

















National report

Czech Republic

Strengthening of the capacity of the institutions from selected EU countries in the field of implementation of Regulation (EC) No 883/2004 and 987/2009 and introduction of the electronic data exchange (EESSI)

















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1. Introduction:

This document represents the national report for the Czech Republic within the framework of the project for "Strengthening the capacity of the institutions from selected EU states in the area of the implementation of Regulation no. 883/2004 (EEC) and Regulation no. 987/2009 (EEC) and the implementation of electronic data exchange in the area of social security.

The realisation of this project is based on, amongst other things, Regulation no. 883/2004 (EC) from 29th April 2004 on the coordination of social security systems and Regulation 987/2009 of the European Parliament and Council (EC) from 16th September 2009 which imposes the obligation of all EU member states to secure international electronic data exchange in the area of social security within the framework of the entire European network.

The basic goal of the project for the institutions in the Czech Republic is the use of all of the benefits arising from the international cooperation during the building of fully functioning points of access to the data of the insured individuals in the EU (so-called Access Points (AP)) which ensure the necessary interoperability with the other affected international bodies within the framework of the European architecture for the exchange of standardised electronic documents.

The electronic data exchange should gradually completely replace paper communication between the institutions of the member states. Every member state accesses the EESSI system via a so-called Access Point which consists of a national and an international part. An Access Point is understood as being any electronic contact point designated by the appropriate organ of the Czech state for one or more of the areas of social security stated in Article 3 of the basic regulation.

The affected institutions from the area of social security in the Czech Republic have been working on the connection to EESSI since 2008 when the original feasibility study was compiled. The goal of the preparation and the realisation of the feasibility studies was the creation of the conditions for the timely preparation of the technical documentation, for the objective selection of suppliers, especially suppliers of information and communication technology, for the resolution and implementation of the necessary software and the acquisition of the hardware and for securing the operation of the Access Points. The feasibility studies have been regularly updated and supplemented to include new information from the creation of the European part of EESSI. The document on the Functional and Technical Specifications for the System has been drawn up upon the basis of the latest technical information regarding EESSI and the construction of the individual AP.

The Czech Social Security Administration and the Centre for International Reimbursements, as well as the liaison bodies and competent institutions for their given areas in the Czech Republic according to the regulation are aware of the need for multinational cooperation within the framework of the preparation of EESSI and they are interested in defining and resolving the common problems in order to find the best practises. They are therefore prepared to actively participate in the realisation of the individual events within the framework of this project.

1.1 The national organizational structure description

When deciding on the number of AP and their locations within the framework of the institutions of the Czech Republic, it was necessary to proceed from the output provided by the individual ad hoc working groups established by the Administrative Committee and to verify within the framework of the individual areas/sectors/contact points whether the necessary data is available, where it is located and what its quality and accessibility is like. The Administrative Committee's decision concerning the directory which influences the scope and success of the communication between the institutions and the method of communication with the employers or the regional offices etc. was also of importance.





















The branches which will resolve the individual AP defined in Article 3 of Regulation no. 883/04 (EEC) within the framework of the Czech Republic are as follows:

- sickness benefits,
- maternity benefits and equal paternity benefits,
- invalidity, old age and survivors' pensions,
- funeral allowances and family benefits,
- unemployment benefits,
- benefits during accidents at work and occupational illnesses,
- pre-pension benefits (theses currently do not exist in the Czech Republic).

The aforementioned areas of social security are divided among three AP administered by the current contact points: the Czech Social Security Administration, the Centre for International Reimbursements and the Ministry of Labour and Social Affairs.

Each of these three AP requires a different solution. The existing systems at the MoLSA and the CSSA which must be connected to the AP solution differ both technologically and materially (the data content, functionality and integration requirements). The areas on which the AP focus are different from the point of view of the content and the connected processing algorithms, while the organisation and management structures function differently at the MoLSA and the CSSA and various sets of requirements for the solution, implementation and operation of both AP have been specified.









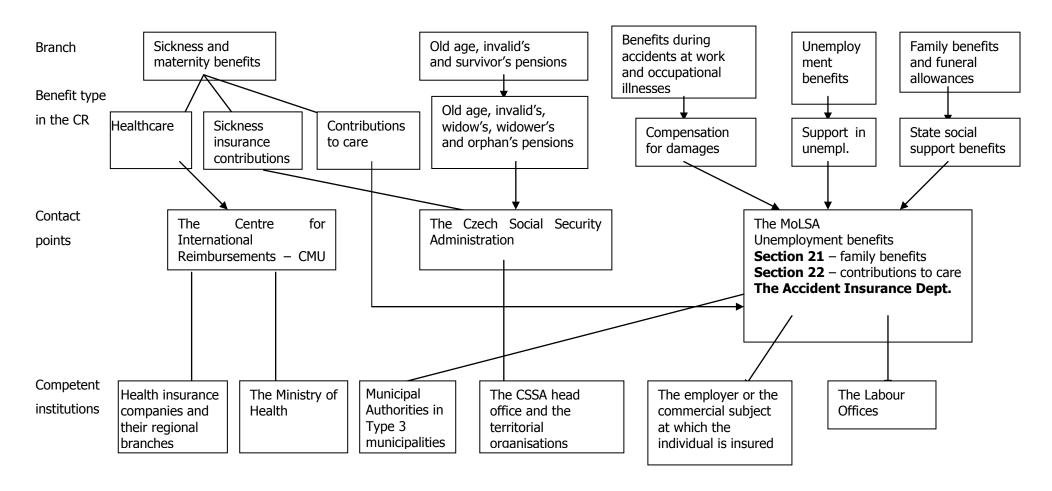








The structure of the branches and of liaison bodies in the Czech Republic and the communication between them



















1.1.1 The Centre for International Reimbursements (the CMU)

The CMU is the Czech Republic's liaison body for the area of healthcare. It represents the Czech healthcare system in relation to a total of 36 states.

It was established in 2001 upon the basis of a call for it to be established and subsequent authorisation from the Ministry of Health of the Czech Republic. The establishment of this liaison body was an essential prerequisite for the institutional implementation of the international social security treaties and subsequently also the law of the European Community. Since 1.5.2004, the CMU has performed the function of the Czech Republic's liaison body not only upon the basis of the authorisation provided by the individual international treaties, but also upon the basis of the directly binding and effective EEC Council Regulation 574/72.

The CMU is an association of legal entities (health insurance companies). The CMU is the only institution which brings together all of the Czech public health insurance companies. It resolves the horizontal questions in the system for the provision of healthcare during the implementation of the directly effective international law. The director is the statutory representative of the CMU. The CMU Council is the supreme body at the CMU. As well as the statutory representatives of the health insurance companies, representatives of the Ministry of Health, the Ministry of Labour and Social Affairs and the Ministry of Finance all contribute to the Council's activities.

The activities of the CMU involve the fulfilment of the tasks arising from the international treaties, especially:

- 1) securing the cooperation of the individual health insurance companies,
- 2) agreements with international liaison bodies, for example the negotiation and creation of the conditions for the submission of the documents and information for the payment of all healthcare material benefits and the method of realising these payments with the contact bodies abroad,
- 3) the administrative securing of the financial operations between the individual health insurance companies, the CMU and the liaison bodies abroad, including the realisation of settlements
- 4) the creation of a joint methodology for the implementation of the international treaties and the collection and distribution of the information necessary for the implementation of the international treaties by the health insurance companies and their contractual healthcare providers,
- 5) cooperation with the Ministry of Labour and Social Affairs and with the Ministry of Health on the preparation of the international law regulations and the associated Czech legal regulations
- 6) cooperation during the resolution of disputes, including cooperation with the appropriate state bodies and social security bodies,
- 7) administrative assistance and consultancy activities in relation to international and domestic institutions and insured individuals
- 8) the processing of the data analysis records and numerical data,
- 9) securing the documents for the implementation of the international treaties,
- 10) activities within the framework of the EU bodies,
- 11) the fulfilment of any other activities according to the requirements of the CMU Council, the member health insurance companies of the Czech Republic or the public administration bodies, including those associated with the subject of the CMU activities according to the previous points of this article.

The CMU also carries out the following activities:

• the information service (by means of www pages, informative material, printed material, telephone and email services),



















- advisory activities (for Czech and international health insurance companies, Czech and international insured individuals and employees, other Czech and international social security providers, healthcare institutions, etc.),
- methodological activities (the CMU prepares the methodology for Czech health insurance companies, Czech healthcare facilities and insured individuals in the area of the implementation of international law within the territory of the Czech Republic),
- the legislation applicable (the CMU and the CSSA are jointly responsible for assessing applications for exceptions to the jurisdiction of the Czech or international social security legal regulations),
- statistics (these serve the public administration bodies and the health insurance companies during the better planning of their expected earnings and expenditure associated with the Czech Republic's international obligations),
- participation in the European bodies (the statutory representative of the CMU is a member of the Technical Committee and the Accounting Committee (within the framework of DG Employment) which resolve practical matters and the consequences of the coordination of the social security systems).

1.1.2 The Ministry of Labour and Social Affairs of the Czech Republic

The Ministry of Labour and Social Affairs of the Czech Republic (the MoLSA) was established as the central public administration body of the Czech Republic as of 1st July 1990 by Czech National Council Act no. 203/1990 Coll. governing the changes in the organisation and jurisdiction of the ministries of the Czech Republic. Its jurisdiction is defined in section 9 of Act no. 2/1969 Coll. governing the establishment of the ministries and other central public administration bodies of the CSR, as amended, as follows: the MoSLA is the central public administration body for labour law relations, work safety, employment and requalification, collective bargaining, wages and other remuneration for work, pension security, sickness insurance, sickness security, social care, taking care of the working conditions for women and young persons, the legal protection of maternity, care for the family and children, care for citizens who need special assistance and for other questions of wage and social policy

1.1.3 The Czech Social Security Administration

The Czech Social Security Administration (the CSSA) is active as a public administration body in the area of pension insurance, sickness insurance and the medical assessment service. With 8.5 thousand employees, the CSSA is the largest administrative institution in the Czech Republic's public administration. The volume of this organisation's overall earnings and expenditure is more than 681 billion CZK. It administers matters for more than 7.863 million clients, of which more than 2.719 million are pensioners. The CSSA pays out more than 3.347 million pensions.

The CSSA carries out its activities in the area of social security (pension insurance and sickness insurance) and the medical assessment service. Its jurisdiction is regulated by Act no. 582/1991 Coll. governing the organisation and implementation of social security, as amended.

The CSSA fulfils the following tasks:

it decides on the amounts of pension insurance, unless the aforementioned Act states that these
decisions are to be made by other social security bodies, and secures the payment of these
amounts,



















- it decides on the obligation of any citizen to return any amount of a pension insurance benefit which has been provided wrongfully or provided at an incorrect amount, as long as it is authorised to make the decision with regard to this amount of the pension insurance benefit,
- it decides on the obligation of any organisation to refund any wrongfully paid out amount for a pension insurance benefit, provided it is authorised to make the decision with regard to this amount of pension insurance,
- it decides on the appeals in matters where the district social security administration has reached a decision at the first level,
- it decides on the removal of any harshness which would arise during the implementation of the social security, provided this has been assigned to it in individual cases,
- it collects the contributions to social security and the contributions to the state's employment policy according to the special Act,
- it appears before the courts in proceedings concerning the review of decisions relating to matters of social security,
- it fulfils the tasks during the payment of social security abroad,
- it manages and inspects the activities of the district social security administrations,
- it approves any change in the residence of a citizen who is incapacitated for work when said citizen goes abroad,
- it secures the publication of the printed matter prescribed by law.

As well as these tasks, the CSSA also inspects the fulfilment of the obligations of the subjects involved in social security, assesses the state of health and ability to work of citizens for the purposes of social security, maintains the records of citizens who are incapacitated for work and realises sickness insurance in the designated cases.

According to the EU coordinating regulations, the CSSA is the liaison body and the competent institution for contact with international institutions with regard to monetary sickness and maternity benefits, pensions and the assessment of the relevance with regard to the legal regulations.

The Czech Social Security Administration was established on 1st September 1990 upon the basis of Czech National Council Act no. 210/1990 Coll. governing the changes in the jurisdiction of the bodies of the Czech Republic in social security and the changes to Act no. 20/1966 Coll. governing the care for the health of people which was amended by Czech National Council Act no. 114/1988 Coll. governing the jurisdiction of the bodies of the Czech Republic in social security. According to the wording of Czech National Council Act no. 582/1991 Coll. governing the organisation and implementation of social security, the Czech Social Security Administration is defined as:

- the social security body which implements the performance of the social security,
- the state's organisational unit which is subject to the responsibilities and authorisations which arise from the special legal regulations or are established for the administrative authorities or the public administration bodies.

The Czech Social Security Administration is lead by a Director-General who is appointed and dismissed by the Minister of Labour and Social Affairs. The Director-General of the Czech Social Security Administration is responsible to the Minister of Labour and Social Affairs, or to any executive ministerial employee at the appropriate management level who has been authorised by the Minister, for the fulfilment of the Czech Social Security Administration's tasks.

The territorial organisational units of the Czech Social Security Administration are the district social security administrations. The district social security administrations are led by directors who are responsible to the Director-General of the Czech Social Security Administration, or to any executive employee of the Czech Social Security Administration at the appropriate management level who has been authorised by the Director, for the fulfilment of the district social security administration's tasks.





















1.2 The accepted AP resolution (relevant spectrum)

When deciding on the number of AP and their locations within the framework of the institutions of the Czech Republic, it was necessary to proceed from the output provided by the individual ad hoc working groups established by the Administrative Committee and to verify within the framework of the individual areas/sectors/liaison bodies points whether the necessary data is available, where it is located and what its quality and accessibility is like. The Administrative Committee's decision concerning the directory which influences the scope and success of the communication between the institutions and the method of communication with the employers or the regional offices etc. was also of importance.

The goal of the "Building Access Points" project is to shift to electronic communication within the framework of the coordination of social security. The uniform EESSI system has been created in the EU in order to resolve the transfer of electronic information from the area of the social security of migrating individuals between the institutions of the EU member states. The realisation of this project is based, amongst other things, on Regulation no. 883/2004 (EC) of the European Parliament and Council of 29th April 2004 governing the coordination of social security systems. Electronic data exchange should gradually completely replace paper communication between the institutions of the member states. Every member state accesses the EESSI system via a so-called Access Point which consists of a national and an international part. An Access Point is understood as being any electronic contact point designated by the appropriate organ of the Czech state for one or more of the areas of social security stated in Article 3 of the basic regulation.

The individual states communicate together via the access points (AP). Given the fact that in practise the AP will be an access and output point through which all of the electronic documentation transferred between the institutions of the individual member states will pass, the AP can be simply seen as an "electronic contact point". In practice, of course, the AP will not mean only a technical solution, because in practice many cases exist where the forms are not merely transferred to the appropriate institutions, but also have to be processed prior to transfer. EESSI presupposes the electronic receipt and sending of the necessary information using Structured Electronic Documents (hereafter simply referred to as SED) via the appropriate AP. The internal arrangement and especially the degree of automation and electronification during the creation of the SED at the internal state level falls completely within the purview of the member states.

The CSSA Access Point will resolve the following areas:

- pensions (old age, disability and survivor's pensions)
- sickness, maternity and paternity benefits in cash
- legislation applicable
- claim recovery and the crediting of benefits
- the assessment of the state of health
- the confirmation of insurance periods
- work accidents and occupational illnesses at the designated extent

(Note: the CSSA is only responsible for sickness benefits in cash; benefits in kind fall under the purview of the health insurance companies and the CMU which will establish a special AP for this purpose.)

The requirements for the solution of the CSSA AP are set out in the following list and have been categorised into sub-areas.

The functional requirements

 the realisation of the AP for the CSSA as "EESSI-enabled" in accordance with the definition of this status set out in the decision of the Administrative Commission for the social security coordination systems dated 12th June 2009.



















- The coverage of the following areas of social security by the CSSA AP:
 - pensions (old age, disability and survivor's pensions)
 - sickness, maternity and paternity benefits in cash 0
 - legislation applicable 0
 - claim recovery the crediting of benefits
 - the assessment of the state of health
 - the confirmation of insurance periods
 - work accidents and occupational illnesses at the designated extent
- the securing of the following within the framework of the CSSA Access Point:
 - the function of the electronic contact point for the coordination with the coordination node (CN),
 - the function of automatic routing based on addressing,
 - the function of intelligent routing based on sophisticated software which enables automatic inspections and routing and/or human intervention,
 - the function of communication with the other national AP
 - the integration of the AP into the CSSA operating application which provides the data for processing the SED.

Technical requirements

- Use the IPAP functions and implementation (the international part of the AP) provided via the European Commission (EC) within the framework of the reference implementation (RI) and secure the conditions for the further support and development of the implementation provided by the EC.
- When communicating, respect the SEDs defined by the Administrative Commission for the coordination of the social security systems.
- Secure the communication with the other IPAP within the framework of the sTESTA network and using the interface, protocols and technology defined in the IPAP RI.
- Enable the sending and receipt of all relevant SED for the given sector designated for the CSSA AP in the XML structure given and regularly updated with regard to the EESSI coordination node (CN).
- The SED ID will be the fundamental search criterion.

Other requirements

- Performance
 - a. The required through-flow of the reports is 6,000,000 per year in both directions.
- Accessibility
 - b. Realise a highly accessible solution whose server part will function in two independent and geographically separated locations. The client part must be accessible to all of the Contracting Entity's authorised employees, both from the Contracting Entity's internal network and for all secure remote access from the internet.
 - i. The user accessibility of the application is required during working hours on work days
 - ii. The communication interface for the cooperating systems must be accessible 7 days a week, 24 hours a day
 - iii. The acceptable accessibility of the system as a whole is higher than 96%
 - iv. Planned unavailability of 4 hours/week
- Security
 - a. The system works with information about individuals and payments and must therefore secure a high level of information security during the establishment, transfer, storage, use and liquidation of the information in line with the CSSA security policy.
 - b. It is necessary to use a high level of security with the use of the certificates for personal chip cards for the access of CSSA users.



















- c. It is necessary to establish and save the records of events (logs) concerning the key operations and operations involving sensitive data.
- Incorporation into the existing operating environment
 - a. The solution must be connected to the Contracting Entity's communication infrastructure in a suitable manner.
 - b. All of the parts of the solution must be connected to the Contracting Entity's existing search infrastructure.
- Disaster recovery (DR)
 - a. The system documentation must include a disaster recovery plan (DRP).
 - b. The viability of the DRP must be verified within the framework of the testing.
- Extensibility and scalability
 - a. The solution must enable the gradual introduction of the SED, as well as increased numbers of SED, changes to their structure and changes to the SED processing method.
- The language environment
 - a. The language within the user environment must be Czech. The application must be prepared for the future addition of another language.

According to the technical definition, the Access Point is a unit which carries out the following functions:

- the function of any electronic contact point;
- the function of automated routing upon the basis of addressing;
- the function of intelligent routing based on sophisticated software which enables automatic inspections and routing and/or human intervention.

The exchange of data between the member states will take place via the secured sTESTA network administered by the EC. The sTESTA network is a secured connection between the EU member states. It enables the points which are connected to it to transfer the defined information. This network enables the transfer of information with security at the level of interbank communication security which conforms to the goal of EESSI with regard to the fact that this involves sensitive information from the area of social security, but not information which has been classified from the point of view of confidentiality.

The future functional operation of the AP has several fundamental characteristics. The AP operation will be gradually fully automated, but with the option of human intervention to ensure that the SED has been filled in correctly and sent to the correct recipient or that any errors of another SED sender have been corrected. The investment costs can be resolved within the framework of a query from the IOP: the future operating costs will be defrayed by the institution operating the specific AP. At present, the charging of a fee for the operations during the sending or receipt of the individual SED is not under consideration.

1.3 Grounds for the accepted resolution

As has already been mentioned in Chapter 1.2, it has been necessary to proceed from the output provided by the individual ad hoc working groups established by the Administrative Committee and to verify within the framework of the individual areas/sectors/contact points whether the necessary data is available, where it is located and what its quality and accessibility is like when deciding on the number of the AP and their locations within the framework of the institutions of the Czech Republic. The Administrative Commission decision concerning the directory which influences the scope and success of the



















communication between the institutions and the method of communication with the employers or the regional offices etc. was also of importance.

When choosing the structure of the 3 AP at the CSSA, the following factors were taken into account:

- the Ministry of Internal Affairs of the Czech Republic mediates the connection of the Czech Republic to sTESTA
- the structure of the AP copies the structure of the contact points
- the option of opening AP for other appropriate institutions
- the communication between the AP at a national level

The main output from the Project involves the construction of fully functional points of access to the data of the individuals insured in the EU which will contain all of the necessary hardware and software with a functional connection both to the international part of the system and to the IS of the national part of the AP, including the interconnection of the appropriate individual institutions. The constructed AP must be fully compatible with the EESSI system and with further AP (for other areas of data exchange) within the framework of securing the Czech part of this system.

The key limitations of the AP defined by the European Commission were also taken into account

- during the exchange of a SED between the CSSA AP and the other AP at the national level, the SED processing begins at the AP at which it was accepted from the international network and this AP will be responsible for this process,
- the structure of the SED data sent to the international network must meet the requirements designated at the international level,
- the sensitive data transferred between the international network and the RI and between the RI and the NPAP will be encrypted and decrypted using the resources provided by the RI,
- the international part of the entire solution, i.e. including the RI (the CSSA IPAP), will be
 connected to a closed network on the reserved sTESTA infrastructure. The receipt of data from the
 other AP and the sending of data to the other AP at the national level, i.e. between the NPAP and
 the MoLSA and the CMU will take place in a secure manner, ideally via the secured sTESTA
 network, if this is enabled by the institution which is responsible for the administration and
 operation of sTESTA,
- the backing up and archiving of the detailed contents of the SED, including their annexes, will only be realised up to the moment of the sending of the SED from the CSSA AP to the national, internal or international network,
- the archiving of metadata, code lists and other data not containing personal or sensitive data will be realised in full with regard to the volume of the archived data.

1.4 The risks identified in the course of accepting the national resolution decision

During the definition of the AP in the Czech Republic, it was necessary to carry out the parallel resolution of the financing (the question of resources), the scope and the functionality of the European delivery and the functionality of the system in general (especially the unclear matters concerning the sectors), the option of the gradual connection of further national AP and the legislative and organisational solution in the Czech Republic. From this point of view, the question of the placement of benefits during work accidents and occupational illnesses remained long open. The Act which regulates this area has deferred effectiveness until 1.1.2013. At present, the agenda is fragmented among several state and private subjects. With regard to the expected solution, i.e. the commissioning of the CSSA to implement the aforementioned Act, it has been planned that the AP for this area will also be the CSSA AP.





















1.5 Financing (possible for particular AP)

The CSSA AP and the MoLSA AP will be financed from the European Union's Structural Funds with Czech co-financing. The project will be financed upon the basis of project plan no. 154 which is part of the so-called Smart Administration list of projects (approved by resolution no. 757/2007 of the government of the Czech Republic), "Building Access Points – points of access for the Czech Republic to the European architecture for the exchange of standardised reports in the area of the social security of migrating individuals" (hereafter simply referred to as "Building Access Points" or "AP").

The Ministry of Labour and Social Affairs of the Czech Republic is responsible for the overall coordination, preparation and realisation of the projects for the MoLSA AP and the CSSA AP.

Given the fact that the project resolves the building of two AP, whereby one of these will be operated by the CSSA, the ownership rights must duly resolved in this regard. All of the tangible and intangible assets will be acquired within the framework of a tender for the implementer of the project's technical solution. All of the procedures for awarding the tenders will be in accordance with Act no. 137/2006 Coll. The property will not be written-off throughout the period of use and it will remain the contracting entity's property.

From the point of view of ownership, both Access Points will be the property of the MoLSA and the regulation of the ownership relations with regard to the CSSA will be resolved as follows.

The MoLSA will be entitled to utilise its property upon the basis of Act no. 219/2000 Coll. governing the property of the Czech Republic and the representation thereof in legal relations and Regulation no. 62/2001 Coll. governing the economic activities of the state's organisational units and state organisations with the state's property. Section 19 of Act no. 219/2000 Coll. enables a change in the competency to utilise the state's property. The MoLSA may transfer its property to the CSSA without remuneration in accordance with section 16 of Regulation no. 62/2001 Coll. governing the economic activities of the state's organisational units and state organisations with the state's property.

The maintenance of the property, the records of the property and the handling of the property will be realised in accordance with all of the internal regulations of the MoLSA and the CSSA.

The CMU AP will be built using the organisation's own funds – or those of the health insurance companies.

1.6 The project administration (possible for particular AP)

1.6.1 National management

The proposal for the national solution was accepted at the level of the inter-resort Working Sub-Group for the Coordination of Social Security and a decision was subsequently reached by the management of the Ministry of Labour and Social Affairs of the Czech Republic (the MoLSA AP and the CSSA AP) and the Ministry of Health of the Czech Republic (the CMU AP). In order to secure the management and coordination within the entire Czech Republic, an inter-resort committee for electronification has been established within the framework of this Coordination Working Group: the members of this committee include the representatives of the Czech liaison bodies and the institutions responsible for the European agenda (from the areas of administration and IT), the representatives of the Czech Republic in the Technical Commission and the other bodies/groups which function within the framework of the Administrative Commission and the representatives of the appropriate authorities.

The representatives in the aforementioned bodies regularly consult the individual members of the Working group about the given area and post important information at the MSE web address and thus secure the coordination of the national solution.



















The MSE meets in approximately three-monthly cycles or ad hoc. The calling and chairing of the meetings and the drawing up of the minutes are based on a CMUculating principle between the CSSA, the CMU and the MoLSA.

1.6.2 Project management for the individual AP

The CSSA AP:

The CSSA solution contains the following projects:

- Hardware and software within the framework of the project financed from the EU structural funds (the main part, the part of the project managed by the MoLSA) the management is secured by the MoLSA project office and the project management
- The supplementary projects (the test project in the preliminary period, the "International Insurance Relations" project for the appropriate legislation, the project for the pensions software, the project in the area of the recovery of Czech and international receivables, etc.) the management is secured by the CSSA project office and the project management

The MoLSA AP:

 Hardware and software within the framework financed from the EU structural funds (the main part, part of the joint project with the CSSA – see above) – the management is secured by the MoLSA project office and the project management

The CMU AP:

The so-called Committee for the Electronification of Documents and Data (the CEDD) was established within the framework of the CMU in 2007. The committee fulfils the function of an advisory body for the CMU Director in matters of electronification. As well as the representatives of the CMU who chair the CEDD, the members of the CEDD also include representatives of the individual health insurance companies. The CEDD has discussed, amongst other things, the tender documentation for the public tender for the creation of the CMU AP.

1.6.3 Management in relation to EESSI (note CASSTM 392/09)

1.6.4 The inter-resort group within the framework of the Czech Republic (the MSE)

An Inter-Resort Committee for Electronification has been established in the Czech Republic. Its members are the CSSA, the CMU, the MoLSA and the Ministry of Health. At present, it is expected that there will be 3 access points in the Czech Republic and that they will be used for the areas of: 1) sickness and maternity benefits (the CMU), 2) pensions and the relevance to the legal regulations (the CSSA) and 3) unemployment and family benefits (the MoLSA).

With regard to the given maximum number of AP for a country, an agreement has been reached with the Czech Republic to have 3 AP (essentially copying the liaison bodies) and to divide them as follows:

- the CSSA (pensions)
- the MoLSA (state social support benefits and unemployment benefits)
- the CMU (sickness and maternity benefits)

It has been agreed that the CSSA will use the CMU access point for the area of sickness and maternity benefits in cash. Within the framework of the Czech Republic, it is also necessary to resolve the future





















practises for transferring data in disputed areas such as benefits for long-term care or benefits during work accidents.

1.6.5 The CSSA working group for the preparation of electronic data exchange (PSE)

The Working Group for Electronification at the CSSA (hereafter simply referred to as the PSE) was established in 2007 upon the basis of a decision of the CSSA management meeting and it is managed by the Manager of the CSSA Concept and System Integration Department who is also the Czech Republic's representative in the Technical Commission. Her deputy is the CSSA expert in the Administrative Commission, the Head of the CSSA International Department.

The PSE has drawn up material, the so-called Work Timetable, which is based on the Timetable for building the electronic system for the exchange of information in the area of social security (EESSI). The Timetable and the target solution have both been approved by the management of the CSSA.

The members of the working group are actively involved in the preparation of the CSSA for the implementation of Regulation no. 883/2004 (EEC) in the area of international electronic data exchange. They hold meetings and keep the minutes of these meetings. A web page has been created in the CSSA environment for the purposes of the PSE and this includes all of the necessary documentation for the members of the PSE. This involves the PK\36 PSE directory.

The PSE has drawn up material, the so-called Work Timetable, which is based on the timetable for building the electronic system for the exchange of information in the area of social security (EESSI) and it has requested the other Czech institutions to send their timetables so that all of the institutions may proceed in accord as much as possible. The Timetable is regularly updated.

1.6.6 The roles in EESSI

In accordance with note CASSTM 392/09, it is necessary for each member state to appoint a national coordinator and his or her deputy for the EESSI project and so-called AP managers.

The MSE has approved the appointment of the following persons on behalf of the Czech Republic:

- national coordinator: Ms. Radka Poláková
- deputy national coordinator: Mr. Václav Janalík, the CMU
 - AP managers:

APCZ01 is the CMUR AP - Mr. Václav Janalík
APCZ02 is the MoLSA AP - Ms. Ivana Chalupová
APCZ03 is the CSSA AP - Mr. Ondřej Církva

EESSI SPOC – at the national level, the national contact point, **Ms. Radka Poláková**.

AP Manager - the roles at each national AP:

The CMU AP Mr. Václav Janalík
 The MoLSA AP Ms. Ivana Chalupová
 The CSSA AP Mr. Ondřej Církva

AP Administrator – national business role, MD updates, participates at the training

on behalf of the CMU: Mr. Václav Janalík
on behalf of the MoLSA: Ms. Ivana Chalupová
on behalf of the CSSA: Ms. Jana Rychtářová











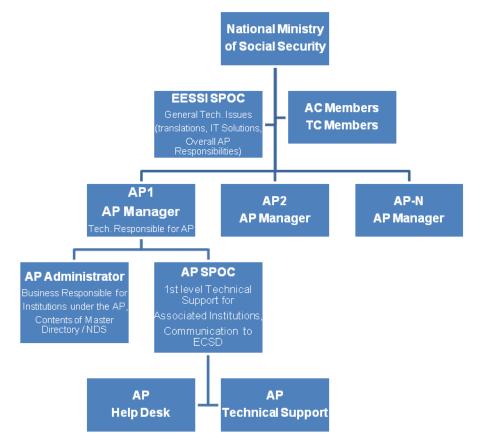












1.6.7 Within the framework of the CSSA AP project

The project management has been assigned to the Project Leader (the project manager) who is an employee of the contracting entity. For the purposes of the Project, the new position of the project manager has been created as a part-time job. The task of the Project Manager is to coordinate the activities of the Project and to manage the project team. The Project Leader has a designated representative who carries out the functions of the Project Leader whenever the Project Leader is absent.

Two management levels have been proposed within the framework of the structure of the project management:

- The Steering Committee for the realisation of the Project;
- The Project Leader;

A **project team** has been defined (created) within the framework of the project management structure. This constitutes an executive element of the Project, but not the management level. The wage costs for the project team constitute eligible costs of the project and are part of the project budget.

All of the aforementioned structures have been created by employees of the MoLSA and the CSSA.

All of the activities performed in Project no. 154 have been secured by the team members who are responsible for the given area and have clearly defined competencies within the framework of the team's organisational structure. The individual responsible for each specific area or task will operatively initiate the actions of the further team members according to their involvement. The Project leader will provide information on the results, as will the other team members at the regular meetings.



















The project leader is authorised to call meetings of the project team. The aim of the meetings is the provision of basic information about the development of the project, the designation of the goals and tasks for the following period and the inspection thereof or the analysis and proposal of the solution for any problems which have arisen during the implementation of the project.

Any arising non-standard and unexpected events will be resolved by the member of the team responsible for the given area, who will immediately inform the project leader about the situation and, in cooperation with the other members of the project team, will draw up a solution to the arisen situation which will be in accordance with the rules of the IOP.

1.7 The national resolution time planning – FI, BG, CZ, HU

Number	Phase description (the steps carried out within the framework of the phase)	Commencement of the phase (date)	Completion of the phase (date)
1	Preparatory phase	1.12.2009	30.9.2010
2	Implementation phase (implementation of the project's technical solution)	1.10.2010	30.5.2012
2.1	Implementation – the MoLSA AP	1.10.2010	31.5.2012
2.2.1	Elaboration – the Access Point system project	1.10.2010	30.11.2010
2.2.2	Elaboration – the Access Point technical implementation project	1.12.2010	31.3.2011
2.2.3	The implementation of the Access Point's technical solution	1.3.2011	30.11.2011
2.2.4	The implementation and pilot operation of the MoLSA Access Point	1.10.2011	31.5.2012
2.2.5	Project monitoring – the MoLSA AP	1.2.2010 1.2.2010	30.6.2012
2.2.6	2.2.0 Project management and Molesa Ai		30.6.2012
2.2	Implementation – the CSSA AP		
2.1.1	Securing the technical infrastructure for the AP	1.10.2010	31.1.2011
2.1.2	The analysis and proposal of the solution for the application software and communication	1.11.2010	31.5.2011
2.1.3	The implementation of the application software for the AP	1.2.2011	30.9.2011
2.1.4	The implementation of the application software – the CSSA internal part	1.4.2011	31.1.2012
2.1.5	The implementation of the AP application software and the CSSA internal part	1.8.2011	28.2.2012
2.1.6	The trial operations of the individual AP	1.11.2011	28.2.2012
2.1.7	The transition to routine AP operations within the framework of EESSI	1.1.2012	30.4.2012
2.1.8	Project monitoring – the CSSA part	1.2.2010	30.6.2012

















2.1.9	Project management – the CSSA part			1.2.2010	30.6.2012
3	The operations operations)	phase	(routine	1.7.2012	1.7.2017

1.7.1 The first phase of the project - project preparation

The first phase of the project contains the following expected activities:

- The preparation of the feasibility study,
 - the project team's proposal, the designation of the project leader,
 - the definition of the areas and the tasks arising from them which the AP will process and
 - the basic proposal of the IT architecture (with regard to the fulfilment of the functional requirements, including the requirements for security, reliability and efficiency),
 - the basic proposal of the workflow,
 - the proposal of the personnel to secure operations,
 - the basic ICT Security Specifications and the solution procedure,
 - the proposal of the necessary hardware and software,
 - the incorporation of the feasibility study in the specifications for the public tender, the project realisation plan, the agreement on cooperation with the partners.
 - the evaluation of the EU part and its projection into the national solution for the AP
 - The evaluation of the EU part and its projection into the national solution for the AP
- The compilation of the application for a grant to IOP
- The organisation of the public tender for the supplier
 - the preparation of the tender documentation, 0
 - the collection and evaluation of the bids, 0
 - 0 the selection of the supplier(s), the signing of the contract.
- project management
 - the creation of the personnel, systematic, contractual and administrative conditions for the 0 implementation of the project,
 - the compilation of the project's implementation team, O
 - the management, administration and publicity of the project. 0

1.7.2 The second phase of the project - the implementation of the project's technical solution

The second phase of the project contains the following expected activities:

The MoLSA AP:

- Elaboration the Access Point's system project
 - The review of the key information on the status and development of EESSI and the MoLSA 0 (the basic architecture, the technical and procedural view),
 - the creation of the system project for the management of the other steps. 0
- Elaboration the Access Point's technical implementation project
 - the technical proposal of the solution for the MoLSA AP (IPAP, NPAP, the communication 0 processes, integration with the environs),
 - the detailed elaboration of the integration with the internal systems and the technical 0 environment of the MoLSA,



















- the plan for the regular and acceptance tests, O
- the creation of the technical implementation project, 0
- the project for the connection of the MoLSA network and sTESTA at the necessary level of 0 security, penetrability and reliability and the proposal for the modifications in the network and system environment of the MoLSA.
- The implementation of the Access Point's technical solution
 - the IPAP configuration, O
 - the development of NPAP, O
 - the development of the communication processes for processing the SED, 0
 - the development of the communication adapters for the cooperating systems (internal and 0 external),
 - the launch of the testing environment's communication and system infrastructure, 0
 - the implementation and verification of the AP in the testing environment, 0
 - the verification of the connection to the ancillary systems (supervision, back-ups, etc.), 0
 - the processing and submission of the documentation (user, operating documentation). 0
- The implementation and pilot operation of the MoLSA Access Point
 - the launch of the communication and system infrastructure of the environment for routine 0 operations,
 - testing in pilot operations, 0
 - the processing of the necessary modification ascertained during the pilot operations, 0
 - updating the documentation, O
 - the connection to the ancillary systems (supervision, back-ups, etc.), 0
 - launch into routine operations, 0
 - the connection to the security management system and the ICT Risk Administration and 0 the MoLSA data centres and the connections to the secured MoLSA infrastructure.
- Project monitoring the MoLSA AP
 - 0 the monitoring of the performance indicators, the evaluation of the functioning of the system's technical solution and its effectiveness, the administration of the system, the final evaluation of the project.
 - the monitoring reports, the final report, settlement. 0
- Project management the MoLSA AP
 - the creation of the personnel, systemic, contractual and administrative conditions for the 0 implementation of the project,
 - setting up the project's implementation team, O
 - 0 the management, administration and publicity of the project.

The CSSA AP:

- Securing the technical infrastructure for the AP
 - the implementation of the technological infrastructure of the individual AP the purchase 0 of the hardware and technical components for the needs of the testing and operating configuration (fixed tangible assets, low value fixed tangible assets),
 - the connection to sTESTA. 0
- The analysis and proposal of the solution for the application software and the communication
 - the proposal for the creation of the international parts of the AP (IPAP) according to the O EESSI rules,
 - the proposal for the creation of the national parts of the AP (NPAP), 0
 - 0 the proposal for the incorporation of the AP into the appropriate existing IS,
 - the proposal for the procedural model and the information and data flows, 0
 - the proposal for the application for the receipt, sending and administration of the SED, 0



















- The implementation of the AP application software
 - o the international part of the AP (configuration, installation)
 - o the national part of the AP, i.e. the core system, connectors, workflow, databases and the LDAP and the CSSA WEBIC NPAP
- The implementation of the application software the CSSA internal part
 - o the application part
 - o DMS and the file service (including archiving)
 - o Webic the internal part
 - o Workflow
- The implementation of the application software for the AP and the CSSA internal part
 - o the installation of the application software for the national part of the AP, the implementation of the workflow,
 - o testing the AP and the applications in the CSSA internal part,
 - o testing the communication between the individual AP,
 - o the documentation of the technological software and hardware for the AP solution,
- The trial operations of the individual AP
 - o the basic training of the system administrators,
 - o the basic training of the system users,
 - o the pilot operation of the systems and the setup for routine operations
- The transition to the routine operations of the AP within the framework of EESSI
 - o testing the complex systems at the national level and within the framework of EESSI,
 - o modifications to the application software, changes in the setup, the resolution of problems with the other EU states,
 - o modifications to the software and the documentation, agreements on securing operations.
- Project monitoring the CSSA AP part
 - o monitoring the fulfilment of the indicators, the evaluation of the functioning of the technical solution and its effectiveness, the administration of the system, the final evaluation of the project.
 - o the monitoring reports, the final report, settlement.
- Project management the CSSA AP part
 - o the creation of the personnel, systemic, contractual and administrative conditions for the realisation of the project,
 - o the compilation of the project's realisation team,
 - o the management, administration and publicity of the project,

1.7.3 The third phase of the project - the operational phase

• the routine operations of the AP the regular operations of the system, support for the operation of the system, reinvestment















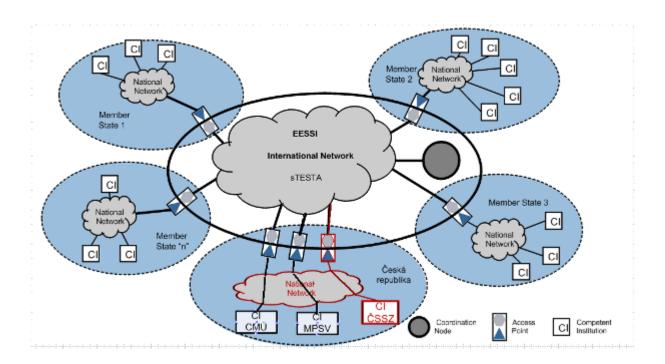






2. The National Architecture:

2.1 The AP map



2.2 The architecture of particular AP (graphics with descriptions)

2.2.1 The MoLSA AP

The architecture of the MoLSA AP is fully based on the architecture of the RI and the recommendations set out by the working group of the EESSI project as the framework for the creation of the EESSI network the IDA Architecture Guidelines a European Interoperability Framework.

The initial component composition of the AP is set out in figure 5.3-6. The outer element of the MSLA AP is IPAP. IPAP secures the following functions:

- the verification of the structure of the reports,
- the verification of the signatures,
- the encryption and decryption of the reports,
- · the fragmentation and defragmentation of reports,
- operation logging,
- · implicit routing,
- the implicit conversion of reports (if they are in the XML format),



















- the basic adaptation of the connected applications (if they communicate with the JMS, WS, FTP and JDBC protocols),
- the application interface for WebIC access

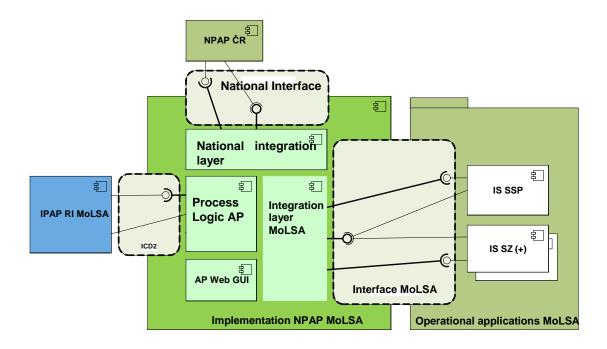
The implementation of IPAP will be assumed from the EC as part of the RI and configured and adapted to the environment of the MoLSA. During the launch, emphasis will be placed on fulfilling the conditions of the further support and development of the RI from the EC. The specifications of IPAP, as well as the specific ICD1 interface for communication with the CN (not shown) are described in the EESSI documentation and will therefore not be specially covered here.

IPAP is connected to NPAP by means of the ICD2 interface. The MoLSA NPAP will be implemented to order and it will consist of the following key components:

- the AP process logic,
- the national integration layer,
- the MoLSA integration layer,
- the AP web GUI.

The MoLSA NPAP will be implemented using the technology used in the RI and any other technology which has been suitably selected so that it conforms to the needs and standards of the MoLSA.

The component composition of the MoLSA AP



The AP process logic

The process logic is the core of the NPAP and it contains all of the functions which are necessary for the operation of the national part of the AP which will not be able to be taken from the RI. It will secure all of the specific national operations of the AP, including the possible coordination of the cooperation with the other national AP via the National Integration Layer. Both integration layers will be secured by the AP Procedural Logistics Department from the specifics of the implementation of the other national AP (and the applications connected to them) and the MoLSA operational applications.





















The National Integration Layer

The National Integration Layer logically separates the MoLSA AP from the other national AP. The integration layer implements the function of the National Interface which connects the MoLSA AP with the other AP in the Czech Republic. The interface is used for the communication of the necessary information, if arrange the national AP is not able to compile the reply to a request for information received from the CN itself (only from the data of the operating applications connected to it) and it must therefore request the cooperation of a different CI via another AP. The national interface will be designed in cooperation with the suppliers of the other national AP (the CSSA, the CMU) so that the dependency of the implementations of the individual AP is minimised.

The selection of the protocols for the definition of the MoLSA Interface has been preliminarily designated as follows:

- JMS for the exchange of events (notifications of requirements, changes),
- RMI and/or WS (SOAP 1.2 and WS-MTOM) for the exchange of the data at the application layer.

The MoLSA integration layer

The MoLSA integration layer separates the AP and the MoLSA operation applications and implements (by means of adapters) the function of the MoLSA Interface which enables the connection of the AP to the MoLSA operation applications. The MoLSA Interface will be defined within the framework of the realisation of the project in cooperation with the supplier of the applications so that the mutual dependency of the implementation of the AP and applications is minimised.

The selection of the protocols for the definition of the MoLSA Interface has been preliminarily designated as follows:

- JMS for the exchange of events (notifications of requirements, changes),
- RMI and/or WS (SOAP 1.2 and WS-MTOM) for the exchange of the data at the application layer
- UDDI and HTTP for the exchange of information about the end points of the services and their availability.

The GUI AP web

The NPAP will include the web user interface enabling the work of administrators and the officials. The interface will make the maximum possible use of the implementation of the WebIC from the RI and will be supplemented and adapted to include any other necessary functions specific for the MoLSA so that the users can work on their tasks within the framework of the EESSI system without any problems. The web interface will use the Application Interface for WebIC and the process logic interface as its central-application layer. The proposal for the interface will be prepared within the framework of the realisation of the project on the basis of the current state of the RI and the requirements given by the MoLSA.

Security management

For the purposes of the security management, it is possible to separate the possible overall solution into several security domains:

the international domain – contains the IT infrastructure operated by the European Commission, i.e. the European Commission's network (sNET), the services of the European Commission's telecommunications centre (EESSI directory services, the connection to sTESTA and the security facilities such as firewalls and so on) and the services of the European Commission's data centre (this especially contains the EESSI CN etc.). From the logical point of view of the security defined according to EESSI, the international part of the AP, the so-called IPAP, falls under the international domain.



















- the sTESTA domain secures the exchange of data between the sTESTA members managed using our own security policy. All of the connections to the further European domains are encrypted.
- the national domain contains the MOLSA AP, i.e. the implementation, routine operations, overall management and security management of the AP, including the connection to the national networks, the connection to the national systems and the interconnection of the national network with the sTESTA domain.

The MoLSA AP predominantly falls under the national domain and communicates with the international domain (CN) from the point of view of security and uses the sTESTA domain services.

The security system for the AP at the MoLSA must be implemented as a whole into all phases of the information system's life cycle. This approach specifically means respecting the current security policy of the MoLSA, the rules for the secure implementation and operation of the IS/IT and the connection of the resulting AP system to the processes for the regular management and handling of risks. The following measures are necessary in order to achieve the thus designated goals:

- the realisation project will be connected to the organisation's security policy and will secure the conditions for the regular managing of both the information and the technical risks in the realisation and operation phases.
- exceptional attention will be paid to all the layers of the information system, especially the transfer routes, the configuration of the technological infrastructure, the data repositories and the other components of the solution with significant vulnerability as early as in the elaboration phase.
- the proposal and realisation of the MoLSA AP will respect the security policy defined in the "EESSI
 Security Policy" document which is part of the description of the reference implementation of
 EESSI.
- risk analyses of the assets, threats, risks and coping methods associated with the newly introduced system will be realised within the framework of the launch of the AP system into regular operations. This analysis will be realised using the already existing risk management tools and procedures according to the ISO 27 001 standard.

The goal of the aforementioned steps is the manage the security of the newly implemented system on the same principles which are sued for the current information assets of the MoLSA.

A specific area of security involves the protection of personal data. The MoLSA AP will work with personal data. For this reason, a large emphasis will be placed on information security which concerns the unauthorised handling of personal information upon its creation, transfer, storage, use and liquidation. At the same time, it is necessary to ensure the accessibility, confidentiality and integrity of the data in all of the phases of data processing within the framework of the MOLSA AP.

The following components will be used when protecting the information:

- a system of managed access to the AP (authentication and authorisation) using the PKI solution and chip cards for the users,
- the use of secure encrypted communication protocols,
- the securing of the information services against outages,
- systematic data back-ups,
- the placement of the servers in the security zones of the MoLSA data centre,
- an advanced AP recovery system after an outage according to the prepared recovery plans (DRP),
- the use of high quality and tested components for the AP software and hardware, including the provisions of servicing,
- the preservation of logs of the access to the AP and the work with sensitive information.

The entire AP system will be designed in such a way so that it conforms to the requirements for public administration information systems (the standard pertaining to the matters of the information system's life cycle, the requirements for information system security), the Personal Data Protection Act and any other relevant legal regulations.

















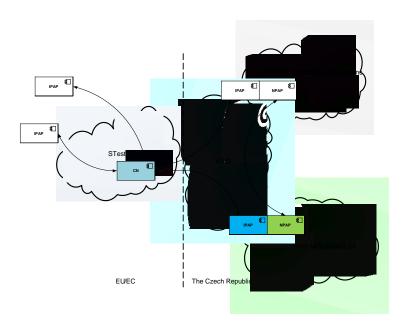




2.2.1.1 The technical infrastructure

The MoLSA AP makes significant use of network communication and its functionality is also highly dependent upon it. For the most part, the necessary network infrastructure has already been installed. The realisation phase of the project will especially include the verification of the necessary characteristics and the ascertainment of any eventual differences. The figure depicts the global topology for the connection of the MoLSA AP to the EESSI structure.

The EESSI global topology



The AP serves as a connection point to the CN which sends the reports it has received from the AP of other member states to the AP or receives them from it. This communication occurs exclusively via the secured sTESTA European network. If necessary, the national AP communicate together via KIVS.

The specific target operating environment of the MoLSA AP has three data centres (DC) available in various locations, in which it is possible to place components of the AP. Every DC is equipped with a security configuration of separated network zones for the organisation of data, application layers and zones in twos for the view layer of the systems. The first view layer serves for external use, while the second is for internal use. The figure depicts the diagram of the network structure of two selected MoLSA DC.

2.2.2 THE CSSA AP

The CSSA secures the payment of the sickness benefits, maternity benefit in cash, pregnancy, and maternity indemnity and family member care benefit for practically the entire working population of the Czech Republic.

According to the coordinating regulations of the EU, the CSSA is the liaison body and competent institution for contact with international institutions with regard to sickness and maternity benefits in cash, pensions and legislation applicable. The CSSA also includes the medical assessment service which assesses the state of health and capacity to work of citizens for the purposes of sickness and pension insurance.





















2.2.2.1 The basic requirements for the CSSA AP

The CSSA AP will be located outside the CSSA network which is a necessary condition for ensuring that the CSSA AP can also be used in future by other competent organisations as their AP.

The functional requirements have been grouped into the following areas – logistical modules:

- The receipt of SED from the EU to the Czech Republic,
- Sending SED from the Czech Republic to the EU,
- National communication between AP,
- On-line communication,
- The administration of code lists and parameters,
- Workflow,
- Data archiving.

2.2.2.2 The prerequisites of the CSSA AP

The CSSA AP is based on the following prerequisites:

- The AP Reference Implementation will be used for the construction of the CSSA AP
- The proposal for the technical solution will be based on the current state of information on the development of EESSI which may be further elaborated or corrected
- The CSSA AP will be created in such a way so that it may also serve in future for the connection of other competent CI institutions
- The national parts of the AP (NPAP) will be created in such a way so that it is possible to transfer not only SED, but also other national structured forms to other CI in the Czech Republic
- The CSSA AP will be resistant to outages and easily expandable

The Reference Implementation (RI) will be used as the basis for the construction of the AP. Given, however, that the AP must also enable the connection of other CI, the functionalities contained herein will not depend upon the CSSA, but will apply generally for the Czech Republic.

All of the EESSI processes which are specific for the CSSA will be processed in the area of the entry to the CSSA where a systemic solution for the receipt of messages and their handling and preparation for processing in the CSSA applications has been prepared. The informal validation of the SED, the filling in of the SED, the inspection of the data in the SED, the archiving, etc. will take place there.

As well as all of the functions required for incorporation into the EESSI structure, the CSSA NPAP will also enable the exchange of information with other CI in the Czech Republic.

The CSSA AP is an integrated solution which consists of subsystems securing the functionality of the information exchange (the transfer of reports and replies to them) at an international level (IPAP – the International Part of Access Point) and a national level (NPAP - the National Part of Access Point). The functionality for the exchange of reports at an international level is secured by the Reference Implementation (the RI) which the supplier creates at the level of EESSI. The RI will be supplied as the complete software for the AP which will need to be installed and customised according to the specific conditions of the CSSA AP. The RI will support the basic processes for the exchange of reports between the CSSA AP and foreign institutions. From the point of view of the RI supplier, the NPAP subsystem is an





















optional part of the specific national Access Point and the need for the NPAP depends on the decision of the specific Access Point.

2.2.2.3 The properties of the CSSA AP

The system for the connection of the CSSA to the EESSI structure will be fully compatible with EESSI and its resources will be used correctly and securely. To this end, the system will have the following properties:

- The system will fulfil the requirements of EESSI
- The system will fulfil the requirements of the CSSA
- The system will be robust and expandable
- The system will be able to be upgraded according to the requirements of EESSI
- The system will enable the connection of other CI
- The system will be accessible according to the required SLA
- The system will have the corresponding response times
- The system will communicate with its environs and will exchange information with them
- The system will be adequately secured
- The system will provide adequate inspection of the functions and communication
- The system will provide logging, monitoring and statistics
- The administration of the code lists and the workflow
- Data archiving
- The system will provide the following services
 - the asynchronous processing of the SED belonging to the CSSA
 - o the synchronous processing of the SED belonging to the CSSA
 - SED generation according to the samples
 - o the sending and receipt of SED
 - o the provision of the relevant required information to EESSI subjects
 - o the provision of the relevant required information to other CI in the Czech Republic

The specification of the requirements for the RI

The following requirements for the technical and technological environment for the RI arise from the supplied EESSI documents for the supplier of the RI:

- Redhat Enterprise Linux 5.2 64-bit,
- Sun Java 5/6,
- JBoss Application Server 5.1,
- JBoss Enterprise Service Bus 4.6,
- PostgreSQL database for Linux 8.3,
- Open LDAP Directory Services 2.3.

If the aforementioned specifications for the RI operations are adhered to, the RI supplier will guarantee the functionality and the supplier's support for the RI solution both during its implementation and during any further development of the solution in the future.

2.2.2.4 The architecture for the pilot and full operations of the CSSA AP

The architecture of the CSSA AP is based on the following prerequisites:

- The AP must be securely separated from the other parts of the sTESTA network.
- The AP must ensure secure communication with the other Czech AP and with any other organisations using the CSSA AP.
- The AP will ensure the WEBIC operations.
- The AP will ensure a secure connector to the CSSA.



















• No CSSA logic will be implemented at the level of the CSSA AP – that will be implemented at the CSSA Application Layer.

The CSSA AP will secure the following services:

- the exchange of reports at an international level
- national communication between the other Czech AP
- WEBIC
- the interface for the CSSA
- prospectively the interface for other institutions using the same AP

The individual EESSI processes concerning the CSSA (including report queuing) will be implemented in the CSSA Application layer. The following will occur to the individual SED according to their identification:

- they will either be forwarded for processing to DMS
- or they will forwarded to the VPO application via its workflow and will be able to be processed by other agendas (NPD, NEM, POJ, VYP and so on).

The following global requirements have been identified for the functions of the CSSA AP:

- 1. securing the transfer of reports and mass files between the CSSA AP and the other AP in the EU at an international level this function is primarily secured by the RI,
- 2. securing the transfer of reports between the CSSA AP and the CSSA internal network this will be secured by NPAP,
- 3. support for the inland communication between the CMU, the CSSA and the MoLSA, i.e. especially the exchange of some electronic documents (SED) with the CMU or with the MoLSA this will be secured by NPAP.
- 4. the secured communication and transfer of secured information to the CSSA internal network and the international network the secured communication at the international level will be provided by the RI, while this must be secured in NPAP at the national level,
- 5. securing support for the SED processing processes and the processing of replies to SED between the Access Points of the Czech Republic, i.e. at a national level.
- 6. the automatic entry of any missing addresses of recipients at a national level in cases where this is possible.
- 7. the administration of difficult to deliver files this is secured at an international level in the WEBIC component within the framework of the RI, while the realisation in the NPAP part will be proposed by the NPAP resolver.
- 8. the automatic return of undeliverable files to the sender in defined cases at the national level,
- 9. the operation of a directory server in order to secure the NPAP directory functions, i.e. the records of the code list for the types of SED,
- 10. securing the interface for NPAP communication with the external systems which are not administered by the CSSA, i.e. securing the interface on the NPAP side for the communication with the other Access Point in the Czech Republic (the CMU AP and the MoLSA AP),
- 11. securing the data for the purposes of the evaluation of the SED processing and the output statistics,
- 12. the communication between the CSSA AP NPAP and the other institutions must be enabled at least using the internet,
- 13. the transfer of information between the CSSA NPAP and the MoLSA and the CMU must be secured,
- 14. in the case of on-line requests, a response from the NPAP application is required within 1 minute,
- 15. the option of administering the data and metadata essential for the operation and administration of the NPAP.











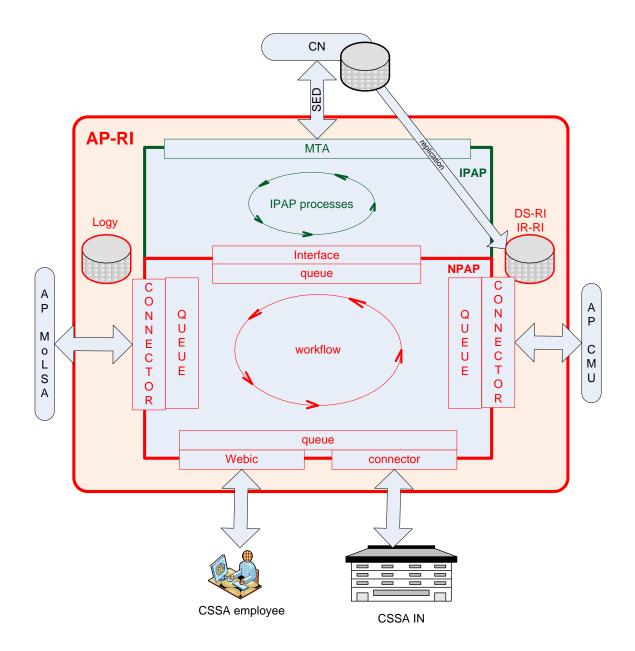












- 1. IPAP is the part of the AP which will be assumed from the RI and will only be configured
 - a. The processes in IPAP this includes, for example, the encoding/decoding of SED, the electronic signature on the SED, the sending and receipt of SED to/from CN and so on.
 - b. MTA Message Transfer Agent is responsible for sending and receiving SED
- 2. **NPAP** is the part of the AP which will only be partially assumed and will be significantly reworked and significantly adapted.
- a. **The core** – the proposal for the entire structure, logic, data structure and queue system front













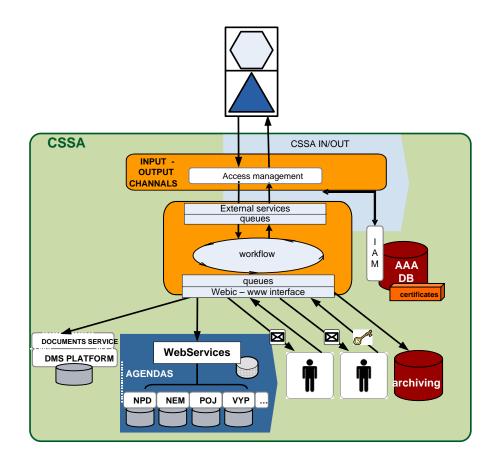






- connectors NPAP communicates with its environs using connectors. The connectors will be partially configured and partially programmed
- **The workflow** the workflow is the process which corresponds to the processing of the SED. Once a SED has been received, a workflow instance will be opened and this will then be closed after the successful delivery of the SED. The workflow says what should happen to the SED, designates when it will be validated, finalised and piped to the CSSA or to the MoLSA, the CMU or back to the CN.
- d. **The database** – the logs and encrypted SED are saved in the database and the directory and the data from Master DS-CN and IR-CN is replicated there. The SED samples and the information on the other CI, certificates and routing information are saved there. As well as the data replicated from the CN, data specific for the national environment and enabling the transfer of national reports will also be there.
- **Webic** is part of the AP and it enables the sending and receipt of SED. No CSSA specific modifications are expected here and the solution presupposes that this Webic, which is part of the AP, will be used by the CSSA to a minimum and will also serve any other institutions connected to this AP.

All of the EESSI processes which are specific for the CSSA will be processed in CSSA IN. The informal validation of the SED, the filling in of the SED, the inspection of the data in the SED, the archiving etc. will take place there.





















- 1. The application part will be newly created at the CSSA this includes the communication with the AP, the inspection upon entry (Access Management) and the creation of the entrance-exit queues and the external services
- 2. **DMS and the file service** the registration and archiving of the SED at the CSSA (the AP will use all of the ancillary parts of the CSSA system: if the file service has finished, it will connect to it and will not create a new one)
- 3. Webic the web interface through which the CSSA employees will access EESSI. Webic will be used as the basis. It will, however, be adapted and deprogrammed at the web interface for the access to EESSI and the SED.
- **The workflow** the workflow is the process which is responsible for processing the SED for the SED life cycle. As in the AP, the workflow takes care of the formal processes associated with the SED: in CSSA IN, the workflow will take care of the informal processes for processing the SED. This includes the designation of the methods chosen during automatic processing, an entry to/from the SED, the notification of the employees responsible for the data or the validation of the SED, the finalisation of the SED etc.. The workflow must be carefully analysed so that it is able to react to non-standard situations and so on. The definitions and programming of this workflow will be one of the most difficult parts of the EESSI implementation.
- 5. Automatic SED processing the laborious part enabling the greatest possible amount of data to be gradually transferred to/from the SED. The basis is the WebServices interface and the definition of the methods above the VPO application.

2.2.3 The system for the CMU AP

The CMU AP will consist of:

- the international part (the reference implementation), the supply, development, maintenance and support of which is secured by the European Commission and will be operated on independent hardware within the framework of the order
- the national part which will be the subject of the supply of our own application and its operation for a period of five years.

The national part of the CMU AP (NPAP) will be used by the health insurance companies and the CMU as a tool for the maintenance of the agenda involving the processing of the structured electronic documents for the area of sickness and maternity benefits and their exchange with the other countries of the EU and with the other competent institutions of the Czech Republic, especially the CSSA, the MoLSA and the Ministry of Health. The mutual communication will be resolved by means of the construction of the NPAP portal which will fulfil the role of an access point for its users (the employees of the health insurance companies and the CMU) and will technically secure the communication between the other competent institutions using Web services and B2B services. The NPAP portal will provide its users with a comprehensive and automated tool for the processing of all the possible scenarios involving the exchange of electronic documents and the





















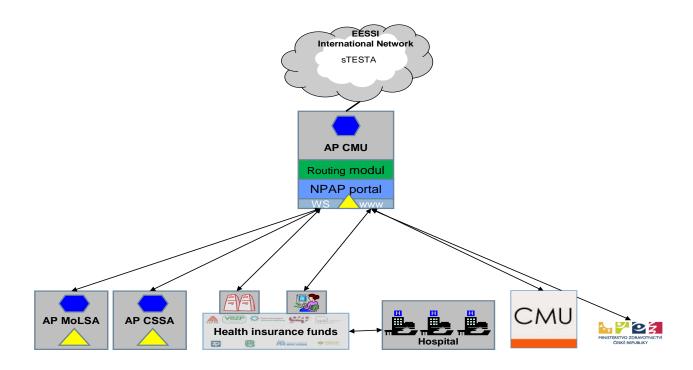
automatic entry of data from the internal information systems of the health insurance companies using an interface which can be configured separately for each health insurance company.

The system especially enables:

- The receipt of SED from the EU to the Czech Republic, a)
- The sending of SED from the Czech Republic to the EU, b)
- National communication between the AP and CI within the framework of the Czech Republic, c)
- On-line communication with the CI, d)
- Securing the workflow, e)
- f) The recharging of the costs for the provided healthcare,
- The administration of code lists and parameters, g)
- Data archiving, h)
- The issuance of transferable documents, i)
- j) Statistics and searches.

The CMU AP communication diagram:

Diagram AP CMU











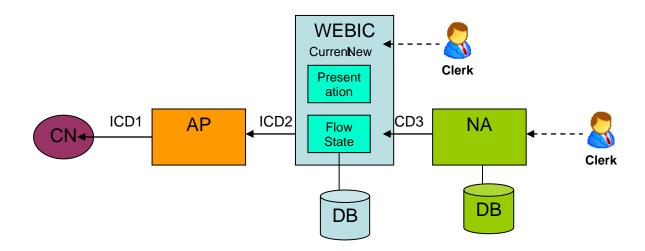








2.3 The utilization of components given by European Comission (RI, ICD 1, ICD 2, MD, WEBIC)



Variant 3: Interact with the existing FSC engine by means of a new interface (ICD3)

In the stated variant, the FSC (Flow State Control engine) would be part of WEBIC and the presentation layer (this may be separated as independent of the FSC during the course of time) and the connection to the national application would be secured via ICD3.

The user could view the reports received from WEBIC or from the national application. When viewing from WEBIC, it would also be possible to view the national database from the national application.

Advantages:

- secured access to the national DB
- the option of sharing WEBIC or the national application
- this will also include the FSC (Flow State Control engine) free
- one GUI (graphic user interface) per user

The disadvantage from the point of view of the individual states:

the national application must be implemented for "EESSI model mapping" the burden for the member states - "medium"

Miscellaneous:

the demands on the development of DB EMPL - also "medium"



















2.4 The utilization of national components

Our own workflow for filling in the SED within the framework of the CSSA IS The ICD2 connection

The national exchange of SED in order to ensure the information necessary for filling in the SED from other institutions in the Czech Republic

3. The actual experience

(testing, productive background)

As has already been stated in Chapter 1.7.1 "The first phase of the project", the individual phases of the project have been divided according to the activities and it has been necessary to incorporate these activities in the timetable.

The first phase of the project contains the following expected activities:

- the preparation of the feasibility study,
 - the proposal for the project team, the designation of the project leader,
 - the definition of the area which the AP will process and transfer and the tasks arising from it,
 - the basic proposal for the IT architecture (with regard to the fulfilment of the functional requirements, including the requirements for security, reliability and efficiency),
 - the basic proposal for the workflow,
 - the proposal for the personnel required to secure operations,
 - the basic ICT Specifications and the progress on the solution,
 - the proposal for the required hardware and software,
 - the incorporation of the feasibility study into the specifications for the public tender, the project implementation plan, the agreement on cooperation with partners.
 - the evaluation of the EU part and its projection into the national solution for the AP
 - The evaluation of the EU part and its projection into the national solution for the AP,
- the drawing up of the application for the grant to the IOP
 - the organisation of the public tender for the supplier
 - the preparation of the tender documentation,
 - the collection and evaluation of the bids,
 - the selection of the supplier(s), the signing of the contract.
- Project management
 - the creation of the personnel, systemic, contractual and administrative conditions for the implementation of the project,
 - the compilation of the project realisation team.
 - the management, administration and publicity of the project.

The second phase of the project - the project implementation The MoLSA AP:

- elaboration the system project for the Access Point
- elaboration the technical implementation project for the Access Point
- o the implementation of the Access Point's technical solution
- the launch and pilot operation of the MOLSA Access Point
- project monitoring the MOLSA AP part
- project management the MOLSA AP part





















The CSSA AP:

- o securing the technical infrastructure for the AP
- the analysis and proposal of the solution for the application software and communication
- o the implementation of the AP application software
- o the implementation of the application software the CSSA internal part
- the implementation of the AP application software and the CSSA internal part
- o the trial operations of the individual AP
- o the transition to the routine operations of the AP within the framework of EESSI
- project monitoring the CSSA AP part
- o project management the CSSA AP part

The third phase of the project - the operation phase

- the routine operations of the AP
- o the regular operations of the system, support for the system operations, reinvestment





















4. The Actual risks identified

4.1 At the European level

- Delays in the timetable during the building of EESSI or the associated AP the late start-up of the system's full operations,
- Insufficient support for EESSI operations, the non-adherence of the SLA,
- The risk of overloading the European network and the central node (CN)
- The risk involving the current interconnection of most of the member states to EESSI as of 1.5. 2012

4.2 At the National level

- o A change in the competency between the institutions in the case of work accidents and occupational illnesses
- (A legislative change in the accident insurance agenda from 1.1.2013 which will require a twolevel solution for the AP with regard to EESSI is under preparation)
- Fundamental legislative changes at the level of the sectors
- The adherence to the national timetable
- The current unclear matters concerning the realisation of the IOP
- The financing of the national parts of the AP
- The selection of a poor quality implementer for the project's technical solution 0
- Low personal data security
- The insufficient quality of the acquired solution
- Poor quality security and data storage
- Insufficient coordination of the implementation work
- The failure to secure the funds for any eventual required investments
- An insufficient qualified workforce in the sustainability period
- Higher demands for the operation of the new system by officials

4.3 At the particular AP level

- The unknown precise form of the SED and the data which will be necessary to fill them in.
- The interconnection between the AP project timetable and the EESSI timetable,
- The project deadlines, including delays around the publication of the public tender
- The risk of only using WEBIC
- The reorganisation of the CSSA and the MoLSA (changes in the composition of the project team)
- The failure to adhere to the project's monitoring indicators
- The failure to adhere to the delivery deadline
- Technical problems during the implementation of the project 0
- Poor cooperation between the suppliers of simultaneous operating applications
- Inadequacies in the project documentation
- Insufficient funds in the project's operating phase

4.4 The risk matrix



















			Impact	of risk	
		Insignificant	Minor	Major	Catastrophic
	Unlikely		Poor quality security and data storage	 Low quality of project team The failure to adhere to the project's indicators 	
Likelihood	Possible		The insufficient coordination of the implementation work The failure to secure the funds for any eventual required investments An insufficient qualified workforce in the period of sustainability	The failure to adhere to the delivery deadline Technical problems when implementing the project The unknown precise form of the SED and the data which will needed to filled into them. The interconnection of the estimated project timetable and the EESSI timetable, The project deadlines, including the delays around the publication of the public tender The risk of using only WEBIC The reorganisation of the CSSA and the MoLSA Poor cooperation between the suppliers of the simultaneous operating applications	 The poor securing of personal data The insufficient quality of the acquired solution
	Likely		 Higher demand for the operation of the new system by officials The financing of the national parts of the AP Basic legislative changes at the level of the sectors 	Inadequacies in the project documentation Inadequacies in the funds in the project operation phase The risk of overloading the European network and the central node	The selection of a poor quality implementer for the project's technical solution
	Almost certain		Insufficient support for the operation of EESSI, the non-adherence to the SLA A change in the competencies with regard to work accidents and occupational illnesses The adherence to the national timetable The current matters concerning the realisation of the IOP	Delays in the timetable during the building of EESSI or the associated AP – the delayed start-up of the system's full operations,	
Legend: A negligible risk An acceptable risk An unacceptable risk					



















5. Problems to be solved in the concrete time horizon

5.1 For informing the partners

The conclusions from the analysis of the SED and the flows The creation of the national SED and flows

5.2 For discussion

Communication between the AP at the national level – the flows and national SED The communication with the subjects outside the OVM (Kooperativa)

- the numbers of personnel and their training, the training methods
- the use of the MD in an institution
- special bilateral communication between states (the Nordic Convention?)
- the contents of the analysis of the SEDs and the business flows
- the inclusion of the SED up to which level (clerk, workplace...) and why

5.3 For discussion and accepting of the recommendation within the project framework

If everybody is not prepared as of 30.4.2012, the communication, the method of exchange and the transition period will not be extended.

The concurrent use of paper and electronic documents.

The application for the use of E-forms – the preservation and concurrent use or termination (cutting off); the scope, technical problems, costs.





















6. Attachements

Annex no. 1 – The timetable – EESSI_HARM.xls

7. The list of abbreviations

Expression	Abbreviation	-
Electronic Exchange of Social Security Information		An electronic communication project at the level of the EU. For matters of simplicity, the abbreviation is also sometimes used for the international network interconnecting the individual states.
Czech Social Security Administration	CSSA	
Centre for International Reimbursements	CMU	
Ministry of Labour and Social Affairs	MoLSA	
Access point	AP	The AP is a transitional connection between the Institutions and the CN. Its task is to receive reports from the Institutions and to submit them to the CN and vice versa.
Coordination node	CN	The CN is the central sender, before which it is necessary to route all reports
Competent State	CS	The state where an individual is insured with a health insurance company
Member State	MS	This is used in the submitted documents in two meanings: An EU member state An EU/EEA state participating in the EESSI project or any part thereof
Competent Institution	CI	The Institution responsible for the SED solution. The national network of the Czech Republic has the following CI for the CSSA AP: the CMU, the MoLSA
Directory services	DS	The functional area of EESSI which involves the management of the information according to the directories.
EMS	EMS	EESSI Messaging Services
EMD	EMD	EESSI Messaging Dispatcher
ESB	ESB	Jboss Enterprise Service Bus
Information Repository	IR	The "Information Repository" (IR) is a label which covers a set of services rather than one specific element. Despite the fact that the IR does not directly participate in the actual exchange of SED.
Interface Control Document 1	ICD1	The specifications of the interface for the connection of the Access Points to the EC Infrastructure (CN)

















Expression	Abbreviation	Description
Interface Control Document 2	ICD2	The specific interface for the connection of the EMD to the EMS
IPAP	IPAP	The International Part of an Access Point (DG-EMPL/Siemens is responsible for this)
Institution		An Institution communicates with an AP in order to receive or send reports.
Master Directory Service	MDS	A directory service installed at the EC Data Centre and operated by DG EMPL which contains the entire file of the information concerning EESSI.
Structured Electronic Document	SED	A document for the electronic exchange of information in the international network. The SED definition and operating regulations are part of the IPAP
National structured electronic document	NSED	A national SED which is used for the national communication of the CI in the Czech Republic
National structured electronic document - primary	NSEDp	A primary national SED. It is used for the exchange of information between the CI in the Czech Republic, it has no link to the international exchange of SED
National structured electronic document - derived	NSEDo	A derived national SED. An ancillary SED – it is used for the completion of an international SED by another CI. It is linked to the international exchange of SED
Report		This involves a full report consisting of the SED, the report header and the annexes sent via EESSI
Report header		This involves the part of the report which EESSI uses to realise its tasks so that the components of EESSI are capable of communicating mutually
Message Transfer Agent	МТА	The MTA is the component responsible for the exchange of reports between the CN and the AP. In reality, this is the entry point for a report coming from the CN and the end point for a report coming to the CN.
Monitor, Logging and Statistics	MLS	The MLS includes the tools for monitoring healthy systems, maintaining protocols of all the activities and creating statistical information.
International Part of the AP	IPAP	The part of the AP whose functionality in the CSSA AP will be secured by the RI
National Part of the AP	NPAP	The National Part of the Access Point (the individual countries are responsible for this)
Reference Implementation	RI	The IPAP implementation whose development, maintenance and support is secured by the European Commission
Reference Implementation Information Repository	IR_RI	The "Information repository" (IR) containing the types of SED and other information for the creation of the SED at the national level of the AP.
NPAP Information Repository	RI_MS	

















Expression	Abbreviation	Description
Reference Implementation Directory Service	DS_RI	The replication of the sub-file information saved at a single directory server on another directory server.
NPAP Directory Services	DS_MS	The directory services containing information for the exchange of the SED at a national level
System Report		A System Report is a report which is generated by the system to improve its functioning, unlike the Reports which contain actual commercial data. Examples of System Reports: confirmations, forwarding, cancellations.
Directory	D	The CI directory administered by the CN
Central Register of Insured Individuals	CRP	The register of individuals insured with health insurance companies in the Czech Republic.
The Ministry of Health	MZdr	
Health Insurance Company	ZP	Czech health insurance companies in general
EESSI Messaging Service	EMS	
European Health Insurance Card	EHIC	A health insurance identification card according to the EU standard. The identification information on the card has a uniform format within the framework of the EU.
Social Security Administration	SSA	
European Economic Area	EEA	
Self-employed individual	OSVČ	
Information and Communication Technologies	ICT	
Effective Public Administration	EVS	
Integrated Operating Program	IOP	
European Community	EC	
Terabyte	ТВ	
Executive Committee	ŘV	
Project Manager	PM	
EESSI Messaging Dispatcher	EMD	The service for merging and converting reports
Extensible Markup Language	XML	A markup language
Interoperable Delivery of European eGovernment Services to Public Administrations, Businesses and Citizens	IDABC	The Interoperable Delivery of European eGovernment Services to Public Administrations, Businesses and Citizens
Data Centre	DC	
Local Area Network (also LAN, local network)	LAN	
Wide Area Network	WAN	



















Expression	Abbreviation	Description
Information system	IS	
Service level agreement	SLA	The contract on the provision of IS support
Data management system	DMS	
Free Movement of Persons	VPO	An internal CSSA system – the agenda for integrating the data required for the exchanges between further European social security subjects
Pension claim information	NPD	An internal CSSA application
Insurance contributions	POJ	An internal CSSA application
Payouts	VYP	An internal CSSA application