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|  | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2022-2024 | TSAG-C84 |
| TSAG  |
| Original: English |
| **Question(s):** | RG-IEM | Geneva, 22-26 January 2024] |
| **CONTRIBUTION** |
| **Source:** | Broadcom Europe Ltd. |
| **Title:** | Progressing RG-IEM ToR item 3 on ‘new and emerging technologies’ |
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| **Abstract:** | This contribution proposes a way forward to progress RG-IEM ToR item 3 on ‘new and emerging technologies’ |

# Introduction

As a reminder, RG-IEM is tasked[[1]](#footnote-1) to:

* *Establish an appropriate mechanism at TSAG level to be used at the study group level and at the Focus group level to examine and coordinate work on new and emerging technologies (Res.22 resolves 5, 6, 7).*

After several iterations (in particular [TD258](https://www.itu.int/md/T22-TSAG-230530-TD-GEN-0258/en) and other contributions) in the RG-IEM rapporteur group meetings, at the last TSAG, Broadcom offered a problem decomposition and analysis as per [C31](https://www.itu.int/md/T22-TSAG-C-0031/en).

In this latter contribution, on purpose, Broadcom didn’t want to propose a first candidate mechanism as the analysis revealed a lot of ‘grey’ areas and the requirement to address some of the issues first.

To summarize the situation, the table below re-uses the *Table 1 – RG-IEM ToR item breakdown* from [C31](https://www.itu.int/md/T22-TSAG-C-0031/en) and provides a status and actions needed:

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| **Piece #** | **RG-IEM ToR item extract** | **Status** | **Actions needed** |
| P1 | *establish an appropriate mechanism at TSAG level* | Analysis shows that:1. there are a lot of lessons learnt from the previous study period,
2. that the concerns from the stakeholders are not formalised,
3. that no mechanism was suggested yet.
 | A candidate mechanism should be proposed to lead and frame the rest of the work. |
| P2 | *to be used at the SG and FG level* | Analysis shows that lessons from the previous study period demonstrated that Study Groups are not set for collaboration but for competition which is certainly an issue directly linked to the bottom-up gravitation nature of standardisation in general and ITU-T in particular.  | Further understanding on the allocation of new and emerging technologies is required and links to P3. |
| P3 | *to examine and coordinate work* | Analysis shows that there is a need for a significant tooling to support the ‘examination’ of each new and emerging technologies that is required to support coordination. | Analysis of other SDOs mechanisms should be conducted and thinking on tooling design would certainly help but it requires that P4 progresses. |
| P4 | *on new and emerging technologies* | Analysis shows that: a) this term is not defined however,b) it is intensively used in both a large fraction of WTSA resolutions and in them, in a large sub-fraction of operative parts,c) there is a large variety of synonyms and nuances by scope and other dimensions. | This study could be extended to e.g. PP Resolutions to ensure that there is the complete and coherent view between ITU-T and ITU Resolutions.Then proposals to define this term and related ones to cover the various semantics needed and this is a pre-requisite to P3. |
| P5 | *Res.22 resolves 5,6,7* | Analysis shows a difference between WTSA20 Res. 22 and the way the item 3 of the ToR to RG-IEM are expressed as Res.22 seems to instruct 2 mechanisms and the RG-IEM ToR is identifying one mechanism. | This ambiguity needs to be lifted by TSAG.The current assumption will be that the mechanism is at this stage limited on ‘new and emerging’ not ‘on strategy’, though recognizing that if a proper work is done for ‘new and emerging’ it may (or should be designed so that it is) easily be extended to ‘strategy’.  |

# New considerations

In addition to all the above considerations and their details in [C31](https://www.itu.int/md/T22-TSAG-C-0031/en), Broadcom observed the following:

* The current “coordination” ‘by Liaison Statements’ or by ‘delineations and lead study groups within Resolution 2’ led to a large distribution of topics across nearly all the Study Groups as demonstrated by contributions in RG-WPR and questions **if there is actually any “coordination”.**
* Last TSAG demonstrated in one clear occasion that when agreements occurred between some Study Group chairs about which SG will do what, that this one and maybe others **are not documented** which led to a significant issue between 2 Study Group chairs and shows there are limits to point of records outside of assemblies.
* Given how time compressed are the TSAG meetings, Broadcom doesn’t see any chance that ‘new and emerging technologies’ **be properly addressed during TSAG meetings**.
* Regarding coordination, the only moment when Study Group chairs can meet is a short meeting with TSB director during TSAG meetings. **Broadcom questions what can be coordinated** and if the whole coordination resumes to 2 times 1-2h per year sounds grossly insufficient.

# Proposed way forward

Broadcom understands that establishing a mechanism will be a long-term task and would like to propose a step-by-step approach.

Following the breakdown proposed above, it is suggested here to:

* resolve P5 at this TSAG meeting,
* progress P4 and possibly P3 during the next leg of RG-IEM RGMs
* examine progress at the next TSAG meeting.

## P5 - Pending key questions that need to be resolved

P5 shows a gap between the TSAG ToR item and [WTSA20 Res. 22](https://www.itu.int/pub/T-RES-T.22-2022). Here are some questions to help a needed discussion:

* Are resolve 5, 6, and 7 prescribing one mechanism about new and emerging technologies?
* Or are they prescribing two mechanisms, one for new and emerging technologies and another for standardization strategies?
* Or are they prescribing an overall mechanism about new and emerging technologies within the context of a standardization strategy?
* Is this correctly written in the Resolution and does the TSAG ToR item need to be clarified?
* Or is it on the contrary that the Resolution should be clarified?
* Any other question/suggestion?

Broadcom insists that:

1. these questions must be discussed at this TSAG meeting,
2. a way forward to resolve the issue must be agreed.

Resolving this issue is both urgent and existential to the execution of this ToR item.

## Progressing P4 and P3

Regardless of the above questions there are two aspects that can progress:

* developing a definition for ‘new and emerging’ as per P4,
* developing ideas for ‘tooling’ to support the examination of new and emerging technologies.

Broadcom recognizes that ideally P4 should be done before P3. However, it may be possible and likely desirable to work by anticipation.

Broadcom recognizes that in one hand, progressing both P4 and P3 at the same time might be ambitious considering potential resources to contribute and on the other hand, it would be beneficial for P4 that P3 starts as it would provide both a context and one way to test candidate definitions being developed in P4.

Broadcom proposes that RG-IEM rapporteur group meetings start to progress by contributions on these two aspects as pre-requisites for the rest of the work.

RG-IEM will report on the progress on both items at the next TSAG meeting.

# Proposal

* Request RG-IEM rapporteur group meetings to enhance [TD258](https://www.itu.int/md/T22-TSAG-230530-TD-GEN-0258/en) for the next TSAG meeting in order to capture [C31](https://www.itu.int/md/T22-TSAG-C-0031/en) and the relevant, agreeable content in this contribution and any future work in one place
* Resolve P5 (the perceived gap between WTSA20 Res. 22 and the TSAG ToR item) at this TSAG meeting.
* Make a call for contribution to the RG-IEM rapporteur group meetings to engage the development of P4 and possibly P3, respectively on the definitions and the tooling, and report progress at the next TSAG meeting.

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1. item 3 of the Terms of Reference (ToR) of RG-IEM as per section D.7 of Annex D of the (Draft) Report of the first TSAG meeting (Geneva, 12-16 December 2022) contained in [TSAG-TD004R1](https://www.itu.int/md/T22-TSAG-221212-TD-GEN-0004/en) [↑](#footnote-ref-1)