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Research and interdisciplinary evaluation on the information society : networks,uses and roles of the State : third annual report : 1999 : interuniversity poles of attraction : phase IV

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THIRD ANNUAL REPORT : 1999
Interuniversity Poles of Attraction (I.P.A.)
Phase IV

**"Research and Interdisciplinary Evaluation
on the Information Society :
Networks, Uses and Roles of the State"**

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1. Staff

The date of the beginning of a contract is given below only if it is different from the date of the beginning of the IPA.

1.1. CITA /CRID

1.1.1. Promoter/Coordinator

Yves POULLET

Lawyer (Ph.D.)

1.1.2. Personnel on IPA (Interuniversity Poles of Attraction) contracts

Name	Background	Percentage on IPA
Paul BELLEFLAMME	Economist (Ph.D.)	100 % until 8/99
Marie d'UDEKEM-GEVERS	Computer scientist - Biologist (Ph.D.) - Anthropologist	50 % until 8/99
Tanguy EWBANK	Economist	50 % since 9/99
Laurent HENIN	History and DGTIC Degree	100 % since 9/99
Axel LEFEBVRE	Lawyer	50 % since 1/98
Robert QUECK	Lawyer	100 % since 1/99

1.1.3. Personnel being paid on other contracts but working within the IPA-network

Name	Background
Jacques BERLEUR	Civil Engineer - 'Meta - computer scientist', Philosopher Theologian
Jean-Marie CHEFFERT	Economist (Ph.D.)
Christine Danneel	Secretary
Dominique DIENG	Lawyer and marketing manager
Jean-Marc DINANT	Computer scientist
Claire LOBET-MARIS	Sociologist (Ph.D.)
Sophie LOUVEAUX	Lawyer
Laura OGER	Secretary
Laetitia ROLIN	Lawyer
Béatrice van BASTELAER	Economist

1.2. LENTIC

1.2.1. Promoter

François PICHAULT

Sociologist (Ph.D.)

1.2.2. Personnel on IPA contracts

Name	Background	Percentage on IPA
Marc MINON	Economist	50% 1/1-30/6/99 100% 1/7/99-31/12/99
Dominique GILLEROT	Business management specialist	50% 1/1/99-31/10/99 100% 1/11/99-31/12/99

1.2.3. Personnel being paid on other contracts but working within the IPA-network

Name	Background
Linda AGRO	Business management specialist
Giseline RONDEAUX	Sociologist

1.3. SMIT

1.3.1. Promoter

Jean-Claude BURGELMAN

Communication scientist (Ph.D.)

1.3.2. Personnel on IPA contracts

Name	Background	Percentage on IPA
Bart CAMMAERTS	Political scientist	100 % since 15/5/97
Pascal VERHOEST	Communication scientist (Ph.D.)	10 % since 1/1/97

1.3.3. Personnel being paid on other contracts but working within the IPA-network

Name	Background
Franck NEUCKENS	Communication scientist
Gert NULENS	Communication scientist
Carolien PAUWELS	Communication scientist (Ph.D.)
Jo PIERSON	Communication scientist
Yves PUNIE	Communication scientist
Leo van AUDENHOVE	Communication scientist

2. Summary of the research

2.1. Reminder of the project goals

Based on a tradition of co-operation between the three parties involved (CITA-CRID, LENTIC and SMIT), the project aims to set up a pole of research and interdisciplinary assessment on the development of the Information Society, and in particular information superhighways in Belgium, and to increase basic knowledge about the impacts of information technology on society. Based on both conceptual studies and empirical analysis, this pole is meant to contribute to the definition of sustainable development policies of the Belgian Information Society, made possible through intensive work on the enhancement of its results.

The research is structured around three main axes, each one including a conceptual, an empirical and an evaluative/prospective dimension, which can be understood in the light of the application and development of the methodological results already acquired in Technology Assessment. Here follows a definition of these dimensions for each of the three axes.

Axis 1. Economy of innovation and development of networks

The first work axis deals with the identification of development scenarios for communication networks of the future. Its conceptual dimension aims at setting up an analytical framework enabling the study of the different existing technical solutions for communication networks. This task starts from an analysis of the interactions between and the strategies of the actors on the markets for telecommunications and information and communication technologies (ICT); the observations need then to be confronted with economic theories related to innovation, investment, standardisation and industrial organisation. The empirical dimension consists in drawing up a map of the actors, undertaking detailed analysis of their interests, of the means used by them, and of the strategies of alliance and conflict in which they engage. Finally, the evaluative/prospective dimension aims at establishing and assessing different existing scenarios, with special attention being brought to the interests and controversies at stake.

Axis 2. Dynamics of uses and logics of appropriation

The objective of the second axis is twofold: there is, first, the need to understand more deeply how ICT are used in their social, cultural and organisational contexts; then, such better understanding must lead to the identification of the conditions under which the demand for innovative services may arise and develop in the Information Society. In the conceptual dimension, the associated teams take advantage of their previous work and set up a common framework to understand the dynamics behind the usage of ICT, through the analysis of social appropriation behaviour, demand formation, and social as well as cultural transformations. The empirical dimension deals with the observation of some communities of users (or creators) of networks (or of communication services) which serve as prototypes for the communication systems of the future (Internet, inter-organisational communication systems, etc.). Finally, the evaluative/prospective dimension implies a definition of relevant action schemes in the field of formation (about new cognitive models, for instance), in the conduct of social experiments and in regulation. This dimension also consists in defining the role of the State and its expected actions concerning the promotion and regulation of innovating uses.

Axis 3. Management of the public/general interest and State intervention in the Information Society

The transformation of society into an information – and thus knowledge based – society prompts a multitude of questions hitherto unanswered. The third axis has the ambition to answer at least some of those questions through fundamental scientific research; that is, the axis focuses on the role of the state in the development towards an information society and its role as protector of the ‘public interest’. The conceptual dimension aims at clarifying the current debate on the "public service" notion through work on the socio-historical evolution of the public/general interest notion, on the role of the State, and on the ethical foundations capable of taking into account cultural differences and assisting regulatory authorities. The empirical dimension implies an analysis and comparison of various existing approaches, both at the level of defining public/general interest and at the level of its subsidisation, as well as that of the regulatory role granted to the States. Finally, the evaluative/prospective dimension seeks to determine the economic feasibility and social relevance of the different approaches to the public/general interest standard and propose a novel framework for State intervention in the Information Society. This raises the issue of the relationship between self-regulation and the ethical considerations regarding public/general interest regulation in the Information Society.

2.2. Reminder of the research performed in 1998

Most of the research performed in 1998 with respect to the three axes was a deepening of the theoretical insights and a refinement of the analytical concepts. Important empirical work has also been done in axis 1 complementing the theoretical analysis on digital convergence and in axis 2 related to the appropriation processes of ICT in public administrations and on digital cities. Moreover, the three axes have contributed to feed the observation of the Belgian and international telecommunications market.

This research has been performed through extensive contacts between the associated research centers, either on an individual basis, either by the organisation of scientific closed workshops. These latter aimed at fostering global discussion around the methodological, theoretical and empirical papers that were presented at these occasions, in order to help defining further directions for the different researches undertaken.

An important effort has been made for the dissemination of the results of the common research lead by the associated centers by the organisation of 3 open workshops :

- Information Society and Employment
- Information Society, Administration and Citizen
- Paving the way for a New Public Telecommunication Policy

2.3. Overview of the research performed in 1999

Before giving an overview of the research performed in 1999 pertaining to each work axis, it is worth to remind of some points related to the organisation of the research, and thus of the presentation of the report. The distinction between the three axes is mostly drawn for the sake of the exposition. Because of the very interdisciplinary and global nature of the research, there are a number of overlapping issues from one axis to the other. Though specialised in a single work axis, the majority of the staff of the three research centres takes an active part in the common reflection about all three axes. Note in this respect that two main issues are on the global agenda of the whole IPA network: (i) the effects of the emergent information society on employment, and (ii) the close observation of the international and Belgian telecom markets.

2.3.1. Axis 1 Economy of innovation and development of networks

The main research project of axis 1 for 1999 was the continuation of what had been started with respect to digital convergence in services. This project contained both a theoretical and an empirical part:

the theoretical part is a continuation of the analysis of the microeconomic implications of digital convergence, by comparing different institutional arrangements for marketing new convergent goods.

the empirical side concerns the observation of the impact of the development of electronic commerce on the publishing sector.

On the *theoretical side*, Paul Belleflamme (CITA) in collaboration with LENTIC tried to shed some light on the factors that potentially favor –or discourage- the creation of "convergent" goods or services. The different research questions that have been addressed in this context are based on the following assumption: one critical factor for service convergence to take place is the creation of vertical coalitions enabling design of plug and play standards, allowing goods from different industries to be easily combined and to market new convergent goods. The analysis focused on the effects of product substitutability, of horizontal competition and on various institutional arrangements on the introduction of convergent goods.

On the *empirical side*, Marc Minon and Dominique Gillerot (LENTIC), in collaboration with CITA, analysed the impact of the rise of electronic commerce practices on the publishing sector. For several reasons (in detail outlined in point 3.1.2.) this sector seemed to constitute an interesting laboratory for investigation on how new goods and services are created and through which form of collaboration between firms they are produced and marketed, thus complementing the findings of the modelling framework developed.

Indeed, the modelling work performed, based on the theoretical appraisal of factors that may encourage or on the contrary discourage development of convergent goods or services, shows the relevance and the limitations of different strands of the industrial organisation literature. Considering the Internet and the development of electronic commerce as the most visible development of what may be understood under digital convergence (in infrastructure and services) and being confronted to the very early stage of development of this phenomena and

thus having few analysis tools available, it seemed judicious to refine the first modelling efforts with empirical observations, mainly lead by LENTIC.

In a more general way, the study aimed at verifying the postulates often made concerning the emergence of the "*new economy*". Indeed, the question is whether this is a new ideological construction which barely hides the fact that practices of actors present on the net mostly come from economic and social logic already describes or that is possible to analyze by means of existing theoretical tools; or, on the contrary, whether these are practices really so specific that they call for the development of new analytical tools and new concepts ? Further research will try to formalise and widen the analysis of the publishing sector in order to tend to describe a framework for the understanding of the internet economics in general.

Finally, the topic on "information Society and Employment" is further explored through the research initiated end of 1998 concerning the evolution of the specific jobs related to ICT, the so-called "Information technicians" professionals. In 1999, this research has been focused on empirical observations in order to understand the strategic choices made in relation to the profession, the organisation and its surrounding labour market.

2.3.2. Axis 2. Dynamics of uses and logics of appropriation

In 1997 and 1998, the teams associated in the IPA IV have undertaken research projects along both the theoretical and the empirical dimensions of Axis 2. Furthermore, during 1998, a theoretical approach has been built referring to different models of usage usually mobilised in the social sciences dealing with technological innovation: the *diffusion* model, the *appropriation* model and the *translation* model (see § 3.2.2.).

On this theoretical basis, different studies have been undertaken in 1999 by the members of the IPA in various fields of interests : (i) the study of the appropriation processes of an information system in organisations from profit and non-profit sectors; (ii) the analysis of the important role of ICT in the improvement of the functioning of local and non-local public administrations; (iii) the growing importance of "digital cities"; (iv) the introduction of ICT in the Education sphere.

(i) the study of the appropriation processes of an information system in organisations from profit and non-profit sectors

Interorganisational use of groupware technologies within the industry

Following a research carried out in 1998 aiming at identifying the conditions that may influence the introduction and the use of groupware tools in the industry, IPA members have led in 1999 a project in a company of the industry sector in order to study the appropriation processes of a system of shared information. Three categories of variables have been observed : the adoption variables, the variables of the organisational context and the variables of conduct.

Social dialog within network organisations

Researchers pursued in 1999 the project led in 1998 about the understanding of the socio-organisational stakes involved by the intensive use of ICT in the new modalities of inter-company co-operation (see second IPA annual report). In 1999, a training module developed

in the form of a game and aiming at preparing workers to operate in the new organisational environments and to help social partners to initiate new modalities for social dialogue has been developed by IPA members.

(ii) the analysis of the important role of ICT in the improvement of the functioning of local and non-local public administrations

Social uses of interorganisational communication systems within Belgian federal administrations

In the mark of a partnership which combines technical, organisational and legal expertise, the project aims at analysing the applications developed in the federal administrations, their constraints, their needs and their priorities. Based on this analysis, the input of this project is the formulation of recommendations in terms of improvement in the telematic exchange of data, specifically centred on interdepartmental links.

Innovation in service delivery in public administration : the One Stop Government concept

This research comes within the framework of a large European survey carried out by the COST A 14 network on the majors *One-Stop Government* initiatives developed in 11 countries. IAP members were responsible for the Belgian part of the survey. The project pursues two main purposes : the first is to realise a first typology of the various approaches to OSG delivery in Europe. The second is to identify factors that influence the diffusion of these types of delivery services in public administrations.

Innovation in policy of information diffusion in the public administration

The purpose of this research is to analyse the strategy and policy applied by the Federal Ministry of Economy in the public diffusion of information of public interest. Several issues have been pointed out in the case analysis. On each of them, researchers have adopted a methodology of constructive technology assessment, gathering experts from various spheres in order to develop a consensus about the solutions that could be adopted and implemented. Researchers have elaborated a Vade-Mecum so as to transfer the developed knowledge towards other Ministerial departments.

Methodology of users involvement in the development of ICT applications in the non-profit sector

The objective of this project is to develop a user guide in order to support user's involvement in the mark of telematics applications development in the non-profit sector. On the basis of the 10 case studies realised in 1998 (see second IPA annual report), the user's guide was achieved in 1999.

(iii) the growing importance of "digital cities"

Improving the relation with the citizen using electronic services ("Digital Cities")

The research about the digital cities was pursued in 1999. IPA members have mainly took an interest in three issues. First, they focused on the question of the models of development. Three main models have been analysed regarding the way actors of a project manage technical, managerial or social uncertainties : the regulation or control model, the experimentation, adaptive or flexible one and the laissez-faire one. Secondly, a qualitative study surveying official and non-official Web sites from about 200 cities from the French-speaking part of Belgium was carried out. Finally, a Vade-Mecum describing the main steps to follow when creating a digital city was realised.

(iv) the introduction of ICT in the Education sphere

Multimedia in the service of Education

This research aims at collecting relevant information in order to elaborate useful guidelines to develop educational products and services. The information was collected on the basis of a survey of teachers' needs and expectations and on current uses of ICT in primary and secondary schools, and completed by the bench marking of some interesting European and North-American successful experiences.

These studies will be the basis for further conceptual work, and will enable IPA members to deepen their understanding of the way information and communication technologies are used in their social, cultural and organisational contexts, and then to identify the conditions under which the demand for innovative services may develop in the Information Society. They will notably lead to the organisation of a seminar devoted to the use of ICT within the administration in spring 2000.

2.3.3. Axis 3. Management of the public/general interest and State intervention in the Information Society

The transformation of society into an information—and thus knowledge based—society prompts a multitude of questions. This UIAP/PAI project has the ambition to answer at least some of those questions through fundamental scientific research. This third axis focuses on the role of the state in the development towards an information society and its role as protector of the 'public interest'.

In 1999 three more comprehensive lines of research were drawn up. The third line provides the input for the two others ;

- The influence of the information society on the state
- The influence of the state on the information society
- Observation of the Belgian, European and international telecommunications market and regulatory framework

These categories express the dynamic relationship that exists between the state on the one hand and the information society on the other.

The first line of research entails the influence that the information society and its potentials has on the nature of the state and its functioning. In this regard two aspects have been analysed in the previous years. The first aspect refers to the consequences for democracy. The second one highlights the consequences for the nation/welfare state. Regarding the welfare state the focus will shift from policy convergence's towards policy divergences. Next year these two aspects will be also be complemented by a third aspect namely the implications for public intervention of electronic commerce in culture, media and education.

The second line of research entails the influence of the state on the information society and has been placed in the context of the classic roles of the state; to stimulate, to produce and to regulate. The influence of the state on the information society has been analysed in two ways; first of all by examining state action regarding the access & privacy - issues and secondly by examining the modes and concepts of (self-)regulation. These efforts will be continued in the year to come.

The third line of research could be defined as the observation of the Belgian, European and international telecommunications market and regulatory framework. The observation of the evolution of both, the market and the existing (and emerging) regulatory framework is in this context essential and provides basic input for all the analysis undertaken in Axis 3 and constitutes therefore day to day business for every member of the IUAP/PAI team. Against this background, certain aspects will nevertheless be highlighted hereafter. In this context the IUAP/PAI team focussed on; the 1999 review of the regulatory framework for Electronic Communications infrastructures and associated services, evolutions concerning universal service, the dominant position of the incumbent operator, rising consumer complaints and high tariffs for residential users. This observation will be continued in 2000.

3. Description of the work performed in 1999

This section starts with a detailed description of the research undertaken under the three work axes. For each axis, the global evolution of the project is first recalled; then, the main results obtained during the year 1999 are presented; finally, work in progress and directions for future research are delineated.

3.1. Axis 1 : Economy of innovation and developments of networks

3.1.1. General evolution of the project

The first work axis deals with the identification of development scenari for communication networks of the future. As scheduled in the initial proposal, this work axis has been divided into three major dimensions.

The first dimension of the work is of a theoretical and methodological nature. The aim is to finalise an analytical framework enabling the study of the different existing technical solutions for communication networks.

The second dimension is empirical and consists in drawing up a map of the actors, undertaking detailed analysis of their interests, of the means used by them, and of the strategies of alliance and conflict in which they engage.

The third dimension, implying assessment and prospective considerations, aims at establishing and assessing different existing scenarios, with special attention being brought to the interests and controversies at stake.

Most of the work done during 1997 has concerned the first dimension of the project; one has also started to tackle the second dimension. In particular, the three associated centres have mainly focused on the scientific representation of a communication network. Through a survey of different strands of the economic literature, adequate theoretical tools have been identified and, in the light of an empirical description of the main actual trends on the scene of information and communication technologies (ICT), a list of lines of future research was drawn up.

In 1998 the associated centres decided to focus the research for Axis 1 mainly around three main projects:

- the first project was the organisation of an open workshop about the evolution of employment in the information society;
- the second, more prospective, project aimed at understanding the economic implications of the process of "digital convergence";
- the third project concerned the empirical description of the telecommunications and ICT markets and the identification of the players' strategies and of the interactions between them; since this task overlaps with the work of the other two axes, it was decided that the whole network would perform it transversely.

The main research project for 1999 was the continuation of what had been started with respect to digital convergence in services. This project contained both a theoretical and an empirical part:

- the theoretical part is a continuation of the analysis of the microeconomic implications of digital convergence, by comparing different institutional arrangements for marketing new convergent goods.
- the empirical side concerns the observation of the impact of the development of electronic commerce on the publishing sector. It analyses on how the Internet encourages new goods and services development, and generates new relationships between the economic actors. The aim of the study is to illustrate the theoretical findings as well as to assess the different postulates that are put forward today as basis of the "new economy".

We now review in depth these two issues, as well as other research related to Axis 1 (Section 3.1.2). The forecasts for next year are delineated in Section 3.1.3.

3.1.2. Work performed in 1999

3.1.2.1. The micro-economic implications of digital convergence in services

The main research performed in 1999 is the continuation of what has been started since 1997 with respect to the analysis of digital convergence in services. It concern both a theoretical and an empirical approach.

On the *theoretical side*, Paul Belleflamme has effectively continued his analysis on the micro-economic implications of digital convergence.

The first step has been a description of the two different trends that are embodied by digital convergence; that is at infrastructure level, the ability of different network platforms to carry essentially similar kinds of services and, at the service level, the coming together of consumer devices such as telephone, television and personal computer.

Further analysis tries to shed some light on the factors that potentially favor –or discourage– the creation of "convergent" goods or services. As very few theoretical contributions in the economic literature (to the best of our knowledge) has been inspired by this issue, we try to pave the way for a rigorous economic analysis of service convergence.

The different research questions that have been addressed in this context are based on the following assumption: one critical factor for service convergence to take place is the creation of vertical coalition enabling design of plug and play standards, allowing goods from different industries to be easily combined and to market new convergent goods.

The theoretical appraisal of the issue should combine three different strands of the industrial organisation literature:

- The endogenous formation of coalitions
- The economics of compatibility and standardisation
- The "mix and match" literature

After having identified the relevance and limitations of using these theoretical approaches, it seemed that the most sensible way to tackle the problem was a "bottom-up" approach. The idea was first to identify the incentives to market new convergent goods or services assuming that compatibility is not an issue (the mix and match approach). Then, we questioned the previous assumption and studied the incentives to make convergent goods compatible (both vertically and horizontally). Finally, we extended the possibility of compatibility agreements and analysed the endogenous formation of vertical alliances.

For the sake of addressing one question at the time, the modelling frameworks that were developed in the mark of this analysis focused on the effects of product substitutability, of horizontal competition and of various institutional arrangements on the introduction of convergent goods, putting aside issues related to compatibility or to negotiations between firms belonging to different industries.

Thus, the first task to understand service convergence consisted in the assessment of the incentives for firms belonging to different industries to introduce new convergent goods from scratch, that is, in a world where only "pure" goods are marketed (where "convergent" goods refer to combinations of components produced by different industries, while "pure" goods refer to goods produced within a single industry).

Based on the intuition that new convergent goods are substitutes to existing pure goods, it seems probable that their introduction induces a new source of competition between industries that used to be independent. The additional revenue they represent must therefore be balanced with the reduction of revenue they entail on the pure goods market (cannibalisation phenomenon). Modelling of this issue shows that the degree of horizontal competition (i.e. within an industry) is critical for the balance between the two opposite forces. In particular, it shows that the incentives to introduce new convergent goods increase with the degree of competition on the *pure* goods market, and decrease with the degree of competition on the *convergent* goods market.

When we consider the case of new convergent goods that can be completely produced by a single firm (and not where these goods are the result from the combination of a couple of complementary components produced by different firms, as in previous analysis) but that their production follows some process innovation that requires complementary and specific assets, we tried to analyse the factors contributing to collaboration or competition in R&D and production activities.

Following conclusions may be pointed out:

- None of the options involving uncoordinated R&D activities would ever be chosen either by the firms or by a regulator willing to maximise global welfare.
- When cannibalisation is not too strong, global welfare is maximised, for high R&D costs, when firms form a Research Joint Venture and, for low R&D costs, when they form an independent joint venture.
- When cannibalisation is strong, firms might find it unprofitable to market the new convergent good unless they are allowed to narrowly collaborate with each other; at the

limit, a complete merger will be the only option which the new convergent good will appear.

The latter result is of particular interest for antitrust matters. It implies indeed that in the presence of strong cannibalisation, mergers could be a necessary evil for the socially desirable introduction of new convergent goods. The modelling framework established is however too specific to elaborate on this issue.

This research is in clear connection with the analysis of the Regulatory framework carried out under Axis 3 (see below).

3.1.2.2. Observation of the publishing sector: the implications of the development of electronic commerce

Previous described modelling work, based on the theoretical appraisal of factors that may encourage or on the contrary discourage development of convergent goods or services, shows the relevance and the limitations of different strands of the industrial organisation literature. Considering the Internet and the development of electronic commerce as the most visible development of what may be understood under digital convergence (in infrastructure and services) and being confronted to the very early stage of development of this phenomena and thus having few analysis tools available, it seemed judicious to refine the first modelling efforts with empirical observations, mainly lead by LENTIC. A deductive approach has been chosen starting from the observation of a specific sector, the publishing industry, as it seems for different factors that will be described below, symbolic of what appears to characterize in a certain way the "*new economy*". The aim is to formalise and widen the analysis to the understanding of the Internet economics in general.

Analyzing the impact of the rise of electronic commerce practices, this study constitutes an interesting laboratory for investigation on how new goods and services are created and through which form of collaboration between firms they are produced and marketed.

Based on *empirical* findings, the study aimed at verifying the postulates often made concerning the emergence of the "*new economy*". Indeed, the question is whether this is a new ideological construction which barely hides the fact that practices of actors present on the net mostly come from economic and social logic already describes or that is possible to analyze by means of existing theoretical tools; or, on the contrary, whether these are practices really so specific that they call for the development of new analytical tools and new concepts ? The publishing industry (including literary, press, music and audiovisual publishing) deserves special attention when we are to observe and analyze the behaviour of the actors and the way the market is structured. It is indeed especially concerned by the development of electronic commerce because of the proximity of the targets, the important number of references, the "homogeneous goods" character of the products/services offered and finally because of the fact that they are well adapted to electronic commerce (reduced relation bulk/price or weight/price, goods composed of digital information or which are possible to make digital).

Beyond these specificities, the publishing sector seems to be symbolic of the "*new economy*" for different reasons:

For a long time, the heart of the publishing sector consisted of managing and enhancing the value of a group of immaterial assets. What is, for example, a literary publishing house, if not an "network-enterprise" whose value chain rests on a clever mix of internal and external activities, like that of most of the actors of the "neteconomy" ?

On the other hand, and before anything else, the enterprises in the publishing sector have been characterized by fixed-cost economies, like most of the enterprises present on the net, which allows them to opt for product policies – "versioning" the product in function not of their cost structure but rather in function of the value given to it by the client – price policies or market entry strategies that are, from now on, typical of the immaterial economy.

This makes that the publishing sector makes up a key field of observation for anyone who tries to understand the working of digital markets.

The findings of this observation has the merit of moderating the capacity of the postulates relative to the way the new economy works and to highlight the ambivalent character, in many ways, of the electronic commerce:

The first theory frequently heard or defended is that the development of the Internet will almost mean inexorably the decline of the material economy. Electronic commerce will necessarily end up by disassociating production of physical tangible goods, from exchange operations. In fact, in the publishing sector, electronic commerce is more than a simple development of mail order. In fact, in the field of books – as in all editorial fields: music, audiovisual, video games – at least three levels must be distinguished for analytical purposes:

- Order and pay "on-line" and physical delivery of the product
- Delivery of a dematerialised product or service through the network
- Delivery of a dematerialised product or service through the network and consumption of it on portable terminals (for instance, electronic books)

But, if these three levels need to be intellectually distinguished, in fact, they seem to be difficult to separate. More and more, on line bookstores offer the sale of dematerialized works - which is shown, for example, by the very active sales promotion of products/services tied to electronic books, such as *Barnesandnoble.com* - , or offer to the user the possibility to download parts of the works, contributing to moderate the "experience goods" character of editorial goods and products.

More importantly, the development of the Internet and the progress made in digitalizing encourages the appearance of printing services on request (the printing of a unity or small quantities of works ordered over the net). This formula, put in place by new enterprises specialized in micro-editions as well as by industrial actors linked to diffusion/distribution structures (the *Bookpole* project of Havas) do not only allow the management of the flow tied to the production of works but also limit the costs tied to stocks.

In any case, it would not be very pertinent to estimate that electronic commerce will necessarily mean a reduced importance of material questions. In many cases, on the contrary, passing from mass production to individualized mass production (mass-customizing) means setting up especially sophisticated logistical chains.

A second postulate of the "*neteconomy*" consists in affirming that the development of electronic commerce will open the door to the elimination of a certain number of functions, corresponding in this way to shortening the lines of production-distribution-sales.

Different factors unique to the publishing sector contribute to re-enforce the possibility of "the end of the intermediary":

The high number of intermediaries in the book distribution channels – editors, diffusers/distributors, wholesalers, book-sellers – end up by limiting the profitability of the production/creation activity itself, which is in most cases less than 12% of the total selling price;

In addition, with a few exceptions, the fame of a book and its image – that is the elements which constitute the "brand" in any other economic sector – depends today more on the author than that of the intermediaries: editors and distributors. In such a context, the technical possibility of a tendency to eliminate the could cause the authors to address the end-users directly. Such a hypotheses would mean the development of authors' sites, in a way similar to that observed in the music sector where one sees the development of many artist-performer sites. Editors also may be tempted to shorten the chain.

However, in a rather paradoxical way, in parallel with this tendency, one sees an unprecedented increase in the complexity and a strengthening in the functions of the intermediaries. The case of *00H00.com*, which tried to guarantee all of the publishing functions – (i) choice of texts and their organization in collections, (ii) production (digitizing, set-up, making the interface), (iii) advertising, (iv) management of the profits in sales towards those who have rights – and the commercialization before thinking about specializing in one of these activities, shows, for example, the limits of a model based on total integration of the different functions in only one actor.

In a plan for the "*re-intermediation*", the question is however to know which activities seem to be deciding and which functions will offer little added value, comes more under the heading of "*comodities*". This is especially the question that is posed for the future of the job of selection and the kind of relationship with the end-user.

Is the Internet, as some people say, the ideal expression of perfect competition? The weakness of the entry barriers – almost anyone could become salesman or editor on line tomorrow-, the perfect mobility of the consumers – "*a site is never more than a click away from another*" is a common expression-, the location of information – potentially – perfect, and the absence of geographical barriers are many elements which go in this direction; and the "homogeneous goods" characteristic of books – as well as other published products – re-enforces without doubt the weight of these different factors.

In fact, different studies have shown the efficient characteristic of on line markets. Erik BRYNJOLFSSON and Michael SMITH¹ examining the distance-selling of books over the Internet, have shown that the prices offered by the *e-tailers* are (in the United States) from 9%

¹ E.Brynjolfsson and M.Smith, Frictionless commerce ? A comparison of Internet and Conventional Retailers, MIT Sloan School of Management, May 1999 (<http://ecommerce.mit.edu/papers/friction>)

to 16% lower than those in traditional business, that the costs linked to price changes are much lower, and that the price spread – while not non-existent – is significantly lower on the Internet than in "physical" stores.

A major axis of the *e-tailers'* strategy consists in, after having maximized their market share – by accepting especially high hiring costs - developing customer loyalty by offering their clients value added services: the use of, thanks to "collaborating filters", related marketing techniques whose interest, for the consumer, increases with the frequency of his purchases on the same site; simplification of order-taking for former clients,...

These practices developed by the operators to rebuild new barriers for entry are probably greater in the published products sector which without them, the "homogeneous goods" characteristic of books and the specificity of the network could effectively contribute to making the market too fluid and cause, when it is possible through price fixing, heavy pressure on prices.

Because of its international character, the Internet is, almost by nature, a powerful vector of the internationalization of practices and of the globalization of markets. Particularly in the book sector, traditionally very closed – buying the rights are, for example, generally done by linguistic groups or national markets -, the Internet could also fundamentally upset the competitive landscape.

The Internet allows, in fact, operators to extend without difficulty their customer base beyond national borders, and eventually choose, consequently, hyper-specialization strategies, which would not have been wise in the context of "physical" business. On the other hand, the development of the network eases the arrival of "new entries" and allows the extension of competition to an international scale.

However the internationalization strategies of the e-business actors have their limits, and the postulate of "the end of borders" must be weighed.

The booksellers' or publishers' sites on line cannot easily take advantage of the particularities of each national market. On the contrary, as in the case of the television sector, the global strategies of the operators are thwarted by the specificities of different countries and/or different language groups.

Additionally, as for "on-line bookstores", the internationalization trends are more often rather roundabout: the fact that the demand is massively for texts published in the reader's language, the necessity of enriching the content of the e-business site, and the obligation to deal with local suppliers, encourages the main actors to increase their sales overseas not by directly increasing their export activities, but by developing their idea on different national markets or in different language groups (*Amazon, Barnesandnoble, Fnac, Bol,...*) The objective is to reconcile by this way the large scale effects (recuperation of R&D efforts, use of client data-bases), on one side, and the local establishment (agreements with suppliers, adaptation of the mix, marketing efforts, partnership policies, content production,...).

Given the technical specificity of the network, it is tempting to think that the development of electronic commerce necessarily involves the reversal of the relationship which is established, as in any kind of business, between the client and the supplier.

The role of the intermediary played by the retailer can in fact be guaranteed in a very different way: traditionally, the retailer is mandated by the supplier to expose and offer for sale a selection of products. In the book sector, the practice of "automatic", which implies the automatic delivery of all the new works of a publishing house (or some of them) to bookstores – perfectly explains this way of working.

On the contrary, on the sites of the "new economy", the seller may no longer be the representative of the supplier but the representative of the end-user, who orders him to look for the work that he has chosen from the total offer, or, at least, an important part of the of the publisher's production.

This change from a "*push*" logic -the intermediary pushes the publisher's production – to a "*pull*" logic involves not only a redefinition of the intermediary function; it also induces the reversal of the flow of revenue towards the very center of the channel. While in the "physical" book shop, the retailer buys to sell – it is the bookshop which feeds the treasury of the whole channel of book distribution-, in on-line business, he limits his action to buying that which he has already sold and/or billed.

Between the "push" kind of application and the "pull" kind of application, the limits are not always clear: more and more, it is possible, for example, to manage the transactions and the passage between the two kinds of applications. The offer of access to the Internet, via the *set-top boxes* of digital television, could in this way allow one to direct the consumer attracted by an application of interactive television, towards a Web site which offers a complementary data base.

As may be observed, there are fewer automatic rules in the matter than what may be read in management literature. It is probably the same for which concerns the development of economic models susceptible to establish the growth of on-line activities in the book sector. At least four different models may be observed :

- The sales model (e.g. Amazon.com)
- The database model (generally in the field of juridical and specialized publications) enabling access or consultation to texts, either on a membership basis, either on a pay-per-view basis.
- The portal model (e.g. Encyclopaedia Britannica) having as principal aim to generate traffic so as to generate advertising revenue.
- The agent model (e.g. Evenbetter.com) facilitating the meeting between the offer and demand and financed on commissions on sales generated following its services.

None of these economic models seems to be able to assure alone, and over a long period, the financing of publishing activities on line. Already today, different moves on the on-line market testify of a progressive convergence of these different models.

3.1.3. Forecasts for 2000

3.1.3.1. Analysis framework on the Internet Economy

After having identified through the observation of the publishing industry the different questions related to the impact of the development of electronic commerce in this sector, the work in 2000 will concentrate, based on a deductive approach, to formalise and widen the analysis of the publishing industry to the internet economy as a whole.

In order to cover the different questions induced by the development of the Internet economy, the analysis will proceed in three steps. It seems necessary to analyse how the characteristics of the Internet may modify the firms' behaviours, may affect, in terms of industrial economy, the market structure and may be at the basis of macro-economic and macro-social transformations.

The analysis of the firms' behaviour will try to appreciate how the Internet, after having been developed on a free basis, is based on three different types of economy –the economy of the audience, the economy of sales and the economy of mediation – which, although differentiated, tend to converge.

The study of the market structure requires principally to examine whether the Internet must be perceived as the expression of perfect competition or if, on the contrary, it encourages horizontal concentration and vertical integration moves between actors. Further, the analysis consists in studying how the Internet impulses reorganisation of certain sectors and how, inside those sectors, it brings remodeling of certain functions. Main questions in this field will concern the nature of intermediation and the modification of the relation between producer and consumer.

At the macro-economic level, beyond the assessment of the weight in the global economy of the Internet related activities (as well in value added terms as in jobs counts), the analysis will try to reformulate the classical question of the link between technological innovation, growth and employment, given the development of the Internet.

Progressively, the analysis is widened and will necessarily need to integrate questioning of the impact of the Internet on the economic regulation modes related to anti-trust issues, fiscality,... as well as the question of the adequacy between national/sectoral regulations and the worldwide character of the Internet. This part is immediately related to axis three which is further examined in point 3.3.

The whole development will be formalised in the publication of a book and will make the object of an internal seminar with all the members of the IAP.

3.1.3.2. Analysis of "Information Technicians" professions

In the framework of the analysis of qualifications, LENTIC is also conducting research on the evolution of the specific jobs related to ICT. What is called today, the Information Technicians cover a professional field difficult to define due to its vague and unstable borders.

Based on the findings that the classic theory of professions is incomplete to understand what is at stake today in this professional category of information technicians, the research tries, by using the expertise concept to understand the reasons of their poor professionalisation today. The fact that ICT become a feature of life and the diffusion of the knowledge in a large public is probably one of the important factors to master towards professionalisation. But first, it will be necessary to study the real nature of the work and the modalities of the relation of these professionals with the users, but also the organisational and social frameworks in which those actions take place. This research which has already given rise to an internal seminar in January 1999 is pursued in 2000.

A longitudinal methodology of research has been privileged for this study of the population of the IT's. Forty IT specialists, selected among four organisations differentiated according to various variables of size, type of technology used, HRM policy, ..., are currently followed closely. By means of semi-structured interviews of research, we try to determine the strategic choices posed in relation to the profession, the organisation and its surrounding labour market. It is indeed to take into account these three variables to identify the categories of the expertise and the professional paths which lead to it.

An internal seminar is scheduled in autumn 2000 to discuss the achievements of this research.

3.2. Axis 2: Dynamics of uses and logics of appropriation

3.2.1. General evolution of the project

The objective of the second axis is twofold: there is, first, the need to understand more deeply how information and communication technologies (ICT) are used in their social, cultural and organisational contexts; then, such better understanding must lead to the identification of the conditions under which the demand for innovative services may arise and develop in the Information Society. This objective is pursued along three dimensions.

In the theoretical dimension, the associated teams take advantage of their previous work and set up a common framework to understand the dynamics behind the usage of ICT, through the analysis of social appropriation behaviour, demand formation, and social as well as cultural transformations.

The empirical dimension deals with the observation of some communities of users (or creators) of networks (or of communication services) which serve as prototypes for the communication systems of the future (Internet, inter-organisational communication systems, etc.).

The assessment and prospective dimension implies a definition of relevant action schemes in the field of formation (about new cognitive models, for instance), in the conduct of social experiments and in regulation. This dimension also consists in defining the role of the State and its expected actions concerning the promotion and regulation of innovating uses.

In 1997 and 1998, the teams associated in the IPA IV have undertaken research projects along both the theoretical and the empirical dimension of Axis 2. Furthermore, during 1998, a theoretical approach has been built referring to different models of usage usually mobilised in the social sciences dealing with technological innovation: the *diffusion* model, the *appropriation* model and the *translation* model (see § 3.2.2.).

On this theoretical basis, different studies have been undertaken in 1999 by the members of the IPA in various fields of interests : (i) the study of the appropriation processes of an information system in organisations from profit and non-profit sectors; (ii) the analysis of the important role of ICT in the improvement of the functioning of local and non-local public administrations; (iii) the growing importance of "digital cities"; (iv) the introduction of ICT in the Education sphere.

The work performed along these various research directions is described in the next section (Section 3.2.2); this work is gathered under several main headlines related to specific fields of application. Then, directions for future research are identified in Section 3.2.3.

3.2.2. Work performed in 1999

The theoretical approach which has been progressively built by the IPA members lays on the recourse of three models of understanding ICT usage :

The first one which may be called the diffusionist approach is based on a clear separation between technological innovation and social diffusion. Its main aims are to identify who are the early adopters of a technological innovation, what are their socio-demographic characteristics, and the frequency of use of the systems in order to calculate the rhythm of diffusion and how quickly the critical mass of users can be reached.

The second model called the appropriation model is based on the postulate of the social construction of the technologies. In this model, a special attention is paid to the context of use and the meaning given by the users to the technological innovation. Its main aims are to identify via case studies and field works the social conditions which favour the emergence of certain forms of innovation.

The third model called the translation model views the innovation process as a networking activity. It stresses the role of key players directly or indirectly involved in the innovation process and their capacity of mobilisation. Its main aims are to identify the critical factors leading to an irreversible innovation process.

On the empirical level, the studies undertaken by the UIAP members refer to one or a combination of these paradigms (as indicated in the table below).

	Diffusion	Appropriation	Translation
A. Interorganisational use of groupware technologies within the industry			
B. Social uses of interorganisational communication systems within Belgian federal administrations			
C. Innovation in service delivery in public administration : the One Stop Government concept			
D. Innovation in policy of information diffusion in the public administration			
E. Social dialog within network organisations			
F. Methodology of users involvement in the development of ICT applications in the non-profit sector			
G. Improving the relation with the citizen using electronic services ("Digital Cities")			
H. Multimedia in the service of Education			

These different studies are now briefly presented.

3.2.2.1. Interorganisational use of groupware technologies within the industry

IPA members are interested in the introduction of groupware applications in companies from different economic sectors (automobile industry, electricity, aerospace,...). The objective is to identify the organisational, relational and individual conditions that act upon the introduction and the appropriation of groupware tools.

Following the tasks performed in 1998 (analysis of work environments and information flows, definition of the hypothesis on the communication flows and modes of work that may be concerned by the introduction of groupware applications, identification of the users' expectations, evaluation of the economic impact of the introduction of groupware applications, questioning of the technical innovation processes in the companies...) IPA members carried on with research in this field.

Thus, an important project has been led by IPA in a company of the energy sector in order to study the appropriation processes of a system of shared information. Three main categories of variables have been observed:

- The adoption variables: the statistics of use, the users characteristics and the technology characteristics (diffusion model analysis).
- The variables of the organisational context: the work organisation modes between individuals and working units and the modes of construction of expertise (the appropriation model analysis).
- The variables of conduct: the inventory of controversies, the identification of the agents, the characteristics of the enrolment actions (the translation model analysis).
- The main conclusion which can be formulated through this approach is the following:

- The analysis offers an instant image of the explanatory factors of reversibility and irreversibility of the innovation process initiated, and underlines its systemic character. The analysis shows the important number of variables to take into account and the interdependence between these variables, as well as the ambivalent character of certain variables.

3.2.2.2. Social uses of interorganisational communication systems within Belgian federal administrations

In the mark of a partnership which combines technical, organisational and legal expertise, the project aims at analysing the applications developed in the federal administrations, their constraints, their needs and their priorities. Based on this analysis, the input of this project is the formulation of recommendations in terms of improvement in the telematic exchange of data, specifically centred on interdepartmental links.

Telematics is apprehended at large, integrating at the same time the management of the digitised documents, the infrastructure of the computer networks, the security of the information, as well as the organisational and legal aspects related to these different fields. Each partner, specialised in one of these 5 core subjects, participates to a transversal and multidisciplinary study of the federal administrations. The concrete result of this study is the definition of a common diagnostic identifying which factors favour or impede the use of administrative telematics in the federal services. Based on this diagnostic, it is the intention of the partners to formulate general recommendations, a sort of schedule of conditions that should be useable for any telematics project in a public administration. IPA is in charge to lead an analysis on the organisational aspects of the federal administrations, in order to identify the optimal organisational conditions for the implementation of a telematic network, with the objective of improving the efficiency of the interdepartmental processes. The approach is based on the user-friendliness and the implication of the users.

The methodology adopted concentrates on four points:

- Preliminary organisational diagnostic based on interviews with the key persons and on the analysis of the relevant administrative documents.
- Analysis of the processes of information flow in order to identify the interdepartmental exchanges and to improve them.
- Two case studies in two federal ministries, based on a qualitative approach.
- Elaboration of suggestions to improve the flow of information and the systems essentially centred on the users.

3.2.2.3. Innovation in service delivery in public administration : the One Stop Government concept

The research investment of the IPA network on issues related to innovative use of ICT in the public administration has shaped a specific field of interest and scientific analysis. This field does concern the concept of One Stop Government (OSG). According to BENT,

KERNAGHAN and MARSON² *"The essence of this concept is the bringing together of government services, or information about them, in order to reduce the amount of time and effort citizens must expend to find and obtain the services they need."* (p. 1)

In public administration, the concept of OSG delivery is interpreted very broadly and covers a very wide variety of organisational and technological practices. In the frame of the COST A 14 network, IPA has participated to a large European survey on the major OSG initiatives developed in 11 European countries. IPA was responsible for the Belgian survey. All together, 80 OSG cases have been analysed in a diffusionist perspective. A major purpose of this survey was to provide a first tentative typology of the various approaches to OSG delivery in Europe. The second purpose of this survey was to identify factors (institutional, organisational and legal) that influence the diffusion of these types of delivery service in the public administration.

Based on the analysis of the 80 cases, a first typology has been elaborated regarding the organisational patterns used to manage the coupling between the front office and the back office. This typology identifies three major patterns : the First Stop of Information, the Multiple Services Shop and the Single Window Delivery.

Regarding the valorisation aimed the transfer of expertise, a first international conference has been organised in Bremen (Germany) in October 99. The national reports have been presented and commented in order to find common organisational and technological patterns between the different cases of Single Window Delivery. A member of the IPA network has chaired one of the workshops organised during this conference and devoted to the re-engineering of administrative processes needed by the development of Single Window Delivery platforms. A scientific publication is planned for a near future. This book will gather the 11 national reports and some transversal analyses concerning the major issues related to the organisational and technological implementation of Single Window Delivery Platforms. During this conference, some fruitful contacts have been taken with the other national research teams in order to apply in the IST programme of the 5th Frame Programme of the European Union.

3.2.2.4. Innovation in policy of information diffusion in the public administration

This research has analysed the strategy and policy applied by the Federal Ministry of Economy in the public diffusion of information of public interest. This information does concern different types of indexes calculated by the Department of Economics Analysis of the Ministry on the basis of national surveys about the production prices, the consumption prices, etc.

This empirical "terrain" has been used by the researchers as a demonstrative "field" since it raises typical issues related to information diffusion policy in public administrations. For this reason, an in depth case has been elaborated on the policy and practices applied by the Department. This case has contributed to clarify practical and political issues related to public diffusion of information.

A wide variety of issues has been pointed out in the case analysis :

- the organisational issues regarding the management of the information flow into the Department and between this Department and its information suppliers and clients ;

² BENTS., KERNAGHAN, K. and MARSON D.B., *Innovations and Good Practices in Single Window Service*, Canadian Centre for Management Development, March 1999

- the economic issue regarding the calculus of the informational added value brought by the Department of Analysis and the subsequent tariffication policy ;
- the legal issues regarding the intellectual rights and the responsibility frame than can be applied in this policy of information diffusion ;
- the social issue regarding the social and public impacts this policy can have on the political capabilities of a wide range of citizens and interested agencies.

On each of this issue, the researchers have adopted a methodology of constructive technology assessment gathering experts of the Department, representatives of the groups of interest and researcher in order to develop a consensus about the solutions that could be adopted and implemented. These solutions have been formalised in a Vade-Mecum that aims at transferring the developed knowledge towards other Ministerial departments.

The Vade-Mecum elaborated by the researchers plays an important role in the policy of knowledge valorisation related to this project. The Vade-Mecum, based on the knowledge elaborated in the case, aims at helping any public Department to set up a sustainable policy of information diffusion. This Vade-Mecum is structured on 5 axes :

- Axis 1 : identification of the major key questions to be raised before developing a specific policy of diffusion of information ;
- Axis 2 : a set of pedagogical documents elaborated to give a practical solutions to the major key questions ;
- Axis 3 : a set of methodological advises that should help the Department to lead efficiently its project ;
- Axis 4 : a set of informational sources gathering legal texts and other informational bases that could help the Department in its approach ;
- Axis 5 : a set of useful addresses of agencies to be contacted on specific issues.

3.2.2.5. Social dialog within network organisations

Within the framework of the research carried out into this field (see previous IPA annual reports), IPA members deepened their knowledge in 1999.

Based on the theoretical findings on social dialogue and network organisations, a training module has been developed to anticipate new organisational forms induced by the increased use of ICTs. This module aims at preparing workers to operate in the new organisational environments and to help social partners to initiate new modalities for social dialogue. This training program, developed in the form of a game, is essentially dedicated to individuals responsible of training programmes inside organisations of professional retraining/adaptation, to trade-union representatives and to members of human resources departments of companies confronted with the emergence of these new phenomena. The conception and the realisation of the project has been the result of a close collaboration with the non-profit organisation, Microbus and Archipel, as well as with the European Social Fund.

The methodology used in the creation of this game tried to join the thoughts on the questions at stake for social dialogue induced by the new organisational forms. It is a result of the capitalisation of the scientific literature on this matter: from the initial forms of teleworking to the problematics of virtual organisations, comprising the few working papers trying to put

forward the social impacts of the new organisational forms of work. But this inventory of the literature needed to be completed by empirical evidence: through the collection of empirical data and case studies of companies from different sectors specifically concerned by the studied thematic (call centres, consulting, transports, finance,...), based on a qualitative (semi-structured interviews) approach.

3.2.2.6. Methodology of users involvement in the development of ICT applications in the non-profit sector

As mentioned in the second IPA annual report (see § 3.2.2. for further details), the objective of this project is to develop a user guide in order to support user's involvement in the mark of telematics applications development in the non-profit sector.

Based on the 10 case studies realised in 1998, the analysis of the modalities for implementing and managing the implication of users of user's via the constitution of consortiums and partnerships has given rise to the development of this user's guide as well as the organisation of a colloquium in June 1999.

3.2.2.7. Improving the relation with the citizen using electronic services ("Digital Cities")

In 1999, some members of the IAP network have deepened their knowledge on digital cities in a translation perspective.

In March, an IAP workshop has been organised in collaboration with the University of Maastricht. This workshop focused on the question of the models of development. After an overall presentation of these models, they were applied to the sample of 37 Belgian French-speaking digital cities analysed in 1997. Then a perspective of these models of development in the education field was proposed by the guest researcher to this workshop, Marc van Lieshout, from the University of Maastricht (Faculty of Cultural Studies). These models were then discussed by the IAP members.

The idea of the models of development refers to the way actors of a project manage uncertainties at the technical, management or social levels. Based on some case studies of digital cities, three main models of development have been analysed.

In the first model, the regulation or control model, uncertainties are reduced or controlled through defined choices made by designers at the beginning of the project. These choices concern technical solutions, the content and services provided and some social aspects (like the access and training possibilities). In this model, designers try to isolate the artefact from any disturbance coming from the social reality. The artefact is only confronted to the social reality at the end of the life cycle.

In the second model, the experimentation, flexible or adaptive one, more flexibility is allowed. Designers reduce uncertainties through a progressive social shaping process. Users are involved in the shaping process through experiments. In this context, experiment, which can sometimes have a negative or non-professional connotation, has to be understood in a broad way, close to the idea of adaptation and flexibility. Designers adapt the artefact following suggestions made by users, if there are relevant of course. In this model, designers maybe be seen as the architects of a social reality which is shaped by the users' reactions and which changes constantly.

The last model, the laissez-faire one, corresponds to the 'Internet' culture. Here, there is no separation of roles between designers and users; their roles are merged. There is then no central regulation anymore. The project is shaped and grows richer by everyone's contributions. Regulation in this model is close to self-regulation, to a kind of 'invisible hand' following the fact that users appropriate some developments and reject others. The project is never finished and continues to evolve due to actions and interactions of users.

In April-May 1999, a qualitative study has been conducted on the Walloon digital cities and presented at the second *Rencontre Réelle des Villes Virtuelles* in June 1999 (see below). This study, based on an extensive questionnaire, was sent to 190 cities and municipalities regarding more than 260 web sites. The study surveyed 'official' web sites (http://www.name_of_the_city.be) and non official ones. For the official web sites, the rate of answer was up to 46% while it only reached 13% for the others. The main questions concerned the objectives of the project, the target public, the content, the access and training possibilities provided, the management of the project, the reorganisation of the local administration (if any), the partnership and the assessment made by the actors of the project themselves.

At the same time, the analysis on a sample of 37 digital cities made in the Summer 1997 has been updated and also presented at this June event.

Following the survey as well as the expertise gained by some IAP members on the field and the change of majority at the regional level, some of these members obtained a contract with the Walloon government for the set up of its new policy regarding digital cities. These contracts cover the legal aspects of digital cities (contract already begun with the previous government in collaboration with *l'Union des Villes et des Communes de Wallonie*) and the "management" aspects of the project with the realisation of a vade-mecum describing the main steps that have to be followed when creating a digital city.

Regarding the valorisation of this research, several initiatives have been carried out in 1999. A second *Rencontre Réelle des Villes Virtuelles* was organised in June. Following the perspective begun at the first *Rencontre Réelle des Villes Virtuelles*, the objective of this meeting was to confront the theoretical views of the IAP researchers with the practical points of view of the local government officers or city representatives. In the morning, the results of the exhaustive survey on the Walloon cities as well as the update analysis of the sample were presented together with the current situation in Flanders (by a KUL researcher) and a French perspective (by a representative of the *Observatoire des Télécommunications*). The afternoon was dedicated to three specific subjects : the legal aspects of digital cities, the management aspects and the organisational aspects. These three workshops focused on the problems currently experienced by the Belgian cities. For further details, the minutes of this meeting are available on the web : (<http://www.info.fundp.ac.be/~cita/ville/rr/compte-rendu2.html>)

Besides this meeting, IAP members participated to training sessions (see § 6.3.), to conferences (see § 6.2.) and realised several publications on that subject (see § 5).

3.2.2.8. Multimedia in the service of Education

The research "Multimedia in the service of Education", carried out between November 1998 and July 1999, comes within the scope of the second axis of the IPA program. First because we can draw from it many lessons regarding the way information and communication

technologies (ICT) are used in primary and secondary schools in the French-speaking part of Belgium. Then, because these lessons enlighten us about the conditions under which the demand for new services may develop in the educational sphere.

This research also fits in with the three models of understanding ICT usage :

- It is closely related to the diffusionist approach as it takes an interest in the early adopters of ICT in schools and in their socio-demographic profile ;
- It also resorts to the appropriation model as it underlines the conditions which favour the emergence of the use of information technologies in Education ;
- Finally, it calls for the translation model as it stresses the role of key players in the educational sphere (school headship, Department of Education, Telecommunications operators,) and tries to identify the critical factors leading to the diffusion of ICT in schools.

IAP network members had to collect relevant information in order to elaborate useful guidelines to develop educational products and services. Their research consisted of two parts:

- on the one hand, a survey on teachers' needs and expectations, and on current uses of information and communication technologies in primary and secondary schools in the French-speaking part of Belgium;
- on the other hand, the bench marking of some interesting European and North-American successful experiences.

The main objective of the survey (carried out with teachers from primary and secondary French-speaking schools) was to collect information about the introduction of new information and communication technologies in classrooms. One or several teachers from about fifty schools were interviewed on the basis of a standard questionnaire realised in collaboration with ICT and Education specialists. This questionnaire tackled notably the following topics: successful educational projects already developed, problems encountered during the setting-up of such projects, teachers' needs and expectations, the issue of pupils' and teachers' training, ideas regarding educational uses of ICT, constraints related to school organisation, ...

The second part of this research collected information about successful European and North-American educational uses of information technologies and assessed the conditions under which they could be transposed in primary and secondary schools of the French-speaking part of Belgium. IAP network members were also interested in actions developed to promote the use of information technologies in schools.

Results of this research provided the input for an in-house publication and for a paper published in *Revue Ubiquité* in November 1999.

3.2.3. Forecasts for 2000

3.2.3.1. Quantitative survey on equipment and use of computers by the Belgian households – Use of the non-profit services

In support to the analysis lead in axis 1 around the development of the market of convergent goods which refers to factors encouraging demand formation on the Internet market as well as

stimulating the emergence of initiatives on the supply side, there will be a resumption of the survey that has been lead in 1998 on the use of internet services in Belgium (telephone survey on a sample of the Belgian population ageing from 15 years or more). The survey should evaluate following aspects:

- the number of households having a computer at home and the number of individuals who have access to the internet, either at home, at school or on the working place;
- Evaluation of the number of individuals using electronic commerce sites.

It should also enable the analysis of the socio-demographic profiles of the users and give a good basis to understand the conditions and motivations leading to the use of the network.

3.2.3.2. Specificities of Human resources management in public administration

In 1998, IPA started working on, the AGORA project. It aimed at modernising , enriching and facilitating access to socio-economical informational contents of administrative federal databases and at implementing measures of scientific support for their use on demand of the concerned institutions.

These measures are primarily aiming harmonisation and reprocessing of the data coming from the federal institutions and, to this effect, to provide them with scientific and methodological expertise, to facilitate the effective use of their informational contents, in exchange of the efforts made by the public institutions concerned by making this information available to external users.

In a second part of the research, which will essentially be lead in 2000, IPA will be brought, through the analysis of the personnel database of the public administrations, to assess how networks and data flows, are able to act as a valorisation tool of the human resources management. This research requires a feasibility study for the construction of a datawarehouse, demanding identification of the right data, its availability, its presentation and its utility for human resources management in public administration. This study contributes to the identification of the specificities of human resources management in public administrations.

3.2.3.3. Which public administration in the information society ?

Lentic is organising in close collaboration with the other IAP members a colloquium on Public Administration and the Information Society in Brussels on the 18th and 19th May 2000.

The main purpose of this colloquium is to draw up the assessment of projects and technological applications at the level of public administrations, as well as to think and to debate, through field experiences, about the stakes and the priorities of public administrations regarding to ICTs.

The general orientation of the colloquium is resolutely opened, by gathering both contributors from the academic circle and field actors. The reflection is mainly focused on , preferentially, towards the users and the uses of ICTs within public administrations, as well as on the relations between the users and these administrations.

The different themes that will be discussed are divided into 10 workshops:

Workshop 1. Intermediation and appropriation

- Workshop 2. Specificities of the public sector
- Workshop 3. Organisational impacts (I)
- Workshop 4. IT and environmental policies
- Workshop 5. Virtual cities
- Workshop 6. Organisational conditions of success (I)
- Workshop 7. Organisational impacts (II)
- Workshop 8. Knowledge management
- Workshop 9. Quality of interfaces
- Workshop 10. Organisational conditions of success (II)

3.2.3.4. Innovation in service delivery in public administration : the One Stop Government concept

In the year 2000, the research programme will concern two major issues :

First of all, the researcher will try to stabilise and refine the established typology by a deeper analysis of the organisational and technological coupling between front and back office. Secondly, the researcher will develop some of the Single Window Delivery cases in an appropriation perspective in order to better analyse and understand the dynamics of organisational changes related to these initiatives. The theoretical frame that will be used into this in depth cases analysis will be the structural and informational approach of organisations.

3.2.3.5. Improving the relation with the citizen using electronic services ("Digital Cities")

Regarding the question of the relation between the administration and the citizens at local level, we should distinguish researches meant to develop current knowledge from initiatives of valorisation.

At a theoretical level, the question of the models of development will be deepened and an analysis of the utopian and dystopian discourses regarding the development of ICT and especially regarding digital cities, including the question of the local electronic democracy, will be achieved. In this analysis of discourses, the focus on the user and on the potential uses will be stressed.

At a more practical level, IPA will continue the collaboration with the Walloon government regarding its digital cities policy, mainly with an assessment task on the web sites of the Walloon municipalities and the legal aspects.

On the other hand, different initiatives of valorisation are forecasted in 2000 : publication of a book on digital cities (L'Harmattan, Paris) including four case studies and focused on a social shaping perspective, organisation of a third *Rencontre Réelle des Villes Virtuelles*, probably in September, participation to a session at the 4S/EASST conference in Vienna ('Worlds in Transition: Technoscience, Citizenships and Culture in the 21st Century') in September, participation to the IAP conference on the public administration (Brussels, May 2000), article on the models of development in digital cities to be published for the 10 years of the French *Communications & Stratégies* journal, ...

3.3. Axis 3: Management of the public/general interest and State intervention in the Information Society

3.3.1. General evolution of the project

The transformation of society into an information–and thus knowledge based–society prompts a multitude of questions. This IPA project has the ambition to answer at least some of those questions through fundamental scientific research. This third axis focuses on the role of the state in the development towards an information society and its role as protector of the ‘public interest’.

1997 was set down as an intellectual and conceptual reconnaissance flight, whereas in 1998 and 1999 theoretical insights were refined and analytical concepts deepened. The efforts of last year not only widened the co-operation between the different research centres but also pointed to the need to restructure the third axe in a more coherent way. In the previous years the following 4 main research topics were delimited;

- Macro trends and their implications for telecommunication policy;
- Regulatory frameworks: economic efficiency versus social equity;
- Ethics and self-regulation;
- Observation of the Belgian and international telecommunications market.

As such these topics will remain central in the research efforts of the third axe. However, the work which has been done in 1999 and the forecasts for next year made it necessary to introduce more comprehensive categories. In this sense three lines of research were drawn up, whereby the third line provides the input for the two others ;

- The influence of the information society on the state: democracy & welfare state
- The influence of the state on the information society: access, privacy & regulation
- Observation of the Belgian, European and international telecommunications market and regulatory framework

This expresses the dynamic relationship that exists between the state on the one hand and the information society on the other. It is also noteworthy that besides the theoretical work, empirical studies have been or are on the verge of being initiated.

3.3.2 Work performed in 1999

3.3.2.1 The influence of the information society on the state

A first line of research entails the influence that the information society and it’s potentials has on the nature of the state and its functioning. In this regard two aspects have been analysed in the previous years. The first aspect refers to the consequences for democracy. The second one highlights the consequences for the nation/welfare state and more specific for social rights.

3.3.2.1.1. The concepts of "democracy" and of "democratic State" in the Information Society

Democracy is bound by space-time constraints that leads towards a representative government. Emerging information and communication technologies are likely to revolutionize these constraints. The most ambitious dreams of direct democracy are thus becoming a possibility. Referenda can be organized at a minimum cost to the community, with an extremely small investment of time for voters and as often as necessary, potentially for every piece of legislation. Moreover, these technologies offer communication capabilities that allow a much wider public debate.

Enthusiasm for participatory democracy must nevertheless be tempered by a careful examination of the implications, issues and risks of direct electronic democracy. We must consider three aspects when it comes to the validity of electronic referenda: the deliberation process, means of persuasion, and where political decision are made.

Electronic referenda differ radically from the parliamentary process by their deliberation process. Political deliberation legitimizes political decisions in the same way as the principle of majority rule. An analysis of how this deliberation operates and is conducted, based on the writings of J. Habermas, raises questions about electronic referenda, which lend too much emphasis to the principle of majority rule by simply adding up votes while eroding political deliberation. Deliberation exists but takes place in other forums, involves new stakeholders and follows different rules. These elements must be considered in comparing the democratic validity of electronic referenda to that of the parliamentary process.

In electronic referenda, political debate takes on new forms. Networks offer new opportunities for direct political marketing, which must be examined in light of the basic principles of modern democracy. Traditional means of political persuasion are being revolutionized as the boundary between private and public communication becomes blurred and technologies converge.

3.3.2.1.2. The Welfare State, Policy convergence and Policy divergence

In 1999 the concepts of social citizenship and welfare systems have been explored further by SMIT.

3.3.2.1.2.1. The welfare state as a compromise between social and economic goals

It is important to stress the 'comeback' of the welfare state concept in the socio-political debates throughout Europe. It was not a coincidence that Romano Prodi placed social welfare central in his openingsspeech to the European Parliament; *"A highly developed welfare system is one of the distinctive features of our European societies, and we must preserve it"* (14/09/1999). Furthermore international institutions such as the Worldbank and the OECD have recognised the prime importance of social welfare for economic growth and the crucial role of the state in promoting and balancing both welfare and growth. The economic and political context has of course changed a lot over the last years. In that sense the means to provide for social welfare, to improve the quality of life and promote equity have changed or are changing. This is due to a complex interplay between economic, social, cultural and

political factors such as demographic shifts, budget constraints, privatisation, the introduction of competition, increased (capital)mobility, reorganisation of labour and new modes of (corporate) governance/regulation. These factors have been examined in detail in the following articles of which some have been published and others are in press;

- CAMMAERTS, B.: (1999) 'De rol van de overheid in het communicatiebeleid: van speler naar scheidsrechter ?' published in BODARD, K. (ed): *'Overheid en ICT. Hoe speelt de overheid in op nieuwe ICT? : Een onderzoek van verschillende dimensies die door het Internetfenomeen worden in vraag gesteld'*, Libridis, Gent ;
- BURGELMAN, J.C.: (1999) 'The Employment-map' of Futures Project, IPTS (Institute for Prospective Technological Studies), Seville (co-author) ;
- BURGELMAN, J.C.: (1999) 'Information and Communication Technologies and the Information Society Panel Report', EU, DG JRC, IPTS (Institute for Prospective Technological Studies (Seville), With K. Ducatel, main author, J. Howells, E. Bohlin & M. Ottitsch (IPTS) ;
- CAMMAERTS, B.: (2000) 'Economic and Political Restructuring, Social Citizenship & New Social Rights in the Information Society' in: CAMMAERTS, B. & BURGELMAN, J-C (eds.): *'Beyond Competition: broadening the scope of telecommunication policy'*, VUBpress, Brussel;
- CHEFFERT, J-M.: (2000) ' Universal Service: a Concetual Approach' in CAMMAERTS, B. & BURGELMAN, J-C (eds.): *'Beyond Competition: broadening the scope of telecommunication policy'*, VUBpress, Brussel; and
- VERHOEST, P.: (2000) 'The Myth of Universal Service: Hermeneutic Considerations and Political Recommendations', *Media, Culture and Society*.

3.3.2.1.2.2. Policy convergence

Besides this more general macro-oriented line of research a lot of attention went towards the influence of ICT-services on policy convergence. Not only technology integrates, but policy also requires a multi-disciplinary approach. In the course of this project it has become apparent that information society policies go much further than the traditional policy fields; media policy, telecommunications policy and industrial policy. Information society policy refers also to other policy areas such as; competition policy, social policy, education policy, equal chances, labour policy and fiscal policy. Public authorities should foster the links between the different fields in order to develop a coherent and an effective information society policy.

In this regard a lot of time was spent on editing the book; Cammaerts, B & Burgelman, J-C (eds.): (2000) *'Beyond Competition: broadening the scope of telecommunication policy'*, VUBpress, Brussel. This book brings together contributions by most members of the IPA network as well as internationally renowned scholars. It had to be published end of 1999, but due to publishing delays it has been published march 2000. Included is a paper entitled 'On the Role of government in the Information Society' written jointly by Claire Lobet-Maris (CITA), Beatrice van Bastelaer (CITA) and Bart Cammaerts (SMIT). This book will be widely distributed towards academic partners, private actors and policymakers.

LENTIC & SMIT co-organized and co-chaired the DWTC/SSTC colloquium 'Which future for the cable ?', 10/01/2000. SMIT also presented the final conclusions where policy convergence was an important issue.

SMIT co-organized an IPTS-workshop on convergence and e-commerce in Brussels (6/1999). SMIT was also discussant during the follow-up seminar which was also held in Brussels (1/2000).

3.3.2.1.2.3. Policy divergence

Another aspect examined in many of the above mentioned publications is the shift in the balance between the three classic roles of a state; stimulate, produce and regulate. In recent years we have witnessed a very visible shift from 'producer' towards 'regulator'; whereby services are ceded to a regulated market. This shift amongst others has led to conflicts between the different roles of the state. A common example of such a conflict is that policymakers still need to get used to the fact that public services are embedded in a competitive context. Policies favouring incumbents have to be seen in this context. Another example of such a conflict is the possible clash between social policy (cheap tariffs for schools f.i.) on the one hand and competition policy (lack of choice) on the other. Overcoming these policy divergences will be one of the main challenges for policy in the years to come. That is why it will be examined further in 2000 and onwards.

In the mean time the issue of policy divergence has been boarded extensively in this recent IUAP/PAI-publication; VERHOEST, P. (2000) *'Openbare Telecommunicatie (1798-1998): twee eeuwen politieke economie van het netwerkbeheer in België'*, VUBpress, Brussel.

3.3.2.2 The influence of the state on the information society

The influence of the state on the information society should also be placed in the context of the classic roles of the state; to stimulate, to produce and to regulate. Although the dynamics between the different roles has changed radically the state is still a powerful and above all pivotal actor inbetween citizens and industry. Public authorities shape society and the market despite of anti-state rhetoric. The relationship between information society and the state is however much more dynamic in nature now, then it was a few decades ago. As pointed out above the information society as such also influences the state and the way it operates. Moreover, whereas in the past the state was the only actor in the communication field, it now has to share its power and thus influence with international and market actors. The influence of the state on the information society has been analysed more in detail in two ways; first of all by examining state action regarding the access and privacy - issues and secondly by examining the modes and concepts of regulation.

3.3.2.2.1. Topics of state intervention in the information society : Information Society Policies

In an effort to revalidate the welfare state, to overcome the policy divergences and to acknowledge the policy convergence's SMIT & CRID did further research into the concepts of social citizenship and social rights. The growing importance of ICT's in the economic, social, cultural & political life of people affects their rights as citizens defined in the 'classic' social contract (right to employment, right to equal chances, right to social protection, right to protection against poverty) which dates from the industrial era. On the one hand some classic rights such as full employment have become difficult to guarantee in a post-industrial context whilst on the other hand new needs call for attention. Considering the importance of welfare

for economic growth, but also the necessity to evaluate and revalidate the current welfare state, one could argue for a realistic revision of classic rights and the extension towards new rights. Regarding the latter two 'new' social rights have been examined; the right to access and new rights to protection. Access was examined in relation to infrastructure (consumer-level) and in relation to information - knowledge (citizen-level). Protection on the other hand was examined in relation to anti-trust (consumer-level) and in relation to privacy (citizen-level). This was developed further in the presentation; CAMMAERTS, B.: 'The need for a renewed social contract tuned to the information society'. Discussion paper presented at European Network of Doctoral Studies in Communication and Media, Westminster-London, 29/08 - 03/09/1999.

Access has and will be analysed as a case. Besides that more indepth attention has gone to protection in terms of privacy (see 3.3.2.2.1.2.).

3.3.2.2.1.1 The case of access

Whilst 'new' protection-issues such as privacy is more matter of legal regulation on the one hand and legal enforcement (see a2) on the other, access refers more to sector specific issues, public service guarantees and capabilities. More and more, access to information and information networks is becoming a pre-condition for participation in the economy and in society. If we move towards a world ruled by ubiquitous computing, it will not only have to be accessible everywhere, but above all for everyone. This is crucial not only in a social and democratic sense but also from an economic point of view. However, up until now the distribution of technology and access is uneven, leading towards new dualities. In this regard many authors refer to the emergence of a digital divide. The access-issue has thus been analysed in a socio-political and in the legal sense during the IUAP/PAI-workshop 'The Access to Communication and Information technologies and the Role of the State' organised by B. Cammaerts (SMIT) and R. Queck (CRID) on February 26, 1999 at the VUB. The Workshop was introduced by a short discussion on the concept and different types of access (access to an infrastructure – access to a service – access to a content) as well as on the different providers of these types of access and on the roles of the state (provision – regulation – promotion). The second part of the Workshop presented the European regulation concerning especially one case of access: interconnection. This regulation was discussed with regard to both, sector specific telecommunications regulation³ and competition law⁴ and with regard to the relationship between these two sets of regulation. Finally the access-concept was analysed on three levels;

- _ access to infrastructure (telecom – computers - internet),
- _ access to information - services (public service) &
- _ access to capabilities to manage the information (education – training).

SMIT has started a comparative analysis aiming to examine various types of welfare state regimes in Europe, the way they respond to the structural changes as outlined above and the extend to which they develop policies directed towards the right to access on the 3 different levels. The typology of welfare state regimes as outlined by GÅsta Esping-Andersen⁵ has

³ In particular the interconnection directive.

⁴ Commission Notice on the application of the competition rules to access agreements in the telecommunications sector - Framework, Relevant Markets and Principles, OJ N° C 265/2 22.8.1998.

⁵ Esping-Andersen, G., (1990) *The Three Worlds of Welfare Capitalism*, Polity Press, Cambridge.

proven to be very useful in this context. Esping-Andersen delimits three kinds of welfare regimes, the liberal, the conservative and the social-democratic. A fourth type can be added to this, namely the Latin regime. At this moment research is in the phase of data collection. The results of this comparative analysis will be used in 2000 and onwards to formulate policy-relevant proposals on how access can be guaranteed in a welfare context. It will also result in a paper and publication.

SMIT chaired the chair session "access: issues at stake" at the IDATE's International Conference "A wireless world", in Montpellier, 18-19/11/1999. SMIT also co-edited an issue of Communications & Strategies centred around 'access'; BURGELMAN, J.C., (eds) 'L'accès: enjeux, stratégies et régulation', Communications & Strategies 36, 1999 (together with Jacques Arlandis).

CRID and SMIT have started a thorough conceptual analysis of 'universal service' which can be viewed as a particular way of organising the telecommunication market when taking into account social equity and economic efficiency. The link between such a policy and the competitive context is also analysed. See the publications above and the Workshop described later (in point 3.3.2.3).

3.3.2.2.1.2. The case of privacy

The use of new technologies by private and public operators does create various opportunities to exercise a surveillance of citizens. So, through cookies, certain firms of cybermarketing might develop one to one marketing services and the governmental police or State Security Agencies might follow the multiple traces created by the Internet users in order to detect illegal activities. The development of a surveillance society might affect our liberties.

Jointly with ECLIP activities, Certain CRID researchers (J.M. Dinant, S. Louveaux, Rosa Julia and Y. Pouillet) have developed different studies about the phenomenon.

The first ones concern the problem of the privacy. Privacy might be jeopardized by new activities like cybermarketing. In that context, the main provisions of the two European directives are challenged. A special attention has been devoted to technical possibilities (the Privacy enhancing technologies) in order to limit the risk. In that perspective, P.S.P., encryption techniques, labelling system have been evaluated in order to ensure that these new systems incorporate really the privacy legislative requirements.

The fight against computer crime is also analyzed. New criminal provisions are envisaged in Belgium like in other countries. As member or expert of the Privacy Commission, J-M. Dinant, Y. Pouillet with the assistance of certain VUB researchers (P. de Hert, B. De Schutter) have analyzed these new provisions in order to maintain a right balance between the public interest and the privacy concerns.

Finally, the questions of the limits imposed to the freedom of expression on Internet has been studied jointly by CITA and CRID. The problems about the Internet regulation against illegal and harmful content and about the partition between governmental regulation and selfregulation have been clearly addressed.

On that issue, it has been demonstrated that the role of the State is important in order to impulse a selfregulation broadly discussed by all the interested parties and enacted by them, to ensure that the limits put on the freedom of speech are strictly proportionate with the risks occurred by the Society. The article 14 of the E commerce draft directive which consecrates a system of limited liability has been deeply criticized from this second point of view and procedural solutions have been recommended (See particularly, the Rosa Julia's articles on that subject).

3.3.2.2.2. Roles of the state in the Information Society : the case of regulation

This section deals with the activity of regulation related to the information society. On the one hand the state as a regulator and the different types of regulation are examined. On the other hand the regulatory role of the state is analysed with regard to institutions of self-regulation (eventually legitimised and controlled by the State).

3.3.2.2.2.1. Concepts, types, characteristics of and need(s) for regulation(s) and regulator(s)

The main responsible for the research carried out under this point was/is R. Queck. The main topics addressed were the types of regulations and regulators which are and will be needed and/or best suited for the ruling of the information society and especially its telecommunications sub-sector. The relationship between different types of regulations were analyzed as well as the more general meaning of the concept of regulation as such (in particular in the context of the universal service policy), although the latter with less emphasis in 1999. These basic topics⁶ have, for reason of their interdependence, all (more or less) been addressed in 1999, at least at a first basic level. They will need to be deepened through ongoing research in 2000 (see *infra* 3.3.3. Forecasts) and 2001.

Concerning the scope of research, even if research was concentrated on the telecommunications sector, it also took into account the convergence of the telecommunications, media and information technologies. In this regard research subscribed to an approach which entails the regulation of electronic communications infrastructures, regardless whether they are used for the provision of telecommunications services in a strict sense (e. g. telephony, provision of leased lines,...) or for the conveyance of broadcasting services. This trend will be emphasised in 2000 (see *infra* 3.3.3.2.2.1. Forecasts – scope of analysis).

In 1999 the research was carried out in 3 main parts. The first part adopted an approach in terms of regulations involving the ruling of the telecommunications sector. The two main sets of regulation present today in the telecommunications sector: general competition law and telecommunications sector specific regulation (e.g. harmonisation directives⁷) were compared. As announced in the IUAP/PAI report for the year 1998, the report on the research work carried out by R. Queck in 1997 and 1998 at the University of Münster (FRG), in the context of a European Commission Marie Curie Research Grant (TMR-Programme – contract Nr.

⁶ See also a more complete list in the IUAP/IAP report for 1998.

⁷ For reason of their specific scope, liberalization directives may also be considered as telecommunications sector specific regulation, even if they are adopted on the basis of article 86 § 3 (former article 90 § 3) of the EC Treaty (see J. SCHERER, T. BARTSCH, "Telecommunication Law and Policy of the European Union", *op. cit.*, in particular pt. 1.54, p. 15).

ERBFMB I CT 961106) on the topic of "The Regulation of the Telecommunications Sector in the European Union: between competition law and sector specific regulation"⁸ was finished and sent to the European Commission in March 1999.

This analysis first examined the state of the art with regard to the two sets of regulation envisaged. It then described a number of criteria allowing to compare and differentiate sector specific telecommunications regulation and competition law (e.g. the starting points for regulation, approach adopted,...). Were furthermore discussed specific topics (e.g. licences and access to markets, interconnection, management of scarce resources, universal services,...) with regard to their need for regulation and their need for a specific regulation, either sector specific telecommunications regulation and competition law. It finally analysed possible hierarchy, relationship and ways of co-ordination between the two sets of regulation. In this context special attention was given to the role of article 86(3) (*ex-article* 90(3)) of the EC Treaty used as an in-between of sector specific telecommunications regulation and competition law.

In this context members of the IUAP/PAI team organised jointly with the Centre de Philosophie du Droit (UCL) an advanced (closed) research seminar with European Commissioner Karel van Miert on the specific role of Competition Law in the telecommunications sector, especially with regard to the '1999 Review' (see *infra* 3.3.2.3).

Afterwards the approach was broadened beyond a comparison of sector specific regulation and competition law in order to encompass more general questions such as; "which type(s) of regulation and regulators (if any) will in the middle and long term guarantee the best development of the telecommunications sector ?". A first investigation (needing more thorough analysis and to be lead further in 2000) identified sector specific audiovisual regulation, horizontal general state law (e.g. consumer protection rules, contract law, commercial practices law, town and country planning law,...), self-regulation and even "non-regulation" by pure reliance on market forces. As far as industry self-regulation was concerned, the basic theoretic analysis was done in close co-ordination with research carried out under point 3.3.2.2.2.2.

The second and third part of the research carried out in 1999 shifted from an approach in terms of regulation to an approach in terms of "active and passive subjects" of regulation. This part focussed on the regulator and their counterparts the main addressees of obligations, *i. e.* organisations having significant market power and those enjoying a dominant position.

Thus, the second part of the 1999 research addressed the concept of "Significant Market Power" used by sector specific directives⁹ as the main trigger for obligations imposed under

⁸ See R. Queck, TMR Contract N° ERBFMB I CT961106, The Regulation of the Telecommunications Sector in the European Union: between competition law and sector specific regulation – Intermediate report, Attachment 1: summary of intermediate results arising out of this research, 23.03.1998, 36 p. and R. Queck, TMR Contract N° ERBFMB I CT961106, The Regulation of the Telecommunications Sector in the European Union: between competition law and sector specific regulation – Final report, Attachment 1: summary of results arising out of this research, 30.03.1999, 20 p. The latter report continued the first one.

⁹ Article 2(3) of Council Directive 92/44/EEC of 5 June 1992 on the application of open network provision to leased lines, OJ N° L 165/27, 19.06.1992, as modified by directive 97/51/EC of the European Parliament and of the Council of 6 October 1997 amending Council Directives 90/387/EEC and 92/44/EEC for the purpose of

telecommunications sector specific regulation. This concept was compared to the concept of "Dominant Position" used by competition law. While analysing the origin, evolution and role of the concept, the research addressed in the same time the objectives of sector specific telecommunications regulation and their evolution as well as the type of obligations (and their addressees) needed in order to achieve these objectives. The results of the analysis were published in November 1999¹⁰ (see list of publications).

The third part of research carried out in 1999 focussed on the regulators active in the telecommunications sector (in a broad sense). In this context it is understood that the concept of "regulatory authority" does not mean an institution entrusted with the setting up of the regulatory rules¹¹ (e.g. a Parliament) but one or more body(is) concerned basically with the application of rules and the control of obedience to these rules¹². These tasks may include dispute settlement.

As relevant regulatory authorities may be mentioned the Executives (government and/or specific ministers), sector specific national (telecommunications and audiovisual) regulatory authorities, European and national competition authorities, courts and self-regulation bodies (even if for the latter the limit between rule setting and rule enforcement is particularly tiny). A very first comparison of their respective strong and weak points as well as of the type of issues for which they may be used has been set up. In this regard the analysis of the telecommunications sector specific National Regulatory Authorities (NRA) was deepened,

adaptation to a competitive environment in telecommunications, OJ N° L 295/23, 29.10.1997, ("ONP-Leased Lines Directive 1997").

- Articles 2 (2) and 7 (1) (d) of Directive 97/13/EC of the European Parliament and of the Council of 10 April 1997 on a common framework for general authorisations and individual licences in the field of telecommunications services, OJ N° L 117/15, 07.05.1997 ("Licensing Directive").

- Article 4 (3) of Directive 97/33/EC of the European Parliament and of the Council of 30 June 1997 on Interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP), OJ N° L 199/32, 26.07.1997 ("Interconnection Directive").

- Article 2 (2) (i) of Directive 98/10/EC of the European Parliament and of the Council of 26 February 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment, OJ N° L 101/24, 01.04.1998 ("ONP-Voice Telephony Directive 1998").

¹⁰ R. QUECK, Ph. DEFRAIGNE, "Réflexions sur la notion de 'puissance sur le marché' en droit des télécommunications: concept autonome ou chimère?", in E. MONTERO (dir.), Droit des technologies de l'information – regards prospectifs, Cahiers du CRID n° 16, Bruylant, Bruxelles, 1999, p. 339 – 376.

¹¹ Even if the borderlines between rule setting and rule application may sometimes be blurred, e.g. in the area of the granting of licences.

¹² See for example Article 7 of Commission Directive 90/388/EEC of 28 June 1990 on competition in the markets for telecommunications services (OJ N° L 192/10, 24.07.1990) ("Services Directive") as modified by Article 1, 7 of Commission Directive 96/19/EC of 13 March 1996 amending Commission Directive 90/388/EEC regarding the implementation of full competition in telecommunications markets (OJ N° L 74/13, 22.03.96) ("Full Competition Directive"): "Member States shall ensure that from 1 July 1991 the grant of operating licences, the control of type approval and mandatory specifications, the allocation of frequencies and numbers as well as the surveillance of usage conditions are carried out by a body independent of the telecommunications organisations". See also Article 2, 1, b of the Licensing Directive: "'national regulatory authority' means the body or bodies, legally distinct and functionally independent of the telecommunications organisations, charged by a Member State with the elaboration of, and supervision of compliance with, authorisations". Sometimes the limit might nevertheless become tiny as for example at least the drafting of licences by national regulatory authorities may be considered to some extent as being rule setting. The latter remark may also apply to standard setting.

especially with regard to the scope of their activities, their roles, ways of actions and missions as well as their necessary characteristics.

This part of the research has lead to a presentation on "Telecommunications Sector Specific National Regulatory Authorities: Vestiges of the Past or Key Players for the Future? - Questions and Thoughts for Discussion", and on "Universal service: some observations Relating to Future European Debates", delivered at the Congress marking the 20th anniversary of the CRID (see *infra* 3.3.2.3). Revised versions of the presentations will be published in INFO, Vol. 2, N° 2, April 2000.

3.3.2.2.2.2. Governance and self-regulation

On the other hand Internet governance and the role of self-regulation in this context has been the subject of ongoing consideration.

- Self-regulation: concept, pre-requisites, usefullness and practical examples

In this context has first been analized the content of the codes (which belong to self-regulation), to see what they control or govern. The analysis, conducted by CITA, adopted a method which is often used when analyzing the content of the law: *ratione personae*, *ratione loci* and *ratione materiae*; analysis has thus been conducted according to the grid below. The attention has been also focused on the question of enforcement, sanctions, and procedures. In a first phase, some 50 codes have been analyzed: 30 coming from computing national associations belonging to the International Federation for Information Processing (IFIP) and 20 others more related to the Internet. In a second phase, the analysis was performed on codes of specific Internet Service Providers Associations. As a general conclusion, one may say that even self-regulation, co-regulation sounds today "socially correct" in many circles, it becomes clearer that the general public and the government authorities have to be more stringent towards the content of the codes, and towards the use and practices namely of the ISPs and have to request more than self-protecting statements. The participation of all implied parties, clients and consumers included, would have also to be considered as an obligation.

Ratione personae	Actors present People concerned	
Ratione loci		
Ratione materiae (Topics)		
Enforcement	Sanctions Procedures	
Alia - Miscellaneous		

This research on self-regulation gave rise to an original participation, linking techniques, self-regulating and legal approach, in a series of "rolling workshops" ending in a "round-table" not of panelists but of people having participated in the rolling workshops. This took place during the 5th international conference Human Choice and Computers of IFIP, in Geneva. This experience has now resulted in the publication of a monograph *Ethics and the Governance of the Internet*, published at the IFIP Press in 1999. It has also been presented in different

conferences and circles: UNESCO-InfoEthics Conference, ERIE Conference at the University of Lausanne, IFIP Conference in Stockholm, IFIP General Assembly in Kuala Lumpur, ...

The conceptual considerations will be followed in 2000 by an application of the theoretical grid to practical topics of regulation like access to market, universal service, ... in order to define the type of regulation/regulators appropriate for the organization of these different issues (see below, 3.3.3.2.2).

CRID enlarged the research on self-regulation towards other areas like the E-commerce. In the context of a research done for the Academy of Science¹³ (where CRID, CITA, SMIT and LENTIC were associated), comprehensive study on the value and the limits of the selfregulation has been produced. The various techniques of the selfregulation have been analyzed: so the "labelling" systems, the technical and administrative standardization, the code of conduct. The double meaning interaction between technology and law (the technology on a way to enhance the legal protection, the technology as a way to jeopardize the balances embedded into the legal system) has been enlightened. Finally, some general criteria have been settled out in order to judge the legal validity of the selfregulatory solutions.

This part of the analysis was possible by the fact that the PAI researchers have been involved in a large amount of researches developed by the CRID for the Ministry of Economic Affairs¹⁴, for the European Commission¹⁵ and for private companies.

Finally, certain reflections have been also addressed by new characteristics of the Internet government regulations. The recourse to "open" and broad concepts, the multiplication of "Independent Administrative Authorities", the progressive empowerment of the international public bodies have to be considered as the major trends of this phenomenon.

- Technical regulation means

The research into the technical regulation of the Internet, undertaken in 1998 by CITA, has been completed, and finalized. This research into the technical regulation of the Internet clarifies how technical means, such as filtering systems, may help in regulating the Internet content

First of all, the analyzed sample has been extended to about fifty off-the-shelf filtering systems. An analysisgrid focusing on the authors of the filtering criteria, on the authors of the rating/classifying and on the filtering techniques was suggested and applied to the sample. Moreover, the number of services using PICS ratings in the sample is underlined in order to evaluate the current impact of this standard. On the other hand, the relationship between the different filtering services and languages other than English has been pointed out in order to investigate the status of the cultural diversity at the level of the filtering providing. Also, the

¹³ That refers to the work done in the context of the BACAS-CAWET-CAPAS (Royal Belgian Academy Council of Applied Sciences) on the "Information Society". This group has started its works in 1997 the outputs have been presented the 17th of February 2000.

¹⁴ A research contract including a analysis of the different labelling systems has been concluded between the Ministry and the CRID in 99.

¹⁵ The so-called ECLIP project (ESPRIT Programme) has as object the analysis of the legal aspects of the E commerce (see the ECLIP outputs as the Web site: <http://www.jura.uni-muenster.de/eclip>).

various classifying/rating categories used in the sample are reported and their frequencies calculated. Finally, the research into filtering services will be placed in the framework of the official document of the European Union¹⁶.

In 1999, the results of the research done by CITA into filtering systems was presented at various conferences (e.g. on the morning of 30th April 1999, at the 'Faculté Polytechnique de Mons') and workshops (e.g. in the afternoon of 30th April 1999 at the IPA workshop organized at the FUNDP and entitled 'Self Regulation and Internet Governance'). These results are also published.

The paper, written jointly by Marie d'UDEKEM-GEVERS (CITA) and Marc BOGDANOWICZ (LENTIC) and entitled 'Workshop II: Social Regulation - Setting Welfare Objectives for Communication Policy', has been published begin 2000.

3.3.2.3. Observation of the Belgian, European and international telecommunications market and regulatory framework

"The challenge of the Communication sector is its dynamic mode; understanding has become a moving target depending on constantly changing information"¹⁷. The observation of the evolution of both, the market and the existing (and emerging) regulatory framework is in this context essential and provides basic input for all the analysis undertaken in Axis 3 and constitutes therefore day to day business for every member of the IUAP/PAI team. Against this background, certain aspects will nevertheless be highlighted hereafter.

A major development in 1999 has been the start of the European Commission's 1999 review of the regulatory framework for Electronic Communications infrastructures and associated services by the adoption of a related communication (hereafter '1999 Review Communication'¹⁸). This review aims at revising the current regulatory framework for telecommunications in order to adapt it to basic evolutions of the sector (e.g. convergence of telecommunications, media and information technology sectors, increase of competition,...).

In the context of the consultation launched by the European Commission on its '1999 Review Communication' positions were prepared by members of the IUAP/PAI-team especially on the issue of Universal Service. As these positions were send in February 2000, they will be mentioned in full in the report for the year 2000.

¹⁶ and particularly the recent Internet Action Plan decision published in Official Journal Decision No 276/1999/EC of the European Parliament and of the Council of 25 January 1999 adopting a multi-annual Community action plan on promoting safer use of the Internet by combating illegal and harmful content on global networks. OJ L 33 6 February 1999 p.1

¹⁷ S.E. Funde, "Convergence and the Regulatory Body", Presentation at the ITU/BDT Workshop on Telecommunication Reform, Botswana, May 1999, Slide 16, <http://www7.itu.int/treg/RelatedLinks/LinksAndDocs/instit.asp>

¹⁸ European Commission, Towards a new Framework for Electronic Communications infrastructure and associated services – The 1999 Communications review, Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, COM(1999) 539, 10.11.1999 ("The 1999 Review Communication"). See also European Commission, DG XIII Discussion Document – The 1999 Review : Regulatory Principles, 21 May 1999, <http://www.ispo.cec.be/infosoc/telecompolicy/en/comm-en.htm>.

In the context of the 1999 Review was also organised the "Working Group 1: Telecommunications Regulation in Europe: *quo vadis* ?" of the "Congress marking the 20th anniversary of the CRID – On the Brink of New Evolutions in the Law of Information Technology", held at Namur, 8, 9, 10 November 1999. All research centres participating in IUAP/PAI IV were involved in the organisation of the Congress by being members of the scientific committee, by chairing sessions or by delivering papers. Working Group 1 dedicated to telecommunications discussed the following topics:

- The principles underlying the European Commission's approach when defining changes to be made to the current regulatory framework in the telecom field (Ph. Defraigne);
- The telecommunications sector: competition as key-criteria for the type of regulation to be used - the situation, criteria, indices and prerequisites (M. Cave);
- Access and interconnection (P. Scott);
- Technological convergence of fixed and mobile, "wire-based" and "wireless" communications (E. Van Heesvelde);
- The regulators : types, requirements, principles for action (R. Queck);
- What regulation for the telecommunications sector in the coming years? (J. Scherer).

In the same context of the 1999 Review was organised, during the same Congress, a Workshop on "Universal Service". The following topics were presented and discussed:

- Conceptual presentations on Universal Service (J-M. Cheffert and N. Garnham);
- European perspectives (R. Cawley, P. Jonckeer);
- Situations in different European countries (C. Milne, N. Curien);
- The case of reductions in the USA (F. van der Mensbrugghe);
- Universal Service and competition (A. de Streel);
- Universal Service and cost issues (P. Nicolaides).

Again in the context of the '1999 Review' Members of the IUAP/PAI team have been active in leading a discussion group with representatives of the telecommunications sector and dedicated to defining the guiding principles of (Belgian) regulation in the future. The group met 7 times in 1999. Its work will be ongoing in 2000.

In the general context of follow up of evolution of the EU regulatory frame work, members of the IPA study team have attended the following workshops and expert panels:

- Workshop on Assessment of the situation of interconnection in telecommunications in the European Union and the need to review the ONP Interconnection Directive 97/33/EC, based on a study by OVUM, 30 June 1999;
- Workshop on Consumer Demand for Telecommunications Services and the Implications of the Convergence of Fixed and Mobile Networks for the Regulatory Framework for a Liberalised EU Market, based on a study by Squire, Sanders & Dempsey, 30 June 1999;
- Workshop on The possible added value of an independent European Regulatory Authority for Telecoms, based on a study by Eurostrategies, 14 September 1999;
- Workshop on Licensing issues: licence fees, categories of authorisations and information required for verification, based on studies by ETO, 20 September 1999;
- Workshop on EU Telecoms Survey, based on a study by EOS Gallup, 15 December 1999;
- Workshop on Universal Service, based on a study by WIK, 15 December 1999;

Delegate for Belgium in Management Committee of COST Action A16 (COST-Telecom) 'Policy & regulatory responses to the use of electronic communications technologies by transnational communities in Europe';

- _ Chair of the workgroup 'Information Society', European Science Foundation;
- _ Expert invited by the Belgian delegation at the European Commission's ONP Committee;
- _ Expert for the 'ICT-panel' of the IPTS futures project.

With regard to the evolution of the Belgian regulatory framework papers have been prepared, especially with regard to the evolution of deregulation. A first one gives a thematic presentation of the Belgian liberalisation process in the telecommunication sector¹⁹ (see list of publications).

The Belgian national level of analysis has also been addressed and this concerning evolution of the regulatory framework as well as market development. In this context SMIT analysed the dominant position of the incumbent operator Belgacom and the motives of the government to support that dominance were examined. The current telecom market situation was also analysed in relation to rising consumer complaints and high residential tariffs. Teachings were provided and several publications in this field were prepared and have been published recently or will be published in the course of next year (cf 3.3.3.3). This recent publications refers to; CAMMAERTS, Bart & BURGELMAN, Jean-Claude: 'Balancing Social Ambitions and Competitive Desires – the Liberalised Belgian Telecommunication Policy', *Telecommunication Journal of Australia* 49(4), pp.55-61.

3.3.3 Forecasts 2000

3.3.3.1 The influence of the information society on the state

3.3.3.1.1. The concepts of "democracy" and of "democratic State" in the Information Society

The research will concern the influence of information and communication technologies on public sphere. The role cyberjournalism on this sphere will be relevant. The constitution of public opinion by the collective deliberation will be examine. Finally, we will consider the influence of this new context in the state's policy.

3.3.3.1.2. The Welfare State and Policy divergence

3.3.3.1.2.1. Welfare State

The time has come for a shift from theoretical fundamental research towards empirical research. The methodology which will be used is that of comparative policy analysis.

¹⁹ R.QUECK , M.BOGDANOWICZ, The Belgian Liberalisation Process in the Telecommunication Sector - A thematic presentation , in European Survey of Information Society (ESIS) Server, Regulatory Developments – Belgium – I. Historical and juridical viewpoint, 1/1/1999 <http://www.ispo.cec.be/esis/Regulation/BEregQ8.htm>

For the comparative analyses SMIT will use the original regimes of Esping-Andersen, complemented with the Latin welfare state regime of Leibfried²⁰. The UK and New-Zealand were selected for the liberal regime, Belgium, France and the Netherlands were selected for the corporatist regime, Sweden and Denmark were selected for the social-democrat regime and Spain and Portugal were selected for the Latin regime. The comparative study will focus on policies directed towards the different levels of access (see 3.3.2.2. a). Besides that the study will also try to determine whether the international economic and political restructuring has blown away the differences as identified by Esping-Andersen and Leibfried.

This comparative analysis will result in a paper to be presented at the 22nd IAMCR Conference in Singapore (17-20th of July 2000). It will also be published later on.

3.3.3.1.2.2. Policy divergences

Whereas in previous years the emphasis lay on policy convergences and the need to broaden communication policy towards other policy fields, the focus in 2000 will be on policy divergences. These divergences are the result of shifts between the different roles of the state; to produce, to stimulate and to regulate.

The first set of divergences relate to the changing nature of state intervention. Communication policy in the past saw the state primarily in it's role of producer (cf. state-owned and -controlled PTO's & public broadcasters). Communication policy formed also a part of the industrial policy of a country where national interests often outweighed those of consumers. Now-a-days communication policy is much more a matter of stimulation and regulation, less of production. Operators have been (partly) privatised. Telecom and broadcasting has been liberalised and placed in a competitive context. A lot of countries have difficulties shifting from producer to regulator. This results in conflicts between national states and Europe, but also between operators. Incumbent operators are often confirmed in their dominant marketposition, regulators aren't really independent, etc. This leads to a situation whereby resident users pay the price of the competitionbattle for big and international users.

A second set of divergences relates to the conflict between social policies and competition policies. In contrast to the US, competition policy in terms of anti-trust is new to Europe. Favouring the national operator is still often perceived to be in the national interest. On the other hand communication is a public service with inherent public interests attached to it. As argued above in the context of policy convergences communication policy has to be broadened towards other policy fields such as social policy. Paradoxically social policies may lead to an increase in dominant market power by incumbent operators. This conflict between social and competition policy will prove to be the main challenge for the years to come. Policymakers must find a middle ground to reconcile competition on the one hand and social goals on the other.

In the Autumn of 2000 SMIT and CRID will organise a workshop which in part deals with policy divergences. This workshop will investigate the potentialities of competition law with regard to the guarantee of access to the Information Society. As such the workshop will discuss the potentialities of competition and of competition law as a warrant for access (in a

²⁰ Leibfried, S.: (1993) 'Towards a European welfare state ?', in Jones, C.: 'New Perspectives on the Welfare State in Europe, Routledge, London, pp.133-156.

broad sense, including interconnection, universal service, access to content,...) to the Information Society. Following this workshop a joint SMIT-CRID publication is envisaged. This workshop has very strong links with the cases access in the next section (cf 3.3.2.2-a)

3.3.3.1.3. Culture, media and education : implications of electronic commerce on public intervention

Although the Internet has initially been developed on principles of gift, exchange and free of charge services, it is obvious today that merchant applications constitute the essential part of the transactions on the network. All these applications may be referred to as being electronic commerce applications which may take very different forms :

Distribution of physical goods via postal services, ordered and payed via the Internet. This is the most common form of electronic commerce encountered on the Internet today.

Selling of dematerialised "goods" or "services". This is the distribution of digital information which enables the user/consumer to access the good or services without needing physical delivery of it. This form is already in development in certain sectors, for instance in the specialised publishing sector (scientific, technical,...), but also the music sector.

The further development of dematerialisation might be encouraged by the commercialisation of new terminals which enable mobile use of these "goods" or "services" (cfr. Rio and e-book developments). This multiform evolution will probably induce important modifications in the organisation of numerous sectors, transforming the nature of certain professions, the relation between actors, or even relocating the frontier between the different sectors concerned.

The frontier between the media sector and the publishing/distribution sectors of cultural goods may progressively fade away, as is illustrated by the fact that actors like *TF1*, *Canal+*, *NRJ* or *Le Monde* position themselves more and more in electronic commerce applications, either through partnerships, either as mere electronic commerce operators. In the same way, the american situation where progressive acquisition of rights on education programmes by private actors of the multimedia sectors may be observed, makes us think of a progressive closer development of education and publishing sectors.

As economists describe this evolution, the Internet and the development of electronic commerce do not only concern the emergence of a new distribution mode for goods and services, but induce a complete transformation of the value chain of the concerned sectors.

In this sense, it seems obvious that the development of electronic commerce questions public authorities in charge of cultural, media and educational matters. This evolution will probably require redefinition of the respective roles of private and public sectors around these activities.

Based on research performed by LENTIC in these fields, LENTIC suggests to discuss the effects of these recent evolutions in a workshop aiming at defining the first basis for possible actions that may be taken by public authorities.

Three main evolutions may require closer analysis :

The high concentration rate of certain sectors on the Internet. The important scale effects associated to electronic commerce applications will probably accelerate the concentration movement.

The globalisation of the markets, which reduces the possibilities of intervention of national operators.

The extension to the business sphere of certain activities which were up until now essentially organised by public actors. The reduction of production and distribution costs enabled by the digitalisation and the use of the Internet constitute an important lever of deregulation of certain sectors, characterised today essentially by the presence of a public service offer.

3.3.3.2 The influence of the state on the information society

3.3.3.2.1. Topics of state intervention in the information society : Information Society Policies

3.3.3.2.1.1. The case of access

As already pointed out the section of the welfare state SMIT will conduct a comparative study combining the concepts welfare state and access. In this sense national ICT policies directed towards the different levels of access will be evaluated and related to the historically grown welfare state regimes.

The case of access does not limit itself to access to infrastructure (telephone, cable, modem, computer, etc.), it should also be understood in the sense of access to information and content or in the sense of access to capabilities. Especially this last issue will prove to be of great importance, acquiring the necessary skills in order to be able to select, assess and use information. This can also be placed in the 'lifelong learning' perspective, important for employment.

On the level of infrastructure classic penetration data, as well as universal service provisions will be compared. On the level of information the use of ICT's by governments/administrations will be analysed and on the level of capabilities Internet-access in schools and projects in low-income neighbourhoods will be considered.

This comparative analysis will result in the already mentioned paper to be presented at the 22nd IAMCR Conference in Singapore (17-20th of July 2000).

Furthermore as already pointed out SMIT and CRID will organise a workshop Autumn of 2000 on policy divergences where questions related to access will be addressed. A Workshop will investigate about the potentialities of competition law with regard to the guarantee of access to the Information Society. Is competition and competition law enough to guarantee the different levels of access. Following this workshop a joint SMIT-CRID publication is envisaged. This workshop also has links with the case regulation in the next section (cf 3.3.2.2.2).

3.3.3.2.1.2. The case of privacy

The work to be undertaken in 2000 will focus on new techniques of data collection and the risks for privacy and the implications for regulation of these techniques. Will be analysed data collections realized by the public sector in a broad sense (e.g. listening in and surveillance of telecommunications networks like those in the case of the Echelon project) as well as those undertaken by private companies (e.g. in the context of cyber marketing).

3.3.3.2.2. Roles of the state in the Information Society : the case of regulation

3.3.3.2.2.1. Concepts, types, characteristics of and need(s) for regulation(s) and regulator(s)

- Scope of analysis

Due to convergence of the telecommunications, media and information technologies and due to the "despecialisation of infrastructures"²¹ implied by this evolution, it is no longer possible to regulate diverse electronic communications infrastructures in different ways. Drawing its conclusions from the analysis undertaken with regard to convergence²², the European Commission therefore proposes in its '1999 Review-Communication'²³ the separation of transport and content regulation, while recognizing the links between them, and the adoption of a more horizontal approach to all transport network infrastructure and associated services, irrespective of the types of services carried²⁴. The new regulatory framework proposed by the Communication would therefore cover all electronic communications infrastructures (e.g. fixed and mobile telecommunications networks, cable TV networks, terrestrial broadcast networks as well as facilities such as Application Program interfaces, which control access to services) and associated services (i.e. communications and access services). Broadcasting or information society services delivered over communications infrastructure and content as such are not concerned²⁵. This approach is confirmed by the Commission in its "Principles and guidelines for the Community's audiovisual policy in the digital age" ²⁶. The scope of telecommunications regulatory authorities would, in consequence, be extended to the entirety of electronic communications infrastructures and associated services.

As a consequence IUAP/PAI analysis carried out under 3.3.3.2.2.1. will explicitly be broadened from pure telecommunications regulatory framework to the regulatory framework of electronic communications infrastructures. It should nevertheless be emphasised that this evolution has in fact already been taken into account by analysis carried out in 1999.

²¹ This means the fact that an infrastructure is no longer technically able to carry only one type of services: or telecommunications or broadcasting services. For further information see - S. BAZZANELLA, R. QUECK, V. WILLEMS, " Le régime juridique de la fourniture de services multimédia en Belgique", Auteur & Médias, N° 2, Januar 1996, especially p.. 95 – 96 et 102.

²² See

- European Commission, Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors, and the Implications for Regulation - Towards an Information Society Approach , COM(97) 623, 3.12.1997;

- European Commission, Commission Working Document, Summary of the results of the public consultation on the Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors – Areas for further reflection, SEC(1998) 1284, 29.07.1998;

- European Commission, Communication to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions, The Convergence of the Telecommunications, Media and Information Technology Sectors, and the Implications for Regulation – Results of the Public Consultation on the Green Paper (COM(97)623), COM(1999) 108, 10.03.1999.

²³ 1999 Review Communication, especially p. 4 and 6.

²⁴ 1999 Review Communication, p 6.

²⁵ *Idem*, p. 4. See especially the list of definitions. See also p 21.

²⁶ European Commission, Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, Principles and guidelines for the Community's audiovisual policy in the digital age, COM(1999) 657, 14.12.1999, especially p. 10 – 11.

- Content of analysis

The analysis started (or continued with regard to the results of the EU – TMR project) in 1999 will be developed further and deepened in 2000. The themes of research to be addressed remain the same than those identified above under 3.3.2.2-b1. Particular attention will be given to the concept of "regulation" (and of the distinction between the French concepts of "réglementation" and "régulation"). Beyond this, the analysis in 2000 will be structured around 4 workshops based on the results of work realised in 1999. Some of the workshops may eventually be phased into 2001 according to progress of the research.

A first workshop will identify relevant technological, economical and sociological characteristics of the Information Society and the (tele)communications sector. As examples of such characteristics may be presumed technological convergence mentioned above, high speed of technological and market development, trans-nationalization and globalization,... . The workshop aims to derive objectives and goals from these characteristics which should be pursued by the regulation of electronic communications infrastructure and associated services. It will furthermore derive first (see also WS 2) consequences for this regulation, in terms of need, type(s) to be used and characteristics of regulation (and regulators).

Based on the first, a second workshop, which will last at least one day, will address furtheron the question of the type(s) of regulation(s) and regulator(s) needed (or at least useful) to rule electronic communications infrastructure and associated services. This will be approached in 3 stages;

The first stage will address the concepts of regulation (including the distinction between the French concepts of "réglementation" and "régulation") and of the regulator (in a broad sense, encompassing as well rule setting and rule application including dispute settlement). This analysis may, among others, be based on the work conducted by OECD in the field of regulation-reform²⁷. The relationship between regulators and regulation will be discussed (e.g. does a regulation imply a regulator and vice versa, is the scope of a regulators activity to be limited to its generic regulation,...). Characteristics of "good" regulation (e.g. transparency, adaptability,...) and of "good" regulator (e.g. independence, information, co-ordination,...) will also be approached.

The second stage will update an inventory of regulations (including self-regulation) and regulators ruling electronic communications infrastructures. They will be compared on the basis of an analytical grid based on the work realised in 1999 (including the addressees of obligations and the triggers for imposing these obligations). Criteria for choice will be discussed. One of the key criteria for the choice of a specific type of regulation is the existence of "effective and sustainable competition". The meaning, forms and criteria of existence of effective and sustainable competition will therefore be examined. Ways of coordination between existing regulations and regulators will be discussed.

The third stage will identify "significant" (*i.e.* key for the organisation of the sector according to the objectives identified in WS 1) topics for regulation. With regard to these topics which need regulation, one could think of access/interconnection, universal service, management of

²⁷ e.g. OECD, The OECD Report on Regulatory Reform – Synthesis, OECD, Paris, 1997, 57 p.

scarce resources,... . The criteria for choosing a specific type of regulation (or a specific combination of regulations) will be applied upon each specific topic for regulation. A basic question to be addressed will be the balance between sector specific laws and horizontal rules (e.g. competition law, commercial practices law, consumer protection law,...).

Based on the second, a third and fourth Workshop will address specific issues. They will provide inputs to analysis undertaken as described above, but also for other analysis carried out in axis 3. These issues are access (see Workshop description under 3.3.3.2.1.1.) and a specific type of regulation *i.e.* self-regulation (see Workshop description under 3.3.3.2.2.2.).

3.3.3.2.2.2. The specific case of governance and self-regulation

- Self-regulation: concept, pre-requisites, usefulness and practical examples

The work started in the first years of IAP IV by different members of the research team will be integrated in 2000. This will happen around the Workshop mentioned above. It will lead further the analysis with regard to self-regulation. The analysis of the concept of self-regulation as well as of its intrinsic characteristics and potentialities for use will be deepened. The legal framework necessary in order to make self-regulation produce legal consequences will also be examined in depth. Possible cases of use of self-regulation with regard to electronic communications infrastructure and associated services and with regard to content related information society services will be discussed (including weaknesses and strengths, advantages and disadvantages of this use). Examination of content of texts of self-regulation will be realised according to the grid shown above (*ratione personae*, *ratione loci*, *ratione materiae* see supra 3.3.2.2.2.).

Several types of self-regulation texts will be examined such as:

- _ Codes of Associations of computer professionals and scientists,
- _ Internet general Codes of Conduct (Bill of Rights for the Citizen in the Global Information Society, Citizen's Charter in the Information Society, ...),
- _ Internet Service Providers Associations Codes of conduct,
- _ Standards for professional and ethical telemarketing conducted by members of Teleservices Association,
- _ E-commerce Code of Conduct or Resolutions (Electronic Commerce Platform Nederland, Global Business Dialogue on Electronic Commerce Paris Recommendations, ...),
- _ etc.

Attention will be paid to their enforcement and to the procedures of reporting and sanctions.

The analysis of practical examples will also and in particular cover the question of the relationship between regulation and self-regulation, addressed already above. The way the European Union and the United States discussed the famous "adequate level of protection" (article 25 of the European Directive 95/46/CE²⁸) through the so-called "Safe Harbor Principles" in the domain of privacy protection could exemplify this kind of relationship between regulation and self-regulation. They seem to have reached an agreement which "creates a bridge between the European Union's legislative approach to data protection and

²⁸ Directive 95/46/EC of the European Parliament and of the Council of 24 October 1994 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, OJ N° L 281/31, 23.11.1995.

that of the US, which - while having considerable legal underpinning - relies mainly on self-regulation."²⁹

- Technical regulation means

The work undertaken about the technical means and standards for the governance of the Internet will also be finalized, in the framework of our participation to the INCORE programme of the European Internet Action Plan.

3.3.3.3. Observation of the Belgian, European and international telecommunications market and regulatory framework

As pointed out under 3.3.2.3 the observation of the evolution of both, the market and the existing (and emerging) regulatory framework provides essential input for all the analysis undertaken in the context of Axis 3. It must and will therefore be continued in 2000.

Special emphasis will continue to be given to the "1999 Communications Review" (see *supra*) for it affects all aspects of the work undertaken in axis 3. The consequences of this review for national (and community) regulation will be monitored closely. Ongoing attention will also be given to the development of the positions adopted by national and European authorities with regard to self-regulation³⁰.

An article relating to this topic and assessing the Belgian situation will be published shortly ; CAMMAERTS, Bart, BURGELMAN, Jean-Claude: 'Het Belgische Telecommunicatiebeleid: schipperen tussen sociale ambities en competitieve verlangens', in *Informatie & Informatiebeleid* 18(1). Other publications are in the pipeline.

²⁹ Data protection: significant progress made at February 21/22 talks on facilitating EU/US data transfers, <http://europa.eu.int/comm/dg15/en/media/dataprot/news/talks.htm>

³⁰ E.g. Council Conclusions of 27 September 1999 on the role of self-regulation in the light of the development of new media services, OJ NÁ C 283/2, 6.10.1999.

4. Structure and functioning of the IPA network

4.1. Co-experiments

4.1.1. At the level of the IPA members

- LENTIC has organised in close collaboration with the other IPA members (CITA, CRID, SMIT) the seminar "Quelle administration publique dans la Société de l'Information ?" that will take place the 18th and 19th of May 2000 in Brussels. IPA directors are members of the scientific committee and several IPA directors or researchers will chair or take part in workshops.
- LENTIC, SMIT and CITA have taken part in the conference, seminars and workshops held in november 1999 in Namur within the context of the congress "20 ans du CRID".
- CRID was in charge of the workshop dedicated to the legal issues during the "2èmes Rencontres Réelles de Villes Virtuelles" organised in June 1999 by CITA.
- As we will see below (see § 4.2.3.), CRID and CITA have taken part to the creation of "La Revue Ubiquité", the multi-disciplinary scientific review of the DGTIC (Post-graduate Diploma in Law and Management in Communication and Information Technologies).
- Furthermore, CRID and CITA carried out other research as ARTHUR (**A**rchitecture de **T**élécommunications **H**ospitalières pour les Services d'**U**rgence), a project in the field of tele-medicine and emergency department, or MAE (Ministère des Affaires Economiques), for the elaboration of a Vade-Mecum regarding the diffusion of public information in administrations.
- In the context of the '1999 Review' Members of the IUAP/PAI team have been active in leading a discussion group with representatives of the telecommunications sector and dedicated to defining the guiding principles of (Belgian) regulation in the future. The group met 7 times in 1999. Its work will be ongoing in 2000.
- LENTIC has developped with the collaboration of CRID the training programme www.theinternetinstitute.net on the "Gestion Stratégique de l'Internet" which takes place the first semester of 2000. Several IPA members do present different parts of this programme.

4.1.2 At the individual level

Since Sept. 1997 J.C. BURGELMAN (SMIT), Y. POULLET (CRID), J. BERLEUR & CL. LOBET-MARIS (CITA) and F. PICHAULT (LENTIC) are experts for the group CAWET-CAPAS (Koninklijk Academie van Wetenschap en Technologie - Comité de l'Académie pour les Applications de la Science) on the Information Society.

Since October 1997 Cl. LOBET-MARIS (CITA) and M. MINON (LENTIC) are experts for the 'Collège d'Avis du Conseil Supérieur de l'Audiovisuel'

Since November 1998 A. LEFEBVRE, Y. POULLET, J.-M. CHEFFERT, R. QUECK (CRID), CL. LOBET-MARIS, P. BELLEFLAMME, B. VAN BASTELAER, A. DEVOS and L. HENIN (CITA) are members of the editorial board of *Revue Ubiquité* (see § 4.2.3.).

4.2. Exchange of materials, data, ...

4.2.1. World-Wide-Web site of the IPA programme ‘ Information society ’

In order to facilitate their collaboration and to offer an integrated view of the research vis-à-vis the scientific circles, the IPA members have decided to create a WWW site (<http://www.droit.fundp.ac.be/crid/webpai/home.html>). This site is physically based in the FUNDP Namur, although each partner may access it without any restriction and contribute to its development.

Here is, for information, the structure which divides the site into the following information areas :

- _ Associated partners and IPA members
- _ Presentation and aims of the research
- _ Detailed presentation of the research
- _ Publications
- _ Diary of the activities
- _ Main links.

Associated partners and IPA members

This area lists the 4 IPA partners and offers links to their web sites. It also refers to a larger presentation of the IPA directors and associated directors and of IPA researchers and associated researchers from the four associated centres.

Presentation and aims of the research

This area contains basic administrative information and description of the aims of the research, as defined in the final version of the project. A link to the federal Office for Scientific, Technical and Cultural Affairs’ (OSTC) is also incorporated.

Detailed presentation of the research

In this zone, the detailed presentation of the project is available.

Publications

This area is divided into two sections. The first, in public access, contains the list of the publications from the associated centres (with the full text for several articles). They are sorted by authors. The second section contains the same papers sorted by axis.

Diary of the activities

This area contains the list of external and internal seminars, workshops, conferences, open meetings organised in the framework of IPA.

Links

Here is simply recorded the main links of the IPA program.

Furthermore, a new version of the IPA WWW site has been realised. Bart CAMMAERTS (SMIT) designed the new site while Tanguy EWBANK (CITA) is in charge of updates and maintenance. (<http://www.droit.fundp.ac.be/crid/webpai/home.html>).

4.2.2. Booklets

IPA members have published a booklet linked with the Congress marking the 20th anniversary of the CRID "On the Brink of New Evolutions in the Law of Information Technology", held in Namur on the 8th, 9th and 10th November 1999, showing that the event was linked to the IPA network.

4.2.3. Journal

The IPA takes part to the creation of a new scientific journal : ' La Revue Ubiquité '. This new instrument gives to the three parties involved the opportunity to present and communicate the result of their different researches. The ' Revue Ubiquité ' is a multi-disciplinary scientific review.

IPA researchers from CRID (A. LEFEBVRE, Y. POULLET, R. QUECK, J.-M. CHEFFERT) and CITA (CL. LOBET-MARIS, B. VAN BASTELAER, P. BELLEFLAMME, A. DE VOS, L. HENIN) are members of the editorial board of this journal and have written several papers on their research.

4.3. Conferences, workshops, ... organised by the network

4.3.1. Conferences, workshops, ... which took place in 1999

Liège, ULG, *Employment & ICT* : analysis of "Information Technicians" professions, M. ZUNE, 22th of january 1999

Brussels, VUB, IUAP-workshop, 2/02/1999, 'La Question de l'accès aux TIC et le rôle de l'Etat', organised by B. Cammaerts (SMIT) and R. QUECK (CRID), february 1999

Speach " Access to infrastructures : the example of interconnection ", hold in the context of the Workshop " The Access to Communication and Information Technologies and the Role of the State – Some Thoughts", R. QUECK co-organized with B. Cammaerts, IAP IV (SSTC) " Research and interdisciplinary assessment on the information society: networks, uses and roles of the State", SMIT-VUB, Brussels, 26 February 1999.

Advanced Research Seminar with European Commissioner Karel van Miert on the Telecom Review 99 as well as on the specific role of Competition Law, Louvain-La-Neuve, 31 March 1999 . R. Queck co-organization with P. Nihoul, CPDR (UCL).March 1999

Namur, FUNDP, IUAP workshop, 26/03/1999, Models of development in digital cities and education organised by Béatrice VAN BASTELAER (CITA), March 1999.

Louvain-La-Neuve, CPDR/UCL, Advanced Research Seminar with European Commissioner Karel van Miert on the Telecom Review 99 as well as on the specific role of Competition Law, 31 mars 1999. co-organised by Robert QUECK (CRID), March 1999.

Namur, FUNDP, IUAP seminar on selfregulation, 30/04/1999, organised by CRID/CITA, April 1999

Namur, FUNDP, A. LEFEBVRE, IPA seminar on use of IT in politic sphere, 28th of may 1999

Brussels, IPTS-seminar, 'the innovation cycle in ICT', 20/5/1999, organised by Jean-Claude BURGELMAN (SMIT/IPTS), May 1999.

Namur, PAI Workshop, 30/04/1999 'The governance of the Internet'. Jacques BERLEUR: *'Self-regulation and the governance of the Internet'*.

Namur, FUNDP,. 'Deuxième rencontre réelle de villes virtuelles'. 29/06/1999, Organised by Claire LOBET-MARIS and Béatrice VAN BASTELAER (CITA), June 1999. See <http://www.info.fundp.ac.be/~cita/ville/rr/renc2.html>.

Brussels, IPTS-workshop, Convergence and Electronic Commerce, co-organised by Jean-Claude BURGELMAN (SMIT/IPTS), June 1999

Namur, FUNDP, Conference marking the 20th anniversary of the CRID 'On the Brink of New Evolutions in the Law of Information Technology, 9-10/11/1999, organised by CRID, November 1999 ` See: <http://www.droit.fundp.ac.be/crid/XXeme/default.htm>.

Namur, FUNDP; in the context of the 1999 Review was also organised the "Working Group 1: Telecommunications Regulation in Europe: *quo vadis* ?" of the "Congress marking the 20th anniversary of the CRID – On the Brink of New Evolutions in the Law of Information Technology", held at Namur, 8, 9, 10 November 1999. All research centres participating in IUAP/PAI IV were involved in the organisation of the Congress by being members of the scientific committee, by chairing sessions or by delivering papers. Working Group 1 dedicated to telecommunications discussed the following topics:

- The principles underlying the European Commission's approach when defining changes to be made to the current regulatory framework in the telecom field (Ph. Defraigne);
- The telecommunications sector: competition as key-criteria for the type of regulation to be used - the situation, criteria, indices and prerequisites (M. Cave);
- Access and interconnection (P. Scott);
- Technological convergence of fixed and mobile, "wire-based" and "wireless" communications (E. Van Heesvelde);
- The regulators : types, requirements, principles for action (R. Queck);
- What regulation for the telecommunications sector in the coming years? (J. Scherer).

Namur, FUNDP, in the same context of the 1999 Review was organised, during the same Congress, a Workshop on "Universal Service". The following topics were presented and discussed:

- Conceptual presentations on Universal Service (J-M. Cheffert and N. Garnham);
- European perspectives (R. Cawley, P. Jonckeer);
- Situations in different European countries (C. Milne, N. Curien);
- The case of reductions in the USA (F. van der Mensbrugghe);
- Universal Service and competition (A. de Streel);
- Universal Service and cost issues (P. Nicolaides).

Namur, FUNDP, workshop E-CLIP "Liability of Online Intermediaries on Internet", 8/11/1999, organised by Yves POULLET (CRID), November 1999

Namur, FUNDP, workshop "Telecommunication & universal Service", 8/11/1999, organised by J.M., CHEFFERT (CRID), November 1999

Brussels, DG-V-seminar, 'The media & jobs project', co-organised and co-managed by Jean-Claude BURGELMAN (SMIT/IPTS), (2 seminars 12/1999 and 2/2000), December 1999

4.3.2. Workshops, ... organised in 1999 which are going to take place in 2000

The program of the workshops, seminars and colloquiums scheduled for 2000 is the following

Date	Subject	Responsible researchers	Responsible centres	Schedule
April	Features of the Information Society and consequences on the regulation	R. Queck	CRID, SMIT, LENTIC	Closed seminar
May	Which public administration in the Information Society ?	L. Agro	LENTIC, CITA, CRID, SMIT	Colloquium
May	Regulations and regulators for the Information Society	R. Queck, B. Cammaerts	CRID, SMIT, LENTIC	Closed seminar
June	Internet and state intervention in the cultural sector	D. Gillerot, M. Minon	LENTIC, CRID	Closed seminar
June	3 ^{me} Rencontre Réelle de Villes Virtuelles	B. Van Bastelaer, C. Lobet, L. Henin	CITA, CRID, SMIT	Colloquium
September	Economy of the Internet	D. Gillerot et M. Minon	LENTIC, SMIT	Closed seminar
September	The competition law : guarantee of access in the Information Society ?	B. Cammaerts, R. Queck	SMIT, CRID, CITA	Closed seminar

Fall 2000	Information technicians : a new model of human resources management ?	M. Zune	LENTIC, CITA, SMIT	Seminar
End 2000	The governance of Internet : the self-regulation.	Y. Pouillet, R. Queck, J. Berleur, T. Ewbank	CRID, SMIT, CITA	Workshop
To be determ.	Sociological analysis of change processes	F. Pichault, C. Lobet	CITA, LENTIC	Open seminar

4.4. Training or courses

An executive education programme, www.theinternetinstitute.net - has been developed by LENTIC in collaboration with CRID on the strategic management of the Internet. Several members of the IPA are involved in this programme, Yves Pouillet and Robert Queck on the legal aspects and François Pichault and Linda Agro on the organisational aspects of the Internet.

The third cycle programme entitled DGTIC (Droit et Gestion des Technologies de l'Information et de la Communication) is multi-disciplinary and set up by the Law Faculty, the 'Institut d'Informatique' and the Faculty of Economic, Social and Management Sciences of the FUNDP. Several members of the IPA network are involved in this programme and have chosen the object of their teaching according to their research inside this network :

BELLEFLAMME Paul (CITA) and J.M. CHEFFERT (CRID) are in charge of the 'Telecommunications and industrial economics' course with a section devoted to : *The economics of compatibility and standardisation*.

LEFEBVRE Axel (FUNDP) is in charge of the course "Droit et déontologie de l'informatique" at the Paul Lambin Institute in Brussels

LOBET-MARIS Claire (CITA), Béatrice van BASTELAER (CITA) and Anne DE VOS (CITA) are in charge of the 'Industrial Sociology' course : *Analysis of the public policies in the matter of the information society*.

POULLET Yves and LEFEBVRE Axel (CRID) are in charge of the course : *Liberties in the Information Society*.

To support these courses, BELLEFLAMME Paul, LOBET-MARIS Claire (CITA), Y. POULLET (CRID) and A. LEFEBVRE (CRID) have collaborated with the IPA associated centres (CRID, LENTIC and SMIT).

QUECK Robert, "Belgian Telecommunications Law", course thought in the context of the Degree in Law and Management of Information and Communication Technologies (DGTIC), University of Namur

QUECK Robert, Seminar "The Information and Communications Technology Market", organized together with J.-M. Cheffert in the context of the Degree in Law and Management of Information and Communication Technologies (DGTIC), University of Namur.

In this context, the following speakers presented papers: G. Deneff (IBPT – 4 mars 1999), B. Meunier (Belgacom – 18 mars 1999), S. Bazzanella (Codenet – 25 mars 1999), J.M. Vekemans (Service de médiation pour les télécommunications – 1^{er} avril 1999).

4.5. Formal and informal contacts

The four research centres have decided to create formal working structures in order to achieve a better cooperation between them. Furthermore they have developed a lot of informal cooperation inside and outside the IPA programme.

4.5.1. Formal structures

As regards the formal structures, two organs have been created since the start-up of the contract : the 'General Meeting' and the 'Board of the Directors'.

The '**General Meeting**' groups all the researchers working on the IPA researches. Two General Meetings have been organised, the first one in March, the second one, in September.

The main objectives of a General Meeting is to discuss :

the progress of the different tasks,
the main lines of the researches to be achieved, and
points of general interests.

A specific alias for the e-mail of all the IPA researchers has been created in order to easily send pieces of information about what happens in the networks and information of general interest (special events, conferences, ...).

The '**Board of the Directors**' joins together F. Pichault (LENTIC), Y. Pouillet (CRID), J. Berleur (CITA), C. Lobet-Maris (CITA) and Pascal Verhoest (SMIT).

- The tasks of this Board are the following :
- decisions on the strategy to be followed as regards the presence of the IPA on the national and international fora via publications, papers, etc.
- discussions and decisions about the progress of the research projects,
- decisions about the organisation of events like conferences, seminars, ...
- control of the financial aspects, and
- improvement of exchanges between the different research centres.

The Board meets on a quarterly basis.

Moreover a specific alias has been created in order to support the exchange of information between the members of the Board of the Directors.

4.5.2. Informal contacts

As the informal structures are concerned, main actions have been developed **between research centres** taking benefit of the IPA cooperation. Indeed, IPA members (CITA/CRID, LENTIC & SMIT) have developed a lot of contacts in the context of other research

programmes (see § 4.1.1.), taking care that their involvement in these new projects will cope with their work within the IPA.

As regards the cooperation on an **individual basis**, it is difficult to synthesise it. Let us notice only :

- the attending of several researchers from different IPA centres to the same conferences, seminars etc. (see § 4.1.2.),
- the participation of several members of the various IPA centres as experts for the CAWET (Koninklijke Academie van Wetenschap en Technologie) on the Information Society and for the 'Collège d'Avis du Conseil Supérieur de l'Audiovisuel' (see 4.1.2.),
- the participation of several members of the various IPA centres in the same training or education programme like LEDAREL (see § 6.2.2.).
- the writing of papers between researchers of the various IPA centres.
- the common intention of setting up in each IPA centre a place where the main publications from the others centres would be available.
- the will to increase the information available on the PAI web site (see § 4.2.1.).
- the exchanges of documentation (see § 4.2.).

5. IPA publications

Only the publications with explicit reference to IPA are listed below. The other scientific productions of the associated centres are to be found in the annexes.

5.1. Publications realised in common by different teams

CHEFFERT J., "The Universal Service : a Conceptual Approach", in CAMMAERTS, B. and BURGELMAN, J-C (eds.): "Beyond Competition: broadening the scope of telecommunication policy", VUB Press, March 2000, Brussels 19 p.

BOGDANOWICZ M. et d'UDEKEM-GEVERS M. (2000), "Workshop II : Social Regulation : summary - Setting Welfare Objectives for Communication Policy", in CAMMAERTS B., BURGELMAN J-C. (eds), "Beyond Competition: Broadening the Scope of Telecommunication Policy", VUB press

LOBET-MARIS, C., VAN BASTELAER, B. & CAMMAERTS, B. (2000) 'On the Role of Government in the Information Society' in CAMMAERTS, B. & BURGELMAN, JC. (eds) 'Beyond Competition: Broadening the Scope of Telecommunication Policy, VUBPress

POULLET Y. et VAN BASTELAER B. "Rapprochement entre administrations locales et citoyens via les technologies de l'information et de la communication", *Instances* n° 8, juin 1999, pp. 30-33.

POULLET Y. et VAN BASTELAER B., "Rapprochement entre administrations locales et citoyens via les technologies de l'information et de la communication", *Revue Ubiquité*, 1999, n° 2, pp. 97-101.

PIERSON J., Metropolitan Area Network (MANAP) - Digital Metropolis Antwerp (chapter 8) in van BASTELAER B., LOBET-MARIS C., Social Learning regarding Multimedia Developments at a Local Level - the Case of Digital Cities (SLIM-TSER) - proposal 4I4I PL 951003, CITA-FUNDP, Namur, pp.151-172, July 1999.

QUECK R., BOGDANOWICZ M., The Belgian Liberalisation Process in the Telecommunication Sector - A thematic presentation , in *European Survey of Information Society (ESIS) Server, Regulatory Developments – Belgium – I. Historical and juridical viewpoint*, 1/1/1999, <http://www.ispo.cec.be/esis/Regulation/BEregQ8.htm>

5.2. Publications realised by each team

International publications are underlined.

5.2.1. CITA

BELLEFLAMME P., "Stable coalition structures with open membership and asymmetric firms", in *Games and Economic Behaviour*, vol. 30, n°1, 1999- 2000, pp. 1-21.

BELLEFLAMME P., "Le 'paradoxe de productivité' des technologies de l'information et de la communication : le cas du commerce électronique", in *Revue Ubiquité*, n°2, Mai 1999, pp. 17-30.

BELLEFLAMME P., "Assessing the diffusion of EDI Standards across Business Communities", in *EURAS Yearbook of Standardization*, Vol. 2, ed. by Manfred J. Holler and Esko Niskanen (Homo oeconomicus XV(3)), Munich: Accedo, pp. 301-324.

BERLEUR J., "Vers une éthique de l'Internet ?"; in *Choisir*, Carouge (Genève), Mars 1999, pp. 20-25.

BERLEUR J., *Ethique et autoroutes de l'information*, Académie Royale de Belgique, Groupe CAPAS- CAWET, Avril 1998, 23 p. Texte - Résumé - Recommandations. Samenvatting, Aanbevelingen (<http://users.skynet.be/vab/CawetInfor/index.htm>).

BERLEUR J., "Self-Regulation and Democracy: Choice and Limits?", in *User Identification & Privacy Protection, Applications in Public Administration & Electronic Commerce*, FISCHER-H BNER S., QUIRCHMAYR G.& YNGSTRÉM L., Eds., Proceedings of the joint IFIP-WG8.5 and WG9.6 Working Conference, Stockholm 1999, DSV - Dept of Computer and Systems Sciences, Stockholm University/Royal Institute of Technology - on behalf of IFIP, Report Series 99-007, ISBN 91-7153-909-3, pp. 1-19.

BERLEUR J., DUQUENOY P. and WHITEHOUSE D., Eds., *Ethics and the Governance of the Internet*, IFIP-SIG9.2.2 (IFIP Framework for Ethics of Computing), September 1999, IFIP Press, Laxenburg - Austria, ISBN 3-901882-03-0, Event number 1303, 56 p. This brochure may also be found on the SIG9.2.2 website by clicking on SIG9.2.2 "Ethics and Internet Governance":

<http://www.info.fundp.ac.be/~jbl/IFIP/cadresIFIP.html>.

BERLEUR J. and d'UDEKEM-GEVERS M., "Codes of Ethics/Conduct for Computer Societies : The Experience of IFIP", in *Technology and Ethics : A European Quest for*

Responsible Engineering, European Ethics Network, A European Engineering Ethics Handbook, (Centre for Engineering Ethics, Lille, France) (in press)

BERLEUR J. and VALENDUC G., *The knowledge (or cognitive) society: A critical analysis from the social organizations point of view*, Contribution to the Workshop 'Information and Communication Technology, Work Organization and Human Beings', March 15-16, 1999, Brussels. - *Work Life 2000*, A European Conference endorsed by the Swedish Government. (to be published at McGraw Hill)

BERLEUR J., "Ethics and the Governance of the Internet, Introduction and Recommendations of IFIP-SIG9.2.2", in Leif Bloch Rasmussen & Colin Beardon, Eds., *Computers and Networks in the Age of Globalization*, Proceedings of the 5th IFIP-HCC International Conference, Kluwer, 2000

BERLEUR J., "Distance Between Ethical Declarations and Interests - Which place and Role for Self-Regulation?", Contribution to the Marc van Lieshout Afscheid, Katholieke Universiteit Nijmegen, March 20, 2000.

d'UDEKEM-GEVERS M., "Internet Filtering: current provider roles and potential government policies"

(<http://www.info.fundp.ac.be/~pai/workshop0499.html#MG>).

d'UDEKEM-GEVERS M., "Internet Filtering Criteria: Survey and Ethical Stakes", Proceedings of the 4th ETHICOMP - International Conference on the Social and Ethical Impacts of Information and Communication Technologies, (ETHICOMP99, Look to the future of the Information society, 6 to 8 October 1999, Rome), Luiss CeRSIL.

HENIN L., "Les nouvelles technologies à l'école : structures scolaires et politiques publiques", in *Revue Ubiquité*, n°3, Novembre 1999, pp. 131-137.

LOBET-MARIS C., VAN BASTELAER B., "Regards sur la construction sociale des villes virtuelles", *Actes de la conférence ICUST 99 "Penser les usages"*, Bordeaux-Arcachon, 7-9 juin 1999.

LOBET-MARIS C., VAN BASTELAER B., *One-Stop-Government in Belgium*, COST report, November 1999.

VAN BASTELAER B., "Les villes virtuelles en Belgique francophone et germanophone", *Wallonie, Revue du Conseil Economique et Social de la Région Wallonne*, n° 60/61, octobre 1999, pp. 37-51.

VAN BASTELAER B., avec la collaboration de DE VOS A., DE BAENST-VANDERBROECKE A., DESSE R. et DIENG D., *Compte-rendu de la deuxième Rencontre Réelle de Villes Virtuelles*, juillet 1999. Disponible sur le Web à l'adresse <http://www.info.fundp.ac.be/~cita/ville/rr/compte-rendu2.html>.

VAN BASTELAER B., *La situation belge en matière de villes virtuelles*, Présentation à l'Institut d'Economie Urbaine dans le cadre du programme "Les enjeux territoriaux du développement des techniques et des services de l'information et de la communication" (Séminaire 2).

5.2.2. CRID

CHEFFERT J.-M., "Le service universel : une notion à cerner pour un champ politique à identifier", in *Service universel, concurrence et télécommunications, Cahiers du CRID* n° 15, Bruxelles, Story Scientia, 1999, pp. 7-31.

CHEFFERT J.-M., "Le service universel : clés de lecture et propositions concrètes pour un dossier non-clos", in *La Revue Ubiquité* n°3, novembre 1999, pp.15-27.

CHEFFERT J.-M., "Théorie économique et recherche pluridisciplinaire", in *Droit des technologies de l'information, Cahiers du CRID* n°16, novembre 1999, Bruxelles, Bruylant pp. 325-340.

CHEFFERT J.-M., "Universal Service : Some Observations Relating to Future European Debates", in *Info*, Camford, Cambridge, April 2000, 14 p., forthcoming.

DINANT J.-M., "Vie privée, cybermarketing et cryptographie.", *Ubiquité*, 1999, n°2, pp. 117-126.

LEFEBVRE A. et MONTERO E., "Informatique et droit : vers une subversion de l'ordre juridique", *Droit des technologies de l'information. Regards prospectifs, Cahier du CRID* n° 16, Bruxelles, Bruylant, novembre 1999, pp. III-XIX.

LEFEBVRE A., DUSOLLIER S. et DE LA VALLEE F., "Internet gratuit : un pari ?", *Revue UBIQUITE* n°3, novembre 1999, pp. 7-9.

POULLET Y., "'Téléservices' : Etat de la question en droit belge", *Conférence des pouvoirs locaux*, Namur, mars 1999, pp. 11-12.

POULLET Y., "Administrations communales et NTIC" "- Pour un cadre juridique de l'utilisation des TIC dans les relations entre administrations communales, administrations et citoyens", *Doc.CRID.*, mars 1999, 18 pages.

POULLET Y., "Communication ou A-Communication ? Libertés fondamentales et société de l'information", in *Revue Générale*, 1999, n°3, pp. 21-27.

POULLET Y., "Freedom and information highways or how to ensure electronic democracy", *Telematics and Informatics*, 1998, n°15, pp. 163-180.

POULLET Y., "Diffusion des données juridiques et nouveaux médias : un enjeu fondamental pour la justice", in *Multimédia – Le Cyberavocat*, Liège, Formation Permanente CUP, Volume XXIX, février 1999, pp.109-137.

POULLET Y., "Libertés fondamentales et société de l'information", *La Revue Générale*, 1999, n°3, pp. 21-27.

POULLET Y. et LEONARD T., "La protection des données à caractère personnel en pleine (r)évolution. La loi du 11 décembre 1998 transposant la Directive 95/46°CE du 24 octobre 1995.", *J.T. n°5928*, 22 mai 1999, pp. 377-396.

POULLET Y., "Tintin at the E-Commerce no man's land", (Belgian National Telecommunications Congress, 16th-17th september 1999.), *Débat national telecommunication '99*, septembre 1999, 9 pages.

POULLET Y., "Diffusion des données juridiques et nouveaux médias : un enjeu fondamental pour la Justice", *Savoir innover en droit, concept, outils, systèmes. Hommage à Lucien Mehl*, La Documentation Française, Paris, 1999, pp. 133-152.

POULLET Y., "Riservatezza e sicurezza delle reti", *Internet e Privacy : quali regole ?*, 1999, pp. 31-39.

POULLET Y. et HAVELANGE B., "Secret d'Etat et vie privée : ou comment concilier l'inconciliable", *Droit des technologies de l'information. Regards prospectifs, Cahier du CRID n°16*, novembre 1999, pp. 233-277.

POULLET Y., L'autorité de contrôle : "Vues" de Bruxelles., *Revue française d'Administration Publique n°89*, janvier-mars 1999, pp. 69-81.

POULLET Y., Nella società dell'informazione lo Stato diventa rapido e leggero, *Burocrazia elettronica società più civile*, TELEMA 1999, pp. 29-35.

POULLET Yves, "De la "Maison Multimédia" au droit du village global – quelques réflexions d'humeur". (Colloque de Strasbourg, 7/8 octobre 1999.), *Doc. CRID*, octobre 1999, 9 pages.

POULLET Y. et DHONDT J., "Data protection – Belgium – An analysis of the new law.", *C.L.S.R. n°16/1*, janvier 2000, pp. 5-19.

POULLET Y., LOUVEAUX S. et SALAUN A., "User protection in cyberspace. Some recommendations", *INFO n°1/6*, décembre 1999, pp. 521-537.

QUECK R. (dir.), CARNEROLI D., de la VALLE E F., de LOCHT P., LECOCQ L., VEGIS E., *Audit du nouveau cadre réglementaire belge des télécommunications – Application et problèmes subsistants*, ECSC-EC-EAEC, Brussels-Luxembourg, rapport final janvier 1999, 248 p. The report has been published on the CRID website (<http://www.droit.fundp.ac.be>).

QUECK R., HOEREN Th. (Eds.), *Rechtsfragen der Informationsgesellschaft*, Erich Schmidt Verlagsgesellschaft, Berlin, 1999, 305 p.

QUECK R., TMR Contract N°ERBFMB I CT961106 "The Regulation of the Telecommunications Sector in the European Union : between Competition Law and Sector Specific Regulation" - Final Report : January 1st, 1997 – December 31st, 1998. Esp. Attachment 1 – Summary of results arising out of this research, 22 p. The report has been delivered to the European Commission in March 1999.

QUECK R., DEFRAIGNE Ph., "Réflexions sur la notion de 'puissance sur le marché' en droit des télécommunications: concept autonome ou chimère?", in E. MONTERO (dir.), *Droit des technologies de l'information – regards prospectifs*", *Cahiers du CRID* n°16, Bruylant, Bruxelles, 1999, p. 339 – 376.

5.2.3. LENTIC

AGRO L., DIEU A.-M., SCHOENAERS F., "Flexibilité et représentation des travailleurs : un compromis (im)possible ?", in *IREC*, Conférence, 1999, Aix en Provence, mars 1999.

DELHAYE C., DIEU A.-M., ZUNE M., "L'implication des utilisateurs dans les innovations technologiques : un dernier avatar de l'idéologie communicationnelle ?", in *Communication et Organisation*, pp. 173-193 , 1st semestre 1999.

ZUNE M., "New organisational forms and social dialogue", *International Colloquium EGOS*, Warwick, 4-6 July 1999, 22 pp.

GILLEROT D. and MINON M., "Commerce électronique et établissements de prêt", *Bulletin des Bibliothèques de France*, February 2000.

GILLEROT D. and MINON M., "Le secteur du câble en Belgique en 2005 : un exercice de prospective", *SSTC colloquium on the perspectives of teledistribution in Belgium*, January 2000.

PICHAULT, F. Configurations organisationnelles: Mintzberg revisité (with NIZET Jean), in *Revue Française de Gestion*, n° 123, march-april-may 1999, pp. 30-43.

PICHAULT, F., HRM Practices in a process of Organizational Change: A Contextualist View (with SCHOENAERS F.), dans Munduate L. et Bennebroek Gravenhorst, K.M., *Power Dynamics and Organisational Change III*, 9th Congress on Work and Organizational Psychology, Helsinki, 1999, pp. 75-93.

PICHAULT, F., Les tensions et jeux de pouvoir liés aux modèles de gestion des ressources humaines (with NIZET J.), in *AGRH, la GHR: contrôle et autonomie*, Actes du 10^e congrès, Lyon, september 1999, pp. 412-422.

5.2.4. SMIT

BURGELMAN, J.C., "Futures Employment Map 2010" EU, DG JRC, IPTS (Institute for Prospective Technological Studies (Seville) (co-author with Ken Ducatel), 1999

BURGELMAN, J.C., "Information and Communication Technologies and the Information Society Panel Report", EU, DG JRC, IPTS (Institute for Prospective Technological Studies (Seville), With K. Ducatel, main author, J. Howells, E. Bohlin & M. Ottitsch, 1999

BURGELMAN J.C.,(eds) "L'accès: enjeux, stratégies & régulation", *Communications & Strategies*, n.36, 1999 (together with Jacques ARLANDIS)

BURGELMAN J.C, (eds) *Communication, Citizenship and Social Policy: rethinking the limits of the welfare state*, Boulder, Rowman & Littlefield (editor with A. Calabrese), 1999.

BURGELMAN J.C, "The future of the welfare state and its challenges for communication policy". in A. Calabrese & J.C. Burgelman (eds), *Communication, Citizenship and Social Policy: rethinking the limits of the welfarestate*. Boulder, Rowman & Littlefield, pp.125-136, 1999

BURGELMAN J.C, "Politica de comunicacion y regulacion Europea". in E. Bustamente y J.M. Alvarez Monzoncillo (eds.) *Presente y Futuro de la TV digital. Control: Universidad de la Computense*, pp. 57-74, 1999.

CAMMAERTS B., "De rol van de overheid in het communicatiebeleid: van speler naar scheidsrechter ?" in BODARD K. (ed): *Overheid en ICT. Hoe speelt de overheid in op nieuwe ICT? Een onderzoek van verschillende dimensies die door het Internetfenomeen worden in vraag gesteld*, Libridis, Gent, 1999.

CAMMAERTS B., BURGELMAN J.-C.: "Balancing Social Ambitions and Competitive Desires – the Liberalised Belgian Telecommunication Policy", *Telecommunication Journal of Australia* 49(4), pp.55-61, 1999

VAN AUDENHOVE L. BURGELMAN J.-C., NULENS, G. & CAMMAERTS B., "Information society policy in the developing world: a critical assessment", in *Third World Quarterly* 20 (2), pp.387-404, 1999

NULENS G., VAN AUDENHOVE L., BURGELMAN J.-C. & CAMMAERTS B., "Naar een informatiesamenleving in Afrika: tussen discours en realiteit", in *VUB Tijdschrift*, pp. 29-40, 1999

PIERSON J., "Acceptance and use of ICT by Small Office & Home Office (SOHO): Analysing the appropriation of transaction-oriented and knowledge-oriented applications", in *Conference Proceedings of International Conference on Uses of Services and Telecommunications (ICUST)* (organised by SEE, IREST & ADERA), Bordeaux, 7-9, pp.376-387, June 1999

6. IPA national or international contacts

6.1. Conferences, workshops and seminars organisation

January 1999 Liège, ULG, *Employment & ICT* : analysis of "Information Technicians" professions, M. ZUNE, 22th of january 1999

February 1999 Brussels, VUB, IUAP-workshop, 2/02/1999, 'La Question de l'accès aux TIC et le rôle de l'Etat', organised by Bart Cammaerts (SMIT) and Robert QUECK (CRID)

Brussels, Foire internationale du Livre de Bruxelles, round-table on the impact of the development of electronic commerce on the book industry, 25 february 1999, co-organised by Marc Minon.

March 1999 Namur, FUNDP, IUAP workshop, 26/03/1999, Models of development in digital cities organised by Béatrice VAN BASTELAER (CITA).

Louvain-La-Neuve, CPDR/UCL, Advanced Research Seminar with European Commissioner Karel van Miert on the Telecom Review 99 as well as on the specific role of Competition Law, 31 march 1999. co-organised by Robert QUECK (CRID).

Brussels, Développements et usages des infrastructures télématiques dans les universités. Vers une recherche en réseau, 25 March 1999, Musée de la Médecine, in collaboration with Groupe de Recherche en Informatique et Sciences Humaines de l'U.L.B., coorganised by François Pichault.

April 1999 Namur, FUNDP, IUAP seminar on selfregulation, 30/04/1999, organised by CRID/CITA

Namur, FUNDP, A. LEFEBVRE, IPA seminar on use of IT in politic sphere, 28/5/1999

May 1999 Brussels, IPTS-seminar, 'the innovation cycle in ICT', 20/5/1999, organised by Jean-Claude BURGELMAN (SMIT/IPTS).

June 1999 Namur, FUNDP,. 'Deuxième rencontre réelle de villes virtuelles'. 29/06/1999, Organised by Claire LOBET-MARIS and Béatrice VAN BASTELAER (CITA)

Brussels, IPTS-workshop, Convergence and Electronic Commerce, co-organised by Jean-Claude BURGELMAN (SMIT/IPTS)

Brussels, Management de projet et implication des utilisateurs dans les applications télématiques à destination du secteur non marchand, 8 june 1999,

Maison des Associations, in collaboration with Groupe de Recherche en Informatique et Sciences Humaines de l'U.L.B. et l'Observatoire Social Européen (projet INUI, supported by the Services Fédéraux de la Science, de la Technologie et de la Culture), co-organised by François Pichault and Linda AGRO.

November 1999 Namur, FUNDP, Conference marking the 20th anniversary of the CRID 'On the Brink of New Evolutions in the Law of Information Technology, 9-10/11/1999, organised by CRID '

Namur, FUNDP, workshop E-CLIP "Liability of Online Intermediaries on Internet", 8/11/1999, organised by Yves POULLET (CRID)

Namur, FUNDP, workshop "Telecommunication & universal Service", 8/11/1999, organised by JM CHEFFERT (CRID)

December 1999 Brussels, DG-V-seminar, 'The media & jobs project', co-organised and co-managed by Jean-Claude BURGELMAN (SMIT/IPTS), (2 seminars 12/1999 and 2/2000)

6.2. Participation in conferences, workshops and seminars (with communications and/or papers)

International papers or communications are underlined.

6.2.1. Participation in conferences (with communications and/or papers, or as the chairman/a discussant)

Only the conferences in which a member of the PAI has presented a communication or a paper are listed below. (More information pieces are to be found in the annexes.)

January 1999 Padova, University of Padova, J. MONNET Colloquium "Information superhighways and new legal approaches", 11-12/01/1999, Yves POULLET, "E. commerce and consumer Protection - New rules".

Brussels, Belgian State Secrecy Services, Colloquium "State Secrecy and transparency", 20/01/1999., Yves. POULLET, 'State Secrecy and Privacy : how to concile the apparent contradiction ?'

February 1999 Namur, AJN & CVP, colloquium "The cyberlawyer", 5/02/1999, Yves POULLET, chaired and presented "Access to the legal Information : new treads and challenges".

March 1999 Lausanne, Colloquium "Face à la déréglementation: l'éthique, substitut à la régulation par la loi ?", 19 March 1999, François PICHULT: Les nouvelles formes d'organisation du travail liées aux technologies de réseau: une figure de la de réglementation du marché du travail.

Venice, Centro Studi San Salvatore, 13th EURO CPR (European Communication Policy research) Conference, 15-17/03/1999, Jean-Claude BURGELMAN, discussant session '*Social Participation in the Global Information Economy*'.

April 1999 Kobe (Japan), IERE Conference, panel "Today's technologies for tomorrow's society", 20 april 1999, François PICHAULT, *IS and the Future of Work: New Challenges for Modern Organisations*.

May 1999 Ottawa, Colloquium organised by the ACFAS, 11 may 1999, François PICHAULT, *Nouvelles formes d'organisation du travail et politiques de GRH dans la société de l'information*.

Münster, Institut für Informations-, Telekommunikations- und Medienrecht (ITM), conference "Aktuelle Entwicklungen an der Schnittstelle von europäischem Telekommunikations- und Wettbewerbsrecht", May 10, 1999. co-organised by Robert QUECK.

June 1999 Brussels, INUI colloquium, supported by the Services Fédéraux de la Science, de la Technologie et de la Culture, 8 june 1999, Maison des Associations, en collaboration avec le Groupe de Recherche en Informatique et Sciences Humaines de l'U.L.B. et l'Observatoire Social Européen, François Pichault : '*Management de projet et implication des utilisateurs dans les applications télématiques à destination du secteur non marchand.*'

Brussels, INUI colloquium, supported by the Services Fédéraux de la Science, de la Technologie et de la Culture, 8 june 1999, Maison des Associations, en collaboration avec le Groupe de Recherche en Informatique et Sciences Humaines de l'U.L.B. et l'Observatoire Social Européen, Linda AGRO (with Monique TAVERNIER) : '*Modalités de constitution des consortiums : un guide méthodologique*'

Namur, Conférence des pouvoirs locaux, Les administrations locales face à la société de l'information, Linda AGRO and Marc MINON : '*La connaissance des usagers : une condition préalable au succès du développement des téléservices*'

Namur, FUNDP, Conférence 'Deuxième rencontre réelle de villes virtuelles', 29/06/1999, Béatrice VAN BASTELAER : '*Présentation du paysage des villes virtuelles en Communauté française Wallonie-Bruxelles. & Présentation d'un outil d'aide à la construction des villes virtuelles*'

Namur, FUNDP, Conférence 'Deuxième rencontre réelle de villes virtuelles', 29/06/1999, Marie d'UDEKEM-GEVERS : '*Evolution de la situation de 37 villes/communes en Belgique francophone de 1997 à 1999.*'

Namur, FUNDP, Conference 'Deuxième rencontre réelle de villes virtuelles', 29/06/1999, Yves POULLET : chair of the legal session

Namur, FUNDP, Conference 'Deuxième rencontre réelle de villes virtuelles', 29/06/1999, Claire LOBET-MARIS : *Introduction à la journée*, Claire LOBET-MARIS and Béatrice VAN BASTELAER : co-chairs of the management and organisation session.

Stockholm, Joint IFIP-WG8.5 and WG9.6 Working Conference, Stockholm, 14-15-06/1999 Invited Speaker. Jacques BERLEUR, 'Self-Regulation and Democracy: Choice and Limits?'.

Bordeaux, International Conference on Uses of Services and Telecommunications (ICUST) (organised by SEE, IREST & ADERA), 7-9 June 1999, Jo PIERSON, 'Acceptance and use of ICT by Small Office & Home Office (SOHO): Analysing the appropriation of transaction-oriented and knowledge-oriented applications'.

Bled, University of Maribor, 13th International Conference, 7-8-9/06/1999, Yves POULLET "Think Global - Act locally: the legal point of view", he also chaired the legal session and delivered a report on the privacy aspects of e-commerce.

Trêves, R. QUECK, Speech "Belgian Telecommunications Regulation – An attempt at showing the Thread", Conference on European Telecommunications Law, Académie de droit européen de Trêves (ERA), Trêves, 21 – 22 June 1999.

July 1999 Warwick, International Colloquium EGOS, 4-6 July 1999, New organisational forms and social dialogue, ZUNE Marc.

Brussels, IPTS Futures Conference, Jean-Claude BURGELMAN, 'Summary'.

Leipzig, IAMCR-ECCR Conference, 31/07/1999, Jean-Claude BURGELMAN, chair of session 'The socio-cultural consequences of the European Information Society'.

September 99 Bremen, COST A14 conference, 30/9-2/10/1999, Claire Lobet-Maris, One stop government workshop,

Rovaniemi, E.U. Commission and the Finnish Republic, conference on "ICT and the law", 6-7-8 sept. 1999, Yves POULLET "Access to legal documents and ICT".

Freiburg, International colloquium of the German Academy of Comparative Law, 23-24 sept. 1999, Yves POULLET, 'How to concluded a contract through electronic means ?'

October 1999 Rome, ETHICOMP 99 - International Conference on the Social and Ethical Impacts of Information and Communication Technologies, 1-8/10/1999, Marie d'UDEKEM-GEVERS, "Internet Filtering Criteria: Survey and Ethical Stakes".

Torino, Yale Law School and the law Faculty of Turin, conference, 25-26 oct. 1999, Yves POULLET "The regulation of the Information Superhighway - New paradigms".

November 1999 Namur, FUNDP-CRID, Conference marking the 20th anniversary of the CRID 'On the Brink of New Evolutions in the Law of Information Technology, 8-10/11/1999 Jacques BERLEUR, chair of session '*Vers un nouveau droit des technologies de l'information ?*'

Namur, FUNDP-CRID, Conference marking the 20th anniversary of the CRID 'On the Brink of New Evolutions in the Law of Information Technology, 8-10/11/1999, Robert QUECK, '*Presentation of the Congress and of the Working Groups*', '*Telecommunications Sector Specific National Regulatory Authorities: Vestiges of the Past or Key Players for the Future? - Questions and Thoughts for Discussion*' and '*Working Group 1: Telecommunications Regulation in Europe: quo vadis? : Report on Results of Discussions*'.

Namur, FUNDP, Conference marking the 20th anniversary of the CRID 'On the Brink of New Evolutions in the Law of Information Technology, 9-10/11/1999, Yves POULLET introductory report on "XX years of Computer Law" and the final conclusions.

Namur, FUNDP, "The Congress marking the 20th anniversary of the CRID – On the Brink of New Evolutions in the Law of Information Technology", CRID of FUNDP, Namur, 8, 9, 10 November 1999. Co-organization. R. QUECK :organisation of "Working Group 1: Telecommunications Regulation in Europe: *quo vadis?*", Namur, 9 November 1999.

In this context the following speeches were delivered:

- "Presentation of the Congress and of the Working Groups"
- "Telecommunications Sector Specific National Regulatory Authorities: Vestiges of the Past or Key Players for the Future? - Questions and Thoughts for Discussion"
- "Working Group 1: Telecommunications Regulation in Europe: *quo vadis?* : Report on Results of Discussions"

Namur, FUNDP-CRID, Conference marking the 20th anniversary of the CRID, "La société de l'information, une révolution sociale?", François PICHAULT. 9th of november 1999.

Namur, ABDF, ALDF, CRID and the Faculty of Law, colloquium on "Electronic Money", Yves POULLET chaired the morning session.

Montpellier, IDATE's International Conference "A wireless world", 18-19/11/1999, Jean-Claude BURGELMAN, chair of session "acces: issues at stake".

6.2.2. Participation in workshops, seminars, meetings, summer school (with communications and/or papers ; or as the chairman/a discussant)

Only the workshops, seminars... in which a member of the PAI has presented a communication or a paper or was the chairman are listed below. (More information pieces are to be found in the annexes.). Participation in an expert meeting is also considered.

January 1999 Brussels, European Science Foundation, Jean-Claude BURGELMAN, chair of workgroup 'Information Society' (regular meetings all year long)

Paris. Unesco Meeting on Child Pornography and Paedophilia on Internet. 18/01/1999, Béatrice VAN BASTELAER, Présentation de l'initiative MAPI. Mouvement Anti-Pédophilie sur Internet

Brussels, Forum organized the Fondation Roi Baudouin, 28/01/1999, Yves POULLET, *"the Information Society: where are we going"*.

February 1999 Liège, Participation to the round-table "Which federal policy towards sustainable mobility ?", 23 February 1999 in the framework of the roundtables organised by the Ministry of communications and infrastructure, François PICHAULT, *Le télétravail dans un perspective de mobilité durable*.

Brussels, VUB, IUAP-workshop 'La Question de l'accès aux TIC et le rôle de l'Etat', 2/02/1999, Bart CAMMAERTS & Robert QUECK, co-chairs.

Brussels, VUB, IUAP-workshop 'La Question de l'accès aux TIC et le rôle de l'Etat', 2/02/1999, Bart CAMMAERTS, *'Access and the Information Society'*.

Brussels, VUB, IUAP-workshop 'La Question de l'accès aux TIC et le rôle de l'Etat', 2/02/1999, Robert QUECK, *'Access to infrastructures: the example of interconnection'*.

Brussels, EMDMI working Group about the ethical and legal aspects of the use of the telematic within the Healthcare Sector, Yves POULLET has participated at the different meetings (Feb. 23/March 30/July 16/Sept. 9/Nov. 23).

March 1999 Brussels, European Foundation of Ethics and Science (Consultative Committee near the E.U. Parliament), 17/03/1999, Yves POULLET *"Main Principles of the legal approach of the H.C. relationships in an telematic environment"*.

Brussels, E.F.E.-seminar, 24/03/1999, Yves POULLET, *"E commerce directive : Main Issues and Provisions"*.

April 1999 Liège, Ulg (Ledarel-Faculté de Droit). Séminaire de recyclage en management communal, 22/04/1999, Béatrice VAN BASTELAER : *Introduction aux villes virtuelles*

Namur, PAI Workshop, 30/04/1999 'The governance of the Internet'. Jacques BERLEUR: '*Self-regulation and the governance of the Internet*'.

Brussels, Squire, Sanders & Dempsey, 13 avril 1999, Robert QUECK "*The Transposition and Implementation of European Telecommunications Regulation in Belgium - Some (critical and subjective) Comments with special Emphasis on the Activity of Regulation*".

Namur, CRID/CITA, IUAP seminar on selfregulation, 30/04/1999, Yves Poulet "*How to regulate Internet - Selfregulation: Value and limits*".

Brussels, Speech of R. Queck "The Transposition and Implementation of European Telecommunications Regulation in Belgium - Some (critical and subjective) Comments with special Emphasis on the Activity of Regulation", Squire, Sanders & Dempsey, Bruxelles, 13 April 1999.

May 1999 Montréal, UQAM, research seminar at the administration department, 6 may 1999, François PICHAULT, *La société de l'information nous condamne-t-elle à abandonner les modèles classiques d'analyse des organisations?*

Brussels, ULB (Inemap) - Parentville. Séminaire INEMAP - ModuleII "Technologies de l'information et gestion communale", 18/05/1999. Béatrice VAN BASTELAER: '*La gestion des projets multimédia développés dans les villes*'

Namur, FUNDP, Staff-seminar. 31/05/1999, Béatrice VAN BASTELAER : '*La démocratie électronique*'

Münster, R. Queck, M. Haag, conference "Aktuelle Entwicklungen an der Schnittstelle von europäischem Telekommunikations- und Wettbewerbsrecht", Institut für Informations-, Telekommunikations- und Medienrecht (ITM), 10 May 1999. Co-organization.

June 1999 Louvain-La-Neuve, round-table organised by FOREM on the impact of telecommunications on employment, 16 june 1999, François PICHAULT, *Aspects organisationnels de la société de l'information*.

Louvain-La-Neuve, round-table organised by FOREM on the impact of telecommunications on employment, 17 june 1999, Jo'lle KIVITS and Marc MINON, *NTIC: Problématiques de l'emploi et des besoins en compétences en Région Wallonne*

Brussels, IPTS, Convergence and Electronic Commerce workshop Jean-Claude BURGELMAN, co-organisator and final discussant of follow-up seminar (1/2000)

Trêves, Académie de droit européen de Trêves (ERA), Séminaire sur le droit des télécommunications, 21th-22nd of June 1999. Robert QUECK, "Belgian Telecommunications Regulation – An attempt at showing the Thread".

Namur, FUNDP/CRID, Observatoire des télécommunications (discussion meetings with members of the Belgian telecom sector), 1st of June 1999, 28th of June 1999, other meetings: 27th of July 1999, 6th of September 1999, 13th of October 1999, 23rd of November 1999 and 14th of December 1999, organised by CRID

Lille, colloquium organized by the Chamber of Commerce of Lille, 4th of June, Yves POULLET chaired the afternoon session dedicated to the "*legal aspects of the E commerce*" and delivered the introductory report.

August 1999 Westminster-London, European Network of Doctoral Studies in Communication and Media, 29/8-03/9/1999, Bart CAMMAERTS, "The need for a renewed social contract tuned to the information society".

September 1999 Brussels, ULB (Inemap) - Parentville. Séminaire INEMAP - Module II "Technologies de l'information et gestion communale". Claire LOBET-MARIS : '*guichets uniques et administrations*'

Berlin, EULISP Summer Academy, Institut für Rechtsinformatik der Universität Hannover, 27/09/1999, Robert QUECK "Belgian Telecommunications Regulation and the EU Context".

Brussels, UCL - CDC Congres 'The electronic consent', Axel LEFEBVRE, "Information, advertising and consent in an electronic context"

Berlin, R. QUECK, Speech " Belgian Telecommunications Regulation and the EU Context ", EULISP Summer Academy, Institut für Rechtsinformatik der Universität Hannover, Berlin, 27 September 1999

October 1999 Strasbourg, Faculty of Law of the R. Schuman University (Strasbourg) & the Faculty of Law of Namur, International Symposium, 8-9/10/1999, Yves POULLET, "Selfregulation". He also chaired the final session and addressed the final conclusions.

Strasbourg, Faculty of Law of the R. Schuman University (Strasbourg) & the Faculty of Law of Namur, International Symposium, 8-9/10/1999, Axel LEFEBVRE, "The electronic contract".

Paris, Interministeriel OECD Conference on E commerce, 13-14/10/1999, Yves Poulet has been designated as expert for the Belgian Government.

Canada (London-Ontario), Conference "Citizens at the crossroads - Whose information society?" A. LEFEBVRE, "Political participationism and information technology", University of Western Ontario.

November 1999 Dusseldorf, European Institute for the Media, International Seminar on "Comparative Media Research in Europe: Subjects, Experiences, Perspectives", 12-13/11/1999 Jean Claude BURGELMAN, chair panel 'Media regulation, media policies'.

Namur, FUNDP, workshop E-CLIP "Liability of Online Intermediaries on Internet", 8/11/1999, Yves POULLET, "*Liability for new intermediaries - Main challenges*".

Brussels, Seminar organized jointly by the Faculties of Medicine "I.C.T. and H.C. Sector, 26 nov. 1999, Yves POULLET, "*Privacy and ICT within the H.C. Sector*".

December 1999 Grenoble ESC, XIIèmes Entretiens Jacques Cartier on technological management. Impact of technology on management of individuals, 6-8 december 1999, François PICHAULT, *La GRH dans les centres d'appels : la fin du modèle d'analyse stratégique ?*

Paris, Institut d'Economie Urbaine, "Les enjeux territoriaux du développement des techniques et des services de l'information et de la communication" (Séminaire 2). Béatrice VAN BASTELAER: '*La situation belge en matières de villes virtuelles*'.

Brussels, Management committee of COST-Telecom, 13/12/1999, Bart Cammaerts is the delegate for Belgium in the management committee of COST A16 'Policy and regulatory responses to the use of electronic communications technologies by transnational communities in Europe'.

6.3. Training

Prof. BURGELMAN Jean-Claude (SMIT) is supervisor of several Ph.D.-theses on topics related to the IPA programme :

- *The evolution the Internet as a Public Sphere ? Voorziene inlevering: 2002. L. MORGANTI (assistent Europa College).*
- *De informatiesamenleving: naar een nieuw evenwicht tussen staat en markt? Voorziene inlevering: 2001, B. CAMMAERTS (vorser SMIT).*
- *Generische sociaal-wetenschappelijke analyse van aanbod-en gebruiksprocessen bij ICT-toepassingen binnen de kleinschalige professionele sfeer. Voorziene inlevering: 2001. J. PIERSON (vorser SMIT).*
- *Informatietechnologie-beleid van internationale organisaties in Afrika. Voorziene inlevering: 2001. G. NULENS (assistent VUB).*

- *Telecommunicatiebeleid en privatiseringen in Zuidelijk Afrika. Voorziene inlevering: 2000.* L. VAN AUDENHOVEN (aspirant NFWO).
- *Constructieve technology assessment & implementatie van nieuwe informatietechnologie'n: een gebruikersanalyse. Voorziene inlevering: 2000.* PUNIE Y. (vorser SMIT en VUB).
- *Telecommunications policy and universal service in RSA. A critical analysis. Voorziene inlevering: 1999.* L. OOSTHUIZEN (lecturer UNISA- Zuid-Afrika)

CAMMAERTS Bart (SMIT) is in charge of the seminar 'problematiek van de informatiesamenleving – nationaal niveau', VUB, Brussels

Prof. VERHOEST, Pascal (SMIT) is in charge of the courses:
 'Internationaal Informatie en Communicatiebeleid', KUB, Brussels
 'Inleiding tot de informatiemaatschappij', VUB, Brussels

GILLEROT Dominique (LENTIC) and MINON Marc (LENTIC) presented a teach-in: 'Livres et commerce électronique, in the 'Université Paris-Dauphine', DESS 'Gestion des Institutions Culturelles', 18 January 1999.

GILLEROT Dominique (LENTIC) and MINON Marc (LENTIC) presented a one-day seminar: 'L'impact du développement du commerce électronique sur la filière du livre', at ENSSIB (Ecole Nationale Supérieure des Sciences de l'Information et des Bibliothèques) in Lyon, 26 May 1999.

LEFEBVRE Axel is in charge of the course "Droit et déontologie de l'informatique" at the Paul Lambin Institute in Brussels.

MINON Marc (LENTIC) and PICHAULT François (LENTIC) are in charge of the course '*Analyse des médias et des nouvelles technologies de l'information*'. Communication Sciences at the University of Liège.

PICHAULT François is in charge of the course "Technologies de l'Information et changement organisationnel", D.E.A., in Management, at the University of Liège.

QUECK R., "Belgian Telecommunications Law", course taught in the context of the Degree in Law and Management of Information and Communication Technologies (DGTIC), University of Namur

QUECK R., Seminar "The Information and Communications Technology Market", organized together with J.-M. Cheffert in the context of the Degree in Law and Management of Information and Communication Technologies (DGTIC), University of Namur.
 In this context, the following speakers presented papers: G. Denef (IBPT – 4 mars 1999), B. Meunier (Belgacom – 18 mars 1999), S. Bazzanella (Codenet – 25 mars 1999), J.M. Vekemans (Service de médiation pour les télécommunications – 1^{er} avril 1999).

QUECK R., Workshop on european telecommunication, Westflische Wilhelms-Universität Münster (RFA), summer semester 1999.

QUECK R., JURITIC – Teaching modules for professionals in Information and Communication Law, University of Namur, Autumn 1999 and January 2000. Organization with Ph. Defraigne of the Telecommunications Law Teaching Modules :

"- Introduction générale au droit européen et belge des télécommunications, 9 September 1999

- Module 6: Les autorisations dans le domaine des télécommunications, 9 - 10 September 1999.

In this context speech: "1^{ère} partie: aspects belges - Quelle autorisation pour quelle activité dans le domaine des télécommunications ?", 9 September 1999.

- Module 7: L'interconnexion, 30 September and 1st October 1999.

In this context speech: "1^{ère} partie: aspects belges – Introduction au cadre réglementaire belge de l'interconnexion", 30 September 1999.

- Module 8: Résolution des litiges et droit applicable, 27 et 28 janvier 2000."

POULLET Y., (CRID) is the supervisor of several Ph.D. on topics related to the IPA programme, particularly the following :

- _ *Universal Service in the Information Society* (F. VAN DER MENSBRUGGHE),
- _ *The role of the State in an Information Society* (R. QUECK),
- _ *Commercialisation of data held by the public sector* (C. de TERWAGNE),
- _ *The States of the right to privacy* (Th. LEONARD),
- _ *The concept of Identity in the Information Society* (E. DAVIO).

POULLET Y., (CRID) has participated as member to the doctoral jury of P. Turner. 22 sept. 1999. The thesis was entitled : "The genesis of the Database directive" (London Univ. Social Science Faculty).

POULLET Yves (CRID) - JURITIC Programme (continued education for companies's lawyers), with Th. Léonard & J.M. Dinant - 2 days seminar on the "Privacy Questions". 22-23 April 1999.

POULLET Yves (CRID) – organisation of the "Chaire Franqui Award" - a course given by M. FONTAINE on the "E commerce directive: a critical approach", 19 April 1999.

7. Material Purchased

SMIT purchased a Macintosh Apple 350 Mhz

8. Annexes

Activity reports of CITA, CRID, LENTIC and SMIT

SMIT (1989-)

STUDIES ON MEDIA, INFORMATION AND TELECOMMUNICATION Annual Report 1999

Director: Jean-Claude Burgelman
Deputy Director: Caroline Pauwels

0032 - 2 - 629 2414 (Jean-Claude Burgelman)
0032 - 2 - 629 2418 (Frank Neuckens - Research co-ordinator SMIT)
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MAJOR RESEARCH TOPICS

The research centre for Studies on Media, Information and Telecommunication (SMIT), set up in 1990, has two main approaches. First of all, research topics are grouped around policy questions; secondly, and supplementary to this, the centre carries out its own user research. During the years transversal approaches have emerged. These touch upon both our policy and users research. In this respect traditional mass media, new media and information technologies as well as convergence between telecommunication and broadcasting is being considered. At the same time research topics are also developed on a geographic basis. This means that research can be regional (Flanders), national (Belgium), European (European Union), and world-wide (third world problems). Schematically, this gives the following research programme:



In all, 42 research projects have been completed within this framework and a further 8 are at hand. Most research

projects are fundamental in nature, but consultancy research is also sporadically carried out.

With this research programme, SMIT is seeking to fill a number of empirical and theoretical gaps in communication science research.

First of all, it wants to differentiate itself from a vision of policy and user research that is purely economically inspired, technologically determinist and instrumentalist. According to this vision, what will happen socially is derived from what is technically possible, whereas from the social science perspective, it is precisely the reverse questions that are relevant. This obviously implies that the focus of the work lies on fundamental rather than applied research questions: for example: what is precisely the nature of the transfer from a post-industrial to an information society, what consequences does this have for organizing the future of the Western welfare state, for maintaining a culturally inspired media policy, for fundamental policy principles such as "the general interest", "universal service provision", for the cultural way in which we experience time and space, etc.

Secondly, SMIT's research differentiates itself from a simplistic or naïve use of the categories of "market" and "state" in policy debate and research, regardless of whether this involves broadcasting, telecommunications or new information technologies. In most debates and research, "market" and "state" are seen as a dichotomous pair: there is a regulation by the market, and there is regulation by non-market forces, which must then be the state. Depending on the author's orientation, this is then deemed to be good or bad. However, historical research and detailed analysis have shown that it has never been the one or the other, and that regulation by the market or the state has never been a goal per se, but rather a way of solving clashes of interests in society.

Thirdly, SMIT differentiates itself from the type of market-inspired user research which is directed at product optimisation and market introduction and is inspired by the motto "what is possible technically must also succeed". This requires us to ask two questions: first of all about demand and acceptance/reception, and secondly about what information technology has to offer: once the information technology is there, we examine how it is accepted by the public, but equally fundamentally, we ask how this offering came into being (influence of economic, political, social, cultural and technological factors from a structural-dialectic causally-inspired policy model).

Fourthly, but again deriving from the foregoing, SMIT, from a normative-humanistic option, focuses its research

on the public interest, by asking very precise questions on how and under which conditions the public benefits from what occurs and, if not, what must be done for this to be so. This of course requires us to use a refined user categorisation system, and one must take care not to extrapolate residential use from research on professional and large-scale users, a shortcoming which until recently distorted user research. The same distortion appears whenever one extrapolates from conclusions arrived at in user research in Europe to a third world context. Here too one can gainfully extend the area of examination to encompass the economic, political, cultural, social and technological factors environment.

Translated into concrete research, the above represents a very broad range of research possibilities in which a cross-pollination of findings between the various research directions and projects is sought after. For example, in its research and theory-formation, SMIT assumes that a possible convergence may exist between audio-visual policy and telecommunications policy in Europe. In so doing, it is objective about the fact that the two sectors are separate empirical realities, each with its own internal dynamism, and as such studied separately by SMIT, but at the same time offer analogies, which need to be examined, in terms of policy problems and underlying assumptions. One obvious point of attention is, for example, the way in which the general interest is best regulated in both areas. More in particular the question of whether "public service" is still a meaningful regulatory concept for the broadcasting sector, and "universal service" a meaningful concept for the telecommunication sector, and if so, how they must be implemented. Mutual cross-pollination, we insist, not extrapolations, exist also when we examine telecommunication policy in a European and third world context, and again when we look at how the new information technologies are introduced in both parts of the world.

CURRENT RESEARCH PROJECTS

(**Dates in bold** refer to foreign/international research projects)

2000 - 2004

European Media, Technology and Everyday Life Network (EMTEL). Research Training Network within the Fifth RTD Framework Programme of the EU.

1999 - 2002

De Vlaamse Multimedia Actoren: Inventarisatie van de Vlaamse internetindustrie, gefinancierd door PBO 98 - Vlaamse Gemeenschap.

1999 - 2003

Ontwikkeling & gebruik van informatie- en communicatietechnologie binnen de kleinschalige professionele context (SOHO), gefinancierd door NFWO.

2000 - 2002

Competition, decisions and mediapolicy in the European Union, Consultancy project financed by CEAS- Norway

1997 - 2001

Interdisciplinair aspectenonderzoek naar de informatiemaatschappij: Netwerken, gebruikers en de rol van de staat, IUAP in samenwerking met FUNDP - Namur en LENTIC - Liège, gefinancierd door DWTC.

1997 - 2001

Telecommunicatie, liberalisering, privatisering en ontwikkeling in de derde wereld. Kritische analyse en prospectieve evaluatie van het telecommunicatiebeleid in Zuidelijk Afrika, gefinancierd door NFWO.

1997-2002

Information technology policies of international organisations in Sub-Sahara Africa, gefinancierd door OZR - VUB

1996 - 2001

Media, significatie en informatie. De mediatisering van publieke sfeer tussen dualisering en democratisering, GOA in samenwerking met Cemeso - VUB gefinancierd door Vlaams ministerie van Onderwijs.

COMPLETED PROJECTS

(**Dates in bold** refer to foreign research projects)

1997 - 2000

Socio-Economische en regulatorische voorwaarden voor de innovatie van multimediasdiensten in Vlaanderen, medialabproject gefinancierd door IWT.

1997 - 1999

Social Learning in Multimedia - Targeted Social Economic Research, in co-operation with CITA - Namur, financed by EU - DG XII.

1997-1999

Capaciteitsopbouw Telecommunicatie- en Informatiebeleid voor de Universiteit van Zuid-Afrika. Internationaal samenwerkingsproject SMIT-Unisa gefinancierd door het de Vlaamse Gemeenschap Departement Onderwijs

1997-1999

l'implication des utilisateurs dans le développement de projets télématiques: du guide au réseau, financé par SSTC - volet C - forum des usages des télécommunications.

1997 - 1998

Rol, beïnvloedingsmechanismen en conflictzones van het communautair mededingingsbeleid inzake de audiovisuele cultuurindustrie postdoctoraal onderzoek gefinancierd door NFWO.

1998

Begeleiding en opstarting van de interactieve website naar aanleiding van het congres "Staten-Generaal Telecommunicatie", gefinancierd door BIPT.

1994-1998

Constructieve technology assessment & implementatie van nieuwe informatie-technologieën: een gebruikersanalyse, gefinancierd door: Onderzoeksraad VUB.

1995-1998

Convergentie tussen omroep en telecommunicatie, gefinancierd door: DWTC.

1997 - 1998

Innovation within the service sector: The use of interactive networks by retailers. Research training grant financed by the European Commission.

1996 - 1997

Innovatie en strategisch beleid inzake telecommunicatie- en informatiediensten in het Brussels Hoofdstedelijke Gewest, gefinancierd door: het Brussels Hoofdstedelijke Gewest (i.s.m. T-Regs en DDV).

1995 - 1997

Multimediaal archief- en documentconsultatiesysteem voor de Munt-schouwburg en andere culturele instellingen, gefinancierd door: DWTC.

1997

Geschiedenis van de telecommunicatiesector in België 1798-1998, gefinancierd door Belgacom.

1996

Must carry- en may carry rules voor Europese kabelmaatschappijen, Opdracht: Euro Media Activities.

1993-1996

Toekomststrategieën voor de telecommunicatie in België, gefinancierd door: Belgacom.

1990-1995

Grenzen en mogelijkheden van een kwalitatief cultuur- en communicatiebeleid in een economisch geïntegreerd Europa. Een kritische analyse en prospectieve evaluatie

aan de hand van het gevoerde en te voeren Europese omroepbeleid, gefinancierd door: NFWO (1990-1994) / SMIT (1994,-).

1995

Publieke Dienst en universele dienst in de Informatiesamenleving, Opdracht: Rathenau.

1995

De markt voor internationale telefonie in België, gefinancierd door: DDV Telecom Consultancy.

1995

Van telegraaf tot Telenet. Historiek en toekomst van het communicatie-beleid in België , gefinancierd door: NFWO/SMIT.

1990-1994

Nieuwe informatietechnologieën en derde wereld. Voorwaarden voor succesvolle endogene implementatie in de derde wereld, gefinancierd door: NFWO.

1994

Analyse van het Bangemann rapport. Nationale perspectieven, gefinancierd door: BIPT.

1992-1994

Regionalisatie van de telecommunicatie in België. Een technology assessment approach, gefinancierd door: Vlaamse Gemeenschapsminister voor Economie.

1992 - 1994

Onderzoek naar de sociale acceptatie van nieuwe informatietechnologieën, gefinancierd door: Onderzoeksraad VUB.

1994

The social responsibility of TV. The Belgian Case, financed by: European Institute of the Media Bertelsmann Foundation.

1994

L'usage des télécommunications en dehors des grandes entreprises et de la sphère domestique. Pre-study concerning a program to support the proliferation of innovations in telecommunication . Part 2, Co-promotor: Lentic, financé par: DPWB.

1994

Consumer Information Programmes on European Television, financed by: European Institute of the Media Bertelsmann Foundation.

1994

Convergence in Europe: state of the art (of the problems), Report for Impact (CE, DG XIII/E), Co-promotor CRID (Namen), financed by: DG XIII/E.

1992-1994

Sponsoring als communicatiestrategie voor een vernieuwd cultuurbeleid, gefinancierd door: NFWO

1992-1994

Een meta-assessment studie naar transfertmogelijkheden van informatietechnologie voor de derde wereld, gefinancierd door: NFWO.

1993-1994

Democratisch communicatiebeleid in Zuid-Afrika, gefinancierd door: SMIT, VUBAROS, University of South Africa.

1992-1994

Convergentie tussen het telecommunicatie- en audiovisueel beleid van de Europese Gemeenschap, gefinancierd door: DGXIII, Nederlands Persinstituut.

1991-1994

Analyse van de functioneringsproblematiek inzake de openbare toegankelijkheid van wetenschappelijke kennis voor sociale doelgroepen met bijzondere aandacht voor de vakbeweging en de milieubeweging, Co-promotor: European Centre for Work and Society (Maastricht), gefinancierd door: DPWB.

1993-1994

Toekomstverwachtingen van de Nederlandstalige media in België, gefinancierd door: Vlaamse Raad.

1993

L'usage des télécommunications en dehors des grandes entreprises et de la sphère domestique. Pre-study concerning a program to support the proliferation of innovations in telecommunication . Part 1, Co-promotor: Lentic, financé par: DPWB.

1993

Le Secteur Audiovisuel en Belgique, financé par: BIPE (Paris).

1990-1993

Comparatief onderzoek naar de verspreiding en de consumptie van tv-fictie in Europa, gefinancierd door: VUB.

1991-1993

Telecommunicatie en beleid in België. 1830-1991, gefinancierd door: Ministerie van PTT.

1991-1992

Een kwalitatieve receptie-analytische benadering van de cultureel imperialisme thesis, gefinancierd door: VUB.

1992

Kwalitatief mediabeleid in België, gefinancierd door: Vice-voorzitter van de Vlaamse Regering. Vlaams Gemeenschapsminister voor Economie.

1992

La réforme des télécommunications publiques belges, financed by: Centre National d'Etudes des Télécommunications (CNET)

1991-1992

Sponsoring in België, gefinancierd door: Variety, sponsoring bureau.

1991

Multimedia concentration in Europe. The Belgian case,
financed by: European Institute of the Media.
Manchester.1991*Satelliet televisie in Europa,*
gefinancierd door: Onderzoeksraad VUB.

1991

De geschiedenis van 150 jaar telecommunicatie techniek
in België, gefinancierd door: Telecommunicatiemuseum
Brussel.

1990-1991

European perspectives (EC) on convergence, financed by:
DGXIII, LENTIC (Liège) & Centre for Communication and
Information Studies (UK).

COLLABORATORS/HUMAN CAPITAL

Director

Prof. Dr. Jean-Claude Burgelman

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Jean-Claude Burgelman is Chairman of the Department of Communication Studies at the VUB and lectures national and international media and communication policy. He has a long experience in Belgian and European media and communication policy research. He has published widely and is a member of several pan-European (academic) networks. He has worked as an expert advisor to DGXIII (EU), the Belgian National Science Foundation, the Belgian regulator (BIPT), and the Flemish Government. In 1999 he joins the Institute for Prospective Technological Studies (DG XII) in Sevilla/Spain for 2 years. His main research activities concern the socio-economic effects/consequences of the information society

Researchers

Bart Cammaerts

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In 1992 Bart Cammaerts graduated as a social worker. He then travelled to Latin-America as a freelance journalist. Feeling a lack of theoretical background he started studying political science. After obtaining his degree he worked as press-secretary and advisor Information Society to Elio Di Rupo, vice-prime minister, minister of economic affairs and telecommunication. He is currently researching the role of government in the information society within the framework of an Inter-University Poles of Attraction-project (IUAP) with the universities of Liège and Namur.

Frank Neuckens

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Frank Neuckens is responsible for the co-ordination of the various research projects undertaken by SMIT-researchers. Apart from this, he is interested in the regulation of telecommunications and the strategies of cable operators. Furthermore he's responsible for all communication between SMIT and the public (both external partners and the public at large). Since 1999 he is researcher within Vl@mm@-contract of the Flemish government regarding research about ICT-industry in Flanders.

Gert Nulens

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In 1993 Gert Nulens obtained his degree of Communicationmanagement: Pers & Voorlichting. Three years later he graduated in Communication Sciences on the thesis: 'Socio-culturele aspecten van informatietechnologie in Afrika, de vergeten factor? Een analyse van het beleid van de Wereldbank, ITU en UNESCO ('90-'94). His scientific fields of interest are new information technologies and communication in the Third World, and the changing role of the international organisations in this area. Other point of interest: Internet and other online services.

Dr. Caroline Pauwels

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Caroline Pauwels was formerly a full time researcher at the National Fund for Scientific research and holds a Ph.d. on European audiovisual policy (Free University of Brussels). Since 1996 she is a professor in national and European communication policy at the VUB. She co-directs the Centre for Media, Information and Telecommunication and in 1998 she has been appointed as expert for the Flemish Mediaraad. Her current domains of interest are the convergence of telecommunications and audiovisual, and media concentration and antitrustpolicy. She has published several articles on media-related issues.

Jo Pierson

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Jo Pierson became interested in research concerning the user-consumer during his studies in Marketing. For this he obtained his degree in 1993. The next three years he studied Communication Sciences. He graduated on the thesis entitled: "Telesecurity systems via the cable TV network". This study contained an analysis of residential and "small" professional users of alarm systems via two-way coaxial cable. His current scientific research within SMIT concentrates on the supply, acceptance and use of multimedia technologies and services for professional users. The main focus is on applications for SOHO (Small Offices - Home Offices).

Yves Punie

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Yves Punie is studying acceptance, rejection and use of Information and Communication Technologies (ICTs) in the home. Everyday life is increasingly mediated through ICTs. Several questions are addressed in this research, such as the functions, meanings and consequences, both functional and symbolic of using ICTs in everyday life. Technology is seen as a social construction and the role of users in this process of innovation is taken into account. Expectations of increasing consumer demand for ICTs, and of the ultimate consumer (inter)activity are discussed.

Leo Van Audenhove

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Developing countries are altering their telecommunication and information technology policies to respond to global changes. However, these policies do not take place in a vacuum, they are mediated by a specific African economic, political, social and cultural context. The research focusses on the political economy of policy formation and implementation in the field of ICT in Southern Africa. Several questions are addressed, such as what are the enabling and constraining social, technical, economical and ideological factors in policy formation and implementation, to what extent do international organisations influence national policies and what space is left for an endogenous, developmental and social policy?

ASSOCIATED COLLABORATORS

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Pascal Verhoest is senior researcher and advisor of the Netherlands Organisation for Applied Scientific Research - Institute for Strategy, Technology and Policy (TNO-STB) and he teaches Information and Communication Policy at the Free University of Brussels. His main field of interest is the political economy of information and communication systems. His research includes both aspects of the 'network economics' and of the 'economic networks'. Amongst other things, Pascal Verhoest is expert participant in the OECD Working Party on the Information Economy and secretary of FIST, the permanent working party of the Dutch telecommunications industry on interconnection and access. His academic publication

record includes books and several international articles on telecommunication policy and electronic commerce.

Luciano Morganti

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Luciano Morganti graduated in Philosophy of the Language in 1994, in Rome, with a thesis on 'Hypertexts: Linguistic and Theoretical Aspects'. Since then he has been interested in new communication technologies and their implications in education and learning as well as its effects over society. At the present he is working as a teaching assistant at the College of Europe where, in 1997, he obtained a Master Degree in European Studies with a thesis on "The European Union and the Internet Community: a New Public Sphere?". His present researches concern the development of the Internet and the features and challenges of the so called Information and Knowledge Society.

Patrizia Cincera

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Patrizia Cincera s a Ph.D. student focusing mainly on European media regulation and on the evolution of the convergence phenomenon in the sectors of telecommunication, media and computing. She has been working as a research assistant for the Centre for European and Asian Studies (CEAS) at the Norwegian School of Management in Oslo in collaboration with the Institute of European Studies at the Université Libre de Bruxelles (ULB). She has a degree in Journalism and a Master's degree in Political Science and European Studies. Both degrees were obtained at the ULB.

CO-OPERATION

Current

* EMTEL

(European Media, Technology and Everyday Life Research Network) Research Training Network within the Fifth RTD Framework Programme of the EU with LSE (London), IPTS (Seville), SINTEF (Trondheim), COMTEC (Dublin), TNO/ASCOR (Delft/Amsterdam) and LENTIC (Liege).

* IUAP

(Inter Universitaire Attractie Pool)Belgian Inter University Research Network with LENTIC -ULG (Liège) and CITA - CRID - FUNDP (Namur)

* ENCIP

(European Network on Communication & Information Perspectives) Euroepan Economic Interest Grouping (EEIG) with CIC (Stockholm), IDATE (Montpellier), TNO (Delft), MERIT (Maastricht), SPRU (Brighton), COMTEC (Dublin), WIK (Bad Honnef), LENTIC (Liege), CTI (Lyngby), Chalmers University (Goteborg) and National Technical University of Athens

Delegate for Belgium in Management Committee of COST Action 269 (COST-Telecom) 'User Aspects of ICTs' (1999-2004)

* BCAS

Brussels Centre for African Studies (Joint Research Centre of the ULB and VUB). BCAS is member of AEGIS (Africa-Europe Group for Interdisciplinary Studies)

* COST

Delegate for Belgium in Management Committee of COST Action 269
(COST-Telecom) 'User Aspects of ICTs' (1999-2004)

Delegate for Belgium in Management Committee of COST Action A16 (COST-Telecom) 'Policy and regulatory responses to the use of electronic communications technologies by transnational communities in Europe' (1999- 2004)

Past

* NETEPS (Network on European Communications Policy and the Peripheral Regions/Small Countries)

* Centre for Communication and Information Studies (London).

* Centre National des Etudes en Télécommunications (Paris).

----- SMIT Annual Report 1998 - Collaborators, Co-
operations & Clients-----

- * Comparative Media Systems (international research group on new media and information technologies).
- * European Centre for Work and Society (Maastricht).
- * EuroComm Recherches (pan European research group on telecom).
- * Working Group on Broadcasting (Media) and Cultural Policy in the Small European Countries (pan European research group).
- * Science, Technology Assessment and Managment Group (VUB)
- * European Information Policy Support Network. (DG XIII/E).

CONSULTANCY SERVICES AND CLIENTS

- * Belgacom (Belgian PTO)
- * Belgian Ministry of PTT (Post, telegraphy & telephony)
- * BIPE (Paris)
- * BIPT (Belgian Telecommunication Regulating Authority)
- * BHG (Council of Brussels Capital Region)
- * BRTN (Flemish public service broadcaster)
- * CNET (Centre National d' Etudes en Telecommunication - Paris)
- * DG XIII (RACE, ENS, IMPACT), DG XII (VALUE), DG X
- * DWTC (Federal Office for Scientific, Technical and Cultural Affairs)
- * EOS (Flemish scientific magazine)
- * Euro Media Activities (Consultants EC)
- * European Centre for Work and Society (ECWS, Maastricht)
- * European Institute for the Media
- * Flemish Minister President
- * Flemish Ministry of Economics
- * France Telecom
- * GIMV (Flemish regional development company)
- * Intercai
- * Mc Kinsey consultants
- * Mediagids (Kluwer)
- * Museum of PTT (Post, telegraphy & telephony)
- * Nationaal Fonds voor Wetenschappelijk Onderzoek (Belgian Research Funds)
- * Philips

MOST IMPORTANT PUBLICATIONS

BOOKS (Dates in bold refer to foreign publications)

- 2000
Beyond Competition: broadening the scope of telecommunication policy, VUBpress, Brussel (in press)
- 1995a
Van Telegraaf tot Telenet. Brussel: VUBpress.
- 1995b
Van Tamtam naar Virtuele Realiteit: Telecommunicatie in opmars. (als co-redacteur:) Leuven: Davidsfonds.
- 1995c
La politique des télécommunications en Belgique 1830-1991. Brussel: Synedi. (Franse vertaling 1991)
- 1994a**
Verglaasde steden. Amsterdam: Cramwinckel.
- 1994b
Audiovisuele media in België. Analyse en beleid. Brussel: VUBpress.
- 1992
Sponsoring in België. Een stand van zaken. Brussel: VUBpress/Variety.
- 1991
Telecommunicatie en beleid in België. 1830-1991. Amsterdam: Cramwinckel.
- 1990
Omroep en politiek. Het Belgische audiovisueel omroepbestel als inzet en resultante van partijpolitieke machtsstrategieën (1940-1960) . Brussel: BRT-Uitgeverij.

COMPLETED DOCTORAL DISSERTATIONS

- 2000 Yves Punie
Domesticatie van ICT. Adoptie, gebruiken betekenis van media in het dagelijkse leven: Continue beperking of discontinue bevrijding? - will be defending shortly
ICT mediated practices: Acceptance, use and meanings of ICTs in everyday life. Structural determination versus individual freedom.
- 1996 Pascal Verhoest
Openbare Telecommunicatie (1834-1994) - De rol van de Belgische overheid in het netwerkbeheer.. Brussel, VUB, 16 oktober 1996
Belgian government and Telecom-regulations: A historical perspective.
- 1995 Caroline Pauwels
Cultuur en economie: de spanningsvelden van het communautair audiovisueel beleid. Een onderzoek naar de grenzen en mogelijkheden van een kwalitatief cultuur - en communicatiebeleid in een economisch geïntegreerd

Europa. Een kritische analyse en prospectieve evaluatie aan de hand van het gevoerde Europees audiovisueel beleid. Brussel, VUB, 21 dec. 1995.

A Critical Evaluation of the E-C Audiovisual Policy.

1993 Daniël Biltereyst

Televisiekijkers tussen culturele identiteit en imperialisme: een geïntegreerde receptie-analyse benadering van de cross-culturele impact van VS televisie-fictie. Brussel, VUB, oktober 1993 (co-promotorship)

Cross cultural impact of US television fiction and reception analysis

PUBLICATIONS IN 1999

REPORTS AND CONTRACT RESEARCH

RGLO 99/1

Capaciteitsopbouw Telecommunicatie- en Informatiebeleid voor de Universiteit van Zuid-Afrika (UNISA), Eindrapport van het Internationaal Samenwerkingsproject ingediend bij het Ministerie van de Vlaamse Gemeenschap, Departement Onderwijs.

RUSE 99/1

Actieprogramma MEDIALAB - Bijkomende Opdrachten: Telenet Vlaanderen (970480) Report 'Expertise-ondersteuning bij vragen rond adoptie en gebruik van nieuwe media in de SOHO-markt.' (Eerste onderzoeksrapport - Voorstudie Telenet).

RUSE 99/2

Actieprogramma MEDIALAB - Bijkomende Opdrachten: Telenet Vlaanderen (970480) Report 'Expertise-ondersteuning bij vragen rond adoptie en gebruik van nieuwe media in de SOHO-markt.' (Tweede onderzoeksrapport - Eindrapport Telenet).

RUSE 99/3

Actieprogramma MEDIALAB (IWT) - *Tussentijds Verslag Nr.4 (01/07/98 - 31/12/98)*- Project: Socio-economische en regulatorische voorwaarden voor de innovatie van multimedadiensten in Vlaanderen.

RUSE 99/4

Actieprogramma MEDIALAB (IWT) - *Tussentijds Verslag Nr.5 (01/01/99 - 30/06/99)* Project: Socio-economische en regulatorische voorwaarden voor de innovatie van multimedadiensten in Vlaanderen.

ARTICLES (Dates in bold refer to foreign publications)

APAI/99/1

'Belgian Telecommunciation Policy: a Conflict between Social and Competition Regulation', in *Telecommunications Journal of Australia* (in press)

APAI/99/2

'Het Belgische Telecommunicatiebeleid: schipperen tussen sociale ambities en competitieve verlangens', in *Informatie & Informatiebeleid* (in press)

APAI 99/3

'Economic and Polirical Restructuring, Social Citizenship & New Social Righs in the Information Society' in: CAMMAERTS, Bart, BURGELMAN, Jean-Claude (eds): *'Beyond Competition: broadening the scope of telecommunication policy'*, VUBpress, Brussel, (in press)

APAI 99/4

CAMMAERTS, Bart: 'De rol van de overheid in het communicatiebeleid: van speler naar scheidsrechter ?' in Bodart, K. (ed): *Overheid en ICT. Hoe speelt de overheid in op nieuwe ICT? Een onderzoek van verschillende dimensies die door het Internetfenomeen worden in vraag gesteld*, Libridis, Ter perse 2000.

ACOM 99/1

'Die Rundfunksysteme Belgiens'. In: Hans-Bredow-Institut (ed.): *Internationales Handbuch fuer Horfunk und Fernsehen 00/01*. Baden-Baden/Hamburg: Nomos 2000.

ACOM 99/2

De creatie van een competitieve Europese audiovisuele programma-industrie: een mission impossible? In: BILTEREYST (D.) en DE SMAELE (H.). Ter perse 2000.

ACOM 99/3

De sterktes en zwaktes van de Belgische kabel in het licht van de optredende convergentie omroep/telecommunicatie: onzekerheden, toekomstperspectieven en beleidsopties. Acten van het colloquium 'Welke toekomst voor de kabel'. DWTC/SSTC, 10 januari 2000. Ter perse 2000.

ACOM 99/4

The market is the message. In: *Samenleving en politiek*, 1999, jg. 6, nr.1, p. 44-45

ACOM 99/5

Baas op eigen buis? In: *Samenleving en politiek*, 1999, jg. 6, nr. 3, p.47-48.

ACOM 99/6

Waar zit onze cultuurpolitiek? In: *Samenleving en politiek*, 1999, jg. 6, nr. 6, p. 38-39.

ACOM 99/7

Business as usual. In: *Samenleving en politiek*, 1999, jg. 6, nr. 10, p. 40-41.

ACOM 99/8

Is de Vlaamse film op sterven na dood? In: *De Nieuwe Gemeenschap*, oktober 1999, nr. 3, p. 9-11.

ACOM 99/9

'An overview of communication science research in the Netherlands and Flanders - case Free University of Brussels', in *Tijdschrift voor Communicatiewetenschap*, 27 (4), 257-271.

AUSE 99/1

'Het vrije beroep en de informatiesnelweg', in: Jo Pierson, Natalie Swalens, Patrick Van Eecke & Hendrik Larmuseau, *KMO-ACCENTEN: De informatiesnelweg - Praktijk en juridisch kader*, Diegem: Ced.Samsom, Deel 1 - Dossier 1999/1, 9-72.

AUSE 99/2

Het vrije beroep en de informatiesnelweg', in: Jo Pierson, Natalie Swalens, Patrick Van Eecke & Hendrik Larmuseau, *ACCOUNTANCY IN DE PRAKTIJK: De informatiesnelweg - Praktijk en juridisch kader*, Diegem: Ced.Samsom, 9-72.

AUSE 99/3

'Multimedia in Belgium', in: R. Williams & R. Slack (Eds.) *Europe appropriates multimedia. A study of the national uptake of multimedia in eight European countries and Japan*. University of Trondheim, Senter for teknologi of samfunn (STS), rapport nr. 42, April 1999, ISSN 0802-3581-42, 21-82.

AUSE 99/4

'Acceptance and use of ICT by Small Office & Home Office (SOHO):Analysing the appropriation of transaction-oriented and knowledge-oriented applications', in: *Conference Proceedings of the International Conference on Uses of Services and Telecommunications (ICUST)* (Organised by SEE, IREST & ADERA), Bordeaux, 7-9 June, 1999, 376-387.

AUSE 99/5

'Metropolitan Area Network (MANAP) - Digital Metropolis Antwerp (DMA)' (Chapter 8) in: Béatrice van Bastelaer & Claire Lobet-Maris (Eds.) *Social Learning regarding Multimedia Developments at a Local Level - The Case of Digital Cities* (SLIM-TSER - Proposal 4141 PL 951003 - July 1999). Namur: CITA-FUNDP, 151-172.

AUSE 99/6

'Toe-eigening van ICT door kleinschalige ondernemers: Een interpretatieve analyse van adoptie en gebruik', in *Communicatie*, 28 (4), 4-26

AUSE 99/7

Community Informatics for electronic democracy: Social shaping of the digital city in Antwerp (DMA)', in: Michael Gurstein (Ed.) *Community Informatics: Enabling Communities with Information and Communications Technologies*. Hershey, Idea Group Publishing.

AGLO99/1

'An Information Society in Africa? An analysis of the Information Society policy of the World Bank, ITU and ECA', *Gazette*, 61(6), 451-471. (also published in *Communicatio*, 25(1/2), 28-41)

AGLO99/2

'Information Society Policy in the Developing World: A critical assessment', *Third World Quarterly*, 20(2), 387-404.

AGLO99/3

De Informatiesamenleving in ontwikkelingslanden: de Afrikaanse casus', *Samenleving & Politiek*, forthcoming.

AGLO 99/4

'South Africa's Information Society Policy: An analysis overview', *Communicatio*, 25(1/2), 15-27.

AGLO99/ 5

'Naar een informatiesamenleving in Afrika: tussen discours en realiteit', *Nieuw Tijdschrift van de Vrije Universiteit Brussel (Themanummer: Afrika, interdisciplinair benaderd)*, 29-40.

AGLO 99/6

De geschiedenis herhaalt zich ... altijd anders', in Nulens, G.; Van Audenhove, L. & Burgelman, J.C. (eds.) *De digitale kloof. De informatierevolutie en het Zuiden, Noord-Zuid Cahier*, 24(4), 11-24.

AGLO 99/7

Nieuwe communicatie voor een nieuwe wereld?', in Nulens, G.; Van Audenhove, L. & Burgelman, J.C. (eds.) *De digitale kloof. De informatierevolutie en het Zuiden, Noord-Zuid Cahier*, 24(4), 25-36.

AGLO 99/8

'Het globale communicatieregime. Beleid van de Internationale Organisaties', in Nulens, G.; Van Audenhove, L. & Burgelman, J.C. (eds.) *De digitale kloof*.

De informatierevolutie en het Zuiden, *Noord-Zuid Cahier*, 24(4), 93-102.

ACOL 99/1

'The European Union content regulation in the converged communication environment', in K. Eliassen and M. Sjovaag (eds), *European telecommunications liberalisation*. pp. 74-90, Routledge, Londres.

SCIENTIFIC CONFERENCES, COLLOQUIA, WORKSHOPS:

ORGANISATION / PRESENTED PAPERS

(**Dates in bold** refer to foreign/international conferences)

CGLO 99/1

Communicatie en ontwikkeling: de Informatiemaatschappij in een internationaal kader. Fac. Politieke en Sociale Wetenschappen, Katholieke Universiteit Brussel, 11 Maart.

CGLO 99/2

Global Telecom regulation. An analysis of the international telecommunication policy of the World Trade Organisation. Advanced Postgraduate Programme in Telecommunications and Information Policy, Department of Communication, University of South Africa, Pretoria, 22 April, lecture.

CGLO 99/3

Communication and development: A global view on the Information Society. Department of Information Sciences, University of Pretoria, Pretoria, 13 May, lecture.

CGLO 99/4

'Information Society Policy in South Africa: An Overview' Centre for Information Development and Centre for Occupational Ethics/University of Pretoria: Moral and Legal Challenges of the Information Age. Pretoria, May 24-26, keynote paper.

CGLO 99/ 5

'Donor Practices in Institutional University Co-operation' Flemish Interuniversity Council: Institutional University Co-operation Partner Council. Brussels, June 12-13, keynote

CGLO 99/6

'Development Co-operation and Linkages in Higher Education: Key issues concerning policy and organisation' European Association for International Education: Eleventh Annual EAIE Conference: Good neighbours and faraway friends: regional dimensions of international education. Session on Educational Cooperation with Developing Countries, Maastricht, December 2-4, paper.

CPAI 99/1

'Access and the Information Society', presentation at IUAP-workshop 'La question de l'accès aux TIC et le rôle de l'Etat', Brussels, 2 Février.

CPAI 99/2

Co-Chair IUAP-workshop 'La question de l'accès aux TIC et le rôle de l'Etat', Brussels, 29 Février.

CPAI 99/3

'The need for a renewed social contract tuned to the information society', paper presented at European Network of Doctoral Studies in Communication and Media, Westminster-London, 29/8-03/9

CUSE 99/1

'Acceptance and use of ICT by Small Office & Home Office (SOHO):Analysing the appropriation of transaction-oriented and knowledge-oriented applications' Paper for the International Conference on Uses of Services and Telecommunications (ICUST), Bordeaux, France, 7-9 June 1999 (ADERA).

CCOM 99/1

Participant debat n.a.v. Symposium State of the art van de Vlaams-Belgische documentaire - Pre view point. Rijksuniversiteit Gent, Vakgroep communicatiewetenschappen, 25 februari 1999.

CCOM 99/2

Mede-organisator, voorzitter en eindrefereaat colloquium 'Welke toekomst voor de kabel'. DWTC/SSTC, 10 januari 2000.

CCOL 99/1

'Media et Communication: enjeux et pouvoirs', Congress Center of Metz, organised by the Institut européen du loisir pour le développement social, 20th of November 1999.

CCOL 99/2

'How to use the Tools of the Information Society', College of Europe, Bruges, 16th and 17th of October 1999.

**ARTICLES/REFERENCES IN NEWSPAPERS/MAGAZINES -INTERVIEWS
RADIO / TELEVISION**

Printed press

Philip Shishkin, 'Handset Subsidies Increase Cellular-Service Costs; Belgium Bans Practice', Wall Street Journal, November 1st 1999

De Hondt, Paul (1999) 'ICT bij accountants en juridische vrije beroepen', in: *STV berichten*, 5 (4), 1-3.

Audio-visual

Radio 1 - De wandelgangen (17/02/99) '*Internet, via welke weg in de huiskamer ?*'

Documentary VRT Television - CANVAS (05/09/99) '*Overleven - Welk Wonder Wacht*' (40 min)

Radio 1 De wandelgangen (11/01/00) '*De consequenties van de eventuele merger Newscorp - AOL*'

PUBLICATIONLIST UNTIL 1999

If you are interested in our previous publications, contact Frank Neuckens (co-ordinates look above) or try our WWW-page: <http://www.vub.ac.be/SCOM/smit/smit-uk.html>

Activity Report

LENTIC 1999

LENTIC is a multidisciplinary research centre of the Faculty for Economics, Management and Social Sciences at the University of Liège (Belgium). It focuses on economic, organisational and strategic aspects of innovation processes, with special emphasis on information and communication technologies. It is often called upon to meet external demands in these fields. Its team consists of nine researchers belonging to different fields of study such as economics, sociology, psychology, or management.

DEPARTMENTS

LENTIC stands for 'Laboratoire d'Etudes sur les Nouvelles Technologies de l'Information, la Communication et les industries culturelles', that is Laboratory for Studies on New Technologies in the field of Information, Communication and Cultural Industries. LENTIC is a multidisciplinary research centre of the Faculty for Economics, Management and Social Sciences at the University of Liège (Belgium). It examines the conditions, forms and potential consequences of innovative processes, whether at a macro-social or at an organisational level, particularly when they involve information and communication technologies. It often collaborates with other national and international research centres.

"Communication and Media" Department

For several years now LENTIC has examined social, economic and organisational aspects of our information society, with particular emphasis on the economic and industrial strategies used by influential agents. After studying the conditions in which the use of videotex developed in various European countries it has turned to a wider questioning bearing on the development of new communication possibilities. It examines the constraints and openings provided by rules and regulations; supportive strategies to be implemented as part of a public service; the socio-economic implications at stake in the development of 'information highways'; the reconfiguration that their development entails in the field of communication (audiovisual and other cultural industries).

"Organisations and HRM" Department

LENTIC researchers are involved in a number of projects involving network technologies. Thanks to such longitudinal studies LENTIC has specialized in the analysis of various aspects of organisational change.

Any process of change in a private or public company (technological mutation, downsizing, streamlining, reengineering or other) raises the same set of social and organisational issues: conflict management and management styles, congruence between organisational forms and management policies in the field of human resources, clashes between a through-time policy and the intrusion of unexpected issues, weight of the past. LENTIC carries out organisational auditing and conceptual analyses which can be used by organisational agents in order to assess and interpret the changes they go through or intend to implement.

"Technology Assessment" Department

Since its creation the LENTIC has specialised in technology assessment, which we conceive as a feed-back and support for the projects and programs that we assess. This assessment, which is based on the development of projects, aims at involving users, at understanding the development of uses, at supporting the definition and monitoring of projects, and at integrating social, political or ethical dimensions. Our pluridisciplinary team, by confronting various reference points, aims at privileging a continuous analysis rather than a final assessment. We develop strategies in order to better understand the development of projects and to carry out their follow-up, monitoring and success. The LENTIC's assessment methodology is built on two principles: it is a contextual assessment, which is meant to be close to field realities, and a processual assessment because we take into account the results of the projects' temporality.

RESEARCH TOPICS

Communication and Media Department

• **Observatory of Information Society initiatives**

Object : Evaluation of the regulation initiatives and industrial strategies relative to the development of the digital television market in the Benelux countries (1998-2000).

Funding body : European Commission DG XIII < IDATE.

Object : Correspondent for Belgium and Luxembourg for the ESIS project < inventory of the European initiatives relative to the Information Society (1997-1999).

Funding body : ESIS Project < European Commission.

Object : Development of a Walloon observatory for the projects relative to the Information Society developed on the basis of alternative infrastructures (1996-1999).

Funding body : Walloon Government.

• **Emergence of New ICT Markets**

Evolution of ICT Demand and Use

Object : Research and interdisciplinary evaluation of the Information Society : networks, uses and roles of the State (1997-2001).

Funding body : Federal Services of the Scientific, Technical and Cultural Affairs (S.S.T.C. Prime Minister Services) Interuniversity Attraction Program F.U.N.D.P., V.U.B., Ulg.

Object : Evaluation of the development of the Belgian electronic information services market (1998-1999).

Funding body : European Commission - Federal Services of the Scientific, Technical and Cultural Affairs (S.S.T.C. Prime Minister Services).

Analysis of Economics and Industrial Strategies

Object : Research and interdisciplinary evaluation of the Information Society : networks, uses and roles of the (1997-2001).

Funding body : Federal Services of the Scientific, Technical and Cultural Affairs (S.S.T.C. Prime Minister Services) Interuniversity Attraction Program F.U.N.D.P., V.U.B., Ulg.

Object : Evaluation of the regulation initiatives and industrial strategies relative to the development of the digital television market in the Benelux countries (1998-2000).

Funding body : European Commission DG XIII < IDATE.

Quantification and/or Markets Analysis

Object : Evaluation of the development of the Belgian electronic information services market (1998-1999).

Funding body : European Commission - Federal Services of the Scientific, Technical and Cultural Affairs (S.S.T.C. Prime Minister Services).

State of the Art and Reconfiguration of Communication Sectors

Object : Study of the effects of the electronic commerce emergence on the publishing industry (1998-1999).

Funding body : Ministry of the French Community of Belgium.

• Public Policies

Analysis and Assessment of Public Policy

Object : Settling of a methodology for the elaboration of an evaluation tool for the information technologies development in the Walloon Region (1998-1999).

Funding body : Walloon Region.

Object : Elaboration of an education programme concerning multimedia at the University of Liège (1998-1999).

Funding body : University of Liège.

Organisations and HRM Department

• Organisational Change / Human Resources Management

Led by Prof. François Pichault, Head of the Dept for Human Resource Management in the Faculty for Economics, Management and Social Sciences at the University of Liège, LENTIC has specialized in the study of organisational change, whether they are related to new information technologies or not. Any process of change within a company raises a number of social and organisational issues: conflict management, congruence between organisational forms and policies for the management of human resources, weight of the past. Research projects carried out by LENTIC on this issue concern both private and public companies. The laboratory's aim is always to examine current or planned processes of change with an analytical and critical eye.

Recent Researchs:

Object : Aide à la constitution d'une bibliothèque virtuelle en matière de Gestion des Ressources Humaines (1999).

Funding body : Groupe industriel sidérurgique

Object : Analyse des représentations du changement auprès des cadres supérieurs (1999)

Funding body : Entreprise industrielle

Object : Elaboration d'un programme de formation sur les nouveaux modes organisationnels et leurs impacts sur les relations industrielles (1998-1999)

Funding body : Fonds Social Européen - ADAPT.

Labour Markets

LENTIC is involved in various studies concerning the evolutions of the labour market, with a special attention to:

- the development of the so-called atypical forms of work (short-term contracts, temporary jobs, interim jobs, telework, etc.) in relation with the diffusion of new

information and communication technologies; skill shortages and related (re)training issues; gender polarisation.

In these fields, LENTIC takes in charge desk research as well as data gathering and processing. Moreover, it is concerned with the assessment of employment policies launched by state agencies, particularly within the framework of regional development.

Object : Evaluation de l'impact des actions positives sur les représentations de l'égalité des chances dans le secteur privé (en collaboration avec l'HIVA) (1998-1999)

Funding body : Ministère de l'Emploi et du Travail.

Object : Evaluation et suivi des programmes d'action positive dans le secteur privé (1997-1998)

Funding body : Ministère de l'Emploi et du Travail

• **New Organisational Forms / Information and Communication**

LENTIC has been for many years involved in many researches related to the emergence of the so called New Organisational Forms and the diverse impacts of New Information and Communication Technologies on the way organisations are running and structuring. Ordered by both Belgian and European institutions, as well by private companies wishing our researchers to ensure a socio-organisational follow-up of the implementation process of new telematic tools, our researches have covered these last years on different large subjects - i.e. evolution of the "telework" and "network organisations" concepts, impacts of ICT on structure and HR policies - as well as on much more focused one - i.e. groupware tools implementation in an European automotive company, in-depth analysis of the call-center way of running, etc.

Recent Research

Object : INUI - Information Networks on Users Involvement

Funding body : Services fédéraux des affaires Scientifiques, Techniques et Culturelles

Object : Mise au point d'un manuel d'auto-diagnostic en matière de business électronique à l'usage des PME (1999).

Funding body : Technifutur

Object : Etude sur les usages de l'intranet (1999)

Funding body : Groupe industriel sidérurgique

Object : Etude pluridisciplinaire sur les conditions de réussite de l'introduction de la télématique dans les administrations publiques.

Funding body : SSTC - Services Fédéraux des Affaires Scientifiques, Techniques et Culturelles.

Object : Elaboration d'un programme de formation sur les nouveaux modes organisationnels et leurs impacts sur les relations industrielles (1998-1999)

Funding body : Fonds Social Européen - ADAPT.

• **Public Administrations**

Organisational change will follow specific courses depending on the type of organisation involved. Public administrations and non-profit making organisations obey a set of constraints and offer a number of possibilities which have to be taken into account for an efficient organisational analysis. LENTIC has studied and accompanied such processes of change in various Belgian ministries, mostly related to the introduction of new information and communication technologies. It also contributes to the reflexion currently carried out in the various state and local police corps on how work and collaboration processes can be improved. In the field of non-profit making organisations some of the LENTIC researchers have carried out an in-depth study on the relation between voluntary work, organisational values and change processes.

Recent Researchs

Object : INUI - Information Networks on Users Involvement

Funding body : Services fédéraux des affaires Scientifiques, Techniques et Culturelles

Object : Etude en termes de coûts-efficacité de l'accomplissement des tâches de police de base effectuées par la police communale et par la gendarmerie (1998-1999).

Funding body : Ministère de l'Intérieur.

Object : Etude pluridisciplinaire sur les conditions de réussite de l'introduction de la télématique dans les administrations publiques.

Funding body : SSTC - Services Fédéraux des Affaires Scientifiques, Techniques et Culturelles.

Technology Assessment Department

The (intermediary or final) users, the uses and their development are essential factors for the success of any technological project, be it public or private. If there are no uses or no users, the projects are bound to fail. The technological evolution and the emergence of an Information Society emphasise the importance of those questions: Who are the users and what are their roles in the creation of innovations? How are uses created and adopted? And how do they evolve?

Three theoretical models provide an answer to these questions: diffusion, appropriation and translation. The LENTIC proposes methods in order to combine those three models, which allows us to analyse the users' involvement and to explain the way uses develop.

The LENTIC is called on by projects managers, administrations and companies, and takes a clarifying and voluntarist look at the users' involvement and at the development of uses in each project. It aims at providing those technological projects with real opportunities of success among the public.

Recent Researchs

• User's Involvement

Object : Etude sur l'implication des utilisateurs dans le développement de projets télématiques : du guide au réseau (1997-1999).

Funding body : Services fédéraux des Affaires Scientifiques, Techniques et Culturelles (S.S.T.C. Services du Premier Ministre).

• Monitoring Innovation

The monitoring of innovating technological projects requires not only a good knowledge of the technological aspects of the projects, but also a focus on several other factors, which are:

- the economical factor, that is the position of the product on the market
- the organisational factor which results from the partnership between organisations
- the cultural factor which results from trans-sectorial and transnational collaborations

Through combining methods and concepts from several theoretical frameworks (planning, strategic, incremental, etc. models), the LENTIC has carried out observation and accompaniment tasks for several years.

These tasks, which have been asked for by teams of international partners, companies or administrations, directly support the monitoring of concrete long-term projects.

• The Information Society

The Information Society is a project in which knowledge has a central position, be it in the fields of production, of consumption, or of citizenship.

We can now list the democratic challenges that it raises: accessibility, structuration, protection and management of the information; changes in employment, in investments, in economies and in the local and global political balances.

The education of the younger generations and the training of adults are important, but probably insufficient, features in the actions that have to be conducted in order to guarantee a long-term democratic and fair balance in our transformed society.

Relying on political and social points of reference developed by several international reflection groups such as the High Level European Experts Group, the Lisbon Group and the European Commission, the LENTIC offers its expertise to project managers, administrations and companies to assess, support and develop technological projects that will help to face the democratic challenges of tomorrow: social justice, information management, private life protection, human resource management, local citizenship, long-term development, etc.

Recent Researchs

Object : Recherche et évaluation interdisciplinaire sur la Société de l'Information : réseaux, usages et rôles de l'Etat (1997-2001).

Funding body : Services fédéraux des Affaires Scientifiques, Techniques et Culturelles (S.S.T.C. Services du Premier Ministre) - Pôle d'Attraction Interuniversitaire F.U.N.D.P., V.U.B., ULg.

Object : Inventaire des initiatives européennes relatives à la Société de l'Information (1997-1999).

Funding body : Projet ESIS - Commission Européenne (DG XIII).

TEAM

An Interdisciplinary Team

Established in 1986, LENTIC is composed currently by some nine researchers coming from different scientific fields : specialists in management and communication services, economists, historians, social scientists, psychologists, etc.

President : Michel De Coster, ordinary professor.

Director : François Pichault, ordinary professor.

Head of "Communication" Department : Marc Minon, senior researcher.

Head of "Organisation" Department : Linda Agro, senior researcher.

Head of "Evaluation" Department : Marc Bogdanowicz, senior researcher.

Researchers

Linda AGRO
Marc BOGDANOWICZ
Annie CORNET
Anne-Marie DIEU
Dominique GILLEROT
Joëlle KIVITS
Marc MINON
François PICHAULT
Giseline RONDEAUX

Administrative Team

Paola FAYS
Bérengère PIROTON



FACULTÉS UNIVERSITAIRES NOTRE-DAME DE LA PAIX - NAMUR

Cellule Interfacultaire de Technology Assessment

Rapport d'activités 1999

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Outre une présentation générale de la cellule (p. 5), ce document décrit brièvement la dizaine de membres, directeurs et chercheurs, qui la composent (p. 9). Il énumère les principaux partenaires de la CITA et réseaux de recherche dont ses membres font partie (p. 13). Il présente également, plus en détail et par fiche, les recherches menées durant l'année 1999 (pp. 17-42), les manifestations organisées par le groupe de recherche (pp. 43-44), ainsi que la liste de ses principales publications (pp. 45-48).

Présentation générale de la CITA

La CITA est un centre de recherche interdisciplinaire spécialisé dans le *Technology Assessment*, c'est-à-dire l'évaluation sociale des nouvelles technologies de l'information et de la communication). Créée en 1988 par quatre départements des Facultés Universitaires Notre-Dame de la Paix à Namur (l'UER Méta-Informatique de l'Institut d'Informatique, le CRID - Centre de Recherches Informatique et Droit - de la Faculté de Droit, le Département Sciences, Philosophies et Sociétés de la Faculté des Sciences et le Département d'Analyse Economique de la Faculté des Sciences économiques, sociales et de gestion), la CITA consacre l'essentiel de ses travaux aux Technologies de l'Information et de la Communication (TIC).

Depuis 1991, la CITA a été reconnue par les Services fédéraux des affaires Scientifiques, Techniques et Culturelles (SSTC) comme centre d'excellence dans le domaine du *Technology Assessment* (TA).

La CITA participe aussi activement à d'autres programmes de recherche belges, européens et internationaux. Elle poursuit ainsi des coopérations depuis plusieurs années dans le cadre d'un programme européen de maîtrise en Science, Technologie et Société (ESST) avec des universités européennes, dont le but est de former de jeunes européens à l'analyse des relations entre science, technologie et société. En septembre 1996, la CITA a signé, une entente de collaboration avec le CEFRIO (CEntre FRancophone en Informatisation des Organisations) au Québec, afin de faciliter l'échange de résultats de recherche et d'organiser des manifestations communes, notamment sur les thèmes de l'informatisation des PME et du lien entre administrations et inforoutes.

Domaines de recherche

Les recherches de la CITA s'articulent autour de 5 axes principaux. Ces 5 axes visent à évaluer les enjeux de société liés au développement des NTIC.

1. L'analyse des **processus de développement de projets et d'usages** des technologies de l'information et de la communication

- ◆ Etablissement de cartes d'acteurs
- ◆ Analyse stratégique : objectifs, intérêts, moyens et stratégie
- ◆ Evaluation sociale : bilan des risques et des bénéfices pour les acteurs

Exemples de recherches

- Pôle d'Attraction Interuniversitaire sur les risques, bénéfices et enjeux de la diffusion des TIC (SSTC-PAI II, 1991-1995)
- Elaboration et évaluation d'un prototype de carte-santé (HEMACARD) (SSTC-PAI II, 1991-1995)

- Analyse du développement des projets de "villes virtuelles" (UE-TSER/SLIM, 1996-1998; SSTC-PAI IV, 1997-2001)

2. L'analyse des **facteurs de diffusion** des TIC dans les organisations

- ♦ Evaluation des facteurs conditionnant la diffusion des TIC dans les organisations publiques et privées :
 - facteurs organisationnels - les structures de l'organisation
 - facteurs sociologiques - les pratiques de travail et les relations sociales
 - facteurs managériaux - les politiques et pratiques de gestion

Exemples de recherches

- Diffusion et usage des Systèmes d'information Inter-Organisationnels (SIO) dans les PME (SSTC, 1996-1997 et Fond Social Européen - Région wallonne 1998 - 1999)
- Développement des nouveaux services en ligne dans les administrations fédérales (SSTC, 1997)
- Elaboration de fiches sur les métiers du multimédia (RW-DGTRE, 1996-1998)
- Analyse des stratégies de mise en œuvre des « guichets uniques » dans les administrations belges (UE- DGXII, programme COST A14, Work Group 3, 1999-2002)

3. L'évaluation des **impacts socio-organisationnels** des projets TIC

- ♦ Evaluation de l'intégration des projets informatiques dans les pratiques de gestion et les structures d'organisation
- ♦ Evaluation des conditions d'appropriation des projets par les utilisateurs

Exemples de recherche

- Evaluation de l'informatisation de la police communale belge (PIP) et de la gendarmerie (Polis) et des structures de coopération locale (Ministère de l'Intérieur-PGR, 1995-1997, 1998-1999)
- Analyse d'opportunité organisationnelle du développement d'un Intranet dans une administration Wallonne (DNF-MRW, 1997-1999)

4. L'analyse et l'évaluation des **politiques publiques** de développement des technologies de l'information et de la communication

- ♦ Comparaison des plans d'action nationaux
- ♦ Analyse des rôles de l'Etat en matière de régulation et promotion des usages
- ♦ Etude des notions d'intérêt général et de service public

Exemples de recherche

- Pôle d'Attraction Interuniversitaire sur la Société de l'Information (SSTC-PAI IV, 1997-2001)
- Analyse des politiques régionales de développement des projets multimédia (UE-TSER/SLIM, 1996-1998)

5. L'analyse des questions d'éthique de l'informatique

- ♦ Evaluation des rôles de l'éthique, l'autoréglementation et la loi dans la régulation des usages des technologies de l'information et de la communication
- ♦ Evaluation du rôle de l'Etat dans la régulation de ces usages
- ♦ Evaluation du rôle des codes de conduite dans la régulation de l'informatique et, en particulier, de l'Internet

Exemples de recherche

- Analyse des codes d'éthique et de conduite des associations membres de l'IFIP (Ethics Task Force-IFIP General Assembly decision, 1992-1994; 1996)
- Etudes de cas et recherche sur le rapport entre l'éthique et les différents modes de régulation des autoroutes de l'information (SIG9.2.2-IFIP GA mandate, 1996-)
- Pôle d'Attraction Interuniversitaire sur la Société de l'Information (SSTC-PAI IV, 1997-2001)

Publications et Centre de Documentation

La CITA dispose, en outre, d'un important centre de documentation sur ses principaux sujets de recherche (Technology Assessment, autoroutes de l'information, politiques publiques en matière de Société de l'Information, EDI, cartes-santé, économie et sociologie des organisations, économie de l'innovation, éthique de l'informatique, télécommunications, ...) ainsi que d'une banque de données informatisée de plus de 8000 références.

Dans le cadre des différents projets de recherche, la CITA publie des rapports faisant état des principaux résultats obtenus dans le projet. La liste des publications accessibles au public est présentée sous chaque fiche projet reprise dans ce rapport d'activités. Ces publications peuvent être obtenues au prix de la photocopie et des frais d'envoi sur simple communication des références auprès de la CITA par fax ou courrier postal (à l'attention de Madame Laura OGER).

Les membres de la CITA

Les directeurs

- **Jacques Berleur s.j.**

Fondateur et co-directeur de la CITA, Jacques Berleur s.j., ingénieur civil de formation, licencié en philosophie et licencié en théologie, est professeur à l'Institut d'Informatique des FUNDP-Namur, université dont il a été Recteur durant 9 ans (1984-1993). Les aspects épistémologiques, éthiques et sociaux de l'informatique constituent ses domaines de spécialisation. A ce titre, il est actif au sein de différents organismes internationaux dont l'IFIP (*International Federation for Information Processing*) où il représente la Belgique au Comité technique 9 (*Computers and Society*) et où il préside le *Special Interest Group* relatif à l'éthique de l'informatique. Il est l'auteur de nombreux articles ainsi qu'éditeur d'une douzaine d'ouvrages.

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- **Claire Lobet-Maris**

Sociologue de formation, **Claire Lobet-Maris** est Docteur en sciences du travail (UCL). Elle est actuellement co-directrice de la CITA, chargée de cours et secrétaire académique de l'Institut d'Informatique aux FUNDP. Ses domaines de spécialisation sont, d'une part, l'analyse organisationnelle du développement des technologies de l'information et de la communication et, d'autre part, l'analyse des politiques publiques de soutien à l'innovation technologique. De nombreuses publications sont à son actif dans ces domaines. Elle a également participé et dirigé de nombreux projets de recherche régionaux, fédéraux et européens, notamment sur le thème des administrations publiques. Pendant deux ans, elle a travaillé au Cabinet wallon pour la Recherche, le Développement Technologique, les Sports et les Relations Internationales. Dans ce cadre, elle a fait fonction de conseiller du Ministre en matière de Recherche et Développement, a initié le programme mobilisateur « Du Numérique au Multimédia » et le projet RITTS-Prométhée sur l'évaluation de la stratégie d'innovation en Région Wallonne.

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- **Yves Poulet**

Licencié en philosophie et Docteur en droit, Yves Poulet est professeur à la faculté de Droit et au DES en Droit et Gestion des Technologies de l'Information et de la Communication (DGTIC) des FUNDP. Il dirige le Centre de Recherche Informatique et Droit (CRID) et est co-directeur de la CITA. Il est membre de la Commission

consultative de protection de la vie privée et membre du Legal Advisory Board de la DG XIII de la Commission Européenne (il y préside la Task Force '*Access to public information and Electronic Democracy*'). Son thème principal de recherche est le droit des nouvelles technologies de l'information et de la communication. Il est, dans cette matière et dans d'autres, l'auteur de nombreuses publications.

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Les chercheurs

- **Anne De Vos**

Titulaire d'une Licence en histoire - époque contemporaine, orientation économique et sociale (KUL)- et d'une Licence en sciences de gestion (FUNDP), Anne De Vos est chargée de recherche au sein de la CITA. Ses recherches portent principalement sur l'analyse organisationnelle d'un contrat d'administration et de l'implantation d'un Intranet dans les administrations publiques. Elle étudie aussi les processus d'évaluation dans les services de police locaux belge (ZIP). Enfin, elle est assistante dans le cadre du DES en Droit et Gestion des Technologies de l'Information et de la Communication (DGTIC).

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- **Dominique Dieng**

Titulaire d'une Maîtrise en droit des affaires (Université de Droit et de Santé de Lille) et d'un DESS en gestion (Université des Sciences et Techniques de Lille), Entrée en 1993, Dominique Dieng est coordinatrice de recherche à la CITA. Auparavant, elle a travaillé 5 ans dans le secteur privé. Ses principaux domaines de recherche sont, d'une part, les aspects sociologiques de la télématique médicale et, d'autre part, l'utilisation des TIC au sein des administrations publiques. Dans ce cadre, elle a travaillé plus particulièrement sur les aspects organisationnels et sur la communication de l'information publique vers les usagers de l'administration.

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- **Tanguy Ewbank**

Titulaire d'une Licence en sciences économiques appliquées (IAG - UCL), Tanguy Ewbank est chargé de recherche à la CITA. Son domaine de recherche se concentre autour de l'analyse organisationnelle tant dans le secteur privé (P.M.E. du Luxembourg Belge) que public (Ministère de l'Intérieur et Région Wallonne). Il s'attache à développer des outils de gestion pratique comme le « Réseau Expérimental Multimédia en Wallonie », un manuel d'aide à l'évaluation interne des Zones InterPolices.

e-mail: tewbank@info.fundp.ac.be - téléphone: (32) 81 72 49 61

- **Laurent Henin**

Licencié en histoire (UCL), lauréat du prix 1997 de la Fondation Wallonne Humblet pour son mémoire "Le slalom belge. Etude du problème communautaire à travers la caricature politique, 1961-1970" et titulaire d'un diplôme post-universitaire en droit et gestion des technologies de l'information et de la communication (DGTIC-FUNDP), Laurent Henin est chargé de recherche à la CITA. Il participe à l'étude sur les villes virtuelles mais son principal domaine de recherche à ce jour est l'utilisation pédagogique du multimédia (intégration des NTIC dans l'enseignement en Communauté Française de Belgique et à l'étranger).

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- **Christine Marsigny**

Titulaire d'une Maîtrise en sciences économiques et de gestion (FUNDP), Christine Marsigny est chargée de recherche à la CITA. Ses recherches portent actuellement sur l'analyse des processus d'évaluation au sein des structures policières locales belges ainsi que sur la définition d'un dispositif de coordination de celles-ci.

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- **Béatrice van Bastelaer**

Titulaire d'une Licence et Maîtrise en sciences économiques et sociales (FUNDP), Béatrice van Bastelaer est assistante à l'Institut d'Informatique, au sein de l'unité Informatique, Organisation et Société. Elle est en outre coordinatrice de recherche à la CITA, ainsi que responsable de la visibilité extérieure de la CITA (publications, site Web, etc.). Elle a également organisé diverses manifestations : séminaires sur le développement des autoroutes de l'information (1995-1996), " Rencontres réelles de villes virtuelles " (juin 1998, juin 1999) qui ont remporté un vif succès. De manière générale, ses recherches portent principalement sur les aspects socio-économiques des autoroutes de l'information et d'Internet et, surtout, sur le phénomène des villes virtuelles. Elle est actuellement en train de rédiger un livre sur ce sujet et collabore avec le Ministère wallon des Affaires Intérieures et de la Fonction Publique pour la mise en oeuvre de la politique régionale en la matière.

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Secrétariat et documentation

- **Laura Oger**

Candidate en sciences économiques et sociales, Laura Oger assure les fonctions de documentaliste et de secrétariat. Elle s'occupe également de l'organisation des principales manifestations de la CITA.

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Principaux partenaires de la CITA

Au niveau national

- CRID - Centre de Recherches Informatique et Droit, Facultés Universitaires Notre-Dame de la Paix - Namur (FUNDP)
- LENTIC - Laboratoire d'Etudes des Nouvelles Technologies de l'Information et de la Communication, Université de Liège (ULg)
- SMIT - Studies on Media Information and Telecommunication, Vrije Universiteit Brussel (VUB)

Au niveau international

COST A14 ICT in Public Administration - One Stop Government

L'action de recherche concertée COST A14, réalisée dans le cadre de la DGXII de la Commission Européenne, réunit un certain nombre de chercheurs européens spécialisés dans le domaine de l'impact des technologies de l'information et de la communication sur les administrations publiques.

- Universität Bremen, Telecommunications Research Group (DE) : Prof. Dr. Herbert KUBICEK et Dipl.-Pol. Martin HAGEN (coordinateurs du projet)
- Universität Oldenburg, FB Sozialwissenschaften (DE) : Prof. Dr. Klaus LENK
- Université de Paris IX-Dauphine (F) : Pierre CHAMBART
- Université Paris 13 (F) : Dominique CARRE
- Nottingham Trent University, Department of Economics and Politics (UK) : Chris BELLAMY et Andrew PETRIE
- University of Roskilde, Department of Social Science (DK) : Christian FRIIS
- University of Rome La Sapienza, Computer and Systems Science (I) : Silvio SALZA
- Katholieke Universiteit Brabant, Centrum voor Recht, Bestuur en Informatisering (NL) : Dr. Miriam LIPS
- Österreichische Akademie der Wissenschaften, ITA (A) : Dr. Rupert SCHMUTZER et Dr. Georg. AICHHOLZER
- University College Dublin, Library & Information Studies (IE) : Prof. Michael CASEY et Jessica BATES
- Universitat Autònoma de Barcelona (E) : Raquel GALLEGU-CALDERON et Natalia ROSSETTI
- Universitat de Barcelona, Facultat de Econòmiques, Departament de Ciència Política (E) : Mrs. Laura CHAQUES
- Fundació Carles Pi i Sunyer (E) : Tamyko YSA
- University of Edinburgh, Department of Politics (UK) : Prof. Charles D. RAAB
- University of Twente (NL) : Dr. Ronald E. LEENES
- University of Odense, Department of Political Science (DK) : Sune JOHANSSON
- C.E.A.T. Communauté d'études pour l'aménagement du territoire (CH) : Jean RUEGG
- University of Oslo, Faculty of Law, Section for Information Technology and Administrative Systems (N) : Prof. Dag Wiese SCHARTUM
- Norsk Regnesentral (N) : Ivar SOLHEIM

TSER - SLIM (Social Learning in Multimedia)

TSER, *Targeted Socio-Economic Research* ou recherche socio-économique finalisée, est un programme européen de la DG XII. Au sein de ce programme, la CITA participe au projet SLIM, *Social Learning in Multimedia*, qui vise à étudier les processus d'apprentissage des différents acteurs impliqués dans le développement de projets multimédia.

- Research Centre for Social Science, University of Edinburgh (UK): Robin WILLIAMS
- ComTec, Dublin (Ir): Paschal PRESTON
- University of Maastricht (Neth.): Wiebe BIJKER
- Roskilde University (Dk): Birgit JAEGER
- Centre for Technology and Society, Norwegian University of Science and Technology, Trondheim (No): Knut H. SØRENSEN
- Ecole Polytechnique Fédérale de Lausanne (CH): Pierre ROSSEL
- Telecommunications Research Group, Bremen University (D): Herbert KUBICEK

ESST (European Master in Science, Society and Technology)

ESST est un programme européen de maîtrise en Science, Technologie et Société comprenant une dizaine d'universités européennes, dont le but est de former de jeunes européens à l'analyse des relations entre science, technologie et société.

- University of East London (UK): Alvaro DE MIRANDA
- Rijksuniversiteit Limburg, Maastricht (NL): Rein de WILDE
- Ecole Polytechnique Fédérale de Lausanne (CH): Philippe ROBERT
- University of Oslo (No): Christine BRULAND
- Roskilde University (Dk): Lars FUGLSANG
- Université Louis Pasteur, Strasbourg (F): Patrick LLERENA
- Universidad Autonoma Madrid (E): Paloma SANCHEZ
- Universidad del País Vasco (E): Nicanor URSUA
- Athens School of Public Health (Gr): Demosthènes AGRAFIOTIS
- Università degli Studi di Bari (I): Nico PERRONE
- Vrije Universiteit Brussel (B): Jacques VILROKX
- Université Catholique de Louvain (B): Anne-Marie KUMPS
- University of Tampere (FIN): Gerd SCHIENSTOCK

Entente CEFRIO-CSO

En septembre 1996, la CITA a signé une convention d'entente et de collaboration avec le CEFRIO (Centre FRancophone en Informatisation des Organisations) au Québec, afin de faciliter l'échange de résultats de recherche et d'organiser des manifestations communes, notamment sur les thèmes de l'informatisation des PME et du lien entre administrations et inforoutes. Dans le cadre de cette convention, la CITA bénéficie du soutien de la Région Wallonne (Direction Générale des Relations Extérieures - DGRE) et de la Communauté Française de Belgique (Commissariat Général aux Relations Internationales - CGRI).

La CITA entretient les mêmes rapports de coopération avec le Centre de Sociologie des Organisations (CSO-CNRS) à Paris qui dispose également d'une entente avec le CEFRIO.

International Federation for Information Processing (IFIP)

La CITA participe aux travaux de l'IFIP (*International Federation for Information Processing*) relatifs aux liens entre informatique et société et aux aspects éthiques de l'informatique.

- Universidad de Salamanca (E) : Porfirio BARROSO ASENJO
- Info.T.EC Solutions Pty Ltd (Australia) : Julie CAMERON
- Honeywell Technology Center Europe (Czech Republic) : Jaroslav DOLEZAL
- Middlesex University (UK) : Penny DUQUENOY, Matt JONES, Harold THIMBLEBY
- Georgia Institute of Technology (USA) : Philip H. Jr. ENSLOW
- East Tennessee State University (USA) : Don W.GOTTERBARN
- University of the Aegean (Gr) : Dimitris GRITZALIS
- Privacy Advies- en Onderzoeksbureau (NL) : Jan HOLVAST
- University of Chattanooga (USA) : Joseph M. KIZZA
- European Commission : Vassilios LAOPODIS, Diane WHITEHOUSE
- Virginia Tech Blacksburg (USA) : John A.N. LEE
- The George Washington University (USA) : Dianne C. MARTIN
- Malaysian National Computer Confederation (Malaysie), Mohd. Salleh MASDUKI
- BoE Asset Management (South Africa) : Dr. Andrew MORRIS
- Universität Bremen (D) : Karl-Heinz RÖDIGER
- Universitat Barcelona (E) : Juana M. SANCHÓ GIL
- British Computer Society (UK) : T.R.H. SIZER
- Council of European Professional Informatics Societies (CEPIS): Arjan A. van DIJK
- Charles Sturt University (Australia) : John WECKERT
- Linköping University (Sweden) : Gunnar WENNGREN
- Computer Society of Zimbabwe (Zimbabwe) : Jean WHILEY

Recherches menées par la CITA en 1999

Recherche et évaluation interdisciplinaire sur la Société de l'Information: réseaux, usages et rôles de l'Etat (PAI IV)

Commanditaire

- SSTC - Services fédéraux des affaires Scientifiques, Techniques et Culturelles - Programme Pôles d'Attraction Interuniversitaires (Phase IV)

Promoteurs

- Jacques Berleur
- Claire Lobet-Maris
- Yves Pouillet (CRID)

Chargés de recherche

- Paul Belleflamme
- Marie d'Udekem-Gevers
- Tanguy Ewbank
- Laurent Henin
- Axel Lefèbvre (CRID)

Durée du projet

- 1er janvier 1997 - 31 décembre 2001

Partenaires

- CRID - Centre de Recherches Informatique et Droit, Facultés Universitaires Notre-Dame de la Paix - Namur
- LENTIC - Laboratoire d'Etudes des Nouvelles Technologies de l'Information et de la Communication (François Pichault, Marc Minon), Université de Liège
- SMIT - Studies on Media Information and Telecommunication (Jean-Claude Burgelman, Bart Cammaert), Vrije Universiteit Brussel

Description du projet

Inscrit dans le cadre du programme Pôles d'Attraction Interuniversitaires (Phase IV) des Services fédéraux des affaires Scientifiques, Techniques et Culturelles, le projet vise la constitution d'un pôle de recherche et d'évaluation interdisciplinaire sur le développement des autoroutes de l'information en Belgique. Appuyé à la fois sur des études conceptuelles et des analyses empiriques, ce pôle entend contribuer, par un travail intensif de valorisation des résultats, à la définition de politiques de développement durable en matière de Société de l'Information. Il est structuré autour

de trois axes principaux, chacun comportant une dimension conceptuelle, empirique et prospective.

Axe 1. Economie de l'innovation et développement des réseaux

Le premier axe de travail porte sur l'identification de scénarios de développement des réseaux de communication du futur. Ce premier axe donnera lieu à l'élaboration d'un cadre d'analyse qui permette d'étudier les différentes solutions techniques existantes, d'une part, sous l'angle de l'analyse des configurations d'acteurs en présence, des stratégies et des moyens mobilisés ou mobilisables par ces acteurs et, d'autre part, sous l'angle des théories économiques de l'innovation, de l'investissement et de la normalisation.

Axe 2. Dynamique des usages et logiques d'appropriation

Le deuxième axe de travail vise à développer une compréhension approfondie des usages des autoroutes de l'information dans leurs aspects sociaux, culturels et organisationnels. A travers cette compréhension, l'objectif est aussi de préciser les conditions de développement de la demande et de diffusion des services innovants de la Société de l'Information. Quatre domaines d'usage sont étudiés dans le cadre de ce deuxième axe par le biais d'études de cas menées sur des projets particuliers : la santé, la citoyenneté, l'éducation et l'administration publique.

Axe 3. Gestion de l'intérêt public et intervention de l'Etat

Le troisième axe de recherche a comme objectif d'élaborer différents scénarios d'intervention de l'Etat pour la régulation de l'intérêt public dans la Société de l'Information. Il s'attachera également à mettre en évidence le rôle de l'éthique dans la régulation du bien public. D'un point de vue prospectif, la recherche entend évaluer la faisabilité économique et la pertinence sociale des différentes approches en présence au niveau des pays européens et proposer un cadre original d'intervention de l'Etat et de complémentarité par l'éthique pour la régulation de l'intérêt public dans la Société de l'Information.

Publications

- BELLEFLAMME Paul (1999) "Le 'paradoxe de productivité' des technologies de l'information et de la communication : le cas du commerce électronique", in *Revue Ubiquité*, n°2, Mai 1999, pp. 17-30.
- BELLEFLAMME Paul (1999) "Assessing the diffusion of EDI Standards across Business Communities", in *EURAS Yearbook of Standardization*, Vol. 2, ed. by Manfred J. Holler and Esko Niskanen (Homo oeconomicus XV(3)), Munich: Accedo, pp. 301-324.
- BELLEFLAMME Paul (1999) "Oligopolistic Competition, IT Use for Product Differentiation, and the Productivity Paradox" (1999), à paraître dans *International Journal of Industrial Organization*.
- d'UDEKEM-GEVERS Marie (1999), "Internet Filtering: current provider roles and potential government policies" (Disponible sur le site web à l'adresse : <http://www.info.fundp.ac.be/~pai/workshop0499.html#MG>)
- d'UDEKEM-GEVERS Marie (1999), "Internet Filtering Criteria: Survey and Ethical Stakes", *Proceedings of the 4th ETHICOMP - International Conference on the Social and Ethical*

Impacts of Information and Communication Technologies, (ETHICOMP99, Look to the future of the Information society, 6 to 8 October 1999, Rome), Luiss CeRSIL, ISBN 88-900396-0-4.

- HENIN Laurent (1999), "Les nouvelles technologies à l'école : structures scolaires et politiques publiques", in *Revue Ubiquité*, n°3, Novembre 1999, pp. 131-137.
- LOBET-MARIS Claire, VAN BASTELAER Béatrice (1999), « Démocratie électronique et citoyenneté virtuelle », in *Inside Internet*, Summer 99, n° 24, pp. 102-107.
- POULLET Yves, VAN BASTELAER Béatrice (1999), « Rapprochement entre administrations locales et citoyens via les technologies de l'information et de la communication », in *Revue Ubiquité*, n°2, mai 1999, pp. 97-101.

Rapport de Recherche

- BELLEFLAMME Paul (1999) "Axis 1- Economy of Innovation and development of networks"

<http://www.droit.fundp.ac.be/webpai/index.html>

Ethique de l'informatique

Commanditaire

- International Federation for Information Processing (IFIP)

Promoteur

- Jacques Berleur

rgés de recherche

- Marie d'Udekem-Gevers
- Tanguy Ewbank

Durée du projet

- Septembre 1992 -> date indéterminée

Description du projet

La recherche sur l'éthique de l'informatique a commencé en 1992, suite à la demande de l'Assemblée générale de l'IFIP (*International Federation for Information Processing*) de faire des recommandations en matière de codes de bonne conduite pour informaticiens. Après avoir interrogé toutes les sociétés nationales, membres de l'IFIP, il est apparu que le projet d'un code mondial ne pourrait aboutir, vu notamment la diversité des situations légales, culturelles et sociales. Une analyse de tous les codes d'éthique et de conduite de ces sociétés membres a alors été proposée, accompagnée de recommandations relatives à l'écriture ou à la révision de codes (voir publications *Ethics of Computing: Codes, Spaces for Discussion and Law*).

Suite à ce travail, l'assemblée générale de l'IFIP a demandé, en 1994, que soit mis sur pied un groupe permanent de réflexion sur les problèmes éthiques de l'informatique, veillant notamment à proposer des analyses de cas réels et à analyser les problèmes surgissant avec le développement des technologies.

Les recherches présentes de ce groupe (SIG9.2.2) sont devenues très proches de celles de la CITA, dans le domaine de la régulation des autoroutes de l'information et du rôle des Etats dans cette régulation. Il apparaît que les systèmes légaux, essentiellement nationaux, seront sans doute accompagnés d'autres mesures, soit techniques, soit auto-réglementaires, soit éthiques. L'articulation et les relations de ces différents niveaux de régulation doivent cependant être clarifiées. Tel est l'objectif des recherches actuelles que l'on pourrait relier au thème général de la "gouvernance de l'Internet". Déjà une analyse de différentes techniques de filtrage ('PICS compliant' et 'not compliant') a été réalisée, de même que celle de quelque 20 codes d'auto-régulation et d'autant de codes de déontologie. Ainsi sont mises en évidence les questions éthiques telles qu'elles sont pressenties par différents groupes de personnes. Reste à déceler tout ce qui n'est pas pris en considération.

Ces recherches dans le cadre de l'IFIP sont également menées dans le Pôle d'Attraction Interuniversitaire consacré à la Société de l'Information (axe 3).

Publications

- BERLEUR Jacques(1999), "Une régulation éthique de l'Internet ?"; in *Choisir*, Genève.
- BERLEUR Jacques, (1999), *Ethique et autoroutes de l'information*, Académie Royale de Belgique, Groupe CAPAS- CAWET, Avril 1998 - Publié en 1999, 23 p. Texte - Résumé - Recommandations.
(Disponible sur : <http://users.skynet.be/kvab/CawetInfor/index.htm>)
- BERLEUR Jacques(1999), "Self-Regulation and Democracy: Choice and Limits?", in: *User Identification & Privacy Protection, Applications in Public Administration & Electronic Commerce*, Simone FISCHER-HÜBNER, Gerald QUIRCHMAYR & Louise YNGSTRÖM, Eds., Proceedings of the joint IFIP-WG8.5 and WG9.6 Working Conference, Stockholm 1999, DSV - Dept of Computer and Systems Sciences, Stockholm University/Royal Institute of Technology - on behalf of IFIP, Report Series 99-007, ISBN 91-7153-909-3, pp. 1-19.
- BERLEUR Jacques, DUQUENOY Penny and WHITEHOUSE Diane(1999), Eds., *Ethics and the Governance of the Internet*, IFIP-SIG9.2.2 (IFIP Framework for Ethics of Computing), September 1999, IFIP Press, Laxenburg - Austria, ISBN 3-901882-03-0, Event number 1303, 56 p. This publication may also be found on the SIG9.2.2 website by clicking on SIG9.2.2 "Ethics and Internet Governance"
(Disponible sur : <http://www.info.fundp.ac.be/~jbl/IFIP/cadresIFIP.html>)
- d'UDEKEM-GEVERS Marie(1999), *Internet Filtering : current provider roles and potential government policies*, Avril 1999.
(Disponible sur : <http://www.info.fundp.ac.be/~pai/workshop0499.html#MG>)
- d'UDEKEM-GEVERS Marie (1999), Internet Filtering Criteria: Survey and Ethical Stakes, Proceedings of the 4th ETHICOMP - International Conference on the Social and Ethical Impacts of Information and Communication Technologies, (ETHICOMP99, Look to the future of the Information society, 6 to 8 October 1999, Rome), Luiss CeRSIL, ISBN 88-900396-0-4.

SLIM - Social Learning in Multimedia Apprentissage social du Multimedia

Commanditaire

- Commission Européenne - DG XII - programme RSEF-TSER (Recherche Socio-Economique Finalisée - *Targeted Socio-Economic Research*)

Promoteur

- Claire Lobet-Maris

Chargée de recherche

- Béatrice van Bastelaer

Partenaires européens

- Research Centre for Social Sciences, University of Edinburgh (UK)
- Roskilde University (DK)
- Forschungsgruppe Telekommunikation, Universität Bremen (DE)
- Communication Technology and Culture Research Centre (COMTEC), Dublin City University (IR)
- Technology and Society Studie - Faculty of Cultural studies, University of Maastricht (NL)
- Centre for Technology and Society, University of Trondheim (NO)
- ESST, Ecole Polytechnique Fédérale de Lausanne (CH)

Partenaire belge (sous-traitant)

- SMIT - Studies on Media Information and Telecommunication Vrije Universiteit Brussel (VUB)

Durée du projet

- 1er mai 1996 - 31 janvier 1999

Description du projet

La recherche SLIM, *Social Learning in Multimedia*, vise à étudier les processus de *social learning*, c'est-à-dire les processus d'apprentissage que l'on peut observer lors du développement de projets de la part des différents acteurs impliqués.

Dans un premier temps (1996-1997), les chercheurs ont fait l'inventaire du développement du multimédia dans les pays couverts par les différents partenaires européens ainsi que la France (couverte par la CITA). Dans ce cadre, les chercheurs ont analysé le cadre géo-politique et économique ainsi que les principaux acteurs présents dans les différents pays dans le domaine du multimédia. Un certain nombre d'expérimentations sociales ou de pilotes techniques et commerciaux en cours dans ces différents pays ont également été listés. Toujours dans cette première phase relative aux études nationales, la CITA a participé à la comparaison des politiques

multimédia menées dans les différents pays étudiés et a notamment analysé le rôle des différents Etats en matière de multimédia.

La deuxième partie de la recherche (1997-1998) a été consacrée à l'analyse de trois domaines de développement du multimédia : l'éducation, la culture et les loisirs, et le secteur public. Dans ce cadre, la CITA a coordonné les recherches relatives à l'utilisation du multimédia dans le secteur public, plus précisément au niveau des villes virtuelles par le biais de différentes études de cas menées par les centres partenaires. Dans le cadre de cette recherche SLIM ainsi que de la recherche PAI à laquelle la CITA contribue, une rencontre réelle de villes virtuelles a été organisée en juin 1998 afin de présenter les premiers résultats des recherches sur les villes digitales et de permettre aux acteurs des villes de se rencontrer et d'échanger leur expérience.

L'objectif final de la recherche SLIM est d'éclairer la Commission Européenne, par le biais de recommandations claires et précises, sur la manière de prendre en compte les exigences et les besoins des utilisateurs dans la construction d'une technologie, trop souvent dominée par l'offre.

Au début de l'année 1999, la CITA a finalisé le rapport final de la recherche SLIM sur les villes virtuelles. Ce rapport fera l'objet d'un livre qui sera publié au cours du premier semestre de l'année 2000 chez L'Harmattan dans la collection « Villes et entreprises ». Par ailleurs, durant l'année 1999, la CITA a présenté, en divers lieux, les résultats de la recherche SLIM.

Publications

- LOBET-MARIS Claire, VAN BASTELAER Béatrice (1999), « Regards sur la construction sociale des villes virtuelles », in *Actes de la conférence ICUST 1999*, Bordeaux, 7-9 juin 1999, pp. 43-53.
- POULLET Yves, VAN BASTELAER Béatrice (1999), « Rapprochement entre administrations locales et citoyens via les technologies de l'information et de la communication », in *4Instance*, n°8, April-May-June 1999, pp. 30-33
- VAN BASTELAER Béatrice (1999), « Les villes virtuelles en Belgique francophone et germanophone », *Wallonie*, 60/61, octobre 1999, pp. 37-56.
- VAN BASTELAER Béatrice (1999), *Introduction aux villes virtuelles*, Formation Proagec/Ledarel, séminaire de recyclage en management communal, Ulg Liège, 22 avril 1999.
- VAN BASTELAER Béatrice in collaboration with Claire LOBET-MARIS (1999), « Chapter 4: Development of Multimedia in France », in Robin WILLIAMS and Roger SLACK (eds), *Europe Appropriates Multimedia. A Study of the National Uptake of Multimedia in Eight European Countries and Japan*, STS-senter for teknologi og samfunn, Norwegian University of Science and Technology, rapport nr. 42, april 1999, ISSN 0802-3581-42, pp. 123-155.
- VAN BASTELAER Béatrice, avec la collaboration de Dominique DIENG, Anne DE BAENST-VANDENBROUCKE, Anne DE VOS et Régine DESSE (1999), *Compte rendu de la deuxième Rencontre Réelle de Villes Virtuelles*, 28 juin 1999.
- VAN BASTELAER Béatrice, LOBET-MARIS Claire (CITA) and PIERSON Jo (SMIT) in collaboration with Jean-Claude BURGELMAN, Yves PUNIE and Frank NEUCKENS (SMIT) (1999), « Chapter 2: Development of Multimedia in Belgium », in Robin

WILLIAMS and Roger SLACK (eds), *Europe Appropriates Multimedia. A Study of the National Uptake of Multimedia in Eight European Countries and Japan*, STS-senter for teknologi og samfunn, Norwegian University of Science and Technology, rapport nr. 42, april 1999, ISSN 0802-3581-42, pp. 21-82.

<http://www.ed.ac.uk/~rcss/SLIM/SLIMhome.html>

Action de Recherche Concertée COST A14 « One-Stop-Government » - Guichet Unique

Commanditaire

- Commission Européenne - DG XII - programme COST - action A14 « Government and Democracy in the Information Age »

Promoteur

- Claire Lobet-Maris

Chargée de recherche

- Béatrice van Bastelaer

Partenaires européens (liste non exhaustive)

- Universität Bremen, Telecommunications Research Group (DE)
- Universität Oldenburg, FB Sozialwissenschaften (DE)
- Nottingham Trent University, Department of Economics and Politics (UK)
- University of Roskilde, Department of Social Science (DK)
- University of Rome La Sapienza, Computer and Systems Science (I)
- Katholieke Universiteit Brabant, Centrum voor Recht, Bestuur en Informatisering (NL)
- Österreichische Akademie der Wissenschaften, ITA (A)
- University College Dublin, Library & Information Studies (IE)
- Universitat Autònoma de Barcelona (E)
- ...

Durée du projet

- Avril 1998 - 2002

Description du projet

L'action de recherche concertée COST A14, réalisée dans le cadre de la DGXII de la Commission Européenne, aborde la question du gouvernement et de la démocratie dans la société de l'information ou dans « l'ère de l'information » (*Government and Democracy in the Information Age*). Au sein de ce projet COST A14, le groupe de travail 3 s'intéresse au couple « technologies de l'information et administration » (*ICT in Public Administration*) et, plus spécialement, au concept de guichet unique (*one stop government*) au sein des administrations. Ce concept fait référence à l'intégration « orientée-client » de différents services électroniques dans différents domaines et à différents niveaux de pouvoir et d'administration. Le but du guichet unique est d'offrir plus rapidement des services publics aux citoyens. La mise en œuvre de ces guichets implique souvent une réorganisation importante de l'administration.

Dans un premier temps, il a été demandé aux participants du groupe de travail de réaliser une étude décrivant les principales initiatives existantes dans leur pays en matière de guichet unique. La synthèse de ces résultats a été présentée à un colloque organisé fin septembre 1999 à Bremen et l'ensemble des rapports nationaux devrait être publié dans le courant de l'an 2000.

D'autres colloques sont programmés pour les mois et années à venir : Gouvernement électronique : visions et réalités (février 2000 - Tilburg), Accès à et propriété de l'information publique (automne 2000 - Vienne), Gestion des connaissances et infrastructures informationnelles dans l'administration publique européenne (avril 2001 - Copenhagen), Gouvernement et réseau : dépasser les frontières (automne 2001 - Nottingham).

Publications

- LOBET-MARIS Claire (1999), *Une approche du One Stop Government - Guichet Unique. Résultats d'une enquête européenne*, INEMAP, formation en management communal, novembre 1999.

Rapport de Recherche

- LOBET-MARIS Claire, VAN BASTELAER Béatrice (1999), *One Stop Government in Belgium*, national COST report, November 1999, to be published.

[http:// www.fgtk.informatik.uni-bremen.de/cost](http://www.fgtk.informatik.uni-bremen.de/cost)

MAPI - Mouvement Anti-Pédophilie sur Internet

Commanditaires

- UNESCO
- Comité pour l'Innocence en Danger

Coordinateurs du projet

- Jacques Berleur s.j.
- Béatrice van Bastelaer

Participants au projet

- Tanguy Ewbank
- Claire Lobet-Maris
- Michäel Petit (Institut d'Informatique)

Durée du projet

- septembre 1999 - mars 2000

Description du projet

Début septembre 1996, suite à l'émotion suscitée en Belgique par l'affaire Dutroux, plusieurs chercheurs et académiques des Facultés Universitaires Notre-Dame de la Paix de Namur, principalement de l'Institut d'Informatique, décident de créer le groupe MAPI, Mouvement Anti-Pédophilie sur Internet. MAPI se voulait un groupe d'étude sur le problème de la présence sur Internet d'informations incitant à l'exploitation sexuelle des enfants. Quelques mois plus tard, MAPI publiait un rapport de vulgarisation sur le problème de la pornographie infantile sur Internet. Ce rapport est disponible en ligne à l'adresse :

<http://www.info.fundp.ac.be/~mapi/plan.html>.

Progressivement, MAPI est devenu un lieu de référence recevant régulièrement des messages de différents types dont, principalement, des demandes d'information, des messages d'encouragement pour notre démarche mais aussi des messages d'insultes de la part de pédophiles ou de défenseurs de la liberté d'expression à tout prix et, surtout, des messages de dénonciations de sites litigieux et de demandes d'aide pour combattre ce type d'information. MAPI est donc petit à petit devenu un point de contact (*hotline*) en matière de pornographie infantile sur Internet. Pour cette action, MAPI collabore avec la *National Computer Crime Unit* de la police judiciaire belge. D'autres contacts sont également en cours avec Childfocus, le centre pour enfants disparus.

Depuis septembre 1999, MAPI bénéficie d'une subvention de l'UNESCO dans le cadre du Comité pour l'Innocence en Danger. Cette subvention sera affectée à la rédaction d'une brochure reprenant une série de conseils pratiques pour lutter contre la pédophilie sur Internet. Ce dépliant est destiné aux pays francophones. Il vise à

expliquer, dans un langage clair et compréhensible par tous, les principales actions à entreprendre si, au détour de leur navigation sur Internet, les utilisateurs découvrent de l'information de nature pédophile : point de référence à contacter, information précise à fournir, indications sur le suivi de ce type de démarche, ...

Cette brochure insistera sur l'importance de sensibiliser les utilisateurs d'Internet à ce problème et sur la nécessité que tous contribuent à la lutte contre la pédophilie, sur Internet et en général, et sur la protection de l'enfance en danger. Dans la continuation de l'optique choisie en Belgique et récemment concrétisée par un protocole d'entente entre le ministre de la Justice, le ministre des Télécommunications et l'association des fournisseurs d'accès à Internet, la nécessité de collaborer avec le secteur privé sera soulignée.

Publications

- BERLEUR Jacques (1999), « Les travaux de MAPI, le rôle d'une Université », *Child Pornography Paedophilia on the Internet - Study day*, UNESCO, Paris, 21 juin 1999.
- VAN BASTELAER Béatrice (1999), « Introduction to the Initiative of the Movement Against Paedophilia on the Internet (MAPI) », *Sexual Abuse of Children, Child Pornography and Paedophilia on the Internet: An international challenge - Expert Meeting*, UNESCO, Paris, 18-19 janvier 1999.

<http://www.info.fundp.ac.be/~mapi>

Vademecum pour la communication de l'information publique au Ministère des affaires économiques

Commanditaire

- Ministère des Affaires économiques

Promoteurs

- Claire Lobet-Maris (CITA)
- Yves Poullet (CRID)

Chargée de recherche

- Dominique Dieng

Durée du projet

- Février 1999 - Novembre 1999

Description du projet

En 1998, le Ministère des Affaires économiques a confié au Centre de Recherches Informatique et Droit (CRID), une réflexion sur la mise en place d'une politique de diffusion de l'information. Celle-ci comprenait deux volets : un volet juridique, assumé par le CRID et un volet socio-organisationnel assumé par la CITA.

L'objectif de la recherche était l'émission de recommandations sur le processus de mise en place d'une politique de diffusion de l'information au sein du Ministère des Affaires Economiques. S'appuyant sur l'analyse de la politique de diffusion d'un site-pilote, le Service de l'Indice, elle visait à émettre des recommandations susceptibles de servir de modèle à l'ensemble des administrations du département pour la diffusion de leur information.

A l'issue de cette recherche, le Ministère des Affaires économiques a souhaité pouvoir disposer d'un outil généralisable à l'ensemble de ses administrations et a demandé au CRID la rédaction d'un **vade-mecum** pour aider ses administrations à mettre en place une politique de communication de l'information publique. Se situant dans la poursuite du précédent volet organisationnel, cette mission fut confiée à la CITA.

Rapport de recherche

- DIENG Dominique (1999), *Vade-mecum pour la communication de l'information publique*, Novembre 1999.

Elaboration d'un manuel d'aide à l'évaluation interne des dispositions prises dans le cadre des Zones InterPolices (ZIP)

Commanditaire

- Ministère de l'Intérieur - Direction Générale du Royaume - Affaires Générales

Promoteur

- Claire Lobet-Maris

Chargés de recherche

- Anne De Vos
- Tanguy Ewbank
- Christine Marsigny

Partenaire

- Division Appui en Matière de Politique Policière (S.G.A.P.)
- SONECOM s.p.l.r., Sondages, Etudes et Communication

Durée du projet

- 15 décembre 1997 - 30 novembre 1999

Description du projet

Le concept de Zone InterPolice (ZIP) est à la base d'un nouveau découpage du paysage policier de notre pays. Le territoire belge a été divisé en quelques 200 zones géographiques à l'intérieur desquelles l'ensemble des acteurs institutionnels sont amenés à proposer un projet commun en matière de sécurité locale. Le principal noeud opérationnel de ce processus se situe au niveau des forces de police locales à savoir la (les) brigade(s) territoriale(s) de gendarmerie et la (les) police(s) communale(s); ce sont à elles que revient la responsabilité de mener à bien les dispositions prises dans le cadre de la ZIP. Ce constat est renforcé par l'actuelle réforme des polices en cours qui prévoit une intégration des forces de police au niveau local.

C'est dans ce contexte que la Police Générale du Royaume a proposé à la CITA une convention de recherche. L'objet de la recherche vise à faire l'état des lieux en matière d'évaluation des accords et des actions entreprises au sein des ZIP et, in fine, fournir aux acteurs un outil pratique d'aide à l'évaluation. Quatre étapes ont été distinguées :

- enquête sur les pratiques, attentes et besoins en terme d'évaluation par un inventaire systématique enrichi par une série de visites de terrain;
- analyse des informations récoltées en la matière afin d'appréhender la situation générale et de dégager quelques cas méritant une étude plus approfondie;

- élaboration d'une méthode d'évaluation faisant appel à une synthèse de ce qui a déjà été fait de pertinent en la matière à un apport personnel du centre de recherche;
- rédaction d'un manuel pratique d'évaluation, outil méthodologique concret et utile, à l'usage des acteurs locaux.

Cette recherche porte sur un domaine sensible qui a trait au suivi permanent et à l'évaluation globale des faits posés de façon concertée en matière de sécurité locale par les acteurs opérationnels du système policier.

Dans cet environnement en pleine mutation, le premier défi a été de comprendre quel était le contexte dans lequel nous allons être amenés à proposer un outil de gestion. La compréhension des domaines d'activité, du type de collaboration actuelle ou encore de management interne est fondamentale.

La recherche s'est ensuite attachée à proposer dans un recueil pratique les enseignements tirés de nos visites, enquêtes et études de cas de la façon la plus directe et la plus valorisable pour le décideur au niveau local. Le rapport comporte aussi, en guise de conclusion, quelques pistes méthodologiques nées de nos observations ; elles ont pour vocation première d'être un cadre de réflexion adapté à la situation particulière qu'est la politique locale de sécurité.

Rapport de Recherche

- Anne De Vos, Tanguy Ewbank et Christine Marsigny sous la direction du Professeur Claire Lobet-Maris (1999), *Analyse des processus d'évaluation des accords dans les ZIP, Rapport Final*; Novembre 1999.

Etude d'opportunité et de faisabilité de la mise en oeuvre d'un contrat d'administration et d'un Intranet à la division de la nature et des Forêts (DNF-MRW)

Commanditaire

- Ministère de la Région Wallonne - Direction Générale des Ressources naturelles et de l'Environnement (DGRNE)

Promoteur

- Claire Lobet-Maris

Chargés de recherche

- Anne De Vos
- Dominique Dieng

Partenaire

- Agnès Mathieu-Thirion, Directrice des Relations Extérieures, FUNDP

Durée du projet

- 16 novembre 1998 au 28 février 2000

Description du projet

Consciente de certaines difficultés de fonctionnement et désireuse d'améliorer tant sa performance propre que les services rendus et les relations avec les usagers, la Division de la Nature et des Forêts (DNF) demandé à la CITA d'établir un diagnostic organisationnel de l'administration. A l'issue de cette première mission achevée en octobre 1998, la DNF, soucieux de mettre en place les recommandations formulées dans le rapport, a confié à la CITA, les missions suivantes :

- redéfinir les rôles et missions de la DNF;
- procéder à l'examen des flux d'informations circulant au sein de la DNF;
- mettre en place un plan d'organisation.

L'ensemble de la recherche s'est appuyé sur une méthodologie participative basée sur des interviews, des enquêtes par questionnaire tant pour la définition des rôles et missions de la DNF que pour l'identification des flux d'information. Les résultats de la récolte d'information ont été validés par les agents de la DNF dans le cadre de réunions de consensus réunissant d'abord les agents d'un même niveau hiérarchique, puis organisées de manière transversale autour des thématiques dégagées. Celles-ci ont permis, outre la définition des rôles et missions de la DNF, de clarifier les besoins en termes informationnels et, surtout, de définir une série de priorités pour la mise en place d'un plan d'organisation, intégrant l'introduction d'un Intranet et les modalités de mise en place des mesures organisationnelles préconisées. Des

recommandations pour la mise en place d'un site pilote clôturent le second volet de la recherche : certaines des mesures susceptibles d'affecter le fonctionnement des services extérieurs y seront testées par la DNF afin de les adapter et d'opérer des choix avant de les généraliser à l'ensemble de la DNF.

Rapports de recherche

- DE VOS Anne, DIENG Dominique, avec la collaboration d'Agnès MATHIEU-THIRION sous la direction de Claire LOBET-MARIS (1999), *Proposition d'un plan d'administration pour la Division de la Nature et des Forêts*.
- DE VOS Anne, DIENG Dominique, avec la collaboration d'Agnès MATHIEU-THIRION sous la direction de Claire LOBET-MARIS (1999), *Rapport d'avancement : Convention relative à la diffusion des résultats du diagnostic organisationnel / Accompagnement de la Division de la nature et des Forêts dans la conduite de changements dans trois chantiers de réorganisation*.

Réseau Expérimental Multimédia pour les PME en Wallonie (REM-PME Wallonie)

Commanditaires

- Fonds Social Européen - Objectif 4 (FSE)
- Région Wallonne - Direction Générale des Technologies, de la Recherche et de l'Energie (DGTRE)

Promoteur

- Claire Lobet-Maris

Chargé de recherche

- Tanguy Ewbank

Partenaire

- Chambre de Commerce et de l'Industrie du Luxembourg Belge (CCILB)

Durée du projet

- 1er octobre 1998 - 31 décembre 1999

Description du projet

Le présent projet est un projet de recherche-action qui vise à aider des PME, par des actions de conseil et d'accompagnement, à mettre en place des outils interorganisationnels adaptés à leurs besoins. Plus particulièrement, la CITA intervient dans l'accompagnement des PME en matière de définition de leurs besoins et ce à partir de techniques d'audit organisationnel des liens de coopération et de coordination existants entre la PME et ses partenaires.

Différents domaines de gestion sont couverts par cette analyse :

- Le commerce électronique et le support des échanges de données opérationnelles entre partenaires d'une même chaîne de valeur;
- La création de sites de promotion des compétences, produits et services de l'entreprise;
- La recherche de partenaires et la constitution d'associations ou groupe virtuels commerciaux ou techniques.

L'accompagnement des PME en matière d'étude d'analyse des besoins débouchera sur la rédaction d'un manuel d'aide afin de permettre aux PME de mener elles-mêmes ce type d'analyse.

Rapport de Recherche

EWBANK, T. ET LOBET-MARIS C., (1999), *Guide d'étape. Gestion d'un projet informatique au sein d'une PME.*

Accompagnement des villes virtuelles wallonnes

Commanditaire

- Région Wallonne - Ministère des Affaires Intérieures et de la Fonction Publique

Promoteur

- Claire Lobet-Maris

Chargée de recherche

- Béatrice van Bastelaer

Durée du projet

- décembre 1999 - novembre 2001

Description du projet

Face au constat d'une importante diversité au niveau des développements actuels des villes virtuelles en Wallonie, le gouvernement wallon souhaite encourager chaque commune wallonne à développer un site communal d'information d'un contenu minimal. Dans ce but, le gouvernement souhaite établir des conventions particulières avec les communes relativement à la mise en œuvre d'un tel site. Un cahier de charges définira les conditions minimales que tout site communal d'information doit remplir. Pour aider les communes dans leur démarche, le gouvernement wallon mettra à leur disposition un vade-mecum définissant les grandes étapes à suivre pour réaliser un site Internet interactif. Enfin, avant d'allouer aux communes la somme prévue, il évaluera si les réalisations des communes correspondent aux exigences minimales déterminées dans le cahier de charges.

Grâce à la compétence progressivement acquise par la CITA dans le domaine des villes virtuelles, une convention a été signée avec le cabinet du Ministre wallon en charge des Affaires Intérieures et de la Fonction Publique relativement à l'établissement du cahier de charges, du vade-mecum et en ce qui concerne l'évaluation des sites développés par les communes wallonnes.

Belgacom I-Line : le multimédia au service de l'enseignement

Commanditaire

- Belgacom

Promoteurs

- Jacques Berleur, s.j.
- Claire Lobet-Maris

Chargé de recherche

- Laurent Henin

Durée du projet

- 1er novembre 1998 - 31 juillet 1999

Description du projet

Le projet "Belgacom I-Line" s'inscrit dans le cadre des missions d'intérêt générales confiées à Belgacom en matière de connexion des hôpitaux, des écoles et des bibliothèques.

Ce projet vise à rassembler des informations pertinentes devant aider Belgacom à développer ses lignes d'action à l'égard des écoles. Ces informations ont été récoltées sur base de deux enquêtes : une enquête auprès des enseignants de la Communauté Française de Belgique, d'une part, et une enquête sur les politiques et expériences étrangères intéressantes, d'autre part.

L'enquête menée auprès des enseignants de la Communauté Française de Belgique a eu pour principal objectif de récolter des informations sur l'intégration du multimédia dans l'enseignement. Les thèmes abordés lors des visites dans les établissements scolaires étaient notamment : les réalisations et projets de qualité déjà développés, les attentes et besoins des enseignants dans leur métier, la problématique de la formation des enseignants et des élèves, les idées en matière d'usage pédagogique du multimédia, les contraintes liées à l'organisation scolaire ... Pour ce faire, des enseignants d'une cinquantaine d'établissements de la Communauté Française de Belgique ont été interrogés sur base d'un questionnaire élaboré par l'équipe de la CITA.

Le second volet de la collecte d'informations a concerné l'étude des expériences étrangères relatives à l'usage pédagogique du multimédia pour assister Belgacom dans la définition de son positionnement en matière d'offre de services au monde de l'enseignement, notamment en regard au positionnement adopté par d'autres opérateurs européens ou nord-américains.

Sur base des informations récoltées au cours de cette double enquête, la CITA a établi un ensemble de lignes d'action opérationnelles permettant à Belgacom de développer une stratégie cohérente et appropriée à l'égard du monde de l'enseignement.

Publication

- HENIN Laurent (1999), "Les nouvelles technologies à l'école : structures scolaires et politiques publiques", in *Revue Ubiquité*, n°3, Novembre 1999, pp. 131-137.

Rapport de recherche

- BERLEUR Jacques, LOBET-MARIS Claire, HENIN Laurent (1999), Analyse des opportunités offertes par I-line en Communauté française de Belgique. *Rapport Final*.

Manifestation organisée par la CITA en 1999

Deuxième Rencontre Réelle de Villes Virtuelles

Responsables de l'organisation

- Béatrice van Bastelaer
- Laurent Henin
- Claire Lobet-Maris

Date de la rencontre

- 28 juin 1999

Description de la manifestation

L'objectif de la deuxième « Rencontre Réelle de Villes Virtuelles » organisée par la CITA, qui a accueilli près de 100 personnes, était de continuer la réflexion entamée en juin 1998 lors de la première « Rencontre Réelle de Villes Virtuelles » avec des représentants des communes wallonnes et bruxelloises. Comme pour l'édition précédente, un des buts de cette rencontre était de permettre aux participants d'échanger leurs expériences, réellement et non virtuellement, mais aussi d'éclairer ceux qui souhaitent se lancer dans l'aventure.

Après une matinée consacrée à une présentation des résultats de recherche en la matière menées à la CITA¹ mais aussi en France et en Région flamande, l'après-midi a été structurée autour de trois panels.

Le programme de l'après-midi était composé de trois ateliers s'intéressant chacun à un aspect particulier de la problématique des villes virtuelles. Le premier, réalisé en collaboration avec le CRID (Centre de Recherches Informatique et Droit), était consacré aux aspects juridiques et plus particulièrement à trois questions importantes : le contenu des sites communaux, le respect de la vie privée lors de la mise en ligne d'informations sur Internet et, enfin, la signature électronique. Le deuxième atelier s'intéressait davantage aux aspects gestion des villes virtuelles, la question centrale étant celle de l'ouverture des sites communaux vers des acteurs extérieurs à l'administration et, partant, des rôles respectifs des secteurs privé et public dans l'offre de services et d'informations à caractère public. Le but du dernier atelier, centré sur les aspects organisationnels, était de discuter de l'envers du décor du site, c'est-à-dire des éventuelles démarches de réorganisation de l'administration liées à la création de la ville virtuelle.

Vu le succès de cette manifestation et l'intérêt des participants pour ce sujet, une troisième Rencontre Réelle de Villes Virtuelles pourrait se tenir en 2000.

¹ Notamment une enquête exhaustive sur le développement des villes virtuelles en Belgique francophone et germanophone.

Ce séminaire a bénéficié du soutien du programme CyberEcoles de la Région Wallonne ainsi que du Ministère des Affaires Intérieures et de la Fonction Publique de la Région Wallonne.

Publications

La majorité des textes présentés lors de cette journée, ainsi que le compte-rendu de celle-ci, sont disponibles en ligne sur le site Web (voir ci-dessous).

<http://www.info.fundp.ac.be/~cita/ville/rr/renc2.html>

Principales publications

Remarque : Les publications de l'année 1999 sont listées par projet de recherche dans les fiches précédentes

Livres

- BERLEUR Jacques and BRUNNSTEIN Klaus (Eds) (1996), *Ethics of Computing: Codes, Spaces for Discussion and Law*, A Handbook prepared by the IFIP Ethics Task Group, London: Chapman & Hall, 336 p., ISBN 0-412-72620-3.
- BERLEUR Jacques and WHITEHOUSE Diane (Eds) (1997), *An ethical global information society: Culture and democracy revisited*, Proceedings of the IFIP-WG9.2/9.5 Corfu International Conference, May 8-10, Chapman & Hall, 1997, ISBN: 0-412-82960-6
- NGUYEN Nam Tien, FOUREZ Gérard, DIENG Dominique (1995), *La santé informatisée : carte santé et questions éthiques*, DE BOECK Université.
- Collectif MAPI (1997), *La pornographie infantile sur Internet*, Facultés Universitaires Notre-Dame de la Paix, rapport MAPI, mars 1997.

Articles (publiés dans des revues ou présentés à des colloques)

- BELLEFLAMME Paul (1998) "Adoption of Network Technologies in Oligopolies" in *International Journal of Industrial Organization*, 16, pp. 415-444.
- BELLEFLAMME Paul (1998) "Assessing the diffusion of EDI Standards across Business Communities", *EURAS Yearbook of Standardization*, Vol. 2, ed. by Manfred J. Holler and Esko Niskanen (*Homo oeconomicus* XV(3)), Munich: Accedo, 301-324.
- BERLEUR Jacques et d 'UDEKEM-GEVERS Marie (1996), "Codes of ethics, or of Conduct, within IFIP and in Other Computer Societies", in *Ethics of Computing : Codes, spaces for discussion and law*, Jacques BERLEUR & Klaus BRUNNSTEIN (eds), Chapman & Hall, 41 p. + annexes détaillées (58 p).
- BERLEUR Jacques (1996), 'IFIP Framework for Ethics', in: *Science and Engineering Ethics*, A Special Issue on "Global Information Ethics", Opragen Publications, Guildford, Surrey, UK, Volume 2, Issue 2, pp. 155-165.
- BERLEUR Jacques (1996), 'Remarks on a 'Framework for Social and Ethical Issues' Report', in: Proceedings of the International IFIP TC9-TC3 Conference (Israel March 18-21), *The Impact of Information Technology: From Practice to Curriculum*, Yaacov Katz, Daniel Millin & Baruch Offir (Eds), Chapman & Hall, pp. 108-117.
- BERLEUR Jacques (1997), "Approches des problèmes éthiques de l'International Federation for Information Processing (IFIP) - Ethique, Codes et lois : Créer des 'espaces de discussion", *Proceedings de la XIXème Conférence internationale des Commissaires à la protection des données*, Bruxelles, 17-19 septembre 1997.
- BERLEUR Jacques (1998), Codes of Ethics/Conduct and their Legitimacy, E-CLIP (Electronic Commerce Legal Issues Platform), Workshop on Privacy Issues, Namur, 27-28 May 1998. Disponible sur le Web : <http://www.droit.fundp.ac.be/crid/eclip/workshop/berleur.htm>
- BERLEUR Jacques, "Ethics and the Governance of the Internet: Governance and Self-Regulation", Rolling Workshop and Round-Table at the 5th Human Choice and

Computers IFIP-TC9 International Conference, *Computers and Networks in the Age of Globalization*, Pre-ceedings, S. Munari, G. Krarup and Leif Bloch Rasmussen, Eds, Geneva 25-28 August 1998, printed by the University of Lausanne, pp. 335-360.

- BERLEUR Jacques (1998), *Ethique et autoroutes de l'information*, Académie Royale de Belgique, Groupe CAPAS- CAWET, 4 Septembre 1997, 23 p. (To be published on CD-Rom).
- BERLEUR Jacques and d'UDEKEM-GEVERS Marie (1998), "An International Code of Ethics/Conduct or More Direct Responsibility? The experience of IFIP", in *The European Ethics Network, A European Engineering Ethics Handbook*, (Centre for Engineering Ethics, Lille, France) (To be published).
- BERLEUR Jacques, d'UDEKEM-GEVERS Marie and ROLIN Laetitia (1998), *Ethics and modes of governance of the Internet*, Monte-Carlo, InfoEthique '98, UNESCO, 1-3 octobre 1998. Disponible sur : http://www.unesco.org/webworld/infoethics_2/eng/papers/paper_24.htm
- DE BAENST-VANDENBROUCKE Anne (sous la direction de Claire LOBET-MARIS et de Monique NOIRHOMME-FRAITURE) (1998), *Des Métiers pour le Multimédia : Fiches d'information*, Editeur MRW-DGTRE, septembre 1998, 102 p., ISDN : 2-87401-045-6.
- DELHAYE Renaud, LOBET-MARIS Claire (1995), "EDI adoption and standard choice: a conceptual model", *Proceedings of the 3rd European Conference on Information Systems (ECIS 1995)*, Athens, June 1995, pp. 165-182.
- DELHAYE Renaud, LOBET-MARIS Claire, VAN BASTELAER Béatrice (1996), "Autoroutes de l'information, emploi, travail", *Communications & Stratégies*, n°22, IDATE, Montpellier, pp. 37-79.
- DELHAYE Renaud, LOBET-MARIS Claire & VAN BASTELAER Béatrice (1997), "Autoroutes de l'information, emploi et travail", in CiFoP (ed.), *Les grandes interrogations de l'an 2000: croissance, emploi, sécurité sociale - Commission 1: Avec quelle croissance devons-nous apprendre à vivre?*, Rapport préparatoire du 12ème congrès des économistes de langue française, pp. 211-244.
- DIENG Dominique, GERARD Philippe, LAMOULINE Christian, sous la direction de Claire LOBET-MARIS et Yves POULLET (1997), *Quelles priorités pour l'Administration fédérale dans la Société de l'Information ?*, novembre 1997.
- d'UDEKEM-GEVERS Marie & LOBET-MARIS Claire (1996), "The non-profit Applications of the Information Highways: Comparison of U.S.A. and E.U. Policies", *Proceedings of the 4th European Conference on Information Systems (ECIS'96)*, Lisbon, Portugal, July 2-4 1996.
- d'UDEKEM-GEVERS Marie & LOBET-MARIS Claire (1996), "The non-profit Applications of the Information Highways: Comparison of U.S.A. and E.U. Policies", *Proceedings of INET' 96: The Internet: Transforming Our Society Now (CD-ROM)*, Montreal, Canada, 25-28 June 1996.
- d'UDEKEM-GEVERS Marie et LOBET-MARIS Claire (1996), "Ancien et Nouveau Mondes: des politiques différentes pour mener aux inforoutes", mis en accès direct comme base de discussion dans le Forum «nsnet-diplo» du Monde Diplomatique, à l'occasion de la Rencontre intitulée «L'Afrique et les Nouvelles Technologies de l'Information» présidée par le Président de la République du Mali et le Président de la République et du Canton de Genève, et organisée par la Fondation du Devenir, à Genève, les 17 et 18 octobre 1996.
- d'UDEKEM-GEVERS Marie & LOBET-MARIS Claire (1997), "Non-Profit Applications of the Information Highways - Comparing Grant Programs of the European Commission and the National Telecommunication and Information Administration (NTIA)", in KUBICEK Herbert, DUTTON William H, WILLIAMS Robin (eds), *The Social Shaping of Information Superhighways*, Campus Verlag, Frankfurt, pp. 199-210.

- d'UDEKEM-GEVERS Marie, (1998), "Belgian 'Digital Cities' : a sample of French-speaking web sites "(Large abstract), *Proceedings of the Third European Digital Cities Conference : The Road to Deployment, Berlin, 1-2 December 1997*, pp. 101-104.
- d'UDEKEM-GEVERS Marie, (1998), "Les 'villes numérisées' : entre discours de l'Union européenne et initiatives locales spontanées en Belgique francophone", *Actes du 11ème Colloque Européen en Informatique et Société : Informatisation et anticipation - Entre promesses et réalisations, Strasbourg 10 - 12 juin 1998*, organisé par le CREIS, pp. 11-26.
- d'UDEKEM-GEVERS Marie, (1998), *Villes numérisées belges : Analyse d'un échantillon de sites francophones destinés aux particuliers*, Cahiers de la CITA AI5, 90 pages, juin 1998.
- d'UDEKEM-GEVERS Marie, (1998) "Belgian 'Digital Cities' : a sample of French-speaking web sites", full text (12 p.) accepted for publication in the *Proceedings of the HCC-5 Fifth World*.
- d'UDEKEM-GEVERS Marie, (1998), "Belgian 'Digital Cities' : a sample of French-speaking web sites," abstract of the results, *Proceedings of WebNet 98 - World Conference of the WWW, Internet and Intranet*, Orlando, Florida; November 7-12 1998, edited by Hermann MAURER and Richard G. OLSON, published by AACE (Association for the Advancement of Computing in Education), pp. 1049-1050.
- d'UDEKEM-GEVERS Marie, (1998), "What can be regulated on the Internet by control/filtering software?", Rolling Workshop and Round-Table at the 5th Human Choice and Computers IFIP-TC9 International Conference, *Computers and Networks in the Age of Globalization*, Pre-ceedings, S. Munari, G. Krarup and Leif Bloch Rasmussen, Eds, Geneva 25-28 August 1998, printed by the University of Lausanne, pp. 315-333.
- LOBET-MARIS Claire & VAN BASTELAER Béatrice (1996), "La Belgique: Laboratoire pour l'Europe - le modèle fédéral et la société de l'information", *Actes des 18èmes journées de l'IDATE « Cybermonde: l'avantage européen? »*, Montpellier, 7-8 novembre 1996, pp. 389-404. Disponible sur le Web: <http://www.info.fundp.ac.be/~cita/slim/idate.html>
- LOBET-MARIS Claire, VAN BASTELAER Béatrice (1996), « Belgium, A Laboratory for Europe: The Federal Model and the Information Society », *Telematics & Informatics*, Vol. 13, No. 2/3, pp. 81-96.
- NGUYEN NAM Tien, LOBET-MARIS Claire, BERLEUR Jacques & KUSTERS Benoît (1996), 'Methodological Issues in Information Technology Assessment', in: *International Journal of Technology Management, Special Issue on Technology Assessment*, Inderscience Enterprises Ltd., vol. 11, Nos. 5-6, pp. 566-580.
Disponible sur le Web: <http://www.info.fundp.ac.be/~cita/slim/France.html>
- VAN BASTELAER Béatrice (1998), 'Digital cities and transferability of results', *Proceedings of the 4th EDC conference on digital cities*, Salzburg, October 29 & 30 1998, pp. 61-70. Disponible sur le Web: <http://www.info.fundp.ac.be/~cita/slim/EDC.html>
- VAN BASTELAER Béatrice (1998), *Compte-rendu de la rencontre réelle de villes virtuelles du 16 juin 1998*. Disponible sur le Web: <http://www.info.fundp.ac.be/~cita/ville/compte-rendu.html>.
- VAN BASTELAER Béatrice in collaboration with LOBET-MARIS Claire (1998), 'Social Learning in Multimedia: Main insights from seven case studies of digital cities', *Proceedings of the PAI Seminar 'Information Society, Administration and Citizens' (PAI Seminar 2)*, June 25th 1998, FUNDP, Namur, pp. 20-36. Disponible sur le Web : <http://www.info.fundp.ac.be/~cita/slim/PAI.html>
- VAN BASTELAER Béatrice, LOBET-MARIS Claire (1998), *Démocratie électronique et citoyenneté virtuelle*, Position Paper, Agora 98 - Séance Démocratie, citoyenneté, accès à la jeunesse, Atelier 2: Démocratie et citoyenneté, septembre 1998. Disponible sur le Web: http://www.agora98.org/fr/jeune/ppaper/ppaper2_1.html

- WALTHERY Pierre, LOBET-MARIS Claire, HENROTTE Véronique, DELHAYE Renaud (1996), "Utilisation des systèmes d'échange d'information inter-organisationnels (SIO) par les PME en Belgique francophone", Actes du deuxième colloque international de management des réseaux d'entreprise (CIMRE'96), volume 1, Lausanne, HEC, 23-24 septembre 1996, pp. 19-37.



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RAPPORT D'ACTIVITE DU CRID

1997 - 1999

RAPPORT D'ACTIVITE DU CRID 1997-1999

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~ LES OBJECTIFS DU CRID ~

Les technologies de l'information et de la communication entraînent de substantiels changements qui affectent tous les secteurs de la société. Elles engendrent des pratiques nouvelles qui transforment en profondeur nos modes de vie et nos habitudes de production et de consommation. L'impact sur la société est particulièrement évident pour les services les plus récents offerts via Internet ou le multimédia interactif.

Au plan conceptuel, ce phénomène bouscule nombre d'approches traditionnelles et oblige à repenser de nombreux concepts, voire à forger des solutions entièrement neuves, notamment dans le domaine du droit et de l'économie.

Fort de ce constat, le Centre de recherches informatique et droit (CRID) se donne pour objectif de faire progresser la réflexion ,tant fondamentale qu'appliquée, dans le champ du *droit et de l'économie des technologies de l'information*.

◆
~ **LES ACTIVITES DE RECHERCHE** ~

Depuis 1980, le CRID, qui compte une trentaine de chercheurs, réalise des recherches pluridisciplinaires en matière de "droit et économie des technologies de l'information".

Ses principaux axes de recherches sont actuellement les suivants :

- a. les transactions électroniques
 - droit des contrats, de la responsabilité, de la preuve
 - commerce électronique et protection des consommateurs
 - aspects financiers et fiscaux ;
- b. la protection des produits, services et messages électroniques
 - droits intellectuels relatifs aux logiciels, bases de données, œuvres multimédia
 - sécurité, cryptographie, criminalité informatique ;
- c. les libertés publiques et individuelles dans la société de l'information
 - protection des données personnelles
 - démocratie électronique
 - accès et commercialisation des données publiques ;
- d. la réglementation et la politique économique en matière de télécommunications
 - réglementation et aspects institutionnels
 - libéralisation et service universel
 - convergence, concentration et pluralisme ;
- e. l'informatique juridique
 - bases de données juridiques
 - systèmes d'aide à la décision.

◆
~ **LES ACTIVITES PEDAGOGIQUES** ~

Les recherches du CRID nourrissent l'enseignement universitaire, en particulier dans le cadre du Diplôme d'études spécialisées en "droit et gestion des technologies de l'information et de la communication" (DES en DGTIC), lancé en septembre 1992 par les Facultés Universitaires Notre-Dame de la Paix à Namur. Ce programme interdisciplinaire, d'une durée d'un an, est organisé en cours du jour. Il est accessible à toute personne titulaire d'un diplôme universitaire de second cycle.

<http://www.droit.fundp.ac.be/dgtic/dgtic.html>

En collaboration avec la Faculté de droit et le DGTIC, le CRID organise une formation pour juristes en droit des technologies de l'information et de la communication, le « **juriTIC** ». Ce programme offre, aux cadres d'entreprises et aux praticiens du droit, une formation composée de cours compacts qui intègrent des rappels théoriques et la présentation des solutions imaginées par la pratique.

<http://www.droit.fundp.ac.be/juriTIC>

◆
~ LE CENTRE DE DOCUMENTATION DU CRID ~

Le CRID gère un centre de documentation qui compte plus de 1.500 monographies et une trentaine de revues spécialisées. Ces dernières font l'objet d'un dépouillement systématique par les chercheurs du centre, de manière à permettre l'établissement et la mise à jour régulière d'un catalogue de références bibliographiques. Le centre est ouvert au public tous les jours de la semaine.

◆
~ LES RESSOURCES INFORMATIQUES DU CRID ~

Le centre de documentation du CRID est entièrement informatisé et le catalogue est disponible sur Internet à l'adresse de la Faculté de droit. Les utilisateurs trouveront encore sur Internet des informations générales sur le CRID, les thèmes de recherches, certaines publications et le groupe de discussion "Espace droit".
<http://www.droit.fundp.ac.be> (choisir "recherches documentaires")

◆
~ LE COMITE DE DIRECTION DU CRID ~

Yves Poulet, Directeur

(tél.: 81.72.47.79, Email: yves.poulet@fundp.ac.be)

Docteur en droit, licencié en philosophie et doyen de la faculté de droit de 1991 à 1996, Yves Poulet assure la direction scientifique et administrative du centre. Ses recherches personnelles portent sur tous les domaines d'activité du CRID avec une attirance particulière pour les questions de protection de la vie privée, de télécommunication et plus récemment de libertés individuelles et publiques dans la société de l'information.

Claire Monville, Adjointe à la direction

(tél : 81.72.47.63, Email : claire.monville@fundp.ac.be)

Licenciée en droit, chargée de recherches au CRID depuis 1984, Claire Monville assiste Yves Poulet dans la direction administrative de centre. Sa fonction l'amène, entre autres, à gérer les contrats, organiser les colloques et séminaires et veiller aux relations extérieures du centre.

Sous la supervision du directeur, les responsabilités sont réparties au sein du CRID entre les différents membres du comité de direction, chacun prenant en charge la direction d'un domaine de recherche spécifique ou d'une question particulière.

Jean-Marie Cheffert (tél. 81.72.47.85 Email: jean-marie.cheffert@fundp.ac.be)
- directeur du diplôme d'études spécialisées
"Droit et gestion des technologies de l'information et de la communication"
- responsable des recherches économiques au CRID

Anne Salaün (tél. 81.72.52.05 Email : anne.salaun@fundp.ac.be)
responsable du groupe « commerce électronique »

Sophie Louveaux (tél. 81.72.47.72 Email: sophie.louveaux@fundp.ac.be)
- responsable du groupe "libertés dans la société de l'information"

Séverine Dusollier (tél. 81.72.47.60 Email : severine.dusollier@fundp.ac.be)
- responsable du groupe "propriété intellectuelle"

Jacques Gérard (tél. 81.72.47.71 Email: jacques.gerard@fundp.ac.be)
- responsable du groupe "informatique juridique"
- responsable informatique du CRID et de la faculté de droit

Etienne Montero (tél 81.72.47.64 Email: etienne.montero@fundp.ac.be)
- directeur de la collection "les cahiers du CRID".

Robert Queck (tél. 81.72.52.12 Email : robert.queck@fundp.ac.be)
- responsable du groupe "télécommunications".

◆
~ LES MEMBRES ~

1. Le personnel académique

Jean-Marie Cheffert, docteur en économie
Etienne Montero, docteur en droit
Yves Pouillet, docteur en droit et licencié en philosophie

2. Le personnel administratif

Christine Danneel, secrétaire
Monique Fouillien, documentaliste
Claude Gautier, collaborateur

3. Le personnel scientifique

Le CRID rassemble une trentaine de chercheurs provenant d'horizons très divers, non seulement au point de vue de leur formation, principalement des juristes, des économistes et des informaticiens, mais également au point de vue de leur nationalité. En effet, depuis 1995, le centre accueille, dans le cadre des programmes européens d'échange de chercheurs (DGXII), des doctorands en provenance de différents pays européens.

Liste des membres du CRID , janvier 1999

Nom	Formation	Domaines de recherche
Mireille Antoine	juriste	preuve, signature, commerce électronique
Danielle Carneroli	juriste	télécommunications
Dr. Jean-Marie Cheffert	économiste	télécommunications
Etienne Davio	juriste	commerce électronique
Priscilla de Loch	juriste	télécommunications
Florence de la Vallée	économiste	télécommunications
Alexandre de Streel	juriste	télécommunications
Jean-Marc Dinant	informaticien	Internet et vie privée
Cécile de Terwangne	juriste	protection de la vie privée accès aux documents publics
Dominique Dieng	juriste	administration et santé
Jan Dhont	juriste	vie privée et santé
Séverine Dusollier	juriste	propriété intellectuelle
Jacques Gerard	informaticien, physicien	informatique juridique
Didier Gobert	juriste	preuve, signature digitale
Dr. Pedro Grimalt Servera	juriste	contrat, propr. intellectuelle
Dr. Rosa Julia Barcelo	juriste	EDI, propriété intellectuelle
Laurence Lecocq	économiste	télécommunications
Axel Lefebvre	juriste	protection de la vie privée
Thierry Léonard	juriste	protection de la vie privée
Jean-François Lerouge	juriste	contrats et finance
Sophie Louveaux	juriste	protection de la vie privée
Dr. Etienne Montero	juriste	contrats et responsabilité
Claire Monville	juriste	gestion du CRID
Dr. Yves Pouillet	juriste et philosophe	tous les domaines du CRID
Robert Queck	juriste	télécommunications
Dr. Nancy Risacher	juriste	protection des personnes
Laetitia Rolin	juriste	commerce électronique
Anne Salaun	juriste	Commerce électronique
François van der Mensbrugghe	juriste	service public et télécommunications
Emmanuelle Végis	juriste	télécommunications droit de la concurrence

4. Les collaborateurs extérieurs

Le centre associe à ses travaux des personnes extérieures dont les considérations tirées de la pratique professionnelle enrichissent les résultats des recherches. Parmi ceux-ci se trouvent les collaborateurs scientifiques qui sont d'anciens membres du CRID et également certains enseignants-visiteurs dans le diplôme en Droit et Gestion des Technologies de L'information et de la Communication (DGTIC).

Bernard Amory, chargé d'enseignement- visiteur au DGTIC,
partner chez Jones, Day, Reavis and Pogue
M.-Hélène Boulanger collaborateur scientifique du CRID,
juriste à la Commission de la vie privée
Pol Debroux collaborateur scientifique du CRID
attaché juriste au Ministère de la Région Wallonne

Philippe Defraigne,	collaborateur scientifique du CRID, Cullen international s.a.
Sabine Denis,	collaborateur scientifique du CRID, conseiller juridique chez SWIFT
Bénédicte Havelange	collaborateur scientifique du CRID, juriste à la Commission de la vie privée
Michèle Ledger	collaborateur scientifique au CRID Cullen International s.a.
Bruno Lejeune,	collaborateur scientifique de la Faculté de droit, conseiller juridique au groupe Carmeuse
Jean-Paul Triaille,	chargé d'enseignement visiteur au DGTIC avocat au barreau de Mons
Valérie Willems,	collaborateur scientifique du CRID, Cullen International s.a.

◆
~ LES CENTRES ASSOCIES ~

Le CRID collabore avec deux autres centres interfacultaires des Facultés de Namur et il bénéficie de contacts privilégiés avec plusieurs centres belges ou étrangers ayant un objet similaire, à savoir :

1. au sein des facultés

- la CITA (Centre Interfacultaire de Technology Assessment) dont le CRID est l'un des centres fondateurs. Actuellement les deux centres collaborent dans le cadre du pôle d'attraction interuniversitaire du Service de la Politique Scientifique.
- le CIDES (Centre Interdisciplinaire Droit et Ethique de la Santé) avec qui le CRID mène des recherches dans le domaine des données médicales.

2. en Belgique

- Cullen International s.a.
- Le Centre de droit de la consommation à l'UCL
- l'ICRI à la KUL (Interdisciplinaire Centrum voor Recht en Informatica)
- Le LENTIC à l'ULG (Laboratoire d'Etude sur les Nouvelles Technologies de l'Information, la Communication et les Industries Culturelles)
- le SMIT à la VUB (Studies on media information and telecommunication)
- le Centrum voor International Strafrecht de la VUB
- Le centre de droit de la culture FUSL
- Le centre de droit des médias (ULB)

3. à l'étranger

Les liens du CRID avec des centres étrangers se sont tissés sur base d'accords de coopération ayant pour objet la poursuite de recherches communes (par exemples, E-clip) ou la mise sur pied de programme de formation (comme ENLIST, ou EULISP).

Voici les centres à l'égard desquels les relations sont les plus formalisées :

- l'IDATE, l'ERCIM à Montpellier
- le centre du magistère en droit de la communicatiqu à Poitiers
- « Computer Law Institute » à Amsterdam
- « Centre for computers and law », Erasmus University Rotterdam
- « Institut für Rechtsinformatik », Université de Hannovre
- « Institut fuer Informations-, Telekommunikations- und Medienrecht (ITM) », Université de Münster
- « Institute of public internationale law and relations », Université de Vienne
- « Media and Communication Management Institute », Université de Saint Gall
- « Centro de Estudios de Derecho e Informatica », de l'Université des Baléares

- « Centro di Ricerca in Filosofia del Diritto e informatica », Université de Bologne
- la Faculté de droit de l'Université de Saragosse (Espagne)
- « the Law School », Université de Strathclyde (Grande-Bretagne)
- « Centre for commercial Law studies », Queen Mary College (Londres)
- « Norwegian Research Center for Computer Law », Université de Oslo
- la Faculté de droit de l'Université de Stockholm
- la faculté de droit de l'Université de Lapland (Finland)
- le Centre de Recherches en Droit public à Montréal (CRDP)

Le CRID est également fondateur de l'association FIRILITE (Federation of International Research Institutes on Law and Information Technology in Europe) qui a pour objectif de favoriser la coopération entre institutions universitaires, de promouvoir l'échange scientifique des personnes dans le domaine du droit et de la technologie de l'information et d'assurer l'organisation de séminaires et de cours.

◆
~ LES TRAVAUX DU CRID ~

1. Thèses de doctorat

Sont reprises, ci-dessous, les thèses de doctorat présentées par des membres du CRID en 1997 ou 1998 et les thèse en cours en 1999.

Etienne Davio : L'identité du co-contractant dans les nouveaux réseaux de communication ;

Cécile de Terwangne : La commercialisation des données publiques au carrefour de la liberté de la vie privée, de la liberté de l'information et de la liberté d'entreprise ;

Rosa Julia Barcelo : Les problèmes juridiques soulevés par la formation du contrat par des moyens électroniques (EDI), thèse défendue en 1998 à l'Université des Baléares ;

Thierry Léonard : La protection de la vie privée et le traitement des données à caractère personnel : l'émergence d'un nouveau bien de la personnalité ;

Nancy Risacher : Internet et la protection des mineurs, thèse défendue en décembre 1997, à l'Université de Nancy ;

François van der Mensbrugghe : Etude de la notion de " service universel " à partir d'une comparaison des réglementations américaines et européennes.

2. Projets de recherches

En tant que centre de recherche universitaire, le CRID mène ses analyses en totale indépendance scientifique. Ainsi, il n'entend pas défendre des intérêts particuliers mais vise à éclairer, dans la mesure du possible, toutes les facettes d'une problématique.

Toutes ces recherches sont menées sous la **direction d'Yves Poulet et de Jean-Marie Cheffert**. Les autres membres du comité de direction, dans les domaines qui les concernent, assurent parfois la co-direction d'une recherche .

Les principales d'entre elles, relatives aux années 1997 à 1999, sont présentées ci-dessous :

2.1 Le commerce électronique

Commerce électronique

Analyse juridique de l'impact de l'utilisation des nouvelles technologies de l'information et de la communication :

Premier projet

- la transposition en droit belge de la directive contrat à distance
- l'accès aux données publiques
- la participation à l'élaboration d'un projet de loi sur la signature digitale

Deuxième projet

- rédaction d'un vade-mecum sur les sites web, la sécurité et la protection des utilisateurs
- les recours en cas de conflit (la magistrature électronique)
- l'utilisation des marques sur Internet
- recommandations pratiques sur la labellisation des sites

Chercheurs : Mireille Antoine, Dominique Dieng, Didier Gobert, Anne Salaün

Commanditaire : Ministère des affaires économiques

Dates : premier projet de octobre 1997 à septembre 1998

Deuxième projet de février à novembre 1999

Commerce électronique et Grand-duché de Luxembourg

Fourniture d'une expertise portant sur divers aspects du droit du commerce électronique et devant mener à la rédaction d'une proposition de loi en la matière.

Chercheurs : Mireille Antoine, Didier Gobert, Laetitia Rolin, Anne Salaun

Collaboration entre le CRID et le Centre de Recherche Public, Centre Universitaire
au et pour le grand-duché de Luxembourg

Date : juillet à janvier 1999

Contrat E-CLIP

Contrat visant à instaurer une plate-forme traitant des problèmes juridiques soulevés par le commerce électronique avec pour objectif de fournir un support juridique aux projets européens ayant un lien avec le commerce électronique.

Chercheurs : Jean-Marc Dinant, Séverine Dusollier, Rosa Julia Barcelo, Sophie Louveaux, Laetitia Rolin, Anne Salaün.

Commanditaire : Commission européenne DG XIII

Partenaires : 5 centres européens

Dates : janvier 1998 à décembre 1999

Réseaux et paiement électronique

Le développement des services sur réseaux entre les banques et les utilisateurs réclame l'adaptation du cadre contractuel de manière à garantir confiance et sécurité au consommateur (responsabilité, preuve, qualité du service, ...). Le CRID étudie ces différentes questions et propose des solutions .

Chercheurs : Etienne Davio, Didier Gobert

Commanditaire : une banque belge

Date : 1997-1998.

Internet banking

Elaboration d'un instrument contractuel pour des services offerts via Internet par une banque.

Chercheurs : Didier Gobert, Jean-François Lerouge, Laetitia Rolin

Commanditaire : une banque luxembourgeoise

Date : novembre 1998 à janvier 1999

P-B FLOW

Analyse des contraintes juridiques des techniques de signatures numériques, de cryptage et de certification numérique dans le cadre de procédures administratives.

Directeurs : Jean Ramaeckers(Institut d'informatique) et Yves Pouillet

Chercheurs : Anne Barzin (Faculté de droit), Didier Gobert (CRID)

Commanditaire : ville de Namur

Date : novembre 1998 à avril 1999

TRANSINPOL

Etudes des problèmes juridiques liés à l'utilisation des nouvelles technologies de la communication dans les transports (paiement, protection des données personnelles, télécommunications, problèmes administratifs, ...)

Chercheurs : Jean-François Lerouge, Laetitia Rolin

Commanditaire : Consortium pour la Commission européenne (DGVII)

Date : 1999

2.2 La protection des produits, services et messages électroniques

Convergence et propriété intellectuelle

Analyse de l'impact de la convergence dans les domaines des équipements, des logiciels, de la radiodiffusion et des télécommunications sur la protection du droit d'auteur et des droits voisins et analyse de la pertinence des instruments juridiques élaborés au sein du Conseil de l'Europe.

Chercheurs : Séverine Dusollier et Jean-Paul Triaille (collaborateur scientifique)

Comanditaire : Conseil de l'Europe

Dates : mars à octobre 1998

CDRom et droit d'auteur

Rédaction d'un guide pratique sur l'élaboration d'un CD Rom relativement aux aspects de droit d'auteur (identification des œuvres protégées et des titulaires de droit)

Chercheurs : Séverine Dusollier, Jean-Christophe Lardinois

Commanditaire : Centre Robert Schuman (Luxembourg)

Dates : mars à juillet 1998

COPEARMS

Assistance juridique pour le développement d'un système technique de protection et de gestion électronique des droits d'auteur

Chercheurs: Séverine Dusollier, Rosa Julia Barcelo, Michèle Ledger, JC Lardinois

Commanditaire : Union européenne

Dates : décembre 95 à décembre 98.

2.3 Les libertés publiques et individuelles dans la société de l'information

Transposition de la directive « protection des données »

Etude relative à la transposition au grand-duché de Luxembourg de la directive 95/46 de l'Union européenne relative à la protection des données des personnes physiques et à la libre circulation des données.

Chercheurs : Cécile de Terwangne, Sophie Louveaux et Nancy Risacher

Commanditaire : Ministère de la justice du Grand Duché du Luxembourg

Dates : janvier à mars 1999

Traitement des données personnelles à des fins scientifiques

Etude relative à la protection, à la collecte et au traitement des données médicales à des fins statistiques et scientifiques :

- inventaire et analyse de l'ensemble du dispositif réglementaire belge,
- inventaire et analyse comparative européenne,
- conclusions et recommandations utiles pour le processus législatif en cours.

Chercheur : Jan Dhont

Collaboration : ICRI (KUL)

Commanditaire : Services du Premier Ministre

Affaires scientifiques, techniques et culturelles (SSTC)

Dates : juillet à septembre 1998

Police et vie privée

Analyse du traitement des données à caractère personnel à, l'égard des activités de police, de manière à :

- évaluer l'influence de la loi du 8 décembre 92 sur la protection de la vie privée et son application par rapport aux données policières;
- évaluer la mise en œuvre de projet d'informatisation de la police et ses problèmes au regard des obligations de la vie privée.

Chercheurs : Mireille Antoine, Marc Eloy, Bertrand Renard

Commanditaire : ministère de l'intérieur et VUB

Dates : avril 95 à fin 97.

Méthodologie et vie privée

Contrat de recherche sur la notion de protection adéquate dans la directive européenne sur la protection des données.

Chercheurs : Cécile de Terwangne, Bénédicte Havelange, Axel Lefebvre

Commanditaires : Commission européenne, DG XV

Dates : février 96 à janvier 97

Accès aux documents public et vie privée

Contrat ayant pour objectif l'analyse, dans les différents pays européens, des réglementations « accès aux documents publics » et « protection de la vie privée », avec l'accent mis sur les droits de l'homme. Dans ce contrat, le CRID est sous-contractant, chargé de l'analyse de la Belgique et du Grand-Duché de Luxembourg.

Chercheur : Anne Salaün

Centre associé : Queen Mary College (G-B)

Date : mars-avril 1997.

Protection des données à caractère personnel- comparaison Canada-Europe

Analyse de la directive 95/46/CE relative à la protection des données à caractère personnel et analyse de la législation canadienne au regard des exigences de la directive en matière de flux transfrontières de données.

chercheurs : Cécile de Terwangne, Axel Lefebvre , Sophie Louveaux

commanditaire : une association canadienne

dates : 1997.

Trusthealth

Ce projet a pour but l'analyse des problèmes de vie privée et de preuve posés dans un système médical « on line » sécurisé. Dans le domaine de la preuve, la recherche porte sur l'intervention du tiers certificateur partie pour rendre effective la signature digitale.

Chercheurs : Gaelle de Decker , Rosa Julia Barcelo

en collaboration avec le SPRI (Swedish Institute for health Services Development)

Commanditaires : Commission européenne , DG XIII

Dates : mars 1996 à mai 1997.

2.4 La réglementation et la politique économique en matière de télécommunications

Libéralisation des télécommunications

Analyse de la mise en œuvre, en Belgique, des directives européennes relatives à la libéralisation et à l'harmonisation du marché des télécommunications.

Chercheurs : Danielle Carneroli, Florence de la Vallée, Priscilla de Loch, Laurence Lecocq, Emmanuelle Végis

Commanditaire : Commission européenne, DG IV et DG XIII

Date : 1998

Réglementation de l'offre d'infrastructures et de services de télécommunication

Etude ayant pour but d'aider une entreprise à comprendre les réglementations belge et européenne en matière de télécommunication et de responsabilité des opérateurs de télécommunication par rapport à l'offre d'infrastructures et de services.

Chercheurs : Sandro Bazzanella, Pol Debroux, Priscilla Delocht

Commanditaire : entreprise privée belge

Date : février 97 à septembre 97

Réglementation des télécommunications en Belgique

Contrat portant sur l'assistance juridique dans l'analyse de la réforme du cadre réglementaire des télécommunications (réforme de la loi du 21/03/1991).

Chercheurs : Pol Debroux, Sandro Bazzanella, Laurence Lecocq et Robert Queck

Commanditaire : Opérateur public belge

Dates : 1997.

Analyse de la mise en œuvre des directives de libéralisation et d'harmonisation menant à la pleine libéralisation des marchés des télécommunications.

L'objet du marché consiste en l'analyse de l'état de la législation belge, de la mise en œuvre pratique des directives et des éventuelles barrières subsistant à l'entrée du marché.

Chercheurs : Danielle Carneroli, Priscilla de Loch, Emmanuelle Végis

Commanditaire : Commission européenne (DG XIII/A)

Date : avril et mai 1998.

Cadre juridique pour une infrastructure alternative

Assistance pour la détermination du cadre juridique, pour l'établissement d'une infrastructure de télécommunication alternative, dans les domaines tels les marchés publics, le droit administratif, le droit des télécommunications et le droit de la concurrence.

Chercheurs : Pol Debroux, Sandro Bazzanella, Edith Coune, Priscilla de Loch, Florence de la Vallée, Laurence Lecocq, Emmanuelle Végis

Commanditaire : Région Wallonne

Dates : avril 1997 à avril 1998.

PHARE : télécommunications dans les pays de l'Est

Premier projet

Analyse des politiques et des réglementations dans les pays de l'Est (10 pays) et de leur conformité avec les directives européennes en la matière.

Recommandations à l'adresse de la Commission européenne.

Chercheur : Christophe Meert

Commanditaires : Union européenne

Dates : juin 1996 à 1998.

Deuxième projet

Analyse des réglementations « télécommunications - vie privée » dans les pays de l'Est (10 pays) et de leur conformité avec les directives européennes en la matière.

Recommandations à l'adresse de la Commission européenne.

Chercheurs : Jan Dhont, Sophie Louveaux

Commanditaires : Union européenne
Dates : 1999

2.5 L'informatique juridique

Expertise pour l'analyse d'offre de logiciel dans un marché public

Analyse et classement, dans le domaine de la fonctionnalité des logiciels, des offres relatives au « marché d'équipement des écoles pour l'éducation aux télécommunications et au multimédia ».

Chercheur : Jacques Gérard

Commanditaire : Ministère Wallon de l'Équipement et des Transports

Dates : 1998

Construction d'un système expert sur le suivi des marchés publics

Le projet a pour objectif la réalisation d'un système expert (d'aide à la décision) permettant le suivi juridique tout au long de la procédure de passation de marchés publics. Ce suivi va de l'instant de la décision de construire, d'acheter ou de faire livrer en passant par le choix de la procédure, l'élaboration du cahier des charges du marché jusqu'à la réception définitive et au paiement final.

Chercheur : Jacques Gérard, Charlotte Laurent

Commanditaires : Région Wallonne et CIGER

Dates : mai 94 à mai 98 (suspension du contrat pendant deux ans).

Contrat ENLIST

Utilisation des nouvelles technologies dans un but pédagogique en créant une base de données de référence juridique sur le droit d'Internet, ainsi qu'un cours correspondant, le tout à l'échelle européenne avec la collaboration de différentes facultés de droit européennes.

Chercheur : Jacques Gérard et Laetitia Rolin

Commanditaire : Commission européenne – DG XIII

Coordinateur du projet : CLCT (University of Strathclyde- G-B)

Partenaires : 8 centres européens

2.6 Sujets Transversaux

Experts dans les pays de l'EST

Des experts du CRID se sont rendus en Slovaquie (Jean-Marc Dinant), en Albanie (Cécile de Terwangne) ou en Lettonie (Axel Lefebvre, Sophie Louveaux) dans le cadre de contrats européens visant à une meilleure compréhension des réglementations en vigueur dans le domaine des nouvelles technologies et de la société de l'information.

Directeur : Yves Pouillet

Commanditaire : Commission européenne.

PAI

Etude multidisciplinaire consacrée à la problématique de la société de l'information

Chercheurs : Axel Lefebvre, Robert Queck (CRID),
Paul Belleflamme, Marie Gevers (CITA)

Commanditaire: Services du Premier Ministre

Affaires scientifiques, techniques et culturelles (SSTC)

Date: du 1er janvier 1997 au 31 décembre 2001.

**3. Publications et autres documents rédigés en 1997 et 1998
classés par ordre alphabétique d'auteur**

M. Antoine, Autoroutes de l'information et cryptographie. - Etat des législations belge et française, in *Internet : Quel cadre légal et contractuel ?*, Bruxelles, Edition Formation Entreprise, 25-26 mars 1997, 8 p.

M. Antoine, D. Gobert, "Pistes de réflexion pour une législation relative à la signature digitale et au régime des autorités de certification.", *R.G.D.C.*, 1998, n° 4-5, pp. 285-310.

S. Bazzanella, Ph. Gérard sous la direction d'Y. Pouillet et de R. Queck, Télécommunications et audiovisuel : convergence de vues ? Enjeux et conséquences juridiques de la convergence technologique entre les télécommunications et l'audiovisuel, Bruges, La Charte, 1997, 268 p.

D. Carneroli, Autorité réglementaire de télécommunication - autorité réglementaire de radiodiffusion : complémentarité ou concurrence ?, in *Le nouveau Conseil Supérieur de l'audiovisuel*, Bruxelles, Bruylant, 1998, pp. 107-135.

J.M. Cheffert, "Le service universel universel, une notion à cerner pour un champ politique à identifier" dans les Cahiers du CRID n° 15, "Service universel, concurrence et télécommunications", janvier 1999, pp. 7-31.

J.-M. Cheffert, E. Coune, L. Lecocq, "Principes régissant la politique de service universel : une relecture des solutions belge et européenne" dans les Cahiers du CRID n° 15 "Service universel, concurrence et télécommunications", janvier 1999, pp. 51-85.

E. Davio, Questions de certification, signature et cryptographie, in *Internet face au droit*, Cahiers du CRID n° 12, Bruxelles, Story-Scientia, 1997, pp. 65-86

E. Davio, Identification et signature électronique, in *Internet : Quel cadre légal et contractuel ?*, Bruxelles, Edition Formation Entreprise, 25-26 mars 1997, 16 p.

E. Davio, Preuve et identification sur Internet, *Revue de droit commercial belge*, 1997, pp. 660-670.

Florence de la Vallée, Neuf mois après la libéralisation peut-on parler de véritable concurrence sur le marché belge des télécommunications ?, *Revue Ubiquité*, n° 1, nov. 1998, pp. 121-125.

Cécile de Terwangne, Les outils documentaires électroniques, in *La pathologie législative, comment en sortir ?*, Droit en mouvement, Bruxelles, La Charte, 1998, pp. 81-96. (Actes du colloque du 23 mai 1997 organisé par l'A.J.N.).

C. de Terwangne, Y. Pouillet, P. Turner (eds), Vie privée : nouveaux risques et enjeux = Privacy : new risks and opportunities, Cahiers du CRID n° 13, Bruxelles, Story-Scientia, 1997, 230 p.

C. de Terwangne, M.-H. Boulanger, Internet ou le respect de la vie privée, in *Internet face au droit*, Cahiers du CRID n° 12, Bruxelles, Story-Scientia, 1997, pp. 190-213.

C. de Terwangne, M.-H. Boulanger, Th. Léonard, S. Louveaux, D. Moreau et Y. Pouillet, La protection des données à caractère personnel en droit communautaire, *Journal des Tribunaux de Droit européen*, 1997, pp. 121-127 (1^{ère} partie); pp. 145-155 (2^{ème} partie); pp. 173-179 (3^{ème} partie)

- C. de Terwangne, S. Louveaux, Data protection and online networks, *C.L.S.R.*, 1997, pp. 234-246.
- P. Debroux et A. Delvaux, Marchés publics de travaux et de services, Guide de Droit Immobilier, Story Scientia, Bruxelles, 1997, 111 p.
- J. Dhont, Y. Pouillet (dir. Scient.), S.S.T.C. (commanditaire), De verwerking van medische persoonsgegevens voor wetenschappelijke en statistische doeleinden, Namur, C.R.I.D., 1998, 120 p.
- S. Dusollier, J.-Ch. Lardinois, A propos de la proposition de directive européenne sur l'harmonisation du droit d'auteur dans la société de l'Information, *I.R.D.I.*, 1998, pp. 16-23.
- S. Dusollier, Y. Pouillet, Vers une politique européenne en faveur du commerce électronique, *Cahier du Juriste*, 1998, n° 3-4, pp. 33-37.
- S. Dusollier, Aspects légaux des systèmes d'identification et de gestion électronique des œuvres, *Auteurs et Médias*, 1998, n° 4
- S. Dusollier, Legal aspects of Electronic Copyright Management Systems, in Actes de la conférence SEC 98, Budapest 31/8 au 4/9/98, Kluwer.
- J.-M. Dinant, Y. Pouillet, Internet et vie privée. Nouveaux enjeux, nouvelles solutions, Colloque des 17 et 18 mai 1997, Stresa, Italie, 1997, 24 p.
- D. Gobert, Signature électronique et autorités de certification, la levée des obstacles au développement des commerces électroniques, *Revue Ubiquité*, nov. 1998, n° 1, pp. 79-82
- P. Grimalt, R. Julia Barcelo, Liability for Online Intermediaries (Chapitre concernant l'Espagne), Amsterdam, Institute for Information Law, August 1997.
- R. Julia, Y. Pouillet, Health telematics networks : Reflections on legislative and contractual models providing security solutions, *The EDI Law Review*, 1997, pp. 177-203.
- R. Julia, Th. Vinje, Hacia un marco europeo de las firmas digitales y la encriptation, *D.A.T.*, 1998, n° X/115, pp. 12-22.
- R. Julia, Th. Vinje, Electronic commerce. Towards a european framework for digital signatures and encryption, *C.L.S.R.*, 1998, n° 2, pp. 79-86.
- R. Julia, The German legal situation after the "Digital Signature Law", *D.I.T.*, 1998, n° 1, pp. 77-79.
- R. Julia, Proposal for a directive establishing a common framework for electronic signatures : an overview, in *Electronic commerce : opening up new opportunities for business*, Macclesfield, Cheshire Henbury, 1998, pp. 63-70.
- R. Julia, Th. Vinje, Electronic signatures – another step towards an european framework for electronic signatures : the Commission's Directive proposal, *C.L.S.R.*, 1998, n° 5, pp. 303-313.
- R. Julia, Th. Vinje, Hacia un marco europeo sobre firmas digitales y criptografia, *Revista de Derecho Mercantil*, 1998, n° 228, pp. 695-714.
- R. Julia, Liability For On-line Intermediaries: A European Perspective, *E.I.P.R.*, 12, 1998, P.1-9.

R. Julia, P. Grimalt, El contenido de los derechos de autor en la Propuesta de Directiva sobre derechos de autor y derechos afines en la sociedad de la información, Encuentros sobre Informática y Derecho, 1998-1999

R. Julia, Firma digital y Trusted Third Parties : Iniciativas reguladoras a nivel internacional, Encuentros sobre Informática y Derecho, 1997-1998, pp. 217-218.

A. Lefebvre, Questions introductives au workshop" Potential impact on citizenship and democracy. Seminar 2-June 25, 1998 - F.U.N.D.P. Namur (Belgium). – State, Citizens and Markets in the Information Society, *Information Society, Administration and Citizen*, CITA-CRID, 25 juin 1998, pp. 54-56.

A. Lefebvre, D. Gillerot, Internet : la plasticité du droit mise à l'épreuve, Collection Citoyen, Droit & Société , Bruxelles, Fondation Roi Baudouin, 1998, 59 p.

A. Lefebvre, Y. Poulet, Vie privée et crédit à la consommation, protéger le consommateur ou sa vie privée : un choix difficile, in *Le Crédit à la consommation*, Bruxelles, Editions du Jeune Barreau de Bruxelles, 1997, pp. 103-133.

A. Lefebvre, Pratique du commerce et vie privée : une loi au secours de l'autre, in *Les pratiques du commerce autour et alentour*, Bruxelles, Publications des Facultés Universitaires St Louis, 1997, pp. 129-148

A. Lefebvre, Note sous Comm. Bruxelles, 26 novembre 1996, (Aff. Société D. c. Société C.), - Contrat de fourniture informatique – Résiliation unilatérale – Devoir de conseil – Modification contractuelle unilatérale, *D.I.T.*, 1997, n° 2, pp. 47-51

A. Lefebvre, Note sous Tribunal de commerce de Bruxelles, 3 janvier 1997, (Aff. Indacom.), (Belgique) – Nom de marque Internet – Droit des marques – Usages honnêtes en matière de pratique de commerce, *D.I.T.*, 1997, n° 4, pp. 37-49.

Th. Léonard, , Les législations protectrices des données à caractère personnel : de nouveaux instruments de censure ?, 19^{ème} Conférence Internationale - Commissaires à la protection des données, Bruxelles 17-19 septembre 1997, 8 pages

C. Llorrens, European responses to Bottlenecks in Digital Pay-TV : Impacts on pluralism and competition policy, *Cardozo Art&Entertainment Law Journal*, New-York, 30p. , à paraître en 1998.

C. Llorens, La convergencia estructural de las telecomunicaciones y el Audiovisual en Europa (1995-1996) : un peligro para el pluralismo ?, elos, Madrid, 12 p., 1998.

S. Louveaux, Privacy Issues, (Esprit project 27028), ECLIP, 1998, 28 pages.

S. Louveaux, Fr. de Brouwer, Protection des données à caractère personnel : vers une nouvelle loi belge, *Revue Ubiquité*, n° 1, nov. 1998, pp. 83-99.

S. Louveaux, Y. Poulet, Data Protection in Health Telematics Projects : Compliance with the European Directive on the Protection of Personal Data, in *Vie privée : nouveaux risques et enjeux = Privacy : new risks and opportunities*, Cahiers du CRID n° 13, Bruxelles, Story-Scientia, 1997, pp. 115-136

E. Montero, Les programmes d'ordinateur et le passage à l'an 2000, *J.T.*, 1998, pp. 369-374

E. Montero, La responsabilité civile des médias, *Prévention et réparation des préjudices causés par les médias*, De Boeck & Larcier, Bruxelles, 1998, pp. 95-134.

E. Montero, Aspects juridiques du passage à l'an 2000 pour les programmes d'ordinateur, *Cahier du Juriste*, 1998, n° 3-4, pp. 52-54.

E. Montero (ed), Internet face au droit, Cahiers du CRID n° 12, Bruxelles, Story-Scientia, 1997

E. Montero, Les responsabilités liées à la diffusion d'informations illicites ou inexactes sur Internet, in *Internet face au droit*, Cahiers du CRID n° 12, Bruxelles, Story-Scientia, 1997, pp. 112-137

E. Montero, Les programmes d'ordinateur et le passage à l'an 2000, in *Comment négocier et rédiger au mieux vos contrats informatiques*, EFE, Bruxelles, 1997, 11 p.

E. Montero, Internet et le droit des obligations conventionnelles, in *Internet sous le regard du droit*, Editions du Jeune Barreau de Bruxelles, Bruxelles, 1997, pp. 31-65.

E. Montero, Y. Pouillet, Le droit d'Internet : un mirage ?, *Signe des temps - Pax Christi*, déc. 97, n° 40/4, pp. 18-22.

Y. Pouillet, L'auteur et ses droits perdus ou retrouvés dans le cyberspace, *Auteurs & Media*, 1998, n° 4

Y. Pouillet, B. Havelange, avec la collab. de M.-H. Boulanger, H. Burkert, A. Lefebvre, Elaboration d'une méthodologie pour évaluer l'adéquation du niveau de protection des personnes physiques à l'égard du traitement de données à caractère personnel, étude menée pour la Commission Européenne, Luxembourg, Office des publications officielles des Communautés européennes, 1998, VI, 62 p.

J. Hubin, Y. Pouillet et alii, La sécurité informatique, Cahiers du C.R.I.D. n° 14, Bruxelles, Story-Scientia, 1998, 260 p. Y. Pouillet, B. Havelange, avec la collab. de M.-H. Boulanger, H. Burkert, A. Lefebvre, Preparation of a methodology for evaluating the adequacy of the level of protection of individuals with regard to the processing of personal data, Luxembourg, Office for Official Publications of the European Communities, 1998, VI, 62 p.

Y. Pouillet, Internet et vie privée : Nouveaux enjeux. Nouvelles solutions, Congresso, Stresa, 16/17 maggio 1997, in *Società dell'informazione tutela della riservatezza*, Milano, Giuffrè Editore, 1998, pp. 49-72.

Y. Pouillet, Internet and privacy : any conclusions, 1st E-Clip Workshop, Namur, 27/28 mai 1998, Doc.CRID, 1998, 9 pages.

Y. Pouillet, Internet and Privacy : any conclusions, Doc.CRID, 1998, 9 pages.

Y. Pouillet, Quelques considérations sur le droit du cyberspace, Doc.CRID, 1998, 22 pages.

Y. Pouillet, S. Dusollier, Vers une politique européenne en faveur du commerce électronique, *Cahier du Juriste*, 1998, n° 3-4, pp. 33-38.

Y. Pouillet, Electronic commerce and privacy, Doc. CRID, novembre 1998, 16 pages.

Y. Pouillet, Libertés et société de l'information : le droit de participer à la société de l'information et le droit de s'en exclure, *Revue Ubiquité*, nov.1998, n° 1, pp. 21-27.

Y. Pouillet, Autour de l'arrêté royal du 7 juillet 1997 relatif à la publication des arrêts du Conseil d'Etat : Les technologies de l'information et de la communication, une solution à

la pathologie législative ?, *La Pathologie Législative, comment en sortir ?*, Droit en mouvement, Bruxelles, La Charte, 1998, pp. 57-78.

Y. Pouillet, Diffusion des données juridiques et Nouveaux médias : Un enjeu fondamental pour la justice, (Congrès de l'ADIJ, Paris, 22/23 octobre 1998), Doc. CRID, 1998, 22 pages.

Y. Pouillet, Some considerations on cyberspace law, Doc. CRID, 1998, 33 pages

Y. Pouillet, R. Queck, En conclusion - Le droit face à Internet, in *Internet face au droit*, Cahiers du CRID n° 12, Bruxelles, Story Scientia, 1997, pp. 232-247.

Y. Pouillet, The European directive relating to the protection of physical persons with regard to the processing of personal data and its free circulation - a state of relative harmony, *EC Data Protection Directive : Interpretation Application Transposition, Working conference*, Beiträge zur juristischen Informatik, band 22, Darmstadt, STMV, 1997, pp. 24-29.

Y. Pouillet, Transactions via Internet et protection des consommateurs, *Journées d'études sur la vente à distance*, 18 avril 1997, Leuven, 37 p.

Y. Pouillet, La protection adéquate dans les flux transfrontières de données, *19ème Conférence Internationale des Commissaires à la Protection des Données*, Bruxelles, 17-19 octobre 1997, 8 p.

Y. Pouillet, De quelques questions relatives à l'application de la directive "Données Personnelles" n° 95/46 du 24 octobre 1995 au contexte de l'Internet, *Cahiers Lamy du Droit de l'Informatique*, n° 96/F, octobre 1997, pp. 11-16.

Y. Pouillet, Transactions via Internet et protection des consommateurs, *Verkoop op afstand en telematica*, Kluwer België & Story Scientia, 1997, pp. 127-164.

Y. Pouillet, Towards a social security identity card : lessons from the belgian case, *Health Cards 97*, IOS Press, 1997, pp. 155-161.

Y. Pouillet, Ch. Lamouline, Des autoroutes de l'information à la "démocratie électronique" - De l'impact des technologies de l'information et la communication sur nos libertés, Rapport présenté au Conseil de l'Europe, Bruxelles, Bruylant/Némésis, 1997, 141 p.

N. Risacher, Un positionnement de la problématique : réseaux et droit des personnes, *Cahiers Lamy du droit de l'informatique*, 1997, n°96/f, pp. 7-11

N. Risacher, La régulation des contenus illégaux et préjudiciables sur Internet, *Cahiers Lamy du droit de l'informatique*, 1997, n°92/B, pp. 9-13.

A. Salaün, Les paiements électroniques et la vente à distance : vers une sécurisation des paiements électroniques, *J.T./D.E.*, 1998, n° 50, pp. 134-137.

A. Salaün, Commerce électronique et protection des consommateurs, *Cahier du Juriste*, 1998, n° 3-4, pp. 44-51.

A. Salaün, Electronic commerce and consumer protection, Doc. CRID, juin 1998, 14 pages.

A. Salaün, Les transactions commerciales sur Internet, Lyon, 4-5 juin 1998 le droit communautaire et les réseaux de télécommunication et de télédiffusion : la protection des entreprises et des usagers dans la société de l'information

J.-P. Triaille, A. Strowel, *Le droit d'auteur, du logiciel au multimédia : droit belge, droit européen, droit comparé*, Les Cahiers du CRID, n° 11, Bruxelles, Story Scientia, 1997, 510 pp.

4. Cahiers du CRID

Le centre propose une collection ayant pour objet de diffuser le résultat d'études menées par ses chercheurs et collaborateurs. Chaque cahier constitue la synthèse d'un thème d'actualité traité dans une perspective interdisciplinaire, théorique et pratique.

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L'accès à l'information administrative et la commercialisation des données publiques

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Vers une société de l'information. I. emplois nouveaux et citoyenneté nouvelle II.

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par A. STROWEL et J.P. TRIAILLE, n° 11, Story-Scientia/Bruylant, 1997, 510 p., 3780 FB.

Internet face au droit,

par E. MONTERO (éd.), n° 12, Story-Scientia, 1997, 259 p., 2331 FB.

Vie privée : nouveaux risques et enjeux,

Par Y. POULLET, C. de TERWANGNE et P. TURNER, n° 13, Story-Scientia/Bruylant, 1997, 230 p., 2.178 BEF.

La sécurité informatique

Par J. HUBIN, Y. POULLET et alii, n° 14, Story-Scientia, 1998, 260 pages, 2484 BEF.

Service universel, concurrence et télécommunication,

Par J-M. Cheffert et alii, n° 15, Story-Scientia, 1999, 223 pages.