innovation cycles – end to end.

T1 is responsible for all car-connectivity and backend-scope development e.g. realization for mobile online service.

The T1 supervise in this context the entire development process from strategy for future systems, requirements management out of the brands, technical development for on-and offboard platform components as well as their acceptance and testing. Furthermore the T1 supports the definition for any process regarding the connectivity solutions operations by defining suitable DevOps-, Support-, Diagnose- & After Sales processes in cooperation with the brands and other domains of CARIAD SE.

Target of T1 further is the harmonisation of technical group modules overall brands and construction series to archive the greatest possible synergies and lowest operating costs for backend and car control units.





2.1.1 T1-1 content

In T1-1, the delivery of integrated and tested Vehicle & Cloud Platforms towards the CARIAD solution trains and domains and steer the portfolio and overarching processes is ensured.

T1-11 Platform Management focuses on shaping and optimizing the strategic and operational aspects of the T1 platform. This involves continuous refinement and alignment of the T1 platform and product strategy, operationalizing and managing strategy milestones, and ensuring streamlined budgeting processes. T1-11 has successfully implemented Lean Portfolio Management for T1, overseeing requirements, prioritization, backlog, and roadmap. They provide guidance to Product Lines in standardizing Epic/Feature nomenclature in Jira, manage Module Management for SKCC "Geschäftsstelle," and coordinate financial planning rounds for T1.

T1-12 Software Platform Projects serves as a crucial support unit for Platform Solution Management Teams in delivering T1's goals efficiently. This organizational unit enables Solution Trains to work effectively, acting as an ambassador for cultural change from vehicle projects to the platform. T1-12 oversees T1 deliverables from order to delivery, taking delivery responsibility for the T1 product stack in specific projects. The unit orchestrates the implementation of T1 deliverables, manages Rollout, ensuring a bridge between the EU and the rest of the world, and commits to delivering quality and customer satisfaction. T1-12 is actively involved in establishing delivery processes and standards, maintaining processes for CARIAD deliverables, driving improvements in process and portfolio management, managing special projects across T1, and steering evaluations for Connected Country Rollouts (CoCoRo).

Rollout Management NAR/CHN/RoW:

The Rollout Manager plays an important role in overseeing the deployment and implementation of software releases across different regions, with a specific focus on North America (NAR),

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	8 of 41

China, and the rest of the world. This role involves strategic planning, coordination, and hands-on tasks to ensure successful software rollouts.

- CoCoRo activities and dedicated documentation in Confluence & JIRA, e.g., assessment upcoming wave countries, budget requirements, weekly sync with POs and brands, etc.
- Preparation and presentation of consolidated budget overviews for upcoming waves
- Development of confluence templates for fine assessment (service assessment / budget)
- Preparation, setup, execution and documentation of regular meeting rounds with internal and external stakeholders
- Update dedicated documentation, intranet pages, and dashboards
- Planning and conducting weekly call upcoming clusters and the according countries
- Tracking and resolution (if possible) of rollout issues and risks for existing countries ("Bestandsländer") and CoCoRo countries in JIRA
- Creation of CoCoRo Status pages in Confluence across the different solutions/projects for concept and implementation phase
- Creation of presentations for internal committees and management rounds (usage of standard reporting templates by PM highly encouraged)
- Set-up of project management steering via T1LPM tickets
- Development of Test and Quality Assurance templates and premises to be checked by FOs

<u>Project Management: Project Control Office, Project Lead, Project Management Office</u>
Supporting activities are required as part of project management. This This area of responsibility covers a broad spectrum and begins with requirements management, extends through the development phases to team communication. The following activities reflect the characteristics of the field of work:

General activities:

- Support in the planning and steering of (several) projects and development team(s)
 - o Tracking compliance with project specifications and milestones
 - o Advice on the synchronization and coordination of activities
 - o Technical consolidation of topics within and between teams
 - Alignment of teams to product results (objectives, delivery artifacts, collaboration)
 - Support in deciding on and implementing recommendations for action
 - Support in obtaining information on legal issues, data protection, compliance
 - Developing proposals for prioritizing and defining new and subsequent work packages
 - Developing and presenting potential improvements and impediments, as well as actively proposing solutions
- Coordination, implementation, preparation and follow-up of appointments and workshops
 - in general: setting appointments, preparing meeting minutes, sending documents, coordinating with responsible parties, recording project-related tasks, tracking project-relevant tasks, tracking open points
 - Agile environment: participation in PI planning and updating the corresponding boards with the tasks that arise, JIRA maintenance, Confluence maintenance.

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	9 of 41

- Moderation of meetings such as the presentation of results or retrospective at the end of the sprint
- Support with change management
 - Continuous monitoring of the change
 - Monitoring internal collaboration and deriving measures to establish and expand the agile mindset in existing teams and with new employees
 - o Regular feedback rounds, "coaching" of stakeholders if required
 - o Onboarding new teams / individual stakeholders, generating a common mindset
- Support in setting up agile teams under aspects such as project/product efficiency
 - Definition of a mission, creation of a vision, optimization of team structures, determination of success factors, optimization of team productivity
- Support in the creation of an overall project plan together with product owners and, if necessary, the implementation team
 - Stage planning, portfolio planning
- Guiding the team in the use of supporting tools such as Jira, Confluence, MS Teams, MS
- Office
- Support with approval processes
 - o Support in the preparation of relevant management and committee documents
 - o Preparation of decision bases and facilitation of decision-making
 - Preparing argumentation chains and content, conducting preliminary analysis, creating slide sets, presentations and concepts

Project leadership:

- In addition to all mentioned above and below, a project leader manages an own (sub-) project and reports on it.
- A project leader drives tasks independently and also coordinates with other departments beyond T1-1x.

Requirements & change management

- Recording and detailed analysis of technical requirements and changes in joint collaboration with the dedicated organizational units (e.g., GM)
- Support with requirements specification/validation
- Breaking down the requirements into individual work packages and controlling them via the PI planning / sprint planning
- Tracking requirements throughout the development process

Portfolio management

- Supporting the analysis, planning and development of a project portfolio (e.g., T1LPM) and its maintenance in the relevant tools (e.g., JIRA)
- Collecting new trends, feedback, ideas and requirements in order to develop concrete options for action
- Developing a system for prioritizing projects and a structured decision-making process
- Analyzing resources at portfolio level, optimizing the use of resources, resolving ad hoc resource conflicts
- Monitoring individual project progress and managing dependencies that affect resources, budgets and schedules (= project portfolio controlling)

Information management

 Support in optimizing the flow of information and communication (e.g., through the introduction of regular meetings, incl. participation, moderation, documentation (minutes) etc.)

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	10 of 41

- Documentation and development of a reporting system for internal and external reporting
- Support in communication with the brands / Group (interface management)
- Planning, creation, coordination and follow-up of documents
 - Development of a storyline for presentations, coordination of content, effect measurement
- Creation and maintenance of document structures in accordance with CARIAD guidelines (e.g., CSU classes, retention periods of documents)
- (Re-)viewing and sorting documents
- Creation and updating of authorization structures (e.g., in Azure Devops, Confluence, JIRA)

Reporting

- Reporting with regard to schedule, scope, budget; tracking the critical path. Toolsupported project planning, e.g., in JIRA and cplace
- Transparent presentation of defined maturity levels and tracking in the projects
- Support in the structured analysis of implementation progress when applying agile methods
- Coordination and presentation of final project results
- Collecting and documenting project progress for stakeholders
- Creating and maintaining project status and progress
- Tracking of central activities
- Creating transparency about current and planned projects by providing up-to-date, reliable project data

Risk management

- Documenting risks and their measures transparently and sustainably in accordance with the specified CARIAD/project-specific processes
- Tracking the implementation of measures within the risk tickets
- Evaluation of the existing risk process and possible further development of this together with the specialist departments
- Participation in regular risk and impediment rounds to present if needed project risks by following the escalation process

Methodologies & standards:

- Establishing and ensuring uniform project management standards and quality
- Introduction of uniform project standards and templates across the various platform projects, which the projects can use throughout the entire project period, e.g., templates for reporting, project schedule, critical path tracking, stakeholder management, organizational change management, project kick-off, project closing, etc.

Function Cluster Spokesperson:

The functional cluster spokespersons for each cluster and vehicle project work as representatives of the functional clusters in the project organization. Responsibility of all functions of the cluster of a specific vehicle project from the concept phase to series production. The function cluster spokesperson is responsible for the cluster-specific functional scope of a project during the entire product life cycle and for checking the feasibility of all functions via function realization managers (FuRe-V). Tasks:

• Coordination & monitoring of function realization

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	11 of 41

- Coordination of the implementation of function realizations in accordance with the maturity level
- Technical escalation level for implementation and maturity level risks of individual function implementations
- Checking the feasibility of all function implementations (technically, in terms of time and functional dependencies)
- Controlling/obtaining the milestones of the function development process for the cluster functions (function implementations)
- Coordination & time tracking of the function specification provision for the cluster functions
- Reporting on the technical status of the function implementations to the committees
- Coordination of the creation of FuRe releases for all control-relevant FuRe of their cluster
- Coordinating the creation of the FuLi for the functional scope of their cluster
- Responsibility for the creation, coordination and tracking of IS planning and IS vehicle specifications
- Responsibility for coordination & compliance with RG planning incl. technical dependencies in his function cluster in a vehicle project/platform project
- Responsibility for the current project status (technical and schedule) of the cluster functions
- Responsibility for providing the function releases for the functions of their cluster

Approval & Release Approval Management:

- Close collaboration with internal process owner department of release and approval process (e.g., TP), coordination of processes and requirements with relevant specialist departments
- Steering of the release management process for the T1 solutions
- Release planning for cluster functions
- Ensure transparency on the status and progress of the release via Confluence Reporting
- Operational implementation support of the release processes for function & component owners
- Establishing of reporting structures in Confluence/JIRA
- Bundling of communication between the process department and DevTeams / prevention of multiple tasks
- Ensuring understanding and to-do's from shifting the DET for Function & Component Owner
- Release of functions via Release42, incl. tool support (e.g., Sharepoint, Release 42, etc.)
- Support implementation of all open source software (OSS) requirements
- Analysis of the release processes of the various projects/solutions to derive synergies for release management
- Preparation for the introduction of comprehensive release management for all solutions
- Alignment of the processes of the various solutions/projects and embedding of the overall process in the existing workflow

Process Analyst:

The process analyst plays a crucial role in evaluating, optimizing, and implementing efficient processes within CARIAD. This role involves analyzing existing workflows, identifying areas for improvement, and recommending changes to enhance overall operational efficiency.

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	12 of 41

- Process Evaluation: Conduct a thorough evaluation of existing business processes within the automotive software company, including software development, project management, and other operational workflows.
- Stakeholder Interviews: Engage with key stakeholders, including team members, managers, and executives, to gather insights into current processes, pain points, and areas for improvement.
- Documentation Review: Review existing process documentation, standard operating procedures, and guidelines to understand the current state of processes and identify potential gaps.
- Workflow Analysis: Analyze end-to-end workflows, identifying bottlenecks, redundancies, and inefficiencies that may impact productivity and project delivery.
- Data Collection: Collect and analyze relevant data and metrics associated with existing processes, providing a quantitative basis for process improvement recommendations.
- Best Practices Knowledge: Knowledge on industry best practices and benchmarks in automotive software development and related processes, identifying opportunities for alignment.
- Recommendations for Improvement: Develop and present recommendations for process improvements, considering both short-term optimizations and long-term strategic enhancements.
- Process Mapping: Create process maps and flowcharts to visually represent current and proposed workflows, aiding in the communication and understanding of process changes.
- Organizational Change Management Support: Provide support in organizational change management efforts, helping teams transition smoothly to new processes and ensuring buy-in from stakeholders.
- Technology Integration: Assess opportunities for integrating technology solutions to streamline processes, enhance collaboration, and improve overall efficiency.
- Quality Assurance Integration: Integrate quality assurance processes within workflows to ensure that deliverables meet established standards and align with industry best practices.
- Documentation and Communication: Document all changes and improvements to processes, and communicate these changes effectively to relevant stakeholders, ensuring transparency and understanding.

Tool Support:

The role of the tooling support professional is pivotal in ensuring the seamless operation and optimization of project management tools such as JIRA and Confluence. Focused on maintenance, set-up, and continuous evaluation, this role plays a critical part in configuring and customizing these tools to align with organizational workflows and enhance collaboration. By providing expertise in statistical analysis, workflow management, and collaboration with tool support services, the external tooling support professional contributes to the efficient functioning and continual improvement of these essential project management platforms.

- Tool Configuration and Set-Up: Customize JIRA and Confluence instances to align with project requirements and organizational workflows. Set up project spaces, workflows, issue types, and other configurations as needed.
- Maintenance and Optimization: Conduct routine maintenance tasks for JIRA and Confluence instances, ensuring optimal performance and reliability. Implement optimizations, such as database clean-ups, to enhance the efficiency of the tools.

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	13 of 41

- Evaluation and Analysis via JIRA: Leverage JIRA for comprehensive project analysis, including issue tracking, progress monitoring, and team collaboration. Utilize JIRA reports and dashboards to gather insights into project metrics and performance.
- Statistical Analysis: Perform statistical analysis using JIRA data to identify trends, bottlenecks, and areas for improvement. Generate statistical reports to support decisionmaking and project planning.
- Workflow Management: Design and customize workflows in JIRA to streamline project processes and ensure efficient task management. Collaborate with teams to align workflows with project methodologies.
- Collaboration with JIRA Support: Act as a liaison with JIRA support services, reporting and resolving issues, and seeking assistance for complex problems. Stay informed about JIRA updates, new features, and best practices recommended by the support team.
- Collaboration with Confluence: Configure Confluence spaces and pages to support effective collaboration and documentation. Collaborate with teams to structure and organize Confluence spaces for optimal knowledge sharing.
- Training and Knowledge Sharing: Provide training sessions for users on JIRA and Confluence functionalities. Create and maintain documentation, knowledge base articles, or FAQs to empower users.
- Security and Permissions Management: Implement and manage security measures in JIRA and Confluence, including user access controls and permissions. Conduct regular security audits to ensure data integrity and compliance.
- Tool Integration: Facilitate integration between JIRA, Confluence, and other tools to enhance cross-functional collaboration. Ensure seamless data flow and consistency across integrated tools.
- Continuous Improvement: Gather feedback from users and stakeholders to identify opportunities for improvement in JIRA and Confluence processes. Propose and implement enhancements to increase overall efficiency.
- Data Analysis Collaboration: Collaborate with data analysis teams to extract meaningful insights from JIRA data, contributing to strategic decision-making.

Specifications
T1- Projectmanagement
Data classification:
confidential

Place of
performance
22.03.2023
14 of 41

2.1.2 T1-3 content

CLOUD PLATFORM

Our Mission in T1-3 is to provide stable cloud-based platforms that enable other domains as well as external third parties to develop worldwide all digital services and data driven applications. We focus on System- and Software architecture framework, development of all necessary enablers and integration technologies, as well as on monitoring and logging -observability and analysis with one goal: Global deployment!

Since the T1-3 organization within CARIAD will both rebuild and further develop existing cloud platforms of the VW Group and transfer "legacy" platforms into a uniform solution, there is a high demand for additional resources in order to be able to supply the projects in a timely manner. With regard to the different platforms (MQB/MLB, E³1.1, E³1.2, E³2.0) and its corresponding vehicle projects, support for the different phases of development and integration in the relevant regions (EU, NAR, CHN, ROW) are required. In general it can be stated that next to the vehicle platforms, the backend systems are based on the European version (Device Platform) in combination with market-specific backends (Service Platform), market-specific frontends, business processes and other systems.

Existing platforms such as the MQBw Baseline must first be integrated into existing cloud platform systems and also expanded to meet other future requirements. Market launches of the MQB platform for each Group brand, including their country rollouts, must be managed and secured by the MQB project throughout its life cycle. The development resources for this are limited between MQB, E³ 1.1, E³ 1.2 and E³ 2.0 platform projects. To overcome these challenges, the T1-3 organization will primarily focus on a unified architecture and cloud platform strategy and let suppliers manage and secure the operationalization of existing platforms.

The specific requirements for the required roles are explained in more detail below:

Specifications

Function Owner MAGIC Solution:

- Focus on MQBw Baseline, E³1.1 MEB, E³1.2 PPE, E³2.0 SSP
- Lead for the technical development of the owned function/ feature
- Technical coordination/ alignment with other departments and teams in ART and project
- Definition of requirements together with stakeholders to the development teams
- Writing and creating features and user stories (Confluence, Jira)
- Refinement of the stories in collaboration with the development teams
- Planning of features and stories as part of the PI plannings, as well as preparatory and follow-up work
- Observance of compliance with the Definition of Ready, including security aspects
- Organization or participation in the Daily Stand-Up, Backlog Refinement, Iteration Planning and Iteration Review
- Presentation of the results in a system demo
- Preparation of status reports and decision templates for the purpose of reporting, e.g. in committees or project rounds
- Knowledge of agile development models such as Safe or Kanban

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	15 of 41

Agile Mindset

MAGIC Connectivity System Expert:

- Focus on MQBw Baseline, E³1.1 MEB, E³1.2 PPE, E³2.0 SSP
- Creation of development, integration and release concepts
- Alignment of project-specific integration, testing and release requirements from the projects E³1.1 and E³2.0 for a proprietary and standardized software product
- Expert advice on the development of in-house development, integration, testing and release
- Infrastructures and workflows for a proprietary and standardized software product
- Advice on the creation, coordination and follow-up of change requests (CRs)
- Analysis of traces and the prioritization of error tickets (KPM/JIRA)
- Support for process-related error management
- Creation of specifications in the form of features and capabilities
- Support in the implementation of quality processes
- Creation and maintenance of functional documentation
- Structuring, developing, integrating and testing the individual functionalities in a network as well as fixing bugs
- Knowledge of agile development models such as Safe or Kanban
- Agile Mindset

PCO/ Requirements Management OEM.IL:

- Act as a contact person for questions from CARIAD to spread knowledge about OEM.IL, their processes and the group system processes into CARIAD
- Supporting FOs in requesting approvals by group systems (e.g. Carport, FAZIT, S42, V42, ReCall, ConBase, Wuki, etc.)
- Reviewing of CRs / LHs and approval documents prepared by FOs for getting approvals by group systems
- Clarification and documentation of approval processes of the group systems and spreading this knowledge towards CARIAD and OEM.IL
- Tracking of the status of Cariad topics via OEM.IL at the Group systems
- Creation and providing of status reports of CARIAD relevant topics at OEM.IL and organizing biweekly status meetings with OEM.IL
- Organization or participation in the weekly meetings of the Feature Teams or Group Systems with OEM.IL to track the CARIAD relevant topics

LAVIN Function Owner:

- Definition of functional architecture & requirements for functionalities
- Preparation of concepts as needed (e.g., monitoring, versioning approach, load testing)
- Self-contained supervision of implementation and verification of technical development and testing activities

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	16 of 41

- Coordination towards almost all features of MOD4, "architecture forensic"
- Error Management, coordination of tickets and technical decisions w.r.t. bugs and improvements
- Definition of NFRs
- Definition of SLA/SLOs
- Coordination, preparation, moderation, documentation of project relevant meetings
- Preparation and review of documentation (e.g., for service transition and ops preparation)
- Consideration of special situation/requirements due to complexity of VFA project (external stakeholder, contractual implications and potential penalties, anti-trust laws)

PM Core & DXP, PM Cost reduction, OCI&A, CoCoRo, GAS:

- Focus on expanding Developer Experience Platform (DXP), OCI@A; CoCoRo, Cost Reduction
- Preparation and follow-up of PIPE, appointments and workshops
- Documentation of products and services in T1
- Help with creating and maintaining backlog items
- Carrying out market and user analyzes
- Support with communication measures and product marketing (newsletter, demos, etc.)
- Support for improving collaboration with ACBU
- Support Cost reduction activities within all ARTs in collaboration with WirelessCar
- Tracking Cost reduction tickets
- Cloud Platform CoCoRo Coordination
- Technical Evaluation Preparation and documentation, Process optimization

PL-Support China Projects:

- On-site in China
- Focus on IDS5.0 and higher as well as VW Anhui Projects in China
- Preparation of meetings
- Participates locally in Meetings and workshops
- Documentation of backend relevant results and activities regarding China-Projects
- Support in communication with Cariad China, VGC as well as VW Anhui

PCO ART Core / DXP:

- Focus on ART Core as well as DXP
- Preparation of meetings
- Documentation of backend relevant results and activities
- Maintain status dashboards (JIRA, Confluence)
- Create and maintain structures and boards (JIRA)
- PIPE info hub content management (Confluence)
- Ad-hoc queries (JQL)
- Participate in on-line meetings, prepare agenda, keep meeting minutes
- Support for ART related Development teams

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	17 of 41

PO JOSI:

- Capturing status of different scrum teams
- Alignment with dev teams
- Prepare priorisation
- Preparation of CCB process
- Confluence to display status and general overview
- Capturing status of different scrum teams

PO Playprotection:

- Technical understanding of Power and Networkmanagement
- Alignment with Test and DevTeams
- Prepare priorisation
- Confluence to display status and general overview

PO Platform Integration:

- Align on necessary technical needs to the platform
- Track progess
- C/C++ understanding need
- Confluence to display status and general overview
- Project steering

Function Owner ART VURM Technical SPOC and market rollout:

- Focus on MQBw Baseline, E³1.1 MEB, E³2.0 SSP
- Extensive experience in the area of automotive mobile online services
- Deep technical understanding of mobile online service architecture of the relevant markets
- Technical knowledge regarding cloud and vehicle communication
- Technical knowledge to provide ticket analysis to expedite error handling process
- Support for technical development to ensure release timelines in relevant markets
- Technical coordination/ alignment with other departments and teams in ART and project
- Definition of market requirements together with stakeholders to the development teams
- Writing and creating market specific features (Confluence, Jira)
- Observance of compliance with the Definition of Ready, including security aspects
- Participation in Daily Stand-Up, Backlog Refinement, Iteration Planning and Iteration Review
- Organizing market specific meetings to ensure market release
- With German and English language skills

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	18 of 41

Release Manager ART VURM:

- Ensuring quality standards on ART- and Solution level (DoR, DoD, WSJF, Security-Approval, Legal-Approval, Architecture-Review)
- Tracking of all relevant artefacts of the development and product teams relevant to provide a valid software release (FOSS, OSSCA, CCB-Approval, A-SPICE)
- Following and ensuring a unified QA-process together with the quality department
- Coordinating A-Spice-Audits along the development chain and tracking of findings und Improvements
- Continuous support of the product teams to traceability and documentation of the development and relevant changes
- Development of KPIs to measure ART development and release performance
- Tracking of available and resources to ensure release and rollout timelines
- Generating dynamic reports in jira and confluence to allow for traceability and transparency of all relevant development related activities
- Supporting the development of a product roadmap
- Ensuring a prioritization of the release and rollout relevant artefacts
- Providing a capacity-forecast to ensure the release milestones
- Tracking of integration and testing status including overall release maturity
- Risk-Management and escalation on ART and solution level
- With German and English language skills

ST 1.2 Projectmanager Service Integration Hybrid Architecture:

- With german/english language skills
- Coordination, preparation, moderation, documentation of project relevant meetings
- Very good skills in creating documentation, visualization and management Compliant preparation of complex topics
- Requirements Engineering Gathering in alignment with stakeholders
- Convincing appearance and negotiation skills
- Independent and results-oriented work
- Knowledge of agile development models such as Safe or Kanban
- Basic knowledge of software development processes
- Basic knowledge of software architectures
- Basic knowledge of device backend architecture is helpful
- Agile Mindset

ODP 1.0 Projectmanager/Epic Owner Service Refactoring:

- With german/english language skills
- Coordination, preparation, moderation, documentation of project relevant meetings
- Very good skills in creating documentation, visualization and management Compliant preparation of complex topics
- Requirements Engineering Gathering in alignment with stakeholders
- Convincing appearance and negotiation skills
- Independent and results-oriented work

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	19 of 41

- Knowledge of agile development models such as Safe or Kanban
- Basic knowledge of software development processes
- Basic knowledge of software architectures
- Basic knowledge of device backend architecture is helpful
- Agile Mindset

2.1.3 T1-4 content

Our Vision

Industry leading solutions for data-based business models in terms of car data access, ease of use, and time to market.

Our Focus

Deliver data collection solutions for our customer fleet with our products GDC (Group Data Collector), IDS (Intrusion Detection System), CDC (Car Data Collector) and SUU (Statischer Umfeld Uploader).

Deliver a robust and scalable data platform for our existing and future customer vehicles with the VW.AC (Volkswagen Automotive Cloud), IDS Data Platform and UDE (Unified Data Ecosystem) across all vehicle platforms.

Deliver a robust and scalable data platform to support functional testing and resimulation for vehicle homologation with our product Group MDM (measurement data management) incl. "Resim".

Defining and implementing a Unified Data Platform to reduce redundancies and achieve cost savings. Establishing a future proof tech stack.

Way of Working

Data Platform & Services utilizes an agile approach as way of working, mainly following the SAFe Framework.

The structure consists of two main Solutions (DC Pro and UDE), containing multiple agile Release Trains:

- DC Pro Solution (Data Collection & Provisioning)
 - ART Collection
 - ART Provisioning
 - ART IDS
- UDE Solution (Unified Data Ecosystem)
 - ART DP Foundation (Data Platform Foundation)
 - ART UDE Kickstart
 - ART Group MDM
 - ART Data Ingest

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	20 of 41

Project Management Support

Within this tender, we request capacity for different agile Roles and support functions. As a rough overview, we can cluster the demand by the following key tasks:

- Solution Management Support: Program Management Activities, containing several products. Located on Solution Level, overarching multiple ARTs.
- Project Management Support: Containing Product Owner Tasks, located to a specific Product team in a specific ART. Can also contain a role as "proxy Product Owner" for the product Team, and (partial) project lead function.
- Project Management Office (PMO): Containing supporting tasks like reporting, board preparation, ticket management and user onboarding. Can be deployed as supportive function for agile Roles in the Organization (e.g. for PO / PM / SM).
- Requirements Management: Containing tasks like requirements review, stakeholder communication, ticket reporting and preparation of PI Planning. As an additional task, A-Spice compliance shall be monitored and improved regarding processes and requirements.

Key Capabilities

- Experienced working in SAFe agile Software development
- SAFe certified
- Experienced in major agile automotive projects, covering multiple brands or multiple vehicle platforms
- Profound knowledge in agile state of the Art toolchain (e.g. Azure DevOps, Jira, Confluence, Codebeamer)
- Knowledge and experience in automotive standards and process requirements, especially in Automotive SPICE

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	21 of 41

2.1.4 T1-5 content

The Update & DLCM mission is to enable the Volkswagen Group to continuously innovate, deploy and monitor software in a robust, fast and scalable way through updates, that customers of all brands experience seamless update experience. Therefore we develop technologies and processes that ensure safe, secure and compliant over the air software updates across all brands, regions and technology platforms of the Volkswagen Group.

Our delivery organization is set up in a SAFe Solution with three Agile Release Trains and active in cross brand and Cariad project organizations like E³ 1.1 Task Force or E³ 1.2 Project House.

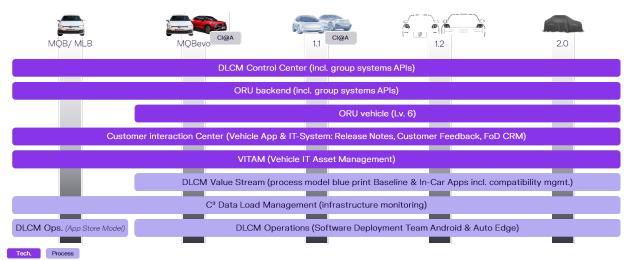


Figure: Update & DLCM scope (excerpt)

Work package Task description

Project manager Task Force and Project House	Management of delivery and clarification tasks (incl. status reporting) for E³ 1.1 MEB and MQBevo ORU Task Force (Wolfsburg) with regard to Update & DLCM TOPs
	Management of delivery and clarification tasks (incl. status reporting) in E ³ 1.2 (OTA) Project House (Ingolstadt) Management of delivery and clarification tasks (incl. status
	reporting) in future project house
PCO/ PMO Task Force and Project House	Preparation, moderation and documentation (incl. status reporting and management of open tasks) for E ³ 1.1 MEB and MQBevo ORU Task Force (Wolfsburg) with regard to Update & DLCM TOPs
	Preparation, moderation and documentation (incl. status reporting and management of open tasks in E ³ 1.2 (OTA) Project House (Ingolstadt)
	Preparation, moderation and documentation (incl. status reporting and management of open tasks in future project house
Program management support and PMO Update Cycles 2030	Program management activities like task tracking, status reporting, meeting and workshop preparation, moderation

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	22 of 41

	and documentation at Undate Cycles 2020 areas to
	and documentation at Update Cycles 2030 program to manage process, IT system and technology transformation
	on Volkswagen Group level
Project manager delivery teams	Project management activities incl. status reporting,
Update Cycles 2030	meeting for a process and IT system delivery team (cross
	technology platforms and brands) within Volkswagen Group
	transformation initiative Update Cycles 2030
Project manager DLCM	Project management activities like task tracking, status
	reporting, meeting and workshop preparation, moderation
	and documentation in Digitla Lifecycle Management
	projects on Update & DLCM Solution level
Project management support	Preparation monthly T1-5 (Update & DLCM) OTA project
and PMO OTA Report	reporting and OTA Report (reporting of delivered OTA
	updates across all brands and technologies)
Project manager Online Remote	Project management activities like task management/
Update (ORU) Backend	delivery and tracking, status reporting, meeting and
	workshop preparation, moderation and documentation and
	in operational ORU Backend team projects
PCO/ PMO ORUnext operations	Preparation, moderation and documentation (incl. status
	reporting and management of open tasks in ORU operations
	projects/ tasks
Project manager Online Remote	Project management activities like task management/
Update (ORU) 2/3	delivery and tracking, status reporting, meeting and
	workshop preparation, moderation and documentation in
	ORU 2/3 projects (MQB platform)
Product owner strategic	Project management activities like task management/
projects Online Remote Update	delivery and tracking, status reporting, meeting and
(ORU) Backend and Download	workshop preparation, moderation and documentation and
platform (DLP)	in strategic ORU Backend team projects incl. scaling of DLP
Project manager MQBevo One	Project management activities like task management/
Infotainment at Android	delivery and tracking, status reporting, meeting and
(OCI@A) China	workshop preparation, moderation and documentation for
Drainet manager MOReye One	MQBevo OCI@A China rollout
Project manager MQBevo One Infotainment at Android	Project management activities like task management/ delivery and tracking, status reporting, meeting and
(OCI@A) NAR	workshop preparation, moderation and documentation for
(OCIWA) NAK	1
Project manager E³ 1.1 MEB	MQBevo OCI@A NAR rollout Project management activities like task management/
China	delivery and tracking, status reporting, meeting and
Cillia	workshop preparation, moderation and documentation for
	E ³ 1.1 MEB China rollout
Project manager E ³ 1.1 MEB	Project management activities like task management/
NAR	delivery and tracking, status reporting, meeting and
TV/IIX	workshop preparation, moderation and documentation for
	E ³ 1.1 MEB NAR rollout
Project manager E³ 1.2 PPE/	Project management activities like task management/
PPC China	delivery and tracking, status reporting, meeting and
1 1 C Cililla	denivery and tracking, status reporting, incetting and

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	23 of 41

Project manager E ³ 1.2 PPE/ PPC NAR	workshop preparation, moderation and documentation for E³ 1.2 PPE/ PPC China rollout Project management activities like task management/ delivery and tracking, status reporting, meeting and workshop preparation, moderation and documentation for E³ 1.2 PPE/ PPC NAR rollout	
Project manager and (SAFe) Product Manager support future projects	Project management and (SAFe) Product Manager support for ORU future projects like: • Preparation, participation and planning/ moderation of agile team routines incl. documentation/ tracking in JIRA • Alignment with development teams on feature-development progress • Alignment with brands & stakeholders on requirements & prioritization of features • Coordination of Test & Integration activities with E2E Integration team • Reporting on product development status • Maintaining product roadmap and aligning it cross teams, brands and regions • PO for brands/markets regarding product	

2.1.5 T1-6 content

VISION

"Enriching the customer experience of any vehicle by providing the most reliable and comprehensive service portfolio utilizing a unified platform approach"

MISSION

"We consolidate today's fragmented landscape of mobile online services solutions and strive to create a transparent and sustainable foundation for future services that empowers brands and markets to customize and improve the overall customer experience"

FOCUS TOPICS/PRODUCTS

- Remote / Alert / Call services | ART 21
- EV services | ART EVCI
- MBB1.5/ODP1.0 Remote/ Alert & eV Services (Grey & Green Services) | ART RACE
- Functions on Demand | ART FoD
- WebApp platform & In-Car WebApps | ART ICWA

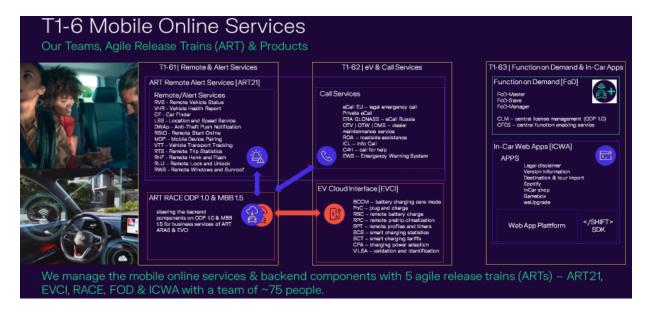
WAY OF WORKING

Mobile online services utilize an agile approach as way of working, mainly following the SAFe Framework.

Specifications	Place of
T1- Projectmanagement	performance perfor
Data classification:	22.03.2023
confidential	24 of 41

Our products and services are provided to the solutions E³ 1.1, E³ 1.2 as well as to our future E³ 2.x solution. Therefor we are organized in five agile Release Trains:

- ART 21
 - o Remote / Alert / Call Services
- ART EVCI
 - o EV Services
- ART RACE
 - backend components on ODP (One Digital Platform) 1.0 & MBB 1.5 for services of ART 21 & EVCI
- ART FOD
 - o FoD-Master
 - o FoD-Slave
 - o FoD-Manager
 - CLM central license management (ODP 1.0)
 - o CFES central function enabling service
- ART ICWA
 - WebApp Plattform
 - Media on Demand (MonD)
 - o inCar Shop
 - o SHIFT
 - o legal App
 - OKVS and Destination and Tour Import
 - o we Upgrade



SPECIFICATIONS

Within this tender, we request capacity for separate roles and support functions.

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	25 of 41

FUNCTION OWNER (FO) - NON-SAFE ROLE

- Creation and continuous development of the functional description (specifications, user stories, epics, etc.)
- Coordination of requirements with suppliers and support in function implementation
- Alignment of the function with responsible parties from other brands within the group
- Integration of functional safety requirements into the functional description
- Definition and alignment of the control and display concept with the HMI team or relevant frontends
- Coordination of technical implementation with system managers and components
- Project management, project planning & control: Support for technical project leaders or lead function managers
- Change management: Evaluation and communication of function changes, formulation and submission of CRs, and representation in committees
- Configuration management: Establishment of a suitable storage structure
- Participation in conceptual work (in proposal concepts and function implementation)
- Requesting signals and interfaces in SBT
- Specify diagnosis requirements and measurement values, and coordinate with diagnosis responsible parties
- Create and review ZDCs
- Commissioning and release recommendation of functions for respective milestone
- Prioritization of production-relevant errors in coordination with TPLs
- Participation in test and trial drives
- Verification of service function in the vehicle project using expertise and tools from the tester team
- Close coordination with test managers, project managers, requirement managers, etc., for each CarNet launch of the client, as well as with technical project leaders
- Fault analysis
- Creation and evaluation of error tickets
- Coordination of corrective measures
- Participation in verifications

It is noted that function managers regularly have to travel to coordination meetings in Wolfsburg, Ingolstadt, or other locations within the group.

Work results:

- Aligned requirements in project-specific formats (DOORS requirements, JIRA user stories, etc.)
- Sequence diagrams
- Project-specific artifacts (EPICs, etc.)
- Maintenance of fault analyses in fault management systems (e.g., KPM)

SpecificationsPlace ofT1- ProjectmanagementperformanceData classification:22.03.2023confidential26 of 41

DELTA FUNCTION OWNER - non-SAFe role

The delta function owner is a central contact person for stakeholders (e.g. markets, projects) within a pre-defined scope, meaning Solution Train, ART and services. The delta FO e.g. takes care for mobile online services which are to be transferred from the EU market for example to the North American Region (NAR) or China (CHN). For this purpose, function specifications need to be adjusted to the market, the implementation tracked, and a release recommendation provided.

- Central contact to projects and markets
- Support of PO's, FO's for market/project specific topics
- Identification of project specific delta requirements and creation of corresponding artefacts
- Alignment and definition of project related test cases
- Coordination of technical clarification
- Participation in project rounds
- Service Rollout Introduction Workshops
- Follow up of open topics
- tracking of releases and milestones
- Support Testmanagement
- tracking of testing activities
- Support and tracking for open bug tickets
- Support, pre-check and pre-analysis for bugfix tickets
- Support of release approval recommendations
- awareness and tracking of market specific delta requirements and service requests

Work results:

- Status reports (weekly)
- Traffic light sheets for critical work streams and project phase documentation (monthly)
- 1x E2E Integration Plan
- 1x Feature-release plan
- Release recommendation for supplier implementation specifications for each function
- Release plans / deployment plan (weekly)
- Technical description of market-specific system adaptations
- System status reports (weekly)
- Adaptation of function-component dependency matrices
- System integration plans and results including status of planned integration milestones
- device Backend Integration plan, release plan / deployment plan
- defect analysis
- Review of market specific function documents e.g. specification and statecharts
- Creation of a Fit/Gap list for market specific adaptations and tracking of the solution for the identified gaps

PROJECT CONTROL OFFICE (PCO) - non-SAFe role

The Project Control Office supports the ART and its PM by covering process implementation, tracking & reporting of project issues to raise transparency and lower the workload of the ART's members.

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	27 of 41

- Focus on ART 21 and ART EVCI
- Preparation of meetings
- Documentation of backend relevant results and activities
- Maintain status dashboards (JIRA, Confluence)
- Create and maintain structures and boards (JIRA)
- PIPE info hub content management (Confluence)
- Ad-hoc queries (JQL)
- Participate in on-line meetings, prepare agenda, keep meeting minutes
- Support for ART related Development teams

PRODUCT OWNER (PO) - SAFE role

The product owner is a co-creator of the product/subproduct developed by the agile team and helps to ensure that customer needs are met throughout the lifecycle of the product. The product owner is part of the agile team and exercises technical leadership for the contents of the team by prioritizing the backlog items in the team backlog. He is in regular communication with the PM of the ART about the contents of the product.

- Contributes to program vision and product roadmap
- Ensures definition of stories/enablers in team backlog including acceptance criteria
- Preparation and follow-up of the relevant committees
- Ensures the completeness of the increment with regard to the requirements
- Understands and communicates customer needs, generates ideas
- Validation and acceptance of increments of the Agile team in the context of the acceptance criteria
- Assists PM in establishing cost transparency within the Agile team.
- Prioritization of elements in the team backlog
- Drives content / deadlines and iteration goals within the dev team
- Works closely with the customer and other stakeholders for clarification, detailing and coordinating the requirements
- Ensures consistency of elements in the team backlog internally and in relation to external elements (vis-à-vis Agile Release Train and other Agile teams)

QUALIFICATIONS

Among other the following qualifications are expected to have for executing the roles described above:

- Experience with mobile online services within the VW group
- Simulation of signals with CANoe
- knowhow in cyber security
- Project management skills according to PMI
- ASPICE experiences
- 5G Campus network
- Good English in speech and writing
- Excellent communication skills and being supportive
- Being eager to get answers and collect knowledge from all sides

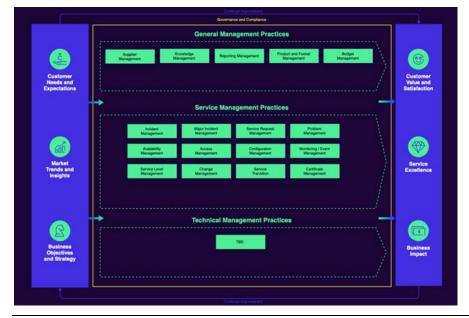
2.1.6 T1-8 content

T1-82: Quality & Processes Support

As the Service Team Quality and Process, we enable CARIAD SE to operate Digital Car Services by designing operational processes and supporting the organization in their implementation. Within our daily work in a team, it is often necessary to get support from trained project management. We must deal with the "faster, better solutions" by focusing our team on the main issues. Below we describe our requirements for this type of project management support:

- Independent preparation, moderation, and independent wrapping up of workshops and special meetings
 - Writing, sharing and saving protocols,
 - o Independent creation of workshop concepts and agendas,
 - Moderation of workshops (special soft skills are needed like communication friendly, able to handle tricky discussions, respectful time boxing,) and
 - Wrapping up of workshops.
- Support in communication processes (e.g. preparation of Power Point slides)
- Independent support in reporting activities:
 - o Creation and update of status reports and
 - Communication of reports to stakeholder,
- Creating independent concepts for documentations,
- Creating and update of different kind documentations (MS Office Apps, SPO, JIRA/ Confluence,
- Creating / restructure of confluence Items

We are mainly working with the processes landscape of the ITIL®Foundation frameworks, plus few additional processes, which supporting us an organisational level (budget management, human resource activities, funnel management, etc.). The processes that are currently in place are visualized in the following figure.:



Specifications	Place of
T1- Projectmanagement	performance
Data classification:	22.03.202 <mark>3</mark>
<mark>confidential</mark>	29 of 41

In the following part, we describe the needed skills of the project management support/partial project management (A3/A4):

- Extensive knowledge in the use of MS Office programs,
- MS-Excel: practical experience in using and creating macros and scripts,
- Experience in the logical simplification and presentation of complex relationships in optimal form (illustrations, matrices, formulas, etc.),
- Editorial review of content,
- Extensive knowledge of JIRA / Confluence and Teams / SharePoint, including the use and creation of macros and scripts,
- · Experience facilitating workshops and communicating with management,
- Knowledge of agile approaches,
- Experience in the field of ITIL[®] Foundation and
- Languages: <u>German</u> / English Level: expert

T1-83: Operations Support

T1-83 (Service Operation and Control Unit) is covering:

- Centralized 1.5 Level Support Team for a high-quality pre-analysis of customer complaints, destined for quick resolution and enabling the brands' 1st level supports. (Team Competence Centre)
- Ensure availability in front of customer by guiding service recovery in case of major incidents. And keep our backends running by supporting, integrating and controlling all operations partners in 7/24 (Team Operation Center)

To realize the team objectives as:

- Ensure high stability in operations for all Vehicle & Cloud Platforms (e.g. via Optimization of Event-, Major Incident -, Problem Management AND E3 1.2 Operation Stabilization, ...)
- To foster unification and simplification of technologies across all our Product Lines (e.g. via reduction of manual effort in support processes for DevOps Teams via Robotic Process Automation OR Provide up-to-date knowledge to CC to ensure minimal E2E solution time and relieve DevOps Teams, ...)
- o Cost Reduction and Operational Cost Management ODP 1.0, MBB 1.5

We need (A2/A3/A4):

- Project Management (support in complex projects, consulting, analysis, further development, project implementation, PMO tracking and documentation)
- Advice on the implementation of the strategy concept and to support in Automation Projects

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	22.03.202 <mark>3</mark>
confidential	30 of 41

2.2 Objectives

The project objectives and detailed description of the technical section and results with performance-oriented milestones and specific service obligations to be invoiced.

The project objectives include the execution of all activities in terms of quality and time so that the required services to reach project milestones (e.g. SOP) are given.

The activities and the different Tasks are described in chapter 2.1

2.3 Responsibilities

Fulfilment of the services described in these specifications must be guaranteed within the period specified.

A stand-in arrangement must be assured; a reduction in the scope of services shall not be accepted.

Both contracting parties shall appoint a coordinator and deputy at the start of the project who shall be responsible for the implementation of the services to be provided.

The Client's technical coordinator is overarching Marcus Kloss (T1-1Z).

The Client shall define from which process step the Contractor is to be commissioned precisely for which area of activity (interface definition). The concrete definition of the scope of every call of order hast to been clarified with the following OE2 overarching contacts:

T1-1 Marcus Kloss

T1-3 Jana Schulze-Hobeling

T1-4 Nils Marek

T1-5 Isabel Sylvester

T1-6 Robin Fritsche

T1-8 Anja Schau

2.4 Service composition

The service period is 36 months, from 01.04.2024 to 31.03.2027.

Optionally, it must be possible to extend the future contract for a further 24 months under the same conditions.

It is possible to offer for roles in cluster 1 or cluster 2 or cluster 1+2 (see column G in attached pricesheet). At maximum two suppliers will be nominated.

The composition of the service is defined as follows:

See 2.1 and the attached "price-sheet (CBD)" and the attached "Sidenote_T1_Projecktmanagement"

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	22.03.2023
<u>confidential</u>	31 of 41

2.5 System knowledge

The Contractor shall deliver the services described in the specifications itself using qualified specialists with knowledge of the following systems:

- Knowledge of Volkswagen Software Update Management System (SUMS), Cyber Security Management System (CSMS)

At each change of staff and during the orientation period for new employees, the Contractor must ensure that the contractually agreed performance meets agreed quality standards.

2.6 Schedule and project documents

The relevant project documents such as schedules and milestones shall be provided separately by the Client.

2.7 Framework conditions to be complied with, standards, technical guidelines

The contractor is generally free to plan the achievement of the objectives as they see fit. It is recommended to provide the necessary technical guidelines for the Contractor within which they must work.

The services to be provided by the Contractor as part of the project must be covered in the specifications with a level of detail that meets the approval of CARIAD SE. For more complex processes in particular, a workflow diagram is useful in order to define clear responsibilities and interfaces. This usually reduces the amount of correction work required during the ongoing work process.

Examples:

- Other applicable documents, insofar as these are not specified in section 4.5 "Applicable documents"
- Specification of standards, technical guidelines, operating equipment regulations etc. in accordance with which the work must be performed
- Geometric specifications and installation space restrictions (data record number, if necessary)
- Required tests/test procedures

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
<mark>confidential</mark>	32 of 41

2.8 Service provision

The place of performance is: Offsite/Remote

We ask all bidders, to include a Best Cost Country (BCC) approach in the main offer if possible.

 See attached pricesheet (CBD) and the **obligatory** Offsite/Nearshore/Offshore quotes in every category/line

Please indicate the Offsite/Nearshore/Offshore place of performance. This detailing must include a Proposal for a collaboration and delivery Model of the (different) shoring location(s).

Further preconditions regarding the realization of shoring proportions of the requested service delivery:

• Nearshore/Offshore capacities should have no disadvantages in comparison to Offsite capacities

The contractor has to make sure safety and security requirements e.g. Information Security, is ensured for all of the contractors sites at which employees are deployed for the project.

If appointments at CARIAD locations are necessary, travel expenses will be reimbursed according to CARIAD travel expenses guidelines.

Authorisation for the necessary access to the plant premises of CARIAD SE to carry out services shall be provided by the Client.

All necessary authorisations for access to CARIAD SE systems to carry out services shall be made available by the Client to the required extent before the project starts. The Contractor shall always provide the services using their own work equipment and materials. Unless otherwise agreed, the use of CARIAD SE work equipment and areas shall be generally subject to a charge.

CARIAD SE shall make the following provisions available over the course of the project:

• Detailed description of the provisions to be made by CARIAD for the project

In all correspondence with CARIAD SE and employees of CARIAD SE, the Contractor's staff shall always indicate that they are performing duties under a contractual agreement between the Contractor and CARIAD SE. The same shall apply when they contact third parties by order of CARIAD SE.

2.9 Transitioning phase

Pursuant to section 33 of the CARIAD SE Terms and Conditions of Purchase for Services in the Field of Information Technology (IT) and/or Electronic Information and Communication (TC), the following regulation shall apply in the present scope of tender:

Specifications	Place of Pla
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	33 of 41

Unless individually agreed in writing between the Client and the Contractor, a migration support (transition phase) shall commence six months before the end of the contract.

If the Client has named a successor service provider to the Contractor, the Contractor shall cooperate with the successor service provider during the last six months of the contract term in order to ensure a smooth transition of the service provision to the new Contractor.

The specific scope and content of the migration service shall be agreed between the Client, the Contractor and the successor service provider based on the requirements of the project. They are part of the scope of services described in the specifications regarding the technical content.

The Contractor undertakes to cooperate proactively during the transition phase, including the project-specific transfer of know-how and parallel cooperation with the successor service provider.

The familiarization, cooperation and transfer of service provision to the successor service provider by the Contractor shall be carried out in accordance with a handover and time plan to be agreed in advance between the Client, Contractor and successor service provider (transition plan and transition checklist).

The transition plan is to be coordinated between the successor service provider, the client and the contractor.

The following checklist lists exemplary criteria for a potential transition phase without claiming to be complete:

Checklist

- Maintaining the competence bearer of the Contractor in the project environment during the transition period Transition phase to ensure proper handover
- Handover of the complete documentation, artifacts, etc. by the contractor to the successor service provider or the client (according to agreed transition checklist)
- Follow-up documentation in case of incomplete, missing, out-of-date and/or incorrect documentation
- Support in the transfer of responsibilities to the successor contractor or the client
- Handover of ongoing tasks and projects by the contractor to the successor service provider or the client
- Dismantling of technical interfaces by the contractor, if necessary
- Migration of data/data relocation
- Project-specific knowledge transfer from the contractor to the follow-on service provider, e.g. in the form of workshops, and also through work shadowing if required
- Shadowing: Employees of the new contractor acquire the project-specific knowledge required for service provision by accompanying employees of the Contractor during service provision (physically or virtually). The Contractor's employees must explain their activities within the framework of agreed communication channels and be available for queries.
- Reverse shadowing: In this case, employees of the successor service provider carry out the
 activities for the provision of services, while employees of the Contractor support them,
 intervene in a corrective manner and are available for questions.
- Support of trial runs of the successor service provider by the Contractor

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
<u>confidential</u>	34 of 41

- All other project-specific activities of the Contractor that are necessary so that the successor service provider can take over and continue services of the same quality without interruption
- Participation of employees of the Contractor in feedback meetings. These shall be carried out by the Client if required.
- Return / handover of hardware (in particular test racks, test vehicles, other equipment) must be completed by the end of to be defined point in time
- Participation of employees of the Contractor in regular appointments

In the event of a transition from the current T1 partners to the new contractor (AN of this tender), one month's free induction training is required (start in 03/2024).

3 General order contents

3.1 Scope, conclusion of contract

"Contractual regulations" are all regulations between CARIAD SE and the Contractor that are either contained in the contract for the service itself or in documents that are referenced directly or indirectly in the contract.

The contract for the service is concluded as part of the CARIAD SE procurement process, which includes the purchasing conditions of Volkswagen AG. All references to Volkswagen AG are to be understood as a reference to CARIAD SE.

The type and scope of service as part of the contractual regulations are orientated to these specifications unless a specific matter is negotiated individually and regulated differently explicitly in writing.

The statutory rights and duties of the Contractor shall not be affected unless deviating regulations are agreed upon.

3.2 Responsibility, obligations regarding information, co-operation

The Contractor shall deliver the services independently, taking responsibility for their own actions, acting in relation to the outcome and exclusively with their own qualified staff. The Contractor shall provide their services in accordance with the latest level of scientific findings and technology and in compliance with the standards of proper professional practice, including documentation. Any technical, specialist or other stipulations by CARIAD SE shall not release the Contractor from their duties and responsibilities in relation to the complete and flawless provision of their services. By agreement with CARIAD SE, the Contractor shall be permitted to make use of subcontractors in their service provision.

The Contractor shall undertake to train their staff according to state-of-the-art technology and the applicable regulations and standards for execution of the activities on high-voltage vehicles agreed in the order. Furthermore, evidence of the qualification of the vehicle technology electrician as well as an instruction concept must be presented on request from the responsible body.

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
<u>confidential</u>	35 of 41

- Performing the service includes work on high-voltage vehicles
- Performing the service does not include work on high-voltage vehicles.

The Contractor shall provide their service in constant coordination with CARIAD SE and shall appoint a coordinator who shall plan and monitor the deployment of personnel and the provision of the service. This coordinator shall be the responsible contact person for CARIAD SE with regard to all matters concerning the project. CARIAD SE can provide this contact person with explanations with effect for the Contractor.

The staff employed by the Contractor act solely under the Contractor's authority. The Contractor shall ensure that said authority is exercised by them alone.

The coordinators of the contractual partners shall hold regular coordination meetings to discuss the content and implementation of the provision of the service. Questions regarding the execution of the agreement and the service delivery must be clarified only by the respective coordinators/the contractual partners.

CARIAD SE shall coordinate the specifics and any changes to the service to be delivered exclusively with the coordinator of the Contractor.

The Contractor shall undertake to adhere to the applicable confidentiality/non-disclosure agreement and access authorisation from CARIAD SE. This shall apply, in particular, to the compulsory wearing of ID upon entering the plant premises.

The Contractor shall, upon prior request, provide information at any time about the status of the provision of the service and disclose details about and enable access to the (partial) results and work documents as well as advance drafts and provide status reports on request.

3.3 Service deadlines

The agreed service deadlines and schedules are binding. Included in these schedules are final dates and, if applicable, intermediate dates, which may only be amended in writing and where mutually agreed.

3.4 Change to service

The written agreement must contain statements regarding the following points: description of the scope of services, remuneration (with written statement of increases and decreases), schedules and deadlines for execution and, if applicable, other contractual provisions.

3.5 Evidence of service / approval

The completion, based on milestones, of the services (in part or in full) as defined in these specifications shall be notified by the Contractor for approval or by provision of corresponding evidence of the service performance in writing with the invoice.

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	36 of 41

Once completion has been notified by the Contractor, CARIAD SE shall check the services. The Contractor shall, at the request of CARIAD SE and without separate remuneration, make the services available for approval and provide evidence of service execution and the documents necessary to do so. Any discrepancies discovered during the approval procedure shall be logged.

CARIAD SE shall grant approval if there are only slight and insignificant defects that have negligible effect on the intended use. The Contractor shall rectify any discrepancies that hinder the approval straight away and present their services anew for approval. The aforementioned regulations apply for renewed approval accordingly. The approval of partial services shall not prevent CARIAD SE from enforcing measures for discrepancies discovered at a later time in already approved partial services where the discrepancies only come to light when all system parts have been provided and are interacting with each other.

3.6 Remuneration

Services shall be remunerated as governed by a payment plan defined at the start of the assignment in accordance with milestones or service phases achieved.

The order value includes all incidental charges. Likewise, all expenses and costs that are not expressly accepted by CARIAD SE shall be paid by the Contractor and covered with the agreed price. Travel times, travel costs and incidental charges shall only be reimbursed if expressly agreed in writing.

Should services be reduced by CARIAD SE/specialist departments (e.g. due to project cancellations), no claim for the full stated amount can be made.

- For each call-off, the contractor must create a call-off document with reference to the future contract number including the final negotiated conditions (daily rates with 40 hour basis) and description of the coordinated work between AN and AG.
- Call-offs are PI-wise (quarterly) ordered as a trade or service at fixed price.
- Fixed price of the Call-offs are on basis of the negotiated daily rates on a 40 hour weekly basis and max. 220 days in a year.
- tracking of consumption must be provided by the nominated supplier on a quarterly basis
- Travel costs within Germany are covered by the negotiated daily rate and cannot be submitted and invoiced separately

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	37 of 41

3.7 General legal relations

The contractual regulations shall apply in terms of the agreed rights and obligations relating to topics such as interruptions to services, third party rights, liability and warranty as well as confidentiality and data protection and open source.

3.7.1 Warranty and liability

The Contractor undertakes to perform all services in a professional and careful manner. In the event of violations of these obligations, the warranty and liability regulations of the contractual regulations shall apply in other respects.

3.7.2 Third party rights

With regard to the services to be delivered by the Contractor, they shall ensure that these do not affect the rights of third parties in an impermissible manner. The contractual regulations apply in the event of legal violations.

3.7.3 Confidentiality and data protection

The services to be provided under contract to CARIAD SE are subject to confidentiality and data protection. The contractual regulations apply.

3.7.4 Open source

Contractors must comply with the relevant industry standards. The contractual regulations apply.

3.7.5 Cyber security

In addition to the specifications, the current CARIAD Cyber Security Basic Requirements ("CSGA") apply. Insofar as regulations in the CSGA and purchasing condition regulations of the actual contract contradict each other, the CSGA regulations will have priority over the regulations of the purchasing conditions.

3.8 Termination

CARIAD SE can withdraw from the contract at any time with notice of 2 weeks to the end of the month. The Contractor can only withdraw from the contract with notice of 2 weeks to the end of the month if CARIAD SE is in significant breach of contract and has not rectified this breach of contract even after a written warning of termination and an appropriate period has elapsed. A termination must be submitted in writing.

Should CARIAD SE terminate for reasons not attributable to the Contractor, the Contractor is entitled to the agreed remuneration for all contractual services that were provided up until the termination takes effect, plus compensation of documented costs for the reservation of staff and materials for a period up to one month after the termination takes effect.

Specifications	Place of Pla
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	38 of 41

Should it be necessary to terminate for reasons attributable to the Contractor, the Contractor is only entitled to remuneration for those parts that CARIAD SE can effectively use in economical terms – at the most the remuneration agreed in the contract for all of the services recognised as compliant with the contract up until the termination takes effect. Any other claims by the Contractor shall be excluded in this case. CARIAD SE has the right to partial termination.

4 General information

4.1 Other applicable documents

The Client shall provide the Contractor with all of the internal coordination documents / methods and process descriptions – in their latest applicable version – necessary for fulfilment of the contract and shall ensure that these can be viewed at the Client's location.

Subcontractors may only be engaged after written consent from the client.

For test bed tasks, the Contractor shall provide the Client with evidence of certification according to ISO 17025.

4.2 Software

If the services requested in the specifications contain complete or partial scopes for the development of vehicle-related software, i.e. software that has an influence on the vehicle and its functions, the applicable documents referred to in this section are binding.

- The requested services contain complete or partial delivery results for the development of vehicle-related software
- The requested services do not contain complete or partial delivery results for the development of vehicle-related software

4.3 Special characteristics

If special characteristics according to VDA volume "Product Development – Process Special Features (BM)" are components of the commissioned scope or if the scope is marked by the customer as relevant for special features, the contractor undertakes the guidelines of the Group Basic Requirements Software (in German abbreviated KGAS (Konzern Grundanforderungen Software)) as well as the LAH.893.909.D for software that is based on components, components or modules, which are installed in the vehicle are to be applied or ensured and adhered to during the fulfilment of the order.

Special features and the Formula Q capability software are available in the current version in Group Supply.

The key ones include Cyber Security, Privacy, Vehicle Safety, Anti-Theft Protection – not all special characteristics may be relevant for every function.

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	39 of 41

- The assignment is relevant for special characteristics
- The assignment is not relevant for special characteristics

4.4 Processing personal data

If the Contractor processes personal data which originate jointly with or from CARIAD SE, a separate data protection agreement must be concluded in accordance with the European General Data Protection Regulation (GDPR). This shall depend on whether order processing, joint responsibility or separate responsibility exists.

The relationship between CARIAD SE and the Contractor has been checked by the Client and corresponds to the following.

Comissioned data processing (CARIAD SE as the purchaser)

In the case of order processing, the conclusion of an Order Processing Agreement in accordance with Art. 28 GDPR is mandatory and must specify the object and duration of processing, the type and purpose of the processing, the type of personal data, the categories of data subjects and the obligations and rights of the party responsible. The contract draft shall be provided by the Client.

If the Contractor processes personal data that has a greater need for protection, the Contractor must have an assessment of its technical and organisational measures in accordance with TISAX carried out at its own expense at the request of the Client. It must be noted that the scope of the certification corresponds to the specific service and that the certification includes the "Data" audit objective (and the "Special Data" audit objective where special categories of personal data are processed). TISAX certification is not required if the Contractor can fulfil the requirements of the technical and organisational measures (TOM) as per Article 32 GDPR.

Joint responsibility

In the case of joint responsibility of the Client and the Contractor for the processing of personal data, a Joint Control Agreement (JCA) shall be required pursuant to Article 26 of the GDPR, which transparently governs and documents, in particular, the respective tasks of the obliged parties with regard to the rights of the data subjects. The contract draft shall be provided by the Client.

Seperate responsibility

Provided that the underlying technical task has been fully transferred to the Contractor and there is separate responsibility, the Contractor shall ensure that there is a suitable legal basis for the processing of personal data at all times and that all data protection provisions are complied with. When a Contractor engaged is located in an insecure third country, an

Specifications	Place of
T1- Projectmanagement	performance
Data classification:	<mark>22.03.2023</mark>
confidential	40 of 41

agreement for the transfer of personal data between two controllers provided by the Client shall be concluded.

• Not yet foreseeable

The processing activity is not foreseeable at this stage and will be evaluated and fixated at a later point of time of this sourcing. The contractor of this tender will proceed the DPA (Data Processing Agreement), NDA (non-disclosure agreement) and TISAX certification (if needed) process of CARIAD SE.

Is not required

There is no processing of personal data.

4.4.1 Evaluation of information security of partner companies

Select classification of the envisaged approval(s):

Ц	accordance with classification by the Development and/or Design departments)
	COMPONENTS AND ASSEMBLIES that are subject to non-disclosure, installed in production vehicles or not design-relevant.
	IMMOBILISER COMPONENTS (e.g. development and production system for keys, lock sets, engine control units, immobiliser masters, electrical steering wheel lock mechanisms etc.)
	Miscellaneous (see appendix) No special features

4.5 Applicable documents

Applicable documents and the documents referenced there in apply in the version valid on the date of issue of the specifications. The contractor shall ensure work is completed using the applicable documents which are valid for the specifications.

In particular, the following documents and standards must be taken into account, which are regarded as the basis for the contract when the contract is concluded:

- CARIAD SE General Terms and Conditions of Purchase
- CARIAD SE Terms and Conditions of Purchase IT & TK
- Contractual provisions for project-related travel costs of CARIAD SE

Specifications T1- Projectmanagement Data classification: confidential Place of performance 22.03.2023 41 of 41

All information exchanged via the shopping platform is subject to confidentiality.

Irrespective of this, the non-disclosure process applies project-specifically:

Non Disclosure Agreement - Cariad Net - Group Wiki (volkswagen-net.de)

Additional applicable documents

- price-sheet (CBD)
- Sidenote_T1_Projektmanagement

Source: Applicable documents that are not enclosed with the specifications can be accessed via the Volkswagen Group's B2B supplier platform on the Internet under www.vwgroupsupply.com or made available on request.