

# SERVICE SPECIFICATIONS / USER GUIDES

## TEMENOS CLOUD SERVICES

### CORE PRODUCTS AND INFINITY USING MICROSOFT AZURE

Version: 29<sup>th</sup> July 2022

#### Introduction

The purpose of this document is to describe the Cloud Services provided by Temenos to the Client under the Agreement. This document forms part of the User Guide(s) for the Cloud Services set out in the attached Order Form using Microsoft Azure, together with all schedules and annexes and any documents attached or referenced in it. Further details are also provided in the Operations Manual and the Documentation for the Temenos Software. Please see the following link for further User Guides:

<https://docs.temenos.com/>

This document is subject to change at the discretion of Temenos, however any such policy change will not result in a material reduction in the Cloud Services provided to the Client.

Any defined terms used in the Service Specifications shall have the meanings given to them in the Agreement unless otherwise defined or the context requires otherwise

The Cloud Services comprise:

- access to the Temenos Software and Support Services relating to the Temenos Software when hosted and managed by Temenos;
- provision of the specified Temenos Environments and associated IT Service Continuity;
- provision of the Management Services which includes Technical Services; Security Services; Cloud Implementation Services and Operational Services.

All Cloud Services documentation and communications etc. are in English. All translation requirements are outside of the scope of the Temenos' responsibilities. No Cloud Services are performed from the premises of the Client. All activities undertaken by Temenos are performed from Temenos premises or from the site of the data centers of the Hosting Provider or other third party service provider unless otherwise specified in an Order Form or agreed in accordance with the Agreement.

#### 1. Definitions used in this Service Specifications

<b>Azure Active Directory</b>	Microsoft's cloud-based identity and access management service, which helps an organisation's employees sign in and access resources in external systems, such as Microsoft Office 365, the Azure portal, and other SaaS applications including those provided by Temenos as part of the Cloud Services.
<b>Azure Private Link</b>	Provides private connectivity from a virtual network to access Azure PaaS Services (for example, Azure Storage and SQL Database) and Azure hosted customer-owned/partner services over a Private Endpoint in a virtual network. Traffic between a virtual network and the service traverses over the Microsoft backbone network, eliminating exposure from the public Internet.

<b>Azure Subscription</b>	An agreement with Microsoft that enables a Party to obtain Microsoft Azure services. The subscription pricing and related terms are governed by the offer chosen for the subscription. (See Microsoft Online Subscription Agreement and How Azure subscriptions are associated with Azure Active Directory).
<b>Azure Virtual Network</b>	A service provided by Microsoft Azure as part of an Azure Subscription that is foundation for the creation of a private network.
<b>Backup</b>	A snapshot of a Temenos Environment representing the state of that Temenos Environment and any data it contains at a particular point in time.
<b>Client Portal</b>	The web based portal or url(s) provided to the Client from time-to-time in order to access the Support Services.
<b>Cloud Service Desk</b>	The help desk system provided by Temenos for the requesting and provision of support related to the Cloud Services and the Temenos Software.
<b>Core Products</b>	The Temenos Software designated as such in the Order Form and which may include Transact (T24), Financial Crime Management (FCM); Temenos Data Lake (TDL); Temenos Payments Hub (TPH); Analytics; and Temenos Channels (UXP).
<b>Dependency</b>	Any responsibilities, Client requirements, roles and obligations of the Client required for the purpose of enabling or facilitating the performance of the Cloud Services.
<b>Developments</b>	Any development or modification to the Temenos Software, made by Temenos (or a Temenos Affiliate) at the Client's request. Developments are identified in the relevant Order Form.
<b>Guest User</b>	A record added to a Client-specific Temenos' Azure Active Directory account that represents a User in the Client's Azure Active Directory account that will be accessing the Cloud Services.
<b>Identity Provider</b>	An identity provider is a system entity that creates, maintains, and manages identity information for principals while providing authentication services to relying applications within a distributed network.
<b>Implementation Project</b>	The project to provide Professional Services to implement the Temenos Software which is provided by the Implementing Party and which is scoped in the agreement /statement of work between the Client and the Implementing Party.
<b>Implementing Party</b>	The Temenos entity, or a Partner or other third party providing professional services to the Client.
<b>Incident</b>	An unplanned interruption to or deviation from the Cloud Services or a reduction in the quality of that service and including (in the context of the Cloud Services provided) as a result of a Software Non-Conformity. Incident management is the process of managing the lifecycle of all Incidents that happen or could happen in delivering the Cloud Services.
<b>Infinity</b>	The Temenos Software designated as such in the Order Form and which may include DBX Digital Banking Platform, Quantum, Experience APIs, DBX Application, Onboarding, Customer 360, Journey Manager, Journey Workspace, and Journey Analytics.
<b>Interfaces</b>	The connectivity specified and supplied by Temenos as listed in the Order Form or the relevant User Guide.

<b>IT Service Continuity</b>	The activities undertaken by Temenos to provide service continuity in the event of a disaster or a need to activate the Temenos business continuity plan or service continuity management plan in respect of a Major Incident.
<b>Major Incident</b>	An event or series of events with wide impact on the Cloud Services and critical urgency.
<b>Management Services</b>	the management services set out in section 7 below.
<b>Non-Production Environment</b>	A non-production or non-live Temenos Environment which may include an environment designed and build for SIT, demonstrations or training and to which no service levels apply.
<b>Non Software Fix</b>	A configuration change, a Workaround, a data modification, or other change that is implemented to resolve a Software Non-Conformity and that does not involve a Software Fix.
<b>Operational Services</b>	The activities and services undertaken by Temenos in relation to the hosting, management and maintenance of the Temenos Environments used to provide the Temenos Software.
<b>Partner</b>	A third-party entity that has a current and valid Temenos Services Partner Agreement. A list of Partners is available upon request.
<b>Production Environment</b>	A Temenos Environment which is designed, built and maintained in order to hold Client Data and be made available to a specified service level as defined in the Support Policy.
<b>Problem</b>	<p>A problem is defined as the root cause of one or many Incidents. A Problem ticket is opened for every Incident and will address the root cause of the Incident. For clarity, a Software Non Conformity is a Problem and a Problem ticket is opened for any Software Non Conformity</p> <p>Problem management is the process responsible for managing the lifecycle of all Problems that happen or could happen in delivering the Cloud Services.</p>
<b>Sign-off / Signed-off</b>	Giving written confirmation of a particular event or of receipt, or agreement to, the form of an item of software, documentation or other material.
<b>Software Fix</b>	A coding change to the Temenos Software or any part of it to fix a Problem and which may include a patch, fix, Workaround, service pack or build.
<b>Software Non-Conformity</b>	Occurs where, the Temenos Software does not perform the functions described in the applicable Documentation.
<b>Support Services</b>	means Temenos' obligation to help the Client remedy a problem with the operation or performance of the Cloud Services or to update the Cloud Services, as specified in the Order Form and described in the relevant Temenos support policy.
<b>Temenos Environment</b>	The cloud environments under the control of Temenos used to provide the Cloud Services, as defined in section 3 below. Temenos Environments are further sub-divided into Production Environments and Non-Production Environments.
<b>Temenos Software</b>	The Temenos software modules set out in the applicable Order Form.
<b>Update</b>	A change to the Temenos Software as part of Support Services and may include Software Fixes.

<b>Upgrade or Main Release</b>	A major qualified and tested release of the Temenos Software or any part of it that includes Software Fixes and any improvement added to the functionality of the Temenos Software as part of Support Services as to constitute revised Software or part thereof; a main release is usually released annually.
<b>Workaround</b>	A procedural change that works around a Problem, a Software Non-Conformity or is a temporary / hot fix.

## 2. Service Overview and Temenos Software

Access to the Temenos Software will be provided to the Client as part of the Cloud Services.

As part of the Documentation, Temenos will develop an operating procedures manual relating to the delivery of the Cloud Services specifically to the Client (the **"Operations Manual"**). Temenos will keep the Operations Manual up to date and provide revisions as appropriate to the Client on a quarterly basis. The Operations Manual:

- Governs the day to day working relationship between Temenos and the Client;
- Describes the procedures used by Temenos relating to the monitoring, management, security maintenance and service continuity of the Cloud Services provided to the Client.
- Describes the frequency, scope and applicability of specific operational processes (e.g. COB) in relation to the Cloud Services and Temenos Environments purchased.
- Defines the scope, service levels and escalation processes.

Temenos shall not be responsible for any failure in the provision of the Cloud Services arising from any failure or delay in the fulfilment of the any Client Dependency set out in the Operations Manual.

## 3. Temenos Environments

The Cloud Services are currently made available on Microsoft Azure and utilize components provided by Microsoft Azure as Infrastructure-as-a-Service (IaaS) and / or Platform-as-a-Service (PaaS).

Temenos shall provide the Client with the Temenos Environments set out in the Order Form corresponding to the Temenos Software set out in the relevant Order Form.

The below table sets out the standard set of Temenos Environments that are provided as part of the Cloud Services for each of the relevant products unless otherwise specified in the Order Form.

Access to additional Temenos Environments or extended/ additional access to Temenos Environments may be requested via the Change Request process.

<b>Temenos Product</b>	<b>Implementation for the period specified in the Order Form:</b>	<b>During user acceptance testing</b>	<b>Pre go live</b>	<b>Standard Production once live</b>	<b>Ad hoc requirements post go live limited to 4 weeks per Contract Year</b>
Core Products and Infinity	Dev/SIT/Training	UAT	LIVE	LIVE/PRE-PROD/UAT	SIT/Training

### Production Environments

<b>Environment</b>	<b>Description</b>	<b>Notes</b>
--------------------	--------------------	--------------

<b>LIVE</b>	<p>An environment managed by Temenos for the purposes of providing the LIVE services to the Client and Users of the Client.</p> <p>This environment will be provided upon completion of user acceptance testing.</p>	<p>Temenos managed.</p> <p>Provided as a High Availability environment with Disaster Recovery at a secondary data centre location and near real time geo-replication (data is replicated asynchronously to the Secondary Location).</p>
<b>UAT</b>	<p>An environment managed by Temenos to support user acceptance testing and verification of changes in a pre-production environment before deployment to the LIVE Environment. This environment will be provided from the commencement of user acceptances testing.</p>	<p>Temenos managed.</p> <p>Provided as a High Availability environment.</p> <p>Recovery at secondary data centre from Backup / copying LIVE.</p>
<b>PRE-PROD</b>	<p>An environment managed by Temenos to support verification of changes in a pre-production environment before deployment to the LIVE Environment. This environment will be provided upon completion of user acceptance testing.</p>	<p>Temenos managed.</p> <p>Provided as a High Availability environment.</p> <p>Recovery at secondary data centre from Backup.</p>

#### Non-Production Environments:

Environment	Description	Notes
<b>System Integration Test (SIT)</b>	<p>An environment managed by Temenos to support systems integration testing with external systems. This environment will be provided during implementation of the service, when Temenos is validating Software Fixes and for up to four (4) weeks per annum after go-live. The Client shall use the environment in a timely manner to conduct testing of Software Fixes otherwise additional Fees shall apply.</p> <p>This environment is not provided on a High Availability/ Data Replication / Disaster Recovery basis.</p>	<p>Temenos managed.</p> <p>Additional Fees shall apply for any additional use requested.</p>
<b>TRAINING</b>	<p>An environment managed by Temenos to support the training of the Client Users of the service. This environment will be provided during implementation of the service and for up to four (4) weeks per annum after go-live.</p> <p>This environment is not provided on a High Availability/ Data Replication / Disaster Recovery basis.</p>	<p>Temenos managed.</p> <p>Additional Fees shall apply for any additional use requested.</p>

<b>DEV</b>	<p>An environment for use by the Implementing Party to develop additional functionality/customization for the Client.</p> <p>Access to this type of environment is provided at an operating system level, allowing the Implementing Party to undertake the necessary activities required to configure, customise and (where applicable) develop the service specifically for the needs of the Client.</p> <p>This type of environment is provided during implementation only. Additional access beyond this will be chargeable.</p> <p>This environment is not managed by Temenos under this Agreement.</p>	<p>DEV environments are provided as stated in in an Order Form and for the specified duration or after the Effective Date, may requested via a Change Request.</p> <p>Client Data must not be stored in this environment. No SLA is provided for this environment.</p> <p>The users of the Development environments are responsible for providing Backups and restores of their development and testing work.</p>
------------	---	---

- **High Availability**

Only the following Temenos Environments are provided with a high availability configuration that provides resilience in the event that a server is undergoing maintenance ("**High Availability**"). The specified Temenos Environments are implemented utilizing multiple resilient infrastructure components to maximize the availability of the service being provided from those environments.

Infrastructure components are distributed across different availability sets with the selected Microsoft Azure data center, ensuring that any maintenance being undertaken by Microsoft does not impact the service.

<b>Temenos Environments</b>	<b>Service only as further specified in the Order Form (not all products may be purchased by the Client)</b>
<b>LIVE Environment</b>	The Core Products (as per the modules set out in the Order Form).
<b>UAT Environment</b>	
<b>PRE-PROD Environment</b>	
	Temenos Channels / Infinity (as per the modules set out in the Order Form).

- **Disaster Recovery**

Only LIVE Temenos Environments are allocated a primary and secondary data centre location within a particular location. LIVE Temenos Environments will be replicated to the secondary data centre location in near real time to ensure recoverability.

- **Failover**

Failover between the data centers is managed by Temenos as part of the Cloud Services. Failover procedures are fully tested prior to go live and reviewed and validated on an annual basis.

The standard point in time restore capabilities for the Cloud Services using relevant database services from the Hosting Provider, allows data to be restored to any 5 second point within the last 30 days. Where this standard is not applicable, the details are set out in the Documentation for the Temenos Software.

- **Backups**

Any Temenos Environment with the scheduled backups attributes is subject to the standard scheduled backup processes undertaken by Temenos.

Only data associated with the LIVE service will be synchronized to this location on an ongoing basis to support recovery of the LIVE service. The data associated with all other Temenos Environments will be restored from the last Backup of that data.

Only the LIVE Temenos Environments / services are provided with geo-replication (data is replicated asynchronously to a secondary region) to a secondary site.

- **Daily Backups:**

Point-In-Time-Restore (PITR). Where supported, the database associated with the Temenos Environment is configured for PITR, with a rolling 30 day retention period. This method of restoration allows the database, or a copy of that database, to be restored to any point in time within the rolling retention period.

- Monthly backup to archive. The database associated with the Temenos Environment is backed up in an encrypted format and retained for a rolling 24 month retention period.
- Annual backup to archive. The database associated with the Temenos Environment is backed up in an encrypted format and retained for a rolling 7 year retention period.

- **Business Continuity**

All services are covered by a disaster recovery plan and the Temenos business continuity process, which will be invoked by Temenos in the event that a disruptive event occurs at the primary data centre location. The plans and the business impact assessment are reviewed annually and 6 monthly testing of key business continuity arrangements is undertaken.

Temenos has certified its Business Continuity Management system to ISO/IEC22310 standards.

- **Temenos Managed Environments**

The Cloud Services include full management of the managed Temenos Environments, including:

- monitoring of all Temenos Environments and management of alerts;
- tuning of systems and procedures to optimize the service performance;
- security monitoring to prevent, detect and respond to vulnerabilities and security events;
- patching of all infrastructure, platform and application components to address security vulnerabilities, including zero day and scheduled updates;
- Backup schedule for all environments with regular scheduled testing of restoration from Backup; and
- analysis and rollout of new capabilities that improve the security, operations and performance of the service.

## **Other Environments**

Unless specified in an Agreement, no allocation of environments has been made in relation to the requirements of any Partner or subcontractor used by the Client. It is assumed that the Partner or subcontractor will provide its own development and test environments. Non-Temenos managed environments may only be accessed using a Temenos issued email ID.

## **Connectivity to Temenos Environments**

### **Private End Points**

Client access to the private end points is supported by the following methods:

- an IPSec site to site VPN connection;
- a Leased Line (ExpressRoute) connection; and
- an Azure Private Link network to a Client Azure Virtual Network hosted on the Client's Azure Subscription or hosted on Temenos' Azure Subscription.

Temenos shall provide the Client with access to the private end points using the method set out in the Order Form.

### **Public End Points**

Access to public end points is supported by the following methods:

- An Azure Private Link network to a Client Azure Virtual Network hosted on the Client's Azure Subscription or hosted on Temenos' Azure Subscription if so expressly agreed. Unless agreed otherwise in the Order Form, the Client is responsible for securing this end point with a certificate relating to the Client domain and for any activities associated with the management of that certificate.
- Temenos hosted end point. Temenos will provide the Client with a certificate signing request (CSR) that will be used by the Client to generate a signed certificate. The Client is responsible for providing a signed certificate relating to the Client domain and for any activities associated with the renewal of that certificate.

For Infinity, the public end points accessible are listed in the Documentation.

The Client is responsible for providing access to an appropriate system for the authentication of End Users who are accessing the channels service and/or Applications.

Temenos shall provide the Client with access to the public end points using the method set out in the Order Form.

### **Supported Interfaces and Developments**

Temenos shall only provide Cloud Services in respect of Interfaces and Developments which are made by Temenos or an Affiliate of Temenos at the request of the Client.

Temenos only provides connections to and support for the Interfaces and Developments as defined in the Order Form.

Note: The interfaces and developments created by third parties do not form part of the Cloud Services. Any additional interfaces or modifications to Temenos Software created by Temenos or the Temenos Affiliate identified following the Effective Date of the Order Form must be submitted as a Change Request.

Where backend integration is necessary for using publicly accessible services like Internet Banking, unless otherwise agreed in the Order Form the Client will need to subscribe to an Azure Subscription and maintain an Azure Virtual Network in that subscription.

Backend integration will be via the Client's Azure Virtual Network and the Client is responsible for managing the configuration of that Azure Virtual Network to their systems. Temenos will create an Azure Private Link connection to the Client's Azure Virtual Network for the purposes of routing network traffic between the Client and Temenos Cloud Service environments.

## **4. Access**

Access to the Temenos Software and any Client Data is provided through the unique URL (Uniform Resource Locator, the distinct web address in the Internet for a web page or any other file format available). Client Data is available in the Production Environment and Backup instances. During on-boarding / implementation, Client Data will also be accessed in a Non-Production Environment for training and user acceptance testing purposes.

The description of the access management features provided for the Temenos Software (and each product provided) is set out in the Documentation for such modules. Some Temenos Software and Interfaces may use or be used by public channels and in such circumstances the Client is responsible for assessing the security and risks associated with such a channel for access.

The Client and Partner, or Temenos if Temenos is providing the relevant on-boarding services, will define the profiles for groups of Users during the on-boarding phase and create the User IDs and profiles and manage these for the duration of the provision of the Cloud Services.



Physical access to user workstations is the responsibility of the Client.

For further information regarding how Microsoft manage security and privacy in relation to Client Data held in Azure please see the following links:

<https://www.microsoft.com/en-us/TrustCenter/CloudServices/Azure>

<https://www.microsoft.com/en-us/TrustCenter/Privacy/We-set-and-adhere-to-stringent-standards>

## 5. Client Requirements

The requirements on the Client will be confirmed during the applicable scoping period or through any other Professional Services agreement in place between the Parties.

If the Client cannot meet the stated requirement, Temenos is not responsible for any failure to provide the Cloud Services.

As a minimum, the Client will need to provide or undertake the following and such constitute Dependencies:

- Workstations with Temenos supported internet browser software (e.g. Microsoft Edge).
- A dedicated internet line between the Client network and the public internet with sufficient bandwidth to accommodate the traffic channels (both Temenos and third party) connecting to the Cloud Services.
- A development/test environment if such is not acquired from Temenos.
- Printers, local to user workstations for reports.
- Timely provision of any required digital certificates belonging to the Client.
- For the following services as applicable, unless otherwise agreed in the Order Form the Client will need to create an Azure Virtual Network within an Azure Subscription owned by the Client:
  - Integration to a Client system and the Client's contracted third party systems via an Azure Private Link.
- Where applicable and including for Infinity, a list of supported devices, OS and browsers is published as part of the applicable Documentation. Devices and OS versions not published on the "supported" list may or may not operate with the current version of the Temenos Software. For non supported or older versions of devices, browsers and OS versions, support may be provided a Change Request basis on a time and materials basis.
- The Client will ensure that it provides sufficient staff dedicated to the performance of any Client responsibilities and Dependencies and who have appropriate skills as business and IT specialists. The Client's resources shall provide timely inputs and information as required in a timely manner.
- The Client's team should be capable of learning about the operation of the Cloud Services and include individuals with the capability to become trainers of the Client's other Client Users.
- In providing any Client Sign-offs, the Client shall be responsible for consulting with all relevant stakeholders within the Client and promptly providing to Temenos a single consolidated Client position on each such item.

## Client Nominated Individuals

The Client must provide in writing the names of the people who are authorized to interact with Temenos in relation to the Cloud Services, using any prescribed Temenos documentation and processes ("**Client Nominated Individuals**"). For any instructions relating to the deletion or transmission of Client Data, Temenos reserves the right to validate such instructions and to seek additional confirmatory approvals from the Client. All interaction must take place through agreed channels and using the Client's official domain and such Client Nominated

Individuals. The Client is responsible for ensuring that its personnel who are authorized to interact with Temenos are maintained as up to date. Temenos takes no responsibility for any delays arising from Temenos validating the authority or instructions of such personnel.

## 6. Cloud Implementation Services

The delivery of the Cloud Services require implementation support services provided by the relevant Temenos entity during the Implementation Project (the “**Cloud Implementation Services**”). The Agreement shall set out the Fees and any additional terms and conditions.

Additional Cloud Implementation Services may be requested from Temenos as provided for in the service catalogue subject to payment of the applicable Fees. This section may be updated from time to time or via the service catalogue made available via the Client Portal.

The obligations of the Client or the Implementing Party on its behalf, are set out below and the performance of such obligations are necessary for Temenos to be able to perform the Cloud Implementation Services and/or to support a successful Implementation Project by the Implementing Party and the Client. If the Implementing Party is not a Temenos Affiliate, the Client shall take responsibility to ensure the Implementing Party fulfils the activities designated to the Implementing Party.

The stages will run sequentially in the order set out in the table below unless otherwise set out in the Services Order. If the Implementation Project is to be multi-phased then this must be expressly agreed within the scope of the Services Order and the Order Form for the Cloud Services. In such cases only, there will be multiple occurrences of certain of the stages as further set out in the relevant plan for the Implementation Project.

Any changes to the activities listed in this section, including but not limited to the number or composition of the stages, can only be made in accordance with the Change Request process. Any changes to the Implementation Project scope which results in changes to the scope of the Cloud Implementation Services can only be made in accordance with the Change Request process.

Delivery Stage as per Temenos Implementation Methodology (TIM)		Cloud Implementation Services provided by Temenos	Activities required from the Client or the Implementing Party on its behalf
Agile	Waterfall		
		Mobilizing Temenos resources which it is acknowledged can take up to 6 to 8 weeks from the final signature of the Order Form by both Parties.	Providing sufficient staff dedicated to the performance of any Client activities and who have appropriate skills as business and IT specialists.
		Attending the project kick-off meeting, and provide an overview of Temenos SaaS governance	Organizing and conducting the project kick-off meeting with Temenos.
		Gathering and reviewing the project information for onboarding of the Client such as, but not limited to, Client Users	Providing all required information to Temenos and validating the relevant

<b>Discover</b>	<b>Initiation</b>	access to Temenos Environments and to the ticketing system.	Cloud Client onboarding document provided by Temenos.
		Initiating the Cloud Services onboarding stage: Client Azure Subscription and other internal set-up.	Getting familiar with the Temenos Cloud Services Client Onboarding Pack, which consists of the Cloud release and management procedures, the Cloud Incident management procedure, the Cloud operational handover, the Disaster Recovery (DR) test plan template and the Client go-live checklist.
		Setting up the connectivity to the Temenos Environments.	Co-operating with and supporting Temenos in setting up the applicable connectivity.
		Provisioning Model Bank environment for induction training and workshops such as process led workshops if such Temenos Environments are within the scope of the Implementation Project.	
		Providing inputs to the project plan for Temenos activities.	
		Reviewing and validating the project plan.	Delivering the project plan to Temenos.
	<b>Analysis and Design</b>	Reviewing any Client-specific non-functional requirements (NFRs) defined within the scope of the Implementation Project.	Conducting meetings to review the non-functional requirements (NFRs) and providing Sign-off on such NFRs.
		Review specifically Disaster Recovery (DR) testing plan.	Conducting meeting to review Disaster Recovery (DR) testing plan and providing Sign-off to such DR testing plan.
		Reviewing and validating Interface requirement documents (IRDs).	Conducting meetings to review Interface needs. Preparing Interface requirement documents (IRDs) and providing Sign-off to such documents.
		Reviewing and validating project release schedule of change packages.	Reviewing and validating project release schedule of change packages.
		Reviewing and providing sign-off to Temenos Environments target architecture taking into account the non-functional requirements (NFRs) and data storage and users.	Reviewing Temenos Environments target architecture and providing details on data storage and residency of users (data transfers).
			Conducting meetings with the Client to obtain parameterization requirements for the Temenos Software.

<b>Design</b>		Provisioning Temenos Environments in scope and used for the subsequent project stage(s).	Participating in meetings as required to provide the required parametrization for the Temenos Software to enable the delivery of the initial software build (ISB).
		Informing the Client of any changes and participating in the Implementation Project change management process.	Initiate change request procedure and ensure the change management process is followed.
<b>Deliver</b>	<b>Build</b>	Setting up Temenos Environment target architecture.	
		Provisioning Temenos Environments in scope and used for the subsequent stage(s).	
		Release changes (fixes, Updates and enhancements) into Client testing Temenos Environments (SIT and UAT) with a maximum of 2 project releases per week per Temenos Environment.	Request a package delivery into Client testing Temenos Environments through the project release and change management procedure.
	<b>Test</b>	Planning and Preparing Disaster Recovery (DR) tests.	Co-operating with and supporting Temenos to plan and prepare Disaster Recovery (DR) tests.
		Executing and reporting Disaster Recovery (DR) tests.	Providing Sign-off to Disaster Recovery (DR) tests.
		Where appropriate, running Close of Business (COB) once per day in Client testing Temenos Environment (SIT and UAT).	
		Reviewing Client specific performance test plan.	Planning and preparing Client specific performance tests.
		Participating to performance tests by monitoring the Temenos Environment(s), supporting loading testing and participating to issue investigation/fixing.	Executing performance tests and providing Sign-off for performance tests.
		Applying performance tuning on the Temenos Environment using findings from performance tests execution.	Validating performance tuning.
		Providing any Cloud Services configuration requested as part of Interface scope.	Providing Sign-off for Interface tests.

<b>Deploy</b>		Release changes (fixes, updates and enhancements) into Client testing Temenos Environments (SIT and UAT) with a maximum of 2 releases per week per Temenos Environment.	Request a package delivery into Client testing Temenos Environments through the release management procedure.
		Resolving Temenos Environment issues or assisting the Client with the process of resolving Temenos Environment issues.	Logging any Temenos Environment issues.
	<b>Deploy</b>	Performing hardening activities in Production Environment including security check and undertaking corrective actions.	
		Where relevant, automating Close of Business (COB) in Production Environment.	
		Reviewing go live check-list.	Conducting go live check-list review.
		Executing one set of go live activities, which form part of the Cloud Implementation Services under the Services Order. A multiphase Implementation Project is not supported unless expressly agreed in the Services Order.	Requesting go-live.
			Providing Sign off for the go-live.
			For Infinity, the Client must inform Temenos when the Client commences using any Platform Services provided as part of the Cloud Services for production / go live purposes.
		Handing over to Temenos cloud operations for run.	Co-operating with and supporting to hand-over to Temenos cloud operations for run. This includes handover of software developments conducted by or on behalf of the Client, if any
		Preparing the Temenos cloud operations procedures for the Client.	Providing Temenos cloud operation hand-over Sign-off.
		Reviewing and providing sign-off for operational readiness and go-live	Provide remediation plan in case of rejected go-live
		Providing assistance to the Client for one calendar month following go live during the deployment stage, which shall consist of providing guidance to the Client on using the Cloud Services procedures (such as Release and change management, Incident management) and fast-tracking and analysing any Incidents arising in that month.	

**Migration. This section is only applicable if data migration is within scope of the Implementation Project.**

Cloud Implementation Services provided by Temenos	Activities required from the Client or the Implementing Party on its behalf
Reviewing the project scope of data migration and verifying the number of data migration runs to be conducted.	Conducting workshops on data migration kick-off meetings and mapping.
Supporting the Implementing Party in setting-up the folders & the sync process for file uploads and in loading the data files.	Setting-up & integrating the core banking data migration tool. Providing Client Data in an appropriate data format for migration loads.
Assisting in monitoring the platform during the loading and tuning where needed.	Performing data file loading.
Assisting in data extraction if not automated by the Implementing Party.	Performing reconciliation and taking corrective actions for rectifying data.
Running go live data load.	Performing post migration verification and providing migration Sign-off.

### Implementation Project Governance

If a Temenos Affiliate is the Implementing Party, the Client and Temenos shall adopt the project governance set out in the relevant Implementation Project Services Order for the Implementation Project.

If a Temenos Affiliate is the Implementing Party but project governance has not been agreed in the Implementation Project Services Order or if the Implementing Party is not a Temenos Affiliate, the Parties agree to apply the following project governance principles for the: **(a)** Implementation Project services and **(b)** Cloud Implementation Services:

#### **(a) Implementation Project services:**

- If the Implementing Party is not a Temenos Affiliate or if project governance services are not in the scope of the Implementation Project Services Order:
  - (i) the Client agrees to purchase for the entire duration of the Implementation Project, the “Temenos Project Consultancy Services” (“TPCS”) Professional Services, which will entitle the Client to receive regular reviews of the risks arising from the Implementation Project as well as recommendations on how to address such risks. The Parties shall execute a Services Order, which shall set out the Fees and any additional terms and conditions applicable to the provision of the TPCS Professional Services.
- If the Implementing Party is not a Temenos Affiliate:

- (i) the Client shall ensure that the Implementing Party will provide post go live support in accordance with the following:
- a. the post go live support shall cover any and all developments and interfaces built by the Implementing Party on behalf of the Client and which Temenos has accepted to deploy in Temenos Environments;
  - b. the Client shall receive post go live support for a minimum period of two (2) months and in all circumstances, it shall last up until:
    - all critical or high Software Non-Conformities that have been registered during the post go live support period have been fully fixed and completely closed by the Implementing Party; and
    - fewer than ten (10) medium Software Non-Conformities that were registered during the post go live support period remain outstanding.
  - c. notwithstanding the above, Temenos may require the Client to obtain post go live support which is longer than two (2) months from the Implementing Party. Therefore, the Client and the Implementing Party shall validate in advance the post go live support period with Temenos;
  - d. the post go live support shall start from the date of deployment in a Live Production Environment of the system scope (the functionalities in Temenos Software, the developments and/or interfaces as configured and parametrised by the Implementing Party). Any prior support, such as but not limited to “friends & family” or “partial” roll-out shall be provided by the Implementing Party.
- (ii) If the Implementing Party is building, “Client-specific” developments or interfaces (“**Level 3/L3**”) on behalf of the Client, the Client shall:
- a. ensure that the Implementing Party is certified by Temenos for the build and implementation of such L3 developments and interfaces;
  - b. ensure that that the Implementing Party has purchased “L3 Advisory Services” from Temenos;
  - c. execute an agreement with Temenos, which will cover the maintenance, support, handover and operations of the L3 developments and/or interfaces; and
  - d. ensure that the Implementing Party shall handover these L3 developments and/or interfaces to Temenos: (i) after Temenos signoff has been obtained for these L3 developments and/or interfaces; and (ii) in accordance with the Temenos’ handover protocol; and (iii) on or before the date agreed with Temenos, which shall in all circumstances be prior to the estimated date of deployment of such developments and/or interface in a Live Temenos Environment
- (iii) The Client shall ensure that Temenos is kept informed on the progress of the operational readiness activities carried out by the Implementing Party.

- (iv) The Client shall ensure that the Implementing Party conducts handover activities to relevant Temenos teams in the project plan. These include the provision of operational, maintenance and support handover documentation.
- (v) The Client shall ensure that the Implementing Party follow the Temenos SaaS governance policy.

**(b) Cloud Implementation Support Services – Governance**

- The Client and Temenos shall each appoint a project manager to act as the principal point of contact and coordinator in respect of its activities. The project manager for Temenos activities is called Cloud Delivery Manager.
- The Client shall establish a project office for coordination of overall administration in relation to the Implementation Project including management of governance processes, establishing a document repository and dealing with project documentation.
- The Cloud Delivery Manager shall coordinate Temenos activities and provide agreed necessary information to the project office.
- The Client shall ensure that a risk log and an issues log is maintained by the project office. Both the Client project manager and the Cloud Delivery Manager shall be entitled to require additions to such logs.
- The Client should establish suitable boards or committees for the Implementation Project with appropriate representation permitted from Temenos, including at a minimum an overall steering committee.
- The Client shall appoint an executive to lead the steering committee (and who would be senior to the Client project manager) and who should be capable of resolving any conflicts between different Client stakeholders and communicating decisions on behalf of the Client.
- Temenos shall appoint a project director or relevant area services manager to be its senior representative on the steering committee, who will be capable of communicating decisions on behalf of Temenos.
- Any minutes of meetings of the steering committee or of any other Implementation Project-related meeting between Temenos and the Client shall be mutually agreed by both Parties. If one Party wants to make a recording (whether audio or video) of such a meeting, it shall first obtain the consent of the other Party and shall ensure that an unedited copy of such recording is provided to the other Party.
- Temenos shall only be required to procure the attendance of representatives at agreed scheduled governance meetings. To the extent additional governance meetings are required that cannot be staffed appropriately by Temenos using the available time of its existing implementation teams, the Parties shall consult in relation to any possible rescheduling and other impacts and shall use the Change Request process if necessary.
- Where required, specifically for larger programmes, Temenos recommends the establishment of a sponsorship committee for C-level executive stakeholders. This senior committee will meet on a regular quarterly basis to track overall project progress and to ensure that the provided solution remains in line



with the business case. The sponsorship committee will not replace the Steering Committee; it will augment it.

Implementation activities are subject to the Temenos SaaS Governance Policy. This policy describes the activities and deliverables necessary to achieve operational readiness to enable the transition into production. Client agrees to follow these activities (described in this document under section 6), and to ensure both the Client and the Implementing Party follow them. Under this policy:

- The Client, Temenos and Implementing Party review the operational readiness aspects and expectations during the guidance meeting of the Temenos Operational Readiness Board;
- Temenos reviews and provides sign-off to Temenos Environments target architecture taking into account the non-functional requirements (NFRs), in the Temenos Cloud Architecture Board;
- Temenos reviews and provides sign-off for go-live activities in the decision meeting of the Temenos Operational Readiness Board;
- If the Implementing Party is a Temenos Affiliate, it will keep the Client informed of progress in relation to activities and deliverables relating to operational readiness through its regular project progress reporting. If the Implementing Party is not a Temenos Affiliate, and the TPCS service has been procured, Temenos will provide an overview of risks and recommendations on operational readiness as part of the regular TPCS reports; and
- Any go-live ranging from friends & family phases, partial go-lives as well as big bang deployments are covered by the policy.

The Client shall be responsible for executing the go live and roll-out. However, the Client agrees that Temenos shall be entitled to postpone the go live date, if in its reasonable opinion some implementation activities (including the testing activities) have not been properly or fully executed by the Client for the go live to occur successfully as initially planned by the Parties, or, if there are remaining critical Software Non-Conformities, or a high number of other Software Non-Conformities. Such postponement of the go live shall not be considered as a delay that is due to Temenos and Temenos shall not be deemed to be in breach of any of its obligations in respect of the impact of such request. Additionally, the postponement request shall entitle Temenos to raise a Change Request to address the impact and if the impact includes Temenos incurring additional Man Days or other costs, then Temenos shall be entitled to make an appropriate adjustment to the Services Fees to cover such additional Man Days or other costs.

#### **Other implementation support services available**

---

The Client may request from Temenos or a Temenos Affiliate other implementation support services such as assistance in developing the Client's exit plan and any migration plan required to extract data or move to an alternative supplier. Such services shall be contracted for under a separate Services Order with the additional Fees payable.

### **7. Management Services**

The following services are provided as standard in relation to the operations of the Cloud Services. Details of the associated service levels are provided in the Support Policy. Additional services may be requested from Temenos as provided for in the service catalogue subject to payment of the applicable Fees. This section may be updated from time to time or via the service catalogue made available via the Client Portal.

#### **Technical Services**

The following services are provided by Temenos as part of this Agreement.

• <b>Service</b>	• <b>Description</b>	• <b>Notes</b>
Service Monitoring	<p>Temenos will undertake monitoring of the service, including the underlying infrastructure, platform and application components.</p> <p>Any alerts raised will be handled as Incidents in accordance with Temenos Incident management policy and procedures.</p>	Access to monitoring data is not provided to third parties.
Application Management	<p>Temenos will provide Software Fixes to the Temenos Software to address maintenance, technical and security issues. Software Fixes will be applied to the UAT Temenos Environment for validation by the Client prior to deployment to the PRE-PROD and LIVE Temenos Environment.</p> <p>For critical security fixes Temenos may perform basic testing to validate the system availability and proceed to apply the fix to all client environments in order to mitigate the security risk being addressed by the fix.</p>	Any failure in third party software, interfaces, modifications to Temenos Software or data feeds not supplied by Temenos or the combination of the Temenos Software with such third party materials not approved by Temenos in writing is outside the scope of Cloud Services.
Temenos Environment Management	<p>Temenos will undertake management of the Temenos Environments it provides on a managed basis, including capacity and performance management of the environments and the implementation of new versions of IaaS / PaaS components available from Microsoft Azure.</p> <p>Temenos will provide details to the Client of such events and as far as reasonably possible such details shall be provided in advance.</p> <p>For non-Temenos managed environments, access is provided on an operating system level, allowing the Implementing Party to undertake deployment and other operational activities themselves. Temenos does not undertake Service Requests and Change Requests in respect of such non-Temenos managed environments and does not provide capacity and performance</p>	<p>Capacity and performance management is undertaken in relation to the volumetric data provided by the Client.</p> <p>Additional Fees may apply if changes are required to the Temenos Environments to support volumes outside of those specified.</p>

	management of such environments. Non-Temenos managed environments may only be accessed using a Temenos issued email id.	
Patch Management	<p>Temenos will undertake patch management activities in relation to the Temenos Environments. This includes zero day vulnerability patching and the application of quarterly vendor issued security patches.</p> <p>Temenos will provide details to the Client of such events and as far as reasonably possible such details shall be provided in advance.</p>	<p>Patching of the IaaS and PaaS components of the service is undertaken by Microsoft. Environments which are not covered by High Availability may be unavailable during the application of patches.</p>
Backup Management / Archiving (only for Transact)	<p>As part of normal operations, Temenos ensures it has the capability to restore an environment to any point in time (targeted to be within a 5 minute window) within the previous 30 calendar days. For a restoration to a pre close of business state, the environment is restored to the time of the COB request acknowledgement from the Temenos operations team. For a restoration to a post close of business state, the environment is restored to the time at the end of the COB. In addition Temenos will undertake the following Backups:</p> <p>End of month – a Backup of the LIVE database will be taken at end of month prior to the running of the COB;</p> <p>End of the Client's financial year – a Backup of the LIVE database will be taken at the end of the financial year prior to the running of the COB</p> <p>End of month Backups will be retained for the current financial year and for the following financial year.</p>	<p>Archived Backups are not undertaken for any other environment except LIVE.</p> <p>Additional Backups may be taken by Temenos as part of the implementation of a change, however these are only stored for the period of the change and are not archived.</p> <p>A Client may request restoration of a system from Backup by raising a Service Request. Additional costs may apply.</p> <p>A Client may request additional Backups to archive by raising a Service Request. Additional costs may apply.</p>

	<p>End of financial year Backups will be retained for a period of 7 years unless otherwise provided for in the Order Form and then deleted provided that there remains a valid agreement in place between the Parties.</p> <p>Backups will also be deleted in accordance with the Agreement upon termination of the Agreement.</p> <p>All Backups will be stored securely within the same location, and subject to the same security controls, as the original data.</p> <p>Temenos will undertake archiving from all databases at least every five years or as required to optimize performance. Prior to any archiving being undertaken, the Parties will agree the process in writing. Temenos will perform a Backup prior to undertaking any archiving.</p>	
Temenos Web Services (only if applicable to the Client)	<p>Temenos will provide the Client with access to a web service interface for the purposes of integration with the service.</p> <p>Access to the Web Services interface will be via agreed connectivity established for the Client Users to access the service.</p>	<p>Any web services shall be considered as Developments and must be listed in the Order Form or agreed by Temenos subject to Change Request.</p> <p>Additional security controls (such as data encryption) may be implemented as appropriate to the classification of the data being transferred.</p>
Data Export Service (only if applicable to the Client)	<p>Temenos will provide the Client with a daily extract of data in a format compatible with the specified on premise application.</p> <p>This extract will be generated as part of the daily Close of Business routine and will be provided to the Client over a Private Link connection to an Azure Virtual Network provided by the Client in the Client's Azure Subscription or, if agreed in the Order Form provided by Temenos in Temenos' Azure Subscription.</p>	<p>Additional security controls (such as data encryption) will be implemented as appropriate to the classification of the data being transferred.</p>

## Security Services

Service	Description	Notes
Security Monitoring	<p>Temenos will undertake security monitoring of the service, including the underlying infrastructure, platform and application components.</p> <p>Any alerts arising from this monitoring will be managed as security incidents through the standard Temenos process.</p>	Access to security monitoring data is not provided to any third parties including the Client. Temenos will report on security incidents related to the management of the Cloud Services to the Client on a monthly basis.
Data Loss Prevention	Temenos Environments are configured with data loss prevention controls which monitor, alert and (as applicable) block activities relating to accessing and moving data within the Temenos Environments.	Access to data loss prevention monitoring data is not provided to external parties except under any examination right outlined in the General Terms and/or an Order Form.
Transparent Data Encryption	All data held within the Cloud databases is encrypted at rest.	

## Operational Services

The following table provides an overview of the standard service catalogue, the detailed service catalogue is available upon request. The Client may make standard service requests as set out below ("**Service Requests**"). Such Service Requests must be made by Client Nominated Individuals via the email address designated by Temenos. The Fees applicable to the Service Requests are set out in Annex 1.

Any changes requested by the Client outside of the standard Service Request should be submitted and will be treated as a Change Request and may incur an additional Fees.

Service Request	Description	Restriction
Close of Business (for Transact only)	Performance of daily and monthly COB batch runs for the service.	The performance of COBs outside of the LIVE environment is subject to agreement in advance. Additional Fees shall be chargeable for COB outside of the regular daily and monthly COB runs.
System Backup to Archive	Perform a system Backup and store it as an archive	Additional Fee may apply for storage when this is in addition to the normal Backup process included in the service.
System Restore	Restoration of a system from: a) point in time restore; b) scheduled archive; and/or c) Client requested archive.	System restorations in relation to an incident are included. Additional restorations outside of this shall incur additional Fees.

	Temenos tests the procedures for restoration from Backup on a quarterly basis.	
New Temenos Environment	Create a new temporary environment, usually as a copy of an existing environment.	Additional Fees may apply depending on the type of Temenos Environment requested.
Temenos Environment Refresh	Refresh an existing environment as a copy of another environment. Each non-quiesced environment will be refreshed at least monthly provided that such refresh shall not involve any re-performance by Temenos of work already undertaken.	Environment refreshes can only be undertaken from a source environment that is higher in the promotional hierarchy than the target environment. Additional Temenos Environment refreshes shall be charged.
Start / Stop Temenos Environment	Used to start / stop environments that are normally shut-down (quiesced) when not in use. For example Training / SIT environments.	Post go-live this type of environment can be utilized for a maximum of 1 month per annum (of up to 4 separate occasions). Additional usage beyond this may incur additional Fees.
Data Load [ad-hoc]	Used to load data into the system on an ad-hoc basis.	Only applies once a system is live. Should not be used for data migration activities during implementation. Maximum of 4 data loads per annum. Beyond this additional Fees may apply.
Connectivity Management	Used to request changes to an existing connectivity	After the implementation phase, only 2 changes per annum.
Client Nominated Individual Management	Changes to the names of Client Nominated Individuals who are authorized to interact with Temenos regarding the service.	5 changes per annum permitted.
Request Security Test Support	Used to request Temenos support in performing an external security test on the service.	All security testing must be scheduled in advance. The scope and duration of the tests to be performed to be agreed in writing with Temenos. Additional Fees may apply.
Request Business Continuity Test Support	Used to request Temenos support with a Client business continuity exercise.	The scope and duration of the exercise must be agreed in writing with Temenos. Additional Fees may apply.

## 8. Change Requests / Change Orders

This provides the ability for the Client, to submit a request for a change in scope of the Cloud Services (a “**Change Request**”), which may include changes to the Temenos Software, including access to new functionality through the installation of updates / upgrades or the licensing of new modules; changes to the platform to support alterations to existing integrations and/or interfaces; any non-functional requirement, or establishing a new integration; or operations such as changes to the scheduling, timing or frequency of services or the provision of new services outside of the existing Cloud Services (including the operational, technical and security services and SLAs set out in the Service Specifications) or beyond the restrictions of the existing Cloud Services. Change Orders may be subject to additional Fees which will be agreed between the parties as part of the change process. The Client may propose a change by written notice to Temenos or via an on line portal provided by Temenos (a “**Change Order Proposal**”).

In addition to the rights of Temenos under the General Terms, Temenos may also raise a Change Order Proposal to address changes arising due to:

- the failure or delay of the Client in relation to a Client requirement or Dependency (for example the Client has failed to update a relevant digital certification in a timely manner); or
- a security risk or threat to the function of the Cloud Services (for example Temenos is obliged to patch all virtual machines as part of an industry wide security issue),

both are referred to as a “**Temenos Change**”.

As soon as reasonably practicable following a Change Order Proposal, Temenos will provide the Client with a written proposal describing the required changes to the Cloud Services, together with an impact analysis to accommodate the Change Order Proposal, including any additional Fees payable (if applicable), timescale and other impacts. Temenos may update the Cloud Services provided that the updates do not result in a material reduction of the functionality, performance, availability or security of the Cloud Services.

The Client will review the proposal and if it objects within the specified time frame, the Client shall provide written notice of its objections to Temenos. In the event of acceptance, Temenos shall prepare an appropriate amendment to the Agreement or a new Order Form for signature by both Parties, where required.

Upon signature of the appropriate amendment to the Agreement or a new Order Form by both Parties, Temenos shall provide such additional services required to fulfil the Change Order as part of the Cloud Services provided any additional Fees are paid.

If the Client objects to a proposal relating to a Temenos Change, the Client must give reasons for the objection. Temenos shall be entitled to resubmit the proposal having made (if relevant) any amendments that the Client has reasonably requested. To the extent the Client unreasonably objects to a Change Order Proposal relating to a Temenos Change, Temenos shall not be responsible for any resulting failure in or delay to the Cloud Services (including any related Security Incident).

The preparation of a proposal for a Change Order Proposal shall be free of charge, unless it is estimated by Temenos, following examination, that such shall require more than a reasonable number of Man Days (or hours as applicable) to accomplish the proposal. (“**Person Days**” means 8 hours of work performed by a resource in any 24 hour period.) In that case the Parties will agree on the cost for completion of the preparation of the proposal (and in absence of such agreement in relation to a Temenos Change, unavoidable additional Person Days incurred for the proposal preparation may be charged on a time and materials basis).

Each Change Order Proposal is considered on a case by case basis by Temenos and Temenos will endeavour to provide a response to a Change Order Proposal within 5 Working Days. No Change Order Proposal will be considered in periods of peak activity or during any period when Temenos has informed the Client of a change freeze, Planned Maintenance or an Agreed Outage.

**Note:**

This Service Specifications is designed for Temenos Core Products and Infinity products hosted in Microsoft Azure. Changes to this document or alternative specifications may be used for other Temenos products or when AWS is used as a hosting provider.



## Annex 1

### Fees

The following are the additional Fees as at the date of the Agreement which are payable for certain Change or Service Requests outside the scope of the standard service. For all other requests not listed, please request the additional Fee from Temenos. These Fees are valid for 12 months from the effective date of the relevant Order Form. Fees are given in US Dollars unless otherwise specified.

Service Request	Fees
Close of Business	\$250/request
System Backup to Archive	\$400 per 100,000 Customer Accounts Minimum commitment 100,000 Customer Accounts
System Restore	\$500 per request
New Temenos Environment	Price available on request from Temenos. Minimum commitment 1 month
Temenos Environment Refresh	\$500 per request
Start / Stop Temenos Environment	\$100 per request (plus any additional Fees applicable for the environment beyond standard service)
Data Load [ad-hoc]	\$100 per request
Connectivity Management	\$200 per request
Client Nominated Individual Management	\$50 per request
Request Security Test Support	Exact Fees will be determined at the time of the request and will be based on a time and materials basis.
Request Business Continuity Test Support	Exact Fees will be determined at the time of the request and will be based on a time and materials basis.
Change Requests	Fixed Fees or time and materials Fees to be assessed during impact analysis Expenses and travel costs to be payable and agreed if any visits to Client premises or travel is agreed
Access, information and audit rights support as referenced in the General Terms and, if applicable, the Regulatory Schedule	\$4,000 per person per day (calculated pro-rata on an hourly basis).