



**Electronic Business  
In the GS1 Community - 2004**

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## Contributors

Name	Organization
Ewa Iwicka (author)	GS1

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# 1. Introduction

This report on electronic business in the year 2004 is based on the answers of 88 Member Organisations, of which 54 have reported some form of EDI usage in their countries.

EDI as a business communication tool has been in use for over 30 years. Over time new forms of this communication have been developed such as web EDI, or more recently XML/EDI. The latter two are closely related to the growing use of the Internet in the global marketplace. These new developments obviously find more and more users, but also the implementation of 'classic' EDI grows steadily. It confirms that the XML and web EDI are not aiming to replace the classic EDI, but rather at complementing it and extending communication possibilities.

This year, for the first time we asked a question about the various EANCOM and XML/EDI messages used in particular countries. This information should give a good overview on the business processes in which EDI is implemented worldwide.

The report on the use and implementation of EDI is split into four major sections:

1. General EDI implementation statistics
2. Classic EDI – EANCOM and other standards
3. Web EDI
4. XML/EDI

We are confident that this survey will be of high interest to you and we invite you to contact us at [info@gs1.org](mailto:info@gs1.org) to receive further information regarding our organisation and/or the standards we produce.

# 2. General EDI Implementation Statistics

In 2004, the various standards of Electronic Data Interchange have been implemented in 54 countries. The year before, in 2003, EDI was used in 45 countries, which represents a growth of 16.5% Classic EDI was in use in 42 countries, while XML/EDI in 33. Both kinds of business communication have been implemented in 27 countries. 33 of GS1 member countries reported no use of any of EDI standards.

**Table 2-1** Countries where EDI is Used

COUNTRY	XML/EDI	Classic EDI	COUNTRY	XML/EDI	Classic EDI
Argentina	Y	Y	Israel	Y	Y
Australia		Y	Italy		Y
Austria		Y	Japan		Y
Belarus	Y	Y	Lebanon**		
Belgium.Luxembourg	Y	Y	Macau		
Bolivia	Y		Mexico	Y	Y
Brazil	Y	Y	Nederland		Y
Canada	Y	Y	New Zealand		Y
Chile	Y	Y	Norway		Y

China	Y	Y	Philippines	Y	Y
Colombia	Y	Y	Poland	Y	Y
Costa Rica	Y	Y	Romania	Y	Y
Croatia*		Y	Russia		
Czech Republic		Y	Singapore	Y	Y
Denmark		Y	Slovakia	Y	Y
El Salvador	Y		Slovenia	Y	Y
Finland		Y	South Africa***	Y	
France	Y	Y	South Korea	Y	Y
Germany	Y	Y	Spain	Y	Y
Greece		Y	Sweden	Y	Y
Guatemala	Y		Thailand	Y	Y
Hong Kong	Y	Y	Ukraine	Y	
Iceland			United Kingdom	Y	Y
India	Y		Uruguay		Y
Indonesia	Y	Y	USA	Y	Y
Ireland		Y	Venezuela		Y
<b>TOTAL: 54 countries</b>					
Middle East, Mediterranean & Africa: 2 countries Asia-Pacific: 13 countries Central & Eastern Europe: 9 countries Western Europe: 16 countries Latin America: 10 countries North America: 2 countries					

**Additional comments:**

- \* Only proprietary classic EDI solutions
- \*\* Data pool project under process with GXS
- \*\*\* Maintenance of the SAANA EDI standard ceased with effect from 31 December 2004. Migration to the EANCOM standard will be encouraged for all new classic EDI users

**Table 2-2 Countries where EDI is Not Used**

Algeria		Honduras		Mongolia
Armenia		Iran		Morocco
Azerbaijan		Jordan		Nicaragua
Bosnia and Herzegovina		Kazakhstan		Panama
Bulgaria		Kyrgyzstan		Paraguay
Cambodia		Latvia		Serbia & Montenegro
Cuba		Lithuania		Syria
Cyprus		Macedonia		Tunisia
Dominican Republic		Malaysia		Turkey
Ecuador		Malta		Uzbekistan
Egypt		Mauritius		Vietnam
Estonia		Moldova		
<b>TOTAL: 35 countries</b>				
Middle East, Mediterranean & Africa: 11 countries Asia-Pacific: 4 countries Central & Eastern Europe: 13 countries Western Europe: 0 countries Latin America: 7 countries North America: 0 countries				

### 3. Classic EDI – EANCOM and Other Standards

In 2004, EANCOM standards were implemented in 42 countries. Since 2002 the number of EANCOM users grew by 22%.

EANCOM 97 is still the most widely used version, implemented in 26 countries. EANCOM 96 (the previous version) is still in use in 12 countries and EANCOM 2002 has already been implemented in 15 countries. The older version, EANCOM 94, still remains widely used however there are no statistics available.

A total of 43 EANCOM messages have been implemented, the most popular being ORDERS (Order), DESADV (Despatch Advice), INVOIC (Invoice), PRICAT (Price/Sales Catalogue) and INVRPT (Inventory Report). Four EANCOM messages have not been reported as implemented anywhere. They are listed below the table containing the details of messages used.

19 countries reported using EDI standards other than EANCOM.

### 3.1. Countries Where EANCOM is Used

COUNTRY	Number of EANCOM Users		Version (or versions) of EANCOM implemented		
	December 2004	Estimated 2005	96	97	2002
Argentina*	NA	NA	Y		
Australia	2500	3000		Y	Y
Austria	2400	2900		Y	Y
Belarus	12	60			Y
Belgium.Luxembourg	326	326		Y	Y
Brazil	4500	4600		Y	
Canada**	NA	NA			
Chile	60	100		Y	Y
China	6	6		Y	
Colombia	2600	3200		Y	
Costa Rica	30	45	Y		
Czech Republic***	650	800	Y	Y	
Denmark	1682	1750			Y
Finland	250	500			Y
France	5400	6000		Y	
Germany	7000	7200		Y	Y
Greece	260	260		Y	Y
Hong Kong	730	802		Y	
Indonesia	NA	NA			
Ireland	NA	NA		Y	
Israel	700	850		Y	
Italy	240	260	Y		
Japan	400	500	Y	Y	
Mexico	7500	8000	Y	Y	Y
Nederland****	1800	1810		Y	Y
New Zealand	NA	NA			
Norway	160	180	Y	Y	
Philippines	NA	NA	Y		
Poland	1500	2500		Y	
Romania	26	74		Y	

COUNTRY	Number of EANCOM Users		Version (or versions) of EANCOM implemented		
	December 2004	Estimated 2005	96	97	2002
Russia	550	2500			Y
Singapore	500	500	Y	Y	
Slovakia	NA	NA			
Slovenia	143	200		Y	Y
South Korea	1600	1700		Y	
Spain	3635	4200		Y	
Sweden	11000	13000		Y	
Thailand	500	1000			Y
United Kingdom*****	NA	NA	Y	Y	Y
Uruguay	6	6	Y		
USA	NA	NA			
Venezuela	50	45	Y		
<b>TOTAL: 42 countries</b>	<b>58716</b>	<b>68874</b>	<b>12</b>	<b>26</b>	<b>15</b>
Middle East, Mediterranean, & Africa: 0 countries Asia-Pacific: 10 countries Central & Eastern Europe: 7 countries Western Europe: 15 countries Latin America: 8 countries North America: 2 countries					

#### Additional comments:

- \* It is difficult to be more precise with the number of EDI users because of the many communication variants.
- \*\* There are millions that are using EDI ranging from small and medium enterprises to the multi-conglomerates. Areas left blank are either not applicable to our structure or specific information is unavailable.
- \*\*\* The number of EANCOM users is estimated due to GLN being allocated automatically to all companies entering the GS1 system. We do not have information which indicates that they are starting to use EDI communication. We do not have information about users outside of EANCOM community, or about projects where other EDI standards are used.
- \*\*\*\* EANCOM 94 is still greatly implemented in the Netherlands
- \*\*\*\*\* GS1 UK does not develop or promote TRADACOMS

### 3.2. EANCOM Messages Implemented in Particular Countries:

COUNTRY	AUTACK	BANSTA	CNTCND	COACSU	COMDIS	CONDRA	CONTRL	CREMUL	DEBMUL	DELFOR	DESADV	DIRDEB	FINSTA	GENRAL	HANMOV	IFCSUM	IFTMAN	IFTMIN	IFTSTA	INSDS	INVOIC	INVRPT	MSCONS	ORDCHG	ORDERS	OSTENQ	OSTRPT	PARTIN	PAYDUC	PAYMUL	PRICAT	PRODAT	PROINQ	QUALITY	QUOTES	RECADV	REMADV	REQOTE	RETANN	RETINS	SLSFCT	SLSRPT	TAXCON									
Argentina											Y										Y	Y			Y		Y			Y																						
Australia							Y				Y											Y		Y	Y		Y				Y		Y	Y																		
Austria										Y	Y			Y				Y	Y	Y	Y	Y			Y	Y				Y	Y		Y									Y	Y									
Belarus											Y														Y			Y			Y	Y	Y				Y															
Belgium.Luxembourg																																																				
Brazil		Y		Y	Y			Y	Y	Y	Y	Y	Y	Y				Y	Y		Y	Y		Y	Y			Y		Y	Y	Y														Y						
Canada																																																				
Chile																					Y	Y			Y							Y					Y															
China										Y	Y								Y			Y		Y	Y			Y				Y																				
COLOMBIA										Y	Y							Y	Y	Y	Y	Y		Y	Y			Y	Y	Y	Y							Y	Y								Y					
Costa Rica											Y													Y	Y						Y						Y															
Czech Republic							Y				Y										Y	Y			Y						Y							Y									Y					
Denmark				Y							Y			Y	Y			Y			Y	Y	Y	Y	Y			Y			Y	Y	Y		Y	Y	Y	Y					Y	Y								
Finland																																Y																				
France	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	Y					Y	Y								
Germany							Y			Y	Y				Y	Y		Y	Y	Y	Y	Y		Y	Y			Y			Y	Y	Y					Y	Y							Y	Y					
Greece											Y			Y							Y	Y			Y	Y			Y			Y	Y															Y	Y			
Hong Kong										Y	Y										Y				Y	Y																						Y	Y			
Indonesia																																																				
Ireland											Y										Y				Y						Y																				Y	
Israel											Y						Y				Y	Y		Y	Y	Y											Y			Y								Y				
Italy											Y										Y	Y			Y							Y							Y													
Japan								Y			Y			Y			Y	Y			Y	Y			Y					Y	Y	Y						Y	Y								Y					
Korea											Y										Y	Y		Y	Y			Y				Y						Y	Y		Y	Y				Y	Y	Y	Y			
Mexico							Y	Y	Y		Y									Y	Y	Y			Y						Y								Y	Y		Y							Y			
Nederland										Y	Y							Y		Y	Y	Y		Y	Y		Y											Y	Y													



### 3.3. EDI Standards Other than EANCOM Used in G1 Member Countries:

COUNTRY	Other EDI standards used - Name of Project 1	Number of project 1 users		Other EDI standards used - Name of Project 2	Number of project 2 users		Other EDI standards used - Name of Project 3	Number of project 3 users	
		December 2004	Estimated 2005		December 2004	Estimated 2005		December 2004	Estimated 2005
Belarus	Supply Chain for Ministry of Agriculture	19	37	System of account checking the transportation (BarCode and RFID technology)	1	10	ISO 15000 1-4 implementation (Registry/Repository)	2	3
Brazil	CNAB - Banking sector	26000	26000	CND	250	250	Others	3000	3000
Canada	X12			VICS EDI					
Czech Republic	NA								
Denmark	Public Procurement	1	2000	Medcom	3000	3050	e-faktura	700	750
Finland	National solutions								
France	Langage Gencod	1100	1000						
Germany	SEDAS	500	500						
Ireland	TRADACOMS	1							
JAPAN	J Protocol	40000	40000						
Korea	NA								
Mexico	X12	2500	1500						
Norway	RIGAL	400	400	STANDARD RECORDS	2115	2115			
Poland	ODETTE/EDIFACT	10							
Slovakia	NA								
Slovenia	eSLOG	12	30						
Sweden	NA								
United Kingdom	TRADACOMS	14000							
USA	X12								
<b>TOTAL: 174256 users in 19 countries</b>									

## 4. WEB EDI

The web EDI solutions were used in 21 countries. In 12 countries, both the web EDI and XML standards were implemented.

### 4.1. Countries Where Web/Lite EDI is Used

COUNTRY	Web/Lite EDI Number of Users		XML + Web EDI
	December 2004	Estimated 2005	
Argentina			Y
Austria	250	350	
Brazil	6200	6200	Y
Chile	1270	1400	Y
Costa Rica	60	200	Y
Denmark	240	325	
Germany			Y
Hong Kong	645	711	Y
Ireland			
Italy	500	700	
Japan			
Mexico	3500	4500	Y
Nederland	50	70	
Norway	110	130	
Romania	24	80	Y
Slovakia			Y
Spain	400	600	Y
South Korea	500	600	Y
Thailand	1000	1500	Y
Uruguay	226	320	
Venezuela	250	300	
<b>TOTAL 21 countries</b>	<b>15225</b>	<b>17986</b>	<b>12</b>
Middle East, Mediterranean & Africa: 0 countries Asia-Pacific: 5 countries Central & Eastern Europe: 2 countries Western Europe: 8 countries Latin America: 6 countries North America: 0 countries			

## 5. XML/EDI

The GS1 XML/EDI standards were implemented by companies from 32 countries. The strong drive behind this implementation was the launch of the Global Data Synchronisation Network (GDSN), thus a number of user companies and Data Pools implemented the messages related to Data Alignment and the Catalogue Item Synchronisation suite. Nevertheless, there are more and more implementations of transactional messages, mostly for ordering and delivery processes.

In total, 33 GS1 XML/EDI messages have been implemented so far, the most popular being **Order**, **Despatch Advice**, and **Trade Item**. 15 messages have not been reported as implemented anywhere. They are listed below the table summarising the use of particular messages.

The most widely used version of XML/EDI standards is the latest one available in 2004, which also contains the largest number of messages: 1.3.1. The three earlier versions are also in use by a certain number of companies.

The GS1 XML architecture layers: **envelope**, **transaction**, **commands**, and **document** continue to find more users. There seems to be a visible trend to utilise the full functionality offered by these new solutions.

### 5.1. Countries Where GS1 XML/EDI Standards Are Used

COUNTRY	Number of GS1 XML/EDI Users		Version (or versions) of GS1 XML/EDI implemented				GS1 XML architecture layers implemented			
	December 2004	Estimated 2005	1.0	1.1	1.3	1.3.1	Document	Commands	Transaction	AS2 Envelope
Argentina	2000	2500			Y	Y				Y
Belarus	12	60			Y	Y	Y			
Bolivia	5	100								
Brazil	20	50				Y	Y			
Canada	NA	NA							Y	Y
Chile	2	10		Y			Y			
China	5	10	Y				Y			
Colombia	30	150			Y					Y
Costa Rica	NA	NA								
El Salvador	5	15				Y	Y			
France	2050	2050	Y	Y		Y	Y	Y	Y	Y
Germany	1	10				Y				Y
Guatemala *	2	10			Y		Y			
Hong Kong	1	2				Y				Y
India **	-	1								
Indonesia	NA	NA								
Israel	700	850								
Mexico	3000	4500			Y		Y		Y	Y

COUNTRY	Number of GS1 XML/EDI Users		Version (or versions) of GS1 XML/EDI implemented				GS1 XML architecture layers implemented			
	December 2004	Estimated 2005	1.0	1.1	1.3	1.3.1	Document	Commands	Transaction	AS2 Envelope
Philippines	NA	NA								
Poland	1	30				Y	Y	Y	Y	Y
Romania	40	200							Y	
Singapore***	70	250				Y	Y		Y	
Slovakia	NA	NA								
Slovenia	1		Y			Y	Y			
South Africa	3	15				Y				
South Korea	500	600	Y				Y			
Spain	170	370	Y				Y			
Sweden	12	23			Y					
Thailand	3000	3500							Y	
Ukraine	10	25				Y	Y			
United Kingdom	NA	NA			Y					
USA	NA	NA								
TOTAL 32	11640	15331	5	2	7	12	14	2	7	8
Middle East, Mediterranean & Africa:		1 country								
Asia-Pacific:		8 countries								
Central & Eastern Europe:		6 countries								
Western Europe:		7 countries								
Latin America:		9 countries								
North America:		2 countries								

#### Additional comments:

- \* During 2004 there has been significant development of our data pool and implementation of the new version of the Business Message Standard for Trade Item 1.3 in the FMCG sector. Much work also went into development of the new guide of the CUSCAR message for the Maritime Sector and the implementation of this message in the Air Sector. The work will continue in 2005 seeking new opportunities for our country in order to have more efficient processes in our Customs.
- \*\* Customs and Banks use UN/EDIFACT & XML standards, not based on GS1 Standards since EANCOM does not cover customs banks messaging formats. GSMP & GS1 standards should address this area urgently.
- \*\*\* For GS1 XML, the protocol to link to Global Registry is currently AS2. This is because in early 2004 in order to quickly conduct test linkage between USA data pool and Global Registry, the AS2 protocol was used. This is despite the fact that in the GSMP GS1 XML standard version 1.3.1, the protocol of AS2 was never mandated. In the case of Singapore, we have designed and built our data pool. The National Electronic Product Catalogue (NEPC) is fully using GS1 XML standard version 1.3.1 and we are able to communicate effectively with supplier and retailers. However, because AS2 is not available easily in Singapore and it is also very expensive, we have not installed AS2 and therefore cannot be connected to Global Registry. This is a serious matter.

## 5.2. XML/EDI Messages Implemented in Particular Countries:

COUNTRY	ALIGN			CATALOGUE ITEM SYNCHRONISATION										PARTY SYNCHRONISATION					DELIVER				ORDER		PAY			PLAN			
	Party	Price	Trade Item	Catalogue Item Confirmation	Catalogue Item Link	Catalogue Item Notification	Catalogue Item Publication	Catalogue Item Registration Response	Catalogue Item Subscription	Data Synchronisation Data Pool Profile	Registry Catalogue Item	Request For Catalogue Item Notification	Data Synchronisation Error	Party Confirmation	Party Notification	Party Registration	Party Registration Response	Party Publication	Party Subscription	Despatch Advice	Full Truckload Load Tender	Inventory Status Advice	Receiving Advice	Warehouse Shipping Order	Order	Control Total	Debit Credit Advice	Simple Invoice	Trade Item Information	Trade Item Location	
Argentina																															
Belarus	Y	Y	Y	Y								Y	Y							Y			Y						Y	Y	
Belgium. Luxembourg																															
Bolivia																								Y							
Brazil	Y		Y						Y																						
Canada																															
Chile																									Y						
China	Y		Y	Y						Y									Y					Y							
Colombia				Y		Y	Y	Y	Y	Y	Y														Y						
Costa Rica																															
El Salvador			Y																												
France			Y																	Y											
Germany			Y																												
Guatemala																													Y		
Hong Kong																									Y			Y			
India																															
Indonesia																															



COUNTRY	ALIGN			CATALOGUE ITEM SYNCHRONISATION									PARTY SYNCHRONISATION					DELIVER					ORDER	PAY			PLAN			
	Party	Price	Trade Item	Catalogue Item Confirmation	Catalogue Item Link	Catalogue Item Notification	Catalogue Item Publication	Catalogue Item Registration Response	Catalogue Item Subscription	Data Synchronisation Data Pool Profile	Registry Catalogue Item	Request For Catalogue Item Notification	Data Synchronisation Error	Party Confirmation	Party Notification	Party Registration	Party Registration Response	Party Publication	Party Subscription	Despatch Advice	Full Truckload Load Tender	Inventory Status Advice	Receiving Advice	Warehouse Shipping Order	Order	Control Total	Debit Credit Advice	Simple Invoice	Trade Item Information	Trade Item Location
Israel		Y																	Y	Y	Y	Y		Y	Y		Y			
Korea	Y																		Y	Y	Y			Y			Y			
Mexico																								Y			Y			
Philippines																														
Poland	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y												
Singapore	Y	Y	Y				Y	Y			Y	Y	using GLN					Y	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y
Romania																			Y					Y						
Slovakia																														
Slovenia	Y		Y																Y					Y			Y			
South Africa																														
Spain			Y																Y		Y	Y		Y			Y			
Sweden			Y																											
Thailand	Y	Y																	Y					Y						
Ukraine	Y		Y																											
UK																														
USA																														
<b>TOTAL 33</b>	<b>9</b>	<b>4</b>	<b>12</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>10</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>14</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>3</b>	<b>2</b>	
	3 Align messages implemented in 15 countries			10 Catalogue Item Synchronisation messages implemented in 6 countries									6 Party Synchronisation messages implemented in 3 countries					6 Deliver messages implemented in 10 countries					1 Order message implemented in 14 countries	5 Pay messages implemented in 7 countries			2 Plan messages implemented in 3 countries			

### **5.3. GS1 XML/EDI Messages Not Yet Implemented:**

- Price Bracket
- Request For Party Notification
- Pickup Manifest
- Pickup Notification LTL
- Request For Payment
- Settlement
- Exception Criteria
- Exception Notification
- Forecast Bulk Data
- Forecast
- Forecast Revision
- Performance History
- Product Activity
- Retail Event
- Event