

ICTs in Everyday Life: Public Policy Implications for 'Europe's Way to the Information Society'

**Final Deliverable
The European Media and Technology in
Everyday Life Network, 2000-2003**

Paschal Preston¹
COMTEC, Dublin City University.

EMTEL - General preface

The European Media Technology and Everyday Life Network (EMTEL) was funded by the European Commission (grant number HPRN ET 2000 00063) under the 5th Framework Programme. It was constituted as a research and training network within the programme, Improving Knowledge Potential and oriented towards “creating a user friendly information society”.

EMTEL conducted interdisciplinary social scientific research and training between 2000 and 2003. This report is one of 12 submitted to the EU in September 2003 as final deliverables for the project. Copies are available on www.lse.ac.uk/collections/EMTEL and a full list of the publications can be found as an Appendix to this report. Contributing partners were as follows:

- ASCoR, The University of Amsterdam
- COMTEC, Dublin City University
- IPTS, Seville
- LENTIC, The University of Liège
- Media@lse, London School of Economics (co-ordinating centre)
- NTNU, University of Trondheim
- SMIT, Free University of Brussels
- TNO, Delft
- SINTEF, Trondheim.

EMTEL sought to bring together young and experienced researchers in a shared project to investigate the so-called information society from the perspective of everyday life. It undertook research under two broad headings: inclusion and exclusion, and living and working in the information society. It then sought to integrate empirical work and developing theory in such a way as to engage constructively with on-going policy debates on the present and future of information and communication technologies in Europe.

Roger Silverstone

EMTEL Co-ordinator

1. EMTEL, Social Science Research and the Policy Dimension

“eEurope is not only about making European industry more competitive; it is also about ensuring that all citizens... have access to modern communications technologies to improve the quality of life’ (EC, 2002c, p. 3).

1.1. Introduction : Scope and Aims of this EMTEL “Final Deliverable”

Over the past three years, the *European Media Technology and Everyday Life* (EMTEL) Network has conducted detailed empirical studies addressing the interfaces between new ICT and social change. Seven post-doctoral researchers have explored “the nature, direction and speed of technological change, and the significance of the everyday as a context for the acceptance of, or resistance to, new communication and information technologies” (Silverstone, 2003, p.1) with particular attention on the everyday.

The EMTEL research has sought to investigate the ways in which users (defined as both consumer and citizen) incorporate or fail to incorporate, the new and the technological into their everyday life – into “the familiar, ordinary and more or less secure routines of his or her life in contemporary European society” (Silverstone, 2003, p.1)

Thus, the EMTEL studies afford distinctive and challenging insights into the role and meaning of new ICT in the everyday life of citizens and consumers in contemporary Europe. In particular, the project’s perspective and methodology affords a very different view of the European “*Information Society*” (or “knowledge society”) compared to that which commonly informs research and policy discourse in this field, whether at the European or national levels.

This particular paper is a component of the “key deliverables” in line with the work programme agreed between the research teams and the funder. Its purpose is to identify some of the important *implications for public policies* and strategy emerging from the final reports of the EMTEL project, focusing on policies related to the European information society. We use the term “*policy implications*” here quite deliberately as it is neither within our competencies nor our intention to produce detailed or specific recommendations for policy practitioners. As researchers, our optimal contribution to the policy process is not to presume to tell policy specialists what to do or think. Rather, our optimal engagement with the policy process is more modest and limited, yet one that is perfectly in keeping with a reflexive understanding of the context of the ever-deepening division of labour so characteristic of the contemporary “knowledge based society”. It is to draw on our research to identify key

findings, which may serve to challenge or enhance the kinds of thinking and considerations that currently inform policy decision-making or practices.

In keeping with this approach and spirit, the paper will draw on the Final Deliverables prepared by the post-doctoral research fellows to focus on some of the key implications for public policy. In what follows, these are largely framed around the key themes set out in the original contractual agreement between the research teams and the European Commission as funder of the research.

1.2 EMTEL, Social Science Research and the Interface with “Policy” Issues

In many respects, the work conducted by the young researchers within the EMTEL project well reflects the particular, if ever evolving, role and character of social science research. Within the ever increasing division of intellectual labour that has characterised the sciences since the classical age of the Enlightenment in Europe, the social sciences have been marked not only by distinct domains of research concern relative to other science fields. By definition, of course, their objects of concern have been focused on social, political, economic cultural questions, not least those pertaining to questions of change and/or continuities in the various processes of social life. Furthermore, they have also been frequently distinguished by an emphasis on critical interrogation and reflection on the kinds of discourses, definitions and meanings that are taken-for-granted or presumed as the “common-sense” by the dominant discourses or political and economic elites of their times. Given their particular objects of study, the social sciences have been animated by their role as specialised public intellectuals charged with the burden of monitoring and interpreting various aspects of social life - and whose work contributes to the public sphere and the construction of self-images of the political and socio-economic realities of their historical contexts.

The work of the EMTEL both draws from these particular strengths, orientations and traditions of the social sciences whilst at the same time contributing some new and important insights to the field, especially concerning the meaning and role of new ICT for the everyday life of citizens and consumers in contemporary Europe. In so doing, the research raises some novel and challenging issues related to the political and policy aspects of Europe’s “way to the information society” (as will be indicated below).

Yet, for the most part, the EMTEL research outputs (especially, the key deliverables) achieve this precisely because its empirically-grounded research strategy does *not* start from a portfolio of ideas, issues or concerns directly driven by the current policy agenda of the EU or

national governments. For the most part, the young researchers paid relatively little explicit attention to the official policy discourses and documents related to new ICT or “the information society” until the final stages of their work. Indeed, in “reflexive” mode, the very fact that these young researchers were little motivated or interested in addressing the content of such documents may itself be regarded as an important “finding” about the perceived role and impact of such political initiatives policies in contemporary Europe. This, in turn, may well be related to precisely the new kinds of political cultures, lived subjectivities and identities discussed in several of the key deliverables. See for example, the ASCoR/TN0 Key Deliverable (Cammaerts & Van Audenhove, 2003) and COMTEC Key Deliverable (Ward, 2003).

That does not at all mean, however, that national or EU-level policies towards new ICT do not matter. Indeed, contrary to all the discursive emphasis on a “market-driven” information society in Europe, the research indicates that such policy initiatives and associated discourses had a very significant impact in shaping users’ perceptions and motivations in purchasing and engaging with new ICTs. The various EU and national policy initiatives and related information society discourses emphasising the importance of ICT access, “computer literacy” and so on are found to have been important influences on user engagement with new ICT. They played an important ideological role in changing users perceptions and in stimulating their purchase of ICT equipment and services quite separate to the marketing operations of corporations involved in the supply of such products [for example, Ward, 2003, pp.21-26 (COMTEC Key Deliverable); Hartmann, 2003 (SMIT Key Deliverable)].

The important point here, however, is that the EMTEL researchers produce their novel contributions to the current policy debates precisely because of their highly inductive, and empirically grounded research strategy. Drawing heavily on the ethnographic and qualitative research traditions of the social sciences, they provide “bottom-up” or thick descriptions of the meaning and role of new ICTs in the everyday life amongst the selected groups of contemporary European citizens and users. The resulting insights with respect to policy implications are enhanced by, rather than hindered by, a certain critical distancing from the core assumptions and ideas underpinning official policy discourse.

In turn, these policy related outputs of the EMTEL project serve to highlight the value of the particular role and character of social science based research traditions indicated earlier, not only with respect to understanding the implications of new ICT, but many other pressing policy issues in the contemporary European context. They highlight the real value added by

social science research that is framed and located some distance from the kinds of singular and centralised constructions of policy relevant research favoured by some recent commentaries (for example, van Langenhove, 2001). This point is all the more pertinent given that, the new sixth Framework R&D programme reverses the efforts made by its two predecessors to reduce the relative “exclusion” of social science based research compared to the levels of public funding allocated to the natural and physical sciences (Preston, 2003).

2. Inclusion and Exclusion: Key Policy Implications

“The new knowledge-based society must be an **inclusive** society.... [and] in emphasising digital inclusion, the European Commission aims to distinguish the European approach to the information society from other regions of the world’ (EC, 2002c, p.4).

2.1 Dimensions of “Inclusion” & “Exclusion” related to ICT and the “Information Society”

Much of the ICT policy discourse surrounding “the digital divide” has focused on measures of access to computers and/or connection to the Internet and related network services. But as the more nuanced policy approaches have well recognised, measures of access or indeed of frequency of use comprise only a part of the problem of exclusion and inequality.

The EMTEL studies illustrate the benefits of adopting a wider view of the role and significance of new ICTs in the evolving patterns of exclusion and inequality in the everyday life of contemporary European society.

For example, the LSE Key Deliverable (Georgiou, 2003) explored the evolving cultural and media-related dimensions of inclusion and exclusion amongst increasingly important diasporic minority groups in contemporary Europe. This research reveals not only the growing role of minority media in the European information environment but also addresses the significance of media cultures for a wider understanding of social inclusion and exclusion. The study addresses how technological as well as other material and symbolic resources are very unequally distributed between and within minority groups in Europe.

Like many other EMTEL studies, the LSE Key Deliverable (Georgiou, 2003) indicates that much of the 1990s information society policies have been very highly focused on technology-led visions. It serves to highlight the central importance for policy makers to transcend the

narrow confines of (technical) access and connectivity in order to address more fully new digital and other media-based cultures and content. This is deemed necessary if policy is to serve the goal of creating a more inclusive (diverse and tolerant) “information society in the face of new multi-cultural communities in contemporary Europe.

In turn, other studies re-affirm the point that the major forms and sources of social exclusion are not primarily ICT-related and that they are often far from technological in character. Rather many key forms of exclusion reflect significant shifts or inequalities in the contours socio-economic power and opportunities to participate arising from increasing globalisation and unemployment levels or the sheer fact of being less-abled [ASCoR-TNO Key Deliverable (Cammaerts & Van Audenhove, 2003); LENTIC Key Deliverable, (Durieux, 2003)]. The resulting implication is that policies predominantly focused on ICT access and use, however well framed or well-intentioned, are unlikely to have much impact in alleviating such forms of social exclusion. In the case of the less-abled, for example, there are significant questions raised concerning the realism and viability of ICT-focused projects compared to alternative strategies addressing other kinds of structural or socio-economic barriers to participation in the jobs market and other spheres of everyday life [LENTIC KD (Durieux, 2003)].

Indeed, the LENTIC study well-illustrates the additional difficulties, if not “exclusions”, that the disadvantaged may experience as result of technology-centred perspectives on new ICT and associated claims which tend to exaggerate the potential benefits of ICT access or related skills. It suggests that “utopian attitudes may also create new forms of exclusion” when the less-abled’s beliefs in “ICT potentials diverge from social constraints”. In such cases, there may be a failure to acknowledge the limited space for human agency and the result may sometimes turn out to ‘produce perverse consequences in terms of exclusion’ (Durieux, 2003, pp.66-67).

2.2. The Limits of Singular Quantitative Standards (Measures) of ICT Access/Use

The overriding objective of European and national IST and information society policies since the mid-1990s has been to maximise the production and (perhaps, especially) the use of new ICTs. To that end, policy makers have been heavily concerned to develop, fund and compare standardised quantitative measures (or universal “barometers”) of such ICT use, both within nations and across Europe or more globally.

Clearly, such quantitative data can certainly play an important and valid role in informing policy. But the more detailed qualitative studies conducted by the EMTEL project provide more nuanced understandings of the social (or socio-technical) significance of the processes of ICT use and adoption. The EMTEL studies thus serve to complement the relevant knowledge base available to policy makers in this field. They also pose certain important questions concerning limitations or validity of some of the ways in which such quantitative studies have been interpreted and used in policy discourse and practice.

For example, the EMTEL findings suggest that the apparently “hard facts” or data emerging from such quantitative studies may not be as solid or as self-evidently informative as often assumed. The bald fact that a certain percentage (say 30% or 70%) of persons are regular users of the Internet tells us very little about the social (or socio-technical) significance of such patterns in isolation from an explicit consideration of the everyday life practices and contexts of the user group(s) under study. The social significance of a particular quantitative score (for example, percentage of Internet users) is not universal, but varies significantly from group to group. For example, it may be the case that a particular quantitative measure, such as that 70% of professional workers (for example, academics and lawyers) in Norway are active Internet users, may be much less significant than one indicating that “only” 20% of farmers in southern Spain are active users. Such apparent facts do not “speak for themselves”. Rather, from a socio-technical change perspective, the latter datum (lower percentage of users) may well prove to be a much more significant development than the former.

One of the key insights provided by the EMTEL studies is that it is important to recognise the limitations of any “universal” measures of Internet or other ICT use, especially if the concern is to understand the co-evolution or extent of social and technical development or change. Both the (quantitative) extent and social significance of technology-enabled change is highly context sensitive as well as being dependent on relevance to the everyday life activities, values and meanings of different social groups.

This applies even in the case of emerging new kinds of “ambient”, invisible and apparently very much more user-friendly technologies [IPTS Key Deliverable (Punie, 2003)]. Whilst emerging developments such as “Ambient Intelligence” (AmI) promises to remove some of the learning-based barriers associated with the uneven acceptance of new technologies it is “difficult to believe” that AmI will appeal equally to all social groups: given “socio-economic differences” and the inevitable diversity of people’s individual preferences, “there will

probably always be ‘early adopters’ and ‘late adopters’ and even people who will even resist AmI’ [IPTS Key Deliverable (Punie, 2003, p.24)]. In addition, the IPTS study suggests that socially prescribed gender roles and identities (those of masculinity and femininity), are likely to continue to shape differences in attitudes, acceptance and use of ICTs in the foreseeable future (Punie, 2003, p.32).

Other EMTEL studies raise very similar policy relevant implications concerning the limits of one-dimensional quantitative measures or singular “universal” barometers of ICT access, use and associated targets and assumptions. In different ways, these studies highlight how current and future use of new ICTs is often highly context dependent. The differential use and appropriate is not determined by the technical features and functions of new ICTs but closely linked to their relevance and meaning as shaped by socially prescribed roles and identities in the everyday life activities of different groups of users (for example, Ward, 2003; Cammaerts and Van Audenhove, 2003; Durieux, 2003). Besides such conditioning social factors are not fixed with respect to time and place but are themselves changing or co-evolving. For example, some of the EMTEL studies indicate that long-documented evidence and images of gender differences in ICT access and use may have become less significant by the late 1990s (for example, Ward, 2003, pp.4)

The NTNU-STIS study (Berker, 2003) which examines migrant researchers as a relatively privileged group of potential users (in terms of ready access to all kinds of new ICTs at low cost). These may be generally typified as comparatively high/heavy users of new ICTs compared to most other social groups. But Berker also reveals significant difference in the patterns of ICT use amongst such migrant researchers. This suggests that existing social networks (rather than technical networks) play a major role in determining the nature of ICT use. This study suggests that it is “mainly existing social networks”, in which users and usage is embedded, “which determine whether this usage is considered useful” by different actors [NTNU-STIS Key Deliverable, Berker, 2003, p.5)].

Even in this relatively small and privileged group of potential users there are significant variations in terms of the types and intensity of ICT use: “All these individual patterns of how, when, and where ICTs are used are deeply entwined with the users’ every day life” and this in turn “is shaped by all kinds of influences, above all household size and form and the respective job” (Berker 2003, p.6).

One key and pertinent policy implication arising from such research findings concerns the need for more sophisticated measures or “barometers” of ICT use and consumption across different countries or social categories if these are to prove of real relevance to public policies. Any new and more nuanced measures or “barometers” of ICT use and consumption would have to combine relevant inputs from both quantitative research methods as well as the kinds of qualitative methods adopted in these EMTEL studies.

2.3. Overload: An Excess of Inclusion

Recent ICT policy debates and practices have usually been framed around the assumptions that ICT access or “inclusion equals good” and “exclusion equals bad”. They have also tended to assume “the more inclusion, the better” and to highlight the universal benefits of maximising the use of new ICT-based connectivity networks and communication services.

In many respects, such ICT policies have tended to focus almost exclusively on the perceived benefits of new ICT for the production and distribution of information and - the initial “sender” stages of - its communication. The following and other findings from the EMTEL studies indicate that ICT policies have tended to neglect demand-side issues, particularly the user and consumption aspects of such developments. Indeed, they suggest some of the ways in which policy making may be enhanced if the relevant actors were to pay more attention to the consumption and user aspects of new ICT-based connectivity networks and communication services.

The study on migrant researchers also raises some relevant issues in this context – issues that have often been neglected in recent policy discourses and practices [NTNU-STS Key Deliverable (Berker, 2003)]. This study provides examples of how high-levels of ICT-based flexible connectivity may become a problem rather than an automatic benefit for some users. It finds that some users have complained about the problems arising from universal accessibility, such as being interrupted too often or drowning in too much information. The study indicates how these individuals develop their own practices to restrict accessibility or to filter information by means of comparison with other sources. But this does not always provide an adequate solution: “The cases where this is not working are, without exception, exposed to forces, which are not mentioned” by official EU or other relevant policy papers (Berker, 2003, p.6).

According to this project’s findings, one of the most important variables here is the *individual’s workload*. To a large degree, this determines whether access and flexibility bring

about “benign or malign consequences” for the user. This is particularly the case for users who exposed to flexible connectivity “whose everyday life is characterised by the highest degree of spatial and temporal flexibility, such as the lack of embeddedness in familial structures (singles) or very short-termed work contracts” (Berker, 2003, p.7). The researcher concludes that “these cases are in danger of becoming examples for flexible connectivity becoming dysfunctional”.

These and other findings from the EMTEL studies suggest that future policy making and research should pay much more attention to such consumption and user aspects of new ICT-based connectivity and communication services - not least the much-neglected impacts of the expanding forms of information “excess” or overload.

2.4. Limitations of Privileging Certain New ICTs and Their Uses over Others

Furthermore, we may note that in policy discourses, which emphasise the maximum adoption of new technologies, the predominant orientation is to privilege certain types of new ICT at the expense of others. There is a marked tendency to assume and highlight the use and benefits of the computer and the Internet - and its access via the computer interface - and a concomitant neglect or devaluing of other kinds of ICT use.

Yet, some of the research findings emerging from these EMTEL studies suggest that such policy assumptions do not well match the actual use and benefits of new ICTs as experienced or performed by users’ in the domain of everyday life.

For example, the EMTEL research suggests that even for the so-called “Web Generation”, the use and benefits of the computer and the Internet - and its access via the computer interface - may be somewhat less important in the domain of everyday life than other facets of new ICTs.

The SMIT study (Hartmann, 2003) of young people’s engagement with new ICT suggests that mobile telephony may well play an equal if not greater role in shaping change in the everyday social patterns of communication (for example, pp.88-92)

Somewhat similarly, amongst migrant researchers, a relatively privileged group of potential users (in terms of ready-made access to all kinds of new ICTs), “we observe users who prefer interpersonal communication (be it mediated or not) over information seeking” (Berker, 2003,

p.6). Indeed the study emphasises the point that members of this relatively privileged group are marked by very different usage patterns.

Finally, under this heading we may also note that the Berker (2003) study of migrant researchers raises another important policy implication. It points to “the superiority of generic over specific applications” in the ICT field. The report suggests that ICT-based “*services and applications that are designed to support maximum flexibility of use* (in terms of time, space, and content) appear to be most *useful* for such users adapting the new technologies in order to fit into a broad variety of different contexts” (Berker, 2003, p.6). Such research suggests that the user’s appropriation of ICTs, which results in individually tailored configurations of uses experienced as useful, “can and should be supported by public policies”. The promotion of specific applications, as it is suggested in prior EU policy documents, is less promising in this respect, compared to the effective protection of the users--especially if this “leaves them room and time to manoeuvre in order to build an environment of ICTs, which supports their everyday life in the best way” (Berker, 2003, p.7).

2.5 Taking Play Seriously: Instrumental versus Ludic Applications / Aspects of new ICT and the “information society”

The thrust of recent policies, at both the national and European level, has been firmly focused on the instrumental uses and benefits of new ICT and/or the “information society” (for example, highlighting the economic benefits, including enhanced productivity, better paid jobs, etc).

In contrast, a number of the EMTEL studies suggest that policy making might usefully pay more attention to the more playful, ludic or entertainment applications of new ICT in the everyday life of the “information society”(for example, Hartmann, 2003, pp.82-84). Indeed, it may be the case here that middle-aged policy-makers, no less than senior researchers, may have some lessons to learn from children and young adults’ engagement with new ICTs. Such studies point out that it is important to recognise that for many children and young adults, new media and ICTs are beginning to reach a state of “naturalness” in their everyday lives. But more importantly in the present context, perhaps, it should be noted that for such users, ICTs are not primarily (or, at all) associated with instrumental applications such as those related to education and work. Furthermore, as the Flanders study suggests, young adults who had the opportunity to “play around” with computers in their childhood years, “were much more inclined to simply adopt them- partly playfully – into their later lives without much trouble” (Hartman, 2003, p.85).

2.6. Close Inter-Connections between On-Line and Off-line Activity and Forms of Exclusion/Inclusion in Everyday Life

The final, but by no means least important, implication for policy thinking and practice in this section concerns the finding that there is a dense and complex interconnection between the processes on-line and off-line exclusion (and inclusion) within the sphere of everyday life.

The EMTEL studies indicate that access and use of new ICT or related on-line services did not mean that users suddenly became inhabitants of some separate new social realm of “cyberspace” that was essentially separate from their everyday life in an “off-line world”. Whilst such speculative constructions and images of the Internet and new ICT proved popular in the late 1990s, the empirically-grounded research emerging from the EMTEL studies tells us a somewhat different story. In essence, this research highlights how the users’ appropriation of the Internet and related new ICTs tends to be not only highly selective but very closely intertwined with their everyday interests, activities and needs in the offline realm. As the COMTEC Key Deliverable (Ward, 2003) puts it: participants actively shaped the Internet “to meet a set of specific needs and use patterns centred round the resolution of personal and private issues”; indeed, “the majority of use related to “everyday use”, where participants personalized the internet, constructing it as a technology to supplement the enactment of existing habits and routines” (Ward, 2003, pp.26-27).

From the outset, the EMTEL project’s perspective and qualitative research methodology was very attentive to the potentially creative and active role of users in adapting, using and appropriating new ICTs in unforeseen ways. For example, many of the 1990s constructions of the Internet emphasised its capacity to expand and enhance participation in the political public sphere (as, indeed, do many current e-Government initiatives). Yet, some of the relevant EMTEL studies suggest that this assumption may have been somewhat exaggerated if not an entirely misplaced or mistaken emphasis. The COMTEC study (Ward, 2003) clearly finds that the residents of “Coastal Town” had very little engagement with such uses of the Internet. Rather, the predominant use was centred round highly personalised and private concerns, as the majority of surveyed residents adopted and adapted the Internet for e-mail purposes (to maintain contact with friends and family) and for the consumption of health and educational content as well as that provided by the websites of older/mature media organisations (Ward, 2003).

Certainly, some of the EMTEL studies reveal how new ICTs may be creatively harnessed by minority, less powerful or excluded groups to expand the range and quality of the performance of their public communication processes (for example, Cammaerts & Van Audenhove, 2003; Georgiou, 2003; Ward, 2003; Durieux, 2003). For example, the ASCOR-TNO study (Cammaerts & Van Audenhove) suggests that new ICT's may not change fundamental inequalities of material and symbolic power, nor "cure the crisis of social democracy". Yet, at the same time, they can and do "enable civil society actors to organize themselves more efficiently, to network and to mobilise" and may thus serve to facilitate the attempts to reinvigorate civil society and social movement participation (Cammaerts & Van Audenhove, 2003, p.85).

But, contrary to the claims of techno-centric analyses and gurus of the 1990s, in no case was there evidence of an autonomous new ICT or specific "new media effect", particularly one which disturbed the fundamental patterns of unequal power or access to material and symbolic resources. As proved to be the case in prior debates about the role of communication technology in socio-economic development and change, there is no 'magic multiplier' effect. Indeed, the overall findings of the EMTEL studies in this regard tend to emphasise the dense and deep interplay between exclusion/inclusion processes and other social practices across both the on-line (or ICT-based) domains and the off-line domains of everyday life (see also Ward, 2003, pp.63-64; Georgiou, 2003; Durieux, 2003).

Although focused on a quite different set applications and users, the LENTIC study (Durieux, 2003) also well illustrates the potential and limitations of ICT/technology-centred inclusion policies and initiatives directed at the less-abled and their interplay with the socio-economic dimensions of unequal life opportunities. This study indicates how well-structured ICT-centred training initiatives may well produce a virtuous convergence of interests between diverse actors in the construction of effective "inclusion" efforts, specifically to enable previously less-skilled and otherwise disadvantaged groups to improve their opportunities in the contemporary labour market. The case illustrates how well-constructed training initiatives, especially where the target users/trainees are treated as effective "actors" in the process, can indeed deliver new opportunities to improve the skills and employment status of the less-abled. But even when a virtuous convergence of interests is present in such ICT-centred training initiatives, the results are not universally beneficial. The case study also highlights that "the 'least-abled' tend to remain excluded", not merely because weak ties between the various actors involved in the training process but also because of the lack of

adequate material and other resources available to redress the other barriers to access faced by such individuals.

In sharper contrast, however, the LENTIC centre's study (Durieux, 2003) of the call-centre initiative illustrates that technology (ICT) cannot act as a significant factor in reducing the exclusions of the less-abled. The study indicates that the call-centre initiative was much less successful in terms of creating significant new forms of inclusion for the less-abled compared to the outcomes of the training initiative. It suggests that technology-centred inclusion efforts may have very little impact on the prospects of the less-abled in an employment context where commercial objectives and instrumental performance operate as the guiding logics or key criteria governing individual or organisational participation.

3. New Media (Internet/WWW) and Public Communication

“ The... research... will investigate whether and how user engagement with digital media serves to generate new forms of content and/or connectivity resulting in new kinds of interactive engagement and/or enhanced participation in public life.”
[EMTEL Workplan].

3.1. “They’ve not gone away, y’know”: Mature Media and Everyday Life

When it comes to questions of digital media and content developments, the EMTEL studies point to the important limitations of technology-led or techno-centric approaches to policy making. For example, despite the claims of popular techno-centric analyses and digital beings in the 1990s, (and of those policy reports and discourses influenced by them), the “old” or established media have not been displaced (or substituted) in any significant way by new (ICT-based) media (for example, Ward, 2003; Hartmann, 2003).

A number of the EMTEL studies examine how the role and use of new/digital media has increased in recent years. But at the same time, they also affirm that the established media continue to play a dominant role within the increasingly complex media environment in which everyday life is now embedded in contemporary Europe (for example, Ward, 2003; Cammaerts & Van Audenhove, 2003; Hartmann, 2003). Furthermore, when it comes to accessing and use of “new media”, A number of EMTEL studies clearly indicate that the

content and other services offered by the “old media” play a major role in the on-line activities of many users. [COMTEC Key Deliverable (Ward, 2003); SMIT Key Deliverable (Hartmann, 2003)].

In essence, these EMTEL affirm that “the mature media remain masters of the multi-media realm”, both offline and online. (for example, Cammaerts & Van Audenhove, 2003; Georgiou, 2003; Ward, 2003).

3.2. “Alternative” Communication: Minority Media and Transnational Social Movements

As noted earlier, the COMTEC study (Ward, 2003) of “Coastal Town” found that the residents of this small urban community in Ireland tended to use the Internet predominantly for private and personal communication affairs. The Internet was not considered or used as an important mechanism to participate in or contribute to public debate, and this was especially the case when it came to a number of important local policy and community planning issues. Indeed, the majority of participants in this study considered publicness or public affairs to be best symbolised and most appropriately conducted via the mature media such as newspapers or even leaflets, and by face-to-face communication. Respondents indicated that they did not consider or use the Internet as an important mechanism to participate in or contribute to public debate. Indeed few residents ever made use of the websites containing information related to local community or political affairs in “Coastal Town” (Ward, 2003, pp.49-53).

Other EMTEL studies, focused on the transnational level rather than the local community level of ICT-based communication networks and services, provide some interesting contrasts to the COMTEC case.

Here we identify some of the very different findings and policy implications arising from two of the EMTEL studies addressing ICT applications and use for new or “alternative” spheres of public communication. One study examined ICT use by transnational social movements (Cammaerts & Van Audenhove, 2003); the other examined minority media cultures and practices in a dozen European countries [LSE Key Deliverable (Georgiou, 2003)]. Both of these studies raise quite specific and important policy implications, some of which challenge the prevailing menu of concerns embraced by ICT and information policy discourse.

The LSE study provides a rich description of minority media initiatives, cultures and practices in a dozen European countries whilst also raising a number of important implications for

media related aspects of ICT and information society policy. This study suggests that there has been a significant increase in the quantity and diversity of media projects originating amongst the ethnic and cultural minorities residing in EU member states. However, the level of inclusion has often decreased in the mainstream media and in mainstream-centred initiatives (for example, marked by decreases in subsidies, cuts to policy supports for multicultural media projects, lower or stable levels of employment of minorities in mainstream media). This contradiction can enforce, not only exclusion, but also the sense of exclusion amongst minorities (Georgiou, 2003, pp.71-73).

The LSE study describes how new ICTs do not merely support the expanded potential for communication within and across diasporic groups and/or between diasporic groups and their country of origin. It also suggests that the qualities and meanings of such communication processes are also being altered. It indicates how the old myths of return to the original *homeland* are now taking a new form, as “instead of a physical return, there is a *virtual return* taking place” via the networks and communication activities supported by new ICTs. The development and use new ICT-based decentralised networks and networks is taken to mean that “the linearity and one-way relation between the centre (original *homeland*) and the diaspora is forever changed”. The LSE study claims that the new diasporic networks operate to reshape geography even if they do not bring about the death of distance or the end of geography. The original *homeland* remains “a significant place of reference – even if partly imagined – as much as that of the locality”, where these populations live (Georgiou, 2003, pp.74-76).

One of the key findings emerging from the LSE study concerns the major inequalities that exist with respect to the quantity and quality of digital media content and services now available between and within different ethnic minority groups. Some well-established groups and groups, with more ready access to material resources than others, clearly produce and control much more communication flows and outputs than others. Once again, we are reminded that the levels and forms of “exclusion” on-line or otherwise associated with new ICT are not “stand-alone” but closely linked to prevailing material and cultural inequalities in the social realm. Such findings raise questions about the responsibility of states and the EU for promoting differentiated rights (for example, Kymlicka, 1995).

The implications for policy point to the potentially egalitarian role of subsidies to support the most excluded minorities and the minorities within minorities [LSE Final Deliverable, (Silverstone, 2003, p.74). European Information Society policies should go beyond the

functional and linear technology-centred views of the significance of ICTs for inclusion to embrace content and other downstream application services which may expand the communication potentials of excluded populations and their cultural inclusion and empowerment (Silverstone, 2003, pp.71-74). The LSE study finds that although Internet access has increased and become cheaper in recent years, significant inequalities exist. Thus supports directed at increasing the levels of access of underprivileged groups should remain high in the policy agenda [Georgiou, 2003, p73).

This particular EMTEL study also indicates that there is an “inevitable complex interaction” between the political discourse and the policies about immigration, minorities and communication within both EU-level bodies and those of member- states. Even if these have emerged and grown with relevant independence, some level of integration in these policies becomes necessary for at least three reasons: (i) in recognising the interconnection of the cultural, the political and the economic dimension of exclusion, linking cultural (communication) policy and immigration and integration policies can tackle exclusion in its different expressions; (ii) communication policies need to explicitly consider how invisible minority producers can create more hospitable communication spaces to achieve inclusion; (iii) the mainstream immigration and integration debates should consider how cultural rights of minorities should be expanded (communication is of key relevance here), not only the “formal” rights (for example, citizenship).

This EMTEL study also suggests that European transnational media policies should not only think within the nation-state frame, but also address transnational media flows, some of which are those of diasporic populations. Initiatives such as *Television without Frontiers* cannot be a “privileged” area of interest of major national broadcasting corporations. The present approach of top-down cross-border co-operation must be complemented by considerations of a parallel of bottom-up processes. These reflect the transnational cross-European flows, which have resisted the national boundaries before these have become part of the EC-agenda. The major, top-down policies could even learn how decentralised, transnational networks become successful and inclusive (Georgiou, 2003, pp.72-73).

Somewhat similar points emerge from the ASCoR-TNO study which emphasises the growth of political engagement in less-formal civil society organisations in more recent years and the need to value this shift in a positive light “not as a threat to the present order, but as a democratic enrichment” ((Cammaerts & Van Audenhove, 2003, p.85).

This particular study also stresses the importance of policy approaches, which maximise the scope for expression of radical views and opinions in digital media domains and expressly warns against policy approaches or regulations, which might serve to diminish an “open network philosophy”. This study suggests that effective inclusion policies must be broadened beyond current technology-centred views of the digital divide, especially to the address the extent to which contacts between the citizen and state become increasingly digitised. This suggests the need for new kinds of socially-centred “universal service” policies, embracing the barriers to inclusion imposed not merely by inequalities in education, training, but also addressing the role played by “structural inequalities on a global and local scale” (Cammaerts & Van Audenhove, p.84).

3.3 The Relative Absence of “Radically New” Content and Content Use

As noted earlier, the development and use of new ICT’s has not changed the fundamental inequalities of material and symbolic power, nor “cured” other aspects of socio-economic and political exclusion in contemporary Europe. At the same time some of the EMTEL studies do indicate the manner in which new ICTs, with appropriate policy supports, may be creatively harnessed by minority, less wealthy or other less powerful (“excluded”) groups to expand the range and quality of the public communication profile and activities (for example, Cammaerts & Audenhove, 2003). They can be used to “enable civil society actors to organize themselves more efficiently, to network and to mobilise” and may serve to facilitate the attempts to reinvigorate civil society and social movement participation (Cammaerts & Audenhove, 2003, p.85).

At the same time, some of the EMTEL studies confirm a significant gap between actual levels of new media developments thus far on the one hand, and the common expectations of policy makers (and many of their related consultancy and research reports) in the 1990s on the other hand. In essence, there is a major gap between earlier expectations and the actual delivery with respect to the extensive “potential” of new ICT to support radically new content forms or modes of public communication (for example, EC 1997a, 1997b, 1997c, 1997d, 1997e, 1998a, 1998b).

For example, the SMIT study suggests that amongst the so-called “Web Generation”, the lives of young people may now be widely touched by new ICT use and their practices “fairly radical”- yet their “content use is mostly not” radical at all (Hartmann, 2003, p.86). Rather their content use largely comprises the reinforcing of existing communicative networks and informational patterns: in no small part due to the lack of distinctively novel content, “the

identities of the young adults are not directly linked to ICT use” (Hartmann, 2003, p.86). This kind of finding echoes those emerging from the COMTEC centre’s study (Ward, 2003) of residents use of on-line content in “Coastal Town”.

These EMTEL studies reveal a perceived “gap” or lag - between the potential of new-ICT enabled communication and content developments and those actually realised so far - which poses some interesting challenges and implications for approaches to policy making. At the very least, they seem to point to the far-from-new question of whether approaches to policy making have thus far paid adequate attention to the “I” (information and content) and “C” (communication) as opposed to the “T” (technological) dimensions of new ICTs.

Ever since the seminal Bangemann Report, “Europe’s way to the Information Society” has been defined as fundamentally “market driven”. At the same time, public policies have involved the mobilisation of considerable material and symbolic resources towards the development of new technological artefacts and networks and in encouraging or even “pressurising” users towards maximising their purchase and use new ICTs. In comparison, the amount of public policy supports directed at supporting the development of novel and innovative ICT-based content and communication forms has been very low in comparative terms. Yet the design, authoring and publication of novel content forms (especially those appealing to minority, local or otherwise diverse audiences) may be deemed high-risk and subject to “market failure”, as they are relatively costly. At the same time, some of the EMTEL studies point to the high value that users place on diverse forms of content – directed at specific local or minority cultures (for example, Ward, 2003; Georgiou, 2003; Hartmann, 2003).

The Irish study, for example, points out that “locality continues to remain important to people suggesting that European and national policy must incorporate the significance of the local”

- National and European policies on public communication and participation must be tailored to meet local needs
- The print and other older media must be acknowledged as continuing to play a key role facilitating public communication, implying that the role of all media must be considered when thinking about and formulating policy relating to public communication (Ward, 2003, p.65).

3.5. Issues of New Media Regulation and “Trust”

One of the policy implications highlighted by the Amsterdam based study is that regulation of the new media arena should be minimalist in scope: the “open network philosophy... is doing fine”. It also suggests that there is little reason for content regulation on the Internet (Cammaerts & Van Audenhove, 2003, p.84).

At the same time, the COMTEC study echoes continuing concerns about lack of safety and trust associated with the new media, particularly in the case of children as Internet users (and their parents). It recommends a stronger role for the established media and for official task forces (at national and European levels) to provide reliable information and guides concerning potential dangers, methods to protect children and steps to create a safer domestic environment (Ward, 2003, p.65).

4. Conclusions: Diverse “Exclusions” and “Inclusions”

4.1. “Exclusion” from What? Definitions of the ‘Information Society’

As indicated so far, the EMTEL studies reveal a great degree of diversity when it comes to users’ adoption of, engagement with, and attitudes towards (meanings of) new ICT in the sphere of everyday life in contemporary Europe. These range from “intensive users” such as mobile professionals (Berker, 2003) and some young persons (Hartmann, 2003), to some very infrequent or low-level users (Ward, 2003; Durieux, 2003).

But this diversity in use may not necessarily or always constitute “a problem” as so often assumed in current policy discourses. This, as indicated, is especially the case with conceptualisations and analyses of “the digital divide” focused on singular quantitative differences between different regional or social collectivities

In part at least, the meaning and appropriate policy responses to such diversities may be related to competing definitions of the role and importance of new ICTs, and in particular to different conceptualisations of that core concept: “the information society”

Quite simply, the issues here revolve around a number of basic if often neglected questions. Precisely what kind of social entity or space is this “information society” that engenders so much attention from researchers and policy makers. Or what kind of “exclusion” is involved when it comes to considerations of “the information society”? Exactly what is meant when researcher write (or talk) of “an information society”, whereby the “exclusion” or “inclusion” of particular groups of people is deemed to be a significant political issue? What kind of “exclusion” (or “inclusion”) in relation to what kind of social setting?

Significant tensions, between competing definitions or conceptualisations of the “information society” and the role of new ICT as driver or marker of socio-economic change have been identified in the EMTEL project’s empirical studies and in the analyses of same by the researchers and at network meetings. Even if such differences or tensions are often implicit rather than explicit, especially in the arena of policy discourses and practices, it may be useful to make them explicit in the present context. Quite simply, they may have significant implications when it comes to identifying/addressing the spectrum of ideas as well as the actual and potential ambitions, objectives, goals and practices underpinning public policies related to “the information society”.

Not surprisingly, perhaps, there are multiple examples of different definitions and meanings attached to the notion of “the information society” since it first began circulating more than 30 years ago now (Preston, 2001). But for present purposes we may summarise some of the key differences along a simplified typology, whilst acknowledging the limitations of all such simplifying schema, including the tendency to highlighted distinctions which may often be blurred in practice (See Table 1).

Table 1: Simple Typology of Competing Definitions of the “Information Society”

Three Competing Definitions or Conceptualisations of the “information society”	The key “changes” which define the “information society” (explicit or implied)	Assumed key benefits for users	Key Goals of Public Policies
Type 1. The dominant policy-related discourses/ definitions (in the late 1990s)	New technical devices & infrastructures; (production and use/diffusion of new ICT, especially computers and the Internet)	Enhanced “competitiveness”, productivity & socio-economic “welfare”	Maximise the production & use or diffusion of new ICT Minimise the “digital Divide”
Type 2. Subsidiary (secondary) policy-related definition	The info-structure (the socio-economic and cultural role of knowledge functions)	Wider diffusion of power (knowledge = power)	Maximise access to formal education and expand the role of “knowledge work” or functions (not simply ICT)

			related)
Type 3. Seminal or classical academic definitions	(i) ICT infrastructures (ii) Info/Knowledge structures/functions (iii) Increased social regulation, planning & meritocracy	A more interdependent and egalitarian (just or “good”) society	Expanded role of social planning and reducing role of “market forces”

Source: Adopted from Preston, (2002) [author’s presentation to EMTEL workshop in Seville]

For example, we find European policymaking and practices usually operate with a definition, which privileges or highlights new ICTs (for example, digital devices, networks or systems) and their diffusion or use as the key or sole indicators of “the information society”. Implicitly at least, in such definitions, the key policy goal and objective is to maximise access to and use of new ICTs. Secondly, we find alternative policy usages of the term which focus more on changes in the info-structure (as opposed to ICT infrastructure or “techno-structure”), including the changing role and character of knowledge or information capabilities. Thirdly, we may note that both of the above-mentioned definitions differ from the more influential and robust academic definitions of the information society idea. The latter focus attentions on changes in both the technical infrastructures and infostructures, but these are complemented by equal if not greater attention to socio-political and even cultural changes.

Furthermore, we may note that proponents of all three positions may embrace a wider view definition or view of the information society as a distinct new kind of social formation, one that is frequently assumed or deemed to equate with a better (the “good” or a more just) society. Yet, it should be noted that the precise drivers and direction of such socio-economic transformations might differ in significant respects across these quite distinct definitions of the ‘information society’.

4.2. Key Conclusions and Implications : ICT & Socio-Economic Change

Let us now turn to some of the practical benefits and implications for policy makers, related to such differences in definitions of the information society related to the concerns of the EMTEL studies discussed earlier.

One fundamental policy implication is that whilst the widespread use and adoption of new ICT may well be an increasingly necessary condition for instrumental goals (related to

economic performance of firms, regions/countries and even individuals) that is not the end of the story by any means - at least in three respects:

(1) The first definition of the information society tends to place a heavy, if not predominant, emphasis on the quantitative distribution of new ICT use. The EMTEL studies suggest that this, somewhat inevitably, lead to unwarranted expectations of diffusion patterns and misleading understandings of the significance and sources of differential use of new ICTs in everyday life in contemporary Europe

In many cases, the low or non-use of new ICTs may have very little to do with enforced exclusion related to the lack of technical skills or other resources as often assumed in contemporary policy discourse. In other words, such practices may well be perfectly rational and in keeping with users' informed calculus of the optimal disposition of their (always finite) time and money budgets/resources, which in turn, will be conditioned by their location in different kinds of professional, socio-economic or cultural settings (within the now expanding 'EU region').

For example, respondents in the EMTEL studies reported a reflexive awareness of "pressures" to acquire and use new ICT products and services arising from Type-1 policy discourses (for example, Ward, 2003; Hartmann, 2003). Whilst many users respond to such pressures, others must be viewed as opting out. In some cases at least, this must be treated as a legitimate option (Hartmann, 2003, pp.92-93) rather than being automatically deemed a policy 'problem'. Indeed, "non-use should be seen as a valid choice" (Hartmann, 2003, p.93), not least as the people concerned may not have the necessary time, energy, desire or need to engage in such processes.

As noted earlier, one key and pertinent policy implication arising from such research findings concerns the need for more sophisticated measures or "barometers" of ICT use and consumption across different countries or social categories if these are to prove of real relevance to public policies. Any new and more nuanced measures or "barometers" of ICT use and consumption would have to combine relevant inputs from both quantitative research methods as well as the kinds of qualitative methods adopted in these EMTEL studies.

(2) The Type-2 definition of the information society implies a much greater attention to the overall spectrum of knowledge(s) and information structures, not merely those directly related

to ICT production and use. Indeed, it furthermore suggests that users' actual and potential (or 'appropriate') engagement with new ICT may well be highly dependent upon :

- The differential distribution of knowledge resources, capabilities/resources and related "dispositions"
- The degree of relevant investment in and policy support for novel and accessible forms of content (for example, Hartmann, 2003; Georgiou, 2003; Cammaert & Van Audenhove, 2003; Ward, 2003).

All of this implies that policy making must take a much less technology-centred approach to the issues of ICT exclusion and inclusion. It means revising the predominant tendency to focus on ICT devices and infrastructures and allocating proportionately more policy attention and material resources towards "downstream" applications in the areas of digital content and communication services that are relevant to the diverse needs of marginalized groups.

(3) The third definition serves to remind us that everyday social life or the "good society" (whether in an "information" or other society) involves much more than instrumental rationality or economic efficiency - and certainly much more than simply "maximum use of ICT" as the goal and end of social development in Europe or elsewhere. This kind of consideration poses important issues for the appropriate approach to future policy making at the European, national levels and indeed international levels of policy-making.

One implication here is that more nuanced and broader approaches to ICT policy may be more useful, if not desirable in themselves. For example, the SMIT study (Hartmann, 2003) of the "Web Generation" suggests a more integrated approach to ICT and ICT use and youth policies in general as this "could then be more demand-driven than policy pushed" (Hartmann, 2003, p.91)

Another is that more attention may be paid to the prevailing "images of participation" in the network or information society. Policy approaches may have much to gain by looking beyond ICT access issues or ICT-instruction at school or in workplaces. For example, drawing on the ASCoR-TNO (Cammaerts & Van Audenhove, 2003) and LSE studies (Georgiou, 2003), policy makers may need to acknowledge and support (if not, indeed, learn from) the innovative modes of networking, participation and organisational forms being pioneered in the transnational communication spaces of civil society.

The SMIT study further suggests that policymakers may also benefit from greater attention to non-utilitarian applications of new ICT, including playful/ludic applications as well as supporting the new forms of communication enabled by ICT networks. It may also imply more sustained attention and policy supports for 'content' related issues, both on the input/creative side, the capacity to critically engage with new content and new ways to access information (Hartmann, 2003, p.91).

Notes

¹ The author gratefully acknowledges the work and contributions of Katie Ward (the EMTEL post-doctoral researcher based in COMTEC) in helping to stimulate and inform the ideas and analysis advanced in this paper.

References

- Bell D (1973) *The Coming of Post-Industrial Society* . New York: Basic Books
- Bell, D [info soc theorist:- Bell, Daniel] (1980) “The Social Framework of the Info. Society”, in Forester, T (ed.) (1980) *The Microelectronics Revolution*. Oxford: Blackwell
- Calabrese, A. and J.-C. Burgelman (1999). *Communication, citizenship, and social policy*. Lanham, Boulder, New York, Oxford, Rowman & Littlefield Publishers: 1-16.
- Castells, M (1996) *The Rise of the Network Society*. Oxford: Blackwell.
- Dutton, W (1996) *Information and Communication Technologies*. Oxford: Oxford Univ. Press
- EC (European Commission) (1983) Community Programme for the Development of the Specialised *Info Market in Europe* . COM (83)661 FINAL
- EC (1993a) *Growth, Competitiveness and Employment--Challenges for entering in the 21st century*. (White Paper, colloquially called 'the Délors Report'). Luxembourg: European Commission.
- EC (1994a) *Europe and the Global Information Society: Recommendations to the European Council* ['Bangemann Report']. Brussels: CEC..
- EC (1994b) ['Green Paper'] *'Strategy Options to Strengthen the European Programme Industry in the Context of the Audiovisual Policy of the European Union* Brussels: EC [Com(94) 96 final]
- EC (1997a) *'Economic Implications of New Communication Technologies on the Audio-Visual Markets- Final Report'*, Report of research commissioned by the EC [DGX/D/3], conducted by Norcontel, NERA, Screen Digest & Stanbrook/Hooper] ['Key EU A-V docs, FIL 'EUAV97a'].
- EC (1997b) *Green Paper on the Convergence of the Telecoms, Media and Information Technology Sectors, and the Implications for Regulation: Towards and Information Society Approach*. [EC, Brussels: COM (97)623.Final. 3.12.1997
- EC (1997c) *Interactive Digital Media: Impact of the Technology to 2003*. Report prepared by 'Informed Sources' and commissioned/published by EC, DG XIII/E (Oct 1997)

- EC (1997d) *Information Engineering-Activities, Priorities and Perspectives [in Gemany and in Other Countries of the EEA]*. Report prepared by Institute for Information Economics, commissioned and published by EC, DG XIII/E (October 1997)
- EC (1997e) *'The Content Challenge: Electronic Publishing and the New Content Industries'*. Research report by Techno-Z FH, commissioned and published by EC, DG XIII/E (Oct 1997)
- EC (1997f) *The European Film Industry under Analysis; 2nd Information Report 1997*. Brussels: EC, DGX/C. --[WWW doc: /print ver in 'Key EU A-V docs ' file/ H as C:\PE\Eur/ECFilm97']
- EC (1997g) *Second Report on the Appln of the Directive .. 'TV Without Frontiers'* COM(97) 523.Final.
- EC (1998a) *The Future of Content: Discussions on the Future of European Electronic Publishing*. Research report prepared by TechServ, commissioned and published by EC, DG XIII/E
- EC (1998b) *'Trading Cultural Assets: The European Commission at Milia 1998'*. [WWW2.echo.lu/milia98] Prep. for the EC by Cambridge Management Group.
- EC (European Commission) (2000a) *'Five Year Assessment Report Related to the Specific Programme: User-Friendly Information Society, 1995-99'*, Brussels: EC Accessed from EC website, 13 Dec. 2002; [FIL 'EU-InfoSocProg95-99-Assess...' FIL].
- EC (2000b) *'eEurope, An Information Society for All: Communication on a Commission Initiative for the Special European Council of Lisbon'*, 23 and 24 March, 2000. EC (2002a) *'Science, Technology and Innovation Key Figures, 2002: Towards a European Research Area'*. Brussels: EC Research Directorate General . [FIL 'EU-STI-KeyData02' FIL]
- EC (2002b) *'eEurope 2005: An Information Society for All: An Action Plan to be presented in view of the Seville European Council'*, Brussels: CEC COM(2002) 263 Final. 21/22 June, 2002. [FIL 'EU02-eEurope2005' FIL]
- EC (2002c) *'Towards a knowledge-based eEurope: The European Union and the Information Society'*, [EC, DG for Press and Communication; DL from website, Nov. 2002] [FIL 'eEurope-State-Oct02' FIL]
- EC (2002) *'eEurope Benchmarking Report'*, [COM(2002)62 Final] [PPh FIL "eEur-BenchM-RepFeb02"]
- EC (2003) *'Electronic Communications: the road to the knowledge economy. Communication*

- *from the commission to the council, the European parliament, the European economic and social committee and the committee of the regions*. Brussels : Commission of the European Communities.
- Freeman, C (2001) ‘A Hard Landing for the ‘New Economy’ ? : IT & the US national system of innovation’, in ‘*Structural Change & Econ Dynamics*’, 12 : 115—139. [PPH “Freeman-01A”]
- Freeman, C. and Louça, F., (2001) ‘*As Time Goes By: From the Industrial Revolutions to the Information Revolution*’, Oxford University Press, Oxford. [PP H]..
- Gandy, Oscar (2002) ‘The Real Digital Divide: Consumers Vs Citizens’, Chap. 26 in Lievrouw, L & S. Livingstone (eds) ‘*Handbook of New Media*’, pp. 448—460..
- Ganley, Gladys (1996) *Unglued Empire: The Soviet Experience with Communications Technologies* -
- Garnham, N (1994) “Whatever Happened to the Information Society?”. In Mansell, R (ed) (1994) *Management of IC Ts: Emerging Patterns of Control*. London
- Gilder, George (1989) ‘*Microcosm: The Quantum Revolution n Economics and Technology*’, New York: Simon and Schuster.
- IT Advisory Panel (1982) *Making A Business of Info* London: HMSO // Machlup, Fritz (var)
- Hall, Peter and Paschal Preston, (1988) ‘*The Carrier Wave: New Information Technology & the Geography of Innovation*. London: Unwin Hyman.
- Heap, N, R Thomas et al (eds) (1995) “*Info Technology & Society: A Reader*” . Sage
- Kintz, Linda (2002) ‘Performing Virtual Whiteness: George Gilder’s Techno-Theocracy’, in ‘*Cultural Studies*, 16(5) 735—773.
- Kubicek, H & R Williams (eds) (1997) *The Social Shaping of the Info Superhighway: European & American Roads to the Info Society*_ London & New York : St Martins Press
- van Langenhove, Luk (2001) ‘Rethinking the Social Sciences: initiatives from multilateral organisations’. In Verlaeckt, Koen & Virginia Vitorino (eds.) *Unity and diversity: the contribution of the social sciences and the humanities to the European Research Area . Proceedings of the 2001 Belgian EU Presidency research conference, Bruges, October 29-30, 2001*. EC: DG Research. [pp. 22-27]. [“Soc-Sci-&-ERA-Euconf01” FIL]
- Mansell, R (ed) (1994) *Management of Information & Comm. Technologies: Emerging Patterns of Control*
- Mansell, Robin & Silverstone, Roger (eds) (1996) *Communication by Design*_Oxford UnPr.

- Masuda, Y (1980) *Managing in the Info Society: Releasing Synergy Japanese Style* Blackwell
- Masuda, Yoneji (1982) 'Vision of the Global Information Society', in Bannon, L et al (eds.) *Information Technology: Impact on the Way of Life*, Dublin:Tycooley International, pp.55-59
- Mills, C Wright (1956a) '*White Collar: The American Middle Classes*'. New York: Oxford Univ Pres
- Poster, Mark (1990) *The Mode of Information: Poststructuralism & Social Context*. Cambridge: Polity
- Preston, Paschal (2000) Guest Editor, special themed section on Digital Media 'Content' Matters. *New Media & Society* journal, Vol. 2, No. 3.
- Preston, Paschal (2001) *Reshaping Communications: Technology, Information & Social Change*, Chs.2--6
- Preston, Paschal (2002) 'The Diverted "Coming" of the Information Society', paper presented at EMTEL-2 workshop, Seville, March 2002.
- Preston, Paschal (2003) 'The European Union's ICT Policies : Neglected Social and Cultural Dimensions'. Chapter in Servaes, J (Ed.) (due Sept. 2003) '*The European Information Society*', Cresskill, NJ: Hampton Press.
- Salvaggio JL (1989) *The Information Society: Econ, Social & Structural Issues*
- Schement, Jorge R & Curtis, Terry (1995) *Tensions & Tendencies of the Info Age*. Transactions
- Schiller, Herbert I (1996) *Information Inequality:Deepening Social Crisis in America*. New York: Routledge
- Silverstone, Roger (June, 2003) *Media and Technology in the Everyday Life of European Societies*. Draft EMTEL Final Deliverable. [June 2003]
- Slack J & Fejes F eds.(1987) *The Ideology of the Info Society*
- Splichal, Slavo, Calabrese, A & Sparks, C (eds) 1994) *Info Society & Civil Society: Contemporary Perspectives on the Changing World Order*. West Lafayette, Indiana: Purdue Univ. Press
- Verlaeckt, Koen & Virginia Vitorino (eds.) *Unity and diversity:the contribution of the social sciences and the humanities to the European Research Area . Proceedings of the 2001 Belgian EU Presidency research conference, Bruges, October 29-30, 2001*. EC: DG Research.]. ["Soc-Sci-&-ERA-Euconf01" FIL]
- Webster, Frank (1995) *Theories of the Information Society*, London: Routledge.

Appendix 1: EMTEL Deliverables

Final Deliverables

- Brants, K. and Frissen, V. (2003) 'Inclusion and Exclusion in the Information Society', University of Amsterdam (ASCoR) and TNO Strategy, Technology and Policy.
- Pichault, F. and Durieux, D. (2003) 'The Information Society in Europe: Methods and Methodologies', LENTIC, University of Liege and ASCoR, University of Amsterdam.
- Preston, P. (2003) 'ICTs in Everyday Life: Public Policy Implications for Europe's Way to the Information Society'.
- Punie, Y., Bogdanowicz, M., Berg, Anne-Jorunn., Pauwels C. and Burgelman, J-C. 'Living and Working in the Information Society: Quality of Life in a digital world', IPTS-JRC, European Commission, Sevilla; Centre for Technology & Society, Norwegian University of Science and Technology, Trondheim; HARTMANN, 2003, Free University of Brussels.
- Silverstone, R. (2003) 'Media and Technology in the Everyday Life of European Societies', [Media@lse](#), London School of Economics and Political Science.

Key Deliverables

- Berker, T. (2003) 'Boundaries in a space of flows: the case of migrant researchers' use of ICTs', NTNU, University of Trondheim.
- Cammaerts, B. and Van Audenhove, L. (2003) 'ICT usage among transnational social movements in the networked society', ASCoR/TNO, University of Amsterdam.
- Durieux, D. (2003) 'ICT and social inclusion in the everyday life of less abled people', LENTIC, University of Liege and ASCoR, University of Amsterdam.
- Georgiou, M. (2003) 'Mapping diasporic media across the EU; addressing cultural exclusion', [Media@lse](#), London School of Economics and Political Science.
- Hartmann, M. (2003) 'The Web Generation: the (de)construction of users, morals and consumption', SMIT-VUB, Free University of Brussels.
- Punie, Y. (2003) 'A social and technological view of Ambient Intelligence in everyday life', IPTS (JCR-EC), Seville.
- Ward, K. (2003) 'An ethnographic study of internet consumption in Ireland: between domesticity and public participation', COMTEC, Dublin City University.