Beyond the World Wide Web

Government strategies to regulate the Internet are focused on the World Wide Web and ISPs. But new ways of using the Internet will create problems for the proposed new regimes says Julian Thomas, senior research fellow at the Australian Key Centre for Cultural and Media Policy

Two recent federal government initiatives have re-ignited debate over how and whether the Internet can be regulated. Senator Alston's proposed regime for Internet content regulation and the recently released draft *Copyright Amendment (Digital Agenda) Bill 1999* have both returned policy argument to the vexed question of liability for Internet Service Providers (ISPs), those who provide Internet access to users and host their websites.

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One unexplored aspect of the government's approach to these questions is its implicit focus on the World Wide Web. The Web's rapid adoption in the mid-1990s attracted media and policy attention largely on the basis of its empowering capacity to turn everyone into a publisher. The prospect of genuine "many -to- many" networks had and has worrying implications for media law and regulation, but governments noticed that despite the Web's egalitarian image, ISPs occupied a strategic place in the Web publishing system. ISPs do not merely transfer data between users' machines and the Internet. They also host websites on their own servers, simply because they have direct, high-bandwidth connections to the network, and the ordinary personal computers most people use aren't well suited to the demands of serving web pages. That job is best done by more powerful and expensive computers, usually UNIX machines, which are designed for the task and require specialised expertise.

Because of their importance in Web publishing, ISPs were seen as natural partners in the regulation game. However unwillingly, they could participate in governments' attempts to contain the potential problems of pirated or otherwise illegal material not only by setting up proxy servers and applying filters, but much more simply by removing offending material if it came from their own servers. Thus the phrasing of Senator Alston's media release, which asserts that "service providers do have a responsibility to remove highly offensive or illegal material from their services", and places an onus on "the service provider to prevent publication of, or access to" content in specific situations.

So what we have is a regulatory system designed with the Web in mind. There is nothing surprising about this, since the Web is by far the most popular means of publishing content on the Internet. The Web is often seen, probably correctly, as the key innovation which popularised and commercialised the Internet. But the Web's present popularity has the potential to create some misleading policy assumptions. "The Internet" and "The Web" are not interchangeable terms, although they are often used as such. The Web is also unlikely to be the final evolutionary expression of the Internet, the history of which has been characterised by a succession of surprising changes.

The Web is only one way the Internet transfers information, and regulatory problems do arise with other Internet services. Email has become a common method of distributing viruses, but a greater problem is the profusion of unsolicited commercial email. Internet Relay Chat and its variants are enormously popular, especially among young users. Usenet newsgroups were the subject of debate about censorship before the Web existed. But few of these services attract much media or policy attention, and the proposed regimes are to a greater or lesser degree ill-

adapted for them.

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Another popular approach is exemplified by the shareware application Hotline, written by Melbourne teenager Adam Hinkley and painfully commercialised by Toronto-based Hotline Communications Ltd (HCL). Hotline abandons the browser, and returns to the text-based 1980s roots of bulletin board networking: messages, news, and file transfers within a community of users. This is an unexpected development for all those industry commentators who saw the Internet becoming more "media-like" over time: the popularity of Hotline reveals alternative futures. Hotline appeals to users who know how to navigate and what they are looking for. Hotline offers them numerous advantages over the Web: its proprietary file transfer protocol is claimed to transfer files about a third faster than the much older protocols used by the Web; it doesn't waste bandwidth on superfluous images or complex page design; it does chat, private messaging, and news much more elegantly than the Web; the client requires only 1.5 megabytes of RAM, meaning that it works well on older machines; a Hotline server can be set up quickly and simply; and the software doesn't crash.

Sounds good? It's not surprising, then, that since the release of Hotline in 1996 it has attracted around 1.5 million users. But its simplicity and economy have contributed to Hotline's reputation as underground software. Hotline has, unfortunately, become identified with piracy and porn. Although the sites listed on Hotline Communications' offical "tracker" - an index of servers which the Hotline client downloads - are innocuous, it's not hard to find other sites full of pirated software ("warez"), serial numbers required for registering software, all sorts of MP3 audio files of CD recordings, and x-rated movies and images. Some sites are coyly called "backup sites"; others specialise in particular genres of MP3s. Copies of most major Macintosh and Windows applications are readily available for downloading.

Since bulletin boards became popular in the 1980s, there have been subterranean, secret places on the Internet where software is copied and passed around. The novelty of Hotline lies in making those places, and others, easier to create and visit, with the help of faster home computers, cheap and huge hard disks, and 56k or better modem connections. Hotline is close to that elusive model of many-to-many communication which the Web promised but did not deliver. Hotline sites are not hosted by ISPs. The server software does not need unusually capable computers. Servers are often connected to the Internet by ordinary dial up services. Cable modem connections, widely available in the U.S., are popular.

Hotline is interesting because it is an example of popular Internet software which does not fit the new regulatory regime. ISPs have little to do with it. There aren't blocking tools or software filters. Hotline users are unlikely to be interested in codes of conduct or responding to ABA inquiries. It is of course possible that new tools will be written to control Hotline. But that's not the point. Hotline shows that even while the Internet is in some ways turning into a new form of "old media", with industry organisations, brands, portals and webcasting, it may at the same time become something different. The gradual stabilisation of Web media will not settle the problem of appropriate policy and regulation for the Internet as a whole.

The Hotline world has itself been in tumult. In February, Nathan Cochrane in *The Age* reported that Adam Hinkley, affectionately known in that world as "Hinks", had been sued by Hotline Communications Ltd. (HCL). He was accused in the Victorian Supreme Court of stealing key underlying software called AppWarrior from HCL, and attempting to sabotage HCL by encrypting Hotline source code and shutting down HCL's Internet connection. An Anton Piller order was exercised by HCL last year; software was seized from Hinkley's Melbourne home. In a related action, a former employer of Adam Hinkley, Melbourne telecommunications company A2B, is alleging that AppWarrior belongs to it.

Meanwhile, almost two years has passed between Hotline versions. Clients developed by third parties have appeared, and the Hotline network is still growing.

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