# Annex A – Technical Specifications

Call for Tenders:  CFT-1700

IT Consultancy for Application & Data Integration, Event Streaming, Data Virtualization and Python Platform Services (INTEGER)

# Annex A – Technical Specifications

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### 0.  Definition of key terms used

| Term | Definition |
| --- | --- |
| Business Hours | From 07:00hrs to 19:00hrs on Bank working days. |
| Fixed Price (FP) | Contractual arrangement for an Assignment in which the Service Provider is compensated based on the parties' Agreement on a lump sum payable, irrespective of the actual resources (Time and Materials) used to perform the Assignment. |
| FTE (Full Time Equivalent) | The hours worked by one employee on a full-time basis, working on all working days and therefore not taking holidays into consideration (i.e., the FTE is counted as NOT having holidays, Service Providers shall therefore plan resources accordingly). |
| Managed Services | Services that are being delivered On-Site or in a Nearshore location and measured based on outcome (e.g., SLAs) rather than inputs (e.g., numbers of people). Managed Services typically include ongoing management and operational services structured as an ongoing multiyear service, defined and governed by service-level agreements. The key element is that the Service Provider has the primary responsibility for managing and operating the offering both during the Bank's Business Hours and outside. |
| On-Site Services | On-Site Services are Services that are being delivered at EIB Premises. |
| SLA | Service Level Agreement |
| SLR | Service Level Requirement |
| Time & Materials (TM) Agreements | Contractual arrangement for an Assignment in which the Service Provider is compensated based on the time spent and for materials used to perform the Assignment multiplied with the binding rates/prices offered. For the avoidance of doubt, any materials shall be included in the binding rates/prices offered. |

### 1.  Background of the subject matter

The subject matter of the Framework Agreement is the provision of IT Consultancy for Application & Data Integration, Event Streaming, Data Virtualization and Python Platform Services for the EIB Group. The technological scope, as well as the specific and the general requirements for the Services to be provided are described in the subsequent sections of this document.

During the period of validity of the Framework Agreement, the EIB will award Contracts (when and as needed), to the Service Provider for the provision of IT Consultants to work onsite (at EIB Premises), offsite (at provider premises) and/or remotely, under time and materials or fixed price assignments. The services to be provided will typically provide consultancy services related to the evolution, maintenance, administration, support, design and development of EIB's Integration Platform, including Kafka, Data Virtualisation and Python Platform, e.g., the Middleware layer for communication between IT applications including the Hybrid Platform.

More details about the procedure for awarding contracts, as well as about the different types of assignments can be found in Section 5.5 "Contracting Modalities" of this Annex A.

## 2. General description of the services, service delivery models and locations

The scope of this Framework Agreement covers services related to the maintenance, administration, support, design and development of the EIB's Integration Platform and Integration Solutions described in the following table:

| Integration Platform Component | Applications / Products involved | Integration Solutions related to the Platform Component |
|---|---|---|
| Enterprise Service Bus (ESB) | IBM AppConnect Enterprise WSO2 Enterprise Integrator MQ Server Denodo Kafka Activity Dashboard Service | Integration Services Messaging application interfaces Data Services |
| API Management | API Gateway Active Directory Federation Services Activity Dashboard Service | Team Onboarding Single Sign-On and Security Token Configuration CI/CD Automation |
| Event Streaming | Kafka Activity Dashboard Service | Topic and Schema Configuration IT Application Onboarding |
| Hybrid Platform | Python Server Platform Denodo API Gateway Activity Dashboard Service | User Onboarding User Support IT Operationalization Support Python Package Management Python Platform Packages Data Virtualisation |

A detailed description of the application / software products, including transversal ones (not listed above), is provided in the table at the end of the section.

The scope of the work includes, but is not limited to:

- Integration Platform administration and management
- Incident resolution and change request management
- Integration Solution requirement specifications
- Integration Solution design specifications
- Integration Solution implementation
- Integration Solution unit and integration testing
- Integration Solution life-cycle management and documentation
- Planning and execution of Integration Solution deployments
- Planning and execution of Integration Platform application / product deployments
- Regression testing of updated Integration Services, Data Services, and application interfaces (both manual and automatic testing)

- Regression testing of new Integration Platform product patches and upgrades (both manual and automatic testing)
- Integration Platform monitoring
- Integration Platform evolution and maintenance
- Support for Integration Services, Data Services, and application interfaces in non-production environments (DEV/TST/UAT)
- Integration Platform Infrastructure administration and support

The **Enterprise Service Bus (ESB)** is the central integration component in the EIB Integration Platform for realising the Service Oriented Architecture (SOA) approach to communication between business applications. The SOA approach covers the fundamental and federated SOA, currently without the process-enabled middleware layer. A process engine might be considered in the future.

The ESB hosts reusable business services (including service compositions and mediations) with global data types, which allows for easy communication between more than 50 business applications in the EIB's IT landscape, as well as 26 external data providers and services. The EIB applications comprise both off-the-shelf software packages and in-house developed applications, some of which follow the modern micro-service architecture.

Messaging protocols supported by the ESB:

- Web Services over both SOAP and REST
- HTTPS with WS-Security and TLS 1.2
- MQ, JMS, SSH, Database and file transfer (SFTP-based)

The classic ESB is based on the product IBM AppConnect Enterprise v11, deployed on premise in an active-active server array (RedHat Linux v8), and additional tools around it to create a complete platform. IBM MQ Series is used as the principal messaging middleware component for the classic ESB. IBM Transformation Extender (ITX) is used for complex transformations and Swift message decoding.

The Open Source ESB is a new, generation Integration Platform based on containerized deployment of micro-integrations built with the open source WSO2 Micro Integrator v4. The Open Source ESB relies on Kubernetes for on premise container management, Continuous Integration and Delivery with GitOps, RabbitMQ and Kafka for internal messaging, and Denodo Data Services.

In addition to this, the Integration Team provides configuration and operation support for over 63 IBM MQ and RabbitMQ instances hosted on other application servers and connected to the ESB MQ.

The ESB platform is patched on a quarterly basis following the product patch cycles from the vendors.

**API Management** enables lean integration of REST/HTTP micro-service applications without complex transformations and orchestration inherent in the ESB. API Gateway, based on the WSO2 API Manager v4, is a self-service platform for IT Application Development Teams that allows them

to expose micro-service APIs to Modern Web Application front ends, as well as to other micro-service applications.

API Gateway relies on the Security Tokens and Single Sign-On for authentication and authorization (SAML v2 and OpenID Connect), provided by the Microsoft Active Directory Federation Services (ADFS) 2019.

ADFS is installed at EIB as a part of the overall Microsoft Identity Management solution (centred on Windows Server OS and Active Directory) and is maintained by a dedicated IT Team. The Integration Team is responsible for configuring the Single Sign-On and Security Tokens for about 30 applications (SAML and Open ID Connect), registering client applications from API Gateway in ADFS, and managing certificates (token signing, encryption, and communication).

**Event Streaming** platform is based on Apache Kafka, deployed in active-active on-prem pattern, with the Control Center and Schema Registry. It provides a high-performance, replicated infrastructure for distributing streams of business events between applications in (near) real-time.

The Integration Team provides Kafka as an application infrastructure service to IT Teams and takes care of access rights and topic configuration. At the same time, Kafka is used internally in the context of the ESB as an implementation technique for publish-subscribe and other messaging scenarios.

The **Hybrid Platform** is a collaborative platform for business users (data scientists and "citizen developers") and IT specialists to create business analytic models in Python, access enterprise data via Data Virtualization, and expose (operationalize) these models as services using the API Gateway.

The Python Server Platform is based on Anaconda Enterprise v5, deployed on premise in product-specific Kubernetes clusters. It includes a test environment for patches and upgrades, a production-grade modelling environment for interactive use and development by the data scientists and citizen developers, and a production environment (non-interactive) for deploying operationalized models.

The Integration Team develops and maintains a set of Python Platform libraries that enable easy and performant connectivity and interoperability of Python code running inside Anaconda Enterprise with the API Gateway and Denodo.

The Data Virtualization platform is based on Denodo v8, deployed in active-active pattern on premise. It exposes datasets from about 20 data back-ends, ranging from the Enterprise Data Warehouse to operational databases, services and flat files, in the form of a virtual relational database to business users and applications. Denodo is also used to expose the virtual vires as REST data services (secured with basic authentication, Kerberos or OAuth2/OpenID Connect) as a part of the ESB solution.

The Integration Team manages the Denodo installation in the Bank and administers the common virtual database open to EIB users and application. This includes adding and modifying definitions

of virtual views, access rights management, technical testing, UAT support, promotion of changes, and CI/CD support for other IT application teams.

**Activity Dashboard Service** (ADS) is an in-house developed application that caters for real-time, integrated tracing and logging of business and technical events on the Integration Platform. The underlying Service Analysis component of ADS performs analysis of traffic through the Integration Platform, and static analysis of Integration Services in order to deduce static (compile-time) and call (run-time) dependencies between Integration Services and back-ends, thus facilitating incident investigation and impact analysis.

ADS consists of a Java analytical service back-end, Angular Web front-end, and a MongoDB data store holding service information, 30-day full history of calls on the ESB and API Gateway, and a longer-term statistics about Integration services.

**Key supporting technologies** (managed by other IT Teams in EIB) include:

- Azure DevOps (on premise) for hosting Git repositories and managing CI/CD pipelines
- Infrastructure provisioning, including Linux VMs (RedHat v8)m databases (Oracle 19c), and network volumes (NFS v4)
- Kubernetes for cluster management with supporting components (CoreDNS, Knative) using both the generic (vanilla) setup on VMs, and VMware Tanzu on the EIB infrastructure level

The overall indications of volume for the whole Integration Platform are:

- ESB:
    - o 52 connected applications
    - o 25 external data providers
    - o 760 service flows with 3750 data flows
    - o 265 million messages per month
- API Gateway: 20 tenants (applications or teams) and 30 APIs.
- Denodo views: 220 released in production (760 in development and pre-production testing)
- Anaconda Users: 150
- Azure DevOps repositories: 2800
- Azure DevOps Pipelines: 1500
- Kafka Events: 6 million messages / month
- 65 production servers (2TB RAM, 330 CPUs)
- 200 non-prod servers (5TB RAM, 630 CPUs)

There is a 15% average annual growth rate, for both the Integration Services and message volume.

The Integration Platform is only available at the EIB headquarters in Luxembourg and has no connections with EIB external offices.

EIB Group requires the provision of competent external consultants to work on-site, off-site or remotely on a time & materials basis or on fixed price basis. The services focus on software

development related activities in a range of technologies that are listed in detail in subsequent sections.

The Service Provider shall be able to support at minimum the following service delivery models:

- Provision of external consultants for on-site work at the EIB premises in Luxembourg, on a time & materials basis (on-site staff augmentation model);
- Provision of external consultants, to work from a vendor managed remote location, on a time & materials basis (off-site, staff augmentation, delivery centre model);
- Provision of external consultants, working remotely from potential different locations on a time & materials model (remote - distributed workforce model);
- Provision of fixed scope and price services.

The detailed descriptions of the required profiles are provided in Appendix 1. The estimated annual volumes per different types of profiles and per different types of service delivery model can be found in Annex C – Pricing Form. These estimated volumes do not represent a commitment on the part of EIB and are provided as an indication only.

### 2.1 Service Locations

#### 2.1.1 On-site services

On-site services will be provided at EIB's Premises in Luxembourg, unless otherwise requested or specified by EIB (e.g., intervention in other locations). EIB will supply the Service Provider staff with office accommodation and EIB's standard office equipment, including PCs and devices attached to EIB's network.

On-site services will be provided during business hours unless otherwise specified. In addition, certain types of work, such as a system upgrades, may require work outside business hours defined in section 0 or even on weekends or public or Bank holidays of Luxembourg. This is not to be confused with on-call services (described under section 2.2).

For on-site time and materials Services delivered outside normal Bank working days (after hours, on weekends and public holidays of Luxembourg), subject to EIB's request or prior approval, the following rules shall apply (travel time is excluded from the below):

- For after-hours work from 19:00 to 07:00 on normal working days, a multiplier of 1.5 (150%) of the applicable daily rate will be applied, pro-rata on the hours worked;
- For work on Saturdays a multiplier of 1.5 (150%) of the applicable daily rate will be applied, pro-rata on the hours worked;
- For work on Sundays and public holidays of Luxembourg, a multiplier of 2 (200%) of the applicable daily rate will be applied, pro-rata on the hours worked.

#### 2.1.2 Off-site services

Off-site services cover the same services as described under 2.1.1 On-site services but are provided from the Service Provider's location. This can be either in Luxembourg or outside of Luxembourg in a country within the European Union of the choosing of the Service Provider.

For off-site services, remote access to the Bank's IT systems will be made possible.

### 2.1.3 Remote services

Remote services will be provided to EIB from a location not managed by the Service Provider (e.g., home office) and might be required under specific circumstances (e.g., the recent COVID-19 pandemic that enforced working from home).

For remote services, remote access to the Bank's IT systems will be made possible.

### 2.1.4 Business Continuity Site

The Bank operates a business continuity site which is located in the Grand Duchy of Luxembourg. Consultants might need to provide support and maintenance of the business continuity sites, contribute to the BCP testing and carry out the specified activities in case the BCP is invoked (in line with the BCP / DRP policies and procedures at the EIB).

### 2.2 On-call services

EIB may require the Service Provider to set up and operate an on-call support service in a location where the required response times can be met, outside the normal business hours during the week and during weekends and Bank holidays, all year round. Consultants on on-call support will be required to handle incidents and changes, which could be related to software failures or general incidents affecting the respective applications.

Services shall be provided by the Service Provider staff who have reached a good understanding of EIB's IT environment and infrastructure, and who, if required (e.g. if physical presence on-site is requested by EIB or if remote connection is not possible) will be able to come to the Luxembourg based Premises of EIB to analyse the incident, take the necessary actions and/or escalate the incident in accordance with the relevant policy made available by the EIB to the Service Provider as part of the Assignment.

The On-Call Service will cover time slots outside normal business hours and can be handled remotely by phone. Its purpose is to be able to solve incidents. Incidents can be solved remotely (if applicable) unless resolution requires presence on-site. The On-Call Service can be triggered via telephone by an approved list of EIB operators or by internal EIB IT staff members. On-call services are not to be confused with regular outside of business hours services as described in 2.1.1 On-site services.

The Service Provider will do whatever is necessary to ensure all the on-call consultants are accessible by EIB. The on-call consultants shall be part of the same team responsible for

infrastructure engineering on a daily basis; any exception from this rule will require the Bank explicit agreement.

3. **Technological scope of the required services**

The services in the scope of this Call for Tenders are related to the following applications and technology stack (non-exhaustive, additional applications can be deployed in the future):

**Table 2: Current technology environment**

| Application | Environments | Technology |
|---|---|---|
| **IBM AppConnect Enterprise** | • Development<br>• TST<br>• UAT<br>• Production | • IBM ACE v11<br>• IBM Transformation Extender<br>• IBM Integration Toolkit<br>   o Java 8+ (JAX-WS, JAX-RS, JAXB)<br>   o Git for source version control<br>   o Maven<br>   o CI / CD pipelines with Azure DevOps<br>   o Postman and SoapUI for integration testing<br>• Linux Bash scripts for automation of deployments and runtime system management<br>• SOAP and REST Web Services (HTTPS) with WS-Security and TLS 1.2<br>• MQ, JMS, SSH, Database and file transfer (FTP-based)<br>• Oracle, Mongo-DB |
| **WSO2 Enterprise Integrator** | • Development<br>• TST<br>• UAT<br>• Production | • WSO2 Enterprise Integrator v7<br>• WSO2 Integration Studio, Micro-Integrator<br>• Containerized deployments (on-prem Kubernetes clusters)<br>• Java 8+ (JAX-WS, JAX-RS, JAXB)<br>• Git for source version control<br>• Maven<br>• CI / CD pipelines with Azure DevOps<br>• Postman and SoapUI for integration testing<br>• RedHat Linux 8 |
| **Activity Dashboard Service** | • Development<br>• TST<br>• UAT<br>• Production | • Lightbend Play Framework 2.8<br>• Angular 8<br>• Java and Scala<br>• Maven and sbt<br>• REST APIs |

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| Application | Environments | Technology |
|---|---|---|
| | | • Single Sign-On |
| **Python Platform** | • Development<br>• TST<br>• UAT<br>• Production | • Anaconda Enterprise<br>• Anaconda Distribution (Individual edition)<br>• Conda package and environment management<br>• Python 3.6+<br>• VSCcode, Git for version control<br>• Kubernetes / Gravity<br>• RedHat Linux 8 |
| **Active Directory Federation Services** | • Development<br>• Production | • ADFS 2019<br>• SAML v2, OpenID Connect |
| **API Gateway** | • Development<br>• TST<br>• UAT<br>• Production | • WSO2 API Manager v4<br>• On-premise, active-active deployment<br>• RedHat Linux 8 |
| **Denodo** | • Development<br>• TST<br>• UAT<br>• Production | • Denodo v8<br>• On-premise active-active deployment<br>• Data Services<br>• OAuth2 and Kerberos integration<br>• GraphQL<br>• RedHat Linux 8 |
| **Kafka** | • Development<br>• TST<br>• UAT<br>• Production | • Confluent Kafka v6.2<br>• Kafka Schema Registry<br>• On-premise stretched cluster<br>• Kafka Control Center<br>• RedHat Linux 8 |
| **MQ Server** | • Development<br>• TST<br>• UAT<br>• Production | • IBM MQ v9<br>  ○ On-premise multi-Instance setup<br>• RabbitMQ v3.9<br>  ○ On-premise cluster & standalone |
| **Transversal** | • Development<br>• TST<br>• UAT<br>• Production | • Azure DevOps<br>  ○ On-premise installation<br>  ○ Git repositories, projects, Wiki<br>  ○ pipelines, artifact stores<br>• Kubernetes cluster management<br>  ○ Kubernetes 1.23, Knative<br>  ○ Prometheus, Grafana<br>  ○ ArgoCD |

## 4. **Specific Requirements**

*4.1 Sourcing quality consultants*

The main task to be performed under this Framework Agreement is providing consultants for services to be rendered at the locations and under the service delivery models required by the EIB Group, with adequate profiles and in a timely manner.

In this context, the Service Provider shall source and make available at the required locations (and especially at the EIB premises in Luxembourg) the required numbers of consultants, with the required profiles, experience, skills and qualifications (the requirements for each profile are described in detail in Appendix 1) and within the given timeframes.

Moreover, the Service Provider shall provide backup resources in case of absence in order to ensure guaranteed on-site presence is also relevant.

The Service Provider shall:

    i.    Put in place an appropriate organisation for the sourcing of consultants, including a sourcing team;

    ii.    Use appropriate sources and channels from which candidates will be drawn;

    iii.    Organise the consultant planning process to ensure that sufficient staffing in Luxembourg as well as off-site and remote within short timeframes will be handled including their placement/relocation;

    iv.    Guarantee on-site presence of consultants on a day-to-day basis, including back-up resources in case of absence (e.g., holiday periods, illness, …);

    v.    Handle the evaluation for suitability of the candidates;

    vi.    Ensure readiness and ability to provide additional consultants if requested by EIB.

The Service Provider will maintain the agreed-upon number of resources during all working days and ensure there are backups for holidays, sick-leave, and any other contingencies, in order to avoid any understaffing. It is the responsibility of the Service Provider to ensure there is an adequate amount of backup resources for the different profiles and to ensure resources have been approved beforehand by the Bank, including the backups.

The Service Provider shall provide, for each Assignment, an overview of resource provision planning including holidays, training and resource backup procedures, in case of unforeseen absences. Understaffing will be subject to SLA breach penalties.

During the term of the Agreement and of any Contract, the Bank reserves the right to interview any candidates proposed by the Service Provider for the profiles required by the EIB. The EIB shall be the ultimate arbiter on whether the proposed resource meets the stated needs of the Bank.

A background check is required for all Service Provider staff members with access to EIB Group buildings and/or EIB Group systems and will be performed by the Service Provider prior to the start of any Assignment related to the performance of the Agreement involving such access.

The EIB reserves the right to access and review the background check information upon request. Such requests will be analysed and honoured subject to the terms and conditions of the applicable

data protection regulations and/or prior consent of the consultant in question to the disclosure of personal data, if required.

Planned interventions may also require presence on-site or on-call support outside Business hours, including weekends. The Bank will decide, based on the type of intervention, whether this support shall be given on-site and by the same resource or by an additional resource.

The Bank reserves the right to increase or decrease the estimated number of FTEs during the implementation of the Framework Agreement.

### *4.2 Training of resources*

Training is key in order to introduce the Service Provider consultants to the EIB environment and in order to ensure consultants remain up to date in their respective domain of work and developing additional competencies. Training of the Service Provider's consultants shall however not have any negative effects on the execution of the Assignments under this Framework Agreement (i.e., reduced staffing levels).

The Service Provider shall:

    i.    Put in place an appropriate training approach to train consultants on the specific environment at the Bank, including training at the start of an Assignment and training for replacements

    ii.    Put in place an appropriate training approach for consultants once working for EIB, including certifications

    iii.    Put in place a process to replace resources that are on training

EIB is open to consider the possibility of allowing consultants to be trained on-site if that is judged convenient for both sides. In this case, EIB shall incur no cost for the Service Provider staff who are receiving training. However, while in training, these consultants do not contribute to the required minimal presence on-site. The Service Provider will need to provide additional consultants in order to fulfil the required minimal presence on-site.

During the performance of each Assignment of minimum 9 months, the Service Provider will provide a detailed approach of how the training will be provided, including:

- A plan covering the terms of the Assignment that includes training areas, certifications (which certifications, for which profiles etc.) and the number of hours per year that the Service Provider staff will be attending technical and soft skills training (minimum 24 hours of technical training). The training plan needs to be validated and agreed with EIB;
- Remedial training for underperforming consultants based on user feedback and EIB evaluation;
- Initial newcomer training pack per role. The Service Provider will provide and fund on-boarding training for new consultants joining the EIB. Training will have a duration of two weeks and will be done before the consultant joins the EIB projects, unless agreed differently with EIB;

- The structure and organisation of EIB specific training that will be provided.

The information above will be provided by the Service Provider to the EIB within the deadline set forth in the relevant Assignment Terms of Reference.

### 4.3 Measurement of resource performance

Performance of resources is key for EIB. Therefore, EIB requires the Service Provider to put in place adequate resource performance measures, including KPIs, for measuring performance and productivity of the consultants (e.g., frequency, consultant involved in the assessment) and foreseen action plans to remediate underperformance.

The Service Provider shall:

    i.    Put in place performance measures to measure performance and productivity of the resources under the agreement

    ii.    Put in place an evaluation process for these performance measures

    iii.    Put in place a remediation process for underperformance issues

### 4.4 Resource replacement and new resources during assignments

Key personnel business continuity is a key factor to ensure long-term success of the relationship between the Service Provider and EIB.

The Service Provider shall put in place a process to mitigate the risk of knowledge concentration within key personnel and to ensure proper knowledge transfer of key personnel and reduce the impact in case of unavailability of these resources.

Resource replacement during the term of an Assignment will be subject to EIB's prior written approval and subject to rules described in § 6 of Appendix C - General Terms and Conditions. If this approval is given, the Service Provider will be responsible for maintaining the continuity, the level and the quality of Services performed as part of the Assignment.

EIB shall have the right to request the Service Provider to replace any of the resources, if not satisfied with the performance or quality of services rendered.

Before the on-boarding of a new resource (resource replacement or new resources), EIB may require an interview of the proposed resource (to assess how the requirements specified in the AToR are met) and will reserve the right to accept or reject the proposed resource. This also applies to a trial period of at least two weeks after completion of the handover.

New resources, regardless of their seniority level, will spend 10 working days onboarding and participating in the appropriate knowledge transfers for their role. Time spent during this period (i.e., 10 working days) shall not be invoiced to the Bank.

*4.5 Professional standards and project methodology*

The Service Provider shall perform the services requested by the Bank, including the preparation and submission of deliverables, in accordance with the highest industry standards of professional competence and integrity, having due regard for the nature and purposes of the Bank as the EU's long-term financing institution.

The Service Providers must have an IT Services Model and Project Methodology based on industry best practices and accepted standards.

The Service Provider shall:

i.  Put in place appropriate project management methodologies, including Waterfall and Agile practices;

ii.  Put in place measures and KPIs to capture the project outcomes and lessons learned from previous projects and how to incorporate them in future projects for EIB

*4.6 Takeover and exit assistance (hand-over) activities*

4.6.1 Takeover of present activities

The takeover period is estimated to take up to 2 months as from the first assignment for a complete transfer of all services, i.e., for the consultants to be operational and EIB to be fully independent from the incumbent service providers.

The Service Provider(s) will take into consideration the possibility that holiday periods (summer, Christmas, etc.) may overlap with the takeover period and ensure the appropriate measures are in place to ensure that takeover is not negatively affected.

During the takeover period, Service Provider(s) shall perform the services and activities required during the takeover period as well as the services specified in the relevant AToR[1].

4.6.2 Exit assistance (hand-over) services

One of the key challenges in the implementation of the Agreement is the smooth handover from the Service Provider to a future service provider selected under a new framework agreement.

Apart from a well organised and executed planning, this also requires well accompanied learning, knowledge transfer and other measures required to ensure effectiveness and efficiency do not suffer because of the handover.

The Service Provider shall:

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[1] Assignment Terms of Reference

i. Put in place an exit plan, to handover the services to the next provider

ii. Put in place appropriate policies and practices for knowledge management during the handover at the beginning and end of the Agreement, and during the Agreement

The respective provisions of the General Terms and Conditions notwithstanding, upon expiry or termination of the Agreement at any time during the planned lifetime of the Agreement for whatever reason, the Service Provider(s) shall be required, via the relevant Contract, to provide Exit Assistance Services for the handover of Services to the EIB staff members and external consultants designated by EIB, and/or successor contractors to whom new contracts for the same or similar scope of Services will have been awarded.

The hand-over period and the phasing out of resources, if any, will be specified in an AToR that will cover this period.

At the end of the Agreement, the Service Provider(s) must hand over the Services, data, know-how, documentation, processes, contracts database and repository, and any related infrastructure within the EIB Premises. Exit assistance services shall include training of the consultants of the new contractor and transfer of knowledge of the underlying processes, documentation, etc. This hand-over must be done without impacting the Services provided to the Bank, and without impacting the day-to-day operation, quality of services or the achievement of the Service Level Requirements as described in section 4.8.

At the Bank's request, the Service Provider(s) will develop an updated Exit Plan, in collaboration with the EIB that complements the successor plan developed by the Bank (or its designated contractor). The Service Provider(s) will then keep the Exit Plan up to date to reflect eventual updates to the transition plan.

To facilitate the transfer of knowledge from the Service Provider(s) to EIB or the new provider(s), the Service Provider(s) shall explain to EIB (or its designated contractor personnel) the procedures and operations, configuration and change management process, and other standards and procedures that are specific to the Services.

The provisions of the GTC notwithstanding and unless otherwise set out in the relevant Assignment, all data and information, reports or other documentation (and title of ownership to such) derived from the contractual relationship between the Service Provider(s) and EIB will belong to EIB. The Service Provider(s) must return all of the Bank's property, i.e., all copies of data, licenses, standard software, etc., and related data shall be deleted or destroyed, after explicit approval by the Bank. The Service Provider(s) must in any case guarantee the confidentiality of information, including details on EIB's application landscape, user data, procedures, details of communications, and any other aspects related to the Services provided during the term of the Agreement, even after termination or expiration of the Agreement.

The owner of the transition period will be EIB (or its designated contractor), who will manage the transition/migration and phase-in procedure. To the extent necessary however, the Service

Provider(s) will be required to ensure availability of its consultants dedicated to the performance and governance of the Agreement during the entire hand-over and migration period.

Upon successful conclusion of the handover, an acceptance certificate will be delivered by EIB to the Service Provider(s). EIB (or its designated contractor) will be consulted to ensure that all the necessary information and documentation allowing transfer of responsibilities at the end of the handover period has been received.

### 4.7 Governance and Relationship management

#### 4.7.1 Relationship management

Adequate relationship management will ensure that the needs of EIB are met and misunderstandings avoided, which is of mutual benefit.

The Service Provider shall:

i.   Put in place a process for managing the relationship between the Service Provider and EIB including but not limited to Account Governance, Risk Management, Collaboration with the Ecosystem and Customer Satisfaction

ii.  Put in place workflows, collaboration and project management tools. Well established and proven (in engagements with other clients) approaches that can be used for the performance of this Framework Agreement are preferred.

Contact persons will be defined by both parties, and clearly identified with their names, e-mail addresses and telephone numbers, either in the Agreement or in the relevant Assignments.

#### 4.7.2 Account management

The Account Manager is responsible for managing and administering this Agreement, including addressing Assignment requests from the Bank, proposals and Contracts concluded with the Bank, as they arise. The Account Manager must be reachable by the Bank during Business Hours. In case of absence, a back-up must be designated. The activities carried out by the Account Manager shall not constitute a service paid by the Bank, as this shall be considered to be part of the customer service on behalf of the Service Provider.

#### 4.7.3 EIB service management

The Bank will provide at least one (1) contact person as the EIB Service Manager. They will be in charge of managing all technical and operational issues related to the Services provided by the Service Provider. The EIB Service Manager will send and receive notifications and escalations related to any incident or crisis situations related to the Service delivered by the Service Provider. They will be in charge of following up on all SLA matters with the Service Provider.

#### 4.7.4 EIB Budget, Contract and Vendor Management Unit

The EIB Budget, Contract and Vendor Management (BCV) unit will act as the administrative contact in charge of managing administrative and contractual matters related to the Services with the Service Provider. This will include issuing AToRs, receiving proposals, issuing and managing contract extensions and indexation, as well as invoicing and other procurement related activities.

4.7.5 Reports and Meetings involving the Bank and Service Providers

The Bank may require to hold a Steering Committee Meeting (SCM) twice a year. When such meetings are called, the Service Provider shall ensure the presence of the following participants at a minimum:

- Account Manager
- Service Delivery Manager (responsible at the Service Provider side for the delivery of services to EIB)
- The hierarchical managers to whom the Account Manager and the Service Delivery Manager report

Other participants may be required depending on the particular points on the agenda of the SCM.

For the EIB, at least the EIB Service Manager will attend the SCMs.

The main objectives of the SCMs include but are not limited to:

- Event or situation review, when relevant
- Review of technical and contractual achievements and performance issues since the last Steering Committee meeting
- Definition of the strategic action plan for the coming months or years
- Other points as may be required

Documents for the SCM including a report of issues relating to the period in question will be provided by e-mail by the Service Provider to the EIB Service Manager at least 2 working days before the meeting.

The Service Delivery Manager shall produce a meeting report (minutes) and submit it to the Bank 5 working days after the meeting at the latest for approval.

### 4.8 Service Level Agreements

EIB is seeking to establish a multi-year relationship with the Service Providers based on a mutual understanding, trust and the achievement of agreed quality measures. EIB has defined a list of Service Level requirements at framework level, enabling the Bank to evaluate the overall relationship and service delivery of the Service Providers (see Appendix 2). These Service Level requirements detail the mandatory requirements of services to be provided, the defined metrics, the method of measuring achievement as well as applicable penalties for underperformance against or non-fulfilment of these requires Service Levels.

Furthermore, the Service Provider must put in place processes and proper organisation to guarantee the achievement of the SLRs.

The Service Provider shall:

i. Put in place processes and procedure for managing the SLA achievement throughout the duration of the Agreement

      ii.     Put in place processes, procedure and tools to measure and report on the status of the SLRs to EIB

## 5. <u>General Requirements</u>

### 5.1 Language Requirements

Consultants must be proficient in English (B2 level or equivalent). Knowledge of other languages is an asset. The language level will be assessed based on the Common European Framework of Reference for Languages.

### 5.2 Knowledge management

Knowledge management is important to the EIB. If knowledge is retained, it can be shared to ensure that the right information is always available when required, which allows making informed decisions. Knowledge transfers will be greatest at the start of the Agreement when the Service Provider takes over from the incumbent service provider and when the Service Provider does a handover at the end of the Agreement.

Knowledge management will also play a role during the execution of the Assignments awarded under the Agreement because it is important that knowledge is captured and made available and (actively) shared to allow all parties to benefit from it.

The Service Provider will have to create documentation destined for the EIB IT department in case it does not exist and maintain existing documentation.

As part of proactive incident management activities, the Service Provider will analyse all available information in the tools at their disposal, in order to continuously improve the service, which may include raising problems, changes, improving tools and documentation and recommending users for training activities.

### 5.3 Managed Services

Any time after the first anniversary of the Agreement, under the relevant Assignment the Service Provider may be requested to shift a certain portion of On-Site Services into Managed Services in specific areas to be defined.

Managed Services are being delivered either at EIB Premises, or at an off-site location. Managed Services typically include ongoing management and operational services structured as an ongoing multiyear service, defined and governed by service-level agreements. The key element is that the Service Provider has the primary responsibility for managing and operating the offering.

The offering itself may be limited to ongoing curation of data or may involve the operational management of the business process or technology solution. Services may range across business

processes, applications, and platforms that are customized, commercial off-the-shelf (COTS), software as a service (SaaS) or combinations thereof.

The request for a move to Managed Services will be initiated with an AToR issued by the Bank. Upon submission of the AToR by the Bank, the Bank can decide whether to accept the proposal. If the proposal is accepted, the services described in the AToR replace the defined portion of On-Site Services, including the billing thereof.

## 5.4 IT Organisation at EIB

### 5.4.1 Service and project organization at EIB

The Service Provider will carry out Assignments in different areas of the Bank, and in doing so will need to rely on other operational units for the day-to-day support of their activities. The main points of interaction with the Bank are as follows:

- **IT Service Owner**, typically a senior IT professional working closely with the Business Owner, with overall responsibility for technology related services for the systems and applications in a particular area or domain of the business, including budgeting, resourcing, capacity planning and tracking service levels;
- **IT Project Manager**, typically an IT professional working closely with the Business Project Leader, with responsibility for the architectural design of solutions, the planning and execution of all IT related components of the project;
- **IT Maintenance and Development Unit**, a group of IT professional staff with responsibility for second line support of the systems and applications within a particular area or domain of the business, designing and implementing corrections or changes;
- **IT Operations**, responsible for the day-to-day running and operation of all systems and applications and execution of disaster recovery procedures;
- **IT Security**, responsible for the definition and tracking of IT security policies and procedures across all systems and applications;
- **IT Service Desk**, responsible for first level user support, primarily in the desktop and MS Office environments, and client-side installations required by the various applications;
- **Infrastructure Services**, responsible for support design and implementation of changes in the following areas: servers, storage, operating systems (Red Hat, Linux and Solaris), Virtualization technologies (VMWare), Backup & Recovery systems and Database Support (Oracle, MySQL, MSSQL, Sybase);
- **Enterprise Architecture**, responsible for defining technology standards & guidelines and for the validation of design specifications regarding systems and applications within the Bank.

### 5.4.2 Policies, procedures and tools at EIB

In the performance of any Assignment the Service Provider will have to comply with the Bank's IT policies, standards, and procedures applicable to all systems, applications and projects in the Bank.

The Service Provider will be provided with the relevant policies upon signature of the Agreement (which may be updated by the EIB during the duration of the Agreement).

### *5.5 Contracting modalities*

#### 5.5.1 *Framework Agreement*

It is intended to establish one Framework Agreement with up to five different Service Providers and to subsequently award particular Assignments to one of these Service Providers, using the parallel competition award mechanism. The procedure for awarding Contracts under the parallel mechanism is described in Article 4 of the Agreement.

The objectives of the Bank in selecting this particular approach are the following:

- **Flexibility** - services will be secured on a timely, as-needed basis with minimal overhead within a clear and transparent procedural framework;
- **Reliability** - establishing a long-term relationship with a selected group of service providers will ensure consistency and continuity of Services, resources and management over the life of the Framework Agreement.

Service Providers shall be aware that the conclusion of a Framework Agreement does not oblige the Bank to request all of the Services or any minimum volumes of Services specified in this Call for Tenders from the selected Service Providers.

#### 5.5.2 Awarding Assignments

The Service Providers are requested to take note of the following additional rules complementing provisions of Article 4 and Article 5 of the Agreement regarding the awarding of assignments.

AToRs will be dispatched via a central mailbox or by other electronic means as specified by the EIB. During the bidding phase (from the time the AToR has been dispatched up to the award of the Contract), this communication channel shall be the sole means of communication allowed, and any requests for clarification and the Proposals themselves must be addressed via this communication channel: no other EIB staff member or other EIB email address may be used or copied. Failure to comply with these communication restrictions may lead to disqualification of the Service Provider's Proposal.

Each Assignment will be limited to an overall cost and duration and may include take-over (start-up) and handover activities at the beginning or end of the Assignment. Specific deliverables and, where applicable, means of tracking performance and quality will be defined in the Assignment Terms of Reference (AToR), the Purchase Order (PO) issued which constitute the Contract or, in exceptional cases, the Contract concluded with the Service Provider selected for that assignment.

In the case of Fixed Price Assignments, the Fixed Price is not subject to any upward adjustment and the selected Service Provider takes full responsibility for all potential cost escalations in relation to that Assignment.

During their involvement in Service delivery at the Bank, seniority levels of the Service Provider's resources will evolve as they acquire additional experience. Changes in seniority will have no effect on pricing or the delivery of Services to the Bank. If a Service Provider's resource evolves to a higher experience profile, e.g., from Junior to Senior, the Service Provider must propose a suitable alternative at the lower profile level or obtain the Bank's approval to change the composition of the team dedicated to an Assignment, in accordance with the provisions of this Section. However, if the profile that has evolved to another seniority level takes another position, with the approval of the EIB, adjustments in pricing can be agreed between the Service Provider and the Bank.