

Economy and Culture: S4C in Wales Present and Potential Economic Impacts

Prepared for S4C

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S4C 

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1 Introduction

- 1.1 S4C owes its existence to the overwhelming conviction of the cultural importance of the broadcast medium. This medium faces radical changes as it moves from analogue to digital delivery, and the traditional paradigms collapse. The one certainty is that the transmission language of the future is digital.
- 1.2 Beyond that, the method of payment for viewing is changing in imaginative ways, with television licence-funded public service broadcasting under increasing pressure. The consumer already has choices regarding the point at which he/she makes the contract with the broadcaster; by purchasing programme schedules through the licence fee, then through set-top de-encryption hardware, and/or subscriptions for cable and satellite services. The contract can be extended further, once the hardware has been purchased and the technology option has been decided, through pay per view.
- 1.3 Analogue¹ switch-off will be determined by the point at which access to digital is no longer considered by government to be unacceptably socially exclusive. Two tests will be employed; that digital services are transmitted to virtually all and that the equipment required can be afforded by virtually all. Both tests are expected to have been passed by 2006-2010. The impacts of these technological and market alterations to the economics of broadcasting are immensely complex. Still at the point of delivery, the television set and the personal computer are converging, with far-reaching impacts on consumer expectations from broadcast services, and indeed on society.
- 1.4 Technological change also infiltrates the economics of content provision and can then alter the distribution and type of activity within the sectors that provide broadcast material. For example, cameras are increasingly cheaper, lighter and more user friendly. Digital production mediums are more flexible and less subject to loss of quality. Post-production procedures are no longer the sole preserve of facility houses, as producing firms grow or consolidate. These factors together alter the speed, quality, and cost of programme making.
- 1.5 Technology has then imposed far-reaching pressures, as well as options, on those who deliver, receive and regulate broadcast material, in a manner that often appears to be hard to fully understand, and moreover, effectively control. Under the weight of these pressures and opportunities, it is easy to lose sight of the cultural importance of the broadcast medium and the burden of social responsibility. Indeed, the broadcast environment provides such relentless temptations for public exploitation at so many points in its process from government to the consumer that it is an industry that is uniquely dependent on having a strong guiding core of integrity.
- 1.6 The social, economic and political dimensions related to quality issues are no

¹Sky has already announced that analogue “switch-off” for their satellite services will be summer 2001.

easier to assimilate, and impinge on many levels. Quality can be perceived as driven up or down by economic responses to technology change, and a complexity of competitive or budgetary pressures in opposing directions. The activities of broadcasters can have a profound effect, both in terms of their economic contribution through the creation of broadcast material and its social impact on delivery. The extent of *local* impact may be a direct function of how far the broadcaster remit is skewed to the locality, and in a free market, the returns for such an emphasis may be significantly lower than a wider horizon. The following analysis will consider, in some detail, the direct and indirect consequences of the spending behaviour of the broadcaster and its suppliers. This is not to attach unimportance to the other key impacts of broadcasting on consumer behaviour, either directly through the effects of advertising or indirectly through effects on consumer tastes and preferences. The analysis of such impacts is, however, beyond the scope of this report.

- 1.7 While those responsible for broadcast policy and services are understandably preoccupied by the implications of technology and an unfolding future which demands 'sprint or fall' strategies, current programme quality cannot yet be separated from the broadcast heritage, with the base set by the excellence of programmes provided within the analogue public service framework. The explicit quality responsibilities attached to public money and the prerequisite statutory control has resulted in the provision of significant benchmarks for the subsequent independents to follow and compete with, albeit via a separate controlling body. Public funding and the maturity of the controlling framework has historically provided a medium for the pursuance and capture of excellence, and, as a result, broadcasting within the United Kingdom enjoys a world-wide reputation that is rarely attributed to its public sector origins. Crucially, the role of the BBC in setting public service benchmarks and enhancing the value people receive from the licence fee depends on its own public purse and the freedom it is given to exploit commercial opportunities. In a digital environment, there must be some questions regarding the share of audience time required to retain such influence on quality, and consequently the resources to achieve that. Moreover, reach may become more important than share in this advancing age; the latter inevitably declining amongst the clutter of channels.
- 1.8 It is worth noting that measures of quality are built on shifting sands, metamorphosing over time, as technology, values, expectations, information and even humour ever change their perspective. What was regarded as poor yesterday can gain a stamp of excellence today, while today's techniques and content may seem absurd tomorrow. Classic qualities need time, at the very least, to be recognised. The notion of quality, in a broadcasting context, has to be a 'now' judgement and can never aspire to objectivity. 'Quality' issues are also perplexed by the choice of creative material and production team, as well as the earnings commanded by performers who have achieved real and perceived 'audience power'. Spectrum scarcity allowed broadcasters to exert significant monopoly purchasing power over talent and programme rights. With abundance of spectrum comes increasing competition for talent and rights,

driving prices up.

- 1.9 Nor are quality issues confined to the broadcast product. The production of broadcast services, embracing programmes, film and a range of new outputs, requiring a high level of initiative, creativity, and transferable technical skills for which the returns are relatively high, has quality implications for economic development at the regional and sub-regional level; a feature which will be substantiated in this study.
- 1.10 S4C is a unique broadcaster with a remit unusual in the medium, to serve a discrete, limited, and exclusive audience who speak a minority language. Lying outside the framework of the television licence fee, but the recipient of substantial public funding and accountable to the S4C Authority, itself appointed by the Secretary of State for Culture, Media and Sport, S4C must meet its remit to provide a wide range of high quality programmes satisfying general and eclectic tastes, all in the Welsh language, whilst also responding to the challenges and opportunities evidenced in the sector.

2 Project Objectives and Report Structure.

- 2.1 The principal objective of this report is to assess the current and potential contribution of S4C to the Welsh economy. However, the introductory discussion has signalled the complex context in which the report has been written – as a result, the study has been divided into five principal sections. The next section provides a detailed background for the study and addresses four themes: S4C’s remit and performance, the changing political and technological framework in which S4C’s activities take place, a brief review of the published literature and finally, the contemporary Welsh economy and the potential role of creative industries in its development.
- 2.2 Section four describes the methodology used to assess the direct and indirect economic impacts of S4C activity and the academic pedigree of this approach. The methods used to evaluate the qualitative and less easily measured effects of S4C are also described. Section five presents the findings of the quantitative assessment methodology, discusses a range of qualitative economic impacts on the Welsh economy, including the relationship between S4C and the independent sector and the implications for economic development, market opportunities and challenges. Section Six examines the implications of these findings presented in terms of opportunities and challenges, while section seven makes a series of practical and strategic recommendations. Conclusions are drawn in the final section.

3 Project Background

3.1.1 S4C Remit and Performance. The Welsh Fourth Channel Authority was established under the 1981 Broadcasting Act to satisfy the demand in Wales for a separate channel to broadcast Welsh language programmes and to increase the number and range of those programmes having particular regard to peak-time. Initially the Home Secretary and subsequently the Secretary of State for National heritage and then for

Culture, Media and Sport appointed its eight strong board, while any future appointments will be subject to consultation with the National Assembly for Wales. The Authority must ensure the provision of high quality programmes in the Welsh language, satisfying a broad audience, keeping in touch with public opinion and maintaining a responsible awareness of the social impact of broadcast material; operating under the broad guidelines of the Independent Television Commission (ITC) Programme code.

- 3.1.2 The Authority holds the task of defining the broad aims, strategy and priorities of the broadcaster with detailed planning, programming and execution discharged to the Chief Executive of S4C and staff, who are then answerable to the Authority. Authority members are intended to have, between them, a wide range of skills, education and experience representing depth and breadth of practical, commercial, intellectual and cultural expertise, while sharing a commitment to the culture, heritage and language of Wales. This group then sets the tenor and drives the standards that have come to be associated with S4C, delivered by the S4C executive.
- 3.1.3 From 1981 to 1990 Fourth Channel funding was set at 17% of the Net Advertising Revenue (NAR) received by UK ITV contractors, who sold the airtime of Channel 3, Channel 4 and S4C. S4C's negotiated share of this was 20% (making 3.4% of total UK NAR), was paid directly by the IBA to S4C. This aggregate NAR increased over and above the rate of inflation throughout most of the 1980's (Huw Jones, Gregynog, 2000). In 1991, when the Independent Broadcasting Authority was replaced by the ITC as regulator, S4C and Channel 4 were allowed to retain their advertising income. The equivalent of 3.2% of UK NAR for the previous year was paid directly from the Treasury to S4C. In the 1996 Broadcasting Act S4C's future funding was to be tied to 3.2% of UK NAR in 1997, and increased annually in line with retail prices, despite the additional costs involved in broadcasting in both analogue and digital. At current prices this is estimated to have resulted in a S4C funding shortfall amounting to over £2m per annum (Huw Jones, 2000). However, S4C was newly allowed to supplement its funds through commercial enterprise but with the added difficulty of many claims on these early, modest revenue streams. Analogue/digital output needs additional finance, while the future can only be assured by investment.
- 3.1.4 S4C transmitted Welsh language programmes amounting to 4,388 hours during 1999. Of these, 2,390 hours of programmes were commissioned by S4C from its local supplier resources. A further 210 hours of programmes were acquired, and 1,253 hours were repeats. The BBC supplied 535 hours (some of which were repeats) free of charge to S4C but funded by the television licence fee, in accordance with the Broadcasting Act 1990.
- 3.1.5 In accordance with its obligations under the Act to be the Fourth Channel in Wales, the remaining schedule of its analogue service was made up of C4 programmes. The pressure on broadcast hours meant that the programmes scheduled were those considered to best reflect viewer

interests and preferences and were either broadcast simultaneously with the C4 network or rescheduled. These programmes summed to a further 5,837 hours.

- 3.1.6 The number of transmitted programme hours has doubled since 1998, largely due to the introduction of digital broadcasting. At the same time programme costs per hour have reduced, in part because of repetition and in part because of changes in the commissioning process outlined later; so-called bundling, which was initiated in 1997 and has been subject to further refinement since. Efficiencies have been achieved through the use of programme archives, and by encouraging content providers to create additional programmes on 'the back of' existing projects. In the latter example, content providers can achieve extra outputs using already committed resources by imaginative application. Some of the implications of these productivity improvements will be examined later. It should be noted that S4C programme costs, on an equivalent per genre per hour basis, are around one third of the equivalent rates on the main UK networks. (S4C Annual Report, 1999). S4C received £77m from the DCMS in 1999, representing a small increase on the previous year.
- 3.1.7 While transmitted Welsh programmes increased, largely as a result of digital outputs, from 1,936 hours in 1998 to 4,388 in 1999, English programmes declined from 5,956 hours to 5,837 hours. The number of Welsh language repeats increased from 247 hours to 1,253 hours, while English language repeats declined from 1,125 hours to 847 hours.
- 3.1.8 In terms of delivery 1999 can be regarded by S4C as a successful year. The statutory remit was exceeded in each of the three criteria; hours per week of Welsh-language programmes, percentage of peak hours devoted to Welsh-language programmes and reach (proportion of Welsh speakers viewing S4C each week). Equally, using quality measures by type of programme content, each of S4Cs self-set targets were exceeded, representing improvements on the previous year.

3.2 Changing Environments; Technology, Commerce and People: The Digital Future.

- 3.2.1 Digitisation affects production processes, transmission chains and receiving equipment. Advances in fibre optics and DSL technology are multi-consequence developments of which effective use of bandwidth is the crucial element. A digital output, which sends sampled fragments (in the form of 'bits'), allows the transmission medium to be used much more efficiently than analogue, real-time information which consumes a greater amount of a given bandwidth. For example, between six to ten TV channels can be transmitted on the same frequency as one analogue channel with the result that spectrum scarcity will no longer constrain access to the market.
- 3.2.2 The main challenge for new entrants is to create the right financial model for a particular service. Opportunities are being presented as more

bandwidth becomes available and technology advances spawn new financial models for different channels and services. However these have yet to be tried and tested. Video on Demand is one example. Under the traditional paradigm, commercial broadcasters principally realise financial opportunities through advertising revenue. The rewards for this accrue to both broadcasters and advertisers and, in turn, depend on a complex equation, the major components of which are the perceived disposable income of a target region or audience and the attracting properties of programme content. The advertiser, as the broadcaster's customer, will only be satisfied by delivering to the largest possible target audience, which the broadcaster will wish to achieve at the lowest cost. This can lead to the proliferation of programmes with the widest appeal.

- 3.2.3 Beyond that, digitisation will ultimately provide sufficient capacity for the transmission of the perfect viewer programme profile, such that the viewer, with the appropriate home technology, will be able to exercise almost perfect freedom of choice. Indeed, 'intelligent' technology which will search for and record content according to pre-programmed preferences is now available in the UK. In a fully 'converged' digital world sound, images and information will be delivered through more than just satellite or terrestrial broadcast and will include cable, fibre, copper or mobile radio.
- 3.2.4 Under this almost inevitable scenario, broadcasting will require new regulatory controls, which the Communications Bill will seek to anticipate. Without such revisions, digitisation, with its comprehensive offer, could deliver rapidly increasing power to the content providers, while denuding benevolent authorities, which may then lead to the requirement for censorship rather than the promotion of a positive content ethos. Almost as serious is the current level of uncertainty regarding the nature of legislative changes, which discourages investment and planning.
- 3.2.5 Nor is technological change confined to the physical transmission of sound and vision. Equally important is the nature of access and payment systems, offering new market opportunities through the realised potential of added-value. In particular Britain may be lagging behind in the development of e-money with negligible transaction costs, which in turn may hinder the development of commercial broadcast opportunities.
- 3.2.6 Not only will digitisation, by virtue of its transmission capacity, allow people to choose when they view programmes, but it is already leading to the proliferation of programmes serving 'niche' regional and topical interests. Without public funding, revenue to finance these 'niches' must come from viewer-related opportunities. For example, programmes with a limited geographical or linguistic appeal, may only attract revenue from local advertisers, which itself will be modest. Advertising revenues are likely to become highly dispersed; a characteristic that will encourage consolidation in the ownership of broadcasting rights.

3.3 S4C and the Digital Challenge

- 3.3.1 Rights to exploit digital capacity in Wales were vested to S4C by the 1996

Broadcasting Act. In 1997, S4C applied for and was awarded the ITC licence to be the Multiplex operator across the United Kingdom for Digital Terrestrial Multiplex A (the multiplex on which S4C has guaranteed capacity as a public service broadcaster in Wales). In 1998 S4C entered into an equal partnership with United News and Media and ntl Digital Ltd in order to exploit this licence through the company henceforth known as SDN (S4C Digital Networks). SDN acts as a platform, providing carriage on digital terrestrial television for a number of commercial and public services, including ITN News, BBC Knowledge, TV Travel Shop and Simply Money. It also provides carriage across the UK for Channel 5 and for S4C and S4C2 in Wales. SDN has entered into a joint venture agreement with Ondigital, the operator of three other multiplexes, to create Onrequest, a pay per view service offering films, sport and live events. Through these subsidiaries and joint ventures, S4C hopes to increase its commercial revenues as the take up of digital television accelerates.

- 3.3.2 C4 is available throughout Wales on all digital platforms. However, until analogue switch-off S4C will continue to transmit favoured C4 programmes. In 1999 95% of C4's most popular programmes were broadcast on S4C within 14 days of their initial showing.
- 3.3.3 S4C Digital started broadcasting on terrestrial in Wales in November 1998, on digital satellite in Wales in January 1999 and became available throughout the UK in May 1999, free to air for those with receiving equipment. This development has extended the S4C reach outside Wales, capturing Welsh speakers in the rest of the UK and elsewhere. The channel provides opportunities to see many of S4C's most popular programmes, as well as coaxing viewers to the new technology by transmitting some exclusive programmes including, for example, a series of thirty minute plays by new writers.
- 3.3.4 S4C2 digital was launched four months later (also available via terrestrial transmission in Wales), with the remit to televise a live service of Assembly proceedings in partnership with BBC Wales. S4C currently leases almost all its unused guaranteed capacity in Wales to third parties including BBC Knowledge, OnRequest and the Einstein Channel.
- 3.3.5 The digital challenge is an awesome edifice that all broadcasters must scale. The S4C remit compels an early stakeholding lest it becomes marginalised in the drowning pool of the information society. S4C has properly identified the digital challenge as an opportunity to directly add further value to its public service remit in Wales, whilst generating new revenue streams to support that remit.

3.4 S4C and the Commercial Challenge.

- 3.4.1 The 1996 Broadcasting Act gave new freedom for S4C to exploit other commercial avenues, with the intention that these revenue streams would supplement public funding in order to further enhance the S4C offer. In 1999, as a result of its commercial activities S4C transferred over £4m from its General Fund to its Public Fund.

- 3.4.2 These sums are claimed as the result of both the creation of quality programme products with global appeal, and the strong commercial effort in marketing the products. In 1999, 196 programmes found international markets compared to 103 in the previous year. By entering 35 co-production partnerships S4C was able to increase production budgets and add greater value to the output. This corporate effort also had the crucially important effect of providing opportunities for Welsh-language producers to exercise their skills at the highest level, and to expose their talents in an international forum. Wales has gained a global reputation in the field of drama and animation. Indeed, one cogent test of a programme fulfilling its public service remit should be its ability to enthrall a wider audience; yet these outputs are the most costly to produce.
- 3.4.3 The major part of S4C's commercial revenues derive from the sale of advertising around both Welsh and English language programmes, with 23 new advertisers in 1999. This is a particularly welcome achievement given the perceived constraints of relatively low household disposable income in Wales, coupled with strong competition from other terrestrial and satellite delivery platforms. Revenues from advertising around Welsh language programmes face the inevitable constraint of relatively small audiences. Such revenues will be seriously depleted by analogue switch-off, resulting from the loss of popular C4 programmes.
- 3.4.4 As a result of these commercial activities both the sums transferred from the S4C's general to public fund and the share of these public funds spent on Welsh language programming are increasing. In 1999, S4C channelled 95.4% of public monies to its programme service; forecast to increase to 99% in 2000. However, given the poor prognosis for advertising revenues S4C has already anticipated the need to generate revenue streams from its digital interests. Hence, S4C has invested in digital distribution, via SDN, with returns being determined by consumer take-up of the delivery mechanism.

3.5 S4C and the Interactive Challenge.

- 3.5.1 The forthcoming Broadcasting Bill will anticipate future revisions to the nature of broadcasting and telecommunications regulations. Issues of which body regulates what aspect of information delivery have been called into question by rapid technological changes, not only to the nature of the signal but also the medium through which the signal is downloaded. The technology will exist for television signals to be transmitted via the telephone line, as capacity is increased through compression. Already, internet access via a phone line to the television set is possible. Current regulatory territories have difficulty handling these progressions, within the existing separation of telecoms and broadcasting licensing. Beyond this, delivery mechanisms will cloud the already muddy water between public service broadcasting and methods of raising funds for it. Satellite delivery will retain the advantages of wide reach, low costs and proven efficiency in the delivery of live events.
- 3.5.2 Technological convergence is not confined to the marriage of the personal

computer and the television set and the resultant interactivity. It also applies to how current communications networks will change. For example, the consumer is being offered increasing amounts of information via the mobile phone, which gives any information agency, including broadcasters, further opportunities to distribute their output. S4C will be among those seeking to supplement revenue streams through these conduits.

- 3.5.3 The principal threat for broadcasters of this marriage, quite apart from having to compete with the computer offer for amounts of consumer leisure time, is the transmission of free to air, unlicensed broadcast material via the computer, which also provides capacity to by-pass the television set for viewing films on DVD. At the same time, the internet provides under-exploited opportunities for advertising which may prove to be a significant rival to the independent broadcasters, as its usage becomes ubiquitous. This development alone will prompt further ownership consolidations; this time between the electronic and broadcast media, and will drive major revisions to the current regulatory framework.
- 3.5.4 The *challenge* of interactivity requires a separate treatment. The internet is a beguiling, information-rich two-way instrument, which allows dialogue and hence extends the mutual contract between users. This represents an important opportunity for broadcasters to invite participation and win commitment from both their audiences and their advertising clients. Channel 4's 'Big Brother' was an example of both access to "virtually" unlicensed broadcast material via the internet and the extension of the viewer relationship well beyond the televised programme slot. Broadcasters also offer news products and topical affairs in downloadable video formats which can viewed at leisure. Synergies between information creators and deliverers are providing a new cohort of commercial opportunities; the limits of which are untested.
- 3.5.5 The computer will also be increasingly used as a conduit for increasing the reach of individuals, firms and educational establishments without having to move people between places (implying greater efficiency), and hence can be used to deliver sophisticated training packages, conference and marketing materials and even pre-televised degree courses. The skills synergies between programme/film-making and those used to prepare such packages represent an important commercial opportunity, which is certainly available to the media sector if not to broadcasters themselves through co-production of such content. The computer is already an established business tool, but its ever-extending potential needs to be fully understood and exploited. S4C already communicates electronically, in detail, with its programme suppliers, which has had the effect of reducing the 'distance' between it and more remote suppliers in North and West Wales.
- 3.5.6 S4C also plays a key role in training initiatives to raise skills and awareness in the commercial use of information technology (see also Section 5.29). This includes influencing training priorities with consultations with Cyfle, direct investment in in-firm training, as well as consulting with Teledwyr

Annibynnol Cymru (TAC) on developing suitable delivery packages to the independents on web technology and e-commerce. S4C has also developed links with the Welsh Development Agency (WDA) to arrange a series of Information and Communications Technology awareness seminars, in accordance with the strategic objectives of the National Assembly for Wales.

- 3.5.7 S4C is the leading partner in the Digital College joint venture, which is spearheading interactive learning. This is delivering the direct benefit of an easy-access education service, via the television set, using on-line downloadable skills packages, television programmes, on-line assessments and hyper links to associated service providers. S4C is providing the College with the digital capacity. By opening an educational gateway, evoking concerted effort among education providers, it will engage those who might otherwise be excluded from lifelong learning, and will provide an important new vehicle to gauge skills shortages to which education providers and policy makers can respond.
- 3.5.8 S4C's website, and those websites related to individual programmes, are currently being developed as a means of enhancing the value of programmes to viewers/users and of enabling greater interactivity between user, broadcaster, programme maker and others. As with other broadcasters, S4C is seeking to develop its web strategy as an enhancement to its public service and as a commercial initiative, with the longer term possibility of broadcasting audio-visual content on the web.

3.6 S4C and the Cultural Challenge.

- 3.6.1 While independent broadcasters have a commercial incentive to understand their audience, publicly funded broadcasters have a social and legal obligation to do so. S4C, uniquely at present, shares both these obligations as a publicly funded broadcaster and as a commercial broadcaster, having to satisfy its advertising customers.
- 3.6.2 There are two key considerations driving that comprehension. In the case of S4C, the first is understanding the demographic, economic, linguistic and social qualities that underpin their 'universe' of Welsh speakers. The second is understanding how those measures and qualities alter audience responses to programme material. Finally, S4C must itself seek programmed outputs that satisfy the needs and preferences of their audience. The dilemma for any broadcaster with a dual remit must be the extent to which it serves against the extent to which it influences. While separation of these two issues is impossible in practice, it is worth considering some aspects of the above in order to better understand the challenges facing S4C.
- 3.6.3 S4C uses 1991 census data as well as the Broadcasters' Audience Research Board (BARB) Establishment Survey² data to gain an understanding of the Welsh Speaking Audience. While Welsh speakers are

² Based on several thousand householder interviews per annum.

more numerous in North and West Wales than in South Wales, each region has pockets where Welsh speakers are relatively highly concentrated. The demographic profile of the Welsh speaking audience differs from one sub-region to another. For example, the South is characterised by disproportionately higher levels of younger, more affluent Welsh speakers. Approximately 20% of Welsh speakers in the South are under the age of 10 years while 39% are under 16 years. Only 16% of Welsh speakers in the West are under 16, while 30% are 65 years or older. The South also has large numbers of Welsh speaking adults from the AB social grades (29% of the South's Welsh speaking population compared to 16% of Welsh speakers across the whole of Wales). The youthful age profile in the South may partly be the result of growth of Welsh medium education in recent years.

- 3.6.4 S4C subscribes to the services of the Broadcasters' Audience Research Board (BARB) and, in effect shares their resources with the other broadcasters. BARB is responsible for constructing a representative sample of the viewing population, guided by published survey data and thorough investigation of potential participating families, from whom are chosen those who will represent the viewing 'universe'. The sample frame embraces those key criteria, considered above, which include age, social class, family size, and location. Participating families constitute the Audience Measurement Panel and their representativeness is checked on an on-going basis. BARB viewing data is highly regarded both within the UK and internationally, and provides the information on which all broadcasters depend upon to make appropriate responses in order to satisfy both their viewing audience and their commercial clientele.
- 3.6.5 220 Welsh homes (based on population share) comprise the core BARB panel which then require supplementing by a further 200+ homes which are Welsh speaking (i.e. contain 1+ Welsh speakers) to ensure better representation. This is an additional cost to S4C. The analysis of BARB data by S4C includes reach, 000's of viewers and viewer share (%) for the five analogue channels, and aggregated data for the digital channels. In coming years, as viewing becomes more fragmented, disaggregated digital data will become a critical consideration.
- 3.6.6 S4C also has access to individual programme viewer data so that it can monitor its performance in terms of any of the criteria measured, i.e. by age of viewer, location, economic status etc. Detailed reports are prepared on a monthly basis but with a high degree of flexibility so that, for example, a new programme or series can be scrutinised and responses made. This post-broadcast monitoring provides the content provider with the potential to judge a range of quality issues, over and above compliance, such as whether presentational style can alter audience response to factual content.
- 3.6.7 Age, fluency, and economic group have a considerable bearing on viewing patterns. Sub-regional variations mean that S4C is unlikely to deliver complete satisfaction to one group or one region without dissatisfying another. Furthermore, the North and South Wales cultures have evolved

differently for a number of reasons; not least as a result of their different historical relationships with England to their east, varying interests arising from their economic structural profiles, variations in the level of national and political commitment and whimsically, their differing success at the national sport of Wales; rugby. This last provides a vivid example. The success of South Wales rugby teams such as Llanelli, Pontypridd and Swansea ensures high viewing figures there when these sports are televised, whilst leaving North Wales relatively unengaged.

3.6.8 The relatively higher presence of young Welsh speakers in some parts of Wales notably, the South compared to West Wales, also presents challenges, not only in terms of the effects on programme preferences but also in the quality of Welsh language usage. First, Welsh speaking youngsters, who may be picked up in official figures as a result of learning Welsh in school may not always be in a position, within the family structure, to indulge their viewing preferences. Secondly, their preferred usage may include a measure of English-Welsh, since their fluency may not have been strengthened within the family. Yet engaging this population is clearly an important part of S4C's remit even as they face the greatest competition from rival broadcasters, (Sky, for example), in capturing this group. Meanwhile, S4C is subject to criticism from Welsh language purists for satisfying the non-fluent, while excluding non-fluents when satisfying the purists.

3.6.9 S4C recently commissioned an opinion poll (NOP, 1999) of Welsh speakers in order to refine their understanding of the attitudes of an audience that appears to be increasingly heterogeneous. Five segments were identified; traditional Welsh (14%), the intelligentsia (23%), relaxed Welsh (21%), progressive Welsh (12%), and outsiders (11%). While all spoke Welsh, two thirds of the total sample claimed to speak it well, with considerable variation between groups. For example, less than half of the traditional Welsh (over 65, and belonging to DE groups) claimed to speak Welsh well, while over 70% of the intelligentsia (35-54 years, ABC1s and light viewers) made a similar claim. Meanwhile, the relaxed Welsh (15-34 years, C1C2s), a key segment for S4C, typically use an English-Welsh language mix. The poll confirmed many of the difficulties facing the broadcaster. Principal among these is satisfying ever-widening tastes, against a background of increasing competition, a restricted budget, and a time constrained schedule which must nevertheless include the traditional core elements of a public broadcasting service, such as news and current affairs in peak hours, original children's programmes, the arts and religious programmes. Channel 4 material shown on S4C provides a crucial advertising revenue opportunity (which will be cease with analogue switch-off), maximised by S4C's own efforts. However, the current schedule reduces the opportunities for S4C to produce high quality 'post-watershed' material that may have cross-segment appeal within Wales and potential markets outside Wales. These tensions will continue until analogue switch-off, at which point the new challenges will emerge.

3.6.10 S4C's audience is then characterised by a lack of homogeneity, reflected in gradually declining audience share. However, changes in share

experienced by all five analogue channels owe more to the exponential growth and take-up of alternatives channels and the globalisation of viewer tastes. Given this fragmentation, reach is fast becoming a more relevant measure of performance. However, it remains that S4C must remain true to its remit, despite the pressures that make that remit more difficult to achieve.

3.7 S4C and the Transmission Challenge.

3.7.1 Scattered population and mountainous terrain in Wales present particular transmission difficulties to all but satellite broadcasters. With only eight masts in Wales transmitting a digital terrestrial signal, large tracts are currently unable to receive these signals. Some people in Wales receive such signals from English masts, but these do not carry S4C. Hence, Welsh-speakers in Gwynedd, for example, may be failing to benefit from the effort S4C expends in providing a digital output. The test of 'virtually all' access may exclude disproportionately large numbers of a small 'universe'. In these areas S4C's satellite digital is available free-to-air but can only be accessed either through paying the cost of a basic subscription or through incurring a higher installation cost for free-to-air channels only. Cable transmissions are only currently available in areas with high population densities, and are unlikely to be extended in the near future. Given these difficulties S4C requires on-going flexibility and financial support to operate on a multi-platform basis.

3.8 A Literature Review of Broadcasting in Wales.

3.8.1 Operating in a rapidly changing environment, and one where public funding plays a crucial role in financing delivery, has meant that arts and culture in Wales and broadcasting in particular has been subjected and subjected itself to a high degree of research and scrutiny. Research follows several themes. Among these are strategic reviews related to future funding requirements which embrace the changing economics of broadcasting, economic analyses which assess the role of the broadcasting and related sectors in terms of local impact, and strategic outputs from local economic partnerships and interest groups who have a shared interest in sectoral development. To this can be added academic literature with a regional or disciplinary bias (politics, economics or sociology) addressing multi-media or broadcasting issues.

3.8.2 A review of the BBC's future funding requirements was published in 1999 by the Davies Committee for DCMS, in the midst of an aggravated debate around increasing licence fees to fund a digital output that is not yet universally accessible. Central to the report was the challenge faced by the BBC to reconcile the vastly increasing costs of maintaining reach (and less importantly, share) in the digital age against prospects of only modest increases to licence fee revenues. The licence fee is still considered to be the most acceptable form of funding for public service broadcasting. It allows for cross-subsidies between universally popular services and those that appeal to smaller audiences and provides a buffer between government and broadcaster in the funding of content. However, in a

digital world of abundance not scarcity, a variety of operators will perform the different functions and the contract between viewers and broadcaster will be similar to other consumer contracts where there is ample choice. Free-to-air services funded by licence fee and advertising will co-exist with subscriber services funded from subscription, pay-per-view events, and movies funded by one direct payment from consumers. New transaction based services such as home shopping where the service is free to the consumer and content is funded from the distribution business models will also proliferate.

- 3.8.3 Commercial latitudes built into succeeding Broadcasting acts, applying to both the BBC and S4C, reflect a recognition that the economics of digital broadcasting will drive an increasing gap between costs and funding and signal that self-help is an essential part of modern public service broadcasting. These new opportunities have been presented amidst a tide of frantic competitive activity amongst those who have already a wealth of experience of riding such challenges; resulting in relative disadvantage to those newcomers to commercial behaviour who are constrained by a public remit.
- 3.8.4 The three planks of self-help identified by the Davies Committee were improved licence fee collection, improved returns from commercial revenues, principally through extending the activities of BBC Worldwide, and improved efficiency through cost savings in the BBC's internal market. If these measures were executed there would still remain a significant funding shortfall. The Committee recommended that the shortfall be met by introducing a digital supplement to the existing licence fee. In November 2000 the government agreed to an increase in the licence fee.
- 3.8.5 The BBC's partial dependency on commercial revenue, which dates back to 1923 with the launch of the Radio Times, also called for detailed rehearsals of the manner in which private/public interfaces can be abused, leading then to an unfair market place. BBC's commercial activities bear some similarity to S4C in intent, if not in terms of scale and type, with the exception of BBC Resources. BBC Resources Ltd is a wholly owned subsidiary of the BBC. It trades externally and is now allowed to increase its non-BBC business and invest in new production technologies, whereas previously it was constrained to selling only underused capacity on a temporary basis. It operates in a current market of over £800m, forecast to expand to £1.5bn, taking into account growth of multi-media, advertising, interactive and film-making. The Committee recommended that BBC Resources Ltd. should be privatised. Interestingly, it also recognised that such a move, without due care, could threaten the BBC's role as a primary investor in core broadcast skills, undermining its craft base and creative capacity.
- 3.8.6 S4C does not make programmes. Hence, its opportunities for self-help through greater efficiency are necessarily confined to increasing productivity within its own organisation, and that of its suppliers through changes to the commissioning process.

- 3.8.7 A report by the Universities of Wales and Liverpool, funded by the Economic and Social Science Research Council, examined the impacts of S4C activities on the establishment and development of small firms in the television industry in Wales. The report was written on the cusp of a new programme commissioning process; before many of its impacts could be evaluated.
- 3.8.8 The report acknowledged that the new 'bundling' regime represented a change in the relationship between S4C and its content suppliers; amounting to a reduced degree of paternalism and favouring combined effort resulting in larger and fewer production companies. Another noted change was a gradual geographical redistribution of S4C commissioned programme expenditure over the 1992-1997 period with more emphasis on Cardiff; principally as a result of HTV commissions. The Cardiff drift was considered a cause for concern, particularly in the light of observations made by Williams (1990) that contracts awarded by S4C to companies in areas of poor economic performance had greater impacts than equivalent expenditure in Cardiff.
- 3.8.9 The report made the general point that the small firm-size structure of the independents could yield greater economic benefit through higher local sourcing and management self-development than larger firms, on the basis of prior research findings by Storey (1987). It was not clear whether Storey's findings could be robustly applied to the independent film sector, which has unique properties at variance with other service sectors and indeed with the manufacturing sector. In connection with this the sector was found to directly employ relatively few people while depending on freelancers to meet shortfalls when under commission; a feature which applies to this sector in particular.
- 3.8.10 The study asked its production/facilities respondents to give a view as to whether they were successful entrepreneurs or not. The largest shares of respondents either thought that they were or were unsure. The report acknowledged that there may have been difficulties with this question. The age structure of respondents was reported to be heavily skewed to the over 40 group, with only 2% being under 30 years old. Gender balance was biased towards males. Educational attainment was reported to be higher than that found in other studies, although it was not made clear what the comparators were. A low level of management training was observed, although the report did not make clear what constituted 'training' as measured or distinguish between in-house or external training. The report suggested that the low observed levels of training could be explained by the small sizes of firms on the one hand, and the high level of management support from S4C on the other. An analysis of previous work experience showed that 67% of respondents had worked in the public sector and 19% in the private sector. 54% had no management experience and 81% had started the business themselves. These figures were held to reflect the success of S4C in developing entrepreneurship. However, the reasons for starting a business included the desire for independence, artistic expression, invitation by S4C, redundancy or lack of work. Only 19% of respondents were considering expansion of their

business. Lack of work was the cited as the main constraint to growth (reported by 60%), which the report interpreted to be the result of a high reliance on S4C. The detailed nature of entrepreneurship, beyond the notion of starting up a business, was not discussed in this report.

- 3.8.11 The study concluded that the establishment of S4C had led to development of a very successful small business sector in the media industry in Wales and allowed opportunities for entrepreneurial role models to inspire others to start their own business. The authors also noted however, that *'S4C's success has been achieved at some cost, particularly the financial and management support as well as the continuity of work'* (Fuller Love, et al 1997)
- 3.8.12 In the following year a report was prepared by the Welsh Economy Research Unit and DCA (Cardiff) for The Arts Council of Wales, S4C and the Welsh Development Agency (WDA) in order to examine the economic impact of the arts and cultural industries in Wales. Activities embraced by the study included the Performing Arts, Visual Arts, Craft and Design, Media, Literature and Publishing, Libraries, Museums and Heritage, and finally, General Cultural. In total the sector was estimated to provide employment for 28,000 people in Wales, or 2.6% of its working population, with a turnover of £836m and a spend in Wales in excess of £540m. The report provided evidence of high and welcome levels of indigenous control and local sourcing, and particularly a high degree of inter-connectedness between each of the sub-sectors under scrutiny.
- 3.8.13 The Media sector, which included broadcasting and film production as well as cinema, exhibitions and multimedia, was the largest of the defined groups, with a total turnover of over £350m (40% of the combined industry total), with one quarter of its participants being Welsh speakers. The sector at that time was estimated to employ 3,691 people, of which over 65% were in full time work. Average gross wages per full-time equivalent were estimated to be well over the combined industry average of £16,134 at £21,584. Just under half of a non wage spend of £258m was spent in Wales, within a total spend in Wales of £189m. The Media sector (which included multi-media and cinemas) also demonstrated well-established linkages with other arts and cultural sectors, having high consumption of Performing Arts outputs, and particularly purchases within Media. Income and employment multipliers for Media were 2.07 and 2.47 respectively showing that, while the sector's direct impacts were relatively lower than other sectors as a result of low labour intensity, they purchased from sectors requiring higher levels of labour inputs, resulting in an important growth 'inducing' role in the combined sectors.
- 3.8.14 While this exercise was not required to describe economic multipliers for S4C activity, it signalled the singular importance of the organisation as a commissioning body which had contributed most to the development of an independent film sector in Wales, as a result of its particularly high levels of local sourcing, comprising 95% of its commission budget. Equally, S4C's consolidation policies, intrinsic to the 'bundling' process alluded to earlier, were considered to hold the potential to reduce imports, increase exports,

generate greater security and continuity within the sector, as well as to evoke supply economies. However, the report noted that the independent film sector still faced constraints as a result of low management resources, high dependence on S4C, and poor demand for their outputs in national and international markets.

3.8.15 Subsequent literature reveals a policy focus on the means by which multi-sectoral media clusters could be developed, particularly in North Wales. DTZ Pieda applied a SWOT analysis to the task. Among the strengths identified were the existing concentration of production and post-production activities, a strong resource pool, good locations both for filming and for working, a low cost base and easy access to Dublin, Liverpool and Manchester. Chief among the weaknesses were poor management resources, (a feature noted in the Fuller-love Report), peripherality, a poor track record outside the Welsh language medium, and a failure of local institutions to yet meet the graduate needs of the sector. The report estimated that an injection of £21m would be needed to finance a series of specific initiatives addressing the building of a skills and business base, innovation, knowledge transfers and competitive working practices, (Pieda DTZ date).

3.9 The Welsh Economy: Today and Tomorrow.

3.9.1 Wales is substantially less prosperous than the UK average on a number of economic indicators. GDP per head was 79.4% of the UK average in 1997, while personal incomes were 86.0% of the UK average in 1996. Poor performance can be traced, in part, to the distribution of output by sector. Wales's industrial structure is dominated by sectors which are 'low-growth' in a UK context, with an under-specialisation in sectors which have experienced rapid growth elsewhere in the UK. Between 1976 and 1998, Wales became more specialised in manufacturing and public services and less specialised in private sector services.

3.9.2 The 'prosperity gap' also has its origins in an 'activity rate gap', with GDP/person being five percentage points lower than GDP/worker, that is, fewer people in Wales are in or seeking work compared to the UK average. Wales has higher levels of long-term sickness (especially among men), and a greater share of early retired. These characteristics may originate from relatively slow adjustment to waves of rapid structural upheaval, as employment in Welsh coal declined steadily from 100,000+ people in 1945 to 2,000 in 1998, while steel output has been maintained by replacing labour with capital, now directly employing under 14,000 people compared to 40,000 in 1980.

3.9.3 Relatively poor performance is also a function of opportunity and the capacity to respond to it. In Wales, opportunities and response-capacity have been most visibly achieved with respect to inward investment, both in electronics and engineering manufacturing. While satisfying the urgent need for employment, this has also had the effect of reinforcing a manufacturing tradition. Meanwhile, the service sector in Wales is both smaller and less productive than the UK average.

- 3.9.4 The difficulty lies in matching the supply of skills with the demand for them, while ensuring that the driving agents are projected to have a high value added, high income outcome. This point is demonstrated by the earnings structure by sector and occupation in Wales. For example, manufacturing earnings in the UK were 4% below the all-sector average in 1998, while manufacturing earnings in Wales were 4% above Welsh average earnings. By the same token, UK finance and business sector earnings were 27% higher than the all-sector average, while in Wales they were only 8% above the Welsh average. Average earnings for manual workers in general in Wales, and plant and machine operatives in particular, are closest to the UK average, while the relative pay position is deteriorating for managers and professionals. This can be interpreted to reflect both poor supply of and demand for professionals.
- 3.9.5 The pattern of inward investment to date suggests that locational choice is extremely sensitive to the supply of appropriate skills, hence Wales's success in attracting new manufacturing. Incomers are not averse to poaching skills from existing businesses, as well as absorbing residual skilled labour. Transfers of best practice from incomers to the indigenous base have also been documented (Munday, 2000). However, the indigenous skills base provides one initial impetus. Further support for this is provided by the small but increasing presence of incoming 'call centres', some of which appear to offer low skilled work for poor remuneration, in response to perceptions of a Welsh offer appropriate to a limited requirement.
- 3.9.6 The structural economic processes described above may result in relatively high returns for work in a low growth sector and relatively low returns for work in a high growth sector, while both having external origins with Wales reacting rather than behaving proactively. Hence, policy makers in Wales must interrogate the issue of what sort of organisations, occupying high growth sectors, have not only the highest skills requirements (which are well-paid) but the greatest predisposition to generate them locally.

3.9.7 Sub-regional Performance. Aggregate figures describe a poor Wales. However, some sub-regions face great disadvantage even in a Welsh context. For example business VAT registrations per ten thousand population show wide variance from UK-normal figures of 39 in Monmouthshire, Powys and Denbighshire to 17 in Rhondda, 14 in Blaenau Gwent and 19 in Merthyr (Bryan, 2000). The overall GDP/hd figure for Wales at 79.4% of the UK average disguises the fact that South Glamorgan performed 11% over the UK average, while Mid Glamorgan's figures were 38% below average UK levels.

3.9.8 Objective One. Uneven economic performance across Wales is reflected in the fact that large areas of Wales (including 2/3rds of the population) have recently qualified for Objective One funding under European Structural Fund regulations. This provides financial assistance for Europe's poorer regions (defined as having GDP/capita of 75% or less of the European Union average), in order to facilitate structural change. As a result parts of Wales will have access to around £200m per annum matched funding over

the next six years, a high proportion of which will be devoted to human resource development.

4 Methodology

- 4.1 Quantitative Methodology.** One purpose of this report is to assess the impacts of S4C's trading activities on the Welsh economy in terms of outputs, expenditures and jobs. Recent work has already demonstrated that arts and cultural industries have important economic impacts in Wales, not just in terms of the volume of jobs and incomes directly and indirectly associated with them, but also in terms of the nature and location of those jobs and incomes and their interaction with other parts of the economy, particularly within the broadly defined arts and cultural industries themselves (Arts Council Wales, 1998).
- 4.2 In consequence such industries are especially important for the spread and depth of economic development in the region. At the same time the consequences of any broadcaster will be much more than economic: yet more so for a broadcaster with a specific linguistic and cultural remit. Hence any quantitative assessment that simply relies on the nature and magnitude of trading relationships, in however a sophisticated form, can never be more than partial. Nonetheless the estimation of such quantitative impacts forms an important baseline in assessing the economic significance of the broadcaster, and, more importantly, provides the appropriate framework for an analysis of the likely consequences of change.
- 4.3 The direct consequences of S4C activity on the local economy are relatively straightforward to assess. In 1999 S4C's total spending was around £94.2m, of which some £72.5m was directly spent in Wales, including about £58m spent with independent producers. S4C itself provided 204 full-time equivalent³ (fte) jobs, whilst its independent producers provided more than 400 fte's. These figures compare to (rather more dated) estimates that HTV Wales spent some £59m and provided 263 direct fte jobs, whilst BBC Wales spent £70m and provided 1056 fte jobs, both sets of figures referring to 1996/7 (WERU 1998, Hill and Roberts 1998). However such comparisons are fraught with difficulty, given the diverse nature of the three television broadcasters in Wales. In particular S4C is a commissioner/broadcaster, sub-contracting all programme production, whilst both HTV and BBC employ direct staff in order to make programmes, both for themselves and for S4C. In the meantime both HTV and BBC have interests well beyond television broadcasting.
- 4.4 Direct local expenditures will have indirect local consequences, both as a result of local sourcing (the supplier effect) and because of the impacts on local incomes and hence further local spending (the induced-income effect). Local spending then "ripples" through the local economy, generating local demands and hence local incomes, then further demands and incomes etc,

³ Full time equivalents (ftes) should not be confused with numbers of people. In those arts and culture sectors with a high level of self-employment or part-time work, the number of people engaged in such activities will be substantially higher than the estimated full time equivalent numbers.

in a circular flow of incomes and spending that is only constrained by leakages from the local economy in the forms of imports and taxes.

- 4.5 The estimation of these indirect impacts depends on the development of a modelling framework that allows these subsequent effects to be assessed, in particular through detailed estimates of the trading relationships between firms, sectors and consumers. Such a framework is provided by the Welsh Input-Output Tables, themselves the product of a continuing major research project at Cardiff Business School. The latest incarnation of these Tables provides detailed estimates of the trading relationships between 70 different sectors that constitute the Welsh economy, together with transactions with consumers, government and trade with the rest of the UK and beyond.
- 4.6 For each sector of the Welsh economy the Tables detail the input requirement per £1 of output, as well as imports (from outside of Wales) and labour requirements. Then if the outputs of one sector change, or if consumers spend more, the influence on other and all sectors can be traced.
- 4.7 The Input-Output methodology then analyses the activity, firm or sector under scrutiny by placing the direct expenditure of that activity in the context of its influence on the rest of the economy, first according to the direct spending, itself distributed across sectors, and then via the second (and subsequent) round effects of this spending distributed according to the established pattern of trading relationships of those affected by the initial (first round) spending. Hence the ultimate impact of the spending, in terms of incomes and jobs, is estimated.
- 4.8 One particular methodological difficulty arises from the commissioner/broadcaster nature of S4C, with the majority of S4C spending being on independents rather than in-house production. Then S4C will, by its nature, employ relatively few people directly relative to its total budget and to the other broadcasters in Wales, and relatively more people indirectly, via the activities of its independent programme-makers. There are two potential solutions to the presentation of results. One is to accept that S4C will have a much higher multiplier impact, i.e. ratio of final to direct impacts, in terms of jobs and incomes, than the other broadcasters in Wales, but a smaller multiplicand, so that the eventual impacts of S4C in terms of overall jobs in Wales may not be too dissimilar to the other broadcasters. The alternative approach would be to redefine direct impacts as including those independents trading directly with S4C, in which case the estimated multipliers may be comparable to other regional broadcasters. Both approaches will be examined in this study.
- 4.9 Both the economic analysis of cash-flow impacts and the qualitative assessment of S4C impacts were informed by a series of interviews conducted with S4C-supplying independents across Wales, complemented by interviews with major players in the sector. A small sample of independent producing companies was derived from the population currently under commission by S4C, reflecting the distribution of that population in terms of firm size, genre and location. The purpose of the enquiry was,

initially, to gain greater precision regarding the sector distribution of S4C's spending. The number of responses was limited by encountering a very busy period for the producers, coupled with limited capacity to handle a challenging survey questionnaire. However, the eight responses gained were of a high quality.

- 4.10 Each participating firm was interviewed so that the research team could assist in the production of accurate expenditure data. This interview also provided the opportunity to explore qualitative issues in detail as well as acquiring data on the type and quantity of training undertaken in house and externally. The interview was an informal process with time delimited by the firm under consideration, and conducted at their premises.
- 4.11 While each interview had a character and order of its own, the event followed a consistent line of enquiry pre-determined by a standard interview schedule. Respondents demonstrated varying degrees of sensitivity to certain issues, particularly turnover information where sales had been made to broadcasters other than S4C.
- 4.12 Given the opinion-based and anecdotal nature of this part of the enquiry, only those key points for which credibility could be tested by having consensus and consistency throughout the process, are included in the discussion below. Hence views that were clearly particular to the experiences of only one company are excluded. Further, this report avoids the presentation of opinion-based qualitative data in a quantitative (graphical) manner since this may impart an misleading appearance of robustness, given the sample size. The interview process was confidential to the parties present, requiring a level of mutual trust which disallows the identification of individual companies. This trust promoted frank and honest discussions with a shared goal of investigating positive and appropriate strategic outcomes.
- 4.13 In addition to the voluntary but time limited involvement of the independent content providers, a range of interviews were also conducted with key players within the S4C organisation, as well as external bodies including BBC, HTV, Sgrin, BECTU, Cyfle and TAC. The purpose of these interviews was to examine and understand the nature of common goals and constraints, as well as the presence of conflicting interests and resultant tensions and their impacts, which may have wider ramifications in an economic development context.

5 The Findings

- 5.1 The table below sets out the estimated distribution of S4C spending in 1999, together with the estimated share of that spending that occurred within Wales, and within the European Structural Funds Objective One areas of Wales. As anticipated the majority of that spending is to Independent Producers or associated services, with S4C spending less than £7m on directly employed staff (including employers costs). All but 3% of this S4C spend on independent production is estimated to have been in Wales, contributing to the 85% of S4C attributable spending being in Wales, split

fairly evenly between the Objective One and non-Objective One areas within Wales. Hence S4C in 1999 spent an estimated £35m in the Objective One areas of Wales. The final element of Table 1 is financial capital, including taxes, local authority rates, depreciation, interest and profits. Whilst this is conventionally regarded as an outflow from the local economy, some elements may have considerable local significance, for example local rates.

5.2

Table 1 – spending by S4C in 1999

	total, £m	%Wales	%obj 1
Independent production services	60.33	97	56
Related programme costs (incl sub-titling, archive, audience research, and other programme costs)	4.03	57	10
Transmission and distribution	5.97	15	0
Marketing and publicity	2.70	58	11
Equipment, equipment hire, maintenance and repair	1.11	58	7
Other costs (incl premises, professional services, training)	4.38	50	10
Labour costs	6.80	100	2 ⁴
Sub- total	85.32	85	41
Financial capital: taxes (incl. rates), profits, depreciation etc	8.91	na	na
Total = gross output	94.23		

⁴ While labour costs for staff at the Caernarfon office are small, it is the case that labour costs for S4C staff domiciled in Objective 1 areas amount to 20% of the total.

5.3 As noted earlier this S4C spending directly supports some 204 full-time equivalent employees at S4C, relatively highly-skilled and well-paid employment (note: £6.8m labour costs includes employee costs and National Insurance contributions etc.). However, and also as noted earlier, this S4C employment is small relative to other broadcasters in Wales, because of the nature of S4C as commissioner/broadcaster. A better picture of S4C’s initial impact may be gained by combining the information of Table 1 above with an appreciation of the estimated spending pattern of the S4C-supplying independent producers. Table 2 below sets out this estimated expenditure distribution. Note that these estimates are based on a relatively small sample of independents, with results then scaled up to represent the sector as a whole. Note also that Table 2 refers only to expenditures relating to revenue derived from S4C commissions. Some of the independents supplying S4C will have other sources of revenue (although, as examined later, this is typically relatively small), whilst other independents will be supplying other broadcasters in Wales and beyond.

5.4

Table 2 – Spending by S4C-Supplying Independents in 1999 (related to S4C commissions)

	Total £m
Labour costs	11.0
Production facilities and post-production	3.7
Non-broadcast equipment	0.3
Subcontractors	19.3
Transport and accommodation	3.6
Production overheads	2.8
Capital expenditure	1.2
Training and support services	0.4
Spending in Wales	42.3
Imports and financial capital	16.2
Total = S4C spend on independents in Wales	58.5

5.5 Hence S4C-supplying independents in Wales also make a substantial contribution to the local economy, as well as directly providing some 439 full-time equivalents jobs in Wales, again relatively well-paid and highly-skilled (although once more Labour costs include more than wages).

5.6 The indirect or multiplier consequences of this spending occurs as a result of local purchases, either directly by S4C and the independents, or via their suppliers, or through the induced-income effects as employees of S4C, the independents, or suppliers to either, make local purchases. These indirect consequences were estimated by placing S4C-related spending within the context of the Welsh Input-Output Tables and then tracing the impacts through the supply chain. Table 3 sets out the results of this process.

5.7

Table 3 – The estimated Impacts of S4C on the Welsh economy in 1999

	Employment fte's	Disposable Income £m
S4C gross output = £94.2m	204	5.1
<i>Which then supports</i>		
Independent Production Services	439	8.3
<i>Which together support</i>		
Other media (sub-contractors to independents, other broadcasters, multi-media etc)	554	9.6
Performing Arts, Recreation, other arts, other public services	285	4.5
Total Impacts within Arts and Culture	1482	27.5
S4C Impacts outside Arts and Culture:		
Hotels, retail, wholesale	244	2.5
Manufacturing, energy, construction	76	0.9
Other services, inc. transport, finance, professional	173	2.3
Total = S4C impact in Wales	1975	33.2

5.8 S4C's spending in Wales generates activity in other sectors of the local economy, as it is "passed-on" to its (first round) suppliers, including the independents but also other sectors such as manufacturing, financial services etc. The first round suppliers then also purchase within the local economy (for example, the independents' sub-contract relationships). As these cash-flows move along the supply-chain jobs and incomes are supported in the process. For example, spending S4C indirectly supports 285 ftes in Performing Arts, Recreation, other arts and other public services. Similarly, spending on Hotels, retail, wholesale etc accounts for just over 240 jobs. Table 3 then shows that the activities of S4C result in a gross employment effect in Wales of almost 2,000 full-time equivalent jobs, being paid a total disposable income (net of direct taxes such as income tax and NIC) of £33.2m. Hence although direct employment at S4C is relatively small, S4C makes a substantial contribution to the Welsh economy in terms of both jobs and incomes.

5.9 The results of economic impact assessments are conventionally reported in terms of employment multipliers, defined as the ratio of final to direct employment. Given the figures of Table 3, the employment multiplier for S4C would be 9.7 (or 1975 divided by 204), implying that for every direct fte employee of S4C, a further 8.7 jobs in Wales are dependent on S4C activities. Whilst this figure is accurate, it is also misleading, given S4C's role as commissioner/broadcaster. A more meaningful figure would be if S4C and its independent production suppliers were combined, giving a direct employment figure of 643 (204 plus 439) and an employment impact multiplier of 3.1, i.e. for every direct job at S4C and its supplying independents, a further 2.1 jobs are generated in Wales.

5.10 Previous studies, in particular *The Economic Impact of Arts and Cultural Industries in Wales*, have already demonstrated the high degree of interdependence between the various sectors that make up the cultural industries in Wales. More specifically, there is a high degree of dependence between media sectors. According to that study, in 1997 32% of total non-wage media spending in Wales was to other firms and organisations in the arts and cultural industries. These inter-relationships are confirmed by the current study, with an estimated total of 993 fte jobs in the media sector in Wales dependent on the activities of S4C, in addition to the 204 fte employees of S4C.

5.11 The Qualitative Impacts of S4C. It is not possible to estimate numbers for many of the effects S4C's direct and indirect activities in Wales. Yet, as the following sections will demonstrate, these impacts are nonetheless important.

5.12 The Culture of Wales. S4C enriches the lives of those who use the Welsh language. It also serves a wide range of capabilities, tastes, age and economic backgrounds. Its outputs stimulate engagement in the culture and heritage of Wales. The Urdd, the Royal Welsh Agricultural Show, and the National Eisteddfod, are given comprehensive coverage bringing these events into the homes of viewers. Digitisation also allows greater access by S4C to those who have interests in and originate from Wales but are

geographically distanced.

5.13 Creative People. S4C, as a programme commissioner, has provided a rich conduit for creative, talented people in Wales to express themselves and demonstrate their skills to both local audiences and increasingly those further afield. This applies to both those who make programmes as well as those who perform in them. As a result S4C has contributed to the development of talents in the fields of drama, education and animation. *Solomon and Gaenor* and *Hedd Wyn* (drama), *The Canterbury Tales*, and *Famous Fred* (animation) have all won Oscar nominations, while *The Miracle Maker* has been released on cinema and is likely to be an enduring attraction for young families across the UK, in whatever form it is made available. International successes such as these also advertise Wales and heighten its profile as a distinct region within the UK.

5.14 High Skills Requirements. S4C in its direct activities and in the commissioning of its outputs requires the deployment of high level skills, whether they be developed through vocational, higher education or other routes of a more generic nature. These skills range from technical skills such as sound, light and camera, through to research skills, communications, finance and production and direction skills. Moreover, many of these skills demands are made within communities in peripheral parts of Wales which have a higher share of traditional activities. The activities of independent producers in the more remote parts of Wales have contributed to raising the prospects of these areas.

5.15 Developing Enterprise. While the operational constraints resulting from the current small size structure of the independent producer sector create additional pressures as individuals undertake a wide range of tasks, S4C, via its content providers, has facilitated the development of a range of particular business skills including sophisticated budget and people management, which holds the prospect of stimulating an enterprise resource base having the potential for future growth.

5.16 High Incomes. Average gross incomes in S4C's direct and indirect activities are significantly higher than the Welsh average, resulting in relatively high induced-income spend, and hence growth-inducing effects elsewhere in the Welsh economy.

5.17 Mini-Cluster Development. S4C activities take place in three principal distinctive sub-regional clusters; Cardiff, Caernarfon in North Wales, and West Wales around Llanelli and Llandeilo. Two features are important. First, these incipient clusters give rise to growth potential within the media sector as increasing technology driven synergies are realised, and also deliver scope for developing valuable relationships with other sectors which supply to Media and its activities, for example, technical hard/software supply and maintenance, hotels and catering and education. Secondly, these mini-clusters (with the exception of Cardiff) have occurred as a result of their correspondence with Welsh language clusters, in areas of generally low opportunity for high value-added employment.

5.18 Other Partnerships. S4C has a range of important partnerships and relationships with other organisations in Wales. Apart from the content providers, S4C also sources other services locally such as marketing and advertising, printing and publishing, and financial and business services, which are reflected in the quantitative impacts described above. S4C also has important mutual relationships with other broadcasters; for example, HTV Wales is among the suppliers of S4C outputs, the impacts of which have been included in the above multiplier estimates. BBC Wales provides S4C with over 500 hours of Welsh programmes, among them *Pobol y Cwm* (for which S4C funds subtitling, the Sunday omnibus edition and six weeks production in the summer). S4C then benefits from receiving high quality programmes, while BBC Wales extends its public remit and trade mark into S4C territories. S4C also sponsors the BBC National Orchestra for Wales. The BBC Wales/S4C team gives viewers access to the deliberations of the National Assembly; the impact of which, in terms of engaging political interest, then depending on the Assembly itself. The Digital College, another partnership effort, will encourage the excluded onto a path of life-long learning, as it develops.

5.19 Supplier Issues. The research team explored a range of issues in the preparation of this report, both within the two-way interview process and independently, in order to strive towards objective conclusions. A number of key issues were critical for the modelling process described above, and which colour the strategic implications, including the level and nature of sub-contracting within the sector. Also covered were in-house and external training, the interface with the business community at large, a qualitative investigation of capital investment and a range of perceived constraints in the fields of general management, skills shortages and training.

5.20 Human Resources Development. S4C-related activities combine relatively highly rewarded, labour-intense activities that have high added value. This is a potent mix in the context of economic development. However, such activities, where the human component has a relatively important emphasis, also have a high dependency on skills provision, and equally importantly, skills succession. The adequacies of these two provisions, within the sector, were consistently raised.

5.21 There are widespread concerns within the sector that it faces problems associated with an 'ageing' demography. This issue was raised by S4C, the other two broadcasters in Wales and by the independent producers. Broadcasting is currently facing exponential growth accelerated by impending analogue switch-off. In the earliest phases of broadcast, output was predominantly generated from within the principal organisations. In Wales, BBC Wales and HTV both had a high dependency on internal resources for producing broadcast content. In common with many large organisations, the capacity existed to execute succession and training planning so that younger skills-holders could follow the older generation in a seamless fashion. Cost pressures within the sector, predicated increased out-sourcing to reduce the financial burden of intermittent over-capacity, have resulted in a reduction in the ability of broadcasters to supply sufficient successors. S4C as a commissioner rather than a programme maker

cannot itself generate the required successors in the field of programme content provision. This has resulted in new pressures to create an adequate supply of skills among the young, for youth-orientated programmes in particular, but ultimately across all genres.

5.22 There was the common view among those interviewed that the ever-popular media degrees offered by higher education institutions, which may be held to partially mitigate the shortage of in-house skills development, were far more attractive to potential students than they were useful to the sector. A combination of in-house on-the-job training and bespoke ex-house training was seen as providing the optimum basis for skills development and succession.

5.23 The quality of training offered by S4C, the greater degree of strategic planning implicit in the training programmes on offer, and the efforts of the Cyfle training organisation tend to support the view that larger organisations are more efficient training vehicles. Meanwhile, small firms, facing financial, management and strategic constraints, recognise that, while the will is certainly there, training may become yet more short-term and reactive.

5.24 Training within S4C. S4C directly provides around 204 full-time equivalent jobs. Compared to other broadcasters this is a small organisation (BBC Wales employs over 1000). However, it is of sufficient size to support a training budget and a Training and Development Manager, combining the will to train with the capacity to do so. This is demonstrated by S4C's Investors in People⁵ accreditation, gained in 2000 following six years of work. The training effort within S4C can be described under the banners of aim, method and result. Training aims include raising efficiency, improving internal and external relations and engendering a common vision, individual motivation and skills-sharing. The general ethos is to optimise collective and individual knowledge in the organisation. The methods are: improving communications between and within each management hierarchy and between S4C and its customers, sophisticating the internal appraisal system, lengthening and deepening S4C's strategic responses and finally operating a tight focus on each so that the training costs can be minimised. S4C report that appraisal standards have been raised over time, teams are better and more frequently briefed and staff are more satisfied with the amount of training received.

5.25 However, the tests by which to measure results are more difficult to find and apply. Typically, training is seen to be working when needs identified during appraisal are met in the following period. Using this criteria S4C is a successful training organisation. In addition low labour turnover may indicate a high level of satisfaction within the organisation, coupled with the stability to raise skills. However more tangible training results such as changes to productivity are not easily measured when outputs are qualitative. Furthermore, as S4C faces a changing world, the skills and work volume demanded have also altered and increased, resulting in a growing establishment, inevitably disguising any impacts of training-induced

⁵S4C is the first television broadcaster in the UK to gain IIP.

efficiencies.

5.26 While S4C has made significant advances in training existing staff so that they can fulfil the requirements of their current job, little succession planning is undertaken to anticipate the skills requirements of future job vacancies presenting as a result of natural wastage or retirement. This is partly the result of having a 'flat' organisation structure with responsibility evenly spread while authority is highly concentrated at the top.

5.27 S4C has made an obligation to support training a condition of independent suppliers receiving commissions.

5.28 S4C recognises its obligation to provide a strategic message to the industry through its support of Cyfle (see below), and by the commissioning requirement that independent suppliers also support training. Several new schemes are under consideration such as one for 15 graduate and 12 business training beneficiaries by 2005, the Scholarship Scheme for 10 students, the proposed schools competition, the multi-skilling programme and multi-media Awareness Seminars (currently in progress). However, while the general aims and needs of the industry appear to be clearly understood, the mechanisms by which these can be achieved are still unresolved and untested. For example, the graduate scheme is proposed as a joint funding initiative between S4C, Cyfle and participating companies. In order to compete for a place on the scheme, interested parties will be required to present detailed business and training plans to a committee including representatives of independents, S4C and Cyfle. Resistance to the scheme may arise because of reluctance to submit commercially sensitive information.

5.29 S4C and Bespoke Training Organisations. There are two bespoke media training organisations operating in Wales: Cyfle and its sister Media Skills Wales, which are apart from higher education establishments offering non-specific degree qualifications (for example, media studies). Cyfle was established in 1986 to provide training for Welsh speakers or competent Welsh learners. Since then it has trained 75 on full-time training courses, in addition to those receiving training on short courses on a wide range of disciplines including AVID, Health and Safety, and Film Scripting. Cyfle is managed by a committee of TAC, S4C, facility house and the Trade Union representatives, and financed from a variety of sources including S4C. In 1999 Cyfle received around £300k from S4C. Independent content providers who are members of TAC are also levied at a rate of 5% of their management fee, providing some incentive to use Cyfle's training facilities. On the rare occasions when firms opt-out, S4C undertakes to ensure that in-firm formal training programmes adequately replace Cyfle training.

5.30 Given S4C's current monopoly purchasing power over its content providers, it falls to S4C to provide the strategic direction for the sector in terms of future skill requirements. Both S4C and Cyfle have been imaginative in exploring ways of 'feeding' necessary skills into the independent sector. One difficulty pertains to who 'owns' the individuals receiving training. If Cyfle employs a given trainee who then undertakes on-the job training modules

within the independent sector, there is a danger that courses can be disrupted if that trainee takes permanent work at one of his/her secondments. Alternatively if an independent firm employs the trainee, the firm will be reluctant to expose the trainee elsewhere. In a competitive, skills-scarce environment there is only one effective route, which is to provide a skills base in advance of demand. The UK broadcast sector provides a cogent argument for advance skills development.

5.31 While there are risks attached to strategic training behaviour, these risks are most appropriately taken in a sector whose growth is assured at the national level because of digitisation, and where the rewards for work are likely to be high. Indeed, risk-averse training behaviour may ultimately stagnate the sector in Wales. Finally, as with S4C's own training strategy, there are difficulties in implementing a performance monitoring mechanism. This cannot be rectified without determining strategic sector goals to which can be attached tangible but long-term training targets.

5.32 Training within the Independents. Interviewed firms provided information on both in-house training and their take-up of external training facilities. This report will not seek to quantify internal training within the firms interviewed, in the absence of standard benchmarks for describing 'on the job training' in a way that is universally meaningful. Indeed, the absence of a suitable framework for measurement may account for the anecdotal belief that small companies fail to train.

5.33 Some difficulties in recruitment were reported among the independents. These usually related to specific challenges resulting from the particular demands of a programme genre, for example, research skills requiring a scientific bias. Another problem was recruiting young people to work in rural or semi-rural environments, since the ambitious young may be more pre-disposed to seeking livelier towns and cities, in Wales or elsewhere. In addition small companies cannot usually offer permanent employment to sound, light and camera technicians and as a result have a high dependence on sub-contractors. Companies must then depend on either their past experience of such individuals or on any paper credentials.

5.34 Small companies interviewed did, without exception, recruit promising individuals and impart skills on the job. These individuals do not, however, typically go through a formal training programme. All the firms interviewed had at least one or two trainees whose skills were being incubated in-house. The second issue is that such training was normally undertaken to fill short to medium term needs, rather than longer term ones. However, increasing investment in post-production facilities such as AVIDs requires strategic approaches to fully utilising such equipment and providing editing training within long term goals. Only the most confident independents can release resources to do more than this.

5.35 While in-house training may not have a structured approach, this does not mean that these trainees are under-valued. The time and expense required for recruiting trainees and re-deploying in-house expertise to them within the small firm represents a significant investment. The value placed on 'on-

the-job' trainees also creates resistance among training firms to relinquish them to external training programmes, which may expose them to other competing firms.

5.36 While bundling has allowed the commission period to be extended, content providers have little long term security with respect to establishment size or offer job security to their trainees, many of whom are on fixed term contracts, with no prospect of wage increases. Examples of wage deflation were also cited. While actual security may be greater than that perceived, the latter more profoundly influences behaviour.

5.37 There are some notable exceptions to the evident short-termism. For example, S4C has commissioned a series of 'magazine' programmes for its digital service, aimed at young people. In commissioning 'Lush', S4C has embraced a package conceived by Teledu Telegop. The production team, during the course of production, will be training students in the basic techniques of programme-making. These students will be attending a new MA course run by Trinity College, Carmarthen in conjunction with the programme makers. The specific intention is to provide newcomers to the television industry with an understanding of broadcasting in its widest sense. The training experience conferred by this concept differs markedly from the typical higher education offer, since it addresses specific on-the-job challenges such as ideas development, 'pitching' techniques, budget preparation, management issues such as health and safety, recruitment and employment law, trade unions, multi-skills requirements such as camera, sound, editing and presentation. Innovative initiatives such as these combine the best elements of on-the job training with the requirement for the strategic provision of anticipated rather than actual skills within the industry.

5.38 Within the sector accredited training typically occurs in short bursts. 'Hands-on' non-accredited training was common to all interviewed companies. Without deeper investigation it is not possible to comment on variations in quality from one company to another or indeed, whether it was being undertaken to the satisfaction of the trainee. The point is that a satisfactory framework exists within the industry for companies to 'top-up' skills externally, while providing the foundation work in-house. Much more valuable (and constraining) to each of the firms was the availability of 'raw' untutored recruits exhibiting the drive and enthusiasm onto which could be impressed job-specific skills. Time and again, the best recruits had presented themselves to a firm, possessing only a strong inclination to enter the business and having by-passed the media degree route. A strong case exists for developing initiatives to raise awareness in secondary education for vocational training. While small independents may endorse this route, in practise they currently lack the collective resources to initiate it.

5.39 Changing Structures, Market Opportunity and Conflicts. Several features of the S4C commissioner/commissioned relationship are typical for the industry in the UK as a whole. First, broadcasters have a tradition in the UK for commissioning on a cost plus, fixed fee basis, according to a complex sliding scale. The S4C model is built upon this tradition. Unlike other

manufactured or service 'products', programmes are, on each occasion, separately conceived, highly differentiated and unique (although often following a formula) and, moreover, budgeted-for prior to production. While there are industry expectations regarding the costs of a given genre, each product will differ from the next in terms of a wide range of criteria including the equipment and human resource type and mix, the potential for recycling nationally and internationally or in terms of potential added value. As such, both the requirement for and the burden of being cost-explicit are very high prior to delivery. In a business environment where the emphasis is roundly placed on the relationships and qualities of the individual rather than the firm, penetrating the market is much more difficult than sustaining market share. Despite low capital entry and exit barriers and strong signals regarding high reward, the industry is not conducive to opportunistic start-ups, given both the proprietorial role of the commissioner and the need for individual track records.

5.40 These general features aside, the relationship between S4C and its independent content suppliers differs in many respects from that which is typical for the sector nationally. S4C, unusually for a broadcaster, is a commissioning body only. Secondly, it uses public funding to commission output in the Welsh language. Hence, historically there is a unique inter-dependency, with S4C's suppliers owing their existence to S4C, while S4C depends for its output on the small population its activities have spawned. There is no doubt that S4C has been responsible for providing the vital underpinning of a broadcast related sector in Wales. At the same time, both the BBC and C4 have recently undertaken to increase their commissioning share from outside the M25. The S4C contribution, coupled with greater regionalism within broadcasting, has resulted in a buoyant notion among policy makers that this sector can develop the critical mass to attract new activity into areas which are otherwise disadvantaged in North and West Wales, as well as ensuring growth in Cardiff.

5.41 S4C are responsible for creating the conditions which have resulted in one of the lowest cost bases, in the field of content provision, within the UK. As a result of the 'bundling process' encouraging mergers, Welsh producers have reduced their overheads and increased their efficiency. By driving a hard bargain, coupled with securing a digital future, S4C has both pushed producers (and, equally, relied upon them) to seek new and clever ways of using committed resources to extend their output. Hence, S4C has created and shaped a sector, which serves it well.

5.42 S4C will continue to play a determining role in the future shape of the sector. How this unfolds will depend on S4C's strategic intentions and internal competencies, how those are translated to the supplier sector, and how they, in turn, respond. These elements have been explored during the interview process. Without exception, discussions with suppliers have been measured and constructive, and can be described under the following headings:

- The benefits and disadvantages of cost efficiency
- Commissioning Protocol
- Feed-In and Feedback

- Lessons from other Broadcasters

5.43 The Benefits and Disadvantages of Cost Efficiency. Greater efficiency has certainly been achieved and Welsh suppliers offer 'good value for money'. However, S4C is both the sole driver and beneficiary. Producers cannot themselves benefit from their own efficiency, nor can they capitalise their low cost advantage without seeking new markets. The low-cost output would not have been achieved without stretching management resources within the firm. The more entrepreneurial firms, wishing to extend their market outside Wales, have found it difficult to invest the time needed to develop contracts. Moreover, it has been made clear to those making successful but modest skirmishes into the wider market that they face prejudices regarding their S4C credentials and that low cost has an unfortunate association with low quality. Two factors are at work here. First, outside commissioners may have poor knowledge of S4C programmes beyond the notion that they are cheap to produce, and secondly their own experiences may have led to the perception that low cost equals low quality. However it is up to the producer to prove his/her worth, with rewards that may be relatively higher with important implications for the sector as a whole.

5.44 The time, effort and costs required to pursue outside commissions are relatively high, requiring several meetings, probably in London and with no guarantee of success. However, the financial buffer or dead time which allows the development of ideas can only be derived from past commissions, and the lower the accumulated residual the greater the restriction on exploring new markets. This begs the question of who would benefit from a film-producing sector in Wales having national credibility? The interview process revealed a schism between firms with wider aspirations (fulfilled or not), and those who were content to serve S4C. Explaining the schism is difficult - responding to it even more so. There appeared to be little relationship with age of managing director, locational preference, programme genre or programme quality. In any sector only a few small companies are destined to grow (*The Ten Percenters*, Storey 1998). Within the S4C independents, firms with the potential to drive sectoral growth from the bottom up may be subject to top-down pressures preventing this. Given this polarisation, a different approach may be required for those production activities which are less restricted by top-down pressures.

5.45 The Commissioning Protocol. Firms and individuals who had won commissions outside Wales noted that their experiences of the process were often very rigorous. Meetings usually involved detailed technical discussions where the cost and quality implications of using specific equipment or skills were clearly understood. Ideas were tested and explored to the full. The process, led by commissioners with production experience, was often time-consuming but resulted in anticipating some problems before they occurred while ensuring quality standards. Successfully withstanding such a process requires more preparation and hence is more costly. Similar rigour within the S4C process could help to develop the sophistication required to compete nationally. While S4C notes that its own internal training processes have resulted in more professional external

transactions, there remain some differences in perceptions between S4C and its suppliers. While there are risks for S4C in up-skilling individuals through secondments to other organisations, the dis-benefits of isolationism may exceed these risks. By exposing its commissioners to the techniques and competencies of other broadcasters in the UK as well as undertaking role-reversal training and increasing technical understanding, S4C would gain greater capability of knowledge transfers to their suppliers during commissioning processes which would be of mutual benefit.

5.46 Feed-in and Feedback. S4C has a diverse and divergent audience. S4C viewers will express preferences for one genre over another but they can also reveal preference for the outputs of other broadcasters. Hence, S4C must have one eye on their viewers and one on their competitors. There is a view among suppliers that S4C is occasionally slow to respond to ideas and formats which gather momentum in the UK as a whole, and equally fails to take risks with new formulae. At the same time S4C observes a shortage of new ideas in Wales. It is difficult to establish the genuine origins of this apparent stalemate. However, the dual forces of digitisation and interactivity should provide the environment for S4C to experiment with the more radical ideas they are presented with, which previously may have lacked national precedents. A greater degree of programme piloting may be a suitable approach to adopt. However, such a strategy would inevitably require appropriate investment.

5.47 Some producers felt that S4C needed to provide greater feedback at many crucial stages of content provision, particularly given the cost pressures and the requirement to produce programme content on the 'back of' existing projects. Currently S4C communicates its programme requirements to its suppliers, who then develop ideas over the succeeding months. Prompt, detailed and constructive feedback is required during these vital stages for which creative effort has no guarantee of reward, in order to ensure that potentially very good ideas are not inadvertently quelled.

5.48 Lessons from other Broadcasters While S4C operates on a tight budget, lacking the scale of public funds of the BBC and the advertising revenue streams of the independent broadcasters, it can nevertheless duplicate the best practices of the latter, on an albeit more modest scale. The BBC has, over the last eighteen months, made marked improvements to both the method and degree with which it trails programmes. Drama trailers, for example, increasingly use customised footage to attract viewers. While often tiresome for a disinterested viewer, it is a necessary but effective strategy to win future loyalty to the channel from interested viewers and ensure that one-off programmes are not inadvertently missed, at a marginal extra cost. S4C faces a more complex equation in balancing broadcast time to satisfy its paying advertisers against its own advertising. However, it may be fruitful to carefully test and monitor the effectiveness of different trailing strategies, following the BBC example.

6 Opportunities and Threats

6.1 The opportunities and threats facing S4C have been well rehearsed. The

purpose of the organisation is to satisfy a cultural demand in a minority language. S4C still has an almost complete dependence on public money, and must compete with other demands on the public purse. In recognition of a growing chasm between funds and costs, S4C has been given the right to explore commercial opportunities but in a rapidly metamorphosing broadcast world. The organisation must interrogate itself on how to achieve long term accord between its remit, its resources, its suppliers on whom it depends and the wider context of the Welsh economy with which it interacts. There are conflicts in this mix and a balanced strategy is crucial.

- 6.2 S4C's audience covers a wide range of ages, linguistic competence, education and social groups, and as a result satisfaction cannot be delivered to all simultaneously. Today's young Welsh speakers are the audience of the future. Their tastes will be reflected, in part at least, by Wales's success in a number of fields. They will have the technology, tastes and confidence to graze freely in an international world of information and entertainment. Who knows how much loyalty they will have to place or language. In a sense that will also depend on the successes they enjoy in Wales and Wales's own accomplishments. A broadcaster also has power to influence preferences, inevitably conditioned by its resources. The first challenge is then determining a balance of programmes which devotes acceptable resources to the audiences of today, while freeing up as many resources as possible to capture and perhaps hasten the future. This would suggest a re-evaluation of how much development effort goes to S4C digital output. Reach, and particularly share, will be increasingly poor measures of public utility or service, in a world overwhelmed by choice. Ultimately, S4C's achievement in meeting its remit should probably be measured in terms of maximising the quality of its future outputs, almost irrespective of who chooses to view, with an underlying conviction that quality means much more than watchability.
- 6.3 S4C has been compelled, by the necessity to compete in the digital world, to increase programme hours on an almost static budget. As a commissioner only, this burden has fallen primarily upon its suppliers. S4C has achieved 'higher productivity' by tightening its requirements from them, and they, in turn, have responded to the challenge. The result has been greater efficiency, more imagination, harder work, fine-tuning of incipient management skills, consolidation of effort and resources with increases in capital expenditure on post-production facilities to contribute to a reduction in future costs - all of which have mutual real or realisable benefits. Two issues arise. How can S4C increase its commercial revenues, and how sustainable and advantageous are the new structural and behavioural changes evidenced among suppliers?
- 6.4 In order to increase revenues S4C must first generate creative outputs which combine the properties of having international appeal, and hence be high quality (but costly), while also fulfilling core linguistic requirements. For example, recent experiences have shown that animation, which can cross cultural and linguistic barriers at a relatively low cost while being expensive in absolute terms, and that drama, also expensive (and more so if made back to back), has had the highest international appeal. To that should be added

those documentary programmes which have, by their nature, low levels of 'talking heads'. In a real sense these potentially wide-reach programmes can also share qualities with the best public service content. They also have durability and can give rise to commercial spin-offs such as books, music, videos, interactivity mileage, education materials, and even toy characters! However, they have to be strongly marketed, requiring further investment and effort. Meanwhile, other 'local' programmes such as magazines, game shows and light entertainment can be produced at relatively low cost as a result of volume economies, shallower learning curves, and lower creative skills requirements, but will lack extra mileage from wider sales or repeat programming. The conflicts of low cost volume versus high cost quality; consolidation of resources on fewer but larger players versus inexperienced start-ups, and sectoral flexibility across all genres versus sector specialisation begin to emerge as serious issues.

- 6.5 The final conflict lies with determining whether bottom-up or top-down sectoral drivers deliver the best prognosis for vigorous content-providing activity in Wales. Clearly, a commissioner whose demands place greatest emphasis on low cost provision will fail to drive the growth of a quality sector able to compete in a larger market. With the current monopsony, S4C's strategic aims power the direction of its part of the media sector. S4C can continue to apply downward pressure on costs. This could be expected to drive suppliers to other markets. In this case, suppliers are disadvantaged by poor perceptions nationally of their S4C work. Given public funding, there must be some cognisance of broader objectives sought for the sector and hence for Wales. S4C and its suppliers may be approaching the threshold upon which these issues must be addressed. All the other issues, such as management and technical skills training, succession planning, commissioning exchanges, trailing strategy and the freedom and competence to explore wider markets emanate from this point. It is interesting to note that despite some current tensions, S4C and its suppliers express mutually solid consensus that content quality has not been undermined.
- 6.6 The challenges described above take the sector structure as given, with S4C acting as a commissioner. S4C holds the conviction that greater efficiency within the sector is possible, through firms developing economies by combining their resources. Meanwhile, the independent producers have voiced concerns that these measures have induced additional pressure and stretched their resources. Neither are wrong. Programme production can benefit considerably from scope and scale economies. However, the small firm is by its nature less able to realistically deliver those economies, whatever effort or efficiency is brought to bear. Indeed, often the prime *raison d'être* of the small enterprise is its ability to serve niches. Moreover, individuals who are used to working on their own or in small teams may find it hard to make the enduring alliances required to deliver sustained efficiencies. In an attempt to reduce their costs increasing numbers of firms are investing in editing facilities and so demonstrating a commitment to future growth. However by doing so they are undermining the activities of post-production houses downstream, who may then seek additional revenue sources, perhaps upstream.

6.7 Agenda is an interesting example. As a result of a large and enduring commission it has grown in size. Its magazine programme output is high volume and offers considerable opportunities for developing products that can be differentiated for digital transmission at relatively low extra cost. However, magazine programmes have no classic properties and no prospect of having wider appeal. Moreover, firms reaching larger size, and increasing their capacity to train, are inevitably disposed to express their independence from top-down training initiatives. Meanwhile, drama outputs are expensive, leading to a higher dependence on investment via co-production, and perhaps less durable alliances within Wales. Documentary and education-related genres, appealing to perhaps smaller audiences locally, will also have longevity and appeal to wider audiences accessed via other broadcast platforms. Indeed, the distribution of budgets by genre does play an important role in determining both the future of S4Cs suppliers and the sort of bottom-up skills provision the sector is capable of in the longer term.

7 Recommendations

- 7.1 This report has sought an objective analysis in order to stimulate positive thinking and outcomes. Recommendations, of which some are original while others endorse views published elsewhere, have been prompted by the research process. Among them will be ideas which already may be familiar to S4C or are more appropriate for consideration by others outside S4C. They are as follows:
- 7.2 S4C should consider carefully the nature of the divide between those who speak Welsh and those who view Welsh language programmes and should evaluate measures to address this.
- 7.3 S4C should consider acknowledging to greater effect the initiatives and efforts of its content providers who have produced low cost programmes for digital transmission on the back of their analogue output. With pressure building along the supply chain, S4C should engender greater trust in those mutually beneficial working relationships which combine efficiency with quality.
- 7.4 S4C should address the issue that persistent low-cost provision may not be sustainable in the medium term, since it depends on stability within alliances and supportable human effort. In the longer term, closer to switch-off, any latitudes regarding quality which creep in as a result of the pressure to produce from a low cost base will be detrimental to the organisation, its suppliers and its viewing public.
- 7.5 S4C should note that it can be seen as holding a dominant position in some markets, and must carefully consider its commercial relationships in the context of competition rules.
- 7.6 The digital forum allows the experimentation of new formats and ideas for which precedents may not have been set elsewhere, particularly for

interactive programmes which will appeal to younger audiences, a crucial future segment of S4C's audience.

- 7.7 Where bespoke digital material is produced it should be of a quality acceptable for analogue transmission, and hence be inter-changeable without incurring extra cost in terms of performer rights issues.
- 7.8 S4C currently drives the fortunes of its suppliers as a result of its monopsony position. At the same time, quite appropriately for a commissioner, it plays a responsive rather than a proactive role in ideas' origination. However the best ideas are hard to realise and expensive, perhaps needing the higher levels of finance found only outside Wales. S4C should critically review the distribution of its budget placing greater emphasis on durable, high quality programmes which have wider market appeal. The prospect of higher value commissions may have the effect of stimulating fresh ideas and formats, and may drive new alliances.
- 7.9 S4C's retention of programme rights is a major strength, which distinguishes it from other broadcasters who relinquish such rights when they commission programmes from producers who are prepared to invest more of their own money in a production. While many of S4C's suppliers lack this ability, the responsibility for driving quality, and exploiting this advantage lies with S4C. Other broadcasters will certainly be seeking to retain more rights in order to exploit every possible commercial spin-off. Conversely, S4C's history of right's retention does reflect a culture of under-investment among the independents. Some genres may be more amenable to co-production alliances between S4C, its independents and outside finance.
- 7.10 Firms combining technical ability, entrepreneurial flair, creative and management vision may also be those most likely to present S4C with ideas of the highest quality (but more costly). These firms, in turn, are most likely to reinvest their profits into training and equipment, seek wider markets and enter co-production contracts, which in turn can drive quality. They may also stagnate if they cannot benefit from their developing strengths. S4C must then move towards making the same demands upon these suppliers as are the norm in the UK market, but these demands should be reflected in their programme budgets. The commissioning process provides the arena in which ideas are discussed, quality goals are established and limits are recognised. The greater the rigours of this process the better the output, but this may require some re-evaluation of the current commissioning protocol.
- 7.11 Some of S4C's independent producers appear to put relatively little effort into seeking markets beyond S4C. S4C must take a view on whether a strongly expressed lifestyle choice impinges on performance in other ways such as potential for growth, technical capability or ideas generation. If this is the case then it may be appropriate for S4C to develop a different type of relationship with those firms.
- 7.12 S4C, as a commissioner, has a strategic interest in the development of skills

within the sector. However, there are dangers of being seen as over-proprietary if intervention is heavy-handed or carries too high a information burden, especially as growing firms will inevitably increase their in-house capacity to train. S4C should be more concerned with communicating *what* quality standards are required than with *how* they are achieved.

- 7.13 A significant feature of the film-producing sector serving S4C is its dependence on free-lance labour in the fields of camera, lighting and sound, as well as a range of other specialities unique to the industry. While the economic impacts of these have been estimated, their nature and quality lies outside the report remit. Indeed there can be no conviction that Wales is different from the rest of the UK in this respect. However, the conclusion cannot be avoided that it is difficult to include the freelance element within any current training strategy without mandating minimum technical standards. For example, S4C, via its relationship with Cyfle, can only impress the importance of NVQ qualifications in technical spheres through the standards it imposes on independent suppliers.
- 7.14 Successful content provision requires an unusual and complex mix of creativity and business pragmatism. These sophisticated skills could be best captured and developed at the postgraduate level. The Telesgop/Trinity College initiative is an excellent contribution that should be carefully observed, supported and possibly built upon. A Media School, financed by its students, and by European funding matched by public/private stakeholders including the education funding councils, offering full-time one year courses covering industry specific skills such as commissioning protocols, marketing, production, accountancy, editing, writing etc., with a compulsory business secondment scheme should be considered. However, the small but growing media sector in Wales must have the capacity to send out strong signals regarding reward for work, in order to retain the newly skilled. In return, the independents could compete on an even playing field for these individuals, and furthermore, make a unique contribution by participating in designing and tutoring courses. Such an initiative could also engage experienced producers and directors who may be lying fallow, as well seek inputs from other development agencies in Wales, then breaching the current isolation of the sector. Any resulting new business start-ups would have an expectation that they can compete anywhere in the UK, while operating from a low cost-base and benefiting from the existing media infrastructure.
- 7.15 S4C has established its credentials as a Welsh Language service with a core programme remit. However, it shares its schedule with C4 English programmes, for which there have been both opportunity costs and benefits, among them scheduling restrictions for S4Cs outputs after the watershed and, more positively, the capture of viewers otherwise lost and hence the opportunity for advertising revenues. The appearance of English language programmes on Wales' fourth channel has also set a precedent. Meanwhile S4C's language programming has certainly resulted in the retention of expenditure for content in Wales to which the independent sector owes its origins and current strengths. S4C is indirectly a source of considerable opportunity but mostly to those who are competent in the Welsh language, thus reducing the pool of talent and resources. S4C should

carefully consider the strength of the precedent and the desirability, within its overall objectives, of introducing English language programming as a means of extending its resource pool and easing the pursuance of commercial opportunities.

- 7.16 S4C will be considering every possible commercial avenue. Future scope for pay per view and video on demand (VoD) via the TV/PC implies strategic effort will be required to both generate and supply new demand. For example it may be possible to provoke demand for archive material as well as recent popular programmes. However, viewing on demand has serious implications in terms of rights clearance with performers, etc. While this market is being established there will be some ambiguity regarding the value of such rights for which S4C should be prepared. S4C should devote resources in order to develop an inventory of potential on-demand material and forecast best-case scenarios for rights clearance costs.
- 7.17 Other broadcasters in Europe may share S4C's remit of serving linguistic minorities as well as having in common audiences whose interests reflect their loyalty to place and culture. S4C has already identified that broadcast content from other cultures can offer an antidote to the global appeal formulae that currently pervades television. S4C may consider developing reciprocal arrangements with those producing high quality outputs with a strong cultural bias.
- 7.18 Finally, S4C already undertakes a range of initiatives which engage secondary schools in broadcast content and its process. Such initiatives include participation in competitions in order to stimulate ideas in drama, natural history, heritage, current affairs and politics etc, as well as scholarships and the distribution of S4C-related materials via road-shows and direct contact with schools. This effort should have a strategic intent with consideration given to the potential of these youngsters to feed into the Media sector. S4C might consider organising holiday secondments into their organisation or consider, with the independents, subsidies for similar initiatives, with a view to developing new conduits.

8 Conclusions

- 8.1 "The natural definition of public service broadcasting is that it is broadcasting which, for one reason or another is desirable, but which the market will not provide or will provide in insufficient quantity".
- 8.2 This report has evaluated the current flux in the broadcasting/information world. The challenges for the most advantaged are extraordinary, and even for these the commercial opportunities are hard to identify, let alone see to fruition in an increasingly global context. The challenges are still more awesome for the small broadcaster and its small supplier, while the opportunities will be considerably more constrained. This report does not question the legitimacy of the S4C service to the Welsh language community in Wales. Indeed, the proximity of S4C to its immediate audience will be an enduring feature in an otherwise fluid world - a feature which calls for special consideration in the event of changes to the

regulatory framework. There is a wide range of evidence to suggest that S4C is demonstrating vision and awareness of its responsibility to exploit commercial avenues, while remaining true to its remit, despite inevitable conflicts.

- 8.3 S4C is exceptionally embedded in the Welsh economy through its expenditure on content provision, commissioned from an independent sector of its own creation. These producers, in turn, spend much of their income directly or indirectly on supporting jobs elsewhere in the Media sector, and thence in Wales more generally. While S4C directly employs around 204 people, its spending generates an estimated further 440 jobs among the Independent producers who in turn generate further jobs, through sub-contract purchases elsewhere in the Media sector. The impacts of this spend are also felt outside the media sector as purchases from other services during their production process, and as induced-income effects as incomes generate new local spending. The total employment effects of an initial S4C expenditure of £94.2m is then estimated to be almost 2,000 full-time equivalent jobs across Wales as a whole. While the majority of these jobs are in media or related sectors, the jobs total includes 290 jobs in public and recreational services, 240 in retail and distribution and 80 in the production and construction industries in Wales. Hence the impacts of S4C and its independents permeate the Welsh economy.
- 8.4 S4C activities take place in three principal sub-regional clusters; Cardiff, Caernarfon in North Wales, and in West Wales around Llanelli and Llandeilo. These mini-clusters (with the exception of Cardiff) have occurred as a result of their correspondence with Welsh-speaking clusters, in areas of generally low opportunity for high value-added employment, presently qualifying for assistance under Objective 1 as a result of their disadvantage. These incipient clusters are important as they have growth potential both within the media sector as synergies are realised, and through the development of valuable relationships with other sectors which supply Media, for example, technical hard/software supply and maintenance, hotels and catering, and education.
- 8.5 S4C's direct and indirect influence provides a unique conduit for creative endeavour that impacts qualitatively on the Welsh economy. This includes opportunities for Welsh writers, performers, producers, technicians and entrepreneurs, who by their endeavours raise the profile of Wales.
- 8.6 Through partnerships and trading relationships with other broadcasters S4C also helps to underpin a range of important activities and initiatives, which includes providing the means to broadcast the National Assembly and the Digital College. S4C is also increasingly investigating other means to invigorate the media skills base in Wales. The Cyfle Training organisation, supported by the Media sector in Wales is also dynamically exploring new ideas and sources of funding.
- 8.7 However, there are fundamental constraints bedevilling S4C and its supplier pool, which cause tensions as the many claims on limited resources intensify. That part of the Media sector which feeds S4C has responded

imaginatively to the requirement for additional programmes for digital transmission, making it, collectively, one of the lowest cost production bases in the UK. This is not without problems, as perceptions of Welsh independents' products in the UK generally make it hard for them to penetrate the wider markets which will assure their sustained growth. Meanwhile operating from a low cost base also diminishes the resources required to make the leap into these wider markets. This represents important opportunities missed as the skills and abilities which have led to high quality output for S4C have yet to find wider audiences. Furthermore, there are certainly limits to the economies that can be achieved within the small unit, irrespective of the acquired competencies of individuals and alliances. The strengths of small firms in any sector are their flexibility, their creativity and their ability to serve niches, while their weakness will be their inability to extract scope and scale economies.

8.8 S4C has recognised these constraints and sought to alter the size distribution of independent producer firms through its new "bundling" process. This strategy can claim some success where alliances have gelled and endured. However, there have also been high risks, failures and even occasions where bundling is perceived to have had the potential to substantially reduce the prospects of a firm. However, in any population of small firms there will always be a very small group of 'fliers'. The growth prospects of these firms will be favourable, probably irrespective of bundling.

8.9 Finally, S4C faces unresolved conflicts regarding how much it invests in the future at the expense of the present, and the pressure of pursuing quality at the expense of quantity. While funding remains fixed in the short-term and longer-term commercial prospects gestate slowly in an otherwise frantically changing world, these unenviable choices cannot be resolved without causing dissatisfaction. However, a gold standard approach is required to confront this 'brave new world' - a consensus shared by S4C and its suppliers regardless of where the sector is driven.

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The opinions expressed in this report and the conclusions drawn are the responsibility of the authors. The quantitative impact assessment is based on best estimates and cannot fully represent fluctuations resulting from changes to genre, location etc.