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DIGITAL ACCESS SERVICE (DAS) 2.0 BUSINESS REQUIREMENTS

REVISION HISTORY

Revision	Date	Comments
1.0	22/09/2011	Initial creation
2.0	31/01/2012	Include comments and recommendations made by Offices (OEPM, EPO, IB, JPO, KIPO, SIPO, UKIPO and USPTO) before 16 January 2012

SUMMARY

The Third Session of the DAS Working Group held from July 12 to 14, 2011 in WIPO gave the mandate to the International Bureau to implement the extension and improvements of DAS as summarized in the Summary by the Chair (Document WIPO/DAS/PD/WG/3/7).

The purpose of this document is to consolidate the complete set of requirements for the new version of the DAS system, as well as considerations for the transition period where some offices are still operating under the procedures of Routes A and C and other offices have adopted the new single route procedures.

SCOPE OF THE REQUIREMENTS

Based on the outcome of the DAS Working Group, the requirements for version 2.0 of the DAS system are summarized as follows:

Extension

- (ii) The Working Group agreed that the Service should be extended to priority documents relating to other types of IP rights, including trademarks, designs and utility models.
- (iii) Offices will be able to “opt-in” for each type of IP right separately.

- (iv) DAS 2.0 will support color, grayscale and large-sized images, initially in JPEG and TIFF formats for industrial designs and trademarks.
- (v) Based on bilateral technical arrangement between a participating Office and the IB, DAS 2.0 may deliver the requested priority documents of a specific type of IP application to the Office on paper or on DVD until the Office is ready to receive them via the agreed automated transfer mechanism. This process will be handled manually by staff at the IB and is not a functional requirement for the system.

Improvements

- (vi) The existing Routes A, B and C will be replaced by a single route based on a modified version of the "Route D" proposal made by the delegation of Japan. The operation of the new route, as well as the requirements for the transition from the old routes to the new route, are described in this document. The transition requirements apply only to priority documents relating to patent applications.
- (vii) The main objectives of the new route are to simplify the system from the point of view of the applicant, to encourage more use of the system, and to provide the required levels of security and confidence in the system for offices and applicants.
- (viii) The concept of priority document being made "publicly available" via the service is removed in respect of access permissions.
- (ix) The Office Portal will be implemented as a simplified mechanism for offices with low volumes of transactions to participate in the system.
- (x) The Applicant Portal will be revised to:
 - (a) Provide account-based management of all priority documents related to one user (the applicant or their representative).
 - (b) Provide information to the applicant about the retrieval and success/failure status of all types of IP applications.
 - (c) The management of Access Control Lists (ACL) will become optional and will be needed for patent documents during the transition period and may be needed long term if required by certain depositing offices.

OPERATION OF THE NEW ROUTE UNDER DAS 2.0

The main differences between the new route and the existing routes A to C are the role of the applicant and the security mechanism.

- Under the new route, applicants will not be required to set Access Control Lists (ACLs) except in certain conditions (for cases where the OFF requires a default ACL to be set, and for transition cases where OSF have not upgraded their systems to use access codes).
- This means that the Applicant Portal becomes primarily for informational purposes, and it is not essential for an applicant to create an account and authorize access for OSF for every document.
- The main security mechanism under the new route will be the access code, which will be generated by the OFF or the IB, transmitted by the applicant to the OSF, and used to authorize access to the document by the OSF.

TRANSITION REQUIREMENTS

For a period of time, there will be offices which are still operating under the Routes A and C (for patent documents only) while other offices are operating under the new route. These modes of operation must co-exist for a period of time until all offices have upgraded their procedures and their IT systems. The transition period must be as simple as possible from the point of view of the applicant.

This will be achieved mainly by allowing OFF and OSF to continue using the existing systems for Route A and C during the transition period, but only for patent documents. As more offices move to the new route, the system will become progressively simpler for the offices and applicants.

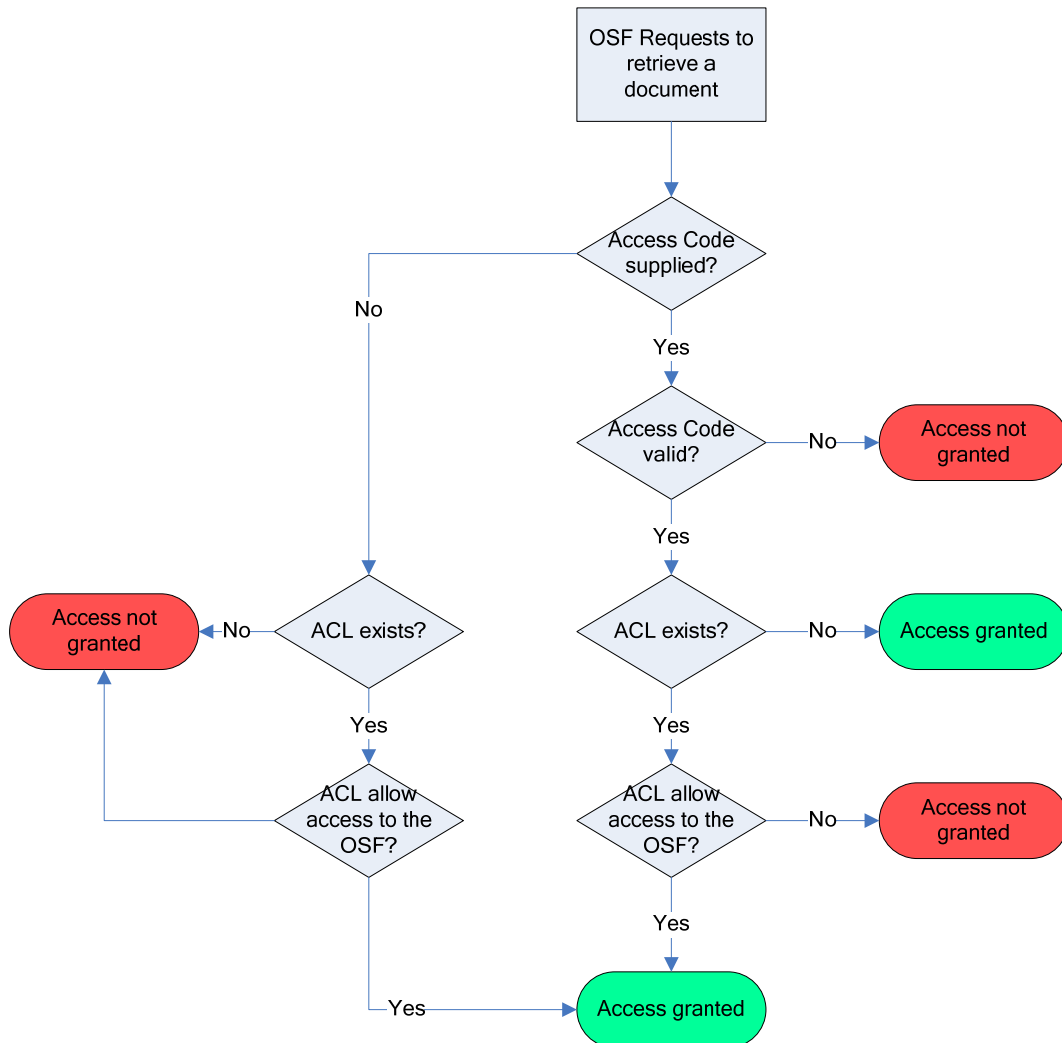
- The OFF needs to supply the type of IP right and the application date with every document. If the OFF does not supply the type of IP right, the document will be assumed to be a patent document. For the transition period where the OFF does not supply the application date, the system will operate without validation of the date for those documents.
- The OFF also needs to generate an access code and include the access code in the metadata used to register a document with DAS. If the OFF does not generate the access code, this will be done by the IB.
- The addition of documents for new types of IP rights will be on an “opt-in” basis for each OFF. Therefore, each OFF can decide if and when it will offer the DAS service for each type of IP right.
- The OSF will need to modify its procedures to accept the access code from the applicant and update its IT system to provide the access code when requesting documents from the system. During the transition period, OSF will be able to retrieve documents (for patents only) from the system without an access code, but only if the applicant has set an ACL which allows them access.
- The OSF will also need to update its IT system to provide the type of IP right and the priority date with every request. During the transition period, the system will accept requests without the type of IP right or the priority date, but for patent documents only.

SECURITY MECHANISM

The security mechanism in DAS 2.0 will be based on the Access Code which will be generated by the OFF or the IB and given to the OSF by the applicant. All participating Offices might not be able to migrate to the new Route at the same time and therefore a transitional period would be needed to deal with new Route and old Routes (i.e. A and C). After the transition period, the new Route will become operational and replace Routes A and C and the ACL will become a second-level of security which is normally optional for the applicant to add in, but which may be required by an OFF. Technical arrangements are offered to OFF which wish to establish this additional ACL by specifying the list of authorized accessing Offices which are allowed by default to access all document of a specific IP type registered by the OFF. This mechanism will hereafter be cited within this document as the default ACL. In this context, access permissions will be granted based on both ACL and access code. If there is no default ACL set for an OFF, access permissions will be granted only on the basis of Access Code.

The main element to understand in the transition period is the security mechanism and the interaction of the ACL and the access code.

Access will be granted based on the ACL or the access code, or both, as shown in the diagram below. The following diagram is applicable only to the transition period.



Note, this logic does not apply to Trademark documents, for which access is always granted to any OSF.

This implies that the applicant will need to use the Applicant Portal to set an ACL, during the transition period, for all OSF that have not yet upgraded their IT systems to supply the access code.

After the transition period, there may still be cases in which a default ACL is set. This may be done either (i) by the OFF making a bilateral arrangement with the IB that the same default ACL should apply to all applications registered by that Office; or (ii) by the OFF sending an access list as part of the registration of the document with the system. In the latter case, depending on the policies and services of the Office, the latter list may either be the same for all applications registered or else permit specific lists to be set up by the applicant for a particular application.

FUNCTIONAL REQUIREMENTS

The functional requirements for the system are described in three high-level use cases:

- Register Priority Document
- Applicant Portal
- Retrieve Priority Document

USE CASE: REGISTER A PRIORITY DOCUMENT

DESCRIPTION

The purpose of this use case is to register a priority document with the DAS system so that:

- Either the document is stored in the system, or a link to an external document is stored in the DAS system.
- The priority application is recorded in DAS with the IP rights as specified by the OFF.
- A default ACL has been set, if required by the OFF through a technical arrangement with WIPO.
- The applicant has been given an access code.

ACTORS

- Applicant – the person filing an application for IP rights, or the person representing the applicant.
- Office of First Filing (OFF). Known as Depositing Office in the DAS Framework Provisions.

PRE-REQUISITES

The applicant has filed an application at the OFF. The copy of that application will become a priority document at another office.

STEPS

1. The applicant requests the OFF that they wish a priority document to be registered with the DAS system. This notification can happen in different ways, depending on the procedures of the OFF. The applicant may submit the request when filing the original application, or they may file a separate request with the OFF.
2. The OFF may check the applicant's right to file abroad, and make other checks as necessary.
3. The OFF makes the document available to the DAS system in one of the following ways:
 - 3.1. The OFF uploads a copy of the document to the DAS system or sends information to the DAS system about the availability of the document, using the PCT-EDI protocol and the "add-entry" transaction.
 - 3.2. The OFF sends information to the DAS system about the availability of the document using the TDA protocol and a new "dasRegister" transaction.
 - 3.3. The OFF uploads a copy of the document to the DAS system, using the Office portal.
4. The OFF or the DAS system notifies the applicant of a unique "access code" that will be needed by the OSF to retrieve the document:
 - 4.1. if the OFF supports the functionality, the OFF generates the access code, sends it to the applicant, and notifies the DAS system of the access code as part of the registration metadata.
 - 4.2. for an OFF that is not equipped to generate access codes, the DAS system generates the code, stores it with the document, and notifies the applicant by email. In this case, the applicant's email address must be provided as part of the registration metadata.

VARIATIONS

- In the case of trademark document, no access code is generated.
- The OFF may **optionally** specify an Access Control List on behalf of the applicant when uploading a document. The ACL will specify which OSF have access to the document. The applicant may modify the ACL using the Applicant Portal.
- The OFF may also decide that all applications of a certain type (e.g. all Trademark applications) are systematically made available to the DAS, whether or not this is requested by the applicant.
- Based on a bilateral agreement with the IB, the OFF may submit documents to the DAS system in paper format. In this case, the IB will take the role of the OFF in the basic flow above (register document, supply metadata, generate Access Code).
- Some Offices may have technical constraints in their IT system or cannot be uploaded using the Office portal which would not accept a large-sized document (e.g. 50 MB). In this context, an over-sized document will be sent the IB on CD/DVD.
- In case of change or regeneration of access code at the OFF (probably on behalf of the applicant), registering a priority document with the new code will overwrite the existing one in DAS.
- If the OFF makes a registration without indicating the priority application filing date, the system will reject the registration request. This is to enable the cross-check of the priority filing date by DAS at retrieval of the document.

TRANSITION VARIATIONS

OFF currently operating under Route A or C will continue to use the system in the same way, until their IT systems have been upgraded. The following transition assumptions will be made:

- Only patent documents may be uploaded by such offices, and the system will automatically set the type of IP right to “patent”.
- During the transitional period, the system continues to allow OFFs to make registrations without indicating the filing date (in which case, obviously the filing date part of the check by DAS at OSF step needs to be bypassed permanently),
- If the OFF does not generate the access code, it must supply the applicant’s email address so that the IB can generate the access code and send it to the applicant.

NON-FUNCTIONAL

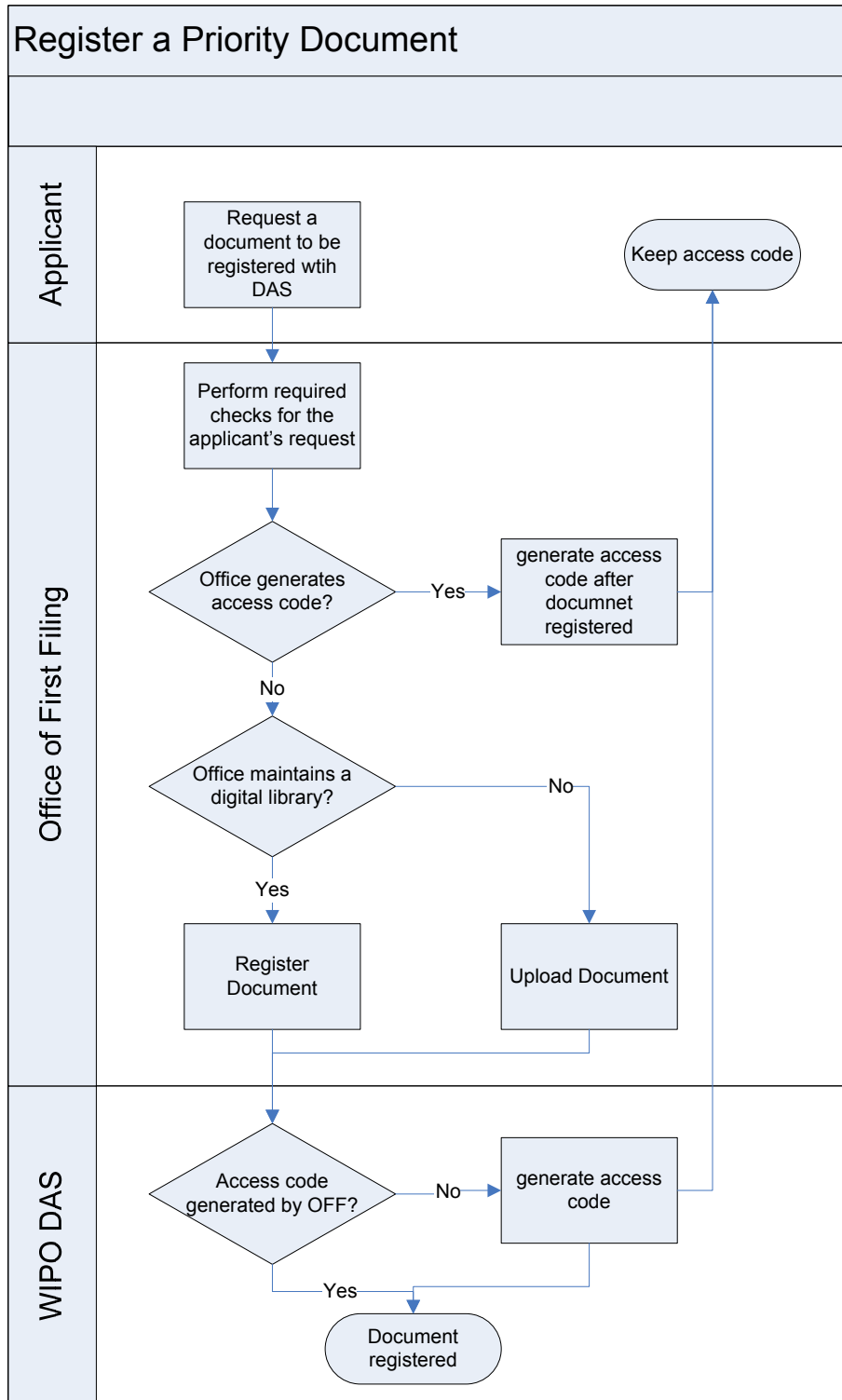
- Documents for the following IP rights will be supported: Patents, Trademarks, Industrial Designs and Utility Models.
- When a document is uploaded or made available, the following metadata must be provided and stored in the system: office of first filing, application number and application filing date. Optionally, the applicant waiver date (e.g. form SB39 for the USPTO) may be provided and stored in the system.
- The system must support documents with colour and greyscale images in JPEG or TIFF format for Industrial Designs and for Trademarks.
- Initially, the TDA protocol will only be available for Patents. This means that documents for other types of IP right can only be uploaded into the system using the PCT-EDI protocol or the Office portal. The TDA protocol needs to be extended to support other IP rights in the future.

- If the applicant's email address is not available, the OFF may provide the registered post mail address to the DAS system so that the access code would be sent to the applicant on paper.
- If an OSF fails to retrieve a document because it used an access code which had once been valid but which had been replaced at the request of the applicant at the OFF, there should be a special error message to allow the problem to be understood and resolved more efficiently.
- Access code may be generated by the OFF or by the IB. This is an option to be considered by the OFF. To reduce errors, a short, consistent format of code is required from all OFFs. The code generated should consist of exactly 4 alphanumeric characters, case insensitive [0..9,a..z]. However, although any alphanumeric characters are permitted in order to provide compatibility with codes already used by USPTO, it is strongly recommended that new implementations should use numeric characters only in order to avoid the risk of transcription errors as a result of characters of similar appearance.
- If there is any change of the priority filing date, the depositing Office should send an overwriting update to DAS by new dasRegister operation of the TDA protocol or add-entry of the PCT-EDI protocol. Details of the new dasRegister operation are to be specified and added to the TDA protocol through a new change request.
- The date of registration of the document in the new Route becomes the date of availability of the document, which is stated in the certificate of availability generated by DAS.
- Documents containing color image(s) can be registered in DAS, regardless of the type of IP applications.

ISSUES

1. For Offices which implement the access code generation, it is recommended to make the DAS registration before communicating the access code to the applicant. If these two operations are performed in the reverse order, there will be situation where some applicants may fail to associate the priority documents with their WIPO account because of the delay in communication of DAS registrations between the OFF and DAS.
2. As recommended by the DAS Working Group, the concept of priority document being made “publicly available” via DAS is removed in respect of access permissions. At present, some Offices provide the application publication date to the DAS system as part of the registration metadata. In the future, if the publication date is provided by the OFF, it will be stored in the system but will not be used for validating the access permissions.
3. Some Offices maintain their own digital libraries of priority documents. But access to the relevant priority document is granted on the basis of a successful cross-check of the priority filing dates performed by DAS in addition to the verification of the access code and optionally the default ACL. As the priority filing date is an important element used to authorize access to the documents and if correction of the priority filing date is made by the OFF after registration in DAS, there should be a provision for Offices to update the record held in DAS.
4. Further technical details about the support of color in JPEG, PNG, TIFF and GIF formats would need to be clarified for industrial designs and trademarks.
5. There will be cases for which access codes have been generated by the OFF as Route C Office but the applicant would use them to register the corresponding priority documents via the applicant portal after the Office has migrated to the new Route. In this context, DAS would consider these applications as unknown and display a warning message indicating the reason as follows:
 - a. The access code could be incorrect
 - b. The application number could be incorrect
 - c. The access code could be generated by the OFF under Route C and the applicant had not registered the application prior to the Office’s migration to the new Route on [MIGRATION DATE]. To this end, the system should record the migration date of each Route C Office, noting that these cases would not apply to Route A Offices. The warning message should advise the applicant to request the priority document to be registered with DAS again by the OFF

DIAGRAMS



Note: no access code is generated for Trademark documents

USE CASE: APPLICANT PORTAL

DESCRIPTION

The purpose of this use case is for the Applicant to access the DAS Applicant Portal to perform some maintenance functions on their portfolio of documents in the DAS system:

- Associate and de-associate documents with a WIPO account.
- Change the access control lists if it is set by default by the OFF through a bilateral arrangement with the IB.
- View information about documents, including access and availability status information.
- Produce an availability certificate.

ACTORS

- Applicant – the person filing an application for IP rights, or the person representing the applicant.

PRE-REQUISITES

- The applicant has created a WIPO Account and is logged into the system if he/she wishes to use portal services for Industrial Design, Patent and Utility Model applications. For Trademark related services, they are made available to all public without the need of an account-based login.
- Priority documents have been uploaded or registered with the DAS system, and the applicant is in possession of an Access Code for each document.

STEPS

Associate Documents with a WIPO Account

1. The Applicant enters the priority office, IP type, priority application number, priority application filing date, and DAS access code. All fields are mandatory.
2. The system validates the information given and checks to see whether a priority document with the corresponding data is available.
3. If there are any errors, the system gives the applicant the opportunity to correct the data.
4. If the data correctly matches a registered priority document, the system associates that document with the WIPO account. A document can only be associated with one WIPO account.

VARIATIONS

- If a document is already associated with another WIPO account, the system does not allow it to be associated to a new account. This also means that an access code would be used once only and then become unusable by anyone else.
- Support will be provided by the IB to deal with conflict resolutions and identify abusive use of the Access Code by an unauthorized person.
- The provisioning and management of WIPO account is served by another WIPO online service which is not part of DAS. Details of the WIPO account are visible after login. In particular, it includes a public ID which uniquely identifies the account and which can be shared with other business partners by the account holder. How the account holders notify each other of their ID is to be communicated outside DAS (e.g. through email).

- After the new Route becomes operational and if it is necessary to manage situations where there are multiple applicants for one application, an e-handshake operation might be offered to allow an account holder which has been successful associated with the document to authorize other account holders to associate their account with the same document without the need of using the access code. By this, the system will keep track of the operation of association request and confirmation by all parties.

De-associate Documents with a WIPO Account

This function is required to deal with assignment of rights so that the account holder would be able to transfer the registered application directly to another WIPO account. In order to avoid re-issuance of a new access code to be used for the new account holder, At initial stage of the new service and in order to make it simple, the current holder would need to ensure that all the actions will be taken by the new holder to create and activate his own WIPO account.

1. The Applicant selects a priority document and the option to de-associate the document.
2. The system displays the fields to capture the target WIPO account customer ID including the possibility of selecting an account with which the user has previously formed an e-handshake in accordance with the system used for ePCT.
3. The applicant confirms the de-association and a request for association is sent to the target WIPO account holder. The de-association becomes effective only after the new target account holder confirms the association request. This would avoid change of the existing access code and notifying OSF to which the access code has already been sent for retrieval.

View Document Access history and Availability Status

1. The Applicant selects a priority document and selects the option to view the document access history and availability status.
2. The system displays the document data (application number, date, etc), the date of availability when the document was made available via TDA or if the document was uploaded via PCT-EDI or the Office portal, the access history including the Offices which have accessed the document and the dates of access or the Offices which have attempted to access the document and the reason of failure (e.g. application number and filing date mismatch). It is important that the document content is not visible.

Create and/or Change Access Control Lists (during the transition period)

1. The Applicant selects a priority document and selects the option to edit the access control list.
2. The system displays the access control list and allows the Applicant to add or remove Offices (OSF) from the list. Only participating offices are shown but changes are disabled for Offices which have already migrated to the new Route (e.g. checkboxes being grayed out).
3. The applicant may also delete the access control list from a document.

Change Access Control Lists (after the transition period)

This function is only made available for priority documents registered by the OFF which has established a default ACL in DAS through a bilateral arrangement with the IB.

1. The Applicant selects a priority document and selects the option to edit the default access control list.
2. The system displays the default access control list and allows the Applicant to overwrite it by adding or removing Offices (OSF) from the list. Only participating offices are shown.

NON-FUNCTIONAL

- Based on the bilateral arrangements with the IB, the OFF which has established a default ACL may submit any update requests the IB to add or remove authorized accessing Offices. Such modification will be applied to all documents registered by the OFF except those for which the default ACL has been changed by the applicant.

Produce Availability Certificate

1. The Applicant selects the option to generate an Availability Certificate
2. The system generates a certificate, in PDF format, with the following information: IP type, priority office code, priority application number, priority application date, date of availability.
3. The system gives the applicant the options to download or print the certificate.

VARIATIONS

- If a document is already associated with another WIPO account, the system does not allow it to be associated to a new account.
- The ACL functionality does not apply to Trademark documents. Trademark documents never have an ACL.
- Trademark document also do not have an access code.

NON-FUNCTIONAL

- Documents for the following IP rights will be supported with regard to this user case: Patents, Industrial Designs and Utility Models. For Trademark applications, only two features of this user case are offered to all public without the need of using an account-based access: view document access history and availability and produce availability certificate.
- A document may have an access control list, or no list. If the document has no access control list, then all OSF will be granted access to the document (provided other criteria are met).
- Access Codes are stored in the system but never displayed to the applicant.
- The “date of availability” is the date on which the document was registered via TDA or uploaded via PCT-EDI or the Office Portal.
- The existing “publication dates” that have been made available by the OFF will not be displayed, because they will not be used any more.
- The applicant may have the possibility to request reissuance of the access codes by the OFF or the IB on behalf of the Offices (OFF) which do not issue access codes. In case of reissuance of the access code by the OFF, the OFF should send the new access codes to DAS by new dasRegister operation of the TDA protocol or add-entry of the PCT-EDI protocol. This will overwrite the previous access code recorded in DAS.
- During the transition period, the applicant portal can be used for applications that are made under the new and old Routes.

USE CASE: RETRIEVE A PRIORITY DOCUMENT

DESCRIPTION

The purpose of this use case is to retrieve a priority document from the DAS system. An Office of Second Filing will access the system using the TDA or PCT-EDI protocol or the Office portal, specify the data to identify a priority document, and retrieve a copy of the document from the DAS system.

ACTORS

- Applicant
- Office of Second Filing (OSF). Known as Accessing Office in the DAS Framework Provisions.
- Office of First Filing (in cases where the document is held in the digital library of the OFF).

PRE-REQUISITES

- The applicant has filed an application at the OSF.
- The applicant has notified the OSF of the priority office, priority application number, priority application filing date and access code to retrieve the copy of a priority application via the DAS system.

STEPS

1. The applicant requests the OSF that a priority document is retrieved via the DAS system. This request can happen in different ways, depending on the procedures of the office. The applicant supplies an access code with the request.
2. The OSF requests to retrieve a copy of the priority document via the DAS system. The OSF supplies the following data in the request: priority office code, IP type, priority application number, priority application filing date and access code:
 - 2.1. If the OSF uses the TDA protocol, the request is sent using a “pdRequest” transaction.
 - 2.2. If the OSF uses the PCT-EDI protocol, the request is sent using a “get-document” transaction.
 - 2.3. If the OSF uses the Office portal, the request is submitted as a download operation.
3. The system checks the availability of the document and the validity of the access code. If the identifying data or the access code are not correct, the system returns an error message with the reason for the rejection of the request (e.g. “Application number and access code do not match”, etc)
4. The system retrieves the priority document:
 - 4.1. If the OFF has registered the document using the TDA protocol, the system retrieves the document from the digital library of the OFF using a “pdRequest” transaction. It is the responsibility of the OFF to check the matching application filing date and to provide the appropriate response.
 - 4.2. If the OFF has uploaded the document using the PCT-EDI protocol or the Office portal, the system retrieves the document from its own digital library if the application filing date provided by the OSF matches the record in DAS. If the application filing date does not match the record in DAS, the system returns an error message with the reason for the rejection of the request (e.g. “application number and filing date do not match”).
 - 4.3. If the OFF has registered the document with a link to the external document held at the OFF using the PCT-EDI protocol, the system retrieves the document from the digital library of the

OFF using the “get-document” transaction. It is the responsibility of the OFF to check the matching application filing date and to provide the appropriate response.

5. The system delivers the document to the OSF in response to one of the above requesting transaction in step 2.

VARIATIONS

- In the case of trademark documents, there is no access code and no Access Control List (ACL). Any OSF can access any trademark document that has been registered with the DAS system.
- Permission must be granted on the basis of the access code, or the ACL, or both, as described in the section relating to Security.

TRANSITION VARIATIONS

An OSF that has not updated its systems may be obliged to accept a Utility Model or Industrial Design document as priority for a Patent application (other scenarios are also possible). In this case, the OSF may contact the IB and request a paper copy of the document or arrange a bilateral agreement with the IB so that Utility Model priority documents are sent on paper.

OSF currently operating under Route A or C will need to update their systems for retrieving documents with the DAS system in the following ways:

- Provide all identifying data when requesting the document. Required data will be: priority office code, IP type, priority application number, priority application filing date, access code.
- If the OSF has not updated its systems to provide the necessary data, only patent documents may be retrieved.

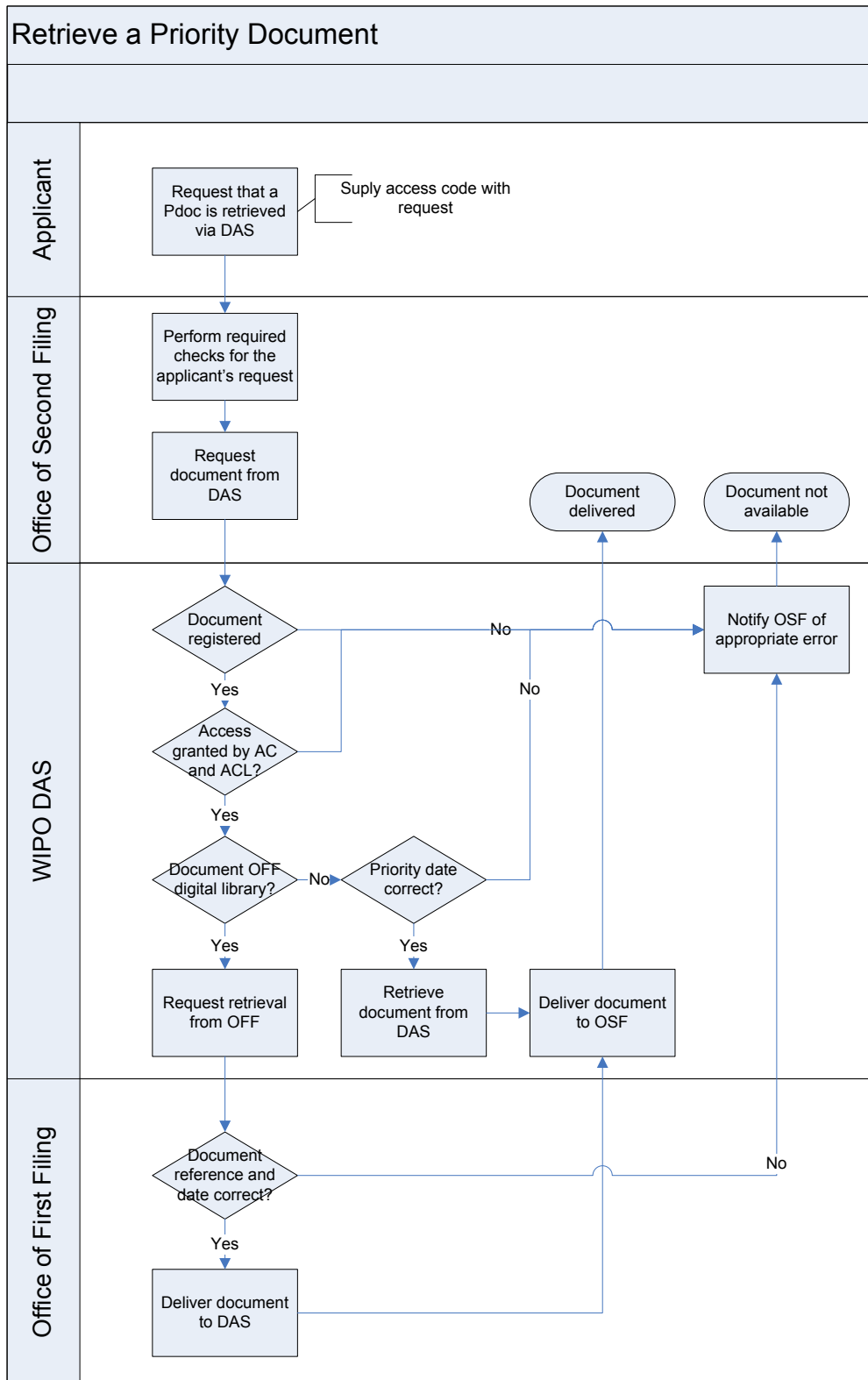
Some depositing Offices (e.g. the Japanese Patent Office) may offer the service to make available a foreign priority document held in a national application. It is necessary to register the national application number and country code that holds the priority document in addition to the priority office code, priority application number, priority filing date. This is useful if the actual Office of first filing is not a DAS participating Office. This arrangement implies that a single priority application could, in principle, be registered with DAS more than once. As such, multiple valid access codes would be issued and recorded sufficiently to determine the appropriate OFF. In the unlikely event of codes for the same application from different Offices matching, DAS should supply the document by preference directly from the actual OFF (if the code matches the OFF code) or alternatively from the Office which first registered the application with that code.

NON-FUNCTIONAL

- Documents for the following IP rights will be supported: Patents, Trademarks, Industrial Designs and Utility Models.
- The system must support documents with colour and grayscale images in JPEG, TIFF or PDF format for Industrial Designs and for Trademarks.
- Documents are transmitted to the accessing Offices as received from the depositing Office. But some Offices in their capacity of OSF may have the technical constraint to accept the document in black and white Tiff format only. In this case, DAS would perform a color or grayscale to black and white conversion with possible loss of quality and it would be useful to provide a conversion indicator in the transmission protocol to notify the accessing Office of such cases.

- Initially, the TDA protocol will only be available for Patents. This means that documents for other types of IP right can only be requested from the system using the PCT-EDI protocol or the Office portal. The TDA protocol needs to be extended to support other IP rights in the future.
- Some Offices may have technical constraints in their IT system or the TDA implementation which would not accept a large-sized document (e.g. 50 MB). In this context, an over-sized document will be delivered to the requesting Office on CD/DVD as it works at present (including the DAS system itself).
- Distinct error messages would be introduced in order to make it easier for the Offices to respond to any error that may occur due to any mismatch combination of priority application number, access code and priority filing date.

DIAGRAMS



Note: the access code and ACL are not required and not checked for Trademark documents.