TECHNICAL ANNEX TO

AGREEMENT BETWEEN EUROCONTROL AND THE "CRCO EXTRANET FOR AIRSPACE USERS ("CEFA") USERS

This annex relates to Articles 3 "Validity of electronic document", 12 " Security" and 13 "Confidentiality and protection of data".

1- Encrypted connection

The CEFA website uses the HTTPS protocol. HTTPS is the protocol for accessing a secure Web server where authentication and encrypted communication is possible. Using HTTP, the session is then managed by a security protocol. HTTPS encrypts the session data using the SSL (Secure Socket Layer) protocol ensuring protection.

Secure Socket Layer (SSL) is a protocol for encrypting and decrypting data across a secure connection from a client to a server with SSL capabilities. The CEFA server is responsible for sending the client a certificate and a public key for encryption. If the client trusts the server's certificate, a SSL connection can be established. All data passing from one side to the other will be encrypted. Only the client and the server will be able to decrypt the data. This exchange of information is done automatically and transparently without any human intervention.

2- Account names and password

On the CEFA website, an account name and password are mandatory to connect to the site. The account name and password rules are set to enhance computer security by encouraging users to employ complex passwords and use them properly.

The CEFA website requires an account name and password with a minimum length of six characters. The account name and password formation impose the following minimum requirements:

- The use of both upper- or lowercase letters (case sensitivity)
- Inclusion of one or more numerical digits

It is not required that CEFA users change their password periodically but strongly recommended.

3- CAPTCHA mechanism

A special mechanism called Captcha (**C**ompletely **A**utomated **P**ublic **T**uring test to tell **C**omputers and **H**umans **A**part) is used during the subscription process and the recover function. This method requires that a person types the 6 letters of a distorted image composed of letters and digits. This prevents unauthorised access by automats.

4- Protection of data

4.1 Principles

CEFA uses an Advanced Electronic Signature (AES) for signing invoices and related documents. It is by nature a closed user group domain.

Electronic signatures do not affect any substantive rights or obligations of the parties. A contract or other documents relating to a transaction may not be denied legal effect, validity, or enforceability solely because it is in electronic form.

The sole purpose of the electronic signature is to assist the recipient of the documents in checking the authenticity and integrity of the document and in verifying the identity of the emitter. The successful verification of the electronic signature is only one element contributing in asserting the authenticity and validity of the document. It is the responsibility of the recipient to use other methods of additional controls that are considered standard or best practices in commercial relations.

Any claim or enquiry based on an electronically signed document shall not be accepted after 6 months from the end of validity of the certificate used for signing the document, with the exception of a possible early cancellation of a certificate.

4.2 Use of electronic signature

Some of the electronic documents issued through CEFA are "Billing documents". These documents are PDF files. All these files are digitally 'signed'. The digital signature is compliant with standard PDF signature interchange standard, which can be verified by Acrobat reader 8.1 or above, or by compatible handler directly.

When digitally signing these PDF files, Eurocontrol CRCO is using their own private certificate key and GlobalSign as Certification Authority.

The certificate gives an intuitive way to authenticate and verify the origin of these PDF files. The advantage of PDF signature is that the user can verify the signature.

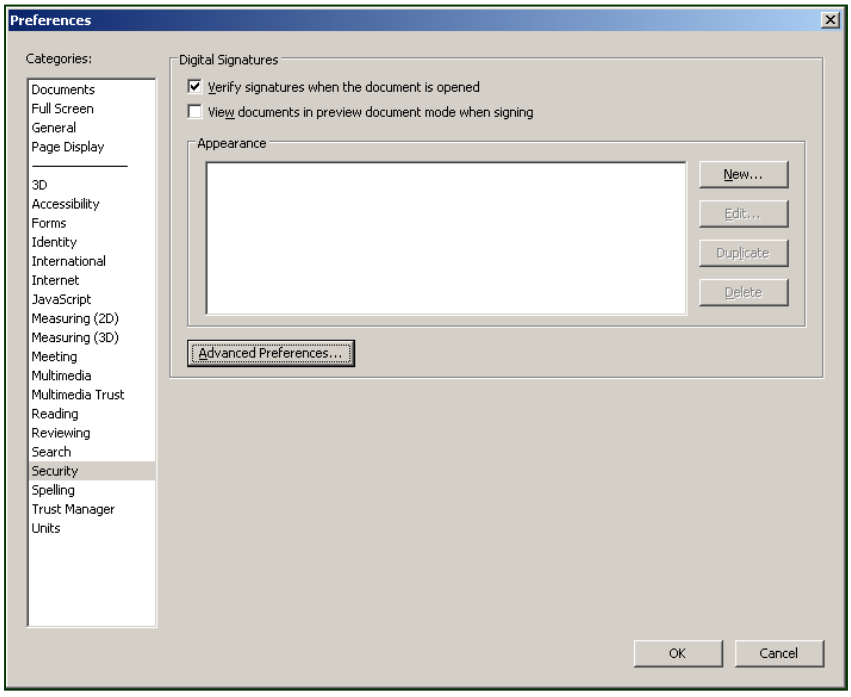
4.3 Users guide

For example, in MS-Windows and using Acrobat Reader 8.1.0, you can find hereunder (A.) how to set signature verification and (B.) how to check the validity of the digital signature:

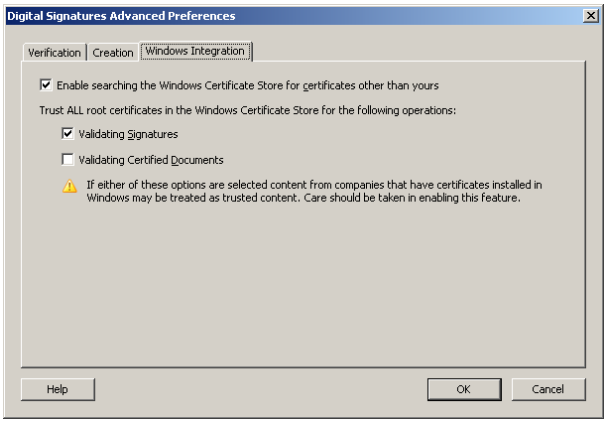
A. Set signature verification preferences

Before you open signed documents, you can set your preferences to optimise Acrobat Reader for validating signatures. This setting of preferences is a one-off procedure.

1. Choose Edit > Preferences (Windows) or Reader > Preferences (Mac OS), and select *Security* on the left.
2. To automatically validate all signatures in a PDF when you open the document, select *Verify Signatures When The Document Is Opened*. This option is enabled by default.



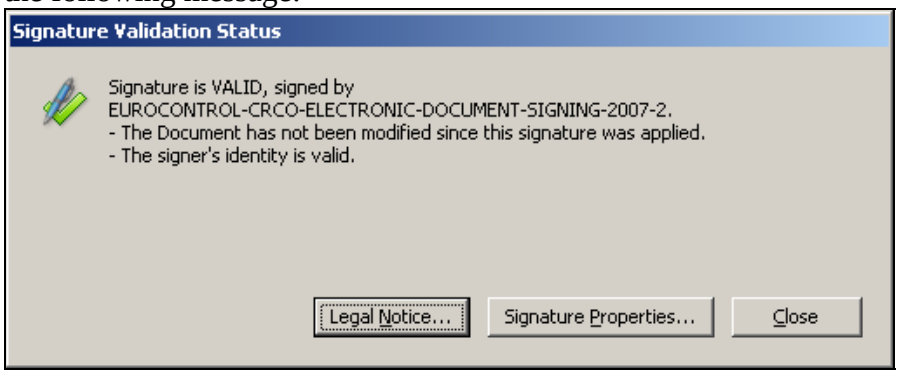
3. Click > Advanced Preferences and in the Windows Integration tab, click the option "Enable searching the Windows Certificate Store for Certificates other than yours' and click the option *Validating signatures* under *Trust all root certificates* in the Windows Certificates.



B. Validate the signature

1. Open the PDF containing the signature, and click the Signatures button on the left to open the Signatures panel.
2. Select the "Eurocontrol-CRCO" signature in the Signatures panel, and then choose *Validate Signature* from the Options menu. By doing this operation, Acrobat Reader is going to validate the 'Eurocontrol CRCO….' certificate by contacting a function of the Fedict website – Belgium E-Government Portal, http://ocsp.pki.belgium.be.

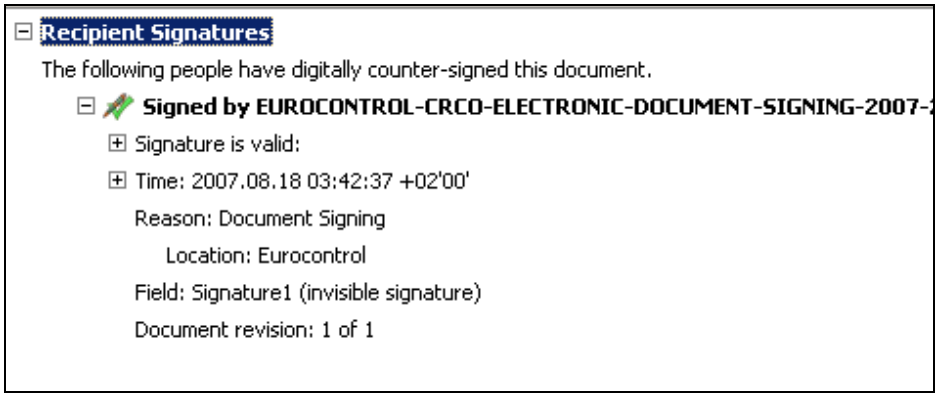
   The Signature Validation Status describes the validity of the signature. You should have the following message:



- The check mark icon indicates that the signature is **valid**.
- The red *x* icon indicates that the signature is **invalid**.
- The caution triangle icon indicates that the **document was modified after** the signature was added.
- The question mark icon indicates that the signature couldn't be validated because the signer's certificate **isn't in your list of trusted identities.** (see chapter **A.** Point 3**.**)

If the signature status is unknown or unverified, validate the signature manually to determine the problem's cause and possible solution. If the signature status is invalid, indicated by the red *x* icon or the caution icon **contact EUROCONTROL CRCO about the problem**.

3. On the left panel, as shown hereunder, the document version must be 1 of 1. This supports the fact that the document was not modified after the signature.



4. Click Signature Properties and then click Show Certificate to view the details of the certificate. The "Eurocontrol-CRCO …"certificate must present a full certification path having the certificate Global Sign Root CA as Certification Authority.