



NATIONAL INTEROPERABILITY FRAMEWORK OBSERVATORY

Analytical Model *LATVIA*

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

Directorate-General for Informatics

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

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	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 [describe monitoring procedure here]	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
Subsidiarity and proportionality EIF, Chapter 2, Underlying principles Category: Principles See reference: the European Interoperability Framework v2 See definitions listed in the ISA EIF brochure	Does the NIF contain the 'subsidiarity and proportionality' principle?		0	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
User-centricity EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'user-centricity' principle?	Although no formal principle on user-centricity has been defined, online functionality is centralised via single points of access (e.g. web portal latvija.lv) for which personalized citizen profiles are used (to initialize eServices where identification is required and afterwards to track the process of service delivery). The idea is to define technical standards and to introduce information technologies that provide for: Creating a joint technological platform for all the home pages of ministries. The ministries would build their own content within the system. It would give the customers user-friendly unified access to all the information they could need independently of the concerned ministry; See p.31, http://www.opengovpartnership.org/files/latvia-ogp-irm-public-comment-engpdf/download New public ICT development strategy defines user-centricity as the one of basic principles for information systems and electronic services development. Reference: - Page 2, 2009-09-23_LV_SEMIC-Partner-Initiative-factsheet2009.doc - Chapter 1, Basic_InfoSheet_eService_platform_EN.PDF	1	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Inclusion and accessibility EIF, Chapter 2, Underlying principles Recommendation 2 Category: Principles	Does the NIF contain the 'inclusion and accessibility' principle?		0	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Security and privacy EIF, Chapter 2, Underlying principles Recommendation 3 Category: Principles	Does the NIF contain the 'Security and privacy' principle?	The logical protection, security management and access rights are prescribed by means of legal frameworks. - Section 14 & 15, Law on State Information Systems, http://www.vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab_Reg_No_765_-_Security_Requirements_of_State_Information_Systems.doc - All pages, General Security Requirements of State Information Systems See http://www.vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab_Reg_No_764_-_Requirements_of_State_Information_Systems.doc See http://www.vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab_Reg_No_1445_-_Protection_of_Critical_State_Information_Systems_...doc See http://www.vvc.gov.lv/export/sites/default/docs/LRTA/Likumi/State_Information_Systems.doc	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Multilingualism EIF, Chapter 2, Underlying principles Recommendation 4 Category: Principles	Does the NIF contain the 'Multilingualism' principle?	Without any other specific	0	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Administrative simplification EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Administrative simplification' principle?		0	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Transparency EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Transparency' principle?	Transparency principle is not defined in National EIF ("conceptual architecture") as the separate principle, but is being addressed by particular areas and particular solutions.	1	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Preservation of information EIF, Chapter 2, Underlying principles, Recommendation 5 Category: Principles	Does the NIF contain the 'Preservation of information' principle?	Preservation of information and "once-only" approach is one of the basic concepts in National EIF ("conceptual architecture").	2	[describe here]	[describe project here]	2	[describe monitoring procedure here]	0
Openness EIF, Chapter 2, Underlying principles, Recommendation 6 Category: Principles	Does the NIF contain the 'Openness' principle?	In Latvia The General Technical Requirements of State Information Systems include the following requirements which contribute to the implementation of the openness principle: - The system user interface shall ensure the opportunity of sending and receiving data, using platform independent file formats and data transmission protocols. - Moreover, the integration platforms employ open standards. See General Technical Requirements of State Information Systems, Section 4.4, http://www.vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab_Reg_No_764_-_Requirements_of_State_Information_Systems.doc Reference: - Paragraph 4.4, General Technical Requirements of State Information Systems - Page 2, 2009-09-23_LV_SEMIC-Partner-Initiative-factsheet2009.doc	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0

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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 [describe monitoring procedure here]	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?	New conceptual architecture of public information systems sets reusability at services and components levels as one of the key principles. Several reusable services (authentication, payments for public services) are already in use and new shared platforms and reusable services are planned to be developed. Electronic services and data exchange integration platforms encourage reusability as well. Engagement to build a Single platform for Government Websites (2014-2020) is one more example of shared (reusable) platform to be developed. The idea is to define technical standards and to introduce information technologies that provide for: 2. Development of open data sets in accordance with the categories of data identified by stakeholders in technically reusable formats See p.31, http://www.opengovpartnership.org/files/latvia-ogp-irm-public-comment-engpdf/download Reference: Page 2, 2009-09-23_LV_SEMIC-Partner-Initiative-factsheet2009.doc	1	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Technological neutrality and adaptability EIF, Chapter 2, Underlying principles, Recommendation 8 Category: Principles	Does the NIF contain the 'Technological neutrality and adaptability' principle?		0	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Effectiveness and efficiency EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Effectiveness and efficiency' principle?		0	[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?	Several conceptual architectures were proposed for the integration platforms - See Chapter 2, https://ivis.eps.gov.lv/IVISPortal/files/folders/41/download.aspx - See Chapter 2, https://ivis.eps.gov.lv/IVISPortal/files/folders/484/download.aspx	2	[describe here]	[describe project here]	0	[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)	The integration platforms are Service-Oriented-Architecture (SOA) based. - See Chapter 2, https://ivis.eps.gov.lv/IVISPortal/files/folders/41/download.aspx	2	[describe here]	[describe project here]	0	[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?	Common schemes are defined and shared for the integration platforms to interconnect components - See Chapter 4, https://ivis.eps.gov.lv/IVISPortal/files/folders/41/download.aspx - See Chapter 5, https://ivis.eps.gov.lv/IVISPortal/files/folders/10/download.aspx Reference: - All chapters, IVIS4.IVIS_FRW.Metadatu un e-pakalpojumu identifikācijas standarts.v.1.01.doc	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?	All integration platforms (ISIS, IVIS, VISS) are implemented to interconnect loosely coupled service components. See Slide 6, http://www.vraa.gov.lv/uploads/PPP/Vita%20Narnicka.pdf Reference: Slide 2, VRAA_eservice.pdf	2	[describe here]	[describe project here]	0	[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?	Principle of access to authentic sources of information is put in basis of State Information Systems Law (first version 2002). This principle is elaborated further in "Conceptual Architecture of Public Information Systems".	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Access control EIF, Recommendation 11 Category: Conceptual model	Does the NIF encourage access and control mechanisms to ensure compliance to security and privacy legislation?	The VISS security framework consists of several levels, including high-level security frameworks (e.g. SAML, XACML), web service security (e.g. WS-Security) and XML encryption. See Slide 7, VISS_standartization_presentation.pdf	2	[describe here]	[describe project here]	0	[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?	The VISS interoperability framework defines technical policies to align different interfaces, including XML schema development approaches, IS service development approaches, E-services development approaches and standards. See Slide 2, VISS_standartization_presentation.pdf	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
Interoperability levels EIF, Chapter 4 Category: Interoperability levels	Does the NIF describe the four levels of interoperability?	The National Interoperability Framework is focusing on technical and legal aspects. "Conceptual Architecture of Public Information Systems" consists of 40 principles defined for 4 levels in accordance with EAI approach, which is similar (although slightly differs from) to the EIF approach	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0

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EIF Element - Reference - Category	NIF-EIF Alignment			NIF implementation		NIF monitoring		
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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?	Legal frameworks for State Information Systems exist, but do not go in detail about data exchange. 1- See Law on State Information Systems, http://www.vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab_Reg_No_764_-_Requirements_of_State_Information_Systems.doc - See General Security Requirements of State Information Systems, http://www.vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab_Reg_No_765_-_Security_Requirements_of_State_Information_Systems.doc - See Requirements for the Protection of Critical State Information Systems and State Information System Management Integrators, http://www.vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab_Reg_No_1445_-_Protection_of_Critical_State_Information_Systems_...doc - See Procedures for the Establishment, Maintenance and Activities of the State Information Systems Management Integrators and Procedures for Ensuring of the Functioning of State Information Systems within the Framework of Integrated State Information Systems, http://www.vvc.gov.lv/export/sites/default/docs/LRTA/MK_Noteikumi/Cab_Reg_No_1131_-_Establishmentx_Maintenance_and_Activities_of_the_State_Information_Systems_Management_Integrators...doc - See General Technical Requirements of State Information Systems, http://www.vvc.gov.lv/export/sites/default/docs/LRTA/Likumi/State_Information_Systems.doc State information systems law is planned to be replaced by the new Electronic government law currently being developed.	1	[describe here]	[describe project here]	0	[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?		0	[describe here]	There is a catalogue of public services in place, that should contain identifiers and descriptions of all national level and municipal public services. Data quality in the catalogue is being gradually improved and that is being enforced by requesting it as an obligatory activity within the scope of any public services IT support related ICT development investment project. Unified services delivery processes are also requested for those services that are being delivered by means of joint - state/municipality one-stop agency customer service centres.	1	[describe monitoring procedure here]	0
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?		0	[describe here]	International services currently are being delivered in specific domains only (social security, tax administration etc.). To support more general approaches we are preparing for implementation of eIDAS regulation requirements. National EIF ("conceptual architecture") requests compliance with eIDAS requirements.	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?		0	[describe here]	[describe project here]	0	[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?	Change management process in public services delivery area is considered to be part of the unified public services delivery and management process, that is being delivered for "multi-channel" services platform, providing delivery of services electronically and by "one-stop agency" customer service centers.	1	[describe here]	[describe project here]	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?	Interoperability information catalogues and repository define the IS services and XML schemas. Nevertheless, these repositories focus on technical semantics, by defining the serialisation of the concepts, rather than defining the meaning of the concepts. See Chapter 5, https://ivis.eps.gov.lv/IVISPortal/files/folders/10/download.aspx	1	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
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?	The IVIS catalogue allows different stakeholders to share XML schemas. See Slide 5, VISS_standartization_presentation.pdf	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	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.	Formalised specifications are defined on the technical level by means of XML schemas. See all pages, https://ivis.eps.gov.lv/IVISPortal/files/folders/41/download.aspx	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0

Analysis of the NIFs

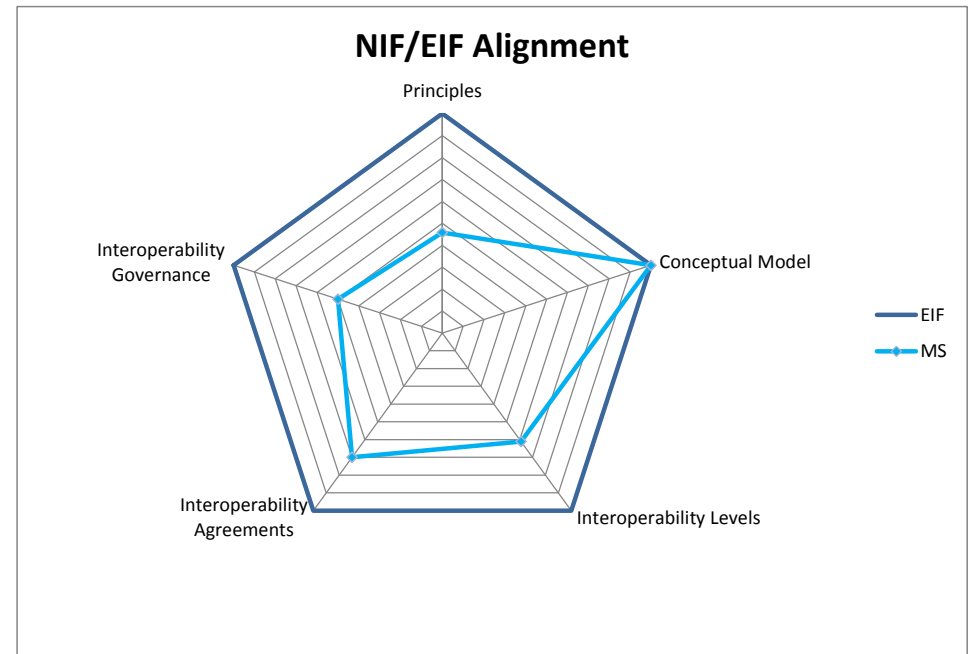
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Public administrations, when establishing (European) public services, should base interoperability agreements on existing formalised specifications, or, if they do not exist, cooperate with communities working in the same areas. EIF, Recommendation 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.	On the technical & semantic level, interoperability agreements are made (e.g. using IVIS metadata). See all chapters, https://ivis.eps.gov.lv/IVISPortal/files/folders/41/download.aspx	1	[describe here]	[describe project here]	0	[describe monitoring procedure here]	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	[describe here]	[describe project here]	0	[describe monitoring procedure here]	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?	All integration platforms (ISIS, IVIS, VISS) are implemented by means of open standards (where applicable). See Slide 7, VISS_standartization_presentation.pdf See Page 2, 2009-09-23_LV_SEMIC-Partner-Initiative-factsheet2009.doc	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	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?	The national interoperability framework ("conceptual architecture") recommends unification, reuse of components and services, stimulating progress towards national "standards de facto" that way.	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
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?	Public administrations use shared components and tools for e-service development, equipped to support secure data exchange. - Slide 7, VISS_standartization_presentation.pdf - Slide 6, http://www.vraa.gov.lv/uploads/IPP/Vita_Narnicka.pdf	2	[describe here]	[describe project here]	0	[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 Category: Interoperability Governance	A governance framework exists to control the interoperability activities across administrative levels.	Governance model is being built to supervise from ICT architecture perspective all significant ICT development investment projects. The new governance model is currently being applied for the ICT projects being co-funded by EU structural funds.	1	Conceptual architecture of government ICT sector governs over 40 principles for business process, services, semantic and technical interoperability as well as principles for infrastructure	State Interoperability platform (Valsts informācijas sistēmu savietotājs) allows for integration of services and serves as platform for developing public service digital channels	2	Large investments in information systems are allowed only, if principles mentioned in Conceptual architecture, are fulfilled. Projects are evaluated by VARAM and approved by Ministru Kabinets	2

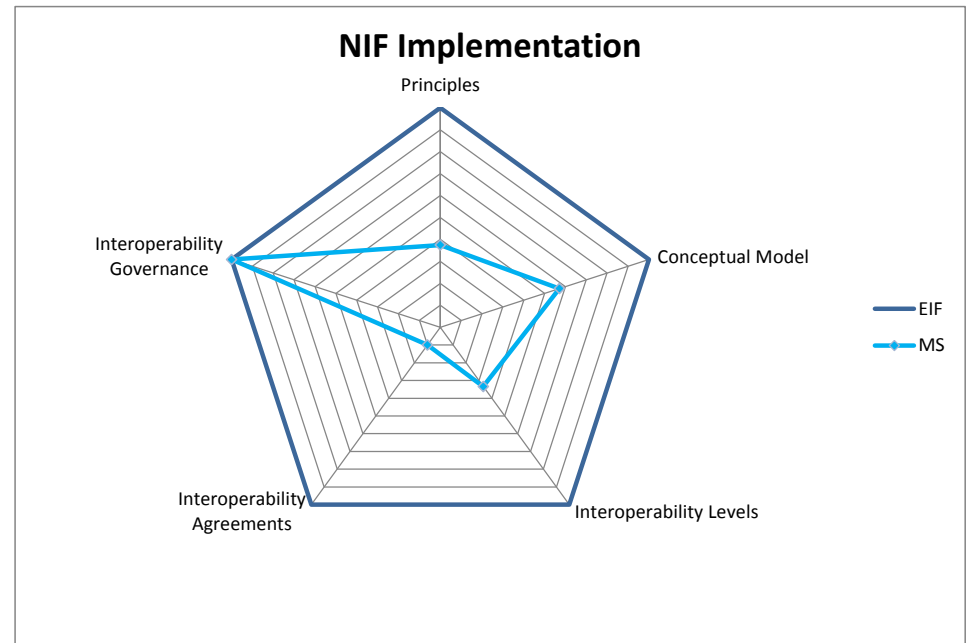
Category	EIF	MS
Principles	100%	45,8%
Conceptual Model	100%	100,0%
Interoperability Levels	100%	61,1%
Interoperability Agreements	100%	70,0%
Interoperability Governance	100%	50,0%

Category	EIF Element	Scoring		
		Max	MS	
Principles	Subsidiarity and proportionality	2	0	
	User-centricity	2	1	
	Inclusion and accessibility	2	0	
	Security and privacy	2	2	
	Multilingualism	2	0	
	Administrative simplification	2	1	
	Transparency	2	1	
	Preservation of information	2	2	
	Openness	2	2	
	Reusability	2	1	
	Technological neutrality and adaptability	2	0	
	Effectiveness and efficiency	2	1	
	Total		24	11
	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	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	
Total		14	14	
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	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	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	2	
	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	11	
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	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	2	
	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	2	
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%	37,5%
Conceptual Model	100%	57,1%
Interoperability Levels	100%	33,3%
Interoperability Agreements	100%	10,0%
Interoperability Governance	100%	100,0%

Category	EIF Element	Scoring		
		Max	MS	
Principles	Subsidiarity and proportionality	2	0	
	User-centricity	2	1	
	Inclusion and accessibility	2	0	
	Security and privacy	2	1	
	Multilingualism	2	0	
	Administrative simplification	2	1	
	Transparency	2	1	
	Preservation of information	2	2	
	Openness	2	1	
	Reusability	2	1	
	Technological neutrality and adaptability	2	0	
	Effectiveness and efficiency	2	1	
	Total		24	9
Conceptual Model	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	1	
	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	2	
	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	2	
	Total		14	8
	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	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	0	
Total			18	6
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	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	
Total		10	1	
Interoperability Governance	A governance framework exists to control the interoperability activities across administrative levels.	2	2	
	Total	2	2	



Category	EIF	MS
Principles	100%	16,7%
Conceptual Model	100%	28,6%
Interoperability Levels	100%	5,6%
Interoperability Agreements	100%	10,0%
Interoperability Governance	100%	100,0%

Category	EIF Element	Scoring		
		Max	MS	
Principles	Subsidiarity and proportionality	2	0	
	User-centricity	2	1	
	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	1	
	Reusability	2	1	
	Technological neutrality and adaptability	2	0	
	Effectiveness and efficiency	2	1	
	Total		24	4
	Conceptual Model	Does the NIF contain a conceptual model?	2	1
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	1	
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	1	
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	1	
Total			14	4
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	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	
	Total		18	1
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	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	
Total		10	1	
Interoperability Governance	A governance framework exists to control the interoperability activities across administrative levels.	2	2	
	Total		2	

