



# NATIONAL INTEROPERABILITY FRAMEWORK OBSERVATORY

## Analytical Model *MALTA*

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*

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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			
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
 <p>See reference: the European Interoperability Framework v2</p>									
Subsidiarity and proportionality EIF, Chapter 2, Underlying principles Category: Principles	Ref: Does the NIF contain the 'subsidiarity and proportionality' principle?	The EIF Interoperability agreements and the 'subsidiarity and proportionality' principle in particular are used as the basis for the conceptualisation of interoperability architecture. See Figure 4 -The 12 EIF principles ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> )	1	The National Digital Strategy 2014-2020 embed the subsidiarity and proportionality principle at a national level with the following guiding principles: A. Online government services will be organised around customers' needs. Businesses, local councils, community learning centres and the public will have a role in designing and implementing new or enhanced services. F. Ministries and entities will own their ICT projects. Only horizontal services, shared across government, will be centrally owned and delivered. <a href="http://www.digitalmalta.gov.mt/en/Pages/Landing-Pages/GuidingPrinciples.aspx">http://www.digitalmalta.gov.mt/en/Pages/Landing-Pages/GuidingPrinciples.aspx</a>	The Programme of Initiatives for the Digital Malta Strategy is composed of 228 initiatives being implemented by various entities, supporting the subsidiarity principle ( <a href="http://www.digitalmalta.gov.mt/en/Pages/Pot/DMProgrammeOfInit2015.aspx">http://www.digitalmalta.gov.mt/en/Pages/Pot/DMProgrammeOfInit2015.aspx</a> ). With regards to the proportionality principle, common ICT services and infrastructures which can be shared and reused have been developed and made available to all Government systems, including an eID system, a Government Payment Gateway, etc. ( <a href="http://mita.gov.mt/en/eGov/Pages/eGovernment.aspx">http://mita.gov.mt/en/eGov/Pages/eGovernment.aspx</a> )		2	This NIF element is monitored: To ensure that each application is treated in its own merit while embedding the local and European principles, MITA uses both road mapping and architecture assessments. MITA uses an architecture assessment process to establish and influence the technology strategy aspects based on the Government's vision and drive through governance, the relevant implementations. These aspects include, amongst others, strategy, operational alignment, governance and architecture. See NIF section 2.6.2 Governance. <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> See ICT Solutions Policy ( <a href="https://mita.gov.mt/en/GMICT/GMICT%20Policies/GMICT_P_0117_ICT_Solutions_v1.0.pdf">https://mita.gov.mt/en/GMICT/GMICT%20Policies/GMICT_P_0117_ICT_Solutions_v1.0.pdf</a> ) See Interoperability and Open Specifications Policy ( <a href="https://mita.gov.mt/en/GMICT/GMICT%20Policies/GMICT_P_0115_Interoperability_v1.0.pdf">https://mita.gov.mt/en/GMICT/GMICT%20Policies/GMICT_P_0115_Interoperability_v1.0.pdf</a> ) See Enterprise Architecture Policy ( <a href="https://mita.gov.mt/en/GMICT/GMICT%20Policies/GMICT_P_0067_EnterpriseArchitecture_v2.0.pdf">https://mita.gov.mt/en/GMICT/GMICT%20Policies/GMICT_P_0067_EnterpriseArchitecture_v2.0.pdf</a> )	2
User-centricity EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'user-centricity' principle?	- At a National Level user centricity is reflected in the Digital Malta Strategy through one of the core (vertical) theme forming the National Digital Strategy 2014 - 2020 - Digital Citizen. The link between Interoperability and user centricity in this case can be noted through one of the horizontal themes of the strategy "Regulation and Legislation" where interoperability within the standards and good practices action is a key enabler for this horizontal theme. ( <a href="http://www.digitalmalta.gov.mt/en/Pages/Landing-Pages/RegLegis.aspx">http://www.digitalmalta.gov.mt/en/Pages/Landing-Pages/RegLegis.aspx</a> )  - Within the NIF, the EIF Interoperability agreements and the 'user-centricity' principle in particular are used as the basis for the conceptualisation of interoperability architecture. See Figure 4 -The 12 EIF principles ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> )	2	MITA published the National Digital Strategy and a programme of initiatives (updated on a regular basis) which among other things established a number of actions targeting businesses, citizens and government. The key actions relevant to user-centricity are: Transacting with government - Citizens and organisations will be able to transact securely with government using different channels. The take-up of online services will be encouraged by making them easy to use and available on mobile devices. These services will include online forms, e-Payments and e-Invoicing. One-stop shop - Citizens and businesses will benefit from a one-stop shop concept. They will be able to access services from their home or office, or through agents. Practices such as 'one face to government', 'one-login', 'service personalisation' and 'ask-only-once' will be the driving force.	Some implementation examples based on initiatives planned for the year 2015 are: - ONE STOP SHOP FOR CITIZENS - TECHNOLOGY SOLUTION - CONSUMER ADVICE PORTAL - HUMAN RESOURCE INFORMATION UNIT'S PUBLIC FACING ESERVICE - ENHANCING USER EXPERIENCE More information can be found at the following link: <a href="http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%20-%20Programme%20of%20Initiatives%202015.pdf">http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%20-%20Programme%20of%20Initiatives%202015.pdf</a>		2	This NIF element is monitored: All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. It's alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a> See <a href="http://meib.gov.mt/en/ministry/Documents/Malta%20Digital%20economy%20Vision.pdf">http://meib.gov.mt/en/ministry/Documents/Malta%20Digital%20economy%20Vision.pdf</a> See <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a>	1

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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
Inclusion and accessibility EIF, Chapter 2, Underlying principles Recommendation 2 Category: Principles	Does the NIF contain the 'inclusion and accessibility' principle?	<p>Objectives and Key Principles:</p> <p>5. Citizens can, at any point in time, request and make use of public information.</p> <p>See Section 1.3, Chapter 1, NIF framework Objectives and key principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- The EIF Interoperability agreements and the 'inclusion and accessibility' principle in particular are also used as the basis for the conceptualisation of interoperability architecture.</p> <p>See Figure 4 -The 12 EIF principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	1	The Digital Malta Strategy 2014 - 2020 defines two key actions focused on inclusion and accessibility Action 3. Empowering vulnerable/minority groups and the elderly. Action 4. Accessibility and Assistive Technologies <a href="http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%202014%20-%202020.pdf">http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%202014%20-%202020.pdf</a>	<p>Some implementation examples based on initiatives planned for the year 2015 are:</p> <ul style="list-style-type: none"> <li>- INCLUSION (DISABLED AND THE ELDERLY)</li> <li>- EMPOWERING OLDER CITIZENS WITH DIGITAL SKILLS</li> <li>- ONE-TO-ONE MENTORING CALL FOR VOLUNTEERS</li> <li>- ENHANCING USER EXPERIENCE</li> <li>- BUTTERFLY PROJECT</li> <li>- HEALTH FORMS AND SERVICES DIRECTORY</li> </ul> <p>More information can be found at the following link: <a href="http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%20-%20Programme%20of%20initiatives%202015.pdf">http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%20-%20Programme%20of%20initiatives%202015.pdf</a></p>	1	This NIF element is monitored: National Digital Economy Strategy: Access to all - internet accessibility standards will be promoted to enable everyone, irrespective of disability, to navigate and access content. Moreover the access and use of assistive technologies will be promoted and facilitated to help independent living of the elderly and vulnerable groups. This will also stimulate market demand for diverse, affordable technologies. All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. It's alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a>	2
Security and privacy EIF, Chapter 2, Underlying principles Recommendation 3 Category: Principles	Does the NIF contain the 'Security and privacy' principle?	<p>Objectives and Key Principles:</p> <p>4. Inter-connectivity and information sharing between solution constituents, public services and EU-wide implementations is transparent, secure and trustworthy</p> <p>See NIF Framework, chapter 1, section 1.3 Objectives and key principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- Trusted Exchange of Information: "... Ultimately, as a multi-faceted characteristic, trust is earned by providing a desired level of assurance to collaborating parties that instil a sense of reliability and security."</p> <p>See NIF Framework, chapter 2, section 2.3 Trusted Exchange of Information (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- A separate security policy does exist. See <a href="https://www.mta.gov.mt/MediaCenter/PDFs/1_IMS-POL-infoSec-v7.0.pdf">https://www.mta.gov.mt/MediaCenter/PDFs/1_IMS-POL-infoSec-v7.0.pdf</a></p>	2	The Digital Malta Strategy 2014 - 2020 defines two key action related to Security and Privacy i.e. Action 44. Digital Legislation and Regulation and Action 53. For example action 53 defines that Government will enforce a National Cyber Security Strategy, to help ensure a safer internet, the protection of critical infrastructure, the rule of law, accountability and privacy. The main pillars will be designed to: - Combat Cyber Crime. Law enforcement agencies will identify gaps and strengthen their capability to investigate and combat cybercrime. - Strengthen National Cyber Defence. Public and private entities will be guided and assisted in strengthening their cyber defence capabilities. - Secure Cyberspace. Higher levels of trust will be instilled through awareness programmes and the delivery of trustworthy, ICT-enabled services that assure confidentiality, integrity, availability and privacy. - Build Capacity. The skills and educational frameworks required will be identified and developed.	<p>In line with the European Commission's proposal for a Directive of the European Parliament and of the Council concerning measures to ensure a high common level of network and information security across the Union, MITA is in the process of articulating and communicating a national Cyber Security Strategy 2015 - 2020 for Malta.</p> <p>More information can be found at the following link: <a href="http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%20-%20Programme%20of%20initiatives%202015.pdf">http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%20-%20Programme%20of%20initiatives%202015.pdf</a></p>	2	National Digital Economy Strategy & National Cyber Security Strategy: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a>	2
Multilingualism EIF, Chapter 2, Underlying principles Recommendation 4 Category: Principles	Does the NIF contain the 'Multilingualism' principle?	<p>- The EIF Interoperability agreements and the 'Multilingualism' principle in particular, are used as the basis for the conceptualisation of interoperability architecture.</p> <p>See Figure 4 -The 12 EIF principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- Public officers are invited to familiarise themselves with the EIF's principles and recommendations to ensure a more harmonised approach in developing cross-border public services.</p> <p>See NIF Framework, chapter 1, section 1.7 Based on best practice (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	1	(describe here)	The alignment to this principle is reflected in an initiative that kicked off early 2015 where the central Content Management System for citizens facing portals (currently being used by most Ministries and Departments) is being upgraded to handle multi lingual support. This should be implemented by June 2016	1	All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. It's alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a>	1

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Administrative simplification EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Administrative simplification' principle?	<p>The EIF Interoperability agreements and the 'Administrative simplification' principle in particular, are used as the basis for the conceptualisation of interoperability architecture.</p> <p>See Figure 4 -The 12 EIF principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- Public officers are invited to familiarise themselves with the EIF's principles and recommendations to ensure a more harmonised approach in developing cross-border public services.</p> <p>See NIF Framework, chapter 1, section 1.7 Based on best practice (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	1	<p>The Digital Malta Strategy 2014 - 2020 defines two key actions related to simplification</p> <p>Action 26. Transacting with government Citizens and organisations will be able to transact securely with government using different channels. The take-up of online services will be encouraged by making them easy to use and available on mobile devices. These services will include online forms, ePayments and invoicing.</p> <p>30. ICT innovation in procurement Government will use its position as a major procurer to stimulate demand for innovative ICT. It will encourage collaboration between local players and, as an early adopter, it will act as a showcase for locally-produced technology.</p> <p>Innovative policies will improve procurement cycles and deliver better value. The eProcurement framework will be extended to cover eOrdering, invoicing and ePayments. <a href="http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%202014%20-%202020.pdf">http://www.digitalmalta.gov.mt/en/Documents/Digital%20Malta%202014%20-%202020.pdf</a></p>	<p>Some implementation examples based on initiatives planned for the year 2015 are:</p> <p>ONLINE ELECTRONIC FORMS Government intends to increase the number of online electronic forms made available to citizens and businesses. In this respect a project to improve the central electronic forms solution has commenced which aims at significantly simplifying the form creation process. Apart from reducing the costs and efforts to deploy new electronic forms, the eForms simplification project will enable a larger number of forms to be published.</p> <p>ENHANCEMENTS TO THE EPROCUREMENT SYSTEM To facilitate further the transition to eProcurement for Ministries and Contracting Authorities (CAs) within their respective portfolio when publishing tenders below the EU thresholds. Enhancements on the eTenders system will reduce costs to Economic Operators by streamlining and simplification of processes. Through new reporting features, a fuller picture of public procurement activity across Government allows for better informed policy decisions and reduced time spent on resolving litigations.</p>	1	<p>One of the goals of the National Digital Economy Study under the Digital Government section, is "Simplify existing digital public services."</p> <p>All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. Its alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link. <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a></p> <p>See <a href="http://www.digitalmalta.gov.mt/en/Pages/Content/DMVision.aspx">http://www.digitalmalta.gov.mt/en/Pages/Content/DMVision.aspx</a></p>	1
Transparency EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'Transparency' principle?	<p>Objectives and Key Principles: 4. Inter-connectivity and information sharing between solution constituents, public services and EU-wide implementations is transparent, secure and trustworthy.</p> <p>See NIF Framework, chapter 1, section 1.3 Objectives and key principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>Figure 4 -The 12 EIF principles</p> <p>- Public officers are invited to familiarise themselves with the EIF's principles and recommendations to ensure a more harmonised approach in developing cross-border public services.</p> <p>See NIF Framework, chapter 1, section 1.7 Based on best practice (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	1	<p>The Digital Malta Strategy 2014 - 2020 defines one key action related to transparency</p> <p>33. eDemocracy Government is committed to using ICT to encourage citizens to take part in democratic decision-making. Initiatives will be implemented to enhance the visibility, transparency and accountability of government.</p>	<p>Some implementation examples based on initiatives planned for the year 2015 are:</p> <p>EPARTICIPATION In collaboration with Government Ministries establish the required structures and implement an eParticipation to allow Government to conduct online public consultations.</p>	1	<p>This NIF element is monitored.</p> <p>One of the goals of the National Digital Economy Study under the Digital Government section, is "Extend government transparency and e-democracy."</p> <p>All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. Its alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link. <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a></p>	1
Preservation of information EIF, Chapter 2, Underlying principles, Recommendation 5 Category: Principles	Does the NIF contain the 'Preservation of information' principle?	<p>The EIF Interoperability agreements and the 'Preservation of information' principle in particular are used as the basis for the conceptualisation of interoperability architecture.</p> <p>See Figure 4 -The 12 EIF principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- From a low level perspective, through an Adopted Specifications List which contains adopted standards that are used to streamline and enforce implementations surrounding data persistence, transmission and rendering within Government hence addressing technical interoperability.</p> <p>- Public officers are invited to familiarise themselves with the EIF's principles and recommendations to ensure a more harmonised approach in developing cross-border public services.</p> <p>See NIF Framework, chapter 1, section 1.7 Based on best practice (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	1	<p>From a high level perspective, the National Digital Economy Strategy specifies a key action intended to improve the collaboration with and within Government: Collaborative Digital Environment (Action 28) defines: Government will work with stakeholders to:</p> <ul style="list-style-type: none"> <li>- Assist departments and entities to adopt technology that integrates cross-departmental services.</li> <li>- Facilitate the management of born-digital records, protect corporate knowledge, and improve data security, integrity, accessibility, traceability and archiving. Industry standards for records and information management and business classification scheme will be adapted.</li> <li>- Strengthen knowledge sharing.</li> <li>- Enable workflows.</li> <li>- Provide collaborative environments for unified working across multiple devices and media-types.</li> </ul>	<p>0</p>	<p>This NIF element is monitored.</p> <p>All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. Its alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link. <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a></p> <p>See <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a></p>	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 <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 2: Monitored 1: Partially monitored 0: not observed
Openness EIF, Chapter 2, Underlying principles, Recommendation 6 Category: Principles	Does the NIF contain the 'Openness' principle?	<p>Public officers are invited to familiarise themselves with the EIF's principles and recommendations to ensure a more harmonised approach in developing cross-border public services.</p> <p>See NIF Framework, chapter 1, section 1.7 Based on best practice (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>Objectives and key principles: Citizens can, at any point in time, request and make use of public information.</p> <p>See NIF Framework, chapter 1, section 1.3 Objectives and key principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	2	<p>Government is committed to be transparent, and to encourage public engagement. Online engagement will increase using digital technologies such as social media and crowd-sourcing, soliciting contributions from many. Communications and eParticipation activities will be designed to promote better development of public policy, increase public trust and encourage citizens and businesses to collaborate with government. In line with EU regulations, government will open up public data for use by private organisations and the general public, and will promote innovative application of such data.</p>	<p>During 2014 an Open Government Data initiative was launched where middleware platforms were implemented covering both Public Administration Data Interchange Scenarios and Government Open Data Scenarios using CDR Data Sets. During 2015 work in these platforms shall continue to reach key objectives set out in the PSI directive.</p> <p>As an initial step the PSI EU Directive will be transposed to local legislation and the implementation of operational requirements resulting from the new legislation will be assessed.</p>	1	<p>This NIF element is monitored: All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. Its alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a> See <a href="http://meib.gov.mt/en/ministry/Documents/Malta%20Digital%20Economy%20Vision.pdf">http://meib.gov.mt/en/ministry/Documents/Malta%20Digital%20Economy%20Vision.pdf</a> See <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a></p>
Reusability EIF, Chapter 2, Underlying principles, Recommendation 7 Category: Principles	Does the NIF contain the 'Reusability' principle?	<p>In Malta, the National ICT Interoperability Framework (NIF) is driven, among other things, by the following objective: shared and reusable information and communication technology (ICT) assets owned by the public sector are discoverable and can be used by public services with minimal effort.</p> <p>The Framework also includes a Section 2.3 "Share, discover and re-use" which specifies that ICT solutions, based on multilateral agreements, can be viewed as shared or common services of a generic nature which meet common user requirements across multiple sectors and policy areas. It is a consumable service that can be used without modification, in support of the implementation of the public service being offered.</p> <p>An example of a common service (from a technology perspective), provided and managed by the Malta Information Technology Agency (MITA), is MAGNET - the Government's own private IP-based network. MAGNET offers a telecommunications interconnection platform that responds to the growing need for secure information exchange between public sector organisations.</p> <p>To be effective, services and tools need to be:</p> <ol style="list-style-type: none"> <li>1. Created with reusability in mind and are shared by their owners;</li> <li>2. Discoverable by and meaningful to their consumers.</li> </ol> <p>There are also plenty of opportunities for reuse beyond our borders. International best practice, data schemas and even entire software solutions can be found from reputable sources and adopted as-is or with minor modifications.</p> <p>See NIF Framework, chapter 2, section 2.3 Share, Discover and Reuse (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	2	<p>This NIF element is applied: Action 56 of the Digital Malta defines Government will accelerate the modernisation of ICT implementations, maintain a cartography of ICT assets, and promote the re-use of mature local and EU established ICT building blocks using the Enterprise Architecture &amp; Road-mapping Initiatives of MITA. This is currently</p>	<p>As an example, the INSPIRE stack is based entirely on open source software and is promoted for re-use across the public administration.</p> <p>More information can be found at the following link: <a href="http://sdi.data.gov.mt/index.html">http://sdi.data.gov.mt/index.html</a></p>	2	<p>This NIF element is monitored: All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. Its alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a> See <a href="http://meib.gov.mt/en/ministry/Documents/Malta%20Digital%20Economy%20Vision.pdf">http://meib.gov.mt/en/ministry/Documents/Malta%20Digital%20Economy%20Vision.pdf</a> See <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a></p>
Technological neutrality and adaptability EIF, Chapter 2, Underlying principles, Recommendation 8 Category: Principles	Does the NIF contain the 'Technological neutrality and adaptability' principle?	<p>"The ICT Solutions policy incorporates the spirit of technological neutrality and adaptability, as follows: "To the maximum extent possible, dependencies on specific hardware and software stacks and respective configurations shall be avoided or appropriately mitigated."</p> <p>See <a href="https://mita.gov.mt/en/GMCT/GMCT%20Policies/GMCT_P_0117 ICTSolutions_v1.0.pdf">https://mita.gov.mt/en/GMCT/GMCT%20Policies/GMCT_P_0117 ICTSolutions_v1.0.pdf</a></p> <p>Objectives and Key Principles: Public services are deployed on a flexible architecture centred on business needs and provided through standardised approaches and capabilities so as to reduce dependencies on specific vendors, technologies and practices. In turn this promotes:</p> <ol style="list-style-type: none"> <li>a. A level playing field so that multiple vendors can fairly compete on the feature set and performance levels of their products;</li> <li>b. A wider selection during the acquisition process which may allow for improved business continuity and exit strategy scenarios whilst keeping in view of the required performance levels and functional capabilities;</li> <li>c. The ability to take advantage of pre-established international best practices that have already been applied by other EU Member States;</li> </ol> <p>See NIF Framework, chapter 1, section 1.3 Objectives and key principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>Data provisioning principles: Where Open Specifications exist, that define data persistence, interchange and presentation, these must be used; See NIF Framework, chapter 4, section 4.2.1 Data provisioning principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>Ref. NIF Framework, chapter 4, 4.2.1 Data provisioning principles</p>	1	[describe here]	<p>A number of key building blocks enable and direct consumers to use the technological neutrality and adaptability principles. These include the Government Payment Gateway and Notifications platform. These principles are also enabled and manifested in the Spatial Open Data Portal at <a href="https://msdi.data.gov.mt/">https://msdi.data.gov.mt/</a></p>	1	<p>This NIF element is monitored: MITA uses an architecture assessment process to establish and influence the technology strategy aspects based on the Government's vision and drive through governance, the relevant implementations. These aspects include, amongst others, strategy, operational alignment, governance and architecture.</p> <p>See <a href="https://mita.gov.mt/en/GMCT/GMCT%20Policies/GMCT_P_0117 ICTSolutions_v1.0.pdf">https://mita.gov.mt/en/GMCT/GMCT%20Policies/GMCT_P_0117 ICTSolutions_v1.0.pdf</a> (new scoring -&gt;)</p>

## 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
Effectiveness and efficiency EIF, Chapter 2, Underlying principles Category: Principles	Does the NIF contain the 'effectiveness and efficiency' principle?	<ul style="list-style-type: none"> <li>Objectives and Key Principles:</li> <li>1. Shared and reusable ICT assets owned by the public sector are discoverable and can be used by public services with minimal effort.</li> <li>- The EIF Interoperability agreements and the 'Effectiveness and efficiency principle in particular are used as the basis for the conceptualisation of interoperability architecture.</li> <li>See Figure 4 -The 12 EIF principles</li> <li>(<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</li> </ul>	1	The approach for sharing ICT assets are clearly manifested in the private cloud (compute store network) that enables all the vertical information systems that the Government has in place. It is also manifested in the number of common and shared information systems in place including but not limited to the Payroll System and eGovernment Enterprise Content Management System - examples of the former (common) and latter (shared) respectively. The basic distinction between common and shared are that whilst the latter refers to a single instance of a service consumed by many parties, the former refers to multiple instances of the same service in use.	[describe project here]	2	This NIF element is monitored. Effectiveness and efficiency is considered across the digital strategy. All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. Its alignment and execution are being monitored by a Governing Body within MTA. Reports are made available through the Digital Malta portal at the following link: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a>	1
Conceptual model EIF, Chapter 3 Category: Conceptual model	Does the NIF contain a conceptual model?	<ul style="list-style-type: none"> <li>The Information Systems Framework sets a common approach for delivering information systems for the public sector based on the Service Oriented Architecture (SOA). The Information Systems Framework contains various sections related to the conceptual model including:</li> <li>- 4.3 Information Systems Blue Print</li> <li>- 4.3.2.2 Interoperability levels Interoperability levels</li> <li>- 4.3.4.1 Service Oriented Architectures</li> <li>See ISF Framework, chapter 4, Information Systems Framework</li> <li>(<a href="https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf">https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf</a>)</li> <li>Ref: NIF Framework, chapter 3, section 3.3 Service attributes</li> </ul>	2	[describe here]	To enable a coherent data messaging and enabling building block, the Government has established an Enterprise Service Bus with associated Service Provisioning API and governance. This building block enables an orchestrated approach towards the aggregation and provisioning of data access.	1	This NIF element is monitored. MTA uses an architecture assessment process to establish and influence the technology strategy aspects based on the Government's vision and drive through governance, the relevant implementations. These aspects include, amongst others, strategy, operational alignment, governance and architecture. See <a href="https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf">https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf</a>	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)	<ul style="list-style-type: none"> <li>The Information Systems Framework sets a common approach for delivering information systems for the public sector. It contains various sections related to the conceptual model including:</li> <li>- 4.3 Information Systems Blue Print</li> <li>- 4.3.2.2 Interoperability levels Interoperability levels</li> <li>- 4.3.4.1 Service Oriented Architectures</li> <li>See ISF Framework, chapter 4, Information Systems Framework</li> <li>(<a href="https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf">https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf</a>)</li> <li>- Service Attributes:</li> <li>When transitioning from a business process approach to a service-oriented model, it is sometimes preferred to document and preserve service descriptions and attributes in both human and machine readable formats. Models such as W3C's Web Service Modelling Ontology and Dublin Core Meta Data Element Set are such examples.</li> <li>See NIF Framework, chapter 3, section 3.3 Service Attributes</li> <li>(<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</li> <li>Ref: NIF Framework, chapter 3, section 3.3 Service attributes</li> </ul>	1	[describe here]	[describe project here]	0	This NIF element is monitored. MTA uses an architecture assessment process to establish and influence the technology strategy aspects based on the Government's vision and drive through governance, the relevant implementations. These aspects include, amongst others, strategy, operational alignment, governance and architecture.	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	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>Objectives and Key Principles:</p> <p>2. Public services are deployed on a flexible architecture centred on business needs and provided through standardised approaches and capabilities so as to reduce dependencies on specific vendors, technologies and practices. In turn this promotes:</p> <p>a. A level playing field so that multiple vendors can fairly compete on the feature set and performance levels of their products;</p> <p>b. A wider selection during the acquisition process which may allow for improved business continuity and exit strategy scenarios whilst keeping in view of the required performance levels and functional capabilities;</p> <p>c. The ability to take advantage of pre-established international best practices that have already been applied by other EU Member States;</p> <p>See NIF Framework, chapter 1, section 1.3 Objectives and key principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- Presenting the Interoperability Architecture:</p> <p>Agreement on common semantic schemas at the public sector level. A semantic schema is a model with entities and the relations between these entities. As such, semantic schemas define business objects at the public sector level. To understand the meaning of data, it is important to harmonise the identification of business objects across the public sector.</p> <p>See NIF Framework, chapter 2, section 2.6 Presenting the Interoperability Architecture (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>Accredited data services are in Malta known as information from base registries - in interoperability agreements. Agreement on establishment of catalogue of accredited datasets available for the public sector. Commonly used and reusable data sets can be endorsed by a central clearing house to support the delivery of public services by providing consistent data.</p> <p>See NIF Framework, chapter 2, section 2.6 Presenting the Interoperability Architecture, Table 1 (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>Data interchange services should be implemented using Service Oriented Architecture 7 principles; See <a href="https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf">https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf</a></p> <p>Ref: NIF Framework, chapter 2, 2.6 presenting the interoperability agreements - Table 1: interoperability agreements</p>	1	[describe here]	EIDAS / SUNFISH are key projects at scale which show the use of loosely coupled and interconnected principles.	1	MITA uses an architecture assessment process to establish and influence the technology strategy aspects based on the Government's vision and drive through governance, the relevant implementations. These aspects include, amongst others, strategy, operational alignment, governance and architecture.	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?	<p>The intention of the enterprise architecture is to:</p> <ul style="list-style-type: none"> <li>- Drive the continuous alignment of the adoption and use of technology with the Government's business objectives and strategic direction;</li> <li>- Describe the current and future state of a Government's business processes and technology implementations;</li> <li>- Provide an overall plan for designing, implementing and maintaining the underlying infrastructure to support the transition from the current to the future state.</li> </ul> <p>While the enterprise architecture depicts the whole Government, in this context, a public service architecture represents a "solution-specific" architecture that deals with the necessary building blocks required to offer the service in question. Apart from incorporating the various public services and their underlying ICT constituents, the enterprise architecture identifies common and shared solutions that can be used by the various public services.</p> <p>See NIF Framework, chapter 2, 2.1.1 Visualising the public service architecture (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>Ref: NIF Framework, chapter 2, 2.1.1 Visualising the public service architecture</p>	1	[describe here]		0	This NIF element is monitored: MITA uses an architecture assessment process to establish and influence the technology strategy aspects based on the Government's vision and drive through governance, the relevant implementations. These aspects include, amongst others, strategy, operational alignment, governance and architecture. See <a href="https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf">https://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/ISF_framework.pdf</a>	1
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?	<p>Accredited data services are in Malta known as information from base registries - in interoperability agreements. Agreement on establishment of catalogue of accredited datasets available for the public sector. Commonly used and reusable data sets can be endorsed by a central clearing house to support the delivery of public services by providing consistent data.</p> <p>See NIF Framework, chapter 2, section 2.6 Presenting the Interoperability Architecture, Table 1 (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>ref: NIF Framework, chapter 2, 2.6 presenting the interoperability agreements - Table 1: interoperability agreements</p>	2		[describe project here]	0	MITA uses an architecture assessment process to establish and influence the technology strategy aspects based on the Government's vision and drive through governance, the relevant implementations. These aspects include, amongst others, strategy, operational alignment, governance and architecture.	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?	<p>Infrastructure Service Categories:</p> <p>Identity and access management encapsulates all the processes, policies, and technology solutions that manage digital identities and specifies how digital identities are used to access resources. This infrastructure service includes entity authentication (the mechanism needed to manage controlled access of entities to applications) and authorisation (the mechanism to define what access privileges an entity has within the application by defining roles and groups).</p> <p>NIF Framework, chapter 5, figure 10 Infrastructure Service Categories (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- Further information in the GMICT policies (MITA Security policy) See <a href="https://www.mita.gov.mt/page.aspx?pageid=223">https://www.mita.gov.mt/page.aspx?pageid=223</a></p> <p>ref: NIF Framework, chapter 5, figure 10 Infrastructure Service Categories</p>	1	The National Digital Economy Strategy has a whole chapter (7) about Regulation and Legislation. Among other things, it mentions the following: <p>38. Digital Single Market Malta will seek to maximise the benefits and opportunities deriving from legislation adopted within the EU. As at 2014, these include:</p> <ul style="list-style-type: none"> <li>The Data Protection Framework.</li> <li>The Electronic Identification and Trust Services Regulation.</li> <li>The Information Society Directive.</li> </ul> <p>Regulation concerning the European single market for electronic communications and achieving a Connected Continent.</p>	[describe project here]	0	All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. It will continually be monitored by the Governing Body. Reports will be presented on qualitative and quantitative assessments and progress achieved.	0



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		
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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?	Malta describes the agreement on common semantic schemas at the public sector level, explaining the entities and the relations between these entities. As such, semantic schemas define business objects at the public sector level. To understand the meaning of data, it is important to harmonise the identification of business objects across the public sector. See NIF Framework, chapter 2, section 2.6 Presenting the Interoperability Architecture ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) Accredited data services are in Malta known as information from base registries (in interoperability agreements). Agreements on the establishment of a catalogue of accredited datasets are available for the public sector while commonly used and reusable data sets are endorsed by a central clearing house to support the delivery of public services by providing consistent data. See NIF Framework, chapter 2, section 2.6 Presenting the Interoperability Architecture, Table 1 ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> )	1	The ICT Solutions Policy and the Interoperability and Open Specifications Policy deal with technical and semantic interoperability as the following example demonstrates:  The ability to share and process data beyond its source of origin is considered fundamental and expected. Any shareable data shall be exposed through appropriate machine readable mechanisms in an industry standard fashion, using open standards and interoperable engineering principle/practices. Specifically in the context of domain data, ownership of the data is considered to rest within the respective legally empowered authority/authorities, unless explicitly otherwise indicated. As a matter of preference, any machine to machine (solution to solution) interaction between data consumers and providers shall happen directly between the consumer and the specific information system storing and processing such domain data.	The Technical Implementations surrounding the PS1 directive shall be kicked off during 2016. Further information shall be provided in due course.	0	MITA uses an architecture assessment process to establish and influence the technology strategy aspects based on the Government's vision and drive through governance, the relevant implementations. These aspects include, amongst others, strategy, operational alignment, governance and architecture.	1
Interoperability levels EIF, Chapter 4 Category: Interoperability levels	Does the NIF describe the four levels of interoperability?	Interoperability levels: The Political context is considered as a necessary backdrop to the more detailed levels of interoperability. Political support and sponsorship is required when cross-sectorial visions and strategies need to be harmonised for the elaboration of new public services. - Legal interoperability deals with the legal validity of exchanged information across the public sector and the EU. - Organisational interoperability aligns the goals and objectives of the business processes that support public services delivery. - Semantic interoperability enables organisations to process information from external sources in a meaningful manner. It ensures that the precise meaning of exchanged information is understood and preserved throughout exchanges between parties. Semantic interoperability encompasses the following aspects: a. The meaning of data elements and the relationship between them. It includes developing vocabulary to describe data exchanges, and ensures that data elements are understood in the same way by communicating parties; b. Describing the exact format of the information to be exchanged in terms of grammar, format and schemas. - Technical interoperability covers the technological aspects of linking information systems. It includes aspects such as interface specifications, interconnection services, data integration services, data presentation and exchange, etc. See NIF Framework, chapter 1, Figure 3 Interoperability levels ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) Ref: NIF Framework, chapter 1, Figure 3 Interoperability levels	1	[describe here]	[describe project here]	0	All levels were considered during the formulation of the National Digital Economy Strategy	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?	This document does not present policy, regulation and/or compliance perspectives as these fall directly within the ICT Governance and the Compliance Management Frameworks respectively. Related policy documentation is issued separately on the GMICT Policy portal to complement the framework's guidance. (Policy documents are published online through the GMICT Policies section of the MITA web portal) See NIF Framework, chapter 1, section 1.4 Scope and applicability ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) See <a href="https://mita.gov.mt/en/GMICT/Pages/GMICT-Policies.aspx">https://mita.gov.mt/en/GMICT/Pages/GMICT-Policies.aspx</a>  Ref: - NIF Framework, chapter 1, section 1.4 Scope and applicability - <a href="https://www.mita.gov.mt/page.aspx?pageid=221">https://www.mita.gov.mt/page.aspx?pageid=221</a>	1	[describe here]	[describe project here]	0	"This NIF element is monitored. All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. It's alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a> The National Digital Economy Strategy defines the following with regards Interoperability and Standards: "The fast pace of ICT development requires continuous review of industry standards. Government has a leadership role to play. It must ensure standards and policies produce optimal returns on investment in systems architecture and data that is open and interoperable." Various actions have been defined that support Interoperability and Standards. The following are considered to be the most relevant from a legal interoperability aspect: - Digital by default legislation - Government will evaluate all new laws at the drafting stage to ensure compatibility with the vision for Digital Malta. - Standards and Good Practice - Government shall collaborate with stakeholders to support and promote: a) National and EU cross-border interoperability. b) ICT standards based on industry best practices. c) Green ICT. See <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a>	2

**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
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?	The following principles can be helpful for public sector organisations during their planning exercises and when collaborating on processes that cut across organisational and sectorial boundaries: - Use a common and standardised approach for documenting and communicating business processes with collaborating organisations. See NIF Framework, chapter 3, Section 3.2 Business Process, Interoperability Principles ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) Ref: NIF Framework, chapter 3, 3.2 Business process interoperability principles	2	[describe here]	[describe project here]	0	MODIFIED This shall be taken into consideration during the next NIF iterative review.	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?	-When sharing business processes across public sector boundaries, such as between departments, we aim to establish trust and confidence by applying pre-determined controls and measures; See NIF Framework, chapter 3, section 3.1 Introduction, figure 8 ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) - To start with, organisations are invited to start using a minimal set of attributes to identify business processes across the public sector, such as the following: - Identifier: An unambiguous reference to the business process or basic service within a given context; - Publisher (can be referred as Custodian): An entity responsible for making the resource available; - Providing public body (can be referred as Owner): the public sector organisation that is responsible for the service; - Contact: the actual Public Officer that should be contacted for a given context, for example technical support; - Contact email, telephone number or other communication channel: The means with which the Public Officer can be contacted. Whichever attributes are chosen, it is important that this information is published in a way that is discoverable and searchable by its intended user base. See NIF Framework, chapter 3, Section 3.3 Service Attributes ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> )	1	[describe here]	[describe project here]	0	One of the main principles of Digital Malta states that "Government will use technology, coupled with business process reengineering, to rethink and redesign resources. A simplification of services will reduce paper use, cut costs and lower the risks that arise from cash handling." More specifically, Collaborative digital environment - Government will work with stakeholders to: - Assist departments and entities to adopt technology that integrates cross-departmental services. - Facilitate the management of born-digital records, protect corporate knowledge, and improve data security, integrity, accessibility, traceability and archiving. Industry standards for records and information management and business classification scheme will be adopted. - Strengthen knowledge sharing. - Enable workflows. - Provide collaborative environments for unified working across multiple devices and media-types. All actions and initiatives defined in the Digital Malta Strategy are monitored and reported publicly, allowing all stakeholders to track its success. It's alignment and execution are being monitored by a Governing Body within MITA. Reports are made available through the Digital Malta portal at the following link: <a href="http://www.digitalmalta.gov.mt/en/Pages/Home.aspx">http://www.digitalmalta.gov.mt/en/Pages/Home.aspx</a>	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?		0	[describe here]	[describe project here]	0	MODIFIED This shall be taken into consideration during the next NIF iterative review.	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?	Any changes to the corporate (e.g. Payroll, Accounting System) and government business information systems (taxation, social policy, etc.) or to core services (e.g. email for Government, Government network, internet service, etc.) are governed through MITA ICT Change Management Procedure which is ITIL based. This procedure is administered by a central team within MITA and any change involves the respective project / service team and client representative as appropriate.	1	This NIF element is applied: The Information Systems Framework defines a Government strategic model that specifies the building blocks that are governed by MITA (see chapter 4). More specifically in section 4.1, For Government Shared Services and Corporate Shared Services "Business change control process determined by MITA"; for Core Information Systems, "Business change control process determined by the respective CIO". The ICT Change Management within MITA controls the lifecycle of all Request For Changes (RFCs), with the main objective being that to facilitate the whole implementation process whilst ensuring minimum disruption to IT Services. MITA manages changes through a centralised ICT service, offering interfaces (such as the use of the MITA Call Centre), so CIOs and other stakeholders can raise and monitor calls. See <a href="https://www.mita.gov.mt/MediaCenter/PDFs/1_ISF_framework.pdf">https://www.mita.gov.mt/MediaCenter/PDFs/1_ISF_framework.pdf</a>	[describe project here]	2	[describe monitoring procedure here]	0

# Analysis of the NIFs



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EIF Element - Reference - Category	NIF-EIF Alignment			NIF implementation		NIF monitoring		
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<p>Semantic interoperability. Public administrations, when working together to establish (European) public services, should use a common taxonomy of basic public services.</p> <p>EIF, Chapter 4 Recommendation 13</p> <p>Category: Interoperability levels, semantic artefacts.</p>	<p>Does the NIF encourage the usage of a common taxonomy of basic public service?</p>	<p>- Interoperability agreement: Schemas Data Standards Catalogue</p> <p>Agreement on common semantic schemas at the public sector level</p> <p>A semantic schema is a model with entities and the relations between these entities. As such, semantic schemas define business objects at the public sector level. To understand the meaning of data, it is important to harmonise the identification of business objects across the public sector.</p> <p>See NIF Framework, chapter 2, Table 1: interoperability agreements (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- Data provisioning principles:</p> <p>Where Open Specifications that define data persistence, interchange and presentation exist, these must be used;</p> <p>See NIF Framework, chapter 4, 4.2.1 Data provisioning principles (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>- Adopted Specifications Catalogue Interoperability Profiles; Adopted Standards &amp; Services</p> <p>Formalised specifications which can impact the way public services interoperate can be endorsed by a central body and contextualised for effective use in the public sector. Adopted specifications can also be used in acquisition scenarios as technical requirements.</p> <p>See NIF Framework, chapter 2, Table 1: interoperability agreements (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0
<p>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.</p> <p>EIF, Recommendation 18</p> <p>Category: Interoperability levels, semantic artefacts</p>	<p>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?</p>	<p>The Maltese semantic interoperability depends primarily on high-quality documentation of repositories (registries / databases), services, applications and ultimately business domains. To reach a mature and stable semantic state, collaborative agreements should be established across the public sector to establish a realistic version of the asset descriptions. Policies, standards and procedures can be created to centrally coordinate and guide these efforts. An elaboration of dictionaries, thesauri and nomenclatures can be centrally established as a reference point. If necessary references to these semantic assets can also be made in the legislation it is necessary to make their use mandatory.</p> <p>The following actions create an organisational support framework to drive semantic interoperability:</p> <ul style="list-style-type: none"> <li>- In all major business domains, expert groups are formed with the task of creating and maintaining the respective business domain's semantic assets;</li> <li>- Semantic assets spanning or interacting among multiple domains might require cross-sectoral / cross-domain expert discussions. So while a multilateral agreement can eventually be reached, working groups represented by the relevant ministries / departments can create and maintain instructions on the translation/modification of data objects of one area into those of another area.</li> <li>- On an international level, the participation in semantic interoperability fora can influence the elaboration of mutual agreements and semantic gateways for the semantic interoperability between information systems of different countries.</li> </ul> <p>Together with the Data Governance Council, public sector organisations are invited to incorporate semantic considerations when developing public services. This will facilitate the gradual transformation of data to value adding information.</p> <p>See NIF Framework, chapter 4, 4.4 organisational support (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p> <p>See NIF Framework, chapter 4, 4.5.1 Semantic initiatives promoted through the Joinup platform (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	2	[describe here]	[describe project here]	2	[describe monitoring procedure here]	0
<p>Technical interoperability. Public administrations should agree on the formalised specifications to ensure technical interoperability when establishing European public services.</p> <p>EIF, Recommendation 19</p> <p>Category: Interoperability levels, technical artefacts.</p>	<p>Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.</p>	<p>Adopted Specifications; Catalogue; Interoperability Profiles; Adopted Standards &amp; Services</p> <p>Agreement on a common set of formalised specifications for technical connectivity</p> <p>Formalised specifications which can impact the way public services interoperate can be endorsed by a central body and contextualised for effective use in the public sector. Adopted specifications can also be used in acquisition scenarios as technical requirements.</p> <p>Data modeling and semantic experts across the Public Sector are invited to:</p> <ol style="list-style-type: none"> <li>Consider the adoption of interoperability assets from the Joinup platform;</li> <li>Collaborate in identifying and publishing interoperability assets in the Joinup's asset repository.</li> </ol> <p>See NIF Framework, chapter 2, Table 1: interoperability agreements (<a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a>)</p>	2	[describe here]	[describe project here]	2	[describe monitoring procedure here]	0

## 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 monitoring procedure here]	Monitoring scoring 2: Monitored 1: Partially monitored 0: not observed
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.	In Malta, two approaches are taken towards interoperability agreements. - Agreement on a common set of formalised specifications for technical connectivity. Formalised specifications which can impact the way public services interoperate can be endorsed by a central body and contextualised for effective use in the public sector. Adopted specifications can also be used in acquisition scenarios as technical requirements. - Building Block: Adopted Specifications Catalogue Interoperability Profiles; Adopted Standards & Services See NIF Framework, chapter 2, 2.6 Presenting the interoperability architecture ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> )	2	This NIF element is applied. The Interoperability and Open Specifications Policy states: Flexible and configurable formalised specifications that are applicable across the Public Sector shall: - have at least one documented interoperability profile which is relevant and reusable by the Public Sector - clearly describe the scope and applicability of their use within the Public Sector. See <a href="http://mita.gov.mt/en/GMICT/Pages/General-GMICT-Policies.aspx">http://mita.gov.mt/en/GMICT/Pages/General-GMICT-Policies.aspx</a>	[describe project here]	2	[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?	intended to verify that the Interoperability related building blocks are being used by public services as intended and that the envisaged benefits are in fact being fulfilled. Public services adopting building blocks as defined by the NIF will only need to describe their use within their solution without the need to explain their technical validity as this analysis would have already been done. For instance a solution proposing the use of SAML 2.0 (a formalised specification already adopted and endorsed by MITA) to request an authentication claim from the Government's identity repository of public officers can do so immediately. An added benefit here is that the overall assessment time can be drastically reduced if solutions are standardised and use pre-established services. See NIF Framework, chapter 2, 2.6.2 Governance ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) - Technical standards need to be evaluated against a number of criteria mostly falling within the following	2	This NIF element is applied: Implemented through the Formal Specifications suite in the GMICT Policy section of the MITA website: - Formalised Specifications Adoption Procedure - Formalised Specification Adoption Guidelines - Formalised Specification Adoption Request Form Moreover there is an internal repository of application forms, analysis and results See <a href="http://mita.gov.mt/en/GMICT/Pages/General-GMICT-Policies.aspx">http://mita.gov.mt/en/GMICT/Pages/General-GMICT-Policies.aspx</a>	[describe project here]	2	[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?	- Data provisioning principles: Where Open Specifications exist, that define data persistence, interchange and presentation, these must be used. See NIF Framework, chapter 4, 4.2.1 Data provisioning principles ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) - Qualities of a technical standard: 5.2.1 Openness in standardisation: More often than not, Open Standards (as they are usually referred to) are subject to full public assessment and can be used without constraints in a manner equally available to all parties. 5.2.2 Selection criteria a. Openness in standardisation While the consideration to the criteria mentioned in 5.2.2 is vital for an effective selection process, the public sector should opt for the use of technical standards which embed "openness" characteristics in their development, implementation and use. See NIF Framework, chapter 5, 5.2.2 Selection criteria ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) - GMICT policy on Open Source The interoperability and Open Specifications Policy states: When establishing Public services, the Public Sector shall prefer open specifications, taking due account of the coverage of functional needs, maturity and market support. ( <a href="https://www.mita.gov.mt/en/GMICT/Pages/GMICT-Policies.aspx">https://www.mita.gov.mt/en/GMICT/Pages/GMICT-Policies.aspx</a> )	2	This NIF element is applied: As part of the architecture assessment process and the adoption procedure for formal specifications	[describe project here]	2	[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?	- Semantic interoperability depends primarily on high-quality documentation of repositories (registries / databases), services, applications and ultimately business domains. To reach a mature and stable semantic state, collaborative agreements should be established across the public sector to establish a realistic version of the asset descriptions. Policies, standards and procedures can be created to centrally coordinate and guide these efforts. An elaboration of dictionaries, thesauri and nomenclatures can be centrally established as a reference point. If necessary references to these semantic assets can also be made in the legislation, making their use mandatory The following actions can create an organisational support framework to drive semantic interoperability: - In all major business domains, expert groups are formed with the task of creating and maintaining the respective business domain's semantic assets; - Semantic assets spanning or interacting among multiple domains might require cross-sectorial / cross-domain expert discussions. So while a multilateral agreement can eventually be reached, working groups represented by the relevant ministries / departments can create and maintain instructions on the translation/modification of data objects of one area into those of another area. - On an international level, the participation in semantic interoperability fora can influence the elaboration of mutual agreements and semantic gateways for the semantic interoperability between information systems of different countries. Together with the Data Governance Council, public sector organisations are invited to incorporate semantic considerations when developing public services. This will facilitate the gradual transformation of data to value added information. See NIF Framework, chapter 4, 4.4. Organisational support ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> )	1	The GMICT policy suite is intended to establish the required degree of governance and standards from an ICT perspective. The respective stakeholders are able to influence the articulation and feedback loop of all standards and policy articulation	The full set of GMICT policy suite is available at <a href="https://mita.gov.mt/en/GMICT/Pages/General-GMICT-Policies.aspx">https://mita.gov.mt/en/GMICT/Pages/General-GMICT-Policies.aspx</a>	2	[describe monitoring procedure here]	0

## Analysis of the NIFs



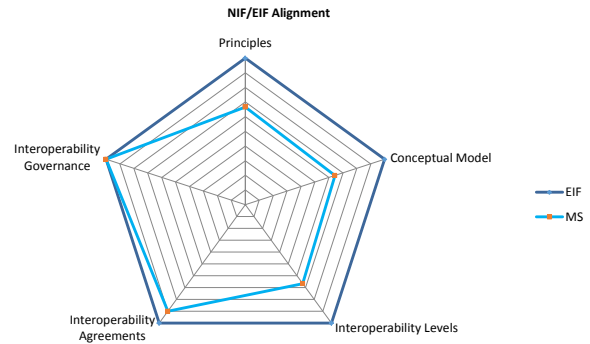
[See Alignment Examples in NIFO toolbox](#)

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

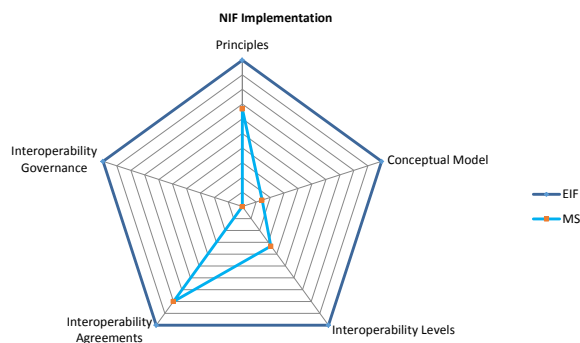
EIF Element - Reference - Category	Measurement	NIF-EIF Alignment		NIF implementation			NIF monitoring	
		NIF element present - Reference - (Text in English)	NIF-EIF alignment scoring 2: fully 1: partially 0: not aligned	Large scale implementation [describe if and how implementation of the element is 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, 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?	- Trusted Information Exchange While trust features are required in all data exchange scenarios, the level of assurance is dependent on factors that can be determined by participating parties. Common scenarios implementing trust features should therefore be designed to accept multiple levels of exchange scenarios that provide practical implementations without jeopardising the quality and performance of the involved services. See NIF Framework, chapter 2, 2.5 Trusted Information Exchange - Data Architecture Policy, Directive and Standard is currently (11/2012) under review See <a href="https://mita.gov.mt/en/GMCT/Pages/Data-GMCT-Policies.aspx">https://mita.gov.mt/en/GMCT/Pages/Data-GMCT-Policies.aspx</a> Governance of the interoperability activities in Malta is described in two main topics: - Visualising the public sector architecture In order to facilitate the transformation to a connected Government, it is useful to determine the key responsible owner or custodian for each aspect of a public service and as much as possible to harmonise the decisions made for each domain. See NIF Framework, chapter 2, 2.1.1. Visualising the public sector architecture ( <a href="http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf">http://mita.gov.mt/en/Technology/Initiatives/Interoperability/Documents/NIF_framework.pdf</a> ) - Governance The GMICT Policy Suite is a collection of policies, directives, procedures and standards, managed centrally by MITA, governing the adoption and use of technology within the Government of Malta. More specifically, an Interoperability Policy is used to regulate the building blocks identified by the NIF. In addition, formalised specifications adopted by MITA are also coordinated and governed by GMICT Policies.	2	MODIFIED Data policies are currently being reviewed	[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.		2	[describe here]	[describe project here]	0	[describe monitoring procedure here]	0

Category	EIF	MS
<b>Principles</b>	100%	66,7%
<b>Conceptual Model</b>	100%	64,3%
<b>Interoperability Levels</b>	100%	66,7%
<b>Interoperability Agreements</b>	100%	90,0%
<b>Interoperability Governance</b>	100%	100,0%

Category	EIF Element	Scoring		
		Max	MS	
<b>Principles</b>	Subsidiarity and proportionality	2	1	
	User-centricity	2	2	
	Inclusion and accessibility	2	1	
	Security and privacy	2	2	
	Multilingualism	2	1	
	Administrative simplification	2	1	
	Transparency	2	1	
	Preservation of information	2	1	
	Openness	2	2	
	Reusability	2	2	
	Technological neutrality and adaptability	2	1	
	Effectiveness and efficiency	2	1	
	<b>Total</b>		<b>24</b>	<b>16</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	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	1	
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	1	
<b>Total</b>			<b>14</b>	<b>9</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	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	2	
	Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.	2	2	
	<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	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	2	
	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	2	
<b>Total</b>		<b>10</b>	<b>9</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>	

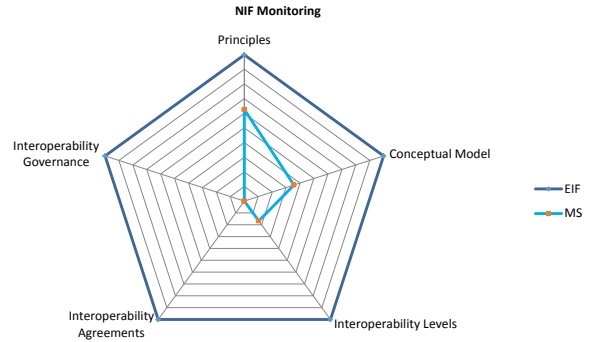


Category	EIF	MS
<b>Principles</b>	100%	66,7%
<b>Conceptual Model</b>	100%	14,3%
<b>Interoperability Levels</b>	100%	33,3%
<b>Interoperability Agreements</b>	100%	80,0%
<b>Interoperability Governance</b>	100%	0,0%



Category	EIF Element	Scoring		
		Max	MS	
<b>Principles</b>	Subsidiarity and proportionality	2	2	
	User-centricity	2	2	
	Inclusion and accessibility	2	1	
	Security and privacy	2	2	
	Multilingualism	2	1	
	Administrative simplification	2	1	
	Transparency	2	1	
	Preservation of information	2	0	
	Openness	2	1	
	Reusability	2	2	
	Technological neutrality and adaptability	2	1	
	Effectiveness and efficiency	2	2	
	<b>Total</b>	<b>24</b>	<b>16</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	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	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>2</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	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	2	
	Does the NIF encourage public administrations to agree on the formalised specification to ensure technical interoperability when establishing European public services.	2	2	
	<b>Total</b>	<b>18</b>	<b>6</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	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	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	0	
<b>Total</b>	<b>10</b>	<b>8</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>	

Category	EIF	MS
<b>Principles</b>	100%	62,5%
<b>Conceptual Model</b>	100%	35,7%
<b>Interoperability Levels</b>	100%	16,7%
<b>Interoperability Agreements</b>	100%	0,0%
<b>Interoperability Governance</b>	100%	0,0%



Category	EIF Element	Scoring		
		Max	MS	
<b>Principles</b>	Subsidiarity and proportionality	2	2	
	User-centricity	2	1	
	Inclusion and accessibility	2	2	
	Security and privacy	2	2	
	Multilingualism	2	1	
	Administrative simplification	2	1	
	Transparency	2	1	
	Preservation of information	2	1	
	Openness	2	1	
	Reusability	2	1	
	Technological neutrality and adaptability	2	1	
	Effectiveness and efficiency	2	1	
	<b>Total</b>	<b>24</b>	<b>15</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	0	
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>5</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	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	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>3</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>		