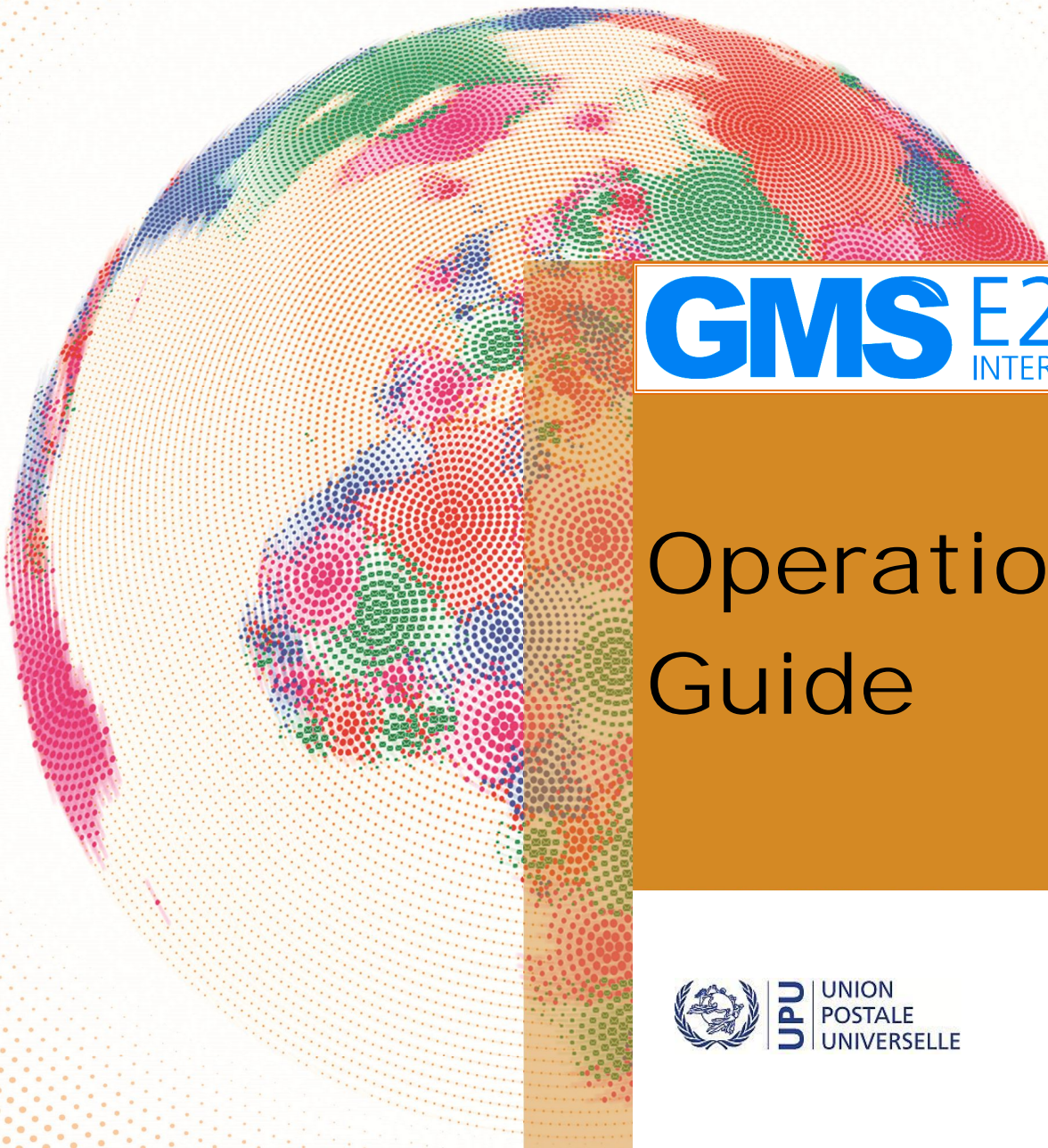# GMS

Global Monitoring System
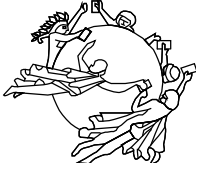
GMS E2E
INTERNAL

Operational Guide

UPU | UNION POSTALE UNIVERSELLE

UNION POSTALE UNIVERSELLE

BUREAU INTERNATIONAL

Operational guide
for GMS end-to-end testing of transmission times for priority/airmail letter-post items

2014 edition, v1.1

Contacts

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Documents and forms:
http://www.upu.int/en/activities/global-monitoring-system/end-to-end-quality-testing.html
http://www.upu.int/fr/activites/systeme-de-controle-mondial/evaluation-de-la-qualite-de-bout-en-bout.html

Contents

Part I – Instructions for designated operators and national coordinators

Introduction – General remarks

The Global Monitoring System (GMS) is a UPU global quality measurement system designed to enhance the quality of letter mail throughout the UPU community, and to strengthen the capabilities of all postal operators, in order to facilitate growth in the international letter-mail business.

The 24th Universal Postal Congress, through resolution C 45/2008, mandated the Postal Operations Council (POC) to ensure that GMS is implemented as a UPU global quality measurement system.

Since 2009, thanks to the growing affordability of radio frequency identification (RFID) technology, the number of designated operators participating in GMS has rapidly increased, and continues to grow every year.

In resolution C 39/2012, the Doha Congress, noting this progress and the changing needs of operators, mandated the POC to extend the capacity of GMS to cover end-to-end measurement and achieve synergies with the UPU continuous testing system by integrating the latter into GMS.

At the 2013.1 POC, it was decided that UPU continuous testing should cease in December 2013, and that end-to-end measurement should continue through GMS end-to-end (GMS E2E Internal) measurement from 2014.

Consequently, a new GMS E2E Internal web application (**https://gms.upu.org/E2EInternal/** – see Part I, Annex 1) was developed to replace the UPU continuous testing web application for panellists. Using the new GMS E2E Internal web interface, administrators (at the UPU International Bureau (IB)), Coordinators and panellists can perform specific tasks that contribute to the sending and/or receiving of test letters as required in end-to-end measurement.

The Global Monitoring System's end-to-end testing measures the transmission times for international priority/airmail letter-post items. GMS E2E provides designated operators with a simple, effective tool for measuring international quality of service. The main characteristics of the testing are as follows:

– The tests are from **end to end** (test letters posted in letter boxes and delivered to test participants);

– The testing is from **city to city**; participants are located in towns or regions with the most favourable delivery standards;

– On links where participating designated operators so wish, the testing can be **external** (testing work carried out by people who do not belong to the designated operator);

– **Data on posting and delivery are processed separately** and are merged only by the **independent body** (the IB);

– The testing is **continuous** (test letters posted continuously, five days a week);

– The testing is limited to standard-format letters;

– On links where technical conditions permit, the testing may be **diagnostic** (using transponders to identify the passage of mail through offices of exchange, or possibly other mail processing points);

– The use of the **Internet** as a means of communication **ensures low-cost testing and rapid communication of results**;

– The results are processed confidentially, unless the designated operators concerned agree to publish them to a restricted target group or to the general public.

Role of the designated operator

The **designated operator** should:

– appoint a national coordinator responsible for overseeing the testing, and communicate his/her name, work address, fax/telephone numbers and e-mail address to the International Bureau;

– provide the national coordinator with the necessary number of stamps and "Airmail/Priority" labels, and with a reliable e-mail address and Internet access;

– monitor the work of the national coordinator and resolve any problems;

–   have the instructions received translated into the local language (if necessary);

–   meet the financial obligations associated with the testing (local costs and, if the designated operator wishes, the cost of recruiting external participants).

Instructions for the national coordinator (liaison officer)

1   General

1.1	Role of the national coordinator	The national coordinator is the key figure in the continuous testing. He/she is responsible for continuously recruiting the necessary number of test participants, training them and monitoring their work. He/she will take immediate steps to replace any correspondents no longer able to carry out their duties, and inform the International Bureau of this. He/she distributes the test materials to the country's correspondents and provides them with professional advice.
1.2	Communications and languages	The national coordinator has Internet access and an e-mail address. He/she is in regular contact (by e-mail) with the International Bureau. He/she monitors the work of the correspondents, if possible through personal phone and e-mail contacts.

The languages of operational communications with the International Bureau are preferably English or French.

2   Management of test participants

2.1	Recruitment of test participants	For the testing, a minimum of **three** test participants are appointed per country. They have access to the Internet (unless the data is entered by the coordinator). The three constitute **one team** which can exchange test letters to a maximum of six links.
2.2	Geographical distribution of participants	The GMS E2E testing is from city to city; the geographical distribution of participants will therefore be simplified in comparison with real mail flows. Participants are located in towns or regions with the most favourable delivery standards.
2.3	Assignment of correspondent numbers	The national coordinator gives each correspondent a unique number, preferably made up of the first two letters of the designated operator code followed by a two-digit number.

For example, if the designated operator code of Poland is PLA, then **PL03** is a possible panellist number for correspondent No. 3 in Poland.

To avoid duplication of data, do not use the same correspondent numbers for different persons, particularly where participants are replaced. If necessary, continue using two-digit numbers up to 90.

2.4	Informing the International Bureau of correspondent addresses and numbers	The coordinator will supply the International Bureau with the exact address and unique number of each participant as soon as possible, preferably by e-mail or by entering the information directly on the appropriate web link as directed.

If the testing is conducted by an external agency, participants' addresses are not supplied to the designated operator.

3 Replacement of test participants

3.1	Replacement of participants for a short period	For a short absence (less than three weeks), the national coordinator works closely with the participant to ensure that the test mail continues to be posted and received. He also decides how the data on this mail will be entered reliably on the Internet, in accordance with the deadlines.
3.2	Data entry on behalf of participants	If necessary, the national coordinator is authorized to enter the data on behalf of the other participants.
		To do this, the national coordinator proceeds as described in Part II, "Instructions for test participants/panellists", section 6.6.
3.3	Permanent replacement of participants	If a participant in the test is no longer able to carry out his/her duties (moves house, etc.), or if the quality of his/her work is unsatisfactory, the coordinator replaces him/her.
		As soon as possible, but **preferably four weeks before the change takes place**, he/she informs the International Bureau of this change by e-mail or as directed by the UPU International Bureau.
		The number of the new correspondent must be different from the ones already used.
		Once the International Bureau has been informed of the replacement, it will produce new address labels and send them to the coordinators in the countries of posting.
		The coordinator can verify the address on the GMS E2E Internal web page.
3.4	Reserve participants	The testing is a long-term project. It is therefore highly likely that the coordinator will need to replace certain participants. It is recommended that the coordinator maintains a list of replacement/reserve persons.

4 Test materials

4.1	Receipt of materials at beginning of testing	Before the testing operation commences, the International Bureau sends the national coordinator a pack of materials consisting of:

– test letter identification cards (bearing unique identification numbers);

– sheets of self-adhesive address labels, with the addresses of correspondents in the destination countries;

– copies of this Operational Guide for each participant in the testing, plus one copy for the coordinator.

The necessary forms can be downloaded from the UPU Internet link given on page 2.

For each of the links where at least one partner country has semi-active RFID installation, the national coordinator also receives **transponders**, if requested.

The International Bureau sends the coordinator the user name and corresponding passwords separately by e-mail to enable him/her to access the GMS E2E Internal web interface (**https://gms.upu.org/E2EInternal/**).

The test letter posting plan can be downloaded from the same link (see Part I, Annex 1)

4.2	Checking of materials received	Immediately upon receipt, the national coordinator:

– checks that the materials received are complete;

– checks that the addresses of test participants in his/her country have been entered correctly;

– sends the UPU International Bureau confirmation by e-mail or fax that he/she has received the materials. He/she will inform the International Bureau of any errors found.

4.3	Distribution of materials to correspondents	Before the materials are distributed to participants, the national coordinator records:

– the series of unique numbers of test letter identification cards distributed to each participant;

– the numbers of the transponders received (if included) and their initial distribution among participants.

The national coordinator delivers to each of the test participants, on a proportional basis:

– test letter identification cards (bearing unique identification numbers);

– sheets of address labels;

– one copy of this Operational Guide;

– "test letters **P**osted" forms, marked as "**P**" forms;

– "test letters **R**eceived" forms, marked as "**R**" forms;

– one copy of the test letter posting plan (detailed instructions in Part I, Annex 1);

– one list of links to be tested;

– other materials ("Airmail" or "Priority" labels, stamps, envelopes); these materials are not supplied by the International Bureau.

For each of the links to be tested by the diagnostic method, the national coordinator also distributes transponders to each participant.

4.4	Requesting further materials	The national coordinator monitors the stocks of materials distributed to correspondents and contacts the International Bureau if he/she needs:

– test letter identification cards;

– other materials (address labels in particular).

Materials should be ordered by e-mail or fax or by any other means as directed by the UPU International Bureau.

4.5	Test letter identification format	A test letter has an identifier, made up of the first two letters of the designated operator code (similar to the system explained in 2.3) of the country of origin and destination, the two-digit year of printing of the cards and a four-digit serial number.

4.6	Ordering test letter identification cards	The test letter identification cards are printed in batches of 600. At the beginning, the initial batch may have less than 600 cards.

Additional cards must be ordered **separately for each link**. For example, if the last batch of cards for the Slovakia > Poland link was numbered 601 to 1200, the next order should state that 600 additional cards are required for the **SK > PL** link.

| 4.7 | Ordering transponders | If transponders are needed, the International Bureau will check for availability and send the transponders to the national coordinator. |

5 Communications with the International Bureau

| 5.1 | E-mail | For communications with the International Bureau, the coordinator should preferably send an e-mail to the following address: |

GMSE2Einternal@upu.int

| 5.2 | Post and fax | The address for communications by post and fax is: |

Letter Post Quality Measurement Programme
UPU International Bureau
P.O. Box 312
3000 BERNE 15
SWITZERLAND

Fax: +41 31 350 31 10

Part I, Annex 1 – GMS E2E Internal web application

The GMS E2E Internal web application (**https://gms.upu.org/E2EInternal/**) was developed to replace the current UPU continuous testing application. Using the new web interface, administrators (at the UPU IB), coordinators and panellists can perform specific tasks that contribute to the sending and/or receiving of test letters as required in end-to-end measurement. As a coordinator, you can perform additional administrative tasks related to the team of panellists that you coordinate.

This section explains all the tasks that you can perform directly with the web application.

Login and changing of password

You must first log in, using your assigned user name and password. If you have forgotten your password, click "**forget**" in **did you forget password?**, enter your **user name** in the new window that opens, and click the **Forgot Password** button. A new password will be sent to your email address.

Login procedure

1 Enter your user name and password in the login window that opens and click the **Log In** button. If you are logging in for the first time, you will be required to change your password.

2 To change your password, enter your **Current password**, then your **New password**, then confirm the new password and click **Change password**. The new password must respect the following password requirements:

   ✓ must be at least seven characters long;

   ✓ must contain non-alphanumeric characters;

   ✓ must have both lower-case and upper-case characters;

   ✓ must contain numbers.

After login, you are taken to the GMS E2E Internal home page as shown below. You can return to the home page at any time by clicking the GMS E2E Internal logo or **HOME** at the top left of the screen.

To the top-right of the home page after "Hello", you will see your **user name**. The letters enclosed in parentheses, denoted here by XX, represent the first two letters of the designated operator code (as explained in 2.3). You can change your password at any time by clicking your **user name** and following step 2 above.

GMS E2E Internal web application user guide and online help

The GMS E2E Internal web application user guide is a document that provides full information on how the application can be used. This document is available on request. However, as a coordinator, all the information you need has been extracted from the user guide and is provided below. Nonetheless, when you log in, you can access the practical online **Help** to the top-right of the home page.

Panelists / Coordinators / Administrators

This tab allows you to view and modify all the details of your panellists: name, e-mail address, physical address, telephone number, etc. As a coordinator, you can define/create/add a new panellist directly on the web application, as follows:

1 Click **Add new panellist**.

2 Enter the **Country** of the panellist.

3 Enter the **Location** of the panellist. If the panellist location/city is not listed, please contact the UPU.

4 Specify the **Role** as panellist.

5 Enter the **Team** the panellist will belong to. **You MUST assign your panellist to a team**.

6 Enter the **Title**, **First name** and **Last name** of the panellist.

7 Enter the **User name** of the Panellist.

8 Enter the **E-mail** address.

9 Enter the panellist's **Preferred Language** from the list of choices in the drop-down menu.

10 Enter the **Address**, **Postcode** and town or city in **Locality**. *Note that this is the address that will be used to print the address labels, so it must be accurate!*

11 Enter the **Telephone** number.

12 Click **Submit**.

When you click **Submit**, the web application will create the new panellist with a panellist identification number (panellistID) in the format **XXnn,** where "XX" are the first two letters of the designated operator code (as explained in 2.3) and "nn" are two numeric digits from 0 to 99. An example of a panellistID is **GH02,** which means panellist number 2 from the DO in Ghana whose operator code begins with GH.

If a panellist is not participating in the testing, select **edit** against the panellist's name and uncheck the **Is active** selection box. If the panellist is again participating in the testing, select **edit** against the panellist's name and check the **Is active** selection box.

To delete a panellist, select and click "**delete**" against the panellist's name.

Posting plan

The posting plan enables you to prepare, for each test participant, a plan for posting test letters based on the following principles:

– As the plan is randomly generated, a different one is prepared each time you click the "Generate posting plan" button;

– A total of five test letters are sent over a link per week;

– A correspondent (panellist) sends no more than two test letters per day;

– The number of test letters sent from the country of origin to a particular participant in the country of destination is two per week.

To generate the posting plan, select and click **Posting plan.** A new window opens similar to the one below:

Follow the steps:

1   Enter the **Origin team**.

2   Enter the **Start date** for the posting. ⚠ **Important**: You can only select the next available first posting day of the week of the origin country.

3   Enter the **Number of weeks** covered by the posting plan. There is an upper limit to the number of weeks you can select.

4   Depending on the **Origin team** selected, GMS E2E Internal automatically displays a list of valid **Destination teams** for the country-to-country link. Select a **Destination team** or multiple **teams** (CTRL + click).

5   Click **Generate posting plan**. The application creates an Excel file containing all details required for the Origin team to send test letters.

6   Click **Download Posting plan for** *<Origin team>* and an Excel spreadsheet opens to display a table similar to the section shown below:

The maximum number of destinations possible in a posting plan is six. Designated operators that have recruited several teams of participants must prepare a separate posting plan for each team. Each generated posting plan is given to each of the three panellists in a team.

The example of the posting plan above is interpreted as follows:

On **Monday, 7 July 2014:**

–   panellist XX01 will post one test letter to panellist 09 of Fiji (FJ09), and another test letter to panellist 03 of the Cook Islands (CK03);

–   panellist XX02 will post one test letter to panellist 05 of the Cook Islands (CK05);

–   panellist XX03 will post one test letter to panellist 08 of Japan (JP08).

Send/Receive letters
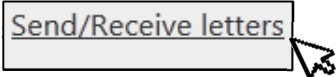
The **Send/Receive letters** section is primarily used by panellists to record details of the test letter that has been posted/received. As a coordinator, you can enter details of the test items on behalf of your panellists if the panellists cannot do it themselves. It is strongly recommended that your panellists record the item details themselves.

For further information and procedures regarding this section, please see Part II *(Instructions for test participants)* of this document.

Part I, Annex 2 – GMS end-to-end measurement results published on the Internet

Introduction to GMS STAR

All test letters recorded in the GMS E2E Internal web interface are validated then automatically transferred and stored in the GMS STAR database. The GMS **ST**atistical system for **A**nalysis and **R**eports (**STAR**) is a UPU intelligent central database that processes all valid GMS test items to produce quality performance reports. GMS STAR is a web application through which all designated operators can directly access and download real-time quality performance results by logging in at **https://gms.upu.org/STAR**.

GMS STAR user name and password

Each participating designated operator has received the appropriate GMS STAR credentials. After accessing the web application, you are asked to identify yourself by user name and password:

Screen 1

Enter your user name in the first field and your password in the second, then click "**Log In**". You will then see the GMS STAR opening screen, which offers you the following menus/tabs (see screen 2):

– REPORT menu;

– MONITORING menu;

– MANAGEMENT menu.

Additionally, you can change your password if necessary. The GMS STAR User Guide, as well as the online **Help**, offers you the various features and functionalities to enable you to understand all aspects of the GMS STAR reporting tool. The GMS STAR User Guide is available in different languages in addition to English (**EN**).

Screen 2

You can access the MONITORING and MANAGEMENT Menus to view other relevant information about measurement settings. You are requested to inform the GMS team if you notice any information about your country that is not entered correctly.

GMS STAR E2E reports

All quality performance reports are found under the REPORT menu.

The following submenus are available under REPORT:

– Operational reports;

– My reports.

Under the operational reports, you will find the following GMS E2E reports:

– GMS E2E matrix report;

– GMS E2E distribution of transmission times;

– GMS E2E items report (flat file).

(see Screen 3)

Screen 3

Download procedure for GMS E2E reports

For each of the GMS E2E reports, the download process is as follows:

Select **REPORT** > **Operational Reports**, then:

1   Select the date range using **From** and **To**:

Note that the dates for **From** and **To** must be in the same year.

2   Select the **Report name** that you want to download from the displayed list:

3   Select the **Measurement**. Select GMS E2E from the list.

In addition to GMS E2E, Designated operators that have participated in the previous UPU continuous testing system (UPU CT) can also access their UPU CT reports for 2012 and 2013. Quality results for other end-to-end measurements are also available only to participants.

4   Select the **Report type**, either PDF or Excel file format. Other reports have only the Excel option.

5   Click **Generate**.

If **Send me a notification email when the report is generated** is selected, an e-mail will be sent to you when the report has been generated. By default, this option is not selected.

The last five generated reports are shown in the **LAST GENERATED REPORTS** section. To see all generated reports, please go to **REPORT > My Reports**. In this window, you can also delete old unwanted reports by selecting an appropriate date that includes the unwanted reports, and then click **Delete reports**.

1 GMS E2E Matrix Report

This report contains the end-to-end aggregated **unweighted performance** results within the selected date **From/To** period. (See Screen 4, with dummy data.)

Please refer to the section **Download procedure for GMS E2E Reports** to download the report.

Screen 4

GMS E2E Matrix Report
Measurement Type: GMS E2E
From date 01/01/2015 to date 31/12/2015

Origin country			AF	BA	BB	CK	MZ	NE	NG	UY	UZ	VN	WS	ZA	ZM	ZW	TOTAL
	FJ	J+5		80.0%		87.9%							95.0%				87.6%
		Avg*		5.0		3.1							3.0				3.7
		Items		45		230							158				433
	FR	J+5					96.0%				48.8%			91.1%			78.6%
		Avg*					2.4				11.5			9.2			7.7
		Items					189				124			50			363
	KH	J+5	79.0%		94.1%			97.9%				94.1%			94.8%		92.0%
		Avg*	3.0		2.1			3.2				4.5			2.1		3.0
		Items	150		253			240				130			261		1034
	MU	J+5								90.5%				96.5%			93.5%
		Avg*								5.6				4.5			5.1
		Items								230				248			478
	SC	J+5	80.0%				90.7%						76.9%			42.8%	72.6%
		Avg*	2.5				2.1						4.6			8.5	4.4
		Items	160				238						263			198	859
	SG	J+5		98.0%				76.0%			96.6%						90.2%
		Avg*		1.2				3.5			2.3						2.3
		Items		250				201			142						593
	VE	J+5			90.5%						56.9%			90.5%			79.3%
		Avg*			2.4						6.3			3.6			4.1
		Items			220						132			160			512
	VN	J+5	85.0%		94.8%					45.8%					91.3%		79.2%
		Avg*	2.2		1.8					10.2					3.5		4.4
		Items	160		370					152					103		785
	ZM	J+5										94.9%					94.9%
		Avg*										3.2					3.2
		Items										235					235
	ZW	J+5					90.5%		86.2%					90.5%	94.2%		90.4%
		Avg*					3.6		5.2					4.2	2.3		3.8
		Items					60		210					126	370		766
	TOTAL	J+5	81.3%	89.0%	94.5%	89.2%	90.6%	86.0%	92.1%	68.2%	67.4%	94.5%	86.0%	92.1%	94.5%	67.1%	85.2%
		Avg*	2.6	3.1	2.0	2.8	2.85	2.95	4.2	7.9	6.7	3.85	3.8	5.375	2.2	6	4.2
		Items	470	295	623	450	298	390	450	382	398	365	421	584	631	301	6058

*Avg: average transit time from the Origin Country to the Destination Country

For the purpose of interpreting the GMS E2E Matrix Report above, take the example of the link **FJ** (Fiji – *Origin country*) to **WS** (Samoa – *Destination country*). The table shows that, out of 158 test items, 95.0% were delivered within J+5 for the entire end-to-end transit time. Considering the whole sample size of 158 test items, the average end-to-end transit time is 3.0 days.

2 GMS E2E Distribution of Transmission Times Report

This report shows, for the selected specific country, a summary of the number of test letters outbound/outward to other countries and inbound/inward to the selected country, the items delivered on the same day (J+0), or within one day (J+1), and so on, for each receiving/sending country. The report shows, for each link, the average transit time from the origin country to the destination country, along with the number of test letters exchanged. (See Screen 5, with dummy data.)

Please refer to the section **Download procedure for GMS E2E Reports** to download the report.

Screen 5 (Outbound Report)

GMS Global Monitoring System — UNIVERSAL POSTAL UNION

GMS E2E Distribution of transmission times
Measurement Type: GMS E2E
From date 01/01/2015 to date 31/12/2015

Origin Country	Destination Country	J+1	J+2	J+3	J+4	J+5	J+6	J+7	J+8	J+9	J+10	J+11	J+12	>J+12	Valid letters	Avg*
							OUTBOUND REPORT									
AUSTRALIA	BRAZIL	0	0	14	89	102	24	2	1	1	0	0	0	0	233	4.6
	% of items	0.0%	0.0%	6.0%	38.2%	43.8%	10.3%	0.9%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%		
	Cumulated	0.0%	0.0%	6.0%	44.2%	88.0%	98.3%	99.1%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%		
AUSTRALIA	NORWAY	0	0	52	65	123	6	1	0	0	1	0	1	0	249	4.4
	% of items	0.0%	0.0%	20.9%	26.1%	49.4%	2.4%	0.4%	0.0%	0.0%	0.4%	0.0%	0.4%	0.0%		
	Cumulated	0.0%	0.0%	20.9%	47.0%	96.4%	98.8%	99.2%	99.2%	99.2%	99.6%	99.6%	100.0%	100.0%		
AUSTRALIA	OMAN	0	19	21	56	85	45	2	1	0	1	1	1	0	232	4.6
	% of items	0.0%	8.2%	9.1%	24.1%	36.6%	19.4%	0.9%	0.4%	0.0%	0.4%	0.4%	0.4%	0.0%		
	Cumulated	0.0%	8.2%	17.2%	41.4%	78.0%	97.4%	98.3%	98.7%	98.7%	99.1%	99.6%	100.0%	100.0%		
AUSTRALIA	SLOVAKIA	0	4	8	89	75	23	23	12	2	2	1	2	0	241	5.1
	% of items	0.0%	1.7%	3.3%	36.9%	31.1%	9.5%	9.5%	5.0%	0.8%	0.8%	0.4%	0.8%	0.0%		
	Cumulated	0.0%	1.7%	5.0%	41.9%	73.0%	82.6%	92.1%	97.1%	97.9%	98.8%	99.2%	100.0%	100.0%		
AUSTRALIA	JAPAN	23	167	12	23	8	7	3	2	1	0	1	2	0	249	2.6
	% of items	9.2%	67.1%	4.8%	9.2%	3.2%	2.8%	1.2%	0.8%	0.4%	0.0%	0.4%	0.8%	0.0%		
	Cumulated	9.2%	76.3%	81.1%	90.4%	93.6%	96.4%	97.6%	98.4%	98.8%	98.8%	99.2%	100.0%	100.0%		
AUSTRALIA	KENYA	0	0	23	74	102	23	8	1	1	0	0	0	0	232	4.7
	% of items	0.0%	0.0%	9.9%	31.9%	44.0%	9.9%	3.4%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%		
	Cumulated	0.0%	0.0%	9.9%	41.8%	85.8%	95.7%	99.1%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%		
TOTAL	Items	23	190	130	396	495	128	39	17	5	4	3	6	0	1436	4.3
	% of items	1.6%	13.2%	9.1%	27.6%	34.5%	8.9%	2.7%	1.2%	0.3%	0.3%	0.2%	0.4%	0.0%		
	Cumulated	1.6%	14.8%	23.9%	51.5%	85.9%	94.8%	97.6%	98.7%	99.1%	99.4%	99.6%	100.0%	100.0%		

Sheet1 | Sheet2

Screen 5 (Inbound Report)

GMS | Global Monitoring System

GMS E2E Distribution of transmission times
Measurement Type: GMS E2E
From date 01/01/2015 to date 31/12/2015

UPU | UNIVERSAL POSTAL UNION

Origin Country	Destination Country	J+1	J+2	J+3	J+4	J+5	J+6	J+7	J+8	J+9	J+10	J+11	J+12	>J+12	Valid letters	Avg*
BRAZIL	AUSTRALIA	0	5	101	85	10	23	5	2	1	0	0	0	0	232	3.9
	% of items	0.0%	2.2%	43.5%	36.6%	4.3%	9.9%	2.2%	0.9%	0.4%	0.0%	0.0%	0.0%	0.0%		
	Cumulated	0.0%	2.2%	45.7%	82.3%	86.6%	96.6%	98.7%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%		
NORWAY	AUSTRALIA	0	21	56	85	56	12	1	5	0	0	0	1	0	237	4.1
	% of items	0.0%	8.9%	23.6%	35.9%	23.6%	5.1%	0.4%	2.1%	0.0%	0.0%	0.0%	0.4%	0.0%		
	Cumulated	0.0%	8.9%	32.5%	68.4%	92.0%	97.0%	97.5%	99.6%	99.6%	99.6%	99.6%	100.0%	100.0%		
OMAN	AUSTRALIA	0	15	38	123	45	2	5	1	0	1	1	1	0	232	4.1
	% of items	0.0%	6.5%	16.4%	53.0%	19.4%	0.9%	2.2%	0.4%	0.0%	0.4%	0.4%	0.4%	0.0%		
	Cumulated	0.0%	6.5%	22.8%	75.9%	95.3%	96.1%	98.3%	98.7%	98.7%	99.1%	99.6%	100.0%	100.0%		
SLOVAKIA	AUSTRALIA	0	2	205	12	3	10	0	1	0	2	1	0	0	236	3.3
	% of items	0.0%	0.8%	86.9%	5.1%	1.3%	4.2%	0.0%	0.4%	0.0%	0.8%	0.4%	0.0%	0.0%		
	Cumulated	0.0%	0.8%	87.7%	92.8%	94.1%	98.3%	98.3%	98.7%	98.7%	99.6%	100.0%	100.0%	100.0%		
JAPAN	AUSTRALIA	15	35	67	109	8	4	2	1	0	1	1	0	0	243	3.4
	% of items	6.2%	14.4%	27.6%	44.9%	3.3%	1.6%	0.8%	0.4%	0.0%	0.4%	0.4%	0.0%	0.0%		
	Cumulated	6.2%	20.6%	48.1%	93.0%	96.3%	97.9%	98.8%	99.2%	99.2%	99.6%	100.0%	100.0%	100.0%		
KENYA	AUSTRALIA	0	0	59	147	12	23	5	1	1	0	0	0	0	248	4.1
	% of items	0.0%	0.0%	23.8%	59.3%	4.8%	9.3%	2.0%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%		
	Cumulated	0.0%	0.0%	23.8%	83.1%	87.9%	97.2%	99.2%	99.6%	100.0%	100.0%	100.0%	100.0%	100.0%		
TOTAL	Items	15	78	526	561	134	74	18	11	2	4	3	2	0	1428	3.8
	% of items	1.1%	5.5%	36.8%	39.3%	9.4%	5.2%	1.3%	0.8%	0.1%	0.3%	0.2%	0.1%	0.0%		
	Cumulated	1.1%	6.5%	43.3%	82.6%	92.0%	97.2%	98.5%	99.2%	99.4%	99.6%	99.9%	100.0%	100.0%		

◄ ► ►| Sheet1 | **Sheet2** |

3   GMS E2E Items Report (Flat file)

This report is an extract of all raw data of valid items in CSV (comma-separated values) file format within a specified range of dates. The file can be imported into Excel or third party applications for advanced analysis. (See Screen 6, with dummy data.)

Please refer to the section **Download procedure for GMS E2E Reports** to download the report.

Screen 6

OriginCountry	OutboundCityCode1	OutboundCityName	OriginArea_PostCodeRange	LetterIdentifier	TagIdentifier	LetterFormat	WeightStep	AddressingMethod	FrankingMethod	Ind
DZ	DZACT	Alger		DZ0001ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZACT	Alger		DZ0002ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZACT	Alger		DZ0010ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZACT	Alger		DZ0011ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Chlef		DZ0102ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Chlef		DZ0103ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Chlef		DZ0104ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Chlef		DZ0105ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Chlef		DZ0106ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Chlef		DZ0119ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Chlef		DZ0120ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Constantine		DZ0112ES		C6	0-20 grams	Machine written	Stamped	Ma
DZ	DZCCT	Constantine		DZ0201ES		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESBCN	Barcelona		ES0034DZ		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESBCN	Barcelona		ES0035DZ		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESBCN	Barcelona		ES0041DZ		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESBCN	Barcelona		ES0042DZ		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESMAD	Madrid		ES0152DZ		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESMAD	Madrid		ES0153DZ		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESMAD	Madrid		ES0154DZ		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESMAD	Madrid		ES0155DZ		C6	0-20 grams	Machine written	Stamped	Ma
ES	ESMAD	Madrid		ES0168DZ		C6	0-20 grams	Machine written	Stamped	Ma

GMS_E2E_Items_report_2014060317

The GMS E2E Items Report (Flat file) has a total of 85 columns when imported into Excel. Each column contains information about each test item from the posting country to the calculated end-to-end time T. The file shows all valid items (outbound/inbound) for all associated links.

The last columns to the right of the file (starting with column "**CalculationStatusA**" onwards) show the transit times **A** (time between posting and dispatch in origin country), **B** (outbound international transportation time), **AB** (outbound transit time), **HE2E** (inbound transit time in the destination country) and **T** (end-to-end transit time). Below is a diagram showing all the transit time stretches:
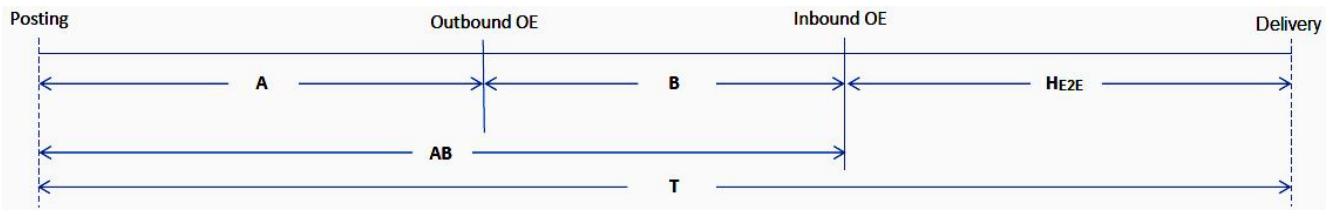
For example, the transit time A is shown in the file as in column "**CalculatedTimeA**".

Supplementary information

1   Methods of calculating results

The GMS end-to-end transit time calculation rules are based on the POC's recommendations contained in documents POC C 1 2010.1–Doc 6a and POC C 1 QIG 2010.1–Doc 9. For consistency in publishing results, the UPU official calculation rule is applied to end-to-end transit times, whereby:

–   non-delivery days in the destination country (weekends and public holidays) are excluded from the transit time;

–   non-processing days (when the outbound or inbound office of exchange is not operating) are excluded from the transit time. If a non-processing day is also a non-delivery day, it is removed only once from the transit time, not twice;

–   only a five-day posting and delivery span is used. For example, if the normal five-day delivery span is Monday to Friday, Saturday deliveries are classified as "Monday" deliveries, where six days of delivery are allowed. Similarly, if the normal five-day delivery span is Sunday to Thursday, Friday deliveries would be classified as "Sunday" deliveries, where six days of delivery are allowed.

2   Validation of GMS E2E items

Barring any circumstances beyond their control, data is incorporated by participants into the **GMS E2E Internal web interface** database daily. The GMS E2E Internal web interface uses all events of the test letter recorded by panellists to perform a simple first-level automatic validation process using a pre-defined set of validation rules. Test letters that fail to pass the automatic validation are taken to the second level of manual validation. The validated test letters are then transferred to **GMS STAR**. In GMS STAR, each item is subjected to a third-level set of validation rules before the transit time is calculated every day, beginning midnight local time at the UPU. The quality performance reports are then accessible from GMS STAR.

3   Updating GMS E2E results on the Internet

As mentioned at the beginning of this annex, all designated operators can directly access and download real-time quality performance results at **https://gms.upu.org/STAR**. Since validated items automatically enter the **GMS STAR** database every day, performance results of the previous month are provisional until the end of the current month, when the results are considered to be definitive. For example, GMS E2E performance results for June are considered definitive at the end of July of the same year, and so on.

Part II – Instructions for test participants/panellists

Instructions for sending test mail

1   Participant's cooperation with national coordinator

The national coordinator is your first contact; inform him or her immediately of any test execution problems you cannot deal with yourself.

2   Receipt of materials before beginning of tests

2.1	Checking materials before beginning tests	Check that you have received from your national coordinator, for each of the links to be tested, the materials listed below:

- Test letter identification cards (bearing unique identification numbers);
- Transponders (if included);
- One copy of this Operational Guide;
- "**P**" (mail posted) entry form;
- "**R**" (mail received) entry form;
- Test letter posting plan;
- Pre-printed self-adhesive address labels.

For each of the links to be tested by the diagnostic method, the national coordinator also distributes transponders to each participant.

3   Sending of test letters

3.1	Test letter posting plan	Your national coordinator will send you the test letter posting plan. You are asked to strictly adhere to it.

As this is a randomly-generated plan, the number of test letters sent per participant is irregular. A total of five letters per week are posted for each link to be tested.

3.2	Use of pre-printed address labels	For each of the links to be tested, the national coordinator has supplied you with pre-printed self-adhesive address labels.

To find out which correspondent your test letter is to be sent to, consult the posting plan.

3.3	Preparing a test letter	Insert a test letter identification card in the envelope.

The six-digit number in the middle of the test letter is the serial number of the test letter. It does not matter in what order you use cards from the same batch.

The test letter is sent in a closed envelope, with an "Airmail" or "Priority" label and stamps to the correct value. Envelopes with "Airmail" or "Priority" already printed on them can also be used.

(For items with transponders, see point 4.3 below.)

| 3.4 | No additional information to be included with test letter | **To ensure the reliability of the tests, it is strictly prohibited to include information other than that pre-printed on the test letter identification card.** |

In particular, it is prohibited to add:

– the date of posting of the test letter;

– the particulars (address, number and name) of the sending correspondent.

| 3.5 | Provisional entry of data on forms | **Before you seal the envelope**, record details of the letter to be sent on the "**P**" form. |

For example, if letter No. AR 140135 CK from Argentina is sent to the Cook Islands, you will enter **140135** in the "Letter No." column.

Example:

If the test letter is accompanied by a transponder, please also enter the transponder number in the "Transponder No." column. Do not forget to enter the posting date and your panellist number.

| 3.6 | Posting of test letter in letter box (before final collection) | Seal the envelopes and post the test letters in the most convenient letter box. Make sure the letter is posted on the day shown on the test letter posting plan, and **at least 30 minutes before the final collection from the letter box**. |

3.7	Return of **"P"** forms to coordinator	A copy of the **"P"** form, duly completed with the data for Monday to Friday, will be sent to the national coordinator so that, if agreed, he/she can enter the data via the Internet **no later than the Monday of the following week**.
		(Participants who enter the data via the Internet themselves send these forms to the coordinator at the end of each month for filing, records and spot-check quality control.)

4   Sending of test letters with transponders

4.1	Links tested using transponders	The transponder is an electronic device used to automatically enable detection of the time at which a test letter passed through certain offices of exchange. The transponder can be sent in a standard envelope. There are two types of transponders used, depending on the RFID technology used in the measured link:

–   A passive transponder, which fits at the back of the self-adhesive transponder label. All passive transponder numbers have **0** immediately after the J5GJ00 initial code;

–   A semi-active transponder weighing about 12 g, with the transponder number written on a self-adhesive label. All semi-active transponder numbers have **1** immediately after the J5GJ00 initial code.

For a link whose partners have passive RFID technology at one end and semi-active RFID technology at the other end, "dual" transponders will be used. The dual transponder is a combination of passive and semi-active transponders fixed into one hardware unit. The passive transponder part will be registered when the test item passes through an office with passive technology, and the semi-active transponder part will be registered when the test item passes through an office with semi-active technology. All dual transponder numbers also have **1** immediately after the J5GJ00 initial code.

4.2	Use of transponders on same link	Each transponder has a label showing the link on which it is to be sent, for example:

Each transponder number is assigned to a specific link. In the example above, the transponder number **0–14–00094029** is used only in the link between Argentina (AR) and the Cook Islands (CK).

4.3	Return of semi-active and dual transponders received	At the beginning of the GMS E2E Internal measurement, each correspondent receives semi-active transponders, to be sent on each of the links concerned. The same number of transponders are distributed to correspondents in the partner countries of the measurement.

Once they have received a transponder in a test letter and recorded the details, test participants are asked to return it to the country of origin with the next test letter.

It is not important to which of the participants in the country concerned you return the transponder; simply return it with the next test letter as soon as the sending plan allows. However, it is absolutely essential that you return it according to the link shown on the label (see point 4.2).

Each transponder is always sent to and from the same two countries. Observing this instruction will increase the amount of diagnostic information gathered.

4.4	Putting the semi-active and/or dual transponders in the envelope	**Important instruction!**

To prevent damage to the transponder during cancellation, make sure the electronic parts are not placed in the corner of the envelope used for the stamps.

4.5	Return of damaged non-working semi-active and/or dual transponders to the UPU	Semi-active and/or dual transponders may stop working after some time. This may be caused by physical damage, failure of the electronic chip, or possibly low battery level. Although the UPU is monitoring the transponder performance, please inform your coordinator when you notice that the transponder can no longer be used.

All non-working transponders must be returned to the coordinator as soon as possible. The coordinator will send them back to the UPU to be repaired or replaced.

Participants' cooperation in these efforts will help the maintenance process to run smoothly.

Instructions for receipt of test mail

5   Receipt of test letters

5.1	Provisional entry of details	You are asked to record details of the test letter received **as soon as you receive** it, on the "**R**" form.

Example:

| 5.2 | Cancellation of identification card | To prevent re-use of the test letter identification card, strike it through upon receipt and before filing. |

5.3 Irregularities

Inform your national coordinator immediately if you receive:

– a test letter identification card without an identification number or a link that does not correspond to your link;

– a transponder without a test letter identification card;

– a test letter with information other than that listed in this Guide (see 3.4 in particular, with details of the sender's address or date of posting).

5.4 Receipt of transponders

If you receive a transponder, record the details as explained above. If it is a semi-active or dual transponder, return it to its country of origin with the next test letter to be posted to that country, as explained in detail in part 4.3. **Passive transponders are used only once, so you can dispose of them after recording the test item data**.

5.5 Return of **"R"** forms to coordinator

Participants who do not enter the data via the Internet send the "R" form, duly completed with the data for Monday to Friday, to the national coordinator **no later than the Monday of the following week**. (Participants who enter the data via the Internet themselves send these forms to the coordinator at the end of each month for filing, records and spot-check quality control.)

5.6 Filing

File the test letter identification cards and envelopes within two months of the month of receipt (for example, by the end of March for mail received in January).

Instructions for data entry on the Internet

6   Link to the relevant UPU server page

6.1   Opening the link   You can enter the GMS E2E data from any computer with Internet access.

Open your Internet browser and type the following address: **https://gms.upu.org/E2EInternal/** .

6.2   Log-in   Once the connection with the UPU server has been established, you will need to enter your user name and password:

In the **User name** field, enter the name supplied by the national coordinator.

Any accents normally used in your language will not appear.

Next, enter the password supplied by the national coordinator in the **Password** field.

Then, click the **Log in** button. This will take you to the appropriate home page, as shown below.

Click **Send/Receive letters**, and this will take you to the window below, with a list of previous entries of items, if any:

6.3   Data entry screen –
       sent items

Take the **"P"** form containing the list of recorded items that you want to enter on the Internet.

With the **Data entry** screen (see 6.2) opened, click **Send** to enter posted items. The following screen appears:

Data entry - send letter

My id

CK02 - Anti nt

Receiving panelist

Test letter identification card no.

CK -   -

Transponder

[J5GJ00]   -   -

Date sent

Comments

Cancel   Confirm

Your user name will be indicated automatically below **My id**.

In the box below **Receiving panellist**, select from a drop-down list your corresponding receiving panellist (as indicated in the posting plan), for example AR03 in the example below:

Data entry - send letter

My id

CK02 - Anti nt

Receiving panelist

AR03 - Rodrigos Avent

After selecting the receiving panellist, enter the six-digit test letter number, as in the example below:

Test letter identification card no.

CK - 14   - AR

Trans **14**0001

[J5GJ **14**0002

Date   **14**0003

Note that after entering the first two digits, a drop-down list of a maximum of 10 possible test letter numbers will appear. If the number you want to enter is not shown, continue to type the third digit of the test letter, and a refined list will

appear. The items are filtered progressively as you type the test letter number. If the number you want to enter appears, select it from the list. If it does not appear in the drop-down list after entering the fifth digit, contact your coordinator.

Once you have entered the test letter number, the system will open up the rest of the entry fields for you to complete.

Fill in the **Transponder** information if a transponder is included with the test letter. Enter the transponder number from the drop-down list from left (step 1 – after the [J5GJ00]) to right (step 3), as shown in the example below:

If there is no number displayed at step 3, it will be for one of the following reasons:

- steps 1 and 2 were not selected correctly; or
- the transponders are not yet defined in the system – please contact your coordinator.

Finally, enter the posting date below the **Date sent** in the selectable calendar.

Please click **Confirm** to complete the process.

6.4   Correcting data entry errors

Before you have clicked **Confirm**, you can correct any mistakes you may have made.

If you find any major errors after the data has been entered and confirmed, inform your coordinator.

6.5   Data entry screen – received items

Take the **"R"** form containing the list of recorded items that you want to enter on the Internet. With the **Data entry** screen (see 6.2) opened, click **Receive** to enter received items. The following data entry screen will appear:

Your user name will be indicated automatically below **My id**.

Below **Test letter identification card no.**, in the first box on the left, select the first two letters of the test letter you have received. Then, in the box to the right, select the six-digit test letter serial number. In the same way as for entering posted items, enter the serial number of the test letter from the drop-down list from left (step 1) to right (step 2). The list of items is filtered progressively as you enter the digits (see 6.3 above), as in the example below:

If there is no number displayed at step 2, please contact your coordinator.

After entering the test letter number, the system will open up the rest of the entry fields for you to complete.

If a transponder is included with the test letter, please enter the transponder number, as explained in 6.3 above.

Enter the received date below **Date received** in the selectable calendar. Continue by entering the **Stamp date** if legible on the test letter envelope.

Please click **Confirm** to complete the process.

| 6.6 | Data entry by coordinator on behalf of panellists | The coordinator can enter sent and/or received items on the Internet on behalf of his/her panellist team members.

After clicking the **Send** or **Receive** tabs of the **Data entry** page, the following screen appears:

Select your **Team** and, below **Data entry for**, select the panellist for whom you are entering the data. Continue by entering the other fields as explained in 6.3 and 6.5. |

| 6.7 | Switching between send/receive data entry | You can switch between **Send/Receive** data entry windows as many times as you like when entering data. But, for each **Send** or **Receive** entry, it is important that you always complete the process by clicking the **Confirm** button. |

| 6.8 | Use of barcode for send/receive data entry | All test letter cards and transponder labels have a barcode printed on them. The barcode represents the identification number: the barcode on the test letter represents the full alphanumeric test item characters, for example **AR140135CK**; and the barcode on the transponder represents the full alphanumeric transponder characters, for example **J5GJ0001400094029** with a letter "A" included at the start. |

With an appropriate barcode scanner and software, the barcode can be scanned and the information directly uploaded to the Internet.

Panellists who wish to perform data entry by scanning the barcode are requested to contact their coordinator.

6.9   End of data entry

Do not forget to log out by clicking **Log off** when you have finished entering data.

Other instructions

7   Absences

7.1   Short absences

If you are due to be absent for a short period (less than three weeks), inform your coordinator; follow his or her instructions to ensure that the test letters continue to be sent according to the posting plan, and that the **Send** and **Receive** details are recorded on the **"P"** and **"R"** forms, respectively.

If you are unable to enter the data via the Internet in your absence, ensure that the **"P"** and **"R"** forms, duly completed, are sent to your coordinator within the prescribed period for entry via the Internet.

7.2   Long absences, termination of participant's work

If you are no longer able to carry out your work as a test participant, or if you are absent for more than three weeks, inform your coordinator at least two months before your resignation or long-term absence. He/she will arrange for a replacement and inform the UPU accordingly.

8   Confidentiality

8.1   Principles of confidentiality

The working method and all information on the test procedures are confidential. In particular, ensure that employees of the Post are not told about your role in the process of testing the quality of the international service.

Do not reveal your user name and password, the GMS E2E Internal Internet address or details of the test methodology and test data to other people.