# UPU-TechCert Manual

## Guidelines for Vendors applying for certification

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# 1 Executive summary

The International Bureau of the Universal Postal Union has put in place a technical certification program called "UPU-TechCert" is opened to any Vendor that has successfully interfaced at least one of its hardware or software (Vendor Product) with the software developed and distributed by the UPU (UPU Software).

This document is a manual available to Vendors interested in applying for certification. It details the prerequisites, the process, the outcomes and the prices of the UPU-TechCert certification process, without prejudice to the provisions of the "General Terms and Conditions for the UPU-TechCert certification.

# 2   UPU-TechCert, benefits for Vendors

Historically, UPU Software have been delivered with a number of documented interfaces, that UPU Licensees can use for integrating our software in their IT landscape. That trend has accelerated with the advent of Application Programming Interfaces (API), as well as architectures hosted on the UPU Cloud: the UPU fully contributes to the Service Oriented Architectures (SOA) that are now in place in many of its Licensees, which include Designated Operators (DOs) as well as a number of Wider Postal Sector Players (WPSPs).

SOA permit that different pieces of software inter-operate and complement each other. Those pieces can come from different providers. As a result, UPU Software is increasingly exposed to software or hardware components developed by Vendors. Many of such links between UPU Software and Vendors' software or hardware are already implemented and operational.

Bearing the above in mind, the UPU-TechCert is a certification program developed by the UPU and available to any Vendor that has an interface with UPU Software. The UPU-TechCert brings the following benefits to Vendors:

- **Promotion**: authorization to use the UPU-TechCert logo in their communication materials and during contacts with potential partners (DOs or WPSPs);
- **Credibility**: (international) validation by the UPU of the interfaces/integrations with UPU Software;
- **Continuity**: through periodic certification renewals, Vendor Products maintain their value to UPU Licensees, reducing integration errors or evolution gaps, as well as preventing production risks;
- **Continuous development**: possibility to extend the Certification Domain and Scope;
- **Confidence**: in the consistency of the integration with UPU Software, when it is used by a UPU Licensee

# 3 Certification Scope, Domain, and prerequisites

The Certification Domain shall refer to the lines of UPU Software (mail and logistics, postal payments, big data/business intelligence tools, …).

The Certification Scope shall refer to:

- The specific interface(s)/API(s) that the Vendor has used for its integration; and
- The purpose of the Vendor Product subject to certification, which, for instance, may include HS codes (Harmonized System) lookup engines, AML compliance, accounting system, POS (Point of Sales) solution, mobile payment application, among others.

Available Certification Domains and Scopes are available at the UPU web site at: http://upu.int/UPU-TechCert.

Vendor Products subject to the certification process shall be able to meet the following prerequisites for a first certification:

- The Vendor must have developed and tested an integration with UPU Software for at least one specific Certification Domain and Scope. The Vendor shall apply for certification only when confident that its Vendor Product is correctly interfaced with the UPU Software.
- The Vendor must fill-in the Certification Application From (CAF) reproduced in Annex 2. This questionnaire will be used for the UPU to decide on the eligibility of the Vendor for certification.
- A Vendor may have integrated its Vendor Product for different Domains and Scopes, and may decide to apply for more than one certification. In that case, the Vendor must fill-in a different questionnaire for each Domain/Scope it applies for. The UPU may confirm the relevant eligibility for all, some, or none of the applications.

# 4 Sequence and timeline for the certification

| Step | Description | Duration |
|------|-------------|----------|
| 0 | Vendor develops interface(s) with UPU Software, according to the specifications provided by the UPU (standard set of APIs).<br><br>This phase can be done without the involvement of the UPU: Vendor can access all public UPU API documentation online (UPU API Documentation), and validate its integration with a local instance of a UPU SOFTWARE (integration project in cooperation with a Licensee or autonomously). | According to the Vendor schedule |
| 1 | Vendor prepares one or more CAF.<br>Vendor expresses interest to obtains CAF with online form http://upu.int/UPU-TechCert, submits the CAF to the generic address dedicated to the UPU-TechCert certification program UPU-TechCert@upu.int<br><br>Vendor takes note of the General Terms and Conditions (GTC-TechCert) related to the certification | According to the Vendor schedule |
| 2 | UPU analyzes the CAF and the eligibility of the request. During that phase, the UPU may contact the Vendor for clarification, as necessary.<br><br>The Initial assessment from the UPU on the Vendor Product's eligibility is free of charge.<br><br>UPU shall decide if the certification process may continue and shall inform the Vendor accordingly.<br><br>If the UPU decides that:<br>• the application must be summarily rejected: the UPU may explain the reasons, alongside guidance, where applicable, to assist the Vendor in preparing for a new application and/or concerning the necessary re-working of the Vendor Product's integration with UPU Software. The certification process shall thus be deemed as completed until a new CAF is received.<br>• is eligible for further assessment, the UPU shall contact the Vendor and:<br>   o confirm the selected Certification Domain and Scope. A Vendor may apply for more than one Domain and Scope if multiple CAFs have been submitted;<br>   o for the selected Domains and Scopes, provide the detailed information of what will need to be achieved to get certified:<br>     ▪ technical test cases to be executed successfully by the Vendor<br>     ▪ additional questions/evidence checks that may be proposed by the UPU<br>   o inform about the total costs for the certification, and possible timeline and collect accounting contact information. | Vendor is informed around 4 weeks after submitting the CAF |
| 3 | Following the UPU communication provided at step 2, Vendor makes an informed decision to proceed or not with the certification, which shall be notified accordingly to the UPU alongside the signature, or express | Maximum 2 weeks after step 2 |

| Step | Description | Duration |
|------|-------------|----------|
| | acceptance, in writing, of the General Terms and Conditions for the UPU-TechCert certification. | |
| 4 | UPU invoices the Vendor for the full cost of the certification. Vendor must make the full payment before the certification process can progress. The Vendor shall not claim any refund or compensation of any kind in the event that the certification is not granted at the end of such process. | Maximum 2 weeks after the decision from the Vendor to proceed is received by the UPU |
| 5 | Vendors pays the associated fees and costs with the certification process in full to the UPU. | Maximum 2 weeks after being invoiced by the UPU |
| 6 | Following the payment mentioned in step 5, The UPU shall:<br>• prepare the technical platform for the necessary tests;<br>• communicate to the Vendor the credentials for accessing the test platform;<br>• when applicable, provide a test data set;<br>• confirm the timeline for the execution of the certification tests and additional questions/evidence checks (i.e. 2 to 3 weeks, subject to a prolonged timeframe if multiple Domains and Scopes are covered) | Maximum 2 weeks after payment |
| 7 | In light of the above, the Vendor shall:<br>• execute the test cases;<br>• answer any additional questionnaire from the UPU;<br>• provide the requested additional evidences (i.e. other technical certifications), when applicable;<br>During that phase, UPU shall be in regular contact with the Vendor with a view to:<br>• following-up the test results for each test case;<br>• reviewing the answers to the questionnaire, and ask for complements/clarifications, as needed;<br>• collecting the required evidence<br><br>In the event that the UPU identifies a substantial number or defects or critical defects when assisting the Vendor to run the test cases*, or if the Vendor Product and its interface with UPU Software shows a significant lack of maturity, it may notify the Vendor and, according to the severity of the situation, either:<br>• suspend the certification process. The Vendor is thus expected to work on the necessary adjustments and restart/resume step 7 when ready. Vendors may have at the latest 3 weeks to complete any necessary work. No associated report shall be provided by the UPU; or<br>• cancel the certification process. The Vendor will then be required to restart the certification process from step 0 above and thus apply again for certification (step 1) when ready. In the event that the certification process is canceled, the Vendor shall not be entitled to a refund of any costs regarding the certification program. No associated report shall be provided by the UPU. | 2 to 3 weeks for each Domain/Scope, depending on its complexity |

| Step | Description | Duration |
|------|-------------|----------|
|  | *The assistance provided by the UPU is limited to defects preventing the execution of test cases (such as: accessing the test platform, accessing UPU Software, among others).* |  |
| 8 | UPU analyzes the results and compiles the Score Cards related to the certification. This is largely an automated process (see below: UPU evaluation process).<br><br>If the certification:<br>• is granted, the Vendor is notified accordingly;<br>• is rejected, the UPU shares a CERT REPORT listing the major gaps that led to its decision<br><br>UPU shall then update its database of certified Vendors | Maximum 2 weeks after completion of step 7 |

# 5   UPU evaluation process

## 5.1   Score Cards

Certifications are granted according to pre-defined Score Cards. Each Score Card lists a number of criteria, with their weights and possible scores. The UPU shall implement at least one Score Card for each Domain and Scope, and depending on the Domain and Scope the Score Card shall have two sections:

- The core section, with a list of technical, automated tests. All tests must be passed successfully in order for the Vendor to pass the certification. In some cases, a test can be partly achieved and certification can still be granted with some remarks that the UPU will register in its CERT Report.
- For some certifications, the Score Card has an optional section with additional criteria. They can be technical tests, or series of questions/evidences that the UPU wants to collect. Depending on the certification, this section can lead to specific mentions or remarks on the certificate.

An example of a SCORE CARD can be seen in Annex 3.

## 5.2   CERT REPORT

CERT Reports are provided by the UPU at the conclusion of each certification. The report shall use the same structure as the SCORE CARD applicable to the certification. If the certification:

- is not granted, the report will highlight the mandatory tests that have failed. Depending on the severity of the defects, the report may not be exhaustive and may end after identifying the first major gaps (particularly, when the certification process has been aborted, see step 7 of the "sequence and timeline" above).
- is granted, the report may list some reservations: minor non-conformities identified either with the mandatory tests, or with optional criteria. Vendors are informed that these remarks will be used during the certification renewal process, when the related criteria will be assessed with more severity, should no noticeable progress be identified at that time.

## 5.3   Closing the certification

In case of success, UPU shall provide the Vendor with:

- The certificate, signed by the UPU, which indicates:
  - The Domain and Scope;
  - The exact name of the Vendor;
  - The exact name of the Vendor Product that has been certified; and
  - The validity period of the certification (from/to)
- The CERT REPORT

In case of failure, the UPU provides the CERT REPORT to the vendor. Vendor can address the issues and decide to apply again for certification (step 1 in the "sequence and timeline" above), at minimum 90 calendar days after being notified of the failure by the UPU.

# 6 Certification lifecycle

Certifications are valid for two years. During this period:

- the UPU and the Vendor have the duty to inform each other about any change that is relevant to the certification.
- The Vendor may decide to extend or reduce the Domain and Scope of the Vendor Product certified
- The Vendor shall need to take timely action to renew/maintain its certification

## 6.1 UPU information to the Vendor

During the period of validity of the certification, UPU will inform the Vendor of:

- Any technical change affecting the interfaces with the UPU Software that are in the certified Domain and Scope of the concerned Vendor Product;
- Any discontinuation of the UPU Software, leading to discontinuing the associated certification; and
- Any new Domain and/or Scope opened to certification

This information can be communicated using various methods, but in most of the cases will take the form of updates on the UPU web pages related to certification, and the UPU API web pages. It is the Vendor's duty to periodically check the UPU web site and stay abreast of the changes.

## 6.2 Vendor information to the UPU

During the period of validity of the certification, Vendor will inform the UPU of:

- Any technical change in its certified Vendor Product that can affect the alignment with the certified Domain and Scope;
- Any discontinuation of its Vendor Product, leading to discontinuing the associated certification;
- Any change to the name of its Vendor Product;
- The deployment of its Vendor Product in organizations where the UPU Software is used.

Vendor has the duty to proactively contact and inform the UPU for the changes above, preferably by email (UPU-TechCert@upu.int)
In addition, the Vendor:

- Can decide to extend the Domain and/or Scope of its certification. This process can start any time during the period of validity of the current certification. See below "extending the certification".
- Must start the certification renewal process 6 months before the end of validity of the current certification. The UPU may also contact the Vendor during the last 6 months of validity, if no request for renewal has been received from the Vendor. See below "certification renewal".

## 6.3 Extending the certification (Scope and/or Domain)

The process starts at the request of the Vendor, from step 0 in the "sequence and timeline" above. Generally, and in case of success:

- an extended Scope within the same Domain will lead to a new certificate, replacing the current one and indicating the new Scope and new validity (two years from the date of the extended certification). Note: the initial Scope does need to be tested again, but benefits anyway of the extension of validity when certifying the extended Scope.
- a new Domain will lead to an additional certificate that will follow its own lifecycle. The previous certificate for the initial Domain and Scope remains untouched.

## 6.4 Certification Renewal

The process for renewal starts at the request of the Vendor at step 1. Should the Vendor also apply for the extension of Domain and Scope, the renewal process shall start at step 0.

Vendor must submit its CAF for certification renewal 6 months before the end of validity of its certificates.

The new certificate shall also be valid for two years.

# 7 Annexes

## 7.1 Annex 1 - Glossary of terms

| | |
|---|---|
| AML | Anti Money-Laundering |
| API | Application Programming Interface |
| CAF | Certification Application Form: the questionnaire to be filled-in by the VENDOR applying for certification. See Annex 2 |
| ISO | International Organization for Standardization |
| IT | Information Technology |
| DO | Designated Operator |
| DOMAIN | IT products lines of the UPU |
| DPTC | Directorate of the Postal Technology Centre of the UPU |
| GTC-TechCert | General Terms and Conditions related to the UPU-TechCert certification |
| HS | Harmonized System of tariff nomenclature of the World Customs Organization |
| LICENSEE | DO or WPSP having a license to use at least of the UPU IT solutions |
| POS | Point of Sales |
| CERT REPORT | The report that the UPU provides to the VENDOR at the end of the certification process |
| SCOPE | Specific API or group of APIs, within a particular DOMAIN and that together represent a specific certification within the UPU-TechCert program |
| SCORE CARD | The instrument used to determine if the certification can be granted, according to a list of weighted criteria (mostly: technical tests) |
| SOA | Service Oriented Architecture |
| UPU SOFTWARE | Software developed and owned by the UPU, providing one or more publicly available interfaces, through API that form the SCOPE of each UPU-TechCert |
| UPU | Universal Postal Union |
| UPU-TechCert | The name and label of the UPU technical certification program |
| VENDOR | A commercial company, provider of information technology, and owner of one or more VENDOR PRODUCT |
| VENDOR PRODUCT | Hardware or software developed and owned by the VENDOR, and interfaced with at least one UPU SOFTWARE |
| WPSP | Wider Postal Sector Players. Organizations or businesses (other than the DOs) formally recognized by the UPU and authorized to access some of the UPU products and services |

## *7.2 Annex 2 – Certification Application Form (CAF)*

Template for the CAF to be filled-in by the Vendor when applying for certification (or certification renewal).
All fields are mandatory.

| Vendor | **Name (a)** | The precise name of the company applying for certification |
|---|---|---|
| | **Address (a)** | Place of registration of the Vendor |
| | Contact (1st) | Focal point for the certification:<br>Name, Title, email address and phone number |
| | Contact (backup) | Backup focal point for the certification:<br>Name, Title, email address and phone number |
| | Presentation | Any link (URL), or document to join in attachment (PDF format) to present the Vendor |
| Certification | **Domain (a)** | The selected Domain. From the list of possible Domains published on the UPU web site http://upu.int/UPU-TechCert |
| | **Scope (a)** | The selected Scope. From the list of possible Scopes, within the selected Domain, published on the UPU web site http://upu.int/UPU-TechCert |
| | New certification | Yes/No. In case of certification renewal, indicate the date of the current certificate |
| Technical product or IT Service | **Name (a)** | The precise commercial name of the technical product or IT Service that the Vendor proposes for certification |
| | Description | Vendor shall summarize:<br>• What its technical product/IT Service does<br>• Specifically, detail what value is added to the UPU Software when interfaced with it. Description can take the form of workflows or use cases scenarios/stories describing the interoperability between the UPU Software and the Vendor's technical product/IT Service |
| | Presentation | Any link (URL), or document to join in attachment (PDF format) to present the Technical product or IT Service |
| | Maturity | Vendor shall indicate:<br>• The date when the interface with UPU Software was developed and tested<br>• The list of UPU Licensees that are already using the technical product or IT Service together with the UPU Software, with the date when they have been equipped (b) |
| Other certification(s) | List | Vendor shall list here any relevant IT certification (such as ISO 27001) it owns, at the level of the company and/or for the specific Technical product or IT Service |

(a) If the certification is granted, the information appears on the certificate
(b) UPU reserves the right to contact the Licensees and check the correctness of the information, and their experience in using the Vendor's technical product or IT Service

## 7.3 Annex 3 – Example of a Score Card

The table below presents an extract of score card with few certification criteria as described in prerequisites guide for each certification scope.

| Purpose | Score card test cases to validate if technical integration to UPU-IP API is sufficient for an entity that supports emission in cash or from an account and payment in cash or to an account. |
|---|---|
| Scope | UPU-IP API Technical Integration |

| TC# | Summary | Module | Importance | Calling Org | Implementation Steps |
|---|---|---|---|---|---|
| TC1 | Emission of a cash postal payment | Cash_Emission | Mandatory | Issuing | Call Issue operation with test data P1 |
| TC2 | Emission of a cash postal payment with required and optional data filled | Cash_Emission | Optional | Issuing | Call Issue operation with test data P2 |
| TC3 | Reimbursement in cash to the sender for an expired cash postal payment  - OR only | Cash_Emission | Mandatory | Issuing | For an expired order Call Reimburse operation with test data P3 |
| TC4 | Cancellation of a cash postal payment | Cash_Emission | Mandatory | Issuing | Call Issue operation and later call Cancel operation on P4 |
| TC5 | Reimbursement of a cancelled cash postal payment | Cash_Emission | Mandatory | Issuing | On a cancelled order Call Reimburse operation with test data P4 |