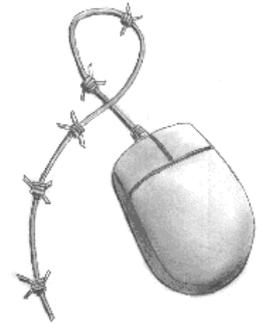**GreenNet CSIR Toolkit Briefing no. 11**

Media Regulation and Convergence

The impact of the new digital media on society

Written by Paul Mobbs for the
GreenNet *Civil Society Internet Rights Project*, 2002.
http://www.internetrights.org.uk/

Two hundred years ago the only means of communicating with a large number of people were the spoken word and the printed page (which had only limited circulation). Telecommunications, radio and television developed as mass media in the twentieth century and have become widely available over the last fifty or sixty years.

The major debates on politics, social issues and social change now take place through the mass media.

The cost and complexity of the technology involved means that, until recently, only large public or private corporations have had the means to produce for and through these media. Today, however, Internet and multimedia technologies are available on every computer, and ordinary people now have the opportunity to use mass media as both audience and producer.

Existing UK legislation relating to mass media reflects the media industry as it has been for most of the past fifty years. In the light of recent technological developments and with a new Communications Bill on the horizon, this legislative framework is set to change.

New digital technologies offer immense potential for civil society and it is in the interests of civil liberties that the public's use of the new media should not be restricted. There are political and economic pressures upon governments to do this, however. In the UK the mass media have always been closely regulated; the increasing consolidation of media corporations has seen a small number of players wielding huge economic power to gain control the media market.[1]

This briefing explores the implications of the new digital media and their use by civil society. It also looks forward to changes to forthcoming media regulation and legislation, and at the role to be played in this process by interested groups in the community.

The converging mass media

The mass media are *converging*, or coming together. This is due to the pace of technological change rather than any strategy on the part of media corporation managements. Recent developments in digital technology have resulted in improvements in the cost, quality and quantity of media outlets.
Multimedia digital technologies have brought huge changes, over the last ten to fifteen years, in the way that computers are used. The CD-ROM, for example, has made large-scale data storage possible for

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[1]For more information on the restrictions on community radio stations lobbied for by the National Association of Broadcasters see the Radio For All web site - http://www.radio4all.org/NAB/index.html

computers; the growth of electronic communication networks has enabled the growth of the Internet; combining computer software and the CD-ROM with the MP3 data format has enabled people to obtain and share music via computers and the Internet in new ways; and video digitising cards, now beginning to be installed as standard in higher-powered computers, mean that more people will watch TV and video via their computer.

Over the next five to ten years most broadcast media will transfer to digital systems. As homes become connected to high-capacity broadband networks, computers and *data appliances*[2] will replace the separate telephones, radio, TV and computers that people use today. *Interconnectivity* between different media formats (video, audio and print) will enable wholly new approaches to the mass media, and to how people communicate and express themselves in society.

There is a fear, however, that, as the media converge and ownership becomes concentrated in fewer and fewer hands, the media will cease to cover issues outside the mainstream. Pressures from sponsors or advertisers could limit editors' freedom to cover issues of concern to civil society campaigners.

On the other hand, digital technology could enable new, low-budget forms of media based around Web radio and TV broadcasting. Those with interests within mainstream politics and the larger media corporations often perceive the rise of such alternative media as a threat to their hegemony.

The Government's communications review

In 2000 the UK government set up a review of communications and media law. This resulted in a communications white paper[3] issued jointly in December 2000 by the Department of Trade and Industry and the Department of Culture, Media and Sport.

With the exception of print media, the mass media are closely regulated by the state. This is partly because telecommunications, radio and television in this country were for many years wholly or partly state-owned. Control over the media by the state is also a legacy of the historical desire of those in power to prevent challenges to the status quo and to their own political power-base.

In the UK deregulation and privatisation of the media began in the 1980s. This trend spread throughout Europe during the 1990s. As part of the general move towards globalisation the European Commission[4] put forward various directives on the liberalisation of the media and telecommunications industries. This led to the liberalisation of regulatory systems and to the privatisation of state-owned media assets across Europe (as well as in East European states aspiring to membership of the European Union).

Radio, television, and, to a lesser extent, telecommunications and the print media have developed on the basis of the following models:

- Wholly state owned - much state ownership has been reversed over the past few years;
- Public service - where the state provides a monopoly market for the media, supported through a licensing or tariff system; and
- Wholly commercial - where the media is supported by direct payment from consumers. Tight

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[2]*Data appliances* - new dedicated consumer appliances that, like computers, offer multimedia capabilities but without the complexity of a computer system.

[3]The white paper, and supporting documents, are available from http://www.communicationswhitepaper.gov.uk/

[4]These reforms were outlined in detail in the *Green Paper On The Convergence Of The Telecommunications, Media And Information Technology Sectors, And The Implications For Regulation* [COM(97)623] - see http://europa.eu.int/ISPO/convergencegp/greenp.html

restrictions on the cross-ownership of these media ensure diversity of views and content.

New digital technologies now challenge the way in which the media operate. Driven by digital technology, controls over cross-media ownership are being challenged as a result of globalisation.

In this context, the 2000 communications white paper[5] identified a number of new objectives :

- The opening up of the media market to permit the development of new systems and services;

- The establishment of a new regulator - OFCOM (the Office of Communications) - to take over the powers of the various media regulators that currently exist;

- Preserving the role of public service broadcasting within the new digital media;

- Developing universal access, including, for example, universal access to the Internet by 2005;

- Reviews and relaxing of current restrictions on cross-media ownership;

- Strengthening the standards applied within regulated media, whilst improving the scope for self-regulation amongst the most heavily regulated media;

- Maintaining requirements for accuracy and impartiality in media, and retaining the ban on political advertising and controls over religious advertising; and

- Giving OFCOM the ability, through the Internet Watch Foundation,[6] to control undesirable content on the Internet.

The white paper concentrates mainly on the commercial aspects of media reform. Proposals in relation to civil society's use of new digital media technologies are vague. Significantly, perhaps, there is no reference to community-operated broadcasting via the Internet. Consideration of the needs of community focuses on centralised public service broadcasting rather than community-developed broadcasting systems; this also applies to the "expert" reviews which supplement the white paper.[7]

Community interests

UK governments have traditionally been reluctant to expand community-based radio broadcasting (hence the pirate radio community that has thrived in the UK since the late 1970s). With the growth of digital media and the Internet, many groups who previously sought broadcast licences are now realising the potential of *web-casting* (i.e. broadcasting via the Internet) as a means to enable local community media.[8] If the Government continues its effective ban on small-scale community media (the exception being short-term "event" licences, a whole section of technologies available through the Internet will be denied to the UK public.

Small-scale online community media currently operate within a regulatory void and their situation is therefore precarious:

- Some argue that, because of the vague wording of the Broadcasting Act 1990, broadcasting over the Internet requires a licence to stream video or audio;

- Any advertising as part of streamed media may also require regulation by the Independent

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[5]The white paper, and supporting documents, are available from http://www.communicationswhitepaper.gov.uk/
[6]The Internet Watch Foundation is an organisation set up by UK Internet Service Providers and the government to allow the informal regulation of Internet content in the UK - http://www.iwf.org.uk/
[7]The 'expert papers' focussing on particular aspects of the communications white paper are available through the web site - http://www.culture.gov.uk/creative/dti-dcms_comms-reform_experts.html
[8] Radio Verulam - http://www.radio-verulam.co.uk/

Television Commission;

- Some argue that programmes which are downloaded on demand should be vetted by the body that censors video and video games.

Internet *streaming* by small organisation and community groups has been ignored so far; it represents a very small sector of the Internet. As the availability of broadband networks increases across the UK, however and more people can receive streamed media, the state may take the view that these services should be regulated. Streaming provides a new way of using the Internet because the special streaming servers involved work to provide the user with a continuous stream of audio or video data. You don't have to wait for a programme to download before watching it. You can receive audio or video live - the Internet becomes a real-time, live broadcast system.

The cost of applying for a licence or permit could be enough to close services down. If a moral panic were created in the mainstream media about the content of online community broadcasting, Government and regulatory bodies might well take cases against small-scale community web broadcasters.

The communications white paper promises great change, but essentially it takes a purely commercial view of how media corporations will provide services to the public. It does not provide a framework to enable civil society to express itself, or to ensure that services provided by minor media groups are protected from the predatory actions of mainstream media organisations.

The white paper does, however, open up a space for debate. It gives civil society groups with an interest in the Internet and community media a chance to promote alternative views on the opportunities for media and networking within communities (whether geographically or interest-based) that new digital media offer.

Europe and the information society

There are important developments at European level of which those engaged in lobbying work around the UK communication review should be aware. Riding on the back of the commercial development of the Internet are proposals for expanding the *information society*. The UK white paper discusses *universal access.* More detailed proposals are being evolved at European level on how the new communications media should enable greater dialogue and participation in society

A number of strategies combine to form the basis of a European approach to the development of the information society:

- The commercial framework for an information society was outlined in the *Green Paper On The Convergence Of The Telecommunications, Media And Information Technology Sectors, And The Implications For Regulation*.[9]

- The EC research programme on technological development launched an initiative for the development of a *Demonstration On A User-Friendly Information Society*.[10]

- A subsequent report, as part of the EC's *Information Society Technologies programme*,[11] details the various technological developments that would assist the development of the information society - *Information Society Technologies (IST) 2000*.[12]

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[9]COM(97)623 - http://europa.eu.int/ISPO/convergencegp/greenp.html
[10]*Adopting A Specific Programme For Research, Technological Development And Demonstration On A User-Friendly Information Society (1998 To 2002)* (1999/168/EC) - http://www.cordis.lu/ist/library.htm
[11]See the CORDIS web site - http://www.cordis.lu/ist/
[12]*IST2000 - realising an information society for all* - http://www.cordis.lu/ist/library.htm

Whilst accepting that any development of an information society depends entirely upon the development of new communications capacity (as part of the commercial development led by media services), these reports outline the benefits of new information society technologies (IST) to the public. The *IST 2000* report, for example, puts much greater emphasis than the UK white paper upon the use of new digital technologies (especially multimedia) as part of continuing education and community initiatives.

European policies on IST have a bearing on how the UK government progresses its communications review. In any case, the *transparency directive*[13] adopted in 1998 means that any proposals made by the UK government must be submitted for approval to the European Commission and other EU member states, as part of the regulation of the EU's internal market, before they are enacted.

The needs of civil society, highlighted through the EC's research programme, could therefore be reflected in any UK review of communications and media legislation. Likewise, proposals for an EU *Charter of Fundamental Rights Related to Technological Innovation*[14] (related to work on the *EU Charter of Fundamental Rights*) may provide civil society groups with a strategies for possible legal challenges to any legislative proposals that restrict their rights to access the new digital communications technologies. In particular the proposed *right to expression* provides that everyone has the right to hold, receive and impart ideas without the interference of public authorities, regardless of frontiers.

Bandwidth and access

Collectively, the digital technologies that enable the development of the information society are called *new media*. New media play an integral role changes within the mass media as a whole.

These new media give many more people facilities to communicate, exchange ideas and organise. They encompass:

- Improved telecommunications - availability of telephones and fax machines has increased, and costs have fallen;
- Enlarged mass-media - new opportunities have been created for the production and spread of information;
- Word processing - documents can be stored, composed, modified and exchanged on an unprecedented scale and quality;
- The Internet - truly global communication is now possible through email and the mass-medium of the World-Wide-Web.

More significantly, every advance in new media over the recent years has usually favoured community groups and grass roots activists; it has reduced costs and increased public accessibility, or enabled easier use by those originating information.

There are however growing restrictions on the use of new media, brought about by the increasing volume and sophistication of the communications involved:

- Bandwidth - i.e. the physical capacity of the connection to the network or telephone system to carry data; and
- Access - i.e. the ability to access online services; not just in terms of connecting, but also of having the right software to access digital information in appropriate formats.

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[13]See http://europa.eu.int/comm/internal_market/en/media/infso/transp.htm
[14]See http://europa.eu.int/comm/european_group_ethics/index_en.htm.   A copy of the draft framework is available from http://europa.eu.int/comm/european_group_ethics/docs/prodi_en.pdf

The use of the Internet exploded with the introduction of the World Wide Web in 1994. It is still restricted to people who have access to a personal computer. Over the next five years, however, we are likely to see the rate of growth in use of the Internet outstrip that which has taken place since 1994. This is due to:

- Development of non-computer-based means of accessing the Internet - in particularly access via TV and videogame-type consoles in shops;

- Increasing broadband information access, via cable and fibre-optic links in the home (the new ADSL15 system, for example, rolled out by telecommunications companies in 2001), will enable much more information to be moved around; and

- Development of mobile access through the next generation of mobile phones and portable computers, using the wireless applications protocol (WAP) system.

In the UK British Telecom has placed restrictions on access to the *local loop* (the wires that link people's home to the local telephone exchange). In order to access higher bandwidth services lines would need to be upgraded.[16] So far, although the regulator (OFTEL) and European regulations require the opening up of the local loop,[17] no efforts have been made to allow access to other service providers. This is impeding the implementation of higher capacity ADSL services because BT does not have the ability to install these services itself. Cable TV services can also carry higher bandwidth communications; the costs of cabling up mean that systems are developing slowly, and only in the main urban centres.

Many of the higher bandwidth systems, such as ADSL, will only function up to three or five kilometres from the local exchange. So whilst the larger urban areas will have complete coverage, coverage in suburban and rural areas is likely to be very patchy, effectively excluding a whole section of society from high bandwidth services. ISDN is available as an alternative to ADSL, but it costs significantly more.

There are alternatives, such as wireless or satellite systems, but currently there are no definite proposals on the agenda to establish these services in rural areas, partly because of the high costs involved.

Another obstacle to access is the problem of proprietary systems.[18] Proprietary systems are programs made by commercial companies that that either *interpret* or *read* information from, or *encode* it into specific digital formats. The former is available free to users (the Adobe Acrobat document reader is a wide-spread example), but you have to pay for the latter.

The costs and licensing restrictions of proprietary systems put severe restrictions on individuals and community groups wishing to produce their own media. Intellectual property law means that anyone trying to develop their own systems to utilise the new digital formats could be prosecuted. Cases have been brought against people who have developed unlicensed software for decoding the digital video disk (DVD) *CSS* format.[19] This is because the legal protection given to patented technological systems, rather than the copyright on ordinary software, is absolute. No copying is permitted. This effectively denies access to some of the latest media encoding or recording systems to anyone unable to pay the required licensing fee.

It will be some years before *open source* (free) systems are available for encoding and decoding of digital data, although some are in development.[20]

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[15]ADSL - *asymmetric digital subscriber line* - a high capacity telephone connection for the delivery of data and video into homes/businesses that is intended to compete with cable TV's currently restricted broadband network using existing lines.

[16]For information on BT's broadband proposals see http://www.bt.com/broadband/ or http://www.bt.com/openworld/

[17]Publications on broadband and the the opening up of the local loop are available from OFTEL - http://www.oftel.org/publications/broadband/llu/index.htm

[18] For more information on proprietary systems, see GreenNet CSIR Toolkit Briefing no. 1 *Introduction to the Internet*

[19]There is an archive of information relating to the DeCSS case on the Cryptome web site - http://cryptome.org/cryptout.htm#DVD-DeCSS

[20]For developments in relation to open source video see the LiVid (*Li*nux *Vid*eo) web site - http://www.linuxvideo.org/

If people are to get the most from new media they must be able to produce and distribute information themselves. The fact that most new systems (including ADSL) are *asymmetric* - that is, they download at higher speeds than they upload - impedes this. Innovative use has been made of the Internet through *peer-to-peer* systems[21] such as Napster or Gnutella,

Peer-to-peer systems enable stand-alone computers to network directly, rather than being routed through one central hub. Asynchronous connections restrict our ability to use new media creatively and to develop our own information and media content; they cannot upload information to other systems at a high enough rate to develop effective, real-time, streamed media and file sharing.

The new Communications Bill

The Government is planning to introduce a draft Communications Bill in the near future. The Bill will shape a new regulatory structure for the media and communications industries and will be based on the white paper.

Since the publication of the white paper, industry lobby groups have been seeking to influence the content of the new legislation. Given the overriding commercial basis of the white paper, it is important that civil society groups engage in this process to ensure that public access to new digital media technologies is protected.

Non-commercial uses of Internet media (streaming audio and video, for instance, and downloading media clips) currently operate in a regulatory vacuum. The majority of media streaming is done by existing licensed media companies, so, from a regulatory point of view, minor amounts of streaming by other groups has not been considered significant enough. A single court case could be enough to clarify the law or change the situation - even to ban access to streaming or online media by setting financial or licensing conditions which would effectively place it beyond use.

A charter of rights?

The exact form of the draft Communications Bill remains to be seen at the time of writing. We can, however, identify key priorities for the interests of civil society Internet services and media groups:

- To ensure that restrictions placed upon the publishing of information on the Internet are not greater than those for other publishing media such as print;

- To require a minimum charter of rights for customers of Internet service providers with respect to the provision of Internet connectivity and services, and to enable the establishment of a complaints procedure and an independent body (presumably OFCOM) which could make rulings where services were arbitrarily restricted or withdrawn;

- To ensure that restrictions placed on Internet service providers (such as licensing or registration requirements rendering ISPs to take liability for content) do not restrict the ability of the public to publish material online;

- To ensure that the self-regulatory approach proposed for the major broadcasters does not allow the invasion of privacy, or the misrepresentation of views, without effective means of redress for those affected by media coverage;

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[21]For details of peer-to-peer projects, and their impacts, see the book *Peer-to-Peer: Harnessing the Power of Disruptive Technologies*, Andy Oram (O'Reilly, 2001)

- To require that the "public service broadcasting" element of the white paper encompasses public and community access to broadcast frequencies and Internet streaming, and not merely centralised public service programming by mainstream broadcasters;

- To ensure that the financial conditions for permits or licences for broadcasting, or the technical standards for broadcast, are not (as has traditionally been the case) used as a means of preventing small groups or communities from setting up broadcasting or streaming services;

- To require that the development of high bandwidth connections enables easy access to high capacity uploading (and not merely high capacity downloading through asynchronous links), so that people can develop their own peer-to-peer capacities;

- To ensure that requirements for digital identities, or the protection afforded to software vendors for controlling the registration of software, do not effectively remove the ability to publish material anonymously;

- To ensure that restrictions on the political content of the media are not used as a means of prohibiting small media and community broadcasters from developing their own critique of social or economic policy;

- To ensure that the development of universal access encompasses access to the technologies that make the Internet work, and not just the physical connection, so that everyone has access to the technological developments of the 'Net;

- To develop clear protection for small broadcast and online publishers or media developers against restrictive or predatory actions by larger broadcasters and media corporations; and

- To require that the concentration of media ownership, especially cross-media ownership, does not result in greater restriction or editorial control over information or programming carried by the mass media. There must be a clear separation of management and editorial roles within the mass media to prevent undue influence over or bias in content.

The new Communications Bill will define the agenda for the development of new digital services for the next fifteen to twenty years. More significantly, it will establish regulation and media competition in areas (such as Internet content, and the legal position of Internet media providers) that have been ignored under current media legislation and guidelines.

The benefits of new media technologies, particularly with regard to campaigning and community action (both local and global), must not be restricted by government's desire to control the Internet, or by pressure from the commercial sector to restrict independent, community-based competition. It is therefore essential that civil society should have a significant role in drafting any new regulatory framework for the media.

Further work

This briefing has been written in the context of the legal framework currently in force in the UK. If you live outside the UK you will need to make yourself aware of the procedures operating in your own country. Key points you will need to find out are:

- How do laws on media regulation apply to Internet service providers, and in particular to those providing audio and video via the 'Net?

- Does the deregulation of telecommunications and media/broadcasting services provide protection for minorities and small-scale or community media producers?

- Does the media framework seek to exclude small organisations and community groups from broadcasting (via wireless or the Net) by requiring compliance with expensive applications and licensing procedures, and excessively high technical or programme content standards?

- How does your government propose to amend the legal framework to take account of the new digital media, especially new 'convergence media, and the potential monopolies of cross-media control?

You should also contact any civil liberties organisations operating in your country. They may be able to provide you with much of the information you need on laws relating to media regulation and convergence.

The GreenNet Internet Rights Project

GreenNet[22] is the UK member of the Association for Progressive Communications[23] (APC), and is leading the European section of the APC's Civil Society Internet Rights Project[24]. The primary goal of this project is to provide the resources and tools necessary to defend and expand space and opportunities for social campaigning work on the Internet against the emerging threats to civil society's use of the 'Net. This involves developing ways and means of defending threatened material and campaigning, as well as lobbying to ensure a favourable legal situation for free expression on issues of public interest.

Until recently, the social norms of Internet communities, together with a very open architecture based on supporting these norms, regulated the Internet, and was responsible for its openness. The main forces of regulation now, however, are the business sector and government legislation. Corporations and governments are pressing for fundamental changes in legislation and in the architecture of the Internet. Unless challenged, these moves could radically change the nature of the 'Net, making it a place of oppressive controls instead of freedom and openness. It is in this context that APC's Internet Rights project is being developed.

This briefing is one in a series[25] that document different aspects of work and communication across the Internet. Although written from the perspective of the UK, much of its content is applicable to other parts of Europe. There is continuing work on these issues, as part of the European project. If you wish to know more about these briefings, or the European section of the APC Civil Society Internet Rights Project, you should contact GreenNet. You should also check the APC's web site to see if there is already a national APC member in your country who may be able to provide local help, or with whom you may be able to work to develop Internet rights resources for your own country.

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[22]GreenNet - http://www.gn.apc.org/
[23]APC - http://www.apc.org/
[24]CSIR Project - http://rights.apc.org/
[25]http://www.internetrights.org.uk/

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