Domain Name System
Internet-Draft
Intended status: Informational
Expires: 20 November 2026

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19 May 2026

Community considerations on DNS WG structures at IETF
draft-hardaker-dns-wgs-at-ietf-07

Abstract

There has been an increasing level of discussion within the IETF about the best Working Group (WG) structures for handling the wide array of DNS work being conducted within the IETF. Wes Hardaker was asked to gather information from the community at large through e-mail, hallway discussions, and meetings and create a small team to discuss potential structural changes to be shared with the community. This document describes the team' s aggregated findings, their derived recommendations, and topics where the team did not find sufficient commonality within the collected opinions.

This document is published to retain the record for historic reference.

About This Document

This note is to be removed before publishing as an RFC.

Status information for this document may be found at https://datatracker.ietf.org/doc/draft-hardaker-dns-wgs-at-ietf/.

Discussion of this document takes place on the Domain Name System Working Group mailing list (mailto:ietf@ietf.org), which is archived at https://mailarchive.ietf.org/arch/browse/ietf/. Subscribe at https://www.ietf.org/mailman/listinfo/ietf/.

Status of This Memo

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1. Introduction

There has been an increasing level of discussion within the IETF about the best Working Group (WG) structures for handling the wide array of DNS work being conducted within the IETF. Wes Hardaker was asked to gather information from the community at large through e-mail, hallway discussions, and meetings and create a small team to discuss potential structural changes to be shared with the community. See Appendix B for the announcement. This document is the result of that effort. The main venue for this effort was [DNS-at-IETF].

The DNS@IETF recommendation team consisted of Wes Hardaker, Joe Abley and Lars-Johan Liman. Together they reviewed all the feedback about what respondents thought about the effectiveness of the DNS related WGs within the IETF between September 2025 through March 2026. Material reviewed (118 pages) included relevant e-mail (both public and private), notes taken during discussions, and WG/Area recordings from IETF meeting proceeding archives. After review, the team met multiple times in early 2026 to extract any commonality among the expressed opinions and developed recommendations based on them to offer the DNS community and the IESG. The main recommendations were then reviewed and reported in IETF#125 (March 2026).

This document describes the team' s findings (Section 2), their derived recommendations (Section 3) and topics where the team did not find sufficient commonality within the collected opinions (Section 2.2).

This document is published for historical reference and also to provide a stable reference for future assessment of the DNS work in the future.

1.1. Working Group Names Used In This Document

The team uses a few new WG names below, but recognizes that both these recommendations and these not-yet-existing WG names are subject to change and thus should be considered placeholders. It is up to the IESG and the community to decide what WGs and their names should be used. Such decisions are beyond the scope of this document. These are terse definitions that are further defined in the rest of the document.

* DNSPROT: A potential new WG dedicated to the development of the DNS protocol features themselves.

* DNSDEP: A WG dedicated to developing documents related to the deployment, and operation in general, of the DNS protocol. Note that in discussions, some believe this should be called DNSOP still or potentially DNSOPS.

* DNSDISPATCH: A WG dedicated to recommending where new DNS proposals should be directed for potential adoption and development.

* DNSOP: the still existing (in March 2026) DNSOP WG. Note that at the time this writing the current charter of the DNSOP WG includes all of the tasks described above in the DNSPROT, DNSDEP and DNSDISPATCH WGs.

1.2. Requirements language

Although the document does not specify a protocol, the [BCP14] is used to stress the importance of some recommendations and for better clarity.

2. Findings

The team found some clear points within the collected opinions. These findings are listed here and were later distilled into recommendations (Section 3). Note that items listed here do not necessarily indicate unanimous agreement, but do reflect a significant majority among the opinions. Note also that some of the concerns listed below are at least partially addressed later in the recommendations section.

2.1. Observed Commonality in Feedback Received

* It would help DNS engineers within the IETF to create two WGs: one for operations and one for protocol development.

  - One WG should concentrate on operations and hopefully streamline the process to get these from I-Ds to RFCs. Also, this can be a forum for reporting operational issues and elaborating recommendations and guidance.

  - One WG should concentrate on longer term protocol development efforts, potentially in a higher-volume discussion.

  - An issue mentioned with splitting of work into separate WGs is that some people would need to attend and participate in both WGs anyway. Though this is clear for some IETF participants, there were indications it doesn’ t apply to everyone. Some participants may also be able to concentrate more centrally on one, and merely watch/monitor the other.

* A separated DNSDISPATCH mechanism would be beneficial for helping decide where and how new work should be conducted.

  - Main protocol and operations WGs can then concentrate on the work they are chartered for.

  - DNSDISPATCH followers know where to track new works of interest.

  - A downside of this approach could be a potential slow down of new work, and an increase in agenda time in face-to-face IETF meetings.

* No structure can solve the "human problems".

  - It will still be up to the Area Directors (ADs) and chairs to deal with common management issues and disagreements, for example.

  - This includes how and where work is handled in more nuanced cases.

  - WG chairs need to be supported in handling these situations.

  - WG chairs will need to coordinate both within their own WGs and between their WG and other related WGs. Collaboration needs to occur between all DNS@IETF WGs and IESG Area Directors (ADs) about all current DNS topics of concern.

* Narrowly chartered WGs are necessary for more challenging development problems.

  - DELEG and ADD were two WG examples referred to in discussions and comments, with DELEG being an especially agreed-upon example of a body of work that needed a separated, dedicated WG.

* The team did not receive enough feedback indicating that the other DNS WGs not mentioned here, like DNSSD and REGEXT, need structural modifications. Thus we have no findings related to these WGs and do not provide recommendations that affect them.

2.2. Feedback That Did Not Achieve Common Agreement

* Always requiring running code.
  - Requiring running code before adoption had a wide set of opinions with no commonality among them.
  - Requiring running code before document publication had generally more agreement, but opinions varied about whether this was required for all types of documents.
  - Based on this, we believe each WG will need to make its own decision on this matter.
* Where to develop BCP documentation is an open question.
  - Some believe operational WGs like DNS-OARC should drive BCP development.
  - However, there was general agreement that the publication of BCPs should remain in the IETF to ensure multiple protocol reference commonality remain within the IETF.
  - It may be that interim meetings held in conjunction with external conferences would be a good idea to better gather input from network operators managing DNS infrastructure.
* Although a few people did suggest splitting the main DNS WGs into three or more WGs, most of the feedback received indicated that two primary WGs would be sufficient. For example, some IETF participants believe there should be a DNSAPP or similar WG focused on applications and protocols that make use of the DNS protocol. Furthermore, some people offered opinions that more than two would impose additional complications.
* There was general disagreement about whether or not to close the existing DNSOP WG if new ones were formed, or whether it should be rechartered in the process.
  - Some believed that a clean break would be beneficial to signal the change in structure.
  - Others believed that DNSOP was already the right name and there was no need to change it, aside from narrowing its charter.

3. Recommendations

Based on the findings above (Section 2), the DNS@IETF team extrapolated information from discussions to derive a set of suitable recommendations that the IESG ADs should consider:

* Create a new DNSPROT (DNS Protocol) or similar WG for working on protocol development and maintenance.
  - This WG should have a fairly wide charter that tasks it with work on the DNS protocol itself.
  - One potential recommendation for deciding whether things belong in this WG is whether or not the work was likely to develop special processing rules.
  - Documentation about protocol semantics should progress in DNSPROT.
* Create a new DNSDEP (DNS Deployment) WG for working on protocol deployment and operational concerns.
  - This WG's charter should be wide enough to cover work that avoids special processing rules, involves only simple IANA actions or algorithms, and consists of BCPs documenting existing behaviors.
  - Work should include guidance documents about "How you use the protocol". Examples such as algorithm rollover guidance, BCPs, or split horizon considerations.
* Create a DNSDISPATCH WG for providing guidance to authors and work proponents about where new DNS work should be conducted.
  - This will alleviate the current DNSOP WG from needing to fulfill this role.
  - To avoid introducing delays and agenda constraints (as discussed in Section 2), this WG should conduct its work almost entirely over a mailing list. Only the more complex or difficult cases should require interim or, worst case, in-person meeting time. Ideally, in-person meetings should be rare.
  - A significant portion of submissions to DNSDISPATCH can likely be handled quickly and efficiently.

- DNSDISPATCH can recommend dispatching work to any areas of the IETF, including but not limited to DNSPROT, DNSDEP, AD-sponsored, another-WG, a BOF, or the ISE.

- The DNSDISPATCH chairs should require that documents clearly articulate the problem space and proposed solution before consideration.

- DNSDISPATCH may decline to provide a recommendation for documents. This would include documents not within scope of the IETF or that were not sufficiently mature to understand the problem or solution space, for example.

- Chairs of the DNSDISPATCH WG need to be strict in managing, enforcing and carrying out its objective.

- The DNSDISPATCH WG will not prioritize work within the other WGs, and its dispatch decisions cannot result in automatic adoption. Each WG will continue to follow its own processes for formal adoption.

- The DNS directorate (dnsdir) will be considered as a resource available to the DNSDISPATCH WG, just as it is available to other WGs.

- The DNSDISPATCH WG might use a pool of willing shepherds to assist the chairs and authors with process related help for incoming documents.

- The DNSDISPATCH WG will make informed recommendations to authors (and work proponents, in general) and document where they should take their work.

  o The output of a dispatch discussion should include a short shepherd write up (perhaps a paragraph in length)

  o These should be light weight write ups that are sent to the mailing list for archiving. This should not require datatracker changes.

  o DNSDISPATCH chairs should create a light template as a boiler plate to be used by most cases.

- DNS WGs may require, in their charter, that new work proposals first get a dispatch suggestion before being considered in their WG.

- After a dispatch recommendation, new work proponents are encouraged to follow the recommendation and approach the relevant WG chairs, AD, ISE, etc. with a follow-on request (including but not limited to adoption requests).

- The chairs of the DNSDISPATCH WG should work closely with the chairs of the other WGs. They may need to work together for handling more difficult topics and to collaborate on advice or questions for the DNSDISPATCH WG participants.

* WG management may be significantly different in each of these WGs.

  - With an effective split in functionality, each WG may choose to have different forms of execution, meeting, progression, and publication requirement strategies.

  - For example, some WGs may require running code, while others may not.

* Documents may occasionally (hopefully rarely) need to move after being dispatched when the problem or solution scope changes during their development and refinement.

  - For example, problems that become large may need to move to an entirely new WG.

  - Sometimes, however, the dispatch and adoption location decision might have been wrong, but might as well stay in the WG that initially adopted the document after dispatch.

  - The AD(s) and WG chairs will need to handle this (rare) problem on a case-by-case basis.

3.1. Example Dispatch Scenarios

The DNS@IETF team recognized that some examples might be helpful in better understanding how the envisioned DNSDISPATCH WG might process incoming work. As such, we offer the following three example scenarios that highlight how dispatch workflows might happen.

1. Maxwell Coulomb writes a document that describes a new way that DNS can be used by DHCP clients. They take this document to DNSDISPATCH where, after some discussion (including references to other discussions in DHCP WGs), the chairs post a recommendation drawn from consensus to the list saying that in their opinion the best DNS WG for this document would be DNSDEP. Maxwell then approaches the DNSDEP chairs by sending a message to the chairs that includes a mailing list archive link to the DNSDISPATCH

recommendation. The DNSDEP chairs review the request and also decide that this is a good candidate document for DNSDEP and send a request for comment to the DNSDEP mailing list.

2. Marie Ampre writes a document that describes a new protocol for encoding video into linked, short ASCII messages, including examples of how this allows video to be published in the DNS. They take this document to DNSDISPATCH where, after some discussion, the chairs post a recommendation that this is not a good fit for any DNS WG since it does not really represent DNS-specific work. Thus, the chairs draw a consensus that a dispatch recommendation will not be provided.

3. Marmaduke Nxdomain writes a document in response to some operational problems that have been discussed in another forum, proposing some changes to DNS best practices to avoid such failures. After some discussion, including references to presentations and related observations surfaced in a recent DNS-OARC meeting, the chairs decide that this is a good candidate document for DNSDEP but that the document would benefit from some restructuring and rewriting first so that the substantive issues can be better considered in the WG. The chairs solicit a volunteer shepherd to help Marmaduke with the next steps. The shepherd helps Marmaduke update the text and later discuss the document with the DNSDEP chairs, including a reference to the DISDISPATCH recommendation.

4. Operational Considerations

The new structure hopes to streamline the processing and handling of DNS documents and, thus, will hopefully foster improved development of operational guidance and provide mitigations to operational issues.

5. Security Considerations

None

6. IANA Considerations

None

7. References

7.1. Normative References

[BCP14] Best Current Practice 14, <https://www.rfc-editor.org/info/bcp14>.

At the time of writing, this BCP comprises the following:

Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, DOI 10.17487/RFC2119, March 1997, <https://www.rfc-editor.org/info/rfc2119>.

Leiba, B., "Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words", BCP 14, RFC 8174, DOI 10.17487/RFC8174, May 2017, <https://www.rfc-editor.org/info/rfc8174>.

7.2. Informative References

[DNS-at-IETF]
"dns-at-ietf mailing list", n.d., <https://mailarchive.ietf.org/arch/browse/dns-at-ietf/>.

Appendix A. Acknowledgments

Wes greatly thanks the team members (Lars-Johan Liman and Joe Abley) he corralled into helping him consume all of the review content, and for the insights they brought to the discussion about this problem space.

A significant number of people (too large to list here) offered their opinions on this subject and we greatly appreciate everyone’s time, energy and desire to help the IETF be as efficient as possible in the DNS space.

Appendix B. Original Project Announcement

The following text is the announcement about this opinion collection project that was sent to various DNS IETF lists on 2025-10-06 by Mohamed Boucadair in his role as the OPS AD.

‘‘‘ text

From: mohamed.boucadair@orange.com Subject: Kick-off DNS work structure consultation Date: Mon, 06 October 2025 07:49 UTC

Hi DNSOP, all, (+ all concerned WGs: opsawg, intarea, deleg, dnssd, add, dconn, regext)

Background

As you know, DNS-related activities in the IETF are wide, affecting many other protocols within the IETF’s standardization efforts. Because of this, the DNS and its adjacent work is carried out in a wide number of WGs and even areas (INT, OPS, ART).

Currently, DNSOP is acting as the central hub for much of the core DNS work and has been for the past decade or more (and prior to that in DNSEXT as well). But, the full history of the slowly evolving structure of the DNS related WGs is beyond the scope of this message (although certainly the lessons learned from the changing structure over time remain important to consider).

Recently there has been a flurry of hallway discussions about whether the current DNS-related WGs structures are working as efficiently as possible, and whether it is time to make some changes about where recommended DNS related work gets dispatched to and subsequently developed in. It may be that change is needed. It may be that no change is needed. However, it has become clear that a discussion needs to happen, and the results of that community discussion should drive any change to be implemented. See also the provisions about this discussion in the recent DNSOP Charter 1 (https://datatracker.ietf.org/doc/charter-ietf-dnsop/).

As indicated in my message 2 (https://mailarchive.ietf.org/arch/msg/dnsop/9aztqcxfpgCEkhQT3LGxkWuMui8/), and now that the first intermediate DNSOP chartering step is done, we want to hear from everyone about what is working, and what is not, with the current structure of DNS WGs. What are the requirements for creating the most optimal work environment? Specifically, should the current DNSOP structure be maintained, modified, etc.?

Mission

The main goals of this effort are as follows:

* Provide an overview of current IETF DNS landscape & interactions

* List issues/features with the current work structure

* Propose options to soften/mitigate the issues

* Sketch a transition plan

* Propose Charter(s) (New and/or Updates to existing ones)

Task leader, team, and Call for Feedback

In order to avoid impacting ongoing DNSOP work and given the load the DNSOP Chairs already experience, I decided that this discussion is better moderated by other community members than the DNSOP WG Chairs.

I’m delighted to announce that Wes Hardaker has agreed to collect information from the community to help me, other ADs/IESG decide what the best path forward is.

Wes and a small team will gather the thoughts and opinions of those working on the DNS within the IETF and distill them down to a set of recommendations for the IESG about whether the community believes that structural changes are needed or not and, if so, to what existing or new charters.

To accomplish this, we need help from the community. Specifically, we want feedback from everyone with an opinion on the subject (including from those who think "everything is fine as is").

Below is provided a list of sample questions that are worth considering (thanks Wes for the inputs), but opinions of any sort on the subject are welcome. Note that though Wes has his own opinions, he intends to only collect information from the community and will only respond with an acknowledgment and maybe follow on questions, if needed. Wes is willing to meet with anyone wanting to discuss this during IETF#124 in person or over a virtual meeting before hand.

After thoughts, opinions, and suggestions are collected from the community, Wes will be convening a small discussion team of interested parties to help review the collected material. If you’re interested in helping on the review and recommendation team, please let Wes know. Responsible ADs, with Wes help, will decide on the small team membership later this year.

A timeline is included below detailing the course of events over the next 6 months.

Mailing List to collect feedback & discuss

A new mailing is created to collect public opinions and discussion: dns-at-ietf@ietf.orgdns-at-ietf@ietf.org (mailto:dns-at-ietf@ietf.org).

If you have opinions you don’t want to share publicly, please send them to dns-structure-anon@hardakers.netdns-structure-anon@hardakers.net (mailto:dns-structure-anon@hardakers.net) or to me and Wes or only to me and I will anonymize them before bringing them to the discussion team.

Information to be gathered

* How do we deal with the quantity of work that approaches DNSOP or similar?

* Is one overarching group like DNSOP good, or do we need an ops/protocol split like DNSOP and DNSEXT were in the past

  - and how do we ensure WGs/Chairs communicate and collaborate efficiently?

* What is the right combination of operational vs protocol maintenance group(s)?

* How to make sure that new work takes into account operational and deployment considerations?

* How do we dispatch new work coming into the IETF related to the DNS protocol?

  - DNSOP did this for the past few years.

  - Should small, contained proposals generally be dispatched to OPSAWG or similar?

  - Do we need a DNSDISPATCH group or leverage DISPATCH WG?

  - What is the right balance between a bunch of small groups vs one or a couple larger ones?

  - How to address different problem spaces and attract interested people?

  - What is the overhead on the participants that need to attend all these meetings?

  - How do we ensure there is enough expertise available?

* How do we ensure that there is sufficient support for things that are adopted (before they’re adopted)?

* Do we have an over-arching policy for requiring running code/deployment(-promises) first, or is it per-WG?

* Is the current split between mDNS/EPP/RDAP/RPP, and full DNS working well?

* What should change?

* What shouldn’t change?

Timeline

Event	Expected Ends
OPSAREA Session discussion	IETF#124
Collect feedback, suggestions, etc.	Nov 31
Analysis team craft recommendation(s)	Jan 2026
Team recommendations given to the community	Feb 2026
Analysis team meets with IESG members	Feb 2026
IESG announces plans	IETF#125

Table 1

Thank you

Cheers, Med

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