|  |  |  |
| --- | --- | --- |
|  | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2022-2024 | TSAG-TD214 |
| TSAG |
| Original: English |
| **Question(s):** | RG-WPR | Geneva, 30 May - 2 June 2023 |
| **TD** |
| **Source:** | Associate Rapporteur |
| **Title:** | Baseline text for report of the analysis of ITU-T study group restructuring alternatives |
| **Contact:** | Greg RattaNational Telecommunications and Information AdministrationUnited States of America | Tel: +1 202 482 0499E-mail: gratta@ntia.gov  |

|  |  |
| --- | --- |
| **Abstract:** | This document provides the baseline text of the draft, final report to TSAG of the implementation by RG-WPR of the action plan for analysis of ITU-T structural alternatives. |

**Introduction**

WTSA20 added a new Resolution that resolves to implement the action plan for the analysis of ITU-T study group restructuring that was produced by TSAG during the last study period. This document provides a proposed baseline document concerning the analysis of study group restructuring alternatives to be used as a target for future contributions.

**Discussion**

The participants in the February 2023 RG-WPR meeting requested that a baseline document be created of the analysis of study group restructuring alternatives to be used as a target for future contributions. This document presents the baseline following the 19 April 2023 meeting.

**Summary**

After discussion in the May 2023 RG-WPR meeting, the attachment of this document could be used as a target for future contributions if the participants agree.

**Annex - Analysis of ITU-T study group restructuring alternatives**

Draft Text as of 19 April 2023

**List of Revisions**

|  |  |
| --- | --- |
| **Date** | **Description** |
| 23-03-15 | Creation of initial draft |
| 23-03-20 | Inclusion of agreements reached at 15 March 2023 virtual meeting |
| 23-04-19 | Inclusion of agreements reached at 19 April 2023 virtual meeting |
|  |  |
|  |  |
|  |  |

**List of Issues**

|  |  |  |
| --- | --- | --- |
| **Issue** | **Date** | **Description** |
| 2303-01 | 230315 | Need to confirm accuracy of table of work activities presented in RGWPR-DOC2 (230315) |
| 2304-01 | 230419 | Further discussion is desired on how timely identification of standardization needs can be converted to a KPI |
| 2304-02 | 230419 | Further discussion is desired on how BSG issues can be converted to a KPI |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Analysis of ITU-T study group restructuring alternatives

# Introduction

The World Telecommunication Standardization Assembly included in Resolution 99 (Geneva, 2022) an action plan initiating a thorough review of ITU-T potential restructuring options, based on empirical analysis, with a view to having a more effective, efficient, fit-for-purpose, forward-looking and inclusive ITU-T. TSAG was charged with the responsibility to manage the analysis of ITU-T study group restructuring based upon contributions to TSAG from Member States and ITU-T Sector Members. This document details the management of that analysis.

Editor’s Note – additional information to be added about the structure and execution of the work within TSAG is to be provided here.

# Overview of analytic approach

The analysis comprises four elements: (1) identifying and making available the common set of data to be used by all participants, (2) specifying measurable KPIs in formulaic expressions and their relative importance in the evaluation, (3) detailing the way to use KPIs when comparing alternative proposals for ITU-T SG structure and (4) compare alternative proposals for ITU-T study group structure and select an optimal one to advise TSAG on what to propose as a good ITU-T SG structure to WTSA-24.

## Data for use in analysis

Resolution 99 identified an extensive list of metrics to be used in the analysis. A roadmap to the relevant data provided by TSB for the metrics identified in the action plan for the analysis. It was emphasized that the metrics to be used should be selected carefully so that the necessary workload would be reasonable. This roadmap is contained in RGWPR-DOC1 (230315).

## Utilization of KPIs

The intention is to complete an analysis table such as shown in Table 1. The success of this approach is dependent upon establishing a numeric value for each KPI. The relative significance (weight) of each KPI is used to moderate the impact of that KPI in the evaluation of each alternative.

Comparison of the relative merits of the alternatives yields the optimal structure according to the analysis executed by the collaborators.

Table 1 – Model of analysis table

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | KPI 1 | Weight1 | KPI 2 | Weight 2 |  | KPI X | Weight x | Relative merit of alternatives |
| Alternative A | αA | Wt1 | βA | Wt2 |  | ΩA | Wtx | Σ(αA\*Wt1+ βA\*Wt2 + … + ΩA\*Wtx) |
| Alternative B | αB | Wt1 | βB | Wt2 | … | ΩB | Wtx | Σ(αB\*Wt1+ βB\*Wt2 + … + ΩB\*Wtx) |
| Alternative N | αN | Wt1 | βN | Wt2 |  | ΩN | Wtx | Σ(αN\*Wt1+ βN\*Wt2 + … + ΩN\*Wtx) |

# Definition of key performance indicators

Editor’s Note – general introductory sentences are needed.

Editor’s Note – The February 2023 meeting recognized the need for identifying measurable KPIs, and that the contributions submitted to date satisfy this need; however, their proposals are included here to encourage further contributions.

Editor’s Note – the following KPIs were proposed in RGWPR-230215-DOC-0003.

3.1 Minimize the number of study groups involved with ITU-T E-series Recommendations to reduce coordination required for notifications on changes to national numbering plans.

3.2 Minimize the number of study groups involved with security topics to reduce coordination required, duplication of effort and potential for conflicting standards.

3.3 Minimize the number of study groups involved with QoS/QoE/performance to reduce coordination required, duplication of effort and potential for conflicting standards.

3.4 Address in no more than one study group tariff and accounting principles and international telecommunication/ICT economic and policy issues to clarify to where contributions should be directed, and to reduce the need for cross-question meetings.

3.5 Minimize the total number of study groups to reduce operational costs of convening study group meetings, to avoid duplication of standardization work between ITU-T study groups, and to clarify to where new work proposals should be directed.

3.6 Minimize the total number of Questions to reduce the cost and complexity of multiple meetings in parallel during study group or working party meetings, to clarify to where contributions should be directed, and to reduce the need for cross-question meetings.

3.7 Minimize the number of study groups involved with QKD/DLT topics to consolidate where the same expertise is required to advance the studies.

3.8 Minimize the number of study groups involved with AI topics to consolidate where the same expertise is required to advance the studies.

3.9 Minimize the number of study groups involved with Big Data topics to consolidate where the same expertise is required to advance the studies.

3.10 Minimize the number of study groups involved with IoT/M2M topics to consolidate where the same expertise is required to advance the studies.

3.11 Minimize the number of study groups involved with testing topics to consolidate where the same expertise is required to advance the studies.

3.12 Minimize the number of study groups involved with network/system architecture topics to consolidate where the same expertise is required to advance the studies.

3.13 Minimize the number of study groups involved with smart sustainable city and community topics to consolidate where the same expertise is required to advance the studies.

3.14 Minimize the number of study groups involved with smart city topics to consolidate where the same expertise is required to advance the studies.

3.15 Minimize the number of study groups involved with multimedia topics to consolidate where the same expertise is required to advance the studies.

3.16 Minimize the number of study groups involved with ITS topics to consolidate where the same expertise is required to advance the studies.

3.17 Minimize the number of study groups involved with signalling/protocol topics to consolidate where the same expertise is required to advance the studies.

3.18 Minimize the number of study groups involved with future network/emerging telecom networks topics to consolidate where the same expertise is required to advance the studies.

3.19 Minimize the number of study groups involved with numbering/addressing/Identification topics to consolidate where the same expertise is required to advance the studies.

3.20 Minimize the number of study groups involved with health topics to consolidate where the same expertise is required to advance the studies.

3.21 Minimize the number of study groups involved with cloud topics to consolidate where the same expertise is required to advance the studies.

3.22 Minimize the number of study groups involved with broadband cable and TV topics to consolidate where the same expertise is required to advance the studies.

3.23 Minimize the number of study groups involved with access/transport topics to consolidate where the same expertise is required to advance the studies.

3.24 Minimize the number of study groups involved with operations topics to consolidate where the same expertise is required to advance the studies.

3.25 Minimize the number of study groups involved with policy topics to consolidate where the same expertise is required to advance the studies.

3.26 Minimize the number of study groups involved with EMF topics to consolidate where the same expertise is required to advance the studies.

3.27 Minimize the number of study groups involved with environment/climate change topics to consolidate where the same expertise is required to advance the studies.

3.28 Minimize the number of study groups involved with combatting counterfeit topics to consolidate where the same expertise is required to advance the studies.

Editor’s Note – the following KPIs were proposed in RGWPR-230419-DOC-0004.

3.29 Every study group shall have a single Question charged with considering the creation of new Questions (to address timely identification of standardization needs) such that a KPI has a value of 1 if such a question exists in all SGs of a proposed structure and a value of 0 if it does not.

3.30 Every study group shall have a Question charged with support for bridging the standardization gap such that a KPI has a value of 1 if such a question exists in all SGs of a proposed structure and a value of 0 if it does not.

Editor’s Note – the following KPIs were proposed in RGWPR-230215-DOC-0004.

|  |  |  |  |
| --- | --- | --- | --- |
| KPI/criteria | Available Metrics from [**TD124r1**](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0124/en) | Note | Additional considerations |
| 1. Relevance: Outputs of study group | 2.1 number of unique downloads by Recommendation from 2008 to 2021. | T22-TSAG-221212-TD-GEN-0025 shows the aggregate for each year from 2001. Confidence in data prior to 2018 is reduced.  | Download of revisions of a recommendation is also indicative of the relevance of the work. Frequency of the revisions is indicative of the level of activity of the group. |
| 2. Activity level of study group | 5.3. Number of contributions to a work item from, * Supporters
* others (by country, by region, by membership category)
 | DMS data is available at the Question level. Aggregating at the WP and SG level will allow to evaluate if a WP or SG is low on active participation or on diversity. | In addition, a minimum number of meaningful contributions per year, or active work items may need to be defined to justify the existence/cost of an SG and of its structure. |
| 5.2. Number of different members, sector members and associates that have committed to contributing actively to the introduction of new work, as shown in the A.1 and A.13 justifications• by country• by region• (by membership category) | Derivable from the work programme (<https://www.itu.int/ITU-T/workprog/wp_search.aspx>? ) by adding the “Supporting Member” field in the customised tab view. | Aggregating the information at the WP and SG level will indicate if a particular WP or SG is low on active participation, on diversity or steered toward a location. |
| * Nb of RGM and in particular of e-meeting
* Stale work-item
 | Data is available from 2010 onward. T22-TSAG-221212-TD-GEN-0025 shows the aggregate from 2010 for each study group. | Stale work items may be considered over multiple study periods. If the number is consistent, it may indicate a systemic lack of expertise or participation to complete the work. |
| 5.Collaboration | * Proportion of Liaison for action over the total number of liaisons received and sent.
 | Received liaisons: Data is available from 2010 onward. T22-TSAG-221212-TD-GEN-0025 shows the aggregate from 2010 for each study group.Sent liaisons: Data is available from: <https://www.itu.int/net/ITU-T/ls/ols.aspx>?  |  |
| * Cross SG e-meeting or meeting.
 | Not available? |  |

# Alternative structures considered

# Analysis of alternatives

# Conclusion

References

WTSA Res 99

TSAG TD 124r1

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_