



III – TECHNICAL SPECIFICATIONS

INTERPOL “TRAINING MANAGEMENT SYSTEM” (TMS) AND “LEARNING
MANAGEMENT SYSTEM” (LMS) SPECIFICATIONS DOCUMENT

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1 PURPOSE OF THE DOCUMENT

This document is prepared by CBT (the Capacity Building & Training directorate of INTERPOL) to specify the requirements of distance learning services to be acquired through renting or purchasing by INTERPOL.

This document includes brief Introduction, overview, needs to be covered and use cases of the INTERPOL Training Management System (TMS).

2 INTRODUCTION TO INTERPOL DISTANCE LEARNING

The purpose of the tender is to create a centralized location to process and record all information related to **police training data, events and resources** at INTERPOL via a new Training Management System (TMS) which shall include the access to the Learning Management System (LMS).

The TMS overall aim is to allow the Organization to better manage and standardize its police training activities and online resources with external audiences (from Member countries).

The TMS will also be a gateway for donors on police training needs and training resources from INTERPOL and its partners.

Current situation	Expected deliverables
<p>Training events managed manually INTERPOL has no system available to help course managers & instructors to prepare, deliver and assess training events.</p>	<p>A common online tool The TMS will be used by all course managers & instructors to prepare, deliver and assess training events. This will include: TNAs, sessions, rosters of instructors and participants, training material, evaluations...</p>
<p>No quality check No quality control by INTERPOL of training events delivered by all units.</p>	<p>Quality checks through TMS The TMS will enable INTERPOL to check the implementation of training standards (e.g. instructor names and certification).</p>
<p>Training evaluation Done randomly by course managers</p>	<p>Online training evaluation The TMS shall have online evaluation tool</p>
<p>No repository of training material No rosters All units working in silos</p>	<p>A library of approved training material Training material & course outlines accessible to course managers and instructors on need to know basis Rosters of instructors and participants</p>
<p>No reliable training statistics INTERPOL does not manage reliable training data.</p>	<p>All training data processed through the TMS The TMS will record all information related to police training events and training data. Reliable global and specific training reports will be possible.</p>
<p>No visibility Little internal and external visibility on training events and online resources (e.g. sessions are indicated in the calendar of events with no search tool by region, by subject,...).</p>	<p>Open information Any data - on a need to know basis – can be visible by INTERPOL staff, NCBs and other authorized users.</p>

<p>IGLC (INTERPOL Global Learning Center) an option IGLC is a separate online learning tool barely used by course managers and instructors.</p>	<p>IGLC integrated The TMS is an inclusive tool and will integrate IGLC services. Course managers & instructors will assign online resources and follow-up assignment completion by participants.</p>
<p>No online resources available on mobile App</p>	<p>Online resources available from mobile app Either online existing resources from IGLC or new chunks of learning resources shall be accessible by IGLC users on and off line from mobile devices.</p>

3 OVERVIEW OF INTERPOL TMS

3.1 Introduction

Overall objectives of TMS:

1. Standardize law enforcement training activities for Member countries processed by INTERPOL course managers and instructors through a single system including a TMS, a LMS and mobile app.
2. Ease up the course managers and instructors training and administrative tasks
3. Avoid duplication of efforts internally and externally by giving visibility on planned events
4. Support the concept of INTERPOL Global Academy enhancing regional outreach
5. Generate reliable corporate statistics.

3.2 Environment

Every year, about **100 INTERPOL course managers*** organize more than **250 police courses** for Member countries with around **7,000** external participants.

*N.B. * Course managers is not an official title. Course managers include all officials involved in organizing training activities.*

This includes activities funded by INTERPOL and about 100 donor projects. In addition to workshops, activities include panels, reviews...and distance learning.

In addition to the above workshops, **the INTERPOL e-learning platform called IGLC** (INTERPOL Global Learning Center) is accessed through INTERPOL secured web sites. It has a LMS (Learning Management System from Talentsoft company) internally called "I-Learn" which has **70 online courses and about 10,000 users**.

About 15,000 online courses will be completed in 2018. The online courses have an average length of 45'. Most of the online resources are developed internally (by INTERPOL)

Our external partners (member countries) and a few external partners (e.g. UNODC, ITU,...), donors (GAC Canada,...) or competent national governmental authorities approved by CBT will have access to specific contents of the TMS.

For instance, external partners may not have access to the roster of instructors (containing names).

3.3 Target audience and beneficiaries

Main target: **All INTERPOL course managers and instructors** of police capacity building events for Member countries and the Participants to training activities.

Secondary targets: Some portions of the TMS shall be partially consulted by a selection of external partners. Initially, three types of external users to the TMS are envisaged:

- INTERPOL training partners (CEPOL,...) → granted certain management rights

- NCBs, Other national or International organizations (e.g. approved police services, UNODC) → access to some information (e.g. training calendar)
- Donors could access to a repository of needs.

All the actors above will be able to submit training needs through the TMS. This section of the TMS will be managed by CBT.

3.4 Roles

The TMS will be monitored by the Capacity Building and Training directorate (CBT).

The three primary role based functions are:

Administrator: The TMS administrator will manage the access rights of ALL key users and other users. The TMS will be administered by an administrator from CBT who will:

- Establish SOPs and procedures
- Adjust access rights parameters per user
- Advise users (mainly the INTERPOL course managers)
- Insert data
- Draw statistics.

Key users: The INTERPOL course managers and instructors will manage the access rights of their course users (the training participants).

Other users: Training participants, NCBs, other entity representatives.

The LMS has a dedicated team developing and managing the online content and administering the users.

3.5 Expected services and access rights

The table below lists the TMS expected services and the type of access by users to services. The TMS administrator is not included in this table as he/she will have all rights over the whole TMS.

LOT 1: the TMS

/ = no access

EXPECTED SERVICES	Comments	Type of data	KEY USERS (INTERPOL Course managers)	Member country participants	NCBs	INTERPOL Global Academy (CEPOL,...)	Other external partners (UNODC, ...)
Training needs	Repository of training needs organized by crime domains (cybercrime, terrorism, child exploitation...). Each unit will be able to consult specific needs expressed by external partners.	Text on needs (no names)	read	/	contribute	contribute	contribute
INTERPOL Resource repository	Catalog of training courses (with search engine)	Description of courses	Contribute	Read	Contribute	Contribute	Contribute
	Training facilities (description of facilities)	Contact details of facilities managers	Read	/	Contribute	Contribute	/
	Approved training material and TNAs	Curriculum and lesson plans	Contribute	/	Read	Read	/

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	Roster of Internal Instructors	Names and contact details	Contribute	/	/	Read	/
	Roster of External Instructors	Names and contact details	Contribute	/	/	Contribute	/
	Information on INTERPOL Global Academy	General info on what the Academy does	Read	/	Read	Contribute	/
Library of information on external partners projects and courses	Information on Projects funded by various donors + Planned sessions	Non Interpol project names, donor, scope, budget, beneficiary countries, training courses catalogue	Read	/	Read	/	Contribute
Dynamic management of INTERPOL training events	Plan sessions	Topic, venue and dates of sessions	Contribute	Read	Contribute	Contribute	Read
	Participant applications	Participant names and contact details	Manage	/	Contribute	/	/
	Selection of participants <i>N.B. NCBs are often involved in the selection of national police officers for training events. This is a sensitive and potential issue when setting up the TMS parameters supporting the selection of participants.</i>		Manage	/	Contribute	/	/
	Letters of invitation	Participant names and contact details	Manage	/	/	/	/
	List of participants	Participant names	Manage	/	/	/	/
	Sending of training resources including online resources		Manage	/	/	/	/
	Edit training certificates of attendance and certifying certificates	Participant names	Manage	/	/	/	/
	Roster of effective participants including names, gender and nationalities	Participant names, gender, nationalities, pictures.	Manage	/	/	/	/
Evaluations	The TMS shall allow course managers to process online level 1 evaluations		Manage	Contribute	/	/	/
	Level 2		Manage	Contribute	/	/	/
	Level 3		Manage	Contribute	/	/	/
Training data	Data for the annual INTERPOL Training reports and specific reports including: events, dates, venue and nationalities.	No name. Data on course venues, dates, gender,	Read	/	/	/	/

		participant nationalities.					
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LOT 2: THE LMS

Access to e-learning resources (from I-Learn or from the TMS)	E-learning modules, forums, online resources,... Course managers and instructors will be able to assign online resources and follow-up.	Learning content accessible to https and I247 users through I-Learn	Assign online resources + completion monitoring	Complete courses	Security officers will assign online resources + completion monitoring	Assign online resources + completion monitoring	Read online course catalog
Optional: webinars and virtual classrooms	The TMS would ideally support webinars and virtual classrooms	Live training	manage	Complete webinars and VC	/	/	/
Access to e-learning resources from an App	E-learning short modules Authorized IGLC users will be able to complete online and off-line resources.	Learning content accessible to https and I247 users through I-Learn	/	Complete courses	/	/	/

4 SCOPE OF WORK

4.1 General Requirements

4.1.1 Web based application

The system as a service mode is a web application accessible 24/7 in the public cloud (SaaS – or system bought) from all countries irrespective of the location and time zone.

4.1.2 Cloud hosting

Commercial providers offer TMS and LMS as online services lodged in clouds “off the shelves”. The system must be hosted on Cloud provided by the vendor, with all relevant security measures.

INTERPOL Information System and Technology directorate will support the management of the INTERPOL security protocol (including SSO) to manage the user access to the TMS provider’s cloud. A cloud-based TMS and LMS will require Security Components, such as IDP (identity provider) and CASB (security broker).

The TMS will be administered by an administrator from CBT who will:

- Establish SOPs and procedures
- Adjust access rights parameters per user
- Advise users
- Insert data
- Draw statistics.

The LMS is administered by a super LMS administrator from CBT.

4.1.3 User Authentication and Authorization management

The service provider must be able to integrate with an identity provider using SAML v2 protocol for the management of the authentications and authorizations. Failure to support this protocol will cause the bidder’s offer to be rejected.

The preferred flow is the SP-initiated flow, but an IdP-initiated flow would be accepted.

The service provider must indicate in his bid whether he supports just-in-time provisioning of the users, or if the provisioning can be done through an API.

4.1.4 Standard software without customization

INTERPOL will only accept standard software (Commercial off the Shelf) without customization.

The Vendors must indicate which function is offered as standard function, and thus will benefit future maintenance and upgrade. Any function that is not offered within the standard software must be clearly indicated with reference to Chapter 7.6

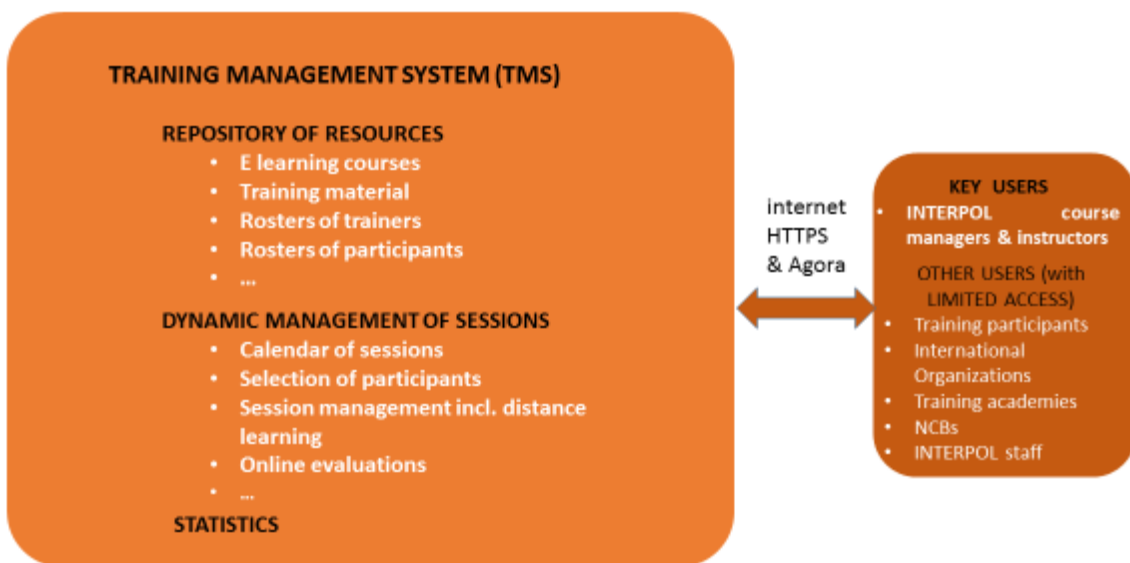
4.1.5 System environment and INTERPOL distance learning capability

The system must be accessible through all devices from desktop machines to mobile devices. Vendor must clearly specify those which are accessible thru mobile devices and limitations, if any.

The solution must support responsive design.

As most of the LMS training content is developed by INTERPOL, the LMS will include authoring tools.

The LMS content through Mobile Devices shall be accessible online and off-line.



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The system needs to be agile enough to embrace future developments in terms of scaling, changing/embedding/linking of services, etc.

Integration with INTERPOL's current Distance learning capability:

The TMS can either:

- **link with the existing LMS** (Talentsoft (formerly e-doceo) ELMG version 6.3.9) internally called "I-Learn" after an integration test of I-Learn with the TMS,

or,

- **Include e-learning capabilities** (IS preferred option) which will allow the management of all online training related activities from a single platform. This requires the transfer of existing e-learning modules and the history of modules completion by users. The LMS shall provide content authoring tools (videos/animation), interactions (such as www.mentimeter.com), streaming services/repositories, adding webinars, VR/AR, etc.

The e learning modules available from the LMS in SaaS mode shall be made available via a Mobile Application.

Search engine

All authorized users will be able to search courses from the catalogue of training events with filter by domains or key words and locations.

4.1.6 Content Type

The system must be capable of processing different types of content like documents of all types (word, excel, PDF, PPT, jpeg), audio files (all types) and video files (AVI, MP4, MOV etc.).

4.1.7 Lots, estimation of users and volume of content

LOTS	SERVICES	FIGURES YEAR 1	FIGURES YEAR 5
Lot 1 (main lot)	TMS (Training Management System)	Key users (course managers and instructors): 100 Training courses: 300 Course participants: 7,000	Key users (course managers and instructors): 150 Training courses: 400 Participants: 10,000
Lot 2 (Lot 1 + TMS)	LMS (online learning capabilities)	Users: 10,000 Courses completed: 15,000 (online courses have an average length of 45') 80 online courses	Users: 15,000 Courses completed: 30,000 (online courses have an average length of 45') 160 online courses
Lot 3 (Lots 1 + 2 + LMS)	LMS content of Lot 2 available on Mobile Application	Same users than above Short modules completed: 1,000 100 online modules	Same users than above Short modules completed: 30,000 300 online modules

The Tenderer may submit bids for rented solutions and/ or purchased solutions for any of the lots (a fully integrated solution TMS + LMS + App) would be an asset):

- Lot 1: Training Management System, as further described in the Technical Specifications.

- Lot 2: Lot 1 + Learning Management System, as further described in the Technical Specifications.
- Lot 3: Lots 1 & 2 + the training content from the Learning Management System above accessible on mobile applications, as further described in the Technical Specifications.

4.1.8 Language support

The system interface will be in English.

The TMS and LMS must support training content in all four official languages of INTERPOL (English, French, Spanish and Arabic).

The content must be presented as submitted without any changes. The language or quality of the audio or video must not be altered.

Automatic translation of content is not required.

4.1.9 Usability

The TMS should have a central homepage (referred to as TMS homepage) which contains an introduction to the system and a disclaimer and the list of pages the user can access depending on the roles assigned to them. The system homepage is accessible by all users, while only users having the necessary roles to view other pages have access to those pages.

4.1.10 Robustness

If the connection between the user and the system is broken prior to a content being either submitted or deleted, the system shall enable the user to recover an incomplete action.

4.1.11 Data retention after deletion

If any content is deleted by an authorized user or at the end of the default period, the content should be retained for a period of 12 months and available to authorized administrators (CBT) only.

The retention period of the content shall begin from the date of receipt. The content shall be deleted automatically on expiry of this period.

The logs about the specific content should also be stored in the system. This includes meta-data and any additional information recorded about the content.

4.1.12 Storage

Vendor must state the storage policy, location of physical server etc. while submitting the bid.

4.1.13 Back up

Vendor must provide a clear backup and restore management plan while submitting the bid.

This should be in line with Chapter 6.4 of Service level agreement.

4.1.14 Audit Logs

The system must create audit trace logs for all actions performed by users in the system through the web interface as well as for automatically triggered system actions (ex. sending of notification emails etc.), only users having the necessary roles to view logs have access to the logs pages.

Moreover, the system must provide a way to regularly export the content of the audit trail. Our preferred way to perform this export would be through an API, but other ways can be considered.

Failure to comply with the 2 above points will cause the bidder's offer to be rejected.

4.1.15 Training evaluation and Statistics

- The TMS shall either allow a link to the current online provider (Survey Monkey) or contain similar services.
- The system must generate statistical information pertaining to all actions performed like the number of actions recorded in the TMS, the number of searches as well as the number of contents accessed etc. per country, per time period, per type of users etc. Only users having the necessary roles to view statistics have access to these pages. Content and frequency of statistics would be discussed in detail in due course.

4.1.16 Reports

The TMS shall provide the TMS administrators with data that we can use in regular reporting or reports generated on request (real-time). This can be country or region specific data about the usage of the system in general, the training services, etc. which is reported to e.g. NCBs. These learning analytics provide an instrument to make adjustments to the training and learning portfolio as well as that it provides input to your TNA.

Some of the reports are stated below:

1. Number of courses
2. Category of courses
3. Number of participants
4. Participants per gender, nationality....
5. Evaluations by the participants

All figures shall be available by geographical grouping and per course category (e.g. courses related to cybercrime).

The LMS and LMS through the Mobile App should allow to draw statistics on the completion of courses and users data in an aggregated way.

4.1.17 Training platform Requirements

4.1.17.1 Training Platform

As the production environment cannot be used for hands on training, a training platform should be available and dummy data will be used to train the end users.

Training platform must enable the CBT administrators to run a live demonstration of the system and provide hands on training for the course managers and instructors and simulation exercises for training participants to have hands on experience in the usage of the system

The look and feel of the training platform for the user must be very close to the real application.

The users must be warned in the homepage that this is a training server and any real data should not be used for training purposes.

Whenever there is a new release of the system or a patch being delivered, vendor must update the hosted training server appropriately.

4.1.17.2 Access Management

The CBT administrators will grant access to the key users who are entitled to use the training platform. The access is not permanent and will be removed once the need for it is over.

The users of the TMS shall be the same than users being able to access to the LMS content through Mobile Devices.

4.1.18 Manuals

Detailed manuals must be provided in English.

1. User Guide for users with different roles, FAQs and Terminology.
2. Technical details of the system, FAQs, standard trouble shooting tips, any other relevant information targeting System administrators.

Content of the manuals would be discussed in due course.

4.1.19 TMS User Training through Video (Optional)

A video for TMS user training to be used by INTERPOL staff is optional. If provided, the video must be in English language. The content must address user training. The end user training must be categorized in chapters accessible based on their roles and functions as described in 4.2 below.

Content of the videos would be discussed in due course.

4.1.20 Security audit

The solution offered by the Vendor must be of the highest quality. The application shall be used in a complex production environment for the purposes of International cooperation in fighting against criminality and therefore requires the Vendor to adhere to industry best practices and norms in order to ensure quality and security.

The Vendor must use software development practices and a quality control that ensures that the resulting Solution is free of anomalies and known vulnerabilities.

Known vulnerabilities shall be defined as the vulnerabilities listed in the US national Vulnerability Database (<http://nvd.nist.gov>). It is expected that the Vendor will update its solution to fix the newly discovered vulnerabilities in a timely manner.

Additionally the Vendor shall ensure that the relevant best practices of the OWASP (Open Web Application Security Project) <http://www.owasp.org> are adopted. In principle this means that the application is resistant to attacks and free of the vulnerabilities that are listed on the OWASP web site.

The Vendor agrees that INTERPOL shall have right to carry out a security audit concerning the Solution provided by the Vendor in order to comply with its internal rules and procedures.

The Vendor shall correct any security shortcomings identified by INTERPOL within a reasonable timeframe after the notification.

4.2 Actors and Functions of the TMS

The following table shows only the Primary actors and their functions. It may be necessary to create more primary and secondary actors during the system set up.

Primary Actors	Organization	Functions
Global Administrator	INTERPOL CBT	<ul style="list-style-type: none"> -Configure the global parameters of the system (e.g. file sizes, event list etc.) -Create/update/delete all documentation -Manage all access rights of all users -Manage content categories -Upload contents on behalf of external entities -Download any global and specific statistics
Key user	INTERPOL course managers and instructors	<ul style="list-style-type: none"> -Create and manage own training event -Manage participants -Assign training tasks -Manage training content -Facilitate webinars -Facilitate virtual classrooms -Check from the LMS the completion of e learning modules -Upload contents on behalf of external entities
National Administrator	INTERPOL Member Countries (NCBs)	<ul style="list-style-type: none"> -Submit messages on training needs -Download documents such as application forms -Submit national applications to the key user
Training participant	INTERPOL Member Countries	<ul style="list-style-type: none"> -View contents -Download documents -Access and play e learning modules -Participate to webinars -Participate to virtual classrooms -Contact training managers and instructors -View my activity (history, ratings and comments)
International administrator	INTERPOL training partners (Global Academy and other police training entities)	<ul style="list-style-type: none"> -Submit messages on training needs -View and download INTERPOL documents (such as training curriculums) -View and download their training content
All authorized users		<ul style="list-style-type: none"> -Search/filter training events

5. COMMON USE CASE

Login and logout

In order to have access to the TMS key user should first be authenticated.

- All INTERPOL staff log into the TMS directly with a SSO.
- All other users is presented with a request for login and password for authentication.

If authentication is successful, the user is presented the home page.

By logging out of the system, the user's session is invalidated and the user cannot have access to the system until they log in again.

- ▶ The user selects the "Logout" link of the application.

The System shows a success message and provides a visual cue to the user that there is no more access to the system and prompts for close of webpage.

Conditions:

- ▶ After a period of inactivity the system logs out the user automatically. A notification message is displayed to the user before the automatic logout allowing them to renew their session.
- ▶ The period after which the system logs out the user is configured by the global administrator.

For the LMS, the IGLC administrators will manage the user access.

For the access of the LMS through Mobile Devices, the bidder will indicate how user authentication for the Mobile Application is managed knowing that the authentication to the LMS in SaaS mode will be done via an Identity Provider (IDP) based on the INTERPOL user directory.

For access security, in case a user mobile device is lost, the bidders shall indicate whether and how the access to the App can be shut down after a time (to be defined) of no use.

Change Language

Function: The user can select the language in which the e learning content is displayed.

Typical Use Case: Key user creates and manages a training event

Function: The "Create training event" functionality allows a key user to use the application in order to manage a training activity.

Description:

- ▶ The key user is logged in.
- ▶ The key user selects the "My training event" page.
- ▶ The key user feeds the page(s) with planned activities:
 - Training title, aim and objectives, dates, venue, target audience.
 - Agenda, curriculums,

- Instructor names,
- Application forms...
- ▶ The key users select the participants
- ▶ The key users fill in data on participants (names, agency, gender, nationalities...)
- ▶ The key user can access to the distance learning content and assign any online resources to the participants
- ▶ The key user can follow the completion of assigned training tasks by the participants
- ▶ The key user can send messages to the participants
- ▶ The key users can deliver webinars and virtual classrooms
- ▶ The key users launches training evaluations (through an external provider allowing the review of results from the TMS, or directly through the TMS services)
- ▶ The key users edit certificates
- ▶ The key user can modify or delete content anytime.

6. SERVICE LEVEL AGREEMENT (SLA)

A Service Level Agreement (SLA) for users has to be associated with the Solution.

Service guarantee hours

Vendor must describe the costs and details of the following classes of SLA:

- ▶ 24X7 support and maintenance. This includes requests on all holidays and from any geographical location of the world.
- ▶ Limitations of Support and maintenance only during working hours (please describe which country and the time zone)
- ▶ Any other detailed proposition from the vendor is encouraged.

Regardless of the SLA adopted the vendor must guarantee support from provisional acceptance.

INTERPOL will have a specific team as a first level functional support, only this team shall contact the vendor for support and maintenance service to all end user issues.

Service operational hours

If no incident, the system must be operational 24 hours a day, 365 days a year.

For planned maintenance, updates or new releases, the vendor must inform INTERPOL with a **4 weeks' notice** on the time necessary for the update and impact on the solution and end users.

Service operational hours

Vendor must specify the Service Response time:

- ▶ RTO : Recovery Time Objective (maximum unavailability permitted)
- ▶ RPO : Recovery Point Objective (maximum "data time" loss permitted)

Incident Gravity	RTO	RPO
Major (Blocking)	3d	1d
Minor (Degrading)	5d	No Data Loss

Back up of Information

All information must be backed up.

Every daily backup of all confidential information from the previous seven days must be recoverable.

Every weekly backup version of all confidential information from the previous four weeks must be recoverable.

7. APPLICATION INTERFACING SPECIFICATIONS

7.1. Cloud Specifications

Bidder must provide detailed Cloud services specifications and all other technical details applicable to the software while submitting the bid.

7.2. System Security Questionnaire

Bidder must complete the system security questionnaire to the best of the knowledge and submit it along with the bid.

7.3. Software Performance metrics

Performance metrics used, if any, and test results may be submitted by bidder to demonstrate the capabilities of the software provided for testing.

7.4. Open API

The bidder must indicate if the cloud solution hosts an open API, if so, provide full description of features and way to access them.

7.5. Scalability

The system has to be scalable. It should allow INTERPOL in the future, to manage more users and/or more content and/or more content types.

The bidder must clearly indicate the limits of the proposed system in all aspects, if any.

7.6. Specific development

The bidder must indicate for each function specified in chapter 4, whether it is part of the standard product or specific development needs to be done for INTERPOL.

The bidder must submit the Software Compliance Table document duly filled while submitting the bid.

7.7. Upgrades, New versions and Release management

Bidder must clearly specify the proposals for the following in the bid

- i. Upgrades
- ii. New versions
- iii. Release Management

It is understood that functions for which the bidder indicates that they are part of the standard product need no specific development and benefit from general support. This implies that upgrading of all these functions is implicitly provided in case of any version changes and upgrades, both major and minor, and are provided along with the maintenance and support.

7.8. Data Migration (reversibility)

For any reason whatsoever in the future, there might be a need for Data Migration from Vendor supported premises to INTERPOL premises or to premises of any third party. Data Migration is to include any data contained in the database submitted by INTERPOL or its member countries, including tables of contents, tables of users and passwords, any comments inserted; documents, images, videos and any type of media inserted in the system. This Data Migration shall be exported into mutually agreed industry standard formats. The bidder must include in his proposal his proposed methodology for data migration.

Failure to meet this requirement will cause the bidder's offer to be rejected.

INTERPOL assumes that this Data Migration service is provided along with the maintenance and support. If any additional costs were to be incurred, the bidder must clearly indicate these costs involved for the global Data Migration of the product.

8. EVALUATION AND VALIDATION PROCESS

8.1. Evaluation version during Tender Process

All bidders are requested to propose an evaluation version (on the Internet) together with their bid. The evaluation version should contain most of the screens required by INTERPOL.

It is understood that this evaluation version does not completely meet INTERPOL requirements to 100%, therefore bidder must indicate which of the functions requested cannot be shown during the evaluation period, refer to Chapter 7.6

Testing will be done by Pilot Users of INTERPOL team for a period of next **4 weeks** and if satisfactory, bidder would be contacted to proceed further for a procurement process.

The evaluation version of application must be frozen and modifications or updates by the bidders are not allowed during testing period.

8.1.1. Tests

Technical test scenario specifications must be provided by the bidder. The Organization reserves the right to introduce any modification or addition it deems necessary without the bidder being invited to discuss it. The technical test specifications possibly modified will be approved by the Organization.

The technical tests and the user tests are intended to demonstrate that:

- ▶ The functioning of the Solution complies with the specifications set out in the documents
- ▶ The Solution provided by the bidder is capable of ensuring a consistent service under normal operating conditions to fulfil the functions specific to it.

Each completed test can have one of three different kinds of outcome:

- ▶ Test carried out with success;
- ▶ Test carried out without success but not blocking the Solution; and
- ▶ Failure of test leading to blocking the Solution.

These outcomes shall be determined by the Organization which supervises the tests.

8.1.2. Anomaly

It is agreed that there will be three distinct categories of anomaly (hereinafter collectively referred to as the "Anomalies");

- ▶ Critical Anomaly: Non-compliance of the Solution's major functions, or malfunction or incompatibility that cannot be circumvented and affecting major functions of the Solution and/or its environment or leading to irretrievable loss of data or inability to achieve the performances specified.
- ▶ Major Anomaly: Malfunction or incompatibility offering possible bypass solutions and affecting major functions of the Solution or leading to loss of data but with the possibility of retrieval of data, or inability to achieve the performances specified.
- ▶ Minor Anomaly: Non-compliance of minor functions of the Solution or any other fault or malfunction.

8.2. Validation phases after Contract Signature

8.2.1. Provisional acceptance of the solution

Once the solution has been customised to correspond to INTERPOL requirements and is available, INTERPOL will launch the provisional acceptance testing phase in order to assess quality of the solution and that all requirements are met.

The acceptance of the solution follows rules described in article 27.4 of the Bid Procedures & Administrative Clauses. It will trigger an intermediate payment and will allow to start the final acceptance phase.

8.2.2. Verification of Consistent Service (VCS)

This verification of consistent service will last 3 months and validate usage in real conditions with end users, in conditions specified in the article 27.4 of the Bid Procedures & Administrative Clauses.

8.2.3. Final Acceptance

Final acceptance follows rules described in article 27.4 of the Bid Procedures & Administrative Clauses.

9. REQUEST FOR INFORMATION

9.1. Response

The bidder must provide a complete proposal, with a technical response to the call for bids following the same order of this document. Each chapter of the response to the call for bids should clearly indicate to which chapter of this document it refers.

9.2. Workload

Detailed tasks and associated workload to execute the project have to be indicated in the bid.

9.3. Planning

The Bidder must provide a schedule of the time estimation from start of customization up to the availability of the solution.

9.4. Core Functionality and Alternative Solution

All bidders must first respond to the Core functionality, as set out in the specifications. In addition, Bidders are invited to also propose any Alternative Solution that might differ from INTERPOL's specifications, on whatever point considered appropriate.

It must be noted though, that only bidders who respond to the Core Functionality are allowed to submit an Alternative Solution.

9.5. Renting or Buying of the software (SaaS)

INTERPOL has a preference for software renting, based on pay-as-you-go model.

However, suppliers are called to also submit options for purchasing the software.

Any reference to price or payment conditions should only be part of the financial offer.



10. FUNCTIONAL EVALUATION GRID

(70 % OF EVALUATION)

TMS (LOT 1)

EXPECTED SERVICES	Comments	%	Evaluation by CBT	Mark (X / 100)
TMS secured access from IS point of view		10		
TMS management from CBT point of view		10		
Training needs	Repository of training needs organized by crime domains (cybercrime, terrorism, child exploitation...). Each unit will be able to consult specific needs expressed by external partners.	5		
INTERPOL Resource repository	Catalog of training courses (with search engine)	10		
	Training facilities (description of facilities)			
	Approved training material and TNAs			
	Roster of Instructors			

Library of information on external partners projects and courses	Requested by Cyber directorate and Child exploitation:	5		
	Projects funded by various donors + Planned sessions			
Dynamic management of INTERPOL training events	Plan sessions	20		
	Participant applications			
	Selection of participants <i>N.B. NCBs are often involved in the selection of national police officers for training events. This is a sensitive and potential issue when setting up the TMS parameters supporting the selection of participants.</i>			
	Letters of invitation			
	List of participants			
	Sending of training resources including online resources			
	Edit training certificates of attendance and certifying certificates			
	Roster of effective participants including names, gender and nationalities			
Evaluations	The TMS shall allow course managers to process online evaluations	10		
Training data	Data for the annual INTERPOL Training reports and specific reports including: events, dates, venue and nationalities.	10		
User-friendly	From the point of view of course managers and instructors: assessment about how flexible and clear are the TMS functionalities	20		

LMS (incl. in LOT 2)

EXPECTED SERVICES (OPTION A : in case an integrated LMS is available)	Comment	%	Evaluation by CBT	Mark (X / 100)
Flexibility in customization and personalization	LMS should allow us to customize certain aspects of the user interface (such as images, logos, etc..) and online training content	5		

Flexibility in grouping users and providing different resources to different groups	Currently, our users are grouped by country and groups might have different user rights.	10		
Flexibility to implement SSO with current Interpol Platforms	Users have to access multiple INTERPOL platforms/applications with one set of login credentials.	10		
Right Management	LMS has to provide different rights, such as learner, instructor, administrator, facilitator, etc.	10		
Periodic and automatic reporting	LMS should generate detailed statistics on the usage of the system.	10		
Social Learning integration, community tools, forums, chat, discussion boards, etc.	It is important to have such features which allow users to interact with each other and share feedback, exchange information.	5		
Assessment tools	It should have an user-friendly assessment tool in order to track learner engagement and progress.	5		
Certification	LMS should be able to offer an on-line certification once a course completed successfully.	10		
Capacity in terms of content to be hosted as well as number of users	Current content is about approx. 80 course with average of 30 mb each and current number of users are around 19,000. LMS should support	10		
Resource Compatibility	It must be compatible with current e-learning resources (all in SCORM format)	10		
Authoring tools	Quality of the authoring tools allowing CBT to develop online resources	10		
Optional: webinars and virtual classrooms	The TMS would ideally support webinars and virtual classrooms	5		

EXPECTED SERVICES (OPTION B : in case an integrated LMS is NOT available)	Comment	%	Evaluation by CBT	Mark (X / 100)
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Flexibility at integration of the TMS with the current LMS (I-le@rn)	TMS should talk to current LMS keeping all user profiles and history, as well as specification and structure of the contents.	100		
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LMS from Mobile devices & App (incl. in LOT 3)

EXPECTED SERVICES	Comments	%	Evaluation by CBT	Mark (X / 100)
Access to e-learning resources from an App	E-learning short modules Authorized IGLC users will be able to complete online and off-line resources.	100		

10. IT evaluation:

Ref	Requirement	Must/Should	Evaluation	Score
4.1.1	Web based application	MUST		
4.1.2	Cloud hosting	MUST		
4.1.3	User authentication and identification: SAML v2	MUST		
4.1.4	Standard software without customization	MUST		
4.1.5	Responsive design	MUST		
4.1.8	Language support (UI in English, materials in 4 off. Lang.)	MUST		
4.1.12	Storage policy	MUST		
4.1.13	Backup policy	MUST		
4.1.14	Audit Log	MUST		
6	SLA	MUST		
7,2	Security questionnaire	MUST		
7,3	Software Performance metrics	MIGHT		
7,4	Open API	MIGHT		
7,5	Scalability	MUST		
7,7	Upgrade and Release Management	MUST		
7,8	Reversibility	MUST		



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