Public Service Media
in the Digital Age

Continuing our contract
with the people
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The Digital Opportunity

Though its core principles, and core services, remain the same, public service broadcasting is in continuous change, brought about by new programme production and technology (the ‘digital revolution’), and the growth of the Internet and other new media.

Electronic media has also become an international industry, no longer operating only within national boundaries, and no longer regulated solely by national authorities.

On the one hand, this internationalization has opened up new opportunities. Europeans can enjoy a vast range of programming, designed for both a national and an international audience. The internationalization of the media and the new digital technology can, at its best, encourage global culture and international understanding, and bring more choice to the individual.

On the other hand, national public service media who are there to draw on, and celebrate, cultural diversity, national citizenship, language, culture and identity, now share the media landscape with international media-corporations. They often combine telecommunications, IT and media operations or are worldwide IT organizations whose interests do not include national ‘cultures’. Their objective, entirely logically, is to create shareholder value for their owners.

Much of the world is concerned about the possible eventual negative effects of ‘globalization’ on the quality and richness of life, and in broadcasting and the media we are not immune to these concerns.

These developments have been a formidable challenge for the community of European public service broadcasters. For most of their 50-75 years of existence, many have been near ‘monopolies’ or ‘duopolies’ within national boundaries, regulated and protected by national legislation. Their production and distribution of programmes was carried out in a relatively straightforward analogue technical environment, undisturbed by wholly commercial companies and ‘gatekeepers’ controlling access to the home with proprietary technology.

Technological developments, changing consumption patterns, and the internationalization of the media industry forces public broadcasters to re-think their programme policies, their technology, their ways of operating, their organizational structures, and their existence as institutions. This volume is intended to help them to do so.

This was the background for the setting up of the first Digital Strategy Group (DSG) by the EBU in 1999. The task of the group was to undertake the following:

- Investigate the need for common perspectives on the digital revolution – and international media – developments, and what they may bring, in terms of opportunities, to national public service broadcasters.

- Identify areas of concern in the field of new media, and ensure that they are appropriately acted upon

- Identify issues requiring immediate attention, such as multi-channel navigation, gateways and home storage.

The results of the work of the Digital Strategy Group and its recommendations were presented in the first report of the

Later in 2003, the Administrative Council established a follow up activity, the DSGII, to monitor and follow developments identified by the first DSG report. Though the DSG report was forward thinking, by 2005 it had been overtaken by new developments in certain areas, while in other areas the pace of change was slower than had been predicted. The DSGII was invited to prepare a revised version of the original DSG report for 2006. This report is that revised version.

Reading the report, and evaluating its analysis and recommendations, we should bear in mind that European public service broadcasters, although sharing the same main objectives and working along the same principal lines, represent a diverse group. Some of them are among the large media companies operating on an international scale and with strong positions in their national markets, while others are small players in the media industry. Some EBU Members – large as well as small – are relatively well-financed and operate technically up-to-date production facilities, while others lack financial and technical resources.

In most European countries there is a political and popular understanding of the value of public service broadcasting, and of the need for editorial and economical independence from both political and commercial interests. But, there are also examples where the degree of independence from political and commercial influence is weaker. This must continue to be challenged.

Against this background, it has not been the objective of the Digital Strategy Group to present a detailed ‘one-size-fits-all’ analysis and precise description of the route to follow for each and every one of the over 70 members of the European Broadcasting Union. Rather, the group has tried to draw attention to a number of likely developments in the broadcasting environment relevant for all broadcasters. Based on the analysis of these developments, the group suggests a number of strategies – or elements of strategies – which will be taken into account by EBU Members addressing their own digital challenges.

Making realistic strategic forecasts in a complex media environment is not easily done – as the developments in the first years of this millennium clearly shows. We have a seemingly inevitable tendency to overestimate the speed with which these changes will overtake us. The late 1990s was the ‘age of gurus’, who predicted the death of broadcasting, and enormous structural changes in society as a result of the Internet. After the ‘dot com bust’ of the early years of the century, we vowed that the time for ‘hype’ was over, and we would never again be taken in by the excesses of ‘futurism’. We must try to do so. But change is ahead – as broadcasters we know that our whole environment will eventually be digital, and that the number and technical quality of our services will rise, and that we will need to make choices about delivery means. The question is not if these revolutions will happen, but how and when they will take place. We need to manage change, not fear it.

The Digital Strategy Group, on several occasions, reported its work to the Administrative Council and the General Assembly of EBU, and received important suggestions and perspectives for its further work. The analysis and recommendations of the first report were finally presented to, and approved by, the EBU General Assembly in Naples in July 2002 and published as a book in 2003. By 2005 it was clear that the original report needed to be updated. Much of the original work is still valid, but there are major new directions for broadcasters to consider – including new delivery systems such as broadcasting to mobiles, broadband, and high definition television. As the first volume captured it, though we tend to overestimate the speed of introduction of new technology, we also underestimate its eventual impact.

The DSG and DSGII groups have drawn heavily on advice from many informed experts from Members of the EBU and the staff of the permanent services of the EBU in Geneva. We thank every one for their help. Special thanks must be given to the chair Andreas Weiss (ARD), the Secretary of the group David Wood, and to Lina Vanberghem, from the EBU in Geneva. A list of the members of the DSGII group can be found in Annex 2 of the report.

The multimedia environment of the future is challenging us all. We, the public service broadcasters, must continue to study, adapt to, and respond to, the evolving environment. Our organizations must expect change, and be ready to adapt to it. They must submit themselves to, but also shape, the future of broadcasting in Europe.

Public service broadcasters are among the guardians of Europe’s human values, its traditions and its heritage of pluralistic democracies, for coming generations. We must not fail them.

Jean Reveillon
Secretary General, EBU
Managing Digital Evolution
An introductory set of Recommendations

Below is an introductory set of recommendations from this report. This set is by no means comprehensive, and many are self-evident, but these are among the most important for public broadcasting management. They provide a sample of the messages the DSGII believes are important for EBU Members.

1. Use new technology, new formats, and new organizational structures; continue to innovate – but NEVER, NEVER TAKE YOUR EYE OFF THE PEOPLE YOU ARE THERE TO SERVE. Stay close to the viewers and listeners. The aim must be to go from strength to strength, serving the public interest, without over-extending, nor running too far ahead of public interest and demand.

2. The most important product of public service media providers is their PROGRAMME CONTENT. Their primary objective, in the new media age as ever, must be cost-effective and high-quality programme production. Public service broadcasters need to continue to see their broadcast generalist services as a mainstay of their public service mission. The new media delivery tools must be used to complete the programme offer and to develop new services appropriate to the changing pattern of consumption.

3. Public service broadcasters need to TRANSFORM THEIR ORGANISATION FROM SINGLE MEDIA ORGANISATIONS TO ‘MULTIMEDIA’ ORGANISATIONS. Whether a television or a radio organization, or a combined organization, we need to move to be in the business of making ‘scalable content’. We need to see the totality of the media tools available, and the totality of delivery platforms, as the basis for their work. This calls for changes in working methods, attitudes, and structures. The Director General must be the first to say “we are now a multimedia organization”.

4. Public service broadcasters must develop and establish their BRANDS. They must be seen to be, and be in reality, islands of trust and high programme values in the traditional and new media environment. The brand will serve as a mark of distinction across all media tools and delivery platforms. But respect and esteem do not come as a right. They must be earned.

5. Public service broadcasters must take steps to ensure that they continue to have access to the finest quality content. This will require concerted action to SECURE CONTENT RIGHTS. Public broadcasters need to investigate what rights they have for their existing content for new and extended services, and furthermore they must anticipate a future environment where some owners of ‘premium’ content will be attracted by the prospect of bypassing broadcasters. There will be more ‘competition’ for the best that is produced outside or own walls.

6. One of the biggest changes that public broadcasters need to make concerns their own internal HUMAN RESOURCES. The new world of digital technology and ‘information systems; production by software, and scalable content, call for new skills and new attitudes. Many staff must become multi-skilled. Finding the right kind of people for the new environment, and treating existing staff appropriately, is no easy task. It must be done. Technology can be bought. People must be cared for, and led.

7. A CRITICAL ELEMENT OF THE PUBLIC SERVICE MISSION IS INNOVATION. PSBs need to be responsible pathfinders for new technology, new services; and, most of all, for new content. The fundamental quality for leadership in public service media is the ability to learn and change.
Chapter 1

The Public Service Mission – what does it mean in the digital age?

Four cardinal rules for public service media providers

There are four cardinal rules for public service media providers in the digital age. These are not related to a specific medium, but need to be adopted by all public service media providers.

- **DEFINE YOUR ROLE.** There are no laws of physics that give public service broadcast and media providers (PSBs) the automatic right to exist. PSBs are valuable to the individual and to society, but they must explain what they are, what they do, and why they are valuable. The organization must have a ‘due process’ to establish and define their role. **Public service broadcasters must take the lead in the public debate.**

- **COMMUNICATE YOUR ROLE.** Public service broadcasters must be active in explaining to their nation and national administration what their role is; and, critically, explaining it to their staff. Concerted efforts must be made to communicate their role in a clearly understood and logical way. If it is not communicated, public support for the public service broadcaster’s objectives risks being compromised.

- **REGULARLY REVIEW YOUR ROLE.** Technology changes continuously. ‘The only thing permanent is change’. The context in which PSBs operate changes. PSBs must ask themselves regularly whether they are still achieving all they could for public with the tools available. Definitions of the mission and objectives of public service media need constant revision and ongoing public consultation.

- **CHOOSE THE PATH OF INNOVATION.** Assess the public value associated with new content and new services, and where the benefits justify, take a leadership role at the national level, and work in the EBU at a European level. Encourage and help the citizen to make use of new media, and be their trusted guide.

The Economist’s basis for Public Service Broadcasting

Products or services that are beneficial to the whole of society are called ‘merit goods or services’. These include services that lower pollution, encourage economic growth, encourage cultural awareness, good citizenship, etc.. Where the market economy alone does not produce as much benefit as the product or service has the potential to provide, regulation is introduced, to help it to do so. This is ‘market intervention’ in the public interest, applied to help and encourage merit goods and services. If a market economy, left to itself, would not produce merit goods or services, or not produce as much merit goods or service as it could, this is termed ‘market failure’. Regulation is used to correct market failure.

The case for regulation to set up public service broadcasting is that, left to itself, the market economy will not do justice to the potential benefits for society of the media – left to itself there will be a degree of ‘market failure’, across the spectrum of viewer’s and listener’s needs. The electronic media are of considerable influence on society, and can be a considerable positive force. More benefit can be gained by creating national and local audio/visual structures than by leaving the market entirely alone. The private sector can and does provide media which are ‘merit services’, but experience shows that because of market pressure for profitability they cannot exploit the full potential of the media for society. This is the essential case for public service broadcasting, and the premise that it helps society and
compensates for market failure has been confirmed by worldwide experience.

Goods and services that are available to everyone, that can be used by everyone (rather than being sold to individuals), and cannot be 'used up', are called 'public goods and services'. Free-to-air broadcasting is available to everyone, and cannot be 'used up' by individual users, and so falls into this category. One of the characteristics of 'public goods' in general is that they may need to be paid for by society as a whole, in the form of licenses, government grants, or advertising.

Public service broadcasting is both a 'merit service' and a 'public service'. Merit goods and services bring to society different degrees of 'merit' or benefit. Public service broadcasters need to quantify the degree of benefit they bring, and optimize it. Since what they supply is a 'public good', the 'measure of benefit' is termed the 'public value', though it might also be called 'merit value'.

The economists’ case for public service broadcasting is that the public value it brings is positive ('merit') and thus it justifies, the framework in which it operates – the public expense incurred when needed, the granting of rights to spectrum, or the special status given to it.

Those who establish and manage public service broadcasters need to optimize the public value. This means finding the best trade off between quality and quantity of output, and organizational cost and efficiency. This is not an easy task, but it is necessary for all public service media providers – for new and old media.

Public value is complex to evaluate quantitatively. Measures are available, principally derived from feedback from the public. Public service broadcasters usually cannot use conventional private sector measures of efficiency to express their performance. There is no profit margin to indicate whether the organization is becoming more or less efficient. Yet PSBs have a duty to demonstrate their value to society, even if complex. They need transparent management and accounting practices that demonstrate that their services are being delivered cost-effectively, and are providing the maximum public value for the funds available.

The concepts of merit goods, public goods, and public value apply for all media activities of public service media providers. The task of public service media management is to evaluate the public value potential of media systems and services, and take decisions about which services they should provide, based on this evaluation.

**Regulatory models of Public Service Media**

Public service broadcasting (or other media provision) can be a combination of three central features or elements, in a “contract” that is given to a broadcasting or media institution by society, and which defines the following:

- Its obligations to society,
- The regulatory framework required for it to produce and distribute the programming by which it fulfils its obligations, which include effective governance and accountability,
- The method of financing its activities.

The three features can be seen as a common frame of reference, upon which specific national definitions and descriptions of public service media can be built.

**The Obligations of Public Service Media**

The central feature of the definition of public service media, distinguishing it from purely commercial media providers is its obligations to society. Where wholly private media companies work primarily in the interests of their owners or shareholders, public service broadcasters are obliged to serve the whole society by enhancing, developing and serving social, political and cultural citizenship. In doing so they provide media content with the following characteristics:

- Universality of content and access
- Editorial Independence
- High Programme Values
- Accountability.
Each attribute is achieved to given degrees. The public service broadcaster and media provider strives to achieve the attributes to the maximum practical extent. The public service media provider has a responsibility to be cost-effective and efficient in its operations to achieve these objectives.

There are many differences between European societies, both from a cultural, political and economic point of view; and there is no unique and precise recipe for how these elements should be achieved, or the extent to which they should be achieved. But, in spite of these differences, there is sufficient common ground, on a broad European level, to present a number of fundamental principles, which can be seen as guidelines for formulating the obligations.

Universality of Content and Services

Universality has three dimensions:

- **Universal reach** across the full portfolio of services and delivery platforms, some of them specialized or tailored for specific audiences, providing an extensive and comprehensive range of services.
- Supply a **full range of content on generalist channels** including mass appeal programming central to the public service broadcaster offer and the need for the ‘shared experience’ by the nation.
- Maximum **flexibility for audiences** in the ways they can access content, on all significant technical platforms.

Reach

Audiences can be measured in a number of ways, but one is termed ‘reach’. This is the number (or proportion) of different individuals that select a service (rather than a specific programme) over a given period of time, which might be for example, one week. This is not the same as the size or share of the audience for any given programme.

For public service broadcasters ‘reach’ can be more important than size or share. While share is important for advertising revenue, reach – the measure of how many different people use a service – is a precondition for public support.

As users adopt new platforms and new technologies, public service broadcasters must ensure they make the best use of the new media to maximize the reach of their services, and users access to them. **Reach is part of the demonstration that they are meeting needs across society.**

Range of content and services

In the former times of frequency spectrum scarcity, public service broadcasters needed to cover all types of programming and genres in their one or two channels. There needed to be popular programming for the general public, as well as programmes which addressed special interest groups. Today the multiplication of outlets, of technical platforms and services, for some, calls into question the need for this full scale programming, and there can be pressure on public service broadcasters to concentrate on the provision of programming which is not able to draw large audiences or advertising.

But like reach, a full range of programming is necessary for public value and widespread support for PSB. Full range programming and universality of content is vital for public broadcasters to fulfil their obligation to society. All citizens should have the possibility to find programmes on the public channels to their taste and about their interests. The nation listening to radio or watching television or using new media must find what they seek and need via the public service channels.

Public service broadcasters have a duty to produce a distinctive high quality offer in every genre of programme including popular genres like entertainment, sports, movies, as well as more challenging content. Social cohesion can only be achieved by the shared experience of programming which is ‘popular’. Popular programming is as much a part of the public service mission as programming for minorities.
Convenience

Public service media must, in the coming years, while remaining a universal service, go beyond serving everyone at the same time and in the same way. It will have to go where the audience is, i.e. offer both generalist and thematic channels and on-line, interactive and other new services such as mobile television if they are widely used. To serve the public, the goal of public service media should be presence on all relevant media platforms.

Public service broadcasters must find the resources to allow them to make the transition to ‘public service media providers’.

In its traditional role of promoting societal cohesion, public service broadcasting should assume a responsibility for promoting digital inclusion. It must participate in all significant areas of new media. Its tasks must include:

- Developing strong and recognizable programme and brands, serving as a beacon of service for people among the multitude of new content providers;
- Supporting traditional broadcasting content with Internet and interactive resources and mobile broadcasting content;
- Being available on all digital platforms, wherever the public wishes to find public service media;
- Providing multimedia interactive services, independent and complimentary web services;
- Actively promoting digital media literacy and awareness of the tools of the information society, in particular the use of Internet;
- Providing content in local and minority languages in order to encourage minorities to use the tools of the information society;
- Promoting open technical standards which will help accessibility.

To be able to fulfill these tasks, public service broadcasters must keep pace with the general trend of transition from a ‘mass society’ to a more ‘fragmented society’, in which people seek more personalized services and products, tailored to their needs. The demand for programme and other services to be delivered to audiences where and when they want must be met.

The individual will also have more mechanisms available to contribute her or himself to media content, which others can see or hear directly (‘Open Source Programming’), or which can be used as contributions to professional content (‘User Generated Content’). Audience members increasingly want to be more actively involved in producing the services (including information and cultural services) they consume. Public service media need to develop ways of accommodating this “individualized communication culture” by using the new technologies to deliver a more personalized public service.

Editorial independence

One of the primary features of public service broadcasting is its independence from biasing influence by the state or by any political, religious, economic or other interests. Yet, the independence of public broadcasting from influence by the state presents, in some senses, a paradox.

- On the one hand the public service institutions and activities are owned by society, whose representatives – parliaments and governments – are entitled to define its remit, set up the rules of governance, and decide its financing.
- On the other hand, public broadcasting cannot live up to its obligations as a trustworthy source of information and enlightenment, if it is playing the role of spokesman of government. Independence must therefore be defined as editorial and economic independence, securing that programmes and other content that are made to serve the whole public and not special interests.

Editorial independence is the key to public support for public service broadcasting. The heart of any public service broadcasting mission is that the PSB should serve the public – the community of citizens. A broadcaster that is perceived to be unduly influenced by political or economic power, and under that influence, to be neglecting its duty of impartiality, will loose public support.
Broadcasting is a ‘political’ activity. It has unequalled power to form and influence public opinion. Accordingly, pressure on broadcasters to conform to political or other interests can be considerable.

Effective influence and impartiality depends on the broadcaster’s own resourcefulness and willingness to defend it, at least as much as on the good-will of those that have the power and influence to reduce it. Public service broadcasters must treasure their independence, and be prepared to stand up for an impartial and authoritative portrayal of reality, in the face of outside pressure.

Developments in several European countries remind us of the need to maintain vigilance in guarding editorial and economic independence.

**High 'Programme Values'**

- PSBs are ‘engines of investment’, they are the key tools for ensuring that nations and communities sustain investment in original and high quality content production.

Most public service broadcasters sustain significant production capacity. They offer the audience new, original, first-run programming developed for the audience and within its cultural context, resonating with themes, characters and references taken from its current circumstances of life. Public service broadcasters should consider provision of such programming as one of their primary tasks.

Public service media serve democracy and the political institutions of society by providing a forum for broad public debate on national issues, and by being a watchdog of national authorities. To do so, they remain a mainstay of national audio-visual production capability, developing and nourishing talent, with increased ability to achieve these goals across a wider range of programme and other services and content output.

- There is no contradiction or trade off between the pursuit of quality and the pursuit of success with audiences. PSBs must pursue both. Quality in all genres is the mainstay of public service media.

The services of public broadcasting can in some ways be considered as the ‘town square’ or ‘market place’ of modern society. It is one of the ‘places’ where people gather to learn and contribute to what is going on in the world they live in. Radio and television is our prime supplier of news as well as entertainment. It is the place where the history of the past is being told, and the music of today is played. The media has an important influence on the national languages, music and art, and on the social values of society.

- PSBs must cultivate a balanced relationship with the independent production sector. A critical mass of in-house production can ensure that PSBs remain a key production centre and an engine of investment, while significant recourse to independents helps to ensure that there is effective and creative competition based on quality.

- Public service broadcasters should aspire, in each type of content or service, to constitute a benchmark of high quality. Much public broadcasting content has always challenged the audience, and extended its taste and knowledge. This must continue and be extended to the new technologies and services.

Defining the attribute of ‘quality’ or ‘programme values’ in the media is quite complex. It is the continuous search for originality, to mirror our lives and our world through the media. It is the creativity, hard work, and dedication of the programme maker to the public service mission.

Public service broadcasting has special obligations and purposes. Public service broadcasting continues to be dedicated to supporting national culture (where culture is the collection of defining elements of our lives rather than ‘high culture’), producing national programme content, supporting national languages, drama, art and music.

**The role of public service media in national and international citizenship**

Public broadcasters know they have to spread awareness of the additional (both supra- and sub-national) dimensions of citizenship, as well as individual and societal co-responsibility. The public rightly expects ever more in-depth information on the international scene and on individual foreign countries.
The programming of public service broadcasters also provides a forum for international debate on policy issues. It helps develop – and be part of – the international/global public sphere, serves as a watchdog of international bodies and organizations, promotes and defends cultural diversity at the international level.

At the same time, with globalization and international integration, people seek stronger roots in communities they can identify with. In response, public service broadcasters are there to provide programming closely attuned to the lives of regional and local communities.

A special obligation to public broadcasters of today’s Europe is to reflect our increasingly multi-ethnic and multicultural societies. This must not, on the other hand, take the form of unduly accentuating differences or ‘ghettoizing’ different social and ethnic groups by locking them into ‘walled gardens’ of programme services, dedicated solely to them.

**Accountability**

The public service mission is quantifiable in general terms, but not to the last letter. It is possible to make accounts of hours of broadcasting in different programme-categories and genres, and to find whether these statistics are growing or shrinking. But it is much more difficult to measure how good the net benefits of public service broadcasting are – whether they are improving our lives or not – the ‘public value’. A key attribute of public service broadcasting is ‘accountability’.

We need, as far as possible, to specify the public broadcasting mission and the extent to which we are fulfilling the obligations, but at the same time to recognize that this will not be a complete template, and that ultimately it is ‘accountability’ which will, in a sense, define the public service broadcasting activities.

Public service broadcasters need to seek mechanisms for accountability, in a continuous search for feedback and appraisal of what they do. New technology, such as return channels and Internet, make this process even more effective and convenient.

Public service broadcasters should do all they can to promote systems of governance and control capable of assuring independence from political power and effective accountability to the public at large.

**Public service media – range, innovation and availability**

In the digital environment public service broadcasters have the opportunity to fulfill their mission in new ways, adding even more value to society than they do today. But if they do not respond, if they take no action, they may find themselves relegated to providing television services for those who cannot afford Pay-TV. Public service broadcasters must rise to meet the challenges of the new environment – they must stimulate and lead the debate on public service media. Their present structures may need changing. They have to adapt themselves, and be pro-active, in order to play their full and rightful part in the new media environment.

At the same time, there are fundamental principles of public service broadcasting, which must continue to guide the strategy and policy of public service broadcasters in the digital environment. These include universality and diversity, accountability, and independence. Company policy must be directed to maintaining these objectives. The public service mission is, by definition, a service to the citizen.

- This means that it must be universally available. If the service is only available to some social or geographic groups, it is failing in its fundamental purpose. As part of the evolution of delivery technology the audience will fragment to different delivery systems or combinations of them. Public Service Broadcasters cannot expect the ‘mountain’ to come to them. Public service content provision must be available on all media where a substantial segment of the public finds its electronic media. Thus, public service media providers need access to terrestrial, satellite, cable, and broadband networks. They must also be a part of the evolution of services on the Web and mobile broadcasting.

- This means that it must provide globally a full range of media content. It is no longer essential for a single channel from a public service broadcaster to provide a full spectrum of content appealing to all interest groups in society. But it is necessary for this to be provided by the total range on offer, including web content that the public service broadcaster provides.

- This means that it must have editorial freedom, and independence from both political ties and commercial bias.
The changes that PSBs need to make

The evolution of media delivery options and the changing of the media value chain oblige public service broadcasters to reconsider their place in the media world, the way public broadcasting is regulated nationally and by international bodies, and the way their activities are to be financed in the future.

The public service broadcasters must also evaluate the extent to which changes to their programme policy are needed, and how and when to introduce multimedia and interactive content, as well as the issue of how to manage content rights in the new environment. They must redefine their place in the new value chain, and their relationship to other organizations, private and public, which form other parts of the chain. This includes organizations whose breadth of operations makes them new ‘gatekeepers’ to the public. Public service broadcasters must review the way they handle their production processes, technical infrastructure and organization.

Public service media provision will not be uniform, manifesting itself as a single concept, which is the same for every institution. But there will be shared visions and shared objectives. As new forms of programme delivery are developed, the institution must be an efficient, living and changing organism, which responds to the environment while keeping its core values and purpose.

Recommendations

1. Apply the four cardinal rules for public service broadcasting – define your role, communicate your role, regularly review your role, and be innovative and pro-active

2. Use ‘public value’ as a measure of success in fulfilling the PSB role – making a difference to people’s lives. The real measure of public service media is not what happens on the screen or on air, it is, in some senses, what happens afterwards.

3. Make it the role of management to include methods of measuring and evaluating public value; and, at the same time, maximizing the public value for minimum cost.

4. See the framework for PSB as a contract, the terms of which must be clear – a method of financing which is conditional on fulfilling obligations which relate to public value, all within a regulatory framework.

5. See the obligations of public service broadcasting as fourfold: universality, independence, accountability, and high programme values. These are not ‘absolute’ quantities, but the role of management is to maximize them at the same time as the efficiency of the organization.

6. Take the initiative and lead the public debate about the future of public service broadcasting.

7. Continuously anticipate the future by keeping attuned to technology, social, and business trends.
Chapter 2

Services, distribution, marketing

Trends and tendencies of the electronic media

In the media, there is no unique and inevitable future which can be prescribed in advance. We can however identify trends and tendencies, as a snapshot of a dynamic development. We need to be vigilant, to constantly review the evidence, and look for new turns of events that will have a major impact.

The process of analysing the future has to be cyclic. The beginning of this process was the purpose of the first DSG report, which was first published in summer 2002. Four years later, this edition updates the analysis and recommendations. A similar review will be needed in future years.

The media environment continues to evolve. In order to understand the situation, and the way public service broadcasters need to respond to it, we can identify changes in four interconnected areas: technology, market environment, consumer behaviour, and the regulatory environment.

TECHNOLOGY CHANGES accelerate with the growing use of digital technology. Digital technology makes possible new ways to produce and deliver media, and brings the wider use of ever more sophisticated multimedia, interactivity, the option of multichannel services, on-demand services, and the availability of different picture and sound quality options.

In fact, there are two parallel technological revolutions underway. The first is the 'analogue-to-digital' revolution. The second is the 'digital-to-software' (or IT) revolution. It is the combination of these two that is the enabling mechanism for many critical changes in the media environment.

Currently, new media products and new media delivery networks take advantage of the following digital technologies:

- **Linear Digital Broadcasting and Cable-casting** (including DVB-T, DAB, DVB-C, DVB-S, DVB-S2) enabling television and radio services of flexible technical quality, and the addition of multimedia ‘applications’ (for example, EPGs, enhanced radio & television, digitext, play along) to the traditional broadcast signal.

- **Broadband Services using Internet Protocol for television and radio content** (IPTV and IPR), on fixed telephone lines and broadband networks, using DSL or other broadband technology, including wireless technology, to provide normal broadcasts, services-on-demand, and interactivity. These can be provided in a ‘triple play’ environment: where radio, TV, fast access internet and telephony are provided on a single network infrastructure or platform. IPTV networks are available to restricted groups of users, the so-called ‘walled garden’, and thus offer content defined by a network operator. Broadband can also provide access to the open Internet, so-called ‘fast access Internet’.

- **Mobile Services** dedicated to new mobile and handheld devices by digital broadcast technologies (DVB-H, DMB, which can be based on Internet Protocol or broadcast protocol) and digital IP telephone technologies
Music and Game downloads, real and “virtual” Video-on-Demand (using the storage capacity of “Personal Video Recorders”), audiovisual services for mobile phones and digital High Definition Television transmissions at relatively low bitrates were not practical even a few years ago. The innovative combination of technologies paves the way for many new business models, of which Apple’s “iPod”, i-Tunes, and ‘podcasting’ is an important example, which will have profound implications for the media industry.

While traditional ways of consuming radio and TV services (‘linear services’) will remain at the core of electronic mass media in the foreseeable future, they will make up only a portion within the range of new delivery platforms. While not over-estimating the speed of change, Public Service Broadcasters should understand and accept this evolution as among their most important strategic challenges.

MARKET ENVIRONMENT CHANGES include the globalisation (or internationalisation) of media interests. Market economics almost inevitably lead organisations to grow and to seek ever-larger markets. To an extent, market evolution stems from the effect of converging technologies and its constant melting of “natural” barriers between once separate markets. Telephony is now available on traditional fixed lines and broadband cable, via the Internet and through wireless technology. All these networks also potentially offer Internet access and broadcast content (“triple play”).

Broadcasters not only deliver their existing channels via DTT, satellite and broadband cable but increasingly also to digital telephone operators for DSL (fixed line) and in future DVB-H, DMB, and 3G (mobile). Some participate as content providers in a variety of commercial platforms that develop and offer added value media products “on-demand” via mobile 3G-packages, DSL operations, and “push” services to PVRs, and in the framework of new Internet business models (iTunes by Apple, Google Video etc.).

This has created more competition for audience time in the media sector. While many platform operators hope to safeguard their interests by vertical integration, the owners of premium content rights seek to increase their control by establishing "direct-to-home" outlets.

Coming from a position among the market leaders in the analogue age, some public service broadcasters now find themselves in a weaker situation. In small national markets, limited by language needs, viewers - and the media industry - still depend on the active contribution of the PSB organisations. But in larger markets which have large commercial media companies, viewers and the media industry are less dependent on PSBs.

In new media today, many Public Service Broadcasters currently provide content for digital distribution platforms, which are owned and controlled by commercial operators, and they share this market place not only with traditional competitors but also with brand new start-up companies — the music industry side by side with Hollywood studios, sports clubs, games providers and publishing houses. This affects the PSBs’ position in many respects. One of the most important is the Terms and conditions governing the new distribution platforms, which can be determined by the interests of the operators and their most important clients — those that add the highest commercial value to the platform. PSBs are not always among them.

Important parts of the platform’s functionality such as the digital rights management are shaped by the priorities of the users in business areas, also copy protection, encryption, interactivity, tariffs, content and service packages, Electronic Programme Guides, and subscriber management. Even if the PSBs, following their remit and/or the national broadcasting law, offered their programmes “free at the point of reception”, the basic fees levied upon the customers by the platform could gradually dilute the public perception of PSBs as free-to-air broadcasters. In the medium term, this might well affect acceptance of PSB funding.

Considering the multitude of platforms, some of which are based on proprietary technology, PSBs will face increasing difficulties to create added value content and services for each and every platform separately. There is a risk that financial constraints will oblige them to either abandon their further participation in the platform or surrender the customisation and the marketing of their content to the platform operator.

(2.5G, 2.75G, 3G) can provide access to a mobile version of “triple play” services. Internet Downloading technologies (podcasting) used in conjunction with mobile devices will be of major importance, and they can be used for both audio and video content. The viewer or listener can enjoy the downloaded programme at any time and location he wishes.

These innovative and powerful delivery systems are being implemented in many countries with different priorities and at different speeds. An ever increasing storage capacity in consumer devices, and ever more sophisticated compression technologies, support and supplement the development, providing speed, convenience and quality. These make the distribution of an unlimited number of new media products possible.
Equally, the space for inventing compelling new public service programme formats and applications aiming at strengthening the PSBs’ position are constrained – beyond the financial burden – by the limits of the different platforms’ technical capacities and their operators’ consent.

One important specific development is that rights-owners, upon whom broadcasters traditionally depend for recorded music, sports, or films, have begun using new digital outlets directly themselves.

The music industry has offered for some time products such as “music subscriptions” (streaming access to the music library for a monthly fee), “purchased downloads” (the Internet equivalent of a physical CD acquisition), “online samples” (Web channels experimenting with ‘timed-out’ content that plays for a period of time or a number of plays).

Four major Hollywood studios have the Internet movie rental service “Movielink”. They are partnering with platform operators to develop and implement digital video-on-demand, electronic sell-through and peer-to-peer services. To protect such exploitation, rights owners have pushed the traditional broadcast ‘time windows’ for showing feature films back in time.

Public Service Broadcasters need to define their role with respect to new digital delivery systems. New platform operators gain control over the media value chain, and those rights owners who develop their own outlets, seek as much control over their product as they can. Outside the “linear world”, PSBs capacity to bring the full range of content to their audiences in an autonomous operation is shrinking. Without adopting an appropriate strategy, the PSBs’ position could eventually be restricted to purely a “content provider”.

REGULATORY CHANGES include the legal consequences of the change of delivery opportunities from scarcity to plenty. There are many more opportunities for broadcasting and media delivery, and thus new regulatory frameworks are being developed to cope with this. The place and influence of the public service broadcasters in the media landscape is changing. National media regulation has to cope with more complex paradigms as, on the one hand, the media market becomes more competitive and more international; and, on the other hand, the role of broadcasters in satisfying the media needs of local, regional and national communities, of democratic public debate and of cultural identity becomes more important. This requires the position of Public Service Broadcasters on the highly complex marketplace to be defined.

Furthermore, European Union regulation is playing a larger role in media regulation. Public service broadcasters actively participate in media discussions in European instances, but more needs to be done. Public service broadcasters need to lead the debate at the European level. As the notion of broadcasting changes with the emergence of new delivery technologies and with convergence, there is some tension between national regulators (according to the “Amsterdam Protocol”, national authorities are responsible for media regulation) and the Commission (European competition rules also apply to the electronic media).

CONSUMER BEHAVIOUR CHANGES include the propensity for media viewing and listening to be less of a collective experience and more of an individual experience. This individualisation of the media experience is fuelled by the technological possibilities for providing more personalised services. In the same way as the Internet integrates the traditional media for individuals and user groups, mobile phones increasingly follow the same pattern. Programmes for use on mobiles appeal mainly the younger audiences. In some European countries young listeners substitute radio broadcasts with radio content downloaded from the Internet using ‘podcasting’.

Currently “Podshows” pushed from the “i-Tunes” website (which is responsible for about 70% of podcasting today) to the consumers’ PC, and then to a listener’s portable recorder (often the Apple “i-Pod”, and the latest cellular phones) are very successful. User generated content (UGC) is also coming to play a more important part in the new media.

Three stages in the evolution of the pattern of media consumption

Looking from a distance, at the years since radio and television began and into the future of broadcasting, we see a changing pattern emerging, with three main stages or eras (Fig. 2.1) which in many European markets are already available and overlapping.

The FIRST STAGE is (or was) the LIMITED CHANNEL FLOW world (the A element in Fig. 2.1). The viewer or listener is allowed a small number of programme streams or channels from which to ‘catch’ the programmes as they ‘flow’ by. Thus, the programme choice of the listener and viewer is (or was) determined by two central features of broadcasting: Channels and flow.
In the early days of broadcasting in Europe, when public service broadcast institutions were created, one argument for doing so was the “scarcity rationale”. The airwaves were a limited, and thus a precious, resource. Given the need for national coverage, only a few channels were technically possible. This world of limited numbers of channel flows represented the first age of electronic media. In some parts of Europe, it has already come to an end. The scarcity of media delivery means called for public service broadcasters to provide generalist channels with due care for programming for minorities.

The **SECOND STAGE** is, or will be, the **MULTICHANNEL-FLOW** world (the B element in Fig. 2.1). The viewer or listener is allowed a much larger number of channels from which to catch media as they flow by. This world is enabled by the technologies of broadband cable, telephone line, satellite, terrestrial DTT, and digital compression. This second stage often supersedes the first stage, when the limited channel flow delivery becomes unnecessary because there is universal access to the multiple digital channel flow. This can be part of the process of ‘digital switchover’.

Where there is a very large channel offer, the viewer/listener inevitably needs help in navigating it. An electronic programme guide or **EPG**, cataloguing and finding programmes across the many channels, can provide this.

Though EPGs have not met all predictions for use, the diminishing importance of the channel as the point of departure for the viewer is likely to continue. Public service broadcasters may need to move their “branding” from their channels, such as they are today, closer to the programmes themselves. Public service broadcasters will need to be active in the development of – or participate in – electronic programme guides to secure a visible position for their programmes.

Not all parts of Europe will enjoy the same kind of channel offer or timescale for the enlargement of services. There may also be different patterns for radio and television, but the general tendency will apply everywhere.

The **THIRD STAGE** is (or will be) the **ON-DEMAND** (neither channel, nor flow) world (the C element in Fig. 2.1). The viewer or listener is now able to choose from a range of individual media offers. He can watch or listen to them when he wants. The viewer or listener in principle becomes his own programme scheduler, though predetermined channel flows will still be present for those who want them.

Some media content will need to be available at particular times, such as sports events, so even in an on-demand world, we will still have available the power of the ‘shared moment’, but most content will be there when and where we want it. Broadband networks via digital cable networks, PVR, or digital telephone networks (DSL) provide this world.
Cable and telephone operators create Internet Protocol TV ('IPTV') platforms as “walled garden” architectures, usually based on ‘DSL’ technology. They control the signal flow to and from the consumer devices – and thus have an important impact on all broadcasters and content providers. In order to bring their linear programmes and “Video-on-demand” – offerings to the end user, they need to be accepted by the network operator. Offering content via freely accessible sources on their own – via terrestrial distribution or the open Internet – and routing it to the customer’s TV set (or the set top box) is currently often impeded by the network operators in order to protect their business (channel packaging, video-on-Demand).

Some mobile telephone operators currently are trialling IP services based on broadcast channels (DVB-H, DMB) and digital telephone channels (UMTS/3G) technology. Thus the mobile phone may become a powerful multimedia device integrating telephony, broadcast and internet capacities in “triple play” architecture. As DVB-H and DMB are ‘broadcast’ technologies, some Public Service Broadcasters believe that their free to air terrestrial programmes should be freely available also on those mobile phones. This issue is likely to be a critical strategic issues for many broadcasters in the year’s ahead.

In “walled garden” broadband networks, the ‘client storage’ or ‘PVR’ systems can be integrated together in the operation, serving as a local ‘server’ for on-demand content.

PVR receivers are available in all parts of Europe – in most cases serving as a substitute for the traditional video recorders in the free to air environment. Also ‘PCs’ equipped with TV receivers are being used as ‘PVRs’. Finally, ‘Mobile Phones’ increasingly provide storage capacities, serving as MP3 music players or as PVRs. In the Pay-TV environment however, the PVRs are in general designed as a feature offered by the pay TV operator at an additional monthly fee or at a ‘pay-per-view’ fee. The EPG can be used to ‘program’ a PVR, and thus the broadcaster must obtain clear and prominent visibility on the programme guide from the EPG operator – who is often the delivery platform operator.

Across the new eras, the content delivered will progressively include more ‘MULTIMEDIA’ and ‘INTERACTIVITY’. The services will make more use of the technical capacity available for the viewer to interact with the programmes via his remote control, keyboard or cellular phone.

THE THREE-STAGE MODEL of the evolution of delivery systems for electronic media (limited channel flow, multichannel flow, on-demand) is a simple interpretation of current trends. It is important to realize that the three stages overlap each other. They are not consecutive in the sense that one will take over abruptly from the other. In fact, some European media consumers are already today using all three ways of consumption. Stage 2 (multichannel digital) will be a substitute for Stage 1 (limited analogue channels), and thus when there is no longer a need for Stage 1 it can be terminated. However, there will be a different relationship between Stage 2 and Stage 3, where the combination of stage 2 and 3 may foster synergy rather than substitution.

Podcasting has already caused, in some countries, a major shift of young audiences away from radio to the new customizable download content, and this may be an important indicator of future trends.

The precise timescales for the transitions between the different stages is impossible to predict, and will vary in different parts of the world. There are differences in economic climates, tastes, population sizes, and existing infrastructures, which will influence this, even within European nations. We can predict that these will be the three stages of media delivery, but timetables for the changes, and the likely periods of overlap, are much more difficult to predict.

The user may not migrate or switch from programme channels to on-demand. He may continue to use broadcast channels as the principal media delivery channel, but there will be additional layers of multimedia and programmes on demand added selectively by the media provider, and used selectively by the viewer. A vision that Public Service Broadcasters might aspire to could be described as follows: having a central broadcast core around which is wrapped optional additional supplementary services of multimedia and programming, delivered either by the broadcast network itself or, at its discretion, the free internet or the operator’s ‘walled garden’ network, via broadband or mobile phone.

There are many dimensions which will affect the success of such ‘cooperative content network’ systems – infrastructure availability, costs, user-friendliness, and others, but this model could shape the future face of ‘convergence’. However, first implementations by cable and network operators do not reflect this vision of a basically ‘open cooperative platform’.
HDTV – the inevitable future for video delivery to the home

HDTV provides about four times the detail available with standard definition television. It is already available in Japan, Australia, and the United States, and services are now available in Europe. HDTV will change dramatically television viewing patterns and production in the years ahead.

HDTV will not change the general pattern of evolution described above, and requires the digital channels that will be available from the multichannel worlds, and the on-demand worlds. But the size increase in viewer’s receiver screens, and the high quality sound and vision, will lead to a different relationship between the viewer and the programme, and hence the broadcaster.

The possibility of watching an ‘immersive’ show at home will become an ever more natural requirement for the viewer, and broadcasters will need to respond to this. HDTV may represent an opportunity for differentiation with new operators and network operators for several reasons:

- HDTV will be a service for large screens, and thus it will not compete with the network operators for mobile services
- The value of HDTV is particularly strong with sports programmes, movies, and documentaries – areas where broadcasters are very strong.
- The experience and know-how that broadcasters have with making ‘events’ programmes such as sports is likely to make them ‘market leaders’.
Changes in the media value chain

As already indicated, probably the most important change in the media landscape is in the media value chain between the broadcaster and the consumer. Until recent years there was only one element in the chain separating the programme maker from the consumer – the operator of the broadcasting network, either being publicly owned or operated by a private company (Fig. 2.2). That element was merely a technical service, which did not interfere with the content, the rights or the financing of the broadcasted programmes.

Into this traditional value chain, two very important new elements are now introduced (Fig. 2.3). The “GATEKEEPING” FUNCTION and a number of NEW DELIVERY NETWORKS. The gatekeeper will, through its control over new functions such as multiplexing (MUX), electronic programme guides (EPG), conditional access (CA), application programming interface (API) and subscriber management systems, control the ‘admittance’ of the consumers to the programme content of the broadcaster, and the possibilities the broadcaster has to be in contact with the audience. This control will also determine the flow of funding, and thereby change the way broadcasting may be financed.

The second new element in the chain is the many new delivery networks in the digital age. Digital radio (DAB), digital television (DVB), the Internet (in all its variants) and telephony bring new possibilities both in content, and in ways of reaching the audience. But, as can already be seen in the satellite, cable and terrestrial world, they also give room for new commercial operators using their own delivery platforms to create their own broadcasting environment. The current trend is fragmentation of programme delivery which shifts from traditional broadcasting to the multitude of platform, accompanied by an increasing segmentation of audiences.
Programming policies for public service broadcasters in the multimedia environment

The main product of the public service broadcasters is, and will continue to be, content. Public broadcasters should always focus on ways of producing high quality content in a cost-effective way. The balance of the resources of the organisation should be dedicated to this, and management should always keep this in mind.

Fig. 2.4: Elements of PSB content-strategy in a digital environment

Whether radio, television, or both is their business, public broadcasters need to make a conscious and planned move to become ‘multimedia’, rather than ‘single media’ organisations. Their products are not to be just linear programmes, but scalable media products that can be used for multiple delivery platforms. The linear programme is a core component, but creative use should also be made of multimedia. The programme maker needs to create a product with all the relevant media elements available, and for all the delivery platforms that will be used. This requires substantial change in thinking and management. Elements of a public broadcasting strategy for content in the digital environment are illustrated in Fig. 2.4.

1. The overall obligation for public broadcasters continues to include UNIVERSALITY IN PROGRAMMING. This is a precondition for a continuous and close relationship to the audience, meeting the cultural and social role of public service broadcasting.

2. Therefore, public service broadcasters must retain their GENERALIST CHANNELS as their priority in the multimedia environment. Choice of media content will be greater in future, and generalist channels will inevitably have a smaller share of the national audience. However, public broadcasters should not be seduced, because of this, into new separate commercial or high-tech business models, which are not consistent with their mission.

3. Instead, they should take advantage of new technologies to strengthen their existing programming – for example by adding NEW ENHANCED SERVICES to the existing channels and programmes. As added value elements to already popular programmes, enhanced services can build the bridge between the traditional channel flow user pattern, and the new interactive services. The new digital broadcast environment will bring channels with multimedia enhancements. Public broadcasters must be able to match or lead the field.

4. The introduction of digital radio (DAB) and television (DVB), the Internet and other new delivery means, give broadcasters the possibility to develop NEW INTERACTIVE AND ON-DEMAND SERVICES, which can only be used with digital receiver equipment. In the transition period from analogue to digital-only broadcasting, these may be difficult to justify, as these new services will not be universally available.
They are also not “broadcasting” in the conventional meaning of the term. These services create new ways for public broadcasters to fulfil their cultural and political obligations, by providing services which the individual can tailor to his own wishes and needs.

Public broadcasters need to recognize **THE NEED FOR A STRONG BRAND**, which signifies reliability and quality. They should consider having a specific function in the organisation with the task of developing and establishing the public’s perception of their brand. Brands can apply to groupings of channels and new media, individual channels, or specific programmes. The brand should be the bridge to new media. The more successful multimedia services will probably be those that are connected, by branding and by content, with the linear broadcast programme services.

More attention must be paid to the relationship between the brand of a channel and its programmes. Consumption patterns are moving to viewing ‘a la carte’, and that inevitably means that the programmes themselves will contribute significantly to the brand of the channel. Particular attention must be paid to programme branding strategy to optimise channel branding.

Part of the success of branding is visibility. More channels and more platforms mean more visibility. Nevertheless, this has to be balanced against the cost-effectiveness of the media delivery method, platform or channel, and the resources available to provide high quality content for it.

A brand image must be backed up by the reality. Securing content of quality for all the new channels and services will be difficult for many small- and medium-size public broadcasters. They need to find ways to **COOPERATE WITH OTHER PRIVATE AND PUBLIC ORGANISATIONS**, to obtain the high quality content without losing their role as public service broadcasters. Different sized companies will need different approaches, conditioned by audience size and local context. One solution might be collectively to join with content financing consortia, and/or be the motive force behind them. Cooperation with Sports Federations for online multimedia, for example, is proving productive.

Public broadcasters need to develop their tools of obtaining **AUDIENCE FEEDBACK** for their content. The purpose will not be the same as it is for many consumer products. For public service broadcasters, it is to help maintain the quality of the content, and to provide mechanisms for accountability, which is a vital attribute of public broadcasting. Public broadcasters also need to develop models which will allow them to evaluate success in their mission. Such models will not be based solely on audience size, but on a combination of elements which include audience size, reach, satisfaction, and other parameters.

**Securing universal coverage with new delivery methods in the digital environment**

**Introduction**

In the past, broadcasters achieved universal coverage by using terrestrial radio and television transmitters. In some countries, cable systems extended the coverage of terrestrial transmitters, and have become the dominant means of delivering TV services. Broadcasters now have to decide how to implement ‘universality’ in the digital new media world, and what mix of platforms and delivery media will provide it in the most cost-effective way.

**Digital radio** can be provided by a range of delivery systems. But for public service radio, the essential delivery media has to be terrestrial broadcasting. This is because of the key role of local and regional radio, and the need for portable in-house reception. The technology best suited to multi-channel terrestrial digital radio is **DAB**. Radio’s future is discussed in more detail later, and will only be mentioned briefly in this section.

**Current situation**

Initially the new entrants to the digital broadcasting market place provided essentially Pay-TV, and they were most successful in countries where, previously, channel choice by terrestrial transmitters or cable was limited. Currently, an increasing number of new media platforms are available on terrestrial transmitters, cable and satellite networks, each of them delivering more than broadcast services. Many platforms operate as ‘vertically integrated’ services with proprietary technical elements needed for reception. In this way, the platform operator acts as a ‘gateway’ between the broadcaster and the public, rather like a cable operator. The platform operates as a ‘technical universe’. 
The emerging new business models tend to offer a range of new services (broadcast, Internet, telephony, downloads, on-demand, interactivity, etc.) in subscription packages. Thus “Pay TV only”, which has attracted until now only a limited number of customers in many European markets, may gradually be replaced by combined pay functions, appealing to a larger group of customers. There is, according to some, a risk that the new business approaches might ease out the traditional broadcast networks and bring independent free-to-air radio & TV to an end. As customers of the new media platforms the Public Service Broadcasters would face commercially oriented gatekeepers and find themselves in a fundamentally different situation than their traditional environment.

The table in Annex 1 gives an overview on the currently emerging new media platforms. It indicates the range of services, the main content and service providers, and outlines the business models and the launch status.

Although all digital broadcasts in Europe rely in part on specifications developed by the DVB Project, private operators were not prepared to include a common conditional access interface system in their set-top digital TV receiver or common multimedia system. For digital satellite and cable broadcasting, this has created a closed market for digital television receivers. The viewer has very little real choice of receiver, and access to the public is only possible if the platform operator agrees. The role of the platform operator as “gatekeeper” of the digital media world is of great concern to EBU Members. Fig. 2.5 illustrates the range of gatekeeper elements.

The first digital television broadcasting services to be launched were provided by what is effectively a new kind of broadcast ‘value chain’, where operators control access to the viewer with proprietary hardware.

**Which mix of platforms for universal coverage?**

Public service broadcasters need to achieve ‘universal’ coverage for their digital public services. A critical strategic issue is whether this needs to be achieved by digital terrestrial television alone, or whether a mix of terrestrial, satellite, and cable delivery media can be used. In any event, public broadcasters will need to be present on a plurality of delivery media. There is probably no unique solution for all EBU Members. The decision is complex, and needs to take into account multiple factors. These are mainly the following:

- Geographical considerations – the size of country, population density, and terrain
- Existing infrastructure – existing cable and satellite use – and likely developments for broadcast spectrum
- Economic climate
- Regulatory environment and government policy
- Competitive environment
- Gateway environment.

As the number of different platforms using proprietary hardware and software systems increases, the potential for services to be implemented and run in different ways will increase. Public Service Broadcasters may find it increasingly difficult to provide services on all platforms, for the following reasons:

- The differing capabilities of the platforms will make it difficult to add the same value to the PSB services on all platforms.
- Customizing value added content for all platforms will bring new costs. Public Service Broadcasters may be tempted to convert added value offerings into a pay operation. Such an approach may appear attractive in the initial stages of interactive new media, but it may, in the long term, lead to the commercialisation of all PSBs’ added value services. Public opinion on the Public Broadcasting remit could then rightly not extend to new media development and be confined to traditional linear programmes.
- If they are closely related to the respective platform operators’ business model, Public Service Broadcasters will face limitations for creatively inventing and developing their own added value services.

Public Service Broadcasters should encourage and work for open standards with fair and reasonable licensing on all platforms. This would make it more possible to create added value services and implement them on all significant platforms.

PSBs should negotiate open “entrance doors” in the operators’ “walled gardens”. They should for example provide for optional terrestrial free-to-air reception in the receivers, and/or to leave the platforms’ content providers the option to integrate some of their audiovisual (open) Internet services into the platforms’ EPGs.

These provisions would allow PSBs greater control over their new media operations.

The transition from analogue to digital terrestrial broadcasting

A critical and difficult strategic issue in the digital transition will be the length of time for which both analogue and digital terrestrial signals are broadcast. Except in circumstances where the analogue terrestrial broadcasts are already only in marginal use, this needs to take account of late adopters and the less well off, and is likely to mean a transition period of 5-10 years.

On the other hand, as custodians of their income, public broadcasters must recognize that long transition periods will be very costly, and will use funds that could be used for programmes. If the transition from analogue to digital terrestrial is slow, it may well be irrelevant anyway, because the viewing public will have been attracted to other media for receiving the digital content, which will be more rapidly available. Special measures, which involve the national government, are needed to balance all these opposing requirements.

Within the next decade, analogue television will come to an end across Europe. Today, plans are being made and strategies are being developed to make a transition to digital broadcasting that will cause the least disruption to broadcasters, and most importantly, to the general public. PSBs have played a crucial role in the launch of DTT services and will do likewise as ‘analogue switch off’ (ASO) approaches.

The first step on the road to ASO is usually to launch digital terrestrial television (DTT) services and to simultaneously transmit both digital and analogue television (simulcasting). Some countries have done so at the time this is being written, but six countries in Western Europe have not yet done so, and there have been no full launches in central and Eastern Europe to date. There is testing, planning, and preparatory work is taking place in these countries, and DTT launches are expected soon.

There two strong imperatives to move toward ASO as quickly as possible. The first is the high cost of simulcasting, and the second is that the benefits of digitalization and the release of analogue spectrum are realized sooner.
The past development and projected development of Digital Terrestrial Television (DTT) and the progress toward Analogue Switch-off (ASO) in Europe can be seen in roughly the following phases:

• 1998 to 2002 – emergence and failure of pay TV platforms; delays or abandoned launch plans; limited growth, then no growth.

• 2002 to 2005 – introduction and success of predominantly free-to-air platforms; important role of public broadcasters in the offer; emergence of funding controversies; higher growth.

• 2005 to 2008 – remaining western European countries launch; new mixed free to air/pay TV models develop; new technology adopted in some cases; funding controversies resolved; growth continues but slows; HDTV trials; DVB-H trials. National debates on frequency allocation priorities.

• 2008 to 2010 – mature platforms stabilize; Eastern Europe launches; the approach to analogue switch-off (ASO) refined; several countries achieve ASO; HDTV services; DVB-H services.

• 2010 to 2015 – all countries converted; HDTV becomes widespread; mobile TV and interactive applications grow.

The first phase of DTT ended in the spring of 2002 with the financial failure of DTT ventures in Spain and the UK, and no growth in Sweden. These attempted to compete against established cable and satellite operators with a traditional pay TV business model that included film and sports programming and decoder subsidies. Delays (e.g. France) and abandoned launch plans (e.g. Portugal) were characteristic of the period which ended roughly when the UK launched a successful free-to-air platform in 2002.

Key lessons were learned from those early attempts which set the stage for a new structure and model for DTT. These lessons included: the need for strong support and presence of Public Service Broadcasters; the need to adopt a predominantly free-to-air offering; the need to encourage a free and open market for consumer equipment to put downward pressure on retail prices; the need to rely less on interactivity and other features, rather than channels themselves, to encourage take-up.

Additionally, broadcasters realized that development needed broad industry consensus and support, particularly from private broadcasters whose natural instincts may have been to avoid the increased content and transmission costs. Governments learned that they could encourage broadcasters and overcome other obstacles by adopting certain indirect financial support mechanisms, while at the same time maintaining a technology neutral position. Finally, some countries made contingency planning an important part of their implementation blueprints. Recent and upcoming launches have taken these lessons into account. Many of these lessons will assume even greater relevance as ASO approaches.

Europe is currently making the transition to a high-growth DTT model based on a primarily free-to-air model, and characterized by a major role for Public Service Broadcasters, fluid markets for low-priced receiving equipment, and limited neutral government intervention. In the current phase, ten countries have established platforms and within the next two years those countries not yet launched are expected to do so.

In the next phase all countries will have running platforms; growth will continue but may slow for the more mature platforms. Mixed models will develop, most still based on free-to-air content but with a variety of pay components. New technology will begin to be adopted in some markets making HDTV and broadcasting to mobile devices possible. Growth will be high in newly launched markets but tend to stabilize for mature platforms.

Market conditions in the final phase, during which most ASOs will likely take place, are hard to predict. Many expect that new services with advanced coding, HDTV and broadcasting to handhelds will be characteristic of this period. For many markets additional stimulus to spur growth will be required in the final stage approaching ASO. The way in which funding controversies are resolved will determine what kind of measures can be used and to what extent adequate stimuli can be applied.

Throughout all these phases of DTT development public service broadcasters have demonstrated their commitment to DTT and they will likely provide the continuity throughout the ASO process.

As individual countries make progress toward ASO, some divergence will occur and there is a risk of uneven development in Europe. The European Commission has been active in encouraging its Member States to plan for ASO, proposing a concrete timetable (2008-2012). International frequency coordination bodies have also
pointed out the need for concurrent timing for digitalization in Europe*. Market conditions vary widely across Europe, and differences in actual ASO dates may be substantial.

Almost all countries have published target dates for shutting down analogue transmissions. They have all been actively engaged in frequency planning and coordination for digital terrestrial spectrum, and have begun testing digital transmissions. In each European country there is some legislation in place or in process authorizing or recognizing the launch of digital terrestrial television.

**Expected ASO ranges**

<table>
<thead>
<tr>
<th>Fast Track</th>
<th>Expected Range</th>
</tr>
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<tbody>
<tr>
<td>Finland</td>
<td>2007</td>
</tr>
<tr>
<td>Sweden</td>
<td>2008</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2006</td>
</tr>
<tr>
<td>Germany</td>
<td>2009</td>
</tr>
<tr>
<td></td>
<td>2006 to 2008</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Middle Term</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Belgium</td>
<td>2010</td>
</tr>
<tr>
<td>Norway</td>
<td>2009</td>
</tr>
<tr>
<td>Denmark</td>
<td>2009</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2009</td>
</tr>
<tr>
<td>Austria</td>
<td>2010</td>
</tr>
<tr>
<td>Ireland</td>
<td>2012</td>
</tr>
<tr>
<td></td>
<td>2009 to 2012</td>
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<table>
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<tr>
<th>Last</th>
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<tbody>
<tr>
<td>Italy</td>
<td>2008</td>
</tr>
<tr>
<td>UK</td>
<td>2012</td>
</tr>
<tr>
<td>France</td>
<td>2011</td>
</tr>
<tr>
<td>Spain</td>
<td>2010</td>
</tr>
<tr>
<td>Portugal</td>
<td>2012</td>
</tr>
<tr>
<td>Greece</td>
<td>2015</td>
</tr>
<tr>
<td></td>
<td>2012 to 2015</td>
</tr>
</tbody>
</table>

Source: EBU

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* The ITU RRC-06 recommended in June 2006 that ASO occur before 2015 in Europe.
Suggestions for Analogue Switch Off

There are several general guidelines for broadcasters and DTT planners that can be identified to facilitate the Analogue Switch Off process:

1. ASO dates should remain flexible and contingent on market conditions, but be fixed at soon as possible. This requires close monitoring of DTT penetration levels as ASO approaches, and changing the status of conditional target dates to fixed ones, taking into account channel licence periods, manufacturer product cycles, and retail supply chains. At the European level, as common a schedule as possible should continue to be promoted.

2. Currently, most provisions for communications and marketing budgets look like they are probably going to be inadequate, and there may also be a lack of sufficient national coordination. Adequate funding and cooperation for the following elements would be beneficial: call centre for viewers, television and radio advertisements, online information via a dedicated websites, information meetings with equipment suppliers and retail networks; training for the consumer organizations and groups representing the elderly and disabled.

3. Reserve the option to take measures in case growth is flagging. Financial incentives and other supports promoting ASO may be necessary. Potential actions include: tuner mandates, tax relief for consumers and other fiscal incentives, transmission subsidies, subsidies to consumers, funding marketing and communications, augmenting license fees, loan guarantees, etc.

4. Linked to the previous point, the European Commission may consider creating an environment where Member States are permitted maximum flexibility to implement measures promoting ASO.

5. Ensure that obligations placed on Public Broadcasters concerning ASO are commensurate with adequate funding.

6. Broadcasters must request that the broadcast bands should continue to be used exclusively for broadcasting after ASO, and develop arguments to support this.
The future of radio services in the digital multimedia environment

"New Radio" – A digital rebirth of radio

Radio is the most widespread, used, trusted media in Europe and World Wide. It is a unique media form and user experience, and it is a key component in our lives. No other medium reaches so many people with such variety of content and usages. It brings information and entertainment, and helps social integration and identity.

Radio in Europe is a growing business. The annual turnover of radio broadcasting in Europe is €9.8 billion. The European radio sector includes 400 public service stations which account for over 50 per cent of turnover, and 38 per cent of listening. Over time, these proportions will change as more non-public service radio stations come on air. Non-public service radio today counts 5,100 stations in Europe with total revenue of about €4 billion. The expected level of commercial growth is 6 per cent per year over the next 5 years.

Thus the radio industry is healthy and competitive, and European listeners have a rich and growing choice of radio stations, which brings new challenges to Public Service radio, serving the radio listeners in a distinct and distinguished, but competitive way.

One of the strengths of radio is its low cost and its ability to be present and used everywhere. But one of the weaknesses of traditional analogue radio is that the programs are tied to a time bound flow on a limited number of frequencies, and that programs are not available when it suits the listeners. Digitization might be the answer to this, enabling the listeners to catch the programmes more or less how, when and where they like. Through more choice and increased interactivity, digital radio can bring the listener anything – anywhere – anytime.

Radio listening time is growing, even as Internet and other media use grows. Furthermore, radio is the medium most used to accompany life at the Internet, and thus the Internet, with its offer of music, sound and other audio services, tends to increase the demand for radio.

The environment for media delivery is changing, and radio broadcasters need to understand, adapt, and respond to the changes. The fundamental public service mission for radio broadcasters will not change, but the means of providing it must follow the environment. Technology today holds out its hand and offers a large range of options. Radio broadcasters must grasp those which will best serve the public service mission. The success of Public Service radio in a competitive digital environment depends on whether we are able to provide the content people want on convenient platforms in an accessible, customized and easy-to-navigate way.

Trends

Digitization facilitates a transition of content provision, broadcasting and consumption. Some of the development trends are the following:

- **From analogue to digital**
  Digital audio takes less frequency space and transmitter power, and allows for a wider choice of offer within the same bandwidth.
• **From flow to demand**
  Traditional flow radio, formatted for specific programme genres or target groups will be supplanted by a series of On Demand or Near-On-Demand services, where the listeners can pick and choose the wanted programmes when it suits them.

• **From broadcasting to narrowcasting**
  In order to meet the listeners’ demands for free choice around the clock, broadcasters must provide a wide range of formats. The same content might be shared or versioned for different channels and outlets – or even automatically repeated in order to serve different listeners at different time slots. Utilizing this method, labelled “Digital Synergy Radio” makes it possible for a broadcaster to multiply the outlet with limited costs.

• **From one-platform to multi-platform**
  Radio in the future is a multiplatform phenomenon. Radio will be available on a wide range of technical devices, from racks and hifi’s over stand alones and portables to handheld and pocket receivers. Everything digital – from television and computers to cell phones, mobiles and PDA’s, will be able to carry sound and thus radio along.

• **From one-standard to many-standards**
  There will be no single, winning standard for digital radio. DAB/DMB, DRM, DVB all have their strengths and weaknesses, which will mean they need to co-exist. Manufacturers will make dual, triple and eventually multi-standard radio sets for the consumers. And the consumers will not have to navigate through a jungle of frequencies or abbreviations, as the tuners will have easy-to-navigate browsers on displays with the station brands.

• **From passive listening to active choosing**
  With a broader range of programme and channel offer, and hundreds of thousands internet radio stations, listeners will be able to pick and choose their favourite programmes or channels, possibly aided by electronic program guides or intelligent “radio agents”.

**Technology**

Concerning the much discussed technical standards of digital radio, many standards will co-exist. Some will fade away after a shorter or longer time, and others will converge into second generation standards. There will be no one winning standard. Among the standards used or tested as by 2006 are:

• **Digital Audio Broadcasting (DAB)**
  - DAB is a digital radio standard based on the European-developed transmission system Eureka-147, which is also the underlying system for related systems such as DMB (see below), DAB-IP, DAB+, DABv2 and others.
  - DAB is today broadcast on terrestrial networks (T-DAB), with prospects for Satellite broadcasting (S-DAB). It can be received in a satisfactory sound quality even when driving/moving with high speed, thus making it ideal for mobile reception. DAB and its derived standards can carry not only audio, but also text, pictures, data and even videos.
  - By 2006 more than 50 countries have launched DAB broadcasts on a permanent or test basis. Thus there are more than 475 million people, that are – potentially at least – covered by DAB signals. And there are more than 800 radio stations, most of them European, that are broadcasting on DAB. In the receiver market, there are more than 200 receivers on the market, as prices are declining and sales are growing.

• **Digital Multimedia Broadcasting (DMB)**
  - DAB has been developed and improved under the label DMB, Digital Multimedia Broadcasting, which by 2006 has been tested in a number of countries, including Korea, U.K. and Germany. The system is designed for mobile reception of combined audio, video, text and images on handheld terminals with a small screen.
  - DMB is sometimes referred to as ‘rich media’ because of its combination of audio, video, and graphics within the limits of the capacity of a DAB multiplex. If DMB is to be used other than for tests and trials, DAB-type frequency channel licenses will need to be awarded by national radio regulatory bodies, see recommendations.
• **Digital Video Broadcasting (DVB)**
  - DVB is a digital television broadcasting system, also known under different sub-labels such as DVB-T (terrestrial), DVB-C (cable), DVB-S (satellite) and DVB-H (Handheld). The technical performance of DVB-H in terms of reception quality is similar to DAB and DMB, though there are differences in the width of spectrum needed. While DVB has been used for video and television broadcasting, there has been no significant development for radio only services.

• **Radio ‘on TV’**
  - Among the advantages of radio is that it can be carried by any digital media, including digital television. Digital radio can be provided by using one of the digital television broadcasting systems, DVB-T (terrestrial) or DVB-S (satellite). This is an easy and convenient way to provide digital radio where DVB-T or DVB-S is already available. Radio listening by digital television has just exceeded 10 million people – or 40% of the population – in the U.K. The radio and television channels or programmes can be accessed by the listener/viewer through a cross-media *electronic programme guide* (EPG).

• **Mobile phones and 3G Radio**
  - Radio can be received via mobile phones containing a FM, DAB or DVB-H receiver, or as a specific 3G radio mobile service
  - In the U.K., the number of adults listening to radio via mobile phones is steadily growing and has by 2006 reached 3 millions.

• **Digital Radio Mondiale (DRM)**
  - Digital Radio Mondiale is intended as a digital alternative to replace AM analogue radio channels in the short wave, media wave, or long wave bands, and may be a viable alternative to DAB for radio stations covering large areas or complex topographies. The first receivers are entering the market in 2006, and may be multi-standard, combining DRM with AM, FM and DAB. DRM also contains a modest data capacity for additional text services. Broadcasters such as the BBC and Deutsche Welle are using or testing DRM for overseas broadcasting, and RTL has begun broadcasting on DRM for their European markets. An additional system, ‘DRM120’ is planned for the VHF bands as a digital replacement for FM radio channels. This system may be valuable in parts of the world where there is still space in the VHF/FM bands.

• **Satellite radio**
  - Satellite radio has been successful in the U.S. where the leading satellite radio providers Sirius and XM Radio have now more than 10 million subscribers to their services. They feature over 250 digital radio channels, including some 50 channels of news, sports, talk and entertainment, over 20 dedicated channels of Instant Traffic and Weather, and the deepest play list in the American radio industry with access to over 2 million titles.
  - In the U.S, a wide range of receivers - in-home, in-car, kitchen radios and pocket sets - are now available. A number of projects to provide digital radio satellite services for Europe, including World Space Radio, have reached the planning stage, but until now, none have had a real impact on radio listening, which may be linked to the fact that in Europe service areas will often need to be limited to national boundaries for linguistic reasons.

• **Internet Radio**
  - Internet and Radio have successfully 'converged' over the last five to ten years. The internet offers unlimited access for radio broadcasting, and more than 200,000 radio stations or streams are already available on the Internet. More than 50 per cent of Internet users say they have heard radio or music on the Internet.

  Today, most radio stations in Europe operate a web site with some or all of the following services:

  - Radio Streaming i.e. simulcasts of existing services.
  - Web Radio, i.e. streaming of radio services exclusively on the Internet.
  - On Demand Radio, i.e. programmes made accessible though a browser or search engine.
  - e-Radio, i.e. one of the above, combined with enhanced functions such as shopping or downloading of the music, etc..
  - i-Radio, i.e. personalized, interactive radio or music streams, defined by the listener.
  - Blog-Radio (also known as wiki-radio), i.e. user generated programmes or streams.
The first Internet hi-fi’s and portable Internet radios are now on the market, with great commercial expectations. Public Service broadcasters should encourage national, independent music or radio streams to make themselves available on Internet.

- **Radio podcasting (Pod Radio)**
  
  Podcasting or pod radio is the term for programmes that can be downloaded to a PC, and from there to portable pocket size mp3-players, such as Apple’s i-Pod. No more than a few years old, podcasting is an amazing fast growing phenomena. Try searching for podcasting today in the Google search engine and the results over 75 million references.

Above are listed the existing ways of providing radio in the future. There are advantages and disadvantages for all the different routes forward. But one thing is clear – remaining with analogue radio will result in declining and unsatisfied audiences for radio in the long term. Horse drawn carriages do not survive in the age of the motor car.

**Summary**

The move to digital radio broadcasting is unlikely to be dominated by any one distribution platform. Digitalization will see radio move from a single distribution system service to a multi-system service utilizing terrestrial, satellite, cable, internet, and digital television set top boxes, mobile phones and other mobile and wireless devices.

The digital transmission systems available will include not only DAB but also satellite delivery and the AM replacement technology DRM.

The drivers or ‘killer application’ of digital radio will be the listeners’ freedom of choice in terms of time shift, place shift and content shift, as provided through a convenient way of finding the wanted content among a wide and varied offer on a multitude of platforms. Content may be king, as it’s the case in the analogue radio world, but in the digital world, consumers are Gods. And convenience is the glue that combines the two.

![Diagram](Image)

**Fig. 2.6:** Radio in a digital, multichannel environment - three ways to use radio

*New Radio in the digital world combines traditional flow radio with a multitude of near-on-demand and demand offers.*
Recommendations

Analogue radio transmission will survive for at least another decade, but digital transmission systems must be established in order to improve and enhance radio listening and expand choice. In the long term, no one believes that radio can be the only means of communication trapped in analogue technology. An offensive strategy for public broadcasters promoting digital radio should include the following elements:

1. To increase the attractiveness of digital radio, to ease the transition to digital radio, and to exploit the potential of growth in audio demand, public broadcasters must offer their audience NEW CONTENT FOR SERVICES. This also means that all DAB receivers must be able to receive FM. Radio thematic channels drawing on programme archives can be effective and not costly.

2. EBU Members must be present on NEW DIGITAL PLATFORMS such as the Internet, satellite subscription services, and digital television. Radio can survive in the short term as an analogue service, because it has clear strengths and value for the public. However, broadcast services that do not make the transition to digital technology will eventually be isolated from their audience. The lack of take-off of DAB radio in many parts of Europe is a cause for concern, and is due to the lack of new services available.

3. Public broadcasters must form ALLIANCES with non-public service broadcasters, receiver manufactures, retailers, and all other relevant actors in promoting digital radio.

4. EBU Members must convince their national regulators that the PROVISION OF ADEQUATE SPECTRUM for digital radio, for existing and new services, is very much in the public interest, and that it is necessary for radio to fulfill the growing demand of new free-to-air radio stations.

5. Because the digital signals are less complex, radio broadcasters will migrate to the IT PRODUCTION environment earlier than television broadcasters. Television broadcasters should follow developments in radio, and learn from the radio experience.

6. One of the most important new digital technologies seems likely to be ‘PODCASTING’, because it is strong in several important factors which affect the success of new media. It uses consumer equipment which millions of young listeners already have for other purposes (storing copies of their CDs). It brings no additional costs – if you already have a broadband connection. It is easy to use. It provides something that listeners will want – the ability to create their own schedules of programmes.

7. EBU Members need to evaluate and develop formats for radio production which allow the public to PARTICIPATE MORE in programme ideas and production. In this way, the public service mission is fulfilled by the broadcaster being the means of expression of a wider part of society.
Overall Recommendations on delivery

1. The relative importance of different delivery media and platforms will vary from European country to country, and though some may achieve universal geographic coverage, none will uniquely achieve universality in terms of adoption by consumers. EBU Members could adopt a policy of being present on all platforms, but there is a risk that a blanket policy would not be cost-effective. The best policy will be to be present on “all significant media and platforms”.

However, waiting for complete market penetration before joining a platform bears the risk of being excluded from its development, and from shaping its structure. Those EBU Members who have the necessary regulatory frameworks, and the financial means, should participate in promising platforms. If they cannot fund such an approach by themselves alone, then partnerships might be an alternative. It may be a future role for the EBU to provide advice, know-how and organisational help.

2. For non-traditional delivery media (Internet, broadband, DSL, DVB-H/DMB, 3G) public service broadcasters should decide which to support, case by case. Some of these delivery mechanisms open useful opportunities for public service broadcasting. If Broadcasters decide to distribute their services over such delivery systems as pay services they should consider the consequences carefully. In order not to risk their future options as defined by their public service remit they should provide for the regular review of such decisions.

Today there are differences between the cost effectiveness and roles of over-air broadcast delivered media and Internet and IP delivered media. Internet is not currently a substitute for broadcasting. Each has unique attributes. Over-air broadcasting is the most effective method for delivering the same content to very large numbers. However, the Internet technologies known as ‘peer to peer’ systems and ‘multicasting’ will have a major effect on Internet distribution costs, and the technology and relative costs need periodic review.

3. The route to successful digital terrestrial broadcasting of free-to-air television and (particularly) radio has not been entirely smooth. EBU Members must discuss the transition, vital for the public good, of terrestrial radio and television broadcasting, including transition length and transition funding, with their national governments. Public broadcasters need to analyse the consequences of being outside the new value chains, and, if needed, seek ways of being a part of them. Furthermore, they need to find ways of making the migration to digital broadcasting as rapid as possible.

4. When deciding whether to enter a delivery venture that involves pay-TV public broadcasters must proceed with caution. There are many factors which will influence outcomes, but experience suggests that ‘second comer’ competition for Pay-TV audiences, where a large programme channel offer is already available, will probably fail, unless the programme offer is dramatically more attractive than the incumbent one. If Public Service Broadcasters choose to participate in a Pay-TV platform, then they should encourage a platform architecture that allows their signal to be received directly from the airwaves without conditional access.

5. As is the case with digital production equipment, the delivery world is also burdened in some cases with closed, proprietary technical standards. Competing cable and satellite operators use their own systems. Broadcasters can, for example, find themselves in the situation of being forced to deliver the signal of a TV-channel with new interactive services in many different technical standards to secure the delivery to all the viewers. The different standards also influence the market of set top boxes, and are a hindrance for a market development that can secure lower prices and greater choice of receivers. Public broadcasters should work together, on a European basis, on a regional basis, or within the framework of the EBU, to promote a common, open standard for the broadcasting of digital signals. However, the use of open technical standards is no guarantee of affordability. Recent experience with the MHP open system shows that the rules for licence fees for open standards need to be more clearly defined to be ‘fair and reasonable’ and not exploitative.

6. Broadcasters need to see technical standards for new systems in a hierarchy of options. The public interest is best served if broadcasters actively work toward Level 1, but if not possible toward Level 2.
   - Level 1: open standards agreed in a standards body and which are available on licensing terms known in advance to be proportionate, fair and reasonable.
   - Level 2: standards which accessible on fair and reasonable terms, but which are controlled by particular companies.
   - Level 3: standards which not accessible, or are open but not available on proportionate, fair and reasonable licensing terms.
Chapter 3

Programme Making in the digital age

Media delivery options are undergoing an evolutionary structural shift from limited channel flows, through multichannel flows, to an on-demand environment. New elements in the media value chain include the gatekeeper function, and new digital delivery networks (e.g. DAB, DVB, DVB for mobiles, and the Internet). Public service broadcasters will be confronted with a number of challenges in programme policies, handling of content rights, the introduction of new digital infrastructure, new delivery systems and the need to re-examine the way they organise their work flows.

EBU Members are responsible for both or either radio and television services. Both make vital contributions to the public service mission. The issues which follow are relevant to both radio and television.

The issues in this Chapter are by no means an exhaustive list of those confronting the senior management of public service broadcasters, but they are among the most important. They concern content forms and branding, rights, digital production and delivery, and company organization.

The questions considered are about the consequences of new technology, and they will arise earlier for some broadcasters than for others. In particular, they will arise earlier for more developed broadcasters than for less developed broadcasters. This is not a sign of a lack of respect for the needs of the less developed broadcasters, which are an integral part of the group of public service broadcasters in Europe, because in time all broadcasters will face the same issues.

Programming policies for public service broadcasters in the multimedia environment

Introduction

Public service broadcasters have to begin the decision-making process, about the changes they need to make by examining what should be their future forms of programme content. This is the root from which the answers to many policy questions will grow. There are connections and interdependencies between all the questions considered in this report, for instance the issue of delivery media (analogue or digital satellite, terrestrial, cable, and Internet), but the point of departure for much strategy will be the question of which programme content the public broadcaster needs to offer the audience in the multimedia environment.
Current situation

Many public service broadcasters have, for some years, added new digital services to their conventional, linear programmes broadcast in flow-channels. They have experimented with multimedia which is tied to the programme, and with separate multimedia which can be detached from it, and which may or may not be directly related to a linear programme. The situation and experiences vary from country to country.

Public service broadcasters in Europe have broad experience with WEB SITES. Theirs are among the most visited in Europe. As a generalization, and though there are notable exceptions, today most web sites that are affiliated with television channels or programmes serve as ’attractors’ to the television service. Many web sites affiliated with radio stations or programmes do more, and serve as ‘expanders’ of the radio service. Some public service broadcasters have special sites that go beyond this, and provide an interactive multimedia experience which could even be provided as packaged multimedia. A fourth category of web sites allow viewers to watch or listen to streamed live events, which are linked to broadcasts. There are, in addition, some radically new concepts for web content. The creative situation is healthy, though there is often a lack of overall company vision for the web. Progressively higher ‘bit rates’ are assumed to be being used by the ‘internauts’ as broadband rates increase, and broadband becomes more widely available.

Experience with BROADCAST MULTIMEDIA is limited in the EBU as a whole. A number of services are provided by some EBU Members with ENHANCED PROGRAMMING with different types of core television programme content with their digital broadcasts (BBC, FT, TF1, RAI, RTVE), but such services are not universally provided.

The intention, in some cases, has been to make the viewed programme more of a real-time event, which is more compelling, by providing attractively-packaged pop-up background information, and mechanisms to participate in the programme, such as polling (the ‘play along’). Functionally, these programmes have worked very well. But, in several countries, assessing their value for the community as a whole has been difficult, because of the lack of a major digital audience base with the capacity to experience them. They have also proved expensive to create and operate. Multimedia complements to news and sports programmes have proved successful.

Broadcast Multimedia can also be used for INTERACTIVE STAND-ALONE CONTENT. This includes the Electronic Programme Guide (EPG), news and information services, games, etc. The television becomes an electronic magazine with interactivity. This is the natural successor to Teletext (‘digitext’) which has been successfully provided for many years in Europe. The audience for stand-alone content services will not be insubstantial, but this type of content is not likely to dominate the broadcast medium in comparison with linear programming. Importantly, public service broadcasters are not often leaders in EPG today, because they are not the ‘platform’ providers in the digital environment.

The digital telephone messaging system, SMS, is being used in conjunction with broadcasting, largely to allow viewers and listeners to provide feedback or for polling. Most use is made for young people’s programmes, for whom SMS is a common way to communicate.

Public service broadcasters have less but growing experience with VIDEO ON DEMAND (VOD) via BROADBAND. If availability proves to be significant, public service broadcasters will need to provide services for this media, both channels (IPTV) and programmes VOD (‘archives’ and ‘just missed’). VOD/broadband could make use of public service broadcaster’s programmes and archives, if rights are available, and of public service channels. Fast access Internet, available via broadband networks, will enable more sophisticated multimedia applications to be delivered. Broadband delivery of HDTV is possible with new generations of high bit rate broadband systems.

A critical dimension of content is BRANDING. This is the conscious effort to make the viewer and listener remember characteristics they associate with the content, or the content-delivering organization. The brand is a representation of the spirit of the product provider, product, or personality. Branding is important in the commercial world because it affects sales and audiences. In the environment of public service broadcasting, branding will be needed to guide the viewer or listener, as the media offer becomes ever larger. Viewers and listeners are in a sea of media, and they will need brands as ‘islands of trust’.

The WIDESCREEN FORMAT (‘16:9’) is used for some analogue and digital services in several European countries. Given receivers with certain minimum screen sizes, the widescreen format is more involving for the viewer, and is closer to cinema formats. DVD movies extensively use widescreen, though their format is often even more letterbox in shape that the 16:9 format. Public acceptance for the widescreen format is growing, and
it is the only format available for the flat panel receivers now widely available in the market. It is expected that after 2007 CRT based receivers will no longer be available in quantities.

The introduction of the new multichannel audio system (‘5.1 audio’) together with the wider format will to a large degree enhance the sense of involvement for the viewer.

The developments of the flat panel displays have reached the stage where physical resolution on the screen is able to give justice to the significantly increased resolution of HDTV. This fact more than any other single factor, and coupled with a significant reduction in cost for such screens together with the fact that the public now buy them, have to a large degree made public broadcasters revising their strategies for the introduction of HDTV services.

A range of AUDIENCE RESEARCH methods are used for obtaining audience feedback among public service broadcasters today; and, though widely used, they are less developed and sophisticated than those methods used for many consumer products.

Production for HDTV

One of the major challenges that all broadcasters face is the transition High definition television production. It is likely that the mainstream of programme production equipment will be high definition equipment in the next five years. Standard definition equipment will become less available. As a general trend, from this point onwards, the cost of HDTV production equipment will fall, and the costs of SDTV equipment will and rise, except for ‘stock clearance’ offers for SDTV equipment.

Making programmes in HDTV requires somewhat different production grammar to SDTV, principally to cope with the ‘wide screen’ format, and more care and attention to make up and scenery. Staff retraining is needed. EBU documents such as “You said HOW MUCH? – making programmes in HD” published by the EBU Technical Committee in 2005 provide background information on HDTV production problems and costs.

Production for mobiles

Production for mobiles is a new area, and research needs to be done into the best content formats for mobiles. Since the screen is small, lower resolution pictures can be used. There may be constraints on the shot framing, and captioning. Much work remains to be done.

The migration of programme production equipment and infrastructure from analogue to digital

Introduction

The transition from ‘linear (tape recorders etc)’ to ‘file based’ (IT) production offers significant benefits in the programme production environment. This transition can also make it possible for organizations to develop from single media organizations to multimedia organizations in a cost-effective way. Getting this transition right is one of the key policy decisions for public broadcasting management. The timetable for the transition to ‘server-based production’ will vary between broadcasters, but the strategic direction is clear. The issue is not ‘if’, but ‘how’ and ‘when’.
The current situation

Sooner or later, all radio and television programme production will need to be based on networks of computers, rather than on tapes and conventional tape editing and playout. The transforming the digital audio/video signals into data files enable public service broadcasters to introduce IT based programme production systems.

A fundamental requirement for successful IT programme production is the introduction of electronic ‘metadata’ handling and media asset management systems.

Similarly, the use of standalone desktop computers for editing audio accelerates the production process, and improves productivity. These are examples of direct replacements of analogue equipment by digital equipment.

But, more significantly, the whole production process can be transformed by ‘networked’ production systems using content stored on computer servers. This will allow production staff to assemble programme material on computers, including searching material from the archives. Using information technology for production will increase efficiency and facilitate multimedia production. Fig. 3.1a and 3.1b illustrate the digitalization of the production process and the creation of a “media asset management system”.

The concept of the ‘media asset management system’ is meant to imply the totality of the means needed for programme production, storage and pre-delivery. When this is developed, it is important to see the
management of rights as an integral part of the system. The hardware system alone is sometime called the ‘content management system or ‘CMS’.

Networked systems for radio production are now widely used. Some public broadcasters have invested in video systems for news operations, where the operational benefits are most obvious, and where attitudes are most open to new technology. The current generations of equipment use ‘proprietary’ standards, and thus they generally will not inter-operate with equipment from other suppliers. Members who use them risk becoming captive customers of the supplier.

A key to networked production is the development of systems of ‘metadata’. This is text and numerical information about the content which is recorded and kept with it. This can be used for labeling, for search and retrieval of content, and for a wide range of business elements of programme production and delivery. Metadata will be an important constituent of archive systems, and it will be the fundamental element of the whole production media asset management system.

ARCHIVES will move ‘up-stream’ in the production processes from being the last element, where programme material was stored after having been broadcast, to a central position at the heart of the whole production system. Servers/data tape robots will be a repository for ‘old’ programmes, but they will also store captured raw material, so that it can be accessed and edited by any production team. The archive system will not therefore be a stand-alone system which can be used in isolation from the production process. It will need to be a cornerstone of the media asset management system, and it will need to be integrated with, and interoperate with, other components.
Recommendations

As with content rights, the senior management of public service broadcasters must pay great attention to the task of moving their organization and the whole production system from the analogue to the digital and ‘software’ world. Management must realize that it is not merely an exchange of one type of technical equipment with another. To harvest all the fruits of digitalization, the organization, the work processes, the staff skills and a number of other aspects of the whole organization need to change.

The digitalization of the production equipment and infrastructure is a very, very big investment in money and time. Arguably it is the biggest challenge for broadcasting companies in modern times. For that reason senior management must take full responsibility and an operational part in the process.

1. **NETWORKED PRODUCTION SYSTEMS FOR TELEVISION** are becoming more mature and better suited for general use. These systems are also currently relatively expensive. Broadcasters can choose to buy such proprietary equipment today, or wait some years until they are able to buy similar equipment at lower cost, and which may use open standards. Experience suggests that, in general, early adopters of new production technologies regret their purchase later, because of a lack of inter-operability. However, the purchase may be justified if there are immediate operational savings, or improvements to the quality of the content produced, which outweigh the disadvantages. For a new station, however, networked production should be envisaged from the start, in spite of any lack of open standards. All new ‘green field’ networked production systems should be HDTV capable.

2. **NETWORKED RADIO PRODUCTION SYSTEMS** are already widely used by public broadcasters, because the audio world is technically less demanding than video. The experiences drawn from the digitalization of radio can be very fruitful in similar processes in television. Television companies may want to draw on the experiences of radio companies.

3. One major obstacle, and a very costly one, is **THE LACK OF COMMON OPEN STANDARDS** for digital production systems and equipment in radio and television. The companies developing and producing digital equipment and offering it to the market see their company’s interest as served by being first in the field. They are in competition and often use their own proprietary standard as a weapon in the competition. Broadcasters must work together, exchange experiences, and actively encourage open standards. Here the EBU can play an important role. Broadcaster’s interests are served if the competition is for price and features, rather than technical standards.

4. Public service broadcasters must take an active part in understanding and defining **REQUIREMENTS FOR METADATA** systems, to ensure that their practices and needs are met. They need to be part of the process of deciding what text or numerical information public broadcasters need, or will need, about ‘captured’ content, to be efficient and effective. The meta-data will be the basis for the production process for decades to come, and it is the glue that will bind together the elements of networked production. However, extra effort will be needed to generate and insert the metadata, so its inclusion must be worth the effort.

5. A key managerial issue comes from the fact that networked production systems need **NEW ORGANISATIONAL STRUCTURES, NEW WORK FLOWS, AND NEW ATTITUDES AND SKILLS IN THE STAFF** who operate them. Public broadcasters need training for new competences, both for production and technical staff. Experience shows that production staff that make the transition have greater job satisfaction in an ‘IT’ production world. It is an environment where less operational technical support is needed, because production staff can do more themselves, provided they are so minded, and are trained in the new methods and working practices. The technical staff that are needed will need more software skills than conventional broadcast hardware skills, and will form a technical ‘back office’.

When Public broadcasters begin establishing digital archives they are faced with an enormous amount of content. One **PRACTICAL APPROACH IN THE DIGITALISATION OF ARCHIVES** may be to begin by creating archives for material which will otherwise perish, then turn to archiving current material as it is made. Other content could be digitally archived when needed as part of a current programme. A 20/80 rule will surely apply to the usefulness of archived material.

6. As mentioned above, the digitalization of the technical infrastructure and production equipment is a very large investment, both in money and manpower. Although it is difficult to make precise calculations, different forms of **COST-BENEFIT ANALYSIS** must be used as part of the basis for investment decisions. One of the problems is that such investments in new digital equipment very often cannot be postponed. ‘Linear’ substitutes for worn out analogue equipment may be impossible to obtain, and this will force the transition to digital non-linear IT based systems. The long term strategic perspective of the transition and its consequences influence the whole organization, and it is difficult to evaluate the long-term cost benefits. Nevertheless, some form of systematically comparing the costs with the benefits must be carried out, to secure the optimal use of the resources and the timing of the investment. We should also not forget that all new generations of production equipment will be based on HDTV.
Securing content rights for Public Service Broadcasters in the digital future

Introduction

If the most critical element for broadcasters is the content they provide, then one of the most critical barriers to providing good content is likely to be rights. The problems and complexity of content rights will increase in the new media environment. Public broadcasters need to understand this, and take appropriate early action to forestall barriers.

The current situation for content rights

The increasing development of the on-demand environment, and other factors such as the growing demand for content, is creating a new and potentially more difficult situation for broadcasters, in obtaining rights for content such as music, sports, and movies.

For example, if record companies have widely used outlets for their product via Internet, they will have less need for broadcasting as a showcase for their products. They will also want to control the distribution of their products themselves.

Furthermore, mergers are creating giant companies that will not need outside collecting societies. It remains to be seen how far the record companies, to be successful, will need any other parts of the media industry.

In sports though there are important exceptions, the general trend over the years has been that public service broadcasters gain access to fewer sports rights for premium events. Non-public service media companies are acquiring exclusive rights through very large bids, or by club ownership. Sports clubs provide web services directly themselves, and in some cases their own broadcast channels.

A new rights-bidding environment is emerging. International media companies, who provide channels or content in a number of countries, are able to collectively negotiate for rights for all their outlets. Those with a wide range of media interests beyond broadcasting can exploit the rights in their other media, and thus increase their bidding power. Public service broadcasters do not have such possibilities.

In the digital world, where content can be a combination of linear programmes and multimedia applications, rights will become more complex than in the analogue world of linear programmes alone. Broadcasters will need to take due account of any multimedia format rights, and act accordingly.

The lack of revenue producing models for Internet has curbed early enthusiasm for using Internet as an independent commercial tool for disseminating content such as premium sports, but this may change as confidence grows in the web environment.

The tools available for ensuring fair and legal use of content are either legal or technical. The drawback of technical tools is that they can always be defeated with sufficient know-how. Technical tools can only ever be a greater or lesser deterrent against piracy, and never a guarantee of security in perpetuity. Equally, the legal situation is complex. Large national differences in regulation exist, and the legal process is very slow. In spite of these factors, public service broadcasters must encourage and use both these tools.

The individual-to-individual (peer-to-peer) content exchange of music on the Internet may eventually lead to wider usage of such systems for ‘broadcast’ programmes – the ‘napsterization’ of media delivery as a whole. Public broadcasters as content producers will need to follow legal and technical developments.
Recommendations

Content rights are complex. Senior management of public service broadcasters often refrain from taking the necessary level of interest in the legal and technical aspects of securing rights. They leave it to their legal and technical departments, and hope that they can solve the problems. In a more complicated future, the problems will only be solved if senior management pay more attention to the questions, and make them an integral part of the overall strategies and policies of the organization. Some of the elements of such strategies could be the following:

1. PSBs should develop and communicate a clear POLICY on how they will deal with infringements of copyright. This should take due account of, and balance, the need to enforce copyright protection and the need to meet audience needs and expectations.

2. PSBs should develop SYSTEMS AND TECHNOLOGIES TO ENFORCE COPYRIGHT PROTECTION, and use them consistently. These systems should ideally be based on an open standards technology, or alternatively be subject to regulation ensuring full interoperability, as well as fair and non discriminatory access to technology.

3. PSBs should support and encourage efficient and MODERNIZED COLLECTIVE RIGHTS MANAGEMENT.

4. EBU Members should consider creating a COLLECTIVE RIGHTS-FREE DATABASE OF MUSIC RECORDINGS, and other appropriate content, which can be used by EBU Members.

5. Public broadcasters must plan their rights, and rights negotiations, with scalable content and multi-platform delivery in mind from the outset. Acknowledging the need to do so can be difficult if the organization is not geared to multimedia/multi-platform output.

6. Whether content can be reused in ARCHIVES will depend critically on content rights. The greatest single obstacle for Public Service Broadcasters, to establish a successful and well utilized archive system may be content rights. Archives are a technical system for re-using content, in part or whole. If rights issues prevent this, the most sophisticated technology will have no value. Members must examine and clarify their own rights situations before taking decisions on archives.

7. If they have not already done so, to take account of the new multi-platform environment, public service broadcasters need to NEGOTIATE RIGHTS ON THE BASIS OF THE NUMBER OF ACTUAL VIEWERS OR LISTENERS, rather than the potential number of viewers or listeners.
Chapter 4

Organizing public service broadcasters in the multimedia and digital future

Introduction

The radical change in media consumption calls for a new understanding of the role of PSB which is not linked specifically to individual media delivery methods or platforms, but rather to the value it offers to society. The ‘digital consumer’ needs public service content on a variety of platforms. This calls for new flexibility in the internal management of PSB organizations.

With new distribution platforms, new programme-content, new production-infrastructure, new workflows and a different environment, public service broadcasters must re-evaluate their organizational structures and consider changes. While organizational structure is no substitute for creative talent, it has an important influence on both the quality of programme-content and the efficiency of production, and is thus a critical strategic matter.

Public service broadcasters need to reorganize themselves to suit the emerging environment and new ways of working in the production. This includes the growing use of multimedia for accompanying content or for separate web services, the probable migration of members’ radio and television services to a greater plurality of channel offers and the convergence of the media in general.

There are a range of options for rearranging the organizational structure. They need to be selected and combined according to the individual broadcasting organization. It will never be possible to copy entirely another company’s organization. Each public service broadcaster will have their own priorities that can be supported by structural measures. With time, priorities can change, and the organizational structural will need to change with it. Structural change will be an ongoing process for the public service media provider in future.

Current situation

There is a wide variety of organizational set-ups among the public service broadcasters in the EBU. Some EBU Members are responsible in one and the same organization for both radio and television, while others only run one or other service. Virtually all public service broadcasters have added new digital services by Internet to supplement the traditional broadcast media. The structures of organizations that have been in existence for many years reflect their history; and, to some extent, yesterday’s environments.

Organizational structure can be seen as having several layers. A basic organizational structure reflecting the distribution of responsibility and power, and another structural level which determines the way the resources (budget, manpower) are distributed within the organization.
There are two main basic organizational structures which have variants:

- A classical structure for combined radio and television public service broadcasting is the ‘**MEDIA ORIENTED STRUCTURE**’. The company is arranged into relatively autonomous parts, each concerned with either radio or television. In many ways it mirrors the separate use of the receiver-apparatus (radio or television) in the home of the listener/viewer. Each radio and television domain in the broadcasting organization has its own production staff, facilities and managerial staff. The advantages of this structure include the focus it brings to the separate managements and staff, who have a commitment to their service. This same advantage applies to broadcasters with entirely independent radio and television organizations. The advantages of a clear cut separation between radio and television production may become less in a multimedia environment where technology, content rights, and ways of working are merging across the traditional media-separation.

![Fig. 4.1: The media-oriented organization](image)

- Another structure which has been applied more recently by some public service broadcasters is the ‘**FUNCTIONAL OR MULTIMEDIA ORIENTED STRUCTURE**’. The company is arranged in relatively autonomous parts (combining radio, television and multimedia) for each of the main functions, or divisions in the operation: Channel controlling, programme production, support and internal services. Programme production itself is not separated according to channels or media, but according to programme genres. The advantages of this structure include the synergies of resources and talent for programme production, cross-fertilization of ideas, and greater scope for cross-departmental usage of programme-content that is carried by several channels or services, and across multiple delivery platforms to a variety of new combined receivers for different user situations. Drawn to its outer limits of extreme ‘bi- or tri-media’, this model can have disadvantages in a loss of focus.

One of the variants to the two models is to create near autonomous entities for each part of the broadcasting activity. These entities are held together by a holding company which has a majority shareholding. Alternatively, some of the activities are outsourced to private companies through long term partnerships.
Different ways of **Distributing the Resources** within the broadcasting organization can be illustrated with two models.

Traditionally, the distribution of resources has been carried out in an **Annual “Top-down” Process with Fixed Budgets** where the over-all budget is distributed to all units (programme departments, production units and internal services) more or less in the same amounts as the previous years (often with only marginal changes). This secures a degree of internal certainty that programme makers can carry on from one year to the next without worrying about damaging budget cuts. The disadvantage is that it can bring not only a freezing of resources but also of activities. It can be very difficult to change priorities and to find resources to finance new activities.

The need for more flexibility, and for being able to accommodate more easily to external changes, has led some public broadcasters to introduce an **‘Market Oriented’ Way of Distributing Resources** internally. An **Internal Market** can be applied in both the media orientated structure, or the functional or multimedia-orientated structure. The total programme budget of the broadcaster is given to the channel controllers, who can be free to choose or not from internal programme departments or external producers. This can be called ‘producer’s choice’. In the extreme, the channel controller may have no internal production facilities, and may thus become a ‘broadcaster-publisher’.

In this model it can be easier to change priorities and to move resources from one (programme) department or type of programmes to another. The model opens up internal competition and can stimulate internal efficiency and creativity. On the other hand critics of the ‘market model’ point to the risk that the internal competition creates too much uncertainty among the programme departments. Uncertainty can have a damaging effect on creativity.

Establishing an internal market has in some cases proved to be an important measure to create an awareness of the cost of resources and increase transparency and thus supports behavioral change. However, after some years when a new company culture is in place, the administrative costs of operating a strict internal market may exceed the achievable benefits, and the system will need to be modified.

It is the radical changes in the media environment of public service broadcasters, and the necessity to accommodate to the multimedia future, which has precipitated the introduction of new organizational models and the internal market in some broadcasting organizations. Several of them have also instigated ‘new media development units’, whose objective is to encourage and assist in the application of new media, while the programme makers themselves develop the scalable content packages for their programmes.
The fact that most public service broadcasters use public funds makes it more important for them to be **COST-EFFECTIVE AND ACCOUNTABLE**. A successful reorganisation process can be helpful in identifying where there is slack in the system and unnecessary activities that could be removed to make the organisation more efficient. Being a non-profit organisation makes evaluating cost-effectiveness more difficult from a managerial point of view. There are no direct means, such as rising or falling profit margin, to help determine good management practice or good organisational structure. There are however indirect means, such as benchmarking and peer review, which can be helpful.

Public broadcasters try to measure results by the public value they add to society, the quality of the programme output and the degree to which they meet public needs rather than profit or surplus. This is a difficult task and will need much attention by senior management in future.

One approach is to try to identify 'key performance indicators' which are measurable qualities that give advice about relative success of failure. Performance indicators may include the following:

- **Content quality** indicators, such as number of experimentation, numbers of viewers/listeners/users, and appreciation indexes.
- **Portfolio of services quality**, such as reach, appreciation indexes, demography of audience
- **Operational cooperation**, such as the extent to which there are cross media activities
- **Strategic cooperation**, such as the number of partnerships
- **Finance and resource efficiency**, such as the cost per content unit.
Recommendations

The management of public service broadcasters should recognize that radical organizational restructuring is a momentous matter, which not only influences the way the entire organization operates, but also the hopes and dreams of thousands of employees. It is therefore often met by staff with mistrust. It requires thorough preparations and a good deal of skill and courage by management to carry out.

1. In analyzing the need for organizational changes and in carrying them out, it is imperative to INVOLVE MIDDLE MANAGEMENT AND THE EMPLOYEES (and their staff unions). EBU Members, like any successful organization, must be prepared to ‘live with change’.

2. External MANAGEMENT CONSULTANTS should only be used with great care, and never without top management (the DG) taking full responsibility for the process.

3. The EBU should establish a DATABASE OF MEMBER’S ORGANISATIONAL STRUCTURES and organizational developments within EBU Members. This should allow Members to evaluate trends, to share the experiences of other members, and thus arrive at their own conclusions on the optimal organizational structure for their circumstances. EBU Members should also share ideas, and establish a database of techniques for evaluating cost-effectiveness in public service broadcasting organizations.

4. The EBU should establish mechanisms to allow DIRECTORS GENERAL AND THEIR SENIOR STAFF to share experiences in organizational development and structure.

5. Senior management of public broadcasters need to have some GRASP OF NEW TECHNOLOGY and what it can do, when planning organizational change. This will pay off in good decision making.
Chapter 5

The financing of public service broadcasting in the digital environment

Fig. 5.1: Different methods of funding broadcasting

Financing Public Service Broadcasting in the new media era

Many European public service broadcasters have traditionally been financed through public funding processes, in ways parallel to other public institutions whose services are also ‘public goods’. Public goods benefit the population or society as a whole, and often cannot be financed by the individual user payment. The range of methods of funding is given in Fig. 5.1 above.

Most European public broadcasters are financed at least in part from advertisements. Only in UK and in the Nordic countries are public service broadcasters financed solely by the licence fee. A few public service broadcasters are solely financed from advertisements. The technical possibilities of conditional access (CA), where access of the non-payer to the TV channels can be blocked, provides individual user-based financing, and the service becomes paid for like a ‘private good’, though it retains its ‘inexhaustibility’ characteristic of a ‘public good’.

The Figure below shows the current distribution of ways of financing among EBU Members.
Financing through spot advertisements is likely in the future to lose some of its importance, because digital technology will make it possible for the viewer to evade commercial breaks (‘ad-skipping via PVR’), and because of fragmentation of the audience. The PVR may actually be a benefit to the advertiser if the content is sufficiently compelling for it to warrant recording and re-viewing, but the overall effect is likely to be that the importance and revenue value of spot advertising will diminish. Broadcasters whose obtain income from advertisements, and who have not already done so, need to evaluate product placement or other mechanisms as alternatives to spot advertisements.

There is no dearth of declarations by governments and international organisations that public service broadcasters should have secure and appropriate means necessary for the fulfilment of their missions. However, the political reluctance to increase the licence fee where this is the means of financing used, observed in some countries today, may mean that in the long run, public service broadcasting organisations are not able to maintain levels and quality of programming. If national administrations cannot make good on their declarations, or only partly do so, it is essential that public broadcasters be given framework conditions, which make it possible for them to make use of supplementary sources of funding. They must be able to expand their services both to produce products that support and strengthen the core services, and to make money, provided this does not detract from their ability to perform their tasks fully in line with their remit and mission.

It is not only the institutional public service broadcasters who are under economic stress in these times. The private media sector in general is also under economic pressure from several sides. From one side they have to meet rising costs stemming from investments in new technology, new distribution platforms, and more content to fill the new larger distribution capacity. From another side comes pressure to limit or reduce expenditure due to the lack of growth in traditional commercial funding elements.

Because of the uncertain future of funding, all broadcasters are trying to sustain traditional ways of funding while at the same time developing new ones.

Broadcasters and governments must acknowledge that funding method – i.e. the quantity, kind and source of that funding – influences content.

In general, based on wide European experience, it seems that financing by broadcasting fee, of at least one national public service broadcaster, best meets overall public service objectives. If this is not the case, important types of programmes (seen from a public service perspective) will be less readily produced – or not delivered free on universally accessible channels. By contrast, total dependence on advertising revenue
(which can be highly volatile, jeopardising the broadcaster’s finances) can lead to a loss distinctiveness in order to secure adequate income, unless there are appropriate regulatory safeguards.

The future of public funding for public service media

Besides the above-mentioned difficulty of financing broadcasting via a user base, public funding has also been a basic funding method for cultural and political reasons. By using collective financing it has been possible to provide access by all individuals in society, rich and poor, to the content of public service broadcast. Most European countries uphold a collective funding model for public broadcasting, where public funding (the licence fee or government grant) is predominant in combination with income from advertising.

The freedom of each nation to set up and organise public broadcasting system, and to provide for the funding of that public service, including mixed funding, is now accepted. It is also now recognised by the European Union that while public funding of broadcasting to a certain extent may influence the market, such influence on the market must be accepted "insofar as such funding does not affect trading conditions and competition to an extent which would be contrary to the common interests, while the realisation of the public service remit shall be taken into account", to cite the EU Amsterdam Protocol.

There are no technical or regulatory reasons why the broadcasting fee system cannot be maintained in the future. However, broadcasting fee revenue, while usually stable and predictable (though many countries have to deal with growing evasion rates) is static, with a very limited potential for growth (the number of radio/television households is no longer increasing significantly). It is important to establish and gain acceptance for the practice of cost of living indexing the fee.

The political and social acceptance of the broadcasting fees may decrease over time. In addition, new digital receiver equipment might, in the long run, make collecting traditional broadcasting fee payment based on the possession of a radio and/or television receiver problematic. In the longer term, erosion of the channel concept, especially on TV, and the spread of EPGs, may exacerbate the problem. This may create the need for a system of licence fee collecting which is not related to the television set itself but to the terminal providing access to the public service programming.

In some countries, the collection of the public broadcasting fee is organised through other ways of collecting public funding, for instance via the electricity bill. In the Netherlands, authorities have replaced the broadcasting fee by a central government contribution to public service broadcasting, which is part of the general central government budget. This contribution is financed by a special levy as a supplement to income tax. The amount of tax money earmarked for the Dutch public service broadcasters is indexed, and cannot be used for another purpose. Since the basis (possession of a radio or television set) has now been replaced by an individual tax duty, exemptions for individual citizens are no longer possible.

If finance is provided by a tax model, it should be done in a way which fixes the public contribution in advance over a period of years, so as to minimize the possible threat to the broadcaster’s editorial independence, while providing, at the same time, the necessary medium and long term planning capacity.

Although the Dutch system has been satisfactory, the direct state financing of the ‘tax model’ can, in theory, have drawbacks. Governments can, through direct financial control via tax-financing, be encouraged to adopt a more interventionist approach in the programming of public service broadcasting.

Advertising, sponsoring, etc..

As already mentioned above, there are signs that the business model of advertising-financing free-to-air channels may in the future be threatened by the introduction and proliferation of new digital techniques, making ‘ad-skipping’ technically possible and simple. There may also be a further diminution due to audience fragmentation. After decades of growth in the European radio and television advertising markets, there may be very limited potential for a further growth, which can meet rising costs in the electronic media industry.

This may be one of the contributory factors why it has been international media companies who have been the driving forces in developing digital satellite television distribution, and the creation of the gatekeeper function with electronic programme guides (EPGs) and subscriber management systems (SMS). Often in the past it has been the public broadcasters who have spearheaded new technology, because they can, thanks to the public funding, run new distribution systems in a start up period until the audience rises. The international
media companies see the new digital services as a new source of revenue and therefore have been in the forefront of developing new business models in television broadcasting based on the digital technology.

Another option is to move the advertisement away from flow-disrupting and ‘zappable’ spot commercials, and to insert them directly in the programs, effectively as subliminal promotions of products (product placement). Many public service broadcasters have concerns about the ethics of product placement.

Sponsoring can be seen as a special type of advertising. Although it can sometimes be difficult to see the difference between sponsoring and conventional advertising, one characteristic of the former is the element of corporate branding, promoting the sponsoring firm rather than a special product. Some public broadcasting companies have rules regulating their sponsoring activities. They may face difficulties in the coming years, where the acquisition of important rights is more and more attached to a sponsor element.

**Individual user oriented payment**

As mentioned earlier an important reason why broadcasting in Europe originally was collectively financed was its ‘public goods’ character. The programmes were broadcast over the air and everyone could access them. There has also been – and still is – a cultural and welfare reason behind the collective funding of public service broadcasting. It is important for every citizen to be able to receive the programmes irrespective of income differences, and this is a policy in line with the universality principle of free-to-air public service broadcasting.

With the introduction of radio and television broadcasting through cable and via satellite, and with the use of encryption techniques, it became technically possible to differentiate between payers and non-payers. This opened up the prospect of broadcasting **SUBSCRIPTION CHANNELS**. This created the revenue model for thematic channels directed towards (and paid by) viewers in special interest groups, typically films, sport, children, different hobbies, etc.

The new delivery systems combined with encryption have also made it possible to market user-based payment for the single programme, **PAY PER VIEW** (PPV), where the viewer pays for viewing a football match or a movie. Digital technology will, in future, lead to the introduction of even more individual user-based payment systems, not only for single programmes, but also for a wide range of new services. This development matches the growing importance of individualisation and personalisation of the programme-content, and the way it will be used in the digital, multimedia future. This development towards a more individual oriented user-based payment system will probably, in the long run, result in fundamental changes in the flow of finance along the media value chain and the distribution of funding.

Today, most financing in the audio-visual industry flows through the programme ‘packagers’. In the future it is expected that the gatekeepers (aggregators and access providers) will become the main beneficiaries of subscription revenues, and will also attract some advertising revenues and payments for new services (for access to information, individual communication, and net-shopping etc.). Aggregators and access providers will buy content from rights holders and content producers, and will pay networks for their distribution infrastructure.

As this process unfolds, the current public funding mechanism that allocates funds for the largest part to programme packagers may be reoriented to shifting public funds towards other stakeholders of the value chain (mainly the content producers). There is a risk that this may unconsciously draw society to the “distributed public service” model described earlier.

Although total income sources are clearly skewed toward license fee, the importance of commercial funding for many EBU Members must be acknowledged: over 40% of EBU Members get at least 20% funding from advertising. Many of the strategic and policy position differences of Members derive from this fact.

The commercial media sector, realizing it is highly prone to advertising cycles, has adopted a number of strategies to minimize the impact that these fluctuations have had on income. The most common approach has been to diversify revenue sources to other related businesses and for some private broadcasters up to half of total income is now derived from these auxiliary revenue streams. The strategy has worked effectively for the largest private broadcasters in Europe, many of whom were able to maintain large operating profit margins even in the most recent advertising recession.
Commercial revenue models

In this section we focus on ‘commercial’ revenue. The development of technology, the regulatory response, and shifting consumer behavior is leading to important future challenges for all free-to-air broadcasters. In the chart below we attempt to explain the financial impacts and broadcaster strategies of broadcasters who have commercial revenue for dealing with them.

We start at the bottom of the above figure with technology as the ‘causal factor’. This is a simplification, since regulation may foster technological innovation. The development of digital devices and new distribution channels has opened up new options for advertising and marketing, while at the same time empowering consumers to choose their most desired content and avoid unwanted content, including advertising.

Although the number of channels and means of consuming them has expanded dramatically, channel proliferation has been contained and has not led to a commensurate redistribution of audiences. The primary reason for this is that digitalisation (on satellite and cable platforms) has begun with Pay-TV operators with limited number of subscribers. In the long-term this situation will probably change as other distribution technologies, especially DTT, make more channels available to a wider part of the population. In the future, audience fragmentation will come more and more in line with the degree of channel proliferation.

Digitalisation and its effects on audience fragmentation are leading to three economic effects:

- the loss of impact of traditional spot advertising brought about by ad skipping and problems in measuring small audiences;
- the direct loss of revenue on main generalist channels; and
- the shift of advertising budgets to other media, including the Internet.

Today, these tendencies are clear but limited. They are limited because digitalisation in Europe is not yet complete. Digital television still reaches less than half of households in almost all countries. Broadband Internet, though growing, is not near universal usage, and the penetration of PVR devices is still low.

Broadcaster strategies include the following:
• building a new channel and media portfolio
• developing product placement and new advertising techniques
• Diversifying into related businesses and expanding markets.

**Product Placement**

Product placement (PP) is the representation of branded goods, services, or ideas within the media content itself that is not sequentially separated from the editorial content. This integration can range from a simple coincidental or random depiction to full incorporation into plotlines, central characters, and settings. Increasingly, in markets where PP is permitted, the editorial and/or production nature of content has changed to accommodate the more intrusive form of PP. In rare cases PP occurs as an intentional editorial decision and there is no compensation paid. Most often, PP is remunerated or paid in-kind with the product itself. PP is similar to sponsorship and promotions, and is used primarily within 'brand building' strategies.

A shift to more PP is one of a set of reactions by broadcasters and advertisers to several trends including audience fragmentation, introduction of ad-skipping technology, increasing clutter, and undependable audience measurement systems.

As a result, for global advertisers, PP has become an increasingly important aspect of the 'marketing mix', – the allocation of marketing budgets to specific media and how they are applied within media. So far, there are indications that PP will tend to replace advertising and not represent a new revenue stream as advertisers shift rather than augment budgets to pay for PP.

Non limited by regulation, 2004 spending on product placement in the United States accelerated rapidly, more than doubling the previous year’s level*. As a percent of total TV advertising in the US, PP revenue represented 3.4% last year but this figure is expected to climb to 6% by 2009.

Meanwhile, Product placement regulation in Europe remains an area of uncertainty. It is generally regarded as surreptitious advertising because the viewer is not explicitly informed about its nature, and, although there are no reliable statistics on the value of PP across Europe, PP is fairly limited in practice.

However, in some countries there is no legal definition or explicit prohibitions. The European Commission has given indications that it intends to clarify and loosen restrictions on PP.

**Impact on editorial content**

The impact of product placement on editorial content can range from superficial to severe, to the point where content follows product – ‘the tail wagging the dog’. Fuller integration into plotlines, characters, and settings increases the effectiveness and hence the financial value of PP. Consequently, as PP becomes more prevalent and widespread, the market will demand a higher degree of impact. In the past a clear separation existed: the content of a commercial spot was under complete editorial control of advertisers and their agencies, and programme content was under the domain of broadcasters. This separation will be eroded with PP.

Product placement is not a new marketing technique and is not reliant on digital technologies for its implementation. The growing importance of product placement now is part of a set of reactions to the inadequacies of spot advertising in the new media environment. Unregulated, PP is expected to grow in quantity and intrusiveness. It will have a microeconomic impact through the realignment of the marketing mix of individual advertisers, and affect the industry as a whole through either reduction or slower growth of spot advertising. Format shows and global advertisers may 'internationalize' the phenomenon of product placement.

Currently, the main proponents for PP are the largest marketing and advertising companies who are already moving more of their traditional marketing budgets to branded entertainment. Because of their global reach and influence, their PP practices could well spread to other markets.

* Source: PQ Media LLC, March 2005
The business impact of product placement will be the emergence of new companies to manage, implement, and track PP activity. These will become more involved in the production process and demand a portion of the integration fee.

The future funding of public service broadcasting

Realising the developments in the market (multi-media, and the change in the media value chain) public broadcasters cannot, in the long run, avoid co-operation with commercial companies performing gate keeping functions. Thus, it may be more and more difficult to separate public broadcasting from the wholly commercial market and its sources of financing, and to draw a clear line between commercial and non-commercial activities.

Within the European Union there have been concerns about the compatibility of public funding of public service broadcasters with State Aid principles, as well as for proportionality and transparency of this funding. In the ‘Communication from the Commission on the application of State aid rules to public service broadcasting’ (15.11.2001 – 2001/C 320/04) it is stated that public funding is in accordance with EU regulation as long as it meets a number of criteria, including:

- whether an official definition of the public service remit exists;
- whether this definition does not extend the scope of the public service remit to include activities that cannot constitute public service activities;
- whether a given undertaking has been entrusted, by means of an official act, with the performance of that remit, and
- Whether there exists a control mechanism, by means of an independent body, in order to ensure that the public service mandate is actually performed by the entrusted undertaking.

A difficult – but important – question is how to make the distinction between ‘public service activities’ and those, which are not. Such a distinction shall be based on the (national) definition of public service broadcasting remit and is a separate issue to the way of financing the activities in question.

A number of “new services” (including those funded by individual user payment) must be considered as public service, as long as they fall within boarders of the public service remit. But, publicly funded broadcasters might also have to carry out activities outside the public service remit, and finance them on a commercial basis. Rules of competition and the need of transparency makes it critical to separate accounts both on the revenue side (where does the money come from?) and on the expenditure side (in which field of activity are they used?).

Although there have been some positive clarifications in the guidelines drawn up by the European Commission, the public service broadcasters will probably, for a long period, have to live with considerable uncertainty in the financial field. This is not only because of any legal and regulatory battle with commercial competitors, or due to a declining political willingness to sustain public funding, but also because leaving the safe world of public funding and the traditional broadcasting of radio and television channels, and moving out on the open marketplace to join up with commercial gatekeepers in offering a wide range of new services, is a difficult route to follow. But there is no alternative way to go, if public service broadcasting is to fulfil its obligations to society in the digital future.
### Recommendations

1. The finance environment for public service broadcasters is changing, precipitated by the evolution of technology and the media market. Public service broadcasters need to understand the forces at work, predict trends and tendencies, and try to lead public debate about financing of public service broadcasting.

2. Public funding by government grant rather than licence fee could have advantages such as removing the need to identify the receiver or user to be subject to a licence, but in practice it opens the door to government intervention, and should be viewed with caution.

3. EBU Members whose income includes spot advertising need to be plan for a future where spot advertising diminishes in unit value, because of audience fragmentation and the ease of avoidance of advertising spots by viewers with PVRs.

4. EBU Members need to study the case for product placement as an alternative or an addition to spot advertisements and sponsoring, though there are ethical issues involved, and boundaries will need to be defined for product placement in a public service remit.
### Annex 1

**Available information on services, time tables, and business models**

<table>
<thead>
<tr>
<th>Terrestrial</th>
<th>Services</th>
<th>Content provided by</th>
<th>Business Model</th>
<th>Launch, Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTT (DVB-T)</td>
<td>Free-To-Air Television Pay TV (partly) Data Broadcast HDTV (trials)</td>
<td>PSB Commercial TV ops</td>
<td>Spectrum awarded to PSB. Multiplexes run by/leased to Broadcasters. Limited Pay-TV offerings (France).</td>
<td>Most of Western Europe</td>
</tr>
<tr>
<td>Mobile (DVB-H)</td>
<td>Television Broadcast (IP) Radio Broadcast (IP/TS) Data Broadcast (IP) Interactivity (Telephony)</td>
<td>PSB Commercial Radio &amp; TV ops (New) Content Providers</td>
<td>Platforms run by Mobile Phone, telcos or broadcast companies. Charging subscription fees. Revenues shared with content provider. Option of platform-independent free-to-air broadcasting to mobile phones currently being tested (Germany)</td>
<td>Broadcasting to mobile receivers has begun in Europe. Services have been launched in Italy and Germany and are expected to begin in the United Kingdom and Finland by the end of the year. Many countries throughout western Europe have undertaken pilots for mobile television services for both the DVB-H and the T-DMB standards. In some cases, these pilots may become full commercial launches.</td>
</tr>
<tr>
<td>Radio and Mobile (DAB/DMB/DXB)</td>
<td>Television Broadcast Data Broadcast Radio Broadcast Data Broadcast Interactivity (Telephony)</td>
<td>PSB Commercial Radio &amp; TV ops</td>
<td>Platforms run by broadcast, telcos and Mobile Phone Companies. Charging subscription fees. Revenues shared with content provider. Option of platform-independent free-to-air broadcasting to mobile phones currently being discussed (Germany)</td>
<td>Wherever there is DAB infrastructure there can be DMB. DMB is the first broadcast mobile TV delivery standard to have launched commercially. In Korea, services are on air, devices are available in shops. Meanwhile trials are taking place in Germany, France, Holland, Norway, Italy, Spain, and China.</td>
</tr>
<tr>
<td>3G telephone (UMTS)</td>
<td>Services on Demand (All) Download Services Internet Access Telephony Games The services include VoIP through the Push-to-Talk application, video streaming, and a broad range of applications.</td>
<td>PSB Commercial Radio &amp; TV ops Music / Film Industry Game providers Retailers / Service providers</td>
<td>Platforms run by Mobile Phone Companies. Charging subscription, video-on-demand, download and transaction fees. Revenues to be shared with content provider.</td>
<td></td>
</tr>
<tr>
<td>Cable / Fixed Telephone:</td>
<td>Services</td>
<td>Content provided by</td>
<td>Business Model</td>
<td>Launch, Market</td>
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<tr>
<td><strong>Broadband Cable</strong></td>
<td>Radio &amp; Television Broadcast HDTV Data Broadcast, EPG Data Broadcast Services on Demand IP Internet Access Telephony</td>
<td>PSB Commercial TV ops Music/Film Industry Retailers / Service providers</td>
<td>Platforms run by Cable Companies. Charging triple play subscription fees, package fees, video-on-demand, download and transaction fees. Revenues to be shared with content provider. “Walled Garden” operation.</td>
<td>Digital television was introduced on cable in Sweden, Belgium, Denmark, Germany, UK, Norway and France. Other cable operators in Europe have also invested in digital video broadcasting capacity.</td>
</tr>
<tr>
<td><strong>(Open) Internet</strong></td>
<td>IP Radio &amp; TV streaming IP Data Broadcast, IP Services IP Data Services IP Telephony</td>
<td>PSB Commercial TV ops Music/Film Industry (B to C and P to P) Retailers / Service providers</td>
<td>Access via Internet provider (subscription fee). Also provides multimedia services and VoIP telephony. Each operator offering his services via the Internet is free to implement their own business model (for Video-on-Demand, Podcasting, etc.). Therefore no integration of these services in “walled garden” operations.</td>
<td>Globally up and running</td>
</tr>
<tr>
<td><strong>DVB-S</strong></td>
<td>Radio &amp; Television Broadcast Data Broadcast HDTV IP Download Services IP Internet Access (Down)</td>
<td>PSB Commercial Free TV ops Pay TV ops Game providers Retailers Advertisers Service providers</td>
<td>Platforms run by satellite operators as business-to-business operation. Charging platform operators, broadcasters and content providers which by themselves may generate subscription, download and transaction fees. Transparent transmission of free-to-air broadcasts.</td>
<td>All European Countries</td>
</tr>
</tbody>
</table>
Annex 2
List of Members

Mr Andreas Weiss  ARD
Mr Knud Ebbesen  DR
Mr Xavier Drumare  France Television
Mr Piotr Gawel  Polish Television
Mr Arild Hellgren  NRK
(assisted by Per Böhler)
Mr Stanislaw Jedrzejewski  Polish Radio
Mr James Lancaster  BBC
Mr Leif Lønsmann  DR
Mr Matteo Maggiore  BBC
Mr Neil Regan  BBC
Mr Alexander Shulzycki  EBU
Mr David Wood  EBU

Corresponding members
Mr Carlos Barrocas  RTP
Mr Pedro Jorge Braumann  RTP-SGPS
Mr Hamdy Emara  ERTU
Dr Frank-Dieter Freiling  ZDF German TV
Mr Claude Galipeau  CBC
Mr John Howells  S4C
Mrs Nicoletta Iacobacci  RAI
Mr Hannes Valdma  EESTI Radio
Mr Dionysis Kontogiannis  ERT SA
Mr Valentin Khlebnikov  RTR
Mr Ruud Leyendekker  NPB/NOB
Mr Gregoris Maliotis  CyBC
Mr Constantino Montaner  RTVE
Mr Simon Pitts  ITV
Mr Ismo Silvo  YLE
Mr Momčilo Simić  AYRT/RTS
Mr Harry Sorgeloos  VRT
Mr Ahmet Arif Tarakcioglu  TRT
If there is a fundamental basis for public service broadcasting, which sets it apart from purely commercial broadcasting, it is that public service media use money to make programmes and provide public services, and not the other way around. This must be the fundamental guiding principle for today’s Public Service Media Providers, as they contribute to new and old media. Public service media will continue its contract with the people.