

Improving the MPAG Process

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Note: The views expressed in this presentation are those of the authors and may not necessarily represent the views of the Federal Communications Commission.



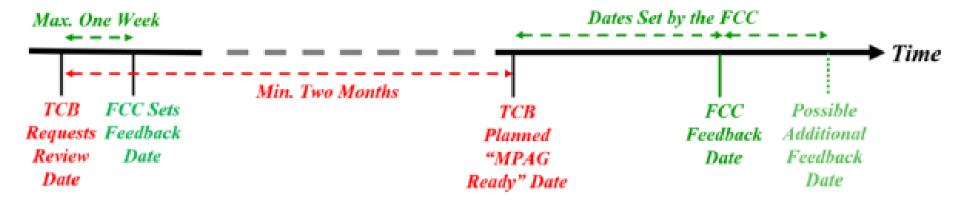
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MPAG Review Scheduling: Status and Functionality

- MPAG advanced scheduling process, as previously outlined in [TCBC
 Workshop April 2023] and now in <u>KDB Pub. 388624-D03</u>, is available for use
- The process allows applicants to ask for a scheduled feedback response date for (complex enough) MPAG reviews
- No additional tools required: process entirely managed via KDB Inquiry tool
- Suitable for large filings, and months-ahead product developments
- Already tested and other filings coming in: so far, so good





Forthcoming PAG Format Changes (I)

- Goal: simplify the review of PAGs (especially large MPAGs)
- Key point: the KDB Inquiry that refers to the (M)PAG shall contain all the information required for the review, either in the main body and/or in the attachments, depending on the complexity.
- The data provided in the KDB Inquiry will be a subset of the files uploaded in EAS, providing the minimum information to support the review
- The content uploaded in EAS still will represent the formal document of record for full compliance demonstration purposes
- Examples: calibration data, large tables showing details with measurements well below the limits do not need to in the KDB Inquiry



Forthcoming PAG Format Changes (II)

- Procedure: for each (M)PAG, the KDB Inquiry shall contain
 - A summary (M)PAG table
 - a compliance summary of how the PAG is addressed (referring to each element of the PAG checklist, if published)
- For each PAG Item, the minimum narrative, set of plots, and/or tabular data demonstrating compliance in a compelling fashion.
- Reference to the pertinent EAS filings in case there are questions about the data that are presented, or additional information is needed.

Inquiry Tracking Number: 123456 Filing Information Introduction: description w/reference to (M)PAG Table attachment **Compliance Summary** PAG Item #1 Checklist Item 1: ... - Checklist Item 2: ... PAG Item #2 Reference to attachment!



Example of New PAG Format (I)

KDB Inquiry submission

Currently Displaying Inquiry Tracking Number: 123456

- Inquiry Details
- Correspondence
- Status History
- Data Change Report

Contact Information:

...

Inquiry Details on 09/26/2023:

First category: PBA Submittal

Second

Multi-PAG

category:

Subject:

MPAG for ABCDEF and GHIJKL (FCC ID

XYZ0000001)

Text of Inquiry:

Pursuant to KDB 388624 D02 Pre-Approval Guidance List v18r03, we are hereby submitting a Pre-Approval request for this applications. MPAG Summary Table is included in the attachment 20230926_MPAG_123456_Summary Table

•••

PAG Item ABCDEF

Devices incorporating ... technologies except when

Checklist is provided in KDB Publication 000000 and all items are addressed here below

Checklist Item 1

The proposed design has a maximum conducted of ... mW thus it is below the limit considered for the ABCDEF PAG Item

Checklist Item 2

The maximum channel bandwidth allowed by design is .. MHz, therefore meeting the requirement of the ABCDEF PAG Item

Checklist Item 3

The spurious emissions are below the required mask, as shown in detail in the file 20230926 ABCDEF_Item3_Spurious herein attached

PAG Item GHIJKL

Devices incorporating ... technologies except when

No checklist is currently provided for this PAG. The following items are then chosen by the applicant to address PAG

Item 1

The device is equipped with ... technology, following the ... manufacturer specifications that were accepted in the KDB Inquiry ... Accordingly, the device is exempt from the SAR testing, as discussed in the GHIJKL PAG Item

Item 2

The power density was measured at the prescribed distances and was found less or equal to the 1 mW/cm² required in the PAG Item GHIKLM. Details of the measurements are provided in the attachment

20230926 GHIKLM Item2 PowerDensity

Attachment List:

20230926 MPAG 123456 Summary Table

20230926 ABCDEF Item3 Spurious

20230926 GHIKLM Item2 PowerDensity



Example of New PAG Format (II)

Required Documentation: a good PAG Table

#	PAG Item	Description/Type of test	Application/ Equipment Class	FCC Guidance	Documentation	Relevant Test Report	Available FCC PAG Checklist
1	ABCDEF	RF Exposure. Wi-Fi 6GHz.	TC000001 (PCS,6CD)	KDB Pub. 123456, 678910	Operational Description Tune- up	6GHz RF Exposure Evaluation	Y
2	UVWXYZ	EMC. Contention-based protocol.	TC000002 (6CD, PCE)	KDB Pub. 111213	Operational Description Tune- up TAS Uncertainty Declaration	Part 0, Part 2 Reports Part 1 SAR Reports	N



Example of New PAG Format (III)

- In some instances, a PAG may not require extensive documentation, then the compliance information for each PAG item can be provided in the Inquiry text
- Example for how the PAG KDB Inquiry may look:

PAG Item ABCDEF - Devices incorporating ... technologies except when

The checklist is provided in KDB Publication 123456 and all items are addressed here below

Checklist Item 1

-The proposed design has a maximum conducted power of ... mW, thus it is below RF exposure test exemption threshold that is required for the ABCDEF PAG Item

• Checklist Item 2

-The maximum channel bandwidth allowed by design is .. MHz, therefore meeting the requirement of the ABCDEF PAG Item

. . . .



Example of New PAG Format (IV)

• The PAG KDB Inquiry may also have a separate attachment for each PAG item, with a clearly self-identifying filename, for example:

PAG Item GHIJKL: Devices incorporating ... technologies except when

No checklist is currently provided for this PAG. The following items are then chosen to address PAG:

- Item 1 The device is equipped with ... technology, following the ... manufacturer specifications that were accepted in the KDB Inquiry 678910 Accordingly, the device is exempt from the SAR testing, as per provision outlined in the GHIJKL PAG Item
- **Item 2** The power density was measured at the prescribed distances and was found less or equal to the 1 mW/cm2 required in the PAG Item GHIKLM. Details of the measurements are provided in the attachment 20231024_GHIKLM_Item2_PowerDensity
- Item 3 The spurious emissions are below the required mask, as shown in detail in the file 20231024_GHIKLM_Item3_Spurious herein attached

. . . .

Attachment List:

20230926_MPAG_123456_Summary Table 20230926_GHIKLM_Item2_PowerDensity 20230926_GHIKLM_Item3_Spurious



Example of New PAG Format (V)

- The compliance narrative section (and related file attachments) shall only contain information related to one particular PAG item: no additional material unrelated to the PAG shall be included.
- File attachments shall address the entire PAG Item, w/checklist if posted by the FCC provided, or in free format if no checklist is available yet.
- File attachments shall be organized in sections, each referring to a particular element of the checklist, or to the list of items that the applicant chooses to provide.
- Any additional information required as a document of record for compliance purposes shall be included in the report(s) filed in EAS.



Transition Period

- Any new change required PAG format will be in effect only after posting in a new KDB Publication
- Phased transition period timeline to help TCBs in the transition:
 - Phase 1: recommendation to the TCBs to follow the new format for forthcoming applications
 - Phase 2: notification to the TCB of misalignments of applications with the required format
 - Phase 3: returning applications deemed non-conforming with a request for corrections
- Additional details to be communicated with ample advance notice
- Feedback is welcome and will be accounted for



Conclusions

- Improved format for PAG KDB Inquiry will provide self-contained documentation for the review
- Will help TCB in their review
- Will lead to faster FCC processing