Guidelines for Considering Operations & Management in IETF Specifications

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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

Where is this currently heading?

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Network Working Group                                      B. Claise
Internet-Draft                                                Huawei
Obsoletes: 5706 (if approved)                             J. Clarke
Intended status: Best Current Practice                        Cisco
Expires: 15 December 2025                                  A. Farrel
                                                Old Dog Consulting
                                                            T. Graf
                                                          Swisscom
                                                        S. Barguil
                                                             Nokia
                                                      C. Pignataro
                                                Blue Fern Consulting
                                                           R. Chen
                                                               ZTE
                                                      13 June 2025
```

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           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

3

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**"*

Current Plan

- Release a bis of RFC5706 as a BCP
- This will be AD-sponsored work in OPS Area
- Alvaro Retana is the document shepherd

Progress So Far

- The authors meet weekly

- We work in GitHub (markdown)

- We track issues both from our own reviews, as well as mailing list feedback as GH issues

- Revision -03 was published just before the IETF 123 cutoff

- Since then, substantial reviews have come in from Alvaro and Chongfeng

6

Inputs & 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
- How can you help to make this useful for your area?