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ANNEX 1: BACKGROUND

Chapter 1. Economic Modelling Background

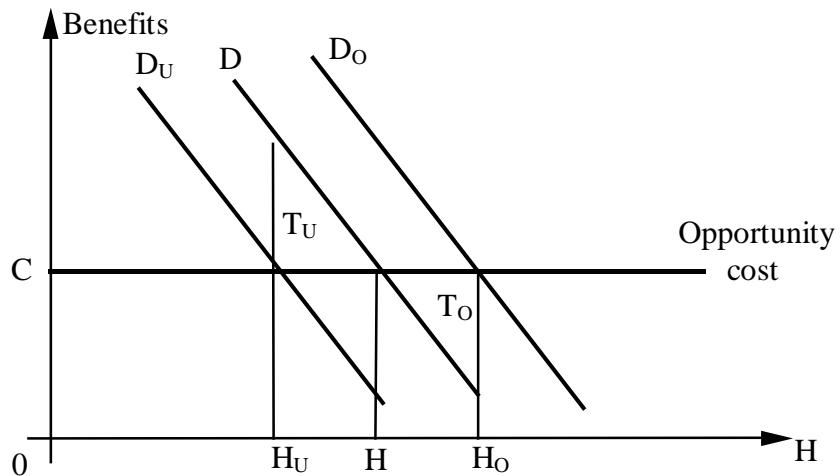
1. Efficiency issues.

This section examines the kind of economic organisation that will make the best possible use of limited resources (i.e. will achieve the most efficient outcomes) given tastes and technologies. This exercise adopts only Pareto value judgements, i.e. it is assumed that: a) households judge their own benefit and b) social welfare on the whole increases if the welfare of one single household increases. The crucial issues that need addressing are as follows:

- Can regulatory interventions - aimed at (i) increasing the flow of information to consumers and (ii) facilitating parental control over minors - be justified on the grounds of efficiency?
- Does public intervention offer sufficient efficiency advantages over free market supply?

Based on the principles of efficiency, there are some economic criteria that argue in favour of appropriate public intervention. Below we examine how strong and convincing these economic arguments are and what kind of regulation seems preferable as far as economic efficiency is concerned.

Generally speaking, there is a fundamental need to address information issues to ensure that the competitive market functions well and to achieve social efficiency. A competitive market mechanism requires consumers to be well informed about the nature of products; they need to be able to define preferences and to determine their market demands in order to make rational consumption choices. This assumption may fail for many audiovisual products where information is complex and imperfect, and contents are mainly decided by producers, which in turn implies serious consequences for the efficiency of the market. In a scenario where viewers, particularly younger and less experienced viewers, are unable to judge correctly the quality of content and are not aware of benefits to be derived from watching it, the market may be distorted by over- and under-valued aggregate demands (such as D_O and D_U), which do not reflect the real private valuations D of households.

Figure 1

As Figure 1 shows for a given opportunity cost of time C this may lead to either too much or too little time (H_O and H_U respectively) being spent on the consumption of a given audiovisual product. In the absence of regulation, this market outcome implies relevant losses in consumer welfare captured by the loss triangles T_O or T_U representing the difference between effective benefits and opportunity costs of over- and under-consumption.

According to economic theory, in order for demand to reflect true marginal private valuations (avoiding over- and under-consumption of audiovisual products) the existing supply of information (provided by other institutions, e.g. newspaper, magazines) may be supplemented by public intervention. In audiovisual markets where competition lacks, increasing competition alone does not necessarily enhance social welfare, since the benefits of competition depend on information that is complete, the absence of strategic behaviour, and equal bargaining power for consumers and producers. Thus, public intervention within these imperfect (oligopolistic) markets should aim to furnish consumers with some power, (in the same way as providing information about the content of food items does) and to prevent producers from exploiting their information advantage. Naturally, any further interference with consumer choice and with free competition should be minimised in the interests of consumer taste and preference for variety, as well as the cost of public intervention.

The expression “V-chip” initially stood for “viewer-chip” and was intended to partly address the information issues raised above. It was supposed to go beyond *information labelling*, i.e. providing recognisable informative indicators. V-chip *rating* - i.e. rating embedding information labelling in a technical device - provides viewers with the choice of blocking unwanted audiovisual products by facilitating the search and choice within given preferred contents. In this way they may be beneficial to all consumers, as they represent a less restrictive alternative to *channelling*, which involves the transmission of given audiovisual content only at designated times and/or only by specific carriers.

In this context social concern about harmful effects of the media on the development of individuals, and, in particular, minors, which has led to the introduction of watershed, channelling or censoring systems in many societies, –may be addressed effectively by rating content. For this reason, the V-chip has become known as the “Violence Chip” in the USA. Moreover, the debate in the USA has focused on parental control, freedom of speech and designing a deregulated Internet.

We will now look at the basic nature of the problem for a typical responsible household, with a sincere interest in the welfare of its children, in a very simplified broadcasting setting. Clearly, since children are, under normal circumstances, less well informed it is generally agreed that most consumption decisions should be left to their parents, at least in the early stages of their development. In what follows we will separate the expenditure of time by parents in control activity c^h from other expenditures (net flow of commodities e^h) that increase their children’s welfare v^h . It seems reasonable to assume the function $v^h(\beta, c^h, e^h)$ represents children’s welfare, and is characterised by decreasing marginal benefits for all arguments.

Given the current broadcasting regulatory environment β with respect to children,¹ the household may only enhance the quality of its children’s viewing and welfare $v^h(\beta, c^h,$

¹ β represents the quality of broadcasting regulation environment, or alternatively the broadcast environment.

e^h) by increasing its control activity c^h , and thereby reducing time spent in income producing activities ($y^h - c^h$). This will lead to a decrease in its net consumption expenditure $Y^h = w^h(y^h - c^h) - e^h$, based on the wages earned by the household w^h and the net flow of commodities towards the children e^h .

Let us assume that the household utility U^h is given by the sum of its net consumption expenditure $w^h(y^h - c^h) - e^h$ and the welfare of its children $v^h(\beta, c^h, e^h)$.²

The household maximises its utility by offsetting the marginal opportunity of consumption (i.e. losses incurred by increasing parental control $\partial U^h / \partial Y^h = w^h$) against the marginal benefits generated by parental control activity $\partial v^h / \partial c^h$ (and by a net flow of commodities $\partial v^h / \partial e^h$) which are assumed to be decreasing.³

No household can modify the environment β^o , which all children share. However, each household could benefit in an environment with improved broadcasting regulation ($\beta^1 > \beta^o$) since the welfare of its children $v^h(\beta, c^h, e^h)$ increases with the quality of the environment.⁴

The initial equilibrium and the consequence of an increase in β for the representative household are summarised in Figure 2. For reasons of simplicity we disregard the presence of a net flow of commodities towards the child e^h , and only take into account the total utility derived from allocating a given amount of time to parental control (c^h) and income producing activities ($y^h - c^h$). By devoting all this time to work ($c^h=0$) it will reach point Y, moving along segment 0Y. In the given environment β^o , time spent on parental control activities increases welfare along the $v^h(\beta^o, c^h)$ curve OV. Welfare is

² To simplify matters, the household is assumed to have a quasi-linear utility function - i.e. a constant marginal opportunity of consumption equal to one $\partial U^h / \partial Y^h = 1$. Hence, disregarding others arguments, we may write:

$$[1] \quad U^h = v^h(\beta, c^h, e^h) + w^h(y^h - c^h) - e^h$$

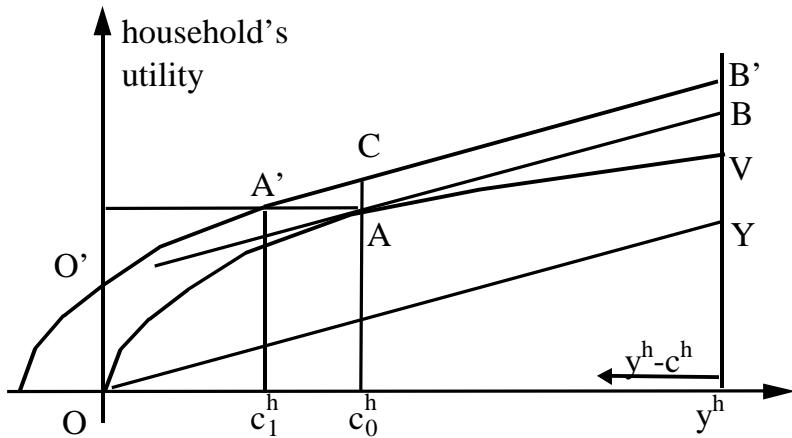
³ In practice, maximising household's utility [1] we get the following first order condition:

$$[2] \quad \partial U^h / \partial y^h = w^h = \partial v^h / \partial c^h = \partial v^h / \partial e^h$$

⁴ Accordingly, household's utility increases ($dU^h > 0$) as environment improves (i.e. $d\beta > 0$)

$$[3] \quad dU^h = \partial v^h / \partial \beta \, d\beta > 0 \quad \text{for } d\beta > 0.$$

maximised when starting from c_0^h (where the marginal opportunity of consumption w^h equates the marginal benefits of parental control activity $\partial v^h / \partial c^h$) and all time is devoted to income producing activities. This allows households to move along AB [$v^h(\beta^0, c_0^h) + w^h(y^h - c_0^h)$], which lies above AV (given decreasing returns in the control activity $\partial v^h / \partial c^h < w^h$).

Figure 2

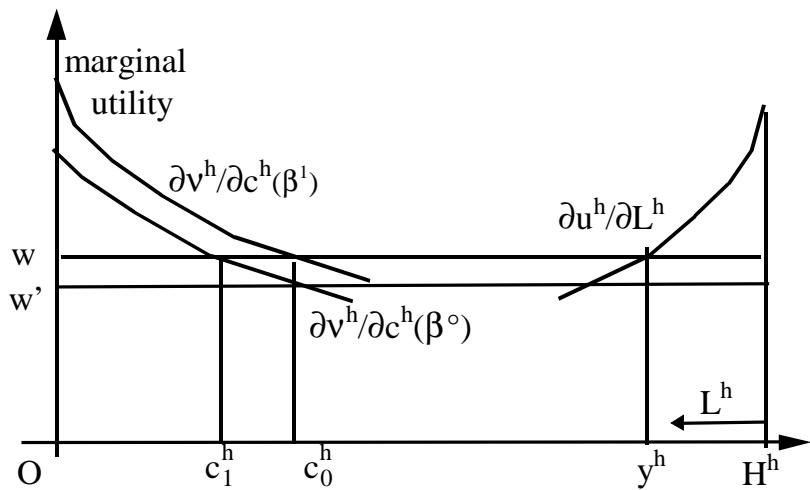
An improved environment ($\beta^1 > \beta^0$) - shifting the utility function to the left by the amount of time saved by not requiring parental control activities ($c_0^h - c_1^h$) - allows the household to devote more time to income producing activities. In this case, the household is allowed to move along A'B' [$v^h(\beta^0, c_1^h) + w^h(y^h - c_1^h)$].

The benefits from less time ($c_0^h - c_1^h$) spent on parental control activities are measured by the opportunity of increasing consumption by $w^h(c_0^h - c_1^h)$. This is the *compensating variation* measure of the benefits, i.e. the amount of money that would need to be given to the household in the first environment β^0 in order to bring it to the same level it would attain if the improved environment β^1 was achieved through regulation. Given the household's quasi-linear utility function, this measure coincides with the *equivalent variation*, i.e. the amount of money that could be taken from the household in the final environment β^1 in order to bring it to the same level as in the original environment β^0 .

The reduction in time spent in parental control is also evident from Figure 3, which compares w^h , the marginal utility derived from allocating $(y^h - c^h)$ hours to income producing activities, with $\partial v^h / \partial c^h$, the marginal benefits from allocating (c^h) hours to parental control activities. In the original environment β° there is no gain in allocating more than c_0^h hours to parental control activities, since beyond that point the marginal benefits of parental control activity $\partial v^h / \partial c^h$ are lower than the opportunity costs of consumption w^h . In the new, improved environment ($\beta^1 > \beta^\circ$) the marginal benefits of parental control activity $\partial v^h / \partial c^h$ are shifted to the left by the amount of time saved by not undertaking parental control activities ($c_0^h - c_1^h$). Moreover, the marginal benefits of time allocated to the two competing activities are equated for the level of consumption equal to c_1^h .

Note how the assumption of a fixed amount of hours devoted to the two alternative activities (parental control or work) is equivalent to subtracting from the available time (in any period) the quota dedicated to leisure $y^h = H^h - L^h$ and that the utility function of leisure $u^h(L^h)$ gives decreasing benefits, i.e. $\partial u^h / \partial L^h$ is declining.

Figure 3



It follows, that w^h economic power, is the wage rate net of tax $w_G^h(1-t)$. Accordingly, as shown in Figure 3, higher taxes (leading to w') increase the time spent on parental control activities and thereby decrease the benefits from work. Hence, the effect of taxes (distorting the behaviour of households by providing incentives for parental

control activities) can be compensated for by an improvement in the regulatory environment.

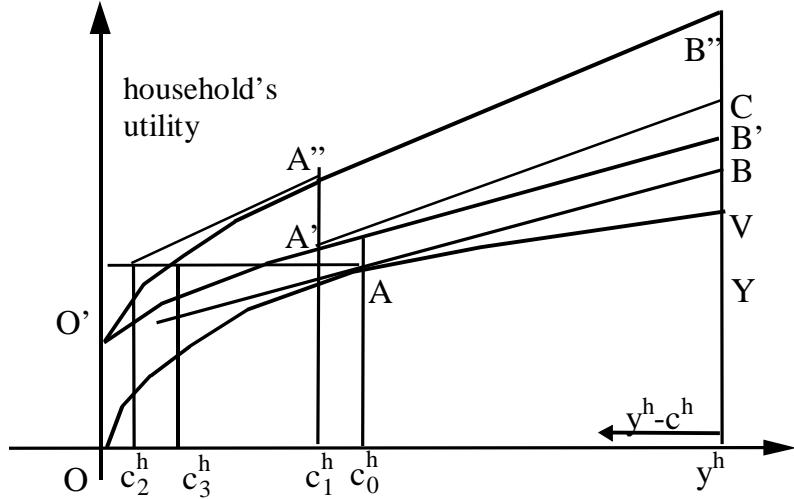
Not only does the improvement of children's broadcasting environment through an appropriate regulatory framework reduce time spent on parental control activities (shifting OAB to the left), but it also modifies its inclination. More specifically, it increases the benefits from work and from parental activities, since the household becomes more productive by specialising in work and other parental activities. Hence, the time ($c_0^h - c_1^h$) saved in parental control activities and the consequent increase in consumption $w^h(c_0^h - c_1^h)$, no longer assess the benefits for the household correctly.

In fact, the time spent on parental activities not only reduces earnings directly by decreasing time available for work, it also reduces them indirectly, by slowing down the growth of the parent's career. Accordingly, we may wish to consider the presence of any indirect benefit linked to an increase in wages as a result of increased working activity $\Delta w^h c_1^h$. This will also reduce time spent on parental control activities, since the opportunity cost of consumption has increased. As a consequence, the marginal benefits of parental control activity $\partial v^h / \partial c^h$ must increase by the same amount. The reallocation of time between different activities is the opposite of that resulting from the reduction in net wage w^h due to an increase in taxation, which we have previously examined.

The increase in benefits from parental activities is represented by the rotation from O'A' to O''A'' in Figure 4, since the time c_1^h allocated to parental control activities provides an additional utility $\Delta U^h = w^h(c_1^h - c_2^h)$ to the household.

Both effects may be reinforced by the substitution of commodities by parental activities, as the opportunity cost of consumption increases, a possibility we did not take into account in Figure 2, as we were disregarding the net flow of commodities towards the child.

Figure 4



By referring to Figure 4 we can calculate the benefit of the regulatory activity for any level of β for the representative household and draw (as shown in Figure 5) the marginal benefits it derives from the regulatory activity $B_{mg}^h(\beta)$ (i.e. the marginal rate of substitution between improvement of the broadcast regulation environment and income). In a society composed of N households the social marginal benefit function is simply given by the sum of individual marginal benefits $B_{mg}(\beta) = N B_{mg}^h(\beta)$.

Public intervention implies: i) a regulatory social cost $C_{mg}^g(\beta)$ in terms of reducing private expenditure, ii) an additional private cost ($p^h = p$) to buy the required technical device, which we may assume to be a constant and disregard for the sake of simplicity.

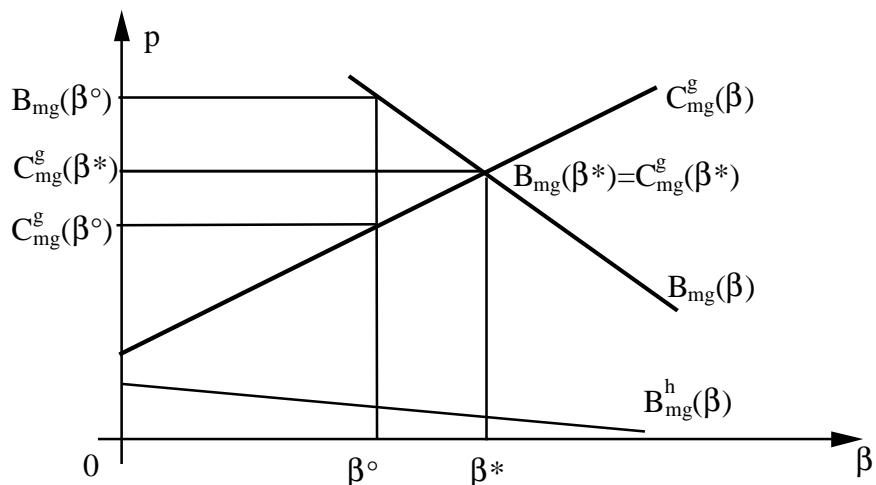
In this simplified setting, the basis of the cost-benefit calculus is provided by comparing the collective benefits of the regulatory activity $B_{mg}(\beta)$ with its costs in terms of marginal benefits of the private consumption $C_{mg}^g(\beta)$, which is foregone.

In theory, the regulatory activity should be pushed forward until the sum of the household's marginal rate of substitution between improvement of the broadcasting

environment and income is greater than the marginal cost of the regulatory activity in terms of private consumption, $\beta \leq \beta^*$ as shown in Figure 5.⁵

The total net economic benefit of regulation can be seen as the difference between social marginal benefits and marginal cost curve $C_{mg}^g(\beta)$. The net benefit is at a maximum when marginal costs and benefits are equal, i.e. when the optimal social level β^* is reached.⁶

Figure 5



From the previous analysis we can conclude that regulation of the broadcasting environment is similar to the provision of a public utility, since it simultaneously affects the productiveness of all households.

Even if the public utility argument is disregarded, an externality may arise because the creation of an improved broadcasting environment for children brings gratification to other members of society due to altruistic (or selfish) reasons. In practice, if the behaviour of someone else's child is affected negatively by the environment, it may be

⁵ Specifically, with N identical household we have:

$$[4] \quad B_{mg}(\beta) = N \frac{\partial v^h}{\partial \beta} d\beta \geq dC_{mg}^g(\beta)/d\beta.$$

⁶ More precisely, the net benefit is given by the difference between the areas of regulation benefit (once the technical devise is bought) and costs, as in formula [5] below:

$$[5] \quad NB = N \left(\int_{\beta^o}^{\beta^*} \frac{\partial v^h}{\partial \beta} d\beta - p \right) - \int_{\beta^o}^{\beta^*} dC_{mg}^g(\beta)/d\beta d\beta$$

detrimental to the welfare of other children or members of the entirety in addition to the affected child itself (whose welfare should matter to society and at least to unselfish households). Hence, there is a legitimate social concern in modifying the current environment.

Therefore, the usual market failure argument - in the presence of a public utility and an externality - does apply. Moreover, the presence of an externality implies opting for more drastic solutions.

Regulatory costs $C_{\text{reg}}^g(\beta)$ in terms of private consumption increase more than proportionally with the complexity of the regulatory framework. Moreover, as is the case with education, there may be a further argument for additional regulation if, without sufficient information and parental support, parents cannot always be trusted to act in the child's best interest. Hence there is a need to introduce minimum standards.

Conclusion

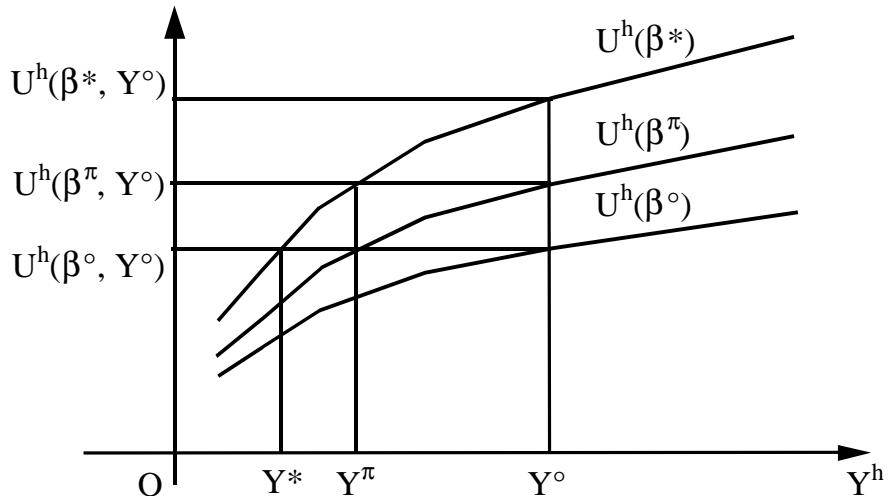
Since the majority of economic benefits occur in the form of time savings, the first approximation emerging from the previous model is that we can achieve a fairly accurate projection by using data on earnings. This way we can consider the monetary value of parental control activity (which is no longer necessary in a regulated environment), in order to reach the previous level of children's welfare, i.e. $w^h(c_h^b - c_b^h)$ which constitutes a cautious estimate of household benefits, as shown in Figure 4.

The fact that elements of risk characterise the world we live in and influence the actions of all households reinforces our previous reasoning. In fact, enhanced regulation yields not only a *direct benefit* by reducing parental control activity (and an *indirect benefit* as the externality case shows) but also additional benefits as a result of solving the problems caused by: (i) uncertainty about the future environment (i.e. the *option value* of regulation) and (ii) the *irreversible* harm which, in the absence of a regulated environment, stems from (ex post) insufficient parental control.

Let us first show in detail the option value of public intervention. In order to develop this argument let us assume that households are risk-averse and that the household's utility depends only on income Y^h and the regulatory environment β . We can compare the utility of income in a properly regulated environment - $U^h(\beta^*, Y^h)$ - with that in the original environment - $U^h(\beta^\circ, Y^h)$ - and/or a risky environment - $U^h = \pi U^h(\beta^*, Y^h) + (1-\pi) U^h(\beta^\circ, Y^h)$ - where π represents the probability of a properly regulated environment, in absence of state intervention.

These utility functions are represented in Figure 6 as functions of consumption expenditure. Clearly the utility curve is higher in the first case and willingness to pay can be represented by the *compensating variation* CV at a given income level Y° , i.e. by the difference in income ensuring the same utility level in both cases $Y^\circ - Y^*$. Analogously, the *expected compensating variation* ECV at the same income level Y° is $Y^\circ - Y^\pi$.

Figure 6

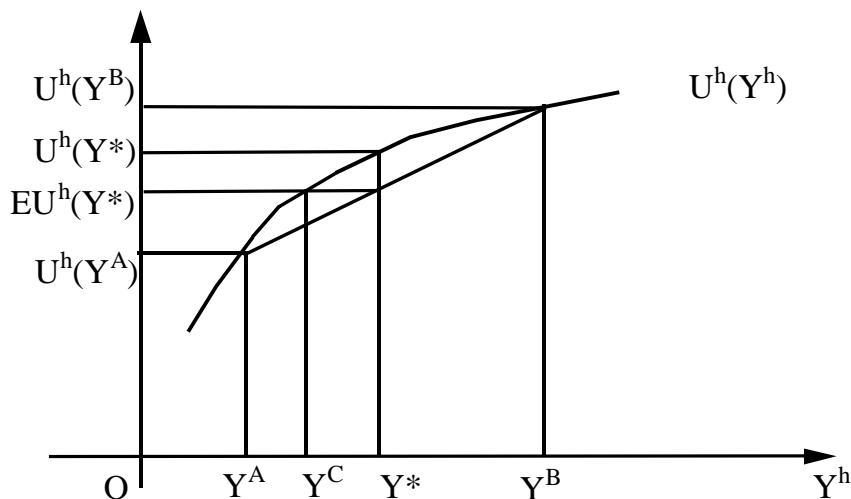


Hence, for the same income level Y° the *option value* OV - i.e. the willingness to pay to eliminate the uncertainty related to the supply of a regulated environment - in this case is: $OV = CV - ECV = Y^\pi - Y^*$.

This result is illustrated in Figure 6, where the utility curves $U^h(\beta^*)$, $U^h(\beta^o)$ and $U^h(\beta^r)$ represent the household's utility of income in a regulated, unregulated and risky environment respectively.

Let us now consider the irreversible harm issue, assuming, for the sake of simplicity, that the damage can be valued in monetary terms $Y^B - Y^A$, so that now the household's utility is only a function of income $U^h(Y^h)$. The elimination of costs associated with harm should be included among the benefits of the regulated environment. Such a component can be calculated by multiplying the monetary cost of harm ($Y^B - Y^A$) by the probability of the occurrence of harm π^B . Additional benefits for risk-averse households derive from eliminating the risk-bearing costs. Such benefits are measured by the risk premium, which arises from the comparison of the expected level of income Y^* and its certainty equivalent Y^c (i.e. the income that in the certainty case would allow the household the same level of utility expected in the uncertain outcome).

Figure 7



The developments of the analysis in a risky setting suggest that:

- our previous approach of estimating benefits from earning data is rather cautious and likely to lead to an underestimation of aggregate individual willingness to pay for improved regulation.
- convincing arguments call for further examination of the desirability of public intervention through some form of compulsory regulation.

2. Equity issues

We will now examine three fundamental questions related to equity issues to determine whether public intervention can also be justified on the grounds of equity.

- i) Is the market outcome characterised by under- or over-consumption of particular contents by different socio-economic groups? More specifically, is there an equal ability to make rational choices (i.e. no income discrimination is associated with receiving information) and equal power in enforcing them (i.e. implementing control)?
- ii) Can regulation enhance any aspects of equity?
- iii) Finally, should any redistribution (e.g. from the rich to the poor)⁷ occur through regulation and if yes to what extent?

As regards i) no strong equity case has yet been made for some form of public intervention aimed particularly towards poor households, to increase the flow of information, with a view to facilitating their parental control activities. Thus far this has been avoided altogether by assuming an average household only.

As already noted, since information and parental control activities are costly, the problem is likely to be greater for households in lower socio-economic groups. In fact, it is very likely that better-educated households have an information advantage, as it is easier for them to acquire and use information appropriately. Accordingly, the consumption patterns of children in lower socio-economic groups may be characterised by excessive viewing of inadequate media.

Moreover, parents in disadvantaged households may be less able to devote sufficient time to control activities or may provide reduced benefits - i.e. they may be less able to raise their child's utility or protect it from harmful audiovisual content. Lone-parent

⁷ In practice, we can define the poor households as the ones below the poverty level and the rich households as the other ones, or alternatively as the ones that earn an income above a certain level.

families are often among the less advantaged households; with the mother being the responsible parent in many cases. The *feminisation* of poverty is an emerging trend; but, in any event, parental activities, which rely mainly on women's time, generally have a negative impact on women's work and earnings predominantly, which are already discriminated against. Hence, regulation might also be required to improve equity as well as efficiency.

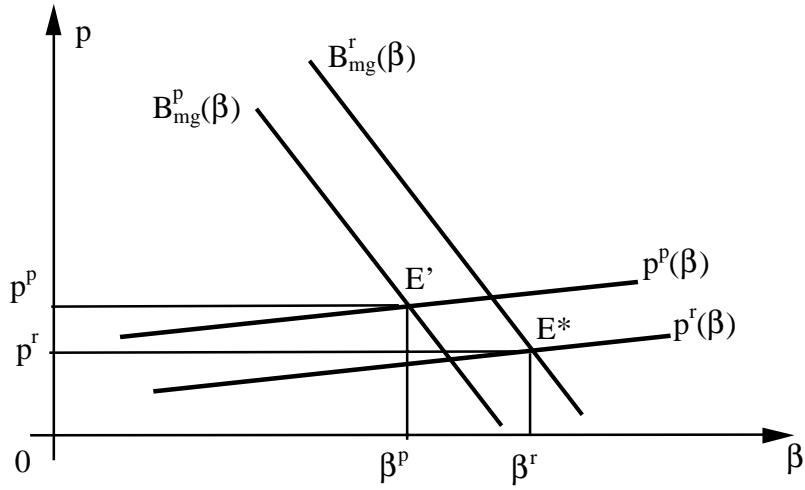
This leads to the second question; i.e. whether regulation aimed at facilitating parental control may have a positive impact on redistribution and thereby in some way improve gender equity in European Union (EU) countries.

Since parents belonging to lower socio-economic groups seem more likely to be misled and/or to undervalue the utility of their own children (and consequently the possible harm from audiovisual products), the presence of regulation financed by a progressive tax system seems likely to have a positive impact on their children's welfare, by improving equity (if user-friendly) and implying no significant (economic or time) burden on less advantaged parents.

In general, regulatory benefits and costs may vary among different socio-economic groups, even in a perverse way, a distinct possible outcome that we would like to avoid. In fact, parents in the higher socio-economic group may receive more benefits if they are better informed or put higher value on the quality of audiovisual content.

Focusing on private benefits and costs, this case may be represented by a higher individual marginal benefits function for rich parents $B_{\text{mg}}^r(\beta) > B_{\text{mg}}^p(\beta)$. At the same time, it may also be the case that poor parents face higher private cost $p^p(\beta) > p^r(\beta)$ related to the acquisition and appropriate use of the technical device, as shown in Figure 8.

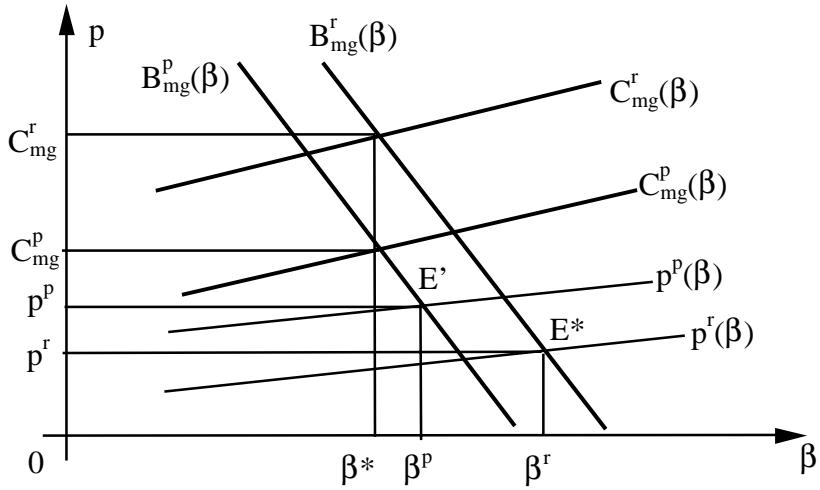
Figure 8



Within this framework, the cost-benefit calculus is different since we disregard social costs and benefits (as well as their allocation). Thus, starting from β^p the regulatory activity should increase to β^r for the rich household since in β^p its marginal rate of substitution between improvement of the broadcast environment and income $B_{mg}^r(\beta)$ is greater than its marginal cost in terms of foregone private consumption $p^r(\beta)$. However, Figure 8 reveals how the regulatory level β

$$B_{mg}(\beta) = p(\beta)$$

$B_{mg}(\beta)$ should also be considered and in the presence of progressive taxation the system taken as a whole may turn out to improve equity. In particular, the distribution of the social cost proposed in Figure 9, leading to total marginal regulatory costs $C_{mg}(\beta)$ and $C_{B_{mg}}(\beta)$ respectively for the rich and the poor household, achieves the same result as before, i.e. marginal benefits and costs are equal B

Figure 9

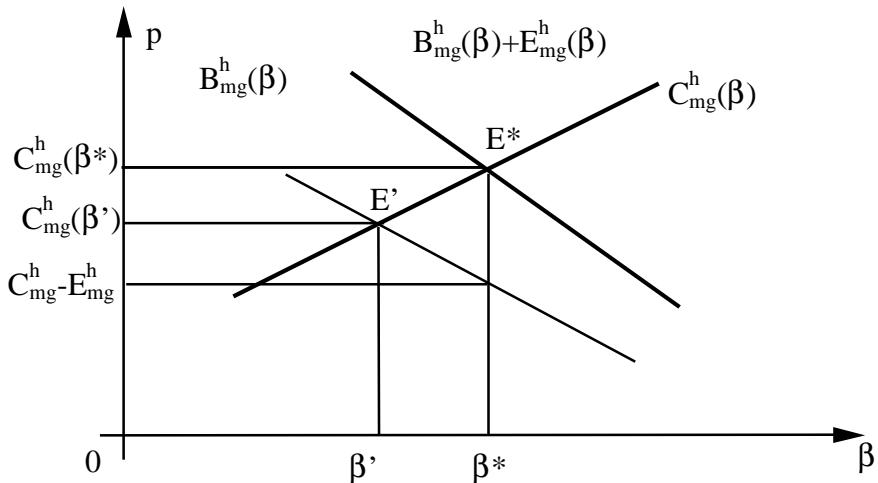
In any case, an unequal and perverse distribution of the net regulatory benefits is not necessarily the outcome, and could be avoided by the appropriate technical design.

Moreover, as outlined above, once we distinguish the roles of wife and husband in our economic analysis of the household's choices for allocating time, positive redistributive consequences emerge. Under normal circumstances, mothers devote the greater share of their time to parental activities (especially in less advantaged households) and hence in most cases it is the net wage rate of women that matters. More specifically, as suggested in the previous analysis of efficiency issues, parental control activities reduce not only the participation by mothers in the labour-market, but also the market value of female human capital, thus further diminishing their lifetime earning capacity. Consequently, regulation that decreases the time mothers need to devote to parental control activities is likely to redistribute resources from men to women. Along with other measures, it may be of help in abating the "*feminisation of poverty*", a phenomenon observed recently in EU countries, by improving the welfare of poor single-parent families.

These equity arguments add weight to the justification of public intervention on the grounds of economic efficiency.

Finally, we need to look at whether and to what extent there is a case for redistributing through regulation. The general externality case does not imply an equity argument.

In practice, the positive externality case means only that for a given household the equilibrium of marginal costs $C_{mg}^h(\beta)$ and benefits $B_{mg}^h(\beta)$ leads to under-consumption. The reason behind this is that the market does not take into account the benefits other members of society receive from the fact that the child's environment is better regulated. Once their willingness to pay $E_{mg}^h(\beta)$ is taken into account we should equate marginal costs $C_{mg}^h(\beta)$ with marginal social benefits $B_{mg}^h(\beta) + E_{mg}^h(\beta)$, to reach the efficient level β^* as shown in Figure 10.

Figure 10

We have a redistribution case due to an externality, if the provision of a better environment for poor children is the only or primary factor in bringing satisfaction to richer members of society, for reasons of efficiency/selfishness and/or equity/altruism. Let $1 > \alpha^p > 0$ represent the subjective evaluation that the rich attach to increased economic growth and the reduction in crime and social unrest brought about by exposing children less to harmful content (and/or directly to their well-being). In practice, with N^p representing poor households, the utility function of the rich household r will also depend on the poor child's welfare v^p and the additional term

given by the sum of the welfare of poor children multiplied by the rich household's subjective evaluation, i.e. $N^p \alpha^p v^p(\beta, c^p, \dots)$.⁸

Conclusion

A regulatory framework that improves the broadcasting environment ($d\beta > 0$) common to poor children will therefore indirectly enhance the rich household's welfare.. The effect on the welfare of rich households will be greater than the increase in consumption of poor households, which stems from the equivalent income transfers to the latter. This is because a rise in income does not necessarily increase parental control c^p nor the welfare of poor children v^p .⁹ On the other hand, improved regulation of the broadcasting environment, by reducing the cost of parental control activities for poor households, will also indirectly increase their welfare U^p and their disposable income.

At an aggregate level, an additional external benefit $E_{hg}^h(\beta) = N^r N^p \alpha^p \partial v^p / \partial \beta$ - given by the sum of the marginal value all rich households place on the enhancement of poor children's welfare - should be added to the original cost-benefit calculus. Accordingly, this implies not only a greater level of regulation (as before), but also a redistribution of financial costs from the poor households to the rich ones.¹⁰ In fact, while in the previous case all members of society receive external benefits from an improved regulatory environment and should contribute to finance part of $E_{hg}^h(\beta)$, in this case only the rich ones benefit from the external effect and only their willingness to pay is reflected in $E_{hg}^h(\beta)$.

⁸ Assuming that the quasi-linear utility function of the rich household r depends also on the poor child welfare v^p we may write:

$$[7] \quad U^r = v^r(\beta, c^r, \dots) + N^p \alpha^p v^p(\beta, c^p, \dots) + w^r(y^r - c^r) - c^r \dots$$

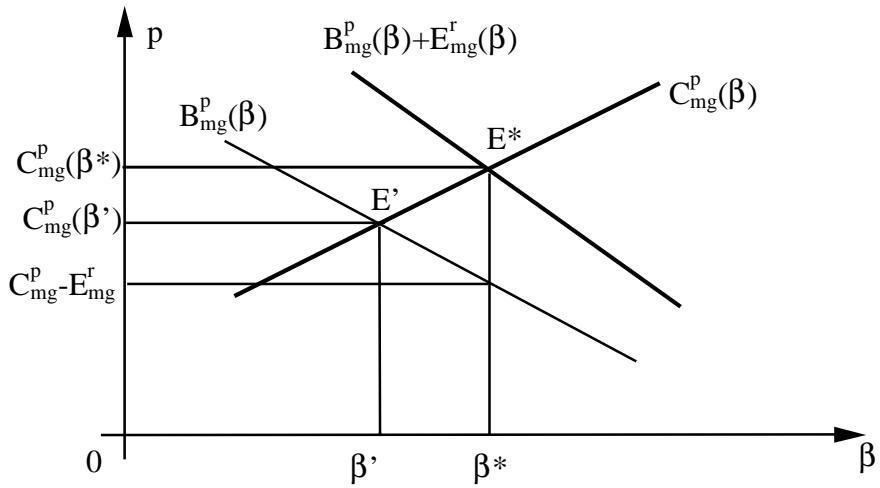
⁹ In practice, the rich household's utility increases ($dU^r > 0$) as environment improves (i.e. $d\beta > 0$)

$$[8] \quad dU^r = \partial v^r / \partial \beta \, d\beta + N^p \alpha^p \partial v^p / \partial \beta \, d\beta > 0 \quad \text{for } d\beta > 0.$$

¹⁰ More precisely, the optimal level of the regulatory activity will be reached when the sum of households' marginal rate of substitution between improvement of the broadcast environment and income $N \partial v^h / \partial \beta \, d\beta$ and of marginal external effect for the rich $N^r N^p \alpha^p \partial v^p / \partial \beta$ equate the marginal cost of the regulatory activity in terms of private consumption, as in formula [9] below:

$$[9] \quad N \partial v^h / \partial \beta \, d\beta + N^r N^p \alpha^p \partial v^p / \partial \beta > dC^g(\beta) / d\beta$$

Figure 11



This vertical equity argument reinforces the efficiency motives and suggests the possibility of an “in kind” transfer, which is welcomed by the poor. The extent to which the rich household is interested in supporting an improvement of the environment of the poor children - i.e. the redistribution from rich to poor - crucially depends on the value of α^p . However, voluntary action is probably doomed to failure since each rich household has an incentive to free ride. At the same time, where there is public intervention, rich households do not truthfully reveal the value of α^p . Hence, the market failure argument applies again and genuine social concern about equity may prove to offer the best justification for public intervention.

Chapter 2. International and Regional Legal Background

Introduction

This section presents an overview of international and supra-national legal instruments relevant to the question of effecting the protection of minors from harmful content at EU level. It describes the relevant legal instruments and their ramifications at both international and European level.

The review examines the two discernible approaches to the protection of minors: *Positive protection* and *negative protection*. *Positive protection* denotes measures promoting content that encourages the positive development of children, cultivating ideas, culture and philosophy as well as fostering a balance in self-perception. *Negative protection* either prohibits certain contents (gratuitous violence, pornography) or sets rules circumscribing the representation of contents that could be harmful to children. Both serve the same public policy goal of protection of minors.

Universal international instruments provide a positive framework for the general approach to protecting minors. Within Europe, the EU and the Council of Europe have addressed this issue. Though they have contributed to the positive approach, they have primarily introduced negative protective instruments. The present review briefly explains and assesses the relevant positions regarding both positive and negative forms

of the freedom of expression are the **Universal Declaration of Human Rights** (Paris, 10 December, 1948), which stipulates that “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers” (Article 19); and the **European Convention for the Protection of Human Rights and Fundamental Freedoms** (Rome, 4 November, 1950), which was adopted two years later within the framework of the Council of Europe.

Further to the UN Declaration, the UN Covenant on Civil and Political Rights, which was adopted in 1966 and entered into force 10 years later, making many of the provisions of the Universal Declaration of Human Rights effectively binding, also contains a provision protecting freedom of expression, which has similarities with Article 10 of the European Convention. Indeed, Article 19 states that:

- “1. Everyone shall have the right to hold opinions without interference.
- 2. Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information on

frontiers”¹¹. However, contrary to the Universal Declaration, the European Convention introduces exceptions and limits to this right. Firstly, “This article shall not prevent States from requiring the licensing of broadcasting, television or cinema enterprises”¹², and secondly, “The exercise of this freedom, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary”.

All EU Member States are signatories to the European Convention of Human Rights. Furthermore, the Treaty on European Union, signed in Maastricht on February 1992, states in Article F2 that “The Union shall respect fundamental rights, as guaranteed by the European Convention on the protection of human rights and fundamental freedoms”.

Article 10 seems to offer to the signatories substantial discretion, under the watchful control of the European Court of Human Rights (**ECHR**), to determine which restrictions on fundamental rights are necessary to protect other legitimate social or cultural goals¹³. Freedom of expression fully applies as long as it does not infringe upon national concerns such as public safety and the protection of health or morals. It

¹¹ The European Court of Human Rights has confirmed that “it is applicable not only to ‘information’ or ‘ideas’ that are favourably received or regarded as inoffensive or as a matter of indifference, but also to those that offend, shock or disturb the State or any sector of the population. Such are the demands of that pluralism, tolerance and broadmindedness without which there is no “democratised society”. This means...that every “formality”, “condition”, “restriction”, or “penalty” imposed in this sphere must be proportionate to the legitimate aim pursued”. *Handyside v. United Kingdom*, 7.12.1976.

¹² Nevertheless this provision does not have to be seen as an unchecked permission to restrict freedom of expression: “the purpose of the third sentence of Article 10(1) of the Convention is to make clear that States are permitted to control by a licensing system the way in which broadcasting is organised in their territories, particularly in its technical aspects. It does not, however, provide that licensing measures shall not otherwise be subject to the requirements of paragraph 2, for that would lead to a result contrary to the object and purpose of Article 10 taken as a whole”. *Groppera Radio AG & others v. Switzerland*, 28.3.1990

¹³ For a full overview of the interpretation of Article 10 by the ECHR, see Prof. Dirk Voorhoof: “Critical perspectives on the scope of Article 10 of the European Convention on Human Rights”. Mass Media files No. 10. Council of Europe Press, 1995.

is generally under this concept of protection of morals that national content regulation is debated. Under this provision, legislative measures may be taken, subject to such measures being legitimate, proportionate and necessary in a democratic society. A brief look at decisions of the EHCR in this area permits us to determine how such limitations or restrictions of freedom of expression are understood by this jurisdiction. Article 10 of the European Convention is not the only instrument giving countries room for manoeuvre, and the way in which Member States of the EU and the European Free Trade Association (**EFTA**) are able to maintain a domestic conception of harmful content in the framework of the EU Directive, Television Without Frontiers, will also be subject to a brief overview. This case law delimits freedom of expression in the interests of sustaining public order or providing for the protection of morals. From these baselines more specific limits and particularities obtain legitimacy. Such is the case of the protection of minors.

With regard to the protection of morals, the European Court of Human Rights has had the opportunity several times to note that countries benefit from a relative margin of appreciation. In the **Handyside** case of 7 December 1976¹⁴, the Court states that “it is not possible to find in the domestic law of the various Contracting States a uniform European conception of morals”, thus “by reason of their direct and continuous contact with the vital forces of their countries, State authorities are in principle in a better position than the international judge to give ... an opinion on the 'necessity' of a 'restriction' or 'penalty' intended to meet ...”¹⁵ requirements related to the protection of morals in their own jurisdiction. The margin of appreciation authorised by the Court applies “both to the legislator (“prescribed by law”) and to the bodies....that are called upon to apply the laws in force.” “Nevertheless, Article 10, paragraph 2, does not give Contracting States an unlimited power of appreciation. ...The domestic margin of

¹⁴ Richard Handyside, published “the Little Red Schoolbook”, the original edition of which was subject to proceedings by the Public prosecutor, under section 3 of the Obscene Publications Act 1959/1964 leading to the seizure of the said book. The motive was that the book, aimed at an audience of young persons from 12 to 18, contained incitement to anti-authoritarian behaviour, which was likely to “deprave and corrupt” the readers.

¹⁵ Handyside, para 48.

appreciation goes hand with hand with a European supervision. Such supervision concerns both the aim of the measure challenged and its “necessity”¹⁶.

This attitude was confirmed in another case, **Müller and others**, of 24 May 1988. At an exhibition of contemporary art in Fribourg entitled “Fri-Art 81”, in the space of three nights, Josef Felix Müller produced three large paintings entitled “*Drei Nächte, drei Bilder*” (“Three Nights, Three Pictures”). The public prosecutor, acting on information from a man whose daughter, a minor, had reacted violently to the paintings, requested that the paintings be destroyed for reason of obscenity as prohibited by Article 204 of the Swiss Criminal Code. Accompanied by his clerk and some police officers, the investigating judge went to the exhibition and had the pictures removed and seized. The Swiss Court sentenced Müller and the exhibition organisers to a fine of 300 Swiss francs for publishing obscene material (Article 204 § 1 of the Criminal Code) and ordered that the confiscated paintings should be deposited in the Art and History Museum of the Canton of Fribourg for safekeeping. The case was brought before the ECHR. As with the Handyside case, the Court noted that no uniformity exists within the Contracting States regarding the protection of morals, and therefore that the States, due to their closer knowledge of society they have in charge, are the best placed to assess this matter¹⁷. Nevertheless, the measure of restriction that may be pronounced has to be “foreseeable” meaning that.. “A norm cannot be regarded as a “law”¹⁸ unless it is formulated with sufficient precision to enable the citizen - if need be, with appropriate advice - to foresee, to a degree that is reasonable in the circumstances, the consequences which a given action may entail”¹⁹. However this “mandate” may be flexible in areas such as obscenity, so as to “...avoid excessive rigidity and to keep pace with changing circumstances.” meaning that laws referring to such areas may be, to a certain extent, formulated in vague terms.²⁰ However, whatever the degree of precision of the national law, the measure has to be considered “...necessary, in a democratic society”.²¹ The Court has consistently held that in Article 10 § 2 “...the adjective

¹⁶ Handyside, paragraph 49.

¹⁷ Müller and others, paragraph 35.

¹⁸ In the sense of Article 10 paragraph 2.

¹⁹ Müller and others, paragraph 29.

²⁰ Müller and others, paragraph 29.

²¹ Article 10 paragraph 2.

“necessary” implies the existence of a “pressing social need”. The Contracting States have a certain margin of appreciation in assessing whether such a need exists, but this goes hand in hand with a European supervision, embracing both the legislation and the decisions applying it, even those given by an independent court”. In this particular case the ECHR concluded that Article 10 had not been violated, and it is interesting to note that one of the arguments raised by the applicant, that he had been able to exhibit works in a similar vein in other parts of Switzerland and abroad, did not preclude the existence of a “*genuine social need*” in the region of Fribourg²².

More directly related to the matter of this report is the **Wingrove** case of 25 November 1996. The applicant created and produced a video representing St Teresa of Avila having, *inter alia*, sexual intercourse with the Christ²³. The applicant submitted the video to the British Board of Film Classification so that it might lawfully be sold, hired out or otherwise supplied to the general public or a section thereof. The Board rejected the application for a classification certificate by reason of infringement of the Obscene Publication Acts 1959 and 1964 and criminal law of blasphemy.

The Court recognised here that “blasphemy cannot by its very nature lend itself to precise legal definition”²⁴, and recalled that “States enjoy a certain but not unlimited margin of appreciation”, meaning that the Court must assess “...whether the interference [of the State] corresponded to a “pressing social need” and whether it was “proportionate to the legitimate aim pursued”²⁵. In this case the interference of the State was considered by the court as fulfilling these requirements, and it therefore concluded that Article 10 had not been violated.

The cases illustrated show how certain States have, in accordance with international provisions, adopted legal provisions specifically aimed at protecting children, endeavouring to shield them from harmful content. This concern has also been

²² Müller and others, paragraph 36.

²³ Wingrove, paragraph 9.

²⁴ Wingrove, paragraph 42.

²⁵ Wingrove, paragraph 53.

expressed internationally in several instruments, both binding and not binding, which aim to protect children from exposure to harmful media.

2. Positive protection

The idea, at international level, that children may be harmed and influenced by unlimited and unrestricted freedom of expression is not new. This principle was clearly enunciated in two resolutions adopted by the Council of Europe in 1967 and 1969, concerning the press²⁶ and the cinema²⁷, respectively, wherein the Committee of Ministers explicitly recognised that media could indeed effect youth behaviour and resolved to take measures. This concern has now reached beyond the scope of the Council of Europe.

1.1 Universal instruments

The Convention on the Rights of the Child, adopted by the United Nations General Assembly on 20 November 1989, is the most comprehensive instrument asserting the global rights of the child. The Convention addresses all key social actors and stresses their responsibilities regarding the development and well being of children. Three of the articles of this Convention are of importance and relevance for the purpose of this study. In Article 3 paragraph 1, the Convention states that “In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration”. State parties, “taking into account the rights and duties of his or her parents, legal guardians, or other individuals legally responsible for [the child], ...shall take all appropriate legislative and administrative measures.”. Parental control mechanisms implemented by EU member States in such a way as to permit collaboration and shared responsibilities between State authorities, content producers and providers, as well as parents and guardians, and dedicated to protecting children

²⁶ Resolution (67) 13 - The press and the protection of youth, adopted by the Ministers' Deputies on 29th June 1967

²⁷ Resolution (69) 6 - Cinema and the protection of youth, adopted by the Ministers' Deputies on 7 March 1969

from contact with material harmful to their well-being, would therefore be completely in line with the aim pursued by the UN.

Entitling children with the right to freedom of expression (Article 13²⁸), within similar limits to those expressed in the European Convention of Human Rights, the Convention on the Rights of the Child stresses explicitly the importance of the mass media in the development of children and requests State parties to act with awareness of the function of mass media in disseminating beneficial information and material to children.²⁹ This point is very important to underline as it must not be forgotten that any protective mechanisms implemented should take into account the fact that mass media, even if potentially harmful to children, are also, given the high level of children's consumption of visual media shown in Chapter 4, an important part of their connection to culture. Any mechanism to be put in place should therefore, as far as possible, preserve this function by avoiding the creation of blocking regimes that would be too intrusive and would undermine children's rights to access appropriate

²⁸ Article 13

1. The child shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child's choice.
2. The exercise of this right may be subject to certain restrictions, but these shall only be such as are provided by law and are necessary:
 - a) For respect of the rights or reputations of others; or
 - b) For the protection of national security or of public order (*ordre public*), or of public health or morals.

²⁹ Article 17

States Parties recognise the important function performed by the mass media and shall ensure that the child has access to information and material from a diversity of national and international sources, especially those aimed at the promotion of his or her social, spiritual and moral well-being and physical and mental health. To this end, States Parties shall:

- a) Encourage the mass media to disseminate information and material of social and cultural benefit to the child and in accordance with the spirit of article 29;
- b) Encourage international co-operation in the production, exchange and dissemination of such information and material from a diversity of cultural, national and international sources;
- c) Encourage the production and dissemination of children's books;
- d) Encourage the mass media to have particular regard to the linguistic needs of the child who belongs to a minority group or who is indigenous;
- e) Encourage the development of appropriate guidelines for the protection of the child from information and material injurious to his or her well being, bearing in mind the provisions of articles 13 and 18.

information. All countries with the exception of Somalia and the United States have signed the Convention on the Rights of the Child³⁰.

The Parliamentary Assembly of the Council of Europe has continued to address these matters. In 1993, on the occasion of the adoption of a **Resolution on the situation of women and children in the former Yugoslavia**³¹, the Assembly urged its constituent states to recognise the universality and indivisibility of children's rights, and to provide for the essential needs of children both in Europe and in the rest of the world. Three years later, in 1996, the same Assembly adopted a **Recommendation on a European strategy for children**³², stressing the importance of assisting states to put into practice nationally the commitments entered into under the United Nations Convention on the Rights of the Child. Further, in this Recommendation the Committee of Ministers strongly urges the constituent states of the Council of Europe "to encourage the media, notably visual, to promote children's rights to a healthy and balanced development, and, in particular in products intended for children, to eliminate violence and to illustrate positive social values". Indeed, if parental control mechanisms appear to be necessary to counter the potential harmful effect of certain media programmes, it must be considered equally important to provide media with positive benefits for children. The first step is to encourage content producers to create visual programmes that are adapted to children and content providers to transmit these programmes at times appropriate to children's viewing habits. Once again sharing responsibility by establishing a clear social contract between content producers and providers and parents or guardians, as represented by a graduated watershed regime and the creation of specific slots dedicated to children, is probably the best way to achieve these two goals: protection and development.

³⁰ See, for further information, "Children and Media Violence", Yearbook from the UNESCO Clearinghouse on Children and Violence on the screen, 1998, pages 20 to 35.

³¹ Resolution 1011 (1993) on the situation of women and children in the former Yugoslavia

³² Recommendation 1286 (1996) of the Parliamentary Assembly of the Council of Europe on a European strategy for children

1.2 International instruments applicable to specific actors

In 1969, the Committee of Ministers of the Council of Europe in its **Resolution on Cinema and the protection of youth³³** recommended, *inter alia*, to the member governments that “the regulations governing the cinema should take biological, psychological and sociological factors into consideration in determining age groups”. The same goes for advertisements³⁴, which “should avoid anything likely to harm their interests and should respect their physical, mental and moral personality”.

Following the concern expressed in 1969, the Committee of Ministers of the Council of Europe adopted in 1990 a specific recommendation on **Cinema for children and adolescents**,³⁵ clearly distinguishing, the needs of children and adolescents from those of adults in the cinema audience. The “developmental needs of children and adolescents” require particular attention, which “the commercial sector only rarely responds to in its present system of production, distribution and exhibition”. Then, “considering that generally there are benefits in providing a satisfactory cinema experience for young people”, the Committee of Ministers recommended that Member States:

- Encourage the adoption of appropriate arrangements for co-operation between film and television in the co-production of films for young people
- Promote close co-operation between the film industry and educational establishments
- Encourage film shows for young people by providing financial support and/or tax benefits to minimise the financial disincentives of this form of exhibition
- Introduce systematic cinema and media education in schools and other institutions for young people;
- Encourage research to determine the types of film that would both interest young people and meet their development needs.

³³ Resolution (69) 6 - Cinema and the protection of youth, adopted by the Ministers' Deputies on 7 March 1969

³⁴ Recommendation N° R (84) 3 on Principles on television advertising, adopted by the Committee of Ministers on 23 February 1984

³⁵ , Recommendation N° R (90) 10 on Cinema for children and adolescents,

The **Bratislava Resolution**, adopted in November 1994, continued this trend, drawing support from producers, broadcasters and others interested in production for children and sharing experiences. This resolution takes a positive approach, and is dedicated specifically to children's programmes.

Acknowledging that “the increasing impact of film, television and other media on our children demands more specific care and action with an aim to achieving better quality in the lives of the young people ... Good quality films and television programmes for children can and must carry positive fundamental human values. These will help and support the development of a personal conscience in young people, and add new dimensions to their basic social behaviour and to their knowledge of the world. [They] encourage the process of creative thinking, of deciding and of acting in full liberty in order that children can build their own personalities and their future. [They] reveal and stress the basic values of each people and of each nation...”.³⁶

Addressing governments, parliaments, national and international agencies and organisations, the Resolution identifies several ways to achieve such goals:

- stimulating increased production of children's films and television, on a national level, by raising and investing more funds
- building a support system for wider and better distribution of those children's films whose artistic and educational values are more important than their commercial aspects
- encouraging the use on a large scale of production for children in schools and in other educational institutions and activities
- supporting the spread of quality children's screenings in all social areas
- financing and developing the education and training of specialists – scriptwriters, directors and others – in children's production
- stimulating and financing scientific research about the reaction of children to the media, and about the way they use media for their specific needs

³⁶ Bratislava Resolution, November 1994

- helping national and international professional organisations and associations dealing with the issues surrounding children's film and television to achieve and develop their activities.

Confirming Bratislava's trends, **The Children's Television Charter** was presented by Anna Home, Head of Children's Television Programmes, BBC, at the first World Summit on Television and Children in Melbourne, Australia, in March 1995. The Charter was revised and adopted in Munich in May 1995. Once more, emphasis is placed on positive protection of children via the development of programmes specifically dedicated to them.³⁷

Completing the picture, the **Children's charter on electronic media** was adopted on 13 March 1998. Among other things the Charter stressed that children's programmes should be fun, entertaining, educational, interactive, and should help them to develop physically and mentally, that they should be honest and real, that programmes must be created for all ages and should be on at times when children can watch them. Children's television should discourage drugs, cigarettes and alcohol and should not promote violence for the sake of violence or violence to solve conflict.

3. Negative protection

³⁷ The Charter makes the following resolutions:

1. Children should have programmes of high quality which are made specifically for them, and which do not exploit them. These programmes, in addition to entertaining, should allow children to develop physically, mentally and socially to their fullest potential.
2. Children should hear, see and express themselves, their culture, their language and their life

As described in the brief introduction above, negative protection measures are understood to be those, which either prohibit certain contents, such as gratuitous violence or pornography, or set rules to circumscribe the representation of contents potentially harmful to children. The instruments presented below represent the most significant negative measures. In this case an action (a regime, a system, etc.) is directly opposed to the content in itself and the difficult question of its articulation within the framework of freedom of expression arises. That is why most of the instruments presented below are careful to recall commitments made in Article 10 of the European Convention on Human Rights.

These negative measures were mainly developed by the two international organisations presiding over Europe, namely the EU and the Council of Europe. The latter, given its culturally oriented duties and mission was the first to tackle the issue, followed in the last decade by the EU, which has implemented a complete legal framework encompassing the entire media sector.

At European level, two main legal instruments are dedicated to the television sector. Both were adopted in 1989, constituting the tutelary framework of broadcasting activities in Europe, and which contain provisions for the protection of minors. These instruments are the European Convention on Transfrontier Television and the “Television without frontiers” Directive. Due to the recent and rapid technological developments in this sector, including the multiplication of means to convey harmful content, these two instruments were recently revised, as well as supplemented by new texts specifically aimed at covering all image delivery sectors.

However it is not the case that these two organisations take only a negative approach. To a certain degree, both groups accompany their negative measures with positive ones such as media awareness and education.

2.1 Council of Europe

The Assembly observed an increasing emphasis on violence in the media, and, in particular, on its portrayal in the visual media (television, video, film, advertising, comics, or still photography). At the same time, the Assembly believed, and explicitly

expressed this belief in a legal instrument for the first time, that prolonged exposure to such media violence could have a direct, cumulative effect on young children, and a growing effect on the accepted values of society. Coterminously, parliaments noted a) the increasing impracticability of national legislative or voluntary restrictions in the light of direct broadcasting by satellite and other technological developments, and b) that the production, distribution and sale of media software has already progressed beyond the control of individual states.

In this context, recalling Article 10 of the European Convention on Human Rights (1950) and stressing the urgency of co-ordinated action involving European States, broadcasting institutions and commercial audiovisual concerns, the Assembly made, *inter alia*, the following recommendations, within **Recommendation No. 963 (1983) on cultural and educational means of reducing violence**, to the Committee of Ministers:

- to request the broadcasting organisations to co-operate in the elaboration of codes of conduct or guidelines covering the portrayal of violence, which would apply to as broad an area in Europe as possible, and to provide, where necessary, autonomous supplementary structures to enable the effective elaboration of such common codes;
- to encourage the elaboration of similar guidelines for other media such as films, written material, video and new forms of visual media that may be developed;
- to encourage the establishment in each member state of a) independent monitoring of broadcast and other visual media through viewer associations and other bodies, b) closer consultation between the public and the programme makers, and c) public accountability for media content, whether to parliament, to the courts or to public opinion, and to envisage at a subsequent stage closer co-ordination between member states on these aspects;

Finally, the Assembly recommends that the Committee of Ministers invite member governments or, through them, the local or regional authorities responsible for education to “review the content of existing school and university curricula in order to avoid thoughtless glorification of conflict and violence, and to introduce in schools the systematic teaching of non-violent behaviour” and also “to introduce into the school

curriculum critical understanding of the media, and to provide the necessary in-service and preparatory training of teachers.”

In 1987³⁸, the Parliamentary Assembly reasserted its concern and recommended that the Committee of Ministers “accelerate and intensify its work on guidelines for reducing violence, brutality and pornography, with reference to national legislation, not only on videograms, but also with reference to broadcasting in general”

This recommendation became concrete in 1989 with the adoption of the European Convention on Transfrontier Television.³⁹ A protocol amending this convention has just been adopted by the Committee of Ministers but does not contain any revision of the provisions relating to the protection of minors, which are contained in Article 7:

Article 7 - Responsibilities of the broadcaster

All items of programme services, as concerns their presentation and content, shall respect the dignity of the human being and the fundamental rights of others. In particular, they shall not:

- a) be indecent and in particular contain pornography;
 - b) give undue prominence to violence or be likely to incite to racial hatred.
2. All items of programme services which are likely to impair the physical, mental or moral development of children and adolescents shall not be scheduled when, because of the time of transmission and reception, they are likely to watch them.
 3. The broadcaster shall ensure that news fairly present facts and events and encourage the free formation of opinions.

This Article is the counterpart of Article 22 of the EC Directive, Television without Frontiers, which, on this particular point, might be considered to be more sophisticated (see below)

Extending the broad-based approach to violence within media, the Committee of Ministers decided to introduce measures specifically dedicated to a single sector, video,

³⁸ Recommendation No 1067 (1987) of the Parliamentary Assembly of the Council of Europe on the cultural dimension of broadcasting in Europe

in which the issue appears to be even more sensitive. Then, in 1989, a **Recommendation on distribution of videograms with violent, brutal or pornographic content⁴⁰** was adopted, which targets harmful content in this field, taking a complex and comprehensive approach, which, by including all the actors involved, signals the inception of a long regulatory process, taking place under the auspices of both the Council of Europe and Community institutions.

The Committee of Ministers, “bearing in mind the Convention for the Protection of Human Rights and Fundamental Freedoms, in particular Articles 8 and 10” and “recalling its commitment to freedom of expression and the free circulation of information and ideas”, established certain principles. A first order principle stated that Member States should encourage the creation of systems of classification and control of videograms, either by the professional sectors concerned under self-regulatory systems or by the public authorities. The analysis of rating systems applied to this specific sector in EU Member States shows that this aim has not yet been achieved (see Book 1, Chapter 3 and Annex 2).

Video games were also subject to the attention of the Council of Europe⁴¹ who directed specific attention to eliminating products containing materials that might incite racial hatred.

However, given the technological developments in this area and the multiplication of media with potential to convey harmful contents, the Committee of Ministers decided

³⁹ European Convention on Transfrontier Television (ETS No. 132), Strasbourg, 5.5.1989.

⁴⁰ Recommendation N° R (89) 7 on Distribution of videograms having a violent, brutal or pornographic content

⁴¹ Recommendation No. R (92) 19 on Video games with a racist content, adopted by the Committee of Ministers on 19 October 1992. The Committee of Ministers recommends that the governments of Member States:

- a) review the scope of their legislation in the fields of racial discrimination and hatred, violence and the protection of young people, in order to ensure that it applies without restriction to the production and distribution of video games with a racist content;
- b) treat video games as mass media for the purposes of the application *inter alia* of Recommendation No. R (89) 7 concerning principles relating to the distribution of videograms having a violent, brutal or pornographic content

to renew its formal global approach. This time it was accompanied, as with the video sector, by a complete set of measures directed at all the identifiable key actors.

With this aim, the **Recommendation on the portrayal of violence in the electronic media**, adopted by the Committee of Ministers on 30 October 1997⁴² was introduced. This recommendation deals with the gratuitous portrayal of violence in the various electronic media at national and transfrontier level. “Electronic media” is defined as “radio and television programme services, services such as video-on-demand, Internet, interactive television, etc., and products such as video games, CD-ROM, etc. with the exception of private communications which are not accessible to the public” while “gratuitous portrayal of violence” is defined as “the dissemination of messages, words and images, the violent content or presentation of which is given a prominence which is not justified in the context”.

Believing that the overall increase in the portrayal of violence in the electronic media makes it an important social issue, but recognising that violence is part of the daily reality of society and that the right of the public to be informed also covers the right to be informed about various manifestations of violence⁴³, the Committee asserts that violence cannot be considered as a proper means of conflict-resolution of any kind, including inter-personal conflicts. To this end, it notes that “there are many ways in which violence may be portrayed by the media, corresponding to different contexts, ranging from information to entertainment and that, especially in the latter case, violence is sometimes trivialised or even glorified so as to attract large audiences, ... portrayed in a gratuitous manner, in no way justified by the context, reaching unacceptable inhuman and degrading levels”. It concludes that, as an immediate consequence, this may impair the physical, mental or moral development of the public, particularly young people, by creating, for instance, insensitivity to suffering, feelings of insecurity and mistrust. This issue is addressed in Chapter 3, Media and Children.

⁴² Recommendation No. R (97)19- On the portrayal of violence in the electronic media

⁴³ This is similar to the principle expressed by ECHR in Handyside v United Kingdom, among other cases, according to which Article 10 of the European Convention applies also to potentially offensive or shocking images or information (see footnote 11)

According to the Committee, the various interested sectors of society - most particularly, electronic media professionals who are the best placed to address this issue - should assume their responsibilities with regard to the portrayal of violence in the electronic media.

For the first time the Committee of Ministers assert clearly that freedom of expression may be restricted. "Freedom of expression includes the right to impart and receive information and ideas which constitute portrayal of violence. However, certain forms of gratuitous portrayal of violence may lawfully be restricted, taking into account the duties and responsibilities which the exercise of freedom of expression carries with it, provided that such interference with freedom of expression are prescribed by law and are necessary in a democratic society. More specifically, measures taken to counter gratuitous portrayal of violence in the electronic media may legitimately aim at upholding respect for human dignity and at the protection of vulnerable groups such as children and adolescents whose physical, mental or moral development may be impaired by exposure to such portrayal." Limitations to freedom of expression as expressed by the Committee are carefully drawn, and respect terms of Article 10 paragraph 2, namely by stating that such restrictions must be "prescribed by law" and that interference must be considered as "necessary in a democratic society".

These instruments do not merely implicate states. Responsibilities for content are increasingly allocated to non-state actors directly linked to the production and distribution of such content and, in the particular case of minors, to those responsible for supervising children.

The first level of accountability consists of those responsible for content: "It is first and foremost for those responsible for the content to assume the duties and responsibilities which the exercise of their freedom of expression entails, since they have primary responsibility for the content of the messages, words and images they disseminate". In particular, operators of electronic media have certain responsibilities

if they disseminate messages, words and images containing violence, in view of the potentially harmful effects on the public, especially young people.⁴⁴

Nevertheless, the various other sectors of society are not excused and parents and teachers particularly have a special responsibility.⁴⁵

Lastly, the Committee also addresses States. While it recognises that “Member States

- enable electronic media consumers, both national and foreign, to lodge a complaint regarding violent content with the regulatory authority or another competent national body;
- include among the licensing conditions for broadcasters certain obligations concerning the portrayal of violence, accompanied by dissuasive measures of an administrative nature, such as non-renewal of the licence when these obligations are not respected;
- establish methods to facilitate the division of responsibilities between those responsible for the content and the public (warnings, watershed);
- raise electronic media professionals' awareness of the problems connected with the gratuitous portrayal of violence and the public's concern about them;
- promote research on the portrayal of violence in the electronic media, in particular on trends in the various media, and studies of the effects of such portrayal on the public.

Given the international dimension of the gratuitous portrayal of violence in the electronic media, these measures may be strengthened via international co-operation. Such co-operation would facilitate the exchange of information between competent regulatory authorities; in particular as concerns content classification and the handling of any complaints lodged from abroad. Sanctions should also be effective.

However, the Committee believes that negative measures are not sufficient, but should be accompanied by positive measures, including both the promotion of non-violent quality programmes and electronic media education, which “constitutes a particularly appropriate way of helping the public, especially the young, to develop a critical attitude in regard to different forms of portrayal of violence in these media and to make informed choices”.

2.2 European Union

Only a few months after the adoption of the Council of Europe's Convention, the EU also adopted a legal instrument covering broadcasting activities in the Member States:

the “Television Without Frontiers” Directive⁴⁶. This legal instrument was also subject to a revision in 1997⁴⁷.

The Directive, the pre-eminent ruling on broadcasting activities within the European Member States, devotes a specific chapter to the protection of minors. Article 22 of this Chapter is of primary salience to this study and to the general question of effecting protection of minors. It prohibits the broadcasting of harmful content and provides stipulations for the legal broadcasting of other content deemed likely to be harmful to minors. Furthermore, this provision is the only one providing grounds to restrict the free movement of broadcasting services.

Article 22

1. Member States shall take appropriate measures to ensure that television broadcasts by broadcasters under their jurisdiction do not include any programmes which might seriously impair the physical, mental or moral development of minors, in particular programmes that involve pornography or gratuitous violence.
2. The measures provided for in paragraph 1 shall also extend to other programmes which are likely to impair the physical, mental or moral development of minors, except where it is ensured, by selecting the time of the broadcast or by any technical measure, that minors in the area of transmission will not normally hear or see such broadcasts.
3. Furthermore, when such programmes are broadcast in unencoded form Member States shall ensure that they are preceded by an acoustic warning or are identified by the presence of a visual symbol throughout their duration.

The Directive also contains a specific provision, Article 16⁴⁸, regarding the protection of minors with regard to advertising.

⁴⁶ Council Directive 89/552/EEC on the co-ordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the pursuit of television broadcasting activities.

⁴⁷ Directive 97/36/EC of the European Parliament and of the Council of 19 June 1997 amending Council Directive 89/552/EEC.

⁴⁸ Article 16 of the directive is the protection of minors with regard to advertising. It states that:

Given the terms of Article 22, and especially its first paragraph, which prohibits pornography or gratuitous violence from broadcasting services, it is interesting to examine two recent cases dealt with by the EFTA Court and the European Court of Justice of the European Communities (**ECJ**). These illustrate the relative room for manoeuvre that States enjoy in their own conception of protection of minors and sensitive persons, and the extent to which they can impose their own standards relating to the depiction of sex or violence in broadcasts transmitted in their own country⁴⁹. It should be noted that these cases referred to the first version of the Directive, not to its amended text. Nevertheless, as the wording of the first sentence of Article 22 and the provisions set out by Article 16 have not changed, the positions of the two Courts remain of relevance.

In the EFTA case⁵⁰, the Norwegian authorities had decided to prohibit the transmission from Sweden via cable relay of the FilmMax channel. Broadcast in encrypted form by TV 1000, FilmMax, which included hard-core pornography could only be accessed by paying subscribers and was perfectly legal under Swedish law. The City Court of Oslo referred to the EFTA Court the question of whether Article 22 of the Directive '...introduced a common standard for what "might seriously impair the physical, mental or moral development of minors"' or, alternatively, '...left it up to each individual EU and EFTA country' to determine the degree of pornography or violence which would have this effect. And, in the event that Article 22 did indeed establish a common standard, whether "...the Swedish norm which accepts scenes shot in close-ups with masturbation, licking and sucking of sexual organs, intercourse dwelling on ejaculation

1. Television advertising shall not cause moral or physical detriment to minors, and shall therefore comply with the following criteria for their protection:

- (a) it shall not directly exhort minors to buy a product or a service by exploiting their inexperience or credulity;
- (b) it shall not directly encourage minors to persuade their parents or others to purchase the goods or services being advertised;
- (c) it shall not exploit the special trust minors place in parents, teachers or other persons;
- (d) it shall not unreasonably show minors in dangerous situations.

⁴⁹ See, for a complete overview the article of R. Craufurd Smith: "Sex and violence in the internal market: The impact of European Community law on television programme standards". *Contemporary Problems in Law* (1999), Forthcoming.

⁵⁰ Case E-8/97, TV 1000 Sverige AB and the Norwegian Government.

in the mouths of women and group sex” could be understood as the expression of this standard.

In its defence TV 1000 raised the principle stated by the Directive, according to which the State in which the transmission originates exercises control over said transmission, and that a second control by the country of reception is excluded.

The European Commission, together with the EFTA Surveillance Authority, Norway, the UK and Sweden, argued strongly against a Community standard in this area, and the Commission, following the opinions expressed by the ECHR (see above), noted that it was “...very difficult to determine objectively what programmes are covered by the first sentence of Article 22”, given that there were legitimate “...differences of interpretation from one country to another, depending on different traditions and value levels”⁵¹. In agreement with this position, the EFTA Court ruled that the Directive left States free to regulate on the grounds of child protection not only those broadcasters established in their territory, but also those relaying programmes to their jurisdiction from other Member States. Each country may then decide what is or is not harmful to minors and make their own interpretation of the terms of Article 22, including the word “pornography”, “...in accordance with their national legislation and moral standards”⁵².

The ECJ did not comment on this specific issue, but the joint Swedish cases of **Konsumentombudsmannen (KO) v De Agostini (Svenska) Forlag AB and TV-Shop I Sverige AB**, even though they relate to advertising, may give an indication of its position on issue. This litigation concerned a specific Swedish regulation prohibiting television advertisements designed to attract children under twelve years old. On the grounds of that prohibition the Swedish authorities prevented De Agostini from advertising its magazine, *Allt om Dinosaurier!* (Everything about Dinosaurs), on two television channels - TV3, broadcast from the United Kingdom, and TV4, a domestic Swedish station. The ECJ ruled that, in respect of the Directive, Sweden might implement more precise and restrictive rules than those contained in the Directive and

⁵¹ Report for the hearing in case E-8/97, paras 49 and 50.

⁵² Case E-8/97, TV 1000 Sverige AB, paragraph 24.

apply them to broadcasters under its jurisdiction. It must not, however, apply domestic regulation to broadcasters established in another Member State. The judges' reason was that Articles 22 and 16 of the Directive specifically set out rules for the protection of children "...in relation to television programmes in general and television advertising in particular"⁵³. As a consequence, Member States were precluded "under any circumstances" from applying to television programmes emanating from other Member States "provisions specifically designed to control the content of television advertising with regard to minors"⁵⁴. Such an attitude would lead to a form of secondary control, additional to that of the State of establishment, and would thus be contrary to principles enacted by the Directive.

The EFTA Court came to the same conclusion in a similar case.⁵⁵ Nevertheless, the fact that the ECJ made explicit reference to both Articles 22 and 16 of the Directive, and the link made between restrictions on advertising and programming, may introduce the idea that, unlike the EFTA Court, the ECJ would apply similar principles to both areas.

With the same willingness to address the media in all its complexity, as that shown by the Council of Europe, the EU recently issued a **Recommendation on the Protection of minors and human dignity in the audiovisual and information services**⁵⁶.

The scope of this recommendation covers all audiovisual and information services made available to the public, whatever their means of conveyance (broadcasting, proprietary on-line services or services on the Internet), and is also valid for broadcasting services covered by the "Television without Frontiers" Directive.

The text explicitly refers to parental control measures as a way to combat illegal content. It encourages the development of legal and responsible use of information

⁵³ De Agostini/TV-Shop, paragraph 57.

⁵⁴ De Agostini/TV-Shop, paragraph 60.

⁵⁵ *Forbrukerombudet v Mattel Scandinavia and Lego Norge*

⁵⁶ Council Recommendation of 24 September 1998 on the development of the competitiveness of the European audiovisual and information services industry by promoting national frameworks aimed at achieving a comparable and effective level of protection of minors and human dignity (98/560/EC)

and communication services and opts for a self-regulation regime, which has the advantage of enabling enterprises to adapt to technical developments and to market globalisation.

It also recalls the principle of freedom of expression, indicating that “any measure restricting these freedoms must be legitimate, necessary for the aim pursued, and strictly proportionate in the limitations it imposes.” The Recommendation proposes a different approach and different solutions regarding illegal content on one hand and harmful content on the other.

Given “cultural diversity and national and local sensitivities”, the Recommendation stresses that “particular attention must be paid to the application of the principle of subsidiarity”, with “the effectiveness of national measures being strengthened, at European Union level, by co-ordination of national initiatives and of the bodies responsible for their implementation and by the development of co-operation and the sharing of good practices, in areas including justice and home affairs.”

The Member States are encouraged to promote, as a supplement to the existing regulatory framework, the voluntary establishment through participation of relevant parties (broadcasters, consumers, public authorities etc.) of national frameworks for the protection of minors and human dignity in audiovisual services. In addition the establishment of national frameworks for self-regulation and co-operation at Community level are advocated.

In addition to this Recommendation, a **Communication from the Commission to the Council and the Parliament, Multiannual Community action plan on a safer use of the Internet by combating illegal and harmful content on global networks**, was specifically dedicated to the Internet.⁵⁷ This action plan was formally adopted by the

⁵⁷ Multiannual Community action plan on a safer use of the Internet by combating illegal and harmful content on global networks. OJEC No. C 48 of 13 February 1998, p. 8.

Council and the Parliament on 21 December 1998⁵⁸. Its aim is to promote Community advancement of Member States' policy regarding information for consumers on the safer use of the Internet.

Specifically, the Action Plan envisages:

- the creation of European Network of hotlines,
- the co-ordination of national initiatives in order to ensure that self-regulation measures will be adapted to the transnational nature of communications networks,
- the development of filtering and rating systems. Projects will be selected to validate rating systems in relation to European content, to encourage integration of rating into the content creation process and to demonstrate benefits of these technical solutions. Other projects will particularly target the validation and demonstration of third party rating systems. International co-operation between operators and other parties concerned in the EU and their partners in other regions of the world is foreseen in order to ensure interoperability.
- the encouragement of awareness action plans aimed specifically at parents, teachers and children. The Action Plan will initiate awareness actions plans aimed at the dissemination of information from access providers to customers, and the development of material for use in the education sector.

It appears with these last two instruments that the EU has taken the same approach as the Council of Europe, responding to the harmful content issue with, *inter alia*, the introduction of preventive measures, i.e. intrusive technical devices, such as blocking and filtering systems. This option is clearly envisaged for on-line services, but is still under discussion for the broadcasting services covered by the Directive⁵⁹, such as free-to-air channels, cable and satellite channels. The drawbacks and advantages of the

⁵⁸ Decision No /98/EC of the European Parliament and of the Council for adopting a Multiannual Community Action Plan on promoting safer use of the Internet by combating illegal and harmful content on global networks

⁵⁹ Article 1 (a) 'television broadcasting' means the transmission by wire or over the air, including that by satellite, in unencoded or encoded form, of television programmes intended for reception by the public. It includes the distribution of programmes between enterprises with a view to their being relayed to the public. It does not include communication services providing information or other forms of communication for use by an individual, such as facsimile, electronic data banks and other similar services.

introduction of comparable measures in the specific context of television services is the matter of this study, constituting a core element of the report's policy assessment and ultimate recommendations.

3. Conclusion

This summary of the international and European legal initiatives relevant to the issue of protecting minors from harmful media content reveals a substantial legal history. It is against this backdrop that the examination of the feasibility and suitability of introducing technical measures at European level has taken place. The cases cited prove that a balance between a positive and a negative approach is somewhat difficult to obtain and both responses to harmful media content need to be co-ordinated to achieve the necessary public goal of the protection of minors. The policy recommendations made in the Report are cognisant of the legal, administrative, technical, industrial, economic, social and cultural issues that will be implicated and are set out in Book 1.

Chapter 3. Media Theories Background

Summary

In order to provide an informed evaluation of parental control methods aimed at protecting children from content perceived to be harmful, it is important to examine the relationship between children and media content. The ways and extent to which media content is perceived to be harmful need to be addressed before the best approach to regulation can be determined.

Real life violent events such as the murder of James Bulger in the UK or playground shootings in the USA heighten public concern about the effects of viewing violence on television, and draw attention to the debate about the role of the media in influencing behaviour. A common argument used by those who make claims for television's effects on the viewer is the resources put into television advertising. Opponents respond that advertising has an effect on sales by raising awareness of a product, but does not necessarily influence a viewer to buy a product - as opposed to a particular brand of that product - just because they have seen it on television. Advertising builds brand awareness. It also supports trends and fashions, which, although an influence on behaviour, is generally dictated by peer pressure and affected by novelty.

Though media violence may have harmful influences on all viewers, children are usually thought to be particularly vulnerable, due to a less well developed ability to distinguish reality from fiction. A survey of the main research into the child/media relationship reveals two main schools of thought. The first contends that media violence has a direct and harmful influence on children, is a factor in the development of aggressiveness in children, that it begins to influence children at an early age and continues into adolescence, leaving lasting effects into adulthood. The second argues that this influence is subject to the context in which violent content is depicted. Underlying both positions is an understanding that environmental factors are an important element in the degree to which children are influenced by violence.

Though there are multiple theories about the ways and the extent to which harmful effects are produced, the effects themselves are generally held to be of three types:

- Learning aggressive attitudes and behaviours.
- Desensitisation to violence (the viewer becomes more callous and desensitised to the harmfulness of violent behaviour)
- Increased fear of being victimised by violence.

If accepted that watching television violence directly produces these harmful effects, it is a simple matter to assess the risk presented by a particular programme by counting the number of violent incidents. For these purposes a simple definition of visual violence is generally used, usually a variation on the following:⁶⁰

“Any overt depiction of a credible threat of physical force or actual use of physical force, with or without a weapon, which is intended to harm or intimidate an animate being or group of animate beings. The violence may be carried out or merely attempted, and may or may not cause injury. Violence also includes any depiction of physically harmful consequences against an animate being (or group of beings) that occur as a result of unseen violent means”⁶¹

This provides an objective criterion by which a programme may be classified for the purposes of parental control. However, by failing to take into account the context in which violence is portrayed, and viewers’ perceptions of violence, it risks offering a distorted judgement of programming, whereby a children’s cartoon or a Shakespearean drama are rated as depicting the same level of violence as an action or horror film. For these reasons some researchers, particularly in Europe, have focused on audience perceptions of media violence, in order to determine whether the context in which violence is shown has a bearing on its harmfulness. Such studies, both among adults

⁶⁰ For the purposes of this document it is not practical to provide the precise definition applied for each study referred to. Our research indicates that the main studies in this area have defined violence in similar terms to the definition provided here.

⁶¹ *Violence and the Viewer: Report of the Joint Working Party on Violence in Television 1998*, BBC, BSC and ITC. From Gunter, B. and University of Sheffield Department of Journalism, *Violence on Television in Britain: A Content Analysis 1995-6*, London: Independent Television Commission, (1996)

and children, have noted varied and complex judgements about violent content from the audience, young and old, with different factors, such as, for example, the viewer's level of identification with characters and situation or the degree to which they perceive the violence to be justified. That the findings of these studies are similar for both adults and children weakens the contention that children are more vuiEings FJ

In addition, an environment in which a family shares viewing experiences and uses television as a tool for stimulating discussion and cultivating critical skills, will give children a level of protection from harmful influences even when their parents are not present. Media literacy programmes can help both parents and children in this respect, as well as assisting parents in making positive programming choices.

This chapter begins with a survey of the main research into the relationship between children and television violence over the last thirty or forty years. It presents a brief summary of some of the most important theories on the effects of viewing television violence on children's behaviour. It also looks at research focusing on the viewer's perceptions of violence on television. Based on the above, it is useful in presenting this review to divide the approaches into two schools of thought – "effects" and "perceptions". As is the case with any conceptual model, it is imperfect, as the two are not distinct. There is also considerable overlap within many of the studies cited as well as between them. Nevertheless, we believe it is helpful to examine the literature from this perspective in order to apply it to the policy questions at hand. Through its review of the main schools of thought and the recent research, the study attempts to show whether and to what extent there are fundamental issues common to all groups, which can provide a frame of reference for action across Europe, or whether it is necessary to take into account national, cultural and social differences in formulating a regulatory strategy. As a supplement to this overview, in the third part of this chapter the results of some European studies are briefly described.

1. "Effects" Theories

Research on the effects of violence in the media is based upon the premise that it has a direct impact on the audience, particularly television violence. While it need not overtly affect behaviour, it may affect attitudes, thus contributing to a more anti-social world-view. Critics argue that this premise relies on uniformity among the audience even where variables such as environmental factors are taken into account. Further criticism has been made of the conditions, under which research has been conducted, with laboratory-based studies attracting particular censure for their remoteness from real-life television viewing.

The majority of research in this area has pointed to three types of harmful effects. These are defined in the National Television Violence Study⁶², conducted over three years in the United States, as follows:

- Learning aggressive attitudes and behaviours.
- Desensitisation to violence (the viewer becomes more callous and desensitised to the harmfulness of violent behaviour).
- Increased fear of being victimised by violence.

For the purposes of this report the theories described are grouped under these three headings.

Most of the research cited has focused on “learning aggressive behaviour”, which indicates that the inspiration for the debate concerning media violence comes from the supposed correlation between real-life manifestations of violence and its depiction on television. Nevertheless, the two other “harmful effects” are important to note, particularly since parents cite “increased fear” as the most important issue with regard to their own children, as will be shown in the examination of viewers’ perspectives on violence in the next section.

Some alternative approaches to “effects” research have also been identified, which, while not representative of the main body of research, provide a useful contribution to our understanding of the “harmful effects” debate. These are also summarised here.

1.1 The Main Theories

The main theories concerning the harmful effects produced on children by television violence are as follows:

⁶² *National Television Violence Study: Executive Summary*, Volume 3. California, Sage Publications, Inc., (1998)

Learning aggressive attitudes and behaviours***Social learning approach - Albert Bandura⁶³***

Much of what children learn, particularly at an early age, is through observing and imitating behaviour in their immediate environment. Bandura suggested that the same could be true of the media. By observing children's behaviour after a controlled experiment in which they watched a child act aggressively towards a plastic doll called a Bobo doll, he and his colleagues found that, when frustrated, the children would directly imitate the aggressive behaviour they had seen demonstrated. This theory has been borne out by many other studies, and has been supplemented by observations that when such behaviour is portrayed as successful or having no negative consequences, such as punishment, the viewer is more likely to imitate it.

Frustration-aggression hypothesis - Leonard Berkowitz⁶⁴

Leonard Berkowitz placed emphasis on the situation of the viewer. He found that frustration with one's own environment increased susceptibility to influence from media violence. Children who have been frustrated by being punished, insulted or physically deprived learn from media violence that violent and aggressive behaviour is a way to deal with those frustrations. Other studies have found that children from socially deprived environments appear to be particularly influenced by media-aggression.

⁶³ Albert Bandura, *Aggression: A Social Learning Analysis*, Englewood Cliffs, NJ, Prentice-Hall, (1973)

⁶⁴ Berkowitz, L., Situational Influences on Reactions to Observed Violence, *Journal of Social Issues*, 42, pp.93-106, (1986); Berkowitz, L., The frustration-aggression hypothesis: Examination and reformulation, *Psychological Bulletin*, 106, 59-73 (1989)

Script theory - Rowell Huesmann; Leonard Eron⁶⁵

The media can influence viewers' perceptions of the world around them. Violence is perceived to be a normal (and perhaps acceptable) part of society as the frequency of violence on television leads the viewer to over-estimate its frequency in the real world. Children are learning "scripts" for social behaviour that will last them throughout their life. Research taking a long-term approach by following subjects from childhood to adulthood, such as that carried out by Huesmann and Eron, has found that children who watch many hours of television violence when they are young tend to also show a higher level of aggressive behaviour when they become teenagers. Leonard Eron found, by observing his subjects until they were 30 years old, that the ones who had watched a lot of television when they were eight years old were more likely to be arrested and prosecuted for criminal acts as adults.

Excitation-transfer theory - Dolf Zillmann⁶⁶

Physiological arousal is a factor in the fascination of media violence for the viewer. Action scenes grab the viewer's attention and create a "kick". People also tend to act more aggressively in a state of arousal, which would explain why arousing television scenes could lead to higher aggression among frustrated or angered viewers as Dolf Zillmann claims. In this context it is not the content but the stylistic features surrounding it, such as sound and visual effects, which are responsible.

⁶⁵ Huesmann, L.R., Psychological Processes Promoting the Relation Between Exposure to Media Violence and Aggressive Behaviour by the Viewer, *Journal of Social Issues*, 42, pp. 125-140 (1986); Huesmann, L.R., An Information Processing Model for the Development of Aggression, *Aggressive Behaviour*, 14, pp. 13-24 (1988); Huesmann, L. R., & Eron, L. (Eds.), *Television and the aggressive child: A cross-national comparison*, Hillsdale, NJ, Lawrence Erlbaum Associates, (1986); Huesmann, L. R., Eron, L.D., Lefkowitz, M.M. & Walder, L.O., Television Violence and Aggression: The Causal Effect Remains, *American Psychologist*, 28, pp. 617-620; Eron, L.D., *Learning of Aggression in Children*, Boston, Little Brown, (1971); Eron, L. D. & Huesmann, L. R., The role of television in the development of pro-social and antisocial behaviour, In D. Olweus, J. Block, & M. Radke-Yarrow (eds.), *The Development of Antisocial and Pro-social Behaviour: Research, Theories, and Issues*, New York: Academic. (1986).

⁶⁶ Zillman, D., Excitation Transfer in Communication-mediated Aggressive Behaviour, *Journal of Experimental Social Psychology*, 7, pp. 419-434 (1971)

Desensitisation

Long-term exposition - Donald Linz; Edward Donnerstein; Steven Penrod⁶⁷

This theory suggests that viewers become desensitised towards violence by frequent and long-term exposure to violent scenes, and empathy towards the victims is reduced. This has been found to be particularly true of men. In addition, as viewers become increasingly accustomed to television violence it loses its ability to arouse, and hence its appeal, with the consequence that the viewer demands more extreme forms of fictional violence.

Increased fear of victimisation by violence

Cultivation theory - George Gerbner⁶⁸

Gerbner has argued for many years that people's perceptions of society are affected by television. With regards to violence he surmises that those who watch a lot of television perceive society to be more violent than it really is, due to the frequency of violence on television. This perception can lead to increased fear and anxiety about the viewer's environment. If people already fear or have experienced violence, or are not given alternative messages in real life, this is reinforced.

1.2 Alternative Theories

Some alternative theories have been posited and tested, which are also useful to consider.

⁶⁷ Linz, D.G. & Donnerstein, E, The Effects of Violent Messages in the Mass Media. In Bradac, J.J., (Ed.), *Message Effects in Communication Science*, Newbury Park, Sage, (1989); Linz, D.G., Donnerstein, E. & Penrod, S., Effects of Long-Term Exposure to Violent and Sexually Degrading Depictions of Women. *Journal of Personality and Social Psychology*, 55, pp.758-768, (1988).

⁶⁸ Gerbner, G., Signorielli, N., *Violence and Terror in the Mass Media*, Paris, UNESCO, (1988); Gerbner, G., Gross, L., Morgan, M. & Signorielli, N., Living with television: The dynamics of the cultivation process. In Bryant, J. & Zillmann, D. (Eds.), *Perspectives on media effects*, Hillsdale, NJ, Lawrence Erlbaum Associates, (1986); Gerbner, G, The Annenberg School for Communication, University of Pennsylvania, Department of Communication, University of Delaware, *Violence Profile 1967 Through 1988-89: Enduring Patterns*, Children Youth and Family Consortium Electronic Clearinghouse (1990) (<http://www.cyfc.umn.edu/Documents/C/B/CB1029.html>)

Catharsis theory - Seymour Feshbach⁶⁹

Taken from the theory applied to Greek tragedy, this suggests that viewers' own aggressiveness can be dissipated by observation of aggressive behaviour. The violence or aggressiveness exhibited acts as an outlet for the viewers' real life frustrations. Feshbach studied two groups of boys in a residential school. One group was given non-violent programmes to watch, while the other watched violent programmes. It was noted that those who watched the non-violent programmes were more aggressive with their peers than the others. The researchers suggested that stimulation of the second group's aggressive tendencies had led to a learned fear of punishment and contributed to their reduction. Critics of the Feshbach experiment have argued that depriving the first group of their usual programmes led to the increase in aggressive behaviour.

“Pro-social” theory – Jerome Johnson and James Ettema

This seeks to prove that television can have positive effects. Many studies have shown that while television can be a useful tool for imparting information, and possibly stimulating discussion, it does not seem to be able to change attitudes on its own. An American study⁷⁰ conducted by Johnson and Ettema, which recorded the views of children with regard to a series of “pro-social” programmes, showed that attitudes seem to change, with discussion enhancing this shift. It also found that messages conveyed in the most action-packed scenes were the ones that made the greatest impression on children.

2. “Perceptions” Research

Studies which have examined programme content by counting the number of identifiable violent incidents in a given programme or period of time reveal that violence is commonplace on television. Nevertheless, its significance for the viewer is harder to measure. Barrie Gunter states in an article for the *Journal of Current Psychology*,

⁶⁹ Feshbach, S., *The Catharsis Hypothesis, Aggressive Drive, and the Reduction of Aggression, Aggressive Behaviour*, 10, pp. 91-101 (1984)

⁷⁰ Johnston, J. and Ettema, J.S., *Positive Images: Breaking Stereotypes with Children's Television*, California, Sage, (1982)

“...television viewers, young and old, are selectively perceptive and judgmental in their responses to programmes. The ways viewers perceive and evaluate characters and events on television do not always match descriptive incident counts or the meanings inferred from them by researchers.”⁷¹

Apart from technical issues, the efficacy of parental control mechanisms is largely dependent upon the willingness of parents to use them. An examination of viewers' perceptions of violence is useful in providing greater insight into the application of such mechanisms. There is a consensus that there is too much violence on television. However, when examining the question of whether children are likely to “learn” aggressiveness from watching violence, it is notable that though there is a high level of concern among parents about the amount of violence on television, this concern is nearly always voiced with reference to “other people’s children”. Parents worry more about their own children being frightened by violence than by them being encouraged to imitate violent behaviour. In a study described in detail below, David Buckingham asked parents what concerns they had about the effects of television. They did not consider themselves to be at risk, but some thought younger children, who might not be able to distinguish between fact and fiction, might be effected by violence on television.

This section summarises the main findings about viewer's perceptions of violence, with reference to various studies, including studies of factual programmes, which provide valuable insights that can be related to findings from studies of fictional programmes. It then examines briefly two studies, which looked directly at children's perceptions of television.

⁷¹ Gunter, B. The Importance of Studying Viewers' Perceptions of Television Violence, *Current Psychology*, 1998. Volume 7, pp. 26-43

2.1 The Main Findings

Fictional Violence

Many studies have focused on the viewer's perception of violence rather than assuming a direct correlation between the quantity of violence (in whatever context) and its effects on the viewer. The reasoning is that viewers' perceptions of the meaning of violence always include an interpretative act, and their reactions to violence are more complex than allowed for by content analysis. For instance, cartoons such as *Tom and Jerry* contain a significant amount of violent acts. A content analysis approach would classify cartoons among the most violent programmes, but the fantastical and animated contexts in which the violence occurs have an effect on the viewer's perception of the violence.

A 1972 BBC study asked viewers to complete a questionnaire about specific programmes shortly after their broadcast, in which their reactions to violence and other aspects of the programmes were examined. It found that the audience's perception of a particular programme as violent did not depend on the number of violent incidents depicted. Neither was there a strong correlation between perceiving a programme as violent and verbally reported emotional arousal. However, if the violence was perceived to be unjustified the programme was more likely to be evaluated negatively.⁷²

The National Television Violence Study⁷³ conducted in the USA also found that violence was more acceptable to the audience if it was perceived as justified. Viewers did not wish to see violence that can only be defended on grounds of inclusion for dramatic impact or shock value. Related to this are viewers' reactions to violent acts towards a person whom they perceived to be innocent. The audience is more disturbed by this than by a violent act against someone they see as guilty, and therefore in some way deserving of punishment. They are also more tolerant of violence perpetrated by a "good" character than a "bad" character.

⁷² British Broadcasting Corporation, *Violence on Television: Programme Content and Viewer Perceptions*, London: BBC, (1972)

⁷³ National Television Violence Study, *ibid.*

Gunter and Furnham⁷⁴ suggest that the form of violence affects the audience's perception of its seriousness, with shootings being perceived as the most violent. However, violence involving close contact will distress the viewer even if guns are not used. The National Violence Television Study also noted that violence shown in "close-up", where the harm and pain caused is evident, is more disturbing to viewers than scenes shot from a distance.

An important element in the viewers' perceptions of television violence was realism, with violent incidents reported in the news or in documentaries commonly rated as more violent than those presented in a fictional context. A further British study, investigating viewers' perception of violence in a number of fictional settings, corroborated these findings. It also emerged that one of the most powerful factors in influencing the viewers' perceptions of television violence was their ability to identify with the protagonists. Thus, violence depicted in a realistic drama or soap opera, set in familiar surroundings, was perceived to be more serious than that depicted in a cartoons or fantastical horror films. Geographical proximity was also a factor, with British viewers finding American cop shows less disturbing than British drama.

Factual Violence

Insights from studies relating to audience perceptions about factual programmes can contribute to our understanding of the impact of violence for the viewer. Fictional violence is perceived in different terms to factual violence, which viewers generally find both more acceptable and simultaneously more upsetting because it is real. In 1993 the Broadcasting Standards Council published the findings of a national survey of 1296 adults, in their *Annual Review of Violence in Factual Television*.⁷⁵ The survey was supplemented by an innovative new research method in which groups of viewers were shown clips from factual programmes and allowed to edit them according to their own views on what would be acceptable material. The results showed that people felt a sense of duty to watch the news, to keep themselves informed. The participants

⁷⁴ Gunter, B. and Furnham, A. Perceptions of television violence: Effects of programmes genre and the physical form of violence, *British Journal of Social Psychology*, 23, (1984)

⁷⁵ Morrison, D. E. and MacGregor, B. edit groups in Broadcasting Standards Council *Violence in Factual Television*. 1993. Edited by Andrea Millwood Hargrave

generally agreed that, if a newsworthy event occurred, it should be reported no matter how violent it was, though the editing process demonstrated that visual limits should be placed on violence.

The conclusions reached in this study were similar to those reached by D.E. Morrison in his study of the audience's opinions about the role of television during the Gulf War, published in *Television and the Gulf War*⁷⁶, and by Barrie Gunter and Mallory Wober in their study of public response to footage of the Falklands War, reported in *Violence on Television: What the Viewers Think*.⁷⁷

From the results of these studies it is possible to draw a simple conclusion that there are four main factors which affect the audience's perceptions of different factual genres and which might also be applied to fictional genres.

- *The Factor of Closeness:* The more distant the viewer feels from the violent situation in terms of geography, time and other relationships, the less disturbing they will find it.
- *The Factor of Certainty:* Viewers are less likely to be shocked either if they know the outcome of a violent scene or if they fully understand what is happening in it.
- *The Factor of Status:* Viewers are likely to tolerate a higher degree of violence if the victim is regarded to have lower claim to justice. Therefore the victims perceived innocence is an important factor in how much violence will be accepted and how disturbing that violence is likely to be.
- *The Factor of Minimalism:* Violent imagery, whether it be real or reconstructed, should not use greater detail than is needed to illustrate the point being made. Furthermore, it should be noted that dramatic techniques such as sound tracks, slow motion and soft focus lenses could add to the distress caused to the viewer since such techniques engage them more in the violence of the action. It was noted in the editing study group that violence does not have to be graphic to be found

⁷⁶ Morrison, D.E., *Television and the Gulf War*, London: Libbey, 1992

⁷⁷ Gunter, B. and Wober M., *Violence on Television: What the Viewers Think*, London: John Libbey, 1988

disturbing, and it is often the combination of images and wording that is distressing to viewers.⁷⁸

2.2 “Perceptions” Studies

Many studies presuppose that children are more vulnerable to television violence because they are unable to make the same complex judgements that adults do. It is important to address the issue of children’s perceptions of violence to be able to make an informed evaluation of the substantive need for protective measures. The following questions are raised. Do children perceive violence in the same way as adults, or does the quantity of violent content make more of an impression than its context? Are younger viewers less able to distinguish between fiction and reality? Can they make the connection between a violent incident in the middle of a programme and the punishment of its perpetrator at the end? Two studies, which addressed these questions, are described briefly here.

Television Violence: A Child’s Eye View

T.H.A. Van der Voort conducted a study of children’s perception of television violence at three schools in Holland.⁷⁹ 314 children in total were shown full-length realistic crime drama (*Starsky and Hutch* and *Charlie’s Angels*), two adventure series (*Dick Turpin* and *The Incredible Hulk*) and fantasy cartoons (*Scooby Doo*, *Tom and Jerry*, *Popeye* and *The Pink Panther*). Immediately after seeing each programme the children responded to a questionnaire measuring ten perception variables:

- readiness to see violence;
- approval of violent actions seen in the programme;
- enjoyment of the violence seen;
- evaluation of the programme;
- emotional responsiveness;
- absorption in the programme;
- detachment while watching;

⁷⁸ From BBC, BSC and ITC, *Violence and the Viewer*, Appendix 1: Research Findings on Audience’s Perceptions of Violence on Television, 1998, pp 11-12

⁷⁹ Van der Voort, T.H.A., *Television Violence: A Child’s Eye View*, Amsterdam: Elsevier Science Publishers, (1988)

- identification with the programme's chief characters;
- perceived reality of the programme;
- comprehension and retention of programme content.

Van der Voort investigated whether the children were more absorbed by those programmes that they perceived to be more realistic. The results showed that the two crime dramas, *Starsky and Hutch* and *Charlie's Angels*, were perceived to be realistic, while the other programmes were seen as fantastic. The children watched the realistic programmes with more involvement, more emotion and less detachment. The crime dramas were regarded as containing the most violence of all the programmes shown.

The study found that 9-12 year-olds' perceptions of the amount of violence in programmes differ little from those of adults. By contrast perceptions differed greatly from those of content analysts who judge violent content in terms of numbers of identifiable incidents in a programme or period of time. Thus, although content analyses identify cartoons as being among the most violent types of programme on television, such programmes tend to be seen by children as containing very little violence at all.

Moving Images – Understanding Children's Emotional Responses to Television

In a study conducted in 1996⁸⁰, David Buckingham found that even young children make complex judgements about violence through making a distinction between reality and fantasy. He claims that the formal stylistic properties of a programme, such as the graphical conventions of a cartoon, are recognised by children and used as a factor in determining how realistic a programme is. He also believes that children apply their own experiences and beliefs about the real world to determine the plausibility of a fictional situation. Through interviews with four different age groups ranging from 6 to 16, he examined perceptions of three programmes in which the boundary between fact and fiction was not obvious. The programmes were the realist drama, *Casualty*; *Crimewatch*, in which dramatised reconstructions of crimes are used to aid the police in

⁸⁰ Buckingham, D. *Moving Images - Understanding Children's Emotional Responses to Television*, Manchester, Manchester University Press, (1996)

finding witnesses to real life crime; and a spoof documentary called *Ghostwatch*, which purported to follow a ghost hunt. Though the children were sometimes repelled by images of blood and gore in *Casualty* and could be upset by certain storylines, such as the death of a character, they recognised the fictional nature of the programme. In some cases the shock they felt added to their enjoyment of the programme. *Crimewatch* was more disturbing because of its reality, though, like the adult viewers they considered it to be an acceptable programme for its social purpose and because it offered valuable lessons in crime prevention. The illusion of reality in *Ghostwatch* was confusing for children, who found it the most frightening programme. Interestingly, the children's fears became stronger after the programme had finished, as they also had with *Crimewatch*. The nature of the programme was to convince the viewer that it was a genuine account of a ghost hunt, and the illusion was given that a ghost had been identified. The children were unable to identify any contextual factors in the programme that suggested its fictional nature. A general belief among them that ghosts could actually exist contributed to their perception that the programme was real.

Buckingham also asked the children to discuss how they felt about the news. He found that reports involving innocent victims, particularly children and animals, were the most frequently discussed, with stories close to home provoking fear and a sense of personal threat. Those that were more distant geographically, such as Romanian orphans or children killed in the former Yugoslavia provoked feelings of sadness and pity, but also made the children feel lucky or relieved that such events were not likely to happen to them. These feelings were often accompanied by a sense of guilt, which some younger children coped with by donating money to charity. The older children were more likely to switch off from the images, considering attempts to help as fruitless.

As with the research conducted with adult viewers, Buckingham found that children had more difficulty coping with violence witnessed in news programmes than that seen in fictional programmes. They developed strategies for coping as follows:

- partial or total avoidance of the violence - by changing channels, switching off the television, closing their eyes or hiding behind the sofa until the scary bits were over.
- changing the context of viewing - by watching with others rather than alone

- distracting themselves or seeking comfort
- reinterpreting the text - by inventing alternative endings or challenging the reality of the text.

2.3 Conclusions

Overall, Buckingham found that the children were more successful in developing coping strategies to deal with fictional than factual violence. From the responses of children in his Gulf War study⁸¹, David Morrison suggested that children coped with their worries and upset over the war in the same way as adults, by reminding themselves that the war was a just one. He also found that over time information received through discussion with friends and families, as well as from the television news, reduced their anxieties, as they gained a fuller understanding of how the war was likely to affect them and their families.

Van der Voort concluded that children become more involved in their viewing than adults do. He found that as they got older they watched more television, and moved from children's to adult programmes. While they gained a greater understanding of violence in drama as they aged, they became more inclined to regard violence as justified. The more television they watched, the less frightened they became of violence. Buckingham, however, found that desensitisation to fictional violence had no impact on reactions to factual violence, which remained upsetting.

The studies also suggest that the more knowledge children have about the context of the programme in which violence is portrayed, whether it be the recognition that a programme is fictional or the availability of background information, such as in the Gulf War study, the less likely they are to be frightened or upset by such violence. Chapter 4 in Book 1 deals with this issue in more detail in its discussion of media literacy.

⁸¹ Morrison, D.E., *ibid.*

3. European Studies

Most research on the issue of children and television violence has taken place in the USA and Northern Europe. In addition to those described above, it may be useful to note the following projects, conducted in some of the Member States.

3.1 Denmark

Two reports from the mid-1990s constitute important contributions to the debate on children and the media, “Report No. 1311”, written in 1996 by the Media Committee under the Prime Minister’s Department, and “Media Violence - children and young people” written by the Committee concerning Film, TV and Video Violence, established by the Minister of Culture in 1995.

Report No.1311

This study researched children's and young people's use of mass media. It made the following key statements:

- Children spend less time using media than young people. 7-12 year old children use 3½ hours daily, whereas a teenager uses 4¾ hours daily.
- Children and young people do not spend as much time using media as adults. The average daily media consumption for 7-18 year olds is 4 hours, whereas it is 6 hours for an adult. Adults spend more time listening to the radio.
- Children and young people spend much more time on electronic visual media than on newspapers.
- Children and young people have, in general, a more varied consumption of electronic media than adults, and they get more easily used to new media such as satellite TV, video and computers.
- Some children and young people have a remarkably high consumption of specific media. For instance 18% of teenagers spend more than 3 hours daily watching TV, and 29% of the teenagers spend more than one hour daily watching video. Comics are the only form of print media read by 56% of 7-9 year olds.
- Some children and young people have a remarkably low consumption of specific media. 20% of teenagers do not read print media at all, and 40% of children do not listen to the radio.

- There is a vague trend for children and young people not to use print media much. However, this is a trend reflected in the population in general.
- Children and young people spend more or less the same amount of time daily using media as they did 10 years ago. However, there is a decrease in relation to radio.
- Those who have access to satellite TV spend a considerable amount of their viewing time on at that medium. The percentage for adults is 37%, whereas it is 48% for teenagers.

The same report focused on two items in relation to children and media, media violence and commercials.

The conclusions regarding children and media violence are:

- that there is a broad spectrum of factors, such as for instance the child's social background and family situation, that may influence children and make them afraid, aggressive or restless - and that the media play an important role in relation to this,
- that some children and young people are more susceptible to influence by media violence than others. These are:
 - a) the youngest children, because they are less able to distinguish between fiction and reality,
 - b) boys from a less privileged social background, who are large-scale consumers of television and video
 - c) children and young people from different social classes, but who all lack loving care, and have experienced bad living conditions and negative school experiences.

“Media Violence - children and young people”

This study was a comprehensive analysis of the research conducted, nationally and internationally, in the area of children/youth and violence. The Committee concerning Film, TV and Video Violence concluded by formulating a series of recommendations vis-à-vis different constituencies of society. The principal recommendations were:

- Parents: The committee recommends increased awareness raising directed towards parents, informing them how moving pictures can influence children in both positive and negative ways. Better informed parents should influence their children

positively by speaking to them about what they watch, helping them to find programmes relevant for their age and, finally, talking with their children about any violence they see and about the function of the violence in the programme.

- School, leisure time institutions and kindergartens: The committee recommends supporting media education in school so that the pupil is enabled to work both productively and analytically with moving images from the beginning of its schooling.
- Social and Health Policy: The committee recommends developing preventive and targeting casework initiatives that, socially, in health terms, and also economically, can improve the situation for deprived families, and thus for a number of those children and young people that are particularly vulnerable to violent programmes.
- Media Institutions and the area of Media Policy: The committee recommends that serious attention is given to the quantity and quality of violence shown on television, especially within the family programme schedule, where there are many infant viewers.
- Computer Games and Virtual Reality: The committee recommends that an advisory rating is displayed on computer games with scary or violent content, corresponding to the ratings used for video films.

Computers

So far little research has been carried out regarding children's and young people's use of computers. Accordingly, the Media Council for Children and Youth (**MCCY**), the organisation responsible for classifying films and videos, has decided to initiate a research project on the potential harmfulness of computer games, in order to consider the possibility of implementing a rating system for them. The idea is inspired by the recommendations of the Report on Media Violence. The project will be finished by the end of 1999. Another project supported by the MCCY is a survey, which investigates a possible categorisation of all computer games within a 12 month period, together with an analysis of the distribution of the games in Denmark. This project will be finished by February 1999.

Recent Research

Recent Danish published research regarding young people provides some interesting figures and conclusions:⁸²

- 15-18 year olds spend around 7 hours daily on media with the gender difference that boys in general use half an hour more daily than girls
- The visual media are the preferred media; boys using a little more than 4 hours daily, girls 3½ hours daily
- Boys spend almost 1½ hours daily in front of the computer whereas girls spend less than the half amount of that time
- The young generation is called the “multi-media generation” and it is emphasised that, although the average amount of time spent using media daily is about 7 hours, it is a mix of media, with the young people often using several media at the same time.
- Although the computer plays an important role for the young people it does not replace the other media. It has been an important supplement to the total media menu where the visual media play an important role.
- As to the content, young people prefer TV fiction, such as films, soaps and sitcoms, and they watch more foreign fiction than the population in general.

One interesting aspect in relation to some of the above-mentioned research is that, apparently, family culture is crucial for children. Also, with regard, for instance, to the content perspective of children's media use, especially the children's familiarity with international media culture and advertising as well as its possible influence on purchases, it would appear that the gender-specific differences that emerge in the children's preferences are firmly anchored in the attitudes and values prevailing within the family - at any rate where young children are concerned. Apparently media play a very important role in most Danish families, although different approaches are taken to it, depending on the norms and traditions of the family, as well as gender and generation differences.

3.2 Italy

Though the Northern states have been the leaders in European research on children and the media, a recent study was conducted in Italy by the leading broadcaster, Radiotelevisione Italiana (**RAI**). The results were published in late 1998.

Experimentally measuring the perceptual impact of televised violence: A new method

This study had two main objectives. It sought to find a new method of measuring the reflexive emotional response to television violence, and to test this method on a particularly vulnerable segment of the television viewing public, teenagers between 12 and 18 years old..

The motive was the perceived inadequacy of traditional research methods, which elicit a conscious and explicit reflective judgement. In such a charged context, the viewer may fear he is defining himself through the position he takes, and, therefore, this judgement may be coloured by external concepts (ethical, ideological, cultural, political etc.) rather than offering an untainted picture of what impacts on the viewer as violent. This might

intellectual judgements. For the purposes of this study, the eliciting material used was violent excerpts, taken from three types of ordinary television programmes.

- “Action” films: the typical films of the Schwarzenegger, Stallone, Rambo-type, where lots of shooting and fighting takes place, within spy, war or crime stories.
- “Drama” films: films portraying stories, facts and episodes close to ordinary, real life.
- “Real” life: these were sequences extracted from news programmes pertaining to real life episodes.

The test was administered to two sample populations: one of 12 year-old and one of 18 year-old adolescents. The portrayal of violence was most realistic and graphic in the “action” films and least in the news programmes. The results were statistically significant, highly stable and unexpectedly robust:

- “Real” life violent episodes, i.e., those within news programmes have by far the highest emotional impact. Films in the “drama” category, which portray stories closer to real life than those depicted in “action” films, have a greater impact than the latter, where events are highly expected and stereotyped.
- The visual representation of violence, i.e. the physical realism of what is shown, has little impact.
- Gender and/or age have no influence on the subjects’ responses, with the exception that younger subjects are less able to differentiate between the two fictional contexts.

Though this has only been a small pilot study, with 120 subjects, the results are interesting because they measure the emotional, immediate response to violence on television, rather than the (ethical/ideological/social) judgement made about it

3.3 The Netherlands

Besides Van der Voort’s study, which was described in the previous section, there have been various other research projects in this field carried out in the Netherlands. Indeed, the country has developed a certain tradition in media-violence studies with senior

researchers from the Universities of Amsterdam (Valkenburg)⁸³, Leiden (Van der Voort), Twente (Wiegman)⁸⁴, and Utrecht (Groebel). From the many studies they have conducted, these share the conclusion that media violence bears the risk of “negative” behaviour and attitude effects, but nearly always has to be considered in the context of additional variables such as personality dispositions (e.g. boys are more at risk), parent and peer influences, and the level of social control.

Professor Jo Groebel has constructed an effects model, which distinguishes different effects modes from the different moderating factors:

Figure 1: The Groebel media-violence-effects taxonomy

| DISPOSITIONS | E.g. gender | Aggression-level | Experiences | Group-structure |
|--------------------|-----------------|-----------------------|-----------------------|---------------------|
| EFFECTS MODUS | PHYSIOLOGICAL | EMOTIONAL | COGNITIVE | SOCIAL |
| MOTIVES | arousal-seeking | identification | Orientation | belonging |
| MEDIUM: content | suspense | heroes | Stressing conflict | aggr.group cultures |
| MEDIUM: form | pace | attractiveness | Credible | social symbols |
| CONTEXT Situation | stimulating | frustration | Similarity media/real | similarity groups |
| CONTEXT: culture | “rhythm” | lack of role-models | Reward aggression | social control |
| EFFECT: short-term | arousal | imitation, admiration | Belief in ag.solution | fascination |
| EFFECT: long-term | habituation | social learning | Aggr./anx.world-view | aggr.group culture |
| OVERALL “RISK” | “thrill-spiral” | aggressive habit | Overall belief system | social climate |

The UNESCO Global Study on Media Violence⁸⁵

In a recent global study for UNESCO, Professor Jo Groebel analysed some of the particular cross-cultural aspects of the media-effects discussion and drew some conclusions for media education as well. This was one of the largest ever intercultural

⁸³ Valkenburg, P. (1997). Vierkante ogen: opgroeiën met TV & PC. Amsterdam: Balans.

⁸⁴ Wiegman, O. en Van schie, E. 'De schadelijke gevolgen van computerspellen; Nederlandse onderzoekers pleiten voor keurmerk', in: SEC, Tijdschrift over samenleving en criminaliteitspreventie, jaargang 11, nr. 2 april 1997.

Wiegman, O. 'De agressieve Nintendo-generatie', in: SEC, Tijdschrift over samenleving en criminaliteitspreventie, jaargang 9, nr. 2 april 1995. Den haag: Ministerie van Justitie, interne uitgave.

⁸⁵ The study was a joint project of UNESCO, The World Organisation of the Scout Movement and University of Utrecht. The findings summarized here were presented by Professor Jo Groebel to UNESCO on 19 February 1998.

studies conducted on the role of media violence for children, with a total of more than 5000 pupils from 23 different countries all over the world participating. It was also unique in several other respects: for the first time, international crisis regions (war zones and high crime areas alike) were part of the research sample. Several of the countries which covered the whole global range of social and technological development had never before participated in an empirical social science study on media. Also the methodology used was unique in so far as all participating 12-year old children answered exactly the same standardised 60-item questionnaire, which was translated into the different languages used. The content of the questions was not culture-bound, as otherwise a direct comparison of the data would have been impossible. The children reported on their media behaviour, their habits, preferences, and social environment.. By January 1998, approximately 350.000 individual data had been collected and processed in the context of the study.

The following countries participated in the core study: Angola, Argentina, Armenia, Brazil, Canada, Costa Rica, Croatia, Egypt, Fiji, Germany, India, Japan, Mauritius, the Netherlands, Peru, Philippines, Qatar, South Africa, Spain, Tadjikistan, Togo, Trinidad & Tobago and Ukraine. These countries represent the broad spectrum of human and technological development and major world cultures, and thus reflect a representative range of countries as covered in the 1997 UNDP Human Development Report.⁸⁶ In a subsequent stage additional countries, such as the United States, Russia, Finland and Poland, will be part of an extension of the research programme.

In each country, the data were collected in metropolitan and rural areas, in high- and low-aggression environments, from boys and girls, and from different types of schools. The only groups of children who could not be considered in the study were those who do not attend any school or who live in extremely remote areas. However, even children living in refugee camps participated. The logistics and distribution of the questionnaires among average children were organised by members of the Scout Movement; the scientific supervision and analysis was conducted at the University of Utrecht.

Five major issues were addressed:

- What role do the media, and in particular TV, play in the lives of children on a global level?
- Why are children fascinated by media violence?
- What is the relationship between media violence and aggressive behaviour among children?
- Are there cultural as well as gender differences in the media impact on aggression?
- How do violent environments (war/crime) on the one hand and the state of technological development on the other influence the ability to cope with aggressive media content?

The results demonstrate:

- 93% of the children in this study have access to a TV-set. The range is 99% for the North-Western hemisphere and 83% for Africa, with Asia and Latin-America in between. The screen has practically become a universal medium. For schoolchildren, it is the most powerful source of information and entertainment. Even radio and books do not have the same global distribution.
- The world's children spend an average of 3 hours daily in front of the screen, with a broad international spectrum of individual viewing behaviour, of course. That means at least 50% more time is spent with this medium than with any other out-of-school activity, including home-work, being with family or friends or reading.
- Thus, TV has become a major socialisation factor and dominates the life of children in urban and electrified rural areas around the globe.
- Boys in particular are fascinated by aggressive media heroes. Some of these, such as Arnold Schwarzenegger's "Terminator", have become global icons. 88% of the world's children know him. 51% of the children from high-aggression environments (war; crime) would like to be like him, as compared to 37% in the low-aggression neighbourhoods. Clearly, children need and use media heroes as role models to cope with difficult situations. And these are plentiful for the children of the world

⁸⁶ <http://www.undp.org>

- A remarkably large number of children live in a problematic emotional state. Nearly half of the children report that they are anxious most of the time or very often; 9% have had to flee their home at least once in their life; 47% report that they would like to live in another country. In the high-aggression areas, 16% of the children report that most people in their neighbourhood die because they are killed by others. Here, 7.5% of the children have already used a weapon against someone themselves.
- In this situation, media heroes are used for escapism and compensation for the children's actual problems. For boys, these are primarily aggressive role models (30% name an action hero), for girls, pop stars and musicians. There are regional differences for the favourite heroes: Asia has the highest ranking for action heroes (34%), Africa the lowest (18%), with Europe and the Americas in between (25% each).
- The children's world views are obviously influenced by actual as well as media experiences. Nearly one third of the aggression-environment group believe that most people in the world are evil as compared to a fifth in the low aggression group. A remarkable number of children from both groups report a strong overlap in what they perceive as reality and what they see on the screen (about 44%). Many children are surrounded by an environment where "real" and media experiences both support the view that violence is natural.
- The impact of media violence can primarily be explained through the fact that aggressive behaviour is rewarded. 47% of those children who prefer aggressive media content would also like to be involved in a risky situation (as compared to 19% with another media preference). This holds again in particular for boys.
- In addition, nations with a high level of technological development reinforce the risk-seeking tendency. The broad spectrum of different available audiovisual communication means have increased the desire to permanently satisfy physiological stimulus needs which are triggered through aggressive media content.

Groebel's overall conclusions are that:

- Media violence is universal. It is primarily presented in a rewarding context.
- Depending on the personality characteristics of the children, and depending on their everyday life experiences, media violence satisfies different needs: It

“compensates” one’s own frustrations and deficits in problem areas. It offers “thrills” for children in less problematic environments. For boys it creates a frame-of-reference for “attractive role models”.

- There are many cultural differences, and yet, the basic patterns of the media violence implications are similar around the world.
- Individual movies are not the problem. However, the extent and omnipresence of media violence (with an average of 5 to 10 aggressive acts per TV-programme hour in many countries) contributes to the development of a global aggressive culture.
- The “normality” and the “reward characteristics” of aggression are more systematically promoted than non-aggressive ways of coping with one’s life. Therefore, the risk of media violence prevails on a global level.

Groebel makes the following recommendations. Given that violence has always been an element of fiction and news reporting, it cannot be excluded from all media coverage. However, its extent, extremeness, and reward characteristics are the problem. Therefore, three major strategies should be considered on an international level:

- Public debate and “common ground” deliberation between the FIVE Ps: Politicians, Producers, Pedagogy, Parents, and the future Prossumers (active consumers).
- The development of codes of conduct and self-control among media professionals.
- The establishment of media education to create competent and critical media users.

He also states that with communication systems like the Internet, the media will be even more omnipresent, universal, and global. The media bear “risks”, as the UNESCO-study has demonstrated. But they also offer many new pro-social possibilities. As a consequence, the new digital environment demands similar attention as culture and education in the traditional world.

The Department of Psychology at the University of Twente has conducted two studies; one on mass media effects, and one which examined the impact of video/computer games.

The effect of mass media information with respect to aggression and violence⁸⁷

M.W.M. Kuttschreuter studied the effect of mass media information with respect to aggression and violence. In collaboration with other members of the Department of Psychology and students in Applied Communication Sciences the following studies were conducted:

- a longitudinal panel study into the effects of violence and pro-social behaviour in drama on the aggressive and pro-social behaviour of children.
- a field study into the effects of a regional mass media campaign concerning crime and crime prevention (tell-the-truth-campaign) on fear of crime, crime preventive behaviour and the attitude towards the criminal justice system and the police. Special attention was paid to the effect of crime communication at information meetings.
- a survey into the relationship between playing computer video games and social status and social behaviour among children.
- a survey into the attitude among the general public towards the advisories used for television programs and films and blocking devices such as the V-chip.

Games and effects on children's behaviour⁸⁸

Given the multi-billion pound per year business generated by the video game industry and its enormous impact on children's leisure activities, research was conducted into the influence such games have on children. To find out more about the use of video games by children they first conducted, in 1994, a survey among 346 children from the 7th and 8th grade of 7 elementary schools to examine possible positive and negative effects of playing video games. The results showed that playing video games did not appear to take place at the expense of children's other leisure activities, social integration and school performance. There was no significant relationship between the amount of time children spent on video games and aggressive behaviour. A negative relationship between time spent playing video games and pro-social behaviour was found; however, this relationship did not appear in separate analyses for boys and girls.

⁸⁷ <http://www.wmw.utwente.nl/vakgroepen/default.htm>

⁸⁸ Ibid

Further analyses showed that children who spent more time playing video games tended to be more intelligent.

The project also looked at the relationship between preference for aggressive video games and aggressive and pro-social behaviour. Children, in particular boys, who preferred aggressive video games were more aggressive and showed less pro-social behaviour than those with a low preference for these games. A significant negative correlation was found between preference for aggressive video games and a child's intelligence.

In a recent experiment a causal relationship between playing an aggressive video game and aggressive behaviour of children was investigated, using a computer. Children were randomly assigned to one of two games (an aggressive game, Streetfighter 2, and a non-aggressive game, Supertetris), to a frustrating or a non-frustrating situation and to a competitive or non-competitive situation. The dependent variable was the amount of aggressive behaviour a child displayed after playing one of the video games. This amount was measured by using a teacher/learner paradigm: a subject had to test another imaginary child from another school on his or her knowledge of the Dutch language, by asking 14 questions. Whenever the imaginary tested child made a mistake (which it did 7 times), the subject punished it by pushing one of several buttons on the computer, which represented varying levels of severity, ranging from 1 = not severe to 9 = very severe. The imaginary tested child then heard an irritating "white-noise" sound on headphones, which varied in volume according to the level of severity chosen

The International Clearinghouse on Children and Violence on the Screen⁸⁹

The Nordic Information Centre for Media and Communication Research (Nordicom) has set up an international clearinghouse on children and violence on the screen. The Clearinghouse receives financial support from the Government of Sweden and UNESCO. Its purpose is to contribute to and encourage knowledge on children, young people and media violence, in the context of the UN Convention on the Rights of the Child, with its prime task being to make new knowledge and data known to prospective users throughout the world. It provides information for various groups of users - researchers, policy-makers, media professionals, teachers, voluntary organisations and interested individuals - about:

- research findings concerning children, young people and media violence,
- ongoing research on children and media violence,
- children's access to mass media and their media use,
- training and courses of study on children and the media,
- positive alternatives to media violence,
- measures and activities which aim to limit gratuitous violence on television, in films, and in interactive media.

The Clearinghouse publishes a yearbook, which contains scientific articles, summaries of ongoing research, notices of new titles, statistics, surveys of measures and legislation, and constructive alternatives to media violence. Information of a more topical nature is provided in the Clearinghouse newsletter.

3.5 United Kingdom

A myriad of studies exists within the UK, some of which have already been mentioned. Two studies on TV Violence in the UK published at the beginning of 1998 are interesting to note:

⁸⁹ <http://jmg.gu.se/nordicom/unesco.html>

“Violence on Television in Britain”

This new analysis of how different viewers regard TV violence was issued by the Independent Television Commission and the Broadcasting Standards Commission, together with a group of broadcasters, comprising the BBC, ITV, Channel 4, Channel 5 and BSkyB. The study, the first of a two-part project, was conducted by Andrew Irving Associates and demonstrates how the nature and content of violent acts affect viewers' perceptions of their acceptability on television. Results from the initial survey show the following:

- that “enthusiasts” for TV violence are male viewers who are positively attracted to programmes where extreme violence will be shown,
- “qualified acceptors” are again mostly male but only accept violence as long as it is in context and relevant to the plot, and
- “rejectors” are predominantly female and do not like violence.

The next phase of the study built on this work and used video editing to uncover individuals' thinking about violence. These results were published in September 1998. They found that men have little interest in what motivates television violence and many enjoy seeing real-life brutality on television. The survey also found that some men felt there was some justification for rape scenes, and while women identified with victims of violence on screen, men did not see themselves as vulnerable.

“The effects of video violence on young offenders”⁹⁰

The results of a second report, which was commissioned by the Home Office Research and Statistics Directorate in 1995, were also made public during January 1998. Groups of offenders and non-offenders were shown a violent video film appropriate for their age. Immediate reactions were monitored as well as memories and impressions of the film some while later. They were also psychologically assessed and asked about film preferences. The research shows that young offenders with violent family backgrounds are more likely to show a preference for violent videos and that violent films may reinforce distorted perceptions about appropriate means of resolving conflict and responding to provocation. The findings suggest also that individuals from violent

families are more prone to offending behaviour and having a preference for violent films, but this may be modified by personality and by moral values.

⁹⁰ "The effects of video violence on young offenders", Research Findings No. 65, Home Office, 1998

Chapter 4. Media Market Background

Industrial and economic statistical indicators are vital to justifying any of the array of possible policy permutations surrounding the discussion of parental control technologies. Thus, clear presentation of the salient data is a foundation both for assessing the various possible policies and outlining the appropriate measures required to introduce and sustain such policies. The following section presents tabular and graphic representations of the essential indicators regarding the parental control technologies inquiry. This section will serve the dual purposes of independently shedding light on the relevant issues and substantiating the arguments concerning available policies that are discussed fully in the Report.

The figures are organised under five headings below.

- Industry
- Users
- Demographic indicators
- Viewing indicators for children
- Harmful content indicators

Summary of economic and industrial indicators

Household penetration rates of TV, satellite and cable in 1996/7

The penetration rate for private households with television is comparable throughout the countries of the EU and is nearing 100%. For cable and satellite, however, a very different picture emerges showing stark regional contrasts. To date, only a quarter of European households are connected to cable, due to the low development of cable in Southern Europe. In Greece and Italy, for example, less than 1% of households are connected, whereas in Germany, Ireland and Finland almost half the TV households are cabled. In the Netherlands, Luxembourg and Belgium cable penetration has almost reached saturation level. A similarly varied scenario is given for satellite television. In the Netherlands, Italy and Greece fewer than 5% of private households are linked, the figures for Sweden, the UK and Finland reach between 10% and 20% and in Denmark 42% are connected.

The feasibility of any harmonisation efforts will depend on which broadcasting mode environment can be used by parental control devices. Given the current differing penetration rates of cable and satellite in Europe, such devices may present a feasible option in some countries; in others, however, they may reach only an insignificant part of the population. For example, decoders which operate exclusively in a satellite environment are a sensible solution in Germany, Austria and Denmark where the penetration rate is over 30%, but present an ineffective approach in Greece or Italy, where fewer than 5% of households are linked, and where most television programmes are still viewed via terrestrial reception.

Household media equipment

In 11 of the EU countries VCR ownership exceeds 60%. VCR penetration is lowest in Greece with 33% and highest in Ireland with 78%. Nearly one quarter of private households in the EU possess a video game console. A high penetration rate is evident for the UK with 39% and in Ireland (28%), but ownership is low for Greece (5%) and Portugal. An average of 8% of total private households own a PC with CD-ROM; again the penetration rate is low for Southern European countries (Greece 1.5%, Portugal 1.6%); a higher penetration rate can be found for Denmark (14%) and Sweden (13%).

Although the presence of a parental control device may prevent minors watching a particular programme, it may still allow the recording of the programme for viewing at a later time, in which case the purpose of the device would not be fulfilled. Considering the high penetration rate of VCRs throughout the EU – two-thirds of private households are owners - it seems obvious that any solution aimed at facilitating parental control needs to address the potential obstacles presented by VCRs. Whilst the penetration rate for video game consoles is considerably lower, and even more so for PCs with CD-ROM, ownership is growing. Material inappropriate for minors may also reach them via these media due to the lack of a parental control mechanism.

Household TV set expenditure

At the European level a decrease in household expenditure on TV sets for 1994-1996 is detectable. On a national level, sales are on the decline and in some cases stagnant. Only for the UK can a considerable increase be noted (14%). Apart from economic variables, a main factor influencing the frequency of private household spending on hardware equipment is the life expectancy of the equipment. In the UK, for example, a household purchases a new television set every 10-15 years on average. If, as is likely, the introduction of technical devices allowing parental control will require the purchase of a new set equipped with the appropriate technology, recent spending patterns should be taken into account. Also of importance is the fact that many second-hand or "old-fashioned" TV sets are moved to children's bedrooms, while in most cases the new TV set is found in the living-room or other common areas.

Breakdown of private households by composition

The proportion of European households with children ranges from 34% in Denmark to 65% in Spain. Households composed of a couple/single parent with at least one child exceed 60% in Portugal and Spain, but reach only 34% in Denmark and 39% in Germany. Childless households account for one fifth of all households in Europe. Therefore, any measures implying a mandatory purchase of new TV sets should recognise that given the fairly high proportion of childless households in Europe, new laws may have financial implications for a significant part of the population not directly concerned with parental control.

Children and young people by age group

Among the four fifths of households in Europe with children, 74% of the children are aged 0-14 years. A breakdown into smaller age groups shows an even spread with one third of children aged 0-4, one third belonging to the 5-9 age group and one third 10-14 years old. 26% of children and young people aged 0-19 are in the 15-19 age band. The legal definition and cultural perception of "minors, children and young people" may vary from country to country in the EU.

Children's viewing indicators

The survey found that, on an average day, children from all age groups spend between 100 and 126 minutes watching television. The Nordic countries rank highest with over 140 minutes per day, whereas France is at the bottom of the scale with 74 minutes. Time spent watching videos is nearly 40 minutes a day for all age bands. There are stark differences between individual countries, however, with children from the Netherlands watching between 80 and 111 minutes a day depending on the age group, and children from Germany only spending around 20 minutes a day watching videos. For games consoles the average time was 25 minutes and above for all age groups. Time spent with PCs (not for games) is between 18 minutes and just over half an hour on a European level; for computer games this figure is in the area of 40 minutes a day for all age groups. All the children interviewed spend an average of just over a quarter of an hour on the Internet per day.

These figures confirm and perhaps even surpass the assumption that children spend a substantial part of their leisure time not only watching television but also increasingly by using newer information technologies. Exposure to inappropriate content may occur via either of these.

Children's media ownership

A recent survey, conducted by the Media Research Group of the London School of Economics, investigates the diffusion and significance of media and information technologies among young people aged 6-17 years. The study, carried out in 10 EU and two other European countries, reveals a range of indicators about children's media ownership and viewing patterns. When interpreting the data on a European level one has to bear in mind that Austria, Greece, Ireland, Luxembourg and Portugal were not included in the survey.

Of the surveyed countries those with highest proportion of children with TV sets in their bedrooms are Denmark and the UK, followed closely by Germany and Sweden. An average of 22% of 6-7 year olds, 33% of 9-10 year olds, 47% of 12-13 year olds and 56% of 15-16 year olds in the selected EU countries have a TV set in their bedroom.

Almost half the children of all age bands live in households with cable and/or satellite television. On a country by country basis the figure is fairly low for Italian and Spanish children with around 20%, and comparatively high for German children with between 75 and 85%. Children with these facilities in their bedrooms constitute between 5% for the youngest age group and 19% for the oldest age group of all children interviewed.

Nearly half of all children taking part in the survey have access to a PC within the household; between 8 and 18% have a PC in their bedroom. The percentages are notably high for the Nordic countries and France. The figures for Internet access within the household range between 13% for 6-7 year olds and 19% for 15-16 year olds. Between 1% and 5% of all children have an Internet link in their own bedroom. With a growing number of children having access to a whole range of media, not only within the households, but more importantly, in their bedroom, parental control becomes more of an issue. Therefore the whole spectrum of content providers needs to be assessed before the introduction of any technical device regime and/or rating systems in order to guarantee their efficacy.

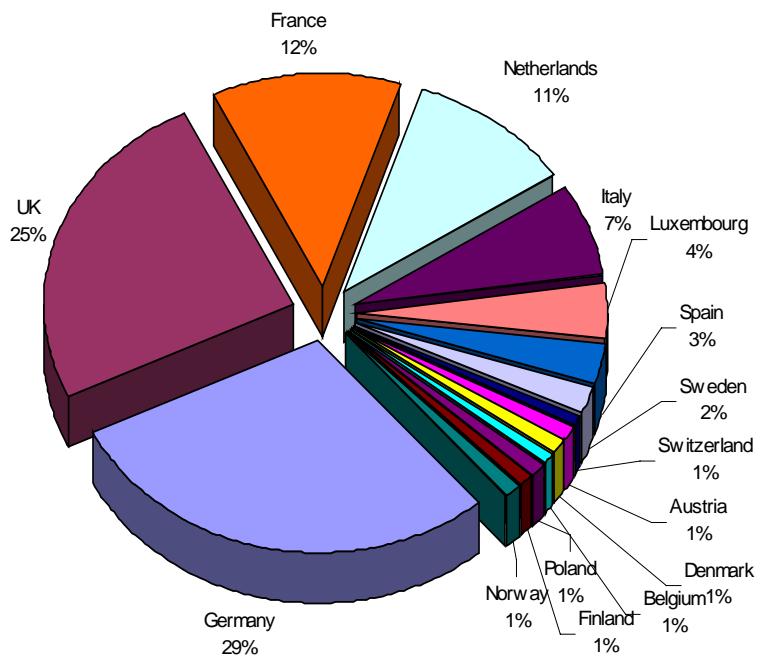
Industry

Figure 1: Audiovisual turnover of the 50 leading European companies in millions of ECU

| Company | Country | AV turnover in 1996 | Total turnover | AV turnover / total turnover |
|-------------------------------|-------------|---------------------|----------------|------------------------------|
| ARD | Germany | 5082 | 5082 | 100% |
| PolyGram | Netherlands | 4438 | 4438 | 100% |
| Bertelsmann | Germany | 3846 | 11295 | 34% |
| Thorn EMI | UK | 3117 | 4242 | 73% |
| BBC | UK | 2631 | 2875 | 92% |
| CLT | Luxembourg | 2315 | 2361 | 98% |
| RAI | Italy | 2200 | 2200 | 100% |
| Carlton | UK | 2099 | 2099 | 100% |
| Kirch-Gruppe | Germany | 2094 | 2094 | 100% |
| Canal+ | France | 1734 | 1793 | 97% |
| Mediaset | Italy | 1602 | 1602 | 100% |
| TF1 | France | 1492 | 1492 | 100% |
| RTL | Germany | 1349 | 1349 | 100% |
| BSkyB | UK | 1262 | 1262 | 100% |
| ZDF | Germany | 1145 | 1145 | 100% |
| SAT 1 | Germany | 885 | 885 | 100% |
| France 3 | France | 839 | 839 | 100% |
| France 2 | France | 830 | 830 | 100% |
| Rank | UK | 762 | 2567 | 30% |
| Pro 7 | Germany | 762 | 762 | 100% |
| Granada | UK | 739 | 4701 | 16% |
| SSR - SRG | Switzerland | 709 | 954 | 74% |
| ORF | Austria | 698 | 698 | 100% |
| Channel 4 | UK | 639 | 639 | 100% |
| RTVE | Spain | 599 | 599 | 100% |
| NOS | Netherlands | 567 | 567 | 100% |
| United News and Media | UK | 463 | 2362 | 20% |
| Antena 3 | Spain | 461 | 461 | 100% |
| Canal+ Espagne | Spain | 442 | 442 | 100% |
| Radio France | France | 437 | 437 | 100% |
| Matra Hachette | France | 430 | 8695 | 5% |
| Kinnevik | Sweden | 427 | 1181 | 36% |
| Endemol | Netherlands | 422 | 422 | 100% |
| Time Warner Entertainment Ltd | UK | 411 | 411 | 100% |
| Sverige TV | Sweden | 405 | 405 | 100% |
| M 6 | France | 370 | 370 | 100% |
| TVP | Poland | 362 | 362 | 100% |
| Yle | Finland | 350 | 350 | 100% |
| DR | Denmark | 344 | 344 | 100% |
| Yorkshire Tyne Tee | UK | 338 | 338 | 100% |
| Premiere | Germany | 306 | 306 | 100% |
| UIP | UK | 291 | 291 | 100% |
| Nethold | Netherlands | 287 | 287 | 100% |
| NRK | Norway | 284 | 284 | 100% |
| Tele Cinco | Spain | 280 | 280 | 100% |
| Deutsche Welle | Germany | 274 | 274 | 100% |
| Pearson PLC | UK | 252 | 2692 | 9% |
| RTBF | Belgium | 243 | 243 | 100% |
| Egmont | Denmark | 234 | 871 | 27% |
| BRTN | Belgium | 230 | 230 | 100% |

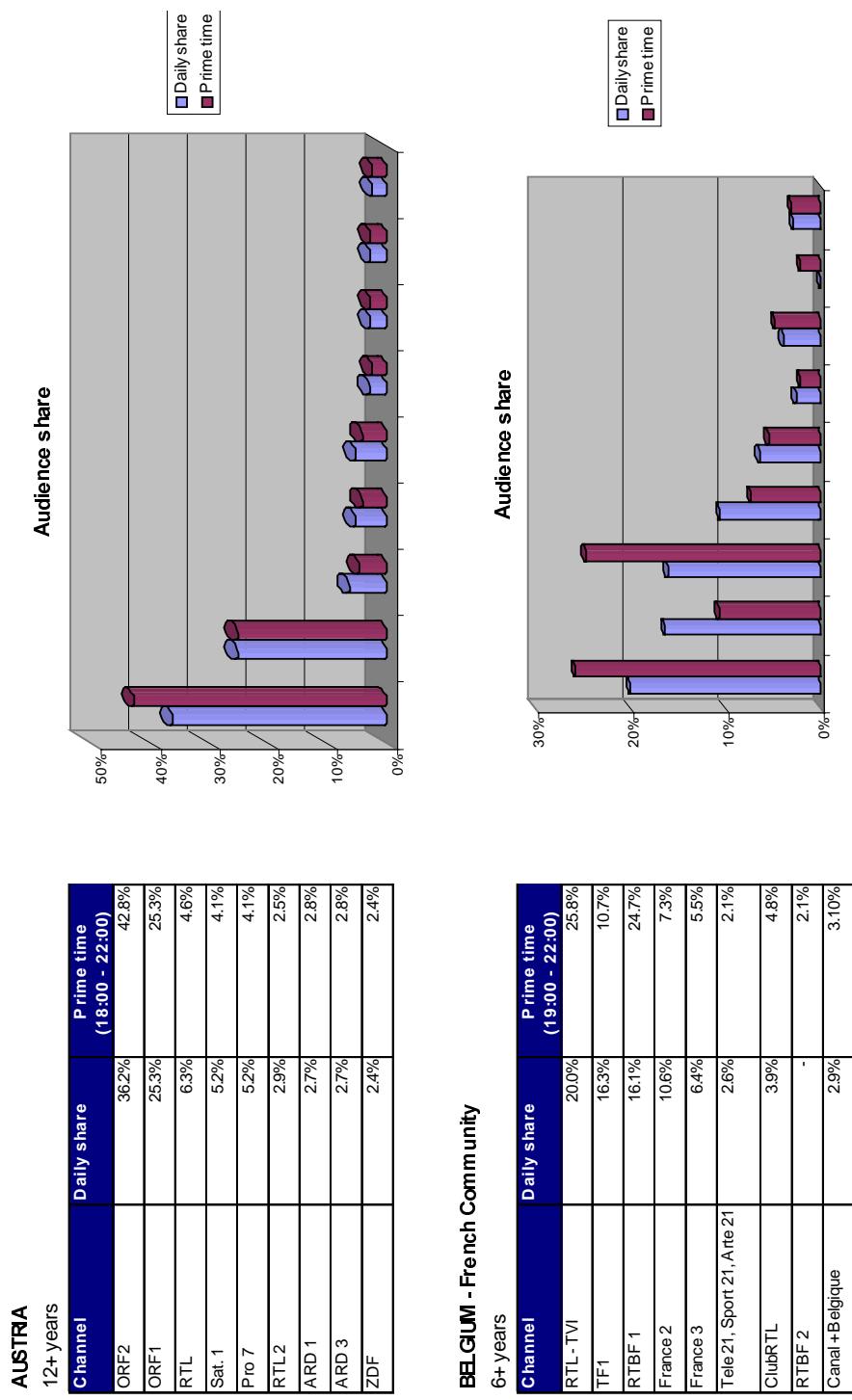
Source: Statistical Yearbook '98, European Audiovisual Observatory.

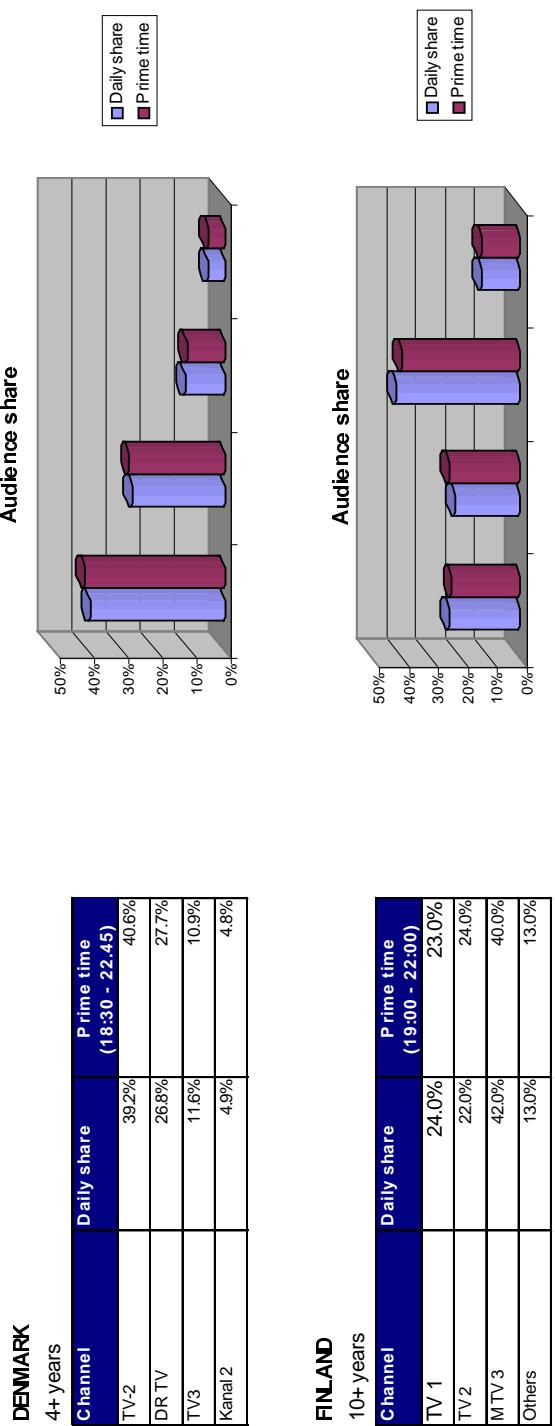
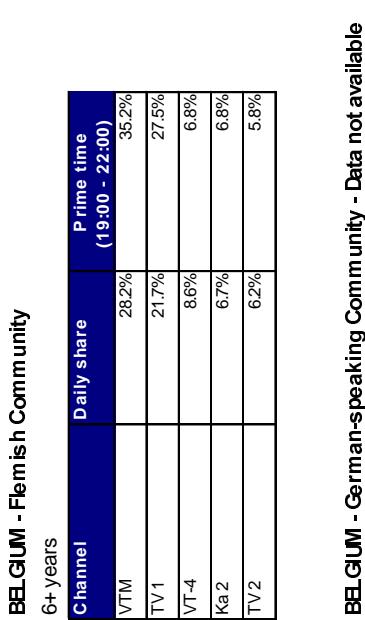
Figure 2: Breakdown of the audiovisual turnover of the 50 leading European companies, 1996



Source: Statistical Yearbook '98, European Audiovisual Observatory

Figure 3: TV audience market share of major channels (daily share 2+ %)

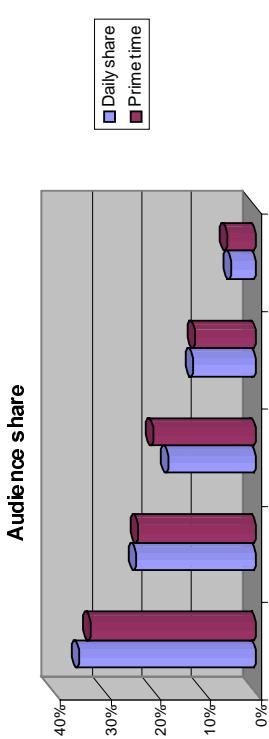




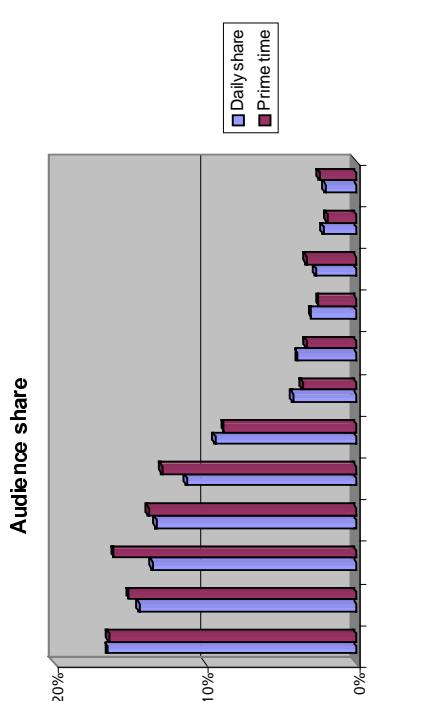
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| FRANCE | | | |
|----------|-------------|-------------------------------|--|
| 6+ years | | | |
| Channel | Daily share | Prime time (19:15 - 22:00) | |
| TF 1 | 35.1% | 33.0% | |
| France 2 | 23.8% | 23.5% | |
| France 3 | 17.5% | 20.4% | |
| M 6 | 12.3% | 12.0% | |
| Canal+ | 4.7% | 5.7% | |

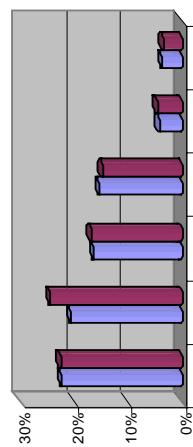


| GERMANY | | | |
|------------|-------------|-------------------------------|--|
| 6+ years | | | |
| Channel | Daily share | Prime time (18:00 - 22:00) | |
| RTL | 16.5% | 16.4% | |
| ARD 1 | 14.4% | 15.1% | |
| ZDF | 13.5% | 16.1% | |
| SAT.1 | 13.3% | 13.8% | |
| ARD 3 | 11.3% | 12.9% | |
| PRO 7 | 9.4% | 8.8% | |
| RLT 2 | 4.2% | 3.6% | |
| KK/Kabel 1 | 3.9% | 3.3% | |
| VOX | 3.0% | 2.5% | |
| N3 | 2.7% | 3.3% | |
| Super RTL | 2.2% | 1.9% | |
| mdr | 2.1% | 2.4% | |



| Greece | | | |
|--------------|-------------|-------------------------------|--|
| 6+ years | | | |
| Channel | Daily share | Prime time (20:00 - 23:00) | |
| Antenna TV | 22.5% | 22.7% | |
| Megachannel | 20.7% | 24.6% | |
| Sky TV | 16.4% | 16.9% | |
| Star Channel | 15.4% | 14.8% | |
| ET-1 | 4.1% | 4.6% | |
| ET-2 | 3.6% | 3.4% | |

Audience share

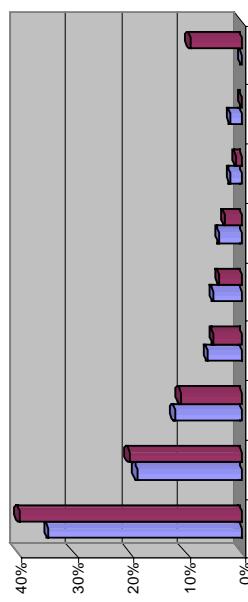


Ireland

4+ years

| Channel | Daily share | Prime time (18:00 - 21:00) | |
|--------------------|-------------|----------------------------|----|
| RTE-1 | 34.5% | 39.8% | ** |
| Network-2 | 18.8% | 20.1% | |
| BBC-1 | 12.0% | 11.0% | |
| C 4/S4 C | 6.0% | 5.0% | ** |
| BBC-2 | 5.0% | 4.0% | ** |
| Sky One | 4.0% | 3.0% | ** |
| Sky News | 2.0% | 1.0% | ** |
| Children's Channel | 2.0% | 0.0% | |
| UTV | 0.0% | 9.3% | |

Audience share

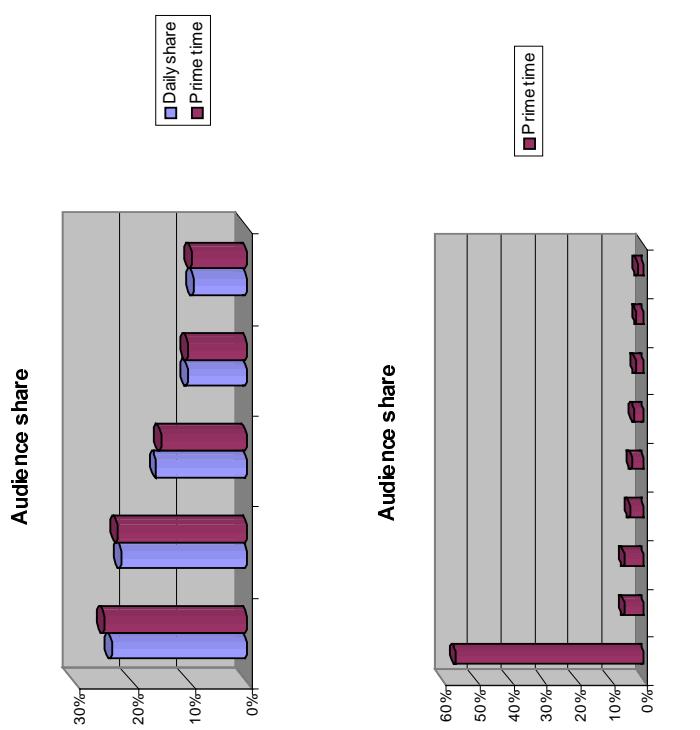


*figures for 1995

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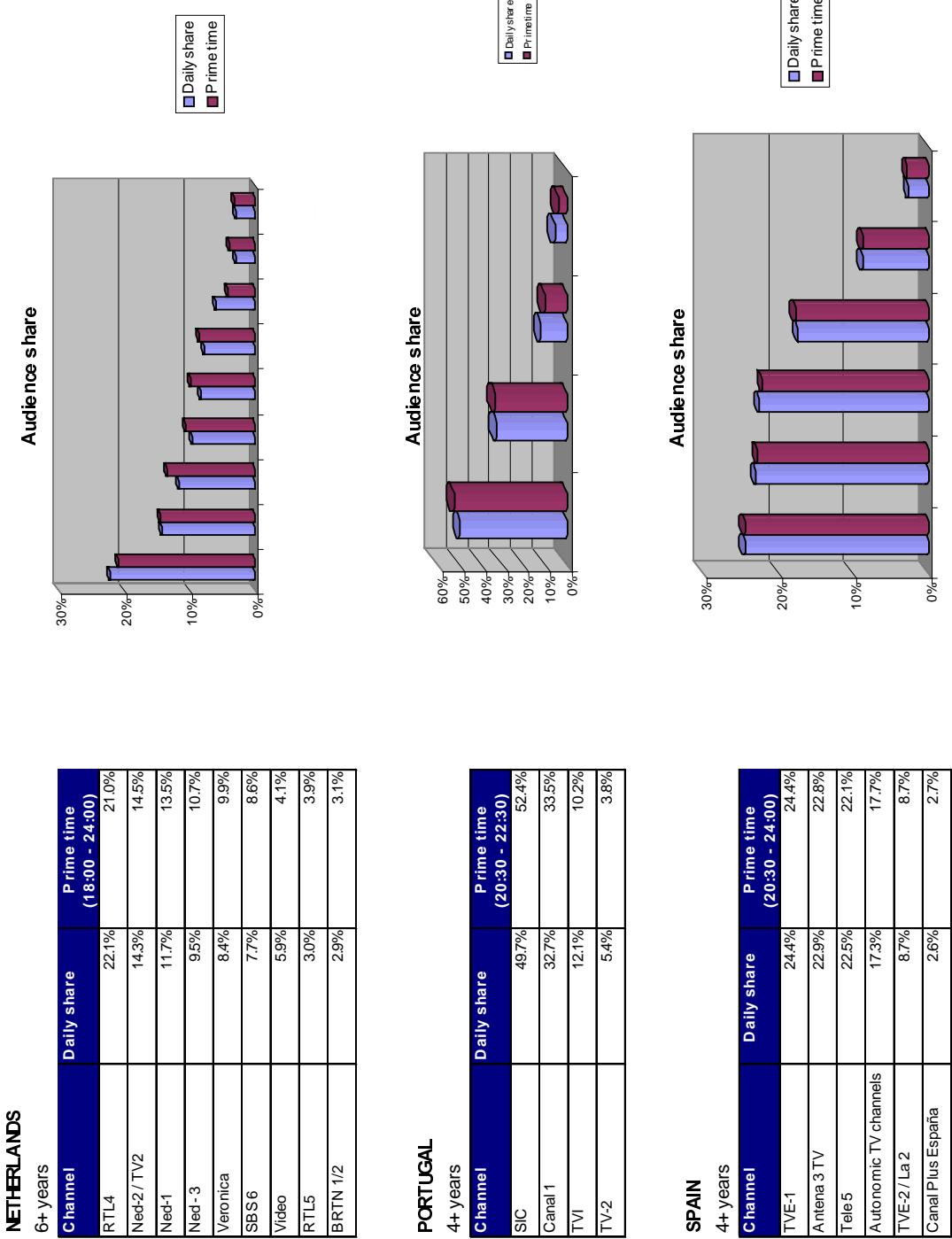
| ITALY | | | |
|--------------|-------------|-------------------------------|----------------|
| 4+ years | | | |
| Channel | Daily share | Prime time (20:30 - 22:30) | Audience share |
| RAIUno | 23.5% | 25.0% | |
| Canale 5 | 22.0% | 22.6% | |
| RAIDue | 15.8% | 15.0% | |
| Italia 1 | 10.3% | 10.4% | |
| RATre | 9.3% | 9.7% | |
| Rete Quattro | 9.0% | 8.0% | |



| LUXEMBOURG (ALL RESIDENTS) - 1996/1997 | |
|--|--------------------------------|
| 12+ years | |
| Channel | Prime time* (19:00 - 22:00) |
| RTL Télé Lëtzebuerg | 56.1% |
| RTL | 6.1% |
| RTP Int. | 6.0% |
| TF1 | 4.4% |
| SAT.1 | 3.9% |
| PRO 7 | 3.1% |
| ZDF | 2.7% |
| ARD | 2.3% |
| RTL-TV | 2.2% |

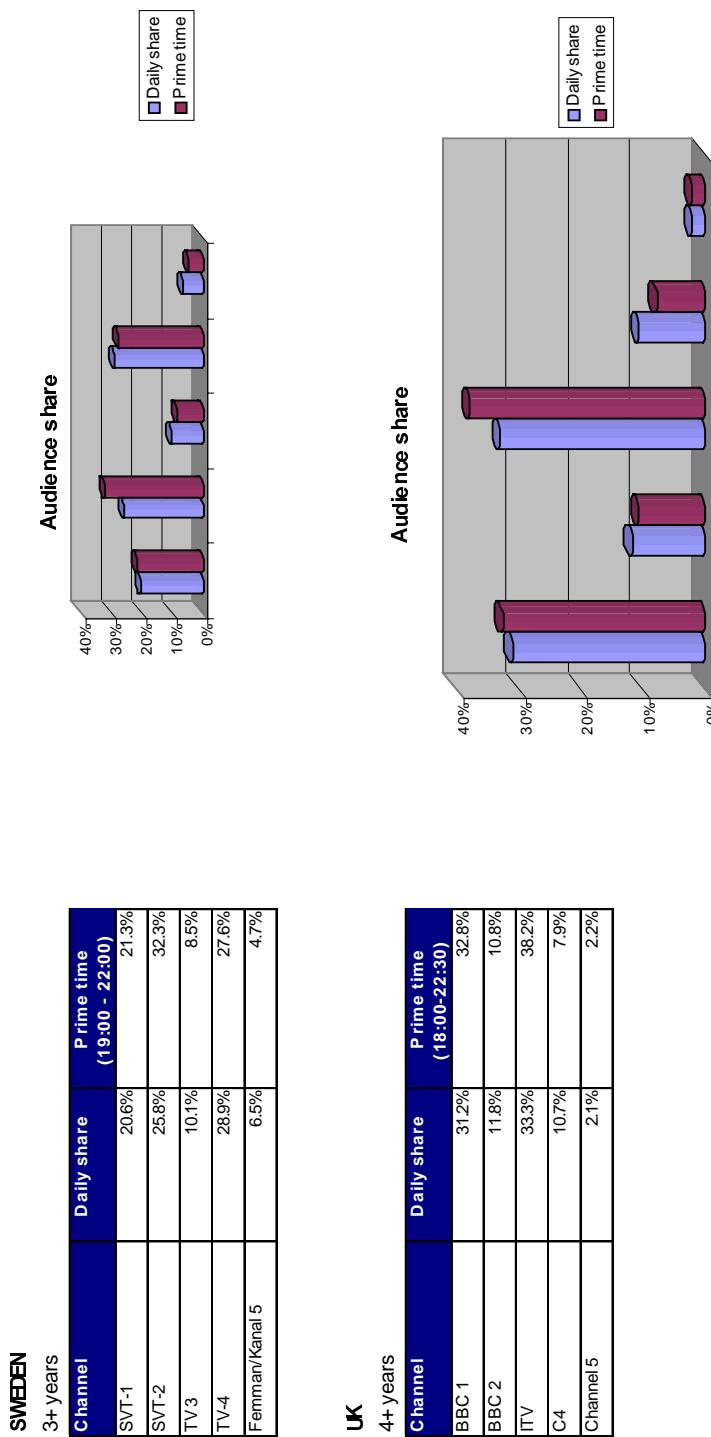
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* data for daily share not available

** data are from 1995

Source: Statistical Yearbook 98, European Audiovisual Observatory.

Figure 4: Main available channels according to audience share (2+%) by broadcaster and broadcasting mode

AUSTRIA

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|--|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| ORF1 | ORF | x | | x |
| ORF2 | ORF | x | | x |
| Foreign channels | | | | |
| ARD 1 | ARD (DE) | x | x | x |
| ARD 3 | ARD (DE) | x | x | x |
| Pro 7 | PRO 7 Television GmbH (DE) | x | x | x |
| RTL | RTL Deutschland Fernsehen GmbH (DE) | | x | x |
| RTL2 | RTL Deutschland Fernsehen GmbH & Co. KG (DE) | x | x | x |
| Sat. 1 | SAT.1 Satelliten Fernsehen GmbH (DE) | | x | x |

BELGIUM - French Community

| Channel | Broadcaster | Broadcasting mode | | |
|---|--------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Canal+Belgique | Canal+Belgique TVCF | x | | x |
| ClubRTL | TVI SA | x | x | x |
| RTBF 1 | RTBF | x | | x |
| RTBF 2 | RTBF | x | | x |
| RTL-TV | TVI SA | x | x | x |
| Channels set up in Belgium targeting other countries | | | | |
| TV5 Europe | Satellimage TV 5 SA (FR) | | x | x |
| Foreign channels | | | | |
| France 2 | France 2 (SAN) (FR) | x | | x |
| France 3 | France 3 (SAN) (FR) | x | | x |

BELGIUM - FLEMISH COMMUNITY

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|-------------------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Ka2 | Vlaamse Televisie Maatschappij n.v. | x | | x |
| TV1 | BRTN/VRT | x | | x |
| TV2 | BRTN/VRT | x | | x |
| VTM | Vlaamse Televisie Maatschappij n.v. | x | | x |
| Foreign channels | | | | |
| VT-4 (GB) | VT-4 Ltd | x | | x |

BELGIUM - GERMAN-SPEAKING COMMUNITY

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|---------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Wochenzmagazin BRF | Belgischer Rundfunk | | | x |

DENMARK

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|---------------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| DR TV | Danmarks Radio | x | x | |
| Kanal 2 | Kanal 2 | x | | x |
| TV-2 | TV2/DANEMARKS | x | | x |
| Foreign channels | | | | |
| TV3 Denmark | TV3 Broadcasting Group Ltd (SE) | x | | x |

FINLAND

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| MTV3 | MTV OY (2) | x | | x |
| TV1 | OY Yleisradio AB | x | | x |
| TV2 | OY Yleisradio AB | x | | x |

FRANCE

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|----------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Canal+ | Canal+ | x | x | x |
| France 2 | France 2 (SAN) | x | | x |
| France 3 | France 3 (SAN) | x | | x |
| M 6 | Métropole TV | x | x | x |
| TF 1 | TF 1 | x | x | x |

FINAL REPORT

Parental Control of Television Broadcasting
University of Oxford, PCMLP

GERMANY

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|---|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| ARD 1 | ARD | x | x | x |
| ARD 3 | ARD | x | x | x |
| KK / Kabel 1 | DKK Fernsehen GmbH | | x | x |
| N3 | Norddeutscher Rundfunk & Radio Bremen | x | x | x |
| PRO 7 | PRO 7 Television GmbH | x | x | x |
| RTL 2 | RTL Deutschland Fernsehen GmbH & Co. KG | x | x | x |
| RTL | RTL Deutschland Fernsehen GmbH | x | x | x |
| SAT.1 | SAT.1 Satelliten Fernsehen GmbH | x | x | x |
| Super RTL | RTL Club GmbH | | x | x |
| VOX | VOX Film- und Fernseh GmbH & Co. KG | x | x | x |
| ZDF | ZDF | x | x | x |

GREECE

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|--------------------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Antenna TV | Antenna TV SA | x | x | |
| ET-1 | ERT | x | x | |
| ET-2 | ERT | x | | |
| Megachannel | Teletypos S.A. | x | x | |
| Sky TV | SKY TV | x | | |
| Star Channel | Entertainment Television Enterprises | x | | |

IRELAND

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|----------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| RTE-1 | RTE | x | | x |
| Network-2 | RTE | x | | x |
| Foreign channels | | | | |
| BBC 1 | BBC (GB) | x | | x |
| BBC 2 | BBC (GB) | x | | x |
| C4 (GB) | Channel 4 Television | x | | x |
| Children's Channel | Children's Channel | | x | x |
| S4C | S4C (GB) | x | | x |
| Sky News | BSkyB (GB) | | x | x |
| Sky One | BSkyB (GB) | | x | x |
| ITV - Ulster Tv | Ulster Television plc (GB) | x | | x |

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ITALY

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|--------------------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Canale 5 | R.T.I. S.p.A. | x | x | |
| Italia 1 | R.T.I. S.p.A. | x | x | |
| RAIUno | RAI Radiotelevisione Italiana S.p.A. | x | x | x |
| RAIDue | RAI Radiotelevisione Italiana S.p.A. | x | x | x |
| RAITre | RAI Radiotelevisione Italiana S.p.A. | x | x | |
| Rete Quattro | R.T.I. S.p.A. | x | x | |

LUXEMBOURG

| Channel | Broadcaster | Broadcasting mode | | |
|--|--------------------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| RTL Tele Lëtzebuerg | CLT SA | x | | x |
| Channels set up in Luxembourg targeting other countries | | | | |
| RTL Television | RTL Plus S.A. & Co. KG | | x | x |
| Foreign channels | | | | |
| ARD | ARD (DE) | x | x | x |
| PRO 7 | PRO 7 Television GmbH (DE) | x | x | x |
| RTL-Tvi | TVI SA (BE) | x | x | x |
| RTP Internacional (PT) | RTP - Radiotelevisao Portuguesa SA | | x | x |
| SAT.1 | SAT.1 Satelliten Fernsehen GmbH (DE) | x | x | x |
| TF1 | TF 1 (FR) | x | x | x |
| ZDF | ZDF (DE) | x | x | x |

NETHERLANDS

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|--|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Ned-1 | Nederlandse Omroep Stichting - NOS / STER | x | | x |
| TV2 | Nederlandse Omroep Stichting - NOS / STER* | x | | x |
| Ned-3 | Nederlandse Omroep Stichting - NOS / STER* | x | | x |
| SBS 6 | SBS Net-6 B.V. | | x | x |
| Veronica | Veronica RTV Beheer B.V. | | x | x |
| Foreign channels | | | | |
| RTL4 | HMG S.A. (LU) | | x | x |
| RTL5 Nieuws en Weer | HMG S.A. (LU) | | x | x |
| TV1 | BRTN (BE) | x | | x |
| TV2 | BRTN (BE) | x | | x |

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| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|---------------------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Canal 1 | RTP - Radiotelevisao Portuguesa SA | x | x | |
| SIC | Sociedade Independente de Comunicação | x | | |
| TV2 | RTP - Radiotelevisao Portuguesa SA | x | x | |
| TVI | Televisao Independente | x | x | |

SPAIN

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|-------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| Antena 3 TV | Antena 3 | x | x | x |
| Canal Plus España | Canal Plus España | x | x | x |
| Tele 5 | Tele 5 | x | x | x |
| TVE-1 | RTVE | x | x | x |
| TVE-2 / La 2 | RTVE | x | x | x |

SWEDEN

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|------------------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| SVT-1 | Sveriges Television - SVT | x | x | x |
| SVT-2 | Sveriges Television - SVT | x | x | x |
| TV-4 | TV 4 AB | x | x | x |
| Foreign channels | | | | |
| Femman/Kanal 5 | Kanal 5 Ltd (GB) | | x | x |
| TV3 | TV 3 Broadcasting Group (GB) | | x | x |

UK

| Channel | Broadcaster | Broadcasting mode | | |
|--------------------------|----------------------|-------------------|-----------|-------|
| | | Terrestrial | Satellite | Cable |
| National channels | | | | |
| BBC-1 | BBC | x | | x |
| BBC-2 | BBC | x | | x |
| C4 | Channel 4 Television | x | | x |
| Channel 5 | Channel 5 Television | x | x | x |
| ITV | ITV Network | x | | x |

* Advertising company

Source: Statistical Yearbook '98, European Audivisual Observatory

Figure 5: Main national broadcasters by channel, status and financing

AUSTRIA

| Broadcaster | Channel | Status | | Financing | | | |
|-------------|---------|---------|--------|--------------|--------------|--------|-------|
| | | Private | Public | Licence Fees | Adver-tising | Pay-TV | Other |
| ORF | ORF1 | | x | x | x | | |
| ORF | ORF2 | | x | x | x | | |

BELGIUM - FRENCH COMMUNITY

| Broadcaster | Channel | Status | | Financing | | | |
|-------------|----------------|---------|--------|--------------|--------------|--------|-------|
| | | Private | Public | Licence Fees | Adver-tising | Pay-TV | Other |
| Canal+TVC | Canal+Belgique | x | | | | | |
| RTBF | RTBF 1 | | x | x | x | | |
| RTBF | RTBF 2 | | x | x | x | | |
| TVI SA | ClubRTL | x | | | x | | |
| TVI SA | RTL-TVi | x | | | x | | |

BELGIUM - FLEMISH COMMUNITY

| Broadcaster | Channel | Status | | Financing | | | |
|-------------------------------------|---------|---------|--------|--------------|--------------|--------|--------|
| | | Private | Public | Licence Fees | Adver-tising | Pay-TV | Other |
| BRTN/VRT | TV2 | | x | x | | | |
| BRTN/VRT | TV1 | | x | x | | | |
| Vlaamse Televisie Maatschappij n.v. | Ka2 | x | | | | | Grants |
| Vlaamse Televisie Maatschappij n.v. | VTM | x | | | x | | |

BELGIUM - GERMAN-SPEAKING COMMUNITY

| Broadcaster | Channel | Status | | Financing | | | |
|---------------------|-------------------|---------|--------|--------------|--------------|--------|-------|
| | | Private | Public | Licence Fees | Adver-tising | Pay-TV | Other |
| Belgischer Rundfunk | Wochenmagazin BRF | | x | x | x | | |

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DENMARK

| Broadcaster | Channel | Status | | Financing | | | |
|----------------|---------|---------|--------|--------------|--------------|--------|-------|
| | | Private | Public | Licence Fees | Adver-tising | Pay-TV | Other |
| Danmarks Radio | DR TV | | x | x | | | |
| Kanal 2 | Kanal 2 | x | | | x | x | |
| TV2/DANMARKS | TV-2 | | x | x | x | | |

FINLAND

| Broadcaster | Channel | Status | | Financing | | | |
|------------------|---------|---------|--------|--------------|--------------|--------|-------|
| | | Private | Public | Licence Fees | Adver-tising | Pay-TV | Other |
| MTVOY (2) | MTV 3 | x | | | x | | |
| Oy Yleisradio AB | TV1 | | x | x | | | |
| Oy Yleisradio AB | TV2 | | x | x | | | |

FRANCE

| Broadcaster | Channel | Status | | Financing | | | |
|----------------|----------|---------|--------|--------------|--------------|--------|-------|
| | | Private | Public | Licence Fees | Adver-tising | Pay-TV | Other |
| Canal+ | Canal+ | x | | | x | | |
| France 2 (SAN) | France 2 | | x | x | x | | |
| France 3 (SAN) | France 3 | | x | x | x | | |
| Métropole TV | M 6 | x | | | x | | |
| TF 1 | TF 1 | x | | | x | | |

GERMANY

| Broadcaster | Channel | Status | | Financing | | | |
|---|-------------|---------|--------|--------------|--------------|--------|-------|
| | | Private | Public | Licence Fees | Adver-tising | Pay-TV | Other |
| ARD | ARD 1 | | x | x | x | | |
| ARD | ARD 3 | | x | x | x | | |
| DKK Fernsehen GmbH | KK/ Kabel 1 | x | | | x | | |
| Mitteldeutscher Rundfunk | mdr | | x | x | x | | |
| Norddeutscher Rundfunk & Radio Bremen | N3 | | x | x | x | | |
| PRO 7 Television GmbH | PRO 7 | x | | | x | | |
| RTL Deutschland Fernsehen GmbH & Co. | RTL | x | | | x | | |
| RTL Deutschland Fernsehen GmbH & Co. KG | RTL | x | | | x | | |
| RTL Club GmbH | Super RTL | x | | | x | | |
| SAT.1 Satelliten Fernsehen GmbH | SAT.1 | x | | | x | | |
| VOX Film- und Fernseh GmbH & Co. KG | VOX | x | | | x | | |
| ZDF | ZDF | | x | x | x | | |

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GREECE

| Broadcaster | Channel | Status | | Financing | | | |
|--------------------------------------|--------------|---------|--------|--------------|-------------|--------|-------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| Antenna TV SA | Antenna TV | x | | | x | | |
| Entertainment Television Enterprises | Star Channel | x | | | x | | |
| ERT | ET-1 | | x | | x | | |
| ERT | ET-2 | | x | | x | | |
| SKY TV | Sky TV | x | | | x | | |
| Teletypos S.A. | Megachannel | x | | | x | | |

IRELAND

| Broadcaster | Channel | Status | | Financing | | | |
|-------------|-----------|---------|--------|--------------|-------------|--------|-------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| RTE | RTE-1 | | x | x | x | | |
| RTE | Network-2 | | x | x | x | | |

ITALY

| Broadcaster | Channel | Status | | Financing | | | |
|--------------------------------------|--------------|---------|--------|--------------|-------------|--------|-------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| RAI Radiotelevisione Italiana S.p.A. | RAIUno | | x | x | x | | |
| RAI Radiotelevisione Italiana S.p.A. | RAIDue | x | | x | x | | |
| RAI Radiotelevisione Italiana S.p.A. | RAITre | | x | x | x | | |
| R.T.I. S.p.A. | Canale 5 | x | | | x | | |
| R.T.I. S.p.A. | Italia 1 | x | | | x | | |
| R.T.I. S.p.A. | Rete Quattro | x | | x | x | | |

LUXEMBOURG

| Broadcaster | Channel | Status | | Financing | | | |
|------------------------|--------------------|---------|--------|--------------|-------------|--------|-------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| CLT SA | RTL Tele Létzeburg | x | | | x | | |
| RTL Plus S.A. & Co. KG | RTL Television | x | | | x | | |

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NETHERLANDS

| Broadcaster | Channel | Status | | Financing | | | |
|------------------------------------|----------|---------|--------|--------------|-------------|--------|-------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| Nederlandse Omroep Stichting - NOS | Ned-1 | | x | x | x | | |
| | Ned-3 | | x | x | x | | |
| | TV2 | | x | x | x | | |
| TELEAC Stichting | Ned-2 | | x | x | x | | |
| Veronica RTV Beheer B.V. | Veronica | x | | | x | | |

PORTUGAL

| Broadcaster | Channel | Status | | Financing | | | |
|---------------------------------------|---------|---------|--------|--------------|-------------|--------|--------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| RTP - Radiotelevisione Portuguesa SA | Canal 1 | | x | | x | | Grants |
| RTP - Radiotelevisione Portuguesa SA | TV-2 | | x | | x | | Grants |
| Sociedade Independente de Comunicacao | SIC | x | | | x | | |
| Televisao Independente | TVI | x | | | x | | |

SPAIN

| Broadcaster | Channel | Status | | Financing | | | |
|-------------------|-------------------|---------|--------|--------------|-------------|--------|--------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| Antena 3 | Antena 3 TV | x | | | x | | |
| Canal Plus Espana | Canal Plus Espana | x | | | x | | |
| RTVE | TVE-1 | | x | | | | Grants |
| RTVE | TVE-2/ La 2 | | x | | x | | |
| Tele 5 | Tele 5 | x | | | x | | |

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SWEDEN

| Broadcaster | Channel | Status | | Financing | | | |
|---------------------------|---------|---------|--------|--------------|-------------|--------|-------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| Sveriges Television - SVT | SVT-1 | | x | x | | | |
| TV 4 AB | TV-4 | x | | | x | | |
| Sveriges Television - SVT | SVT-2 | | x | x | | | |

UK

| Broadcaster | Channel | Status | | Financing | | | |
|----------------------|-----------|---------|--------|--------------|-------------|--------|--------|
| | | Private | Public | Licence Fees | Advertising | Pay-TV | Other |
| BBC | BBC-1 | | x | | | | Grants |
| BBC | BBC-2 | | x | | | | Grants |
| Channel 4 Television | C4 | | x | | x | | |
| Channel 5 Television | Channel 5 | x | | | x | | |
| ITV Network | ITV | x | | | x | | |

* Advertising company

Source: *Statistical Yearbook '98, European Audiovisual Observatory*

Users

Figure 6: Household media equipment in 1996

| Country | Total private households in 000s | Television Households with 2 TV sets or more* | Total private households with VCR in 000s | In % of total private households | Total private households with PC and CD-Rom in 000s | In % of total private households | Total private households with videogame consoles in 000s | In % of total private households | In % of total private households |
|--------------------|----------------------------------|---|---|----------------------------------|---|----------------------------------|--|----------------------------------|----------------------------------|
| <i>Austria</i> | 3282 | 50.0% | 2035 | 62.0% | 205 | 6.2% | 700 | 21.3% | |
| <i>Belgium</i> | 3759 | 42.0% | 2485 | 66.1% | 206 | 5.5% | 857 | 22.8% | |
| <i>Denmark</i> | 2328 | 40.6% | 1583 | 68.0% | 323 | 13.9% | 339 | 14.6% | |
| <i>Finland</i> | 2150 | 40.0% | 1440 | 67.0% | 198 | 9.2% | 406 | 18.9% | |
| <i>France</i> | 22889 | 35.3% | 15538 | 67.9% | 1783 | 7.8% | 5775 | 25.2% | |
| <i>Germany</i> | 35272 | 34.0% | 24639 | 69.9% | 3720 | 10.5% | 8558 | 24.3% | |
| <i>Greece</i> | 3646 | 43.3% | 1218 | 33.4% | 55 | 1.5% | 176 | 4.8% | |
| <i>Ireland</i> | 868 | 36.0% | 679 | 78.2% | 32 | 3.7% | 240 | 27.6% | |
| <i>Italy</i> | 222285 | 46.4% | 10638 | 47.3% | 1021 | 4.6% | 2672 | 12.0% | |
| <i>Luxembourg</i> | 140 | 45.0% | 84 | 60.0% | 8 | 5.7% | 35 | 25.0% | |
| <i>Netherlands</i> | 6400 | 32.9% | 4198 | 65.6% | 688 | 10.8% | 1339 | 20.9% | |
| <i>Portugal</i> | 3574 | 57.3% | 1395 | 39.0% | 57 | 1.6% | 270 | 7.6% | |
| <i>Spain</i> | 15080 | 57.5% | 7352 | 48.8% | 509 | 3.4% | 2979 | 19.8% | |
| <i>Sweden</i> | 3889 | 39.8% | 3037 | 78.1% | 494 | 12.7% | 830 | 21.3% | |
| <i>UK</i> | 21528 | 56.0% | 16661 | 77.4% | 2572 | 11.9% | 8529 | 39.6% | |
| <i>EU-15</i> | 147090 | 43.0% | 92882 | 63.1% | 11869 | 8.1% | 33705 | 22.9% | |
| <i>Canada</i> | 10018 | : : | : : | : : | : : | : : | : : | : : | |
| <i>Japan</i> | 40278 | 99.0% | 29806 | 74.0% | : : | : : | : : | : : | |
| <i>US</i> | 93347 | 78.0% | 75611 | 81.0% | : : | : : | : : | : : | |

*In % of TVHH, if italics: in % of total private households

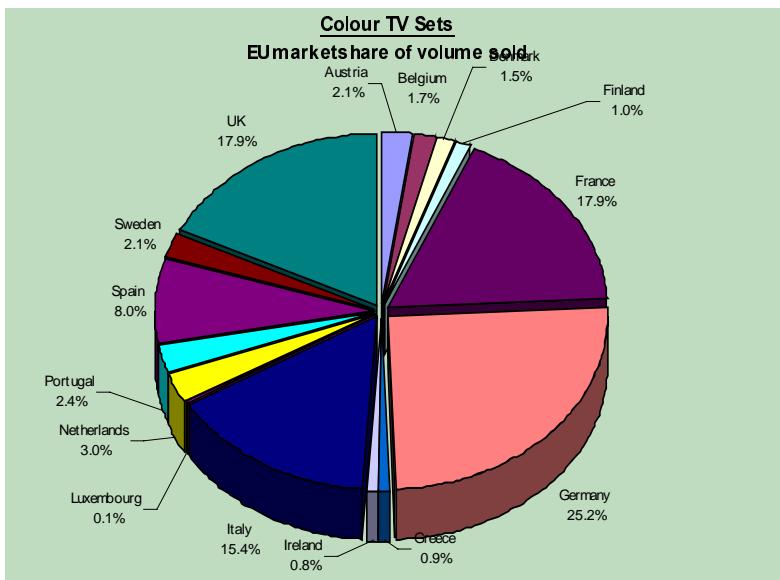
Figure 7: Volume sales and market share of hardware in 1995

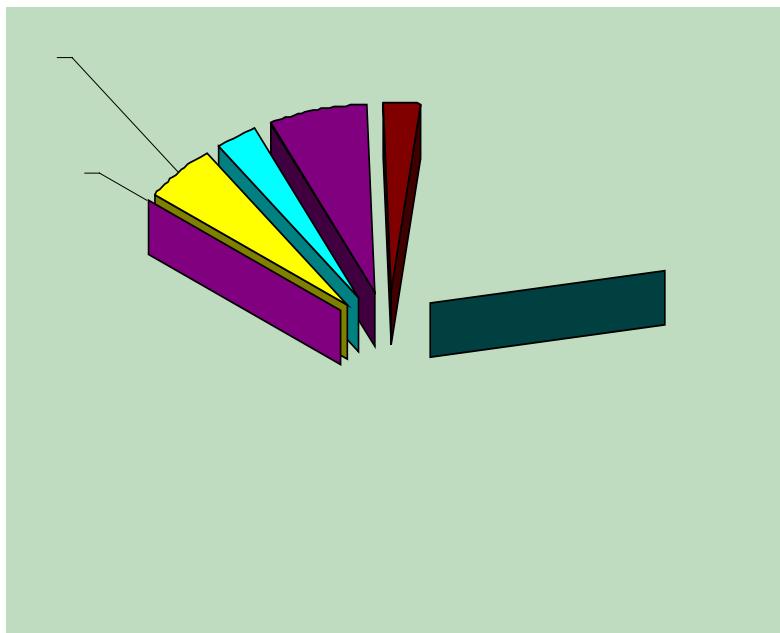
| Country | Colour TV Sets | | Video Recorders | | Home Computers | |
|-------------|-------------------------|--------------------------------|-------------------------|--------------------------------|-------------------------|--------------------------------|
| | Volume of sales in 000s | EU market share of volume sold | Volume of sales in 000s | EU market share of volume sold | Volume of sales in 000s | EU market share of volume sold |
| Austria | 439 | 2.1% | 180 | 1.5% | 160 | 3.1% |
| Belgium | 363 | 1.7% | 272 | 2.3% | 103 | 2.0% |
| Denmark | 319 | 1.5% | 242 | 2.0% | 42 | 0.8% |
| Finland | 200 | 1.0% | 115 | 1.0% | 65 | 1.3% |
| France | 3747 | 17.9% | 2110 | 17.6% | 920 | 17.7% |
| Germany | 5297 | 25.2% | 3152 | 26.3% | 1331 | 25.6% |
| Greece | 186 | 0.9% | 184 | 1.5% | 25 | 0.5% |
| Ireland | 161 | 0.8% | 74 | 0.6% | 12 | 0.2% |
| Italy | 3240 | 15.4% | 1196 | 10.0% | 765 | 14.7% |
| Luxembourg | 16 | 0.1% | 12 | 0.1% | 5 | 0.1% |
| Netherlands | 625 | 3.0% | 611 | 5.1% | 250 | 4.8% |
| Portugal | 510 | 2.4% | 314 | 2.6% | 83 | 1.6% |
| Spain | 1685 | 8.0% | 825 | 6.9% | 321 | 6.2% |
| Sweden | 445 | 2.1% | 280 | 2.3% | 71 | 1.4% |
| UK | 3758 | 17.9% | 2439 | 20.3% | 1045 | 20.1% |
| EU-15 | 20991 | 100.0% | 12006 | 100.0% | 5198 | 100.0% |
| Canada | 1667 | n/a * | 1373 | n/a | 178 | n/a |
| Japan | 14100 | n/a * | ** | n/a | ** | n/a |
| US | 39941 | n/a * | 16624 | n/a | 23300 | n/a |

* all television sets

** data not available

Source: Euromonitor: Consumer Europe 1996; Euromonitor: Consumer International 1996/1997.





Demographic indicators

Figure 8: Children and young people by age group

| Country | 0-4 years in 000s | In % of 0- 14 | 5-9 years in 000s | In % of 0- 14 | 10-14 years in 000s | In % of 0- 14 | Total 0-14 years in 000s | In % of 0- 19 | 15-19 years in 000s | In % of 0- 19 | Total 0-19 in 000s |
|-----------------|----------------------|------------------|----------------------|------------------|---------------------------|------------------|--------------------------------|------------------|---------------------------|------------------|-----------------------|
| Austria | 468.0 | 33.2% | 464.0 | 32.9% | 477.7 | 33.9% | 1409.7 | 75.4% | 458.7 | 24.6% | 1868.4 |
| Belgium | 604.2 | 33.3% | 612.2 | 33.7% | 600.6 | 33.1% | 1817.0 | 74.6% | 618.5 | 25.4% | 2435.5 |
| Denmark | 343.2 | 37.3% | 303.5 | 33.0% | 273.0 | 29.7% | 919.7 | 74.4% | 316.1 | 25.6% | 1235.8 |
| Finland | 324.9 | 33.4% | 316.6 | 32.6% | 330.3 | 34.0% | 971.8 | 74.8% | 327.1 | 25.2% | 1298.9 |
| France | 3593.0 | 31.8% | 3833.0 | 33.9% | 3885.2 | 34.3% | 11311.2 | 74.7% | 3836.8 | 25.3% | 15148.0 |
| Germany | 4038.2 | 30.5% | 4699.9 | 35.5% | 4500.4 | 34.0% | 13238.5 | 75.1% | 4390.2 | 24.9% | 17628.7 |
| Greece | 513.2 | 29.5% | 556.0 | 32.0% | 668.0 | 38.5% | 1737.2 | 69.5% | 761.9 | 30.5% | 2499.1 |
| Ireland | 255.0 | 29.4% | 285.5 | 32.9% | 328.3 | 37.8% | 868.8 | 71.7% | 343.1 | 28.3% | 1211.9 |
| Italy | 2740.0 | 32.2% | 2782.3 | 32.7% | 2994.8 | 35.2% | 8517.1 | 70.8% | 3514.0 | 29.2% | 12031.1 |
| Luxembourg | 27.6 | 36.2% | 25.6 | 33.6% | 23.1 | 30.3% | 76.3 | 77.2% | 22.5 | 22.8% | 98.8 |
| Netherlands | 980.9 | 34.4% | 963.8 | 33.8% | 903.1 | 31.7% | 2847.8 | 75.5% | 923.8 | 24.5% | 3771.6 |
| Portugal | 555.7 | 31.9% | 543.7 | 31.2% | 645.2 | 37.0% | 1744.6 | 69.1% | 778.5 | 30.9% | 2523.1 |
| Spain | 1933.4 | 30.1% | 2026.5 | 31.5% | 2468.2 | 38.4% | 6428.1 | 67.5% | 3091.0 | 32.5% | 9519.1 |
| Sweden | 582.3 | 35.0% | 581.2 | 34.9% | 501.9 | 30.1% | 1665.4 | 76.7% | 506.8 | 23.3% | 2172.2 |
| UK | 3802.4 | 33.5% | 3881.4 | 34.2% | 3678.8 | 32.4% | 11362.6 | 76.5% | 3499.2 | 23.5% | 14861.8 |
| Total EU | 20762.0 | 32.0% | 21875.2 | 33.7% | 22278.6 | 34.3% | 64915.8 | 73.5% | 23388.2 | 26.5% | 88303.8 |

Source: Eurostat Demographic Statistics 1997.

Figure 9: Breakdown of private households by composition in 1991:
Private households by type: non-family, single family and multiple family

| Country | Total private households (TPHH) in 000s | Average households size in persons | Non-family households in 000s | In % of TPHH | Single family households in 000s | In % of TPHH | Multiple family households in 000s | In % of TPHH | Family households in 000s | In % of TPHH |
|--------------------|---|------------------------------------|-------------------------------|--------------|----------------------------------|--------------|------------------------------------|--------------|---------------------------|--------------|
| <i>Austria</i> | 3013 | 2.5 | 980 | 32.5% | 1958 | 65.0% | 75 | 2.5% | 2033 | 67.5% |
| <i>Belgium</i> | 3953 | 2.5 | 1245 | 31.5% | 2675 | 67.7% | 32 | 0.8% | 2708 | 68.5% |
| <i>Denmark</i> | 2274 | 2.2 | 868 | 38.2% | 1362 | 59.9% | 44 | 1.9% | 1406 | 61.8% |
| <i>Finland</i> | 2037 | 2.4 | 761 | 37.4% | 1243 | 61.0% | 24 | 1.2% | 1276 | 62.6% |
| <i>France</i> | 21542 | 2.6 | 6288 | 29.2% | 15117 | 70.2% | 137 | 0.6% | 15254 | 70.8% |
| <i>Germany</i> | 35256 | 2.3 | 13283 | 37.7% | 21195 | 60.1% | 768 | 2.2% | 21973 | 62.3% |
| <i>Greece</i> | 3205 | 3.0 | : | : | 2532 | 79.0% | : | : | : | : |
| <i>Ireland</i> | 1029 | 3.3 | 278 | 27.0% | 744 | 72.3% | 7 | 0.7% | 751 | 73.0% |
| <i>Italy</i> | 19909 | 2.8 | 4717 | 23.7% | 14851 | 74.6% | 341 | 1.7% | 15192 | 76.3% |
| <i>Luxembourg</i> | 145 | 2.6 | 45 | 31.0% | 98 | 67.6% | 2 | 1.4% | 100 | 69.0% |
| <i>Netherlands</i> | 6162 | 2.4 | 2321 | 37.7% | 3838 | 62.3% | 3 | 0.0% | 3841 | 62.3% |
| <i>Portugal</i> | 3146 | 3.1 | 512 | 16.3% | 2511 | 79.8% | 123 | 3.9% | 2634 | 83.7% |
| <i>Spain</i> | 11836 | 3.3 | 1999 | 16.9% | 9701 | 82.0% | 136 | 1.1% | 9837 | 83.1% |
| <i>Sweden</i> | 3830 | 2.1 | : | : | : | : | : | : | : | : |
| <i>UK</i> | 22422 | 2.5 | 6620 | 29.5% | 15596 | 69.6% | 206 | 0.9% | 15802 | 70.5% |
| <i>EU-15</i> | 139749 | 2.6 | | | : | : | : | : | : | : |
| <i>Canada</i> | 10018 | 2.7 | 2805 | 28.0% | 7113 | 71.0% | 100 | 1.0% | 7213 | 72.0% |
| <i>Japan</i> | 40278 | 3.1 | : | : | 28434 | 70.6% | : | : | : | : |
| <i>US</i> | 93347 | 2.6 | : | : | : | : | : | : | : | : |

* It is assumed that multiple family households have children.

Sources: Community Programme of Population Censuses, 1990/91 in: Eurostat Yearbook' 97. Statistics in focus: population and social conditions: households and families in the European Union 1990/1991 census result, Eurostat.

Private households with children

| Country | Single family households | | | | | | Multiple family households in 000s | | Households with children | |
|-------------|--------------------------|--------------|-----------------------------------|--------------|------------------------------------|--------------|--|--------------|-----------------------------|--------------|
| | Couples without children | In % of TPHH | Couples with children in 000s (a) | In % of TPHH | Single-parent families in 000s (b) | In % of TPHH | Multiple family households in 000s (c) | In % of TPHH | TPHH with children in 000s* | In % of TPHH |
| Austria | 710 | 23.6% | 1156 | 38.4% | 279 | 9.3% | 75 | 2.5% | 1510 | 50.1% |
| Belgium | 904 | 22.9% | 1410 | 35.7% | 362 | 9.2% | 32 | 0.8% | 1804 | 45.6% |
| Denmark | 606 | 26.6% | 597 | 26.3% | 131 | 5.8% | 44 | 1.9% | 772 | 33.9% |
| Finland | 490 | 24.1% | 704 | 34.6% | 100 | 4.9% | 24 | 1.2% | 828 | 40.6% |
| France | 5372 | 24.9% | 8200 | 38.1% | 1544 | 7.2% | 137 | 0.6% | 9881 | 45.9% |
| Germany | 8201 | 23.3% | 10762 | 30.5% | 2232 | 6.3% | 768 | 2.2% | 12994 | 39.0% |
| Greece | 761 | 23.7% | 1573 | 49.1% | 193 | 6.0% | : | : | 1766 | 55.1+% |
| Ireland | 141 | 13.7% | 493 | 47.9% | 110 | 10.7% | 7 | 0.7% | 610 | 59.3% |
| Italy | 3853 | 19.4% | 9299 | 46.7% | 1799 | 9.0% | 341 | 1.7% | 11439 | 57.5% |
| Luxembourg | 31 | 21.4% | 56 | 38.6% | 11 | 7.6% | 2 | 1.4% | 69 | 47.6% |
| Netherlands | 1387 | 22.5% | 2062 | 33.5% | 388 | 6.3% | 3 | 0.0% | 2453 | 39.8% |
| Portugal | 698 | 22.2% | 1570 | 49.9% | 214 | 6.8% | 123 | 3.9% | 1907 | 60.6% |
| Spain | 2122 | 17.9% | 6605 | 55.8% | 974 | 8.2% | 136 | 1.1% | 7715 | 65.2% |
| Sweden | 1177 | 30.7% | 852 | 22.2% | 186 | 4.9% | : | : | : | : |
| UK | 6142 | 27.4% | 7434 | 33.2% | 2020 | 9.0% | 206 | 0.9% | 9660 | 43.1% |
| EU-15 | 33568 | 24.0% | 53661 | 38.4% | 11215 | 8.0% | : | : | : | : |
| Canada | : | : | 3004 | 30.0% | 954 | 9.5% | 100 | 1.0% | 4058 | 40.5% |
| Japan | 6715 | 16.7% | 15333 | 38.1% | : | : | : | : | : | |
| US | 27000 | 28.9% | 25300 | 27.1% | 13774 | 14.8% | : | : | 39074 | 41.9+% |

* Figure refers to children only from single-family and single-parent households; does not include any multiple-family households with children therefore real figure will be slightly above given value.

Percentage of private households with children

