INCENTIVES IN PSB DELIVERY AND IMPLICATIONS FOR PSB MODELS

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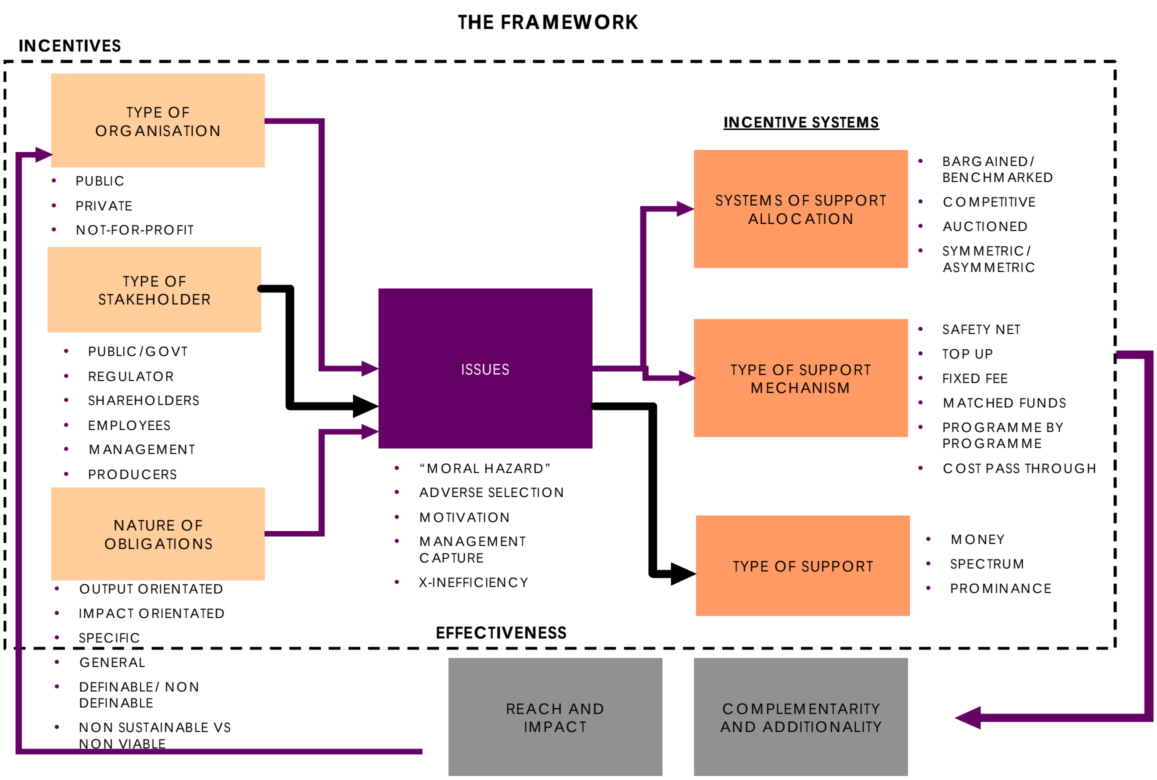
APPROACH AND SUMMARY

The main aim of this paper is to assess the mix of incentive mechanisms that would best ensure that PSB content is delivered effectively through broadcasters and platforms in the on demand age, and then to test this against the four intervention models being assessed as part of Phase 2 of the Ofcom PSB review.

The overall approach has been to assess whether there are any underlying advantages or disadvantages when comparing both the type of organization delivering the PSB content and the type of PSB obligations required on the one hand, with the different incentive systems implied by the 4 PSB intervention models on the other. By incentive systems we mean both the way in which PSB support (funds or assets) are initially allocated and the ongoing system of penalty and reward that applies following initial allocation.

Figure 1 lays out the overall approach taken in this review.

FIGURE 1



Section A reviews the main inputs and outputs of any PSB system. First, the various types of organizations and stakeholders likely to be involved in PSB delivery are reviewed. Second, the type of PSB obligation are classified and assessed. Third the potential systems of support allocation and on-going enforcement for PSB broadcasting are laid out. The key points to emerge are the following.

> Obligations vary considerable in terms of both the ease with which they can be defined and measured, and the proportionate level of support (in terms of assets or funds) they might need (some need substantial support, others probably only a "top up").
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> The differing business models of a profit maximizing and not for profit commercial broadcaster mean that the former will normally only provide a public obligation if the incremental benefit/support exceeds the opportunity cost, while the latter will provide an obligation even if the opportunity costs are less than the benefits/support as long as it has the financial means to do so.
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> The opportunity costs of any given public service obligation could well be different for different public service broadcasters given their different market positions.
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> Despite their tendency to accept public service obligations profit maximizing broadcasters might not, not for profit commercial organizations may still have potential specific interests of stakeholders, management and employees to resolve in delivering public service obligations effectively.
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> There are two basic models of initial resource allocation (or renewal) in support of public service objectives – the bargained-institutional model, and the competitive- contractual model – the UK TV sector has, with a few exceptions – been based on the bargained-institutional model.
>
> The UK systems reliance on regulatory assets rather than direct funding to support public service delivery of commercially funded channels has had the significant benefit of more or less ensuring high reach and impact (in terms of the allocation of scarce analogue and digital terrestrial capacity). However, the system has had the disadvantage of being insufficiently granular in nature to be targeted at specific public service goals or content.
>
> So far, the UK system of public service support has tended not to use sophisticated systems of contingent penalty and reward to encourage cost effective delivery of specific or general public service goals. The main example of a contingent system being the Channel 4 "safety net" system that operated between 1993 and 2000.

Section B then goes on to summarise generic incentive issues that have been addressed by economists and public policy theorists in recent years. This combines theories on motivation in the public and private sectors with general principal-agent theory applied, for the most part, to the efficient operation of commercial organizations. The section then goes on to assess a purely contractual-competitive approach to achieving impact and additionality and the obstacles that might prevent such a system from working effectively.

The key points to emerge are the following.

Information asymmetries (between the broadcaster as “agent” and the regulator “as principle”) are at the heart of problems in designing an effective public service provision system.

The broadcaster (agents) are always likely to know more about the true costs (and opportunity costs) of delivering public service obligations than the regulator (the “adverse selection” problem). The regulator can never be sure if under provision is due to malpractice or a narrow pursuit of self interest by the agents on the one hand, or unhelpful market trends or just bad luck on the other (the “moral hazard” problem).

However, these problems are not unique to the provision of public service obligations. Systems can be designed (either at the time of initial obligation allocation or through ongoing rewards and penalties) to encourage broadcasters to reveal the true costs of public service provision over time, or to protect against adverse external market trends but at the same time discourage cynical or misleading behaviour;

Nonetheless all such incentive systems are essentially based on reconciling organisational self interest and public interest which are assumed to conflict at some level. It might well be the case that public institutions (not for profit or quasi autonomous publicly funded institutions) benefit from the more altruistic motivations of those who decide to work in public service provision;

In such circumstances it might be better to simply allocate public service obligations to a public service orientated institution – within a bargained-institutional approach - rather than to put a price on each obligation and then allocate them to either the highest bidding (in terms of reach and impact promised) or lowest bidding (in terms of need for support) commercially funded organization within a competitive-contractual approach.

In addition to this general motivational objection to a competitive- contractual approach, there are also a number of more practical arguments that follow on from the nature of public service obligations and the different business models in the UK TV market.

Most notably any competitive process could well end up with only one serious bidder or a number of bidders, with radically different opportunity costs, both of which circumstances can lead to the winning bidder providing the obligation at a higher cost than necessary.

In particular, public service obligations in need of just top up support, which are difficult to define, or which benefit from the scale and scope of a large organization are likely to be subject to significant misallocations of public support through a purely competitive-contractual process.

Section C then applies key lessons from the analysis to the four intervention models being assessed by Ofcom in Phase 2 of its PSB review – (1) Evolution, (2) BBC Only, (3) BBC/C4 plus some Competitive and (4) the Competitive Model. It does this by first characterizing each of the four models in terms of both the PSB incentive system adopted and the types of organizations being targeted for PSB support.

The key points to emerge are the following.

The Evolution, BBC Only and C4/BBC models rely heavily on a bargained-institutional model of public service obligation allocation. Only the Competitive model involves significant elements of the competitive-contractual model, and even this leaves the BBC outside such a system.

Some public service obligations might benefit from a competitive-contractual system while others are best pursued through a bargained- institutional system. Bargained-institutional solutions probably work best with not for profit and public institutions rather than profit maximizing commercial broadcasters.

The most appropriate model in terms of incentives and effective public service delivery may be one that allocates some obligations to institutions on a bargained basis (especially those difficult to define, which benefit most from scale and scope and which only require a top up), while leaving other obligations to a competitive-contractual process open to all (those requiring significant proportionate funding, which are easier to define and which can exist without too many benefits of scale and scope – i.e. cross promotion and scheduling advantages).

However, any allocation of obligations to institutions on a bargained basis must be accompanied by strengthened systems of accountability and performance measurement, and systems that support public service motivation and mitigate conflicts of interest within the broadcaster's management and employees.

While not for profit institutions do not have the conflicting pressure of returning profits to shareholders they can still be subject to management capture and/or stakeholder interest group capture if the incentive structure and accountability systems are not carefully designed.

A. REVIEW OF THE PSB SYSTEM

This section reviews the main inputs and outputs of any PSB system. First, the various types of organizations and stakeholders likely to be involved in PSB delivery are reviewed. Second, the type of PSB obligation are classified and assessed. Third the potential systems of support allocation and on-going enforcement for PSB broadcasting are laid out.

1. Six Stakeholders, Three Business Models, Two Main Aims

A Large Number of Stakeholders

The four PSB intervention models laid out by Ofcom potentially involve six different types of stakeholder to deliver public service broadcasting obligations. Government/policy makers (representing the public interest), the regulator (charged with delivering the public interest through broadcasters or similar organisations), the management of the chosen PSB broadcaster, the employees of the chosen PSB broadcaster, the shareholders and/or external stakeholders of the PSB broadcaster and, lastly, the PSB content creators themselves (who are sometimes within the PSB broadcasters and sometimes within independent producers).

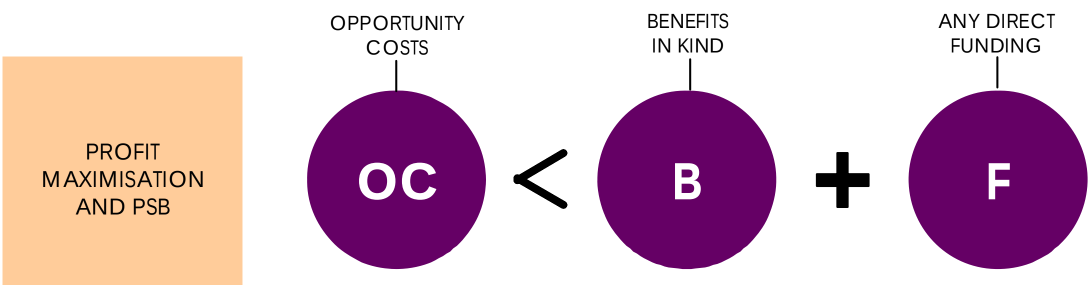
Much is often made in studies of regulated sectors of the potential conflicts between public service obligations and the shareholders of profit maximizing organisations - or indeed the management of such organizations working to maximize shareholder value. But equally constraining stakeholder conflicts can arise between public service objectives and the management of not for profit organizations, or between the employees and management of any type of organization, or indeed between the Government/public and the relevant regulatory and/or the broadcaster management.

Different Business Models

The six stakeholders identified above work through one of three main types of business model to deliver PSB. First, a profit maximizing business model (such as that of ITV, FIVE and BSkyB), second, a not for profit business model – such as for Channel 4 and S4C (where commercial revenues are pursued but annual surpluses and reserves are not distributed to shareholders), or, third, a public body business model – such as the BBC (where public funds are used to achieve PSB goals).

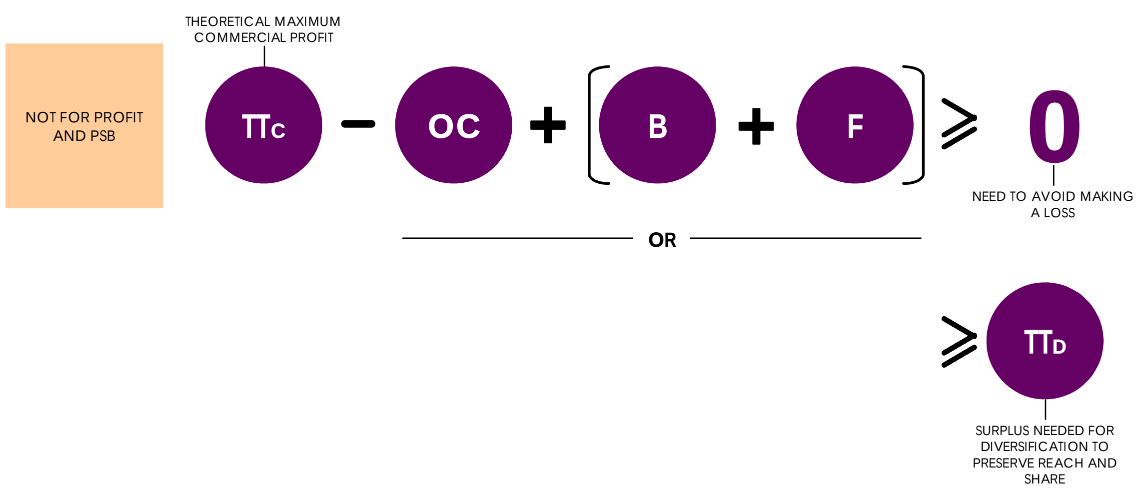
Figure 2 sets out the financial framework that faces profit maximizing broadcasters when considering a PSB obligation. A profit maximizing broadcaster will normally only agree to take on a PSB obligation if the benefits in kind (B) or direct funds (F) exceed the "opportunity cost" (OC) – i.e. the foregone profits from the alternative option of investing and broadcasting in non PSB programming.

FIGURE 2 – PROFIT MAXIMISING BROADCASTER FINANCIAL ASSESSMENT



A not for profit broadcaster faces a different financial framework. Such broadcasters will take on public service obligations even if the benefits (B) or funding (F) offered are less than the opportunity cost (OC) – as long as they do not make a loss or there are sufficient reserves/internally generated funds to do so. The existence of sufficient reserves or internally generated funds will depend on the history or the organization (or its "endowment"), and the on going profitability of its non public service (or perhaps less public service) activities[1]. There may also be a need to retain a surplus to further diversify the service (TTd).

FIGURE 3 – NOT FOR PROFIT BROADCASTER FINANCIAL ASSESSMENT



Two Broad Aims

The primary aims of the PSB system (its overall effectiveness) are likely to be, first, the reach and impact of the PSB obligations and, second, the additionality (or complementarity), above and beyond what the commercial market would provide, achieved through any support mechanisms (assets or funding).

A system that seems to achieve reach and impact but that does so by supporting activities that the "agents" might well have delivered in the absence of support would not be satisfactory. Similarly, a system which only funded activities that were very unlikely

[1] Many charities or Trusts invest in projects with lower returns than could be earned by putting the money in a bank or other commercial investments, as long as there are sufficient funds being generated from current donors or an endowment.

to exist without extra support, but which achieves little reach and impact, would also be unsatisfactory.

2. PSB Objectives and Obligations

The nature of PSB obligations can vary widely. Some obligations are very specific, tend to be output rather than impact orientated – e.g. news – and can be schedule time dependent –e.g. peak time. Other obligations can be much less specific – e.g. innovative content – and are related more to a programme or even an entire TV schedule characteristic than a specific type of output.

Similarly, some PSB obligations may become clearly unviable under any commercial model and are in need of significant support if they are to continue at all, while others may remain potentially profitable but represent a high “opportunity cost” to a broadcaster or outlet compared with other alternatives. Still others may only require a small amount of “top up” support to remove any opportunity cost – leaving as a matter of fine judgment whether a commercial market might deliver them without any extra support.

Figure 4 shows a range of current obligations and how they differ in specificity and categorization.

FIGURE 4 – PSB OBLIGATIONS COMPARED

	SPECIFIC			LESS SPECIFIC	NON SPECIFIC		
	UK CHILDREN	REGIONAL NEWS	NATIONAL NEWS	UK CONTENT	INNOVATIVE	HIGH QUALITY	DIFFERENTIATED
OUTPUT	• ORIGINAL HOURS	• HOURS	• HOURS	• PROPORTION OF HOURS	• NEW PROGRAMMES • NEW FORMAT	• COST PER HOUR • AWARDS	• DIFFERENT SUB-GENRE • DIFFERENT SUBJECT MIX
CHARACTERISTIC /INPUT	• UK	• BY REGION • LOCATION OF NEWS ROOM	• INTERNATIONAL COVERAGE • BREADTH AND DEPTH OF AGENDA	• TIGHT DEFINITION OF ‘UK’ • REQUIRED INVESTMENT (% OF TURNOVER)	• NEW SUBJECTS AND APPROACH	• MIX OF INPUTS	• DIFFERENT SUBJECTS AND APPROACH
SCHEDULING	• OFF PEAK	• EARLY PEAK? • REGUALR SLOTS	• IN PEAK	• IN PEAK, IN NON PEAK	• NONE	• NONE	• NONE
SPECIFIC IMPACT	• REACH OF UK <16 AUDIENCE	• REACH OF REGIONAL AUDIENCE	• NATIONAL REACH	• CUMULATIVE REACH	• INFLUENCE CHANGES IN GENRES	• HIGHER AUDIENCE VALUE • RAISES OVERALL STANDARDS	• BROADER RANGE AVAILABLE
GENERAL IMPACT PURPOSE	• ENHANCE CULTURAL IDENTITY	• REGIONAL IDENTITY • INFORMED	• KNOWLEDGE OF WORLD • INFORMED	• ENHANCE CULTURAL IDENTITY AND REFERENCE POINTS	• CHARACTERISTIC RATHER THAN PURPOSE	• CHARACTERISTIC RATHER THAN PURPOSE	• CHARACTERISTIC RATHER THAN PURPOSE

In terms of the viability of obligations, analysis conducted by O&O of commercial PSB schedules and the revenues and costs of different PSB obligations in support of Phase 2 does indeed show that some obligations are either currently or soon to be heavily loss making (some regional and children’s programming), while others earn lower margins than might be expected from an alternative more commercial schedule – although are still profitable (e.g. current affairs)[2]. Still other obligations earn low margins but are perhaps among a limited number of programme types that can generate the truly large audiences that in the end underpin a leading commercial TV network's economics (high budget originated UK drama). While it may be relatively simple to target the first or even the second of these programme types for support, the third type immediately raises issues of whether the broadcaster might have provided this programming in any event.

PSB obligation viability and opportunity costs not only differ within a specific broadcaster, they can also differ across broadcasters. In particular, some programming obligations that might have high opportunity costs on one channel may have lower opportunity costs on another channel (as the latter channel has fewer higher profit alternatives).

3. PSB Support Mechanisms and Incentive Systems

Support System Characteristics

There are three main types of support system characteristics:

- the type of support offered;
- the initial support allocation and subsequent renewal method; and,
- the ongoing systems of penalties and rewards built into the initial allocation method.

The following section reviews each in turn.

Assets Versus Funds

Support for public service broadcasting in the UK on commercial TV channels has traditionally been through the allocation of scarce assets – most notably terrestrial analogue UHF frequencies to the chosen broadcasters.

The growth of cable and satellite distribution since the mid 1980s has eroded the scarcity value of the analogue UHF frequency asset, and this is gradually being replaced by the lesser, but still important, value of digital terrestrial frequencies, HDTV capacity on these frequencies and mandated prominence for public service channels on electronic programme guides.

The great advantage of using such assets as a way of supporting public service broadcasting is that they not only bring indirect financial support to the receiving broadcaster (by giving them privileged access to audiences and therefore a significant share of advertising funding), but they have also been a guarantee of a certain minimum level of reach and impact.

The disadvantages of this asset based approach are that: first, their value can fluctuate over time in unpredictable ways, leaving the level of effective PSB support subject to exogenous changes in market structure and conditions; and, second, they tend to be relatively indivisible making it difficult to vary the level of support as a way of rewarding

[2] See main consultation document *Phase 2: Preparing for the digital future* Section 6.

more provision of PSB and penalizing less provision of PSB. The use of assets may therefore better support the wide reach and impact of a PSB service, rather than individual programmes which a commercial broadcaster may not otherwise include in their schedule.

By contrast, funded support has the advantage of complete divisibility (so the level can be varied over time to encourage more or less provision), but the disadvantage of not necessarily bringing with it guaranteed high reach and impact.

Clearly, the differences between funding support and asset support can be exaggerated. Funding mechanisms could be used to "buy" distribution as well as funding PSB content (so ensuring access to high reach slots etc). Similarly, assets can be made somewhat divisible by awarding extra frequency, or extra time slots within frequencies, depending on the level of provision of PSB content, and withdrawing such incremental capacity if less PSB content is delivered.

The choice of assets versus funds is likely to be as relevant over the next 10 years as the last 10 years, as issues such as the provision on PSB content in the Web 2.0. age will also come down to choice between financial support and the granting of privileges – such as due prominence on portals, net neutrality across delivery networks etc

Competitive Versus Bargained Allocation Systems

The UK has used both bargained allocation and competitive allocation systems to support PSB in the UK. Bargained outcomes include the BBC's periodic Charter Reviews and Licence fee settlements, and the setting and review of Channel 4's remit. In both cases, the role and remit of the organizations plus the appropriate level of funding and asset support have been settled by negotiations between the Government and the broadcasters and reviewed by parliament. Overall, the recent bargaining process involved in setting the BBC's role and funding has been somewhat more transparent than the process for Channel 4 in part due to the fact that the BBC raises its money from a mandated licence fee while Channel 4 has up until now only drawn in some support assets with no need for any direct funding.

ITV and FIVE have experienced a mixture of competitive and bargained allocation systems. ITV experienced a number of local licence allocation rounds between 1956 and 1991. The first rounds – in 1956, 1968 and 1981 – were conducted as "beauty contests", with the licence being awarded to the bidder who made the most promises to deliver PSB content (under a general condition of sustainability).

The 1991 round of allocation involved a financial bid alongside commitments to PSB provision. The allocation process was a mixture of highest bids and highest quality which ended up producing extreme variations in the financial bids made for each regional licence. In 1991, the financial bids were all positive – as the value of the privileged assets was still so great as to enable the winners to deliver the PSB required and pay for access to the assets.

Since 1991, ITV has had its licence renewed through a bargained process rather than a competitive process. The incumbents reach an agreement with the regulator over their continued level of PSB provision and an adjustment to the annual payments levels (originally set in the bidding process of 1991).

FIVE's initial licence – in 1996 – was also allocated in a bidding process that mixed financial bid with PSB promises, and its subsequent renewal of licence has also been done through a bargained process with Ofcom.

In recent years competitive bidding has been used to allocate more niche public service TV such as the Teacher's TV service funded by the Department of Education and Skills.

Fixed Versus Contingent Support

The allocation system is only one part of the support mechanism. Support mechanisms can also vary in the degree of contingency built in. For the most part, the UK has operated a fixed support system – access to a given level of capacity guaranteed for a period and licence fee with a given formula for a period.

Contingency in support when it has occurred has tended to be indirect and unrelated to PSB provision– such as the level of payments from ITV companies for access to scarce assets being partly based on their qualifying revenue relating to the licence, which may vary according to market conditions.

The only direct contingency that has applied in the UK system of PSB support has been the power to fine or remove a licence to broadcast from a PSB organization if they are in serious breach of their PSB obligations but this had not tended to happen in the UK. There has never been a PSB licence revocation, and what fines have occurred in the past tend to have been for licence breaches related to general standards rather than licence specific obligations.

Contingency could be built into PSB support systems in the UK in a number of ways:

making access to different levels of assets and frequencies contingent of the delivery of different levels of PSB (e.g. a certain level of PSB gets one free DTT frequency, a higher level gets two frequencies, and even higher level gets capacity for an HDTV service etc);

making the level of any funding support contingent on the delivery of public service output – either an indirect link between general levels of provision and general levels of support , or more directly by funding specific programmes – whole or in part – on a case by case basis; and,

a more complex system that has elements of the first two mechanisms above, but which also related the level of funding to market conditions – i.e. if commercial revenues are under pressure more direct funding is made available, but when times get better support levels are reduced (with perhaps a maximum level of support no matter how tough times become also being set). [3]

Mixing Allocation Systems and On Going Support Mechanisms

Initial allocation systems (and renewal systems) can work in combination with contingent support systems. For instance, some PSB obligations could be put out to competitive

[3] This is akin to the "safety net" introduced for Channel 4 from 1993 to 2000 which is covered in more detail later in this paper.

tender, but the licence being tendered for could make the level of support contingent on different levels of delivery – in effect the winning bidder could be the one who needs least support for each level of provision, or the one who can generate most impact at each level of support.

Of course, the effectiveness of such a system would depend on the level and accuracy of information available to those monitoring performance. If the regulator has perfect information on performance and the true causes of performance variation, it would be possible to design a system that got the broadcasters to deliver exactly desired level of PSB output with the desired level of impact and reach.

However, in the real world the regulator does not have perfect information on performance or the causes of performance, and it may be in the licensees' interest to not let them have perfect information. Issues around incentive systems under conditions of asymmetric information have interested economists for many years and such issues are the subject of the next section.

B. THE INCENTIVE ISSUES EXPLORED

This section summarises incentive issues that have been addressed by economists and public policy theorists in recent years. This combines theories on motivation in the public and private sectors with general principal-agent theory applied, for the most part, to the efficient operation of commercial organizations. The section then goes on to assess a purely contractual-competitive approach to achieving impact and additionality and the obstacles that might prevent such a system from working effectively.

1. General Principal-Agent Issues

Incentive issues have been dealt with at length by economists interested in the impact of asymmetric information on standard economic models and behavior. In particular, economists have tried to address the problems encountered in markets or within companies when a "principal" (shareholder, CEO, regulator) tries to get an "agent" – manager, investment or employee - to maximize returns on their behalf.

Simply put, the principal has to design a system that gives the agent more rewards if the agent behaves in a way that optimises the interests of the principal, and less reward (or a penalty) if the agent does not behave in a way that optimises the principal's interest. In terms of PSB, this would imply rewarding a company more if they produced more PSB and less (or penalizing the company) if they produced less PSB.

However, three generic problems arise in principal agent theory due to a lack of information available to the principal.[4]

Moral Hazard

The first problem is termed "hidden actions" or "moral hazard". The principal wants the agent to put in their best efforts to achieve an outcome, or avoid a problem. But the principal can never be sure if best efforts are being made to achieve a given outcome. Either a good outcome is achieved by good fortune or a harmful outcome is achieved by malpractice on behalf of the agent rather than misfortune.

The principal can end up rewarding good fortune not good behaviour, or not penalizing malpractice. [5]

Incentive systems can be designed to minimize the harmful impact of moral hazard under certain conditions. If the agent is risk averse, structuring a reward that is only partly dependent on outcome can help reduce the encouragement of bad behavior or increase incentives to good behaviour. Insurance systems such as "no claims bonuses" and "excess fees" (where the insured are asked to pay the initial amount of any loss) are designed to reduce false claims or sloppy behaviour by those who are insured.

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[4] These three problems and their application to the public sector are dealt with in Dixit, Avanish (2002) – Incentives and Organisation in the Public Sector – An Interpretive Review – The Journal of Human Resources

[5] Recent debates about bailing out failing banks in the UK and USA have raised the issue of moral hazard, Bailing out malpractice will only create more incentives for malpractice – not good behaviour – in the future.

It could be argued that the “safety net” system that applied to Channel 4 immediately after it became independent from ITV in 1993 was an example of designing an incentive system to deal with potential “moral hazard” problems. If Channel 4 were to earn more than 14 per cent of all UK net advertising revenue (NAR), some of that extra income was to be put into a fund to protect against future more difficult times. If Channel 4’s revenue fell below 14 per cent of NAR but was more than 12 per cent, revenue in the fund could be used to bring its revenue back to 14 per cent. However, if the revenue fell below 12 per cent, then there was no extra bail out. [6]

This effectively insured Channel 4 against adverse market conditions or the occasional mistake, but not against a management failure – dropping below 12 per cent. It tried to give Channel 4 an incentive to get the most reach and share (and revenue) from its public service remit, while insuring against adverse market outcomes but penalizing bad management.

Adverse Selection

The second principal agent problem is the so called “hidden information” or “adverse selection” problem. In this situation, the agent knows something the principal does not, and hides it from the principal. Most simply, an assignment is not going to cost as much as is claimed. In this situation, a principal can end up over funding an outcome.

Alternatively, an agent might know there is something wrong with its service or product but this will not become apparent to the principal until well after the service is delivered. Not only does the principal get a bad product, but over time the principal begins to suspect most products might end up being bad and so reduces the price it pays for all products. This means the producer of a good product can not get suitable returns for its product and so good suppliers are driven out the market and only poor ones left in[7].

There are ways of dealing with adverse selection problems – or at least limiting their harmful impact, most notably designing systems that tease out information by agents and help sort the good from the bad. An example of a system designed to tease out the real costs of delivery over time was the RPI-X price control regime applied to many privatized companies in the 1980s and 1990s. This left some of the gains from extra efficiencies and lower costs with shareholders in the initial period after privatization, giving some incentives for these companies to reveal that they could actually achieve certain activities at lower costs – boosting profits in the medium term – but allowing the regulator to insist on lower prices when the time came to reset the formula.

Although the whole problem is not eliminated by the RPI-X system – the regulator with the RPI-X system was always playing catch up - at least some efficiency information was passed on over time.

[6] The actual system was a bit more complex than this, as initially ITV – its former sister company but now its competitor, would take some of the surplus and provide some of the top up funding. But the basic point was that Channel 4 was not given a limitless bail out, but it was also recognized that matters could get worse through no fault of their own.

[7] This was the subject of Akerlof’s famous “Market for Lemons” article, which tried to explain why cars that were only a few days old always sold at a significant discount to new cars. This was due to buyers – principals – always assuming that second hand cars – especially ones which were being resold soon after purchased new – were very likely to be faulty.

An example of an adverse selection problem in terms of support for PSB programming might be the initial exaggeration of opportunity costs of a given PSB obligation, perhaps basing the opportunity cost on a programme's current place in the schedule only to move it to a slot with lower opportunity costs at a later date. Another example, might be an exaggerated need for spectrum for PSB services, only to find the spectrum released at a profit soon after, or used to launch non PSB activities.

Costly information problems

The final general principal agent problem occurs when a principal can find out the truth – true information or truth about behaviour – but it is very costly to do so. In such circumstances the adverse selection and moral hazard problems might still apply, but the principal can deal with these by launching a full investigation for the truth only occasionally – and only when the agent is claiming very high levels of performance (and reward), but making the penalties for being discovered to be hiding the truth very high.

2. Public Service Motivational Issues

Principal agent theory deals with self interested agents and self interested principals. But there has been a significant amount written recently which questions the applicability of self interested models to the provision of public services.

Narrow self interest may not be the correct framework to use when considering the provision of public service in any field. Ideas developed by Richard Titmuss in *The Gift Relationship* and developed by Bernard Frey in *Motivation and Human Behaviour* have suggested not only that people often take a more altruistic view when providing public services, but also the introduction of financial rewards and penalties in a public service environment can be counter productive.

In short, the initial application of a financial value to something people were willing to do for free, can actual dissuade them from providing the service, requiring increasing increments in reward to then encourage them to return and provide the service again.

Applied to public service broadcasting provision, the implication could be that providing extra financial support – especially through rewards and incentives for more public service output – could actually "crowd out" public service efforts being supplied for free by individuals or institutions.

This also implies that public service institutions or organizations with a public service ethos at their heart may be a much more cost effective way of providing public service than supporting public service efforts in more commercial organizations. In the former case, one gets a lot of public service effort for no charge, in the later case all public service effort may have to be supported by extra funding.

3. Not For Profit Issues

While the above framework suggests that public services may be best supplied by public institutions full of public service motivated people, it is important not to conflate the idea of public service institution and not for profit or voluntary organization.

In his book, *Motivation, Agency, and Public Policy – Of Knights, Knaves, Pawns and Queens* – Julian Le Grand, explicitly covers the issue of the not for profit organization within the motivation framework. He suggests that there is no necessary link between not for profit organizations and public service motivation. While it is true that not-for-profit organizations do not have to make money for shareholders, that does not mean that their stakeholders (trustees, managers, staff) might not act in a self interested manner and against the overall public interest.

This suggests that while the absence of profit maximization incentives may be a condition for the cost-effective provision of many public services, it is not in itself sufficient. The appropriate institutional ethos and motivation – and appropriate incentive structures for such motivations – are more important than the mere absence of the profit maximization as a goal. In short, industry awards, peer group recognition, creative freedom may be a better way to encourage public provision than direct financial support and rewards.

4. The Pure Competitive-Contractual Model and Effective PSB Delivery

The proceeding analysis has suggested that it may be difficult to design effective incentives systems where there are significant asymmetries in information between the principal and the agent. It has also suggested that in the delivery of public service goals it may not be appropriate to just consider incentives that appeal to people's or organisations' narrow interests but instead to recognize a need to make the most of altruistic and non material motivations where they arise.

This might suggest that delivering public service through institutions orientated to public rather than private objectives offers a more effective way forward. However, before going on to consider a bargained-institutional approach to public service delivery it is worth laying out the potential benefits of a competitive-contractual system and listing the problems that might arise from such a system if applied to public service broadcasting.

The Pure Competitive-Contract Model Outlined

Competition for support (funding or assets) for PSB obligations brings with it potential maximum efficiency (allocative efficiency) as either the bidder who can achieve a given reach and impact with a minimum level of support wins, or a bidder who can achieve the most impact for a given level of support wins. The process of competition between rival bidders for the same PSB obligation reveals information about the true costs of delivery, e.g. removing the scope for cost exaggeration, helping those allocating the money to achieve the best deal.

Problems with the Pure Competitive-Contract Model

However, the preceding analysis in this paper has suggested that the proper working of a competitive allocation system based on specific contracts for delivery might be affected by:

> the type of obligation (and the ease with which it can be defined) and the extent to which an obligation needs support;
>
> the type of support being offered – funding or asset;

the business models of the bidders;

the level of information available to the regulator (on actual performance or the causes of performance); and,

the design of the on-going system of rewards and penalties implicit in the system.

Consideration of these complications suggests at least six potential problems with the competitive –contractual approach to PSB delivery.

First, only one bidder turns up for an obligation (or more likely one serious bidder able to achieve in the minimum reach ands impact required).

Second, although several bidders turn up, the bidding is anything but a level playing field. The opportunity costs of the individual bidders and/or their business models are so different that one bidder has a clear advantage over all others if the aim is to minimise cost for a given level of impact, and perhaps another has a clear advantage if the aim is to maximise reach for a given level of funding. In effect, the clearly advantaged bidder can ask for nearly all the funds needed by the second placed bidder even though it does not need such support and end up keeping all the added benefit for itself.

Third, there is no clear link between the extra level of support and the additional delivery of PSB output. This is likely to be the case where a certain type of output only needs a small top up from public support. In these cases there is always a suspicion that the top up might not have been needed at all. Conversely, where an activity is so loss making commercially there can be little doubt that without significant support there would be no such output, there is a greater likelihood that extra support does actually equal extra activity.

Fourth, the outputs are not easy to define and hold people to. If these outputs are not very definable, then the winning bidder might end up as the one who can stretch the truth the most knowing that they can promise a great deal but deliver less. This can be an especially significant problem if it is hard to decide whether non delivery is a result of external factors outside the bidders control or poor behavior on behalf of the bidder itself (the kind of hidden action "moral hazard" problem outlined previously).

Fifth, there are many linkages between the delivery of different PSB obligations by the same organisation. If significant economies of scope exist between different obligations that are offered separately, one might find the auction process becomes too "contingent" (the bids for one obligation depend on the outcome of another auction). This can lead to either mistakes being made by the bidders on the level of support needed, or a dominant bidder developing able to secure a lot of obligations (and the support entailed) but again keeping most the benefits to itself.

Sixth, competitive contracts need to allow bidders time to make a return on their bid - either a financial return or in terms of reach and impact - and this may lead to inflexibility in the system, which may turn out to be costly if industry conditions are changing rapidly.

5. The "Bargained-Institutional" Alternative

Any Institution ?

Many proponents of a bargained institutional approach to public service delivery tend to conflate two potential advantages of the institutional approach: first, the benefits of scale and scope and, second, the benefits of public service institutional motivation.

The benefits of scale and scope have historically helped cover the risks involved in developing specific public service programming by having a wide portfolio of projects, or in exploiting linkages between different public service obligations or simply in providing direct access to the many channels, service and portals operated by a large media enterprise.

But it is not clear why this aspect of institutions should in itself argue for a bargained allocation rather than a competitive one. Only the existence of significant and possibly unique linkages between the delivery of different public service obligations within an organisation is likely to lead to arguments for a bargained outcome. Simple linkages and the general benefits of size and scope alone could be dealt with by competition between a number of large institutions for PSB support.

The second institutional-bargained allocation argument relates to the nature of the institution. This relates to problems of delivering public service through narrowly interested agents covered above, and provides a much more forceful argument for an institutional bargained approach.

A "Competitive- Institutional" Model

However, even if arguments for the benefits of delivering PSB through a publicly motivated institution are accepted, this still leaves open the possibility of competition between public institutions.

Such an approach might avoid the worst conflicts of interest between profit maximizing incentives and public service delivery but gain some of their informational benefits of reveal the cost of achieving reach impact with specific obligations.

C. SOME IMPLICATIONS FOR THE FOUR MODELS

This section applies key lessons from the analysis to the four intervention models being assessed by Ofcom in Phase 2 of its PSB review – (1) Evolution, (2) BBC Only, (3) BBC/C4 plus some Competitive and (4) the Competitive Model. It does this by first characterizing each of the four models in terms of both the PSB incentive system adopted and the types of organizations being targeted for PSB support.

1. The Four Models and Incentive Systems

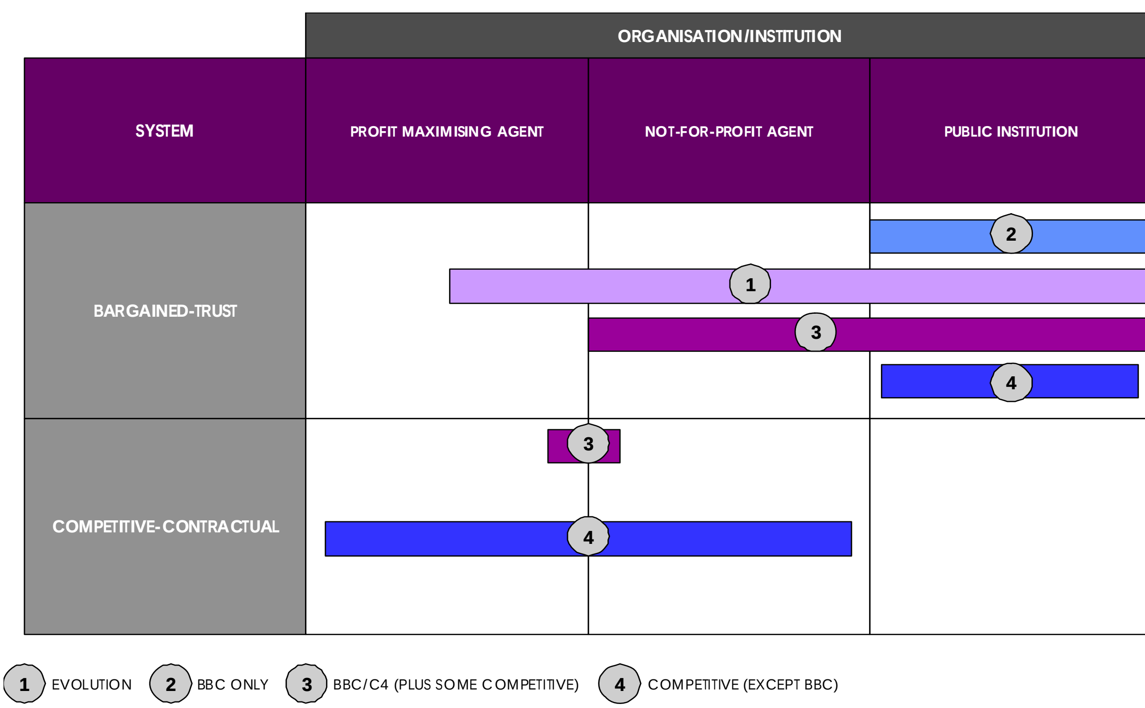
Figure 5 outlines the allocation systems and organizational models involved in each of the four intervention models. The Evolutionary model would represent maintaining a bargained-institutional approach across all types of organization – profit maximizing (ITV, FIVE), not for profit (Channel 4 and S4C) and public institution (the BBC).

The BBC Only model suggests a bargained approach just with the BBC. The BBC/C4 (plus some competitive funding) model suggests a bargained outcome with the BBC and Channel 4, but some competitive allocation to a range of profit maximizing and not for profit organizations not currently designated as PSB.

The Competitive Model as outlined would still maintain a bargained allocation with the BBC, but would open up all provision outside the BBC to a competitive contractual process.

Clearly, within this framework there are other possibilities, such as Model 3 becoming more of a direct competition between Channel 4 and the BBC for pre designated PSB roles and objectives.

FIGURE 5 – THE 4 MODELS AND INCENTIVE SYSTEMS



2. Implications for Future PSB Delivery

The preceding analysis suggests two main conclusions:

Obligations should be assessed on a case by case basis as to whether competitive funding would be likely to deliver the most efficient outcome or fall foul of the limitations outlined in this paper; and,

It may be more effective to deliver some obligations by allocating funding directly to existing public service institutions.

An Obligation Specific Approach

Where obligations need substantial funding and there are likely to be a number of bidders with similar business models, opportunity costs and audience reach, a competitive auction should be used. This might apply to UK children's content, for example.

Where only top-up funding is needed, the outputs are difficult to define and measure, and only one organization is likely to be interested in the obligation an institutional approach may be more appropriate – for example innovative comedy on Channel 4.

In some areas the decision may be less clear cut. For example the provision of nations and regions news may require significant support funding in the future, but arguably in the short term only a channel such as ITV1 can deliver it with significant reach and the cross promotional benefit of a mass audience channel traditionally structured around a regional system.

The Use of Public Service Institutions and Implications for Accountability

While bargained outcomes with large profit maximizing or not for profit institutions can gain benefits from the size and scale of the institution - especially if supported by the allocation of regulatory assets such a spectrum which can help ensure a minimum level of reach and impact – it is only the use of public service institutions that brings with it the implicit benefit of public service motivation.

This suggests that those institutions that are recipients of bargained allocations of public service support should have constitutional and accountability structures in place that ensure they are run to maximize public service objectives, and that avoid capture by management or self interested stakeholder groups.

It may also mean that not for profit status is in itself not sufficient to ensure an effective outcome from a bargained allocation of public service obligations: accountability structure that builds public service objectives and measures into the organizations "DNA" may be needed.