



# NATIONAL INTEROPERABILITY FRAMEWORK OBSERVATORY

## Analytical Model *CROATIA*

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

**DIGIT**

Directorate-General for Informatics

ISA<sup>2</sup> Programme

[ec.europa.eu/isa2](http://ec.europa.eu/isa2)

ISA<sup>2</sup>

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## **EUROPEAN COMMISSION**

*Directorate-General for Informatics*

*Directorate B — Interoperability Solutions for public administrations, businesses and citizens*

*Unit B6 — ISA<sup>2</sup> 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	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 <i>[describe if and how implementation of the element is a common practice]</i>	Only implementation examples <i>[describe an implementation example specific to each element]</i>	Implementation scoring 2: Common practice 1: some examples 0: not observed	NIF monitoring	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
Subsidiarity and proportionality EIF, Chapter 2, Underlying principles Category: Principles	Ref: Does the NIF contain the 'subsidiarity and proportionality' principle?	The e-Croatia Strategy 2020 has defined the EIF as the basic interoperability framework for Croatia. All principles have to be implemented. All texts are derived from the e-Croatia 2020 Strategy. "The Croatian Interoperability Framework was developed in accordance with the European Interoperability Framework 1.0, i.e. in line with the version EIF 1.0. However, Croatia will not develop a new interoperability framework, but will in all its actions take account of the principles of the European Interoperability Framework EIF 2.0."	2	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
User-centricity EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'user-centricity' principle?	The Croatian Interoperability Framework was developed in accordance with the European Interoperability Framework 1.0, i.e. in line with the version EIF 1.0. However, Croatia will not develop a new interoperability framework, but will in all its actions take account of the principles of the European Interoperability Framework EIF 2.0.	2	<i>[describe here]</i>	The e-Citizens platform is a platform for e-services with a National Identification and Authentication System and provided mailbox for all citizens of Croatia. More than 50 messages are sent to citizens and they are in a large amount proactive informing citizens that for example their id card will expire or the car registration.	1	<i>[describe monitoring procedure here]</i>	0
Inclusion and accessibility EIF, Chapter 2, Underlying principles Recommendation 2 Category: Principles	Does the NIF contain the 'inclusion and accessibility' principle?	e-Croatia 2020; chapter 4.1.4 e-Inclusion: "It is necessary to further ensure the inclusion of vulnerable groups in the use of e-services, both by informing them about the possibilities of receiving the services and public information through ICT in general, and through the development of skills and knowledge, particularly targeted educational programs. "	2	<i>[describe here]</i>	The e-Citizens platform is a platform for e-services with a National Identification and Authentication System and provided mailbox for all citizens of Croatia. More than 50 messages are sent to citizens and they are in a large amount proactive informing citizens that for example their id card will expire or the car registration.	1	<i>[describe monitoring procedure here]</i>	0
Security and privacy EIF, Chapter 2, Underlying principles Recommendation 3 Category: Principles	Does the NIF contain the 'Security and privacy' principle?	The e-Croatia Strategy 2020 has defined the EIF as the basic interoperability framework for Croatia. All principles have to be implemented. All texts are derived from the e-Croatia 2020 Strategy. "The Croatian Interoperability Framework was developed in accordance with the European Interoperability Framework 1.0, i.e. in line with the version EIF 1.0. However, Croatia will not develop a new interoperability framework, but will in all its actions take account of the principles of the European Interoperability Framework EIF 2.0."	2	e-services are developed in such a way that a <b>counter clerk</b> can access them, but bearing in mind regulations related to personal data protection, data secrecy and information security, only with individual consent of a citizen, and for the purpose of providing services (like through eCitizens) to citizens with no IT skills,	<i>[describe project here]</i>	2	<i>[describe monitoring procedure here]</i>	0
Multilingualism EIF, Chapter 2, Underlying principles Recommendation 4 Category: Principles	Does the NIF contain the 'Multilingualism' principle?	Guidelines/principles for the development of aggregate, user-oriented public e-services must be developed in such a way that e-services are <b>accessible regardless of the location</b> where an e-service is <b>initiated</b> , e-services are <b>designed in such a way that they support multilingualism</b> , in Croatian and, wherever possible, in English, too, and in other languages when it makes sense; i.e. that during the development of e-services attention is paid to the possibilities of introducing multilingualism.	1	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
Administrative simplification EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Administrative simplification' principle?	Public Administration Development Strategy 2015 - 2020 "Public administration development will go in three main directions: - simplification and modernisation of administrative proceedings, as well as ensuring reliable and fast public administration support to citizens and businesses through the realisation of eGovernment projects - enhancement of the human resource development and management system with the aim to create a modern public service - administrative system reform in line with best practices and experiences of good governance according to European standards."	2	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
Transparency EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Transparency' principle?	As stated in e-Croatia 2020 "Citizens should have the right to track administrative procedures that involve them, and have insight into the rationale behind decisions that could affect them"	2	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
Preservation of information EIF, Chapter 2, Underlying principles, Recommendation 5 Category: Principles	Does the NIF contain the 'Preservation of information' principle?		0	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
Openness EIF, Chapter 2, Underlying principles, Recommendation 6 Category: Principles	Does the NIF contain the 'Openness' principle?	Yes. Chapter 6. e-Croatia 2020 – strategic objectives, activities and indicators; 6.2 Area of operations of the Strategy-to apply the openness principle in the development of software systems tailored to meet specific requirements, in such a way that the developed code can be reused and shared	2	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
Reusability EIF, Chapter 2, Underlying principles, Recommendation 7 Category: Principles	Does the NIF contain the 'Reusability' principle?	Yes. Chapter 6. e-Croatia 2020 – strategic objectives, activities and indicators; 6.2 Area of operations of the Strategy-to apply the openness principle in the development of software systems tailored to meet specific requirements, in such a way that the developed code can be reused and shared	2	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
Technological neutrality and adaptability EIF, Chapter 2, Underlying principles, Recommendation 8 Category: Principles	Does the NIF contain the 'Technological neutrality and adaptability' principle?	Yes. Chapter 2. The 2020 approach strives for technological neutrality i.e. users must not be required to possess specific SW or HW solutions	2	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0

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

EIF Element - Reference - Category	Measurement	NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	NIF implementation			NIF monitoring	
				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
Effectiveness and efficiency EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Effectiveness and efficiency' principle?	The Public Administration Strategy concerns public administration bodies. The principles underlying the functioning of public administration are reliability and predictability (legal security), openness and transparency, responsibility, efficiency and effectiveness.	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Conceptual model EIF, Chapter 3 Category: Conceptual model	Does the NIF contain a conceptual model?	Chapter 4.2 e-Croatia 2020 4.2 Public administration informatisation. All public administration bodies are developing their information systems individually, without any coordination and infrastructure management. Due to insufficient human resources the development is mostly managed by suppliers in the best possible way according to their knowledge and understanding of the public administration system. In addition, informatisation is affected by the financial situation, so it is conducted completely unevenly. In some parts new systems and new technologies are being introduced, while other institutions are struggling to maintain their existing systems. State administration offices in counties are a typical example of institutions in which it is practically impossible to fund informatisation. In this part, services are provided by interconnecting information systems and including data from other sources in applicative solutions, in accordance with the National Information Infrastructure Act. The system is developed according to the scheme of interconnection of loosely coupled service components as the necessary infrastructure for the introduction of European public services in line with the EIF 2.0.	2	[describe here]	Conceptual model is used in a development of services on e-Citizen platform	1	[describe monitoring procedure here]	0
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)	Yes. Chapter 4.2 e-Croatia 2020 4.2 Public administration informatisation. "The system is developed according to the scheme of interconnection of loosely coupled service components as the necessary infrastructure for the introduction of European public services in line with the EIF 2.0."	2	[describe here]	Conceptual model is used in a development of services on e-Citizen platform	1	[describe monitoring procedure here]	0
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?	e-Croatia 2020; chapter 4.2 Public administration informatisation (A2A) In this part, services are provided by interconnecting information systems and including data from other sources in applicative solutions, in accordance with the National Information Infrastructure Act. The system is developed according to the scheme of interconnection of loosely coupled service components as the necessary infrastructure for the introduction of European public services in line with the EIF 2.0.	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
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?	e-Croatia 2020; chapter 4.2 Public administration informatisation (A2A) In this part, services are provided by interconnecting information systems and including data from other sources in applicative solutions, in accordance with the National Information Infrastructure Act. The system is developed according to the scheme of interconnection of loosely coupled service components as the necessary infrastructure for the introduction of European public services in line with the EIF 2.0.	2	[describe here]	Government service bus GSB is under development funded by the Transition facility programme.	1	[describe monitoring procedure here]	0
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?	Chapter 4.2 e-Croatia 2020 4.2 Public administration informatisation. All public administration bodies are developing their information systems individually, without any coordination and infrastructure management. Due to insufficient human resources the development is mostly managed by suppliers in the best possible way according to their knowledge and understanding of the public administration system. In addition, informatisation is affected by the financial situation, so it is conducted completely unevenly. In some parts new systems and new technologies are being introduced, while other institutions are struggling to maintain their existing systems. State administration offices in counties are a typical example of institutions in which it is practically impossible to fund informatisation. In this part, services are provided by interconnecting information systems and including data from other sources in applicative solutions, in accordance with the National Information Infrastructure Act. The system is developed according to the scheme of interconnection of loosely coupled service components as the necessary infrastructure for the introduction of European public services in line with the EIF 2.0.	2	[describe here]	Metaregister system is composed of fourteen sub-registries  The public register Metaregister is in place, functioning as a collaboration tool for the development of the system of interconnection of public registers. Apart from the entry of all the existing ways and possibilities of interconnection, the Metaregister ensures coordination during changes in the system of registers, and creates the so-called 'referential integrity'  For all public registers and official records Metaregister collecting information about the data that originally contains, which are taken from the original registers and format of the data, semantics, description, content, purpose, source, structure, functioning and the right to create, changes, access and deletion of data and available services that access and use the registers.	1	[describe monitoring procedure here]	0



NIF-EIF Alignment		NIF implementation		NIF monitoring				
EIF Element - Reference - Category	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
Access control EIF, Recommendation 11 Category: Conceptual model	Does the NIF encourage access and control mechanisms to ensure compliance to security and privacy legislation?	Chapter 4.2 e-Croatia 2020 4.2 Public administration informatisation. All public administration bodies are developing their information systems individually, without any coordination and infrastructure management. Due to insufficient human resources the development is mostly managed by suppliers in the best possible way according to their knowledge and understanding of the public administration system. In addition, informatisation is affected by the financial situation, so it is conducted completely unevenly. In some parts new systems and new technologies are being introduced, while other institutions are struggling to maintain their existing systems. State administration offices in counties are a typical example of institutions in which it is practically impossible to fund informatisation. In this part, services are provided by interconnecting information systems and including data from other sources in applicative solutions, in accordance with the National Information Infrastructure Act. The system is developed according to the scheme of interconnection of loosely coupled service components as the necessary infrastructure for the introduction of European public services in line with the EIF 2.0.	2	[describe here]	The central interoperability system comprises the Metaregister as the foundation for interconnecting public registers, and the Government Service Bus (GSB, a platform through which systems will be interconnected in a safe and standardised manner. GSB should ensure: • the possibility of interconnection and interoperability between the information systems of public sector bodies related to data and information necessary for e-service provision; • Monitoring changes and developments in the national information infrastructure system, primarily changes in data capture in registers, and communication about it; • Integrated e-services; • Secure and reliable e-service provision; • Monitoring data access and reporting it to the user (the user is entitled to know who accesses his/her data based on the Personal Data Protection Act) • Savings; • Shorter time required for developing e-services by using common standards.  Metaregister system is composed of fourteen sub-registries  For all public registers and official records Metaregister collecting information about the data that originally contains, which are taken from the original registers and format of the data, semantics, description, content, purpose, source, structure, functioning and the right to create, changes, access and deletion of data and available services that access and use the registers.	1	[describe monitoring procedure here]	0
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?	Act on State Information Infrastructure, adopted by the Croatian Parliament at its session on 15 July 2014. This Act regulates the rights, obligations and responsibilities of competent public sector bodies with regard to the establishment, development and management of the state information infrastructure system, establishing and managing the public register system and the conditions which the state information infrastructure has to provide regarding public registers, as well as the use of a common base for a secure data exchange within the state information infrastructure system, a common identification and authentication system, a single point of interaction with the citizens and other users.	2	[describe here]	Metaregister system has subregister of semantics and technical standards.	1	[describe monitoring procedure here]	0
Interoperability levels EIF, Chapter 4 Category: Interoperability levels	Does the NIF describe the four levels of interoperability?	e-Croatia strategy describes the four levels of interoperability in chapter 6. e-Croatia 2020 – strategic objectives, activities and indicators	2	[describe here]	E-citizen platform	1	[describe monitoring procedure here]	0
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?	Yes, e-Croatia 2020 Strategy; chapter 3. European and national strategic context. Act on State Information Infrastructure provides legal framework.	2	[describe here]	Metaregister system is composed of fourteen sub-registries  For all public registers and official records Metaregister collecting information about the data that originally contains, which are taken from the original registers and format of the data, semantics, description, content, purpose, source, structure, functioning and the right to create, changes, access and deletion of data and available services that access and use the registers.	1	[describe monitoring procedure here]	0
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?	Industrialisation and interconnection of national information infrastructure by developing a central interoperability system (by ensuring authentic sources), and ensuring accessibility of a secure, maintained national information infrastructure in the 'government cloud' in the most cost-efficient way possible. Business processes will be optimised through classification of e-services to horizontal and vertical, standardisation, digitalisation and intersectoral integration of simplified business processes on central, regional and local levels.	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0



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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?	Act on State Information Infrastructure, adopted by the Croatian Parliament at its session on 15 July 2014. This Act regulates the rights, obligations and responsibilities of competent public sector bodies with regard to the establishment, development and management of the state information infrastructure system, establishing and managing the public register system and the conditions which the state information infrastructure has to provide regarding public registers, as well as the use of a common base for a secure data exchange within the state information infrastructure system, a common identification and authentication system, a single point of interaction with the citizens and other users. In order to monitor and coordinate the development of the state information infrastructure and the preparation of reports to the Croatian Government established the Council for State Information Infrastructure. Council chaired by the Prime minister.	2	[describe here]	The ProNII Register (Croatian: ProDII), for the entry of all IT projects conducted by public sector bodies for the purpose of coordination and rationalisation of investments in the national information infrastructure.	1	[describe monitoring procedure here]	0
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?	Public Administration Development Strategy 2015 - 2020 "Informatisation of public administration will be conducted in line with the eCroatia 2020 Strategy, which is in preparation. eGovernment will be introduced in such a way that all public authorities ensure e-services from their scope, and attention will be paid to using resources from EU funds, first of all the ERDF, to develop e-services which cover the highest number of users, have the best effect on economy, increase efficiency, reduce the time required to provide services and increase transparency, and which are considered necessary by citizens and businesses according to a survey of public satisfaction with the electronic services of the public sector. The development of information infrastructure will be based on the development of a common interoperability system in the Shared Services Centre and the system for the joint use of computer and communication infrastructure based on the 'cloud' paradigm. Special attention in the development of electronic government will be paid to personal data protection and data security. Data will be exchanged between different registers and institutions in line with legal powers and information security requirements, which will be elaborated in more detail in a strategic document on digital growth."	2	[describe here]	Metaregister system is composed of fourteen sub-registries  The public register Metaregister is in place, functioning as a collaboration tool for the development of the system of interconnection of public registers. Apart from the entry of all the existing ways and possibilities of interconnection, the Metaregister ensures coordination during changes in the system of registers, and creates the so-called 'referential integrity'  For all public registers and official records Metaregister collecting information about the data that originally contains, which are taken from the original registers and format of the data, semantics, description, content, purpose, source, structure, functioning and the right to create, changes, access and deletion of data and available services that access and use the registers.	1	[describe monitoring procedure here]	0
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?	PUBLIC ADMINISTRATION DEVELOPMENT STRATEGY 2015 - 2020 "Public administration development will go in three main directions: - simplification and modernisation of administrative proceedings, as well as ensuring reliable and fast public administration support to citizens and businesses through the realisation of eGovernment projects - enhancement of the human resource development and management system with the aim to create a modern public service - administrative system reform in line with best practices and experiences of good governance according to European standards."	2	[describe here]	Metaregister system is composed of fourteen sub-registries  The public register Metaregister is in place, functioning as a collaboration tool for the development of the system of interconnection of public registers. Apart from the entry of all the existing ways and possibilities of interconnection, the Metaregister ensures coordination during changes in the system of registers, and creates the so-called 'referential integrity'  For all public registers and official records Metaregister collecting information about the data that originally contains, which are taken from the original registers and format of the data, semantics, description, content, purpose, source, structure, functioning and the right to create, changes, access and deletion of data and available services that access and use the registers.	1	[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?		0	[describe here]	Metaregister system is composed of fourteen sub-registries  The public register Metaregister is in place, functioning as a collaboration tool for the development of the system of interconnection of public registers. Apart from the entry of all the existing ways and possibilities of interconnection, the Metaregister ensures coordination during changes in the system of registers, and creates the so-called 'referential integrity'  For all public registers and official records Metaregister collecting information about the data that originally contains, which are taken from the original registers and format of the data, semantics, description, content, purpose, source, structure, functioning and the right to create, changes, access and deletion of data and available services that access and use the registers.	1	[describe monitoring procedure here]	0

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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?		0	<i>[describe here]</i>	Metaregister system is composed of fourteen sub-registries  The public register Metaregister is in place, functioning as a collaboration tool for the development of the system of interconnection of public registers. Apart from the entry of all the existing ways and possibilities of interconnection, the Metaregister ensures coordination during changes in the system of registers, and creates the so-called 'referential integrity'  For all public registers and official records Metaregister collecting information about the data that originally contains, which are taken from the original registers and format of the data, semantics, description, content, purpose, source, structure, functioning and the right to create, changes, access and deletion of data and available services that access and use the registers.	1	<i>[describe monitoring procedure here]</i>	0
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.		0	<i>[describe here]</i>	Specifications will be developed within GSB project.	0	<i>[describe monitoring procedure here]</i>	0
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.		0	<i>[describe here]</i>	Specifications will be developed within GSB project.	0	<i>[describe monitoring procedure here]</i>	0
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?		0	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
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?		0	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0
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?		0	<i>[describe here]</i>	<i>[describe project here]</i>	0	<i>[describe monitoring procedure here]</i>	0

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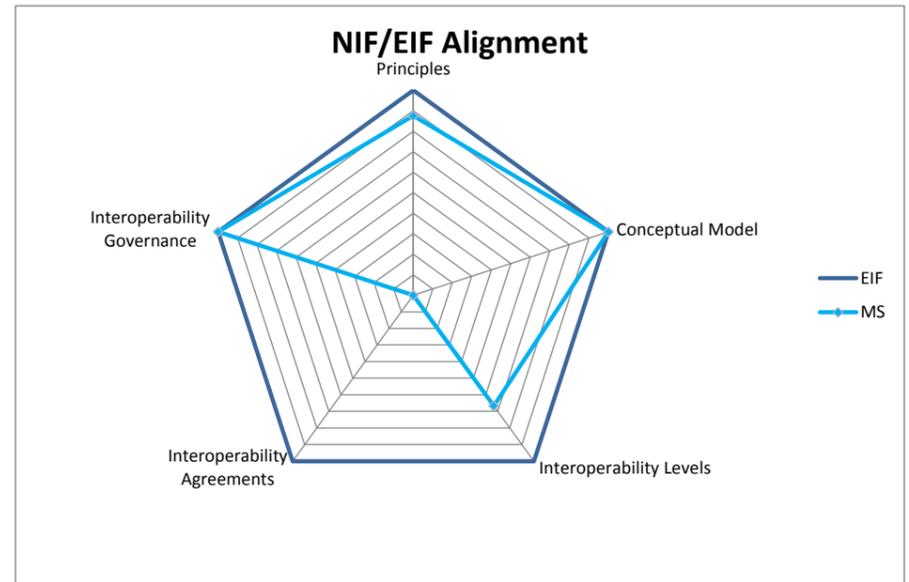
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		NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is a common practice]	Only implementation examples [describe 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, 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?		0	[describe here]	Metaregister system is composed of fourteen sub-registries  The public register Metaregister is in place, functioning as a collaboration tool for the development of the system of interconnection of public registers. Apart from the entry of all the existing ways and possibilities of interconnection, the Metaregister ensures coordination during changes in the system of registers, and creates the so-called 'referential integrity'  For all public registers and official records Metaregister collecting information about the data that originally contains, which are taken from the original registers and format of the data, semantics, description, content, purpose, source, structure, functioning and the right to create, changes, access and deletion of data and available services that access and use the registers.	1	[describe monitoring procedure here]	0
Governance Public administrations should establish a framework for the governance of their interoperability activities across administrative levels. EIF, Recommendation 25 Interoperability Governance	A governance framework exists to control the interoperability activities across administrative levels.	Act on State Information Infrastructure, adopted by the Croatian Parliament at its session on 15 July 2014. This Act regulates the rights, obligations and responsibilities of competent public sector bodies with regard to the establishment, development and management of the state information infrastructure system, establishing and managing the public register system and the conditions which the state information infrastructure has to provide regarding public registers, as well as the use of a common base for a secure data exchange within the state information infrastructure system, a common identification and authentication system, a single point of interaction with the citizens and other users.	2	In order to monitor and coordinate the development of the state information infrastructure and the preparation of reports to the Croatian Government established the Council for State Information Infrastructure. Council chaired by the Prime minister.	[describe project here]	2	[describe monitoring procedure here, Precise if monitoring procedures include stimulating and/or corrective measures]	0

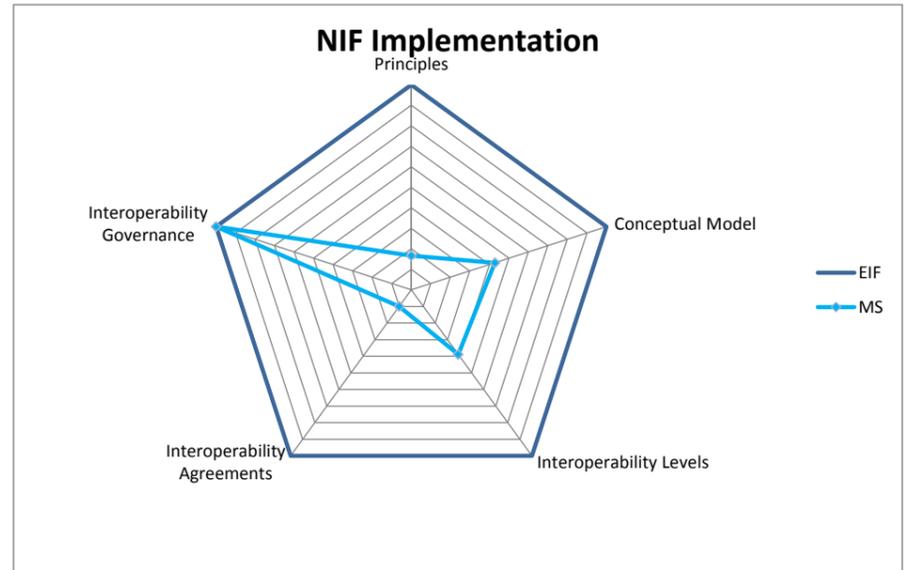
Category	EIF	MS
Principles	100%	87,5%
Conceptual Model	100%	100,0%
Interoperability Levels	100%	66,7%
Interoperability Agreements	100%	0,0%
Interoperability Governance	100%	100,0%

Category	EIF Element	Scoring		
		Max	MS	
<b>Principles</b>	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	2	
	Preservation of information	2	0	
	Openness	2	2	
	Reusability	2	2	
	Technological neutrality and adaptability	2	2	
	Effectiveness and efficiency	2	2	
	<b>Total</b>		<b>24</b>	<b>21</b>
	<b>Conceptual Model</b>	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	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	2	
<b>Total</b>			<b>14</b>	<b>14</b>
<b>Interoperability Levels</b>		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	2	
	Does the NIF encourage public administrations to clarify their organisational relationships as part of the establishment of a (European) public service?	2	2	
	Does the NIF encourage public administrations to agree on change management processes to ensure continuous service delivery.	2	2	
	Does the NIF encourage the usage of a common taxonomy of basic public service?	2	0	
	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	0	
	Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.	2	0	
	<b>Total</b>		<b>18</b>	<b>12</b>
<b>Interoperability Agreements</b>	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	0	
	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	0	
	Does the NIF encourages public administrations to lead or actively participate in standardisation work relevant to their needs?	2	0	
	Does the NIF encourage public administrations to agree on minimum service requirements for secure data exchange?	2	0	
<b>Total</b>		<b>10</b>	<b>0</b>	
<b>Interoperability Governance</b>	A governance framework exists to control the interoperability activities across administrative levels.	2	2	
	<b>Total</b>		<b>2</b>	<b>2</b>



Category	EIF	MS
Principles	100%	16,7%
Conceptual Model	100%	42,9%
Interoperability Levels	100%	38,9%
Interoperability Agreements	100%	10,0%
Interoperability Governance	100%	100,0%

Category	EIF Element	Scoring		
		Max	MS	
<b>Principles</b>	Subsidiarity and proportionality	2	0	
	User-centricity	2	1	
	Inclusion and accessibility	2	1	
	Security and privacy	2	2	
	Multilingualism	2	0	
	Administrative simplification	2	0	
	Transparency	2	0	
	Preservation of information	2	0	
	Openness	2	0	
	Reusability	2	0	
	Technological neutrality and adaptability	2	0	
	Effectiveness and efficiency	2	0	
	<b>Total</b>		<b>24</b>	<b>4</b>
	<b>Conceptual Model</b>	Does the NIF contain a conceptual model?	2	1
Is the conceptual model a component-based service model? (e.g. SOA)		2	1	
Does the NIF encourage the use of common schemes to interconnect loosely coupled service components.		2	0	
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	
<b>Total</b>			<b>14</b>	<b>6</b>
<b>Interoperability Levels</b>		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	0	
	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	1	
	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	0	
	<b>Total</b>		<b>18</b>	<b>7</b>
<b>Interoperability Agreements</b>	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	0	
	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	0	
	Does the NIF encourages public administrations to lead or actively participate in standardisation work relevant to their needs?	2	0	
	Does the NIF encourage public administrations to agree on minimum service requirements for secure data exchange?	2	1	
<b>Total</b>		<b>10</b>	<b>1</b>	
<b>Interoperability Governance</b>	A governance framework exists to control the interoperability activities across administrative levels.	2	2	
	<b>Total</b>		<b>2</b>	<b>2</b>



Category	EIF	MS
Principles	100%	0,0%
Conceptual Model	100%	0,0%
Interoperability Levels	100%	0,0%
Interoperability Agreements	100%	0,0%
Interoperability Governance	100%	0,0%

Category	EIF Element	Scoring		
		Max	MS	
<b>Principles</b>	Subsidiarity and proportionality	2	0	
	User-centricity	2	0	
	Inclusion and accessibility	2	0	
	Security and privacy	2	0	
	Multilingualism	2	0	
	Administrative simplification	2	0	
	Transparency	2	0	
	Preservation of information	2	0	
	Openness	2	0	
	Reusability	2	0	
	Technological neutrality and adaptability	2	0	
	Effectiveness and efficiency	2	0	
	<b>Total</b>	<b>24</b>	<b>0</b>	
	<b>Conceptual Model</b>	Does the NIF contain a conceptual model?	2	0
Is the conceptual model a component-based service model? (e.g. SOA)		2	0	
Does the NIF encourage the use of common schemes to interconnect loosely coupled service components.		2	0	
Does the NIF encourage to put in place the infrastructure to interconnect loosely coupled service components?		2	0	
Does the NIF encourage to make the authentic sources of information available to others?		2	0	
Does the NIF encourage access and control mechanisms to ensure compliance to security and privacy legislation?		2	0	
Does the NIF encourage the development of interfaces to authentic sources that are aligned at semantic and technical level?		2	0	
<b>Total</b>		<b>14</b>	<b>0</b>	
<b>Interoperability Levels</b>		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	0
	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	0	
	Does the NIF encourage to agree on how these processes will interact among the different levels of public administrations?	2	0	
	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	0	
	Does the NIF encourage the usage of a common taxonomy of basic public service?	2	0	
	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	0	
	Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.	2	0	
	<b>Total</b>	<b>18</b>	<b>0</b>	
<b>Interoperability Agreements</b>	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	0	
	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	0	
	Does the NIF encourages public administrations to lead or actively participate in standardisation work relevant to their needs?	2	0	
	Does the NIF encourage public administrations to agree on minimum service requirements for secure data exchange?	2	0	
<b>Total</b>	<b>10</b>	<b>0</b>		
<b>Interoperability Governance</b>	A governance framework exists to control the interoperability activities across administrative levels.	2	0	
	<b>Total</b>	<b>2</b>	<b>0</b>	

