Market Monitoring Process

Ref.: SAP001 v25

1. Introduction and Warnings

This process has been voted by the Trusted Connectivity Alliance Board of Directors during the Board Meeting dated 05th October 2000; modifications have been made and approved during the Board Meeting dated 22nd May 2001 (SAP001 V2).

Other modifications have been made during a Board Meeting dated 22nd March 2002 (SAP001 V3), a Board Meeting dated 10th December 2002 (SAP001 V4), a Board meeting dated 18th November 2003 (SAP001 V5), a Board Meeting dated 15th July 2004 (SAP001 V6), a Board Meeting dated 04th November 2004 (SAP001 V7), a Board Meeting dated 1st December 2006 (SAP001 V8), a Board Meeting dated 12th November 2006 (SAP001 V9), a Board Meeting dated 30th June 2009 (SAP001 V10), a Board Meeting dated 25th March 2010 (SAP001 V11), a Board Meeting dated 30th March 2011 (SAP001 V12), a Board Meeting dated 2nd April 2012 (SAP001 V13), a Board Meeting dated 7th October 2013 (SAP001 V14), Electronic Board decision dated 21st March 2016 (SAP001 V15), a General Assembly Meeting dated 28th June 2017 (SAP001 V16), a Board Meeting dated 3rd March 2018 (SAP001 v17), a Board Meeting dated 18th September 2018 (SAP001 v18), Electronic Board decision dated 8th April 2019 (SAP001 V19.01), Electronic Board Decision dated 4th November 2019 (SAP001 v19.02), Electronic Board Decision dated 25th September, 2020 (SAP001 v20.0), Electronic Board Decision dated 18th December 2020 (SAP001 v21.0), Electronic Board decision dated 12th April 2021 (SAP001 v22.0), Electronic Board Decision dated 12th April 2022 (SAP001 v23.0), a Board Meeting dated 20th June 2023 (SAP001 v23.1), Electronic Board Decision dated 8th April 2024 (SAP001v24), Electronic Board decision dated 15th July 2024 and legal approved on 26th July 2024 (SAP001v25).

The goal of this process is to provide a means for Trusted Connectivity Alliance members to monitor with an acceptable level of accuracy the whole SIM Card market accordingly and its main segments, the whole Embedded Secure Element market including remote eUICC / eSE management services on a quarterly basis. In addition, forecasts for the Total Available Market will be assessed twice per year.

This process is designed to ensure the confidentiality of the market data provided by each Trusted Connectivity Alliance member to feed the process.

Important: The information and market data gathered by this process pertains to the Trusted Connectivity Alliance and are considered as confidential. **This information and market data should not be published by any party external to the Trusted Connectivity Alliance or any Trusted Connectivity Alliance Member without agreement of the Trusted Connectivity Alliance Board.** Official publication of the aggregated data in the name of the Trusted Connectivity Alliance must be voted by the Board.

Process owner: This process is maintained and managed by Joseph Perea, Operations Secretariat of Trusted Connectivity Alliance. Any information request or comment is to be sent to info@trustedconnectivityalliance.org (Tel.: +1 512 698 7553).

2. Objective

The objective of the Market Monitoring Process is to provide Members with an aggregated report of marketing data, referred to herein as "aggregated data" or "aggregated eSIM data §2.12 - §2.16 of the AoAs) about the broader SIM card ecosystem which also includes eSIM, eSE, and remote eUICC / eSE

management services so that stakeholders can better understand the industry, assess trends and adoption rates of current and future technologies, and put strategic emphasis in the right direction.

3. Process Description

3.1 General overview of the process

All Trusted Connectivity Alliance Members send market data which is defined as the data related to their sales on a pre-defined period to a neutral party ensuring the confidentiality of those figures and aggregating each members' inputs to produce a final report of aggregated data.

Market Monitoring Process (MMP) participants (e.g. Marketing Directors & Marketing Analysts) shall NOT include any Board Member, including the Chairman, in the various email exchanges during the execution of the process.

This neutral party, agreed by all Members, sends back the aggregated data to the Members "for their eyes only", including the number of respondent companies.

It is important to note that those data are seen by the Trusted Connectivity Alliance Members as being highly confidential and that guaranteeing their confidentiality is a crucial point. It is then important that the neutral party should be trusted by all the Trusted Connectivity Alliance Members.

A specific procedure will ensure the confidentiality of the Members' inputs (see below).

The market data to be monitored will consist in sales (in volume of SIM Card billed) by area and product segment, the Embedded Secure Element (eSE) global figure as well as eSIM market data on a given period of time. The typology is further defined in this document. This process will be renewed on a quarterly basis.

The neutral party is Squaris Consultants Inc. (Squaris), official trusted partner of the Trusted Connectivity Alliance.

3.2 Participation to the process

Each participant must complete all reporting cells in the questionnaire even if there have been no shipments in the relevant quarter and/or the product is not listed in the member's catalog. Every member of the Trusted Connectivity Alliance shall actively participate in this process, otherwise, non-participating members will trigger a procedure which will require Squaris#1 to contact the non-participating member by phone to ensure they submit their market data. New members will participate when joining the Trusted Connectivity Alliance as mentioned in the Application Form. Active participation is defined as reporting at least one qualifying figure to the process, each quarter. A qualifying figure is any number greater than "0" (zero).

For a member to receive the aggregated data, they should report volumes greater than "0". It is understood that some members may not have shipments to report for a given product category for one or more quarters, and therefore may be required to report "0". In this case, a member may report "0" without any other qualifying figures and still receive the aggregated data. However, if a member does not report any qualifying figures for more than four (4) consecutive quarters and only reports "0's", they will be considered as having not actively participated in the process and will not receive the aggregated data for two (2) full quarters after the 4th consecutive quarter of

reporting no qualifying figures. NA" (or Not Applicable) can be entered for any given cell if a member does not have this product in its catalog but, "NA" does not count as a qualifying figure.

Every Member that actively participates in the process will receive, in return, the aggregated data that pertains to them. For example, Full Members that actively participate will receive the full report of aggregated data; eSIM vendors that actively participate will receive the aggregated eSIM data). Members who do not actively participate at all in a quarterly process (e.g. a Member who does not provide at least one qualifying figure to any cell in the process), will not receive the aggregated data for two (2) full quarters after the process in question has taken place.

Furthermore, because the process includes sensitive market data, TCA is very careful to ensure that each iteration of the process is kept confidential and blind to all members and those involved in the aggregation process—this includes Squaris#1 and Squaris#2. To maintain this level of confidentiality and security around the process, all new Members are carefully onboarded into the process so that aggregated data cannot be reverse engineered to identify the new Member or any other given Member. *Each Member is unique and thus their onboarding into the process is handled by the Board on a case-by-case basis to ensure confidential and secure integration.*

3.3 Schedule

The market data covering quarter N should be sent as inputs to Squaris in the third (3rd) complete week of the first Month of the quarter N+1, from Monday to Thursday the latest.

Members not providing market data by EOD (end of day) Thursday will be potentially contacted by Squaris#1 on Friday.

Squaris will send the feedback, aggregating all the received market data, 4 working days after this date.

3.4 Segmentation

For the purpose of this process, a SIM Card defines any Smart Card used in a wireless device for network authentication and access purposes, regardless of the wireless technology supporting the mobile service (GSM, PDC, CDMA, etc…) as well as Embedded Secure Element (eSE), defines a second secure chip embedded in a mobile device (in addition to the traditional SIM Card) used to secure mobile services and applications but without SIM functionality.

Definitions: Seven product segments, five main zones, fourteen sub-zones will be monitored in a matrix (all product segments will also be tracked per geographic Area).

The corresponding geographical area should reflect the location where the final product is used in the field: the geographical area should not be the area where the product is shipped to a customer, or the location of the billed entity, or the location where the product is assembled by an OEM / device maker.

Example: Company A (TCA Member) ships a product to an OEM / device maker in Region B and the product is billed to a legal entity in Region C, then the OEM / device maker ships the final product to an MNO located in Region D. The geographical area to be declared is Region D for such volumes.

3.4.1 Geographic Areas:

Zone Americas:
North America: Canada, United States

South America wo Brazil: Antigua & Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bermuda, Bolivia, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Rep., Ecuador, El Salvador, French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Neth. Antilles, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Kitts and Nevis, St. Lucia, St. Vincent, Suriname, Trinidad & Tobago, Uruguay, Venezuela, Virgin Islands (US)
Brazil: Brazil

Zone Asia:
Greater China: China Mainland, Hong Kong, Macau, Taiwan
India: India
Indonesia: Indonesia
Pacific Asia: Australia, Bangladesh, Bhutan, Brunei, Cambodia, D.P.R. Korea, Fiji, French Polynesia, Guam, Kiribati, Lao P.D.R., Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nepal, New Caledonia, New Zealand, Northern Marianas, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Tonga, Vanuatu, Viet Nam
Japan / Korea: Japan, Korea

Zone Europe:
Western Europe: Andorra, Austria, Belgium, Cyprus, Denmark, Faroe Islands, Finland, France, Germany, Greece, Greenland, Guernsey, Iceland, Ireland, Italy, Jersey, Liechtenstein, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom
Eastern Europe: Albania, Bosnia, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia Montenegro, Poland, Romania, Serbia, Slovak Republic, Slovenia

Zone CIS:
CIS Republics: Armenia, Azerbaijan, Belarus Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Uzbekistan
Russia/ Ukraine: Russia, Ukraine

Zone MEA:
Africa: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Rep., Chad, Comoros, Congo, Côte d'Ivoire, Dem. Rep of Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea Republic, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Morocco, Mozambique, Namibia, Niger, Nigeria, Réunion, Rwanda, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe
Middle East: Afghanistan, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, West Bank and Gaza (Palestine), Yemen

3.4.2 Product Segments:

Important: All products segments will also be tracked per geographic Area!
Totals must be the same in the first 5 segment tables.

Segment 1: Memory size segment
– 32K & Less
– 64K (>32K ≤64K; 56K incl.)
– 128K (>64K ≤128K)

- 256K to 1Mb
- > 1Mb & more

The 32K segment will also reference lower capacity SIM Cards (e.g., 2K, 3K, 4K, 8K …). The "1Mb & more" segment will also reference SIM Cards with memory capacity strictly higher than 1Mb.
Memory capacity is an addition of the EEPROM and Flash memory size of the SIM Card. ROM memory is not taken into account in this process.

Segment 2: Interoperable Java Card TM SIMs
- SIM Java Card TM 2.1.1 and more
- Proprietary cards: native OS or not interoperable Java Cards TM.

A SIM "Java 2.1.1 and more" must comply with any release greater or equal to 2.1.1.

Segment 3: 5G recommended SIM
Important: There is no total for this segment because if a card uses two features (e.g.: sold as NFC & PK), it should be counted as 1 in NFC and 1 in PK.

- SIM cards compliant to 3GPP Rel-15 or higher that shall implement at least the following features defined in 3GPP TS 31.102
  - Service n°125 "SUCI calculation by the USIM" set "available" in the EF_{UST}
  - Support of GET IDENTITY command
- NFC card – (U)SIM card with an embedded NFC technology & sold as NFC
- PK card – (U)SIM card embedding a hardware cryptographic "co-processor" or "accelerator" architecture and sold as Public Key (PK) card for use cases requiring high level of security.
- A 5G SIM that supports the IMSI privacy functionality and using hardware cryptographic PK processor should also be declared as PK (formerly RSA).
- A 5G SIM that supports the IMSI privacy functionality but not using hardware cryptographic PK processor should **not** be declared as PK (formerly RSA).

Segment 4: "Form Factors"
- 2FF – Plug-in UICC or 2FF. 2FF Card is card with a format of 15mm x 25mm
- 3FF – Micro SIM, Mini UICC, 3FF, 2FF/3FF. 3FF Cards are card with a format of 12mm x 15mm or card with a double-cut of 12mm x 15mm and 15mm x 25mm
- 4FF – Nano SIM Cards with a format of 12.3mm x 8.8mm x 0.7mm, 4FF/3FF (excluded in 3FF), 4FF/2FF
- Triple SIM – 4FF/3FF/2FF

Important: to avoid counting certain SIM Cards twice, the Trusted Connectivity Alliance members will not include in their market data the SIM Cards or SIM modules they have sold to other Trusted Connectivity Alliance members or to affiliates controlled by other Trusted Connectivity Alliance members. To summarize:
- Do NOT count SIM Cards or SIM modules sold to Trusted Connectivity Alliance members (or to affiliates controlled by them)
- Do count SIM Cards or SIM modules sold to non-Trusted Connectivity Alliance members
- Do count SIM Cards or SIM modules you have bought from a Trusted Connectivity Alliance member

Segment 5: Eco-Friendly & Half SIM
Important: There is no total for this segment because if a card uses two features (e.g.: sold as a Removable Half SIM and Eco-Friendly Raw Material), it should be counted as 1 in the Removal Half SIM category and 1 in the Eco-Friendly Raw Material category.

- Removable Half SIM – a SIM plug (2FF, 3FF, 4FF and combined formats) which overall carrier format is half the size in length of an ISO 7810 ID1 standard format (+/- 42,5*54mm).
- Eco-Friendly Raw Material – a SIM plug (2FF, 3FF, 4FF and combined formats) and its respective carrier which support is made of recycled, second-use (post-industrial or post-consumer) material, or biodegradable raw materials.

Segment 6: Additional Features
Important: All additional features will also be tracked per geographic Area!

– M2M soldered cards w/o eSIM – (U)SIM card with solderable form factors sold for Machine-to-Machine purposes, meaning any (U)SIM not used in a consumer handset, PDAs, Tablet PCs, Data cards. This field does NOT consider GSMA eSIM M2M, as this volume **MUST** be reported **ONLY ONCE** in the eSIM part of the spreadsheet.
– M2M Global w/o eSIM - (U)SIM card in all form factors (including soldered cards) sold for Machine-to-Machine purposes, meaning any (U)SIM not used in a consumer handset, PDAs, Tablet PCs, Data cards. This field does NOT consider GSMA eSIM M2M, as this volume MUST be reported ONLY ONCE in the eSIM part of the spreadsheet.

Segment 7: Embedded Secure Element (eSE)
Each member will need to report the number of eSE hardware and software sold worldwide (please note the split between hardware and software in the questionnaire). Note that eSE OS licenses are considered software and that all form factors should be declared.

Important: One single number word-wide for eSE with no impact on other columns and totals
– A second secure chip embedded in a mobile device (in addition to the traditional UICC) used to secure mobile services and applications but without SIM functionality.

It means that a Combined eSIM and eSE product must be declared in segment 7 "Embedded SIM" only (because it supports SIM telecom functionality) and not as well in eSE of segment 6.

Important: to avoid counting two times certain eSE, the Trusted Connectivity Alliance members will not include in their market data the eSE hardware or OS license they have sold to other Trusted Connectivity Alliance members or to affiliates controlled by other Trusted Connectivity Alliance members.

Segment 8: Embedded SIM (eSIM)
a) eSIM volume
   i. First, the declaration of discrete eSIM hardware volume (removable or solderable form factors) shall be done only in the eSIM table, meaning that eSIM volumes shall NOT be counted in other tables (techno, localization, memory…).
   ii. No difference about memory size, form factor, type: M2M / Consumer Devices, no location information (geographical zone), no information about the technology & version.
   iii. Define the eSIM as being an embedded SIM supporting dynamic loading & activation of MNO profiles as defined by GSMA.
   iv. Do only count discrete eSIM hardware volumes sold to non-Trusted Connectivity Alliance members which will end up on the market as eSIMs.
   v. The reported volume is for a quarter and is not cumulative since the beginning of the year.

      vi.   Only eSIM hardware volumes are counted, i.e., OS licenses are not counted.

b) Number of Subscription Management (SM) platforms under operation for M2M, IoT and consumer

      i.   No difference about the location, technology, and version.

      ii.   No need to mention the number and type of operations.

      iii.   Define the Subscription Management platform as a remote entity (could be in the cloud or on-site) able to load, install and activate profiles in deployed eSIMs.

      iv.   Make no distinction between hosted or non-hosted platforms.

      v.   A platform is only serving one customer (e.g., if the platform is serving 20 different customers, the figure to report is 20)

      vi.   In case of VLA (Very Large Account), each country of this VLA where the platforms are under operation is counted, and NOT only one platform for all the countries.

      vii.   In case a SM platform is providing services for more than one domain (M2M, IoT & Consumer Devices) to the same customer, then you will need to report number of domains supported (2 or 3), one in each related segment (M2M, IoT or Consumer).

      viii.   In case of SM platforms, this will be provided by "units" and not in million units like all the other fields in this template.

      ix.   The field which is reported shall be a cumulated value (e.g., in Q2, Q1 & Q2 are to be reported). To be more specific, you must include a running total or cumulative total of all live platforms in operation (e.g., you never stop counting since the platform is "under operation"; DO NOT reset volumes each year but continue the total from quarter to quarter, year to year).

      x.   Only active platforms shall be declared. Be sure to only include platforms that are under operation, commercially live and fully deployed. I.e., do not count geo-redundant, staging, pre-production, test, proof-of-concept, trial or any other non-commercial platforms.

c) Number of eSIM transactions

      i.   Do only count successful eSIM profile download and installation procedure as defined by GSMA specification SGP.02 and SGP.22 and SGP.32, and respectively performed by SM-DP for M2M or SM-DP+ for Consumer or SM-DP+ (Direct and Indirect Download) for IoT.
For the sake of clarity:
- Other profile & platform management functions (eg. as enable, disable, delete…) are not considered as eSIM profile download and installation.
- In-factory profile provisioning is not considered an eSIM profile download and installation.
- eUICC provisioning in SM-SR is not considered an eSIM profile download and installation.
- Profile provisioning in SM-DP+ or SM-DP is not considered an eSIM profile download and installation.

      ii.   The reported volume is for a quarter and is not cumulative since the beginning of the year.

      iii.   Provide the worldwide figure volume as well as the split by region (America, Asia, Europe, CIS and MEA). Consider the regional information of the targeted eSIM on the field and NOT on the SM-DP+ or SM-DP platforms performing the activation.

d) Additional eSIM market data requested:

      i.   Volume of eSIM sold in solderable form factor

      ii.   Volume of eSIM sold in removable form factor

      iii.   Volume of M2M eSIM as defined in SGP.02

      iv.   Volume of IoT eSIM as defined in SGP.32

      v.   The reported volumes are for a quarter and are not cumulative since the beginning of the year.

e) eSIM OS license:

i. Declaration of GSMA eSIM Software sold by the Trusted Connectivity Alliance member during the period of this exercise (3 months), taking into account M2M and Consumer.

Note: a combined eSIM and eSE product must be declared in segment 7 "Embedded SIM" only (because it supports SIM telecom functionality) and not as well in eSE of segment 6.

Segment 9: Full Year TAM

Each member shall report the Full Year (FY) total available market (TAM) for each Full Year reporting (FY 20XX-1). Specifically, members shall report their estimated FY TAM for UICC worldwide, eSIM worldwide, and 5G worldwide once each year during the FY reporting period. The purpose of this segment is to streamline the MMP press release process. Each year, after the FY reporting, TCA's PR firm meets with the Board and with MMP analysts to discuss trends and other key highlights from the final FY report to draft a press release and other marketing material for industry distribution. By collecting the FY TAM from members, it will allow the Board to conduct a more accurate and efficient process when developing the press release for industry communication.

Note: The Full Year TAM (FY TAM 20XX) only needs to be completed ONCE per year, together with the FY 20XX reporting. Additionally, this segment may be optional if a Member is unable to provide such market data. For example, if Members do not ship 5G SIMs or physical SIMs, they may not be able to provide a TAM.

3.5 Forecasting

The intention of the Forecasting segment is to provide an outlook of the total available market (TAM) for the current year. Forecasting market data will be collected twice a year: together with the full year report (FY 20XX) of the previous year and the Q3 reporting of the current year (Q3 20XX). We encourage only those members who have visibility of the FY TAM to participate in the Forecasting Segment.

The following product segments will be monitored within the forecasting process:
- UICC total available market (TAM) worldwide for the current year (Consumer and M2M), whereas:
  - o "Consumer UICC" is defined as covering UICC total worldwide (all regions, 2FF/3FF/4FF and triple-SIM as well as all memory sizes) it does neither include M2M UICCs nor 5G SIM
  - o "M2M UICC" is defined as per the description in Segment 5. It only includes M2M soldered cards w/o eSIM
- eSIM hardware worldwide for the current year (Consumer and M2M) whereas:
  - o "eSIM hardware consumer" reflects forecasted eSIM volume as defined in Segment 7.a., however, excluding "eSIM volume M2M (SGP.02)
  - o eSIM hardware M2M is as defined in Segment 7.d.iii. eSIM volume M2M (SGP.02)
- 5G SIM: i.e. Recommended 5G SIM as defined in Segment 3. Total worldwide available market (TAM) for the current year

The forecast will only be estimated worldwide, no split into the regions will be done. The member will report its best guess estimation of the total available market worldwide (TAM), in units (not revenue). To be explicit, the forecast is *not* related to any expected volume that the particular member is expecting to ship for the given time frame.

The forecast / estimation of TAM will be reported by the members using the template in Annex 2 - Form. Squaris will take the estimated TAM value for each forecast product segment of each

member and calculate an overall mean value per forecast product segment. In addition, a standard deviation is provided in absolute figures and as a percentage. The average values and the standard deviation (value and percentage) are reported back as part of the MMP only to members participating in the forecasting process.

NOTE: Participation in the Forecasting Segment is optional. Members should only contribute if they have good visibility of the forecasting segment. This will help us ensure a clean report and provide the best results overall.

3.6 Rule of 3

The "Rule of 3" means that at least 3 responses are needed to be considered in the aggregation process. If fewer than 3 participants provide market data for a given cell in any of the segments, that cell will not be aggregated and will not be included in the final report. Each member shall populate cells with only 1 kind of qualifying figure:

- Shipment volumes greater than "0" (zero)

Note: If a member reports "0" (zero) for any cell, it will not count towards the "Rule of 3." Furthermore, "NA" does not count towards the "Rule of 3" (see §3.2).

For internal purposes, Squaris will do the following when applying the rule of 3:
- When a cell cannot be aggregated because it does not meet the rule of 3 (e.g. there are not enough member contributions for a given cell), Squaris shall consider how to best merge that cell with other cells while maintaining the rule of 3 across the merged cells. When combining cells, the guiding principles should be followed: 1) when merging cells in a given column or row, there must be a total of at least 3 figures to combine, 2) for a logical flow, it is recommended (not required) that merged cells be adjacent to each other, and 3) merging should be done vertically or horizontally to merge product with product categories or geography with geography categories, to avoid merging vertical with horizontal within a given segment.
- When merging for specific segments, Squaris shall follow the guidance below:
  - For segments 1, 2 & 4, total per geographical zone, sub-zone and country shall be prioritized over values per category when consolidating data—this is to be assessed on a case-by-case basis to ensure that merging will appropriately decrease risk of reverse engineering (e.g. if one company reports the only figure for a given category, Squaris should use judgment when merging with other cells to decrease transparency);
  - For eUICC transactions, total per category shall be prioritized over total per geographical zone, sub-zone and country when consolidating data;
  - For segment 3, eco-friendly and M2M, it is important to give real sub-totals by Geographical Zones and total WW, including values not detailed because of rule 3.

3.7 Significant market share

In case one member has a market share of 75 percent or more for any particular local market / cell within the form given in Annex 2, this cell will not be reported back by Squaris. No indication will be provided as to why the cell is left blank.

3.8 Format of Members' Input and Feed-Back

- Sales in Million units of SIM Cards billed during a given period must be clearly indicated on a standard questionnaire (Standard format 0,000).
- Squaris#1 will acknowledge reception of the market data to each sender.
- Aggregated data (market data aggregated by Squaris#2 from Members' inputs) will be sent by Squaris#2 to Members by email and will include the number of respondent companies (e.g., "…the aggregated data are attached, including figures from all 9 member companies).
- Standard questionnaires are provided as annexes to this process document, which are to be used by Members.

3.9 Confidentiality

Squaris, official trusted partner of the Trusted Connectivity Alliance, is the neutral party chosen by the Trusted Connectivity Alliance Members to ensure the confidentiality and anonymity of this process.

To ensure a high level of confidentiality and anonymity, this process requires two (2) Squaris employees—Squaris#1 and Squaris#2—and the General Secretary. This is obviously not full-time involvement.

Market Monitoring Process participants (e.g., Marketing Directors & Marketing Analysts) shall NOT include any Board Member, including the Chairman, in the various email exchanges during the execution of the process.

The aggregation process:
- Prior to each Market Monitoring Process, each Member will receive a new Member ID# from Squaris. This ID# shall be used as the file name for their completed reporting template or "questionnaire" (e.g., the questionnaire shall be named "company12345.xls").
- Members will also receive two separate emails from the General Secretary prior to each Market Monitoring Process. The first email will include a clean (no metadata) version of the questionnaire. The second email will include a password.
- After each Member completes the questionnaire, they shall ensure there is no metadata that identifies their organization (to do this, open the Excel file, click "File" tab, select "Info" then click the "Check for Issues" icon. Check each box to include all types of metadata in the inspection and click "Inspect". Review the results of the inspection in the Document inspector dialog box).
- Each Member shall zip AND encrypt their completed questionnaire using the password provided by the General Secretary. It is recommended that Members use a zip and encryption tool such as 7-Zip. Instructions are included in Annex 3.
- **Each Member will send the zipped and encrypted file to Squaris#1 via email. DO NOT send questionnaires to Squaris#2**.
- Squaris#1 will then provide each encrypted file to Squaris#2.
- Squaris#2 will unencrypt each file using a key provided by the General Secretary (the key contains the passwords matched with the Member ID#s). For more information about this administrative process, please see Annex 4).
- Squaris#2 will then aggregate the market data and send to all Members (see 2.5).

Squaris#1 will:
- Be the official liaison person with the Trusted Connectivity Alliance Members for this process.
- Assign a unique Member Identity Number (ID#) to each Trusted Connectivity Alliance Member for each process (meaning that a given ID# is valid for one process only) and shares the Member ID#s and the corresponding company names with the General Secretary. Only

Squaris#1 and the General Secretary will be able to match the ID# and the corresponding Members.

- Communicate to Squaris#2 the list of Member ID#s.
- Communicate to each Member its assigned ID#.

As previously noted, each Member shall include the ID# in the file name of the questionnaire sent to Squaris#1. The Member shall NOT include any company identifiable information on the questionnaire itself, ONLY their ID#.

Squaris#2 will:

- Ensure that all Member questionnaires have been received (i.e., the questionnaires covering all the ID#s),
- Abide by the pre-defined process schedule,
- Flag market data integrity by checking figures in the questionnaires (i.e., checking if the total indicated in a given column or line corresponds to the sum of each figure in the line or the column),
- Aggregate the market data received in a global feed-back form (see Annexes for examples) by adding all the figures sent by the Members in a global figure,
- Send the final aggregated data by e-mail to all authorized people (see below).
- Communicate the number of respondent companies.

If any problem occurs on any of the points listed above, Squaris#2 will notify the problem and the associated company ID# to Squaris#1. Squaris#1 will then communicate to ALL members by email any problems that occur (e.g., "Company #XYZ did not indicate the correct Quarter at the top of the questionnaire"). If this does not resolve the problem, Squaris#1 will then communicate directly with the Member contact person by phone, without divulging or requesting any confidential market data, to ensure the Member submits the correct information via email to Squaris#1.

Squaris#2 shall keep both the questionnaires and the aggregated data confidential. Only Squaris#2 can have access to the passwords and questionnaires to be able to unencrypt the questionnaires (without being able to match the ID# and the Members).

One month after sending the final aggregated data to Members, the questionnaires shall be destroyed by Squaris#2.

Members shall notify the General Secretary, Squaris#1 and Squaris#2 of any changes to their contact details (name, phone and email) or of any changes of position that would affect their involvement in this process.

3.10 Authorized People

Squaris shall not check for any company identifiable information on the questionnaires received from Members, except for company ID#s.

Squaris shall send the aggregated data to the following people:

- Trusted Connectivity Alliance Members' Marketing Directors at the time of issuance of the aggregated data,
- Trusted Connectivity Alliance Members' Market Analysts that have been registered (1 per company). Market Analysts must be registered with Squaris and the General Secretary by their company Marketing Directors. Only Marketing Directors can modify the registered Market Analysts.

3.11 Process Set-up

Process V20.0

As of 27 July 2020, the Trusted Connectivity Alliance Board decided that every member of Trusted Connectivity Alliance will declare shipments according to the newly revised scheme. Those changes are reflected in the version of the process Ref. SAP001 V20.0 and in the questionnaire given in Annex 2.

3.12 Process Modifications

This process could be modified by an amendment subscribed by the Board and duly voted by the Trusted Connectivity Alliance Board during a Board Meeting session.

This amendment will necessitate issuing a new process document with a new reference mentioning the previous one that has been replaced.

ANNEX 1: Work required

New process follow-up (from SAP001 V6)

- New Members will be informed of the process when joining Trusted Connectivity Alliance
- Contact list: to be sent to Squaris
- Dispatch of contact details at Squaris (Squaris#1 and Squaris#2)
- Process is not correctly followed, the Board will be informed to make any decision they want (decision to stop, correct current behavior, change process or exclusion of the Member)
- Amendment proposal: Formal debate to modify the process

ANNEX 2: MMP Form

Use Excel sheet: TCA_Market_Monitoring_Process_Data-Template_v24_FINAL

TCA TRUSTED CONNECTIVITY ALLIANCE

Date: *[03/05/2023]* Total Pages: 1

TO	TCA MEMBERS - CONFIDENTIAL	Email	e.kavak@squaris.com / mc.bonnamour@squaris.com
COMPANY	Squaris		
SUBJECT	TCA Market Monitoring Process		*CONFIDENTIAL*
FROM			

Questionnaire - Period covered: Q1-2024

All definitions and rules included in the Full process document.

	32k & Less	64k	128k	256k to 1Mb	>1Mb & More	Total		Java 2,1 & more	Native	Total		5G SIM	NFC	PK
North America (1)						0.000				0.000				
South America w/o Brazil (2)						0.000				0.000				
Brazil (3)						0.000				0.000				
Americas (1+2+3)						**0.000**				**0.000**				
China (4)						0.000				0.000				
India (5)						0.000				0.000				
Indonesia (6)						0.000				0.000				
Pacific Asia (7)						0.000				0.000				
Japan / Korea (8)						0.000				0.000				
Asia (4+5+6+7+8)						**0.000**				**0.000**				
Western Europe (9)						0.000				0.000				
Eastern Europe (10)						0.000				0.000				
Europe (9+10)						**0.000**				**0.000**				
CIS Republics (11)						0.000				0.000				
Russia / Ukraine (12)						0.000				0.000				
CIS (11+12)						**0.000**				**0.000**				
Africa (13)						0.000				0.000				
Middle East (14)						0.000				0.000				
MEA (13+14)						**0.000**				**0.000**				
UICC Worldwide	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**		**0.000**	**0.000**	**0.000**		**0.000**	**0.000**	**0.000**

	2FF	3FF	4FF	Triple SIM	Solderable	Total		ecoFriendly raw material	Half SIM format		M2M Soldered w/o eSIM	M2M Global w/o eSIM
North America (1)						0.000						
South America w/o Brazil (2)						0.000						
Brazil (3)						0.000						
Americas (1+2+3)						**0.000**						
China (4)						0.000						
India (5)						0.000						
Indonesia (6)						0.000						
Pacific Asia (7)						0.000						
Japan / Korea (8)						0.000						
Asia (4+5+6+7+8)						**0.000**						
Western Europe (9)						0.000						
Eastern Europe (10)						0.000						
Europe (9+10)						**0.000**						
CIS Republics (11)						0.000						
Russia / Ukraine (12)						0.000						
CIS (11+12)						**0.000**						
Africa (13)						0.000						
Middle East (14)						0.000						
MEA (13+14)						**0.000**						
UICC Worldwide	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**		**0.000**	**0.000**		**0.000**	**0.000**

		Hardware	Software
eSE Worldwide			

eUICC transactions	Consumer	M2M	IoT SGP.32	Total
North America (1)				0.000
South America w/o Brazil (2)				0.000
Brazil (3)				0.000
Americas (1+2+3)				**0.000**
China (4)				0.000
India (5)				0.000
Indonesia (6)				0.000
Pacific Asia (7)				0.000
Japan / Korea (8)				0.000
Asia (4+5+6+7+8)				**0.000**
Western Europe (9)				0.000
Eastern Europe (10)				0.000
Europe (9+10)				**0.000**
CIS Republics (11)				0.000
Russia / Ukraine (12)				0.000
CIS (11+12)				**0.000**
Africa (13)				0.000
Middle East (14)				0.000
MEA (13+14)				**0.000**
eUICC Worldwide	**0.000**	**0.000**	**0.000**	**0.000**

eSIM Hardware & OS

	eSIM	eSIM Volume Solderable	eSIM Volume Removable FF	eSIM Volume M2M (SGP02)	eSIM SGP32	*eSIM OS License
eSIM/SM Worldwide						

**SM Platforms

Consumer	M2M	IoT SGP32

Note: only SM platforms used to provision profiles in eSIM SGP32, eIM platforms are not considered SM platforms

ANNEX 3: Instructions for using 7-zip for zipping (compressing) and encrypting questionnaires

7-zip is a free file archiving tool that allows you to zip (compress or archive) files using AES-256 encryption method. You may download 7-zip using this link. To zip and encrypt your questionnaire, please follow the below instructions (you may also find these instructions online using this link).
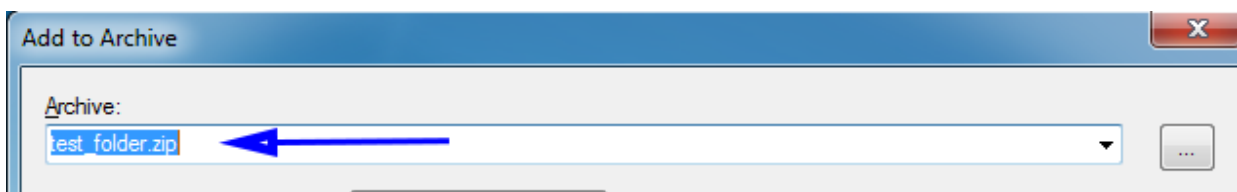
Once the software is installed, please follow these steps to encrypt a file or folder.
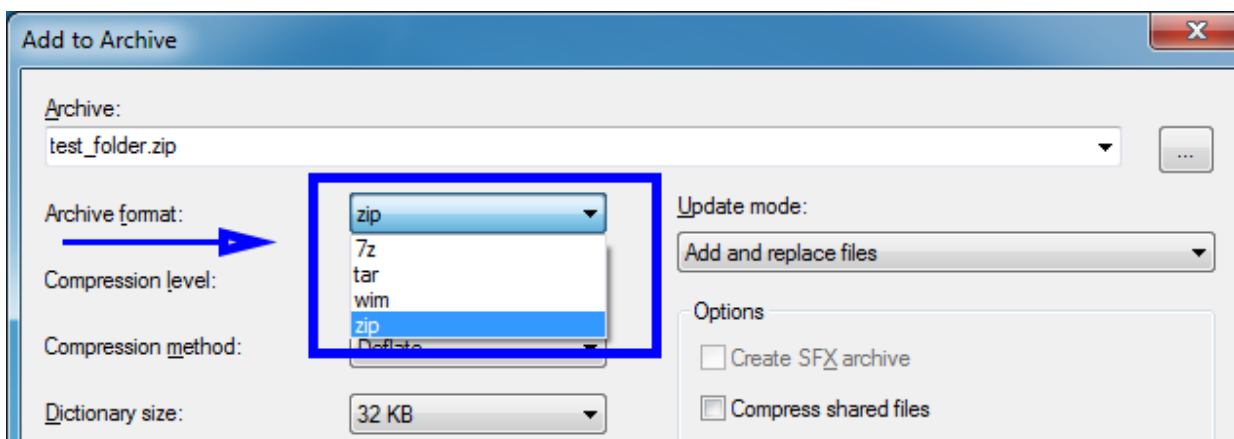
Step 1: Right click on the file / folder to be encrypted.

Step 2: Select "7-Zip" then "Add to archive…"
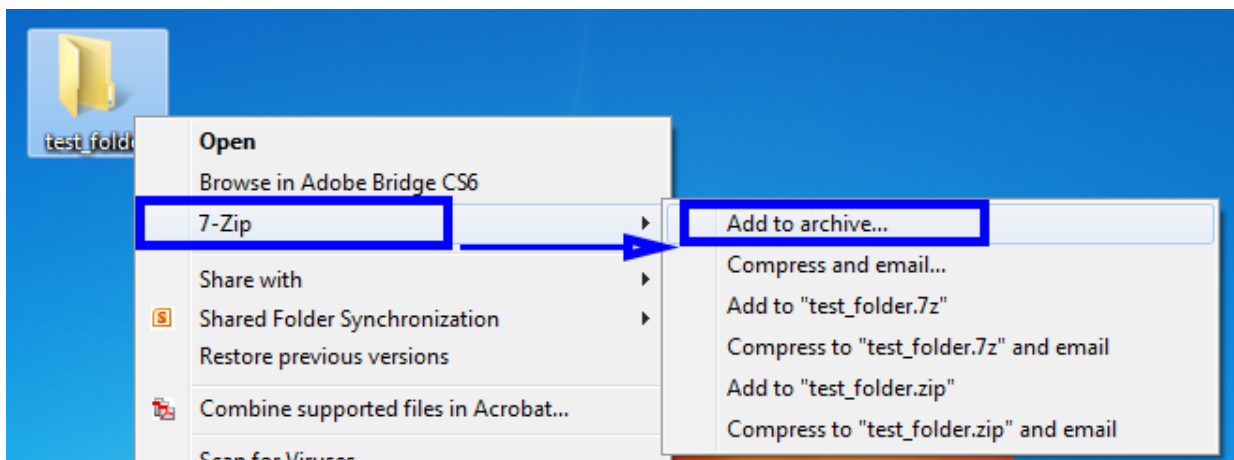
Step 3: In the Add to Archive window change the name of the archive you wish to create.

Step 4: Change the Archive format to "Zip".

Step 5: Change the Encryption Method to "AES-256".
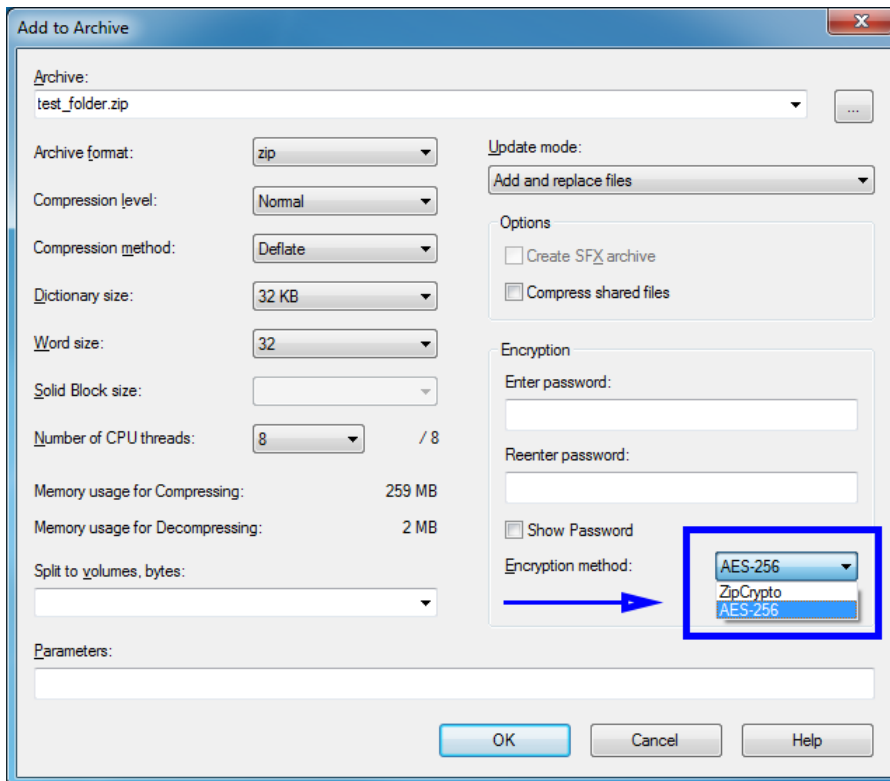
Step 6: Enter a Password. Use a strong password with at least 8 characters containing upper and lowercase letters, and a minimum of one number.

Step 7: Select "Ok" to create the encrypted archive file. The new archive file will be located in the same folder as the original.

ANNEX 4: Administrative Process Flow for ensuring anonymity and confidentiality for the Market Monitoring Process
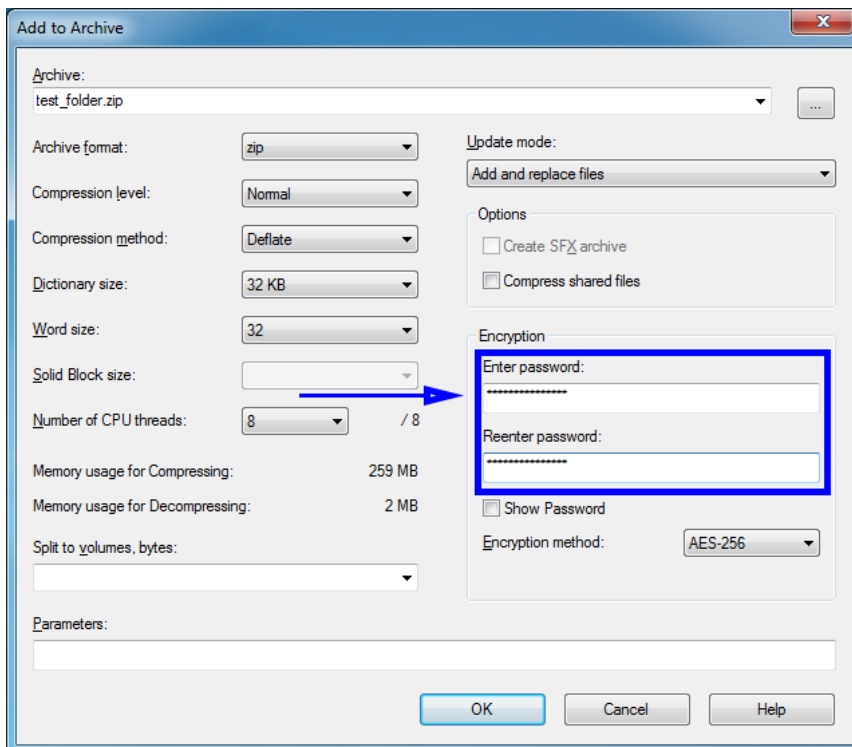
Below is the process flow to ensure a high level of anonymity and confidentiality through email for the Market Monitoring Process.

General Secretary   **Squaris#1**   **Squaris#2**

Assigns member #s to each member and and shares this information (member and matched member #) with Alliances Management

Generates individual passwords for each member

Shares only the member #s with Squaris#2

Sends a clean (no metadata) encrypted Excel template to each member individually and explains how to keep the file clean of metadata

Sends password to each individual member, in a separate email or text

Sends individual passwords matched with their appropriate member # to Squaris#2

Collects encrypted Excel files from members and, if needed, renames them using their appropriate member # before sending the files to Squaris#2

Opens encrypted Excel files using the passwords provided by Alliances Management

If problems with figures reported, she notifies Squaris#1, as in the past

If problems accessing the encrypted files, she notifies Alliances Management