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 in terms of how broad these issues are, and how well understood and agreed upon the approaches to address issues are. Successfully dealing with all important aspects of an issue often requires connecting several, sometimes disparate 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, it can be difficult to address emerging issues if there is a lack of understanding about the problem, incomplete agreement about the steps required to address it, or insufficient buy-in by the stakeholders that need to take actions. This document offers a framework to a) help define the current state of challenges or issues, and b) suggest a way forward for addressing them.

Challenges, Issues, and Roles

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. A r*ole*, 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 roles to assess appropriate stakeholder actions.

For example, continued global addressing of the Internet is an *issue* provoked by its challenging growth. An *role* in addressing this issue—among several that need to be taken by stakeholders—is the deployment of the next generation of IP protocol (IPv6) by industry. This can be further enhanced by supportive policies and stimulus actions developed and implemented by governments.

Classifications

Issues can be classified depending on types of solutions (which start with how well the issues and possible roles 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 a knowledge gap among different stakeholder groups, and while the Internet community has had a rich history of inclusiveness, the Internet is expanding exponentially. It is no longer reasonable to rely on personal interactions. In this case, the issue can be largely addressed by connecting the people that need to act with know-how and resources.

Bridging the knowledge gap can be challenging in terms of resourcing, scaling, and awareness building.

Examples: Spam, other types of unwanted traffic

II. Mobilizing collaborative action
Issues for which answers are known and generally agreed upon; these require collaborative efforts from many different stakeholders—all of whom have differing priorities—thus requiring additional coordination and 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 traditional incentives for one or more stakeholders. They may come about through a collective notion of stewardship, or the emergence of new business models, or even government or regulatory action. Solutions to these issues may disrupt the roles of existing stakeholders. In this case, consensus on key principles or outcomes is critical in order to reach solutions that benefit the global Internet rather than special interests.

Examples: Intellectual Property Rights, Internet access costs

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

Some issues might be market-specific or particular to a local community. This means that there may not be agreement on the problem, or perhaps even that there *is* a challenge for the global Internet.

Example: Sender pays model for Internet service

Issue-Role Summary

Issue Classification	Characteristics	Roles and stakeholders	Example actions
Connecting needs and resources *(Solutions are known and implementable)*	Autonomous, self-contained Answers exist Problem is connecting answers and needs	Awareness building by industry, technical organizations, civil society, governments, local advocates Standards development and implementation: ongoing development of standards and solutions based on new information by SDOs and industry groups Public policies development and implementation: governments, in consultation with all stakeholders Capacity building: Industry, civil society groups, governments	Capacity building workshops Best current practice development
Mobilizing collaborative action *(Answers known; working on implementation)*	Answers known, but require collaborative deployment and/or global deployment to reap benefits		

Issue Classification	Characteristics	Roles and stakeholders	Example actions
Collective behavioural change *(Answers not agreed)*	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		
Disputed issue *(Questions not agreed)*	Failure to agree that there is a problem, let alone behaviours that might need to change to address a situation.		