

(Translation from Czech)

LICENSE AGREEMENT

entered into in accordance with Section 2358 *et seq.* of Act no. 89/2012 Coll., Civil Code, as amended (hereinafter the "Civil Code") and in accordance with Act no. 121/2000 Coll., Copyright Act, as amended (hereinafter the "Copyright Act")

Entered into between:

Czech Republic – State Institute for Drug Control, organizational unit of the state

Identification number: 00023817
Registered seat at: Šrobárova 48, ZIP: 100 41 Prague 10, Czech Republic
Represented by: PharmDr. Zdeněk Blahuta, director
Bank: 623101/0710
(hereinafter the "**Licensee**")

and

Lorenz Archiv-Systeme GmbH

Identification number: 045 238 242 18
VAT No.: DE114182772
Registered seat at: Eschborner Landstr. 75, 60489 Frankfurt, Germany
Represented by: Wolfgang Witzel, President
Bank: account no.: IBAN: DE82503201910367909218, SWIFT: HYVEDEMM430
(hereinafter the "**Licensor**")

(this agreement, hereinafter the "Agreement", the Licensor and the Licensee jointly hereinafter as the "Parties")

Article 1
Opening Provisions

- 1.1 The Licensor explicitly declares to be authorized under the Copyright Act to provide the Licensee authorizations specified in Article 2 hereof.
- 1.2 The Licensor explicitly declares that by granting the Licensee the authorizations hereunder, no third-party intellectual property rights shall be endangered or violated.



Article 2 Scope and Purpose of the Agreement

- 2.1 As of the day of this Agreement entering into legal effect, the Licensor grants the Licensee an authorization to use the below-specified Application Software designed to process registration documents in the eCTD/NeeS format:

1x docuBridge Basic Server license: to be used for test and production system

Server license includes:

- *docuBridge Import module for eCTD and NeeS Submissions*
- *docuBridge View module for Submissions (Navigation, Annotation, Hyperlink, Print)*
- *docuBridge Search Module*
- *docuBridge Administrator Module*
- *dB Invoker license for Link creation/usage*
- *1x LORENZ eValidator OEM version*

170x docuBridge user licenses (named) for viewing and working with registration documents on production server

Following licenses are contained in this number:

- *15x for uploading documents*
- *20x for technical validation*

The authorization specified in this paragraph shall be designated hereinafter as the "License". The License is specified in more detail in the Appendix no. 1 hereof. The application software listed in this paragraph shall be designated hereinafter as "Application Software". The Application Software shall be compatible with the Licensee's requirements specified in Appendix no. 2.

- 2.2 The Licensee hereby accepts the License and undertakes to use the Application Software solely within the scope of this License.
- 2.3 The Licensor grants the License in the scope specified in 2.1 to the Licensee as non-exclusive, effective as of the day of both parties hereto signing this Agreement.
- 2.4 By this Agreement, the Licensor further undertakes to provide the following services:
- a) Performing a detailed analysis of requirements of the Licensee's employees regarding the Application Software and drafting a proposed implementation of the Application Software in the Licensee's environment according to the requirements specified in Appendix no. 2;
 - b) Installation of the Application Software in the testing and production environment of the Licensee according to the Licensee's requirements specified in Appendix no. 2;
 - c) Configuring the Application Software in the testing and production environment of the Licensee according to the Licensee's requirements specified in Appendix no. 2;

- d) Training 10 employees of the Licensee in using the Application Software and 5 employees of the Licensee in administration of the Application Software according to the Licensee's requirements specified in Appendix 2. All training shall take place at the registered seat of the Licensee either in Czech or in English language;
- e) Providing a well-arranged user and administration documents regarding the Application Software either in Czech or in English language in accordance with the Licensee's requirements as specified in Appendix no. 2.

The mentioned services shall be provided by the Licensor in three implementation stages specified in Appendix no. 2. Therein, deadlines for handing-over the products of the mentioned three stages, as handed-over by the Licensor to the Licensee, are specified.

2.5 After rendition of services in each stage according to Appendix no. 2, the services shall be accepted by the Licensee. The Licensor shall hand-over the product of each stage (i.e. services rendered in each stage) to the Licensee for acceptance by deadline specified in Appendix no. 2. The acceptance procedure shall have the following form:

- a) After completing the services in each stage, the Licensor shall hand-over the products of the stage to the Licensee for acceptance. A written, dated record of such hand-over for acceptance shall be drafted by the parties, signed by authorized representatives of the parties in technical matters.
- b) Within 7 days from the date of the record of hand-over for acceptance, the Licensee shall assess, whether the services rendered in the given stage are rendered in accordance with this Agreement and its appendices and in the herein specified scope.
- c) If the Licensee fails to raise any objections regarding the services rendered in the given stage (i.e. the Licensee fails to complain about any defects), the parties shall draft a written, dated acceptance certificate for the given stage signed by authorized representatives of the parties in technical matters, declaring the acceptance of the given stage (i.e. services rendered in the given stage) without any reservations.
- d) If services rendered in a given stage are defective, the Licensee shall specify such defects in a written dated record. In such case, the Licensor shall remedy the complained-about defects within 7 calendar days from the complaint being made. Consequently, the Licensor shall present the services rendered in the given stage to the Licensee for repeated acceptance, which shall be stated in the complaint record. If the Licensee fails to make any complaints during the repeated acceptance, clause c) shall apply. If the Licensee makes complaints during the repeated acceptance, the procedure specified in this clause d) shall apply. This procedure can be repeated within 30 days from the day of handing-over the products of the given stage for acceptance, unless the parties agree otherwise in writing.

2.6 This Agreement is entered into in order to secure full and undisturbed use of the Application Software by the Licensee for the purpose of exercising its powers of a regulatory governmental agency under applicable laws.

Article 3 Royalties

3.1 The Parties have explicitly agreed, as per Section 2366 subsection 1 clause a) of the Civil Code that the royalties for granting the License and rendition of services specified in Article 2 hereof shall be:

the price without VAT of CZK 2,480,000 (in words: two million and four hundred and eighty thousand Czech crowns).

VAT of CZK 520,800 (in words: five hundred and twenty thousand and eight hundred Czech crowns) corresponding to the VAT rate of 21 %.

Total price of CZK 3,000,800 including VAT (in words: three million and eight hundred thousand Czech crowns).

- 3.2 The Parties hereby explicitly agree that the above-specified royalties include the entire performance hereunder in accordance with Article 2, that the above-specified royalties are the maximum royalties permissible and that they cannot be modified in any way in the future, unless agreed explicitly in this Agreement or in any amendment hereof. If during the duration of this Agreement (i.e. after entering into this Agreement) and before the moment of rendition of taxable performance under Act no. 235/2004 Coll., on VAT, the VAT rate is modified (i.e. lowered or increased), the Licensor shall be entitled to reflect such modification in its invoice for the performance rendered, i.e. to lower or increase the final price in accordance with the modification of VAT rate. The price includes all costs of the Licensor related to rendering performance under this Agreement.

Article 4 **Invoicing and Payment Terms**

- 4.1 The royalties for granting the License and services under paragraph 3.1 shall be paid to the Licensor by a single payment after the License and the services are provided to the Licensee, i.e. after handing-over the license-key document authorizing the Licensee to use the Application Software and based upon the acceptance certificate signed by the Licensee's authorized representative in technical matters confirming complete acceptance, without any reservations, of all services under paragraph 2.4. This means that the royalties shall only be paid if both the License and the services are provided to the Licensee in accordance with terms and conditions herein specified. The royalties shall be paid by the Licensee to the Licensor's account stated in the invoice.
- 4.2 The Licensee shall pay the Licensor royalties for the License and the services as specified in paragraph 3.1 hereof based upon an invoice (tax document) issued by the Licensor. The Licensor shall only be entitled to issue the invoice after the performance is rendered, i.e. after due and timely rendition of performance herein agreed. The invoice shall meet all formal requirements prescribed for a tax and accounting invoice as specified by Act no. 235/2004 Coll., on VAT, as well as Act no. 563/1991 Coll., on bookkeeping, as amended.
- 4.3 The invoice specified in this Article shall be due in 30 days from the day of demonstrable delivery of the invoice free from any errors to the Licensee. The Parties have agreed that the duty to pay the invoice shall be met on the day when the corresponding amount is deducted from the Licensee's account in favor of the Licensor.
- 4.4 If the Licensee delays payment of the invoice, the Licensor shall be entitled to demand from the Licensee a late payment interest on the outstanding sum in the amount prescribed by applicable law.

Article 5 **Rights and Duties of the Parties**

- 5.1 The Licensors shall provide the Licensee all assistance necessary for undisturbed enjoyment of the licensing rights by the Licensee.
- 5.2 If any person or entity different from the Licensee, including the Licensors's employees, brings a claim regarding an alleged violation of intellectual property rights in connection with the use of the Application Software, the Licensors shall provide the Licensee all effective aid and assistance and reimburse to the Licensee all costs incurred as a result of any dispute with such person or entity and shall further compensate to the Licensee any damage suffered as a result of any copyright claim being brought against the Licensee in relation to using the Application Software, in full.
- 5.3 The Licensors shall, at any time if so asked by the Licensee, provide the Licensee information or documents confirming performance of the Licensors's obligations under this Agreement.
- 5.4 If, for the performance of services under this Agreement, the Licensors requires for its employees access authorizations to the Licensee's information systems (e.g. servers), the Licensors shall present the Licensee, immediately after such need arises, a completed and signed application for the Licensee's information system access for persons participating in the implementation of this Agreement. If, during the performance of this Agreement, the Licensors requires modification of the list of employees authorized to access the Licensee's information systems, the Licensors shall, in each case, first apply for a termination of information system access rights for the person(s), whose authorization is to be terminated, while at the same time applying for a new access in the information system for person(s), who should newly acquire such rights. The Licensors shall apply for termination/grating access to the information system of the Licensee using an access granting/termination application form attached hereto as Appendix no. 3. The Licensee shall assess such application within two business days following the day of the delivery of the application. When assessing the application, the Licensee shall be authorized to request additional information regarding the purpose of the application. The Licensee shall return a copy of an approved or rejected application to the Licensors.
- 5.5 The Licensors shall further adhere to following rules in connection with access rights for the Licensee's information systems:
- The Licensors shall make sure and shall be responsible, throughout the period of rendering performance hereunder, for only people, in respect of whom an application for information system access rights was filed and, at the same time, in respect of whom such application was approved by the Licensee's IT Security Manager (hereinafter the "ISM"), actually accessing the appropriate sections of the Licensee's information system. At any time throughout the performance of this Agreement, the Licensee shall be authorized to check, which people actually access the appropriate part of the Licensee's information system and, in such case, the Licensors shall always provide and prove such information to the Licensee. Any breach of this duty by the Licensors shall be deemed material breach of contractual obligations by the Licensors.
 - The assigned access rights can only be used by the person, in respect of whom an application was approved by the ISM. Such person shall not be authorized to pass the assigned access rights to any third party. Any violation of the mentioned duty shall be considered material breach of contractual obligations by the Licensors.
 - In case of termination of employment of an employee of the Licensors having access rights, the Licensors shall apply for termination of access rights of such employee in the

Licensee's information system within two business days from the relevant event. The Licensor shall take analogous course of action if the reason or need of a Licensor's employee having access rights to the Licensee's information system ceases. Any violation of the mentioned duties shall be considered material breach of contractual obligations by the Licensor.

Article 6 Contractual Term

- 6.1 This Agreement is entered into for a definite period of time, namely for the period of duration of property author's rights in respect of the Application Software.

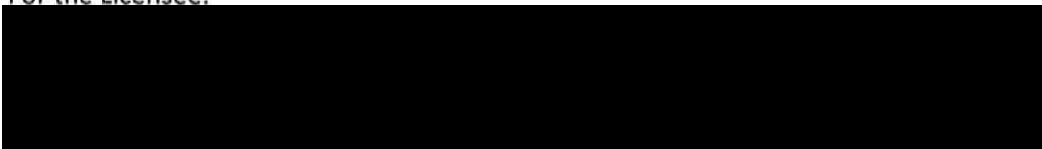
Article 7 Severability

- 7.1 If any of the provisions of this Agreement is or becomes invalid, ineffective or unenforceable, the remaining provisions of this Agreement shall remain valid and effective. Instead of such invalid, ineffective or unenforceable provision, provisions of generally binding laws and regulations governing the issue of mutual rights and obligations of the Parties shall apply. In such case, the Parties shall regulate their relation by agreeing on a different contractual provision best suitable as to its result to the intention originally expressed by the invalid or ineffective or unenforceable provision. If this Agreement is found to lack any provision, which otherwise would be reasonable in the sake of completeness of regulation of mutual rights and duties, the Parties shall exert maximum effort to supplement such provision in this Agreement.

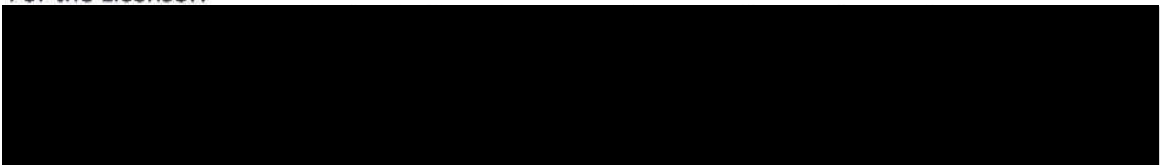
Article 8 Final Provisions

- 8.1 Following persons shall be authorized to act on behalf of the Parties in matters related to performance of this Agreement:

For the Licensee:



For the Licensor:



- 8.2 Following appendices shall constitute an inseparable part of this Agreement:

Appendix no. 1	License specifications
Appendix no. 2	Licensee's requirements regarding the configuration of the Application Software
Appendix no. 3	Application regarding access rights to the Licensee's information systems (e.g. servers)

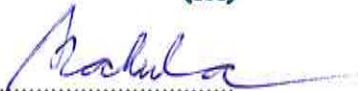


- 8.3 If the Licensor delays handing-over of products of any stage of implementation to the Licensee in light of the deadlines specified in Appendix 2, the Licensor shall pay the Licensee a contractual penalty of CZK 5,000 for each started calendar day of the delay.
- 8.4 This Agreement can only be changed by written, numbered agreement confirmed by both Parties, explicitly designated as amendment of the Agreement. No other records, protocols etc. shall be deemed to modify this Agreement.
- 8.5 In case of circumstances preventing either Party from rendering performance hereunder, such Party shall immediately notify the other Party.
- 8.6 The Parties have agreed that all disputes (if any) arising out of this Agreement shall be settled amicably and only if an amicable settlement cannot be reached, the Parties shall bring the matter before a court.
- 8.7 This Agreement is drafted in 2 counterparts, one (1) to be kept by each of the Parties.
- 8.8 The Parties declare that they have read this Agreement carefully and that the content of this Agreement is clear and comprehensible to them. The Parties further declare that this Agreement is not being entered into in distress or under otherwise unilaterally disadvantageous conditions.
- 8.9 All issues not specifically agreed upon in this Agreement shall be governed by the applicable provisions of the Civil Code, Copyright Act and other valid laws of the Czech Republic.
- 8.10 This Agreement becomes valid and effective on the day of being signed by both Parties hereto.

In testimony of this entire Agreement being a product of their genuine, solemn and free will, the representatives authorized to enter into this Agreement on behalf of the Parties, affix their signatures below.

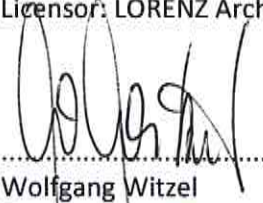
In Prague on 29th April 2016

Licensee: **Státní ústav pro kontrolu léčiv**
Šrobárova 48
100 41 Praha 10
(100)


PharmDr. Zdeněk Blahuta
director

In Frankfurt on 27th April 2016

Licensor: LORENZ Archiv-Systeme GmbH


Wolfgang Witzel
President

LORENZ
ARCHIV-SYSTEME
GmbH
Eschborner Landstraße 75
60489 Frankfurt/M.
Telefon 069 / 7 89 91-901

1 Appendix No.1 of License Agreement

1.1 LORENZ docuBridge® eCTD tool licenses

Regarding the quote of delivered licenses we would like to clarify the following:

Due to a formal mistake the number of licenses which will be delivered by LORENZ within the offered price of the solution was not stated correctly in our response to the tender and in the license and service agreement documents. We hereby declare that we will deliver the license according to Appendix no. 2 of the tender documentation, Part 1 "Specification of the performance subject – Summary".

Therefore, the application SW for working with the registry documentation in the eCTD/NeeS format will consist of the following parts (modules):

1. A module for recording the documentation in the eCTD/NeeS format into the eCTD tool internal database (hereinafter referred to as the "import/recording module") in the form of open-ended licenses for 15 named users.
2. A module for the technical validation of requests in the eCTD and NeeS format according to the technical validation criteria valid as of the day of receiving the request (hereinafter referred to as the "technical validator") in the form of open-ended licenses for 20 named users.
3. A module for viewing and working with the registry documentation in the eCTD/NeeS format (hereinafter referred to as the "reader") in the form of open-ended licenses for 170 named users (this number includes the users in points 1 and 2, whereas the points 1, 2 and 3 may be covered by individual applications or one complex application).

These modules (licenses) are included in the LORENZ docuBridge® software delivery. The provided licenses will contain in addition: server license docuBridge® 1x, eValidator OEM version 1x. Training licenses will be provided according to tender requirements as well.

We declare that license and services agreements and other open contractual documents will be negotiated with SÚKL again and e.g. number of to be delivered licenses will be updated in service and license agreements accordingly. All needed documents will be signed by a person acting in the contractual matters on behalf of LORENZ Archiv-Systeme GmbH.

1.2 Definition LORENZ docuBridge® Licenses

LORENZ docuBridge® is a comprehensive Submission Management System which allows review and production of eCTD v3, NeeS, paper and PDF submission output formats. The system includes built-in submission and document management functionality, and contains the entire technical infrastructure necessary to implement 21 CFR Part 11.

The use of the functionality depends on the purchased licenses. Every docuBridge® installation needs a valid license for normal operation. Without a fully valid license, only limited functionality is available: You can start and configure the system, but you cannot use any of its business logic modules.

Licenses are handled server-side only. There is no need to install dB licenses on client computers.

Every primary docuBridge® server needs a separate license. As part of the delivery SÜKL will receive two server licenses, one for the test and one for the production system.

1.3 License specification

1.3.1 LORENZ docuBridge® Server - Core docuBridge Software

This is the "base license" for LORENZ docuBridge®. It is required to operate the system. The core server software license for SÜKL comes bundled with the following:

- *Submission eReview functionality* for eCTD v3 and non-eCTD submission viewing. Allows Review of electronic submissions and includes functionalities like navigation, commenting, and comment management (annotations and notes), Cross-document Linking and Link Management (Hyperlinks) and Print
- *docuBridge® Search Module*
- *Secure, role-based Submission Management*
- *docuBridge® Import Module for eCTD v3 and NeeS Submissions*
- *docuBridge® Administrator Module*
- *LORENZ eValidator OEM*

1.3.2 LORENZ docuBridge® Clients - User License Model

SÚKL receives user licenses according to the named user licensing model. Named licenses permit a one-to-one ratio between the number of users registered in the system and the number of users permitted to log into the system simultaneously.

Named licenses are available in three categories, as described below.

	User License Type	Description
1.	Compile User License	For key users, full eSubmission import functionality
2.	Hyperlink/Review "Process" User License	Hyperlinking and commenting rights within submissions.
3.	Read-Only "View" User License	Read-only access to submissions and LORENZ EDMS. System Administrators use this license type as well.

1.3.3 LORENZ eValidator

The LORENZ eValidator is quickly becoming the world standard in regulatory submission validation. Originally designed in 2002 to handle the different interpretations of eCTD specifications around the world, the eValidator is now recommended and/or used by eleven health authorities and hundreds of submission-producing organizations globally. The majority of the top ten pharmaceutical companies use LORENZ eValidator as their eCTD validator of choice.

The delivery will include the LORENZ eValidator OEM version, which connects directly to docuBridge®.

1.3.4 LORENZ Invoker

LORENZ Invoker is a utility that creates URL links which reference to submission sequences stored in docuBridge®. The links can be transferred to a third party system e.g. an existing workflow system or database. Essentially, these URL's can be used from every program which is able to launch registered URL formats. Examples include webpages, HTML emails, MS Office documents, shortcuts on the users' desktop and many more.

Like mentioned before the docuBridge® Explorer and Submission Workbench include functions to create some of these links either in the clipboard (for easy pasting to an email for example) or as shortcuts on the desktop.

APPENDIX NO. 2 TO THE LICENSE AGREEMENT REGARDING APPLICATION SOFTWARE FOR PROCESSING DOCUMENTS IN ECTD/NEES FORMAT

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LIST OF ABBREVIATIONS

API	Application Programming Interface
eCTD	electronic Common Technical Document
EMA	European Medicines Agency
GUI	Graphical User Interface
ICT	Information and Communication Technologies
IIM	Internal Identity Management
LDAP	Lightweight Directory Access Protocol
AI	Active ingredient
MP	Medicinal product
Nees	Non-eCTD electronic Submission
SSO	Single Sign-On
SIDC	State Institute for Drug Control
SW	Software
VPN	Virtual Private Network

1. PERFORMANCE SPECIFICATIONS – SUMMARY

The performance rendered under the License Agreement shall, among others, include the delivery, installation and integration of the Application Software for processing registration documents in eCTD/NeeS format in the environment of the SIDC (hereinafter the “eCTD Tool” or “Application Software”), launching the Application Software into flawless operation and personnel training.

The Application Software for processing registration documents in eCTD/NeeS format shall consist of the following sections (modules):

- 1) Module for uploading documents in eCTD/NeeS format into the eCTD database of the tool (hereinafter the “Uploading Tool”) in the form of unlimited time licenses for 15 named users.
- 2) Module for technical validation of requests in eCTD and NeeS formats according to technical validation criteria valid as of the moment of accepting the request (hereinafter the “Technical Validator”) in the form of unlimited time licenses for 20 named users.
- 3) Module for viewing and working with the registration documents in eCTD/NeeS format (hereinafter the “Reader”) in the form of unlimited time licenses for 170 named users (this number shall include also users specified in paragraphs 1 and 2 provided that paragraphs 1, 2 and 3 can be covered either by independent applications or by a single comprehensive application.

Detailed requirements for the Application Software for processing registration documents in eCTD/NeeS format are specified below in the following chapters of this document.

2. REQUIREMENTS REGARDING DELIVERY, INSTALLATION AND INTEGRATION OF THE APPLICATION SOFTWARE

2.1 Requirements regarding the Uploading Module

The Uploading Module allows uploading documents in eCTD/NeeS format in the internal database of the eCTD Tool. Uploading is required to be possible from the following sources:

- External data storage (CD/DVD)
- Network drive in the SIDC environment (file system)

Uploading from network drives must be suitable for automation so that the Uploading Module automatically uploads into the eCTD Tool new sequences stored on a dedicated network drive (in a corresponding directory). The performance agreed in the License Agreement shall include configuration and launching of automatic uploading of applications into the internal database of the eCTD Tool according to specifications included in this chapter.

The Uploading Module must be able to read the directory with documents and, according to a pre-defined mask (algorithm), to match the ascertained value with a designated attribute in the internal database of the eCTD Tool. The Uploading Module must further be able to automatically modify this chain obtained from the name of the directory according to a designed algorithm (see example below). According to the values of the above-specified attribute, it must be possible to then search in the eCTD Reader. Directories and files other than eCTD/NeeS documents can be stored in the

documents folder, therefore the Uploading Module must be able to automatically recognize and search the corresponding sub-directory with eCTD/NeeS documents.

Example:

On a network drive (dedicated as a source of data for the eCTD Tool), there is a directory named "sukls129826-2015_sukl12456-2015." The Uploading Module shall, in this directory among other sub-directories and files, search for all eCTD sequences (such as "0054" and "0055") and upload them into the eCTD Tool. The eCTD sequence itself can be as far as the fourth level sub-directory from the root directory.

When uploading the sequences, the Uploading Module shall automatically copy the first section of the chain of the directory name up to the first underscore, i.e. "sukls129826-2015", substitutes the dash with a slash and assigns it as the value of the attribute "File Number" to all eCTD sequences in the directory – i.e. "sukls129826/2015". The eCTD Reader must then be able to search according to the value of the "File Number" attribute.

End of example

In order to preserve the lifecycle of every MP, the Uploading Module must be able to distinguish between the individual sequences in an application (in case of several sequences within a single application).

As it is possible to file multiple applications in respect of a single MP as time passes, another requirement regarding the Uploading Module is preservation of lifecycle of every MP so that a user can, using the Reader, see a well-organized summary of the development (i.e. changes) of documents for a given MP in time.

The Uploading Module must be able to automatically recognize and register in the internal metadata database of the eCTD Tool at least the following attributes:

- Identifier of a given MP (Tracking number)
- Name of MP or AI (Invented name)
- Applicant
- File number

The Uploading Module must be also able to allow the personnel to manually change the automatically completed attributes (including registration of such change in the application log) and to enter new identifiers, whose value must be reflected when performing a search in the eCTD Reader. To that end, it must be possible to display an overview of the newly uploaded sequences in the Uploading Module, which have not yet undergone user check. Creation of new identifiers completed manually must be allowed in the system using the user interface without the need of configuration by an expert employee of the Licensor and the relevant procedure must be described in the user's documents.

The Uploading Module must allow creation of links to an entire dossier or sequence so that, by clicking on the link, the eCTD Reader launches automatically and displays the corresponding dossier or sequence. The link must be capable of being copied to clipboard to be manually pasted by the user into other information systems of the Licensee and it shall be also appropriately possible to directly send a link by e-mail from the eCTD Reader to an e-mail address inserted by the user (using the eCTD Tool's user interface).

Uploading of data must be uninterrupted and automated without the need of any user intervention. Uploading a sequence of 100 MB must be completed within 1 minute; uploading a sequence of 10 MB must be completed within 10 seconds. Multiple users (maximum of 5) must be able to upload independently at the same time. The Uploading Module must be protected against double upload of the same sequence by multiple users, i.e. any sequence can be stored in the eCTD Tool only once. If a sequence is uploaded repeatedly in respect of the same MP, the Uploading Module shall inform the user thereof and – if so prompted by the user – shall substitute the earlier uploaded sequence by the one being currently uploaded (it must be possible to turn off this dialogue and user prompt in the Application Software's GUI, e.g. for the sake of automated uploads). All manually completed metadata must be taken-over from an older version in the new one, unless overwritten by the user.

The Uploading Module must be able to connect to EMA Common Repository through API interface within the EudraNet network (VPN between EMA and EU medicines agencies). From the Common Repository, new sequences from a set of user-defined dossiers shall be automatically downloaded into the eCTD Tool (it shall be possible to define the dossiers for automatic download through the eCTD Tool's user interface), i.e. synchronization of the selected dossiers between the SIDC eCTD Tool and EMA Common Repository. Configuring and launching the automatic download of documents from the EMA Common Repository to the eCTD Tool in the Licensee's environment shall be a part of the performance under the License Agreement.

A typical example of the foreseen and required procedure of uploading documents in the eCTD Tool:

1. A folder with eCTD/NeeS documents shall be placed on the Institute's network drive. The folder shall be named so that it is possible to automatically extract document file numbers as assigned by the filing service therefrom (e.g. "sukls12345-2015_sukl12345-2015").
2. The Uploading Module opens the given folder, searches it for subdirectories with eCTD/NeeS documents and saves the individual sequences of eCTD documents in subdirectories as required by the Licensee in order to preserve the life cycle of the individual MP on a dedicated storage device for the eCTD Tool (file system) and shall store in the internal database of the eCTD Tool the required metadata procured automatically with the request (e.g. eu_regional.xml) including file number taken-over from the name of the folder.
3. Normally, uploading documents through the Uploading Module shall take place automatically without the need of any user intervention. If necessary, a user shall be able to add additional metadata or modify the automatically obtained metadata in the Uploading Module. To that end, it must be possible in the Uploading Module to display an overview of the sequences sorted according to date of their uploading and indicating, whether a given sequence has already undergone user check.
4. Technical validation of a request shall be performed automatically at the moment of the uploading and the report about the result of the technical validation shall be stored on a dedicated storage of the eCTD Tool attached to the relevant validated section.
5. After a request is uploaded, the Uploading Module shall create an unambiguous link allowing opening the individual dossiers or sequences directly in the eCTD Reader by clicking. This link, together with file identification ("File Number" attribute value) shall be automatically sent by the Uploading Module to a predetermined fixed e-mail address (after the upload, the link shall be sent by e-mail to a designated addressee or manually inserted into other information system of the SIDC).

6. After all the sequences are downloaded from the relevant directory to the dedicated storage of the eCTD Tool, the Uploading Module shall delete the folder from the network drive of the Institute (the document shall only be accessible through the eCTD Tool, the files shall be physically stored on the storage of the eCTD Tool, where they shall only be accessible via the eCTD Tool).

2.2 Requirements regarding the Technical Validator

The Application Software for processing registration documents in eCTD/NeeS format shall also include a tool for technical validation of the individual eCTD/NeeS sequences. The technical validation shall take place according to currently valid validation criteria for both eCTD and NeeS format, provided that the system must be able to automatically recognize the format of the validated documentation. The system must also allow the user to manually choose validated document format.

Furthermore, the technical validator shall ensure automatic updating of validation criteria so that technical validation as of any given day is performed employing the latest validation criteria. Updating validation criteria must be possible without the need of the system Licensor performing such activity by itself, i.e. automatically or by a trained user.

All historic versions of validation criteria must be stored in the system so that users are able to choose an older version of validation criteria for a given document if it is necessary to repeatedly validate older documents.

It must be possible to initiate the technical validation manually by a user via the eCTD Reader. However, the technical validation shall also be carried out automatically during the upload of a document on the storage device (see Uploading Module requirements above).

Results of the technical validation shall be recorded by the system in a validation report summarizing the ascertained deficiencies indicating their seriousness, at least within in the scope of categories error (deficiency resulting in impossibility to accept the document) and warning (deficiency, which does not result in rejection of the request).

The validation report of technical validation created during the upload of documents in the eCTD Tool shall be stored automatically by the system, attached to the given sequence on the storage device including the date of its creation.

2.3 Requirements regarding the Reader

The Application Software for processing documents in eCTD/NeeS format must also include a module allowing full-value reading of eCTD and NeeS documents, allowing a user to maximally use the eCTD and NeeS document standardized structure (hereinafter also the "eCTD Reader"). the eCTD Reader shall have the following properties and functions:

User interface design

The eCTD Reader must be able to display the following windows simultaneously:

- Navigation window for browsing the documents of a medicinal product (MP) or active ingredient (AI) in a tree structure.

This window shall display a tree structure according to the metadata database of the eCTD Tool (the structure shall be dependent on view mode). Basic view modes shall be:

- According to MP or AI name (invented name) – basic view mode.
In this view mode, the system must allow switching from updated state of a document for the given MP or AI (current view) and a cumulative view of the given MP or AI with the list of all documents in the loaded requests regarding the given MP or AI and indication of all changes within the current life cycle of the MP or AI (cumulative view)
- According to a combination of MP or AI name (invented name) and an Applicant, primarily sorted by the name of MPs or AIs.
In this view mode, the system must allow switching from updated state of a document for the given MP or AI (current view) and a cumulative view of the given MP or AI with the list of all documents in the loaded requests regarding the given MP or AI and indication of all changes within the current life cycle of the MP or AI (cumulative view)
- According to applications (administrative procedures)
View of a list of administrative procedures regardless of which MP it belongs to. Several sequences regarding various MPs presented in several waves can be included under a single administrative procedure.
- According to sequences
View of a list of sequences sorted by date and time of uploading in the eCTD Tool regardless of applications and the MP a sequence belongs to

The navigation window shall include comprehensible information regarding the status of each document in a sequence in relation to preceding sequences within the lifecycle of an MP provided that such sequence is uploaded in the eCTD Tool. A minimum of three statuses is required:

- “replaced”- the document in the previous sequence was replaced by another version of the document
- “removed” – the document was present in the previous sequence, it is not present in the current sequence
- “new” – the document was not present in the previous sequence, it is present in the current sequence
- Window for viewing PDF files
- Window for inserting or reading notes regarding the documents
- Search window (can be integrated in the navigation window for browsing documents)

Inserting notes regarding the documents

The eCTD Reader shall be required to allow for insertion of notes on the level of individual sequences and on the level of individual documents.

Notes must allow distinguishing between private and public notes. A private note shall be displayed only to the user, who created the note, while a public note shall be automatically displayed to all users browsing the given sequence or document.

Searching

The eCTD Reader shall be required to allow for searching on all the defined levels, i.e. down to the level of individual documents and their content (does not include multimedia content – pictures, videos, sound etc. and illegible PDF (scans without OCR)).

The search must be allowed based upon metadata values of the stored documents and also based upon the content of a searched for chain in the documents of an application (the requirement of searching inside documents only regards PDF files (except for non-OCR scans), MS Word, MS Excel, XML), so-called full text search, namely among the documents within the frame of a comprehensive storage device of the eCTD documents (i.e. all eCTD/NeeS documents of the Institute uploaded in the system using the Uploading Module).

A search in the inserted notes must also be possible, provided that private notes must not be included in the search, with the exception of private notes of the user carrying out the search.

Search criteria must be combinable at will (e.g. search based upon the values of two different pieces of metadata plus a chain in the text of the documents).

2.4 Other requirements

2.4.1 Access Rights

The eCTD Tool must support Single Sign On (SSO) through the Kerberos protocol of an LDAP server. Access authorization shall be carried out based upon user rights verification on the second LDAP server of the Licensee. Authorization and role registration on the directory server shall be proprietary. Assigning user roles to the individual users must be manageable by the Licensee's central identity management application – Internal Identity Management (hereinafter the "IIM").

In case of an error during logging in the eCTD Tool, it shall be possible to log in without SSO support, using a domain name and password.

The Application Software must be able to at least distinguish user rights for every sequence in respect of:

- Browsing documents in a sequence
- Editing metadata of a sequence
- Removing sequence from the eCTD Tool
- Granting access rights to a sequence

The above-mentioned access rights shall be assigned to individual user roles with the possibility of setting initial values of rights on uploading a new sequence (e.g. the right to edit metadata shall be automatically assigned to the role of "Uploader" and the right to browse documents shall be assigned to the roles of "Uploader", "Validator" and "Evaluator"). Assigning a role to a user shall be done in the IIM application.

Furthermore, it must be possible in the Application Software to set user rights for a system administrator, who shall have at least the following user rights:

- Assigning access rights regarding a sequence
- Viewing application logs
- Administration and configuration of the Application Software

It will be possible to log all the above-mentioned actions in the Application Software, always registering the user undertaking an action, date and time of action and unambiguous identification of the sequence, in respect of which such action is taken.

2.4.2 User Interface

The user interface of the entire Application Software shall visually comply with the look used in Windows 7 and higher operating systems.

All elements of the user interface must be either in Czech or in English.

2.4.3 Technical requirements

The Licensee requires that storage of system assistant data (internal database of metadata of the eCTD Tool) be implemented on a product of Oracle corporation, DB Oracle 12g. The Licensor shall use licensing rights held by the Licensee.

The delivery shall include installation and configuration of all components necessary for the operation of the system excluding installation of server operating systems and installation of database. Installing the application to client stations in case of use of fat client, the Licensee shall collaborate with the Licensor. To that end, the Licensor shall provide the Licensee with all assistance necessary to create an installation package for client stations. The client stations run on the Windows OS, for which the fat client must be optimized.

2.4.4 Installation and configuration

Installation and configuration of the Application Software is required in the testing and production environment. Configuration of the system in both environments shall be identical.

2.4.5 Training

The contractual performance shall include introductory training of 10 key users at the registered office of the Licensee, in Czech or English language. The training shall be structured into sections dedicated to using the Uploading Module, Technical Validator and eCTD Reader.

Furthermore, the Licensor is required to provide training of 5 employees of the Licensee to secure administration and operation of the system in the Licensee's environment. The training shall place at the Licensee's registered office in Czech or English language.

2.4.6 Documents

The Licensor shall provide well-organized user documents for the system in Czech or English language. The user documents shall describe working with the Upload Module, Technical Validator and eCTD Reader.

As a part of the delivery, the Licensor shall provide the Licensee with comprehensible technical documents including all information necessary to administer and operate the system in the Licensee's environment. The documents shall be in Czech or English language.



3. STAGES OF IMPLEMENTATION

The performance rendered under the License Agreement shall be divided into the 3 below-described stages, each finished with a separate acceptance by the Licensee.

1. In the first stage, the Licensor shall carry out a thorough analysis of requirements of SIDC employees. As a part of this stage, the Licensor shall secure complete documents necessary to implement the Application Software in the SIDC's environment. Resulting from this stage shall be an approved document summarizing SIDC's requirements including a proposal of implementation of the Application Software in the Licensee's environment. This stage shall be handed-over for the Licensee's acceptance within 3 months from signing the agreement. In this stage, following documents shall be presented to the Licensee for approval:
 - Schedule of fulfillment and implementation of the entire order approved by the Licensee.
 - Analysis of SIDC's requirements including detailed specification of the Application Software, its functionality, technical solution and integration of the individual parts into the ITC infrastructure of the Licensee. The analysis shall be approved by the Licensee.
2. Implementation of the Application Software in the Licensee's testing environment shall be carried out as part of the second stage. The second stage shall be handed-over by the Licensor to the Licensee for approval within 3 weeks from acceptance of the previous stage and shall include the below-listed activities.
 - Implementation and integration of the entire comprehensive proposal of solution of the Application Software in the Licensee's testing environment
 - Implementation of communication among the concerned application within SIDC's testing environment
 - Testing the Application Software in the testing environment (function, integration, performance). The Licensor shall design individual test scenarios to be used for the testing, which shall be presented to the Licensee for approval
 - Implementation of role administration in the application through IIM in the testing environment
 - Supplying user and technical documents for the installed Application Software
 - Training of users and administrators, schedule to be determined by the Licensee
3. In the final stage, the Application Software shall be deployed in production environment and trial operation shall take place. For more detail, see the list below. The last stage shall be presented by the Licensor for the Licensee's approval within 3 weeks from the acceptance of the second stage.
 - Implementation of the Application Software on the operating environment and a 7-day trial operation.
Throughout the trial operation, accessibility of the system must not drop below 99 %. System availability shall be calculated according to the following formula:

$$\text{Availability} = \frac{\text{Business days in a month} \times 9 \text{ hours} - \text{Total failure hours}}{\text{Number of business days in a month} \times 9 \text{ hours}} \times 100$$

- Implementation of role administration through IMM in production environment

..... Id. no.: (hereinafter the "Applicant") applies for assignment of access to SIDC servers

For its following employees:

.....

We ask for access rights to servers:

Server name	IP address

for the purpose of "Performance under agreement no. (order dated) and related orders"

Access to the servers can only be used for the specified purpose. The Applicant and the employees shall be obliged to protect the access rights against unauthorized use or any abuse. At the same time, they undertake to use the obtained information solely for the purpose, for which the access is granted, and not to disclose the information further.

The Applicant shall only disclose the access rights to its above-named employees charged with carrying out activities under the above-specified agreement / order. The Applicant undertakes to only access servers specified in the application and to notify the SIDC as soon as the need of accessing the servers ceases. The Applicant shall immediately notify SIDC about any employee, who was granted access right, who ceases to perform for the Applicant the activity, in respect of which the employee was granted access rights. Any transfer of access rights to another employee shall be subject to previous approval by SIDC to be granted based upon a newly filed application.

Unauthorized use of access rights by the Applicant or any of its employees shall be considered violation of the granted permit resulting in full liability for such violation under valid law.

The Applicant and its employees accessing SIDC servers undertake to fulfill all duties prescribed by Act no. 101/2000 Coll., on personal data protection, as amended, Act no. 148/1998 Coll., on the protection of secret information, as amended, as well as other valid law. By signing this application, the Applicant represents that its employees are fully informed about the duties stipulated by law mentioned in the preceding sentence.

The Applicant shall be liable to SIDC for any damage caused by breach of a duty herein specified or specified by valid law by the Applicant or its employee. The Applicant shall compensate SIDC for any such damage in full.

Date:

.....

Signature

Approved by the information security manager of SIDC

Date:

.....

Signature