SERVICE PACKAGE
TOSCA TESTCASE PACKAGE

These additional terms shall apply to packaged offerings of Services provided to Customer ("**Service Package**"), as ordered by Customer in the Order and subject to the General Terms and Conditions or the relevant Agreement referred to in the Order.

1 Service Package Overview

Objectives and Targets. This Service Package helps Customers to build automated Test Cases quickly and efficiently. Over the course of 5 weeks, Company scopes, defines, creates and hands over 25 automated Test Cases to Customer. The 25 Test Cases come with an execution protocol that proves their successful, uninterrupted execution and that they are ready to use. Remote access will be required for delivery of this Service Package.

Delivery Schedule. Company uses the following timeline for providing the Services to Customer ("**Delivery Schedule**")

Tasks	Delivery Location	Role	Week1	Week2	Week3	Week4	Week5
Test Strategy	Remote	Architect	2 PD				
Test Case Implementation	Remote	Specialist		10 PD	10 PD	8 PD	
Test Case Review	Remote	Architect		1 PD	1 PD	1 PD	
Customization	Remote	Engineer			4 PD		
Execution Strategy	Remote	Engineer				4 PD	
Test Case Handover	Remote	Architect					1 PD

1.1 Efforts

Allocation of Company Consultants. For the Service Package engagement, Company will appoint different types of qualified Company personnel ("**Consultants**"), based on certain tasks, skills and knowledge based on following estimated allocation:

Role	Week 1	Week 2	Week 3	Week 4	Week 5	Total
Automation Architect	2 PD	1 PD	1 PD	1 PD	1 PD	6 PD
Automation Specialist 1		5 PD	5 PD	4 PD		14 PD
Automation Specialist 2		5 PD	5 PD	4 PD		14 PD
Automation Engineer			4 PD	4 PD		8 PD
Total						42 PD

Remote

1.2   Company Consultants – Description of Roles

Automation Architects are IT professionals with an academic degree in software engineering, computer science or equivalent and 3+ years of experience in the following fields: software application development, support, design or testing ("**Architect**"). They can solve complex problems by breaking them down into smaller units and managing the execution and delivery of a team towards resolution. Architects are subject matter experts for common automation and testing challenges (e.g. test data, environment configuration) and provide coaching for Company Consultants and Users. They insure the value of quality, are the main source of quality control, and lead the on-boarding process. The Architects also provide direction on the effective use of risk-based testing and Test Case design, effective test data management, and test automation access. Finally they act as the main point of contact between Customer, Company and supplier teams assigned to the project.

Automation Engineers are IT professionals with an academic degree in software engineering, computer science or equivalent and 2+ years of experience in object-oriented software development – particularly C# ("**Engineer**"). The Engineers assist in the creation of Test Cases and provides business abstractions of the UI and API interfaces to enable non-programmers to accomplish test automation. The focus of the Engineers is to ensure that automation is made possible with the highest degree of stability for the applications in scope. They contribute learnings to the outlook/retrospective events with Customer, including recommendations for future extensions and enhancements.

Automation Specialists are IT professionals with a few years of experience in either: software application development, support, design or testing ("**Specialist**"). Specialists create Test Cases, provide training, and perform hands-on coaching. They also assist in the automation, execution and maintenance of Test Cases. The focus of the Specialists is to transfer knowledge of Tosca's practical application to Users.

1.3   Definition of Test Case

A "Test Case" as used throughout this Agreement is defined as a specification of the inputs, execution conditions, testing procedure, and expected results that define a single test to be executed to achieve a particular software testing objective, such as to exercise a particular program path or to verify compliance with a specific requirement. Test Cases are implemented in Tosca using TestCase objects.

A Test Case is a flow covering: either multiple functions within a single application (e.g. more than 1 SAP transaction), or few functions across multiple related applications. In either situation, a Test Case covers multiple screens. Typically, Test Cases include between 20-40 different screens. For measuring purposes, Test Cases with more than 40 screens should be counted as multiple Test Cases.

1.4   Deliverables

Phase	No.	Deliverable
Test Strategy	1	Definition of 25 Test Cases to be implemented
Test Case Implementation	2	Tosca Subset with 25 TestCases
Customization	3	Optional: Customization or SET
Execution Strategy	4	Unattended Execution Strategy Document
Quality Checks	5	Delivery Status Report
	6	Task List
Final Handover	7	Delivery Wrap-Up Presentation

2 Service Package Description

The system under test must be determined to be a technology stack supported by the core Tosca product. If that determination cannot be made during a deep dive of the system by the Architect and the Engineer, then another system under test will need to be identified.

- This Service Package is solely intended for the creation of 25 automated Test Cases on the Tosca platform.
- This Service Package will require full remote access into Customer's environment to perform the services described.
- Company may select a third-party company to deliver the services described herein under Company supervision.
- Customer is responsible for documenting the selected Test Cases in a way that allows for remote delivery.

2.1 Test Strategy

Company Responsibilities: The Architect reviews the Test Cases provided by Customer and assists Customer in adjustments necessary to prepare manual Test Cases for automation. The Architect defines Test Cases with appropriate inputs and verifications to be used during Implementation. This may include the creation of a basic requirements structure and related test sheet(s) to support the effort. This process includes assessing suitable Test Case candidates for automation, reducing unnecessary dependencies between Test Cases, and breaking Test Cases into smaller entities.

The Architect will confirm the completeness of the documentation and work with Customer to gather any missing elements. Upon completion of the hand over, both parties will approve the *Definition of 25 Test Cases* in scope, and any changes made after the Test Strategy may result in timeline delays and/or budget changes.

Customer Responsibilities: Customer identifies key functional areas of the application in scope. Customer provides information and documentation of up to 25 previously defined (manual) Test Cases. Customer ensures participation of required Customer team members during meetings and workshops and approves the definition of the 25 Test Cases in scope.

2.2 Test Case Implementation

Company Responsibilities: The Specialist remotely automates 25 Test Cases as previously defined by the Architect and Customer during Test Strategy. The Test Cases are built based on Company best practices including naming conventions, folder structures and reusability. The Specialist reports possible requirements for Customizations to the Architect. The Specialist creates and distributes a *Tosca Subset with 25 TestCases*.

Customer Responsibilities: Customer provides remote access to the required infrastructure and/or tools to enable the Specialist in Test Case automation.

2.3 Customization

Company Responsibilities: *Customizations or Special Execution Tasks ("SET")* determined during Test Case Implementation are built to support the automation efforts of the 25 Test Cases for the application in scope by the Engineer. The Engineer provides the necessary files and coaches the Specialist on how to use and steer the specific controls or SETs.

Customer Responsibilities: Customer provides remote access to the required infrastructure and/or tools to enable the Engineer in developing Customizations or Special Execution Tasks ("SET").

2.4   Execution Strategy

Company Responsibilities: The Engineer fine tunes the automated Test Cases created during Sample Test Case creation and/or Training/Coaching sessions for sustained, repeatable execution. The Engineer assists Customer to implement an unattended execution strategy which may include such topics as:

- Setup and implementation of distributed execution
- Design and implementation of TCShell scripts
- Introduction of concepts, design and implementation of recovery scenarios

The Engineer supports these activities providing examples and coaching Users with the remaining allocated time budget. The Engineer creates and distributes the *Unattended Execution Strategy Document*.

Customer Responsibilities: Customer provides timely feedback to artefacts delivered as part of the Engineer's activities. Customer ensures participation of required Users in workshops.

2.5   Quality Checks

Company Responsibilities: During delivery, the Architect performs regular quality checks ensuring the use of the Tosca components and implementation is in accordance with Company standards and best practices. The Architect reports any blockers that impact the implementation, plan and schedule tasks and resources necessary to complete the delivery. In addition, the Architect schedules a weekly "touch point meeting" with Customer to identify open issues, review the delivery status and discuss upcoming tasks. The Architect creates, updates and distributes the *Delivery Status Report* and the *Task List*.

Customer Responsibilities: The required Customer team members join the "touch point meetings" and contribute to the creation and update of status reports and task lists.

2.6   Final Handover

Company Responsibilities: The Architect reviews the Test Case portfolio and QA processes of the implementation, documenting issues, risks and recommendations for next steps in a presentation. As part of the presentation the Architect provides best practices on how to enhance the use of Tosca in daily operations so Customer gains maximum value from Tosca. The Architect creates and distributes the *Delivery Wrap-Up Presentation*.

Customer Responsibilities: Customer participates in the Delivery Wrap-Up workshop.

3 Pricing and Invoicing

Person Hours and Days. One On-Site person day ("**PD**") equals 8 person hours ("**PH**") working time. A minimum effort of one PD including expenses are charged for each agreed On-Site assignment. The indicated PD for remote sessions may be held on several days.

Invoicing. Invoicing for Services occurs one-month ex-post and Company shall, based on its time recording, invoice Customer for a prorated number of PDs actually worked on a time and material basis.

Service Package Deduction. PDs/PHs get subtracted from the pool specified in the Order. However, the Service Package Fee is pre-discounted and may only be consumed entirely. The Service Package is capped with the fixed PDs and Fee as indicated in the Order and may not be exceeded. PDs which have not been consumed by the indicated end of the Service Package Term shall be finally invoiced to Customer. Customer may schedule and consume remaining PDs within 3 months after the final invoice has been issued to Customer.

Service Change Order. If the parties mutually agree to change or extend the terms of the Service Package, including but not limited to the type or amount of Service to be performed, the parties shall prepare and execute an agreement in writing ("**Change Order**") stating, at a minimum (i) the effective date of the Change Order, (ii) the specific changes, with reference to the affected sections of the Order, and (iii) the effect of the changes on any Fees or other amounts described in, and to be paid under, the Order.

Service Completion. The Service is completed if the contracted number of PDs is exhausted or the deliverables as per the Agreement are delivered. Deliverables are defined as delivered as soon as there is written approval or if there is no written objection within one (1) week after the deliverable was made available to Customer. Modifications to the contracted number of PDs or deliverables require a mutual agreement in form of a Change Order.

4 Organization

Customer Responsibilities and Required Infrastructure. The successful completion of the Order requires Customer's cooperation. Customer shall provide all such information, data, documentation, equipment and other physical and human resources as may be reasonably required by Company to enable Company to meet its obligations under this Agreement as pre-requisite and are not included in the Fees. On-Site and particularly Remote Service requires Customer to make Customer Systems available.

Tosca Software License. Licenses for Tosca are not part of the services engagement agreed herein and not included in this services proposal. It is therefore Customer's obligation to ensure that the Company consultant conducting this services engagement for Customer is provided with the required Company Software licenses.

Location of Delivery. Package Services are delivered at Customer's delivery address ("**On-Site**") as stated in the Order as well as remotely at Company locations ("**Remote**").

Staffing. Company appoints experienced Consultants to supervise the Services. Company may select its own as well as personnel from selected partner companies. In any case Company remains Customer's sole contractual partner and ensures to Customer that the selected partners are following set terms. Customer acknowledges that Company' subcontractors may have access to Customer systems. Given a prior notice of 2 weeks, Company may, at any time, replace personnel according to expertise, focus areas or roles.

Lead Time. Company starts delivery of the services no later than 6 weeks after Customer's signing of this Agreement for the Service to be provided. Company ensures that lead times for requested Service Packages is kept to a minimum. Any Service engagement is planned and mutually agreed upon in cooperation between the parties in accordance with the recommended Delivery Schedule, which shall be the basis for resource allocation and travel arrangements and must be finalized 2 weeks prior start of any Service at latest.

Delivery Pause. Customer caused short notice reduction to project staff (e.g. due to Customer's inability to carry out its duties in accordance with the Delivery Schedule, change of Delivery Schedule) is considered a "**Delivery Pause**". In such an event Company keeps its Consultants engaged until the end of the week the notice was given. Customer has a period of one week to complete the requested duties for immediate resumption; if Customer does not comply, regular lead times apply to re-staff and resume the Service. Any expenses caused by a Delivery Pause are invoiced to Customer.

Workshop Size. Any workshop or training is limited to 10 participants to sustain a trainer-to-participant ratio that is manageable.