



who owns
RED ?

ACTO

DIGITAL DIVIDEND REVIEW EDITION
local public service television directories

UK LOCAL TV FORUM update page 28

Who owns **RED**? *

** if it isn't God, is it as daft as it seems to ask who owns the electro-magnetic spectrum? In the 21st Century should we cling to the 19th Century comfort-blanket of a benevolent national regulation?*

This special edition of **ACTO** reprises earlier editions that looked at Spectrum. This publication coincides with the launch by Analysys Consultancy of their Digital Dividend Review, a study commissioned by Ofcom to run throughout 2006.

If you have any comments, questions or requests for further information regarding the Analysys DDR consultancy please email:

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ACTO 1-12 explored some of the key issues surrounding the introduction of Local digital TV as Public Service Broadcasting - successfully resolving provision of a Local TV channel in every area on every TV set using an 'add/drop box'.

This **ACTO SPECIAL EDITION** consists of three papers reprinted from **ACTO 5, 8** and **9** - which raised some wider issues begged by the introduction of Local digital TV - how might society retain access to digital spectrum for collective benefit? and Does the coincidental transition from *analogue* to *digital broadcasting* and from *central* to *devolved government* suggest we need to consider again the collective basis of rights of access to Spectrum before accepting Spectrum Trading as a UK decision?

Digital switchover is an opportunity to inject clarity and consensus into determining exactly whose interests rights of access to Spectrum should represent.

The choice viewers can make with electronic referenda might combine with the 'add/drop' technologies to change TV channels for area reception at local transmitter sites adding a social choice to the longstanding domestic selection of national channel choice made in the home.

This proposal has clearly unsettled the national channels as much as the regulator - who have both articulated competition for individual viewers among national choices. But each transmitter site can become a 'gate' and the local viewers together its 'keeper'. With 1152 transmitter sites at which to insert such a device is this really offering more choice than national broadcasters would admit to or want to talk about?

So we have less than a year to think beyond the 19th Century mindset of corporate and national patterns of ownership - of delivery before viewer selection - and to explore new ways to regulate Spectrum as a flexible inalienable social asset which becomes immediately of interest to those who can receive a range of signals upon which might be many different channels to be sourced from the local transmitter.

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GOD'S OWN SPECTRUM: Local TV and the Public Good

A public good, in economic terms, is something that is best provisioned for everyone (an economic characteristic called non-excludability) and which anyone can use without depleting the resource (a characteristic called non-rival use — individual users aren't rivals for the resource.) Clay Shirky, 'The Possibility of Spectrum as a Public Good' in *Economics & Culture, Media & Community*, Open Source, 2004

Frequency and power are real attributes of the waves that make up spectrum.

The questions revolving around regulation of that spectrum, though, aren't about those characteristics. Instead, they are about the engineering of *systems* that make use of the characteristics of frequency and power.¹

The broadcasting regulators make two assumptions about such systems which are rooted in analogue radio engineering dating back a century.

The first assumption is that frequency can be defined as a physical path or line. The transmitter emits a frequency which travels to the receiver which in turn is tuned to select the frequency. In analogue transmission the information carried by the waves does not remain precisely confined to its frequency path and behaves much like a drunk man wobbling along a path to his home.

Analogue transmission and reception has been built on the idea that particular frequencies should be allocated to suppliers, knowledge of the frequencies made available to relevant receiver manufacturers and to potential listeners and viewers as well. With a single frequency the amount of data that can be transmitted is limited. Because of the compromise between signal reach and data quantity the most useful frequencies are in the Kilohertz (Khz) to Gigahertz (Ghz) range. These frequencies are 'low' enough to travel through most walls while

"The old mindset, supported by over a century of technological experience and 70 years of regulatory habit, views spectrum—the range of frequencies, or wavelengths, at which electromagnetic waves vibrate—as a scarce resource that must be allocated by governments or bought and sold like property. The new school, pointing to cutting-edge technologies, says that spectrum is by nature abundant and that allocating, buying or selling parts of it will one day seem as illogical as, say, apportioning or selling sound waves to people who would like to have a conversation." Spectrum Policy: On the Same Wavelength, The Economist, San Francisco, 12 August 2004.

Who owns Red?

'high' enough to carry sound and video.

As well as frequency, the broadcaster requires sufficient transmitter power. For terrestrial broadcasting the variations in terrain inhibit and shape each signal's reception pattern. Transmitters are located on hilltops requiring smaller relays or repeaters to be employed to retransmit an off-air signal to fill in any gaps in reception.

The broadcast signal will travel well beyond the point at which it offers a receivable signal. In general terms this signal is still able to cause interference to a receiver tuned to the same signal (and to signals on adjacent frequencies). This interference is not between the signals themselves but with the receiver's capability to distinguish one signal from others.

To avoid these problems large swathes of frequency are left 'empty' as buffers – against which (if you like, and I'm stuck with it now) the drunk man of the signal can safely stumble – and safe distances are required after the last house receives a watchable signal before the same frequency can be reused somewhere else.

In the transition from analogue to digital television virtually all of the old analogue transmitter and relay infrastructure will be reused – far more than if analogue had been scrapped and an entirely new digital service launched some while later. The managed transition from analogue to digital will build in inefficiencies which are not of digital's making.

The decision to use all the present sites is in part attributed to running analogue and digital side-by-side while ensuring the public service reach for digital stays at close to 100% of the UK population. The solution avoids forcing too many of the less enthusiastic viewers to install a new aerial pointed away from their current analogue transmitter site.

But while an objective is to secure universal access for public service television use of so many transmitters is not efficient and neither their location or scale are configured to deliver national services. The television network is composed of regional, local and neighbourhood transmitters and relays. There are no national transmitters and no national frequencies that reach every home in a single stride.

When television (and radio) launched it was only a few areas of the country that could receive a service – with radio it was a 'local BBC service'; with commercial television it was a 'regional TV' service: in both cases a 'service' transmitting from a single 'local' main transmitter. For a decade or more with television – and until 625 line UHF replaced 405 line VHF – cable relay companies made a precarious living carrying TV channels into those areas where the signal was too weak for terrestrial reception. The idea of filling out the regional transmitter map with relays also blurred administrative and cultural regional boundaries. Furthermore the objective in the 1950s (for viewer and broadcaster alike) to have 'better' programming was something regional TV was unable to sustain with a growing but not universal number of viewers receiving regional TV in each area. (Notwithstanding that, the IBA research from the 1950s and since suggested viewers really wanted 'local' rather than 'regional' TV – finding regional too remote from the outset!)

Spectrum as Property

The problems of signal interference have been circumvented by a form of regulation which views frequencies as 'property'.

With the old model of transmitters locked on one frequency and receivers unable to do anything but listen, [viewing spectrum as property] was the right answer. Accordingly, almost all the usable spectrum was licensed to a small number of parties, especially the

Government and broadcasters. These organisations in turn use only a tiny fraction of this spectrum, treating the rest of it as ‘white space’, a buffer zone against competition from other signals. (This imbalance between used and unused signal is actually getting more extreme as broadcasters transition to digital signal, which requires an even narrower slice of frequency than analogue signals do.)

The ‘property’ model of frequency has a number of flaws. But because these can be remedied several of these become more obvious in the transition from analogue to digital broadcasting. The transition also serves to highlight the large quasi-national scale at which ownership and ownership rights for terrestrial transmission are being favoured.

In an ideal spectrum engineering scenario, when a national channel is to be transmitted for reception to all households it would use a solitary large transmitter tower from which its use of a single frequency was able to reach most or all domestic aerials. By this means a national audience would receive the same channel transmitted using one frequency. A huge tower - or nowadays a satellite - offers the most efficient way of delivering a national television channel to almost every home - where no regional or local variation is required. Any other solution is a compromise on this ‘ideal’ and as such national channels using 1152 transmitters and in different places at different times most of the best spectrum bear the brunt of responsibility for ‘using spectrum inefficiently’.

The UK’s network of large transmitters and their numerous relays use umpteen frequencies to avoid interference: it is massively inefficient - with today’s technology. It is an extremely clumsy and wasteful solution to use this spectrum in this way to deliver almost entirely national channels.

Looked at afresh - as digital switchover demands – we can see that the very limitations of geography and location are better able to ensure a good – though not ideal – network to offer Regional and Local TV services. Since it has been conceded that Regional TV is too big to offer satisfactory service this leaves Local TV as the more efficient claimant to the use of the existing television network and spectrum, far more so than national TV.

But the Government and Ofcom view spectrum as property and they prefer to regard this property as a national rather than local asset: and then to sell it primarily to perform a national corporate role.

The presumption of national scale and national ‘ownership’ follows the seventy year ago annexation of ‘local’ frequencies to form into a national broadcasting network - first with radio then with TV. The steadfastness of this slight-of-hand becomes less a legacy than an imposition as transmission and reception move from an analogue into a digital era. The national role in broadcasting may be satisfied but the balance of ‘goods’ not required for digital versions of the national channels should - we argue - be returned for local use. Without a claim for local spectrum utility the national custodial role slips from ‘leasehold’ to ‘freehold’ to obscure the original purpose of acquiring and coordinating the use of this spectrum under a national umbrella: that once was to organise and assemble local frequencies to provide *national public services*.

The recent change of emphasis to establish a market in ‘surplus’ digital spectrum arises at a point when the *national* public service objectives have long been satisfied (over satisfied in the abundance of quasi-national channels).

Is creating a national market in spectrum a regulatory step too far? As more spectrum becomes available for transfer into digital form, as scarcity of spectrum and the long-standing protectionist approach become less convincing regulatory mechanisms – should a national

Who owns Red?

regulatory view prevail at all - or shouldn't local regulation of spectrum reclaim local access and outline local spectrum use?

The economic and legal reality is that the television transmitter network involves over a thousand specific, focused and entirely 'regional/local uses' of frequency all within local authority, regional and UK nation areas. In other 'property' scenarios - in the context of devolving responsibilities to regions and nations - the ownership issue and use-value of these assets would be subjected to local scrutiny, to local planning considerations supervised by elected administrations in the relevant areas who might then under electoral steer provide for both local commercial benefit as well as community gain.

The rightful-guardianship of digital spectrum seems to have gone unnoticed by the solicitors in the nations as much as by the legal departments of local authorities. Terrestrial television spectrum configured for use on the national transmitter network uses a 'local asset' – an asset that can only be used where it is transmitted. So why has this been largely overlooked?

The national approach to regulation still draws on the culture built around the original objective to create and sustain for the common good a *national public broadcasting service*. In circumstances of political devolution and of a satisfied public national broadcasting ambition it is necessary to consider local accountability and spectrum sovereignty.

Spectrum is purely descriptive — a frequency is just a particular number of waves a second — so no one can own a particular frequency of spectrum in the same way no one can own a particular colour of light.

Instead, when an organisation 'owns' spectrum, what they really have is a contract guaranteeing ... prosecution if someone else broadcasts on their frequency in *their area*. The regulatory costs of forcing spectrum to emulate property are enormous, but worthwhile so long as it leads to better use of spectrum than other methods can. That used to be true. No longer. (my italics)

The inefficiencies and distortions arising from treating broadcast spectrum as a form of sub-dividable national property serves only to hide some of its more efficient and flexible economic and social uses. In other words, unless the Digital Dividend Review acknowledges that national terrestrial broadcasting is utterly wasteful of spectrum then every other possible and more efficient service - some with a more rightful claim to spectrum - will be forced to bend to the inefficiencies of the national network being sidestepped by the DDR analysis.

Change is afoot

The drive for a change in both the conception and administration of spectrum comes from several quarters. This is largely a result of the prospect of greater flexibility from digital spectrum beyond the traditional broadcasting transmission and reception technologies.

Smart transmitters and receivers coordinate the transmitter power required in different situations – power can be moderated to suit prevailing spectrum activity.

Another innovation is the introduction of spread-spectrum radio in which the signal is encoded in several frequencies simultaneously. This serves to separate the link between the frequency of a signal and the amount of information or data it carries. Because both receiver and transmitter are 'hunting' they can agree on the optimum way of sending and receiving a signal at any given moment, thus avoiding the traditional form of interference.

Using the 2.4Ghz frequency, WiFi is an internationally licence exempt band which has been the spur to the introduction of many new digital services unimpeded by prior licensing con-

sents. Local TV has also benefited from using 2.4Ghz in its FM form for the e-tv channel in Aberfeldy while Channel 9 in Derry uses 2.4 for its OB links.

By uncoupling this 2.4 band from regulation there have been massive gains and innovations in use value – social, economic, business, educational and community - many innovations would not have been contemplated at all had a licence been required. The limitations of 2.4Ghz are its range and its poor signal penetration.

WiFi networks ... are capitalized by the users, one hotspot or PC card at a time. This model has provided an enormous amount of flexibility in business models, from the Wireless ISP model being pursued by T-Mobile and Starbucks; to the civic infrastructure model, as with Emenity unwiring parks and other public spots; to the office LAN model, where a business treats WiFi access as part of the cost of doing business. And then, of course, there's the home user model, where the user sets up an access point in their house and uses it themselves, as they would a toaster or a TV, without needing to offer access to anyone else, or to come up with a business model to cover the small one-time charge.

There are two ways to build \$10 billion in network infrastructure. The first is to get ten large firms to pony up a billion, and the second is to get 10 million users to spend a hundred dollars each. WiFi fits that second model, and has created an explosion of interest and experimentation that would be impossible to create in a world where the 2.4Ghz band was treated as property.

The 2.4Ghz spectrum is not treated as property but as a common or public good.

The right to broadcast on the 2.4G spectrum is almost worthless, since everyone has that right in an unlicensed regime. But the economic value created by uses of 2.4G are almost certainly higher than for any other section of spectrum, and is still growing rapidly.

But moving the common property adopted for WiFi to other spectrum will be problematic.

The broadcasters have a legitimate concern about old-style interference, of course. After 70 years of hearing that anyone else broadcasting in their spectrum would be catastrophic, they are understandably leery of models that adopt alternate models of interference, even models that only operate in their unused 'white space.'

There are a couple of contemporary European examples where national broadcasting regulation has been abandoned leading to dramatic positive transformations of their respective broadcast television landscapes.

In Croatia, in the years of recovery after the war, instead of returning to large national channels television journalists and broadcasters started Local TV – several hundred channels across the country and fourteen in Nis alone. In Spain over the last decade a confused handover of broadcasting responsibility from central to regional government has led to many years without regional regulation or coordination – initiating a thousand local, community and municipal TV stations operating on an a-legal basis.

The introduction of these Local TV services in Croatia and Spain – running on analogue channels – has taken place without any public distress. How the national broadcasters felt about it is another matter.

These two examples – as well as the manifestly very different broadcasting regimes that are possible with digital – suggests that the regulation of broadcast spectrum serves rather more

Who owns Red?

to protect the incumbent broadcasters in the UK than to engage the public and commercial sector with new and innovative services.

Moot though this point might be – the lifting of scarcity as analogue becomes replaced by digital has seemed to suggest to Government and Ofcom that another central mechanism is required – possibly equally draconian and exclusive: that is to establish a market which can trade spectrum which will leave the existing broadcasters largely untouched and even encourage those same suppliers to expand their near national monopolies over spectrum use. Only this time around scarcity cannot be justified by spectrum availability so much as scarcity-preservation has become an overt purpose of regulation.

Spectrum is currently valuable because it is scarce, and it is scarce because it is treated like property. Even if novel uses of spectrum can be shown not to interfere with the current broadcast model, evidence that spectrum can be transmuted from a property-rights model to being treated as a public good might not be welcome, in part because it could call into question the hold the broadcasters have on spectrum.

The potential threat to spectrum holders is clear. We have a set of arguments for creating and enforcing property rights for things that aren't actually property. We usually apply this artificial scarcity to intellectual property — patents, trademarks, copyright — and grant these rights to protect certain forms of abstract work or communications.

The rationale for all these rights, however, is to reward their creators for novel intellectual work. This does not offer much relief to spectrum holders seeking a justification for continued Government enforcement of scarcity. None of the current holders of spectrum have created any of it — a wavelength is a physical property that cannot be created or destroyed. If spectrum can be regulated without the traditional licensing regime, it's hard to argue that the Government has a compelling interest in creating and enforcing scarcity.

The sophisticated technologies that allow spectrum efficiencies to be made where frequencies can be switched and power reduced are not being put in place for digital terrestrial broadcasting in the UK. The desire to switch rapidly from analogue to digital to free up analogue spectrum invites minimal disruption for domestic reception in the switchover period so as to minimise new technology investment by the remaining reluctant analogue householders.

However, the delivery of digital channels in a multiplex (mux) allows for much greater flexibility in how we think of channels. A muxed channel is more fluid and quite different from a channel on a discrete analogue TV frequency.

The use of 'add/drop' technology ² can replace national channel(s) from the mux as they arrive at each of the 81 main digital transmitter sites, replacing the 'national' channels with 'local' channels. The dynamic character of a channel when in a mux raises questions about whether a 'national' channel should expect to be honoured with a licensed to travel from its source via all transmitters and relays to all homes; add/drop lets you turn off the national channel and introduce a more local channel at each of the main transmitter sites. If local 'ownership' or title to spectrum were acknowledged access to some of the local spectrum could invoke a tithe - a portion of the national licence fee or purchase charge which in turn could be used to support indigenous local channels on the remaining local spectrum.

For example, if a local regulatory interests were to assert themselves, each digital transmitter would represent a trading customs post. Access by national channels to homes from each

transmitter using the 'local' frequencies could be made subject to an exchange: so many 'national' channels granted access in exchange for so many Local TV channels being supported. Odd though this might seem, it's the regulatory model applied to cable which has ensured that local and community channels are available in the US and Northern Europe. Alternatively all local areas could agree to grant national passage in exchange for local network capacity on the national muxes which could be converted to Local TV using add/drop.

Add/drop – in principle – allows a local audience to decide amongst itself collectively by e-voting and referenda which 'national' channels it wants to have transmitted from its local main transmitter site or even from its local relay.

The discussion here questions the ownership of spectrum or rather whose rights should best be reflected in its localised and digital use. If spectrum is to become an economic/market good instead of a common good - then whose market should it be traded in? Should the nations and regional authorities have a say on just how their *local* terrestrial spectrum will be used - particularly where this spectrum is demonstrably no longer required for national public service broadcasting?

There is perhaps a false presumption in Government that having been loaned this local spectrum for the greater commonwealth of public service it has somehow become 'owned' nationally: that presumption is entirely wrong. A more appropriate understanding is that local use has been foregone *only* in favour of Government providing an equitable and demonstrably better national and equitable use - public service broadcasting. It's right of use should be returned 'locally' when no longer required for a greater common 'national' purpose.

When spectrum is perceived as an economic property and not as a public good the case has to be made - who actually owns it? That is clearly not the same as asking who is currently better placed to ensure its continued use .

Of course ... it is the complete absence of a distinctive local regulatory consciousness towards broadcasting which is the problem here – but which (very ironically) Section 11 of the 2003 Communications Act suggests Ofcom put in place!

Broadcasting has both an economic and a social value currently unacknowledged in the retention of broadcasting as a Westminster/Ofcom only responsibility. The development of a local broadcasting economy based on the use of local spectrum is a vital economic and social opportunity. Unless broadcasting policy is devolved to the regions, nations and local areas - or provision made on their behalf - these authorities will be unable to benefit their populations with use of this local asset. They will remain victim to 30+ digital channels going 'in' and no channels going 'out'. In a social democracy the economic justification for decentralisation is social as well as economic.

The regional economies require local spectrum

The question of who controls digital broadcasting spectrum begs political discussion and a more intense public debate. Access to digital spectrum in a post-national public service broadcasting era represents as the high peaks the Ramblers once climbed and then claimed in the interwar years. Piracy too can become bucanneering when its purpose has sovereign justification: the sovereignty of broadcast spectrum is local not national.

The consitutional view might be that an historical justification for the once exclusively national retention/annexation of spectrum has now to be rearticulated in the changed circumstances offered by digital plenty. National regulation should not be presumed in perpetuity in this

Who owns Red?

matter especially where an economic rebalancing is long overdue. (Below we look at the regional skewing of TV production income and the location of production companies.)

National regulation was a mechanism to solve a century old problem that is fast going away: it was certainly not a mechanism to enable government to reintroduce scarcity by commercial means solely on behalf of incumbent beneficiaries and to maintain regulatory power at the centre. Or was it?

It really should not have to be the potential local spectrum user who has to argue for access to spectrum for Local TV use. Instead the case has to be made by the national user who requires local spectrum to reach local viewers to agree terms of access for their services on local spectrum. All terrestrial spectrum regulation should revert – by subsidiarity - to local use and local determination except where there is a public service channel to be delivered (when support can be given to encourage local channels to piggy-back national PSB spectrum).

In one example of spectrum benefit – would three national DTT channels be a ‘better’ economic solution than 250 local channels - both using the same amount of public spectrum?

And what layer(s) of Government should decide this?

And how is the local case to be argued when the local democratic representatives have absolutely no broadcasting responsibility, no independent knowledge, no understanding and precious little interest – except for Gaelic (in Scotland)?

1 Unless otherwise indicated, all quotations are from ‘The Possibility of Spectrum as a Public Good’, August 13, 2004 on ‘Networks, Economics, and Culture’ clay@shirky.com

2 Add/drop solution for Local TV is outlined in *Local Television Renewed, LOCAL television REPORT* and *The Pocket Local Television Atlas (Scotland)* - which are all available from local.tv@virgin.net

ADDENDA:

REGIONAL VARIATIONS IN PRODUCTION SPEND

Distribution of production monies as indicated in the Ofcom/Pact study 2005.

Looking at the figures in this Ofcom Study – there is a great disparity in media spend across the UK. If TV broadcasting were regarded as an ‘industry’ by the regions and nations this disparity would probably be addressed.

Balance of income/spend in the regions and nations relative to London (Figures from the Ofcom /Pact study 2005)

Estimate of production spending in each area:-

SCOTLAND	£138m
LONDON	£1476m
NORTH EAST	£32m
NORTH WEST	£210m
SOUTH WEST	153m
YORKSHIRE	142m
EAST ANGLIA	27m
WALES	£73m
NORTHERN IRELAND	£43m
MIDLANDS	£106m
SOUTH EAST	£98m

A more comprehensive breakdown than I've undertaken below would include comparing each of the English regions identified above with the UK as a whole, with London and with the Nations. For brevity a Nations to UK, Nations to London and London to England (excluding London) comparison is made.

	Production spend in area	
NI	£43m	1.75% of UK production spend 2.9% of population, 2% of broadcast journalism courses,
SCOTLAND	£138m	6% of UK production spend 8.5% of population, 5% of broadcast journalism courses,
WALES	£73m	3% of UK production spend 4.9% of population, 10% of broadcast journalism courses,
LONDON	£1476m	60% of UK production spend 12% of population, 22% of broadcast journalism courses,
ENGLAND	£768m	32% of UK production spend 65% of population, 61% of broadcast journalism course

REGIONAL VARIATIONS IN PRODUCTION COMPANY LOCATION

Distribution of production companies (based on Kemps online directory).

- Almost half of the UK's independent television production companies are based in London, an area with roughly a twelfth of the UK population.
- England (excluding London) and two thirds of the UK population has roughly two thirds the number of London's independent producers .
- Scotland in turn has about a twelfth of the number of production companies to be found in London – while Scotland has a population two thirds that of London.
- Wales has half as many producers as Scotland and Northern Ireland half as many as Wales.

BIGGER PICTURE ON THE SMALLER SCREEN

The best options for digital Local TV are in danger of suffering further delays at Ofcom as year-long consultations begin about the best way to manage or regulate the electromagnetic spectrum released after digital switchover.

This new debate raises unasked questions about the appropriate scale of any proposed markets in which to trade spectrum and whether or not - as local public service broadcasting - Local TV should be exempt from bidding for its frequencies in competition with telecoms operators and large scale broadcasters.

Here ACTO looks at the pressures to accept the monopoly of large-scale television as a natural order and suggests that the UK has taken a quite alien and socially antagonistic route in adopting an exclusively national television 'market' - an approach other European countries have avoided or better resisted.

Television viewing is undertaken fairly evenly throughout the country.

Probably viewing outside the metropolitan centres is greater than in these areas where workers commute or where there are other distractions available.

Possibly television viewing among the elderly or less socially active is greater than among the young and more affluent and socially mobile. Maybe, maybe

Where is this leading? Well the economics of Local TV have been put under the spotlight. But who is holding the spotlight?

It has been suggested by the Department for Culture, Media and Sport that the economic value of digital spectrum will be a ball-breaker for the ambitions for Local TV. DCMS anticipates that in the longer run both new spectrum released from analogue switch-off and spectrum used by public service broadcasters will succumb to market valuation. But on what scale of market and for whose benefit?

We've been wondering about the starting point for an economic valuation of spectrum in the last few editions of ACTO and tried to imagine the markets in which this public asset might have best-value - knowing perhaps that the endgame is that once national assets are transferred to markets in which shareholder value determines development they will be lost forever to smaller or more modest (local) uses.

As we suggested above, television viewing - and attention to public service television in particular - is pretty evenly spread across homes and maybe higher viewing actually occurs the further out from city or population centres. An even spread of access was and is the

objective of public service broadcasting (PSB) – to illuminate all households in the glow of a shared debate through equality of resource.

Television channels which do offer a national public service aspire to reach a universe of all possible viewers while other ‘national’ channels - on Freeview, satellite or cable - cherry-pick so far as they can the appropriate demographics from amongst the smaller than national universe receiving their signals.

Local TV – of course – wants a national universe of local universes. Local TV’s objective is to divide the national universe into smaller recognisable local elements in much the same way that regional public service TV sought to establish a universe smaller than national. But the regional services were based on commercial universes and found a poor fit with the economic and social regions of the country and home nations.

Without embracing the civic and cultural universes regional TV was less public service in conception and delivery in the 1950s than Local DTT will be from 2008.

If television were a physical good then we would look at producing it as close to the centres of consumption as practical - in the way that national newspapers spread out their production centres and local newspapers are mostly produced locally. The nature of broadcast distribution and ‘news ownership’ are the keys here.

Radio and early commercial television began broadcasting nearby their audiences – locally and regionally: radio because there was no national transmitter network in place and commercial television later for exactly the same reason. The TV franchises were licensed in the 1950s on a commercially viable scale and to address regional and ‘nation’ interests where they coincided with a variation of national public service broadcasting.

Early on in the life of ITV the regulator – the Independent Broadcasting Authority - found that the viewers wanted something more local than regional ITV could offer - but the commercial companies found that regional TV was too small to provide quality programming and that the economies of scale offered by combining into a network offered a more realistic competition in the hunger for viewers while competing with a largely national BBC. The television ‘market’ was predisposed to become national because the national supplier in the form of the BBC competed for viewers alongside the ITV companies who occupied a ‘region’ which mostly had no cultural, political or economic coherence or necessary identification with ‘its’ service.

From the beginning of commercial television in the UK there has been a tension between the viewer’s local requirements and the commercial demands of the TV companies to reach as many viewers as possible ‘generally’ rather than to reach viewers ‘specifically’.

This ‘public service’ tension has surfaced regularly in the many viewer surveys conducted by the regulators of the time – the IBA, the Independent Television Commission and more recently with MORI’s study for the present regulator Ofcom. Throughout this fifty year period the viewer’s requirements have been largely ignored and the regulator has supported the broadcaster’s commercial ambitions to secure a more abstract and national rather than localised audience.

One exception has been introduced to break this pattern. In one piece of legislation the viewer came, if not first, at least as a priority: in introduction of cable TV in 1984.

Cable was licenced on a council or borough wide scale and was expected to offer most larger towns and cities across the UK – some 200 or so - local commercial services, and volunteer run community TV services as well as alternatives to the BBC and ITV channels.

Who owns Red?

Twenty years ago the citizen's own capability and desire to produce community channels was recognised in the 1984 Cable and Broadcasting Act. The cable companies were to make available capacity for local community and voluntary organisations to run their own channels. (See Rushton, D, *Citizen Television: a local dimension to public service broadcasting*, John Libbey (1993) for Adrian Friedli's analysis of the cable company commitments to community channels).

Cable TV was the British government's response to earlier relay-cable company demands for a new role as the carriage of solely off-air TV became unnecessary with the roll-out of the more easily received UHF terrestrial transmitter network.

The 1984 Cable and Broadcasting Act offered a strong public service dimension because cable television was largely envisaged as being 'a local service'.

As Tony Currie of the Cable Authority commented ... "the *raison d'être* of cable was going to be to provide local programmes as an alternative to the existing channels and that the cable operators were expected to be programme makers in their own right". (Tony Currie, *The Really New Television Conference Papers*, Institute of Local Television, 1989).

In the 1984 Act the community TV initiatives of the 1970s – in Sheffield, Bristol and Swindon and a handful of other areas - were being acknowledged (See *Local Television Reviewed: essays on local television 1982-1993*, John Libbey, 1994).

Although local and community channels were rarely offered: Coventry, Clyde in Glasgow and Aberdeen were among the exceptions.

Cable did not take off in the UK – blighted largely by central Government's hostility to Labour run local authorities' possible interventions and the desire to see cable as a national vanguard to provide telephony competition with the newly privatised BT.

A less confrontational approach towards the introduction of cable in Northern Europe resulted in city and community channels part funded by 'access' fees as cable companies were favoured by local authorities to run their cabling alongside the other public utilities.

In 1989 I estimated the difference in approach between UK and European cabling was pushing the UK's domestic cable rental to £16 a month while their European counterparts were paying £4, a sufficiently attractive figure to spur European cable build towards the present 70-90%. Cable in the UK still languishes at around 20%.

Cable TV in the early 1980s could not sustain its own commercial programming, and reinvented itself as a carrier service to relay BSB and Sky.

Just like the ITV broadcasters – cable has also seen its audience offered channel 'choice' and assembled its services 'in spite of' where the viewers actually lived and what their local interests might be.

The collapse and mutation of 'local' cable back into its relay form was largely a consequence of a market oriented experiment in regulation distorted by an anti Labour local authority spin from the then Tory central government. The process sacrificed the local vision of the 1984 Act and the community dimension and instead encouraged investment and growth of cable in a fragmented and an outward direction by merger regardless of paying attention to the local scale and local coverage originally addressed as central in drawing up the cable licences.

In spite of the regional character and expectation of the ITV franchises and cable's local remit and franchise build requirement the subsequent evolution of both commercial terrestrial

and cable television in the UK has steadfastly progressed by overlooking the interests of the audience *within* the transmitter and cabled area. Both forms of television have instead served shareholders before viewers by scavenging their audience from a wider territory and moving onto the neighbouring patch and to acquire 'national' viewers spread out across the country.

What competition we have seen in UK television has been with satellite and within variations of its centralised self: there has been (at best) indifference towards developing competition in ideas or on a variety of scales.

The similar growth patterns of regional TV and cable TV are not a result of dynamic market forces at play but of compromised policy, a weak regulation and regulator which together guaranteed that the prevailing and incumbent interests prosper in spite of their legislated purpose and remit - even affording rescue missions to strip away build commitments for cable to help this business overcome its market failure and near collapse. In scale at least, a perversion of the markets these services were built to operate in has been accepted by regulators so as to support these erstwhile failing enterprises.

We have commercial television with a regional public service remit from which they have been slowly released continuing to occupy transmitters granted them as a public service and we have cable occupying the country in a scattered but urban-focused way as a result entirely of government and regulator intervention to set aside the services expected in favour of shareholder benefits. So which markets should we encourage to decide the future shape of digital TV?

In such an environment of shareholder-friendly regulation all things in television becomes more or less the same and on a maximalist 'national' scale. To date the government's intervention seems intent to support an incumbent broadcaster at the expense of other viewer required and licensed obligations projects: local news and community TV.

In Croatia – after the virtual destruction of the national TV networks in the 1990s – there are now numerous Local TV stations built up from the bottom – in a circumstance of little or no government. In Spain, a thousand or so channels – again arose because of no regulation. These examples suggest that regulation in broadcasting is defensive and protectionist of strong vested interest – not creative and enabling - even where these operations fail to offer the services legislated for or wanted by viewers

Cable has not been a success in the UK. That is – cabled homes are to be found in much smaller percentages in each cabled UK area than in Northern Europe. In Europe cable was introduced at about the same time – but in a less nationally dictatorial form and in a more locally involving local partnership oriented way so that it is 'locally' a success and a conduit carrying local and large scale channels to most homes.

Regional TV too was also a failure as a regional enterprise in the UK, seeking a network solution to secure and share access to spread out viewers (and slowed in its local growth because many households initially required different TV aerials from those for BBC reception).

The regional commercial channels were only able to move forward against the BBC share of audience because of the popularity of the mostly London based networked light entertainment (notably, *Saturday Night at the London Palladium*).

The BBC's national focus became what the regional ITV companies had to match or improve upon – to make a well budgeted programme the economies of scale as well as a sense of

Who owns Red?

national location and event proved necessary. ITV's battle with the BBC then became a class war and not a regional versus national war.

Here was a familiar argument – regional TV could not afford the programme budgets to provide like for like alongside the BBC and so turned to national or large scale programming and audiences based on common but not immediately shared interests.

This perception of 'this is how TV works' is a something of fixed (and oft regarded 'economic') picture of a partial if not entirely bogus reality. What this view overlooks is the reflexive defensive response of shareholder based companies and the intervening contingencies: not least of which in the UK has been the distortion even eradication of local TV markets (hitherto) by the powerful competition for viewers represented in the BBC's economic structure and ring-fenced revenue source.

A perception of where the competition in television will be coming from in future – large scale TV - lies behind Ofcom's offer to the ITV companies to withdraw from regional programming: but this is most certainly the wrong view, and for several reasons.

Bigger structures which ignore and eradicate differences are not the rational way ahead for a country that has lost touch with itself and with its communities – smaller more flexible public service operations have greater capacity to survive, to reflect on local aspirations and to transform and innovate.

Television's scale has grown to satisfy the greater investment required in 'big' programmes that will attract the dislocated national viewer against other 'big' programmes – programmes of a similar scale and budget seeking the same casualised audience. This has been the TV wisdom since the ITV companies stepped gaily from the *White Heather Club* to join hands at the London Palladium. It is a wisdom born out of building their own independent infrastructures while trying to compete with the national and ever-centralising BBC. And yet the DTT infrastructure will be in place for Local TV, accessed by 50% or more of households in each Local TV area. It will be available for use if Ofcom can produce its own Local TV Plan, or adopt the Add/Drop Solution in time for switchover engineering.

Throughout the UK it is the television executives and indirectly the shareholders who decide to compete in a broadly national market which is acknowledged and understood by regulator and Government. Yet technology combined with those largely ignored but long standing viewer demands for the more 'local' suggests there are opportunities to start and develop in parallel and on a small scale.

If there were no interest in local news – we'd have no local newspapers; if no interest in local identity, accent or tone – then no local radio (as much as this is a trick of distribution in many areas); if no interest in participation then no community radio or community newspapers, no local exhibitions, fetes, amateur dramatics and so on.

So not, Why Local TV? - but WHY NOT!!

Valuing Local Public Service Television

This paper examines some of the ideas in 'Measuring Public Service Broadcasting' (MPSB) written by Robin Foster (now of Ofcom), Jim Egan and Jonathan Simon. Their paper can be found on the Ofcom website and also as a chapter in From Public Service Broadcasting to Public Service Communication - edited by Damian Tambini and Jamie Cowling at IPPR.

MPSB is something of an early realisation of Ofcom's attachment to 'opportunity cost' for economic evaluation of broadcasting. As well as quantifying an economic value for programmes 'opportunity cost' is used to identify a hidden value in the electro-magnetic spectrum which includes the frequencies used for broadcasting. Ofcom's recently announced consultation on the Digital Dividend will engage further with the ideas of opportunity cost and spectrum trading. See http://www.ofcom.org.uk/media/news/2005/11/nr_20051117.

In the MPSB paper 'opportunity cost' is applied to public service broadcasting (PSB) and in particular to public service programmes. Opportunity cost is introduced in MPSB in a fairly tentative way to attempt economic comparison of different types of social and less social television programmes.

The 'opportunity cost' of a broadcast programme-slot suggests a greater benefit had the *best* alternative programme been shown in a programme's place. MPSB offers that in terms of numbers of viewers and viewer interest the 'best alternatives' to some little watched public service programmes are national 'light entertainment' or 'acquired programming'.

Identifying this alternative applies 'opportunity cost' aligned with the objectives of the organisation or individual making the assessment. So what then is the wider point of this generalisation?

If many viewers don't watch a particular programme should it be replaced with something they are more likely to watch - something more like what they already watch? 'Opportunity cost' in programming and public service broadcasting begs many questions. (See also Rushton, D, 'Introduction' *Citizen Television: a local dimension to public service broadcasting*, John Libbey, 1993.)

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Introducing a market in spectrum will curtail future innovations in public service broadcasting - since this public use for spectrum must either be removed from the market before trading or new PSB broadcasters will have to compete for spectrum on commercial terms.

Dr Martin Cave of Warwick University was commissioned by the government to research a

Who owns Red?

better form of communications regulation. The objective was to improve the long standing methodology built around spectrum scarcity. Cave argues in his Report on spectrum regulation which introduce markets as a regulatory mechanism that the purpose of spectrum trading was not, definitely not to line the Treasury coffers. This somewhat incongruous but forceful remark rings like a plea for the peaceful use of the atom, if not for the genie to stay entirely in the bottle.

Cave might well be concerned that a government and its regulator might want to construct those markets to maximise the cash injection for the public purse - because this simple *consequence* could so easily turn out to be the motivation driving the change. He was right to be concerned.

Talk to both the Department for Culture, Media and Sport and Ofcom as ACTO regularly does and it is very clear indeed that the Treasury crow sits on the DCMS shoulder and is driving aside all regulatory and public service responsibilities. There is no hesitancy among some key figures at DCMS and Ofcom to state clearly and openly that the sale of spectrum is the objective of digital switchover with market regulation and auction the favoured means to achieve financial benefit.

We suggest that this is a blinkered view that will push regulation to maximise market opportunity on current scales at the expense of service objectives, innovations and a different - local scale of service opportunity. But then a regulatory device that encourages spectrum to be viewed as providing a windfall cash-cow will surely encourage the short-sighted to cut to that chase.

The strength of Ofcom's commitment to offer regulation and spectrum to benefit citizen-consumer is about to be tested with spectrum required for local public service television. Ofcom needs to provide a spectrum plan for Local TV - as they have been encouraged to do by DCMS and by the PSB studies. There is now talk at Ofcom that they do not intend to do this but to push the local digital decision beyond the Digital Dividend Review - perhaps better named the 'Digital Divide Implementation' - consultations.

In an earlier ACTO (5) we tested the assumption that spectrum is a national UK asset and puzzled whether it is a national or even a tradeable property: both are at best contentious claims. Both Ofcom and the National Statistics Office suggested spectrum should be viewed as a constitutional issue.

In ACTO 5 we reproduced arguments for stripping away licences because an unregulated use of spectrum can lead to greater innovation. The example used was WiFi where many economic and social innovations in service resulted from making the 2.4Ghz band licence exempt.

The true test of the benefit of a change in regulation for broadcast spectrum will be the benefit to the viewer in variety and this will mean resisting the '50 channels in' at the expense of 'no channels out' and none to provide for sharing views among ourselves.

Try as I might I have only found the 'assumption' of UK spectrum sovereignty characterised by analogy with the ownership of land, sea and mineral rights. The concern here is focused on the boundaries of countries at the outer edges of spectrum use where interference. These international agreements are very vague on property and title - clearly assuming for international agreement a national sovereignty to secure agreement on spectrum boundaries (which themselves don't correspond with territorial limits). Viewing spectrum as property is clumsy but it is not required throughout each state to be seen as national property - only assumed to be so in order to facilitate international agreement. The internal proprietorial arrangements

for spectrum determinations are not of concern at the international scale.

Looking at the variety of legal and administrative frameworks presenting themselves in Europe, there is a Committee of the Regions brokering affairs on a sub-national scale and many countries have variously independent regions or home nations. The German Lande have responsibility for broadcasting and each receives a percentage of the TV Licence Fee to run Open Channels or other media thought locally appropriate and each of the Spanish regions has responsibility for regional and local broadcasting.

The assumption that spectrum is HMGs to sell/trade/lease out requires - shall we say - receipts to prove ownership and title. If Government owns it, how did they acquire it? Was the acquisition fair - should it be devolved? Where in the UK is the documentation that is evident (for example) in the US from the 1920s which shows and dates the process of secondment or acquisition? Is there a Spectrum Acquisition Act 1927 somewhere? Until now the key issue has perhaps been that national governments assume responsibility for sovereignty for the purposes of international agreement. Maybe no one's asked before - while now an Oliver Twist of Spectrum Trading is asking for 'some' (not even more!)

Martin Kellaway, is the author of a comprehensive analysis of relevant spectrum literature and has written on behalf of the UK Treasury's National Statistics Office (CLASSIFICATION OF GOVERNMENT RECEIPTS FROM ALLOWING USE OF SPECTRUM Martin Kellaway - National Statistics). ACTO phoned Martin about his paper and was advised that when writing Martin was 'told' that the UK owned the spectrum - while having no idea where this assumption came from.

When pressed, Peter Bury of the Spectrum Team at Ofcom suggests that spectrum ownership might be a 'constitutional issue', one in which as yet neither the Scottish Parliament nor the Welsh Assembly have shown a great deal of interest. Mark Bunting of Ofcom has also suggested this, writing:

You also raise a question about devolving the regulation of spectrum. Our national offices [eg Ofcom Scotland, etc] do carry out valuable work in licensing the use of spectrum, however devolving spectrum policy regulation would raise constitutional issues which are really for Government to consider.

And so they are, because the process by which spectrum has been assumed to be a national UK asset is an interesting if not an extensively legitimated story. When broadcast spectrum is to be traded as an economic asset - rather more than licenced as a broadcasting asset - this character of kind of transaction falls more squarely within the boundaries of enterprise, concerns which are within the remit of the Welsh or Scottish nations.

In the coming year we will witness the slow movement of spectrum from broadcasting into economics or enterprise - especially if the ambitions of the UK Treasury drive the policies of the Department for Culture, Media and Sport as well as those of Ofcom. The interesting question is the extent to which such a transformation of the public good of spectrum into a private tradeable asset serves to bring those goods into an economic realm which falls more clearly within the devolved nation's responsibilities.

If spectrum has become property whose property was it before the invention of devices to use it? When spectrum use is being redefined where might its title best lie?

Is Ofcom's responsibility under the Communications Act 2003 primarily to benefit the citizen-consumer or, to follow Cave's concerns - to benefit the Treasury, ploughing long argued localised spectrum use ambitions aside to maximise economic gain in the form of recognising and selling national or nationwide assets?

Who owns Red?

The number of persons employed in 250 local TV channels across the UK might usefully be compared with the staff of one national digital channel running repeats or a shopping channel - both use exactly the same amount of spectrum. Which is the more efficient use? Which offers the greatest public and economic benefit? Looking at the one-off sale of spectrum has clouded the integrity of both the DCMS and Ofcom on this issue - discarding local TV planning to ensure there is no solution provided before the markets get to work. This is a scandal.

The assumptions favouring a national market lead back to allowing 'opportunity cost' as a tool to help recast and reimagine alternatives to become something of a precise instrument. It is not. Certainly, as the MPSB authors suggest one television programme made for all viewers is cheaper to produce than several programmes for many regional viewers. But if the authors had looked at the IBA and ITC research on viewer preferences (since the 1950s) they would have found report after report characterising regional programming's problem as being that it is 'too big', too remote to be relevant to the viewer's needs, poorly able to meet their demands as citizens. That is - regional programming misses an opportunity to supply a smaller more familiar scale of service and to stimulate and engage public debate in a 'lived' realm.

It is simply a leap too far - and in the wrong direction - for regional TV to be able to overcome its failings as 'regional' by being given a 'national' job instead, abandoning its regional role: the role for which it was granted a licence! Why not measure other 'opportunity costs' in which one would be to replace regional TV with Local TV, offering services with a more finely tuned public remit.

Why would Ofcom not do this 'opportunity cost' thinking as spectrum becomes available in digital for the first time enabling local TV for all? For here the loss of public service value in the regions might be duly returned in the form of local channels?

Overall - the question to ask seems obvious - does the viewer actually want more national light entertainment, more acquired US programming and new national repeat channels, when instead (or perhaps, as well) there is an option to introduce more vigorous and locally relevant channels?

An alternative starting point for opportunity cost thinking in MPSB would be based on that evidence accumulated by the IBA and ITC over fifty years which broadly shows that regional ITV has been operating at the expense of a more relevant Local TV: that local TV's 'opportunity cost' has been regional ITV.

If the Institute of Local Television had not been suggesting this for sixteen years it might justifiably be accused of hindsight. But consider the interest ITV is now showing in tackling the smaller scale of TV initially through broadband with their LocalITV brand in the Meridian area and in purchasing Friends Reunited. Also the BBC's 'ultra-local' is anything but local - but instead commandeers the 'local' label. You would think that the Government and regulator would see through the 'saying makes it so' approach of the BBC - but far from it. The BBC's 'ultra-local' plan although almost regional in scale permits Catherine Smadje, at the DCMS to write:

we understand that the BBC is proposing to trial local services, which will give local communities access to news and programmes of interest to them.

Nonsense - the BBC are not introducing local services - they are giving new regional services an 'ultra-local' name.

Does the DCMS simply misunderstand the BBC's branding strategy? Of course not - in spite of its Ministerial commitment's the DCMS does not want Local TV.

The question is, in the lengthy consultations which Ofcom has conducted on public service broadcasting have their studies really balanced the needs of new stakeholders and old or has a delay in bringing Local TV engineering forward been deliberately introduced so that the established broadcasters can devise their own Local TV - to kill the independent initiatives before they can begin?

III

The MPBS methodology has placed a financial value on the contribution lost from the public and civil sphere by withdrawing regional Public Service Broadcasting from ITV's commitments during digital switchover. We see that 'valuation' has benefited ITV but not yet the viewers with relevant new programming.

Using 'opportunity cost' Ofcom has followed the MPBS paper and calculated the 'value' of national and regional PSB to be between £300-400m per year - which is the difference in programming cost lost to the public sphere if ITV replaces the PSB programmes with light entertainment or acquisitions.

The preservation of diversity and idiosyncrasy is also an 'opportunity cost' which neither regional TV let alone a national TV service will adequately address.

For in reality what is lost in withdrawing regional programming is an economic as well as social loss of regional assets, a well grounded and recognised focus of creative expression as well as media representation. In other words a failing regional programme is a lost or poorly performing regional asset - it is not a missed 'national' opportunity!

I sense in MPBS a flattening-out of difference - a regional diversity-smashing quality which the authors don't seem aware of when translating the perceived lost value into an orthodox national currency of pounds sterling.

With the grad-grinding efficiency of 'cost effectiveness' a limited species of almost endlessly repeated national brand programming provides a quality mark. This Tesco broadcasting serves to drive out local innovation in favour of a limited, unimaginative and commercial form of monopoly organisation under an ever 'incumbent-compliant' regulator.

We are where we are in broadcasting because for a decade or more broadcasting policy has been informed by raising the global threat: UK mergers and growing availability of spectrum (on satellite) encouraged new channels to fill with repeats and acquisitions - more and more and more to the point of expressive vomiting.

Getting sophisticated and innovative with broadcasting, becoming more supple and subtle seems to have escaped both a conservative government and technophilic regulator almost completely: giving short shrift to local entrepreneurs, failing to see - or if seeing fearing - the potential of local to local broadcasting and exchange initiatives. Ofcom has written of the inequality of local TV in the UK compared with local TV in Europe, highlighting how these expectations are being delivered into digital.

There are 1000s of local channels in Europe, North America, Australia and New Zealand with whom to share and market local programming. But broadcasting is viewed through the wrong end of the telescope as becoming only a world of supermarkets - a rebuff to the corner shop or the farmers market. The switch to digital offers capacity for a world with corner shops and a variety of scales upwards.

Small-scale is that distribution market so far largely denied, even stifled: and that is the real

Who owns Red?

'opportunity lost' with this 'opportunity cost' both in programming and in the national scale of the plans for trading spectrum.

IV

Indirectly the 'value' calculated by Ofcom of the lost public service programming - if replaced by acquisitions or light entertainment - stands at £300-400m per year. From memory, I think this figure is suggested in Ofcom's PSB Reviews. In calculating the PSB deficit and recommending regional ITV's slow withdrawal from their regional public service duties Ofcom suggests making public recompense - albeit largely in the national currency and on its own terms by establishing a Public Service Publisher fund - or 'PSP' to make and possibly deliver new PSB programming. Without PSP, there is no symmetry to 'opportunity cost'.

To date the benefits seem to be flowing only to the ITV companies who progressively will not provide the more expensive less watched regional and national programming. 'Opportunity cost' empties the regional public service purse by removing £70m or so a year of PSB programming from the regions as digital replaces analogue.

The Communications Act 2003 invites Ofcom to look into spectrum trading from the viewpoint of *spectrum's efficient use and for the benefits to the citizen-consumer*. So how and when will spectrum trading recover this lost £70m PSB for the citizen-consumer in the regions?

V

Each national TV channel bounces from one regional television transmitter to a relay and sometimes on to further relays before it reaches the home. In each area a different part of the electromagnetic spectrum is used. This is wasteful in the extreme - tying up vast swathes of spectrum to provide the same content. Satellite is the efficient way to deliver national channels.

Yet the spectrum inefficiency of national TV is being ignored, all other forms of use will have to bend around the national TV services, bend and be distorted into markets that preserve the inefficiency of 'national TV'. The lack of honesty in the spectrum debate is quite profound.

As an 'opportunity cost' that inefficiency represents a barrier to the more efficient uses of spectrum at its regional and local scales. This 'cost' to the notional displaced local and regional users will need to be calculated. That is - what is the opportunity cost in *not* being able to use this spectrum regionally and locally, because of the inefficiencies and dominance of national broadcasting? Cave's declared goal in regulation is the efficient use of spectrum: but all the current uses of broadcast spectrum - except perhaps local advertising avails - are inefficient.

So there is an overwhelmingly strong engineering-efficiency case for being transparent about how national broadcasting services soak up spectrum in an inefficient way to deliver their national TV services: services more efficiently delivered directly by satellite.

So has Ofcom identified the opportunity cost to local and regional use of this wasteful use to add to the opportunity loss of £70m in the withdrawal of regional PSB services?

Significantly too - the former regulation through scarcity of the analogue spectrum is being transformed into an arms length restricted management of digital plenty - where national markets will be constructed to deny access to the small scale. If used for TV these national

channels will add further to the inefficient use of spectrum in being transmitted nationwide via regional and local transmitters: more inefficiency in the name of efficiency.

New regional or local entrants will find it difficult or impossible to enter these markets, especially those with a small scale broadcasting agenda to address, because of the dominance of the market and scale of auctions envisaged and also because of the national way spectrum has (to date) been muxed. This approach forces spectrum into a series of single pipes to ensure service information is retained and carried all the way to the home. This multiplexing further adds to the inefficient use of local and regional spectrum by embedding signal carriage in national and near national moulds. Again, satellite is more efficient in digital spectrum use in delivering large scale national TV channels.

Unfortunately - in Scotland (for example) - there are few who have begun to consider the economic let alone social implications of what we will call 'asset stripping' spectrum before - at least - a more comprehensive range of national television and communications services based on national markets make it all unavailable once more. There is perhaps a year to get this right, a few months to set a new spectrum agenda for the Regional Radio Conference in May 2006. Unless Ofcom wakes to the fact that one super-size no longer fits all - nor should fit all - this change of path will require a constitutional debate.

Currently Ofcom say that spectrum trading will benefit the citizen through the Treasury. So we have to ask Ofcom and the DCMS whether this benefit best represents the primary duty of Ofcom. Because if all conceptions of citizen-consumer benefit from broadcasting or communications can be absorbed by filling the Treasuries coffers then surely 'asset stripping' should appear explicitly in both Ofcom's and DCMS's brief.

This willful collapse of citizen-consumer into a 'national citizen' and 'global consumer' benefiting only from choice rather than engagement presents a further problem for a reasonable application of the 'opportunity cost' principle.

VI

Our starting point is local: which occupies an obscure poorly imagined recess in the regulatory mind. But from this vantage point these rather awkward questions ask how local public agencies might recover the local and regional PSB deficit that will otherwise be lost through 'opportunity cost'? How might we set about replenishing the social and democratic pot of public service broadcasting - for the benefit of regional and local citizen-consumers?

In other papers ACTO has argued that part of Ofcom's duty under Section 11 of the 2003 Communications Act translates as establishing local regulation: we've suggested calling these local regulators Broadcasting Trusts, bodies with the regulatory powers to administer for public benefit spectrum in their areas. The justification for this follows the duty upon Ofcom in the 2003 Communications Act to involve the citizen in broadcasting policy - not after the assets are sold but, we suggest, so that the citizen-consumer might have an intelligent and informed say about the disposal of the family silver.

Ofcom has yet to undertake this work - although recommendations on Broadcasting Trusts were submitted to Ofcom in November 2004 as part of the PSB II review, there's been no word at all from the regulator on a timetable or even a methodology for implementing this aspect of their Media Literacy obligations.

Yet Section 11 of the Communications Act is quite explicit in requiring this dialogue - for all citizens to be better involved in broadcasting/communications policy and to understand in

Who owns Red?

this case the magnitude of what will be lost if some of these assets are not available for regional and local use. It is Ofcom's duty to ensure that citizen-consumers understand the potential significance - loss of public service and common good - of economically quantifying for state benefit a qualitative value like public service reproduced through local and regional spectrum assets. That is, there are options and choices ahead that need to be understood as the citizen becomes informed and encouraged to participate in making broadcasting policy.

There is absolutely no question: national broadcasting services have to 'borrow' regional and local spectrum to deliver their channels. Should they use this spectrum without charge? If the electromagnetic spectrum is owned by HMG - so that it can be sold or traded - where is this process of acquisition described?

Terrestrial television is transmitted from regional and local transmitters: there are no national transmitters. Government and regulator can both argue that the PSB services were created by acquiring these regional and local spectrum assets in order to establish a national public-good equally available for all. But so far as broadcasting goes the state does not use or 'own' spectrum itself, merely directing its use through the arms-length independent regulators while characterising the ownership role as custodial so as to maintain the citizens' (or citizen-consumers') best interests by the good order of regulation.

In the transition from analogue to digital carriage the citizen-consumer has still to be invited to comment on how the local and regional spectrum bringing all terrestrial broadcast signals to them might be used in future.

Without such a debate taking place we should not assume that the public service broadcasting 'citizenship account' can be represented as assets owing to the Treasury: Ofcom has yet to engage the citizen with the broadcasting policy options.

And of course of special relevance here is the question that bounces between these paragraphs - how do those interested in establishing Local TV recover that element of the public service deficit which is 'quantified' as being regional/local in character: or some £70m per annum of 'lost' regional PSB programming after switchover.

The new Local TV broadcasters want to use this sum to help deliver local public broadcasting services. A possible solution would be through reinvestment into the local realm via the PSP - but if there is no PSP, how then?

VII

In reading 'Measuring Public Service Broadcasting' I'm struck by how important it is to have underlying assumptions disclosed - even if these might seem self-evident and perhaps especially if they seem common-sensical.

This reading of MPSB is from a local point of view - not with any particular local in mind in presenting that point of view; but with 'local' as a common site which all viewers as citizen-consumers occupy in varying small numbers and from where they might each react as well as enjoy the products of television.

The total of all local sites for viewing national TV is clearly the sum of those individual sites - but that combination is not to be straightforwardly equated with a national whole. (This and other points that follow are explored in more depth in the books *Don Quixote's Art & Television: seeing things in art and television*, School Press (1998) and in *Local Television Renewed: essays on local television 1994-2005*, School Press (2005).)

A distinction between the citizen and the consumer can be made in suggesting the citizen

places some value in social spaces in which they interact. The consumer facet of 'citizen-consumer' might focus less on a sense of a tangible local, regional or national space or even a shared local identity at all. The identity and identification of consumption in television terms might well have as its end the viewing of a programme, whereas for the citizen the programme is a form of mediation, exchange or stimulus of ideas upon which they might themselves act or otherwise engage.

In a global market the world is ever more readily accessible to the consumer - as it is for the consumer-viewer. But what has been overlooked in criticisms of the citizen-consumer is that we still mostly consume 'somewhere', no matter where the goods come from, whether 'viewable', 'listenable' or corporeal goods - consumption takes place 'locally', and this is often at the same site occupied by the consumer as citizen. The consumer is often no less located by the same moments and places of consumption than the citizen is by their particular responsibilities and duties in mostly occupying one particular place and not another. The division between citizen and consumer is therefore never a complete separation and the site of 'viewing' is one of the elements in which the two are linked.

I hope this does not seem a trivial point: it is important that the citizen-consumer is not confused or conflated into a national abstraction pictured and exhausted of meaning by (Ofcom on behalf of) the Treasury. If we had no local government, no nations, no regions then we might only be citizens of the next tier up - the UK: but we are not 'just UK citizens' and there is a cascade of citizen expectations and responsibilities, some of which regional TV was best placed to reflect upon (often if poorly able to achieve these reflections due to range, execution and viewer engagement).

There is an assumption that as markets get bigger the consumer too goes global. But for the most part this is not so, the consumer is not an abstract figure but one engaged in consuming somewhere and often that's where they are also citizens.

My point is that scaling every 'local' into a single 'national' misses - or rather denies - the interface at which we all as individuals, as Ofcom's citizen-consumers, interact and usefully engage in many of both our citizen and consumer roles.

Without some conviction behind the Public Service Publisher to support the opportunity lost to the public sphere of some £70m per annum from the regions after switchover it will be necessary to find other ways to recover and assign this sum in support of Local TV.

Sale of some of the regional and local spectrum could directly benefit the introduction of Local TV as would a levy at local and regional levels be if applied on national broadcasters for use of the regional and local spectrum - assuming the asset is a property and able to be sold at all!

LOCAL TELEVISION PUBLICATIONS from the Institute of Local Television

Local TV and digital switchover provide a major opportunity to redistribute the social and economic benefits of broadcasting across the UK in creating upwards of 240 local scale TV channels. These will provide employment closer to the centres of media and journalism training, local news where it is relevant and local programmes that address community needs and aspirations. Dave Rushton, Director, Institute of Local Television, at Television from the Nations and Regions: The Promised Land, the future of television outside London, January 2006.

The Pocket LOCAL CHANNEL ATLAS (Scotland) ISBN: 1 899405 05 4. The 'add/drop solution' explained. The terrestrial Local TV option proposed by ACTO and described in Ofcom's Digital Local as "the most consistent and convenient solution and potentially offers the widest reach for Local TV of all the terrestrial options." Add/drop explained and applied to delivering Local TV throughout Scotland (2005), £9.00 inc p&p 40pgs.

ACTO - local public service television directories. Is the pdf directory circulated as an information resource and discussion forum on Local TV. FOC and distributed by email to over 800 readers. To 'subscribe' forward you email address. Papers from the first ten editions of ACTO have been compiled into LOCAL television REPORT.

LOCAL television REPORT - ACTO local public service television papers, ISBN: 1 899405 04 6, published by School Press/ACTO/Institute of Local Television, (December 2005), £13.50 inc p&p 144 pgs. Softback. CONTENTS I Preamble. ii Introduction. ONE Questions & Answers: Natalie White's: Questions on the Future of Local Television; Ofcom's: Assessing the Future of Local Television and Interactive Services: A Survey for Stakeholders. TWO European Background: Assessing Opportunities for Local TV Across Europe; THREE Case Histories: Triangle TV Auckland; Open Channels Germany; Open Channel Berlin; Teveline: Reality Show vs Real People; Channel Six Dundee plus Audience Research; 'e-tv' in Aberfeldy. FOUR Local Spectrum & Costs: The Add/drop Solution and Local Network Channel; How Big or Small is Local TV?; A Stab at Local TV Costs. FIVE Shifting Policies: Media Literacy, Local Licences and Local Government; God's Own Spectrum: Local TV and the Public Good; Regional Variations in Production Spend; Bigger Picture on the Smaller Screen; Valuing Local Public Service Television. SIX Nutshell: ACTO Checklist to Ofcom, April 2005.

LOCAL TELEVISION RENEWED: essays on local television 1994-2005 published by School Press for the Institute of Local Television, (August 2005). £13.50 inc p&p 112 pgs, Softback LOCAL TELEVISION RENEWED provides a vigorous critique of the political impact of public service broadcasting since 1990 and argues for two hundred plus independent local,

community and municipal television channels in line with developments underway across Europe. *LOCAL TELEVISION RENEWED* outlines how these proposals for local TV channels can be introduced as part of digital switchover from 2008 and expanded via broadband.

LOCAL TELEVISION RENEWED is the fifth volume on local television to be published by the Institute of Local Television - published either with John Libbey, the Community Radio Association (CRA, now the Community Media Association) or on the ILT imprint: School Press.

LOCAL TELEVISION RENEWED: essays on local television 1994-2005, ISBN:1 899405 03 8, Dave Rushton, published by School Press (2005) £13.50 inc p&p 112 pgs Softback CONTENTS Preamble; Introduction; Technical Background; Virtual Reality; Vicarious and Experiential TV News; A General Theory of Spectrum; Defining the Social Geography of Local News Identity; Assessing opportunities for local digital TV across Europe; Add/Drop and the Local Network Channel. APPENDICES: A Local Television Reader; Scottish Local TV Forum Report; Some pointers for filming local TV news and short documentaries

CITIZEN TELEVISION: a local dimension to Public Service Broadcasting, ISBN: 0 86196 433 0 edited by Dave Rushton, published by John Libbey & Institute of Local Television (1993) £19.50 inc p&p 232 pgs Hardback CONTENTS PART ONE - Research & Analysis: Citizens and the Local Choice. Edinburgh Television Study, Peter Kitchenman; Cable Company Franchise Commitments, Adrian Friedli; Highways Authority Experience of UK Cable Build, Inken Schindler; Local Authority Cable Briefing, Lyndsey Bowditch; Reading the ITC's Mapping Regional Views, Dave Rushton; Survey of Local Channels on UK Cable, 1992, Julie White; A Local Future on Cable?, Dave Rushton PART TWO - Commentary & Critique, Local Public Service Television. Making Local Work, Dave Rushton; Amendments to the ITC's Draft Invitation to Apply for Channel 5, Amanda Gibbs & Dave Rushton; Channel 5 and Local Television, Dave Rushton; 'Star Rating' Channel 5 Transmitters, Dave Rushton; The European Meeting of Local Television, Dave Rushton. APPENDICES, Section 7 Cable and Broadcasting Act, 1984; Local Channel Survey, 1989, Peter Kitchenman; Tables 9-14, 16, 19 & 21, Peter Kitchenman; Cable Growth, 1983-1992; Pilot Local C5 Survey Edinburgh, 1990, Lyndsey Bowditch; C3 Regional Populations and C5 Transmitter Populations

LOCAL TELEVISION REVIEWED: essays on local television 1982-1993, ISBN: 1 899405 003 Dave Rushton, published by John Libbey & Institute of Local Television (1994) £9.50 inc p&p 48 pgs Softback CONTENTS Introduction; Cable, Cable TV and Video; Work! Work!!; Cultural, Racial, Economic, Political, Social & Class Bias (etc) ... on TV; Swindon Viewpoint, Aberdeen Cable, Cable Authority and the Grapevine Channel; Origins of UK Cable; Cable, Channel 4 and Tape Distribution.

CREATING LOCAL TELEVISION: local and community television under the Restricted Services Licence, 1 899405 01 1 Dave Rushton, published by John Libbey, Institute of Local Television & CMA (1997) £10.50 inc p&p 78 pgs Softback CONTENTS PART ONE - Policy and Intervention. Policy and intervention; PART TWO - Preparing a TV RSL; Locating frequency channels for TV RSLs; Blueprint for a TV RSL; Organising a TV RSL; APPENDICES.

DON QUIXOTE'S ART & TELEVISION: seeing things in art and television, ISBN: 1 899405 02 X Dave Rushton with an introduction by Terry Atkinson, published by School Press (1998) £8.50 inc p&p 48 pgs Softback. CONTENTS Introduction, Terry Atkinson; Noisy Channel; Art & Artifice: or designs on the past; Open Channels and Media Literacy.

Orders or further enquiries can be addressed to **Institute of Local Television 13 Bellevue Place Edinburgh EH7 4BS** or by email to local.tv@virgin.net.

UK Local TV Forum

"The Government are committed to supporting local television and we very much hope to see an expansion of services in the future. We envisage that local television will play a valuable role in keeping communities informed and in particular, help keep in touch those most socially isolated members of the community who may not have access, or are uneasy about using new technology. Local television will also bring economic benefits to areas in terms of employment and training...." LORD McINTOSH, Minister for the Media and Heritage at DCMS, addressing Scottish Local TV Forum 2005.

The 'add/drop solution' was initially proposed at the Scottish Local TV Forum. It "offers the most consistent and convenient solution, and potentially offers the widest reach for Local TV of all the terrestrial options." OFCOM, Digital Local, January 2006

digital local television
22nd March 2006

10.00-5.00pm

CoSLA

Rosebery House
Haymarket Terrace
Edinburgh
EH12 5XZ

to register, email names of delegates and organisation to

tana@talktalk.net

£75.00 (concessions available)

UK Local TV Forum

10.00

Registration and Exhibition

10.30

Local Freeview & Broadband on TV

Add/Drop & Engineering Local Digital Terrestrial

Serge Francois, Terayon, Belgium

Andy Woodcock, ngwireless TBC

Frank Brown, arqiva TBC

Prospects for Broadband on TV

TBC, Homechoice

Broadband

TBC, Narrowstep

Question & Answer

COFFEE

11.45

12.00

Council Channels & Economic Development

County TV

Peter Williams, PWTv

South Lanarkshire TV

Drew King, South Lanarkshire Council

Question & Answer

1.00

2.00

LUNCH

A sense of proportion?

City TV Kosice - city & satellite

Eva Dekanovska, City TV Kosice

Community Production opportunities with BBC Local

Nic Millington, Rural Media Company

Question & Answer

TEA

3.45

4.00

Investment Enterprise and Partnership

Regional Enterprise

TBC,

Regional Newspapers & Local News

Robert Freeman, Press Association


Question & Answer

5.00

FINISH

SCHOOL PRESS

triangulum
consulting

Local 

Campaign for Local TV

ACTO



The Broadcasting Trust

MAPS
media access projects scotland

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