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1. INTRODUCTION

This document sets out the Service Level Requirements (SLR), whose acceptance by the bidder is mandatory. It details the services to be provided, the service levels and the procedures.

2. INTERFACES, ROLES AND RESPONSIBILITIES

2.1. Functional description of the Contractor

The Contractor will have to assign staff to the following positions for managing the contract.

2.1.1. Account Manager (AM)

The AM is the primary point of contact between the IO and the Contractor. He acts as the main interface and assumes the different subjects in order to centralise with the IO

The AM is accountable for the operational execution of the Contractor's services which includes all planning activities as well as problem and change coordination.

The AM will align the Contractor's services with the customer (IO) goals.

Main activities:

- Control, follow-up and functional management of the contract
- Manage any problems that may arise from the IO dissatisfaction with any portion of the service provided
- Establish the regular service review procedure ensuring that all service issues are raised and dealt with effectively and within the required time scales
- Effectively liaise with subcontractors (if any)
- Contractual staff management

2.1.2. Service Delivery Manager (SDM)[1]

The SDM will be responsible for the daily management of operations ensuring that the contract is implemented and executed following this SLR. The SDM will report to the AM who is accountable for the overall execution of the contract.

The SDM is responsible also for the service provided by the Field Service Technicians (FST). He is in charge of sending the correct type of FST within the appropriate on-site intervention time.

The SDM is responsible for efficiently organizing and controlling the execution of standard service procedures within a group of FST as well as for insuring logistical support for these procedures.

Main activities:

- Functional management of his group
- Activity planning for the FST in accordance with the contractual obligations/agreements
- Installation planning and co-ordination with the Project manager during the roll-out periods
- Priority management
- Activity report controlling
- Incident/Problem follow-up

[1] Even if not optimal, SDM and AM can be the same person.

- Spare parts management for FST
- Co-ordination and integration with other parts of the organisation
- Escalation management
- Participation to all Technical Follow-up meetings

2.1.3. Field Service Technicians (FST)

At the beginning of the contract, Field Service Technicians (FST) will be designated for the IO. They will need to become familiar with the IO's equipment, procedures, places of delivery and buildings.

The FST will be in charge of technical interventions on site, as reported by the IO. They will be supported by the IO Service Desk analysts in order to meet the agreed service levels.

Main activities:

- install, repair, and maintain devices, including installation of maintenance kits, but not toners
- install, modify, and update hardware and firmware
- test installations using various testing programs and diagnose error messages
- make modifications and/or improvements to devices covered by the maintenance service
- maintain regular contact with the SDM to keep her informed on the ongoing process (activity reporting) and on any serious problem
- carry out routine maintenance procedures
- implement preventive maintenance programs involving periodical inspection and replacement of components coming to end of life

2.1.4. Project Manager (PM)

The project manager will be in charge with the coordination of the various solutions and equipment large scale deployments that will take place during the contractual life time. For more details please check the section "Contract Phase-in" period (chapter 6) as well as the various descriptions of the Project Management role (sections 0, 3.2.1 and 0).

2.1.5. Solution architect (SA)

2.1.5.1. Managed Print Services –solutions architect (SA-MPS)

This profile designates a senior engineer with at least 4 years' experience in the deployment of Managed Print Services in large organisations. The solution architect will propose the architectural design of the MPS solutions in the IO's environment (section 3.1.4) as well as the related security strategy (section 3.1.7). He/she will be in charge with the management of the most advanced technical issue related to the proposed MPS solutions during the contractual lifetime. In this respect, on request from the IO, he/she will be invited to participate in the Incident and Problem management workflows.

2.1.5.2. Pull printing solutions architect (SA-PP)

This profile designates a senior engineer with at least 3 years' experience in the deployment of the proposed pull printing solution in large organisations. The solution architect will propose the architectural design of the pull printing solutions in the IO's environment as well as the related security strategy. He/she will be in charge with the management of the most advanced technical

issue related to the proposed pull printing solutions during the contractual lifetime. In this respect, on request from the IO, he/she will be invited to participate in the Incident and Problem management workflows (especially when incidents Priority 1 occur and when the solution must be updated or migrated to a new version).

2.1.5.3. Push (type follow me) scan solutions architect (SA-PS)

This profile designates a senior engineer with at least 3 years' experience in the deployment of the proposed push (scan to me) scanning solution in large organisations. The solution architect will propose the architectural design of the push scanning solutions in the IO's environment as well as the related security strategy. He/she will be in charge with the management of the most advanced technical issue related to the proposed push scanning solutions during the contractual lifetime. In this respect, on request from the IO, he/she will be invited to participate in the Incident and Problem management workflows (especially when incidents Priority 1 occur and when the solution must be updated or migrated to a new version).

Note: If some of the above solutions are integrated in one single solution package, the same person may fulfil the related profiles.

2.1.6. Senior Support engineers (technical experts)

The Contractor will foresee 4 types of senior support engineers with at least 4 years of experience in the following areas of expertise:

- Proposed equipment configuration, troubleshooting and integration in the customer infrastructure (networking, security, firmware updates, etc.) [*Senior Support Engineer for Hardware Equipment* – ***SSE-HW***]
- Proposed MPS solution: installation (section 3.1.5), configuration (section 3.1.8), Incident and Problem management of the proposed optional solutions (sections 3.1.9 and 3.1.11) [*Senior Support Engineer for MPS related solutions* – ***SSE-MPS***]
- Proposed pull printing services: installation, configuration, Incident and Problem management of the proposed optional solutions [*Senior Support Engineer for Optional Services related solutions* – ***SSE-PP***]
- Proposed push (type follow me) scanning services: installation, configuration, Incident and Problem management of the proposed optional solutions [*Senior Support Engineer for Optional Services related solutions* – ***SSE-PS***]

Note: If some of the above solutions are integrated in one single solution package, the same person may fulfil the related profiles.

2.1.7. Logistics services

2.1.7.1. Related to purchased MFDs

The Contractor will assign the appropriate human and other than human resources in order to provide the following logistical services:

- delivering the devices to the premises of the ITER Organization,
- installing them on site (at the designed location: building/floor) so that they are ready for use.

2.1.7.2. Related to consumables delivery and installation

The Contractor will assign the appropriate human and other than human resources in order to operate the delivery of consumables for the printing devices.

2.1.8. Specialised Technical trainers for technical teams

This profile designates a professional trainer who will be responsible to deliver introductory training sessions.

3. DETAILED DESCRIPTION OF THE BASIC SERVICES

Documentation

The Contractor will provide the IO with complete documentation in English and in electronic format concerning the solutions and especially all the features listed as mandatory in the tendering specifications and/or for the additional features which the Contractor offered (Administrative guides, features description, installation guide, and any other useful information).

3.1. MPS software related services

As specified in the tendering specifications, for MPS-PpPp mode, device management tools will be provided, deployed on premises and maintained by the Contractor as long as the IO operates these devices. These tools are necessary for device discovery on the network, for proactive provisioning of consumables, for monitoring hardware alerts and for delivery of maintenance services, as well as for system management purposes (i.e. centrally configuring and managing large quantities of queues, handling and configuring drivers, automating firmware deployments) and for reporting purposes. Project Management (MPS Deployment)

This service is available under the MPS-PpPp mode. It will be delivered by the "Project Manager" profile. The objective of this service is to cover all the project management activities related to the deployment of the MPS software packages and to the setup of the related solution, including but not limited to:

- Coordination of all the activities on the Contractor side (software tools delivery and installation, configuration, procedures drafting, IO staff training sessions' organisation, Contractor staff management, etc.)
- Coordination activities with the IO (for all activities related to the MPS software deployment: procurement, logistics, technical, training).

During the IO migration process towards MPS-PpPp the same project manager will manage the mass deployments of MFDs in order to ensure the coherence of the whole migration project (section 3.2.1 - Project management related to printer estate deployment).

These services will be required during the contract phase-in period (see section 6 – Contract Phase-In), but, in addition to this, they may be required for the installation of any additional instances of such software products or for their change management, when the products must be migrated towards new versions.

The Project Manager will be the single point of contact between the IO and the Contractors during such migration phases.

3.1.1. Licensing

The MPS tools will be provided with licenses covering all the included modules and no additional fees will be required later ("software as a service" mode). The licenses will be renewed and maintained as needed by the Contractor, so that they are valid for the whole duration of the MPS-PpPp service (i.e. as long as the IO operates any printing devices in this mode).

3.1.2. Training

3.1.2.1. MPS tools - introductory training for Service Desk

During the mass roll-out, training sessions covering the MFDs basic functions and troubleshooting instructions will be organised (see section 3.2.4.1), and the helpdesk will be informed about the monitoring tools most important functionalities and how they can be used to better troubleshoot/diagnose a mal-functioning device.

3.1.2.2. MPS tools - introductory training for LSAs/engineering teams

As soon as the MPS tools have been installed and configured, the Contractor will provide 1 day training session to the IO system administrators or technical teams. During this session, the technical teams will learn how to use the functionalities of the proposed solution. The operational procedures involving the IO staff and the Contractor will also be drafted at this phase (in English).

3.1.3. Printer estate configuration and enrolment

The supplier will:

1. Configure the devices with the setting(s) necessary to make them compatible with the PpPp mode.
2. Configure the monitoring tools to enable the auto-discovery and monitoring of the devices.
3. Make sure the devices acquired are monitored at all times (including in case of moves, after technical interventions, etc.).

Failures related to the requirements above will be addressed within the Problem management process (section Problem management3.3.7.

3.1.4. MPS (Monitoring) solution(s) design

The Contractor will draft and propose the monitoring solution design, including, but not limited to:

1. Standard design (solution architecture, user profiles, solution configuration, security strategy - recommendations, etc.)
2. Solution resilience plan The overall system availability should be higher than 95% on a monthly basis. The resilience plan may include, although not mandatorily, secondary servers. If, however, the IO is confronted with repeated considerable system outages (system uptime < 95% on a given month), the IO will be entitled to ask the implementation of a consistent improvement plan, that may involve an additional investment from the Contractor. The improvement plan will follow the processes described under Problem Management (section 3.3.7). The improved solution will be provided at no additional charge to IO.

3.1.5. Solution Installation

The Contractor will be responsible to execute the following tasks:

1. Server software installation on Windows Server 2019 (or later) virtual machines for 2 environments: test and production
2. Solution resilience plan implementation.

3.1.6. Implementation backup/restore policy - for the server application

If deemed necessary, the Contractor will assist the IO in the backup/restore policy related tests and implementation. This assistance will be available only in "software as a service mode".

3.1.7. Security strategy (addressing both the centralised management tools and the printer fleet)

The Contractor will deliver, a document (in English) named "Security Strategy for Managed Print Services" containing complete system information and security related recommendations in relation with the MPS solutions (covering the MPS software but also the printer estate) and their implementation within the IO infrastructure. The document will address, within others:

1. Complete documentation about the information that will be transferred outside the IO in case remote access to the IO printing network is approved.

   In any case, the only information that the Contractor will have access to or that will be transferred to outside management systems (if applicable) will be limited to: consumption counters, hardware and consumable alerts, device specific information (serial numbers, brands, models, firmware versions, IP/host names and similar information). The Contractor will configure the system in such a manner so as **not to permit any 3rd party access to nor any transfer of any IO internal documents, whatsoever, outside the IO.**
2. Recommended configuration of the printer fleet (including, but not limited to: the protocols to be used for communication, administrative access protection, HDD/SSD encryption, immediate job overwriting, firmware authenticity and integrity checks, etc.) in order to achieve a security policy that is usable and protects the best interests of the IO.
3. Centralised software configuration - documentation and recommendations (protocols to be enabled or disabled, rules, polices, monitoring processes, etc.)
4. Firewall rules
5. Possible risks and their assessments.
6. Security updates provision (both for the printer fleet and for the centralised management software tools) and management strategy (including risk assessment associated with them)
7. Any other topics that are considered of interest by the Contractor
8. Processes meant to monitor that these policies are correctly respected during the contractual lifetime

   The Contractor will submit the Security Strategy document containing complete system documentation and the various requirements and recommendations to the IO for approval (see section 7.1). Following an evaluation process some adjustments may be required. If the IO estimates that the system in the proposed configuration may pose serious security risks, the Contractor will propose alternatives, which would give the IO the possibility to verify all the information transferred outside (e.g. clear text email messages sent from the management tools to both the IO functional mailbox and to the supplier).

   The Contractor will implement the agreed policy (in cooperation with the IO technical teams when required).

The Contractor will implement processes meant to monitor that these policies are correctly respected during the contractual lifetime. On request from the IO, the Contractor will present reporting about these processes and their results/findings.

3.1.8. Solution configuration

The Contractor will configure the solutions in such a manner as to ensure the Managed Print Services' compliance with the "Minimum Technical Requirements" in Annexes 1 and 2.

3.1.9. Solution maintenance

3.1.9.1. Application Server Updates provision

The Contractor will:

1. Inform the IO within the shortest delay or **at least during each Technical follow up meeting**, by means of a **report**, about any updates/new releases available for the implemented MPS solution or provide access to a website where the IO technical teams will be able to check the availability of such updates. Release notes related to the available updates will be provided.
2. Provide the IO with the possibility to download such updates or new product versions (when applicable) in view of their deployment.

   Difficulties in this areas will be addressed though the Problem management process.

3.1.9.2. Reactive maintenance related to the MPS solution (incident management)

Reactive maintenance covers incident management. The IO-SD will set a priority for each incident that is opened. The Contractor will confirm the priority level at call-back.

When one of the services provided by the centralised management (MPS) tools are interrupted and the system administrators establish the root cause for this malfunction as being related to the server –side software (such as a crash of one or multiple servers), then the IO will open a ticket that will be sent to the Contractor.

The supplier will assist remotely and organise, within the shortest delay, an onsite intervention of a qualified resource who will assist the IO to restore the service and who will analyse the malfunction root cause.

Priority	**Impact**	**Description**
Priority 1 *Critical*	Major outage affecting a large part of the fleet in IO. Critical business commitments cannot be met. Financial, market image, or regulatory implications.	Complete system outage (primary functions related to the monitoring and alert forwarding processes are completely unavailable).
Priority 2 *High*	System or application usable with severe restrictions. Performance severely degraded. Financial, market image, or regulatory implications.	The system performance is severely degraded (other than primary but mandatory functionalities as described in the tendering specifications are unavailable)
Priority 3 *Medium*	System or application usable with some restrictions This is the default priority.	The system is available with some restrictions (other than mandatory but offered functionality is impacted)
Priority 4 *Low*	Incidents that do not directly affect customer's productivity. Workaround available.	Some of the components/features are impacted.

The maintenance service includes the management of incidents and problems during the maintenance period. The normal working hours of this maintenance level is 08h30 to 17h30.

The Contractor will respond within 1 hour providing a phone contact with a specialised engineer (section 2.1.6 – SSE-MPS) who may assist the IO technical teams on the phone (for immediate actions and decisions) and on site.

The onsite intervention will have, as the main purpose, the service recovery (in cooperation with the IO teams, possibly making use of the existing system backups – therefore solution restore) and, as secondary purpose, the investigation of the failure's root cause. The engineer will also recommend some containment measures.

A Priority 1 ticket can be closed (resolved) when the system is "functional" again and when the IO disposes of some interim containment measures. A system is considered to be "functional" when the primary functions are available (at least the monitoring services for hardware and consumables alerts).

A Priority 2/3 ticket can be closed (resolved) when either a solution or some workaround is made available, either when the root cause is discovered and it is established that the only possible solution is a software update which requires additional deployment.

Following the ticket closure, the engineer will draft a complete report that will be presented to the IO teams in charge with the problem management and to the supplier's Service Delivery Manager during an ad-hoc meeting that will be organised within maximum 5 working days from the date the incident occurred. An action plan will be further on drafted by the Contractor, following the processes described under Problem management. Corrective actions (possibly patches) are expected within the following **maximum 5 weeks from the date of the ad-hoc meeting**.

The quality of service will be assessed according to compliance with the following service levels, which apply to all incidents:

Normal working hours	**Call-back response time and specialised engineer available for remote support within**	**Incident resolution time**
08h30 to 17h30 local time at the incident location	Call-back time: 60 minutes from the moment the ticket is sent to the supplier	18 normal working hours from call back time (2 working days)
	Specialised resource (SSE-MPS) availability: 60 minutes from the call-back time	

3.1.10. Printing devices configuration and re-enrolment in the MPS tool

This section refers to situations when the configuration and re-enrolment would be required after maintenance interventions (e.g. a hardware break and fix intervention, firmware update, etc.).

The Contractor will make sure that the entire population is continuously monitored and will execute the operations necessary to insure the continuity of service for all devices enrolled in this mode. This may include the necessity to:

- Adapt auto-discovery methods after devices break and fix operations, moves, replacements, etc.
- Inform the IO when such events occur in order to maintain the information integrity and coherence in the IO databases (such as the inventory systems) and in order to restore the service as soon as possible (i.e. create print queues, etc.)

The procedures covering the communication with the IO will be covered by the Operations Manual (to be drafted during the contract phase-in period and adjusted during the contract lifetime).

3.1.11. Technical assistance in connection with 3rd party hardware or software

Technical assistance may be requested by the IO to determine the cause of problems originated by third-party hardware or software.

Whenever problems occur on one of the solutions provided under the MPS service in relation with third party hardware and software, the IO are entitled to request a skilled support engineer who will investigate the incident at no additional cost to IO.

Profile of the competence will be compliant with the standard support services described in Section 2.1.6. (SSE-MPS). The support engineer will try to determine the root cause and will provide the description of the problem to be escalated to the third party software provider. The Contractor will keep the lead until incident closure. The Contractor will not be held responsible for delays which may occur if the third party software provider fails in giving a complete solution to the problem.

3.1.12. Automatic Reporting

If the centralised management tools support this functionality, and following an explicit request from the IO, the automatic reports described below will be scheduled by the Contractor and sent by the management tools to the IO through electronic means. The IO will decide upon the frequency of the automatic reporting.

This service will be delivered by the Contractor within 5 working days from the IO request.

If the reporting functionality is accessible to the IO staff and covered in the documentation provided, the service cannot be requested.

*3.1.12.1. Automatic Consumption reporting – **raw** data*

On request form the IO, the Contractor will schedule a regular report summarising printer estate information and its related consumption in relation with all devices acquired. Should the monitoring tools discover information related to other devices connected to the network, this information may also be included in the automatic reports, if so required by the IO.

This information should contain at a minimum:

- a list of devices with their related information (serial numbers, IP addresses, FQDNs, subnets, device brand and model, firmware versions, status, status date, installed options, etc.)
- a list of raw counters (printed, copied: black and white, colour, large format, duplex, simplex, scanned, etc.)

The IO is aware that some of these counters may require corrections before being used for invoicing purposes, however, regular logs of the population consumption may be considered useful.

3.1.12.2. SLA reporting (uptime, downtime, other reports)

On request from the IO and if available in the monitoring systems, automatic reports will be scheduled concerning:

- Status and alert history of a specific device/a group of devices for a specific period
- Paper jams history for a specific group of devices
- Consumable outages for the entire fleet
- Offline devices (that have lost connection with the centralised management tools)
- Uptime/downtime per device/specific group of devices.

Depending on the centralised management tools functionalities and on the quality of service delivered, other automatic reports may be exceptionally required by the IO.

3.1.13. Documentation

The Contractor will provide the IO with complete documentation concerning the centralised management tools (administrative guide, features description, installation guide, any other useful information).

3.2. Printing fleet related services

This chapter provides a description for each of the basic services available for the printer fleet:

This chapter will only provide a more detailed description of each basic service.

3.2.1. Project management related to printer estate deployment

This service will be made available when the IO acquires and deploys printing devices (MFDs and printers) in large waves. It will be delivered by the "Project Manager" profile. The objective of this service is to cover all the project management activities related to the deployment of the large waves of MFDs and/or printers. The Project manager will be in charge with the:

- Coordination of all the activities on the Contractor side (devices delivery and installation, configuration, procedures drafting, IO staff training, Contractor staff management, etc.)
- Coordination activities with the IO (for all activities related to the printer estate deployment: procurement, logistics, technical).

During the IO migration process towards MPS-PpPp services the same project manager will manage the software tools installation and the organisation of all the services (section 3.1.1. - Project Management (MPS Deployment)).

These services will be required during the contract phase-in period (section 6 - Contract Phase-in), but, however, they may be required for the deployment of any additional waves of MFDs and printers.

The Project Manager will be the single point of contact between the IO and the Contractors during such migration phases.

3.2.2. Onsite Installation of the equipment and/or options

The objective of this service is to provide the hardware installation of the acquired device with its associated equipment and upgrades ordered under the framework contract.

3.2.3. Preload of the IO's selected firmware settings

This service consists in the deployment of the firmware settings defined by the IO and detailed in the devices "Cookbooks" (drafted during the Contract phase-in period and amended, if necessary, during the contract lifetime).

The IO will define its requirements in a document, based on a template provided by the Contractor (Cookbook). The Contractor will regularly check that the standards which have been defined do not become inappropriate due to incompatibilities with the evolution of the product or its components.

3.2.4. Training

Depending on the types and quantities of devices delivered, training sessions for service desk and system administrators may be provided. The training sessions scheduling will be integrated in the deployment plans that will be drafted by the Contractor project manager before mass deployments are launched and approved by the IO.

3.2.4.1. MFDs – introductory technical training for help desks

The IO will be entitled to one 2-hours training session intended for the Service Desk. This session will be delivered on site at a date subject to mutual agreement.

The purpose of these sessions would be to prepare the local interventions teams in each building for local support and to reduce the risk associated with technical novelty. The basic technical skill will be demonstrated during these sessions (such as paper jam removals, consumables installations,

correct paper loading, basic device configuration and options that can be configured only at the device UI, etc.).

3.2.4.2. MFDs - system administrators (advanced technical training)

For the IO, a 3-hour training session will be organised, preferably before any mass deployment at a date subject to mutual agreement.

The sessions will be organised on the IO premises.

3.2.5. Maintenance services

3.2.5.1. Incident management (Integrated and Reactive maintenance)

The corrective maintenance service includes the management of tickets (incidents and problems) during the maintenance period. The normal working hours of this maintenance level is 08h30 to 17h30.

Each incident will have a Priority assigned according to the table below:

Priority	**Impact**	**Description**
Priority 1 *Critical*	Major outage affecting a large part of the IO. Critical business commitments cannot be met. Financial, market image, or regulatory implications.	NA
Priority 2 *High*	System or application usable with severe restrictions. Performance severely degraded. Financial, market image, or regulatory implications.	Complete outage of the equipment
Priority 3 *Medium*	System or application usable with some restrictions This is the default priority.	The machine functions partially, but least one of the mandatory/award characteristics is affected.
Priority 4 *Low*	Incidents that do not directly affect customer's productivity. Workaround available.	Other than mandatory/award functionality is affected.

The quality of service will be assessed according to compliance with the following service levels, which apply to all incidents:

Normal working hours	**Call-back response time**	**Schedule of intervention and incident resolution time**	**Incident resolution time** **(Priority 1 and 2)**
08h30 to 17h30 local time at the incident location	60 minutes (KPI 1)	Scheduling in 4 hours from opening of ticket. (KPI 2)	Incident resolution time 36 hours (4 working days) (KPI 3)

For KPI 1, KPI 2 and KPI 3, the respect of the KPIs in 90% of the cases (on a monthly basis) is considered acceptable.

Every breach to the KPIs will be reported in the next Technical Follow-up meeting for discussion and proposal of corrective actions. In case for three (3) consecutive months KPI 1, KPI 2 or KPI 3 are breached, the subject will be brought to Progress and Quality Meeting where the Contractor will be asked to propose a remediation plan with a dedicated fortnightly follow up.A ticket may be created by the IO and transferred to the Contractor for resolution. This type of corrective maintenance is named "**Reactive (Ticket-Based) Maintenance Service**".

Alternatively, due to the information received from the monitoring tools, the Contractor may be informed about some of the equipment malfunctions. In this case, the Contractor will create a ticket (in his internal ticketing tools) and transfer it to the IO. Subsequently, the Contractor will intervene, fix the malfunction and keep the ticket documented. This type of corrective maintenance is named "**Integrated (Alert-based) Maintenance Service**".

Overall, it is expected that during the first contractual year, at least 50% of all the tickets are created by the Contractor (i.e. "Integrated maintenance type"). Subsequently, this percentage should increase towards 70% - Integrated ML tickets versus 30% - Reactive ML tickets.

However, overall, the machines are expected to have an average uptime >=90% monthly (KPI 4) with a minimum of individual 75% uptime (KPI 5).

The Contractor commits to implement the ticketing systems interface in such a way as to allow the SRL KPIs to be tracked, followed-up and measured.

3.2.5.1.1. Every breach to the KPIs will be reported in the next Technical Follow-up meeting for discussion and proposal of corrective actions. In case for three (3) consecutive months KPI 4 or SLA 5 are breached, the subject will be brought to Progress and Quality Meeting where the Contractor will be asked to propose a remediation plan with a dedicated fortnightly follow up. IReactive (Ticket-based) Maintenance Services

Reactive (ticket-based) Maintenance covers incident management based on tickets opened, documented and transmitted by the IO to the Contractor. The IO-SD will set a priority for each open ticket covering an incident. The Contractor service desk will confirm the priority level at call-back.

3.2.5.1.2. Integrated (Alert-based) Maintenance Services

Integrated (Alert-based) Maintenance covers incident management based on alerts, reports or any other information generated by the monitoring tools. To the alerts, the Contractor will react as soon as possible by implementing corrective measures and with the principal goal to restore a normal service operation as quickly as possible, minimizing the impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained.

It is the most complete form of maintenance and it implies:

- the implementation of advanced monitoring tools and
- the existence of dedicated resources in charge of continuous monitoring of the available equipment and
- the implementation of corrective measures in a timely manner.

The end-user is not expected to inform the technical teams about technical problems affecting the equipment and neither is he/she expected to document any of these. The maintenance services management and delivery should be transparent to the end-user.

Integrated Maintenance covers **incident management based on tickets opened, documented and transmitted by the Contractor to the IO.** The Contractor will set a priority for each open ticket covering an incident created based on information received from the centralised management tools.

3.2.5.2. Devices replacement

If a device was

- available for less than 75% of the time (i.e. its mandatory functionality, as defined in the minimum technical requirements, was impacted – Priority 2 or 3 incidents) during 2 consecutive months
- in case the contractor cannot fix the device within 5 consecutive working days
- after more than 3 consecutive unsuccessful attempts to fix a specific malfunction

whichever comes first, the device will be immediately replaced by the contractor and at no cost for the IO.

3.2.5.3. Preventive maintenance

At the initiative of the Contractor (i.e. to reduce incidents by installing drivers, patches, firmware upgrades) and after approval of the IO, or at the request of the IO, following a decision during the contract's follow up meeting, preventive maintenance will be executed on the equipment.

Preventive maintenance will also include various security patches that will be applied by the Contractor to the machines. The Contractor will keep the IO informed about the various security vulnerabilities and will provide complete documentation of the various firmware/patches releases. At the same time the Contractor will evaluate the risk severity the respective vulnerability poses to the IO and will recommend a strategy. The IO will evaluate the information received from the Contractor and will decide on the approach to be followed (implement or not corrective actions).

Every time the Contractor proposes a firmware update for the resolution of a known problem, the Contractor will first test the proposed update on equipment located on their premises and then will propose it for tests and validation to the IO,

3.2.5.4. Regular cleaning

At least once per year or every time a device produces another 20% of its total duty cycle (whichever comes first), a technician will be sent on site for the device cleaning, calibration and any other regular maintenance activities. The Contractor will present a report of this activity during the monthly progress and quality meetings. Where a device manufacturer recommends more frequent hardware maintenance activities, these will be performed according to the manufacturer's recommendations.

3.2.5.5. Technical assistance in connection with 3rd party hardware or software

Technical assistance may be requested by the IO to determine the cause of problems originated by third-party hardware or software.

Whenever problems occur on the devices installed with third party hardware and software, the IO is entitled to request a skilled support engineer who will investigate the incident. Profile of the competence will be compliant with the standard support services described in the SRL. The support engineer will try to determine the root cause and will provide the description of the problem to be escalated to the third party software provider through the Central Help Desk. The Contractor will keep the lead until incident closure. The Contractor will not be held responsible for delays which may occur if the third party software provider fails in giving a complete solution to the problem.

3.2.6. <u>Request for consumables (toner, staples and others)</u>

3.2.6.1. Proactive consumables deliveries and installations

The Contractor will pro-actively provide the necessary consumables/replaceable parts for a specific device whenever required in a transparent manner for the user and based on alert information

provided by the monitoring tools. *Exceptions: paper*. In view of some exceptional circumstances and only to prevent incidents, the IO may require small stocks of consumables on site.

In case a PpPp device runs out of a consumables, the IO will have the possibility to open an incident according to the procedure described in the Reactive maintenance (section 3.2.5.1.1). Tickets registered in this context will have Priority 2.

A compliance of service of minimum 97.5% is expected on a monthly basis (less than 2.5% of the population of PpPp mode devices are tolerably blocked due to missing consumables on a monthly basis). Any difficulties in this respect will be managed through the Problem Management workflow.

3.2.6.2. Reporting on proactive delivery of consumables

The Contractor will create regular reports concerning the activity of proactive consumables delivery.

The regular reports will contain a complete list of machines for which the proactive provisioning failed during the previous month. For every such case, the following information will be provided:

- Downtime duration (till the consumables were delivered)
- The root cause of the event
- In case the event can be considered a fault on the Contractor side, corrective measures to prevent such situation for the future.

There reports should be discussed during the Quarterly Progress and Quality Meetings.

On explicit request from the IO, a report will be provided with all the machines that have been proactively supplied with consumables during the last period.

3.2.6.3. Reactive consumables deliveries (based on IO request)

Consumables[2] may be ordered by the Service Desks using the procedure described for reactive maintenance under section 3.2.5.1.1.

Incidents registered in the context of this procedure will be marked as "request for service". Associated priority will be considered as medium (3).

The Service Desks will make sure that the incidents contain the information about the requesting equipment, identifier number of the concerned MFD, serial number(s), quantities of consumables to be acquired. In case these conditions are not fulfilled the Contractor will not process the Incident and communicate this to the IO's concerned service through a standard message.

The Contractor will provide the consumables while respecting the deadline described above.

3.3. Contract management services

3.3.1. Ordering

The ordering process covers all the activities carried out for the acquisition of hardware, software, and associated services by the IO. This includes all commercial aspects from pre-contractual contacts until signature of the Purchase Order/Task Order by the IO.

3.3.2. Specific Offering

The Offering process applies to options, accessories and possibly consumables for the standard equipment that are listed in the catalogue.

It will apply also to functionality extensions/modules [that were not included in the standard service as described in the minimum technical requirements and in the offer] of the various services (MPS

[2] Consumables include toners, staples, maintenance kits, and any other replaceable service parts

or optional services) – such as additional modules for secure watermarking integrated for secure printing solutions or any other functionality that may be useful for a particular department.

It allows the IO to acquire options/accessories/consumables which do not appear in the equipment catalogue without a systematic requirement to adapt the catalogue. It also allows the IOs to request the insertion of a new item.

3.3.3. Delivery

The delivery process goes from the receipt of the fully signed order to the complete and order-compliant delivery of the ordered items.

3.3.4. Order Tracking

During the complete logistical process, the Contractor shall be able to give immediate information on the status of an order at any time, from the moment the request for order has been initiated by the IO to the payment of the associated invoice.

The Contractor shall send order follow-up sheets every month to IT-PROC. This information will enable the IO to follow regularly the progress of purchase orders from the date of signature of the purchase order to the delivery.

3.3.5. Handling of data on permanent storage

At any time the Contractor will make provisions that the data on any permanent storage of the devices acquired under this contract is handled cautiously and with due discretion.

This means, in particular, that when this permanent storage is taken back for repairs or replacement (in the context of maintenance services, warranty exchange) it will be securely wiped before leaving the IO's premises.

3.3.6. Quarterly invoicing based on Pay-per-Page-proactive (PpPp)

The Contractor shall invoice, for each of the proposed devices the price of the Pay-per-Page-proactive (PpPp) service associated to each device.

As the pay-per-page (PpPp) service includes the reactive or proactive provision of consumables (toner, staples, maintenance kits and any other parts requiring periodic replacement - except paper), the cost of PpPp service only considers and depends on the actual number of printed pages.

3.3.7. Problem management

3.3.7.1. Service Objective

This service will focus on the management of the problems that cannot be resolved through the standard maintenance procedures (as described in the sections referring to incident management). Such problems may be the root cause of one or (potentially) more incidents. They may refer to any of the situations below:

- a specific part that has been factory installed on the devices and that has been later reported as defective by the manufacturers; therefore the part must be changed on all impacted devices
- a firmware problem (related to security or any defective or missing functionality)
- any problem that may be observed on the software solutions associated with the devices (MPS solutions or Optional services solutions)
- any recurrent problem related to deliveries, installations, moves, withdrawals and other logistical issues.
- any recurrent problem related to offering, ordering, invoicing and other administrative issues.
- lack of quality of the provided services
- etc. (any other contractual problem)

3.3.7.2. Problems Log

After the entry into force of the contract, the Contractor will create a Problem Log.

Whenever a new problem is observed (that may affect the devices, the solutions or services delivered to the IO), the Contractor will open a new record in the Problem Log and will assign it a unique ID. Further on, every problem will be documented. At least the following information will be provided for each problem:

- Problem ID
- Problem title (one short sentence describing the problem)
- Date of introduction
- Status
- Short description (symptoms, impact, explanation)
- Population impacted (type and number of machines, brand, software solutions, etc.)
- Type (Hardware/Software/Security)
- Context (general or related to a specific configuration)
- The solution description (when one is found)

3.3.7.3. Tasks Log

Associated to the problem log, there will be a Tasks log. In the task log the Contractor will specify, per problem, the actions to be executed, the action owner (in case the cooperation of the IO is necessary) and the scheduled date. These tasks will be part of the action plan the Contractor proposes for the problem containment and/or resolution.

3.3.7.4. Solutions Deployment plan

Every time a solution or a workaround for a known problem is available and must be deployed in the production environment, the Contractor will draft and propose a **Solution Deployment Plan.** The plan will be evaluated by the IO. Some adjustments may be required. Following the IO approval, the Contractor will proceed with its deployment.

3.3.7.5. Solutions Deployments Log

The Contractor will also maintain a **Solutions Deployment Log** (specific to each IO). In this log they will follow the various solutions deployment plans and will report to the IO on the progress.

3.3.8. Ecological reporting and recommendations on print fleet optimisation

3.3.8.1. Consumption reporting (invoicing ready)

At least for the Middle Range devices (better if all are included), a quarterly report shall be provided to group the devices per sub-entity (building/floor).

This report shall list per device at least:

- Device ID (Serial number and IO internal inventory tag ID)
- The number of pages printed/copied in simplex
- The number of pages printed/copied in duplex
- The number of pages printed/copied in Black and white
- The number of pages printed/copied in colour
- The number of pages printed/copied in A4
- The number of pages printed/copied in A3

3.3.8.2. Regular recommendations for print fleet optimisation

On yearly basis, in January, and based on the consumption registered during the last year, the Contractor will provide a report with recommendations for print fleet optimisation:

- List of machines that are overused/under-used and possibly not appropriate for the purpose
- Recommendations for future actions: such as MFDs relocation (replacing an overused with an underused one if necessary). Other recommendation may be included.

4. OPTIONAL SERVICES

These are services directly linked to the implementation of Optional Solutions: Pull Printing and/or Push Scanning. Project Management

This service will be made available whenever the IO decides to implement an infrastructure of pull printing or push (type follow me) scanning. It will be delivered by the "Project Manager" profile. The objective of this service is to cover all the project management activities related to the deployment of the optional solutions, including but not limited to:

- Coordination of all the activities on the Contractor side (software tools delivery and installation, hardware options and accessories installation on the printer estate, configuration, procedures drafting, IO staff training sessions' organisation, Contractor staff management, etc.)
- Coordination activities with the IO (for all activities related to the optional solutions deployment: procurement, logistics, technical, training).

During the contract phase-in period, the same project manager will manage the mass deployments of MFDs and printers in order to ensure the coherence of the whole migration project (section 3.2.1 - Project management related to printer estate deployment).

These services will be required during the contract phase-in period but, however, they may be required also during the contract lifetime (in case optional solutions are deployed at a later stage, or for the deployment of the optional solutions on additional devices or when the solutions must be migrated towards new host operating systems).

The project Manager will be the single point of contact between the IO and the Contractors during such migration projects.

4.1. Training

4.1.1. Optional solutions - introductory training for Service Desk

IO will be entitled to one 2-hours training session intended for the Service Desk. This session will be delivered on site at a date subject to mutual agreement. This session will be given only when the pull printing service is activated. However, if both optional services are activated at the same time, the training session should cover both services.

The purpose of these sessions would be to prepare the local interventions teams in each building for local support and to reduce the risk associated with technical novelty. The basic technical skills will be demonstrated during these sessions (basic installation and troubleshooting skills in relation with the optional services – how to diagnose correctly an incident, how to restore the service as soon as possible, how to configure a device, etc.)

The Contractor will provide a troubleshooting guide as well, that will remain at IO Service Desk for later reference.

4.1.2. Optional solutions - introductory training for LSAs/engineering teams

As soon as the server-side part of the solutions associated with the optional services has been installed and configured in IO, the Contractor will provide training sessions to the IO system administrators & technical teams as follows:

- 1 day session if only pull printing service is activated
- 2 days session if both optional services (print and scan) are activated.

During these sessions, the technical teams will learn about:

- Specific details about how to configure and maintain the proposed solution (solutions administrator guides and any other documentation should be provided in English and in electronic format)
- Specific configurations that may be mandatory for the printer estate setup for the service operation (the devices cookbooks will be adapted to reflect the optional-services required configuration settings). Tools for mass enrolment of the printer estate will also be covered during these sessions.
- Solution installation details (the Contractor will also draft and provide the solution installation guide that may be used for later reference in case the solution needs to be extended at a larger scope.)

4.2. Extensive Reporting

Following an explicit request from the IO, the following reports will be scheduled or extracted by the Contractor from the tools associated with the optional services and sent to the IO through electronic means. These reports must be made available at least every year and presented during the "Progress and quality meetings".

- Consumption reporting (per printer/group of printers)
- Consumption: black&white vs colour (per printer/group of printers)
- Consumption: simplex vs duplex (per printer/group of printers)
- Consumption reports per machine category (model)
- Ecological reports
- Savings reports (deleted jobs following various policies, such as jobs expiration time)

The Contractor will also analyse the reports and propose some recommendation for print fleet optimisation. In this sense, the Ecological report and related recommendations that are presented to the IO (section 3.3.8) every year will take into consideration the available data from the optional solutions.

The reporting functionality should preferably be accessible to the IO staff and covered in the documentation provided, so that the IO can schedule reports at its own convenience.

5. ADDITIONAL SERVICES

The Contractor shall be able to provide these additional services when requested by the IO (i.e. these are mandatory services to be provided at a request of the IO).

5.1. Professional services

The contract will cover the provision of the professional services required throughout the various phases of the lifetime of concerned devices.

The Professional Services will be required during normal working hours.

5.2. Consulting services for optimizing the print fleet

Upon request by the IO, the Contractor will provide consulting services for optimizing the print fleet for all – or a part – of the installed base of devices.

5.3. Recycling of the equipment

This service consists in the withdrawal of purchased equipment acquired under the scope of this contract for their reuse or recycling.

Upon request by the IO, the Contractor will pick up a batch of equipment from the IO's premises and reuse them on the second-hand market or recycle them according to the environmental regulation in force at the pickup location.

The Contractor will assume that the IO has taken all necessary steps to remove sensitive information from the device. Any externally visible tag identifying the equipment as being property of the IO shall be removed by the Contractor.

The IO will request an annual report on reuse and recycling of the equipment on which this service has been applied.

5.4. Moves/relocations

Upon request by the IO, the Contractor will perform moves of devices, mainly MFDs, within the same building or between 2 buildings in the IO campus. This service will be provided during Normal Working Hours.

6. CONTRACT PHASE-IN

In the IO, the contract phase-in project will be split into a number of 4 (four) key phases:

1. Proof of Concept (devices, MPS, and possibly optional services)
2. Pilot Implementation (devices, MPS, and possibly optional services)
3. Introductory Printing audit
4. Mass deployment

The first 3 phases will be organised only if the IO expresses interest in the optional services (pull printing/push scanning). In case the IO has no interest in such services, then the first 3 phases won't be organised (Proof of concept, pilot, introductory printing audit).

Following the phase-in period, the solution will pass into operational phase.

6.1. Mass deployment – detailed description

6.1.1. Objective

The objective of this phase is the replacement of the old printer estate with a new one acquired under the contract.

6.1.2. Scope

This deployment will concern mainly the MFDs but may concern also some group printers.

i. This deployment will concern mainly the middle range MFDs but may concern also some workgroup or individual/group MFDs.

ii. The solution proposed for the monitoring, reporting and centralised management of printer estate including for queues management on Windows-based print servers. For the IO, this solution should be installed in HA mode in the Datacentre (production environment).

iii. If applicable, the solution proposed for pull printing and push scanning (including all options and extensions necessary for complete implementation on each of the devices deployed. For

the IO, this solution should be installed in HA mode in the Datacentre (production environment). This solution will be included in the deployment only on request from the IO (i.e. if the IO decides to acquire this optional service).

For the IO, mass deployment may be carried out in one "wave".

6.1.3. Teams involved

For the Contractor:

- The Project Manager designated for the project of migration to the MPS (PM)
- The solution(s) architect/expert (SA-MPS, SA-PP, SA-PS)
- The senior support engineer(s) (SSE-HW, SSE-MPS, SSE-PP, and SSE-PS) (for tasks such as consultancy on network and devices configuration, servers installations, etc.)
- Other field technicians that may be involved by the Contractor according to the necessities (FST)
- The system administrator (SysAdm-A) who will be in charge with
  - with the devices enrolment in the pull printing/ push scanning solution
  - the devices enrolment in the monitoring tools.
- Field technicians that will be in charge with the actual on site deployment of the devices (their configuration according to the cookbooks created in the POC phase)
- Logistical services (in charge with the transportation of the various devices)

For the IO:

- The Project manager designated by the IO
- The engineering department in charge with the evaluation of the solutions and their integration into the IO infrastructure (IT/ITSO/CSD)
- The departments in charge of operational services (IT/ITSO/ITOP)
- Logistics Services (that will arrange the access to the building, and that may synchronise with the previous supplier for the retrieval of the old machines) (IO-LO)
- Departments in charge with the communication towards the end users
- End users

6.1.4. Deliverables

- Finalised Deployment plan
- Training plan
- Finalised Deployment Process Manual
- Installed base of MFDs and printers according to the deployment plan; complete enrolment in the monitoring tools and in the pull printing/scanning solutions, as foreseen in the deployment plan.
- Delivered training sessions to the end users
- Delivered training sessions to the technical teams

6.1.5. Execution

Upon mutual agreement, a **Deployment Plan** will be drafted by the Contractor in cooperation with the IO. The IO will provide its final decisions on the devices to be replaced and on the newly selected models, as well as any preferences or constraints in terms of timing, access to buildings, coordination with the previous Contractor, resources availability, etc.

The Contractor will take all these requirements into account and will draft a **finalised Deployment Plan** containing all the necessary information – specific machines, location, dates. At the same time, the Contractor will draft a **Training Plan** concerning the end user training sessions' schedule. If required by the IO, training sessions for the technical teams will also be included in the training plan (and scheduled before the mass deployment is launched). The training sessions for end users will be scheduled shortly after the devices are delivered and installed (for each machine: within 1 week from its delivery and installation).

The **finalised Deployment/Training plans** will be approved by the IO (through the IO Project Manager who will liaise with the concerned internal departments).

The IO project Manager will organise a follow-up meeting with all concerned operational departments where these plans will be presented together with the updated **Deployment Process Manual**. The **Deployment Process Manual** will be updated with the final dependencies and the IO operational teams will be informed about their role.

Whenever mass roll-outs are organised, the Contractor delivers and installs the devices, directly in the users' buildings/offices with no transit through central warehouses. This enables a faster deployment of the devices and minimizes the need for storage space.

The cookbooks will be applied and the devices will be enrolled in the associated solutions (pull printing/monitoring)

Once the installation is completed, the Contractor will take away the waste (cartons, plastic bags, polystyrene, etc).

Consequently, the direct delivery and installation of printers from the Contractor's warehouse to the end users' premises will be executed only when mass and simultaneous replacement of installed base are organised.

6.1.6. Timelines

For the IO, the MFD roll-out will be organised in 1 wave starting shortly after the signature of the contract.

7. GLOSSARY

7.1. Definitions

- **Incident** – any event which is not part of the standard operation of an IT service and which causes, or may cause, an interruption to or a reduction of the quality of that service.
- **Problem –** condition often identified as a result of multiple technical incidents that exhibit common symptoms. Problems can also be identified from a single significant incident, indicative of a single error, for which the cause is unknown, but for which the impact is significant.
- **Change management** – process of controlling changes to the infrastructure or any aspect of services, in a controlled manner, enabling approved changes with minimum disruption.
- **Call-back response time** – time between incident ticket creation and the communication of the Contractor's Incident Reference to the IO-SD
- **Incident resolution time** – time between when the incident ticket is created by the IO-SD and the moment when the incident or service request is closed, measured during the normal working hours of the service level; typically a specific email message to signal that the incident can be closed will be sent by the Contractor's service desk to the IO-SD.

- **On-site intervention time** – time elapsed between when the IO-SD sends the request to open an incident by email and the arrival of the FST at the location of the concerned device.
- **Image stability** – time during which all drivers installed on that family of machines will remain the same, even though hardware components may change

7.2. Acronyms

7.2.1. General

Contract	Framework contract to be signed with the successful bidder
IO	ITER Organization
SLR	Service Level Requirement
SLA	Service Level Agreement
MPS	Managed Print Services
PpPp	Pay per Page proactive
PpPr	Pay per Page reactive
MS	Maintenance Services

7.2.2. Contractor

AM	Account Manager
SDM	Service Delivery Manager
FST	Field Service Technician
PM	Project Manager
SA-MPS	Managed Print Services –solutions architect
SA-PP	Pull printing solutions architect
SA-PS	Push (type follow me) scan solutions architect
SSE-HW	Senior Support Engineer for Hardware Equipment
SSE-MPS	Senior Support Engineer for MPS related solutions
SSE-PP	Senior Support Engineer for Optional Services related solutions
SSE-PS	Senior Support Engineer for Optional Services related solutions

7.2.3. ITER Organization

PO	Purchase Order for the acquisition of equipment and associated services
IO-SD	ITER IT Service Desk