Citizens of modern societies lead highly regulated lives. Whether as individuals we agree or disagree with the degree to which governments control our existence, we nevertheless benefit from a myriad of laws and regulations that seek to ensure our safety and welfare. The range of regulation is breath taking, encompassing the purity of air and water, the quality of food, the sanitation of towns and cities, the safety of transportation systems, and the delivery of utilities and other essential services, to name just a few.

To date, however, the provision and usage of information and communications technologies (ICT) are largely unregulated at the technical level, despite the increasingly profound impact that ICT has on our lives. True, the communications side of the equation continues to be subject to significant government control. Radio, television, and a rapidly increasing range of wireless frequencies are the subject of treaties internationally, while the allocation, sale and usage of the bandwidth thus defined remains the province of national regulation. In the United States, Congress occasionally passes a law to accomplish a particular data-related purpose, such as preventing the unauthorized sale of consumer information. But most aspects of the modern networked world are controlled primarily by commercial forces, and to the extent that they are regulated on a de facto basis, it is through the adoption and use of consensus (and sometimes proprietary) standards.

This relative lack of regulation is attributable in part to the decreasing intervals between technology revolutions that typify the world of ICT today. Regulation is a ponderous process that usually begins with perceived pain at the voter or industry level, which is then made known to legislators through the ballot box and the lobbyist. Only with time do those that make the laws and regulations become engaged, educated, and eventually active, since government is far more likely to be reactive than proactive. Similarly, regulators must perceive a problem and investigate it before they can act in the individual case – at which point the lengthy process of litigation begins. Small wonder, then, that legislators have little appetite to regulate what may have ceased to be relevant by the time the regulations are complete.

As a result, allowing ICT deployment to romp ahead of regulation in an unconstrained fashion may in fact be the right as well as the inevitable course of (in)action. But a creeping sense of unease can arise when one considers that more and more of the reality of modern life plays out across the Internet and the Web. Is security adequate to protect privacy and prevent identity theft? Could the cyberinfrastructure withstand a determined assault, not by hackers, but by an enemy government? Has adequate attention been given to whether those with disabilities can exist in a Web-based economy?

These are hardly trivial questions, as more and more critical activities redeploy to the Internet. To give but a few examples, national and global financial infrastructures, first responder networks, national defense telecommunications, government services, and the healthcare system are all becoming ever more dependent upon ICT platforms forming national, and often international networks. These platforms are evolving rapidly and organically largely in response to market forces, without guidance from, and subject to few constraints imposed by, governments in the free world.

As our dependency on ICT increases exponentially, it therefore makes sense to ask whether the continuation of this laissez-faire atmosphere will remain (even) on balance a good thing.

At the highest level, that question might be answered in one of three ways:
The first would be to conclude that we should apply the theory and practice of historical regulation to evolving ICT realities in as consistent a manner as possible. But the old wine often pours poorly into these new bottles. Established notions regarding copyrights, for example, are being challenged by consumers that want to link, mash up and share Web-based content that is effortlessly accessed and difficult to copy protect. Intriguingly, many major companies in the equally established (and challenged) industries that produce and own this content are scrambling to think up ways to make money on freely distributed content. This process already muted the calls for reform, and may ultimately moot the need for laws and regulations entirely. On the other hand, a court has recently concluded that a major retailer (Target Corporation) should be required to make its Website as accessible to its customers as its stores.

Another option would be to decide that we should go to the opposite extreme, and declare the Internet, the Web, and everything that relies upon them to be unique, demanding new approaches and novel solutions. Or, less radically, modern ICT could be viewed as a fresh slate upon which new regulatory formulae, as fresh as the opportunities that these technologies offer, could be written, free of the obligation to apply old rules in rote fashion.

But success has been mixed with this approach as well, as demonstrated by the history to date of the Internet Corporation for Assigned Names and Numbers, more often referred to simply as ICANN. ICANN was created as a brand new quasi-public entity in 1998 to maintain the root directories of the Internet, although it is common knowledge that the International Telecommunication Union (ITU) views itself as the natural and rightful custodian of these basis resources. The bypassing of the ITU was accomplished through the efforts of those who were loath to entrust the root directories to the venerable (and bureaucratic) ITU, despite the fact that it is a treaty organization in which governments work together under the aegis of the United Nations. But despite this fresh approach, ICANN has been regularly criticized on a number of fronts, and remains controversial today, due in large part to the continuing influence that the United States (as the original developer of the Internet) has reserved for itself over ICANN.

The third high-level option would be for government to continue to largely stand aside, allowing commercial interests to play the greatest role in defining our ICT future. But already, as the recent controversy over so-called “Internet Neutrality” has demonstrated, government may find itself dragged into the debate over ICT whether it wishes to stand aside or not. And at other times where similar intervention may be sorely needed, les organized stakeholders, such as consumers, and less powerful polities, such as third world populations, will likely have a hard time making their voices heard.

Thus it seems that there is no clear answer to the question of what role governments — and, for that matter, what role which governments — should play in regulating ICT. During the pioneer period of the Internet and the Web, one could make a strong case that government has played the most important role it could by simply staying out of the way.

But now that the paradigm has shifted, and everything that was based upon tangible media has become virtual, it may be time to reexamine the balance between unregulated innovation and the provision of essential services. Perhaps, before things reach a crisis point that leads to overreaction and over regulation, someone needs to consider those big issues that are of a type that government has addressed in the past.

Many of those issues in ICT can conveniently be grouped under the concept of accessibility. Will those with disabilities have equal access to Internet based information and services? Will public records be accessible to all over the long term, regardless of changes in proprietary technology? Will individual patient records be accessible, on an appropriate, privacy-protected, basis to those doctors and others that need to review them, regardless of where they work? And will access to identity information only be granted to those who have a valid reason to gain it?

It may not be appropriate to argue that it is urgent at this time to reconsider the role of government in the regulation of ICT, although it is unquestionably timely. Regardless of timing, one thing can be assumed with certainty: if private industry does not satisfactorily address the issues identified above, then sooner or later, voters and special interest groups will demand that Congress do the job instead of industry. When that happens, it is unlikely that the legislative approach will be fresh or innovative. In many cases, this may serve the public weal quite well. But in others, more nimble and flexible solutions, devised and
deployed by those most intimately involved at the market and the technical levels, might be of far better benefit to all.

That's something that everyone involved in developing and deploying technology might take the time to consider. It would be, especially worthwhile for those that are involved in the consensus based ICT standards organizations that have the power to place us on prudent paths of self-regulation to do so as we move forward into the future.


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*Comments? updegrove@consortiuminfo.org*

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