Uniform Data Fingerprint (UDF)

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<keyword>Cryptography

<keyword>PKI

<keyword>OpenPGP

<also>http://prismproof.org/Documents/draft-hallambaker-udf.html

<bibliography="../bib.xml">

Internet Architecture Board (IAB) Member

Questionnaire for IAB Nominees

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Please return to nomcom17@ietf.org no later than October 13, 2017, 23:59 UTC.

This questionnaire is intended to provide the Nominating Committee with

information to help select among nominees for the IAB.

The datatracker tools work best if you submit this in 77-column

pre-wrapped ASCII, a la text/plain.

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CONFIDENTIALITY: NOTE that the contents of this questionnaire will remain

absolutely confidential to the nominations committee process.

For IAB nominees, this means that they will be shared with the Nomcom

and the ISOC Board of Trustees.

NOTE that there is a section of this questionnaire labeled

NOT FOR CONFIRMING BODY. In the case of the IAB, if you are chosen as a

candidate for the position, the confirming body is the ISOC Board. The

section labeled NOT FOR CONFIRMING BODY will not be provided to the ISOC

Board during the confirmation process. You may tell NOMCOM things that you

wish not to be shared with the ISOC Board in the NOT FOR CONFIRMING BODY

section. It will be kept absolutely confidential by the nominating

committee.

Thank you!

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NAME AND CONTACT INFO

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Home Timezone: Eastern Standard Time

Other contact information:

URL for resume: http://hallambaker.com/Professional/Resume

You may link to your resume, or include it below the text of the form.

Do not use attachments to your email - they will be lost!

EXPERIENCE AND LEADERSHIP

*Please add any information you wish to share in addition to your resume (if you include one).*

Although my degrees are nominally in 'Electronic Engineering' and 'Nuclear Physics', my actual field of study in both cases was computer science. The courses offered in Computer Science departments in the mid 80s were focused on the mainframe systems I had no interest in. Taking Electronic Engineering instead allowed me to understand computer systems from the gate level up.

The position at Oxford was created to allow me to indulge my interest in highly parallel hardware with a significant budget and attempt to construct a formal proof of correctness for a significant large scale system. The approach taken was to apply what are now known as Domain Specific Languages and use them to generate the proof along with the system. It was achieving this that led me to the realization that the formal methods approach is fundamentally brittle.

Thus when I met Tim Berners-Lee in 1992, I saw the Web as a project to which I could usefully apply the formal methods work I had learned and engineer myself out of a dead end. More importantly, it was a project that I realized had far reaching potential as a tool for political communication. Within days of meeting Tim, I recommended that Jock Gill, who I knew from the Clinton-Gore '92 online campaign look at the Web as the future platform for political discourse. This led to my later work at the MIT AI Lab on the security model for the 'mass listening' email server for the Clinton White House.

An EU Fellowship to work at CERN allowed me to do some work on HTTP architecture at CERN. Unfortunately, the requirement that I had to complete my doctorate before starting work (which had not applied to my previous three post docs) meant that by the time I arrived at CERN six months later, the exponent had already kicked in and we were already constrained by the deployed base.

## Tell us about your current work as well as your educational, professional, and research background.

My current work is focused on making computers easier to use by making them more secure. Public key cryptography is one of the most powerful and flexible tools in Computer Science, why does using it currently make systems harder to use?

Modern cryptographic protocols such as Signal demonstrate that there is no reason why the End to End secure mail user experience should be any different to that for insecure mail. But thus far all the proposals made are closed systems built around a three corner model in which the technology provider is the necessary intermediary in every exchange. If we want to achieve end-to-end confidentiality and preserve the open nature of the Internet, we have to put a standards based four corner protocol on the table. Waiting another 20 years for people to 'realize' they want to use OpenPGPis not going to work.

My end goal is to deploy a communication medium that spans mail, messaging, voice, video, Web with strong cryptography deployed at the transport, presentation and data layers. Most of this code has been written and is available from prismproof.org under MIT License. Writing the system was the easy part of course. Until critical mass is reached, the 'network effect' is a hindrance, not a benefit.

The deployment strategy for the Mesh is shamelessly stolen from the strategy Tim adopted for the Web (It is no coincidence that MMM, the abbreviation for the MatheMatical Mesh is WWW upside down). Early on, the Web had no native content, all the content was supplied from other sources through gateways. I am adopting the same approach with users.

The Mesh provides the simplest way to configure and manage keys for S/MIME, SSH and password based credentials (OpenPGP to be added soon).

The second string to the Web deployment strategy was to employ an existing technology whose advantages had not been realized in earlier systems. Tim's technology was hypertext, mine is proxy re-encryption (recryption), a form of three key cryptography in which encryption is performed as usual but the decryption key is split into two parts, both of which must be used to complete decryption.

Mesh/Recrypt is the first open specification and code to make use of recryption practical. This allows for communications between groups of users to be made end-to-end secure when the membership of the group changes over time.

Attempting to persuade the S/MIME and OpenPGP developers to merge their interests in a common standard is futile, it is VHS vs Betamax with 20 years of history. End to end email is stalled because one has a monopoly on mindshare and the other has the monopoly on deployment. The only way forward is with a new infrastructure (BluRay) that can be seen as a worthy successor to both.

There is currently no space for a new email messaging standard. But there is a large open space for an interoperable data level security solution for business documents (Word, Excel, PowerPoint, etc.). An open standards based solution for that 'killer app' that also provides secure messaging, mail, filesharing, etc. and is easier to use than existing systems might succeed.

What major professional roles do you have in addition to your position with your primary affiliation?

My main income comes from working as an expert witness. Most but not all of my cases have involved patent disputes. One side effect of this work is that I have spent a lot of time researching the history of certain ideas in the design of Internet protocols.

## What experience have you had related to Internet architecture, including research and technology strengths?

In my experience, there are three separate types of design challenge. The first is the clean slate design such as when VeriSign asked me to redesign PKI from scratch 'in XML'. Nobody used the TAXI PKI of course, but that was never the point. Building from a clean slate is usually only useful as a way to understand how the existing system that is deployed might be maintained or refactored. The assertion infrastructure of TAXI did become the assertion infrastructure of SAML/1.0 however.

The second type of design challenge is to reverse engineer incremental improvements in an existing infrastructure. Most of my contributions in PKIX are of this type. If we were building the Web PKI from scratch, features such as CAA and 'Must Staple' would be designed in from the start. Retrofitting them presents a very different and harder challenge.

The third type is architectural challenge is refactoring and this is something that the IETF clearly needs but has rarely performed. Since the 1970s, the Internet has grown in size, speed, capacity etc, a billion fold. Yet the architectural model we use to describe it is still the one developed in the 1970s when nobody knew what the end point would look like. This would not be so much of a problem if we merely attempted to use the 1970s model to explain the Internet but all too often the obsolete model is used to close down discussion of alternatives.

The network stack is not a stack any more. It is hard enough to explain where IPSEC VPN fits in that model. TLS VPNs simply don't fit at all and neither does SSH or SDN or many of the other things we are designing today. The networking world has moved on, often because we have moved it. But our ways of describing that architecture are obsolete. We need to find ways of describing the Internet architecture as it is, not how it was imagined it would be. That is refactoring.

In the 1970s, the 'narrow waist' of the Internet architecture was IPv4, the protocol that everything else ran on top of. Today, the Internet does have a narrow waist but it has moved up the stack to the DNS, or rather a subset of the DNS and the failure to recognize this shift means that the waist isn't as narrow as it should be.

### What is your ongoing connection to the research and development community?

After I left MIT, my research group became increasingly focused on the issue of cyber security as a national security issue and I have remained involved as a technical adviser and interpreter. This has in turn led to a series of joint projects with Joe Nye at the Harvard Kennedy School, work that David Clark and Scott Bradner have also been closely involved with.

The broad goal of this work has been to inform policy makers about the nature of 'cyber' and help them to establish a frame of reference for understanding the issues it raises. Since I do not have a clearance and I am a foreign national, I only participate in the unclassified side of this work. Even so, the fact that I am not an academic and do not need to publish does help.

Early on, our challenge was to persuade participants who had spent their life working on strategic arms limitation talks, that cyber is entirely unlike it in every important respect. Deterrence cannot work without attribution and the paradox of cyber attribution is that you can only be sure where the attack comes from for as long as nobody expects you to act on it.

It is my contention that the risks of cyber most closely resemble those of chemical warfare and terrorism. While the potential damage from a cyber attack is infinite, the likely effect is rather minor. In theory poisoning reservoirs could kill entire cities, in practice, none of the occasions on which it has been tried have had anything like that effect. This does not mean that we can ignore cyber, but is does mean that we should be focused on cyber defense rather than attack.

The current focus is on establishing and agreeing norms of international behavior. Norms being the term used for the precursors to treaties. Norms are not necessarily agreed or even observed by any party. But they represent a position that at least one part is willing to agree to mutually respect.

### How would you go about organizing an IAB Technical Plenary?

The first thing to know would be what idea the IAB wanted to communicate. I am not too fond of the technical plenaries that are organized as light relief.

I think that the most useful tech plenaries have been presenting the outcome of an IAB workshop. So the obvious approach is to pick someone who can explain the material.

## Tell us about your IETF and/or IRTF work experience in technical leadership roles (for example, WG/RG/BoF chair, IAB/IESG/IAOC, directorate, etc.).

I have been a WG chair, document shepherd, author, editor and member of the Security Directorate.

More relevant to the IAB position, I have worked extensively in W3C and OASIS, playing a role in the formation of the first and the transformation of OASIS into its present form. I was a W3C AC member for VeriSign and before that was a staff member.

I am more of a starter than a joiner. When the phishing epidemic hit the net in 2002, I called a meeting of the major CAs, technology providers and the major banks to look at how we face it as a community, that one of the two inputs led to the creation of the AntiPhishing Working Group. Later, when the Domain Validated certificates began to threaten a 'race to the bottom', degrading the ability of the Web PKI to establish accountability, I called the meeting that led to the formation of CABForum and Extended Validation certificates.

## Intercultural Skills

*People from many different cultures and backgrounds participate in the IETF. What is your experience in working in such environments?*

I have worked in multicultural environments since beginning my graduate degree. I have worked in Germany and Switzerland and lived in France. Every working team I have been a member of has been international.

## Please indicate if you have experience being a board member for a volunteer organization or a commercial organization.

*Please share some of the key skills and insights you gained from your experience(s).*

At Southampton, I was Secretary of the Union Club, a role that put me in charge of the only revenue stream available to the Student's Union that was not under control of the charity commission regulations. As such, I was in charge of the pinball machines but also the only person who could call a meeting to disburse funds for purposes such as hiring coaches to attend demonstrations, etc.

## TIME COMMITMENT

*The minimum time required to participate fully in the IAB is detailed in the job description. There is no upper limit to the time you can spend.*

*Are you willing and able to commit your time to complete IAB tasks such as to follow the IAB, IRTF and IETF discussions on a regular basis?*

Yes.

The reason I can provide a commitment to the time necessary to the IAB is simply that I created the product that is responsible for over half the revenue of my current employer and the industry in which I work. They are willing to support almost any project I work on in the hope lightning might strike again.

# IETF

Discuss the ways you think the IETF is fulfilling its purpose, the ways it needs to improve, and how you think the IAB can assist these improvements.

The biggest concern I have for the IETF right now is demographics. When I started working in the IETF at 30, I was one of the youngest participants. That is still the case. I see a lot of graduate students attending while they are working on their degrees but we are not keeping them.

A secondary concern is that while all the major Internet companies remain engaged in IETF at some level, many are considerably less engaged than they were ten years ago. The IETF does not seem to have become a major center for the Open Source community either. We have some large companies whose business model is based on Open Source, but that isn't the same thing as being in the thoughts of folk at the Linux Plumbers conferences.

The IETF has a tendency to define its purpose by the purpose it fulfills which is a problem.

The Internet has grown a billion fold. Every organization comparable to the IETF has met severe organizational issues when growing beyond 1,500 active participants. It was thus inevitable that the role of the IETF would be reduced. It was not inevitable or helpful for it to be reduced as far as it has. More importantly, the IETF should be deciding where it wants to act rather than allowing itself to drift in response to market forces.

Every standards organization I have been involved in has been scrupulously deferential to the SDOs that came before it and more or less ignored those that emerged afterwards. OASIS is ignored by W3C and while the IETF has begun talking to both, IEEE and ITU are considered to be much more important. Which is really rather odd given the importance of ITU today.

In my view, the parts of the Internet that the IETF has primary responsibility for are

\* Specification of the networking stack from the narrow waist down to the hardware layer (border = IEEE).

\* The Internet service discovery infrastructure (border = ICANN)

\* The Internet trust infrastructure (border = CABForum)

What about applications? That is the hard part to define. The IETF role obviously can't be every application or Web Service, there are too many for that to be possible. But I don't think it should be zero either.

I think the IETF needs to define the part of the applications space that it is going to serve. For me this is the federated applications such as SMTP, XMPP, SIP, etc. User centered applications in which users whose account is held with one provider can communicate and interact with users whose account is held at a different provider.

Providing clarity about the scope the IETF seeks to be relevant in would help attract work from those places.

IAB

*Background: The summary of desired expertise for IAB positions is available at https://datatracker.ietf.org/nomcom/2017/expertise*

*The IAB programs are described at http://www.iab.org/activities/programs/*

*In this section each numbered question may contain multiple subquestions. You may wish to provide a single answer that responds to that range of questions.*

How does your skill set match the desired IAB expertise?

What knowledge and skill would you in particular bring to the IAB?

My principal skill is in digesting broad areas of knowledge and being able to explain complex issues across disciplinary boundaries. It is one thing to describe a technical issue in the IETF, another to explain the same issue to a person who has spent 30 years in the state department negotiating treaties.

Being a security specialist requires an understanding of every layer in the stack from the link layer up to what the user thinks is going on when they click on a link. But I am in addition to being a generalist, a specialist in security. I am familiar with the motives, means and methods of the full range of Internet malefactors from script kiddies to nation state actors.

## If you are a past or incumbent IAB member, please tell us what you have contributed to IAB, and what aspects of your work you believe you could improve during your next term (if selected).

N/A

## What should be the impact of the IAB, internal and external to the IETF?

### What is currently going well and what needs improvement? What is your long term vision for the IAB?

What irks me as a WG participant is when we begin a new WG discussing the same set of 'framework' choices that we discussed in the last WG - often with the same people.

Standards are all about making choices that don't matter and whenever possible making them once. I really do not want to have three different protocols making three different decisions about how to do service discovery. I want one decision to be made that can be established as the presumptive default.

I don't much care what the choice of XML schema style is, but the fact that three different XML WGs I was involved with chose very different styles was irritating and led to an unsatisfactory result when the protocols were used in the same system. (Though it may also be noted, that the fact that XML gives people five ways to do a thing, probably should have been realized as a sign that it was the wrong tool for encoding protocol messages much earlier than it was).

The IAB charter does not allow it to play such a role pro-actively but it can observe the choices made by previous WG and recommend that these be followed. Equally important, the IAB can identify areas in which divergence is occurring because the existing infrastructure is not meeting current needs.

What is your understanding of "architecture" when referring to IETF work?

*How is it different from protocol work? What is the role and utility of architecture in IETF activities? What areas of Internet architecture need improvement and how should that be achieved?*

I see architecture as meta-design and meta-description

When designing a protocol, I always look to generalize the protocol elements I am defining to the greatest possible extent. Yes, it does drive some folk nuts. But I think it also makes for a better protocol.

Whether we call these common elements or design patterns or architecture is largely a matter of degree. If one person is building Web Services using JSON in a particular style, it is a design. If a whole community is, then we can call it an architecture.

When I am designing a protocol for OASIS or W3C or IETF, I know that there are particular styles and approaches that will find most favor with each. But the best of these design styles are ideas and approaches that help me in the design process. That is what I think architecture should try to be.

To illustrate the idea further, the following document describes how I make use of JSON, HTTP, DNS Discovery [RFC6763] and a dozen other standards in my protocol suite. In each case, most important concern is that a choice be made and that there be one choice made across all my protocols. The actual choice made does not matter to me very much unless it is utterly bonkers.

http://www.prismproof.org/Documents/draft-hallambaker-json-web-service.html

I would like to see the IAB produce similar guides because standards should always seek consistency unless there is a good reason to break with convention.

One very easy win the IAB could achieve is to simply tell all Web Service designers to make use of the approach described in RFC6763 for discovery rather than roll their own.

Tell us what you think about the ongoing IAB programs.

*In particular, do you see needs for improvements to any of the current practices related to IAB programs, or do you think there need to be changes in the current programs?*

*Which programs (either existing or programs you'd propose) do you think you're particularly suited to contribute to, and why?*

IP Stack Evolution is critical of course, but I think we need to be clear that the objective here is to mitigate the consequences of IPv4 address exhaustion and IPv6 is merely one means to that end.

One of the (hard) lessons in the crypto world was that the overhead of public key cryptography has never become 'negligible' and likely never will for the simple reason that more 8-bit microprocessors are being made today than ever before, more than were made in all the years up to 2010 combined. I find it unlikely that IPv4 devices will become extinct. People will find new uses.

I see the IPv6 transition at this point to be largely a marketing issue. IPv6 exists of course, but the vast majority of Web Servers are still IPv4 only. So subscribers with IPv6 only service are at a disadvantage right now as they have to go through a NAT to contact them.

What I would like to see as a marketing issue is for some body with relevant credibility to specify a set of service criteria for 'Internet Next' readiness for ISPs and Hosting providers. Product management in our industry is mostly a question of finding boxes for your product to tick. If you want to influence the products delivered, give them the boxes to tick. Upgrading the pipe from 100Mbs to 200Mbs is expensive, dropping an IPv6 onto every Web host costs nothing if you have done it already. The product managers that can tick the box will and more importantly will put advertising dollars behind it if their competitors fail to.

I have been deliberately avoiding directly participating in the Privacy and Security program while I have been focused on getting the Mathematical Mesh finished. The risk of seeing and following yet another new requirement was just too great. Now that the code is on the brink of going to actual deployment, I am looking to re-engage.

What relationships with other standards organizations do you see as being most important?

*What are the most important characteristics you will look for in a liaison to those organizations? Discuss your views on the nature and practice of IETF liaisons with other bodies, including any changes you would like to see.*

I see two types of liaison relationship, technical and governance.

In each case, the liaison needs to know their stuff technically and have a personality appropriate for conveying the type of message that the IETF is seeking to convey. One of the biggest challenges any SDO faces is deciding which work it does not want to do. Duplication is not always a mistake but duplication should always be a conscious decision.

Most of the IETF liaisons are essentially technical, attempting to delineate boundaries between work that is related because one depends on another, exchanging information across the boundary, etc. In most cases the liaison is an active participant in both worlds and so their personal position may not be the same as the IETF position, it may be closer to that of the other side.

Since the IETF does not do any of the things understood to be 'governance', it is important to have liaisons with the organizations that do. IETF has liaisons with ITU and ICANN of course, it should also have a liaison with CABForum which has governance of the WebPKI.

## What are your views of developing the skills and talent of others so that there is a pipeline into the IAB and into the leadership roles within the IAB (IAB Chair, directors of programs, etc).

This is not the level I am focused on developing talent right now. I think we need to get more of the younger people into the IETF and becoming document editors and WG chairs. If we have enough of those, the talent will be there for the higher levels.

What can we do to improve internationalization for the IETF?

Internationalization has two important aspects, the first is the purely functional. People are more comfortable using the Internet when applications support their native languages and cultures. The second aspect which is at least equally important but rarely acknowledged is respect. The Internet has changed the world at least as much as any other technology in history and in a shorter space of time. We have run ahead of society's ability to adapt to those changes. There is a risk if not a reality of a reaction to 'techno-imperialism' unless it is understood that the Internet is not the product of Western culture, the Internet is for everyone and that means it now belongs to nobody, including us.

It is not enough for the IETF to internationalize protocols, it must be seen to be doing so which is rather harder.

A third aspect of internationalization that is emergent is that the Internet has become an International culture in itself and the consequences of this are not fully understood. At present, it seems that the opponents of global culture understand the 'threat' better than those advocating it. A lot of people who were very happy in the knowledge that they were king of their local ant hill have become very unhappy with their situation after 'their' ants have found out about mountains on the Internet.

The IAB is currently working on increasing the visibility of the IETF accomplishments to other organizations. How do you think we can help other organizations (academic, volunteer, and commercial) to interest people in participating or supporting the IETF in the future?

See my earlier comment about providing product managers with checkboxes to fill.

Is there one specific thing that you would like to accomplish during your term (if selected)?

I disagree with the terms of the question. I am more interested in what we would accomplish together. Working out a process through which the IETF, through the IAB could reliably influence deployment of new Internet standards would be the most useful in the long term.

MANAGEMENT AND SOFT SKILLS

How do you use analysis, planning and inter-personal skills in working with others?

I identify the stakeholders necessary to achieve a goal and look for the issues that will allow them to succeed. Most cases, the people working inside IETF already agree or are at least sympathetic to the ideas being presented, the problem is how they can sell that idea in their own organization with its own peculiar pathologies.

What are your personal strengths in general that would allow you to contribute to the communications and management aspects of serving on the IAB?

I am a trained corporate spokesperson. If you mess up doing press for a public company in the S&P 500 you can end up in jail. I can communicate complex ideas with clarity.

How do you view conflicts over how to do something versus relationship conflict? What do you do to resolve task conflicts or relationship conflicts?

The WebPKI is a technical and commercial success that many people in the community have always believed and will always believe should never have existed in the first place. I knew that taking the position Principal Scientist of VeriSign in order to build it was never going to win me any popularity contests in the community.

But here is the thing, I examined all the technical alternatives that might achieve the goal of making Internet commerce as secure as bricks and mortar commerce and the Web PKIX was not just the best, it was the only one that I thought would work.

What is the 'right' technical solution and what is the solution that stands a chance of deployment are often two different things. I have been fortunate in my career in that I have been involved in deployment of three technical infrastructures (Web, WebPKI, SAML) that were highly successful. I think I have some understanding of what some of the criteria for success are and if I see them lacking in a project, I will tell people.

Of course, telling people their idea is spiffing and going to work just fine avoids 'conflict' but I am much more interested in avoiding failure.

What type of interaction would you expect to have with other IAB members on joint projects such as the IAB programs? What do you expect from yourself and from other members on a team?

It really depends on the subject area. If the subject area is security or naming then I would expect to be playing a leading role in shaping the conversation, engaging other domain experts, writing reports etc. If however, the subject area is one where I am not the lead expert (e.g. routing), I quickly fall back into my chairman/facilitator role. I do have one, it is just not one I have used often in IETF.

OTHER PARTS OF THE INTERNET ECOSYSTEM

What is your view of the IRTF's role with respect to the IETF, IAB and the Internet?

IRTF provides the IETF with the ability to work on a problem without committing to a protocol specification as the main deliverable and in closed groups.

The part of the IRTF I work with most, the CFRG is not really representative of the IRTF as a whole, being essentially a standing committee on the selection and design of cryptographic algorithms. It is certainly a very useful model, but it is not necessarily the case that this model could be extended to other areas.

The Thing to Thing Working Group session in Chicago was fun because it was arranged as a set of interest groups on topics. I think we should do more of that type of work.

## INTERNET GOVERNANCE

*Please describe your experience (if any) with Internet Governance issues. Please describe Internet Governance issues for which you think the IAB should have a position during your term.*

I have been involved in party politics at a national level since my teens, being a delegate to a national party conference at 18, anda member of the Oxford Union. My understanding of 'governance' is rather different to that of most in the IETF in that I regard ICANN as more of a distraction from the real governance issues rather than a body performing actual governance.

It is ICANN's misfortune to be the big shiny object that appears to the ill-informed to be the control nexus of the Internet and thus a target for those attempting to control the Internet (governments) and SDO's whose original subject matter is obsolete and are left looking for something to do (ITU). And it seems to me that this is exactly what Vint intended.

ICANN is not the only governance board for an Internet control point. CABForum was established, in part to serve as a governance board for the WebPKI.

What I understand to be 'governance' is the set of concerns I address when talking to elected representatives: how do we protect the interests of Internet users? How do we prevent and police Internet crime? How do we protect children? Who controls the flow of information and if so to whom are they accountable?

There are countries that define 'information terrorism' to mean what is understood on the Internet to be 'freedom of speech'.

My main current 'governence' concern is to promote the development and deployment of resilient infrastructure. The Internet is a huge technology trap and we have been caught for the past 20 years. It is not the security of the Internet per se that worries me so much as the fact that all the prior infrastructures that were designed without the expectation of a global adversary model have now been plugged into the Internet, ready or not.

There are multiple pressures in the system to address this deficit in resilience by introducing some form of 'governance' which usually ends up centering on the otherwise defunct ITU as vehicle. It is important to understand these issues and approach them loaded for bear.

APPEALS

*How should IETF leadership approach the dispute resolution/appeal?*

It is generally best to avoid the circumstances where the issue arises in the first place but this is obviously not always possible.

One of the biggest mistakes an organization can make is to assume that the person making a complaint is the person 'causing trouble'. While that is sometimes the case, it is not always so and sometimes it is the person who makes the complaint rather than merely leaving who is doing the organization the biggest service.

ADDITIONAL INFORMATION

If there is additional information you think the committee should have in order to come to a decision, please add it here.

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ADDITIONAL INFORMATION - NOT FOR CONFIRMING BODY

Is there any information you wish to share with the Nominating Committee that

you do not wish to have shared with the ISOC Board? This may include

additional details about employment or work time issues. It may include

opinions or comments about individuals on the various bodies involved in

leading the IETF activities. It may include opinions about the direction of

working groups, areas, or leadership bodies. These comments may also include

elaborations on any of your above answers, if there are further aspects you

would like to mention that you do not want shared with the ISOC Board.

END OF SECTION: NOT FOR CONFIRMING BODY

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