

Internet Collaborative Stewardship Framework

A framework for tackling the challenges – political, technical, operational, and social – facing the Internet

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To understand the difficult issues that impact, or are impacted by, the global Internet, it is useful to think of them in terms of how broadly the issues themselves and the approaches to address issues are understood and agreed upon. Successfully dealing with all important aspects often requires spanning several, sometimes not-well connected areas of technology, policy and development. This implies that a variety of stakeholders—people, communities, and organizations—need to buy into solutions and act in concert – to ensure collaborative stewardship of the Internet.

In fact, some of the difficulties encountered when dealing with past issues arose because of the lack of understanding about the problem, incomplete agreement about the steps required to address it, or insufficient buy-in by the stakeholders that needed to act or were significantly impacted. Hence, a framework to help define the current state of challenges or issues and suggest a way forward for addressing them.

Challenges, Issues, and Approaches

A *challenge* or *issue* can arise when developments occur faster than surrounding structures can keep up. This is certainly the case with the Internet where everyday we are breaking new ground, and in so many areas. An *approach*, in this framework, is a particular set of actions to be undertaken by stakeholder or stakeholders to address a challenge. It is important to correctly define issues and possible approaches to assess appropriate stakeholder actions. For example, continued global addressing of the Internet is an *issue* provoked by its challenging growth. An *approach* to addressing this issue-- (among several that need to be taken by stakeholders) —is the deployment of the next generation of IP protocol (IPv6).. This can be further enhanced by supportive policies and stimulus actions developed by governments.

Classifications

Issues can be classified depending on types of solutions (which start with how well the issues and possible approaches are understood and agreed upon).

I. Connecting needs and resources

Issues for which answers are known by some, but not the people or institutions with questions.

There is imbalance of know-how in the world, and while the Internet community has had a rich history of inclusiveness, the Internet world is expanding exponentially, and personal touch doesn't always reach far enough. In this case, the issue can be largely addressed by connecting the people that need to act with know-how and resources.

The challenges facing these efforts include resourcing, scaling, and ensuring that all concerned parties are aware of the opportunities and resources available to them.

Examples: Spam, other types of unwanted traffic

II. Mobilizing collaborative action

Issues for which answers are known and generally agreed upon. Requires collaborative efforts from many different stakeholders, all of whom have differing priorities, thus requiring additional buy-in/impetus before acting.

For these issues, answers to improve the situation for the global Internet are known, but require collaborative deployment and/or global deployment so that individual stakeholders can reap individual benefits.

Examples: IPv6 (Global addressing), DNSSEC (Trustworthy domain names).

III. Collective Behavioural Change

Issues which require many independent stakeholders to change operations, habits, or capacity.

These problems generally require changes to the incentives faced by one more stakeholders – may come about through a collective notion of stewardship or disruptive business models or..

Examples: Intellectual Property Rights

IV. Disputed Issues

Issues for which there is not general agreement on a problem.

In these issues, there isn't agreement on the problem, or perhaps even that there *is* a problem.

Example: Sender pays model for Internet service

Issue-Approach Summary



Issue Classification	Characteristics	Approaches
<p>Connecting needs and resources <i>(Answers known and implementable)</i></p>	<p>Autonomous, self-contained Answers exist Problem is connecting answers and needs</p>	<p>Capacity building workshops Best current practice development</p>
<p>Mobilizing collaborative action <i>(Answers known; working on implementation)</i></p>	<p>Answers known, but require collaborative deployment and/or global deployment to reap benefits</p>	<p>Promotion of global deployment of key technologies – IPv6, DNSSEC, best practices – by raising awareness and identifying, sharing motivations</p> <p>Network monitoring and collaborative detection, mitigation of routing issues.</p> <p>Monitoring and reporting progress</p> <p>Drive towards “Connecting needs and resources” situation</p> <p>Development of government policies and stimulus efforts to promote deployment of IPv6</p>

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Issue Classification	Characteristics	Approaches
Collective behavioural change <i>(Answers not agreed)</i>	Requires agreement on change of behavior, appropriate steps, imposes actions on other parties (institutional, corporate or regional). Can't finalize policies for implementation or technologies for deployment until changes are agreed Many obvious outcomes are not readily supportable in technology or are too prescriptive for policy Issues rarely compartmentalized – nuances and dependencies	Raise awareness of issues until broad-based agreement on possible approaches Dis-aggregate to reach a solvable problem – driving back to “Mobilizing Collaborative Action”
Disputed issue <i>(Questions not agreed)</i>	Failure to agree that there is a problem, let alone behaviours that might need to change to address a situation.	