

Section II

Schedule of Requirements

Request for Proposal: Provision of NPAA Platform
(UNOPS-NORPRO-2021-S-001)

e-Sourcing reference: RFP/2021/21387

Table of Contents

=	Project Synopsis	2
=	Table of Contents	3
=	Acronyms	4
=	Introduction	5
=	A Current state of affairs	6
=	B Proposed Conceptual Business Model of the new integrated NPAA Platform	19
=	C Requirements of the Integrated NPAA Platform	35

Acronyms

CBAR	Closing Benchmark Assessment Report
CEA	Parliamentary Committee for European Affairs
CSO	Civil Society Organisation
CTN	Chief Technical Negotiator
DCP	Draft EU Common Position
EC	European Commission
EU	European Union
MFA	Ministry of Foreign Affairs
MS	Member States
NPAA	National Programme for Adoption of the Acquis
OBAR	Opening Benchmark Assessment Report
OS	Opening Statement
RNE	Royal Norwegian Embassy in Belgrade
SAA	Stabilization and Association Agreement
SAP	Stabilization and Association Process
SEA	Secretariat for European Affairs
ToR	Terms of Reference
UN	United Nations
UNOPS	United Nations Office for Project Services
WCEI	Working Committee for European Integration
WG	Working Group

Introduction

The Secretariat for European Affairs (SEA) is the main body in the Republic of North Macedonia responsible for coordination and support of the European integration and negotiation process. Its work is regulated with the Law on the Government (“Official Gazette” No. 55/2005).

The negotiations as a comprehensive dynamic process require full preparation of state authorities and institutions as well as the structures established for coordination and conducting negotiations prior to the commencement of the negotiations themselves.

The key document that define country’s European Agenda is the National Programme for Adoption of the Acquis (NPAA). NPAA is the key strategic and planning document in the accession negotiation process, encompassing priorities, dynamic of harmonization of national legislation with the Acquis, as well as adjusting the national institutions for effective implementation. NPAA sets the short- and medium-term priorities in planning of reforms, policies and strategies, plans for harmonization of national legislation with the Acquis, preparation of the national version of the Acquis (translation to Macedonian of the whole body of EU law), administrative structures for implementation of legislation, establishment of new/or restructuring the existing administrative structures, human resource development and training needs, as well as financial resources allocated for implementation of priorities. With the start of negotiation talks, the process for preparation of NPAA and of negotiation positions will become more complex, more dynamic, and much more demanding.

For supporting the NPAA process there is an urgent need for implementation of an Integrated NPAA platform that meets the functional and legal requirements of the European integration and negotiation process. The platform also has to be in compliance with the new EC negotiation methodology introduced in February 2020. It shall replace all currently operational technical platforms and all sub and standalone systems used in SEA to date for supporting various segments of the integration and negotiation process.

This document defines the software architecture, core functional and non-functional requirements of the integrated NPAA platform.

A Current state of affairs

A.1. Accession process towards EU of the Republic of North Macedonia

For over two decades, the Republic of North Macedonia has been committed to fulfilling reforms and obligations in its path towards the European Union. In 2001, it was the first Western Balkan country to sign the Stabilisation and Association Agreement, applied for membership and received candidate status in 2004 and 2005 respectively and received its first recommendation to start accession negotiations in 2009, after it was assessed as sufficiently meeting the Copenhagen Criteria for start of the negotiation talks with the EU.

From 2009 until 2020, following the progress made in reform processes, the European Commission was continuously being recommending opening negotiations with the country.

A major advancement has been achieved with the signing of Prespa Agreement with Greece, in June 2018. The Government further confirmed its commitment to the reform processes, with the action plan for implementation of Urgent Reform Priorities and commenced with establishing negotiation structures.

In February 2020, the EC presented a proposal for a new negotiation methodology and enlargement strategy 'Enhancing the accession process - a credible EU perspective for the Western Balkan countries'¹, which was consequently adopted by Member States at the March 2020 European Council meeting.

Finally on 24 of March 2020, a political agreement was made to open the accession negotiations with the Republic of North Macedonia.

The new EC 'negotiation methodology' and enlargement strategy for WB countries, encompasses new/stricter rules and conditionalities in conducting of negotiations in six clusters (groups of chapters of the Acquis). Implications of the new methodology to existing negotiation structures, coordination mechanisms, capacities, costs and to the dynamics of the negotiation process as a whole, are yet to be assessed. The Integrated NPAA portal will necessarily need to accommodate these changes once the new methodology is operationalized in the Negotiating Framework of North Macedonia.

A.2. National Programme for Adoption of the Acquis (NPAA)

The European Agenda of the Government of the Republic of North Macedonia is defined through its policies and reflected in the National Programme for Adoption of the Acquis (NPAA). The National Programme for Adoption of the Acquis (NPAA) is a comprehensive short-medium-long-term document that defines the dynamic of the adoption of the Acquis, strategic guidelines, policies, reforms, structures, resources and deadlines to be realized by the country to fulfill the requirements for European Union membership. NPAA is aligned

¹ https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/enlargement-methodology_en.pdf

with the country's strategic orientation and with the government priorities, Economic Reform Programme, sector strategies and strategic plans of the institutions involved in the process, as well as with medium term budgetary framework.

NPAA is the main document for reporting on the progress in reforms to the European Commission. First adopted in 2006, this Programme is reviewed and updated annually with the activities arising from the regular communications by the European Commission on the progress made by the country in the previous year. According to the agreed schedule, country contribution for the annual regular EC report is prepared twice a year, as well as additional reports on the NPAA progress and fulfillment of SAA commitments, if required.

Moreover, NPAA is an important source of information on the business and economic sectors in the planning of future activities and ensures that the public becomes informed and monitors the integration process of the Republic of North Macedonia in the European Union. NPAA is therefore an important instrument for transparency in the work of the Government of the Republic of North Macedonia.

NPAA follows the structure of Copenhagen and Madrid criteria now aligned with the new methodology, i.e. it covers political criteria, economic criteria, and abilities to assume the obligations of the membership in all chapters of the acquis, as well as administrative capacity, preparation of the National Version of the Acquis, and public information and communication.

With the start of the negotiation talks, the country will have to prepare negotiation positions for each cluster, area and chapter of the Acquis, consisting of Plans for full transposition of relevant EU Acquis and comprehensive Plans for their harmonization, that includes efficient implementation and enforcement, and build solid track record for the whole duration of negotiations. The NPAA negotiation structures and the planning process will have to adjust to the new cluster-based negotiation methodology and integrate all aspects of the negotiation process (planning of dynamics of reforms, resources, financial/ investment projections), on long-term basis, at the level of chapter of the Acquis, as well as at the level of cluster. Clusters of chapters will be opened only when they will be sufficiently prepared, but only once the intermediary benchmarks of the first cluster – Fundamentals – are sufficiently met.

A.3. Negotiating structures of the Republic of North Macedonia

For over two and a half decades, the Government of Republic of North Macedonia has been continuously upgrading its coordination structures for European integration.

With the advancement in the reform processes, the Government, in July 2019, adopted the necessary acts for establishment of the negotiation structures, defining the negotiation structures and their roles and responsibilities at all government levels.

Package of Government decisions established country's negotiation structures². The Secretariat for European affairs (SEA), the main coordination body for integration process, heads the Working Committee for European Integration (WCEI), chaired by the Deputy Prime Minister in charge of European Affairs, and oversees the work of NPAA working groups for the chapters of the Acquis.

The negotiation structures and mechanisms will have to adjust to the new negotiation methodology and enlargement strategy for WB region, and to the principles and conditions that will be set in the Negotiation Framework (NF) for conducting of negotiation talks of the Republic of North Macedonia with the EU.

At this moment, the **following structures** stemming from the Stabilisation and Association Agreement are responsible for the process of EU accession:

- **SAA Council** – This highest body at the political level established by the Stabilization and Association Agreement, meets annually.
- **SAA Committee** – held once a year, alternately in Skopje and in Brussels, the goal of this committee is to review the progress in all areas and to provide further guidance on the needed reforms.
- **SAA Subcommittees** - There are 7 subcommittees that cover different areas of the SAA, and one Special Group for Public Administration Reform. The role of the subcommittees is to present the achievements of the Republic of North Macedonia in fulfilling the obligations of the Stabilization and Association Agreement. SEA coordinators are co-secretaries of SAA Subcommittees, ensuring timely preparation of all materials for the meetings, preparing minutes from the meetings in consultation with the EC co-secretaries, ensuring coherent monitoring of SAA obligations and commitments, preparing information to the government, and proposing actions, where necessary.
- **Working Committee for European integration (WCEI)** - chaired by the Deputy Prime Minister for European affairs. Its members are all State Secretaries of the Ministries. This inter-ministerial body determines the methods and dynamics for the implementation of the strategic decisions, political directions and priorities of the Government, and monitors the implementation of specific tasks and obligations related to the EU integration. Topics covered by the WCEI include: reform progress in specific areas, progress in NPAA, prioritization of funding priorities through IPA sector working groups, status of preparation of national version of the Acquis, training needs assessment etc.; At highest managerial level, state secretaries are responsible for ensuring allocation of resources, capacities and funds, and inter-ministerial coordination for timely implementation of NPAA planned activities, in chapters under

² Package of government decisions on the negotiation structures, published in OG No. 159/2019, from 1.08.2019;

responsibility of relevant ministries. SEA through WCEI informs the government bodies and proposes actions in the European integration and negotiation process.

- **Working groups for preparation of the NPAA and of the negotiating positions for negotiations for membership in the European Union (NPAA-WG)** – According to current Government decisions there are 37 working groups, one for each chapter of the Acquis, one for the administrative capacities and one expert group for consultation on terminology for the Acquis. Each working group:

- o plans the activities and proposes priorities for harmonization with the EU law and other priorities related to the European integration process;
- o harmonizes NPAA priorities with other strategic, planning and program documents of the Government, as well as with the priorities for the use of foreign aid, in the chapters for which they are competent.
- o indicates which ministry or other body of the state administration is competent for each separate legal act of the EU and the necessary activities for ensuring compliance in the respective sector;
- o prepares, monitors and regularly updates the part of the NPAA that refers to the chapter for which they are competent and harmonizes it with the other parts of the NPAA;
- o makes an assessment of the necessary resources (human, material, technical, etc.) for building the capacities for the implementation of the legislation;
- o prepares, under the guidance of the Secretariat for European Affairs, reports on the implementation of relevant chapters from the NPAA to the Government of the Republic of North Macedonia;
- o makes recommendations on draft laws and bylaws for harmonization with the EU law that fall within their chapter to the proposer, the Secretariat for European Affairs;
- o prepares and participates in the process of checking the compliance of national law with EU law (screening);
- o prepares negotiating positions of the Republic of North Macedonia in the negotiation process with the EU;
- o performs expert consultation on terminology in preparation of the national version of the Acquis (EU law), in the chapter for which they are competent;

SEA-coordinators are secretaries of the NPAA working groups, ensuring unified instructions for preparation of the NPAA, as well as monitoring, reporting and management of the process; Representatives from the Legislation Secretariat, Ministry of Finance, Ministry of Foreign Affairs and State Statistical Office, are members of all NPAA working groups;

- **Legislation secretariat (LS)** - with responsibility for checking the compliance of the legislation and its level of compatibility with the EU law. For each law and by-law that is part of the NPAA it is mandatory to create a statement of compliance and table of concordance that later enables monitoring and assessment of the degree of harmonization of the national with the EU legislation, which is in favor of the successful preparation of the negotiations;
- **Assembly of the Republic of North Macedonia** - adopts laws in the field of European integration. It has two bodies that are part of the EU integration process:
 - o Committee on European Affairs – monitoring body of the European integration process that reports to the Assembly on the level of integration and the activities of the Government in the integration process. This committee is involved in the procedure of adoption/endorsement of the negotiating positions;
 - o National Council for European Integration - aims to strengthen the activities and responsibilities of all competent state bodies, institutions and CSOs representatives, in ensuring mutual consent and action in the accession process of the country to the EU.
- **Ministry for Foreign Affairs (MFA)** - responsible for external dimension of the integration and negotiation process. As responsible for the diplomatic and consular network, and especially the Mission of the Republic of North Macedonia to the EU, MFA establishes regular communication with SEA for exchange of all relevant information, instructions and documents, during accession negotiations.

A.4. Secretariat for European Affairs (SEA)

The Secretariat for European Affairs (SEA) is the main body in the Republic of North Macedonia responsible for horizontal coordination and support of the European integration and negotiation process. Its work is regulated with the Law on the Government (“Official Gazette” No. 55/2005).

In order to be able to perform its activities, SEA, according to its systematization, has 8 sectors divided in 25 departments, each performing different functions and having different responsibilities.

- Sector for integration;
- Sector for support on the negotiations for EU membership;
- Sector for coordination of the European funds and other foreign assistance, and the Training centre for EU/IPA;
- Sector for preparation of the national version of Acquis (legislation of the European Union);

- Sector for organizational affairs and public relations;
- Sector for general and legal affairs;
- Sector for information and communication technology and archiving;
- Sector for financial affairs.

A.5. External stakeholders of the Secretariat for European Affairs (SEA)

The following table shows the external institutions that are communicating the SEA on regular basis for the purposes of coordination and support of the European integration and negotiation process.

Actor	Acronym
General Secretariat of the Government	GS
Assembly of the Republic of North Macedonia	PAR
Legislation Secretariat	LS
Official Gazette	OG
Ministry of Finance	MF
Ministry of Foreign Affairs	MFA
Mission in Brussels	MB
Government Institutions	INST
Translation Agencies	TA
Technical Committees	TC
SAA Structures	SAA
Working Committee for European integration	WCEI
Negotiation Structures	NS
NPAA Working Groups	NPAAWG
Civil Society Organizations	CSO
European Commission	EC
EU Member States	EUMS

A.6. Current technological framework within the Secretariat for European Affairs (SEA)

A.6.1. Network and hardware infrastructure

The Secretariat for European Affairs (SEA) network infrastructure covers two separated physical locations: one in the building of the Government of the Republic of North Macedonia at “Bul. Ilinden no. 2” and the second one at its main headquarters at Presveta Bogorodica square, number 3. The first location contains SEA’s main servers (it is considered as SEA’s server room) that hosts SEA’s email server, SEA’s public web sites and all software applications used by the Secretariat, including the ones used during the accession negotiation process with the European Union. The second location contains network equipment that provides uninterrupted communication services between the ICT devices used by the SEA employees and connection with the first physical location.

The connection between the two physically separated locations is realized using IP-VPN line with 200 Mbps. The connection to the Internet is through a leased line on the first location. This leased line provides Internet to all working stations in SEA and make SEA's public web sites available online.

The first physical location, located at the building of the Government of the Republic of North Macedonia, is considered SEA's "server room". It has five servers and two storage devices (SAN and NAS). Three of these servers are configured in cluster and server virtualization is used to realize the concept of private cloud (Figure 1). **Additional web server will be procured in the scope of this tender for hosting the Integrated NPAA Platform.**

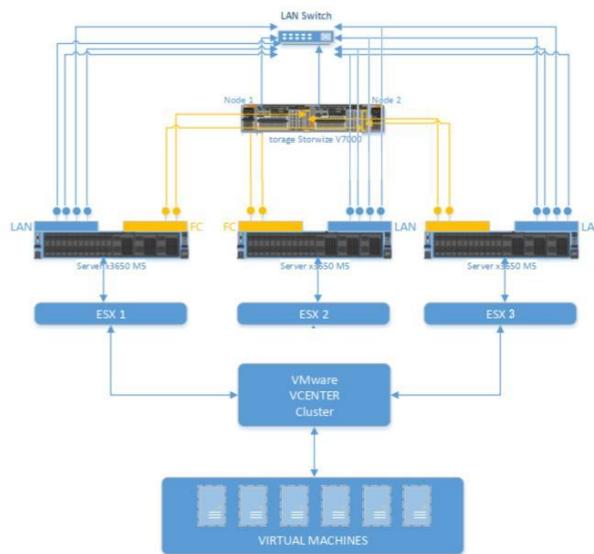


Figure 1: Existing Virtual Machines on the clustered servers in the SEA server room

The following network and hardware equipment exist on the first physical location:

- 1x SLM2024 24-port Gigabit – Switch
- 1x IBM/Lenovo SR650 – Server – independent
- 3x IBM/Lenovo x3650 M5 – Server – connected to IBM Storwize V7000 storage
- 1x IBM Storwize V7000 - Storage
- 1x Dell PowerEdge R310 – Server – connected to NAS
- NAS Sinology DS 220+ 2*6TB 3,5''
- 1x Mikrotik RouterBoard – Router

The hardware specification of the three clustered servers is:

- 2 CPU sockets with installed Intel Xeon E5-2640 v4 processors, with 10 cores per processor, Hyper-Threading, total 20 physical cores (40 logical cores)
- Memory: 128 GB DDR4 RAM
- Hard Disk: 250GB 2.5" 10K RPM SAS 12Gbps
- 5x Network interfaces

- Datastores:
 - o 3x local datastores (datastore1) – one on each server
 - o 2x SAN datastores - shared by the three servers

The SAN storage hardware specification is:

- Storage Model: IBM Storwize V7000 Gen2
- Architecture: two controllers
- Memory: 64GB (32 GB memory per controller)
- 24 Hot Plug Hard Drive Slots 2.5"
- Datastores: 2 datastores
 - o VMware RAID5 - Backup (datastore for backup). It contains 6 Hard Disks, each with 2TB 2.5" 7.2K NL-SAS used for backing-up SEA's ICT systems.
 - o VMware RAID5 – Production (datastore for production). It contains 10 Hard Disks, each with 1.2TB 2.5" 10K SAS HDD used as production environments for the current SEA's ICT systems.

VMware³ virtualization technology (VMware vCenter Server 6 Essentials for vSphere) is used for the creation of virtual machines on the existing clustered servers. The configuration of the VMware Vcenter cluster on the first location is shown on the Figure 1.

A.6.2. Software applications

The Secretariat for European Affairs (SEA) has developed several software applications in the past 15 years for the purpose of supporting the European integration and negotiation process. The main software applications are:

- NPAA Portal, as a multidimensional concept, supports the process of planning, monitoring, reporting and managing NPAA;
- Benchmarking - application for monitoring benchmarks in specific reform areas;
- NLEX – legislation database and the related EU legal acts;
- TCU – EU law translation register and terminology database;
- TNA - application for training needs assessment as well as planning and monitoring trainings related to the EU/IPA;
- CDAD - Central Donor Assistance Database;
- E-Archive – application for registration of input and output documents in SEA that works according to the existing laws for archive material and other acts for office and archive work.

NPAA Portal

³ <https://www.vmware.com/>

The NPAA portal is a multi-layered system with collaborative environment. It is a web-based platform developed using Microsoft .Net technology and SQL server as a database. Access to the NPAA portal is available at: <http://npaa.sep.gov.mk/npaaportal/Main.aspx>.

The NPAA portal is supporting the full cycle of planning and revision of NPAA, on annual basis. The concept includes gap analysis of the EC progress report, setting up the priorities, alignment with strategic plans prepared by ministries, sector strategies, the government work plan and the mid-term budgetary framework.



Figure 2: Front Page of the NPAA portal

The portal supports the planning process of the narrative part of the NPAA document at chapter/subchapter level, while the respective Annexes are prepared with customized templates, submitted by each responsible institution, at chapter level.

The basic instrument for monitoring the realization of NPAA is the NPAA Matrix of goals and activities. The NPAA matrix follows the structure of the NPAA document. It contains an overview of the goals and activities by sub-chapters for each chapter of the Acquis, as well as for the sections on political criteria, economic criteria, administrative capacities, preparation of the national version of the Acquis and informing and communicating with the public about the EU integration process. For each goal there is a set of defined activities that contribute to the fulfillment of that respective goal. Responsible institution and fulfillment deadline is defined for each activity, as well as linking the goals with EC recommendations, identified gaps, strategic plans and sector strategies, government work programme, economic reform programme etc. The NPAA matrix incorporates early warning system in monitoring of planned activities, and generates various reports.

The NPAA Matrix further monitors the legislative process of draft legislation harmonizing with the EU acquis, degree of transposition of EU measures in the national legislation, the progress in the implementation of the projects financed in the frame of IPA instrument and

the projects financed by other foreign donors, the dynamics of strengthening administrative capacities by monitoring the employment dynamics and EU training within institutions, etc.

The NPAA portal contains reporting module for preparation of monthly progress (briefs) reports, quarterly and annual reports on the implementation of planned activities, as well as reports for the issues to be addressed and reports for the needed corrective actions.

The NPAA portal is linked to Benchmarking application, enabling preparation of Action Plans in reform areas of particular interest in the accession negotiations.

The NPAA portal is linked with the other SEA databases with internal links.

All existing data from the NPAA **should be migrated** to the new Integrated NPAA Platform.

BENHCMARKING - monitoring benchmarks in specific reform areas

This application is part of the NPAA portal and is used for monitoring of benchmarks in specific reform areas. Benchmarking is an instrument created by the EC to closely monitor the progress in specific reform areas of particular interest. The application can be accessed at: <http://npaa.sep.gov.mk/npaaportal/BenchmarksList.aspx>.

The application monitors three levels: 1) benchmark; 2) indicator; 3) activities and obligations given by the government (or from EC/SAA);

Indicator	Type	Resp. Auth / Other Auth.	Resp. Person.	Progress
1. Benchmark: Ensure proper implementation of all commitments undertaken in the Stabilisation and Association Agreement				Мате Горѓиоски
1.1. Avoid breaching the obligations of the SAA (e.g. introduction of road charges, which may imply discrimination that is incompatible with the SAA).	O	SEA / MOTC		1. No Progress
		Regarding the constant EC remark about elimination of the existing road tax discrimination for foreign vehicles, contrary to the Transport Agreement, the Ministry for Transport and Communication prepared a Decision on the amount and manner of payment of the charges for the use of public roads for motor vehicles and trailers (road tax) and submitted to EC. The Decision has not yet been adopted despite the intensive communication following the technical meeting with EC (deadline for adoption was 29.02.2009). The Decision is still in fase of review upon the latest comments and remarks of the EC concerning the principle of proportionality in the payment. The MoTC has to submit an additional rationale with regards to the registration tax of the		Proposal: MoTC to submit the Decision on the amount and manner of payment of the charges for the use of public roads for motor vehicles and trailers (road tax) to the SEA promptly, in order to be forwarded to the EC.
2. Benchmark: Promote a constructive and inclusive dialogue, in particular in areas which require consensus between all political parties, in the framework of the democratic institutions				Александар Јованоски
2.1. Stable and regular working relations between President and Prime Minister.	O	PGRM / President of RM		3. Certain Progress
		Of interest and monitoring by the EC and the member states' representatives will be the takeover of function by the President elect.		

Figure 3: Indicators for a benchmark

For each activity, users are able to enter progress, while SEA-responsible person is able to monitor the progress of all activities under the indicator, report on the progress, and set up early warning system (scale 1-5). The application enables entering of information in Macedonian and English language.

NLEX

The Nlex database is recording all EU measures and the linked national legislation, with monitoring tools of the legislative process. It is a web-based platform developed using Microsoft .Net technology and SQL server as a database. Access to the NLEX database is available at: <http://npaa.sep.gov.mk/npaanlex/>.

The Nlex concept is presented in the following diagram:

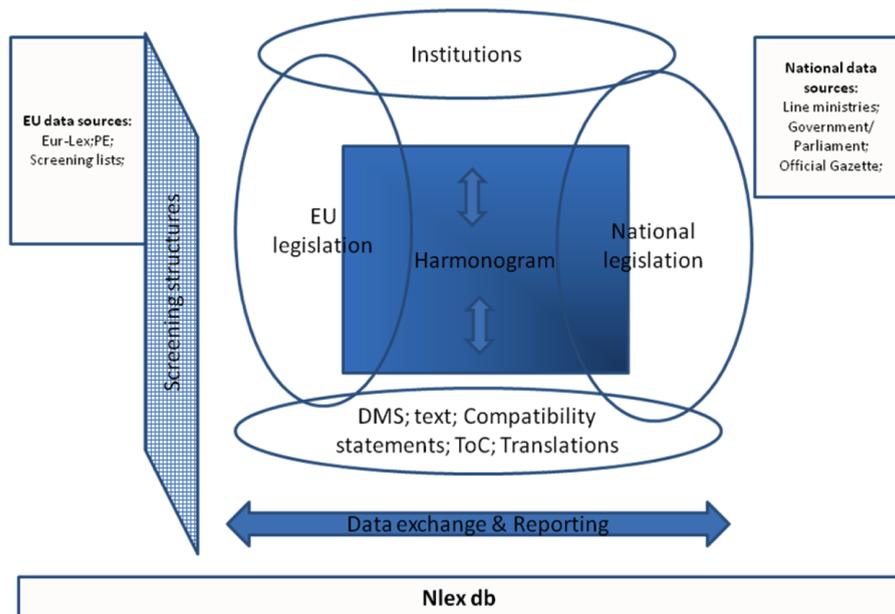


Figure 4: Nlex logical concept

At the moment NLEX contains approximately 50,000 EU acts downloaded from EUR-Lex database and approximately 7,000 records from the national legislation, including all draft and enacted legislation and links to EU acquis transposed, that have been entered into the system during the process of European integration in the past 20 years.

All existing data and connections between the records in the database **should be migrated** to the new Integrated NPAA Platform.

TCU – EU Law translation register

The TCU application was used by the Sector for the Preparation of the National Version of the Acquis in order to handle easily the extensive volume of documents for translation as well as the quality of the translation services. As a support to this application, 21 licenses for TRADOS translation software⁴ were procured by GIZ.

At the moment, approximately 90,000 OJ (Official Journal) pages of EU Acquis are translated, in various stages of the translation process.

Although this application was available at: <http://tcu.sep.gov.mk>, at the moment it is not functional.

⁴ <http://www.iolar.com/sdl-trados-studio-2017/>

All existing data about the translated EU Acquis and legal acts from the national legislation **should be migrated** to the new Integrated NPAA Platform.

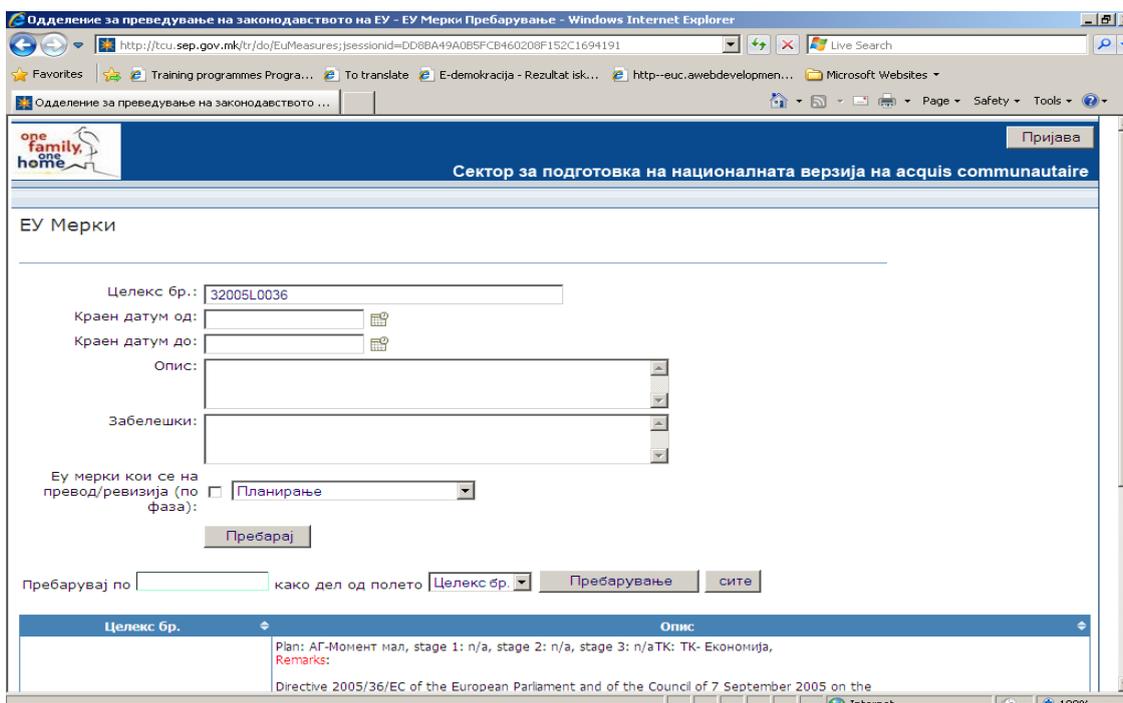


Figure 5: Front Page of the TCU - EU Law translation register

TNA – application for planning and monitoring trainings

TNA application is used by the training department within SEA, sectors for European integration and IPA, as well as by the human resources department. The goal of this application is to plan, conduct and monitor EU related trainings of NPAA/IPA operating structures, as well as SEA employees. SEA training department is also contact point for TAIEX technical assistance, for capacity building of the administration in the process of accession negotiations, as well as for launching EU related scholarships and studies for civil servants. TNA database keeps records important for NPAA - Annex 4b - TAIEX assistance. Although this application was available at: <http://tna.sep.gov.mk>, at the moment it is not functional.

All existing data about conducted trainings programmes and training documents **should be migrated** to the new Integrated NPAA Platform.

CDAD – Central Donor Assistance Database

The Central Donor Assistance Database is a software application for registration of projects that are financed by foreign donor funds. For this type of projects there is a procedure for exemption from payment of customs and other duties, excise tax and value added tax (VAT). The CDAD application is available at: <http://cdad.sep.gov.mk/>

The procedure for registration is initiated by the entities responsible for implementation of projects financed by foreign donors, for which the Government and the foreign donors have

signed agreements containing a clause that the donations are exempt from payment of public levies in the country.

CDAD database keeps records important for NPAA, Annex 4a - IPA and other donor assistance.

All existing data about the registered projects from the CDAD database **should be migrated** to the new Integrated NPAA Platform.

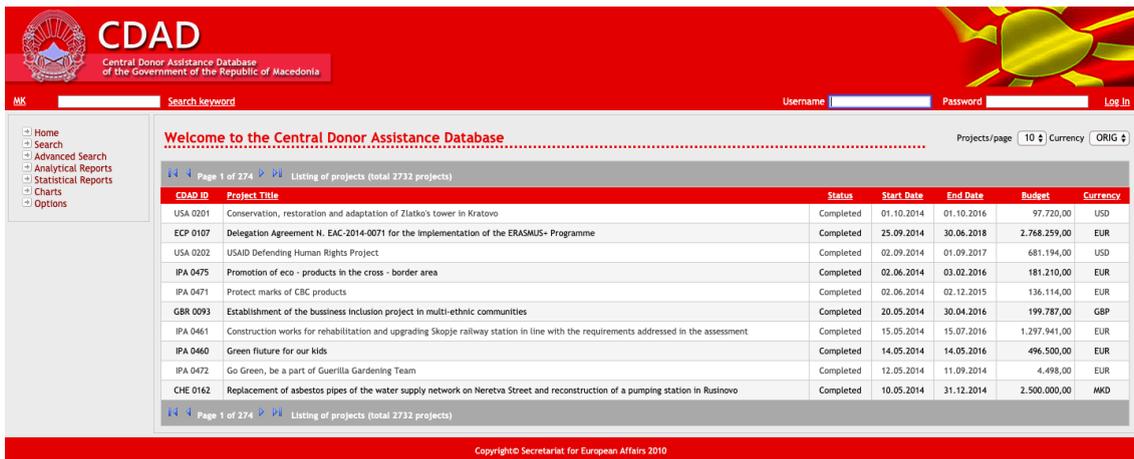


Figure 6: Front Page of the CDAD - Central Donor Assistance Database

In 2021 SEA has automated the process of registration of projects. Interested entities can submit their requests (for project registration, for changing project data and for project extension) through web application that is accessible at <http://registracija.cdad.sep.gov.mk/>

The web application for registration of projects is developed with ASP.NET using MVC architecture model. It uses SQL Server as a database.

B Proposed Conceptual Business Model of the new integrated NPAA Platform

During the negotiation process, in order to make it more efficient, it is extremely important to have properly defined and efficient business processes, communication and access to the right information at the right time.

In the past years, several software applications have been developed and used by SEA to support the negotiation process. However, these legacy systems that have been used in the past are limited in their functionalities and have not evolved to meet the new trends in technology as well as the changing needs of the negotiating process. In addition, they are fragmented software applications developed by different groups of in-house developers that does not share common data model and do not communicate between themselves.

In order to improve the effectiveness of all stakeholders involved in the negotiating process and to improve SEA's business environment there is a need for strengthening the IT systems and development of an integrated NPAA Platform that will have the corresponding functionalities to effectively leverage these efforts.

The implementation of the new integrated NPAA Platform should not only address the limitations of the current systems thus removing (or reducing) present deficiencies, but also the current requirements of SEA and its stakeholders to address the challenges and the needs for support of the negotiation process. The proposed integrated NPAA Platform is aimed at improving the operational efficiency of SEA functions as well as strengthening compliance monitoring and improving the EU negotiation process.

B.1. High-level business model of the Integrated NPAA Platform

Figure 7 presents the business model of the integrated NPAA Platform. It consists of the following modules:

- NPAA Module as a central module of the platform;
- NLEX Module for management of harmonization of national legislation and transposition process of the EU Acquis in the national legislation;
- TCU Module for management of translation;
- TNA Module for management of trainings;
- CDAD Module for management of the international donor assistance;
- Coordination Module for coordination of negotiation structures;
- EU-DOC Module for management of communication with EU and obligations received from EU.

- System Administration Module for management of users, user groups, access privileges, institutions, NPAA structures, translation agencies and technical committees.

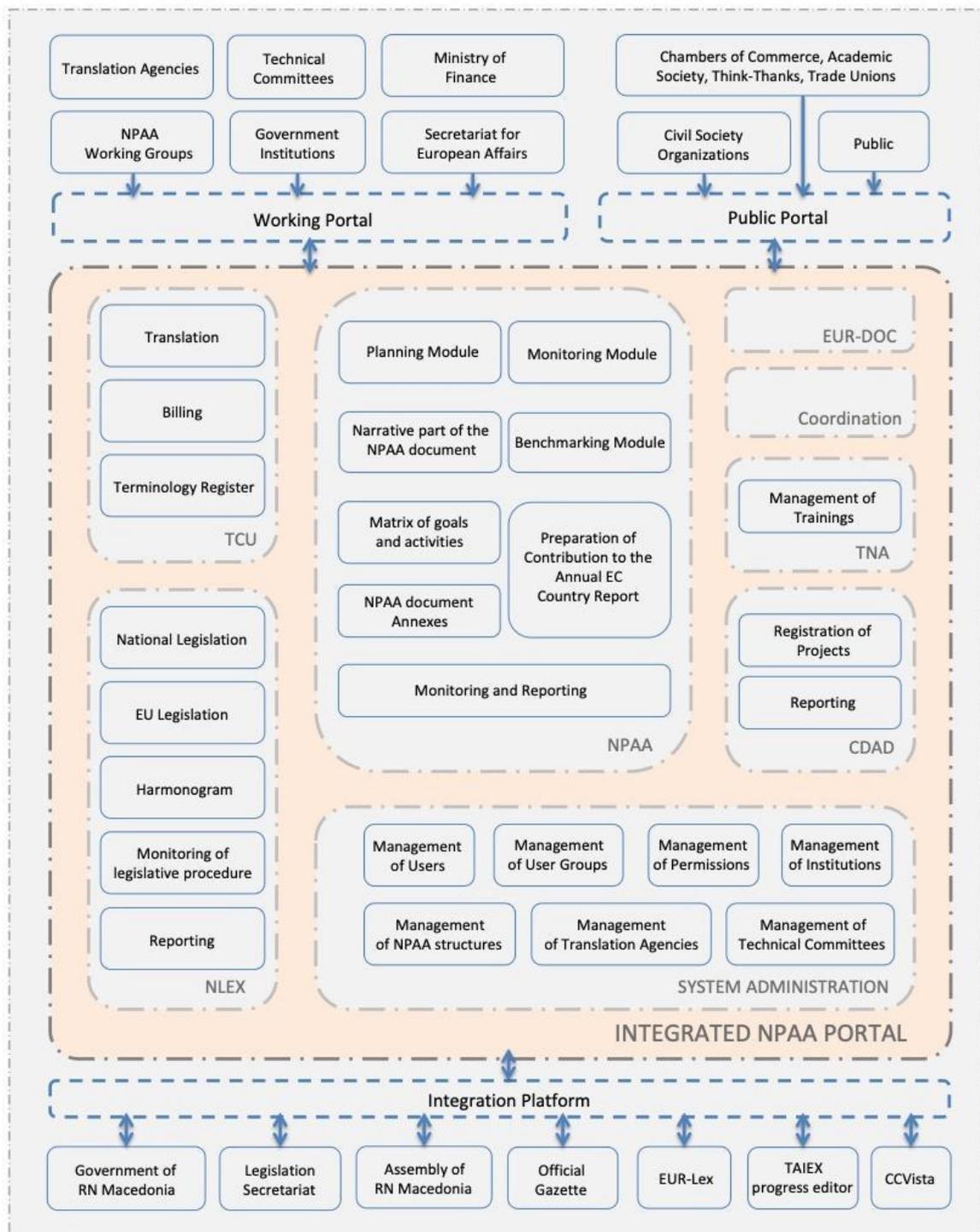


Figure 7: Business model of the Integrated NPAA Platform

The business model shows interaction with the following types of external stakeholders:

- General and expert public;
- Civil Society Organisations;

- Chambers of Commerce, Academic Society, Think-Thanks, Trade Unions;
- Government Institutions (responsible for or participating into activities in different negotiation chapters);
- Members of the NPAA Working groups;
- Translation Agencies;
- Technical Committees for professional and legal review of the translation.

The presented model suggests integration with other external stakeholders

- General Secretariat of the Government of the Republic of North Macedonia;
- Legislation Secretariat;
- EU Legislation databases (EUR-Lex, TAIEX progress editor, CCVista etc.);
- Assembly of the Republic of North Macedonia
- Official Gazette;
- Ministry for Information Society and Public Administration (that keeps official register of public institutions and HR database for all employees in the Public Administration);
- Ministry of Finance;

Under this tender the following modules should be developed:

- NPAA Module as a central module of the platform;
- NLEX Module for management of harmonization of national legislation and transposition process of the EU Acquis in the national legislation;
- TCU Module for management of translation;
- TNA Module for management of trainings;
- CDAD Module for management of the international donor assistance;
- System Administration Module for management of users, user groups, access privileges, institutions, NPAA structures, translation agencies and technical committees.

B.2. NPAA Module

NPAA module is the central module of the Integrated NPAA Platform. Its functionalities are supporting the whole process of preparation of the National Programme for adoption of the Acquis (NPAA). It incorporates four processes: planning, monitoring, reporting and management of NPAA into one integral framework. This module is the working environment

for all members of NPAA working groups, more than 400 civil servants from various responsible governmental institutions and for SEA coordinators.

NPAA module works in two modes: planning mode (during the planning/ revising cycle) and monitoring mode (after adoption of NPAA by the Government). The planning mode is aligned with the annual Government planning and budgeting cycle.

The module should support the following phases when working in planning mode: Gap analysis, strategies, preparation of draft Matrix of goals and activities, preparation of the Narrative part of the NPAA document, and preparation of respective Annexes.

The basic tool when working in monitoring mode is the Matrix of goals and activities, an integral framework with the key activities planned in NPAA. The Matrix is linked with the other modules of the Integrated NPAA.

The module should also support, twice a year, the preparation of Contribution to the EC country report in a pre-defined time and format, as defined by the EC.

B.2.1. Planning Module

Gap Analysis

The planning/revising cycle starts each year after the EC progress report for the country. As an initial step, SEA-coordinators, for each chapter, is preparing gap analysis of the report, with EC recommendations, which serves as guideline for NPAA working groups and relevant institutions. Gap analysis will also be performed after bilateral screenings (EC screening reports, benchmarks) as well as other reports during negotiations.

Based on gap analysis, NPAA working groups align EC recommendations with their policies, strategic plans and sector strategies, and further plan short and medium term priorities in NPAA respective chapters/ subchapters.

During their work, the NPAA working groups have access to the Nlex module and are able to check, update, or enter planned draft national legislation and the corresponding deadlines, as well as to indicate responsibility for transposition of the relevant EU Acquis.

Matrix of goals and activities

Matrix of goals and activities is covering the whole process of planning and monitoring of NPAA. It follows the structure of the NPAA document at cluster/chapter/subchapter level.

The NPAA working groups are defining the Matrix of goals and key activities planned for the year, with responsible and participating institutions (persons), deadlines and financial resources for each activity (budgetary and IPA/donor). The goals are linked to the gap analysis and EC recommendations, strategic plans of the ministries, sector strategies, SAA obligations, various Action Plans, Economic reforms programme, government work plan,

government legislative agenda etc. As a result, draft Matrix of goals and activities is prepared. In parallel, the NPAA working groups are preparing the narrative part of the NPAA document, and adjust the matrix of goals and activities, as relevant.

Preparation of the narrative part of the NPAA document

This module should provide intuitive interface and functionality for preparation of the narrative part of NPAA document in the predefined internal structure of NPAA. The module should ensure the process of drafting, verification, quality check and approval. The module should ensure attachment of additional documents, as relevant. The module should ensure working interface for translation of NPAA text into English.

Preparation of NPAA document Annexes

The Matrix of goals and activities presents Annex 0 of the NPAA document. The system should have functionality to automatically generate Annex 0 based on the data within the Matrix of goals and activities.

NPAA Annex 1: Legislative plans for transposition (laws and by-laws) and respective EU acquis is generated from previously entered plans for harmonization in the Nlex module;

Communicating with the other modules and registers of the Integrated NPAA Platform the system should support preparation of other Annexes: Annex 2 - Institutions, Annex 3 - Budget projections; Annex 4a- IPA and other donor assistance, Annex 4b; TAIEX assistance, based on customized templates provided by SEA.

After two cycles of inter-ministerial consultations, the NPAA document (consisting of narrative part and all Annexes) is adopted by the government. After adoption by the government, the monitoring mode starts. In the monitoring mode, it is not possible to enter new activities/data, except for SEA coordinators.

B.2.2. Monitoring Module

Matrix of goals and activities

During the monitoring mode, the NPAA matrix is a basic instrument for monitoring and reporting using the incorporated early warning system. It supports and follows the work of the Working Committee on monthly basis. According to their needs the module should be able to generate status of the progress of NPAA matrix (legislation, general activities, capacity building etc.).

B.2.3. Benchmarking system

Benchmarking is an instrument created by the EC to closely monitor the progress in specific reform areas of particular interest. For each benchmark there is a set of indicators agreed with the EC for easier monitoring of the level of fulfillment of the benchmarks set-up by the

EC. For each indicator a set of activities are defined, each with responsible main institution, participating institutions and corresponding deadlines.

This module should have functionalities for management and monitoring of the benchmarks at three levels: 1) benchmark; 2) indicator; 3) activities and obligations, planned for fulfillment of respective benchmark indicator.

For particular chapters, the system should support preparation of Roadmaps/Action Plans according to changes introduced by the new methodology/NF and monitoring the fulfillment of the corresponding benchmarks set-up by the EC for those chapters. The system should enable management of the Action Plans with monitoring and reporting on the progress, by responsible institutions (persons), SEA coordinators, and dedicated users with privileges to review, comment, provide recommendations, quality check and approval.

The module should provide an early warning system for monitoring and reporting on the Action Plans (weekly/monthly/3 months/6 months).

B.2.4. Preparation of Contribution to the EC Country Report

Contribution to the EC country report is prepared in predefined periods. Contribution to the EC country report is prepared by the NPAA working groups and responsible institutions and is coordinated by SEA.

The system should provide functionality and interface for preparation of two kinds of Contribution to the EC country report, as well as from the screening reports, benchmarks etc.: based on the Questionnaire provided by the EC for each NPAA chapter; and update of the Contribution with the progress made. The system should also have flexibility to provide support for preparation of other reports required by the EC in specific format.

Based on the EC country report findings and recommendations (in March/May current year, for the previous year), SEA is preparing the gap analysis, as initial step for the annual revision of NPAA cycle.

C.2. NLEX Module

The negotiation process for accession to the European Union includes approximation of the law as an obligation of the accession countries for membership in the European Union⁵. It means that countries aspiring to join the European Union must align their national laws, rules and procedures in order to give effect to the entire body of EU law contained in the Acquis, and to ensure its efficient implementation and enforcement.

⁵ Approximation and harmonization are mostly used as synonyms for the process of alignment of national legislation with the Union Acquis. Harmonization in simplified terms, means not only legal alignment of the national legislation with the Union Acquis, but also implementation and enforcement

NLEX module is supporting and monitoring the most comprehensive and difficult process of harmonization by keeping records of all EU legal acts and their transposition in the national legislation. It also tracks the level of alignment as well as the national legislative process across the institutions.

This module is generating NPAA Annex 1: Legislative plans (laws, by-law and other documents, transposing the EU legal acts) document that is linked to the Government Legislative Agenda, as well as Annex 1a - EU legal acts transposing the national legislation and the level of compliance.

B.3.1. EU Legislation

Legal Acts of the European Union are pieces of legislation that are adopted by the Institutions of the European Union in order to exercise the powers given to them by the EU Treaties. They come in five main forms: regulations, directives, decisions, recommendations and opinions⁶.

Eur-Lex⁷ is an official website of European Union law, case-law by the Court of Justice of the European Union and other public documents of the European Union (EU), published in 24 official languages of the EU. The Official Journal (OJ) of the European Union is also published on Eur-Lex. The documents in EUR-Lex are grouped into 12 sectors.

The documents are also grouped into 20 chapters⁸. Each document is assigned a unique, language independent identifier, a CELEX number⁹. This identifier is composed of the number of the sector, then 4 digits for the year, then one or two letters for the type of document and finally 2-4 digits for the number of the document.

The EU Legislation part of the NLEX module should have functionality to automatically download, based on pre-selected criteria, set of defined documents from EUR-Lex database and distribute them in the appropriate negotiation chapters of the Acquis. For the purpose of the distribution, the system should create mapping between the 20 chapters of EUR-Lex and the negotiation chapters.

For each EU legal act, the module should be able to monitor the process of transposition of that legal act (if required) into the national legislation providing the appropriate functionalities. It should also be linked with the TCU - Translation register module getting information about the status of translation of the EU legal acts.

⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:ai0032>

⁷ <https://eur-lex.europa.eu/>

⁸ <https://eur-lex.europa.eu/browse/directories/legislation.html>

⁹ <https://eur-lex.europa.eu/content/help/faq/intro.html#help9>

B.3.2. National Legislation

This part of the NLEX module keeps data about the laws, by-laws and all other relevant legal acts, transposing EU acquis, and their relationships. Each legal act is distributed in one of the chapters of the Acquis. The Legislative (transposition) plans are entered into this module, during the planning phase of NPAA. This module is linked to the Matrix of goals and activities enabling transfer of the planned legislative activities.

For each legal act, this module keeps data elements that define: responsible institution, negotiation cluster, chapter, title, abbreviations, info for the legal act (basic/amending/new), the category (law, by-law, other type of act), relationship and links to amendments, and hierarchy between the legal acts (for example, subordinated acts), type of legislative procedure (regular, short), related EU measures, institutions responsible for preparation of the legal act, institutions responsible for implementation of the legal act and the related chapters, deadlines, harmonogram, as well as other elements. For each national legal act the system generates and keeps a unique identifier (EPP number).

In order to retrieve details about the adopted legal acts, this module should communicate with the external system of the Official Gazette.

B.3.3. Harmonogram

The Harmonogram manages the connections between the EU acquis and the national legislation that is transposing particular pieces of the EU acquis. It should enable preparation of all needed legal instruments (Table of Concordance, Statement of Compliance) for each draft or enacted legal act and for each EU measure.

B.3.4. Monitoring of legislative procedure

After initiating a new draft legal act, NLEX module is able to track all phases of the national legislative process: (0) planning and analysis; (1) drafting legislation; (2C) consultation with stakeholders; (2EC) - consultations with the EC; (2R) - revision (SEA/LS); (G) government procedure; (P) parliament procedure; (3) Published in OG;

During the legislative process the module enables communication, beside the responsible ministries and NPAA working groups, with external institutions that are involved in the process of adoption of legal acts (Legislative Secretariat, Government, Assembly and the Official Gazette).

C.2. TCU – translation register

During the negotiation process for accession to the European Union there is a need for preparation of the national version of the Acquis as well as translation of the national legislation pertinent to the process of integration of the country in the EU in one of the official EU languages.

The Sector for Preparation of the National Version of Acquis is a central coordinative body within SEA responsible for coordination of all activities related to the translation process. It has two organizational units:

- Unit for Translation Coordination - responsible for drafting translation plans, documents preparation, submission of the same to translation agencies, technical committees responsible for expert and legal revision of translated EU legal acts, databases update, as well as drafting of the Technical Guidelines for all participants in the translation process
- Unit for Revision and Terminology - responsible for terminology unification, monitoring the quality of translation of EU legal acts and legal acts of the Republic of North Macedonia, drafting manuals, as well as maintenance of terminology database.

During its activities, the Sector for Preparation of the National Version of the Acquis communicates and works with other external bodies:

- External Translation Agencies (TA) engaged by SEA responsible for translation of the EU acquis and linguistic revision (proofreading);
- Technical Committee (TC) responsible for professional and legal revision of translated EU legal acts, comprising representatives of relevant institutions of the state administration, public administration, natural and legal persons and non-governmental organisations;
- Special Technical Committee for verification of the terminology and of the national version of the acquis that consists of representatives of the Faculty of Law, the Faculty of Economy, the Macedonian Academy of Sciences and Arts, the Institute of Macedonian Language, the Faculty of Philology, the Secretariat for Legislation as well as the Secretariat for European Affairs.

TCU module (TR - translation register) should support the whole process of planning, monitoring, management and verification of translation process of the EU acquis and preparation of the national version of the acquis, as obligation in negotiation process. It also keeps records about the financial aspects of the translation process. TCU module should be able to export data on translated EU Acquis into TAIEX - CCVISTA database.

TCU reporting functionality provides information about the translation status of the legal acts: whether they are translated, the status of their transition, subjects that participated in the translation process, the expertise that is provided during the translation etc.

B.4.1. Translation

The translation process of the Acquis in Macedonian and the national legislation and other important documents for the integration process in one of the EU languages is performed in several steps involving different entities. The following entities (user roles) are participating in the translation process:

- TCU Coordinator for the translation process at all stages - (TCU-COORD);
- Translator (Translation Agency / Group of natural persons) that performs translation, proofreading and correction - (TA);
- Technical Committee that performs professional and legal review - (TC);
- TCU Auditor that reviews the quality and consistency of the translation - (TCU-REV).

Workflow of the translation process, as it is defined at the moment contains the following steps, and produces various versions of documents:

- Step 0: Preparation of Translation Order for TA by (TCU-COORD) - version (EN0);
- Step 1: Translation and linguistic revision by TA - version (Mk1).
- Step 2: Check and acceptance by TCU-REV and preparation of Invoice by TA;
- Step 3: Expert and legal revision by TC - version (Mk2);
- Step 4: Check and acceptance by TCU-REV;
- Step 5: Revision, correction, and finalization by TC and other professional bodies - version (Mk3);
- Step 6: Check and acceptance by TCU-REV and TCU-COORD;
- Step 7: Closing Translation Order and preparation of Invoice by TC;
- Step 8: TCU internal auditing and preparation of final - national version of the acquis - version (Mk4);

The request for translation can be initiated either from the NLEX Module (Req. NLEX-20) for a EU measure or a draft/adopted national legal act that is part of the transposition process, or through a web form if the document that is being requested to be translated is not part of the transposition plan.

After the initiation, TCU coordinator prepares a translation order that is being send to the external translation agency for translation and proofreading and then to a technical committee for professional and legal audit. When the translation is completed (documents are translated, translation memories are provided and joint statement of alignment of terminology is signed by both translation agency and the technical committee), it is sent to the SEA reviewers for final verification. An order for payment is initiated through the system for all verified translations.

Each step is coordinated by TCU-COORD including the review, verification, return for correction, change of translation priorities, stopping, cancelation etc., as well as the approval in each of the defined steps.

The system should be flexible enough to be able to easily adjust to eventual workflow change, requested by SEA.

The translated documents should be available to governmental institutions as well the public that should be able to find all documents from the EU and the national legislation that are translated.

B.4.2. Billing

The translation register keeps records about the tendering, contracting and billing related to the translation process. It keeps information about all tenders that have been published for translation services, all contracts that have been concluded with the translation agency as well information about all invoices received for translation services.

B.4.3. Terminology Register

For translation purposes, the system keeps terminology register based on the terms provided by the translation agencies. It can be used during the translation process by all translation agencies and professional and legal audit experts. The purpose of this register is to unify the terminology used during the translation of the Acquis and national legal acts. Terminology register is linked to TRADOS translation software used by SEA. The register includes glossaries for various chapters/ areas of the negotiation process. Terminology register should be linked to various glossaries in the country (developed and maintained by the Academic Society and other sources). Terminology register should be linked to NLEX module and should be available to the NPAA working groups during the preparation of Table of Concordance between the EU Acquis and draft national legislation provisions.

C.2. TNA – application for planning and monitoring trainings

The goal of the TNA Module is to support the institutional and capacity building function, both for SEA staff and the coordination structures: Negotiation structures, NPAA working groups, IPA operational structures, and other institutions involved in NPAA and in the accession negotiation process (approximately 2000 civil servants).

SEA Training department is responsible for conducting annual training needs assessment and preparation of training programme for civil servants, NPAA and IPA operational structures, customized to their needs, based on the following:

- Monitoring training-related goals and activities of the NPAA matrix planned by the institutions involved in the harmonization process, as well as implementation and enforcement;

- Horizontal EU trainings, organized by SEA, or by IPA/other donor assistance projects, in specific NPAA areas, relevant for NPAA working groups, IPA operational structures, based on the Annual plan for EU capacity building and training programme;
- Training of SEA staff and preparation of consistent plan for human resource development. Trainings should be conducted on the basis of a Human Resources Development Plan;
- As focal point for TAIEX assistance it identifies the needs on capacity building of NPAA/IPA operational structures in the accession negotiations;
- As focal point for launching EU related scholarships for civil servants/ students, granted by the Government.

TNA Module should track all training events by category, participants, organizers and lecturers. It should keep all documents, presentations and training material produced during the training as well as the evaluation forms both from the participants and the trainers. The system should have searching functionality with options for filtering by various parameters, and should be able to generate reports on the events for each individual civil servant being trained, and for each lecturer.

TNA Module should also track civil servants trainings through the TAIEX instrument, as SEA is a focal point for all NPAA/IPA working groups and ministries. TNA Module should also track granted EU related scholarships. TNA Module should be linked to the NPAA Module for preparation of Annex 4b - TAIEX trainings, Annex 2 - Institutions of the NPAA document.

C.3. CDAD – Central Donor Assistance Database

The Central Donor Assistance Database is a module for registration of projects financed by international donors. It is a platform for tracking international aid that contributes to the planning of budgetary framework for the NPAA. Projects registered in the CDAD database are linked with the activities in the NPAA Module indicating that they are contributing to their completion (for example gap analysis of the EC country report, Matrix of goals and activities, benchmarking system, TNA module etc.). Links with other modules should ensure most updated state of play on project activities related to the EU accession negotiation process, supporting NPAA priorities. Data from this module is also used for generation of Annex 4a - IPA and other donor assistance of the NPAA document.

CDAD database should be adjusted to the new cluster based negotiation methodology and provide appropriate mapping/linking of the clusters with sector policies defined in CDAD, as well as IPA sectors/ priority themes and the new IPA 3 strategic windows. In addition, CDAD database should be aligned with the PAF (Performance Assessment Framework) software that is currently being developed in SEA.

B.6.1. Registration

All projects financed by international donors need to be registered in CDAD – Central Donor Assistance Database. The procedure for registration is initiated by the entities responsible for implementation of the projects. Projects financed by EU funds/IPA instrument, bilateral donors, credits, and other sources should be registered with all relevant information and data. This also includes Project documentation (project fiche), inception reports, quarterly reports, and other project documentation etc.

All international donors that have signed agreements with the Government of the Republic of North Macedonia containing a clause that the donations cannot be used for payment of public fees in the Republic of North Macedonia are exempted from payment of customs and other duties, excise tax and value added tax (VAT). These projects as well as all other projects from international donors need to be registered in CDAD – Central Donor Assistance Database.

At this moment the registration can be done on paper or using the web application that automates the process of registration of projects. CDAD should provide both manual registration of approved projects in its database (for those projects that are registered on paper) and automated retrieval of data for the approved projects from the existing web application (for those projects that are registered online).

B.6.2. Reporting

Having information about all projects financed by international donors provides excellent possibility for different reporting possibilities. CDAD should have various searching and reporting features, feature for viewing details of each project (general information, financial information, contact information, attached documents, period of implementation, status etc). The system should encompass search by key word, basic and advanced searching capability, analytical reports by various parameters, statistics and charts, options for notification etc. CDAD database should be linked with the monitoring platform of targets and indicators defined in PAF (Performance Assessment Framework).

C.4. System Administration Module

This module manages the supporting modules of the platform. It has the necessary functions for management of users, user groups, and privileges for access to different functionalities on the platform, institutions, NPAA structures, translation agencies and dictionary of terms.

B.7.1. Management of Users

The module for management of users should allow management of all users and their authentication features within the Integrated NPAA Platform. It shall provide the administrators with ability to identify and control the status of the users that will have the rights to log into the NPAA platform and use it.

B.7.2. Management of User Groups

Users in the Integrated NPAA Platform shall be grouped into User Groups. The permission to access specific functionality of the system shall be based on belonging to one or more User Group. There shall be 2 pre-defined User Groups in the system (System Administrators and Users). Each active user can belong to one or more User Group and each User Group shall give access to specific set of functionalities based on defined permissions for that user group (as defined in the Module for Management of Permissions).

B.7.3. Management of Permissions

This module manages the permission for access to specific functionalities of the Integrated NPAA Platform. The system shall keep a list of all functionalities grouped by modules and using the module for management of permissions, the system administrator shall be able to dynamically manage the permissions of a specific user group to a specific functionality.

B.7.4. Management of Institutions

This module manages the institutions that are involved in the negotiation process. According to the Government decision, different institutions should participate in the work of the NPAA working groups and at the same time some of these institutions are responsible for all activities within one or more specific chapters in the negotiations.

B.7.5. Management of NPAA structures

This module manages the NPAA structures. They consist of 37 negotiation chapters and 145 sub-chapters that according to the new EC negotiation methodology introduced in February 2020 can be grouped into clusters. According to the Government decision there is a responsible Institution and a set of other institutions that are participating in the work within each cluster/chapter/sub-chapter. As part of its negotiation structures, the Government formed NPAA working groups for each chapter of the Acquis. Members of these working groups should have access to all data related to “their” chapter(s).

B.7.6. Management of Translation Agencies

This module manages the translation agencies. While being responsible for the overall process of planning, monitoring and management of translation of the Acquis, SEA is engaging external translation agencies for the actual translation.

B.7.7. Management of Technical Committees for professional and legal review of the translation

This module manages the technical committees that are providing professional and legal review of the translation provided by the translation agencies. Technical Committees are formed by the Government and have a President and members that can be from the other institutions in the country, Universities or freelance experts in the areas.

C.2. Supporting Processes

Supporting processes are business or technology infrastructural processes, usually performed automatically. Results of these processes are data and information for operational, monitoring and management purpose.

B.8.1. Internal Control

All activities performed by staff or modules of the Integrated NPAA Platform (create and update) should be stored for lifetime as well as the data on which the activity is performed. Data should be organized in optimal way and use by internal control should be enabled for controlling purposes.

B.8.2. Document Management

Input Document Management

Document management system records all documents at input and output including paper and electronic documents. Coding and archiving are to be defined and supported.

Output Document Management

Output documents are created by the system. Every document template is stored within the system. Documents are generated dynamically. Every printed, stored or re-printed document is stored with accurate data and defined labels. All output documents are delivered electronically or in paper.

High security measures are implemented according to legal requirements for protection of privacy of the documents generated by the system where applicable.

B.8.3. Knowledge Management

All documents, cases and experiences during the negotiation process add value to knowledge base. Organization, management and usage of this knowledge base are implemented within separate group of processes and with separate records and rules.

The knowledge base includes, among other things, legal framework with laws and regulations, rulings and interpretations and practice with guidance's, samples. It should utilize content management approaches.

B.8.4. Data exchange and Disclosure

All data exchanges between the Integrated NPAA Platform and the other organizations in both directions are done through separate service for data exchange.

Every disclosure of data to anyone except outside of the Integrated NPAA Platform is to be recorded.

B.8.5. Security Management

Security management is combination of technical solutions and business rules.

C Requirements of the Integrated NPAA Platform

The requirements of the Integrated NPAA Platform are drafted to the level of granularity and details expected to be adequate so that the Bidder can prepare its proposal. For that purpose, the requirements are divided into the following groups:

- General Requirements
- Functional Requirements
- Non-Functional Requirements
- Technical Requirements
- Implementation Service Requirements
- Hardware Requirements

As appropriate, the structured and numbered requirements are accompanied by narrative lead-in paragraphs or explanatory comments.

C.1. General Requirements

- GEN-1. The Integrated NPAA Platform has to be designed as a multi-tier web application. Presentation layers and business rules have to be clearly separated;
- GEN-2. All licenses of specific software (OS, COTS, DBMS, other software) necessary to operate the new Integrated NPAA Platform on the existing infrastructure described in A.6 for unlimited number of end users, unlimited number of devices and for unlimited time should be included in the offer;
- GEN-3. The Supplier needs to assure that the system can operate in compliance with the Macedonian legal framework and implemented regulations;
- GEN-4. The system has to be harmonized with relevant technical standards related to quality, interoperability, performances, or other system properties, including but not limited to:
- The system should support the most common Internet browsers, primarily their new versions: Google Chrome, Safari, Firefox, Edge etc.;
 - The system should be able to export data in various formats such as MS Office documents, pdf, XML, etc.
- GEN-5. With the UAT acceptance, the Client becomes the owner of the source code for all software modules generated in the process of system development. If the Contractor uses licenced products from other producers for some of the component of the system (e.g. RDBMS etc.) the Client will not demand the delivery of the source code for such products. The following documents should be submitted to the Client:
- Source code of the system with comments;

- Technical documentation of the system;
- User documentation of the system;
- Documentation required for database administration;
- Database scheme with detailed description of tables, fields, procedures, triggers, queries. Additionally, SQL query generating the pre-defined database;
- Procedure and documentation related to back up;
- Procedure and documentation related to the process of restoring and recovery of data base;
- Procedure and documentation related to replication of data base to safe location (Disaster location);
- Procedure and documentation related to the transfer of the system to backup location and vice versa (failover and failback).

GEN-6. During the period of the development of the system, business procedures and processes will be in the ownership of the Client, i.e. they will be the intellectual property of the Client. After the development period expires, and after the takeover test (UAT) is successfully done, the source code remains in the ownership of the Client. In that case, the Client has all the rights to use the source code and executive code. This right is in existence for an unlimited period of time, and there is no obligation to pay any fee;

GEN-7. The system shall provide visualization tools and interactive dashboard for each user. Users should be able to configure the set of KPIs (from the available ones based on their privileges) that will be part of their dashboard;

GEN-8. All data from the existing software applications should be migrated to the new Integrated NPAA Platform;

C.2. Functional Requirements

The Functional Requirements of the integrated NPAA Platform are divided into several modules:

- NPAA Module as a central module of the platform;
- NLEX Module for management of harmonization of national legislation and transposition process of the EU acquis in the national legislation;
- TCU Module for management of translation;
- TNA Module for management of trainings;
- CDAD Module for management of the international donor assistance;

- System Administration Module for management of users, user groups, access privileges, institutions, NPAA structures, translation agencies and technical committees.

C.2.1. NPAA Module

- NPAA-1. The NPAA Module should be able to work in two different modes: planning mode and monitoring mode. Depending on the mode in which the system is, different functionalities and access rights will be available to the users;
- NPAA-2. The system should have functionality to enter into planning mode. When entering into planning mode, the system should archive all completed activities defined in the NPAA Module during the previous year;
- NPAA-3. The system should have functionality to enter in monitoring mode after adoption of the NPAA; When entering into monitoring mode, it should not be possible to enter new data into this module, except by the SEA coordinators;
- NPAA-4. The NPAA Module should use as its base the existing negotiation chapters as they are defined in the module for management of the NPAA structures;
- NPAA-5. The NPAA Module should keep document repository with various working documents, reports, strategies and plans, on chapter level;
- NPAA-6. The NPAA Module should provide common interface (discussion and knowledge platform) for all entities (users) involved in NPAA chapters (Universities/ students, Chambers of commerce, CSO, associations, experts in various fields etc.) as a support of NPAA working groups (ministries) in the accession negotiation process.

Planning Module

Gap Analysis

- NPAA-7. The system should provide visualization tools and an interactive dashboard for tracking the most important KPIs (key performance indicators) about the Matrix of goals and activities. At least the following KPIs should be provided: the number of goals and activities (total and per chapter/sub chapter), the number of goals and activities (total and per chapter/sub chapter) that are realized and the number of different types of activities (legislative, training, general) (total and per chapter/sub chapter);
- NPAA-8. The system should provide functionality for preparation of Gap Analysis of the annual EC progress report for the country and making assessment of the progress and preparedness (in a standardized measurement scales, provided by SEA) by negotiation chapter.

- NPAA-9. The system should provide functionality for entering gaps in the existing negotiation chapters as they are identified in the EC country report. At least the following information should be entered: EC findings and recommendations, assessment of progress and preparedness, information from the previous EC progress reports, SAA obligations, category of gaps (policies, legislation, institutions), type of gaps (peer review findings and recommendations identified and classified by SEA), responsible institutions, additional information and link to EC recommendations;
- NPAA-10. The system should provide functionality for importing the identified gaps in the EC progress report using well formatted Excel or CSV file;
- NPAA-11. The system should provide functionality for searching/filtering the identified gaps by the following parameters: negotiation chapter/sub-chapter, progress and preparedness, category of gaps, type of gaps, responsible institution etc.;
- NPAA-12. The system should be able to provide gap analysis report that includes list of all negotiation chapters and the identified gaps per category in each chapter;
- NPAA-13. The system should provide functionality for filtering the gap analysis report by the following parameters: clusters, negotiation chapter/sub-chapter, institutions;

Strategies

- NPAA-14. The system should provide functionality for entering strategic plans (and sector strategies) of the ministries in the respective negotiation chapters. The system shall request at least the following information: short name and code of institution, title of the strategic plan/ sector strategy item, link to NPAA and other government programmes, link to IPA and other donor assistance, link to cluster/chapters etc.;
- NPAA-15. The system should provide functionality for importing the strategic plans (and sector strategies) of the ministries using well formatted Excel or CSV file;
- NPAA-16. The system should be able to provide advanced searching, reporting and filtering capabilities of strategic plans and sector strategies, by all negotiation chapters, grouped also under cluster level, as well as by responsible institution;

Institution Employment Needs

- NPAA-17. The system should provide interface for entering current status and employment needs of the national institutions per negotiation chapters. When entering the employment needs at least the following information should be entered: institution (selected from list of institutions), internal structure (sector/unit), internal-code (automatically generated), function required by EU acquis, current

number of employees, number of employments and required profiles needs and distribution of the needs across period of time (defined by SEA);

NPAA-18. The system should provide functionality for importing the employment needs of the national institutions using well formatted Excel or CSV file;

NPAA-19. The system should provide functionality for basic and advanced searching, reporting and filtering capabilities of the employment needs of the national institutions, with combination of various parameters that will be defined by SEA by institution, by chapter, as well as grouping at cluster level;

Institution Budgeting Plans

NPAA-20. The system should provide interface for entering budgeting plans of the institutions per negotiation chapters. When entering the budgeting plans at least the following information should be entered: institution (selected from list of institutions), description of activity, relation to budgeting programme, type, item within the budget and projected funds (currently approved and indicative for the next years), as well as gaps in the projected funds;

NPAA-21. The system should provide functionality for importing the budgeting plans of the responsible institutions using well formatted Excel or CSV file;

NPAA-22. The system should provide functionality for basic and advanced searching, reporting and filtering capabilities of the budgeting plans of the national institutions, with combination of various parameters that will be defined by SEA by institution, by chapter, as well as grouping at cluster level;

Preparation of the narrative part of the NPAA document

NPAA-23. The system should provide functionality for preparation of the narrative part of NPAA (in predefined template provided by SEA);

NPAA-24. The system should provide different user access rights to the members of NPAA Working Groups, the Heads of NPAA Working Groups and SEA coordinators during the preparation of the narrative part of NPAA document; The members of the NPAA Working Groups should be able to work on parts/subchapter(s) of the document, the Heads of the NPAA Working Groups should have privileges to edit and approve their work, while SEA coordinators should have privileges to edit, conduct quality check and approve/close the NPAA document; Specific users will have privileges to perform final quality check and approve the NPAA document;

NPAA-25. During the preparation of the narrative part of the NPAA document, it should have different statuses like for example: under preparation, quality check, closed, approved;

NPAA-26. The system should be able to generate the narrative part of the NPAA document using predefined template for its structure (cluster/ chapters) that will be defined by SEA.

Preparation of Matrix of goals and activities

NPAA-27. The system should provide functionality for management (entering, editing, deleting) of goals that should be achieved during the negotiation process for each negotiation chapter/sub-chapter;

NPAA-28. The system should provide functionality for management (entering, editing, deleting and reordering) of activities that contribute to the fulfilment of a specific goal. When entering new activity at least the following information should be entered: the goal that the activity contributes fulfilling (selection from existing list of goals), description of activity, responsible institution(s), deadlines and envisaged financial resources (financed by the national budget and by international donors);

NPAA-29. The system should provide functionality for connecting (linking) the defined goals and activities, with the gaps and EC recommendations (selection from available lists), SAA obligations, peer review mission recommendations, Economic Reform Programme, Action plans (under the benchmarking module), strategic plans and sector strategies, and other government plans, as well as provide info on preparation for bilateral screening and negotiations.

NPAA-30. The system should provide functionality for connecting (linking) the defined legislative activities, with the planned draft legal acts, previously entered into the Nlex Module. (Link to Nlex Module);

NPAA-31. The system should provide functionality for connecting (linking) the defined activities with the trainings defined and managed in the TNA Module, including TAIEX; The user should be able to initiate new training from the interface of the Matrix of goals and activities;

NPAA-32. The system should provide functionality for connecting (linking) the defined activities with the existing projects financed by the international donors and registered in the CDAD module;

NPAA-33. The system should provide functionality for connecting (linking) the defined activities with the Roadmaps/Action plans (link to benchmarking module);

NPAA-34. The system should be able to generate Annex 0 of the NPAA document using data entered in the Matrix of goals and activities;

Preparation of NPAA document Annexes

- NPAA-35. The system should be able to generate Annex 0 of the NPAA document using data entered in the Matrix of goals and activities. The format of the Annex 0 will be defined in a template into the system;
- NPAA-36. The system should be able to generate Annex 1 - Legislative plan for harmonization (laws, by-laws and linked EU acquis) of the NPAA document using data from the NLEX Module. The format of the Annex 1 will be defined by SEA in a template into the system;
- NPAA-37. The system should be able to generate Annex 1a - Transposition of the EU acquis into the national legislation using data from the NLEX Module. The format of the Annex 1a will be defined by SEA in a template into the system;
- NPAA-38. The system should be able to generate Annex 2 - Institutions of the NPAA using data entered in the Institution Employment Needs section. The format of the Annex 2 will be defined by SEA in a template into the system;
- NPAA-39. The system should be able to generate Annex 3 - Budgetary projections of the NPAA using data entered in the Institution Budgeting Plans section. The format of the Annex 3 will be defined by SEA in a template into the system;
- NPAA-40. The system should be able to generate Annex 4a - IPA and other donor assistance of the NPAA document using data from the Matrix of goals and activities and its links with the CDAD Module. The format of the Annex 4a will be defined by SEA in a template into the system;
- NPAA-41. The system should be able to generate Annex 4b - TAIEX assistance of the NPAA document using data entered TNA Module. The format of the Annex 4b will be defined by SEA in a template into the system;

Monitoring Module

- NPAA-42. The system should provide functionality for managing the progress of the defined activities in the Matrix of goals and activities by the NPAA working groups and by the state secretaries of responsible institutions (nominated persons);
- NPAA-43. The system should provide functionality for setting-up predefined time during the month (week) for updating the progress of activities by the NPAA working groups for each chapter, and another predefined time during the month (week) for updating the progress of activities by responsible institutions in all chapters that are responsibility of those institutions. The system should have functionality for sending notifications to both categories of users about the closing time of the period for updating the monthly progress of the activities;

- NPAA-44. The working screen for the institutions (nominated persons) should provide functionality (in predefined week) for managing the progress in the Matrix of goals and activities for all chapters for which that institution is responsible;
- NPAA-45. The responsible institutions should be able to edit the status of each activity indicating whether it is completed, and if not to provide descriptive progress information;
- NPAA-46. At the end of each month the institution should be able to generate status report that will contain list of all goals and activities in all negotiating chapters that are responsibility of that institution. The system should be able to export the report in different formats like excel, pdf, etc.;
- NPAA-47. The working screen for the NPAA working groups should provide functionalities (in predefined week) for managing the progress in the Matrix of goals and activities and preparation of monthly reports (members of NPAA working groups for the sub-chapters for which they are responsible and the Head of each NPAA Working Group for the whole chapter for which his/her working group is responsible);
- NPAA-48. The system should provide functionality for preparation of monthly progress report (in a predefined week) for each chapter by the responsible NPAA Working Group. At least the following information should be entered into the monthly progress report: completed activities, current activities, problems, risks and proposed solutions and measurement of the progress and analysis (quantitative and qualitative indicators). The system should be able to export the report in different formats like excel, pdf, etc.;
- NPAA-49. During the preparation of the monthly progress report for each chapter by the responsible NPAA Working Group, the system should provide access to the previous reports prepared for that chapter, information about the chapter, documents related to that chapter and information about the members of the NPAA Working Group;
- NPAA-50. The Head of the NPAA Working Group should be able to check and edit the status of each activity indicating whether it is completed, and if not to provide descriptive progress information;
- NPAA-51. The system should provide functionality for SEA coordinators to set up an early warning system - traffic light for each activity in the Matrix of goals and activities. They should also be able to comment on the status of implementation of the activities, and assess progress in monthly reports (scale 1-5, defined by SEA);
- NPAA-52. Even in monitoring mode, the system should provide functionality to the SEA coordinators to add new and manage existing goals and activities in the Matrix of

goals and activities (SAA obligations, obligations from the WCEI/SCWEI monthly meetings etc.);

NPAA-53. The system should provide functionality for preparation of monthly progress report for each chapter in NPAA by the SEA coordinators based on their views on the progress and on the reports from the NPAA Working Groups. In the report the SEA coordinators should evaluate the progress achieved in the chapter/sub-chapter (scale 1-5). The system should be able to export the report in different formats like excel, pdf, etc.;

Benchmarking system

NPAA-54. The system should provide functionality for preparation, monitoring and management of Action Plans;

NPAA-55. The system should provide functionality for management (adding, editing and deleting) of benchmarks for each negotiation chapter/ subchapter. The benchmarks for the specific chapter of particular interest will be defined by the EC in the accession negotiations. When entering benchmarks, at least the following information should be entered: Number (code), title of benchmark and other information required by SEA;

NPAA-56. The system should provide functionality for management (adding, editing and deleting) of indicators for each of the defined benchmarks in the chapters. When entering a new indicator at least the following information should be entered: number (code) of indicator, status (old, modified, new), title of benchmark indicator, related benchmark (selected from drop-down menu), result and impact indicators, responsible institution (selected from list of institutions), responsible person that should monitor and report on fulfilment of that benchmark indicator, SEA-coordinator, and other information required by SEA;

NPAA-57. The system should provide functionality for management (adding, editing and deleting) of activities for each of the defined indicators. When entering a new activity at least the following information should be entered: number (code) of the activity, description of the activity, responsible institution (selected from list of institutions), responsible person for monitoring/reporting for that activity (selected from list of employees in that institutions), participating institutions (selected from list of institutions), deadlines, envisaged costs (from budget and from donor funds), expected outputs, status of progress and other information required by SEA; the system should have functionality to attach various documents/ reports etc.;

NPAA-58. When managing benchmarks, indicators and activities the system should enable attachment of various documents/reports etc.;

- NPAA-59. When managing the activities, SEA coordinators, monitoring the realization of the Action Plan, should be able to enter comments on the fulfilment of the activities, update their progress, and enter recommendations for further actions;
- NPAA-60. The system should provide functionality for monitoring the Action plan at three levels: 1) benchmark; 2) indicator; 3) activities and should be able to generate the appropriate (progress) reports. The system should be able to export these reports in different formats like excel, pdf, etc.;
- NPAA-61. The system should be able to monitor appropriate indicators: outputs (at activity level), results (at indicator level), and performance indicators (at benchmark level) as defined by SEA;
- NPAA-62. The system should provide functionality to set-up an early warning system with pre-defined measurement scale defined by SEA;
- NPAA-63. The system should be able to provide appropriate notification to users for those activities, indicators and benchmarks for which additional information of actions are needed;
- NPAA-64. The system should provide basic and advanced searching/filtering capabilities, with combination of various parameters, defined by SEA, generation of appropriate views, and export in excel, word, pdf etc.;
- NPAA-65. The system should provide visualization tools and an interactive dashboard for tracking the progress of Action Plans, with the most important KPIs (key performance indicators), at activity level, indicator level, and benchmark level, defined by SEA;
- NPAA-66. The system should enable intuitive interface for translation of the Action Plans and the reports in English;
- NPAA-67. The system should provide functionality for approval of the progress report of Action plans by the appropriate users.

Preparation of Contribution to the annual EC Country Report

- NPAA-68. The system should provide support to the NPAA working groups, responsible institutions, SEA coordinators, and appropriate users for preparation of the Contribution to the EC country report for each annual cycle;
- NPAA-69. The system should provide an interface for preparation of two types of Contribution to the annual EC Country Report: first is based on the Questionnaire provided by the EC, and the second one is update on the progress;

Contribution to the annual EC Country Report based on Questionnaire

- NPAA-70. The system should provide functionality to import the Questions from the Questionnaire submitted by the EC, for each chapter using well formatted Excel or CSV file;
- NPAA-71. The system shall display the list of all questions in a table. The interface should be able to display the list grouped by chapter/subchapter or by responsible institutions;
- NPAA-72. The system should provide functionality for the SEA-coordinators to review the Questions under each negotiation chapter and suggest responsible ministry (NPAA working group) and participating institutions for answering of each Question. When assigning the Question SEA-coordinators should be able to select the responsible institution (from the list of Institutions), Head of the NPAA working group, responsible contact person, suggest participating institutions, and enter additional comments;
- NPAA-73. The system shall be able to display a list of all questions that are not assigned to any institution for answering and notify the appropriate users;
- NPAA-74. The system should provide interface entering the answers for each Question in the Questionnaire;
- NPAA-75. The system will have functionality to tag questions that are not clear or that have specific issues to be addressed by entering comments and suggestions for actions and additional info.
- NPAA-76. The system shall be able to display a list of all questions that are tagged as questions with issues;
- NPAA-77. The system should provide functionality for setting-up predefined time and deadlines for answering Questions;
- NPAA-78. The system should have functionality for setting different statuses to each Question (for example: in review, not assigned, assigned not started, in process, approved, quality check, closed, final approval etc.);
- NPAA-79. The system should provide interface (parallel mode) for translation of the answers for each Question into English. The system should implement quality check, closing, approval and final approval of the translated text, for each question under the chapter;
- NPAA-80. The system should be able to provide an early warning system indicating delays in the process of answering of the Questions;

NPAA-81. The system should provide functionality to notify the responsible institutions (NPAA working groups) and the appropriate users for any delays in the process of answering of the Questions;

NPAA-82. The system should provide visualization tools and an interactive dashboard for tracking the overall progress of answering Questions indicating statistics about the status (for example: not started, in process, closed, final approval etc.), grouped by negotiation chapter and by responsible institutions; The system should be able to export this information in excel, word, pdf etc.;

NPAA-83. The system should provide functionality, to attach documents, (annexes), at chapter level.

NPAA-84. The system should provide functionality for the appropriate users to finally approve the Contribution to the EC country report with all attached documents;

Update of the Contribution to the annual EC Country Report

NPAA-85. The system should provide interface for updating the Contribution to the EC Country Report in a pre-defined time and format;

NPAA-86. The system should provide functionality for review and easy comparison of previous Contribution Reports, with overview of answers to each question in the respective chapters, for the purposes of providing updated information;

NPAA-87. The system should provide functionality for adding additional Questions, submitted by the EC, in respective chapter(s). SEA-coordinators should be able to assign for those questions: responsible institution, Head of the NPAA working group, participating institutions, comments and suggestions;

NPAA-88. The system should provide functionality of repeating the whole cycle of answering the questions (described in the previous section), and update the Contribution to the annual EC Country Report;

NPAA-89. The system should provide functionality for preparation of various reports related to the Contribution to the annual EC Country Report, on the request of the EC, in required formats;

C.2.2. NLEX Module

EU Legislation

- NLEX-1. The system should be able to automatically incrementally download all EU legal acts published on EUR-Lex using pre-selected criteria (excluding those that are in the preparation phase). The system should download specific set of data of the EU legal act including the EUROVOC data;
- NLEX-2. The system should provide functionality for configuring the frequency of the automatic download of the EU legal acts from EUR-Lex;
- NLEX-3. The system should provide functionality to manually activate the process of downloading the EU legal acts from EUR-Lex (available to specific types of users);
- NLEX-4. The system should provide functionality for manual entry of EU legal act;
- NLEX-5. The system should be able to import EU legal acts from the TAIEX progress editor (Microsoft Access database indicating the country progress in the negotiations, available at SEA). This database is updated every 6 months;
- NLEX-6. The system should automatically distribute downloaded EU legal acts from EUR-Lex and those imported from TAIEX progress editor into the existing negotiation chapters using the mappings defined in the module for management of the NPAA structures;
- NLEX-7. The system should automatically check whether the EU legal act is already translated and create a link to the translated act (link to TCU Module - translation register);
- NLEX-8. The system should automatically check whether the EU legal act is already linked to the national legislation and update all needed internal links;
- NLEX-9. The system should automatically divide the articles of the downloaded EU legal acts as separate logical units, where possible. In cases when the EU legal acts are already translated, the translated text should be also divided in the appropriate articles;
- NLEX-10. The system should have functionality to set flags to the EU legal acts, part of bilateral screening process of North Macedonia, by uploading excel file that includes CELEX number and the number of the negotiation chapter of the legal act;
- NLEX-11. The system should provide intuitive interface that shows the recently downloaded EU legal acts into the system. The downloaded EU legal acts should be grouped by download date. When the user views the EU legal acts downloaded on a specific date they should be grouped by the negotiation chapters;

- NLEX-12. The system should be able to display a list of all EU legal acts for review by SEA coordinators (as secretaries of the NPAA working groups), that are not reviewed and not assigned to responsible ministry for transposition;
- NLEX-13. The users with the appropriate privileges should be able to change the status of the downloaded EU legal acts to indicate that they are in review or that they are not relevant for the harmonisation process;
- NLEX-14. The system should provide functionality to assign single or group of EU legal act(s) to a specific Ministry for transposition in the national legislation. When assigning the EU legal act(s), the user (SEA coordinator) shall be able to suggest other institutions that will participate in the transposition activities and indicate deadline for transposition of the EU legal act;
- NLEX-15. The system should be able to automatically suggest to which Ministry a specific (or group) of EU legal act(s) should be sent for transposition, taking into consideration the responsible Ministries for each negotiation chapter, as defined in the module for management of the NPAA structures. However, the appropriate user should be able to edit this suggestion;
- NLEX-16. The Ministry to which the EU legal act is assigned should be able to accept or refuse jurisdiction over its transposition in the national legislation, or to indicate that the legal act is not relevant (not applicable in the country).

When accepting jurisdiction, the Ministry should be able to set the estimated date for its transposition and to suggest other participating institutions.

When refusing jurisdiction, the Ministry should be able to suggest another institution(s) that may be responsible for transposition of that EU legal act. SEA coordinators should review again all EU legal acts for which the Ministries refused jurisdiction. They are coordinating the process of identification of the responsible Ministry communicating with different Ministries, responsible NPAA working group and the Government of the country if needed.

- NLEX-17. The system should provide intuitive interface with a list of all EU legal acts for which the Ministries refused jurisdiction;
- NLEX-18. The system should provide intuitive interface with a list of all EU legal acts for which the Ministries indicated that are not relevant (not applicable in the country);
- NLEX-19. After accepting the jurisdiction for transposing a specific EU legal act, the responsible Ministry should be able to edit/change proposed transposition deadline. In addition, the responsible Ministry should be able to enter comments (preliminary impact assessment) about objective and purpose of the EU act, EU

requirements and obligations arising from the membership, SAA obligations, obligations during negotiations, the economic, social and environmental implications of the transposition of that EU legal act in the national legislation as well as to indicate difficulties, possible benchmarks and the need for detailed regulatory impact assessment if transposition and implementation of that EU legal act require major investments costs;

NLEX-20. After accepting the jurisdiction for transposing a specific EU legal act, the responsible Ministry can send a request for translation of the EU legal act (link to TCU Module - translation register);

NLEX-21. The system should keep track of all changes of the statuses of each EU legal act in the system with appropriate data (who made the change and when);

NLEX-22. The user should be able to view details about each EU legal act that exist in the system. When viewing a specific EU legal act, all downloaded data about that act should be displayed as well as any existing connections of that EU legal act with the legal acts (draft or adopted) in the national legislation;

The user should be able to click on the name of the legal act in the national legislation in order to view details about that act (link with the National legislation);

If cases when the EU legal act is translated, the user should be able to view details about the act in both languages on the same screen (reading in parallel).

National Legislation

NLEX-23. The system should be able to display a list of all laws, by-laws and all other relevant documents in the national legislation. All legal acts from the national legislation should be categorized into one or more negotiation chapters as they are defined in the module for management of the NPAA structures. One of the chapters should be defined as primary chapter for the draft legal act;

The list should visually indicate the relationships and hierarchy between the existing legal acts (for example: laws and sub-ordinated by-laws or amendments of the existing law/by-law). The system should be able to group related legislation (basic laws with all amendments, basic by-laws with all amendments);

The list should provide information about the status of the adoption of the legal act, the responsible institution for its adoption, information about the number of Official Gazette where the act is published and the appropriate link if possible, indication whether the act is part of a transposition procedure of specific EU legal act (with EU flag) and deadline or date of adoption;

NLEX-24. The system should provide functionality for entering new/amendment draft law/by-law or other legal act legal act planned for transposition of the EU acquis;

For each new/amendment of the law/by-law or other legal act in the national legislation the system should generate unique EPP number (unique number of the legal act in preparation). The EPP number has the following format *yyyy.mmmm.bbbb* where *yyyy* is the year, *bbbb* is the institution number and *bbbb* is a unique number (for example: 2020.0600.3577). The system should ensure integrity and consistency of EPP number in cases of multiple/concurrent entering of draft legal acts;

NLEX-25. When entering draft new/amendment of the law/by-law or other legal act at least the following data should be entered into the system: title of draft legal act, abbreviations, category (law/by-law/other), hierarchy (sub-ordinated and relation), type (basic/amending/new and reference), legislative procedure (regular/short), relations with other acts, the negotiation chapter; deadlines, responsible institutions for harmonization, responsible institutions for implementation, and other required information (SAA obligations, obligations from negotiation position, link to government legislative agenda, etc.);

NLEX-26. When entering draft new/amendment of the law/by-law or other legal act the following required deadlines for monitoring different steps of the legislative procedure across government institutions should be entered: Step 0 - plan and analysis, Step 1 - drafting, Step 2C - consultation with stakeholders, Step 2EC - consultation with the European Commission (if required), Step 2R - consultation and approval by SEA/LS, Step G - Government procedure, Step P - Parliament procedure.

The user should also enter additional data for related draft legal act: short explanatory note (about the objectives, purpose, obligations arising from draft legal act, obligations from SAA/ negotiation positions etc.), establishment of a working team for drafting - responsible institution/persons, resources allocated for drafting, translation and the source of translation, consultation (local/international expert), envisaged costs for drafting, and other info required.

NLEX-27. When entering draft new/amendment of the law/by-law or other legal act in the national legislation the user should be able to enter CELEX numbers of all EU legal acts to be transposed into that particular legal act. The system should automatically link those EU legal acts to that particular draft. The user should be able to review the titles of the EU legal acts with the entered CELEX number for verification;

NLEX-28. The system should be able to display details about each national legal act that exist in the system. When viewing a specific national legal act the system should be able to display the following data: details about the legal act, other linked legal acts, related EU legal acts (and their translation if available), institutions responsible for preparation of the legal act, institutions responsible for implementation of the legal act, the related chapters and the Harmonogram.

The user should be able to click on the name of the related EU legal act in order to view details about that EU legal act;

Harmonogram

NLEX-29. The system should provide functionality for creation of Statement of Compliance for each new draft law/by-law or other legal act and Tables of Concordance for each EU legal act that should be transposed in that draft legal act;

NLEX-30. For each EU legal act, the system should provide functionality for creation of Harmonogram and creation of Table of Concordance. The Harmonogram lists data elements of the EU legal act, responsible institutions, list of all national legislation (title, abbreviations, EPP number, draft/adopted) that is transposing or will transpose that particular EU legal act, and the Table of Concordance;

NLEX-31. During the creation of the Table of Concordance, the responsible Ministry should be able to select/enter the text of each provision (art/para/sub/point) of the EU acquis, which is transposing in article/para/sub/point of that particular draft national legal act, the level of compatibility (full, partial, not transposed, not relevant/applicable), as well as information on future transposition and other flags as required;

NLEX-32. During the creation of the Table of Concordance, the responsible Ministry should be able to mark provisions (art/para/sub/point) of the EU legal act that are already transposed/or will be transposed in the national legislation (listed in the Harmonogram), select that legal act (abbrv), and connect the appropriate provisions in the EU legal act with provisions of the existing legal acts in the national legislation (listed in the Harmonogram). The Ministry should be also able to enter information on future transposition and other flags as required;

NLEX-33. If a provision within the EU legal act is already transposed/or will be transposed into a national legal act that is not listed in the Harmonogram, but is entered in Nlex, then the system should provide as-you-type suggestions functionality to find the existing legal act in Nlex db. When the user selects the resulting legal act from the national legislation the system should automatically link it to the EU legal act;

- NLEX-34. If a provision within the EU legal act (art/para/sub/point) have partial transposition or is not transposed, and there is no draft legal act in the national legislation initiated (neither listed in Harmonogram, nor entered in Nlex), the user should be able to enter information about the type of the legal act that will be initiated, indicative title of draft legislation, the Ministry that will be responsible for the harmonization and the expected date when the legal act will be initiated. When the draft legal act is initiated, the responsible Ministry should enter draft legal act into the Nlex database, link that particular EU legal act and update the Table of Concordance by linking that draft legal act, and provisions (art/para/sub/point) transposing appropriate article/para/sub/point in the EU legal act. The Ministry should be also able to enter information on future transposition and other flags as required;
- NLEX-35. The System should have functionality to calculate: the level of compatibility of draft legal act with a particular EU legal act, overall level of compatibility of that draft legal act with all transposing EU legal acts, as well as the overall level of compatibility of all national legal acts transposing that EU legal act;
- NLEX-36. After preparation of draft Tables of Concordance, the system should be able to notify SEA coordinators and the Legislation Secretariat to check the created tables;
- NLEX-37. When all draft Tables of Concordance (one for each EU legal act transposed in that particular draft law) are prepared and checked, the user should be able to create draft Statement of Compliance. The system should pre-fill all data elements into the Statement of Compliance. The user should be able to edit the created draft Statement of Compliance and enter additional information if needed;
- NLEX-38. The system should have functionality to prepare/ update Short explanatory note of the draft legal act. The system should pre-fill all data elements for the Short explanatory note with the existing data. The user should be able to edit the created Short explanatory note and provide additional information;
- NLEX-39. The system should provide functionality for the appropriate users in SEA and in the Legislation Secretariat to electronically approve the created Tables of Concordance and Statement of Compliance;
- NLEX-40. The system should be able to export the Table of Concordance and Statement of Compliance in word, excel or pdf format, and send to SEA and LS, for official opinion;
- NLEX-41. The system should have functionality for SEA coordinators, to prepare draft opinion on compatibility of draft law, with provisions of SAA obligations, and other obligations arising from accession negotiation process;

- NLEX-42. The system should provide functionality to upload the official opinion sent on paper by SEA and the Legislation Secretariat about the Tables of Concordance and the Statement of Compliance that are approved electronically. Information about the number of the documents from the SEA archiving system should be entered in order to create a connection between EPP and the archiving numbers;
- NLEX-43. After the official approval of the Table of Concordance and the Statement of Compliance the system should be able to send notification (or to send approved ToC and SoC) to the IT system within the General Secretariat of the Government of the Republic of North Macedonia through well defined interface;
- NLEX-44. If the draft legal act is a by-law that should be adopted by the ministry, after the official approval, the responsible ministry should be able to update the system with required information and status when that legal act is published in the Official Gazette;
- NLEX-45. The system should have an interface for receiving information when the draft legal act is approved by the Government of the Republic of North Macedonia and sent to the National Assembly; Besides this information, the system should be able to receive the complete adopted legislation file from the IT system within the General Secretariat of the Government of the Republic of North Macedonia;
- NLEX-46. The system should be able to receive information (through interface) when the draft legal act is approved by the National Assembly and sent to the Official Gazette for publication;
- NLEX-47. The system should have an interface for receiving information from the Official Gazette when the adopted law is published with all needed details that will be kept in the database of national legislation, if possible;
- NLEX-48. After publishing of the enacted law/by-law in the Official Gazette, the system should provide functionality for the users/ responsible ministry for the legal act to update the Harmonogram and the Table of Concordance, if needed;

Monitoring of legislative procedure

- NLEX-49. The institution that entered new draft law/by-law or other legal act in the national legislation, the relevant NPAA working group and SEA coordinators, should be able to monitor the progress of adoption of the drafted legal act from its initiation until its adoption. It should be able to change the status of the adoption of the legal act according to the NPAA legislative procedure as follows: Step 0 - planning and analysis; Step 1 - drafting; Step 2C - consultation; Step 2EC - Consultation with the EC; Step 2R - revision/ approval by SEA/LS; Step G-government procedure; Step P - parliament procedure; Step 3 - published in OG; Step 4 - canceled;

Reporting

NLEX-50. The system should provide extensive search tool (basic and advanced) so that the users can search EU/national legal acts using keywords, title (or part of the title), CELEX/EPP number, negotiation chapter, status and institution. The system should provide as-you-type suggestions functionality where it is appropriate;

NLEX-51. The system should provide various reports on the EU legal acts. The initial report should display list of the EU legal acts grouped by negotiation chapters with information at least about: their validity, assigned responsible ministry, not assigned EU legal acts, transposition status, deadline for transposition, translation status and information whether they are part of the country screening.

The users should be able to filter the initial report using various parameters. At least the following filtering options should be available: negotiation chapter, responsible institution, participating institution, validity, transposition status, translation status, deadline for transposition, part of screening linked national legislation etc.;

The reporting part of NLEX should be available for public access.

NLEX-52. The system should provide various customized reports on the legal acts in the national legislation that will be provided by SEA. The initial report should display list of the legal acts grouped by negotiation chapters with information at least about their: title, EPP number, status of the adoption of the legal act (steps in legislative procedure), the responsible institution for its preparation, information about the number of Official Gazette where the act is published and the appropriate link if possible, indication whether the act is part of a transposition procedure of specific EU legal act (with EU flag), deadline for government procedure, deadline envisaged for adoption in the parliament procedure.

The users should be able to filter the initial report using various parameters. At least the following filtering options should be available: negotiation chapter, responsible institution, participating institution, adoption status, translation status, deadline for adoption for drafts, linked EU legal acts etc.;

The other customized reports will be provided by SEA during the implementation phase.

The reporting part of NLEX should be available for public access.

NLEX-53. The system should provide visualization tools and an interactive dashboard for tracking the most important KPIs (key performance indicators) about the EU legal acts. At least the following KPIs should be provided: the number of downloaded EU legal acts, number of EU legal acts in each status, number of EU legal acts

assigned to specific Ministries, number of EU legal acts that are not assigned, number of EU legal acts assigned to specific Ministry but still not linked to national legislation, number of legal acts linked with the national legislation, in each status, statistics by the Ministries that are responsible for adoption of the legal acts etc.;

- NLEX-54. The system should provide visualization tools and an interactive dashboard for tracking the most important KPIs (key performance indicators) about the legal acts in the national legislation. At least the following KPIs should be provided: the number of legal acts per category, status in legislative procedure, number of EU legal acts per national legal act, distribution of planned draft legal acts (by quarters in the year), draft legal acts that are late with planned deadline for revision Table of Concordance and Statement of compliance in SEA/LS deadline for government, the estimated adoption date in Parliament, percentage of legal acts that are transposing EU legal acts per negotiation chapter and per responsible ministry;
- NLEX-55. The system should implement early warning system that should notify SEA coordinators about delays in the harmonization and transposition of the EU acquis. This early warning system should be configurable to monitor specific set of KPIs (key performance indicators) that are of interest for the SEA coordinators;
- NLEX-56. NLEX reporting tool should have the possibility to drill into the collected data in specified directions;
- NLEX-57. The system should provide exporting functionalities for all reports in the most frequently used formats.

C.2.3. TCU Module

C.2.3.1. Translation

- TCU-1. The system should provide functionality for receiving requests for translation from various sources: from NLEX Module (Req. NLEX-20) or through a web form if the documents that are being requested to be translated are not part of the transposition plan or are submitted on paper to SEA through archive;
- TCU-2. The system should be able to categorize requests for translation in three categories: EU acquis, national legal documents and other documents;
- TCU-3. When the request for translation is initiated manually, through a web form, the system should provide functionality for the initiator of the translation request to prepare and attach the bundle of documents to be translated. During this process the initiator needs to enter at least the following information: name of the

document to be translated, number of pages for translation, origin of the document, description;

- TCU-4. The system should provide common repository of documents for all entities (users) involved or interested in the translation process. This repository may contain among other documents: guidelines, procedures, instructions and templates for translation provided by SEA for all steps in translation process;
- TCU-5. The system should provide common repository of documents related to the translation terminology. It may contain: dictionaries, glossaries, thesauruses and set of links to internet resources, knowledge-networks, EUROVOC multilingual thesaurus that are of significant relevance for translation process;
- TCU-6. The system should provide discussion forum functionality for all entities (users) involved or interested in the translation process with possibilities for discussion, clarification and submission of proposals related to some specific terms, proposal of terms in MAKTERM database, proposals of various related projects, etc.;
- TCU-7. Terminology register should be linked to various glossaries in the country (developed and maintained by the Academic Society and other sources);
- TCU-8. The discussion forum should have section with news containing relevant information on: projects for students related to EU Acquis translation, terminology, legal experts, experts in various domains and fields (economy, finance, etc.), available traineeship at SEA (practice), programs for specialization, trainings on specific fields, etc.
- TCU-9. The system should be able to export all completed and verified translations of the EU Acquis into TAIEX/CCVista database;

TCU Coordinators

Planning

- TCU-10. TCU coordinators should be able to enter manually all requests for translation that are submitted on paper to SEA through archive. If the request for translation is for EU acquis or national legal documents, TCU coordinators should be able to make links to the appropriate records in NLex module. Otherwise, the requests for translation should be categorized as translation of other documents;
- TCU-11. The system should provide comprehensive dashboard for the TCU coordinators. On the dashboard they should be able to see: the list of all initiated requests for translation with their status and deadlines, information about the number of EU legal acts in different stages of translation per EUR-Lex categorization, information about the number of national legal acts in different stages of translation per

negotiation chapters, information about the number of other documents in different stages of translation and information about the created translation orders;

TCU-12. The system should be able to show warning indicators on the TCU coordinators dashboard for all legal acts or documents that are late in any stage of the translation process;

TCU-13. The system shall display a list of all initiated requests for translation in a table with at least the following columns: Date of the request, Requesting Institution, Type of document to be translated (EU legal act, national legal act or other document) and indication whether this document is already planned to be translated before;

Translation Plan

TCU-14. TCU coordinators should be able to reject a request for translation (for various reasons. For example, the requested document for translation may be out of force). If a request for translation is rejected, the system should send email to the institution that initiated the translation with information about the rejection;

TCU-15. TCU coordinators should be able to make a plan for translation for each initiated requests for translation. When making a plan, at least the following information should be entered: planned translation agency, planned technical committee, planned deadline for translation and proofreading, planned deadline for professional and legal auditing, planned deadline for alignment between the translation agency and the technical committee, planned deadline for completion of the translation process and additional comments;

TCU-16. The system should be able to display a list of categories (per EUR-Lex categorization of 20 chapters) in a table with columns containing information about: the number of EU measures with total number of OJ (Official Journal) pages, the total number of EU measures with priority for translation and total number of OJ pages, the number of EU measures in different stages of translation (not relevant, planned for translation, translation, proofreading, professional auditing, legal auditing, alignment between the translation agency and the technical committee, final auditing, completed) with total number of OJ pages;

TCU-17. The system should provide basic and advance search functionality on EU legal acts with combination of various parameters/ criteria;

TCU-18. TCU coordinators should be able to select any EUR-Lex category and the system shall display a complete list of EU legal acts from that category in a table with at least the following columns: CELEX number, name and details of the EU legal act, translation status, deadline for translation if it is part of translation order and translation order number. The system shall provide functionalities for querying,

filtering and sorting the list of EU legal acts. The system shall provide functionality for exporting the list of EU legal acts with all details in excel, word, pdf etc.;

- TCU-19. The system shall display a list of negotiation chapters (as defined in the NPAA categorization) in a table with columns containing information about: the total number of national legal acts with total number of OG (Official Gazette) pages, the number of national legal acts with priority for translation and total number of OG pages, the number of national legal acts in different stages of translation (not, relevant, planned for translation, translation, proofreading, professional auditing, legal auditing, alignment between the translation agency and the technical committee, final auditing, completed) with total number of OG pages;
- TCU-20. The system should provide basic and advance search functionality on national legal acts with combination of various parameters/ criteria;
- TCU-21. TCU coordinators should be able to select any NPAA negotiation chapter and the system shall display a complete list of national legal acts from that negotiation chapter in a table with at least the following columns: EPP number, name and details of the national legal act, responsible institution, translation status, deadline for translation if it is part of translation order and translation order number. The system shall provide functionalities for querying, filtering and sorting the list of national legal acts. The system shall provide functionality for exporting the list of national legal acts with all details in excel, word, pdf etc.;
- TCU-22. The system should be able to display a list of other documents that are (or are requested to be) in the translation process in a table with at least the following columns: name of the document, requesting institution and translation status;
- TCU-23. TCU coordinators should be able to view details about each EU legal act with detailed information about the translation activities on that EU legal act, if any;
- TCU-24. The system should provide functionality to “group” EU measures, indicating whether there is corengidum or ammendments of the EU measure, so that the whole “group” can be planned for translation in one translation order;
- TCU-25. TCU coordinators should be able to make a plan for translation for each EU legal act (or group of acts) for which there is no translation plan. When making a plan, different information shall be entered as described in TCU-15;
- TCU-26. TCU coordinators should be able to indicate that a EU legal act (or set of acts) is not relevant and that should not be translated;
- TCU-27. TCU coordinators should be able to view details about each national legal act with detailed information about the translation activities on that national legal act, if any;

- TCU-28. TCU coordinators should be able to make a plan for translation for each national legal act (or group of acts) for which there is no translation plan. When making a plan, different information shall be entered as described in TCU-15;
- TCU-29. The system should provide functionality for importing translation plans for EU and national legal acts using well formatted Excel or CSV file;
- TCU-30. TCU coordinators should be able to view details about each “other document” requested for translation, with detailed information about the translation activities on that document, if any;
- TCU-31. TCU coordinators should be able to make a plan for translation for other documents requested for translation for which there is no plan for translation. When making a plan, different information shall be entered as described in TCU-15;
- TCU-32. The system should provide functionality for review of the Translation Plans with information about various parameters: Translation Agency, Technical Committee, number of EU measures/National legal acts/Other documents, Number of OJ pages, etc., in a table. The Translation Plans can be filtered for different date periods and should be exportable in excel, pdf or csv file;
- TCU-33. TCU coordinators should be able to view detailed information of each Translation Agency and Technical Committee: area of specialization, detailed info of their experts, previous experience and rating as well as workload and availability according to the registered tenders and contracts;

Translation Order

- TCU-34. TCU coordinators should be able to initiate translation order for each (or for a set of) EU legal act(s)/national legal act(s)/other document(s) requested for translation that are not in the translation process. When initiating translation order, at least the following information should be entered: order number, order date, contract number, translation agency (automatically selected if the EU legal act was planned to be translated), the name of the translator (from the list of translators within the selected translation agency), technical committee (automatically selected if the EU legal act was planned to be translated), the name of the technical expert (from the list of technical experts within the selected technical committee), language from which the translation is made, language to which the translation is made, characters per page, number of OJ/OG pages (for EU/national legal acts), number of pages for translation, deadline for Translation agency (TA) (translation and proofreading), deadline for Technical Committee (TC) (professional and legal auditing), deadline for alignment between the TA and the TC, deadline for completion of the translation process and additional comments;

In each translation order TCU coordinator should be able to attach all needed documents related to the EU measure that needs to be translated in pre-prepared "zip" file named in the following format: "celexNo_ENO.zip" where celexNo is the CELEX number of the EU measure;

TCU-35. TCU Coordinators should be able to change priority, return or cancel translation of each document, under each Translation Order, in each stage of translation process;

TCU-36. When making a translation order the system should automatically calculate whether the translation agency and the technical committee have the needed capacity according to the registered tenders and contracts;

TCU-37. The system should be able to display a complete list of translation orders in a table with at least the following columns: order number, order date, translation agency, technical committee, deadline for completion of the translation process and the status of translation;

TCU-38. The system shall provide functionalities for querying, filtering and sorting the list of translation orders. The system shall provide functionality for exporting the list of translation orders with all details in excel, word, pdf etc.;

Translation and Proofreading

TCU-39. In cases when the translation order is marked as incomplete by the Translation Agency, the TCU coordinators should be able to edit the order and resubmit it;

TCU-40. When TCU auditors approve the aligned version of the translation – MK-3, TCU coordinators should be able to verify its quality and consistency.

If TCU coordinator approves MK-3 version of the translation, it is considered as completed.

If TCU coordinator rejects MK-3 version of the translation it should be able to provide feedback and return it to the Technical Committee;

TCU-41. TCU coordinators should be able to view details about the translation order with detailed information about the translation activities;

Invoicing

TCU-42. TCU coordinators should be able to review and approve the invoices created by the Translation Agencies and Technical Committees;

Translation Agencies

TCU-43. The system should provide comprehensive dashboard for the Translation Agencies. On the dashboard they should be able to see: the list of all translation orders for

that specific translation agency, the list of contracts, the list of invoices, information about the available resources (remaining value, remaining number of pages for translation etc.) according to the active contracts, list of registered translators, list of registered users for proofreading;

TCU-44. For the translation agencies, the system should be able to display a list of all translation orders in a table with at least the following columns: order number, order date, technical committee, deadline for completion of the translation and proofreading, deadline for completion of the whole translation process and the status of the translation process;

TCU-45. The system should be able to show warning indicators next to each translation order that is late in any stage of the translation process;

TCU-46. The translation agency should be able to view details about the translation order with detailed information about the translation activities;

TCU-47. After initial review, the translation agency should be able to return a translation order to the TCU coordinators if it is not complete.

If the translation order is complete, the Translation Agency should be able to indicate that the next step is translation and to confirm or change the assigned translator and proofreading expert;

TCU-48. When the proofreading expert uploads the first version of the translation - MK-1, the translation agency should be able to verify its quality and consistency.

If translation agency approves MK-1 version it should be able to indicate that the next step is verification of quality by TCU auditors. When approving MK-1 version, the responsible person of the translation agency should be able to indicate the number of translated pages using the established norm: 1800 characters with spaces = 1 page;

If translation agency rejects MK-1 version it should be able to provide feedback and return it to the translator and to the proofreading expert for corrections. When rejecting a version, the translation agency can change the translator or the proofreading expert;

TCU-49. The system shall display a list of all contracts for a translation agency in a table with at least the following columns: Number of the Contract, Number of the Tender, Value of the Contract, the remaining value, Description;

TCU-50. The system shall display a list of all Invoices for a translation agency in a table with at least the following columns: Number of the Invoice, Number of the Contract,

Number of the Translation order, Date of the Invoice, Value of the Invoice, number of Pages, Payment Status;

TCU-51. The responsible person of a translation agency should be able to create a new invoice for all translation orders that are approved by the TCU auditors (MK-1 versions are approved).

Technical Committees

TCU-52. The system should provide comprehensive dashboard for the Technical Committees. On the dashboard they should be able to see: the list of all translation orders for that specific technical committee, the list of contracts, the list of invoices, information about the available resources (remaining value, remaining number of pages for professional and legal review etc.) according to the active contracts, list of registered professional and legal reviewers;

TCU-53. For the technical committees, the system should be able to display a list of all translation orders in a table with at least the following columns: order number, order date, translation agency, deadline for completion of the professional and legal review, deadline for completion of the whole translation process and the status of the translation process;

TCU-54. The system should be able to show warning indicators next to each translation order that is late in any stage of the professional and legal review;

TCU-55. The technical committee should be able to view details about the translation order with detailed information about the translation and auditing activities;

TCU-56. When TCU auditors approve first version of the translation – MK-1, the Technical Committee should be able to indicate that the next step is professional audit and to confirm or change the assigned professional auditor and legal auditor;

TCU-57. When the legal auditor uploads the version of the translation with professional and legal audit - MK-2, the technical committee should be able to verify its quality and consistency.

If Technical Committee approves MK-2 version (translation memory and a table of selected terms) it should be able to indicate that the next step is verification of quality by TCU auditors.

If Technical Committee rejects MK-2 version (translation memory and a table of selected terms) it should be able to provide feedback and return it to the professional auditor and legal auditor for corrections. When rejecting a version, the Technical Committee can change the professional auditor or the legal auditor;

- TCU-58. The President of the Technical Committee should be able to sign Statement of terminological compliance of the translation for all translations for which MK-3 version (translation memory and table of terms) is approved by the TCU auditors;
- TCU-59. The system shall display a list of all contracts for a technical committee in a table with at least the following columns: Number of the Contract, Number of the Tender, Value of the Contract, the remaining value, Description;
- TCU-60. The system shall display a list of all Invoices for a technical committee in a table with at least the following columns: Number of the Invoice, Number of the Contract, Number of the Translation order, Date of the Invoice, Value of the Invoice, number of Pages, Payment Status;
- TCU-61. The President of the Technical Committee should be able to create a new invoice for all translation orders that are marked as completed by the TCU coordinators (MK-3 versions with all data terms and documentation are approved).

Translators

- TCU-62. For the translators, the system should be able to display a list of all translation orders for Translation Agencies in which that Translator is member, in a table with at least the following columns: order number, order date, translation agency, technical committee, deadline for completion of the translation and proofreading, deadline for alignment between the translation agency and the technical committee, deadline for completion of the whole translation process and the status of the translation process;
- TCU-63. The system should be able to show warning indicator next to each translation order for which the translation agency is late with the translation process and with the alignment process between the translation agency and the technical committee;
- TCU-64. The system should be able to clearly indicate translation orders that have EU measures waiting for translation;
- TCU-65. During the initial translation phase and the correction phase (after the professional and legal audit), the translator should be able to use the MAKTERM terminology database as well as any other available database of terms;
- TCU-66. When the translation or the correction (after the professional and legal audit) document is complete, the translator should be able to upload the translated documents in the appropriate translation order and indicate that the next step is proofreading;

Proofreading experts

- TCU-67. For the proofreading experts, the system should be able to display a list of all translation orders for Translation Agencies in which that Proofreading expert is member, in a table with at least the following columns: order number, order date, translation agency, technical committee, deadline for completion of the translation and proofreading, deadline for alignment between the translation agency and the technical committee, deadline for completion of the whole translation process and the status of the translation process;
- TCU-68. The system should be able to show warning indicator next to each translation order for which the translation agency is late with the translation and proofreading process and with the alignment process between the translation agency and the technical committee;
- TCU-69. The system should be able to clearly indicate translation orders that have EU measures waiting for proofreading;
- TCU-70. During the proofreading and the correction (after the professional and legal audit), the proofreading expert should be able to use the MAKTERM terminology database as well as any other available database of terms;
- TCU-71. When the proofreading document is complete, the proofreading expert should be able to upload the translated and proofreading documents in the appropriate translation order and indicate that the next step is verification of quality by Translation Agency. The version of the initial translated document should be marked as MK-1;

Professional auditors

- TCU-72. For the professional auditors, the system should be able to display a list of all translation orders for Technical Committees in which that Professional auditor is member, in a table with at least the following columns: order number, order date, translation agency, technical committee, deadline for completion of the professional and legal review, deadline for alignment between the translation agency and the technical committee, deadline for completion of the whole translation process and the status of the translation process;
- TCU-73. The system should be able to show warning indicator next to each translation order for which the technical committee is late with the process of professional and legal review and with the alignment process between the translation agency and the technical committee;
- TCU-74. The system should be able to clearly indicate translation orders that have EU measures waiting for professional audit;

TCU-75. During the professional review, the professional auditor should be able to use the MAKTERM terminology database as well as any other available database of terms;

TCU-76. When the professional review is complete, the professional auditor should be able to upload the corrected documents in the appropriate translation order and indicate that the next step is legal audit.

Legal auditors

TCU-77. For the legal auditors, the system should be able to display a list of all translation orders for Technical Committees in which that Legal auditor is member, in a table with at least the following columns: order number, order date, translation agency, technical committee, deadline for completion of the professional and legal review, deadline for alignment between the translation agency and the technical committee, deadline for completion of the whole translation process and the status of the translation process;

TCU-78. The system should be able to show warning indicator next to each translation order for which the technical committee is late with the process of professional and legal review and with the alignment process between the translation agency and the technical committee;

TCU-79. The system should be able to clearly indicate translation orders that have EU measures waiting for legal audit;

TCU-80. During the legal review, the legal auditor should be able to use the MAKTERM terminology database as well as any other available database of terms;

TCU-81. When the legal review is complete, the legal auditor should be able to upload the corrected documents in the appropriate translation order and indicate that the next step is verification of quality by the Technical Committee. This version of the translation document should be marked as MK-2;

TCU Auditors

TCU-82. TCU auditors should review each uploaded version by the Translation Agencies and Technical Committees (Mk1, Mk2 and Mk3) for each EU measure under each Translation Order, verify its quality and consistency (whether it is prepared according to the requirements, rules and format, translation terms with translation memory) and approve it or reject it;

When TCU auditors approve uploaded version, they “unlock” the next step in the translation process and assigns the next responsible entity (for example: when approving MK-1 version, they indicate that the next step is professional and legal expertise by the Technical Committee. When approving MK-2 version, they indicate

that the next step is alignment by the TC and other professional bodies. When approving MK-3 version, they indicate that the next step is quality verification by TCU coordinator). The approved versions become available in all other modules of the Integrated NPAA Platform.

When TCU auditors reject uploaded version, it is returned to the Translation Agency or to the Technical Committee depending on the stage of translation.

TCU-83. In case that any institution in the country has a translated document related to the harmonization process it should be able to upload it to the translation register through a web form;

TCU-84. TCU auditors should be able to review and approve/reject all uploaded translations related to the harmonization process. When the document is approved it becomes part of the translation register. In case the document is rejected, the system should be able to send email to the institution that uploaded the document with information about the rejection;

C.2.3.2. Monitoring and Reporting

TCU-85. The system should be able to generate various reports about the translation register like for example monthly, quarterly or yearly translation plans based on the information within the TCU translation register, number of EU and national legal acts in different stages of translation;

TCU-86. Metadata should be integral part of each translated document. This would enable extraction of information about the translation (name of the translation agency, name of the translator, name of the proofreading expert, name of the professional auditor, name of the legal auditor, status of the document, source document language reference, Celex number, etc.).

TCU-87. The System should be able to generate various types of views and reports based on combinations of different criteria for each of translation stages, based on current information in Translation Register; and enable export in xls, csv. Some of the reports requested by SEA are: by individual stage or the whole process, by Translation Agency, Technical Committee, or individual experts, number of documents and number of corresponding pages which are to be processed, the number of documents and pages or percentage of pages which have already been processed and number of documents and pages which are processing at the moment within the individual stage of the process. The system will have functionality to structure reports according to chapter structure (20 Chapters of Eurlex), screening chapters, or by responsible institutions, etc.

TCU-88. Public part of the translation register should provide information and access to each legal act (both EU and national) that is translated as well as access to any other document related to the negotiation process that is translated. It should also provide information about the status of translation of those legal acts or documents that are in translation procedure.

C.2.3.3. Billing

Tenders

TCU-89. The system shall display a list of all Tenders in a table with at least the following columns: Number of the Tender, Value of the Tender, the remaining value, Description, Start Date, End Date, Cycle;

TCU-90. The system shall provide functionality for adding new Tender. The system shall request at least the following information about the tender: Number of the Tender, Value of the Tender, the remaining value, Description, Start Date, End Date, Cycle;

TCU-91. The system shall provide functionality for importing tender information using well formatted Excel or CSV file;

TCU-92. The system shall consider functionality for importing tender information from the e-Procurement system at the Public Procurement Bureau;

TCU-93. The system shall provide functionality for adding/removing tender(s);

TCU-94. The system shall provide functionalities for viewing tender information. When viewing tender information the system shall display all contracts and invoices related to that tender;

TCU-95. The system shall provide functionalities for editing tender information;

TCU-96. The system shall provide functionalities for querying, filtering and sorting the list of active tenders;

Contracts

TCU-97. The system shall display a list of all Contracts in a table with at least the following columns: Number of the Contract, Number of the Tender, Translation Agency/Technical Committee, Value of the Contract, the remaining value, Description;

TCU-98. The system shall provide functionality for adding new Contract. The system shall request at least the following information about the contract: Number of the Contract, Number of the Tender (drop-down list), Translation Agency/Technical Committee (drop-down list), Contract Type, Starting Date of the Contract, End Date

of the Contract, Number of Pages, Number of Pages EN-MK, Number of Pages MK-EN, Unit Price for translation to Macedonian, Unit Price for translation from Macedonian, Description;

- TCU-99. The system shall provide functionality for importing contract information using well formatted Excel or CSV file;
- TCU-100. The system shall provide functionality for adding/removing contract(s);
- TCU-101. The system shall provide functionalities for viewing contract information. When viewing contract information the system shall display all invoices related to that contract as well as all deliverables;
- TCU-102. The system shall provide functionalities for editing contract information;
- TCU-103. The system shall provide functionalities for querying, filtering and sorting the list of contracts by various parameters;

Invoices

- TCU-104. The system shall display a list of all Invoices in a table with at least the following columns: Number of the Invoice, Number of the Contract, Date of the Invoice, Translation Agency/Technical Committee, Value of the Invoice, number of Pages, Description;
- TCU-105. The system shall provide functionality for adding new Invoice. The system shall request at least the following information about the invoice: Number of the Invoice, Number of the Contract (drop-down), Date of the Invoice, Translation Agency/Technical Committee, Language of translation/expert review, Value of the Invoice, number of Pages, Description;
- TCU-106. The system shall provide functionality for importing invoice information using well formatted Excel or CSV file;
- TCU-107. The system shall provide functionality for adding/removing invoices(s);
- TCU-108. The system shall provide functionalities for viewing invoice information. When viewing invoice information the system shall display all deliverables related to that invoice;
- TCU-109. The system shall provide functionalities for editing invoice information;
- TCU-110. The system shall provide functionalities for querying, filtering and sorting the list of invoices by various parameters;
- TCU-111. The system shall provide functionality for electronic approval of each created Invoice (by TCU coordinator).

Reporting

TCU-112. The system shall provide report on the distribution of tender funds by translation agencies/technical committees by months with information about the number of paid translated/auditing pages and the total amount paid;

TCU-113. The system shall provide report on the distribution of tender funds under contracts with translation agencies/technical committees. The following information should be displayed for each translation agency/technical committee: value of the contracts, maximum number of translation/auditing pages provided by the contracts, price of translation into and from Macedonian language, total amount paid and number of paid pages translated into and from Macedonian language and the remaining amount of tender funds.

TCU-114. The system shall provide report on the distribution of tender funds by translation agencies/technical committees by months with information about the number of paid translated/auditing pages and the total amount paid;

TCU-115. The system shall provide visualization tools and an interactive dashboard for tracking the most important KPIs (key performance indicators) about the financial aspects of the translation process. At least the following KPIs should be provided: the number of tenders, the total budget of the tenders, the number and total number of contracts, the remaining value in the existing contracts, information about the budget (contracted and remaining) per translation agency/technical committee etc.

TCU-116. The reporting tool should have the possibility to drill into the collected data in specified directions;

C.2.3.4. Terminology Register

TCU-117. The system should provide functionality for management of terminology register - MAKTERM;

TCU-118. Terminology register is linked to TRADOS translation software used by SEA;

TCU-119. The translation agencies and the technical committees should be able to propose new terms to be added into the translation register;

TCU-120. The translation agencies and the technical committees should be able to propose a change of an existing terms from the translation register;

TCU-121. SEA auditors should be able to approve entry of a new term in the translation register or change of an existing term in the translation register;

TCU-122. The system should categorize the terms into glossaries for various negotiation chapters.

C.2.4. TNA Module

- TNA-1. The system should provide common repository of documents for all entities (users). The repository should contain information on EU related capacity building and training programmes, events and scholarships;
- TNA-2. The system should provide discussion forum functionality for all entities (users) involved in capacity building and training events related to EU/IPA and TAIEX assistance;
- TNA-3. The system should provide discussion forum and news section for EU related scholarships in the country and abroad for students and civil servants with programmes of European Universities and Institutes and rules of applications. The system should provide tools for involvement of students studying abroad to support the process of accession negotiations in various fields;
- TNA-4. The system shall display a list of all training events in a table with at least the following columns: Code of the training event, Title, Objective, Type of training event (SEA Internal, EU Trainings organized by SEA, External), Category of training event (A - EU general and horizontal, B - EU policies, C - Structural funds and IPA, D - EU management, E - TAIEX, F - Scholarships, G - Other), Organizer, Location, Period and Number of participants;
- TNA-5. The system should provide e-learning module with all needed functionalities for performing online trainings;
- TNA-6. The system should provide functionality to initiate a training event either from the NPAA Module (Req. NPAA-31), or through a web form for training events organized by SEA and other external institutions including the training events organized under TAIEX;
- TNA-7. When initiating a new training event the system shall request at least the following information: Code of the training event, Title of the training event, Type of training event (SEA Internal, EU Trainings organized by SEA, External), Category of training event (A - EU general and horizontal, B - EU policies, C - Structural funds and IPA, D - EU management, E - TAIEX, F - Scholarships, G - Other), Training event topics, Target group, Number of participants, Deadline for nomination, Starting Date and Time, Ending Date and Time, Needed Financial Resources, Planned Financial Resources from the Budget, Planned Financial Resources from Foreign Aid, Organizing Institution, Contact Person, Other Participating Institutions, Lecturers (with their

CVs), Conditions for participation, Location and connection with NPAA chapter if available;

TNA-8. When initiating a new training event the system shall provide functionality to link the event to a project financed by the international donors and registered in the CDAD module if the training is organized in the frame of that project;

TNA-9. When initiating a new training event the system shall provide functionality to link the event to a draft legal act that is being initiated in the NPAA Matrix of goals and activities and NLex module if the training is organized for the purposes of that legal act;

Training for SEA employees

TNA-10. When the Type of training event is internal trainings for SEA employees, email is sent to all SEA employees informing them about the training event. All interested persons for a training event shall be able to submit a registration for participation. When submitting a registration for participation, the persons should enter at least the following information: First Name and Last Name, working position, working experience, list of previous trainings (may be automatically filled from the register of trainings) and information whether the person has appropriate replacement on the work place during the training event;

TNA-11. The Head of each department should be able to view a list with all applications for trainings for the employees inside his department. He/she should be able to review the applications and approve or reject the application;

TNA-12. When approving training event application, the Head of the department should input at least the following information: Does the training fit the job / position of the candidate, What are the benefits, To whom are the tasks transferred during the training of the person, Should a person who is going to train for a certain period of time complete certain work tasks, In case it does not end - to whom is the task transferred, Was the candidate in previous training?;

TNA-13. When rejecting training event application, the Head of the department should enter the reason for rejection. The system should automatically send email to the training event applicant with the entered information;

TNA-14. The system should provide functionality for the same approval procedure for the State Consular (for all departments within SEA) and for the General Secretary of SEA as a final step in the approval process;

TNA-15. The system should provide functionality to link relevant training events of SEA employees with the HRMIS application, managed by the Ministry for information society and administration;

External Trainings

- TNA-16. When the Type of the training event is a training organized by SEA for other institutions, email is sent to contact persons of all institutions that should participate on the training informing them about the training event and requesting them to nominate participants. If SEA participation is needed on this training event, email is sent to all SEA employees informing them about the training event. SEA employees should be able to submit an application that will go through the same approval process described above;
- TNA-17. Responsible persons from the participating institutions in a specific training event should be able to nominate person(s) that will participate on the training event;
- TNA-18. When the Type of training event is External training event, organized by TAIEX or by other institution, at least the following information about the training event should be provided: institution, contact name, objective, purpose, topic, area linked to NPAA chapters, obligation from SSA, responsible person from SEA to monitor (if relevant), number of persons, period, etc., as well as link to NPAA Matrix of goals and activities, and Nlex module, if relevant;
- TNA-19. The Organizing Institution of the training event should be able to update training event information at any time with the following data: agenda, background material, attendance list, presentations, training material produced during the training as well as evaluation forms both from the participants and the trainers;
- TNA-20. If SEA participation is needed on the external training events, email is sent to all SEA employees informing them about the training event. SEA employees should be able to submit an application that will go through the same approval process described above;

TAIEX Trainings

- TNA-21. The system should provide functionality for the TAIEX coordinator within SEA to receive TAIEX applications by the relevant institutions for all trainings and capacity building events in NPAA negotiation chapter areas organized under TAIEX. TAIEX applications have predefined format and should contain at least the following information: institution, contact name, objective, purpose, topic, area linked to NPAA chapters, obligation from SSA, responsible person from SEA to monitor (if relevant), number of persons, period, etc.;
- TNA-22. TAIEX coordinator within SEA should be able to view a list with all applications for TAIEX trainings. He/she should be able to review the applications and approve, return for correction or reject the application;

- TNA-23. When rejecting application for TAIEX training, the TAIEX coordinator should enter the reason for rejection. The system should automatically send email to the TAIEX training event applicant with the entered information;
- TNA-24. The system should provide functionality for TAIEX coordinator to submit the final TAIEX application to TAIEX platform;
- TNA-25. The system should provide functionality to monitor the process of approval of the submitted TAIEX application on TAIEX platform (wait for approval, rejected, approved). The system should be able to inform the applicants about any change of the status by sending emails;
- TNA-26. The system should provide basic and advance searching functionalities on TAIEX applications with combination of various parameters/ criteria (by institution, by topic, by NPAA chapter/subchapter, by status etc.). The system should be able to export the generated reports in xls, csv, or other common format;
- TNA-27. For all trainings organized by TAIEX, the TAIEX coordinator within SEA should receive from TAIEX contacts in the relevant ministries the appropriate documentation and should be able to manage and update the training event with the following data: agenda, background material, attendance list, presentations, training material produced during the training as well as evaluation forms both from the participants and the trainers;

Scholarships

- TNA-28. The system shall display a list of all available scholarships in a table with at least the following columns: Name of scholarship, amount of scholarship, type of scholarship (in the country or abroad), application end date etc.;
- TNA-29. The system should provide functionality to creation a new scholarship. When creating a new scholarship at least the following information should be requested: Name of scholarship, amount of scholarship, type of scholarship (in the country or abroad), application end date etc.;
- TNA-30. The system should provide functionality for the TNA coordinator to receive scholarship applications by civil servants from the relevant institutions;
- TNA-31. TNA coordinator should be able to view a list with all received scholarship applications. He/she should be able to review the applications and approve, return for correction or reject the application;
- TNA-32. When rejecting application for scholarship, the TNA coordinator should enter the reason for rejection. The system should automatically send email to the scholarship applicant with the entered information;

- TNA-33. Approved scholarship applications by TNA coordinator should follow the same approval procedure within SEA mentioned above;
- TNA-34. Scholarship applications that are finally approved within SEA go to final approval in the Government. The system should provide functionality to enter the Government decision on each scholarship application sent to the Government for approval;
- TNA-35. The system should be able to track approved scholarships with information about the start date, end date, contract, information about the number of years he/she needs to work within the Government according to the contract and information about the working position of the scholar within the government after the completion of the study;
- TNA-36. The system should provide basic and advance searching and filtering functionalities on scholarship applications with combination of various parameters/ criteria (by institution, by University, by country, by status etc.). The system should be able to export the generated reports in xls, csv, or other common format

Reporting and Monitoring

- TNA-37. The system should be able to generate TNA Calendar of training events with timetable and participants;
- TNA-38. The system should be able to monitor the status of training events (planned, on-going, completed, canceled);
- TNA-39. The system should provide basic and advanced searching capabilities, with filtering option using various parameters;
- TNA-40. The system should provide visualization tools and an interactive dashboard for tracking the most important KPIs (key performance indicators) about the training events and scholarships. At least the following KPIs should be provided: the number of realized trainings (per type, category and status), the number of people trained, satisfaction from the trainings per type and category, the number of scholarships (per type, country and status) etc.;
- TNA-41. The system should be able to generate basic and customized reports and statistics by various parameters of training events: category, type, NPAA chapter, topic, period, time-period, status, by institutions etc;
- TNA-42. The system will be able to generate comprehensive reports on participants in training events, with at least the following details (institutions, work posts, working experience, area of expertise, membership in NPAA/IPA, previous trainings, etc.);
- TNA-43. The system should be able to export the generated reports in different formats like excel, pdf, etc.;

C.2.5. CDAD Module

Registration

- CDAD-1. The system shall display a list of all registered projects in a table with at least the following columns: Identification number of the project, Title of the project, Status of the project, Start Date, End Date, Budget and Currency;
- CDAD-2. The system should provide functionality for registering new approved project. The registration of the project can be done manually, by the CDAD administrator, or data should be retrieved from the existing web application for registration of projects.
- CDAD-3. If the CDAD administrator registers the project, a scan of the Project Certificate should be uploaded.
- CDAD-4. The system shall provide functionalities for viewing project information. When viewing project information the system shall display all details about the project in a user friendly interface;
- CDAD-5. The system shall provide functionalities for editing project information (changing status of the project);
- CDAD-6. The system shall provide functionalities to attach relevant project documentation, project fiche, project ToR, inception reports, quarterly reports, and other documents, as required;
- CDAD-7. The system shall provide functionalities for querying, filtering and sorting the list of projects by various parameters (donor, sector, policy, status, start year, end year, type of assistance, location, type of institution);
- CDAD-8. The system should provide advanced search functionality where the user will be able to search for the registered projects by combining all existing parameters (donor, sector, policy, status, start year, end year, type of assistance, location, type of institution);
- CDAD-9. The system should provide functionality to link project information, data and project documentation to other NPAA modules, as relevant;
- CDAD-10. The system should provide functionality to generate NPAA Annex 4a - IPA and other donor assistance;
- CDAD-11. The system should be able to export data in different formats, such as excel, pdf etc.;

Reporting

CDAD-12. The system shall provide statistical reports at least by the following parameters: donor, location, policy and sector;

CDAD-13. The system shall provide analytical reports at least by the following parameters: Donor, Donor & Location, Donor & Policy, Donor & Sector, Donor & NPAA cluster/chapter, Location, Location & Donor, Location & Policy, Location & Sector Policy, Policy & Donor, Policy & Location, Policy & Sector, Sector, Sector & Donor, Sector & Location, Sector & Policy, Year, Year & Donor, Year & Location, Year & Policy and Year & Sector;

CDAD-14. The system shall provide visual tools for presentation of the statistical and analytical reports.

Administration

CDAD-15. The system should provide interface for management of all look-up registers needed for CDAD proper operation (for example: countries, currencies, types of projects etc.);

C.2.6. System Administration Module

Management of Users

SYS-1. The system shall display a list of all registered users in a table with at least the following columns: First Name and Last Name, E-mail Address, User Role(s), Institution, indication whether the user is translator, internal auditor, expert auditor, legal auditor, indication of the languages of expertise;

SYS-2. The system shall provide functionality for adding new user. The system shall request at least the following information about the user: Username, Password, First Name, Last Name, E-mail address, Address, Institution (dropdown), Position within the Institution, User Roles (dropdown), indication whether the user is translator, internal auditor, expert auditor, legal auditor, indication of languages of expertise (in case the user is translator or auditor of any type), Fields of Expertise (in case the user is translator or auditor of any type) and Comment;

SYS-3. The system shall provide functionality for importing user accounts using well formatted Excel or CSV file;

SYS-4. The system shall provide functionality for importing user accounts from the HR system in the Ministry of Information Society and Public Administration;

SYS-5. The system shall provide functionality for adding/removing user from User Group(s). The User Groups are defined in the Module for User Group Management;

SYS-6. The system shall provide functionalities for viewing user's information;

- SYS-7. The system shall provide functionalities for deactivating/activating user's account;
- SYS-8. The system shall provide functionalities for editing user's information;
- SYS-9. The system shall provide functionalities for querying, filtering and sorting the list of registered users;
- SYS-10. The system shall provide functionalities for viewing information about the user activity (including but not limited to user login counts and login times);
- SYS-11. When viewing user information, in case when the user is translator or any type of auditor, the system shall provide statistical information about his/her activities.

Management of User Groups

- SYS-12. The system shall display a list of all existing user groups in a table with at least the following columns: User Group Name;
- SYS-13. The system shall provide functionality for adding new user groups. The system shall request at least the following information about the user group: User Group Name, and users that will belong to the new user group;
- SYS-14. The system shall provide functionality for adding/removing user from User Group(s);
- SYS-15. The system shall provide functionalities for viewing user group's information including information about the users that are belonging to that user group;
- SYS-16. The system shall provide functionality for managing permissions for a User Group. The Permissions are defined in the Module for Management of Permissions;
- SYS-17. The system shall provide functionalities for deactivating/activating user group;
- SYS-18. The system shall provide functionalities for editing user group's information;
- SYS-19. The system shall provide functionalities for querying, filtering and sorting the list of existing user groups;

Management of Permissions

- SYS-20. The system shall display a list of all functionalities in a table, grouped by modules, with at least the following columns: Functionality Name;
- SYS-21. The system shall display a list of all permissions to functionalities for a specific user group in a table, grouped by modules, with at least the following columns: Functionality Name. In order to display this list, the system administrator shall select an existing user group from a dropdown menu. Selected checkbox in front of

the name of the functionalities means that the selected user group has privileges to that functionality.

- SYS-22. The system shall provide functionality for adding permission to a user group. During this process, the system administrator shall select an existing user group from a dropdown menu and then using the checkboxes that shall exist in front of each NPAA Platform functionality add permission to a specific functionality by selecting the corresponding checkbox. If the system administrator wants to add permission to all functionalities within a specific module to a specific user group then he/she shall select the checkbox in front of the module name. As a result, the system shall automatically select all checkboxes in front of the functionalities within that module.
- SYS-23. The system shall provide functionality for removing permission from a user group. During this process, the system administrator shall select an existing user group from a dropdown menu and then using the checkboxes that shall exist in front of each NPAA Platform functionality remove permission to a specific functionality by deselecting the corresponding checkbox. If the system administrator wants to remove permission from all functionalities within a specific module to a specific user group then he/she shall deselect the checkbox in front of the module name. As a result, the system shall automatically deselect all checkboxes in front of the functionalities within that module.

Management of Institutions

- SYS-24. The system shall display a list of all institutions in a table with at least the following columns: Institution Name, Institution Short Name, budget number, contact e-mail and contact phone number;
- SYS-25. The system shall provide functionality for adding new institution. The system shall request at least the following information about the user: Institution Name, Institution Short Name, Address, budget number, current number of employees, contact e-mail, contact phone number and indication whether the institution is a Ministry;
- SYS-26. The system shall provide functionality for importing institutions using well formatted Excel or CSV file;
- SYS-27. The system shall provide functionality for management of the institution structure (sectors, units etc.). The should provide functionality for building and managing the organogram of the institutions in a tree structure;
- SYS-28. The system shall provide functionality for importing institutions from the existing register of institutions within the Ministry for Information Society and Public

Administration. During the import, the system shall propose a list of new institutions to be added, changes to existing institutions data to be made and deactivation of existing institutions; The administrator of the system should approve or reject any of these proposals;

- SYS-29. The system shall provide functionality for adding/removing user from Institution. The management of users are defined in the Module for Management of Users;
- SYS-30. The system shall provide functionalities for viewing Institution's information;
- SYS-31. The system shall provide functionalities for deactivating/activating Institution;
- SYS-32. The system shall provide functionalities for editing Institution's information;
- SYS-33. The system shall provide functionalities for querying, filtering and sorting the list of registered Institutions;

Management of NPAA structures

- SYS-34. The system shall display a hierarchical list of NPAA structures with at least the following columns: Name of the structure and Responsible Institution;
- SYS-35. The system shall provide functionality for adding new NPAA structure. The system shall request at least the following information about the structure: Name of the structure, parent structure (if it exist), Responsible Institution, list of participating institutions and responsible user for each institution, responsible user group (working group);
- SYS-36. The system should provide functionality to map the NPAA structures with the 20 categories in which the EUR-Lex documents are categorized;
- SYS-37. The system shall provide functionality for importing the NPAA structure using well formatted Excel or CSV file;
- SYS-38. The system shall provide functionality for adding/removing participating Institution to/from the NPAA structure;
- SYS-39. The system shall provide functionalities for editing NPAA structure information;
- SYS-40. The system shall provide functionality for editing responsible institution for each NPAA structure;
- SYS-41. The system shall provide functionality for editing the responsible user for each of the participating institutions in the NPAA structure;
- SYS-42. The system shall provide functionality for editing the responsible user group for each NPAA structure, by selecting from the list of existing user groups. The

members of the working group responsible for each chapter shall be grouped in a special user group;

SYS-43. The system shall provide functionalities for viewing NPAA structure information;

SYS-44. The system shall provide functionalities for deactivating/activating NPAA structure;

SYS-45. The system shall provide functionalities for querying, filtering and sorting the NPAA structure;

Management of Translation Agencies

SYS-46. The system shall display a list of all registered Translation Agencies in a table with at least the following columns: Name, Contact Person, E-mail Address, Fields of Expertise, Active and indication about languages of expertise;

SYS-47. The system shall provide functionality for adding new Translation Agency. The system shall request at least the following information about the Translation Agency: Name, Contact Person (from the list of users), Address, Email Address, Norm, indication about the languages of expertise, Fields of Expertise, Comment;

SYS-48. The system shall provide functionality for importing Translation Agencies using well formatted Excel or CSV file;

SYS-49. The system shall provide functionality for adding/removing Members (users) to/from Translation Agencies;

SYS-50. The system shall provide functionalities for viewing Translation Agency information;

SYS-51. The system shall provide functionalities for deactivating/activating Translation Agency account;

SYS-52. The system shall provide functionalities for editing Translation Agency information;

SYS-53. The system shall provide functionalities for querying, filtering and sorting the list of registered Translation Agencies;

SYS-54. The system shall provide functionalities for viewing information about the Translation Agency: members, contracts, invoices, translated documents and various statistics about the current status of the translation services offered (number of documents in various stage of the translation process).

Management of Technical Committees

SYS-55. The system shall display a list of all registered Technical Committees in a table with at least the following columns: Name, Contact Person, E-mail Address, Fields of Expertise, Active and indication about languages of expertise;

- SYS-56. The system shall provide functionality for adding new Technical Committee. The system shall request at least the following information about the Technical Committee: Name, Contact Person (from the list of users), Address, Email Address, Norm, indication about languages of expertise, Fields of Expertise, Comment;
- SYS-57. The system shall provide functionality for importing Technical Committees using well formatted Excel or CSV file;
- SYS-58. The system shall provide functionality for adding/removing Members (users) to/from Technical Committees;
- SYS-59. The system shall provide functionalities for viewing Technical Committee information;
- SYS-60. The system shall provide functionalities for deactivating/activating Technical Committee account;
- SYS-61. The system shall provide functionalities for editing Technical Committee information;
- SYS-62. The system shall provide functionalities for querying, filtering and sorting the list of registered Technical Committees;
- SYS-63. The system shall provide functionalities for viewing information about the Technical Committees: members, invoices, reviewed documents and various statistics about the current status of the services offered (number of documents in various stage of the verification process).

C.2. Non-Functional Requirements

The Integrated NPAA Platform should be:

- implemented in accordance with the suggested concept;
- based on existing technical infrastructure;
- developed in accordance with the technical standards and existing legal regulations;
- interoperable with other systems and open for connecting.

Requirements or quality attributes during the system development

The following has to be ensured during the system development:

- Testability of the system is a property that ensures testing of every functional and non - functional requirement in system's operation. In that sense, it is necessary to provide test/development environment (applications, databases etc.);

- Extensibility of the system is a possibility of implementing new properties into the system in an economically acceptable manner and with no adverse effects on existing functionalities;
- Flexibility of the system or its modifiability is the ability of the system to adjust to changes, e.g. regulations or business processes in an economically acceptable way;
- Reusability is a property that ensures that some of the modules can be reused. This primarily refers to software modules.

The development of the Integrated NPAA Platform needs to be secured by change management methodology that includes:

- Keeping records on all change management requests;
- Delivering requests for changes in an official form to official addresses of the parties;
- Change management requests containing all data necessary for decision – making;
- Decision – making related to acceptance of the requests at a proper project management level;
- Notification of all interested parties about the implemented change;
- Change implementation follow-up.

Requirements or quality attributes during the operation of the system

Usability

Usability is the property of the system that enables primary target groups of users to use the system in a user – friendly manner. The usability of Integrated NPAA Platform shall comprise the following attributes:

- simple learning curve to work with the software;
- efficiency and speed for trained users to achieve their goals using the software;
- forestalling all potential errors, a user may make using the software, and the ability of the system to recover efficiently in case of errors;
- User – friendly work with the software.

The usability of the system shall be implemented through:

- Harmonization with business processes;
- Intuitive User interface design;

Harmonization with business processes is the key factor for usability, since it enables the user to integrate with the system in a manner that is natural for the work he/she performs. The system follows the steps within a business process in a natural way, and follows the users in their regular flow of activities. Screen forms must be designed in line with the rules and best practice for the simplicity of web applications usage. This refers to presence, appearance and behaviour of standard elements, consistency, graphic design, error – processing, user help functions, etc. The requirements related to usability are:

- Most common transactions have to be designed in such a way that they can be performed with the least number of interactions (mouse or keyboard clicks);
- Rules and behaviour of user interface have to be consistent through the entire system, including windows, menus and commands;
- All system modules should have an intuitive user interface and consistent object concept (fields, drop – down lists, choice of options) so that users may use different pages/system screens in a more simplified manner (e.g. display of available data, data – entry validity, error notifications);
- The system has to offer default values in all the fields for data entry, where reasonable. Default values may be fixed in advance, defined by the user or determined based on the context;
- Validation: the use of valid data in the system should provide for the rapid entry of data, less sensitive to errors. The users should be given the option of selecting appropriate elements from the list (the list shows appropriate code and description) or to insert the code directly. Once selected, an appropriate code and description is always visible to all data entries and query screens;
- Double – check principle should be ensured for all the changes of reference data within a module for reference data management. Confirmation should be requested from the other (different) user. The module for managing reference data and all its clients use the original version of the record, until its modifications get verified, i.e. the modifications are pending until confirmed;
- The system has to prevent data redundancy, i.e. it should ensure that all the data entered are unique.

Supportability

Supportability comprises different elements of support and maintenance to be provided during the software implementation and software exploitation in the warranty period, these being:

- Elements of the operational support

- o Installation, configuration and supervision of the software;
- o User training, separate for users in charge of the administration of the software, and for users in charge of the exploitation of the software. In that sense, database shall be implemented for the needs of user training;
- o Support to the users who operate in the system.
- help-desk services
 - o by phone, e-mail, web – pages, etc.
- elements of proactive maintenance and logging of the operational events of the software:
 - o identification and providing information on emergency events in the operations of the software;
 - o System maintenance, data base maintenance, application maintenance;
 - o request for proactive replacement of hardware and system software.
- elements of corrective maintenance
 - o error correction and repairs.
- elements of technological maintenance
 - o migration and updating of the software to new versions of system software, base server and application server.
- documentation
 - o technical and user documentation (updated in line with the latest changes) .

Reliability

The Integrated NPAA Platform has to be reliable in order to perform its functions without interruptions during a specific time period within set conditions.

Servers have to be configured in fail-over or load-balance mode, in order to avoid a single point of failure. Availability of the system on an annual level must not be lower than 99%.

Performance

Performance of the system is its property to perform its functions fast enough to be acceptable for the users. Performance may be measured by response time (in a normal and peak system load, with anticipated network resources) and the time required for a service to

be performed. Response time of the system must not be longer than 5 seconds in case of import and export of data.

Controllability

Controllability is the property of the system related to its administration. Requirements related to controllability are the following:

- The system should ensure that the administrator could follow information on intensity of usage, number of customers, usage of the resources, incidents...;
- The system should regularly (daily, weekly, monthly) and automatically create a report on the operations in past;
- The system should automatically create a report on extraordinary events;
- The system should support the possibility to reconfigure hardware and software (detailed specification) without downtime.

Security

Security is the property of the system to prevent access, viewing and change of data or applications by unauthorized persons. In technical terms, it is ensured by implementing a proper user's authentication and authorization system, defining rights and roles within a system, data encryption, implementation of security elements into the application, monitoring and recording all activities on the system itself, log management on data changes, etc. However, implementation of technical security measures is not sufficient. A comprehensive IT security system should be developed, comprising all the aspects of the system, including processes, people and technology.

Data contained in the system have to be protected in line with current legislation, particularly with Law on Personal Data Protection.

The Integrated NPAA Platform has to contain a special module for global configuration of its security core, which shall be available exclusively to specific groups of users (Administrators).

The system has to support the usage of encrypted communication for exchange of data between clients and the central server. Even when the encryption is not used, the authentication of the user has to be done, at least through a temporary SSL.

The system has to support electronic identification of the user, whose level of security depends on the level of access to the system. Electronic identification protocols have to be designed in a flexible manner, so that they can support different methods of checking user's authenticity, such as:

- User password, for the low-level security access,

- Qualified electronic certificates, for the high-level security access.

The system has to ensure settings for strong password policy and expiry of password. System parameter has to enable the System Administrator to configure the expiry of password policy. The system has to ensure memorizing the old password, in order to prevent the user from using the same password multiple times. The system has to ensure the settings of session's expiry, and in case of user's inactivity for a certain time period, automatic sign out is activated.

The system has to ensure that certain users may only perform permitted operations and have the insight into certain cases and documents, in line with the roles assigned by the System Administrator.

The system has to meet the requirements for maintaining auditor's records on all data changes based on user's requests. In that sense, the implementation of history tables has been described within the logical architecture. Proper records shall be kept in a safe manner, for the purpose of auditing recorded transactions, change of data and queries submitted by end-users with time stamps, in order to enable future review of log records.

Backup

The system has to create security back-ups on a daily, weekly and monthly level, outside the system's working hours, in a way that will not impact regular operation of the system.

Two main goals to be achieved through backup procedures are:

- The system has to enable recovery of database through stored security back-ups and the possibility of recovery of loss data;
- Minimizing the time needed for data restore, i.e. minimizing the downtime.

Scalability

Scalability is the property of the system to serve the sudden increase in the number of users or to perform the increased number of transactions. The scalability of the system and its stable operation should be ensured.

Scalability should provide for the possibility of:

- Performing an increased number of operations, providing greater number of services or the increase in the number of users;
- Administrative or organizational extension – the possibility of providing services to additional organizational units or organizations;
- Functional extension – possibility of providing additional services;

- Technological extension – possibility of extension to other devices or platforms (e.g. by providing service on wearable devices).

Interoperability

Interoperability refers to the property of the system to implement transactions with other systems. The system should be interoperable with other existing systems in the public administration. Interoperability involves process interoperability, semantic interoperability and technical interoperability.

Openness of the system ensures that other systems can connect with the Integrated NPAA Platform and modify the data or use its services.

C.3. Technical Requirements

The Integrated NPAA Platform should satisfy the following technical requirements:

Language, Dates, Numbers

- TEH-1. The system shall allow for all data to be stored in Unicode format allowing for multilingual character capability.
- TEH-2. The system shall provide a configurable facility to design and print reports in Macedonian, Albanian and English.
- TEH-3. All dates shall be stored with 2-digit day, 2-digit month, and 4-digit year, and shall be displayable in all common date formats such as for e.g. DD.MM.YYYY
- TEH-4. The system shall provide a flexible calendar/scheduler function to make allowances for holiday and working day definitions.

Database Requirements

- TEH-5. The database management system (DBMS) will comprise a central relational database, which can be connected to the other subsystems/modules over a central local area network (LAN) and wide area network (WAN);
- TEH-6. All the major functional modules in the system will have logical connections to the central database for storing information in and retrieving information from it;
- TEH-7. The DBMS shall allow be accessible only by suitably authenticated users;
- TEH-8. The DBMS shall support the creation and maintenance of at least three kinds of authenticated users, namely, business users, internal system users, and system administrators;

- TEH-9. The DBMS shall allow the monitoring of long-running operations using a GUI interface for ease of operation;
- TEH-10. The DBMS shall have the capability to support data replication to a remote site for Disaster Recovery purposes;
- TEH-11. The DBMS shall support different types of table and index partitioning to increase query performance;
- TEH-12. The DBMS shall provide a recovery mechanism to quickly and easily repair or fix data errors whenever they are reported.
- TEH-13. The DBMS must provide password management capabilities which includes:
- Account Locking
 - Password Lifetime and Expiration
 - Password History
 - Password Complexity Verification
- TEH-14. The DBMS shall provide features to restrict database administrators or other privileged users from accessing business application data or performing unauthorized changes.
- TEH-15. The DBMS shall provide enterprise-wide audit capabilities to efficiently consolidate, detect, monitor, alert and report on audit data for security auditing and compliance.
- TEH-16. The DBMS shall support encryption of sensitive database columns without requiring modification of applications using them.
- TEH-17. The DBMS shall provide management tools with a web-based interface.
- TEH-18. The DBMS shall support dynamic changes to the memory configuration of an active instance.
- TEH-19. The DBMS shall provide configurable transaction logging.
- TEH-20. The DBMS shall provide configurable and automated tools to periodically archive data.

Information Integrity

- TEH-21. The system shall ensure only the person with a particular user ID can perform tasks assigned to that user ID, and that no other person (or system itself) can perform tasks assigned solely to that user ID.

TEH-22. The system shall take advantage various mechanisms to provide integrity, assure data privacy, and eliminate the need for physical signatures.

Audit Logs

TEH-23. The system shall maintain audit logs of all additions, modifications and deletion made to all data stored in the system.

TEH-24. The system shall maintain audit logs of users viewing sensitive (based on user defined security classifications) data in the system.

TEH-25. The ability to modify and remove the audit logs/audit log entries should be restricted to a combination of users (e.g. CIO + Security Administrator), and should not be granted to any single user.

TEH-26. Audit logs must be part of the daily backup of the system.

Password setup

TEH-27. The system shall allow users to define a password expiry period at a global level and at a user group level, with the user group level setting overriding the global setting for users within the specific group.

TEH-28. The system shall allow users to define minimum and maximum password lengths.

TEH-29. The system shall allow users to define alpha numeric requirements for passwords.

TEH-30. The system shall allow users to define password history settings (restriction on reusing a specified number of past passwords)

TEH-31. The system shall allow users to define maximum unsuccessful login attempts allowed before the user account is disabled.

TEH-32. The system shall allow users to allow users to change their passwords without the involvement of systems administrators.

Security Administration and Monitoring

TEH-33. The system shall have the facility to disable user IDs and record details of when and why the user accounts were disabled.

TEH-34. The system shall allow users to specify the period of inactivity after which users are automatically signed off.

Security Reports

TEH-35. The system shall automatically generate exception reports on users overriding the access level assigned in their user profile;

TEH-36. The system shall allow users to define audit trails/exception reports for identified events. These should essentially capture details such as the computer name, user, date and time together with the activity done.

Application Administration

TEH-37. The system shall allow users to post system-wide messages/memos for users to view on login. The system shall allow users to change the messages/memos from time to time

TEH-38. Whenever there are online authorizations, the authorizing user should be able to view the data entry user, modified user (if any), and any other authorizing user

TEH-39. It should not be possible to override the system generated codes/reference numbers (e.g. UserID, EPP, etc.)

Classification of information

TEH-40. The system shall allow users to have documents classified as internal in the system, which would not be provided to outside parties, other than the authorized Government agents.

TEH-41. The system shall allow users to have documents classified as confidential in the system, which would not be made available to other persons other than the owner/group of owners of the documents and any person approved by the owner of the file.

Interfacing with External Systems

TEH-42. The system shall be capable of receiving information from any external system using any open standards for communication. For example:

- Secretariat for Legislation (evaluating the approximation of legislation);
- General Secretariat within the Government (to observe Article 66 of the Rules of Procedure of the Government for approximation with the EU regulations);
- Assembly of the Republic of North Macedonia (Committee for European Affaires and the National Council for European Integration);
- Official Gazette etc.;

TEH-43. The system shall be capable of sending information to other external system of the Government (e.g. the General Secretariat, Assembly, etc.) using open standards for communication;

TEH-44. The system will have the capability to develop interfaces to other systems without changes to core application being made.

File uploads

TEH-45. The system shall have facilities to upload information provided in physical storage media (optical/magnetic discs, etc.).

TEH-46. The system shall have facilities to upload information from common proprietary application formats, such as Microsoft Office file formats, PDF, etc. and open file formats such as Unicode text files, ASCII text files, HTML, etc.

TEH-47. The system shall have facilities to upload information from text files that are provided in known record formats. (E.g. comma separated lists of know record set). This should allow information from other application of the Department and external parties to be uploaded to the system as required.

C.4. Implementation Service Requirements

The Implementation Service Requirements section covers the following topics:

- General implementation requirements
- Business Analysis and Software Development requirements
- Installation, Testing and Acceptance Test Planning requirements
- Training requirements
- Data Migration requirements
- Maintenance and Support Requirements

General Implementation Requirements

IMP-1. The Contractor shall develop Project Plan that will ensure comprehensive knowledge transfer through the inclusion of the SEA personnel in relevant activities of systems design, development and testing.

In this context, the Contractor shall apply all necessary measures for comprehensive familiarization of the said staff with methodologies, tools and techniques used for providing and maintaining the system design, program code, technical documentation, user manuals, test material and training material.

IMP-2. The Project Plan shall clearly define the software development methodology (agile software development methodology is preferred), the tools and the techniques that will be used for design and development of the software;

- IMP-3. The Project Plan shall comprise provisions for delivery of training materials (including the e-learning modules, where applicable) and training of all persons nominated by the Client;
- IMP-4. The Project Plan shall comprise provisions for the establishment of comprehensive support function, e.g. Help Desk to assist the NPAA Platform internal users (SEA personnel) and external users (members of the negotiation structures and state institutions);
- IMP-5. In order to ensure sustainability and appropriate maintenance of the system, the Contractor must deliver full system documentation. The following supporting documents are required:
- Project documents – providing detailed information about project goals, specification of user requirements and implementation plan;
 - User documentation – describing in details the how to use the software from the perspective of the user;
 - Technical documentation – providing detailed information related to upgrading and maintaining the system;
 - Commercial documentation - all commercial software packages that will be eventually used, have to come with the documentation for installation, administration, management and other reference documents.
- IMP-6. The Contractor has to submit the following Project documentation for the system:
- Project Plan;
 - Software Development Plan (SDP);
 - Software Design Document (SDD); and
 - Software Requirements Specification (SRS) document;
- IMP-7. The Contractor has to submit the following User documentation for the system:
- User manual for the system (for all types of users), both inside the system and in printable format;
- User documentation shall not only explain how the software should be used, but also has to explain the rationale: for example, it is not sufficient only to say that a field is mandatory, it has to be explained why it is mandatory, and what is the meaning of certain attribute etc.;
- IMP-8. The Contractor shall develop Technical documentation in parallel with the system development. Technical documentation is intended for future maintenance and

upgrading of the system. The following technical documentation for the software has to be submitted:

- Documentation that describes specification of the system (system description, conceptual design of the system, description of system architecture etc.);
- Database schemes (with comments provided);
- User interface;
- Report design;
- Documented system logic for all system components;
- Documented backup procedures.

The technical documentation has to be detailed and prepared in such a way that upgrade is feasible without participation of analysts, designers and programmers that developed the system.

IMP-9. All commercial software packages that are eventually used for development of the software have to come with documentation for all their components which has to include the following:

- Instructions for system installation;
- Instructions for administration and management;
- Other reference documents.

IMP-10. All documents shall be submitted in English and Macedonian language.

Business Analysis and Software Development Requirements

IMP-11. The Contractor shall provide detailed Software Development Plan (SDP). This plan needs to provide details about the methods that will be used and the approach that will be followed for each activity and resource during the development of the software. It should reference specific standards, methods, tools, actions, reuse strategy, and responsibility associated with the development and qualification of all requirements, including safety and security;

IMP-12. As a result of the performed Business Analysis, the Contractor shall provide Software Requirements Specification (SRS) document. This document describes what the system is supposed to do, and how the system will perform each function. It explains the features of the system, the interfaces of the system, the constraints under which it must operate and how the system will react to external stimuli. This document needs to be approved by the Client before the start of the development process;

IMP-13. The Contractor should use agile software development methodology, creating user stories from the Software Requirements Specification (SRS) document and developing the software in modules. The number and the scope of each sprint should be agreed with the Client.

IMP-14. The Contractor shall provide Software Design Document (SDD). This document needs to provide information about the architecture of the software outlining all its parts and how they will work;

Installation, Testing and Acceptance Test Planning requirements

IMP-15. The Project Plan produced by the Contractor shall describe the proposed approach to development, installation and testing that will verifiably ensure the completeness and quality of the system deliverables, and will provide the Client with regular opportunities to review and confirm acceptance of system and project components;

IMP-16. The Contractor shall create three different working environments:

- Development environment – environment where the modules of the software and their functionalities are developed by the Contractor’s staff;
- Testing environment - environment where the developed modules are deployed for user testing, stress tests and performance tests;
- Production environment – environment where the software modules that passed the user testing are deployed. This is the real working environment of the software;

The Contractors should ensure that the testing environment and the production environment are the same;

IMP-17. Design of tests cases:

- The Contractor shall design test cases (with the assistance of the Client) that cover all scenarios possible in using the system in real life;
- Test cases shall be made on the basis of functional, non-functional, technical, performance and security specifications of the system.

IMP-18. Testing Team shall be composed of future system users. The working group for monitoring, preparation, development and testing of the integrated NPAA Platform will participate in the selection of the members of the team for testing. Since some the members of the WG are also future system users of the platform, they can also participate in the User Acceptance Test;

IMP-19. After completion of each development cycle agreed with the Client, the Contractor should install a version of the software on the testing environment;

IMP-20. Testing team will execute the prepared test cases upon installation on each version of the software on the testing environment to prove that it operates according to specification. All mistakes, inconsistencies and flaws have to be recorded in the minutes from testing with all relevant comments. Stress tests and performance tests should be conducted for each development cycle;

IMP-21. Correcting mistakes or anomalies in the system:

- On the basis of the minutes from testing, the Contractor is obliged to correct the identified mistakes/anomalies within two weeks;
- An updated version of the source code has to be compiled/processed when the mistakes and anomalies are corrected and a new version of the software installed on the testing environment;
- The testing team should repeat the testing process.

When the above steps are done successfully and all test cases are executed without mistakes or anomalies the testing process is considered completed.

IMP-22. After the completion of the development process for the whole system, and verification of the functionalities of the system on the testing environment, the Contractor (with the assistance of the Client) will perform User Acceptance Test (UAT) on the system following its installation and configuration on production environment.

User Acceptance Test (UAT) is the last stage in software testing. During UAT users will test the software to make sure that the system and its subsystems meet all functional and non-functional requirements mandated for Operational Acceptance, meaning that the system is ready to be used in real life. During the User Acceptance Test the following actions will be implemented:

- Unit Testing
- System Integration Testing
- User Acceptance Testing, including:
 - o Performance testing
 - o Stress testing
 - o Functionality testing
 - o Security testing
 - o Parallel testing

- o Upgrade Testing

IMP-23. If the above steps are completed successfully, UAT will be signed. Signature of UAT will mean that the system is officially ready for the production and use in real life.

Training Requirements

IMP-24. The Contractor shall provide a description of their approach to delivering training. The Contractor shall provide a preliminary Training Plan with detailed description of training courses to be carried out, including:

- Course title
- Learning or training objective
- Class size and composition
- Course duration
- Training sequence (relation to other courses)
- Class outline (subject area, topics and critical learning points)
- Delivery methods
- Locations of course offerings
- Trainer

The Contractor shall provide a description of their approach to updating the training plan as details of training requirements are finalized during the course of the project.

IMP-25. The Contractor shall provide training services in all aspects of the system to enable Clients' staff to use, maintain and develop the system;

IMP-26. The Contractor shall train all persons nominated by the Client, to enable them to test, administer, operate and use the system effectively.

IMP-27. Technical training required to administer the system must be provided. Technical training will include courses for NPAA Platform configuration and monitoring, database administration and server administration.

IMP-28. The Contractor shall provide a listing of all user groups (e.g. system administrators, end users etc.), and number of users to be trained and sequence of training, by group and relevant sub-group, by location and by timing, as required to meet the requirements of the implementation plan.

IMP-29. The users should not have access to the production version of the system until they complete the appropriate training.

IMP-30. All training materials must be packaged for electronically delivery and accessible for on-demand requests. Materials must be uploaded to the SEA intranet web portal.

Data Migration Requirements

IMP-31. The Contractor shall provide Data Conversion Plan (DCP) document with description of their technical approaches to data migration, including an estimate of the level of effort, duration, and task sequencing;

IMP-32. The Contractor shall analyse the existing data and provide Data Mapping document that describes the mapping of the existing data with the new data;

IMP-33. The Contractor will provide data migration technical specification, data migration design logic that will explain the mechanism to extract, transform and load the historic data into the new system;

IMP-34. The Contractor shall provide a description of their technical approaches to data migration, including an estimate of the level of effort, duration, and task sequencing;

IMP-35. The Contractor will migrate as much historical data as feasible to the new NPAA Platform. Once it is complete, the Contractor will do the verification of new data. In case of any discrepancy it will be highlighted and resolved to ensure completeness and correctness.

Maintenance and Support Requirements

IMP-36. The Contractor shall include a detailed Warranty, Maintenance and Support plan in its bid, including:

- On-going support for all software components of the solution, including:
 - o Bug fixes;
 - o Help Desk to log all fault;
 - o Distribution, documentation, and installation of patches and upgrades;
 - o Resolve all faults per the service level;
 - o Resolve equipment faults and provide advice on configuration changes and performance enhancements.
- On-site one (1) year warranty;
- On-line support that includes:
 - o Technical advice and assistance;
 - o Knowledge-base, information sharing;

- o Service Level Reporting;
- o Software configuration guides;
- o Fault status tracking.

IMP-37. The Contractor shall include on-site and off-site technical support and maintenance for the software for period of one (1) year. Two persons that will be available for the Client four (4) working hours a day each should provide the maintenance services. The maintenance services should include services that are outside (not covered) of the one (1) year warranty. These services should be related to the software configuration, fixes, small upgrades etc. and will be defined by the Client;

IMP-38. During the Warranty and Maintenance Period, Contractor shall describe the proposed staffing plan, location and operational process of its support centers to meet the following minimum service level requirements:

- Make qualified personnel available to the Client by telephone, via a domestic or toll-free line staffed during business hours, for the reporting of Non-Conformities or other problems with the system;
- During the Warranty Period, such telephone service to the Client shall be unlimited.

C.5. Hardware Requirements

The Integrated NPAA Platform should be installed on the existing infrastructure within SEA. The following equipment needs to be delivered, installed and configured on SEA infrastructure. The server needs to be connected to the existing Storage and the web application and the database should be installed on different virtual machines. The Contractor should also provide all needed licenses for the Operating System (OS) and for the Database that will be used for implementation of Integrated NPAA Platform.

1	Server – Quantity 1
1.1	Minimum 2 processor system
1.2	Installed 2 processors each with: <ul style="list-style-type: none"> ● Minimum 8 physical cores; ● Minimum 2.2 GHz basic frequency; ● Minimum 20MB L3 Cache; ● Support for minimum DDR4 2666; ● Minimum PassMark Score 24 000;
1.3	Minimum 512 GB installed memory DDR4 2666
1.4	Internal disk adapter (HBA - Host Bus Adapter) must have at least 2GB Battery Backed Write Cache (or equivalent technology) and must support RAID 1 protection level

	Minimum 200 GB SSD in RAID 1
1.5	Ethernet: minimum 4 x 1Gbps RJ-45
1.6	Optical Ethernet and iSCSI: minimum 2 x 10 Gbps SFP+ (including SFP+ modules and LC-LC cables)
1.7	Host Bus Adapter: 2 x 8 Gbps FC (including minimum 2 x 8 Gbps SFP modules)
1.8	Redundant hot-plug power supply Redundant hot-plug fans
1.9	Rack rails with cable management arm
1.10	Embedded full server management including virtual KVM console, LDAP integration, Virtual media
1.11	Included software for central management of all servers
1.12	Minimum TPM 2.0
1.13	Ability to lock down configuration and firmware, protecting the server from inadvertent or malicious changes
1.14	Included installation in existing 19" rack; Included installation, configuration and integration with the IT Infrastructure; Included all needed power and network cables, SFP or SFP+ modules.
1.15	All servers must be connected to Ethernet Networks with at least 4 x 1 Gbps each All servers must be connected to FC storage controllers with at least 8 Gbps each
1.16	Operating System must be provided for all CPUs/Cores
1.17	Warranty: 1 year

2	Hard Disk – Quantity 8
2.1	Hard Disks for the existing Storage Model: IBM Storwize V7000 Gen2 described in A.6.1
2.2	1.2TB 2.5" 10K SAS HDD including caddy, Part Number: 00AR327.