

ΚΥΠΡΙΑΚΗ



ΔΗΜΟΚΡΑΤΙΑ

**CYPRUS**  
**NATIONAL INTEROPERABILITY**  
**FRAMEWORK**  
**(eGIF)**

**Version 2.0**



**DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES**



**13 July 2017**



## APPENDICES

### Appendix A: Overview of eGIF Technical Standards

The technical standards of the National eGovernment Interoperability Framework of Cyprus are summarized in the following table.

Table 1: Overview of eGIF Technical Standards

Category	Sub-Category	Mandatory	Recommended	Under Observation
eGovernment Applications Documentation & Development	<b>Modelling Methods</b>		UML v2.4.1	UML v2.5
	<b>Process Models Exchange Schemas</b>		XMI v2.4.2 XPDL v2.2	XMI 2.5.1 Canonical XMI Beta 2
Service Modelling	<b>Process Modelling Methods</b>	BPMN v2.0	UML v2.4.1 (Activity Diagrams)	UML v2.5
	<b>Process Execution Languages</b>		WS-BPEL v2.0	
Data Modelling	<b>Modelling Methods</b>	E-R Diagram (ERD)	UML v2.4.1	UML v2.5
	<b>Data Models Exchange Schema</b>	XSD v1.1	XMI v2.4.2 XSD v1.0	XMI v2.5.1 Canonical XMI Beta 2
	<b>Data Exchange Formats</b>	XML v1.0 (Fifth edition)	JSON	XML v1.1 (Second edition)
	<b>Data Transformation</b>	XSLT v2.0		
	<b>Metadata Schema</b>	Dublin Core v1.1		
	<b>Metadata description</b>	RDF v1.1		
	<b>Semantic Information representation languages</b>	XML v1.0 (Fifth edition)	OWL v2.0	XML v1.1 (Second edition) CCTS v3.0



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<b>Application Development Frameworks and Programming Languages</b>		Java SE v8 Java EE v7	.NET Framework v4.6.x JavaScript	Java ME v8
<b>Information Presentation and Processing</b>	<b>Accessibility</b>	WCAG v2.0	Mobile Web Best Practices v1.0	
	<b>Hypertext Exchange Schemas</b>	HTML v4.01	XHTML v1.0 HTML v5 XHTML Basic v1.1	
	<b>Stylesheets</b>	CSS v 2.1 XSL v1.1		
	<b>Character Sets Encoding</b>	UTF-8 v6.2		
	<b>Date &amp; Time Representation</b>	ISO 8601		
	<b>File Formats Recognition</b>	MIME v1.0 (RFC 2045 – RFC 2049)		
	<b>Document formats for Information Exchange</b>	HTML v4.01 PDF v1.7 (Sixth edition)	HTML v5	
	<b>Document formats for Information Processing</b>	TXT ODF v1.2 OOXML (ISO/IEC 29500:2012, ECMA-376:2012)		
	<b>Graphics Exchange Formats</b>	GIF v89a JPEG v1.02	PNG (Second edition) TIFF v6.0 SVG v1.1 (Second edition)	JPEG 2000



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Category	Sub-Category	Mandatory	Recommended	Under Observation
	<b>Sound, Video and Video Streaming file formats</b>	MPEG-4 v2 OGG (Vorbis I)	QuickTime v7.7.x	WebM
	<b>Data Compression</b>	ZIP v6.3.4		
<b>Communication and Interoperability</b>	<b>Interoperability with Third-Party Systems</b>	SOAP v1.2 (Second edition) WSDL v2.0	UDDI v2 UDDI v3 WS-I BP v1.2 WS-I BP v2.0 WSDL v1.1 SOAP v1.1 XQuery 1.0 (Second edition)	XQuery 3.0
	<b>Discovery of Resources</b>	DNS	LDAP v3 UDDI v2 UDDI v3	
	<b>Locating of Resources</b>	URI URL		
	<b>Network Protocols</b>	IP v4 ICMP v4 SNMP v3	SSH v2 BGP v4 RIP v2 OSPF v2 ESP SNMP v2	IP v6 OSPF v3 ICMP v6 RIPng
	<b>Application Layer Protocols</b>	FTP HTTP v1.1 SMTP POP v3 IMAP v4 (Revision 1)		
	<b>IP Telephony</b>		H.323 v7.1	



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Category	Sub-Category	Mandatory	Recommended	Under Observation
		SIP v2.0		
	<b>Content Delivery</b>	RSS v2.0 Atom v1.0		
<b>Security and Authentication</b>	<b>Web Services Security</b>	WS-Security v1.1.1	WS-SecurityPolicy v1.3 WS-Policy v1.5 WS-SecureConversation v1.4	
	<b>Data Transmission Security</b>	TLS v1.2 HTTPS	X.509 v3 (7 <sup>th</sup> edition)	
	<b>Encryption</b>	AES SHA v2 XML-Enc v1.1	XKMS v2.0 TDES or 3DES	
	<b>Authentication, Identification and Authorisation</b>	XML Signature v1.1 WS-Trust v1.3	WS-Trust v1.4 WS-Federation v1.2 WS-Addressing v1.0 SAML v1.1 SAML v2.0 XACML v2.0 XACML v3.0 XAdES v1.4.1 CAdES v1.8.3 PAdES [v1.1.1 (Part 1), v1.2.1 (Part 2), v1.2.1 (Part 3), v1.1.2 (Part 4), v1.1.2 (Part 5)]	openID v2.0
<b>Standards for specific Business Sectors</b>	<b>Medical images exchange</b>	DICOM 2011		
	<b>Medical data</b>	HL7 v2.x		HL7 v3



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	<b>exchange</b>			
	<b>Geographical data representation and exchange</b>	GML v3.2.1	GeoTIFF v1.8.2 KML v2.2	GML v3.3
	<b>e-Learning content</b>	SCORM 2004 4th edition		
	<b>Election data exchange</b>		EML v7.0	
	<b>Virtualization</b>	OVF v1.1		