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| TSAG |
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| **TD** |
| **Source:** | TSB |
| **Title:** | Updated analysis from TSB investigations on the feasibility of automated generation of statistics |
| **Purpose:** | Information and discussion |
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| **Keywords:** | Metrics; statistics; feasibility analysis; |
| **Abstract:** | This TD provides an updated analysis from TSB investigations on the feasibility of automated generation of statistics. |

 **Action**: TSAG RG-StdsStrat is invited to take note of the findings.

1. **Introduction**

TSB has continued the investigations on the feasibility of automating the metrics generation for their implementation by the Bureau. TSB remain committed to be working on streamlining the reporting statistics.

This TD utilizes the compiled metrics in RG-StdsStrat (ref. TSAG-C084, TSAG-C088, RevCom statistics, and other proposed metrics in TSAG-TD461-R1, RG-StdsStrat TDs 36, 39, 44, and findings from the 1 November 2019 and 6 December 2019 TSAG RG-StdsStrat e-meetings, C019, C020).

The metrics are

* clustered per type,
* have a metric ID,
* a description,
* a priority (as was proposed),
* and reveal comments, considerations of the feasibility of implementation, and if metrics has already been implemented.
1. **General comments**
2. The Table below features a column “Data Source” which identifies as source of input data the available tools such as CRM, DMS, RGM Platform, work programme.
3. The rightmost column provides the initial assessment of the feasibility per metric.
4. We have applied the following colour code scheme to differentiate the metrics in the table below:
* Green highlighting: Normal, deemed feasible to implement.
* Red highlighting: Deemed infeasible to implement at present.
* Pink highlighting: Unclear requirement, requires further clarification.
* Dark green highlighting: Requires further investigation; all resolved meanwhile.
* Yellow highlighting: Sensitive issue; requires further investigations; all resolved meanwhile.
1. Metrics MA1, ML2, ML3: TSB is very well aware of the sensitivity of privacy information of delegates (names, affiliation, e-mail addresses etc), and such information can only be collected, processed and disclosed if it is justified in light of the well-established data principle of data minimization, which requires the processing of only those data which are adequate, relevant, and limited to what is necessary in relation to the purposes for which they are processed. While ITU is not subject to regional laws on data protection (e.g. EU GDPR), it does adhere to the Personal Data Protection and Privacy Principles adopted by the UN High-Level Committee on Management (HLCM) on 11 October 2018.
2. Metrics ML2, ML3: ITU is considered as a global, neutral and trustworthy platform among its membership, and therefore, ITU has to take efforts and responsibilities to protect the delegates from being challenged why they did not attend meetings; or how often they attended. Thus, even if the relevant data protection requirements were to be observed, ML2 and ML3 are assessed as a very sensitive issue and are infeasible to implement.
Likewise sensitivities might be around metrics MM1-10, MM11-20, and MM31-40.
3. TSB is not entirely clear about in which form (numerical/textual data, charts etc) the metrics, statistics should be provided?

For example, many of the RevCom statistics (statistics on meetings, SG results) are compiled for the time period since the previous TSAG meeting; while other RevCom statistics (downloads) are over a longer reporting period.

We observe that many metrics have several parameters such as SG X, Question Q, NWI I etc, and we seek clarification how those statistics should be presented?

Furthermore, it would be helpful to understand what the intended (strategic) purpose of each of the metrics are?
For example, we may assume that one purpose of MA1 could be to track the degree of participation of a Study Group over a certain period of time; or of MA3 and MT1 to track the activity level in a Question over time (or to spot relatively inactive Questions).

Overall, TSB is seeking clarification how to report on each of the metrics.

1. Metric MC4: TSB observed that there is a general potential inconsistency in how the various study groups present member states, and other contribution sources (such as Sector Members, Academia, Associates), and to map those to country names. However, it is assumed that such inconsistencies can be removed with some effort.
2. TSB’s present implementation assumption is to consider utilizing the existing systems and tools in place within ITU and ITU-T for the sake of automatically generating the statistics. It is not foreseen to start implementing entirely new systems such as a new, separate participant database as was suggested.
Overall, the feasibility analysis is forward-looking towards a possible implementation of enhanced systems, tools and data sets at some future point in time, but not for retrofitting old data sets from the past.
The feasibility analysis is done with our best current knowledge for some expected principle technical and operational potential implementation, notwithstanding of any practical difficulties in the implementation, which might arise. Therefore, some of the metrics highlighted in light green might become feasible to implement just once the systems and/or the procedures will have been adapted accordingly; but are not meant to be readily implemented as such.
The analysis in this TD focusses on the feasibility of implementation such as by taking into account if data is actually available, the potential for automation, but does not consider how certain metrics would or could actually be implemented; such is left for further study, and any such future findings might be changing the feasibility assessment as stated in this document.
3. Besides that, TSB identified a number of other opportunities to improve its services to delegates, and is considering further.
4. TSB also sees room for opportunities at TSAG to discuss improvements of ITU-T working methods (e.g., ITU-T A.1 NWI template, contribution template amended with additional information), and of working procedures; such discussions could be carried-out within TSAG RG-WM.

| **Type of metric** | **Metric**Metric ID: Metric descriptionmetric objective | **Priority** | **Data Source** | **Comments, feasibility of implementation, implemented** |
| --- | --- | --- | --- | --- |
| 1. Attendance
 | MA1: #participants at ITU-T Study Group X meetingsEstimate the scale of interest in WIs being promoted by the SG. | P | CRM | Data already available internally through Crystal Report, and shared as a TD after each meeting. |
| MA2: #participants at WP Y/X meetings |  | CRM | Data already available internally through Crystal Report, and shared as a TD after each meeting. |
| MA3: #participants at Rapporteur group Q/X meetings (physical meetings in and outside ITU premises)Estimate the scale of interest in WIs being promoted by the Q/X. | P | CRM for RGM held in ITU premisesOthers are not stored in a database, unless the Work Programme was set for it. | Regarding CRM data, they are already available internally through Crystal Report, and shared with participants.Regarding physical meeting held outside ITU, the online registration form is under used available on demand via the Work Programme would allow recording participants. Unfortunately this form is not used systematically, therefore it cannot be used for statistics.Enable this online form for all physical rapporteurs group meetings held outside ITU premises would make feasible this report. |
| MA4: #remote participants in E-meetings of Rapporteur group Q/XEstimate the scale of interest in WIs being promoted by the Q/X. | P | Depending on the tool used:ZoomGoToMeetingsMyWorkspace | As of today, only participants registered through MyWorkspace are recorded into ITU database.List of participants to E-Meetings organized with the other tools are merged manually, so they can be used for statistics.In the future, with the rationalization of the E-Meetings tools into MyWorkspace, such report will be straightforward. |
| MA5: #participants at TSAG meetings |  | CRM | Data already available internally through Crystal Report, and shared as a TD after each meeting. |
| MA6: #member states at TSAG meetings |  | CRM | Data already available internally through Crystal Report, and shared as a TD after each meeting. |
| MA7: #participants per country at TSAG meetings(additionally per category) |  | CRM | Data already available internally through Crystal Report, and shared as a TD after each meeting. |
| MA8: #participants at FG X (with possible categorization) |  | CRM | Data already available internally through Crystal Report, and shared as a document after each meeting.CRM data is not verified |
| MA9: #participants in regional group R of SG X |  | CRM | Data already available internally through Crystal Report, and shared as a document after each meeting. |
| MA10: #participants at FG Y meeting with parent of SG X |  | CRM | Feasible in principle, but CRM does not provide linkage of FG with parent SG. |
| MA11: #participants at FG Y meeting with parent of TSAG |  | CRM | Feasible in principle, but CRM does not provide linkage of FG with TSAG. |
| MA12: #participants in e-meeting of TSAG RG X |  | CRM | Feasible. |
| MA13: #participants at workshop related to SG X |  | CRM | Feasible in principle, but CRM does not provide linkage of workshop with parent SG. |
| MA14: #participants at workshop related to FG Y |  | CRM | Feasible in principle, but CRM does not provide linkage linkage of workshop with parent FG. |
| 1. Categorization of Attendance at meetings
 | “ITU-T categories”MCA1: #participants of Member StatesEstimate the scale of interest in WIs of the Administration. | P | CRM | **Overall remark on categorization**Number of participants per category is not done as of today.This kind of report can be made available internally and shared on demand, or on a regular basis.As of today, the only available categories are:* Member States
* ITU-T Sector Members: Recognized Operating Agencies
* ITU-T Sector Members: Scientific or Industrial Organizations
* ITU-T Sector Members: Regional and other International Organizations
* ITU-T Sector Members: Other Entities dealing with Telecommunications
* Associates ITU-T
* Regional Organizations
* Permanent Missions
* United Nations and its Specialized Agencies
* Academia
* Resolution 99 (Rev. Busan, 2014)
* Invited Experts / Guests
* International Telecommunication Union

Before implementation, we should agree on input and output fields.Report name: Member states participationInput fields:* From
* To
* Study Group (All by default)

Output fields:* Member state name
* Number of participation (present to one meeting = one?)
 |
| MCA2: #participants of Sector Members (ROA, SIO)Estimate the scale of interest in WIs of the Industry. | P | CRM | Report name: Sector Member participationInput fields:* From
* To
* Study Group (All by default)

Output fields:* Sector Member name
* Number of participation (present to one meeting = one?)
 |
| MCA3: #participants of AssociatesEstimate the scale of interest in WIs of the Industry including SMEs. | P | CRM | Report name: Associates participationInput fields:* From
* To
* Study Group (All by default)

Output fields:* Associate name
* Number of participation (present to one meeting = one?)
 |
| MCA4: #participants of AcademiaEstimate the scale of interest in WIs of the research fields. | P | CRM | Report name: Academia participationInput fields:* From
* To
* Study Group (All by default)

Output fields:* Academia name
* Number of participation (present to one meeting = one?)
 |
| “General categories”MGC1: #participants from Government |  | CRM | Category does not exist, not feasible, unless the system is updated and staff are collecting this new information.  |
| MGC2: #participants from industry |  | CRM | Category does not exist, not feasible, unless the system is updated and staff are collecting this new information.  |
| MGC3: #participants from academia |  | CRM | Category does not exist, not feasible, unless the system is updated and staff are collecting this new information.  |
| MGC4: #participants from others |  | CRM | To be clarified |
| “Specific categories”MSC1: #participants from Govt departments |  | CRM | Category does not exist, not feasible, unless the system is updated and staff are collecting this new information. |
| MSC2: #participants from ministry |  | CRM | What is the difference with MGC1? |
| MSC3: #participants from regulator |  | CRM | To be checked further |
| MSC4: #participants from internal affairs |  | CRM? | Category does not exist, not feasible, unless the system is updated and staff are collecting this new information. |
| MSC5: #participants from foreign affairs |  | CRM? | Category does not exist, not feasible, unless the system is updated and staff are collecting this new information. |
| MSC6: #participants from Industry segments |  | CRM | Segment information do not exist, not feasible, unless the system is updated and staff are collecting this new information. |
| MSC7: #participants from verticals |  |  | Category does not exist, not feasible, unless the system is updated and staff are collecting this new information.*To be clarified* |
| MSC8: #participants from horizontals |  |  | Category does not exist, not feasible, unless the system is updated and staff are collecting this new information.*To be clarified* |
| MSC9: #participants from Academic segments – college, university, research group, etc. |  |  | Information not collected, not feasible, unless the system is updated and users are recording it on registration form. |
| MSC10: #participants from SME |  |  | Information not collected, not feasible, unless the system is updated and users are recording it on registration form. |
| 1. Leadership
 | ML1: List of Study Group X chair & vice-chairs, WP chairs, Rapporteurs, Editors, FG Y chair & vice-chairs, FG Y WP Z chair & vice-chairs, Counsellor, Liaison RapporteurEstimate the degree of contribution of each country and company to ITU-T activities.The list refers to the leadership experts from a country, ML1 is just the list of the names of the Chairmen/Vice Chairmen (as per WTSA Resolution 35) to the study group activities. | P | Work Programme | List already available online for each Study Group, from their main Web page.Can be made available into a single report.And no problem to extend this to the FGs. |
| ML2: Attendance of Study Group X chair & vice-chairs, WP chairs, Rapporteurs, Editors, FG chair & vice-chairs, FG Y WP Z chair & vice-chairs, Counsellor, Liaison RapporteurConfirmation of qualification for re-nomination of chairmen / vice chairmen.ML2 attempts to record the status of participation and contribution of the Chairmen/Vice Chairmen (as per WTSA Resolution 35) to the study group activities. | P | CRM / Work Programme | Technically feasible, information can be grouped by Study Group for a given period of time.Before implementation, we should agree on input and output fields.Report name: Attendance of leadership to study group meetingsInput fields:* From
* To
* Study Group

Output fields:* Role (Chair, Rapporteur, Editor, etc.)
* Contact name
* Number of participations (present to one meeting = one?)
 |
| ML3: Attendance of Study Group X and FG Y leadership team |  | CRM / Work Programme | What is the difference with the previous report ML2? |
| 1. Contributions & TDs
 | MC2: #contributions per Rapporteur Q/X meetingEstimate the scale of specific interest in WI that Q/X is promoting Recommendations. | P | RGM Platform | Contributions are submitted through the SharePoint extranet platform, so they need to be further analysed to determine their feasibility.Do all rapporteur groups use this platform?Do all rapporteur groups use Contribution type of document?Can we extract this information easily from SharePoint? |
| MC3: #contributions addressing Question Q in SG X (Q/All shall not be counted.)Estimate the scale of interest in WI that each Q / X promotes. Q/ALL is a cross-SG issue and is not related to WI. | P | DMS | Feasible, Contributions are associated with the respective Question(s) in DMS.Before implementation, we should agree on input and output fields.Report name: Number of contributions per QuestionInput fields:* From
* To
* Study Group

Output fields:* Question
* Number of contributions (except Q/All)
 |
| MC4: #countries listed in the source of ContributionsKnow the number of countries that contribute to a WI.*MC4 is a parameter that indicates how many countries are interested in the contribution. It is a parameter that identifies the country from all the source names of the submitted contributions and counts the number of countries. For multi-source contributions, we count not only the number of countries in Member State but also the number of countries to which Sector Member belongs.* | P | DMS | Need first to check the consistency of the Contribution sources.Before implementation, we should agree on input and output fields.Report name: Number of countries per ContributionInput fields:* Study Group meeting

Output fields:* Contribution number
* Contribution title
* Number of countries
 |
| MC5: #contributions per Work Item I in SG XEstimate the scale of interest in a WI. | P | ---- | Contributions are not mapped systematically with Work itemsIf this information is not collected in the work programme, this will not be possible.Requires additional mapping to generate the data. |
| MC6: #contributions at FG X |  | [Collaborative FG platforms](https://extranet.itu.int/sites/itu-t/focusgroups/SitePages/Home.aspx) | In this platform, only two types of meeting documents are commonly used: Input and OutputWould this exercise consist of extracting the total number of input documents recorded per FG meeting?All FG Input documents could be considered as contributions. |
| MC7: #members listed in the source of contribution |  |  | Report name: Number of Members per ContributionInput fields:* Study Group meeting

Output fields:* Contribution number
* Contribution title
* Number of members
 |
| MT1: #TDs issued by Question Q in SG XEstimate the degree of Question activities in the SG. | P | DMS | Feasible, TDs are associated with the respective Question(s) in DMS.Before implementation, we should agree on input and output fields.Report name: Number of TDs per QuestionInput fields:* From
* To
* Study Group

Output fields:* Question
* Number of TDs (except Q/All)
 |
| MT2: #TDs issued by Editors for the draft RecommendationsEstimate the scale of activities of making Recommendations in the SG.*MT2 is a count of TDs for the draft recommendations submitted to the meeting whose source is Editor. Which WI’s Editor is not specified. This parameter indicates the activity of drafting the recommendation for the subject. TDs submitted on behalf of Editor by Rapporteur are not counted.* | P | Work Programme / DMS | Assuming that the TD references are systematically updated in the Work Programme, the exercise would consist in counting the TDs associated with a draft Recommendation whose source contains "Editor" and not "Rapporteur".Before implementation, we should agree on input and output fields.Report name: Number of Editors TDs per RecommendationInput fields:* Study Group

Output fields:* Draft Recommendation
* Number of Editors TDs

Requires addition of the Editor’s TDs into the work programme. |
| MT3: #contributions & TDs at SG X/WP meetingsEstimate the scale of specific interest in making Recommendation. | P | DMS | MT3 is implemented by TSB (RevCom statistics). |
| MT4: #contributions & TDs at regional group meetings of SG XEstimate the scale of interest for regional group in the SG | P | DMS | MT4 is implemented by TSB (RevCom statistics). |
| MT5: #contributions & TDs at FG Y meetingNote: Consider to leverage the importance of contributions by means of the contribution purposes, i.e., admin, proposal, discussion, etc. |  |  | This depends on category of documents supported at the respective FG meeting.To clarified: FG input documents or output documents? |
| 1. Liaisons
 | ML3: #ILSs to Question Q of SG X |  | Work programme | Data available, feasible.Before implementation, we should agree on input and output fields.Report name: Number of iLS per QuestionInput fields:* From
* To
* Study Group

Output fields:* Question number
* Number of iLS
 |
| ML4: #OLSs from Question Q of SG XKnow the status of collaboration with other groups | P | ITU-T Study Groups | ITU-T Liaison Statements are associated with the Study Group who approved it, and not the Working Party, or the Question, in line with Study Groups working methods.To evaluate the administrative effort to provide the Question mapping. |
| ML5: #ILSs per type (information, action, comment) of SG XKnow the status of collaboration with other groups | P | Work Programme | ML5 is implemented by TSB RevCom statistics). |
| ML6: #OLSs per type (information, action) of SG XKnow the status of collaboration with other groups | P | Work Programme | ML6 is implemented by TSB (RevCom statistics). |
| ML7: #ILSs from other groups outside ITU-T to SG XKnow the status of collaboration with other groups | P | Work Programme | ML7 is implemented by TSB (RevCom statistics). |
| ML8: #OLSs to other groups outside ITU-T from SG XKnow the status of collaboration with other groups | P | Work Programme | ML8 is implemented by TSB (RevCom statistics). |
| ML9: #ILSs from other ITU-T SGs to SG XKnow the status of collaboration with other groups | P | Work Programme | ML9 is implemented by TSB (RevCom statistics). |
| ML10: #OLSs to other ITU-T SGs from SG XKnow the status of collaboration with other groups | P | Work Programme | ML10 is implemented by TSB (RevCom statistics). |
| ML11: #ILSs to FG Y from other ITU groups |  | Work Programme | Feasible |
| ML12: #ILSs to FG Y from non-ITU groups |  | Work Programme | Feasible |
| ML13: #ILSs per type (information, action, comment) of FG Y |  | Work Programme | Feasible |
| ML14 #OLSs per type (information, action) of FG Y |  | Work Programme | Feasible |
| ML15: #OLSs to other groups outside ITU-T from FG X |  | Work Programme | Feasible |
| ML16: #OLSs to other ITU-T FGs from FG X |  | Work Programme | Feasible |
| 1. Recom­mendations and FG deliverables
 | MRD2: #downloaded Recommendations (e.g., from the ITU website) for SG X*It is a superset. All instead of top 100.* |  | DMS | MRD2 is similar to MRD4. |
| MRD1: Download trends over time |  | DMS | MRD1 is implemented by TSB (RevCom statistics). |
| MDR3: Top 100 downloaded Recommendations | P | DMS | MRD3 is implemented by TSB (RevCom statistics). |
| MRD4: Top 10 downloaded Recommendations per SG X | P | DMS | MRD4 is implemented by TSB (RevCom statistics). |
| MRD5: #consented, determined, approved, agreed texts per SG X meeting | P | DMS | MRD5 is implemented by TSB (RevCom statistics). |
| MFD1: #deliverables of FG X |  |  | Not collected in a database, this information is scattered on various web pages. Could be collected from the Work Programme. |
| MFD2: #FG deliverables that become Recommendations |  |  | Would need first to define formally what is a Recommendation that would have been the result of the work of a focus group? |
| MRO3: #other outputs (Technical Papers, Implementor’s Guides, Testing Specifications, reports, etc.) for SG X |  | Feasible | Feasible |
| 1. New work
 | MN1: #NWIs for SG XEstimate the degree of activities in SG. | P | Work programme | Data already available.This valuable information was implemented on users demand from the [ITU-T Work programme](https://www.itu.int/ITU-T/workprog/wp_search.aspx):The user can chose to restrict the search to the work item registered during the last 30, 90, 180 or 365 days.C:\Users\castano\AppData\Local\Temp\SNAGHTML656b1967.PNG |
| MN2: #NWIs for SG X initiated by Member States |  | None | The work programme is not collecting that information. |
| MN3: #NWIs for SG X initiated by Sector Members (ROA, SIO) |  | None | The work programme is not collecting that information. |
| MN4: #NWIs for SG X initiated by Associates |  | None | The work programme is not collecting that information. |
| MN5: #NWIs for SG X initiated by Academia |  | None | The work programme is not collecting that information. |
| MNG1: #NWIs for SG X initiated by participants from Government |  | None | The work programme is not collecting that information. |
| MNG2: #NWIs for SG X initiated by participants from industry |  | None | The work programme is not collecting that information. |
| MNG3: #NWIs for SG X initiated by participants from academia |  | None | The work programme is not collecting that information. |
| MNG4: #NWIs for SG X initiated by participants from others |  | None | The work programme is not collecting that information. |
| MN6: #supporting members on NWI I in SG XEstimate the degree of interest on NWI in SG. | P | Work Programme | Available only for draft new Recommendation, as long as [ITU-T A.1](https://www.itu.int/ITU-T/workprog/secured/wp_new_item_in.aspx?sg=-1) online form available from Work Programme has been used.This online form was used only 88 times since its launch in 2013. Also it has to be noted, that this form is not used for draft revised Recommendations, their amendments and corrigenda.This should be clarified further before any further development. |
| MN7: #supporting countries on NWI in SG XKnow the status of the activities management in SG | P | Not registered | As of today, supporting Members are filled manually in online form, linkage with countries cannot be done as such.In order to allow this, the online form would have to be updating proposing to select supporting members from CRM. |
| MNS1: #NWIs for SG X initiated by participants from Govt departments |  | Not registered | Linkage between a participant can only be done if it has been submitted via ITU-T A.1 online form.Therefore, this kind of data would be meaning full if this online form becomes systematically used.Then the categories available will be the same as the ones described previously in MCA1. |
| MNS2: #NWIs for SG X initiated by participants from ministry |  | Not registered | Same comment |
| MNS3: ##NWIs for SG X initiated by participants from regulator |  | Not registered | Same comment |
| MNS4: #NWIs for SG X initiated by participants from internal affairs |  | Not registered | Same comment |
| MNS5: #NWIs for SG X initiated by participants from foreign affairs |  | Not registered | Same comment |
| MNS6: #NWIs for SG X initiated by participants from Industry segments |  | Not registered | Info on segments is not registered (see MSC6 for more details). |
| MNS7: #NWIs for SG X initiated by participants from verticals |  | Not registered | Info on segments is not registered (see MSC6 for more details). |
| MNS8: #NWIs for SG X initiated by participants from horizontals |  |  | *To be clarified* |
| MNS9: #NWIs for SG X initiated by participants from Academic segments – college, university, research group, etc. |  |  | *To be clarified* |
| MN7: #stale WIs (i.e., no contributions) in SG X |  | Work Programme | MN7 is similar to MN12. |
| MN8: #Work Items undertaken by Question Q in SG XKnow the status of the activities management in SG. | P | Work programme | This info is already available online from Work Programme website, e.g. Q11/16:<https://www.itu.int/ITU-T/workprog/wp_search.aspx?q=11/16> |
| MN8c: #completed work items (where completed means that it resulted in an output document) |  | Work programme | If completed means, agreed or approved, this information is already available online from Work Programme website, by selecting Approved only, e.g. from SG16:<https://www.itu.int/ITU-T/workprog/wp_search.aspx?sg=16> |
| MN9c: average duration of completed WIs in SG XTime period is from start to finish (which may be across multiple study periods) |  | Work programme | Data available, feasible.A simple solution would be to add the work item oldness in days as a possible output field from the online work programme. |
| MN9o: average duration of open WIs in SG XTime period may be across multiple study periods) |  | Work programme | Data available, feasible.As for previous request, a simple solution would be to add the work item oldness in days as a possible output field from the online work programme. |
| MN10: success rate of WIs in SG X; i.e. #completed WIs/ (#stale WIs + #completed WIs) |  | Work programme | To be meaningful, this report needs to be associated with the work items oldness.A possible output could be:Report name: Study group work programme success rateInput fields:* Study Group

Output fields:* Success rates for work items registered:
	+ Between 30 and 90 days ago
	+ Between 90 and 180 days ago
	+ Between 180 and 365 days ago
	+ More than 365 days ago

Success rate = Percentage of work items approved against the total number of work items registered during the given period. |
| MN11: #WIs under study in SG XEstimate the degree of interest on NWI in SG. | P | Work programme | MN11 is implemented by TSB (RevCom statistics). |
| MN12: List of possible stale work items for SG X (over 18 months)Know the status of the activities management in SG. | P | Work programme | MN12 is implemented by TSB (RevCom statistics). |
| 1. Patents
 | MP1: #patents declared in SG XIs a measure for indicating technical innovation. |  | IPR database | Data already available, need to be proposed as a report. |
| MP2: #patents declared in Q Y/SG XIs a measure for indicating technical innovation. |  | IPR database | Previous report can be detailed with the respective Question numbers. |
| 1. Mentions (in press articles as typically measured by analysts)
 | MM1: #articles that mention ITU-T Study Group XTo express the interest of the industry and to have some external feedback on the results of ITU-T. |  | --- | Not feasible. |
| MM2: #articles that mention ITU-T RecommendationsTo express the interest of the industry and to have some external feedback on the results of ITU-T. |  | --- | Not feasible. |
| 1. Rapporteur Group meetings
 | MRM1: #Rapporteur group meetings of SG X Question Q |  | Work programme | MRM1 is implemented by TSB (RevCom statistics). |
| MRM2: #Rapporteur group meetings of SG X per event venue |  | Work programme | MRM2 is implemented by TSB (RevCom statistics). |
| 1. Membership
 | MMS1: #new ITU members that started in FG X |  | Not available | Information not stored.See also MFG5. |
| 1. Relations and correlations
 | COR1: SG attendance (including participant categorization) to1. Contributions
2. Recommendations
3. Downloads
4. Patents
5. Mentions
 |  |  | Need further analysis from TSAG Contributions 86 and 87; |
| COR2: SG Leadership (including participant categorization) to1. Contributions
2. Recommendations
3. Downloads
4. Patents
5. Mentions
 |  |  | Need further analysis from TSAG Contributions 86 and 87; |
| COR3: SG contributions to1. Recommendations
2. Downloads
3. Patents
4. Mentions
 |  |  | Need further analysis from TSAG Contributions 86 and 87; |
| 1. Member Categorization (member state, sector member and academia member)

This type of metrics is to evaluate the contribution of members within a categorization. | MM1-10: #top ten participations at ITU-T meetings |  |  | No technical issue. |
| MM11-20: #top ten submissions of contributions at ITU-T meetings |  |  | No technical issue. |
| MM21-30: #top ten numbers of ITU-T leadershipTo convey the top 10 names of the Sector Members or Member States etc that participated in a meeting. |  |  | No technical issue. |
| MM31-40: #top ten numbers of ITU-T editorsTo convey the top 10 names of the Sector Members or Member States etc that are editors. |  |  | How do we measure the Editors? Over which time frame? Count also co-editors? Should the editors be listed as persons or by their affiliation?Number of work items? (no problem) |
| 1. Frequency of meetings
 | MFM1: #average frequency of WP Y/X meetings |  |  | No technical issue, input (period, study group number) and output to be clarified |
| MFM2: #average frequency of Rapporteur group Q/X meetings |  |  | No technical issue, input (period, study group number) and output to be clarified |
| MFM3: #average frequency of e-meetings of Rapporteur group Q/X |  |  | No technical issue, input (period, study group number) and output to be clarified |
| MFM4: #average frequency of FG Y meeting |  |  | No technical issue, input (period, study group number) and output to be clarified |
| 1. Focus Group
 | MFG1: #Living time of FG YMFG1 is the time (month) the FG Y has been functioning since establishment |  |  | No technical issue. |
| MFG2: #attendance of ITU members |  | CRM | FG meetings are open to all; there is no focal point approval process for members; thus, the data is not available. |
| MFG3: #attendance of Non-ITU members |  | CRM | FG meetings are open to all; there is no differentiation between members and non-members. |
| MFG4: #deliverables produced per FG Y meeting |  | Work programme | WP DB does not hold this information on FG deliverables. |
| MFG5: #conversion of ITU membersMFG5 is the number of organizations who attend the FG meeting as non ITU members and join the membership within 6 months afterwards. |  | membership database | Occurs only rarely, currently only manually feasibly, membership database does not provide the specific data.See also MMS1. |
| MFG6: #conversion of deliverables to Recommendations |  |  | So rare, that this is available on demand to the relevant responsible.See also MFD2. |
| MFG7: #conversion of FG to Question, WP or SG |  |  | No technical issue |

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