

[pre-SA#97e][R19 process, Moderator_doc2] Solutions Discussion - Version 0.0.7
SA

3GPP TSG-SA Meeting #97-e

Online, 13th – 19th September 2022

Tdoc number: SP-220966

Source: Moderator (Mona Mustapha)

Title: Rel-19 process proposals: pre-SA#97e feedback collected using NWM

1 Introduction

This document compiles a list of the potential solutions for the release planning process issues recorded in contribution SP-220709_rev8 [1]. This document also serves as the basis for discussion of those solutions.

The timeline and process for contributing and participating in this discussion can be found in document Moderator_doc1_rev1 [2].

This document is structured based on the Issues Identified in clause 3 of contribution SP-220709_rev8 [1]. Where the issue identified headings have been simplified (for formatting / readability purposes), the full text for the issue identified from SP-220709_rev8 [1] is copied within the clause for reference.

When a company contribution with a proposed solution becomes available, a new clause with a 'feedback form' will be inserted in the relevant clause related to the issue(s) that the proposal intends to solve. Discussion of the potential solution will be recorded within this feedback form. When a revision is provided for a company contribution, the 'feedback form' for the previous version will be closed, and a new 'feedback form' for the new revision will be provided.

Note on where to add comments:

1. Tables mapping the issues identified with potential solutions are provided in the following clause, with an indication of the clauses where a feedback form is available
2. Sub-clauses with heading "Company_name proposal revX" indicate clauses where a feedback form is available

2 Mapping of Issues with Potential Solutions

This clause provides a mapping of the issues identified in SP-220709_rev8 [1] with the proposed potential solutions and related clause in this document that contains the discussion.

*** indicates a feedback form is available for companies to add their comments.**

Table 1: Mapping of issues under item 1 (Scope-related) with potential solutions

| | MediaTek[3] | Nokia[4] | IDCC[5] | Huawei[6] |
|------------|-----------------------------|---------------------|----------|--------------------|
| 3.1 [1a] | see 3.1* | see 3.1*, 3.2 | see 3.1* | see 3.1* |
| 3.2 [1b] | see 3.1 | see 3.1, 3.2* | | see 3.1 |
| 3.3 [1c] | see 3.1 | see 3.1 | see 3.1 | see 3.1, 3.6, 3.3* |
| 3.4 [1d] | see 3.1, 5.1, 5.2, 5.3, 4.4 | see 3.4*, 4.5, 4.10 | | see 3.4*, 4.5 |
| 3.5 [1di] | | | | |
| 3.6 [1e] | | | see 3.1 | see 3.6* |
| 3.7 [1ei] | | | | |
| 3.8 [1eii] | see 3.8* | | | |
| 3.9 [1f] | see 3.9* | | | |

Table 2: Mapping of issues under item 2 (Timeline / timing-related) with potential solutions

| | MediaTek[3] | Nokia[4] | IDCC[5] | Huawei[6] |
|-------------|------------------------|--------------------------|--------------------|-----------|
| 4.1 [2a] | | see 3.1, 4.1*, 4.5, 4.10 | see 3.1, 4.1*, 4.2 | see 3.3 |
| 4.2 [2ai] | see 3.1, 5.1, 5.2, 5.3 | | | |
| 4.3 [2aii] | see 3.1, 5.1, 5.2, 5.3 | | | |
| 4.4 [2aiii] | see 4.4* | | | |
| 4.5 [2b] | | see 3.1, 4.5* | see 3.1, 4.1, 4.2* | see 4.5* |
| 4.6 [2bi] | | | | |
| 4.7 [2bii] | | | | |
| 4.8 [2biii] | | | | |
| 4.9 [2biv] | | | | |
| 4.10 [2c] | see 4.10* | see 3.4, 4.10* | see 3.1, 4.1 | see 4.5 |
| 4.11 [2d] | | | | see 4.5 |
| 4.12 [2di] | | | | |
| 4.13 [2dii] | | | | |
| 4.14 [2e] | | see 3.1 | see 3.1, 4.14* | see 4.5 |

Table 3: Mapping of issues under item 3 (WG Capacity-related) with potential solutions

| | MediaTek[3] | Nokia[4] | IDCC[5] | Huawei[6] |
|----------|------------------|--------------|-------------------------|-----------|
| 5.1 [3a] | see 5.1* and 3.1 | see 3.4, 4.5 | see 3.1, 4.1 | see 3.4 |
| 5.2 [3b] | see 5.2* | see 3.4, 4.5 | see 3.1, 4.1, 4.14, 4.5 | see 3.4 |
| 5.3 [3c] | see 5.3* | see 3.4 | | see 3.4 |

Table 4: Mapping of issues under item 4 (Other aspects) with potential solutions

| | MediaTek[3] | Nokia[4] | IDCC[5] | Huawei[6] |
|-----------|-------------|---------------|---------|-----------|
| 6.1 [4a] | see 5.2 | | | see 6.1* |
| 6.2 [4b] | see 6.2* | | | |
| 6.3 [4c] | see 6.3* | see 3.2, 6.3* | | see 6.3* |
| 6.4 [4ci] | | | | |

3 Scope-related issues

3.1 [1a] Lack of (coherent) SA view on release content definition

3.1.1 MediaTek proposal rev0

From [3]:

Proposal 3: SA2 needs to spend resources on limited #directions that are set top-down (i.e. at SA plenary) – See Proposal 3bis

Proposal 3bis

Top-Down process relying on SA2 expertise

This proposal is inspired by RAN top-down process, but relies on SA2 expertise to refine the objectives of the work, unlike RAN process where all SI/WI are drafted at the plenary.

| TSG _{N-2} : Rel-X+1 Workshop <i>adjacent to the plenary meeting</i> | TSG _{N-1} : Rel-X+1 Key Directions <i>in-plenary</i> | TSG _N : Rel-X+1 Package Approval <i>in-plenary</i> |
|---|--|---|
| Inputs <ul style="list-style-type: none"> Companies' proposals invited for discussion | Inputs <ul style="list-style-type: none"> Moderators' summaries i.e. Directions with moderated contents | Inputs <ul style="list-style-type: none"> SA2-agreed SI/WI without Rapporteur Information |
| Outputs <ul style="list-style-type: none"> Initial Set {Initial Directions {Potential Content}} Other Set {Other Directions {Potential Content}} Each <i>Initial Direction</i> assigned to an (SA2) Moderator <i>Other Directions</i> assigned to one/more (SA2) Moderator(s) No Rapporteur information | Outputs <ul style="list-style-type: none"> Key Directions Set {Key Directions {Initial Content}} No Rapporteur information Each <i>Key Direction</i> assigned to an (SA2) Moderator | Outputs <ul style="list-style-type: none"> Approved Rel-X+1 Package incl. Rapporteurs |
| Actions to SA2 <ul style="list-style-type: none"> Moderated (NWM/email) discussion 1-week, <i>off the meeting week</i> Each moderator responsible to set-up their own email discussion, moderate it and summarize it | Actions to SA2 <ul style="list-style-type: none"> Define SI/WI based on Key Directions Set (incl. Objectives, All TU-checked, No Rapporteur Information) <ul style="list-style-type: none"> Each Moderator responsible to submit draft SI/WI to following SA2 meeting, corresponding to <i>Key Direction</i> | |

NOTE: Key Directions Set = Subset of Initial Set U Other Set

8

Figure 1: Proposal 3bis from [3]

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 1: Comments on MediaTek_doc1_rev0

1 – Apple France

Comment from Sharp:

- On Proposal 3Bis, it is indicated that for **Rel-X+1 Workshop**, the expected outputs are
 - o **Initial Set** {Initial Directions {Potential Content}}
 - o **Other Set** {Other Directions {Potential Content}}

Comment: It is not clear what differentiates *Initial* and *Other* set. Can you provide an example of *Potential Content* that may be allocated to *Initial* and *Other* sets, and why is there a need for such a differentiation?

2 – Apple France

Comment from **Sharp**:

- On Proposal 3Bis, it is indicated that for **Rel-X+1 Workshop**:
 - o Each *Initial Direction* assigned to an (SA2) Moderator
 - o *Other Directions* assigned to one/more (SA2) Moderator(s)

Comment: As noted above, it is not clear what differentiates the **initial set** from the **other set**, so it follows that is It is also not clear why would an “*Other Directions*” need to be assigned more than one moderator, while an “*Initial Direction*” is limited to one moderator. Can you comment further on why “other direction” may need for more than one moderator?

3 – MediaTek Inc.

Thanks for the question above. The intention is to start distinguishing between directions that could have a higher likelihood of reaching consensus vs. those that may be more challenging.

- **Initial Set** would be a list of clear directions with reasonably wide support thus indicative of good likelihood of consensus on the indicated directions
- **Other Set** would be the remainder of directions with fairly isolated support thus potentially indicative of a more difficult consensus building on these directions

Each Initial Direction could be assigned one moderator

Other Directions could be assigned to >one moderators (e.g. directions could be grouped)

This would follow a similar approach to RAN R18 that proved quite efficient, whilst limiting the number of parallel discussions taking place.

4 – Orange

Comments from Orange:

On TSG N-2: WORKSHOP

- For Input, MRP/Verticals should be invited to present their specific requirements/views for the next release
- Output of SA1 should be used as basis, and companies/MRP/verticals should build on top or in addition to SA1 scope
- Regarding “Action to SA2”, as the proces is offline, it is quite irrelevant to point to a specific group. Especially when the expertise of other groups could be relevant for given discussion
- The goal of the discussion should be clarified. I assume that it is about clarifying/expanding/refining the directions identified in the Workshop. No need to go down to the SI/WI detail level.

On TSG N-1: Key Directions

- Same comment regarding the group from which the moderator is assigned. The moderator could come from another group than SA2, depending on the identified key direction.
- Same comment for "action to SA2"

On TSG N: Package approval

- Question: is it really intended to select the rapporteur in plenary? I'm assuming that this discussion could be part of the preparatory work at the WG level or offline after the meeting.

5 – MediaTek Inc.

Response to Orange

TSG N-2

- First two bullets (MRP, Verticals, SA1): agreed
- Action to SA2: action to SA2 is required as SA2 is in our view the central point in this debate. Having said that, other SA WGs may be relevant as well
- Note the directions are not WI/SI dimension and not expected to go in SI/WI detail level, unless some details can obviously be set

TSG N-1

- Same as above.

TSG N

- Yes - the intention being to focus discussions throughout the process on technical contents and decide on Rapporteurs at the very end of the process

3.1.2 Nokia proposal rev0

From [4]:

Proposal #1:

1. TSG SA to define high-level themes for a Release, and subsequently SA WGs to provide study and work items aligned with these themes.
2. Themes to be cross SA WGs.
3. Themes can be defined in an iterative manner, e.g. first within a workshop and then within TSG SA meeting(s).
4. Allow SA WGs specific or critical features that are not part of any themes, with planned time budget.

Note: For Rel-19, themes to be defined taking SA1 work into account. For subsequent releases, consider whether themes need to be defined before SA1 work starts to also guide SA1 work approval.

Figure hereafter depicts how a Rel-19 contents definition process could look like, with different iterations in TSG SA and intermediate iterations in the SA WGs.

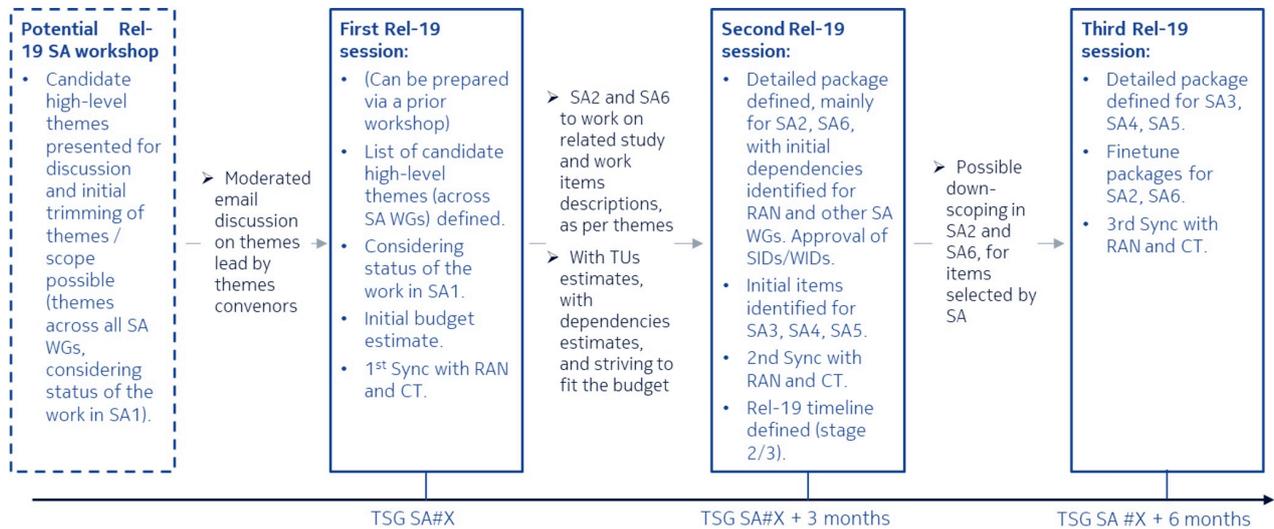


Figure 2: Nokia’s view on potential Rel-19 content definition process

Please provide your questions for clarification, comments and proposed modifications to proposal #1 here:

Feedback Form 2: Comments on Nokia_doc1_rev0 proposal #1

| |
|---|
| <p>1 – MediaTek Inc.</p> <p>Some clarity as to how the "Candidate high-level themes" are derived would be useful. We understand this could follow a similar approach as we propose e.g. based on level of support for said themes.</p> |
| <p>2 – Orange</p> <p>The key aspects will be the definition of an high-level theme and the process for the selection of the candidate high-level themes.</p> <p>Depending on the identified themes, other groups than SA2 and SA6 could work on the proposed WI/SI between SA#X and SA#X + 3 months.</p> <p>The release timeline is decided at SA#X + 3 months whereas WG need to take into this timeline to estimate the overall budget and see if the proposed SI/WI can "fit the budget". Can you clarify?</p> <p>Could you please clarify what could be the reason for the possible downscoping after the approval of the package SA#X + 3 months?</p> |

Proposal #2:

High-level prioritization: If required, TSG SA level prioritization based on initial set of Release themes, and potentially, within a theme, at study item or work item level.

Discussion on proposal #2 covered in clause 3.2.

3.1.3 InterDigital proposal rev1

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases. Current practice is that SID + WID run in series within the same release. In many cases, this takes more time to complete than the amount of available meeting time. The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

SID Provide input to / considerations for the normative work. Not necessarily all aspects considered. SIDs will progress uncoordinated in time. As usual, when a SID is approved a completion date will be established. However, it is proposed that the completion dates of SIDs do not need to align with each other and do not need to be aligned with start / end of a release. SID conclusions may be selected as the basis for normative work in the next release after the SID completion.

WID Normative work scoped (fully or partly) based on conclusions of SID(s). WIDs (features) coordinated and grouped in releases.

This will give the WG more time to complete the normative work within the timeframe of the release.

All WG-meetings for the feature will be used for normative work. In other words, normative work will not be allowed to start for parts of a feature while the study continues for other parts of the feature.

This will reduce the pressure to go normative without proper background work.

Please provide your questions for clarification, comments and proposed modifications to proposal #1 here:

Feedback Form 3: Comments on IDCC_doc1_rev1 proposal #1

1 – MediaTek Inc.

Handling Study and Normative work in two different releases may not always be justified - depending on the volume of work expected from a given Study and related Feature work. Thus we think we should keep the door open to Study and Normative work in the same release, however, the work need to be planned from the beginning bearing in mind the potential normative work load (which would also allow to mitigate the ambition level of normative work).

Having said that we sympathize with some of the concerns expressed i.e. there should not be a default approach to do both study and feature in the same release.

2 – Nokia France

Doing a study in one release and the related normative work in the subsequent release is a possible option, but should not become the only option. Big studies may benefit from this proposal, but let's keep flexibility to do both study and normative work in the same release for some features.

Now, one issue is that it is difficult to estimate the normative work at start of a study, so we need to improve in this area.

3 – Orange

I agree that a WI should only be started after the conclusion of the related SI. But, following this view, the SI completion should not be bound to any release timeline. Based on the completion date of the SI, the estimated work for the normative aspects and the remaining time budget, the corresponding WI would be part of the current release or the next one. But this implies that the release package would be only known at the end of a predefined release timeline and that a pre-determined time is granted at the WG level for the work on the incompleted SI independent of any release (except if there is a decision to stop the SI).

3.1.4 Huawei proposal rev0

From [6]:

Proposal 1.1:

Themes can be considered for the sake of SA view on release content grouping.

- a) *The themes can be only be a subset of the items worked on in a release, they indicate the major subjects of a release.*
- b) *Themes are not used to cut out / filter items.*
- c) *The Rel-19 timeline should be decided in December 2022. Themes should then be discussed 3 month later, when first S/WI proposals have been made in the WGs.*
- d) *Initially the themes could be very simple key words or short sentence.*

Release planning (SA)

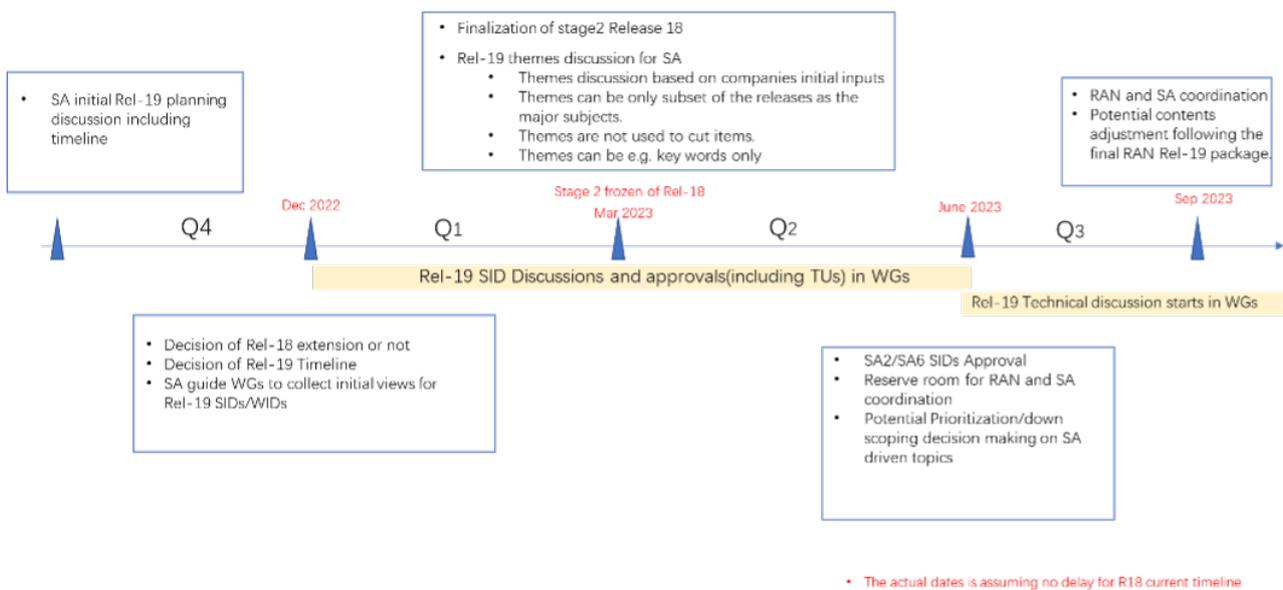


Figure 3: Huawei proposal for Rel-19 planning exercise

Please provide your questions for clarification, comments and proposed modifications to proposal #1.1 here:

Feedback Form 4: Comments on Huawei_doc1_rev0 proposal #1.1

3.2 [1b] SI/WI treated equally

Issue identified from [1]: All proposed SI/WI treated 'equally' without any categorisation of the functionality introduced, e.g. new services, service enhancements

3.2.1 MediaTek proposal

From [3]:

Solution to 1a will address 1b

- *Proposal 3: SA2 needs to spend resources on limited #directions that are set top-down (i.e. at SA plenary) – See Proposal 3bis*

Discussion covered in clause 3.1.

3.2.2 Nokia proposal rev0

From [4]:

Proposal #1:

1. *TSG SA to define high-level themes for a Release, and subsequently SA WGs to provide study and work items aligned with these themes.*
2. *Themes to be cross SA WGs.*
3. *Themes can be defined in an iterative manner; e.g. first within a workshop and then within TSG SA meeting(s).*
4. *Allow SA WGs specific or critical features that are not part of any themes, with planned time budget.*

Discussion on proposal #1 covered in 3.1.

Proposal #2:

High-level prioritization: If required, TSG SA level prioritization based on initial set of Release themes, and potentially, within a theme, at study item or work item level.

Please provide your questions for clarification, comments and proposed modifications on proposal #2 here:

Feedback Form 5: Comments on Nokia_doc1_rev0 proposal #2

1 – Apple France

Comments from **Sharp**:

If SA plenary defines a High-level prioritization of the themes as identified in Proposal #2, and SA also defines the maximum number of WI/SI for each WG as identified in Proposal #4, then it remains to be clarified how (and who is) to reconcile the N-number of available WI/SI across the Prioritized themes (e.g. high to low).

For example, if SA Plenary agrees to 4 themes and SA agrees to assign each theme with a priority of either High, Med or Low, and SA has decided on a maximum of 18 WI/SI for some WG, then how are the 18 WI/SI to be allocated across the 4 themes, and is that task taken by the WG or by SA?

3.2.3 Huawei proposal

From [6]:

Proposal 1.1:

Themes can be considered for the sake of SA view on release content grouping.

- 1. The themes can be only be a subset of the items worked on in a release, they indicate the major subjects of a release.*
- 2. Themes are not used to cut out / filter items.*
- 3. The Rel-19 timeline should be decided in December 2022. Themes should then be discussed 3 month later, when first S/WI proposals have been made in the WGs.*
- 4. Initially the themes could be very simple key words or short sentence.*

Discussion covered in clause 3.1.

3.3 [1c] Items that do not progress

Issue identified from [1]: Time spent in WG on detailed elaboration of items that end up deprioritized or work tasks that get down-scoped

3.3.1 MediaTek proposal

From [3]:

Proposal 3: SA2 needs to spend resources on limited #directions that are set top-down (i.e. at SA plenary) – See Proposal 3bis

Discussion covered in clause 3.1.

3.3.2 Nokia proposal

From [4]:

Proposal #1:

1. *TSG SA to define high-level themes for a Release, and subsequently SA WGs to provide study and work items aligned with these themes.*
2. *Themes to be cross SA WGs.*
3. *Themes can be defined in an iterative manner; e.g. first within a workshop and then within TSG SA meeting(s).*
4. *Allow SA WGs specific or critical features that are not part of any themes, with planned time budget.*

Discussion covered in 3.1.

3.3.3 InterDigital proposal

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases.

The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

Discussion covered in 3.1.

3.3.4 Huawei proposal rev0

From [6]:

Proposal 1.1:

Themes can be considered for the sake of SA view on release content grouping.

1. *The themes can be only be a subset of the items worked on in a release, they indicate the major subjects of a release.*
2. *Themes are not used to cut out / filter items.*
3. *The Rel-19 timeline should be decided in December 2022. Themes should then be discussed 3 month later, when first S/WI proposals have been made in the WGs.*

4. Initially the themes could be very simple key words or short sentence.

Discussion covered in clause 3.1.

Proposal 1.2:

For the items spanning multiple releases, it is based on consensus per release. The leftovers from early release don't automatically get approved in the next release.

Discussion covered in clause 3.6.

Proposal 2.2:

3 months after R18 freeze time SA decides whether any potential prioritization/down scoping on SA driven topics is needed. When RAN finishes their Rel-19 prioritization for RAN driven topics, SA (if necessary) will adjust Rel-19 content in coordination with RAN.

Please provide your questions for clarification, comments and proposed modifications to proposal #2.2 here:

Feedback Form 6: Comments on Huawei_doc1_rev0 proposal #2.2

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3.4 [1d] SA Release planning excludes Stage 3

Issue identified from [1]: SA Release planning does not include Stage 3 consideration

3.4.1 MediaTek proposal

From [3]:

Solution to 2a will address 1d

Solution proposed to 2ai and 2aii:

– Solution to 3 will address this issue

- *Proposal 1: Strict upstream limitation of the #SIDs/WIDs is necessary in addition to meeting the TU budget*
- *Proposal 3: SA2 needs to spend resources on limited #directions that are set top-down (i.e. at SA plenary) – See Proposal 3bis*
- *Proposal 4: SA2 work capacity in a Release shall continue to be defined assuming the constraints of SA2's normal f2f set-up only*
- *Cap #TEI items*
- *Enforce strict single quarter work per TEI item*

Discussion covered in 5.1, 5.2 and 5.3.

Solution proposed to 2aiii:

- *Terminate CT:*
 - *Integrate CT WGs into SA*
 - *Terminate CT6: integrate into CTI*
- *At minimum: CT plenary shifted to mid week*

Discussion covered in clauses 4.4.

3.4.2 Nokia proposal rev0

From [4]:

Proposal #4

Define a realistic scope and time budget for Rel-19 (and future Releases), and define, for each SA WG, a maximum number of study and work items which can be part of a Release and a maximum number of TEI items that can be handled in a Release. Overall CT WGs capacity to be considered.

Please provide your questions for clarification, comments and proposed modifications on Proposal #4 here:

Feedback Form 7: Comments on Nokia_doc1_rev0 proposal #4

1 – MediaTek Inc.

We share similar views. It is important that CT groups capacity be considered when planning SA content.

Proposal #5

Plan and allocate a sufficiently big buffer in SA WGs :

1. *for alignment with other WGs (alignment with RAN, coordination with CT WGs, alignment cross SA WGs),*
2. *for maintenance work (e.g. Rel-18), and*
3. *for critical (e.g. regulatory) features which may come at a later stage of the open Release.*

Discussion covered in 4.5.

Proposal #7

Regular cross TSG checkpoints, i.e. at each TSG round, between RAN, SA and CT, to:

1. *discuss potential delays for existing work and assess cross TSG impacts,*
2. *discuss on new items from other TSGs and decide on way forward considering cross TSG impacts,*
3. *review blocking points / critical LSs that require coordination between TSGs and make decisions collectively.*

Note: This would require a different scheduling of TSGs, at least for CT, i.e. there would be the need for sufficient overlap between TSGs to allow coordination sessions for SA/CT aspects and for RAN/SA/CT aspects.

Discussion on proposal #7 covered in 4.10.

3.4.3 Huawei proposal rev0

From [6]:

Proposal 2.1e:

Keep 9 months gap between stage 2 and stage 3 freeze time to make sure stage 2 items are well implemented in stage 3.

Discussion covered in clause 4.5.

Proposal 3:

1. *Once the R19 Timeline is decided, WG leadership should provide the budget of the TUs for the whole release.*
2. *WG leadership should give maximum SI/WI number for the release (e.g. SA2 would allow for 12 to 15 S/WIs in R19 due to the physical constrain of meeting organization (i.e. parallel sessions management)).*

Please provide your questions for clarification, comments and proposed modifications to proposal #3 here:

Feedback Form 8: Comments on Huawei_doc1_rev0 proposal #3

3.5 [1di] Stage 2 items not progressing to Stage 3

Issue identified from [1]: Time spent in WG on Stage 2 items that do not end up in Stage 3

3.6 [1e] Items spanning multiple release

3.6.1 InterDigital proposal

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases.

The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

Discussion covered in 3.1.

3.6.2 Huawei proposal rev0

From [6]:

Proposal 1.2:

For the items spanning multiple releases, it is based on consensus per release. The leftovers from early release don't automatically get approved in the next release.

Please provide your questions for clarification, comments and proposed modifications to proposal #1.2 here:

Feedback Form 9: Comments on Huawei_doc1_rev0 proposal #1.2

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3.7 [1ei] Items with very large scope

Issue identified from [1]: Unclear handling of items with very large scope which need to be partitioned into smaller items to be worked on over a number of releases

3.8 [1eii] Leftover items

Issue identified from [1]: Unclear handling of leftover items which are either not finished or partially finished in Rel-X, whether they are moved to the next Release, and if so, whether they get any preferential treatment in the next Release

3.8.1 MediaTek proposal rev0

From [3]:

Leftovers shall not be treated with higher priority

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 10: Comments on MediaTek_doc1_rev0

3.9 [1f] Missing check-points between WGs

Issue identified from [1]: Missing check-points between WGs, e.g. whether Stage 1 content is specified in Stage 2, whether Stage 2 content is specified in Stage 3

3.9.1 MediaTek proposal rev0

From MediaTek_doc1_rev0 [3]:

Reduce Stage 1 effective work volume. For SAI:

- *Reduce #meetings: strict max 4/year, no AH*
- *Reduce effective #quarters on a given Release*
- *Cap #SI/WI*
- *Introduce Rel-N buffer (see item 2c)*

Ensure strict Stage X freeze

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 11: Comments on MediaTek_doc1_rev0

4 Timeline / timing-related issues

4.1 [2a] Issues with cross-TSG co-ordination

4.1.1 Nokia proposal rev0

From [4]:

Proposal #1:

1. *TSG SA to define high-level themes for a Release, and subsequently SA WGs to provide study and work items aligned with these themes.*
2. *Themes to be cross SA WGs.*
3. *Themes can be defined in an iterative manner, e.g. first within a workshop and then within TSG SA meeting(s).*

4. Allow SA WGs specific or critical features that are not part of any themes, with planned time budget.

Discussion on proposal #1 covered in 3.1.

Proposal #5

Plan and allocate a sufficiently big buffer in SA WGs :

1. for alignment with other WGs (alignment with RAN, coordination with CT WGs, alignment cross SA WGs),
2. for maintenance work (e.g. Rel-18), and
3. for critical (e.g. regulatory) features which may come at a later stage of the open Release.

Discussion covered in 4.5.

Proposal #6

Create a related SA WG work item whenever a dependency is identified in a RAN led work item. This will e.g. allow SA2 to progress system level aspects for RAN features.

Please provide your questions for clarification, comments and proposed modifications on Proposal #6 here:

Feedback Form 12: Comments on Nokia_doc1_rev0 Proposal #6

1 – MediaTek Inc.

We should be careful with proposal #6 for it could lead to unfortunate overflow late into a Release. Proposal #6 only potentially works if dependencies are *properly* identified at the same time as the original proposal is made.

We should avoid starting single-handedly in a TSG any work with significant impact in another TSG if the other TSG is not able to accommodate the work and the feature is not able to operate without this work.

See e.g. handling of RAN slicing and related major system impact very late after Rel-17 freeze and yet without a working SA2 feature in Q3 2022.

Proposal #7

Regular cross TSG checkpoints, i.e. at each TSG round, between RAN, SA and CT, to:

1. discuss potential delays for existing work and assess cross TSG impacts,
2. discuss on new items from other TSGs and decide on way forward considering cross TSG impacts,
3. review blocking points / critical LSs that require coordination between TSGs and make decisions collectively.

Discussion on proposal #7 covered in 4.10.

4.1.2 InterDigital proposal rev1

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases.

The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

Discussion on proposal #1 covered in 3.1.

Proposal #2

Consider fewer new features per release. How downsized can a new feature be? Too much downsizing may cause numerous discussions on extending the scope during the normative work. The consideration applies primarily to new features as often enhancements to existing features benefit from past experience, which leads to a common understanding of the work scope amongst companies

Like for features, steps must also be taken to ensure that a limited amount of studies be performed in parallel.

Please provide your questions for clarification, comments and proposed modifications to proposal #2 here:

Feedback Form 13: Comments on IDCC_doc1_rev1 proposal #2

| |
|--|
| 1 – MediaTek Inc. We agree with the general direction. |
| 2 – Nokia France We support the idea to be more realistic in terms of how many new features and studies can be worked in parallel in a given Release for a WG. |

Proposal #4:

Standardise a form for rapporteurs to use for indication of progress. Different form for SID and WID.

Discussion on proposal #4 covered in 4.5.

4.1.3 Huawei proposal

From [6]:

Proposal 2.2:

3 months after R18 freeze time SA decides whether any potential prioritization/down scoping on SA driven topics is needed. When RAN finishes their Rel-19 prioritization for RAN driven topics, SA (if necessary) will adjust Rel-19 content in coordination with RAN.

Discussion covered in clause 3.3.

4.2 [2ai] Discrepancy of SA stage 2 and RAN timelines

Issue identified from [1]: Discrepancy of SA stage 2 and RAN timelines: Work with RAN dependencies delayed due different working methods in SA (waterfall model) and RAN

4.2.1 MediaTek proposal

From [3]:

Solution to 3(WG capacity-related issues) will address this issue

- *Proposal 1: Strict upstream limitation of the #SIDs/WIDs is necessary in addition to meeting the TU budget*
- *Proposal 3: SA2 needs to spend resources on limited #directions that are set top-down (i.e. at SA plenary) – See Proposal 3bis*
- *Proposal 4: SA2 work capacity in a Release shall continue to be defined assuming the constraints of SA2's normal f2f set-up only*
- *Cap #TEI items*
- *Enforce strict single quarter work per TEI item*

Discussion covered in 5.1, 5.2 and 5.3.

4.3 [2aii] Insufficient time for Stage 3 work

Issue identified from [1]: Insufficient time for Stage 3 groups after Stage 2 work completion

4.3.1 MediaTek proposal

From [3]:

Solution to 3(WG capacity-related issues) will address this issue

- *Proposal 1: Strict upstream limitation of the #SIDs/WIDs is necessary in addition to meeting the TU budget*
- *Proposal 3: SA2 needs to spend resources on limited #directions that are set top-down (i.e. at SA plenary) – See Proposal 3bis*
- *Proposal 4: SA2 work capacity in a Release shall continue to be defined assuming the constraints of SA2's normal f2f set-up only*
- *Cap #TEI items*

- Enforce strict single quarter work per TEI item

Discussion covered in 5.1, 5.2 and 5.3. Discussion for Proposal 3 covered in 3.1.

4.4 [2aiii] Disconnect between SA and CT

Issue identified from [1]: A degree of disconnect between SA and CT due to timing of CT plenary meeting with respect to SA plenary meeting

4.4.1 MediaTek proposal rev0

From [3]:

Option 1 - Terminate CT:

- Integrate CT WGs into SA
- Terminate CT6: integrate into CT1

Option 2 - At minimum: CT plenary shifted to mid week

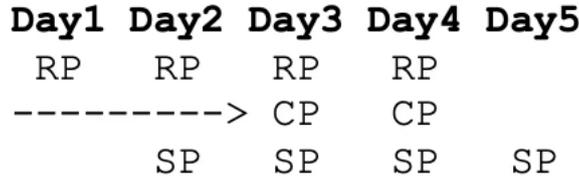


Figure 4: Option 2: CT plenary shifted to mid week

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 14: Comments on MediaTek_doc1_rev0

1 – Nokia France

Proposal to terminate CT6 is not directly in scope of SA \diamond CT disconnect issue discussion, in our view. Instead of terminating CT (your option 1), it may be better to keep CT but ensure CT runs in parallel with SA, which would allow one SA-CT sync session per TSG round, and, if needed, one SA-RAN-CT sync session during each TSG round. Thus we support your option 2.

2 – MediaTek Inc.

Response to Nokia: Option 2 is indeed the minimum that should be decided now. Option 1 is a matter beyond SA and relevant to PCG

4.5 [2b] Insufficient time for inter-WG co-ordination

4.5.1 Nokia proposal rev0

From [4]:

Proposal #1:

1. *TSG SA to define high-level themes for a Release, and subsequently SA WGs to provide study and work items aligned with these themes.*
2. *Themes to be cross SA WGs.*
3. *Themes can be defined in an iterative manner, e.g. first within a workshop and then within TSG SA meeting(s).*
4. *Allow SA WGs specific or critical features that are not part of any themes, with planned time budget.*

Discussion on proposal #1 covered in 3.1.

Proposal #5

Plan and allocate a sufficiently big buffer in SA WGs :

1. *for alignment with other WGs (alignment with RAN, coordination with CT WGs, alignment cross SA WGs),*
2. *for maintenance work (e.g. Rel-18), and*
3. *for critical (e.g. regulatory) features which may come at a later stage of the open Release.*

Please provide your questions for clarification, comments and proposed modifications on proposal #5 here:

Feedback Form 15: Comments on Nokia_doc1_rev0 proposal #5

1 – MediaTek Inc.

A sufficient buffer (TU and duration in terms of quarters) is indeed useful.

4.5.2 InterDigital proposal rev1

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases.

The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

Discussion covered in 3.1.

Proposal #2

Consider fewer new features per release.

Steps must also be taken to ensure that a limited amount of studies be performed in parallel.

Discussion covered in 4.1.

Proposal #4:

Standardise a form for rapporteurs to use for indication of progress. Different form for SID and WID.

Please provide your questions for clarification, comments and proposed modifications to proposal #4 here:

Feedback Form 16: Comments on IDCC_doc1_rev1 proposal #4

1 – MediaTek Inc.

RAN has its own way of providing Status Reports - with its own pros and cons.

SA2 has its own way of providing Status Reports (and included in SA2 Chair report) - with its own pros and cons.

So long as each Rapporteur provides a sound Status Report and that the format is well defined by the leadership, we think it is fine. We could go one step further, however we would recommend against aligning how SRs are made across TSGs.

2 – Nokia France

Questions for clarification:

- Why a different form for SID and WID?
- Is the intention to use these forms in TSG SA and / or in SA WGs?

What seems important is to flag items that need special attention and discussion, e.g. late items, or items requiring cross TSG or cross WGs coordination...

4.5.3 Huawei proposal rev0

From [6]:

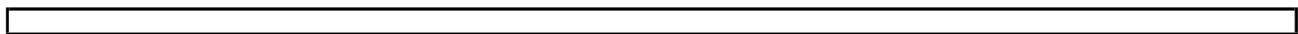
Proposal 2.1:

Rel-19 timeline should be decided in December 2022 thus the Rel-19 content discussion (i.e. SID discussion) has better reference (i.e. length, TUs etc.)

1. SA start initial Rel-19 planning discussion including timeline decision in Dec/2022.

2. SA WGs should have sufficient time to discuss and refine the Rel-19 SIDs/WIDs. SA WGs should open Rel-19 SIDs/WIDs discussion in Q1/2023, SA plenary can give guidance for it.
3. To avoid technical work on new release is blocked at the beginning of the release, granting of exceptions for old release items need to be discussed on a case-by-case basis.
4. SID/WIDs should be allowed to be agreed in WG level and sent to SA plenary as usual for approval.
5. Keep 9 months gap between stage 2 and stage 3 freeze time to make sure stage 2 items are well implemented in stage 3.

Feedback Form 17: Comments on Huawei_doc1_rev0 proposal #2.1



4.6 [2bi] inter-WG co-ordination delays work completion

Issue identified from [1]: time taken for inter-WG co-ordination could delay completion of the work

4.7 [2bii] Insufficient time in SA3, SA4 and SA5 after SA2 completion

Issue identified from [1]: Insufficient time for SA3, SA4 and SA5 work after SA2 work completion

4.8 [2biii] No clear start/end times for SA3, SA4 and SA5

Issue identified from [1]: No clear start/end times for SA3, SA4 and SA5

4.9 [2biv] No clear "Stage 2 content" after content planning

Issue identified from [1]: No clear "Stage 2 content" available after e.g. content prioritization/decision, as at this time SA3, SA4 and SA5 have not agreed all their Stage 2 items

4.10 [2c] Delays completing old-Release delays new-Release

Issue identified from [1]: Delays (e.g. due to exceptions) in completion of old-Release subsequently delays start of technical work for new-Release

4.10.1 MediaTek proposal rev0

From [3]:

Formalize Rel-N buffer before start of Rel-N+1

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 18: Comments on MediaTek_doc1_rev0

4.10.2 Nokia proposal rev0

From [4]:

Proposal #4

Define a realistic scope and time budget for Rel-19 (and future Releases), and define, for each SA WG, a maximum number of study and work items which can be part of a Release and a maximum number of TEI items that can be handled in a Release. Overall CT WGs capacity to be considered.

Discussion on proposal #4 covered in 3.4.

Proposal #7

Regular cross TSG checkpoints, i.e. at each TSG round, between RAN, SA and CT, to:

- 1. discuss potential delays for existing work and assess cross TSG impacts,*
- 2. discuss on new items from other TSGs and decide on way forward considering cross TSG impacts,*
- 3. review blocking points / critical LSs that require coordination between TSGs and make decisions collectively.*

Note: This would require a different scheduling of TSGs, at least for CT, i.e. there would be the need for sufficient overlap between TSGs to allow coordination sessions for SA/CT aspects and for RAN/SA/CT aspects.

Please provide your questions for clarification, comments and proposed modifications on proposal #7 here:

Feedback Form 19: Comments on Nokia_doc1_rev0 proposal #7

1 – MediaTek Inc.

We agree with re-scheduling CT (or incorporating it into SA) as per our proposals.

We also agree that potential delays should be indicated and addressed - however this requires full openness on said delays, which we have seen is not quite always followed.

4.10.3 InterDigital proposal

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases.

The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

Discussion covered in 3.1.

From [5]:

Proposal #2

Consider fewer new features per release.

Steps must also be taken to ensure that a limited amount of studies be performed in parallel.

Discussion covered in 4.1.

4.10.4 Huawei proposal

From [6]:

Proposal 2.1:

Rel-19 timeline should be decided in December 2022 thus the Rel-19 content discussion (i.e. SID discussion) has better reference (i.e. length, TUs etc.)

Discussion covered in clause 4.5.

4.11 [2d] Handling of old-Release end and new-Release start

Issue identified from [1]: Unclear handling at the end of old-Release and at the start of new-Release

4.11.1 Huawei proposal

From [6]:

Proposal 2.1:

Rel-19 timeline should be decided in December 2022 thus the Rel-19 content discussion (i.e. SID discussion) has better reference (i.e. length, TUs etc.)

Discussion covered in clause 4.5.

4.12 [2di] New-Release takes up time from old-Release

Issue identified from [1]: New-Release takes up time from old-Release, as SA WG(2) works on old-Release and new-Release contents definition in parallel just before the new-Release starts

4.13 [2dii] SA2 technical work is blocked at start of release

Issue identified from [1]: At the start of new-Release, SA2 technical work on new-Release is blocked until full package approval of new-Release aligning with the RAN timeline

4.14 [2e] Timing of decisions on release content vs release timeline

4.14.1 Nokia proposal

From [4]:

Proposal #1:

1. *TSG SA to define high-level themes for a Release, and subsequently SA WGs to provide study and work items aligned with these themes.*
2. *Themes to be cross SA WGs.*
3. *Themes can be defined in an iterative manner, e.g. first within a workshop and then within TSG SA meeting(s).*
4. *Allow SA WGs specific or critical features that are not part of any themes, with planned time budget.*

Discussion covered in 3.1.

4.14.2 InterDigital proposal rev1

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases.

The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

Discussion covered in 3.1.

Proposal #3:

Stage 2 must finish on time, e.g., a stricter process to handle exceptions needs to be in place, to prevent normative work from overextending. The fact that stage 2 is late release after release shows that more time for normative work is generally needed.

Realistic budgeting. What is a realistic minimum amount of TUs per meeting for a SID / WID? Budgeting for normative work should not take place until after the study has completed.

Please provide your questions for clarification, comments and proposed modifications to proposal #3 here:

**Feedback Form 20: Comments on IDCC_doc1_rev1 proposal
#3**

1 – MediaTek Inc.

We think otherwise that budgeting for normative work should be done from the outset such that the ambition level can be adjusted accordingly.

2 – Nokia France

We need to find ways to allow stage 2 to finish on time, or at least to finish on time for most of the items. Exception requests should not become the norm. Realistic planning and limitation in number of items in a release could help.

4.14.3 Huawei proposal

From [6]:

Proposal 2.1:

Rel-19 timeline should be decided in December 2022 thus the Rel-19 content discussion (i.e. SID discussion) has better reference (i.e. length, TUs etc.)

Discussion covered in clause 4.5.

5 WG Capacity-related issues

5.1 [3a] handling of large number of SI/WI

Issue identified from [1]: large number of SI/WI not possible to be handled in practice

5.1.1 MediaTek proposal rev0

From [3]:

Proposal 1: Strict upstream limitation of the #SIDs/WIDs is necessary in addition to meeting the TU budget

Proposal 3: SA2 needs to spend resources on limited #directions that are set top-down (i.e. at SA plenary) – See Proposal 3bis

Discussion on Proposals 3 + 3bis covered in 3.1.

Please provide your questions for clarification, comments and proposed modifications on Proposal 1 here:

**Feedback Form 21: Comments on Proposal 1 in Medi-
aTek_doc1_rev0**

5.1.2 Nokia proposal

From [4]:

Proposal #4

Define a realistic scope and time budget for Rel-19 (and future Releases), and define, for each SA WG, a maximum number of study and work items which can be part of a Release and a maximum number of TEI items that can be handled in a Release. Overall CT WGs capacity to be considered.

Discussion covered in 3.4.

Proposal #5

Plan and allocate a sufficiently big buffer in SA WGs :

- 1. for alignment with other WGs (alignment with RAN, coordination with CT WGs, alignment cross SA WGs),*
- 2. for maintenance work (e.g. Rel-18), and*
- 3. for critical (e.g. regulatory) features which may come at a later stage of the open Release.*

Discussion covered in 4.5.

5.1.3 InterDigital proposal

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases.

The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

Discussion covered in 3.1.

From [5]:

Proposal #2

Consider fewer new features per release.

Steps must also be taken to ensure that a limited amount of studies be performed in parallel.

Discussion covered in 4.1.

5.1.4 Huawei proposal

From [6]:

Proposal 3:

1. *Once the R19 Timeline is decided, WG leadership should provide the budget of the TUs for the whole release.*
2. *WG leadership should give maximum SI/WI number for the release (e.g. SA2 would allow for 12 to 15 S/WIs in R19 due to the physical constrain of meeting organization (i.e. parallel sessions management)).*

Discussion covered in clause 3.4.

5.2 [3b] constraints of TU budgeting

5.2.1 MediaTek proposal rev0

From [3]:

Proposal 4: SA2 work capacity in a Release shall continue to be defined assuming the constraints of SA2's normal f2f set-up only

- *Single-week f2f meetings*
- *Max 6 f2f meetings per year*
- *Max 3 parallel sessions per f2f meeting*
- *Plenary sessions per f2f meeting*
- *Regardless whether a meeting takes place f2f or electronically*
- *Upper TU limit per SI/WI shall be kept*

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 22: Comments on MediaTek_doc1_rev0 Proposal 4

1 – Nokia France

We understand with this proposal that SA2 work capacity is defined assuming a F2F meetings setup only, i.e. no change of capacity due to e.g. addition of electronic meetings. We support this.

2 – MediaTek Inc.

Response to Nokia: yes, this is the correct understanding.

5.2.2 Nokia proposal

From [4]:

Proposal #4

Define a realistic scope and time budget for Rel-19 (and future Releases), and define, for each SA WG, a maximum number of study and work items which can be part of a Release and a maximum number of TEI items that can be handled in a Release. Overall CT WGs capacity to be considered.

Discussion covered in 3.4.

Proposal #5

Plan and allocate a sufficiently big buffer in SA WGs :

- 1. for alignment with other WGs (alignment with RAN, coordination with CT WGs, alignment cross SA WGs),*
- 2. for maintenance work (e.g. Rel-18), and*
- 3. for critical (e.g. regulatory) features which may come at a later stage of the open Release.*

Discussion covered in 4.5.

5.2.3 InterDigital proposal

From [5]:

Proposal #1

Regard study and normative work as two separate tasks, handled in two subsequent releases.

The proposal is that studies take place in Release X and the study conclusions may then be selected as the basis for normative work in a subsequent release.

Discussion covered in 3.1.

Proposal #2

Consider fewer new features per release.

Steps must also be taken to ensure that a limited amount of studies be performed in parallel.

Discussion covered in 4.1.

Proposal #3:

Stage 2 must finish on time.

Realistic budgeting. Budgeting for normative work should not take place until after the study has completed.

Discussion covered in 4.14.

Proposal #4:

Standardise a form for rapporteurs to use for indication of progress. Different form for SID and WID.

Discussion covered in 4.5.

5.2.4 Huawei proposal

From [6]:

Proposal 3:

1. *Once the R19 Timeline is decided, WG leadership should provide the budget of the TUs for the whole release.*
2. *WG leadership should give maximum SI/WI number for the release (e.g. SA2 would allow for 12 to 15 S/WIs in R19 due to the physical constrain of meeting organization (i.e. parallel sessions management)).*

Discussion covered in clause 3.4.

5.3 [3c] limit number of TEI items

5.3.1 MediaTek proposal rev0

From [3]:

Cap #TEI items

Enforce strict single quarter work per TEI item

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 23: Comments on MediaTek_doc1_rev0

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| |
|--|

5.3.2 Nokia proposal

From [4]:

Proposal #4

Define a realistic scope and time budget for Rel-19 (and future Releases), and define, for each SA WG, a maximum number of study and work items which can be part of a Release and a maximum number of TEI items that can be handled in a Release. Overall CT WGs capacity to be considered.

Discussion covered in 3.4.

5.3.3 Huawei proposal

From [6]:

Proposal 3:

1. *Once the R19 Timeline is decided, WG leadership should provide the budget of the TUs for the whole release.*
2. *WG leadership should give maximum SI/WI number for the release (e.g. SA2 would allow for 12 to 15 S/WIs in R19 due to the physical constrain of meeting organization (i.e. parallel sessions management)).*

Discussion covered in clause 3.4.

6 Issues covering other aspects

6.1 [4a] Differences between F2F and e-meeting

6.1.1 MediaTek proposal

From [3]:

Proposal 4: SA2 work capacity in a Release shall continue to be defined assuming the constraints of SA2's normal f2f set-up only

Discussion covered in 5.2

6.1.2 Huawei proposal rev0

From [6]:

TU schedule in e-meeting is based on F2F setting.

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 24: Comments on Huawei_doc1_rev0 proposal



6.2 [4b] Rapporteurship aspects

Issue identified from [1]: Rapporteurship aspects such as time spent in WG on discussing rapporteurship, fairness of rapporteurship allocation

6.2.1 MediaTek proposal rev0

From [3]:

Proposal 2: Rapporteur decisions should be done last so the focus can be on technical considerations

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 25: Comments on MediaTek_doc1_rev0, proposal 2

| |
|---|
| <p>1 – Nokia France</p> <p>Would you please clarify how Rapporteur decisions would be made? e.g. would it be in TSG?</p> |
| <p>2 – MediaTek Inc.</p> <p>Response to Nokia:</p> <p>Where: yes, in TSG.</p> <p>How: the key question. But again, the main point is to focus on technical discussions throughout the process and leave the politics of Rapporteurship last.</p> |

6.3 [4c] Identify WGs that are overloaded

6.3.1 MediaTek Proposal rev0

From [3]:

Workload issues to be reported to SA plenary for action

Pruning of SID/WID mid-release must be considered

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 26: Comments on MediaTek_doc1_rev0

6.3.2 Nokia proposal rev0

From [4]:

Proposal #2:

High-level prioritization: If required, TSG SA level prioritization based on initial set of Release themes, and potentially, within a theme, at study item or work item level.

Discussion covered in clause 3.2.

Proposal #3:

Fine-tuned prioritization: Any down-scoping or fine tuning inside a study or work item need to be done at SA WG level.

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 27: Comments on Nokia_doc1_rev0 Proposal #3

1 – MediaTek Inc.

Ditto. Though we should not exclude an SA WG recommending SA plenary to downscope this or that for instance.

6.3.3 Huawei proposal rev0

From [6]:

Either SA or SA WG could identify overload

Please provide your questions for clarification, comments and proposed modifications here:

Feedback Form 28: Comments on Huawei_doc1_rev0 proposal

6.4 [4ci] Prioritisation at WG or SA

Issue identified from [1]: If prioritisation is needed, whether to do a prioritisation exercise at WG level or SA level

7 References

- [1] SP-220709_rev8, Release 19 Process Items (Source: Moderator),
https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_96_Budapest_2022_06/INBOX/DRAFTS/SP-220709_rev8%20R19%20planning.docx
- [2] Moderator_doc1_rev1, Release 19 Planning: Discussion Schedule and Process (Source: Moderator),
https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_96_Budapest_2022_06/INBOX/DRAFTS/Moderator_doc1_R19_rev1%20planning.pptx
- [3] MediaTek_doc1_rev0, Considerations on future release planning (Source: MediaTek),
https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_96_Budapest_2022_06/INBOX/DRAFTS/MediaTek_doc1_rev0.pptx
- [4] Nokia_doc1_rev0, Proposals for Release contents planning for Rel-19 (and beyond) (Source: Nokia),
https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_96_Budapest_2022_06/INBOX/DRAFTS/Nokia_doc1_rev0.docx
- [5] IDCC_doc1_rev1, Proposals for Release contents planning for Rel-19 (and beyond) (Source: InterDigital),
https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_96_Budapest_2022_06/INBOX/DRAFTS/IDCC_doc1_rev1.docx
- [6] Huawei_doc1_rev0, Proposals for Rel-19 Planning (Source: Huawei),
https://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_96_Budapest_2022_06/INBOX/DRAFTS/Huawei_doc1_rev0.docx