“Guidelines for Considering Operations & Management in IETF Specifications” RFC 5706 bis

draft-opsarea-rfc5706bis

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RFC5706bis: Context & Goal

- RFC5706 was published in 2009 with a good discussion of operations and management considerations, however:
  - After +15 years, some ***content is stale***: a ***refresh is needed*** to clean-up many discussions
  - ***Targets several audiences*** with, sometimes, ***distinct perspectives***, e.g., Protocol Designers vs OPS Reviewers
    - ***Need a better scope*** (Protocol Designers/WGs/ADs for Charters)
    - ***Offload review templates/discussion***
  - ***Guidance is lost in the mass of technology background*** material
    - Review the flow with a ***focus on the guidance clarity***
    - Help authors identify ***key considerations*** to discuss/document
    - Challenge: Find the ***right balance between providing clear guidance*** while ***avoiding rigidity***
- OPS-DIR reviews are good, but come too late in the process, at a point where nobody wants to change a document
- Guidance to OPS-Dir reviewers is not discarded, just moved to OPS-Dir wiki

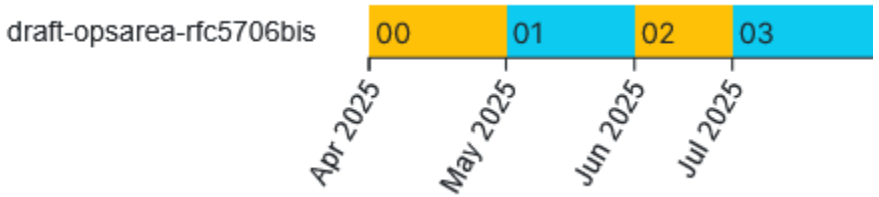
Current (Aggressive) Plan, by our OPS AD Med

- I will be sponsoring the document with joint LCs in all OPS WGs with the expected outcome to produce a ** BCP **
- The reference discussion venue will be OPSDIR + OPSAWG
- Week of April 7th:
  - Authors to submit draft-ietf-opsarea-rfc5706bis-00 with the same content as RFC5706. The only changes are the authors list and document track. See attached.
  - Authors to send a call for inputs to all OPS WGs + reminder of the discussion venue.
  - OPS AD to send a note to all ADs to seek for cross-area inputs.
- Authors to release revisions that address the initial list of change items and any comment from the call for inputs.
  - More clarity on the terminology and leverage the work led by Adrian in NMOP
  - IM part
  - More guidance on the importance of DMs
  - Soften the MIB part + IESG statement in MIBs
  - Add more YANG
  - Generalize the approach in RFC6123/ Manageability Considerations Section in all IETF Specs
- IETF#123 Madrid: Present status and pending issues in OPSAREA Session. A slot is already booked for this.
- Post IETF#123
  - Authors to send reminder of call for inputs to all OPS WGs or follow-ups to specific points raised there in the first call.
  - Authors to release revisions to address pending issues and any received comments.
- 09/2025: OPS AD to issue a LC shared in all OPS WGs.
- 10/2025: IETF LC

OPSAREA-wide document, but OPSAREA can not adopt document, hence AD-sponsored

Progress So Far … Well, on Track!

- The authors meet weekly
- We work in GitHub (markdown) https://github.com/IETF-OPSAWG-WG/draft-opsarea-rfc5706bis
- We track issues both from our own reviews, as well as mailing list feedback as GH issues
- Alvaro Retana, as routing area expert, as document shepherd
- Revision -03 was published just before the IETF 123 cutoff
  - Presentation in OPSAWG
  - Presentation in RTG area
- Since then, substantial reviews have come in from Alvaro and Chongfeng



Where is this currently heading?

Network Working Group
Internet-Draft
Obsoletes: 5706 (if approved)
Intended status: Best Current Practice
Expires: 15 December 2025

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Huawei
J. Clarke
Cisco
A. Farrel
Old Dog Consulting
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Swisscom
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13 June 2025

Guidelines for Considering Operations and Management in IETF Specifications
draft-opsarea-rfc5706bis-02

Abstract

New Protocols or Protocol Extensions are best designed with due consideration of the functionality needed to operate and manage the protocols. Retrofitting operations and management is sub-optimal. The purpose of this document is to provide guidance to authors and reviewers of documents that define New Protocols or Protocol Extensions regarding aspects of operations and management that should be considered.

This document obsoletes RFC 5706, replacing it completely and updating it with new operational and management techniques and mechanisms. It also introduces a requirement for an "Operational and Management Considerations" section in Internet-Drafts, before they are progressed for publication as RFCs.

The name of the section is currently being discussed. Latest proposal (temp version is github)
"Operational Considerations"

RFC5706bis: Approach

- *"The guidance in this document does **not mandate providing a comprehensive inventory** of all operational and manageability considerations. Instead, the guidance is to **focus on key aspects that will ease deployability** and are essential for operating and maintaining the technology."*
- *"The WG should expect that considerations for operations and management may need to be **updated in the future, after further operational experience has been gained**"*
- *"This document **does not impose** a solution, imply that a formal data model is needed, or imply that using a specific management protocol is mandatory."*
- *"Suitable management approaches **may vary for different areas, WGs, and protocols** in the IETF. This document does not prescribe a fixed solution or format in dealing with operational and management aspects of IETF protocols"*
- "While the introduction of a new specification does not automatically mandate the development of **entirely new tools, careful consideration must be given to how existing tools can be leveraged or extended** to support the management and operation of these new specifications."
- *"A WG may decide that its protocol does not need interoperable management or a standardized data model, but this **should be a deliberate decision, not the result of omission**"*

Some Open Issues

- Scope creep (Alvaro):
  - Proposal: Even if this document might be useful to other audiences, we should re-focus the audience section to target only the draft authors writing the Operational Considerations section.
- “Operations and Manageability Considerations Section” or “Operational Considerations” (Alvaro)
  - Proposal: “Operational Considerations”
  - This is as generic as the Security Considerations section.
- The purpose of RFC5706-bis is to instruct authors on how to write "Considering Operations and Management" in their IETF standard. Currently, its length is a bit long, and in order to facilitate its use, I suggest that the final version can reduce its length and mainly list instructions on how to write "considerations“ (ChongFeng)
  - Absolutely: This is not a tutorial on ops/management but tool for authors to help them identify what needs to be supplied in a spec for mgt/ops purposes

https://github.com/IETF-OPSAWG-WG/draft-opsarea-rfc5706bis/issues

Some Open Issues

- Standard track or also Informational and Experimental RFC?
  - Right now, the target is Standdard Track

From RFC2026

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RTG Area Feedback @ IETF 123

- Jim (AD): before telechat the doc is usually circulated among ADs, but still late - we can do it earlier.
- John: such mandatory action will lead people to decide when to start looking at the work. It's going to useful if it's considered early on in the process. So it's a group effort by the doc. shepherd, WG chairs, etc.
- Ketan (AD): Consider guidance for when one releases a protocol extension to a protocol that may not have had a strong base set of management considerations.

Inputs & Next Step & Suggestions

- Contributions, issues, and comments can be shared using:
  - https://github.com/IETF-OPSAWG-WG/draft-opsarea-rfc5706bis
- Mailing list feedback has thus far been happening on opsawg@ietf.org
- We start to see this « Operational Considerations » in some drafts. Thank you.
- Can we lead by example in the OPSAREA, by automatically adding this section in our drafts
- How can you help to make this useful for your area?