UPU-Agreed Measurement Systems External Audit 2017

Universal Postal Union International Bureau

Audit Report March 2018





1. Executive Summary

UPU GMS has been running Quality of Service measurements since 2009, starting with 21 countries. This number rose over the years and ended up to 79 in 2017. Transparency and confidence in the reliability of the GMS postal measurement systems (including data delivered by the UNEX system for this purpose) will be increasingly important going forward in assessing the quality of postal services globally.

As a proven and reputable audit services provider, PwC was pleased to support UPU with this challenge, leveraging our extensive experience in the postal industry, particularly in quality monitoring and auditing.

After the kick-off meeting on August 30, 2017 we received final instructions to perform the audit for the UPU-agreed measurement systems under the UPU Global Monitoring System (GMS) project. We agreed on the scope of the audit consisting of the verification of the compliance toward the UPU – GMS Technical Design document in following areas:

- Calculation and reporting of quality of service results
- Panel Management
- Quality control and validation
- RFID Diagnostic Monitoring

As part of the audit we performed site visits at the UPU in Bern, Switzerland and at the IPC in Brussels, Belgium as well at the service providers Quotas, Qensio and Kantar TNS for the production of the test letters and the panel management.

Based on our procedures as described in this report, nothing came to our attention that caused us to believe that the activities performed by UPU GMS, by UNEX UPU TD measurement system or by the service providers in the audited areas were not compliant with the UPU – GMS Technical Design document.

However, in some areas we identified minor differences with no relevant impact on the measurement results, we refer to them as findings with partial compliance. Some of those points, in particular in the panel management (retention and training of panellists), are related to conscious decisions made to improve operational processes that are not reflected yet in the UPU – GMS Technical Design document. Other points concern monitoring of bundling, pool rotation and archiving of quality checks during mail production.

Since we were able to assess the general risk also outside of the UPU – GMS Technical Design document, we also communicated improvement points that do not impact the interpretation of the UPU – GMS Technical Design document in general. These were not included in this report but were communicated separately. Additionally, we noted that some requirements in the UPU - GMS Technical Design document left room for interpretation, where wording like "may" or "should" were used. This creates a challenge both for the companies applying the standard and for external auditors assessing the compliance with this standard. We suggest to rethink these formulations in future updates of the UPU - GMS Technical Design document.

This report has been prepared solely for the use of UPU and should not be quoted in whole or in part without our prior written consent. No responsibility to any third party is accepted as the report has not been prepared for, and is not intended for, any other purpose. The procedures performed by us do not constitute either an audit or a review made in accordance with International Standards on Auditing or International Standards on Review Engagements. Consequently, we do not express any assurance on the information included in this report.

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2. Scope of our work

The main objective of the external audit was to assess whether the methodology, its implementation and the calculation of QS measurement results by the two UPU-agreed QS measurement system providers were compliant with the UPU – GMS Technical Design document in 2017.

The scope covered following areas:

- A. Statistical design (sample design)
- B. System configuration and inputs
- C. Panel management
- D. Mails production
- E. Mails circulation (distribution / sending / receiving)
- F. Data collection, validation and processing
- G. Transit time calculations
- H. Statistical Analysis
- I. Reporting
- J. Archiving
- K. Quality Control
- L. RFID Diagnostic Monitoring system

It covered following components:

- UPU GMS
- UNEX UPU Terminal Dues measurement
- Kantar TNS
- QENSIO
- QUOTAS

Note that no assessment was performed for LYNGSÖE, due to a coordination issue between them and UPU. We understood that UPU is looking to solve this issue as soon as possible.

It also covered the following areas of the UPU – GMS Technical Design document:

- Calculation and reporting of quality of service results
- Panel Management
- Quality control and validation
- RFID Diagnostic Monitoring



3. Audit Methodology and Process

Based on our postal measurement experience we developed specific audit procedures that we applied in this engagement.

We performed an assessment of the current postal measurement procedures that will allow UPU to understand the quality of service they are getting from their service providers in comparison with what is required by the UPU – GMS Technical Design document. We also provide clear insight on where improvements are needed and clear enforceable recommendations.

Our approach is:

- Independent
- End-to-end and comprehensive
- Reliable and robust
- Statistically accurate
- Quality-driven and standardised
- Tested and proven over many years
- ISO9001 consistent

In our approach, we leveraged on local teams already experienced with UPU and IPC.

While the methodology is standardised, PwC recognises that each client's environment and requirements are different. Hence, we customised it for this specific task, focusing on the four areas in respect of compliance to the UPU – GMS Technical Design document:

- Calculation and reporting of quality of service results
- Panel Management
- Quality control and validation
- RFID Diagnostic Monitoring

Our methodology was underpinned by the following tasks:

- Understanding the requirements of the UPU GMS Technical Design document
- Assessing the risks and mapping all elements in focus into our specific audit process (ref. diagram 1). We produced a viable, solid and efficient work-plan
- Collect information in appropriate mode: we know what should exist and how the existing can be assessed.
- Obtaining during the UPU and IPC visits information and documentation by exchanging experience with postal measurement management with like-minded PwC people.
- Performing efficient walkthroughs on site with very experienced and skilled individuals speaking to the key service supplier people.
- Understanding deviations and confirming them with follow ups. Performing recalculations wherever appropriate, leveraging on our specific tools for this purpose.
- Formulating preliminary reports that can be validated.
- Producing a final report that is adequate for management and for those who have to work with it.
- Findings are formulated in a form that will help follow-up actions and improvements.

This methodology will also be applied in the following years, confirming situation and progress, leveraging on all structured experience from the first year.

Audit process																	
System set-up	>	Statistical design		Panel management		Test mail production		Test mail circulation	>	Data collection, validation, evaluation	Data analysis	>	Reporting	>	Archiving	\geq	Quality control

Process execution against design at MSP and at organization managing the systems									
Operations and IT set-up Panel set-up and organization Quality assurance set-up	Data collection, validation, organization and transmission for implementation of statistical design Application of GMS technical design, espec- ical require- mented statist- ical design	Recruitment of panel lists Panel performance management through KPIs Incentive management Panel training	Generation and preparation of test mail items Programming and integration of RFID tags Dispatch of test mail items	Test mail circulation Registration of induction and delivery information and return of test mail items	Data entry and validation of panellist induction and delivery data Evaluation of panellist data Validation of panellist data against RFID data Diagnostic monitoring	Data analysis Exception reporting Proactive analysisto identify potential project risks Accuracy of calculations	KPI(s) Reporting according to timetable Recommend- ation from site survey process	Archiving of test mail items	Contingency planning Quality controls KPIs Change management process Process monitoring

Demonstrating understanding of GSM technical design by Measurement Service Provider (MSP)

Existence and extent of documentation for all audited areas Correct application of GSM technical design Implementation of country-specific design parameters Implemented internal controls framework

4. Audit results

4.1. Results per audited area

Based on our procedures performed, nothing came to our attention that caused us to believe that the activities performed by UPU GMS, by UNEX UPU TD measurement system or by the service providers in the audited areas were not compliant with the UPU – GMS Technical Design document. The following table provides an overview of the results over the audited areas. When we noted at least one non-compliant finding, we marked the area as red, otherwise it is marked yellow when there was at least one partial compliant finding. Areas are marked as green when no compliance issues were detected in the given area. The numbers included in the table below indicate how many findings were identified per measurement area (in total 8, see detailed list in chapter 4.2).

Me	asurement Areas	UNEX UPU TD meas.	UNEX UPU TD meas. – PMC – TNS	UPU GMS meas.	UPU GMS - PMC -Qensio	UPU GMS - PMC -Quotas
Α.	Statistical design (sample design)	4	4	4	4	4
В.	System configuration and inputs	 1	-	-	-	-
C.	Panel management	4	—! — 2	4	—!— 1	 1
D.	Mails production	•	4	•	—!— 1	•
E.	Mails circulation (distribution/sending/receivi ng)	•	•	•	•	-
F.	Data collection, validation and processing	 1	-	 1	4	-
G.	Transit time calculations	•	4	•	4	4
Н.	Statistical Analysis	4	4	4	4	4
I.	Reporting	4	4	4	4	4
J.	Archiving	4	4	4	4	4
K.	Quality Control	•	4	•	•	•
L.	RFID Diagnostic Monitoring system	•	•	•	•	•

Compliance rating:

Compliant Par

Partially compliant

Non-compliant

4.2. Detailed findings

The following list shows the identified findings.

Finding ID	Area ID	Area Description	Assessment Area	Compliance	Issue description	Significance	Recommendation / Assessment results
1	F4 F8	Validation process as provided in the GMS technical design (KPIs, real-time and off-line validation) built into key areas within the quality measurement system to maintain data integrity and reliability Validation of test mail items' data against pre-defined validation rules	UNEX UPU TD measurement	Partially Compliant	Validation of test mail items Following our review of test mail items' data provided by IPC, we noted that bundling of items does occur. In particular, we identified 143 cases of all items actually received, i.e., having a "receive date" and no cancel status where two (2) items were sent from the same sender to the same receiver on the same date. This issue is considered to be of low significance, given that the number of cases where clustering happened, is less than 0.2% and, therefore, does not affect significantly the end result, section 7.2.1 of the UPU – GMS Technical Design document, "Bundling of items from the same outbound country to the same inbound city shall be avoided, if possible.".	O Low	In order to avoid such cases of bundling / clustering, it is recommended that sender panellists are contacted in case of such incidents in order to be informed that this is against the monitor policy. In case it is deemed necessary, panellists should be retrained. Moreover a process should be setup that, in case of recurring incidents, panellists are removed from the measurement study. Finally, it should be decided whether such postal items impacted should also be invalidated, if that is considered statistically appropriate.
2	B1 B2	Statistical design's parameters (e.g., measured links, cities, flows, weightings, mail characteristics, etc.) System's 'boosting' functionality, i.e. upgrading DO level, promoting a flow, boosting a link, adding a city link, etc.	UNEX UPU TD measurement	Partially Compliant	Pool 1 rotation As per the UPU – GMS Technical Design document, Section 5.3.2, "it is proposed to have Pool 1 rotated systematically to ensure full coverage of all DOS". However, it was noticed that, even though rotation does happen, this is not systematic and sending DOs could appear more than once within 3 years, when, at the same time, some DOs do not appear at all.	O Low	It is proposed, as per the TD document, Pool 1 countries to be rotated systematically, to ensure full coverage of all DOs.
3	C1	Panellists' recruitment questionnaires, to ensure that UPU-specific recruitment requirements are satisfied	UNEX UPU TD measurement - PMC - TNS	Partially Compliant	Panellists' retention period The panellists were not informed, as part of the hiring process, about the requirement that they should be willing to participate for at least six months. This is not fully in accordance with chapter 7.2 of the UPU – GMS Technical Design document: "In all	O Low	We recommend either implementing a clause in the recruitment questionnaire to ensure the panellist is aware that he is expected to participate for at least six months or agreeing with

Finding ID	Area ID	Area Description	Assessment Area	Compliance	Issue description	Significance	Recommendation / Assessment results
					cases, panellists: [] should be willing to participate for at least six months;" However, we noted that the approach gener- ally used to reduce the risk of not having the necessary number of panellists is not ad- dressed by formally requesting the panellist to commit for at least six months but by hav- ing and managing backup panellists.		UPU on updating the formulation of the technical design.
4	C 6	Process of panellists' training	UNEX UPU TD measurement - PMC - TNS	Partially Compliant	Training of Panellists There was no formalised way to assess whether panellists have been sufficiently trained, before starting to act as a panellist. However, we noted that the panellist performance was monitored and that in case of low performance the panellist was trained again. The UPU – GMS Technical Design document (chapter 7.3) mentions that "training should confirm that the panellist has understood the task involved and is able to carry it out as instructed" In addition, the documented training program for newly recruited panellists does not cover the topics on how to indicate the condition of the item received (envelope damaged, address label damaged or not fully legible, transponder missing, etc.). This is not fully in line with UPU – GMS Technical Design document (chapter 7.3.2) where it states "instructions should indicate: [] how to indicate the condition of the item received (envelope damaged, address label damaged or not fully legible, transponder missing, etc.)".	O Low	We recommend, implementing an assessment process to ensure the knowledge of the panellist is tested before involving her/him as an active panellist. In addition we recommend adding to the instructions provided to panellists a section on how to indicate the condition of the item received.
5	C1	Panellists' recruitment questionnaires, to ensure that UPU-specific recruitment requirements are satisfied	UPU GMS - PMC -Qensio	Partially Compliant	Panellists' retention period The panellists were not informed, as part of the hiring process, about the requirement that they should be willing to participate for at least six months. This is not fully in accordance with chapter 7.2 of the UPU –	O Low	We recommend either implementing a clause in the recruitment questionnaire to ensure the panellist is aware that he is expected to participate for at least six

Finding ID	Area ID	Area Description	Assessment Area	Compliance	Issue description	Significance	Recommendation / Assessment results	
					GMS Technical Design document: "In all cases, panellists: [] should be willing to participate for at least six months;"		months or agreeing with the UPU on updating the formulation of the technical	
					However, we noted that the approach generally used to reduce the risk of not having the necessary number of panellists is not addressed by formally requesting the panellist to commit for at least six months but by having and managing backup panellists.		design.	
6	D7 D8	Archiving of completed checklists in an orderly manner Production procedures – quality control and evaluation criteria of test mail productions	UPU GMS - PMC -Qensio	Partially Compliant	Archiving of quality checklist Through inquiry and observation of the production facility, we noted that the test mail production checklist is not retained and quality controls during production are not documented and archived and therefore not comprehensible.	O Low	We recommend implementing a quality control checklist that provides a basis to perform traceable quality checks.	
					This is not in accordance with chapter 8.2 of the UPU – GMS Technical Design document, which states that the production process needs to ensure that "all items within the study meet the requirements of the GMS design []". As an external party it was not possible to perform testing procedures in this area, because this control was not traceably documented and archived.			
7	C1	Panellists' recruitment questionnaires, to ensure that UPU-specific recruitment requirements are satisfied	UPU GMS - PMC -Quotas	Partially Compliant	Panellists' retention period The panellists were not informed, as part of the hiring process, about the requirement that they should be willing to participate for at least six months. This is not fully in accordance with chapter 7.2 of the UPU – GMS Technical Design document: "In all cases, panellists: [] should be willing to participate for at least six months;" However, we noted that the approach generally used to reduce the risk of not having the necessary number of panellists is not addressed by formally requesting the panellist to commit for at least six months but by having and managing backup panellists.	O Low	We recommend either implementing a clause in the recruitment questionnaire to ensure the panellist is aware that he is expected to participate for at least six months or agreeing with the UPU on updating the formulation of the technical design.	

Finding ID	Area ID	Area Description	Assessment Area	Compliance	Issue description	Significance	Recommendation / Assessment results
8	F4	Validation process as provided in the GMS technical design (KPIs, real-time and off-line validation) built into key areas within the quality measurement system to maintain data integrity and reliability	UPU GMS	Partially Compliant Validation of test mail items Following review of test mail items' data provided by UPU, it was observed that bundling of items does occur. In particular, we identified 54 cases of all items listed in the file, where two (2) items were sent from the same sender to the same receiver on the	PU GMS Partially Compliant	O Low	In order to avoid such cases of bundling / clustering, it is recommended that sender panellists are conducted in case of such incidents in order to be informed that this is against the monitor
	F8	Validation of test mail items' data against pre-defined validation rules			This issue is considered to be of low significance, given the low number of these cases where bundling happened and that these cases do not affect significantly the end result, section 7.2.1 of the UPU – GMS Technical Design document, "Bundling of items from the same outbound country to the same inbound city shall be avoided, if possible.".		policy. In case it is deemed necessary, panellists should be retrained. Moreover a process should be setup that, in case of recurring incidents, panellists are removed from the monitor. Finally, it should be decided whether such items should also be invalidated, if that is considered statistically

Compliance rating:	Compliant	Partially compliant	Non-compliant
Significance rating:	O Low	Medium	🛑 High



A1 Rating Criteria

Compliance rating criteria

The compliance rating indicated the compliance of the different assessment areas with the UPU – GMS Technical Design document.

Non-compliant means a clear violation of the UPU – GMS Technical Design document.

Partially compliant means a minor deviation from the UPU – GMS Technical Design document with no expected impact on the final measurement results. The significance rating provides indication on the severity and on the priority. Partial compliance can be related to

- a decision to deviate in order to improve quality in certain areas,
- a different interpretation of the UPU GMS Technical Design document or
- a minor mistake in applying the rules.

Compliance rating:

- Compliant
- Partially compliant
- Non-compliant

Significance rating criteria

The significance is an estimation of the impact on the measurement of the identified issue.

- Low means no impact on the measurement results.
- Medium means an impact on the measurement results that should be analyzed, but expectation is that the impact does not change the measurement.
- High means that the measurement result is affected and the implications should be analyzed in detail.

Significance rating:

- O Low
- O Medium
- 🕨 High

A2 Documentation received

Item ID	Title of document	Description of document
IPC.01	2017 Reporting schedule.msg	2017 Reporting schedule
IPC.02	Information.docx	Information
IPC.03	RFID Data GMS ** AUDIT.xlsx	RFID Data GMS for one country
IPC.04	Reporting Schedule 2017.pptx	UNEX Reporting Schedule
IPC.05	CTTs and Service Standards Summary.doc	CTTs and Service Standards Summary
IPC.06	GMS designs for different countries	GMS designs for different countries
IPC.07	Lot 2 - Design Files 2017 - working file 20160825.xlsx	Design Files
IPC.08	Additional info regarding workload check.txt	Info Workload Check
IPC.09	RE GMS 2017 new design file and upload in UMMS.msg	GMS Design file
IPC.10	Information.docx	Force Majeure and other decisions implementation process
IPC.11	2017 1 POC decisions.msg	POC Decisions
IPC.12	RE 2017 1 POC decisions.msg	POC Decisions
IPC.13	UPU Quality Link Measurement System report - YTD April 2017.msg	QLM System Report
IPC.14	CAP 2017 - self assessment - UPU GMS Technical Design 2011 - 2017 10 23.pdf.docx	IPC comments as self-assessment for UNEX GMS processes and work (23-24 Oct 2017)
IPC.15	End of Year Schedule.pptx	Schedule
IPC.16	UNEX GMS Module 2017 - Inbound Real mail City data collection forms (Mon 1 Aug 2016).msg	Real Mail City Data Collection
IPC.17	UNEX one-pager_final.pdf	Business Description of UNEX
IPC.18	UNEX Team Structure 2017.pptx	Organigram
IPC.19	Reading Point Activity UPU.xlsx	Reading Point Activity UPU
IPC.20	ON-TIME determination of items remaining valid after a Member Query.xls	Member Query Rules
IPC.21	UNEX Quality Control_Validation and MQ 2017_v02.pdf	Process of Quality Control
IPC.22	POT and Accuracy Calculation.docx	Annex C: Performance On-Time Calculation
IPC.23	2017 GMS data.xlsx	Datatable
IPC.24	2017 Holidays per country.xls	Date of Holidays
IPC.25	**_Calculation of the UPU report for ** in excel YTD April 2017.xls	Calculation of the UPU report for one country
IPC.26	Belgium - CTTs in ANRA CLRA GNEA and LGGA.docx	Details of this country
IPC.27	GMS Queries_20171201.xlsx	Queries
IPC.28	Reporting Presentation on October 26th in IPC.pptx	Reporting
IPC.29	RFID Data GMS ** AUDIT.xlsx	RFID Data GMS for one country
UPU.01	GMS RFID documentation.zip	RFID Documentation
UPU.02	GMS_TECHNICAL_DESIGN_en_2nd Edition_October 2011_V1.1.pdf	Note to this 2nd Edition (V1.1) of the UPU GMS Technical Design
UPU.03	GMS Quality calculation and reporting.zip	GMS Quality calculation and reporting
UPU.04	GMS items report Audit.csv	GMS items report Audit

Item ID	Title of document	Description of document
UPU.05	GMS Requirements for Panel Management and Test Letter Production 2016-2017.zip	GMS Requirements for Panel Management and Test Letter Production 2016-2017
UPU.06	Force Majeure.docx	Force Majeure.
UPU.07	GMS Annual workplan.pdf	GMS Annual workplan
UPU.08	GMS Implementation_Plan_**.pdf	GMS Implementation Plan for one country
UPU.09	GMS measurement brochure.pdf	GMS measurement brochure
UPU.10	SLA Panel Management 2013-2017.pdf	SLA Panel Management 2013-2017
UPU.11	System security and disaster management.docx	System security and disaster management.
UPU.12	UPU Quality measurement organization.pdf	UPU Quality measurement organization
UPU.13	GMS STAR User Guide.pdf	GMS STAR User Guide
UPU.14	GMS system_Auditing_27-28 September 2017.pptx	GMS system_Auditing_27-28 September 2017.
UPU.15	GMS_queries template.xlsx	GMS_queries template.
UPU.16	Understanding GMS Reports + Annex C.pdf	Understanding GMS Reports + Annex C
UPU.17	Procedure to implement city zone reporting-2.pdf	Procedure to implement city zone reporting- 2
UPU.18	Procedure to implement the GMS specific report Design- 1.pdf	Procedure to implement the GMS specific report Design-1
UPU.19	Requirements for Panel Management and Test Letter Production 2016-2017-0.pdf	Requirements for Panel Management and Test Letter Production 2016-2017-0
UPU.20	TPC Open tender procedure workflow-3.pdf	TPC Open tender procedure workflow-3
UPU.21	Data Transfer Authorization_**.pdf	Data transfer authorization for one country
UPU.22	GMS Data Transfer Approval_**.pdf	Data transfer approval for one country
UPU.23	GMS RFID NETWORK training.pdf	GMS RFID NETWORK training
UPU.24	GMS RFID reader installation guide.pdf	GMS RFID reader installation guide
UPU.25	GMS RFP for RFID 2015.pdf	GMS RFP for RFID 2015
UPU.26	GMS RFP for Transponders 2012.pdf	GMS RFP for Transponders 2012
UPU.27	GMS RFP for Transponders 2016.pdf	GMS RFP for Transponders 2016
UPU.28	GMS_RFID_Network brochure.pdf	GMS_RFID_Network brochure
UPU.29	GMS_RFID_Network monitoring documentation.pdf	GMS_RFID_Network monitoring documentation
UPU.30	GMS-Site-Certification_template.pdf	GMS-Site-Certification_template
UPU.31	GMS-Site-Efficiency test process_template.pdf	GMS-Site-Efficiency test process_template
UPU.32	GMS-Site-Survey_template_v1.0.pdf	GMS-Site-Survey_template_v1.0
UPU.33	Terminal Dues gates.docx	Terminal Dues gates.
UPU.34	UHF_Regulations.pdf	UHF_Regulations
UPU.35	Report Mieloo and Alexander.pdf	Report Mieloo and Alexander
UPU.36	QMP Control (QC) and Compliance plan.pdf	Quality Control and Compliance Plan
UPU.37	Report Mieloo and Alexander.zip	External Audit Report
EQEN.01	171113_QENSIO_Company Profile.pptx	Company Profile
EQEN.02	DispatchList_week_38_at001_UPU_G.pdf	Dispatch List
EQEN.03	Printscreen_Fehlermeldung_week_32.docx	Printscreen Error Message
EQEN.04	Checklist_**001_week_36-38.xlsx	Checklist for one country
EQEN.05	DispatchList_week_38_at001_UPU_P.pdf	Dispatch List

Item ID	Title of document	Description of document
EQEN.06	DispatchList_week_38_pl001.pdf	Dispatch List
EQEN.07	Panel Information.pptx	Panel Information
EQEN.08	20171120_QENSIO_SP_Produktion_UPUppt	Production Overview
EQEN.09	GMS_YTD_Inbound_City_Report_20171113_1607217804. pdf	Inbound City Report
EQEN.10	GMS_Monthly_Inbound_DO_Report_20171016.pdf	Inbound DO Report
EQEN.11	Region information for all cities	Region information
EQEN.12	20171121_Produktionsmengen.xlsx	Production Quantities
EQEN.13	DE_ GMS ANNUAL QUESTIONAIRE 2017_*******.xls	GMS Questionnaire for one country
EQEN.14	QS Link participants 2017.xlsx	QS Link participants 2017.
EQEN.15	20161003_GMS_Deutsche_Post_Design_2017_approved _by_Julius.xlsx	20161003_GMS_Deutsche_Post_Design_2 017_approved_by_Julius.
EQEN.16	GMS Study Matrix 2017.xlsx	GMS Study Matrix 2017.
EQEN.17	20171115_Statistical_Design_and_GMS_Technical_Desig n.pptx	Statistical Design and GMS Technical Design
EQEN.18	DE_QENSIO Datenauffälligkeit.msg	Data Validation
EQEN.19	DE_QENSIO Fragen zu Versanddaten_S+2.msg	Data Validation
EQEN.20	DE_QENSIO Datenvalidierung_TP+3.msg	Data Validation
EQEN.21	EN_QENSIO Data validation_TP+3.msg	Data Validation
EQEN.22	QENSIO Admin Hilfe-Überprüfungen.docx	Admin Validation Help
EQEN.23	Validation_Rules_QENSIO.xlsx	Validation Rules
EQEN.24	EN_QENSIO data update (LCT).msg	Messages for panellists
EQEN.25	QENSIO Wichtige Panel-Information - Abwesenheiten.msg	Messages for panellists
EQEN.26	EN_UPU 2017 Sender Information.msg	Messages for panellists
EQEN.27	EN_QENSIO Your Participation_Anmeldung am System.msg	Messages for panellists
EQEN.28	QENSIO Return of items.msg	Messages for panellists
EQEN.29	DE_QENSIO Aktualisierung Ihrer Daten.msg	Messages for panellists
EQEN.30	QENSIO Your Mail Performance.msg	Messages for panellists
EQEN.31	QENSIO Important Panel-Information - Absences.msg	Messages for panellists
EQEN.32	EN_QENSIO Your Mail Performance_Testphase_mehrere Sendungen an einem Tag.msg	Messages for panellists
EQEN.33	DE_QENSIO Ihre Teilnahme_Anmeldung am System.msg	Messages for panellists
EQEN.34	EN_QENSIO Your Participation_Test bestanden.msg	Messages for panellists
EQEN.35	TN_Screener 1.png	Registration 1. Address Data
EQEN.36	Versand nicht bestätigt.PNG	Dispatch is not confirmed
EQEN.37	TN_Screener 2.png	Registration 2. Survey Participation
EQEN.38	Willkommens_E_Mail.png	Welcome Mail
EQEN.39	Paneldvalidation_Receiver.jpg	Panel Validation Reveiver
EQEN.40	Versender_Validierung.JPG	Panel Validation Sender
EQEN.41	Anmelden am System.PNG	Logging Into The System
EQEN.42	TN_Screener 3.png	Item Format
EQEN.43	Empfänger-Validierung.PNG	Panel Validation Receiver

Item ID	Title of document	Description of document
EQEN.44	Recruitment and training process.jpg	Recruitment and Training Process
EQEN.45	Automatische Benachrichtigungen_E-Mails.docx	Automatic Messages Mails
EQEN.46	QENSIO_Admin_Hilfe_Automatische_Benachrichtigunen.d ocx	Admin Automatic Messages
EQEN.47	02-3_Participant Screened out - Live Example during presentation.JPG	Panellist Management
EQEN.48	02-1_Participant Screened out - Live Example during presentation.JPG	Panellist Management
EQEN.49	01-2_Participant Screened out - Example during presentation.JPG	Panellist Management
EQEN.50	01-1_Participant Screened out - Example during presentation.JPG	Panellist Management
EQEN.51	01-4_Participant Screened out - Example during presentation.JPG	Panellist Management
EQEN.52	01-5_Participant Screened out - Example during presentation.JPG	Panellist Management
EQEN.53	01-3_Participant Screened out - Example during presentation.JPG	Panellist Management
EQEN.54	02-2_Participant Screened out - Live Example during presentation.JPG	Panellist Management
EQEN.55	QENSIO Registration Process.docx	Registration Process
EQEN.56	QENSIO_Panel-Handbuch_DE.pdf	Panel Guide GER
EQEN.57	QENSIO_Panel-Manual_EN.pdf	Panel Guide ENG
EQEN.58	Qualitätskontrolle und Validierung_20_11_2017_SR.pptx	Quality Control and Validation Presentation
EQEN.59	Recruiting and Training Process.docx	Recruitment and Training Process
EQUO.01	Screenshot TN Qualitätskontrolle.jpg	Participant Quality Control
EQUO.02	Screenshot Fragebogen Teil 1_privat.jpg	Questionnaire
EQUO.03	Screenshot production software.jpg	Production Software
EQUO.04	Example posting list.pdf	Posting List
EQUO.05	Screenshot Fragebogen Teil 2.jpg	Questionnaire
EQUO.06	Quotas_Validation codes_GMS.pdf	Validation Codes
EQUO.07	Panel_Manual.pdf	Panel Manual
EQUO.08	Screenshot TN Kontrolle Versand.jpg	Dispatch Control
EQUO.09	Emails TN 45788_Kontakteintrag.jpg	Contact Entry
EQUO.10	Transponder Loss Report 1st half 2017.pdf	Transponder Loss Rate Report
EQUO.11	Matrix 2017 (Endversion).xlsx	Matrix Test Letters
EQUO.12	Präsentation Quotas.docx	Quotas Presentation
EQUO.13	Example Status Report UPU GMS_30082017.pdf	GMS Measurement Weekly Status Report
EQUO.14	Quotas_Audit Manual 2017.pdf	Audit Manual
EQUO.15	Screenshot TN Kontrolle Empfang.jpg	Receiving Control

A3 Field work

UPU

Date	27.09.2017 - 28.09.201
Location	UPU in Bern
Attendees	Julius Tsuwi (Quality Performance Expert)
	Constantinos Siniolakis (Director PwC)
	Orce Kitanov (Manager PwC)

Kantar TNS

Date	25.10.2017
Location	TNS production facility in West Bromwhich
Attendees	Sebastian Mann, (Associate Director)
	William Simpson (TNS)
	Bert Seghers (IPC – Head of UNEX)
	Yannick Merckx (IPC – Data Analyst UNEX)
	Francesco Gallerani (Manager PwC)
	Simitabye Sonea (Senior Associate PwC)
	Angelo Mathis (Director PwC)
	Orce Kitanov (Manager PwC)

IPC

Date	26.10.2017
Location	IPC HQ in Brussels
Attendees	Bert Seghers (Head of UNEX)
	Ingrid De Roover (UNEX Contract Manager)
	Ana Cejalvo (UNEX Reporting and Systems Manager)
	Yannick Merckx (Data Analyst UNEX)
	Francesco Gallerani (Manager PwC)
	Simitabye Sonea (Senior Associate PwC)
	Constantinos Siniolakis (Director PwC)

Qensio

Date	21.11.2017
Location	Main office and production plant in Munich
Attendees	Mitra Voigt (General Manager)
	Krasimira Dyakova (Project Manager)
	Harun Mehrabi (Data Validation/Reporting)
	Sonja Pawlowa (Production & Transponder Management)
	Svetla Rangelova (Panel Management)
	Orce Kitanov (Manager PwC)
	Simon Marti (Assistant PwC)

Quotas

Date	30.11.2017
Location	Production plant in Hoisdorf (Bip GmbH) and main office in Hamburg
Attendees	Jens Ebering (Director of Research)
	Anja Seiffert (Senior Project Manager)
	Daniel Kulms (Project Manager)
	Isabel Meier (Junior Project Manager)
	Orce Kitanov (Manager PwC)
	Simon Marti (Assistant PwC)

Follow-ups

Activities	Follow-ups of the on-site visits and of the analysed documents have been performed by e-mail and phone conferences in January and February 2018.
Attendees	Julius Tsuwi (Quality Performance Expert UPU) Bert Seghers (IPC – Head of UNEX) Mitra Voigt (General Manager Qensio) Krasimira Dyakova (Project Manager Qensio) Jens Ebering (Director of Research Quotas)