

GS1 Logger for Staff 2nd report (March 2013)

60 GS1 Member Organizations, 350 GS1 colleagues and 1 initiative

About the initiative

GS1 Logger for Staff is a unique solution, combining the elements of GEPIR and MobileCom with the aim to provide an easy-to-use and powerful tool for the purpose of GTIN Intelligence. The main goal of the initiative running under the umbrella of GS1 in Europe led and developed by GS1 Hungary, is to deliver a commonly agreed mobile tool and process behind that for GS1 GCP validation helping GS1 Member Organizations in their fight against 'illegal/unauthorized' use of GCPs and ID Keys.

For more details about the initiative please visit <http://gs1logger.gs1hu.org/> !

About the application – By now, it is far more than validation!

When using the logger application, you can collect and verify the manufacturer's or brand owner's data by scanning and decoding the barcode placed on the individual trade items. You can obtain data from a range of databases (e.g. GEPIR) and more importantly you can send e-mail reports with photos about your scans. No matter when and where you are, the app always provides you the opportunity to verify barcodes and filter out illegal numbers, which is the common interest and benefit of the GS1 Community and the GS1 users of the supply chain.

Besides validation of the GS1 ID keys the application is capable to perform data qualification too. The qualification function is based on GS1Lib, an eLibrary that includes all the definitions and rules of the latest General Specification and prefixes from GEPIR Root XML. This function allows users to perform basic barcode quality check beyond GCP validation.

The application is available on iOS and on Android as well!

For more information about the application and its infrastructure please read the GS1 Logger for Staff User Manual at

http://gs1logger.gs1hu.org/logger_for_staff/documentation.html !

And now let's see the numbers

The GS1 Logger for Staff infrastructure has a special website that records and stores all the actions (scans, reports, etc.) done with the Logger for Staff application. The website also allows the registered users to obtain statistics to create reports in an easy and user

friendly way. You can get access to the website only if you are a registered user of GS1 Logger for Staff. (<http://stafflogger.gs1hu.org/>)

The website as well as the application is available now in **6 languages** (English, German, Russian, Portuguese, Czech and Hungarian). The system has a user friendly translation module so in case you are interested to have Logger for Staff in your local language it can be done easily and quickly.

Distribution of all scanned records between 10 October 2012 (since the 1st Logger for Staff report) and 28 February 2013

- Number of total scans: 9 601 (excluding duplications)
- Valid: 7 243
- Invalid: 1 645
- Faulted: 713 (There was an error in the communication between servers!)

Distribution of all scanned records between 1 January 2012 (since the start of the initiative) and 28 February 2013

- Number of total scans: 36 376 (excluding duplications)
- Valid: 28 687
- Invalid: 5 362
- Faulted: 2 327 (There was an error in the communication between servers!)
- Non-standard barcodes: 398

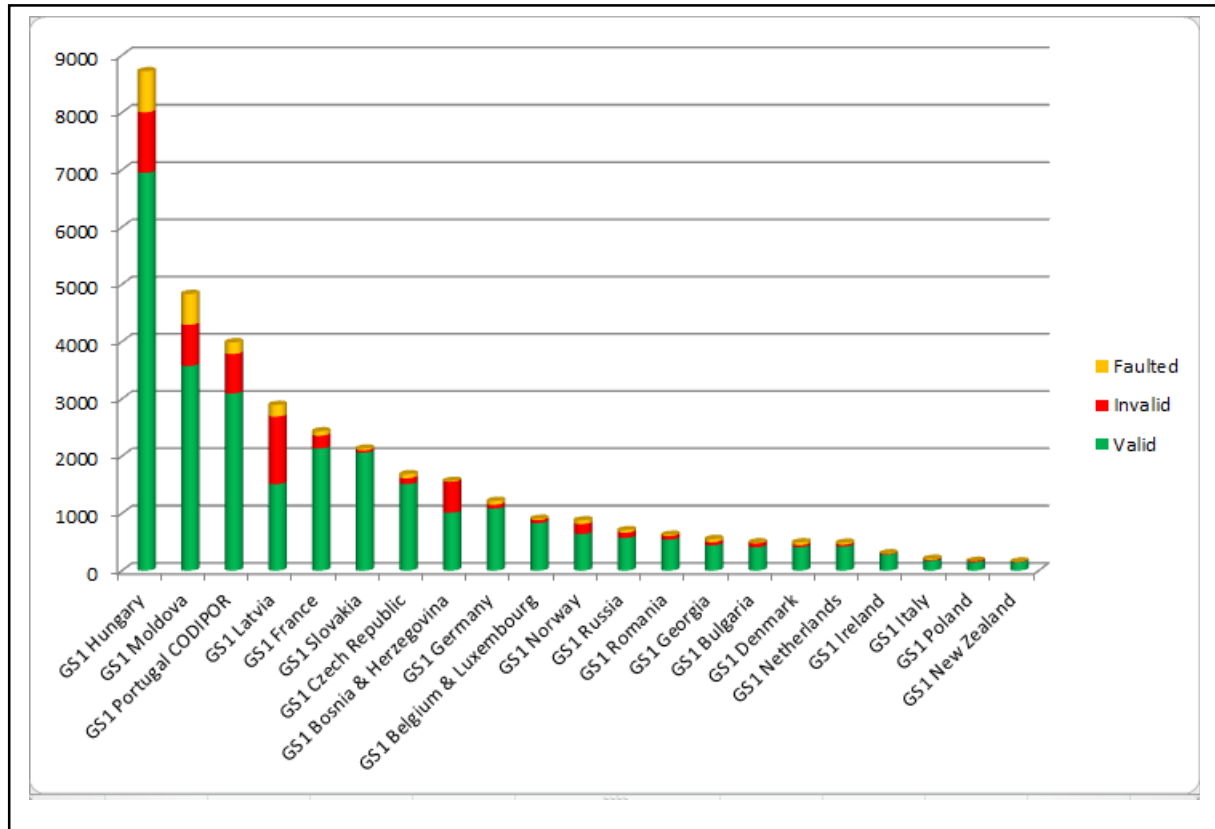
(The application is able to perform quality test of bar codes from data content point of view. This feature supports GS1 MOs to check barcodes on products, cases and pallets whether they are following the rules defined in the General specification!)

As you can see **14.74%** of the scanned GTINs proved to be invalid according to the respond from Gepir. This is an extremely high number however we need to keep in mind that we are talking about “only” GTINs. The actual number of invalid company prefixes is most probably less. Additionally the sampling is definitely not carried out in a proper way from statistical point of view therefore the result has to be considered as a biased data.

6.39% of the scans failed to provide answer to the query due to the error in the communication in the Gepir network. This is also a relatively high number and underlines the need for making the Gepir network more reliable by developing a proper and comprehensive conformance test for Gepir.

Numbers of participating MOs, colleagues and number of scans per MO between 1 January 2012 and 28 February 2013

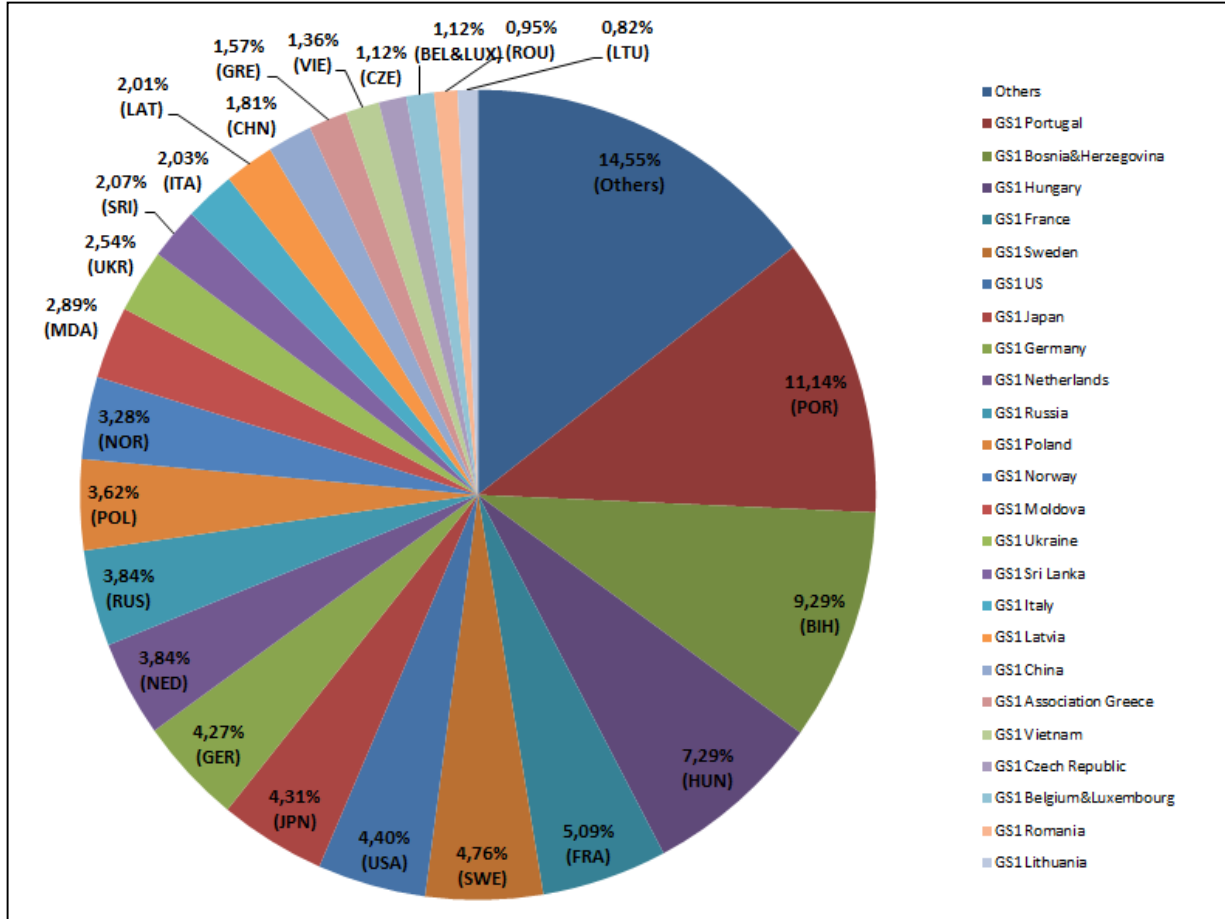
Since the kick-off of the initiative there are now **350 registered users** from **60 MOs** and out of that more than **20 MOs** are actively using the application. However each MO joined the project at different time so it is difficult to compare the actual extent of usage in terms of number of scans per MO. Nevertheless the next two tables aim to give an idea about the number of scans and the distribution of valid and invalid hits per MO.



GS1 Organization	Total hits	Valid hits	Invalid hits	Faulted hits
GS1 Albania	104	87	13	4
GS1 Armenia	99	67	20	12
GS1 Australia	3	3	0	0
GS1 Austria	25	23	1	1
GS1 Belgium & Luxembourg	905	832	53	20
GS1 Bosnia & Herzegovina	1566	1012	541	13
GS1 Brazil	29	24	3	2
GS1 Bulgaria	494	411	67	16
GS1 China	4	4	0	0
GS1 Colombia	2	0	1	1
GS1 Czech Republic	1684	1513	101	70
GS1 Denmark	493	413	33	47
GS1 Egypt	58	22	28	8
GS1 Finland	100	92	3	5
GS1 France	2433	2134	222	77
GS1 Georgia	552	443	55	54

GS1 Organization	Total hits	Valid hits	Invalid hits	Faulted hits
GS1 Germany	1216	1085	65	66
GS1 Global Office	36	31	2	3
GS1 Hong Kong	53	40	9	4
GS1 Hungary	8721	6948	1057	716
GS1 Iceland	15	12	1	2
GS1 Iran	11	9	2	0
GS1 Ireland	302	281	11	10
GS1 Italy	207	173	15	19
GS1 Japan	14	6	1	7
GS1 Jordan	6	4	2	0
GS1 Kazakhstan	81	64	10	7
GS1 Latvia	2894	1511	1180	203
GS1 Lithuania	50	38	11	1
GS1 Moldova	4831	3576	717	538
GS1 Netherlands	488	422	34	32
GS1 New Zealand	158	146	7	5
GS1 Norway	878	639	174	65
GS1 Poland	170	148	19	3
GS1 Portugal	3987	3095	688	204
GS1 Romania	626	543	64	19
GS1 Russia	706	571	92	43
GS1 Singapore	11	10	1	0
GS1 Slovakia	2131	2061	39	31
GS1 Slovenia	122	99	12	11
GS1 Spain	11	9	0	2
GS1 Switzerland	3	3	0	0
GS1 Taiwan	20	17	0	3
GS1 Thailand	2	2	0	0
GS1 Turkey	15	15	0	0
GS1 UK	3	2	1	0
GS1 US	12	10	1	1
GS1 Venezuela	36	32	4	0
Total	36367	28682	5360	2325

Distribution of the 5360 invalid numbers in percentage per MO



*Other: those countries are not listed separately which are represented with less than 1%.

Distribution of GEPIR Return codes between 1 January 2012 and 28 February 2013

The GS1 Logger for Staff infrastructure records and stores all the responds of Gepir nodes related to all of the queries done through the application. This feature actually makes Logger for Staff an excellent tool to support the efforts of GS1 GO in Gepir Conformance.

GEPIR Return Codes	Numbers
No Error	26 894
No catalogue exists	15 479
No record	11 389
Server error	2 117
Company not a member of GS1	768
Response timed out	629
Missing or invalid parameters	446
Company information withheld	527

Daily request limit exceeded	192
No exact match on GLN	143
Country not on the GEPIR network	90
Unknown country code	46
Response may be incomplete	38
Illegal number	18
Too many hits	0
Item information withheld	0
Total	58 776*

**Duplication included.*

How to follow up the invalid GS1 GCPs

In order to ensure the core value of the GS1 system MOs need to do their best to use the report sent by Logger for Staff app and follow up on the invalid numbers! This will be continuously assessed by surveys carried out under the umbrella of GS1 Logger for Staff initiative.

The survey allows us to have an idea about measures taken by the relevant MO and will focus on the following three main aspects:

- I. Actions taken by the MO after receiving 'Report' from Logger for Staff app*
- II. Reason of invalidity*
- III. Latest status of the GCP*

These three main parts includes the following questions in the survey:

I. Actions taken by the MO after receiving 'Report' from Logger for Staff app

1. Did you follow up on the invalid number caught by the Logger for Staff app? (yes/no)
2. Did you manage to contact the product owner based on the information on the picture about the label sent by the application? (yes/no)
3. Did you manage to identify the reason of invalidity? (yes/no)

II. Reason of invalidity

1. Membership was not renewed accidentally by a former user company due to administration details (not on purpose)
2. Membership was not renewed on purpose by a former user company – system misuse*
3. The company does not exist anymore
4. Administrational or technical reasons due the MO
5. Other

** The GS1 System Protection Guideline defines the following types of system misuse:*

- Copying numbers: A manufacturer/supplier copies the GS1 company prefix or GTINs of a GS1 user company*
- Inventing numbers: A manufacturer/supplier uses GTINs that have not yet been assigned*

- *Parallel GS1 organisation: An organisation uses the country prefix of an existing MO or unassigned country prefix to allocate GTINs to manufacturers/suppliers*
- *Unauthorised transfer of GS1 numbers. A member of a MO transfers GTINs from its own number bank to another user*
- *GTIN Reseller: An organisation/company acquires GTINs from a GS1 member company and sells them to manufacturers/suppliers*

III. Latest status of the GCP

1. Membership renewed
2. New membership
3. Specific Company Prefix withdrawn
4. Legal process
5. Other

Results of the follow-up surveys

So far two surveys have been conducted. The two surveys together covered the period between 14 June 2012 and 17 January 2013. The surveys tried to explore measures taken by the MOs on those invalid GTINs which were caught by the application during the given period of time. The surveys were sent to **46 MOs**. Unfortunately only 23 responded to the survey and only **22 MOs** took actions to follow up the invalid numbers. The next table shows the results of the survey.

	Member Organisation	Number of invalid GTINs	How many invalid numbers were followed-up?	How many companies started to pay again membership?	How many companies' statuses were clarified?	How many system misuses were identified?
1	GS1 Albania	3	3	2	2	2
2	GS1 Armenia	2				
3	GS1 Association Greece	16	15	0	15	14
4	GS1 Australia	1				
5	GS1 Belgium & Luxemburg	22	1	0	1	1
6	GS1 Bosnia&Herzegovina	419	296	28	153	293
7	GS1 Brazil	2				
8	GS1 Bulgaria	5	3	1	1	0
9	GS1 China	28	1			
10	GS1 Czech Republic	20				
11	GS1 Denmark	8	4	0	0	0
12	GS1 Egypt	14	11	0	0	6
13	GS1 Finland	17	7	0	0	0
14	GS1 France	54	0	0	0	0
15	GS1 Georgia	1				
16	GS1 Germany	113				
17	GS1 Hong Kong	10				
18	GS1 Hungary	320	182	79	132	168
19	GS1 Iceland	1				
20	GS1 Indonesia	2				
21	GS1 Iran	2				
22	GS1 Ireland	1				
23	GS1 Italy	79	15			15
24	GS1 Japan	221	3	0	0	1
25	GS1 Kazakhstan	4				

	Member Organisation	Number of invalid GTINs	How many invalid numbers were followed-up?	How many companies started to pay again membership?	How many companies' statuses were clarified?	How many system misuses were identified?
26	GS1 Latvia	77	8	2	5	0
27	GS1 Lithuania	26	26	1	1	26
28	GS1 Moldova	72	72	9	10	0
29	GS1 Netherlands	107				
30	GS1 New Zealand	1				
31	GS1 Norway	2				
32	GS1 Poland	49				
33	GS1 Portugal	49	46	0	39	1
34	GS1 Romania	27	25	4	17	4
35	GS1 Russia	123				
36	GS1 Serbia	13	11	9	11	3
37	GS1 Singapore	2				
38	GS1 Slovakia	2				
39	GS1 Slovenia	6				
40	GS1 Spain	3				
41	GS1 Switzerland	10	2	0	2	2
42	GS1 Syria	1				
43	GS1 UK	8				
44	GS1 USA	59	1	0	1	0
45	GS1 Venezuela	3	3	0	2	3
46	GS1 Vietnam	51	51	0	51	0
	In total	2060	786	135	402	537

As table shows those MOs which followed up some of the invalid GTINs managed to get **135** new/old members onboard paying their membership (again). This immediately delivered direct return on investment in using the application. Besides, altogether **402** companies' statuses were clarified which contributed to improve the data quality in the local membership data bases and of course indirectly the quality of Gepir.

Despite the promising results, the figures clearly showed that MOs need to be much more active in following up invalid GTINs. 24 MOs have either not followed up the invalid GTIN or not responded to the survey.

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