



NATIONAL INTEROPERABILITY FRAMEWORK OBSERVATORY

Analytical Model *LITHUANIA*

The content of this Analytical Model reflects the status as collected in 2016.

DIGIT

Directorate-General for Informatics

ISA² Programme

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EUROPEAN COMMISSION

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Unit B6 — ISA² Programme

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Analysis of the NIFs

[See Alignment Examples in NIFO toolbox](#)

[See implementation and monitoring examples in NIFO Toolbox](#)

EIF Element - Reference - Category	NIF-EIF Alignment			NIF implementation		NIF monitoring		
	Measurement	NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is a common practice]	Only implementation examples [describe an implementation example specific to each element]	Implementation scoring 2: Common practice 1: some examples 0: not observed	NIF monitoring	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
<p>Subsidiarity and proportionality EIF, Chapter 2, Underlying principles Category: Principles</p> <p>Ref: See reference: the European Interoperability Framework v2 See definitions listed in the ISA EIF brochure</p>	Does the NIF contain the 'subsidiarity and proportionality' principle?	<p>Principles in law (see https://www.e-tar.lt/portal/lt/legalAct/TAR.85C510BA700A)</p> <p>3) proportionality . This implies that the administrative decision and the extent of the implementation of measures to comply with necessary and reasonable for administrative purposes;</p> <p>7) subsidiarity . This implies that the public administrations of the decisions to be adopted and implemented at the level of the public administration system in which they are most effective ;</p> <p>8) "one-stop shop ." This implies that the person gives information , request, complaint or report is adopted and answer them in the same workplace. The request, complaint or notice and examine information from their departments, subordinate entities , if necessary - and other public administration bodies receive the same request , complaint or dealing with administrative decision -making and public administration body , without binding it to make a request , complaint or report of a person who has filed .</p>	2	<p>One of the tools for subsidiarity and proportionality is State information resources interoperability platform (SIRIP)</p> <p>https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.3BC011766B26, section 17, 18.</p>	[describe project here]	2	<p>Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for SIRIP meeting and its regulations. National Audit Office of the Republic of Lithuania (www.vkontrole.lt) authority time by time checks if SIRIP meets its regulations. See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.3BC011766B26, section 17, 18. See</p>	2
<p>User-centricity EIF, Chapter 2, Underlying principles Category: Principles</p>	Does the NIF contain the 'user-centricity' principle?	<p>Presented/mentioned in legislation related to State information resources interoperability platform (SIRIP) (lith. Valstybės informacinių išteklių sąveikumo platforma - VIISP from 2013 or Viešojo administravimo institucijų informacinių sistemų interoperabilumo (sąveikumo) sistemos - VAIISIS till 2013): "State information resources interoperability platform regulations" (lith. VALSTYBĖS INFORMACINIŲ IŠTEKLIŲ SĄVEIKUMO PLATFORMOS NUOSTATAI) and other legislations mentioned in this regulations II.5 section. Requirements for user-friendliness and multi-channel (for example availability on mobile phones) presented in SIRIP specification in Lithuanian. Moreover we have developed recommendation for delivering e-services based on user-centricity in a form of legislation for all Lithuania, see http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc?p_id=470359&p_tr2=2</p> <p>Reference: [21] https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.440732?fwid=rivwzvpvg , chapter 3. [3] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A, chapter IV 39</p>	2	<p>All e-services of Lithuania accessible from www.epaslaugos.lt;</p> <p>Secure personalization is being allowed by a flexible, secure and reliable national and cross-border identification service. All users (citizens, business entities and civil servants) can log on to the system via online banking or by using an electronic signature (citizen ID-card, civil servant ID-card, STORK, etc.).</p> <p>See google analytics reference for multi-channel</p> <p>See an example of combined e-services - 5 different institution combined their e-services depending on a life event- birth of the child, so parents don't need to do 5 different applications, everything is done in one application and each different part uses the results of other parts. Application form is minimized to the minimum amount of fields. (https://www.epaslaugos.lt/portal/service/38820/7660).</p>	[describe project here]	2	<p>All the portal time by time is reviewed and after changed to new more friendly environment, all e-services are obliged to show contacts for responses [http://labiblioteka.lt/lt/naujienos/613-asmens-tapatybes-kortele-raktas-pro-elektroninius-valdzios-vartus]. There are always questionnaire available for users to answer the question about specific e-service, or about portal [https://www.epaslaugos.lt/portal/citizen/content/14020 , https://www.epaslaugos.lt/portal/citizen/category/20 http://apklausas.lt/lt/elektroniniu-valdzios-vartu-portalo-kokybes-vertinimas-h7agz7g/answers/new.fullpage]. If suggestions are not difficult to develop we are changing it suddenly. If more difficult it is developed later. For example, now we are changing our search engine functionality using tools of another project that parse all the text and do semantic connections and indexing. More about project you can find: http://alkas.lt/2013/04/02/kuriama-lietuviu-kalbos-sintaksines-semantines-analizes-informacine-sistema/ Moreover we use google analytics tool for monitoring.</p> <p>Transport and Communications (www.ivpk.lt) is responsible for allocating and monitoring money from EU structural funds. Doing that they are constantly monitoring if money is used for user-centricity. This year Information Society Development Committee under the Ministry of Transport and Communications is finishing developing service delivery project's evaluation model. In this model institutions</p>	2
<p>Inclusion and accessibility EIF, Chapter 2, Underlying principles Recommendation 2 Category: Principles</p>	Does the NIF contain the 'inclusion and accessibility' principle?	<p>SIRIP requirement</p> <p>SIRIP E-Government Portal graphical user interface should be designed for people with disabilities and the elderly, according to European Union WAI (Web Accessibility Initiative called) guidelines (Web Content Accessibility Guidelines 2.0).</p> <p>Reference: [5] SIRIP specification in Lithuanian (attached to the email), chapter 7.2.7.2.</p>	2	<p>Whole our www.epaslaugos.lt portal is done to be readable with programs like JAWS screen reader. So the whole portal and all e-services which are developed in SIRIP are accessible. More specific e-service is E-Library for people with disabilities: https://www.epaslaugos.lt/portal/service/21220/61784?searchid=438a4b1c-b9be-48e4-a947-62428acdb358, more about that see there: http://elvis.labiblioteka.lt/home/show</p>	<p>SIRIP E-Government Portal graphical user interface should be designed for people with disabilities and the elderly https://www.epaslaugos.lt/portal/</p>	2	<p>www.epaslaugos.lt eGovernment portal was designed according to European Union WAI (Web Accessibility Initiative called) guidelines (Web Content Accessibility Guidelines 2.0) and regularly is checked when the new component of SIRIP is designed. Information Society Development Committee under the Ministry of Transport (SIRIP owner and operator) is working closely with the Lithuanian Library for the Blind and make corrections according to their and other people with disabilities comments. [http://labiblioteka.lt/lt/naujienos/613-asmens-tapatybes-kortele-raktas-pro-elektroninius-valdzios-vartus]</p> <p>In 2012 Information Society Development Committee under the Ministry of Transport evaluated eGovernment portal to measure the inclusion and accessibility. The results are shown in report. According to this report portal have been upgrading.</p>	2

Analysis of the NIFs

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Security and privacy EIF, Chapter 2, Underlying principles Recommendation 3 Category: Principles	Does the NIF contain the 'Security and privacy' principle?	SIRIP regulations and requirements SIRIP data security is ensured in accordance with the Republic of Lithuania on Legal Protection Law, ISO / IEC 27002:2009 standard (to the extent required by data protection legislation), Information Society Development Committee under the Government of the Republic of Lithuania approved SIRIP implementing information security documents SIRIP data safety regulations and other information security legislation. https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cb94b0c51 , chapter I 4.8 Reference: [1] https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cb94b0c51 , chapter I 4.8, VI	2	SIRIP was developed according to SIRIP specification requirements. For example, data management meets the requirements ISO/IEC 27000 standard, ISO/IEC 27002:2005, ISO/IEC27001 and ISO 17799. For data exchange it is used SSL protocols, web services, SVDPT (National physical private network. No access to internet). Lose coupling. SIRIP is made of separate components that serve specific purposes. The communication between these components is implemented using open standard technologies - XML for data structures, WS-S for data security, XML Signature for data integrity. Whenever it is possible, web-services are preferred to other means of interoperability. Etc. All web-services are registered in Oracle OSB which supports open industry standards for ensuring the integrity and privacy of communications and to ensure that only authorized users can access resources in an Oracle Service Bus domain. It uses the underlying WebLogic security framework as building blocks for its security services. There are special e-services for legal and business entities to verify who was managing their personal data: https://www.epaslaugos.lt/portal/citizen/service/12020 SIRIP specification in Lithuanian (attached to the email), Chapter 7.3., 7.4., 7.5., 7.5.1., 7.5.2., 7.5.3., 7.5.1., 7.6., 7.6.1.	[describe project here]	2	At first before using any SIRIP component such as authentication, data access and other SIRIP components that provides for e-service providers personal data of legal and business entities, each e-service provider should register as a Data Controller in Personal Data Controllers Register, that is controlled by State Data Protection Inspectorate. After there is a contract is signed and only then they can use SIRIP components such as accessing personal data of legal and business entities. In SIRIP For security and privacy monitoring we have special tool - Oracle OSB, so only authenticate users can access the data. OSB also provides data monitoring. Each requests of web-service is also monitored and logging, so you can check all logs who, when and for what purpose was asking the data of registers, systems and other person related data. Moreover, building e-services in SIRIP for data monitoring is used Oracle Enterprise Manager that provides comprehensive solutions for testing, deploying, operating as well as monitoring, diagnosing, and resolving problems. Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for SIRIP meeting its regulations [1]. National Audit Office of the Republic of Lithuania (www.vkontrole.lt) authority time by time checks[4] if SIRIP meets its regulations [1]. https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cb94b0c51	2
Multilingualism EIF, Chapter 2, Underlying principles Recommendation 4 Category: Principles	Does the NIF contain the 'Multilingualism' principle?	SIRIP requirements 1.1. Variable and function names must be in the English language; 3rd SIRIP portal to support multilingualism. SIRIP version of the user interface to be implemented in English and Lithuanian languages must also be made for the additional use of other languages; Reference: [5] SIRIP specification in Lithuanian, chapter 7.2.4. 1.1., 7.2.7.3. 3	2	www.epaslaugos.lt eGovernment portal is developed in 2 languages - Lithuanian and English, all technical parameters, source code and text are in English. See identification WSDL in english (https://www.epaslaugos.lt/portal/authenticationServices/auth.wsdl)	[describe project here]	2	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) time by time checks the translation of eGovernment portal information into english.	1
Administrative simplification EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Administrative simplification' principle?	Principal and Requirements in law (see https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A) Public institutions are obliged to exchange information between institutions to simplify the burden and they are obliged to use SIRIP components (such as data exchange component) by law. SIRIP regulations and requirements (See https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cb94b0c51) 'One of the main SIRIP component - data exchange service - offers for public institutions to exchange data between public institutions so there is no need to ask any personal data from public and business entity if it is accessible in any register or system. Building e-service there is an obligation to use web-services as well. See https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cb94b0c51 See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A Reference: [1] https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cb94b0c51 [2] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC [3] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A	1	According the Law of the Republic of Lithuania on Management of State Information Resources, institutions must collect the required data primarily from the state information systems and registers and collect from citizens only the data are not available. For data exchange between registers, systems and application Oracle OSB is used. How to access the data and all specific parameters is public and available for all institutions here: https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660 , more specific: https://www.epaslaugos.lt/portal/file/bc34a6a2-ad5f-4218-982d-d8cb5d6657c5 More specific service delivery example - declaration of resident's living place. Normally to declare your living place in specific address the person needs to be an owner or get a permission from owners. While delivering this service an electronic solution was developed, that automatically checks the list of the owners from other institution register and identified owners can give permission electronically. Before 2008 it was done by asking person to bring a paper contract regarding the ownership. 'Business' and legal entities' identification is provided. All business entities can be recognised by the unique identifier so it gives a possibility to order services electronically. All e-services built in SIRIP uses web-services for data exchange. There are finished 2 e-service design projects that created at least 29 public e-services for business entities using SIRIP tools. All the required data are taken automatically from registers, so only the data which can't be retrieve from registers will be additionally required. [project of e-services design for business' entities' review (http://www.esparama.lt/projektas?id=28975&pgsz=10)].	[describe project here]	2	For data exchange used Oracle OSB also provides monitoring, diagnosing. In each SIRIP e-service delivery project it is monitored that all the data from other institutions should be taken automatically without asking service users to give these data. If there is no possibility to get a data automatically but it is known that this data is stored in some registers or systems, projects should take into account to create a web-service for the access of these data. Once web-service is delivered, wsdl and other information to access it is mandatorily by the law published in SIRIP portal: https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660 Moreover, Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for allocating and monitoring money from EU structural funds. Doing that they are constantly monitoring if money is used for administrative simplification. This year Information Society Development Committee under the Ministry of Transport and Communications is finishing developing service delivery project's evaluation model. In this model institutions should evaluate the real state of their service delivery and reachable. In the questionnaire there is such a requirement "Receiving information from other institution" (lith. "Informacijos gavimas iš išorinių įstaigų ar institucijų"), after this requirement follows 4 questions - "Is it a part of service delivery process?", if yes: "Is it done this moment automatically?", if "no": "Is it will be done automatically after a project?" if	2

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Transparency EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Transparency' principle?	Principles in law '10) Perfection, which means that natural and legal persons in securing access convenient access to electronic services, to provide views and suggestions for their improvement and get answers. see https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A Reference: [3] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter IV 10 10	2	SIRIP portal has these functionalities for end user: possibility to ask online about services, possibility to follow ordered services status and give feedback about provided services.	[describe project here]	2	Transport and Communications (www.ivpk.lt) is responsible for allocating and monitoring money from EU structural funds. Doing that they are constantly monitoring if money is used for transparency as well. Information Society Development Committee under the Ministry of Transport and Communications developed service delivery project's evaluation model. In this model institutions should evaluate the real state of their service delivery and reachable. In the questionnaire there is a list of requirements for transparency, for example requirement "There is an opportunity for service user to give a response about this service delivering" (Lith. Paslaugos gavėjas gali pateikti grįžtamąjį ryšį dėl gautos el. paslaugos (internetinė apklausa, nusiskundimų ir komentarų skiltis ir pan.)) or "Before starting and during service delivery service user sees all service related information such as process steps, received personal information from other institutions etc. Each institution is obliged to evaluate their service delivery by this model. After institution evaluates their projects goal, what they are planning to reach, Information Society Development Committee under the Ministry of Transport and Communications can decide to give EU structural funds money to the project which have better model evaluation. This model is used building services in SIRIP as well. Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible	2
Preservation of information EIF, Chapter 2, Underlying principles, Recommendation 5 Category: Principles	Does the NIF contain the 'Preservation of information' principle?	Lithuania has national e-document management policy. Moreover, there is national format ADOC, based on ASiC standard. It is possible to create signatures from XAdES-PES up to XAdES-A - long term preservation. See for ADOC specification in a form of legislation and e-signature law. In SIRIP requirements you may see that delivering e-services it is possible to create ADOC documents if needed. See e-signature law, https://www.e-tar.lt/portal/legalAct.html?documentId=TAR.382345294FBF e-document specification, ADOC v. 1.0, https://www.e-tar.lt/portal/legalAct.html?documentId=TAR.11EFB8DA962 e-document management policy, https://www.e-tar.lt/portal/legalAct.html?documentId=TAR.F76F0B2DC482 SIRIP specification in Lithuanian, chapter 7.3., 7.4 Reference: [33] e-signature law, https://www.e-tar.lt/portal/legalAct.html?documentId=TAR.382345294FBF [34] e-document specification, ADOC v. 1.0, https://www.e-tar.lt/portal/legalAct.html?documentId=TAR.11EFB8DA962 [35] e-document management policy, https://www.e-tar.lt/portal/legalAct.html?documentId=TAR.F76F0B2DC482 [5] SIRIP specification in Lithuanian, chapter 7.3., 7.4	1	e-document creation tools: https://signa.mitssoft.lt/signa-web/app/index.html/in/en , http://www.archyvai.lt/lt/paslaugos_53/adoc-dokumentai.html . All document management systems are able to create and store e-documents. In 2009, two electronic document storage sites in Vilnius and Šiauliai were equipped, Electronic Archive Information System (EASIS), where is stored long-term validation e-documents, and Freely distributed electronic document creation and validation software tool (compliant with the requirements of ADOC-V1.0 specification) was created. Moreover, there is e-service for transferring eDocuments to Electronic Archive Information System for long-term preservation: https://www.epaslaugos.lt/portal/citizen/service/120 Records in SIRIP is managed by Oracle OSB. It has its WS-Policy.	[describe project here]	2	Every year each institution gives their eDocument to archives. The national archives authority monitors if everything follows by the law and regulations .[http://www.archyvai.lt/veikla/nuostatai_54.html] Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for SIRIP meeting its regulations. National Audit Office of the Republic of Lithuania (www.vkontrole.lt) authority time by time checks if SIRIP meets its regulations and functionality https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6c6db94b0c51 , http://www.vkontrole.lt/page_en.aspx?id=225	2
Openness EIF, Chapter 2, Underlying principles, Recommendation 6 Category: Principles	Does the NIF contain the 'Openness' principle?	Principles in law 8) State information resources of openness, which means creating favourable conditions for natural and legal persons to re-use the information managed by the authorities for carrying out statutory functions, regardless of the personal and corporate legal business objectives and legal form; 11 article 2.9. https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter IV 10 8 Reference: [3] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter IV 10 8	2	Each of SIRIP logical components may be deployed and scaled independently, technologically it is possible to host SIRIP components in public cloud service. "Clear licencing and maintenance. SIRIP is made of several logical units, such as ESB, BPEL, eGovernment portal, payment broker, authentication service. Some of these components are generic to all industries, some require high level of customization to meet <IVPK> needs. Therefore of the shelf solutions were chosen for generic functions. These solutions were chosen basing on manufacturer support and knowledge available in region. ESB, BPEL, DBMS functionality is implemented using Oracle products - OSB, SOA Suite, DBMS. Components that require many custom changes were custom build on open frameworks, e.g. Apache Tomcat web application container, ZKoss enterprise web application framework.	[describe project here]	2	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for checking all Lithuanian public system regulations before it is created. If people from Committee checking regulations sees that new solution will not be using already re-usable parts they suggest to use it and if there is a need of small changes to cooperate with responsible institution and improve reusable solution for more widely needs.	1

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	Measurement	NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is a common practice]	Only implementation examples [describe an implementation example specific to each element]	Implementation scoring 2: Common practice 1: some examples 0: not observed	NIF monitoring	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
Reusability EIF, Chapter 2, Underlying principles, Recommendation 7 Category: Principles	Does the NIF contain the 'Reusability' principle?	requirements in law '9) To make the development of national information systems, information systems, and other records to be re-used by other institutions available information technology solutions; https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A Reference: [3] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter IV 11 9	2	Time by time SIRIP administrations get requests from other institutions to have a functionality that can be reusable for all, e. g. see one discussion example All SIRIP components are based on this principle. For example, now we are changing our search engine functionality using tools of another project that parse all the text and do semantic connections and indexing. More about project you can find: http://alkas.lt/2013/04/02/kuriama-lietuviu-kalbos-sintaksines-semantines-analizes-informacine-sistema/ Each institution can say their needs to advance re-usable solution of SIRIP.		2	National Audit Office of the Republic of Lithuania (www.vkontrole.lt) authority is responsible for monitoring if institution use reusable solutions http://www.vkontrole.lt/page_en.aspx?id=225 Moreover, Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for allocating and monitoring money from EU structural funds. Doing that they are constantly monitoring if money is not used for creating already existing reusable solutions. Information Society Development Committee under the Ministry of Transport and Communications developed service delivery project's evaluation model [31,32]. In this model institutions should evaluate the real and reachable state of their service delivery. In the questionnaire there is such a requirement to reuse existing solutions. The list of existing solutions is mentioned in "Key enablers reusability" (lith. "Bendro naudojimo IT sprendimų (angl., Key Enablers) naudojimas"). Each institution should declare if they are using specific re-usable solutions and if not to define why. [see for more 31]. Each institution from this year is obliged to evaluate their service delivery by this model. After institution evaluates their projects goal, what they are planning to reach, Information Society Development Committee under the Ministry of Transport and Communications can decide to give EU structural funds money to the project which have better model evaluation. This model is used building	2
Technological neutrality and adaptability EIF, Chapter 2, Underlying principles, Recommendation 8 Category: Principles	Does the NIF contain the 'Technological neutrality and adaptability' principle?	Principles in law 6) Technological neutrality, which means that there is no discrimination or promote specific information technologies, as well as their usage is measured by the functionality, security, reliability, validity and performance criteria; 10) to enable the authorities to other natural or legal persons to take advantage of the information handled by law the conditions and the application of information delivery methods available for use, and information technology solutions; 11) install only the hardware, software, legal and organizational measures to impose conditions for the provision of data exclusivity or unreasonable restrictions intended to reduce data utilization; Requirements in law 2) Technical specification should ensure competition and doesn't discriminate providers. https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=268778 Reference: [3] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter IV 10 6, IV 11 10-11	2	Special technologies are not required for interaction with SIRIP, data exchange and use of other solutions.	All SIRIP components are built being technological neutral and adaptable. For example "Documentum process builder" was used until 2011 and it has been easily changed to Oracle Jdeveloper after the due analysis.	2	Before creating any technological solution there is an obligation to do procurement public p. Central project management agency (http://www.cpva.lt/en/home.html) is responsible for reviewing technical specification and monitoring if principle is followed. (lith. 1. Viešųjų pirkimų tarnyba – viešųjų pirkimų politiką įgyvendinanti ir prižiūrinti, kaip laikomasi šio įstatymo ir su jo įgyvendinimu susijusių teisės aktų, Lietuvos Respublikos Vyriausybės įstaiga, veikianti pagal šį ir kitus Lietuvos Respublikos įstatymus, teisės aktus, tarptautinius įsipareigojimus, savo nuostatus ir finansuojama iš valstybės biudžeto. Viešųjų pirkimų tarnybos nuostatus tvirtina Lietuvos Respublikos Vyriausybė. http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=268778)	2
Effectiveness and efficiency EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Effectiveness and efficiency' principle?	Principles in law 6) Efficiency. This implies that the subject of public administration, adopting and implementing the decisions of the resources it uses cost-effective performance reaches the lowest possible cost; https://www.e-tar.lt/portal/forms/legalAct/TAR.FA13E28615F6/TAIS_471234 , chapter 3. Reference: [21] https://www.e-tar.lt/portal/forms/legalAct/TAR.FA13E28615F6/TAIS_471234 , chapter 3. [3] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter IV 39	2	Each technical solution should follow this principle. Investment project document is created and given for evolution to Central project management agency (http://www.cpva.lt/en/home.html). There is methodology for investment project document creation available in http://www.cpva.lt/leidiniu-biblioteka/investiciju-projektu-metodika.html .	[describe project here]	2	Central project management agency (http://www.cpva.lt/en/home.html) is responsible for reviewing and monitoring all investment projects that should meet [http://www.cpva.lt/leidiniu-biblioteka/investiciju-projektu-metodika.html] methodology. Only after it solution can be developed.	2

EIF Element - Reference - Category	Measurement	NIF-EIF Alignment		NIF implementation		NIF monitoring		
		NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is a common practice]	Only implementation examples [describe an implementation example specific to each element]	Implementation scoring 2: Common practice 1: some examples 0: not observed	NIF monitoring	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
Conceptual model EIF, Chapter 3 Category: Conceptual model	Does the NIF contain a conceptual model?	SIRIP requirements, functional architecture Loosely coupling. SIRIP is made of separate components that serve specific purposes. The communication between these components is implemented using open standard technologies - XML for data structures, WS-S for data security, XML Signature for data integrity. Whenever it is possible, web-services are preferred to other means of interoperability. Each of SIRIP logical components may be deployed and scaled independently, technologically it is possible to host SIRIP components in public cloud service. Virtualization. SIRIP is implemented as virtualized platform and each component may be scaled when needed. Depending on situation, different resources may be allocated to ESB, BPEL, Portal, Payment broker and authentication service of the platform. Virtualization of the platform is implemented using VMWare solutions. SIRIP have all elements of EIF conceptual model. Reference: [5] SIRIP specification in Lithuanian, chapter 5.1.	2	In Lithuania there is approved methodological recommendations for developing of electronic services. In practice for data exchange between systems, registers and application it is used Oracle OSB. For user (legal and business entities) authentication to use e-services it is used SIRIP authentication component that offers authentication via e-banking and e-signature solutions (ID-card, civil-servant card, mobile-ID, etc.). We design BPEL process with Oracle JDeveloper, each process relating with specific webservice from OSB for data receiving, validation, or sending, and of course all the process workflow is being sent to OSB. For monitoring workflows, errors (if there is), statistics and for other configuration of instances like process instance recovery we are using Oracle Enterprise Manager. And, of course, we have our own Form designer, each form is being related to specific BPEL process. If at the end e-service needs to create word document which can be signed or printed, we are using ASPOSE library. So if template of the document have changed we just correct word document template and upload to the system (takes only few minutes), after that each new e-service instance will create documents according to the new template, no need to stop e-service delivery. If there is a need in e-service process to sign formed document electronically it can be done with integrated e-documents creation tool (for a moment we are using tool of another institution but having plans next year to have our own regarding to the new specification of e-document). One more tool is used for message templates - FreeMarker. Jenkins is used for Building/testing SIRIP continuously. In SIRIP we offer everything in one package – environment for e-service users (front-office), administrators, back-office people, monitoring tools, etc. See Oracle OSB description, SOA	[describe project here]	2	Oracle OSB is used for webservice monitoring (e.g. You can monitor Oracle Service Bus at run time to know how many messages in a particular service have processed successfully and how many have failed.) For monitoring workflows, errors (if there is), statistics and for other configuration of instances like process instance recovery Oracle Enterprise Manager is used. JavaMelody is used for statistics and monitoring (e.g. CPU, user sessions). Google Analytics is used for SIRIP portal user behaviour, user-centricity and other. Jenkins is used for Monitoring executions of externally-run jobs. Zabbix[] is used for other monitoring, e.g. servers. Moreover, Central project management agency (http://www.cpa.lt/en/home.html) and Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) are responsible for monitoring of e-services implementation.	1
Public administrations should develop a component-based service model, allowing the establishment of (European) public services by reusing, as much as possible, existing service components. EIF, Recommendation 9 Category: Conceptual model	Is the conceptual model a component-based service model? (e.g. SOA)	SIRIP requirements, SIRIP developed according to SOA. This section contains requirements for SIRIP applications architecture. SIRIP components and internal and external components of the integration are realized on the basis of SOA (Service - Oriented Architecture) principles. Each functional component SIRIP is realized by three-tier architecture (called three- tier , 3- tier) principles must exist in imaging, business logic and data layers. Below is a detailed description of each level : First Imaging layer provides computer-based tools to access the whole SIRIP by digital content available digital channels; at the same time the user interface functions required SIRIP performance. Imaging layer interacts with the business logic level of system messages help . Second The business logic layer of software tools to fully or partially automate the business process steps or part of the functions controlled by software execution. Operating logic level system messages are received, processed and transmitted imaging level. Also, this layer serves to: (a) the data level , providing the relevant data queries , processing the received data storage or transmission to change them , (b) display the level of the communication to him of the level of data received and / or business logic layer and the data processed reception and transmission of other systemic instructions. Reference: [5] SIRIP specification in Lithuanian, chapter 7.2.1. Reikalavimai SIRIP programų architektūrai 3rd The data layer is implemented operating systems file systems , databases , data storage tanks or form . Data at the level of different data sets are integrated into a single unified platform for data exchange business logic layer components in support. Furthermore, when processing state information resources, institutions must use the following SIRIP services, according to the Law of the Republic of Lithuania on Management of State Information Resources: data exchange between the institutions, person identification in electronic space, payment of state fees or other charges for the provision of public and administrative services and other services indicated in this Law. These services shall be provided by the mutual agreement of the institution and the manager or his authorised administrator of the state information resources interaction platform.	2	describe here	SIRIP includes following functionalities: design, building and testing of e-services; monitoring, auditing and administration of e-services. .In SIRIP SOA based tools are used: Oracle OSB [42], Oracle JDeveloper [43] etc.	1	SIRIP offers e-services and process monitoring functionality. Oracle OSB, JDeveloper, Jenkins, JavaMelody, Oracle Enterprise Manager, Zabbix , etc. is used for SOA monitoring.	1

Analysis of the NIFs

[See Alignment Examples in NIFO toolbox](#)

[See implementation and monitoring examples in NIFO Toolbox](#)

EIF Element - Reference - Category	NIF-EIF Alignment			NIF implementation		NIF monitoring		
	Measurement	NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is a common practice]	Only implementation examples [describe an implementation example specific to each element]	Implementation scoring 2: Common practice 1: some examples 0: not observed	NIF monitoring [describe an implementation example specific to each element]	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
Public administrations should agree on a common scheme to interconnect loosely coupled service components and put in place the necessary infrastructure when establishing (European) public services. EIF, Recommendation 10 Category: Conceptual model	Does the NIF encourage the use of common schemes to interconnect loosely coupled service components?	<p>SIRIP requirements</p> <p>Lose coupling. SIRIP is made of separate components that serve specific purposes. The communication between these components is implemented using open standard technologies - XML for data structures, WS-S for data security, XML Signature for data integrity. Whenever it is possible, web-services are preferred to other means of interoperability. Each of SIRIP logical components may be deployed and scaled independently, technologically it is possible to host SIRIP components in public cloud service. There are agreed schemes for all components.</p> <p>* SIRIP data exchange must be based on these standards : XML, HTTP (S) , SOAP , WSDL , WS -* .</p> <p>SIRIP data exchange to ensure the safety and security , Web services are realized SIRIP must use the WS - * standards are protocols : WS -Security, WS -Secure Conversation , WS - SecurityPolicy , WS - MetadataExchange , WS -Trust , WS - AtomicTransaction , WS - ReliableMessaging .</p> <p>The system user identity information to support a description of the request and the transfer is based on the SAML 1.0 standard.</p> <p>First external components (called webservices) message format to be XML .</p> <p>Second The external components must be validated according to the WS -I standard.</p> <p>3rd Must be used in a uniform data exchange protocol (SOAP 1.1) and exceptions management rules . The external features of the component returned an error message format must appear united fields to return error information (field names : error_code , error_id , ERROR_MESSAGE) .</p> <p>4th All external component documentation must be submitted to both the WSDL in the scheme , as well as a separate (and can be generated in an automated way) page .</p> <p>5th The external component of the functioning of the platform should be supported by the WS -S standard set of security technology.</p> <p>See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC , 1 attachment - Valstybės informacinių išteklių sąveikumo platformos funkcionavimo taisyklių 1 priedas</p> <p>Reference: [5] SIRIP specification in Lithuanian, chapter 7.2.6. Kiti reikalavimai SIRIP architektūros realizavimui</p>	2	All standardised schemes for different components are available for downloading in https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660	[describe project here]	2	With every new institution which wants to use any of SIRIP component the contract is signed where common scheme is agreed. All available schemes (https://www.epaslaugos.lt/portal/search?category=SIRIP+services+for+public+sector) regularly revised and updated by Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt).	2
Interconnection of service components. EIF, Recommendation 10 Category: Conceptual model	Does the NIF encourage to put in place the infrastructure to interconnect loosely coupled service components?	<p>SIRIP requirements</p> <p>*SIRIP components are developed according to SOA.</p> <p>Lose coupling. SIRIP is made of separate components that serve specific purposes. The communication between these components is implemented using open standard technologies - XML for data structures, WS-S for data security, XML Signature for data integrity. Whenever it is possible, web-services are preferred to other means of interoperability. Each of SIRIP logical components may be deployed and scaled independently, technologically it is possible to host SIRIP components in public cloud service. There are agreed schemes for all components.</p> <p>*SIRIP data exchange must be based on these standards: XML, HTTP (S), SOAP, WSDL, WS-*. SIRIP data exchange to ensure the safety and security, Web services are realized SIRIP must use the WS-* standards are protocols: WS-Security, WS-Secure Conversation, WS-SecurityPolicy, WS-MetadataExchange, WS-Trust, WS-AtomicTransaction, WS-ReliableMessaging.</p> <p>The system user identity information to support a description of the request and the transfer is based on the SAML 1.0 standard.</p> <p>Reference: [5] SIRIP specification in Lithuanian, chapter 7.2.6. Kiti reikalavimai SIRIP architektūros realizavimui, chapter 7.2.1. Reikalavimai SIRIP programų architektūrai</p>	2	<p>Oracle OSB is used for interconnection. *All standardised schemes for different components are available for downloading in https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660</p> <p>For user (legal and business entities) authentication to use e-services it is used SIRIP authentication component that offers authentication via e-banking and e-signature solutions (ID-card, civil-servant card, mobile-ID, etc.), it is interconnected with oracle OSB as well. In SIRIP e-services is designed by creating BPEL process with Oracle JDeveloper, each process relating with specific webservice from OSB for data receiving, validation, or sending, and of course all the process workflow is being sent to OSB. For monitoring workflows, errors (if there is), statistics and for other configuration of instances like process instance recovery we are using Oracle Enterprise Manager.</p> <p>And, of course, we have our own Form designer, each form is being related to specific BPEL process. If at the end e-service needs to create word document which can be signed or printed, ASPOSE library is used. So if template of the document have changed we just correct word document template and upload to the system (takes only few minutes), after that each new e-service instance will create documents according to the new template, no need to stop e-service delivery. If there is a need in e-service process to sign formed document electronically it can be done with integrated e-documents creation tool (for a moment we are using tool of another institution but having plans next year to have our own regarding to the new specification of e-document). One more tool is used for message templates - FreeMarker.</p> <p>Jetkins is used for Building/testing SIRIP continuously.</p>	[describe project here]	2	Oracle OSB, JDeveloper, Jetkins, JavaMelody, Oracle Enterprise Manager, Zabbix, etc. is used for SOA monitoring. "Real-time" monitoring - 24 hours a day, 7 days a week, 365 days a year.	1

Analysis of the NIFs

[See Alignment Examples in NIFO toolbox](#)

[See implementation and monitoring examples in NIFO Toolbox](#)

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Public administrations should make their authentic sources of information available to others while implementing access and control mechanisms to ensure security and privacy in accordance with the relevant legislation. EIF, Recommendation 11 Category: Conceptual model	Does the NIF encourage to make the authentic sources of information available to others?	SIRIP operating rules 'SIRIP operating rules describes what, where and how authentic sources of information should be available as well as all requirements for implementing access and control. It is regulated by law that all access to the data of registries should be published. Soon SIRIP will be modernised with open data accessibility designing e-services. Open data portal is here: Opendata.gov.lt NIF Element: 10. Data transmitted over SIRIP using SIRIP users from developed external components, which is published in the Portal (external components development recommendations presented in Annex 1 hereto), or construction VIISP service. https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC, chapter III. DUOMENŲ PERDAVIMO PASLAUGA https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A Opendata.gov.lt	2	Requirements for implementing access and control mechanism published here: https://www.epaslaugos.lt/portal/provider/content/1254 Webservices description is published here: https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660	[describe project here]	2	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for checking all Lithuanian public system regulations before it is created and is responsible for allocating EU structural funds and monitoring. If in specification of solution there is built new access to authentic sources (e.g. webservice) Information Society Development Committee under the Ministry of Transport and Communications monitors that it should be registered in SIRIP oracle OSB and published https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660 At first before using any SIRIP component such as authentication, data access and other SIRIP components that provides for e-service providers personal data of legal and business entities, each e-service provider should register as a Data Controller in Personal Data Controllers Register, that is controlled by State Data Protection Inspectorate. After there is a contract is signed and only then they can use SIRIP components such as accessing personal data of legal and business entities.	1
Access control EIF, Recommendation 11 Category: Conceptual model	Does the NIF encourage access and control mechanisms to ensure compliance to security and privacy legislation?	SIRIP regulations and requirements Information Society Development Committee under the Ministry of Transport and Communications and SIRIP has been audited and found to be in accordance with the requirements of the management system standard ISO/IEC 27001:2013 / LST ISO/IEC27001:2013. SIRIP data security is ensured in accordance with the Republic of Lithuania on Legal Protection Law, ISO / IEC 27002:2009 standard (to the extent required by data protection legislation), Information Society Development Committee under the Government of the Republic of Lithuania approved SIRIP implementing information security documents SIRIP data safety regulations and other information security legislation. SIRIP operating rules SIRIP operating rules describes what, where and how authentic sources of information should be available as well as all requirements for implementing access and control 1. External components (called webservices) message format to be XML. 2. The external components must be validated according to the WS-I standard. 3. Must be used in a uniform data exchange protocol (SOAP 1.1) and exceptions management rules. The external features of the component returned an error message format must appear united fields to return error information (field names: error_code, error_id, ERROR_MESSAGE). 4. All external component documentation must be submitted to both the WSDL in the scheme, as well as a separate (and can be generated in an automated way) page. 5. The external component of the functioning of the platform should be supported by the WS-S standard set of security technology. See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC, chapter III. DUOMENŲ PERDAVIMO PASLAUGA, 1 attachment - Valstybės informacinių išteklių sąveikumo platformos funkcionavimo taisyklių 1 priedas	1	All web-services are registered in Oracle OSB which supports open industry standards for ensuring the integrity and privacy of communications and to ensure that only authorized users can access resources in an Oracle Service Bus domain. It uses the underlying WebLogic security framework as building blocks for its security services. There are special e-services for legal and business entities to verify who was managing their personal data: For user (legal and business entities) authentication to use e-services it is used SIRIP authentication component that offers authentication via e-banking and e-signature solutions (ID-card, civil-servant card, mobile-ID, etc.). https://www.epaslaugos.lt/portal/citizen/service/12020 SIRIP was developed according to SIRIP specification [5] requirements. For example, data management meets the requirements ISO/IEC 27000 standard, ISO/IEC 27002:2005, ISO/IEC27001 and ISO 17799. For data exchange it is used SSL protocols, web services, SVDPT (National physical private network. No access to internet). Loose coupling. SIRIP is made of separate components that serve specific purposes. The communication between these components is implemented using open standard technologies - XML for data structures, WS-S for data security, XML Signature for data integrity. Whenever it is possible, web-services are preferred to other means of interoperability. Etc.	[describe project here]	2	At first before using any SIRIP component such as authentication, data access and other SIRIP components that provides for e-service providers personal data of legal and business entities, each e-service provider should register as a Data Controller in Personal Data Controllers Register, that is controlled by State Data Protection Inspectorate. After there is a contract is signed and only then they can use SIRIP components such as accessing personal data of legal and business entities. In SIRIP For security and privacy monitoring we have special tool - Oracle OSB, so only authenticate users can access the data. OSB also provides data monitoring. Each requests of web-service is also monitored and logging, so you can check all logs who, when and for what purpose was asking the data of registers, systems and other person related data. Moreover, building e-services in SIRIP for data monitoring is used Oracle Enterprise Manager that provides comprehensive solutions for testing, deploying, operating as well as monitoring, diagnosing, and resolving problems.	1

Analysis of the NIFs

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Public administrations, when working to establish (European) public services, should develop interfaces to authentic sources and align them at semantic and technical level. EIF, Recommendation 12 Category: Conceptual model	Does the NIF encourage the development of interfaces to authentic sources that are aligned at semantic and technical level?	SIRIP operating rules SIRIP operating rules describes what, where and how authentic sources of information should be available as well as all requirements for implementing access and control 1. External components (called webservices) message format to be XML. Second The external components must be validated according to the WS-I standard. 3rd Must be used in a uniform data exchange protocol (SOAP 1.1) and exceptions management rules. The external features of the component returned an error message format must appear united fields to return error information (field names: error_code, error_id, ERROR_MESSAGE). 4th All external component documentation must be submitted to both the WSDL in the scheme, as well as a separate (and can be generated in an automated way) page. 5th The external component of the functioning of the platform should be supported by the WS-S standard set of security technology. See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC , chapter III. DUOMENŲ PERDAVIMO PASLAUGA, 1 attachment - Valstybės informacinių išteklių sąveikumo platformos funkcionavimo taisyklių 1 priedas	2	Requirements for implementing access and control mechanism published here: https://www.epaslaugos.lt/portal/provider/content/1254 Webservices description is published here: https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660	[describe project here]	2	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for checking all Lithuanian public system regulations before it is created and is responsible for allocating EU structural funds and monitoring. If in specification of solution there is built new access to authentic sources (e.g. webservice) Information Society Development Committee under the Ministry of Transport and Communications monitors that it should be registered in SIRIP oracle OSB and published https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660	1
Interoperability levels EIF, Chapter 4 Category: Interoperability levels	Does the NIF describe the four levels of interoperability?	SIRIP regulations, operating rules, legislation [see 8 rows below about interoperability levels]	0	describe here	An example of combined service related to birth of the child event. Normally when a child is born, hospital is giving a certificate about the fact that child was born. After it, the child should be registered in population register and there is a need to declare child's living address. Only after parents can get lump sum after the birth of a child. If father asked for parental leave, he might get parental leave allowance. For all this 4 different institutions are responsible. In SIRIP was built combined service to get all related services by applying one time. Before building such e-service were made contracts between parties, where was written the procedure of data exchange using SIRIP between parties, legislation was reviewed and changed if needed. SIRIP owner (Information Society Development Committee under the Ministry of Transport and Communications) managed all organisational aspects (managed meetings, agreements, staff training etc.). See an example[45] of a contract between parties where the whole process and technical solution requirements are described. Paper birth certificate in hospital became electronic, machine readable. The format of this certificate was agreed between parties. Required hardware and software was given to hospital. Each birth e-certificate automatically is stored in SIRIP (for a moment until there is no specific register). All related parties (4 institutions) prepared their systems to read this e-certificate. The data exchange between parties is done through SIRIP data exchange component. The specific process was built using SIRIP oracle Developer and related with webservice in Oracle OSB.	1	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for allocating and monitoring money from EU structural funds. Doing that they are constantly monitoring if services can be used in other life event related services. Information Society Development Committee under the Ministry of Transport and Communications has created service delivery project's evolution model[31,32]. In this model institutions should evaluate the real state of their service delivery and reachability. In the questionnaire there is a list of requirements for automation, for example, if service can be a part of other service there is a requirement "Service result transfer to other institution" (Lith. "Paslaugos rezultato perdavimas kitai įstaigai ar institucijai") [see for more 31]. Meeting this requirement creates a possibility to combine all life event related services. This model is used building services in SIRIP as well.	1
Legal interoperability: Public administrations should carefully consider all relevant legislation relating to data exchange, including data protection legislation, when seeking to establish a European public service. EIF, Chapter 4 Recommendation 14 Category: Interoperability levels, legal artefacts	Does the NIF impose to consider all relevant legislation related to data exchange?	Some quotes from [1] SIRIP regulations: 5. SIRIP activities follow: 5.1. Republic of Lithuania on the legal protection of the law; 5.2. Republic of Lithuania Law on Electronic Signature (Official Gazette, 2000, no. 61-1827); 5.3. Republic of Lithuania Law on the management of information resources; 5.4. Republic of Lithuania Law on Public Administration; 5.5. Consideration of applications for public service and administration, offices and other public administration entities rules adopted in the Government of Lithuania in 2007. August 22. Resolution No. 875 (Official Gazette, 2007, Nr. 94-3779); 5.6. Regulations; 5.7. State information resource interoperability platform data protection regulations, approved by the Information Society Development Committee under the Government of the Republic of Lithuania in 2008. August 8. Order No. T-140 (hereinafter - Safety Regulations); 5.8. State information resource interoperability platform functioning rules adopted in the Information Society Development Committee under the Government of the Republic of Lithuania in 2008. December 1. Order No. T-228 ; 5.9. other legislation. " Reference: [1] https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cdb94b0c51 *Each year SIRIP regulations, operational rules and law are revised and updated.	2	describe here	[describe project here]	0	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) each time is monitoring and checks if institution before using SIRIP components follows legislation. If not SIRIP components can't be used.	1

Analysis of the NIFs

[See Alignment Examples in NIFO toolbox](#)

[See implementation and monitoring examples in NIFO Toolbox](#)

EIF Element - Reference - Category	Measurement	NIF-EIF Alignment		NIF implementation		NIF monitoring		
		NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is a common practice]	Only implementation examples [describe an implementation example specific to each element]	Implementation scoring 2: Common practice 1: some examples 0: not observed	NIF monitoring	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
Organisational interoperability - business process alignment. Public administrations should document their business processes and agree on how these processes will interact to deliver a (European) public service. EIF, Chapter 4 Recommendation 15 Category: Interoperability levels, organisational artefacts	Does the NIF describe that the business processes are documented in an agreed way in order for other administrations to understand the overall business process?	SIRIP operating rules, legislation 'All organisational aspects for delivering e-services are described in SIRIP operating rules. Designing e-service with SIRIP tools, agreement on how e-service would work is signed, BPMN diagrams are developed which is a part of SIRIP tools. Each institution before developing service or e-services are obliged to document their business processes and agree on how these processes will interact to deliver a public service. https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC http://vakokybe.vrm.lt/index.php?id=452 http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=360388&p_query=&p_tr2=	2	All organisational aspects for delivering e-services are described in SIRIP operating rules. Designing e-service with SIRIP tools, agreement on how e-service would work is signed, BPMN diagrams are developed which is a part of SIRIP tools. Each institution before developing service or e-services are obliged to document their business processes and agree on how these processes will interact to deliver a public service. An example of a part of organisational agreement is shown in [45] birth of a child related services (see attached)	[describe project here]	2	The register of such e-service delivering agreements between SIRIP owner and service providers is stored in Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) and can be revised and changed when needed. National Audit Office of the Republic of Lithuania (www.vkontrolė.lt) authority time by time checks (at least 1 time per year)[4] how many agreements were made each year.	1
Inter-governmental coordination. EIF, Chapter 4 Recommendation 15 Category: Interoperability levels, organisational artefacts	Does the NIF encourage to agree on how these processes will interact among the different levels of public administrations?	5.1. Republic of Lithuania on the legal protection of the law See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC See http://vakokybe.vrm.lt/index.php?id=452 See http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=360388&p_query=&p_tr2=	2	describe here	An example of a part of organisational agreement is shown in birth of a child related services. 'All organisational aspects for delivering e-services are described in SIRIP operating rules. Designing e-service with SIRIP tools, agreement on how e-service would work is signed, BPMN diagrams are developed which is a part of SIRIP tools. Each institution before developing service or e-services are obliged to document their business processes and agree on how these processes will interact to deliver a public service.	1	The register of such e-service delivering agreements between SIRIP owner and service providers is stored in Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) and can be revised and changed when needed. National Audit Office of the Republic of Lithuania (www.vkontrolė.lt) authority time by time checks (at least 1 time per year)[4] how many agreements were made each year.	1
Organisational interoperability - organisational relationships. Public administrations should clarify their organisational relationships as part of the establishment of a (European) public service. EIF, Chapter 4 Recommendation 16 Category: Interoperability levels, organisational artefacts.	Does the NIF encourage public administrations to clarify their organisational relationships as part of the establishment of a (European) public service?	[1] SIRIP regulations Reference: [1] https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cdb94b0c51 [18] http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=360388&p_query=&p_tr2=	1	[describe here]	The register of such e-service delivering agreements between SIRIP owner and service providers is stored in Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) and can be revised and changed when needed.	1	The register of agreements and contracts between SIRIP owner and service providers is stored in Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) and can be revised and changed when needed. SIRIP components can't be used without clarifying organisational relationships. National Audit Office of the Republic of Lithuania (www.vkontrolė.lt) authority time by time checks (at least 1 time per year)[4] how many agreements were made each year.	1
Organisational interoperability - change management. Public administrations working together to provide (European) public services should agree on change management processes to ensure continuous service delivery. EIF, Chapter 4 Recommendation 17 Category: Interoperability levels, organisational artefacts	Does the NIF encourage public administrations to agree on change management processes to ensure continuous service delivery?	SIRIP regulations [1,2] Reference: [1] https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cdb94b0c51 [2] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC	0	describe here	When a change is needed, old contract or agreement is annulled and new is signed. See an example of contract change [46] Each contract is reviewed by all parties and signed. Only then new functionality of SIRIP can be available. Contract changes are stored in a register owned by Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt)	0	[describe monitoring procedure here]	0
Semantic interoperability. Public administrations, when working together to establish (European) public services, should use a common taxonomy of basic public services. EIF, Chapter 4 Recommendation 13 Category: Interoperability levels, semantic artefacts.	Does the NIF encourage the usage of a common taxonomy of basic public service?	SIRIP regulations https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cdb94b0c51 , chapter I 6.2.1 https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter 39, 40	1	describe here	Basic public services are developed in SIRIP and by the law Public administrations should use it. If there is developed new basic public service it should be included in SIRIP as well. Examples of basic public services are: authentication component, payment broker component, access to base registers(descriptions available here: https://www.epaslaugos.lt/portal/search?category=VIISP+paslaugos+institucijoms), etc.	1	The register of agreements and contracts on using SIRIP components (basic public services) between SIRIP owner and service providers is stored in Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) and can be revised and changed when needed. All SIRIP components can't be used without a contract. National Audit Office of the Republic of Lithuania (www.vkontrolė.lt) authority time by time checks (at least 1 time per year)[4] how many agreements were made each year.	1

Analysis of the NIFs

[See Alignment Examples in NIFO toolbox](#)

[See implementation and monitoring examples in NIFO Toolbox](#)

EIF Element - Reference - Category	Measurement	NIF-EIF Alignment		NIF implementation		NIF monitoring		
		NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is a common practice]	Only implementation examples [describe an implementation example specific to each element]	Implementation scoring 2: Common practice 1: some examples 0: not observed	NIF monitoring	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
Public administrations should support the establishment of sector specific and cross-sectoral communities that aim to facilitate semantic interoperability and should encourage the communities to share results on national and European platforms. EIF, Recommendation 18 Category: Interoperability levels, semantic artefacts	Does the NIF encourage public administrations to support the establishment of sector specific and cross-sectoral communities that aim to facilitate semantic interoperability and that share results on national and European platforms?	5.5. Consideration of applications for public service and administration, offices and other public administration entities rules adopted in the Government of Lithuania in 2007. August 22. Resolution No. 875 ; https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter 40 1.	2	describe here	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is responsible for checking all Lithuanian public system regulations before it is created and is responsible for allocating EU structural funds and monitoring . If in specification of solution there is written new solution Information Society Development Committee under the Ministry of Transport and Communications monitors that it should be registered in SIRIP and published (e.g. web-services are published here: https://www.epaslaugos.lt/portal/serviceContract/44420/1222/7660?searchId=b31f3bd0-007d-4f32-a57e-4a8a3d5b9fe0 .) SIRIP was developed according to SIRIP specification [5] requirements. For example, now we are changing our search engine functionality using tools of another project that parse all the text and do semantic connections and indexing. More about the project can be found on http://alkas.lt/2013/04/02/kuriama-lietuviu-kalbos-sintaksines-semantines-analizes-informacine-sistema/	1	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is monitoring of state information resources development and interoperability policies, their implementation and effective use of information resources by the Government of Lithuania approved the information society development planning documents for coordination;	1
Technical interoperability. Public administrations should agree on the formalised specifications to ensure technical interoperability when establishing European public services. EIF, Recommendation 19 Category: Interoperability levels, technical artefacts.	Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.	SIRIP regulations [2] the list of recommended standards [20] Reference: [3] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter 40 [2] https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC , 1 attachment - Valstybės informacinių išteklių sąveikumo platformos funkcionavimo taisyklių 1 priedas	1		The communication between components is implemented using open standard technologies - XML for data structures, WS-S for data security, XML Signature for data integrity. Whenever it is possible, web-services are preferred to other means of interoperability. Etc. The list of recommended standards can be find here: [20]	1	The register of agreements and contracts on using SIRIP components (basic public services) between SIRIP owner and service providers is stored in Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) and can be revised and changed when needed. In such contracts and agreements standards are agreed. All SIRIP components can't be used without a contract. So it is monitored each time making a new contract or agreement. Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) before updating recommendations for open standards [20] sends a requests to all public sector for any comments if changes are needed.	1
Public administrations, when establishing (European) public services, should base interoperability agreements on existing formalised specifications, or, if they do not exist, cooperate with communities working in the same areas. EIF, Recommendation 20 Category: Interoperability agreements.	Does the NIF encourage: - Interoperability agreements to be based on existing formalised specifications? Or - if they do not exist, to cooperate with communities working in the same areas.	5.7. State information resource interoperability platform data protection regulations, approved by the Information Society Development Committee under the Government of the Republic of Lithuania in 2008. August 8. Order No. T-140 (hereinafter - Safety Regulations); See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter 40 See https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.9623682A5AFC	2	Standardised agreements and it's attachments are available on SIRIP eGovernment portal: https://www.epaslaugos.lt/portal/provider/category/1224	[describe project here]	2	The register of agreements and contracts on using SIRIP components (basic public services) between SIRIP owner and service providers is stored in Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) and can be revised and changed when needed. In such contracts and agreements standards are agreed. All SIRIP components can't be used without a contract. So it is monitored each time making a new contract or agreement.	1
Public administrations should use a structured, transparent and objective approach to assessing and selecting formalised specifications. EIF, Recommendation 21 Category: Interoperability agreements.	Does the NIF encourage Public administrations to use a structured, transparent and objective approach to assess and select formalised specifications?	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) regulations [22] [20] recommendations on standards, https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.E6B3CA284A0F Reference: [22] http://ivpk.lrv.lt/lt/administracine-informacija/nuostatai	1	The list of open standards can be found here: https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.E6B3CA284A0F	[describe project here]	2	Once per year Information Society Development Committee under the Ministry of Transport and Communications monitoring interoperability framework requirement will verify, revise and update the list of recommendation if needed. https://www.e-tar.lt/portal/lt/legalAct/TAR.E6B3CA284A0F/DHWUmuJcAQ	2
When establishing (European) public services, public administrations should prefer open specifications, taking due account of the coverage of functional needs, maturity and market support. EIF, Recommendation 22 Category: Interoperability agreements.	Does the NIF encourage public administrations to prefer open specifications, taking due account of the coverage of functional needs, maturity and market support?	It is described generally by the law "All recommendations are described generally in https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.E6B3CA284A0F . By the law it is forbidden to use other standards if open specification could be used." https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.85C510BA700A , chapter III 36 2 recommendations on standards, https://www.e-tar.lt/portal/forms/legalAct.html?documentId=TAR.E6B3CA284A0F	2	In SIRIP such open source tools are used: <i>zabbix, freeMarker, Mercurial, JavaMelody, Jenkins</i> etc.	[describe project here]	0	Before creating any technological solution there is an obligation to do public procurement . Then Central project management agency (http://www.ccpva.lt/en/home.html) reviews technical specification and monitors if open specification is used if there is a possibility.	2

Analysis of the NIFs

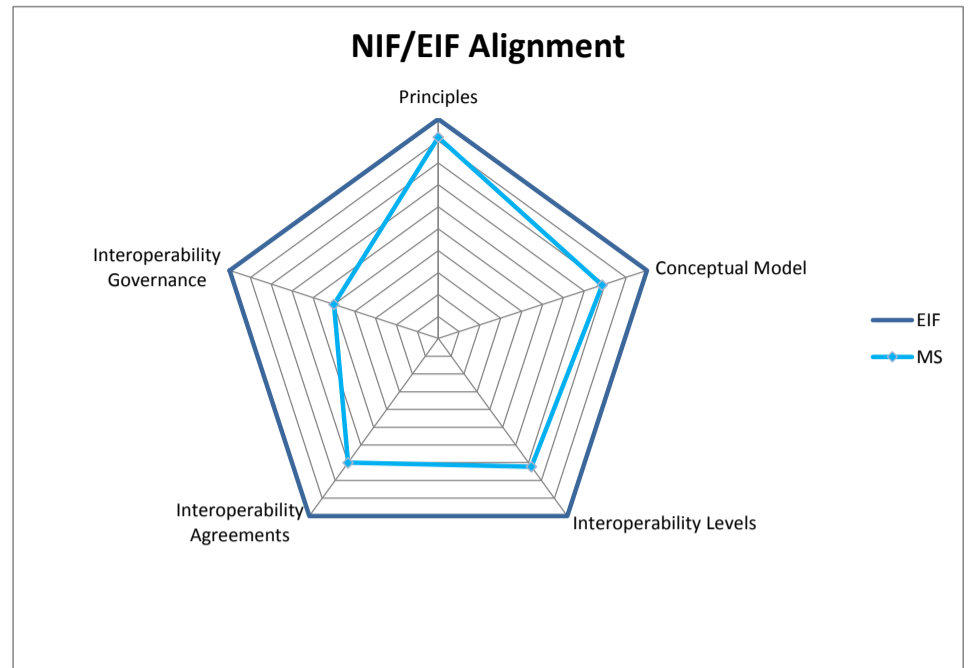
[See Alignment Examples in NIFO toolbox](#)

[See implementation and monitoring examples in NIFO Toolbox](#)

EIF Element - Reference - Category	Measurement	NIF-EIF Alignment		NIF implementation		NIF monitoring		
		NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is a common practice]	Only implementation examples [describe an implementation example specific to each element]	Implementation scoring 2: Common practice 1: some examples 0: not observed	NIF monitoring	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
Contribution to the standardisation process Public administrations should lead or actively participate in standardisation work relevant to their needs. EIF, Chapter 5, Recommendation 23 Category: Interoperability agreements.	Does the NIF encourage public administrations to lead or actively participate in standardisation work relevant to their needs?	Lithuania public sector has an open standards working group (including other interested (external) parties . LITHUANIAN STANDARDS BOARD regulations Reference: [48] http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=448311&p_query=&p_tr2=2	1	[describe here]	For example: Lithuania public sector has approved State information system life cycle management methodology which must be followed by all institutions. https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/296c87d09e8e11e383c0832a9f635113 Data submission standards and recommendations https://www.e-tar.lt/portal/en/legalAct/TAR.E6B3CA284A0F/DHWUmuCAQ	1	All public sector developed information system must follow these documents, legislation. The review and updating is carried out once a year	1
Public administrations, when working together to establish (European) public services, should agree on minimum service requirements for secure data exchange. EIF, Recommendation 13 Category: Interoperability agreements.	Does the NIF encourage public administrations to agree on minimum service requirements for secure data exchange?	SIRIP regulations and requirements SIRIP regulations defines requirements for the security and privacy. More detailed requirements are described in SIRIP specification. SIRIP data security is ensured in accordance with the Republic of Lithuania on Legal Protection Law, ISO / IEC 27002:2009 standard (to the extent required by data protection legislation), Information Society Development Committee under the Government of the Republic of Lithuania approved SIRIP implementing information security documents SIRIP data safety regulations and other information security legislation. https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cdb94b0c51 , chapter I 4.8, V, VI SIRIP specification in Lithuanian (attached to the email), Chapter 7.3., 7.4., 7.5., 7.5.1., 7.5.2., 7.5.3., 7.5.1., 7.6., 7.6.1. Reference: [1] https://www.e-tar.lt/portal/lt/legalAct/1eafc1f04a6711e5a38cd6cdb94b0c51 , chapter I 4.8, V, VI	2	SIRIP was developed according to SIRIP specification requirements. For example, data management meets the requirements ISO/IEC 27000 standard, ISO/IEC 27002:2005, ISO/IEC27001 and ISO 17799. For data exchange it is used SSL protocols, web services, SVDPT (National physical private network. No access to internet). Lose coupling. SIRIP is made of separate components that serve specific purposes. The communication between these components is implemented using open standard technologies - XML for data structures, WS-S for data security, XML Signature for data integrity. Whenever it is possible, web-services are preferred to other means of interoperability. Etc.	[describe project here]	2	All developed information system must follow this document. The review and updating is carried out once a year	1
Governance Public administrations should establish a framework for the governance of their interoperability activities across administrative levels. EIF, Recommendation 25 Category: Interoperability Governance	A governance framework exists to control the interoperability activities across administrative levels.	law [3] "SIRIP is a Lithuanian interoperability platform, also all the systems of public administrations must meet the requirements of interoperability activities. 9) State resources interoperability, which means that information technology be designed so as to meet the performance needs of the Authority's functions and to be eligible to provide services to other authorities of the features to meet the needs;	1	[describe here]	SIRIP is a Lithuanian interoperability platform, also all the systems of public administrations must meet the requirements of interoperability activities. Information Society Development Committee under the Ministry of Transport and Communications owns the responsibility for definition of SIRIP scope and its development.	1	Information Society Development Committee under the Ministry of Transport and Communications (www.ivpk.lt) is monitoring of state information resources development and interoperability policies, their implementation and effective use of information resources by the Government of	1

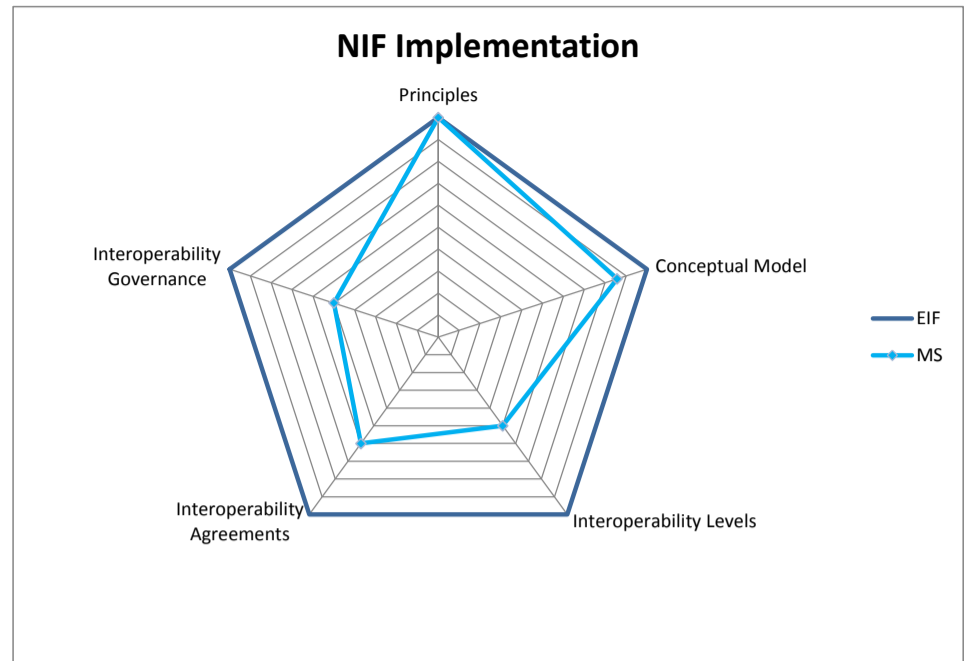
Category	EIF	MS
Principles	100%	91,7%
Conceptual Model	100%	78,6%
Interoperability Levels	100%	72,2%
Interoperability Agreements	100%	70,0%
Interoperability Governance	100%	50,0%

Category	EIF Element	Scoring		
		Max	MS	
Principles	Subsidiarity and proportionality	2	2	
	User-centricity	2	2	
	Inclusion and accessibility	2	2	
	Security and privacy	2	2	
	Multilingualism	2	1	
	Administrative simplification	2	2	
	Transparency	2	1	
	Preservation of information	2	2	
	Openness	2	2	
	Reusability	2	2	
	Technological neutrality and adaptability	2	2	
	Effectiveness and efficiency	2	2	
	Total		24	22
	Conceptual Model	Does the NIF contain a conceptual model?	2	2
Is the conceptual model a component-based service model? (e.g. SOA)		2	2	
Does the NIF encourage the use of common schemes to interconnect loosely coupled service components.		2	2	
Does the NIF encourage to put in place the infrastructure to interconnect loosely coupled service components?		2	2	
Does the NIF encourage to make the authentic sources of information available to others?		2	1	
Does the NIF encourage access and control mechanisms to ensure compliance to security and privacy legislation?		2	2	
Does the NIF encourage the development of interfaces to authentic sources that are aligned at semantic and technical level?		2	0	
Total			14	11
Interoperability Levels	Does the NIF describe the four levels of interoperability?	2	2	
	Does the NIF impose to consider all relevant legislation related to data exchange?	2	2	
	Does the NIF describe that the business processes are documented in an agreed way in order for other administrations to understand the overall business process?	2	2	
	Does the NIF encourage to agree on how these processes will interact among the different levels of public administrations?	2	1	
	Does the NIF encourage public administrations to clarify their organisational relationships as part of the establishment of a (European) public service?	2	0	
	Does the NIF encourage public administrations to agree on change management processes to ensure continuous service delivery.	2	1	
	Does the NIF encourage the usage of a common taxonomy of basic public service?	2	2	
	Does the NIF encourage public administrations to support the establishment of sectorspecific and cross-sectoral communities that aim to facilitate semantic interoperability and that share results on national and European platforms.	2	1	
	Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.	2	2	
	Total		18	13
Interoperability Agreements	Does the NIF encourage: - Interoperability agreements to be based on existing formalised specifications? Or - if they do not exist, to cooperate with communities working in the same areas.	2	1	
	Does the NIF encourage Public administrations to use a structured, transparent and objective approach to assess and select formalised specifications?	2	2	
	Does the NIF encourage public administrations to prefer open specifications, taking due account of the coverage of functional needs, maturity and market support?	2	1	
	Does the NIF encourages public administrations to lead or actively participate in standardisation work relevant to their needs?	2	2	
	Does the NIF encourage public administrations to agree on minimum service requirements for secure data exchange?	2	1	
Total		10	7	
Interoperability Governance	A governance framework exists to control the interoperability activities across administrative levels.	2	1	
Total		2	1	



Category	EIF	MS
Principles	100%	100,0%
Conceptual Model	100%	85,7%
Interoperability Levels	100%	50,0%
Interoperability Agreements	100%	60,0%
Interoperability Governance	100%	50,0%

Category	EIF Element	Scoring		
		Max	MS	
Principles	Subsidiarity and proportionality	2	2	
	User-centricity	2	2	
	Inclusion and accessibility	2	2	
	Security and privacy	2	2	
	Multilingualism	2	2	
	Administrative simplification	2	2	
	Transparency	2	2	
	Preservation of information	2	2	
	Openness	2	2	
	Reusability	2	2	
	Technological neutrality and adaptability	2	2	
	Effectiveness and efficiency	2	2	
	Total		24	24
	Conceptual Model	Does the NIF contain a conceptual model?	2	1
Is the conceptual model a component-based service model? (e.g. SOA)		2	2	
Does the NIF encourage the use of common schemes to interconnect loosely coupled service components.		2	2	
Does the NIF encourage to put in place the infrastructure to interconnect loosely coupled service components?		2	2	
Does the NIF encourage to make the authentic sources of information available to others?		2	2	
Does the NIF encourage access and control mechanisms to ensure compliance to security and privacy legislation?		2	2	
Does the NIF encourage the development of interfaces to authentic sources that are aligned at semantic and technical level?		2	1	
Total			14	12
Interoperability Levels		Does the NIF describe the four levels of interoperability?	2	0
		Does the NIF impose to consider all relevant legislation related to data exchange?	2	2
	Does the NIF describe that the business processes are documented in an agreed way in order for other administrations to understand the overall business process?	2	1	
	Does the NIF encourage to agree on how these processes will interact among the different levels of public administrations?	2	1	
	Does the NIF encourage public administrations to clarify their organisational relationships as part of the establishment of a (European) public service?	2	0	
	Does the NIF encourage public administrations to agree on change management processes to ensure continuous service delivery.	2	1	
	Does the NIF encourage the usage of a common taxonomy of basic public service?	2	1	
	Does the NIF encourage public administrations to support the establishment of sectorspecific and cross-sectoral communities that aim to facilitate semantic interoperability and that share results on national and European platforms.	2	1	
	Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.	2	2	
	Total		18	9
Interoperability Agreements	Does the NIF encourage: - Interoperability agreements to be based on existing formalised specifications? Or - if they do not exist, to cooperate with communities working in the same areas.	2	2	
	Does the NIF encourage Public administrations to use a structured, transparent and objective approach to assess and select formalised specifications?	2	0	
	Does the NIF encourage public administrations to prefer open specifications, taking due account of the coverage of functional needs, maturity and market support?	2	1	
	Does the NIF encourages public administrations to lead or actively participate in standardisation work relevant to their needs?	2	2	
	Does the NIF encourage public administrations to agree on minimum service requirements for secure data exchange?	2	1	
Total		10	6	
Interoperability Governance	A governance framework exists to control the interoperability activities across administrative levels.	2	1	
	Total	2	1	



Category	EIF	MS
Principles	100%	87,5%
Conceptual Model	100%	57,1%
Interoperability Levels	100%	44,4%
Interoperability Agreements	100%	70,0%
Interoperability Governance	100%	50,0%

Category	EIF Element	Scoring		
		Max	MS	
Principles	Subsidiarity and proportionality	2	2	
	User-centricity	2	2	
	Inclusion and accessibility	2	2	
	Security and privacy	2	1	
	Multilingualism	2	2	
	Administrative simplification	2	2	
	Transparency	2	2	
	Preservation of information	2	1	
	Openness	2	2	
	Reusability	2	2	
	Technological neutrality and adaptability	2	2	
	Effectiveness and efficiency	2	1	
	Total		24	21
	Conceptual Model	Does the NIF contain a conceptual model?	2	1
Is the conceptual model a component-based service model? (e.g. SOA)		2	2	
Does the NIF encourage the use of common schemes to interconnect loosely coupled service components.		2	1	
Does the NIF encourage to put in place the infrastructure to interconnect loosely coupled service components?		2	1	
Does the NIF encourage to make the authentic sources of information available to others?		2	1	
Does the NIF encourage access and control mechanisms to ensure compliance to security and privacy legislation?		2	1	
Does the NIF encourage the development of interfaces to authentic sources that are aligned at semantic and technical level?		2	1	
Total			14	8
Interoperability Levels		Does the NIF describe the four levels of interoperability?	2	1
		Does the NIF impose to consider all relevant legislation related to data exchange?	2	1
	Does the NIF describe that the business processes are documented in an agreed way in order for other administrations to understand the overall business process?	2	1	
	Does the NIF encourage to agree on how these processes will interact among the different levels of public administrations?	2	1	
	Does the NIF encourage public administrations to clarify their organisational relationships as part of the establishment of a (European) public service?	2	0	
	Does the NIF encourage public administrations to agree on change management processes to ensure continuous service delivery.	2	1	
	Does the NIF encourage the usage of a common taxonomy of basic public service?	2	1	
	Does the NIF encourage public administrations to support the establishment of sectorspecific and cross-sectoral communities that aim to facilitate semantic interoperability and that share results on national and European platforms.	2	1	
	Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.	2	1	
	Total		18	8
Interoperability Agreements	Does the NIF encourage: - Interoperability agreements to be based on existing formalised specifications? Or - if they do not exist, to cooperate with communities working in the same areas.	2	2	
	Does the NIF encourage Public administrations to use a structured, transparent and objective approach to assess and select formalised specifications?	2	2	
	Does the NIF encourage public administrations to prefer open specifications, taking due account of the coverage of functional needs, maturity and market support?	2	1	
	Does the NIF encourages public administrations to lead or actively participate in standardisation work relevant to their needs?	2	1	
	Does the NIF encourage public administrations to agree on minimum service requirements for secure data exchange?	2	1	
Total		10	7	
Interoperability Governance	A governance framework exists to control the interoperability activities across administrative levels.	2	1	
	Total		2	1

