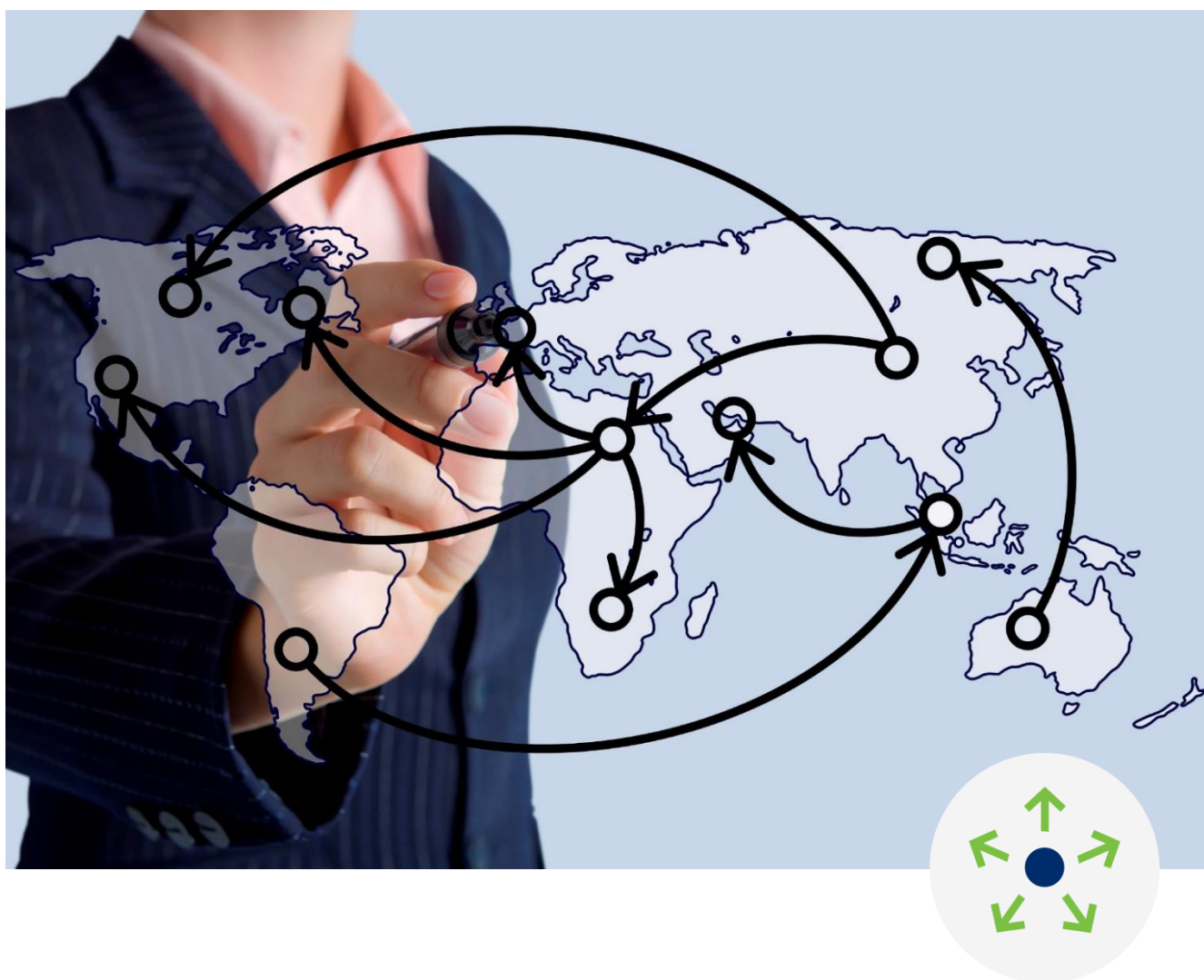




The global language of business

Implementation of GS1 EDI Standards in 2015

Detailed Report



Document Summary

Document Item	Current Value
Document Title	Implementation of GS1 EDI Standards in 2015
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1. Introduction

1.1 Scope and objective

This report presents the implementation of GS1 EDI standards in the year 2015. It is based on the answers of 75 Member Organisations, of which 53 have reported some form of GS1 EDI usage in their countries.

The report covers the implementation of GS1 EDI standards - GS1 XML, GS1 Profiles of the UN/CEFACT XML and GS1 EANCOM® in detail:

- Type and versions of standards implemented
- Number of implementing companies
- Specific messages implemented
- Implementation of EDI standards in core GS1 sectors: Healthcare, Apparel, Footwear & Fashion and Public Procurement
- Communication methods used for exchanging EDI messages
- Member Organisation activities in the area of EDI

There is also general information about Web EDI, non-GS1 EDI standards and proprietary solutions.

We asked similar questions to those from previous years, to provide comparable data. Information included in this report should give a good overview of the business processes in which EDI standards are implemented worldwide as well as the scope of implementation.

1.2 Target audience

The primary target audience of this report is the GS1 Global Office and GS1 Member Organisations.

The **GS1 Global Office** uses the survey results to update the GS1 EDI strategy and define the future of EDI. Information obtained during the survey helps in discovering the marketing, communication and training needs of Member Organisations and their users. It allows taking decisions based on the actual market situation, rather than assumptions.

The **GS1 Member Organisations** benefit from the survey results by being able to compare the situation in their market with what is happening in other countries. Knowing what is being implemented where, it is easier to seek assistance when similar needs arise in their country. They can also estimate how the situation may develop in their market, based on information from other countries. It is particularly useful in supporting user companies with the cross-border business relationship.

However, the information presented can also be useful to GS1 user companies, industry associations, EDI solution providers and other standard development organisations. It enables them to benchmark their own actual or planned implementation with user groups from their own and other countries. The overview of the market trends may also be a valuable aid in taking decisions about the EDI implementation.



When sharing with external bodies or member companies, Member Organisations may wish to adjust the text to suit the intended audience.

1.3 Caveats

Data reported in the survey are sometimes based on estimation made by GS1 Member Organisations, partly on surveys conducted on the local markets and information obtained from EDI solution providers. Thus, the implementation report should not be considered as a scientific research, but as an illustration of market trends. However, the estimation is made by people the most suitable for that: the GS1 Member Organisation staff members, having daily contact with their user community and often assisting them in implementation.

1.4 Structure of the document

The report is divided into eleven major sections:

1. Introduction
2. General EDI standards implementation statistics
3. EANCOM®
4. GS1 XML
5. GS1 Profiles of the UN/CEFACT XML
6. Web EDI
7. Non GS1 EDI Standards
8. Communication methods used to send EDI messages
9. EDI implementation overview since 2005 and future trends
10. Use of EDI standards in Healthcare, Apparel, Footwear & Fashion and Public Procurement

The ninth section contains a short analysis of the EDI implementation trends, based on data between 2005 and 2015, as well as estimation for year 2016.

The Appendix contains the list of EDI related projects and experiences, which Member Organisations are willing to share with the GS1 Community.

1.5 Additional information

We are confident that this survey will be of high interest to you and we invite you to visit our website <http://www.gs1.org/EDI> if you would like to have further information regarding our organisation and/or the standards we offer.

An electronic version of this report can be downloaded from the GS1 website: http://www.gs1.org/docs/EDI/EDI_Implementation_2015-Detailed_Report.pdf. We are open to any comments on any information you would like to see in this report, so that it could best suit your needs in the future. You can submit your comments via the GS1 website <http://www.gs1.org/contact>.

2. General EDI implementation statistics

53 MOs reported that various EDI standards have been implemented in their countries in 2015.

Table 1 List of countries where EDI technologies are used:

Country	GS1 XML	UN/CEFACT Profiles	EANCOM®	Country	GS1 XML	UN/CEFACT Profiles	EANCOM®
Algeria		Y	Y	Macedonia	Y		Y
Argentina	Y		Y	Malaysia	Y	Y	Y
Australia	Y		Y	Mexico	Y	Y	Y
Austria	Y		Y	Netherlands	Y		Y
Belarus			Y	Norway	Y		Y
Belgium&Luxembourg	Y		Y	Paraguay	Y		
Bolivia	*	*	*	Philippines	Y		
Bosnia-Herzegovina	Y		Y	Poland			Y
Brazil			Y	Portugal			Y
Bulgaria			Y	Romania			Y
Canada	Y	Y	Y	Russia	Y		Y
Chile	Y		Y	Serbia	Y		Y
Costa Rica			Y	Singapore	Y		
Croatia	Y	Y	Y	Slovakia			Y
Czech Republic			Y	Slovenia	Y		Y
Denmark	Y		Y	South Africa	Y		Y
Finland	Y		Y	Spain	Y		Y
France	Y		Y	Sweden	Y		Y
Germany	Y	Y	Y	Switzerland	Y		Y
Greece	*	*	*	Thailand	*	*	*
Hungary			Y	UK	Y		Y
Ireland	Y		Y	Ukraine	Y		Y
Italy	Y		Y	Uruguay			Y
Japan	*	*	*	USA	Y		Y
Kenya	*	*	*	Venezuela		Y	Y
Latvia	*	*	*	Vietnam	*	*	*
Lithuania	Y	Y	Y				
TOTAL: 53 countries, GS1 XML: 33, UN/CEFACT Profiles: 8, EANCOM®: 43							

* Only non-GS1 standards implemented

Table 2: List of countries where EDI standards were reported as not used:

Azerbaijan		Jordan		Nigeria
Bahrain		Korea		Pakistan
Cyprus		Kyrgyzstan		Panama
Ecuador		Malta		Saudi Arabia
Egypt		Mauritius		Tajikistan
Georgia		Moldova		Turkmenistan
Honduras		Mongolia		
Ivory Coast		Montenegro		

The chart below illustrates the types of EDI standards implemented in 53 GS1 member countries where some form of EDI is being used.

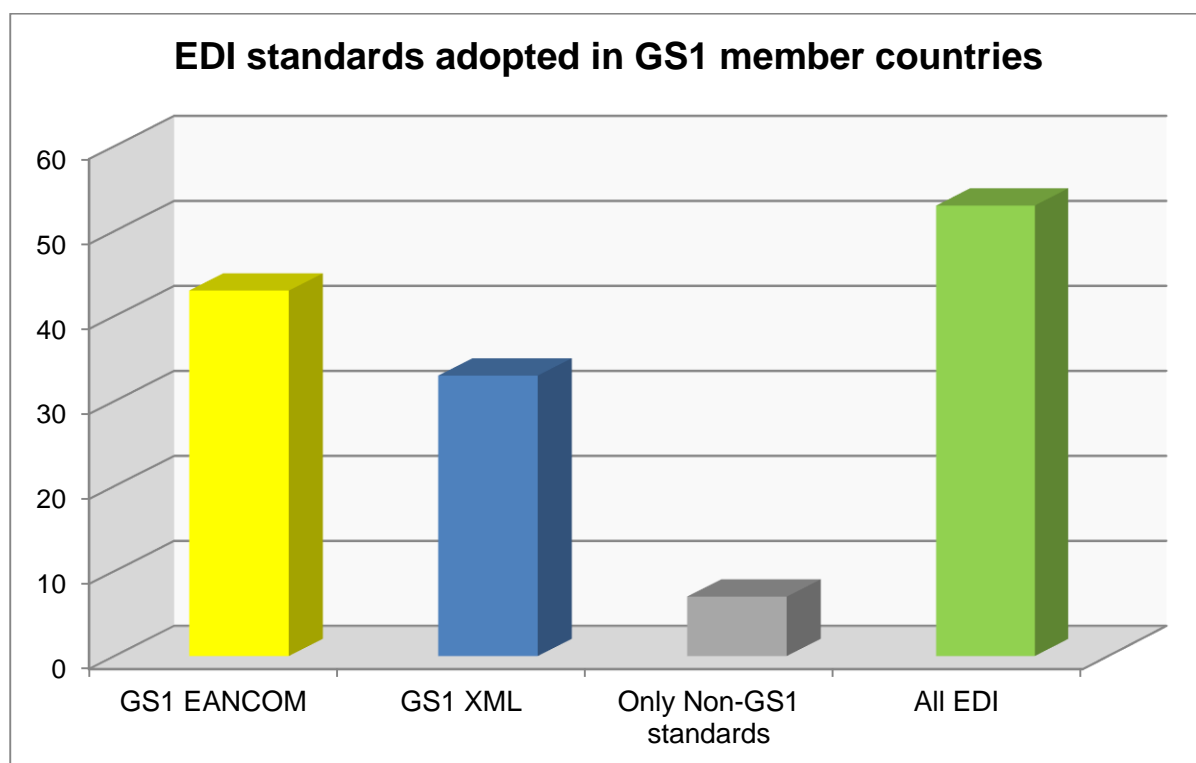


Figure 1: Types of EDI standards implemented in GS1 member countries

3. GS1 EANCOM®

3.1 Number of GS1 EANCOM® and implemented versions

In year 2015, the implementation of EANCOM® standards was reported by 43 countries. EANCOM® versions 97 and 2002 are implemented in almost the same number of countries – 30 each. Version 94 is still in use in 12 countries. If counted in terms of user companies, the EANCOM® 97 is by far the most used one.

An additional question has been asked about the syntax version* used for EANCOM® 2002, to help determine the future development of EANCOM® standard. The number of users of specific versions is included in the Table 3 below.

Table 3: List of countries where EANCOM® is used:

Country	EANCOM® Users		Implemented Versions of EANCOM®			EANCOM® 2002 Syntax version	
	Dec 2015	Est. 2016	94	1997	2002	S3	S4
			# of users	# of users	# of users		
Algeria	3	n/a				Y	
Argentina	1500	1700			Y		
Australia	5800	5800		Y	Y		2
Austria	2900	2950	Y	Y	Y	1950	50
Belarus	191	400			Y		
Belgium & Luxembourg	n/a	n/a		Y	Y	Y	Y
Bosnia-Herzegovina	20	20			Y	Y	
Brazil	690	690	Y	Y	Y		
Bulgaria	900	950		300	600	Y	
Canada	81	n/a	1	1		Y	Y
Chile	1850	1900		Y		1200	800
Costa Rica	340	360		340			
Croatia	50	60		50			
Czech Republic	1160	1180		780	380		Y
Denmark	3000	3000	Y	3000			
Finland	100	200			Y		
France	14870	15200	300	12000	2500	Y	Y
Germany	10000	10500		8000	2000		
Hungary	1800	2000	Y	Y	Y		Y
Ireland	1700	1800		Y	Y	Y	
Italy	1700	1800		Y		Y	
Lithuania	265	300			265		Y
Macedonia	2	n/a			2		
Malaysia	n/a	n/a				Y	
Mexico	14749	15338			Y	Y	
Netherlands	6900	6950	250	5450	2000		
Norway	326	350	326			Y	Y
Poland	2910	3200		2910		Y	Y
Portugal	2700	2850		Y	Y	Y	
Romania	1450	1650		600	850		
Russia	2200	2400	50	150	2000	Y	
Serbia	70	75			70		
Slovakia	820	850		660	160	Y	

* The overview of differences between Syntax level 3 and 4 can be found on [GS1 website](#).



Slovenia	900	n/a		Y	Y		
South Africa	500	520		Y	Y	14870	
Spain	6100	7300	Y	Y	Y		
Sweden	n/a	n/a	Y	Y	Y	Y	Y
Switzerland	3100	3300		Y	Y		
UK	4250	4500	Y	Y	Y		
Ukraine	1915	2135			1915	3000	
Uruguay	3	3		3		Y	
USA	12	12		Y		Y	
Venezuela	317	350		317			
TOTAL	98,144	102,594	12 countries	31 countries	30 countries	22 countries 21020 users	12 countries 852 users

Note: "Y" means that no information about the number of users, even estimated, is available to this Member Organisation, although the version is known to have been used.

Note: More information about GS1 EANCOM® can be found at the
[GS1 website](#)
 Or from the local GS1 Member Organisation.

3.2 EANCOM® message implementations

A total of 44 EANCOM® messages have been reported as implemented, the most popular being ORDERS (Order), INVOIC (Invoice), DESADV (Despatch Advice), PRICAT (Price/Sales Catalogue), ORDRSP (Order Response), RECADV (Receiving Advice) and INVRPT (Inventory Report). This order is very similar to previous years. Table 4 below contains the details of messages used.

Table 4: List of EANCOM® message implementation per country

Country	Master Data				Pre-Order	Order				Transport & Delivery												Payment						Report & Planning														Other			# by country						
	PARTIN	PRICAT	PRODAT	PROINQ		REQOTE	QUOTES	ORDCHG	ORDERS	ORDRSP	OSTRPT	HANMOV	INSDS	IFTMBF	IFTMBC	IFTMIN	IFCSUM	IFTSTA	IFTMAN	DESADV	RECADV	RETANN	RETINS	INVOIC	TAXCON	REMADV	COMDIS	COACSU	PAYMUL	APERAK	BANSTA	CREMUL	CONTRL	DELFOR	DEBMUL	DIRDEB	FINCAN	FINSTA	INVRPT	MSCONS	QALITY	SLSFCT	SLSRPT	CONDRA		GENRAL	AUTACK				
Argentina							Y												Y	Y	Y		Y																									5			
Australia		Y					Y	Y	Y										Y	Y			Y		Y							Y					Y		Y	Y								13			
Austria		Y	Y	Y			Y	Y	Y		Y	Y			Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y		Y		Y	Y	Y	Y		Y	Y	Y	Y	Y				Y				31			
Belarus	Y	Y	Y	Y			Y	Y	Y										Y	Y			Y			Y	Y		Y			Y								Y				Y				17			
Belgium&Lux.							Y	Y			Y	Y			Y			Y	Y	Y	Y	Y	Y		Y		Y				Y					Y				Y	Y		Y					19			
Bosnia-Herz.							Y																																										1		
Brazil		Y					Y	Y												Y				Y		Y			Y							Y				Y	Y							10			
Bulgaria							Y												Y	Y			Y																										4		
Canada		Y	Y				Y	Y	Y	Y		Y				Y			Y				Y			Y		Y															Y		Y				14		
Chile		Y	Y				Y																																										3		
Costa Ria		Y					Y												Y	Y								Y															Y						6		
Croatia							Y																																											1	
Czech Rep.							Y	Y							Y			Y	Y	Y	Y		Y		Y	Y		Y			Y				Y					Y	Y				Y				16		
Denmark	Y	Y					Y	Y			Y		Y	Y	Y	Y	Y	Y	Y	Y			Y		Y			Y			Y	Y	Y			Y	Y	Y		Y	Y			Y					25		
Finland		Y	Y				Y	Y							Y				Y	Y			Y																											8	
France	Y	Y	Y				Y	Y	Y		Y	Y				Y	Y		Y	Y	Y	Y	Y		Y				Y				Y							Y	Y	Y								21	
Germany	Y	Y		Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y		Y			Y			Y	Y				Y	Y		Y	Y	Y									29	
Hungary	Y	Y					Y	Y											Y	Y	Y		Y																												8
Ireland							Y	Y											Y	Y	Y		Y	Y																											7
Italy		Y					Y	Y	Y										Y	Y			Y		Y											Y															9
Lithuania	Y	Y	Y	Y			Y	Y	Y		Y								Y	Y			Y																												11



Country	Master Data				Pre-Order		Order				Transport & Delivery										Payment						Report & Planning														Other			# by country						
	PARTIN	PRICAT	PRODAT	PROINQ	REQOTE	QUOTES	ORDCHG	ORDERS	ORDRSP	OSTRPT	HANMOV	INSDS	IFTMBF	IFTMBC	IFTMIN	IFCSUM	IFTSTA	IFTMAN	DESADV	RECADV	RETANN	RETINS	INVOIC	TAXCON	REMADV	COMDIS	COACSU	PAYMUL	APERAK	BANSTA	CREMUL	CONTRL	DELFOR	DEBMUL	DIRDEB	FINCAN	FINSTA	INVRPT	MSCONS	QALITY	SLSFCT	SLSRPT	CONDRA		GENRAL	AUTACK				
Macedonia	Y								Y										Y																												3			
Mexico		Y						Y											Y	Y	Y		Y		Y			Y														Y				9				
Netherlands		Y	Y				Y	Y	Y			Y			Y				Y		Y	Y	Y		Y				Y			Y	Y		Y	Y				Y	Y						19			
Norway		Y						Y	Y										Y				Y						Y													Y						7		
Poland								Y	Y						Y		Y		Y				Y																									6		
Portugal		Y					Y	Y	Y	Y	Y	Y			Y		Y		Y	Y			Y		Y				Y			Y					Y			Y	Y	Y					19			
Romania	Y	Y	Y					Y			Y				Y				Y	Y			Y			Y	Y		Y						Y					Y	Y		Y				14			
Russia	Y	Y	Y		Y	Y	Y	Y	Y		Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y		Y	Y			Y	Y			Y	Y	Y					31			
Serbia	Y	Y						Y	Y														Y																									5		
Slovakia	Y	Y	Y					Y	Y		Y	Y						Y	Y	Y	Y		Y	Y	Y	Y		Y	Y		Y					Y					Y	Y		Y				22		
Slovenia	Y	Y	Y				Y	Y	Y			Y			Y			Y	Y		Y	Y	Y					Y			Y	Y	Y				Y				Y	Y						19		
South Africa		Y					Y	Y	Y							Y			Y	Y			Y	Y	Y											Y	Y											12		
Spain		Y						Y	Y	Y		Y			Y	Y	Y		Y	Y	Y	Y	Y		Y		Y		Y							Y						Y	Y		Y	Y			22	
Sweden	Y	Y						Y	Y						Y		Y		Y	Y			Y		Y											Y													11	
Switzerland		Y	Y				Y	Y	Y		Y	Y			Y		Y				Y		Y		Y												Y					Y							14	
UK		Y					Y	Y	Y							Y			Y	Y			Y	Y	Y								Y			Y													12	
Ukraine	Y	Y	Y					Y	Y			Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y			Y	Y		Y			Y				Y					Y	Y	Y						24	
Uruguay								Y	Y																																								2	
USA		Y						Y									Y						Y					Y																					5	
Venezuela	Y	Y					Y	Y	Y										Y	Y			Y		Y		Y	Y		Y	Y				Y	Y	Y					Y								17
Total	15	31	14	4	2	2	14	40	32	5	10	14	4	4	16	8	12	7	33	29	15	9	35	4	19	7	7	5	17	2	4	11	10	3	1	5	21	4	2	6	18	17	2	8	3					

4. GS1 XML

4.1 Number of GS1 XML and implemented versions

In 2015, the implementation of GS1 XML standards was reported by 33 countries. The most widely used version set of GS1 XML standards was 2.x, and out of the three latest EDI releases 3.0 and 3.1 were implemented in more countries than the other ones.

Table 5: List of countries where the GS1 XML standards are used:

COUNTRY	2015	Est. 2016	1.X	2.X	3.0	3.1	3.2
Argentina	10	10		Y			
Australia	2800	2800		Y	Y	Y	
Austria	40	80		40			
Belgium & Luxembourg	n/a	n/a					
Bosnia-Herzegovina	10	20		20			
Canada	6	5	2	4			
Chile	1850	1900		1850			
Croatia	150	300					
Denmark	n/a	n/a		2			
Finland	n/a	n/a					
France	617	650		40	577		
Germany	460	480		370	20	50	20
Ireland	2	10			2		
Italy	75	150		Y			
Lithuania	776	800		100		688	
Macedonia	7	20			5		
Malaysia	n/a	n/a	Y				
Mexico	14750	15414					Y
Netherlands	1500	1550		1400	25	50	25
Norway	30	35		2			
Paraguay	265	400		265			
Philippines	n/a	n/a					
Russia	250	300			230	10	9
Serbia	120	140		70	40	10	
Singapore	600	n/a	600				
Slovenia	85	n/a		60		Y	
South Africa	400	430	Y	Y	Y	Y	Y
Spain	840	1000	Y	Y	Y	Y	
Sweden	n/a	n/a				20	
Switzerland	n/a	n/a					
UK	500	500	Y	Y	Y		
Ukraine	1050	2100			Y	1000	
USA	8300	8350					
TOTAL	35493	37444	6	19	12	11	5

Note: "Y" means that no information about the number of users, even estimated, is available to this Member Organisation, although the version is known to have been used.



4.2 GS1 XML message implementations

The details of the implementation of particular messages are presented in Table 6 on the following pages.

Last year, the most widely implemented GS1 XML messages were Order, Despatch Advice, Receiving Advice and Invoice, similar to the previous years.

Note: The table lists official GS1 XML message names.

Visit GS1 website to find:

- [More information about GS1 XML](#)
- [Definitions of messages and their components](#) and [information about GS1 XML design](#)
- [Download message packets](#)

Or contact the local GS1 Member Organisation.



Table 6: List of GS1 XML EDI message implementations per country

Country	Align	Order			Deliver				Transport Mngm.			Warehousing					Pay				Plan										
	Item Data Notification	Order	Configure to Order	Order Response	Consumption Report	Despatch Advice	Despatch Advice – Fish Traceability Ext.	Despatch Advice - Meat Product Ext.	Inventory Report	Receiving Advice	Transport Instruction &Response	Transport Status Request &Notification	Transport Pick-up Drop-off Request &Conf.	Warehousing Inbound Instruction	Warehousing Inbound Notification	Warehousing Outbound Instruction	Warehousing Outbound Notification	Logistics Inventory Report Request	Logistics Inventory Report	Advanced Remittance Notification	Request for Payment	Debit or Credit Advice	Invoice	Settlement	Goods Requirements	Goods Requirements Response	Purchase Conditions	Replenishment Proposal	Replenishment Request	# of messages by country	
Argentina		Y																												1	
Australia		Y		Y	Y	Y			Y	Y												Y	Y	Y	Y	Y					11
Austria	Y																														1
Bosnia-Herzegovina		Y																													1
Canada																							Y								1
Chile	Y	Y	Y	Y	Y				Y						Y		Y		Y												9
Croatia	Y	Y																													2
Denmark	Y	Y				Y			Y	Y													Y								6
France		Y				Y				Y				Y		Y	Y					Y				Y	Y				9
Germany		Y		Y		Y		Y	Y	Y	Y	Y	Y			Y	Y						Y								12
Ireland		Y				Y				Y													Y								4
Lithuania		Y		Y		Y				Y											Y		Y								6
Macedonia		Y		Y		Y			Y														Y								5
Mexico	Y	Y								Y													Y								4
Netherlands	Y	Y		Y		Y			Y	Y	Y			Y	Y	Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Y	Y	20

Country	Align	Order			Deliver						Transport Mngm.			Warehousing						Pay				Plan						
	Item Data Notification	Order	Configure to Order	Order Response	Consumption Report	Despatch Advice	Despatch Advice – Fish Traceability Ext.	Despatch Advice - Meat Product Ext.	Inventory Report	Receiving Advice	Transport Instruction &Response	Transport Status Request &Notification	Transport Pick-up Drop-off Request &Conf	Warehousing Inbound Instruction	Warehousing Inbound Notification	Warehousing Outbound Instruction	Warehousing Outbound Notification	Logistics Inventory Report Request	Logistics Inventory Report	Advanced Remittance Notification	Request for Payment	Debit or Credit Advice	Invoice	Settlement	Goods Requirements	Goods Requirements Response	Purchase Conditions	Replenishment Proposal	Replenishment Request	# of messages by country
Norway		Y		Y		Y																Y								4
Paraguay		Y																			Y	Y								3
Philippines		Y																												1
Russia		Y		Y		Y			Y	Y												Y								6
Serbia		Y		Y		Y			Y	Y												Y								6
Singapore		Y		Y		Y				Y												Y								5
Slovenia		Y		Y		Y				Y												Y								5
South Africa	Y	Y		Y		Y				Y										Y		Y								7
Spain		Y		Y		Y	Y			Y												Y								6
Sweden		Y		Y		Y					Y			Y	Y	Y	Y	Y	Y											10
Switzerland	Y	Y				Y																Y								4
UK	Y	Y				Y			Y	Y												Y	Y							7
Ukraine		Y		Y		Y			Y	Y													Y							6
USA		Y		Y		Y					Y																			4
TOTAL		27	1	16	2	20	1	1	10	16	4	1	1	3	3	4	5	2	3	1	1	4	20	2	3	3	1	1	1	29

5. GS1 profiles of the UN/CEFACT XML messages

GS1 has developed subsets (profiles) of four UN/CEFACT XML messages:

- Cross Industry Order
- Cross Industry Order Response
- Cross Industry Despatch Advice
- Cross Industry Invoice

Nine MOs reported that these profiles either have been implemented in their countries or such implementation is being considered. The results are presented in Table 7 below.

Table 7: Implementation of GS1 profiles of UN/CEFACT XML

COUNTRY	Cross Industry Order	Cross Industry Order Response	Cross Industry Despatch Advice	Cross Industry Invoice
Algeria				
Canada				
Croatia				
Germany				Y
Lithuania	Y		Y	Y
Malaysia				
Mexico	Y		Y	Y
Thailand				Y
Venezuela	Y	Y	Y	Y
TOTAL	3	1	4	5

6. Web EDI

The Web EDI involves the exchange of electronic documents via an internet enabled platform. The business messages are available to the users as web forms that can either be filled-in manually or in automated way. The message is then converted by the translation application into the suitable EDI standard and transferred to the other user company.

GS1 does not provide separate guidelines for the WEB EDI, but some GS1 MO do provide local guides.

Table 9: List of countries where Web EDI is used:

COUNTRY	2015	Est. 2016	COUNTRY	2015	Est. 2016
Algeria	n/a	n/a	Macedonia	2	10
Argentina	n/a	n/a	Malaysia	n/a	n/a
Australia	n/a	n/a	Mexico	17630	18336
Austria	600	650	Netherlands	600	620
Belarus	191	400	Norway	10000	10000
Belgium&Luxembourg	n/a	n/a	Paraguay	146	200
Bolivia	25	55	Poland	3648	4000
Brazil	15484	15484	Portugal	2400	2600
Bulgaria	600	640	Romania	680	n/a
Canada	52	77	Russia	19000	25000
Costa Rica	270	300	Serbia	150	200
Croatia	150	200	Singapore	600	
Czech Republic	250	250	Slovakia	380	400
Denmark	900	1000	Slovenia	160	n/a
Finland	1000	1300	South Africa	600	650
France	11500	12000	Spain	2600	3400
Germany	6000	6200	Sweden	n/a	n/a
Hungary	500	500	Switzerland	n/a	n/a
Ireland	n/a	n/a	Thailand	10	100
Italy	3200	3400	UK	n/a	n/a
Japan	n/a	n/a	Ukraine	4950	7350
Kenya	n/a	n/a	Uruguay	585	610
Latvia	1080	1300	USA	n/a	n/a
Lithuania	500	n/a	Vietnam	n/a	n/a
Total	In 2015: 106,443 in 49 countries, estimated for 2016: 117,232				

Note: "n/a" means that no information about the number of users, even estimated, is available to this Member Organisation, although the Web EDI solutions are known to have been used.

7. Non GS1 EDI standards and solutions

Non-GS1 EDI standards have been implemented in 36 countries. The most widely used ones are: UBL and various local standards (including ANSI X12). These results are very similar to previous years. The details can be found in Table 10 below.

Table 10: List of non GS1 EDI standards used in GS1 member countries:

Country	Standard	# of users	
		2015	Est. 2016
Algeria	Details not available	n/a	n/a
Australia	ANSI X-12	3000	3000
	RosettaNet	n/a	n/a
	Proprietary XML	n/a	n/a
Austria	UN/EDIFACT	n/a	n/a
	ebInterfaceXML	n/a	n/a
	Odette/VDA	n/a	n/a
Belgium & Luxembourg	Bilaterally agreed flat files and XML	n/a	n/a
Brazil	CNAB/FEBRABAN	38000	38000
	RND	10	10
	NTC	698	698
Bulgaria	Details not available	n/a	n/a
Canada	ANSI X12	n/a	n/a
Chile	Details not available	n/a	n/a
Costa Rica	XML INVOICE	n/a	n/a
Croatia	OAGI	2	2
	UBL	2	2
Denmark	UBL 2.1	200,000	200,000
	MEDCOM medical communication EDIFACT	2600	2600
Finland	National EDI standards based on UNCEFACT (Tieke)	n/a	n/a
France	gencod	n/a	n/a
Germany	OpenTrans	n/a	n/a
	BMEcat	n/a	n/a
	EDIFACT-Subsets	n/a	n/a
Hungary	EDIFACT (not EANOM)	100	n/a
Ireland	Tradacoms	20	n/a
Japan	Ryutsu BMS	8500	9500
Kenya	Details not available	n/a	n/a
Latvia	Yes	1080	1300
Lithuania	Details not available	n/a	n/a
Malaysia	Details not available	n/a	n/a
Netherlands	proprietary XML	500	550
	BMECAT	50	n/a
	UBL	n/a	n/a
Norway	UN/CEFACT transport messages (EDIFACT not XML) used for transport booking and confirmation	20	20
	local profile e2b Invoice XML	1000	1000
	local profile EHF XML used in public procurement	4000	4000
Poland	Internal standards provided by EDI service providers	n/a	n/a
Portugal	XCBL	n/a	n/a

	UBL	n/a	n/a
Russia	Federal Tax Service XML	2,200,000	2,400,000
	State Reporting and Procurement formats	2,200,000	2,400,000
	Federal Customs Service XML		
	XML format of the Central Bank	750	700
Serbia	Details not available	n/a	n/a
Slovenia	e-Slog	50000	n/a
Spain	facturae	n/a	n/a
	UBL	n/a	n/a
	CSL	n/a	n/a
Sweden	UBL	5000	5500
	National format developed by Building and construction based on XML.	100	110
	Odette		
Switzerland	Details not available	n/a	n/a
Thailand	Own standard (Tesco Lotus, Big C, Makro...)	100	
UK	TRADACOMS numbers unknown but much more widely used than EANCOM®	n/a	n/a
	EDIFACT limited number of users	n/a	n/a
Ukraine	Customs, Finance, Tax, Transport	n/a	n/a
Uruguay	Electronic Invoicing Requested by the National Tax Agency (DGI)	1600	5000
USA	ANSI X12	14200	14250
Total countries: 36		4,811,309	5,166,266

Note: "n/a" means that no information about the number of users, even estimated, is available to this Member Organisation, although the standard is known to have been used.

8. Communication methods used to exchange EDI messages

The most popular communication channel used to send the EDI messages is AS2, followed by Web Services and Value Added Networks. This result is similar to in previous years, but it is clear that more and more companies use Internet to exchange EDI messages, hence the growing popularity of AS2 and web services. The details are presented in Table 11 below.

Table 11: List of communication methods used to exchange EDI messages.

COUNTRY	AS1	AS2	AS3	AS4	Web Services	ebMS	VAN	Other
Argentina		Y						Y
Australia	Y	Y	Y		Y	Y	Y	
Austria		Y			Y		Y	sFTP
Belarus	Y	Y			Y			
Belgium&Lux.		Y			Y		Y	
Bolivia		Y						SFTP,MAC
Bosnia-Herzegovina	Y	Y	Y	Y				
Brazil							Y	
Bulgaria		Y			Y			Y
Canada		106			2		1397	65 (FTP, SFTP, FTPS)
Chile							Y	
China							web EDI	
Costa Rica	Y	Y			Y			
Croatia		Y					Y	
Czech Republic	Y	Y			Y		Y	
Denmark		Y	Y			Y	Y	
Finland		Y			Y		Y	
France		Y			Y		Y	
Germany		Y			Y		Y	e. g. FTP
Hungary		Y			Y		Y	
Ireland		Limited use			Y		Y	
Italy		Y			Y		Y	
Japan		Y				Y		Jx
Kenya					Y			
Latvia		Y						
Lithuania				Y	Y		Y	
Macedonia					Y			
Mexico	Y	Y			Y			Y
Netherlands		Y			Y	Y	Y	
Norway							Y	FTP and others
Paraguay					Y			
Philippines							Y	
Poland	Y	Y			Y		Y	
Portugal	Y	Y				Y	Y	
Romania		Y						
Russia		Y			Y		Y	FTP, SFTP, FTPS, OFTP, FTP/VPN, JMS, X400, e-mail
Serbia			Y		Y			Y



Singapore		Y			Y			
Slovakia		Y			Y		Y	
Slovenia		Y						SFTP, eMail
South Africa		Y			Y			
Spain	Y	Y					Y	Y
Sweden		Y			Y		Y	
UK	Y	Y			Y		Y	FTP
Ukraine		Y			Y			Y
Uruguay		Y			Y			
USA		Y			Y		Y	
Venezuela	Y	Y			Y		Y	RemoteWare
Total 49	11	39	4	2	33	5	30	16

9. GS1 EDI implementation overview since 2005 and future trends

The EDI implementation survey has been run for eleven years now. Although a large part of data is based on estimation since absolute figures often are very difficult to obtain, these are made by people the most suitable for that: the GS1 Member Organisation staff members, having daily contact with their user community.

Due to some inconsistencies in the responses received every year, the charts presented below the chart represent statistical approximation of the 11 year results. Thus, they should be considered only as a trend illustration, rather than absolute figures.

Figure 3 illustrates the implementation of GS1 EANCOM® and GS1 XML and Web EDI in last 11 years, and the forecast for 2016.

From the chart it is clear that GS1 EANCOM® is far from being an 'old and obsolete' technology. The number of users amongst GS1 member companies is now more than 100,000 companies and in 2016 it is forecasted to increase by further 10.000. The details of the GS1 EANCOM® implementation results are presented in Figure 4.

The newer – comparing to the 'classic' EDI – GS1 XML standard after a period of modest implementation levels during first years, is now exceeding 38.000 companies. The slightly lower level of implementation in 2015 is due to the fact that the responders were for the first time explicitly asked to provide numbers only for the EDI standard and exclude GDSN implementation (thus, versions 2.7 and 2.8 of GS1 XML). The details of the GS1 XML implementation results are presented in Figure 5.

The Web EDI implementation is growing at even a greater rate, which indicates that also smaller companies and organisations are increasingly embracing EDI based information exchange. See figure 6.

Please note that the slight dip in some of the figures in last years does not mean that the implementation rate is decreasing, but more GS1 MOs base the figure they report on actual market data, rather than estimation. Hence, some correction of the reported numbers.

In general, the interest and actual adoption of the electronic form of business documents exchange is constantly growing, confirming the benefits the companies can get from this form of business integration.

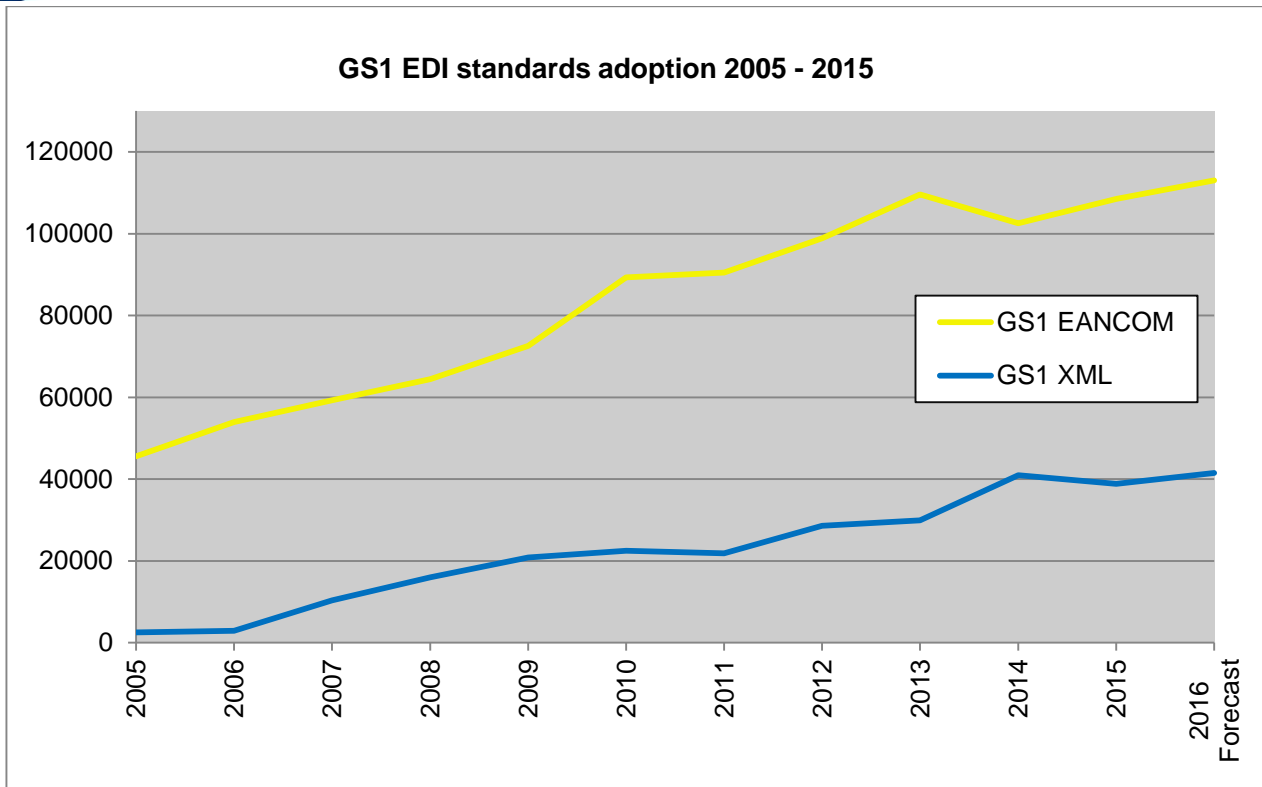


Figure 3: Adoption of GS1 EDI standards 2005-2015 and forecast for 2016

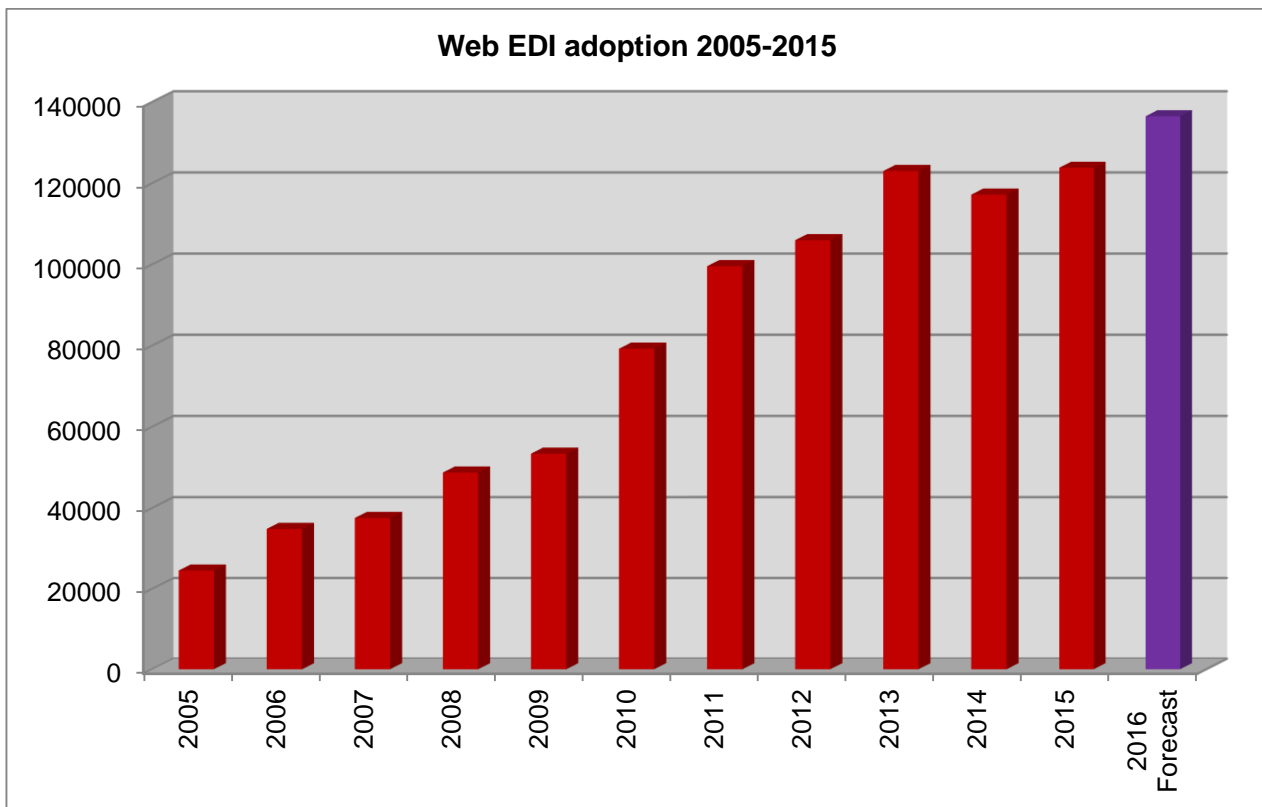


Figure 4: Adoption of Web EDI 2005-2015 and forecast for 2016

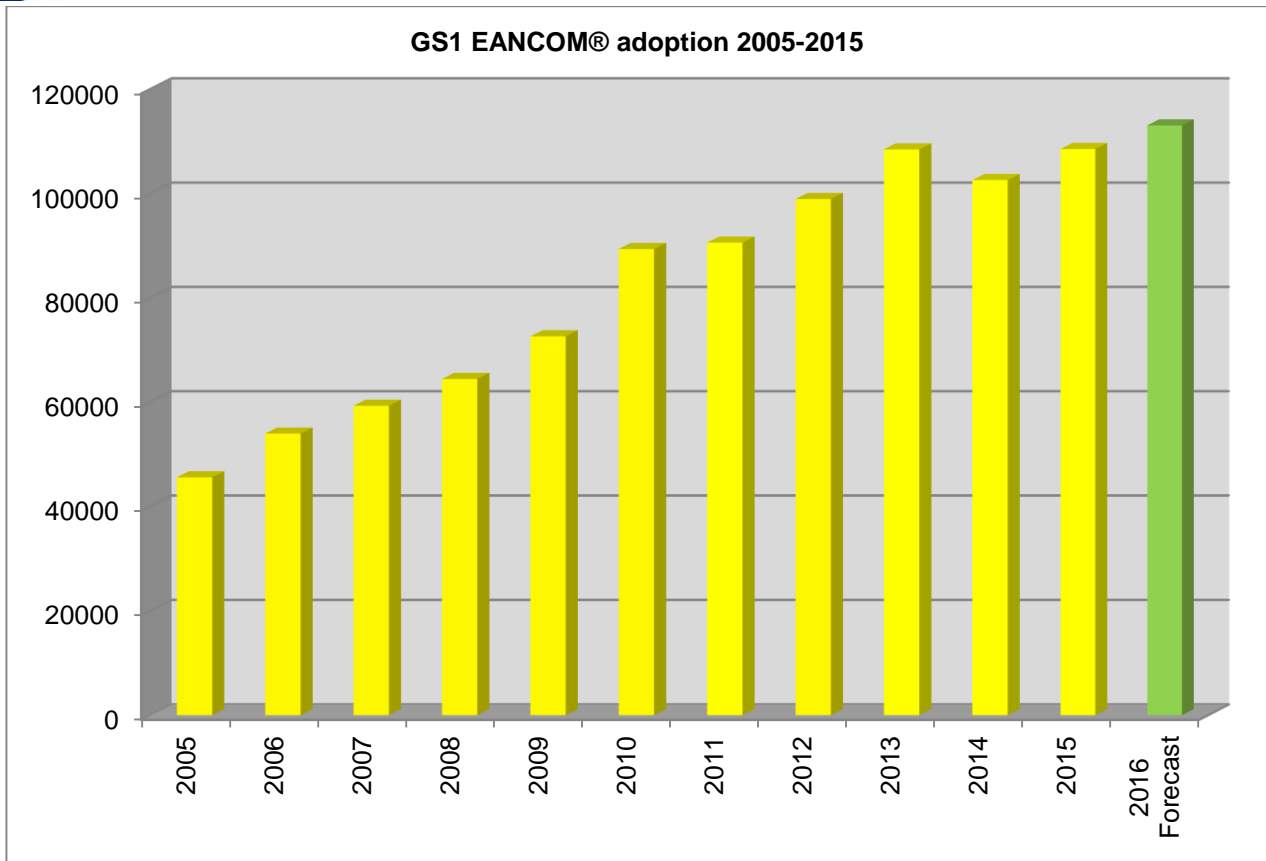


Figure 5: Adoption of GS1 EANCOM® 2005-2015 and forecast for 2016

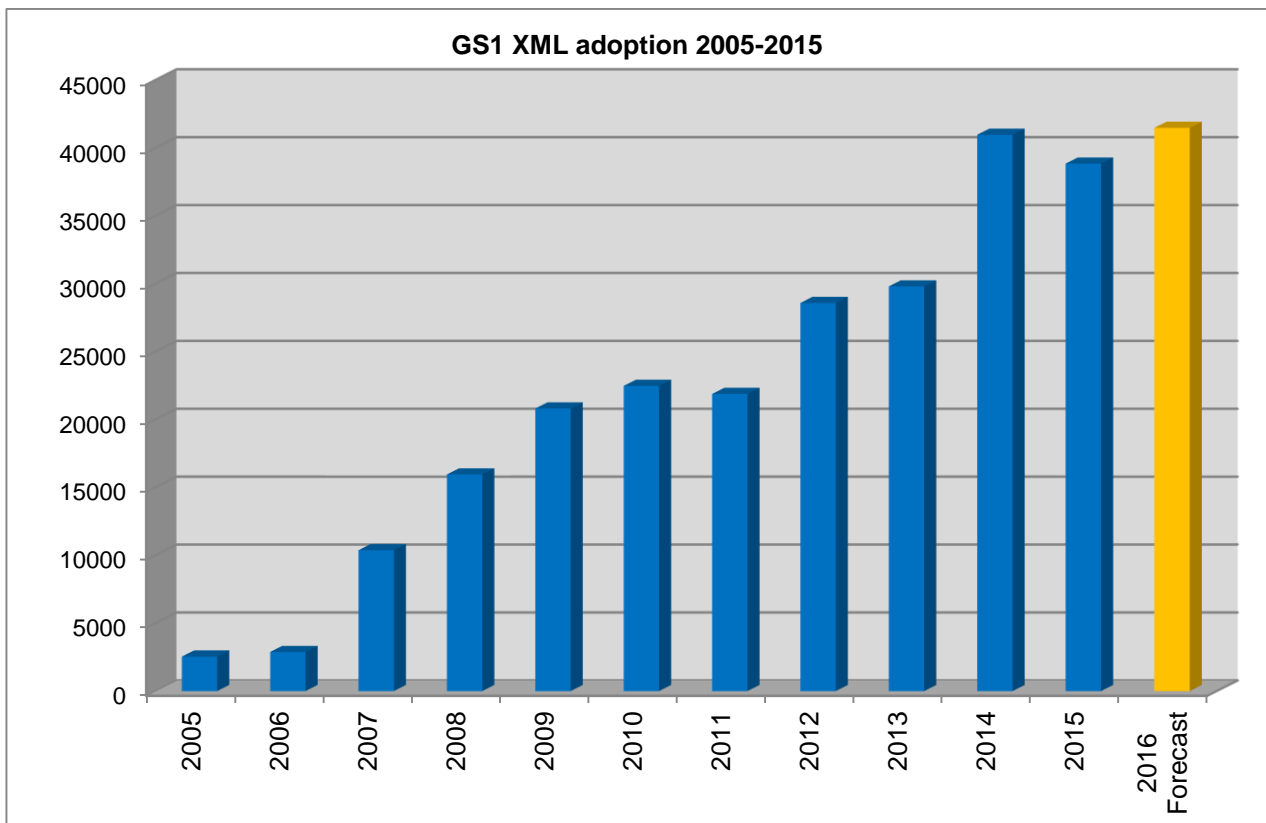


Figure 6: Adoption of GS1 XML 2005-2015 and forecast for 2016

10. Sectors using EDI standards

Since the previous survey we added a question about the EDI standards implemented in: Healthcare, Apparel Footwear & Fashion and for Public Procurement.

10.1 Use of EDI standards in Healthcare

In Healthcare sector, we asked questions about the implementation of the GS1 EDI standards: GS1 EANCOM® and GS1 XML, as well as HL7 – widely used by Healthcare worldwide and possible other standards. The results received from 26 countries are presented in Table 12 below.

Table 12: Use of EDI standards in Healthcare sector

COUNTRY	EANCOM®	GS1 XML	HL7	Other
Argentina		Y		
Australia		Y	Y	
Austria	Y			
Belarus	Y			
Brazil	Y			
Canada			Y	X12
Croatia	Y	Y		
Denmark	Y			
Finland	Y			
France	Y			EDIFACT
Germany	Y	Y		
Ireland		Y		
Latvia				WEB XML
Netherlands	Y	Y	Y	IHE, Dicom
Paraguay		Y		
Russia	Y			
Serbia		Y		
Slovenia		Y		
South Africa	Y	Y	Y	
Spain	Y			facturae
Sweden	Y			
Switzerland		Y		Standard of financial institutions and Invoice 3.1
Thailand				own standard but they're use GTIN on this process
UK	Y		Y	TRADACOMS and shortly PEPPOL
Ukraine				proprietary
USA		Y	Y	X12
Vietnam			Y	
TOTAL 26	14	12	7	10

10.2 Use of EDI standards in Apparel, Footwear & Fashion

In Apparel, Footwear & Fashion sector we checked implementation of the GS1 EDI standards: GS1 EANCOM® and GS1 XML, as well as and possible other standards. The results received from 17 countries are presented in Table 13 below.

Table 13: Use of EDI standards in Apparel, Footwear & Fashion sector

COUNTRY	EANCOM®	GS1 XML	Other
Austria	Y		
Belarus	Y		
Belgium&Luxembourg	Y		Besides EANCOM®, not sure if GS1 XML has been used. We get almost no support questions about GS1 XML.
Denmark	Y	Y	
Finland	Y		
France	Y		
Germany	Y		e.g. PRANKE
Italy	Y		eBiz
Japan			Ryutsu BMS
Mexico	Y		
Netherlands	Y		Pranke - approximately 400 users
Russia	Y		
South Africa	Y	Y	
Spain	Y		
Ukraine	Y		proprietary
USA			X12 EDI
Vietnam			eBIZ
TOTAL 17	14	2	8

10.3 Use of EDI standards in Public Procurement

In Public Procurement sector we checked implementation of the GS1 EDI standards: GS1 EANCOM® and GS1 XML, as well as and possible other standards. The results received from 22 countries are presented in Table 14 below.

Table 14: Use of EDI standards in Public Procurement sector

COUNTRY	EANCOM®	GS1 XML	Other
Australia		Y	
Austria	Y		ebInterfaceXML
Belarus	Y		
Belgium&Luxembourg			BIS (UBL / CEN BII profiles)
Canada			X12
Chile	Y		
Croatia	Y	Y	
France			AIEF (chorus message) UN XML
Germany	Y		
Ireland		Y	UBL is a likely syntax
Italy			XML PA
Latvia			WEB XML
Lithuania			UBL 2.1
Malaysia	Y	Y	
Netherlands			
Norway			local profiles based on UBL
Portugal			UBL
Russia	Y		
Spain	Y		facturae
Sweden	Y		
Ukraine			proprietary
USA			X12 EDI
TOTAL 22	9	4	13

10.4 Use of EDI standards in Transport, Warehousing, Logistics & Delivery

Because of significant difficulty in separating out the implementation of EDI for Transport & Logistics and other processes, we calculated the number of GS1 XML and EANCOM® logistic and warehousing messages reported by each country. The results are presented in Table 15 below.

Table 15: Use of EDI standards in Transport, Warehousing, Logistics & Delivery processes

COUNTRY	EANCOM®	GS1 XML
Argentina	Y	
Australia	Y	Y
Austria	Y	
Belarus	Y	
Belgium & Luxembourg	Y	
Brazil	Y	
Bulgaria	Y	
Canada	Y	
Chile		Y
Costa Rica	Y	
Czech Republic	Y	
Denmark	Y	Y
Finland	Y	
France	Y	Y
Germany	Y	Y
Hungary	Y	
Ireland	Y	Y
Italy	Y	
Lithuania	Y	Y
Macedonia	Y	Y
Mexico	Y	Y
Netherlands	Y	Y
Norway	Y	Y
Poland	Y	
Portugal	Y	
Romania	Y	
Russia	Y	Y
Serbia		Y
Singapore		Y
Slovakia	Y	
Slovenia	Y	Y
South Africa	Y	Y
Spain	Y	Y
Sweden	Y	Y
Switzerland	Y	Y
UK	Y	Y
Ukraine	Y	Y
US	Y	Y
Venezuela	Y	
TOTAL 39	36	22

Appendix List of EDI related projects and / or experiences

This Appendix contains a list of projects and / or experiences that particular MOs would like to share with the GS1 Community.

The MO employees interested in details of any of those projects should contact directly the respective Member Organisation and the user company employees can receive more details via their local MO.

Country	Projects to share
Australia	Transport & Logistics Workgroup
Belgium & Luxembourg	<p>Since 1/1/2016 the Harmonized Order to Cash messages have been implemented for the following sectors: Retail FMCG + Foodservice (7 retailers have agreed to use them). This subset is based on EANCOM® 2002 (filtering out some segments, data elements and value codes). It contains different business scenarios and examples.</p> <p>GS1 Belgium & Luxembourg will investigate if those Harmonized O2C messages can be used in the Retail DIY & Garden sector and if the trade partners in that sector want to harmonize. It is possible that different MIG has to be created.</p> <p>We will start a pilot to integrate the EU RECADV as a part of the Belgium & Luxembourg Harmonized Order to Cash.</p> <p>We will investigate to possibility to use GS1 EDI B2B INVOIC for B2G, since the Belgian authorities will only accept BIS (UBL / CEN BII profiles).</p>
Chile	We are working on developing the Receiving and Despatch Advice in Comercionet.cl, our EDI platform which uses EANCOM® standard.
Finland	GS1 Golli - A GS1 Finland service. Cloud based service for SMEs. AS2 connection - EANCOM® 2002 syntax 3 message formats (ORDERS, ORDRSP, IFTMIN, DESADV, RECADV, INVOIC, Logistic Labels, Waybill etc.)
Macedonia	We have started a new Pilot project using GS1 XML between 5 member companies
Netherlands	<p>There is a growing demand for test services of our MIGs, but also so for GS1 XML message. We are investigating how we can meet this demand.</p> <p>The Dutch Apparel sector uses the set of GS1 Germany apparel messages; a good example of real cross border EDI implementation.</p> <p>For our Food & Drug sector we have an account management team which pro-actively contacts de suppliers who are involved in the Despatch Advice project to go through their status and advise them in the next steps. For example we check the EDI messages (by an EDI test service) and compare them with the labels, to see if they match, and give the suppliers back the results. In the last two years we have assisted 321 suppliers to a successful implementation.</p>
Portugal	<ul style="list-style-type: none"> - Publication result of GS1 Portugal EDI annual survey (2014) (Portuguese and English versions) - DESADV implementation with major retailers - GS1 Portugal EDI annual Survey (2015)
UK	We have an EDI Order to Cash toolkit available on our website