Commentary on the IAB Charter

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Disclaimer: This document includes some personal opinions of the author, and comments by some early readers have been incorporated. This document is about an institution that the community has constructed. Implied or explicit criticisms are directed at the institution, not at individual participants. I have been a participant myself, so I share the blame.

Introduction

Several recent events have suggested that the IETF and its ecosystem are due for a reasonably profound constitutional re-examination.The standards process, the publication process, the roles of various bodies, and the process for selecting the leadership, are all fundamentally unchanged since the mid-1990s.Yet the world has moved on dramatically and the IETF is no longer operating in the environment for which its present arrangements were designed. Recently, the creation of IETF LLC has added a new complication – a legal entity. This document focuses on one element, the IAB, but that is only a starting point. It may not even be the most important starting point, but as the annual nominating process is about to start, it seems timely to raise the potential issues.

At the end, there is a suggested list of questions that the community might wish to consider.

The current charter of the Internet Architecture Board (IAB) dates to May 2000, when it was published as [RFC 2850](#), and also as BCP 39, i.e. a Best Current Practice document declared by the Internet Engineering Steering Group (IESG) to represent Internet Engineering Task Force (IETF) consensus. This was the final act in a complicated process. An outline history of the IAB up to 1992 can be found at https://www.iab.org/about/history/, but that version (as of 10 July 2019) is silent about some events in 1992 and the period since then.

In June 1992 the IAB caused an upset in the IETF. After its meeting during the first Internet Society (ISOC) conference in Kobe, Japan, the IAB issued an Internet-Draft whose key sentence was 'The IAB proposal is to adopt the CLNP[1] protocol specification and packet formats for IPv7'.[2] However, the IETF itself was still in the process of analysing the problem of IP address exhaustion and starting to discuss possible solutions for what eventually became IPv6. There was a strong feeling that the IAB was out of line. As a result of this upset, by the end of 1992, the IAB was no longer in charge of the IETF and the Internet standards process. Important powers – above all, the right to declare a particular document to be an Internet standard – were given to the IETF's internal steering group, known as the Internet Engineering Steering Group (IESG). Also, a procedure was put in place to collect nominations for seats in the IAB and IESG, with the final choices made by an independent Nominating Committee. The IAB agreed on a written charter, and the IETF agreed on a formal process for drafting and standardising technical specifications. Things were set up so that the IETF needed no legal existence of its own. If a legally constituted entity was needed for some reason, ISOC would step in.[3]

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1 ConnectionLess Network Protocol, the OSI layer 3 protocol, now ISO/IEC 8473-1:1998
2 At that time, version number 6 had been assigned to another proposal (not the current IPv6).
3 A more opinionated version of this story may be found at B.E. Carpenter, *Network Geeks,* 2013, p. 102.

There was thus an IAB charter published as RFC1358 (August 1992) and revised as RFC1601 (1994), but the IAB that I joined in 1994 was still unsure of itself. The current charter was agreed after a number of years during which the IAB, which I chaired in1995-2000, searched for its role. I am listed as the editor of that charter, but it was very much a collective work and was out for comment to the IETF community as a whole for several months in 1999-2000. So it's fair to say that it represented the rough consensus of the members of the community who were interested in such things at that time.

The current charter

I now discuss point by point how the charter seems to have borne the test of time. My focus is mainly on the jobs the IAB does, not on its organizational details. I quote selected extracts, but the reader is advised to read them in the context of the complete document [RFC 2850]. Readers are of course free to disagree with my comments.

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Status of this Memo

    This document specifies an Internet Best Current Practices for the
    Internet Community, and requests discussion and suggestions for
    improvements.  Distribution of this memo is unlimited.
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That is boilerplate text, but it makes three important points:

- It's for the Internet Community, not just the IETF.

- It requests discussion and suggestions.

- It is 'open access' in modern terminology.

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Full IAB members, including the IETF chair, are selected and
appointed according to the procedures defined in [BCP 10]. Normally,
six sitting members are appointed each year to sit for two years, and
the IETF chair is appointed every two years.
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The result is that in addition to having to identify seven or eight IESG nominees each year, the Nominating Committee (NomCom) has to find six people for the IAB. Very few people agree to be IESG candidates unless they (and their employers) are willing to carry a heavy workload. The IAB workload (except for the Chair) is less, but it's an open secret that some employers perceive IAB membership as conveying status without a heavy commitment. Often, NomCom has serious difficulty in finding candidates for some IESG roles, but not for the IAB.

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The chair of the Internet Research Task Force (IRTF) is an ex-officio
member of the IAB...
The Internet Society, the RFC Editor, the IANA and the IESG each
appoints a liaison member to the IAB.
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In other words, the IAB has somewhat formal channels for communication with the other bodies named.

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2.  The Role of the IAB

    The IAB is chartered both as a committee of the IETF and as an
    advisory body of the Internet Society.
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This phrasing was chosen as a delicate compromise. The IAB was descended ultimately from the Internet Configuration Control Board and Internet Advisory (or Activities) Board created by DARPA. Then, it "was chartered as a component of the Internet Society in June of 1992" [RFC1601]. The earlier version stated that it "shall be constituted and shall operate as a technical advisory group of the Internet Society" [RFC1358]. In 1999/2000 both these formulations seemed strange, since the IETF NomCom procedure was used to seat the IAB, and most of the IAB's dealings were with the IETF and IRTF.

Now to consider the IAB's responsibilities one by one:

```
(a) IESG Appointment

The IETF nominating committee established under [BCP 10] annually
provides a list of candidates for vacant IESG seats and for the IETF
Chair if vacant. The IAB reviews the candidates, consenting to some,
all, or none.
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This was conceived as part of the "checks and balances" aspect of IETF self-governance. In practice the IAB has sometimes queried or even rejected NomCom choices, but only in a small minority of cases over the last 25 years. Since NomCom discussions are strictly confidential, it's difficult for the IAB as the confirming body to understand all the issues in a particular case. Nevertheless, this role appears to operate as intended.

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(b) Architectural Oversight
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See below, since a separate section of the charter is dedicated to this item.

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(c) Standards Process Oversight and Appeal

The IAB provides oversight of the process used to create Internet
Standards [BCP 9].
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In practice, this sentence seems to me to mean nothing.

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The IAB serves as an appeal board for complaints of improper
execution of the standards process, with powers defined in [BCP 9].
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In round numbers, there have been about 38 appeals to the IESG since 2002, and 14 subsequent appeals to the IAB. To the best of my knowledge, there have been no appeals to the ISOC Board. This IAB role appears to operate as intended.

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(d) RFC Series and IANA

The RFC Editor executes editorial management and publication of the
IETF "Request for Comment" (RFC) document series, which is the
permanent document repository of the IETF.  The RFC series
constitutes the archival publication channel for Internet Standards
and for other contributions by the Internet research and engineering
community. RFCs are available free of charge to anyone via the
Internet.
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This text establishes the existence of the RFC Editor as an independent publisher of documents for the whole technical community. In many ways the RFC series was the pioneer of open access

publishing on the Internet, ever since RFCs were first freely available via the network (apparently as early as 1971[4]).

```
The IAB must approve the appointment of an organization to
act as RFC Editor and the general policy followed by the RFC Editor.
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This sentence was phrased carefully to reflect that an independent organization (USC/ISI at that time) carried out the editing, copy-editing, publishing and distribution of RFCs, led then by the late Bob Braden. It is an open question whether this "approval" role of the IAB should ever have been extended to actions such as defining the various RFC Streams, separating the RFC Editor function into distinct functions (Series Editor, Independent Submission Editor, Production service and Publication service) and the creation of an "RFC Series Oversight Committee" (RSOC). "Oversight" of the RFC Editor is not mentioned in the IAB Charter.

The documents that define the recent RFC Editor arrangements [RFC5620, RFC6548, RFC6635] and the modern RFC "streams" [RFC5741, RFC7841], which also describe publication review and other procedures for the streams and various categories of documents, are not BCPs expressing IETF consensus. They were issued directly by the IAB (after open community discussion), presumably claiming their authority under the above words in the IAB charter.

While the IESG has a mandate to declare consensus within the IETF community, it isn't clear to me how the IAB can judge consensus of the much wider community served by the RFC Series.

```
The Internet Assigned Numbers Authority (IANA) administers various
protocol parameters used by IETF protocols, delegating this
administration as appropriate. The IAB must approve the appointment
of an organization to act as IANA on behalf of the IETF. The IANA
takes technical direction on IETF protocols from the IESG.
```

This model was consolidated by the IETF-ICANN MoU [RFC2860] and subsequent supplementary agreements, formerly between ICANN and ISOC, now between ICANN and IETF LLC. In practice the IAB has no active role here and technical instructions to IANA come from the IESG, usually in the form of approved RFCs. A major difference from the RFC Editor situation is that IANA is a function executed by a completely independent corporate entity with its own revenue stream. It is unclear to me that the IAB has any meaningful oversight role in the current situation.

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(e) ISOC Liaison

The IAB acts as a source of advice and guidance to the Board of
Trustees and Officers of the Internet Society concerning technical,
architectural, procedural, and (where appropriate) policy matters...
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In practice, technical advice and guidance to ISOC has proved to be a minor part of the IAB's work in recent years. It was more significant previously, at the time when ISOC had no senior technical experts of its own.

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(f) External Liaison

The IAB acts as representative of the interests of the IETF and the
Internet Society in technical liaison relationships with other
organizations concerned with standards and other technical and
organizational issues relevant to the world-wide Internet. Liaisons
are kept as informal as possible and must be of demonstrable value in
improving the quality of IETF specifications.  Individual members of
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    the IETF are appointed as liaisons to other organizations by the IAB
    or IESG as appropriate.
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In practice, technical liaisons are mainly appointed by the IESG, and the IAB doesn't do much "representing" itself. Nevertheless the IAB has remained involved in some cases, e.g. related to Unicode and internationalization issues. There are certain representational jobs that the IAB does fill, usually after a call for nominations or volunteers from the IETF community. Examples are the IETF Delegate to the ICANN Nominating Committee and the IAB liaison to the ICANN Root Server System Advisory Committee (RSSAC). An internal example is appointing members of the IETF Trust's Community Coordination Group.

Now expanding on the "architecture" topic:

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2.1 Architectural oversight in more detail

    A major role of the IAB is long range planning and coordination
    between different areas of IETF activity.  The IAB, both collectively
    and on an individual basis, is expected to pay attention to important
    long-term issues in the Internet, and to make sure that these issues
    are brought to the attention of the group(s) that are in a position
    to address them.  It is also expected to play a role in assuring that
    the people responsible for evolving the Internet and its technology
    are aware of the essential elements of the Internet architecture.
```

This text was copied from RFC1601, but I have no clear idea whether the IAB has achieved any of these goals.

```
    IAB members pay special attention to emerging activities in the IETF
    and to "Birds of a Feather" sessions at IETF meetings.  The IAB
    assists the IESG in evaluating such activities and in determining
    whether an IETF or an IRTF group is more appropriate.  When a new
    IETF working group is proposed, the IESG will forward a preliminary
    version of the charter to the IAB for review of architectural
    consistency and integrity.  The IAB shall review these proposed
    charters and give feedback to the IESG as appropriate.
```

I believe the IAB performs this function as described.

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    Pursuant to the architectural oversight function, the IAB sponsors
    and organizes the Internet Research Task Force (IRTF) [BCP 8].  The
    IAB reviews proposed IRTF groups.
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See below for the IRTF.

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    The IAB will convene invitational workshops to perform in-depth
    reviews of particular architectural issues...
    The results of such a review will be a report which may give advice
    to the IETF community and the IESG.
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I believe the IAB performs this function as described. Of course, it's a matter of judgment whether the IAB has chose the most appropriate topics and whether the reports have been useful. Unfortunately, some reports have been severely delayed.

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    The IAB may organize ad hoc bodies of independent technical experts
    to adjudicate technical disputes.
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I'm not personally aware of any such cases in recent years.

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3.3 Selection of the IRTF chair

    The IAB shall have the authority to appoint the chair of the Internet
    Research Task Force (IRTF) for a two-year renewable term, and to
    remove him or her. The IRTF chair shall be responsible for the
    management and organization of the IRTF according to [BCP 8].
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There is actually an inconsistency here, since the earlier clause states that the IAB "organizes" the IRTF. In practice, I believe that the IAB has effectively delegated this to the IRTF Chair. Of course, it's a matter of judgment whether the IRTF's output has been useful.

Questions for Discussion

In my opinion there are several aspects of the IAB charter that are ripe for revision. For now I simply ask a series of questions.

1. Is the IAB a committee of the IETF, an advisory body of the Internet Society, both, or neither? In general, to whom is the IAB responsible, and what community ultimately legitimizes it and its actions?

2. Is the role of reviewing IESG nominations useful?

3. Does the IAB provide oversight of the standards process?

4. Should it?

5. Is the role of handling appeals against improper execution of the standards process useful?

6. Is the IAB's role of approving the RFC Editor organization and policy meaningful? (Noting that formal and contractual arrangements are now in the province of IETF LLC.) If so, what does it mean and what are the constraints on that role? For example, does the IAB have the authority to direct the RFC Editor to publish, or not publish, a particular document?

7. Is the IAB's claim to oversight of the RFC Editor (via the RSOC) valid? (Noting that formal and contractual arrangements are now in the province of IETF LLC.)

8. Is the IAB's role in dealing with IANA meaningful? (Noting that formal and contractual arrangements are now in the province of IETF LLC.)

9. Is the IAB a useful advisory body for the Internet Society?

10. Is the IAB's role in external liaisons useful? If not, what should replace it? And is the answer different for different external organizations?

11. Is the IAB's role in "long range" issues meaningful?

12. Is the IAB's role in BOFs and Working Group and Research Group formation useful?

13. Are IAB workshops useful? For what audience?

14. Is the IAB's role of convening expert groups useful?

15. Does the IRTF benefit from the IAB as its "sponsor"?

16. Is the IAB's role of picking the IRTF Chair useful?

17. Is 12 members too many?

18. Is a 2 year term too short, too long, or appropriate?

19. Should renewal of terms be considered normal in the absence of problems, or conversely should there be a term limit?

20. Is the "Internet Architecture Board" appropriately named?

21. In view of all the previous questions, is the IAB useful in its present form?

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