

CITIDEP

**Centro de Investigação
de Tecnologias de Informação
para uma Democracia
Participativa**

**Research Center on
Information Technologies
and Participatory Democracy**

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Where to Reach Us

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CITIDEP International

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Introduction to CITIDEP

Research Center on Information Technologies and Participatory Democracy

CITIDEP (Centro de Investigação de Tecnologias de Informação para uma Democracia Participativa) is a private, non-profit scientific and technological organization, which is committed to foster citizenship, preserve our heritage and protect the environment, through sustainable development.

CITIDEP's primary objective is to study participatory democracy, in particular through the research, development and demonstration (RD&D) of new information technologies, of its impacts, and of ethical, social, political and planning frameworks that enable participatory mechanisms in the *information society*.

CITIDEP has its headquarters in Lisbon, Portugal, therefore within the European Union, but it is open to researchers from any country in the world, through national chapters and multi-national research clusters.

CITIDEP has a particular aptitude for applied research, based on national and multinational multidisciplinary teams. We face the challenge of combining research on technology and engineering with research on social sciences and humanities, keeping a focus on participatory democracy and information technologies; and the no lesser challenge of linking such research to concrete measures in support of the civil society.

CITIDEP has currently about 60 affiliates in 8 countries, with 2 organized chapters (Portugal and USA) and another soon to be (Mexico). All Chapters share common principles and by-laws, but are otherwise autonomous.

Reflecting our profile as a Research Center, among our membership we count 12 Ph.D.'s (10 of which are Faculty members in their Universities), 13 Ph.D. candidates, 11 holding a Master degree, and 4 Master degree candidates. About 70% of our membership is actively engaged in research. Reflecting also our commitment to link research to *praxis* in society, many CITIDEP members are professionals with responsibilities in both the private and public sectors; some of them are leading activists of major Non-Governmental Organizations. Our associates have a rich and diverse background, including: Political Science, Planning, Communications, Computer Science, Environmental Engineering, Electronic Engineering, Mathematics, Medicine, Biology, Business, Social Service, Sociology, Anthropology, Psychology, Philosophy, Literature, among others.

To pursue its objectives, CITIDEP proposes to:

- a) Organize and develop disciplinary, interdisciplinary, and transdisciplinary studies and research projects;
- b) Offer grants for research and study, including for masters and doctoral study, and host and orient grantees of the Center itself or other institutions;
- c) Collaborate with educational institutions to develop new curriculum materials relating new information technologies and participatory democracy;
- d) Sponsor and collaborate with other scientific institutions in the holding of colloquia, conferences, and seminars, with the aim of fostering debate and furthering knowledge on these issues;
- e) Promote and collaborate in training activities;
- f) Constitute a Documentation Center, with access to international computer networks;
- g) Contribute to research and development of computer-based tools that support participatory democracy;
- h) Inform public opinion and raise public awareness, through its own publications, including those with international circulation, and through the general mass media;
- i) Provide services that help to promote participatory democracy, as well as related research and development activities;
- j) Promote and collaborate in initiatives that lead to legislative reform in the area of new technologies and participatory democracy;
- k) Collaborate with public institutions, such as national, regional and local administrations and parliaments, as well as federative multinational institutions such as the European Parliament, United Nations, and others;
- l) Support individual citizens and citizens' groups in processes of public consultation, namely in the evaluation of environmental impact studies and of master plans.

CITIDEP Organization

CITIDEP is a private, non-profit scientific and technological organization with headquarters in Lisbon, Portugal, but open to researchers from any country in the world, through national chapters and multi-national research clusters.

CITIDEP has currently about 60 affiliates, in 8 countries, with 2 organized chapters (Portugal and USA) and another soon to be (Mexico). All Chapters share common principles and by-laws, but are otherwise autonomous.

CITIDEP has the following organizational units: General Assembly; Board of Directors; Science Council; Research Clusters; Socio-Economic Advisory Council; Coordinating Committee; National Chapters; Country Correspondents. Research Cluster structure, composition and agenda is described in other document [doc. "CITIDEP Research Clusters"].

General Assembly: Composed of all voting members. It is the highest decision instance of CITIDEP; elects every 2 years the Board of Directors; reviews and aproves all CITIDEP activity plans.

Board of Directors: (Executive Committee, Review Committee, General Assembly Presidency).

Executive Committee: Manages and coordinates CITIDEP activities. It is the highest decision instance between General Assembly meetings; one of its functions is to designate Science Council members.

- Pedro Ferraz de Abreu (President)
- Rui Ponte (Vice-President)
- Nuno Vieira (Treasurer)
- Ana Teresa Chinita (Assistant Director)
- Cristina Angelo (Assistant Director)

Review Committee: Reviews the activities and finances managed by the Executive Committee.

- Fernando Sacramento (Chair)
- Alfredo Henriquez (Secretary)
- Ana Galhardo (Secretary)

General Assembly Presidency: Summons and presides over the General Assembly meetings.

- Joana Veiga (Chair)
- João Angelo (Secretary)
- Idalina Barradas (Secretary)

Science Council: Presides over and coordinates all CITIDEP scientific activity; elaborates and approves the CITIDEP General Research Plan; concedes and reviews CITIDEP research grants. The Science Council elects a President every 2 years.

- Timothy Sieber, PhD (President)
- Ana Coito, PhD
- Fernanda Veiga de Oliveira, PhD
- João Joanaz de Melo, PhD
- José Cardoso Duarte, PhD
- José Manuel Costa Portela, PhD
- José Manuel Palma-Oliveira, PhD
- Luis Miguel Rionda Ramirez, PhD
- Mark Hasegawa-Johnson, PhD
- Rui Ponte, PhD
- Timothy Wütrich, PhD

Coordinating Committee: Acts in support of the Executive Committee and the Science Council to manage and coordinate projects, resources, and promote CITIDEP Chapter organization. The Coordinating Committee is composed of the Executive Committee, the National Chapters / Nuclei Coordinating Committees and of all Project and Task Coordinators.

Socio-Economic Advisory Council: Committee composed of invited representatives of NGO's, of social institutions and of businesses related to CITIDEP activities in support of the civil society.

National Chapters: Promote CITIDEP activities and projects, linking research to *praxis* in society. Chapters may therefore also accept members not involved in research. Each Chapter elects a Chair, approves a National Plan of Activities, and designates a Chapter Coordinating Committee.

Portugal Chapter: (40 members)

Chapter Committee:

- Nuno Vieira (Chair)
- Teresa Sancho (Organization)
- Cristina Angelo (Press)
- Pedro Borges (Web Master)

USA Chapter: (12 members)

Chapter Committee:

- Timothy Sieber (Chair)
- Mark Hasegawa-Johnson (Web Master)
- Clelia Guinazu (Coordinator for Colloquim USA-Task Force)
- Rui Ponte (Coordinator for Research Journal USA-Task Force)
- Marie Mchugh (Coordinator for Chapter Organization Task Force)

Country Correspondents:

- Argentina: Ricardo Domingues
- Brazil: Celso Oliveira
- Dominican Republica: Remy Ruiz
- England: Alejandro Natal
- France: Pedro Ferreira
- Mexico: Pablo Pineda Jovel

CITIDEP Research Team Experience: 1992 - 1996

CITIDEP was born on the 14th September 1996. Therefore, it is still in its take-off stage. Before 1996, we had a long process of reflection, in meetings and brainstorming sessions both in Portugal and USA, as well in multinational forums via Internet. In addition to on-going research cooperation, the main agenda was over the scientific profile and planned activities for CITIDEP, in order to outline the research domain boundaries in Information Technologies and Participatory Democracy, and to define a research focus for CITIDEP. This is still a crucial part of our joint activity.

Projects: Among the team of researchers who joined CITIDEP, already working in related areas, many participated in two research projects initiated during 1995 and since then supported by CITIDEP: «Impacts of EXPO98» and «IMS».

The «Impacts of EXPO98» project, coordinated by Professor Timothy Sieber, involves an urban anthropological analysis of the current redevelopment of Lisbon's waterfront, and public perceptions and impacts of developments in this rapidly changing urban zone, in particular due to EXPO 98. Of particular interest is an assessment of public participation in the process. The preliminary studies took place in September 1995. The project is now part of the CITIDEP research agenda, involving six other unit members. The project coordinator was recently awarded a Fulbright Scholarship which allows him to proceed with his work in Lisbon. Meanwhile, there is one forthcoming related publication: "Urban Waterfronts," in "Encyclopedia of Contemporary American Culture". New York: Routledge, 1997.

The «IMS» project (Intelligent Multimedia System) is coordinated by Dr. Pedro Ferraz de Abreu and is part of his Ph.D. thesis research at the Massachusetts Institute of Technology (MIT), USA. He was awarded a scholarship through CITIDEP, based on a cooperation protocol between the DGA (Environmental Ministry, Portugal) and the DCEA / FCT-UNL (New University of Lisbon) supporting this research, which aims to test and evaluate the use of new Information Technologies (IT) in the review process for Environmental Impact Assessment (EIA), in particular for Public Consultation. Among the team work of 16 researchers and experts (11 from CITIDEP) that have been actively cooperating in this project, we can cite the contributions from Prof. Joanaz de Melo's work on EIA Public Consultation, as well from Prof. José Palma's research on the "Interface between IT and Cognition and Psychological Individual Processes", as examples of successful multidisciplinary research collaboration. Partial results of this research (communication: "*Participacion y Democracia. La toma de decisiones sociales en la nueva Sociedad de Información*") have already been presented at an international conference at the University of Mexico on «Desarrollo, Democracia Y Comunicación», October 96, coordinated by our associate Dr. Alejandro Natal, and at a seminar at MIT, on «Planning Support Systems» (paper: "*Metadata for Intelligent Multimedia Systems*"), in

December 96. Another article ("*Current Challenges in EIA Evaluation in Portugal, and the Role of New Information Technologies: -- The Case of S. João da Talha's Incinerator for Solid Urban Waste*"), was recently published in a book, «Environmental Challenges in an Expanding Urban World», edited by Reis Machado & Jack Ahern, CNIG, June 97.

By the end of 1996, partially based on the IMS project experience, two other research projects were initiated:

The «RegioNet» project aims to design, implement and test an Internet-based Interactive System to support public debate on Regional Policy. Coordinated by Dr. Nuno Vieira, this project was submitted to the Portuguese Parliament and includes the participation of a Leonardo Da Vinci grantee from the University College London, UK, hosted by CITIDEP.

The «Public access to environmental information» project, coordinated by Dr. Manuel Antunes, aims to evaluate how new IT promote the transparency of public administration and the fulfillment of the 90/313/EU Directive, concerning freedom of access to environmental information. DRARN-LVT (Min. of Environment, Portugal) is funding a demonstration component of this project.

Other Research Activities:

A "start-up" editorial body was created for the CITIDEP international scientific journal «Participatory Democracy».

MIT Urban Studies and Planning Dept. invited Dr. Ferraz de Abreu to coordinate the organization of a series of MIT seminars on «Citizenship, Participation and Information Technologies in City Government over the Next Millennium». A CITIDEP team from 5 countries is helping to organize this event. The Mayor of Lisbon is already invited to participate.

A CITIDEP research group, coordinated by Prof. Rui Ponte, is analyzing and discussing the *Green Book on Information Society*, the *Bangemann Report*, and the work of the European Community *Information Society Forum*.

Based on the experience acquired through these projects, CITIDEP discussed and approved a preliminary Research Plan [doc. 'Research Goals']. The identification of priorities and an assessment of the areas where CITIDEP reaches a "critical mass" for focused research is now in progress.

CITIDEP Research Goals (1997 - 2002)

The primary objective of CITIDEP is to study participatory democracy, in particular through the research, development and demonstration (RD&D) of new information technologies, of its impacts, and of ethical, social, political and planning frameworks that enable participatory mechanisms in the *information society*.

CITIDEP has a particular aptitude for applied research, based on national and multinational multidisciplinary teams. We face the challenge of combining research on technology and engineering with research on social sciences and humanities, keeping a focus on participatory democracy and information technologies; and the no lesser challenge of linking such research to concrete measures in support of the civil society.

At this time, CITIDEP has also to deal with the difficulties inherent to a start-up phase, particularly a chicken-and-egg kind of problem: without funding, we cannot reach critical mass for effective research, which in turn is required to obtain adequate funding. In order to address both (above mentioned) challenges and difficulties, CITIDEP adopted initially a three-pronged strategy: 1) a project-driven research strategy and corresponding research team organization structure; 2) an initial emphasis on the D&D components of RD&D projects, which are easier to fund through service provision contracts with *ad-hoc* project teams; 3) an effort to build and refine the CITIDEP research agenda, beginning with the best matches between research interests of our associates.

This strategy has proven to be effective [doc. "Research Team Experience"], but also highlighted its limitations. We need now to complement project-driven research with a domain/cluster-driven research, able to develop and sustain an *institutional memory* regarding research efforts; and prepare a shift from D&D emphasis to a more balanced RD&D emphasis, only possible by becoming less dependent of funding from service provision contracts.

Consequently, CITIDEP is set on fulfilling the following **goals** over the next 6 years:

- To define (and update) a **General Research Plan**, which will include the creation of *Research Clusters* focused on the thematic areas of interest to CITIDEP and its associates. The proposed research cluster structure is as follows: **Support research** (1. *Meta-Research*; 2. *Mathematical Analysis, Models and Simulation*; 3. *Pedagogy, School Curricula, and Open Education*); **Information research** (1. *Communications and Media*; 2. *Information Technologies*); **Society research** (1. *Frameworks: Ideology, Ethics, Economy and Political Science*; 2. *Institutions: Planning, Legislation and Public Administration*; 3. *People: Society, Communities and the Individual*).

Research Clusters' specific agendas and composition are described next [doc. "Research Clusters"].

- To obtain both financial and infrastructure means, through research grants and service provision contracts linked to Research, Development & Demonstration projects, in order to create the conditions to fulfill the research agenda, namely the ability to fund CITIDEP fellowships, and to provide installations, equipment and administrative support;
- To establish research and cooperation protocols with Universities and other Research Centers, on both national and international level, in particular those based on promoting the continuing reinforcement of bonds between our researchers and their *Alma Mater* ; and also with Public Administration institutions, in particular those committed to participatory mechanisms (e.g. IPAMB) and to Information Society initiatives (e.g. Portugal's I.S. *Green Book* Commission, and EU's Information Society Forum) [doc. "Institutional and International Cooperation"];
- To supervise and support MSc, MPhil and Ph.D. thesis in CITIDEP research areas of interest, acting also as host institution to young researchers, students and grantees, for projects or course related work. At least four Ph.D. and three MPhil thesis, with some support from CITIDEP, are expected to be completed by 1999;
- To publish research work in the areas of interest of CITIDEP, in particular building bibliographic support for each CITIDEP research cluster, in academic journals of internationally acknowledged merit and also on the Internet; as well supporting and promoting the participation of CITIDEP researchers in international conferences;
- To organize a biennial conference on "Information Technologies and Participatory Democracy", as well several other national and international seminars with expanded participation through video-conference links;
- To develop and maintain a state-of-the-art, Internet based, multi-nodal high-speed international video-link infrastructure, not only to support CITIDEP multi-national research team work, but also to develop and test tools and methodologies supporting telecooperation in general;
- To host the edition of an international scientific journal, «Participatory Democracy», already with an editorial body of researchers from Portuguese, British and American universities.

CITIDEP Research Clusters

Research Areas on Information Technologies and Participatory Democracy

Research Agenda 1997 - 2002

The unifying theme of CITIDEP research focus (on Information Technologies and Participatory Democracy) is the **Information Society**. Our research organization is correspondingly structured in three major groups: ***Support***, ***Information***, and ***Society*** related research areas. Each major group is subdivided in domain-specific ***Research Clusters***.

Research Clusters, which may encompass different *application areas*, pursue a limited number of well defined *research topics*, by means of research activities and research/development/demonstration (RD&D) projects. Research activities are preliminary, less structured research efforts led by *ad-hoc* teams, that may produce *project proposals*. Research projects (RD&D projects) are led by formal teams and may cross-relate research topics from different Research Clusters, as long as the *research project agenda* (targeted problem, research questions) remains focused and consistent.

CITIDEP has, consequently, two levels of research unit organization: the Research Cluster Team (domain oriented) and the Research Project Team (both problem and domain oriented). This document describes the Research Cluster Teams and their agendas.

Support Research Clusters	Information Research Clusters	Society Research Clusters
<p>Meta-Research</p> <p>Mathematical Analysis, Models and Simulation</p> <p>Pedagogy, School Curricula and Open Education</p>	<p>Communications and Media</p> <p>Information Technologies</p>	<p>Society Frameworks: Ideology, Ethics, Economy and Political Science</p> <p>Society and Institutions: Planning, Legislation and Public Administration</p> <p>Society and People: Social Movements , Communities and the Individual</p>

1. Support Research Clusters

Meta-Research (research on research); **Mathematical Analysis, Models and Simulation** (thinking aids); **Pedagogy, School Curricula and Open Education** (teaching / learning aids)

1.1 Meta-Research

Alias: Research on Research

Coordinator: Timothy Sieber, Ph.D.

Team:

Timothy Sieber, Ph.D.; Fernanda Veiga de Oliveira, Ph.D.; Rui Ponte, Ph.D.; Ana Coito, Ph.D.; José Cardoso Duarte, Ph.D.; Mark Jonhson-Hasegawa, Ph.D.; João Joanaz de Melo, Ph.D.; Manuel Antunes, PhD. 'ABD'; Pedro Ferraz de Abreu, PhD. 'ABD'; Alejandro Natal, PhD. 'ABD'; Alfredo Henriquez, MPhil.

Research agenda:

To study and develop:

- Methodologies for multidisciplinary research (e.g. differences between research methods in engineering and social sciences; bridging between problem-oriented and research-question-oriented team work; integrating criteria's for success; building common referential for multi-value systems and different concepts of proof and evidence).
- Protocols and tools for multi-national research team work (e.g. information technologies for infrastructure support; collaborative tools; telecooperation procedures).
- Strategies to connect *research* with *development* and with *demonstration* (RD&D), concerning the new information technologies and participatory mechanisms (e.g. how to link research to concrete measures in support of the civil society; how to provide services as a *demonstration* component of associated research projects).

Application areas:

Research Policy; Plans, Methodologies and Strategy.

Research Activities:

- Literature review; Brainstorming sessions and Seminars (95 - 96).

Plan outline for 1997 - 2002:

- Literature review; Brainstorming sessions and Seminars (1997 - 2002);
- Participation in the Internet discussion mail list group on "information society" (1997 - 2002);
- Biennial International Seminar with a section on Meta-Research (1998);
- Publication of CITIDEP guidelines on multidisciplinary and multi-national team work (1998, revised every year);
- Publication of CITIDEP position paper on mission and strategy (1998, to be revised every 2 years);
- Project proposal "*Video-link and Telecooperation*" [develop and maintain a state-of-the-art, Internet based, multi-nodal high-speed international video-link infrastructure, not only to support CITIDEP multi-national research team work, but also to develop and test tools and methodologies supporting telecooperation in general] (1998-2002) .
- Publication of a minimum of 3 Cluster related articles (1999 - 2002);

Main References (92-97):

Henriquez, B. A. (1997) "Prólogo" in Ander-Egg, E. & Idáñez, M.J.A. "*Cómo Elaborar um Proyecto*" 13^a ed, Lumem/Hvmanitas, Argentina.

1.2 Mathematical Analysis, Models and Simulation

Alias: Thinking aids

Coordinator: Fernanda Veiga de Oliveira, Ph.D.

Team:

Fernanda Veiga de Oliveira, Ph.D.; Rui Ponte, Ph.D.; João Joanaz de Melo, Ph.D.; Pedro Ferraz de Abreu, PhD. 'ABD'

Research agenda:

- Analytical methods (e.g. numerical analysis);
- Computer tools for mathematical analysis;

- Computer models (e.g. formalism; implementation techniques; consistency checks, model evaluation and criticism; transparency of model-based decision-making);
- Simulation (conditional and unconditional forecasting) techniques; simulation and data visualization in public debate; what-if models (trade-off models) and public participation;
- Cryptography and theoretical constraints for security and privacy parameters in computer data.

Application areas:

Model design and critique; Decision making; Model-assisted public debate; Model-assisted public participation; Evaluation of computer data privacy and security.

Research Activities:

- Mathematics for social sciences (92 - 93);
- Bertaud computer model and public participation in low-income housing planning (92 - 94);
- Computer models for the optimization of regional waste water treatment systems (92 - 95);
- Computer models in weather and oceanography (92 - 96);
- Numeric analysis methods applied to non-linear elasticity (92 - 96);
- Internal education and training (96).

Research Projects:

- Contribution to the "Public access to environmental information" project [Research Cluster Host: "Society and Institutions"] (96 - 98).

Plan outline for 1997 - 2002:

- Continuation of current research activities, with emphasis on seminars for internal education and training (1997 - 2002);
- Contribution to the "Public access to environmental information" project (1997 - 1998);
- Collaboration with EU project for public debate on global warming

assisted by computer models [Prof. Peter Cebon, Suisse] (1999);

- Publication of a minimum of 8 Cluster related articles (1997 - 2002);

Main References (92-97):

Melo, J.J. (1992) “*Optimização de Sistemas Regionalizados de Tratamento de Efluentes — O Modelo OPTTAR*”. Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa.

Ponte, R.M. & D.S. Gutzler, (1992) "40-60 day oscillations in the western tropical Pacific: Results from an eddy- resolving global ocean model". *Geophysical Research Letters*, 19: 1475-1478.

Antunes, M. (1993) "*Para uma Utilização do SPSS - Statistical Package for the Social Sciences - Guia do Utilizador*". Universidade Lusófona de Humanidades e Tecnologias, Lisboa, 30pp.

Ferraz de Abreu, P. (1993) "The Bertaud Model: A two-way mirror on the evolution of information technology's impact on planning for low-income housing". *Biennial International Housing Workshop*, Boston, November 1993.

Melo, J.J. e Câmara, A. (1994). "Invited review: Models for the optimization of regional wastewater treatment systems". *European Journal of Operational Research*, 73: 1-16.

Ponte, R.M.& Rosen, R.D. (1994) "Ocean angular momentum and torques in a general circulation model". *Journal of Physical Oceanography*, 24: 1966-1977.

Ponte, R.M., (1994) "Understanding the relation between wind-and pressure-driven sea level variability". *Journal of Geophysical Research*, 1994, 99: 8033-8039.

Veiga, M.F. (1994) "A Galerkin approximation for homogeneous anisotropic elastic beams", *Applied Analysis*, 1994, 53: 67-84

Veiga, M.F. (1995) "Asymptotic method applied to a beam with a variable cross section" in "*Asymptotic methods for elastic structures*", P.G.Ciarlet, L.Trabucho and J.M.Viano, eds. (de Gruyter), 1995, p. 237 - 254

Gaspar, P., and Ponte, R.M. (1997) "Relation between sea level and barometric pressure determined from altimeter data and model simulations". *Journal of Geophysical Research*, 102: 961-971.

Ponte, R.M. (1997) "Oceanic excitation of seasonal to daily signals in Earth rotation: results from a constant- density numerical model". *Geophysical Journal International*, 130: 469-474.

1.3 Pedagogy, School Curricula and Open Education

Alias: Teaching / learning aids

Coordinator: José Henrique Portela, PhD.

Team:

José Henrique Portela, PhD.; Rui Ponte, Ph.D.; Ana Coito, Ph.D.; Dorita Anjo Freitas, MPhil.; Graça Castanho, MA; Filomena Henriques, Lic.; Teresa Sancho, Eng.; Ana Carla Gordo, Lic.; Ana Galhardo, Lic.; José Carlos Cima Gomes, Lic.; Rui Fernandes, Arch.

Research agenda:

- Compile curriculum bridging Information Technology and Participatory Democracy;
- Use of new information technologies to increase public access to knowledge and education;
- Use of new information technologies to support a better informed public debate (e.g. understanding social implications and ethical issues concerning scientific progress, research methods and strategies);
- Conception, development and testing of software tools as teaching and self-learning aids;
- Instruction delivered through the Internet (e.g. how students react to instruction delivered through the Internet; perceptions concerning the potentiality of the Internet to teach and learn);
- Teacher's needs for using information technology in their classroom.

Application areas:

Open access to education; Computer-based teaching / learning methodologies and tools; New High-school and University course curricula; Interactive content delivery (CD-ROM, Internet); Supporting the public debate.

Research Activities:

- Internet and the communication between instructor and students and among students (93 - 96)

- Support J.H. Portela Ph.D. thesis research (1997)

Plan outline for 1997 - 2002:

- Research project proposal on "Internet and Teaching" (1997 - 1999);
- Research project proposal on interactive content delivery models for distribution in CD-ROM, WWW media (1998 - 2001);
- Proposal for a joint study group on curricula reform over information technologies and participatory democracy, with participation from public and private High Schools and Universities (1999 - 2002);
- Publication of a minimum of 8 Cluster related articles (1997 - 2002).

Main References (92-97):

Anjo Freitas, M.D.P. (1992) "*Insucesso Escolar: dupla exclusão*". MPhil. Thesis. Pontifícia Universidade Católica de São Paulo, Brasil, 1992.

Anjo Freitas, M.D.P. (1997) "Insucesso Escolar: dupla exclusão - o Insucesso Escolar no saber e na praxis em saúde", *Intervenção Social*, nº 11/12, 1997.

Portela, J.H. (1992) "Preparar professores para uma melhor Educação, com ou sem computadores", *TICEA: I Encontro de Professores de Melgaço, Monção e Valença*, Monção, 21 e 22 de Maio de 1992.

Portela, J.H. (1993) "*Avaliação de necessidades de formação dos professores dos centros escolares de informática do Projecto Minerva em escolas do distrito de Viana do Castelo*". MSc. Thesis. (defense at Universidade do Minho, 1991). Associação dos Professores de Matemática (APM), 1993.

Câmara, A., Ferreira, F., Vasconcelos, L. e Melo, J.J. (1993) "Educação em Engenharia do Ambiente — a perspectiva do Grupo de Análise de Sistemas Ambientais", *2º Congresso Nacional dos Engenheiros do Ambiente*. APEA, Maia, 3-5 Fevereiro 1993.

Portela, J.H. (1995) "Hands on Cabri.-Computer Software Mini-course", *The Eighth Annual International Conference on Technology in Collegiate Mathematics*. San Jacinto College e Addison-Wesley Publishing Company. Novembro 16-19, 1995. Houston, Texas.

Portela, J.H. & Ache III, P. (1995) "Using Hypercard to Design Alternative Assessment Materials", *CAMT'95-Celebrating Sailing Under the Standards*. San Antonio, Texas. Agosto 2-4, 1995.

Melo, J.J. (1996) "à descoberta com" in Soeiro, F. "*Partir à Descoberta - Ciências da Natureza — 5º ano*". Texto Editora, Lisboa, 1996.

Moreira, F., Póvoas, L., Lopes, C., & Galopim de Carvalho, A.M. (1995)

“Divulgação em Geologia e Cidadania”, *Memória* nº4, 1995. Museu e Laboratório Mineralógico e Geológico, Faculdade de Ciências, Universidade do Porto.

Portela, J.H. (1997) "*The Internet in a Mathematics class: A Study Case*". Texas A&M University, 1997.

Sieber, R.T. (1997) "Pedagogy, Power, and the City: Paulo Freire as Urban School Superintendent". in Freire, P. et al, (eds.) "*Mentoring the Mentor: a critical dialogue with Paulo Freire*", Peter Lang, New York, 1997, pp 273-281

2. Information Research:

Communications and Media (new technologies - new information flow); **Information Technologies** (IT)

2.1. Communications and Media

Alias: New technologies - new information flow

Coordinator: Alejandro Natal, PhD. 'ABD'

Team:

Alejandro Natal, PhD. 'ABD'; Cristina Rebelo Angelo, Lic.; Isabel Trindade, Lic.; Mariana Pereira, BS.; Alejandra Mirafuentes, student; Idalina Barradas, student.

Research agenda:

- New electronic media: different attributes, globalization, regulatory challenges;
- Impact of new information technologies on communication techniques (e.g. new communication between citizens and their representatives);
- Impact of new information technologies on advertising (e.g. transfers in costs; SPAM practices)

Application areas:

Information Networks; Community Information Systems; Electronic

publication; Advertising.

Research Activities:

- Literature review and case documentation on censorship in Internet, and on "spam" practices;
- Publication of CITIDEP documents on the Internet (WWW).

Plan outline for 1997 - 2002:

- Literature review; Brainstorming sessions and Seminars (1998 - 2002);
- Position paper on chart of freedoms and "netiquette" for Internet (1999);
- Position paper on "Participatory Democracy, the new Information Technologies and Communication" (1999);
- Project proposal for "Regulatory and Technological Solutions for SPAM" (2000 - 2002);
- Publication of a minimum of 2 Cluster related articles (1997 - 2002).

Main References (92 - 97):

Natal, A. (1997) "Information Costs", *CITIDEP Working Papers Series*, UK, June 1997.

2.2. Information Technology

Alias: IT

Coordinator: Mark Hasegawa-Johnson, Ph.D.

Team:

Mark Hasegawa-Johnson, Ph.D.; Pedro Ferraz de Abreu, PhD 'ABD'; Antonio Fernandes, Eng.; Carl Jengtes, Eng.; Jorge Mendonça, Eng.; Pedro Borges, Student; Sergio Ferreira, Technician; Mario Carneiro, Technician.

Research agenda:

- Extending Information Technology targeted to Public Participation;
- Technologies for accessibility, interactivity, portability and sustainability of information systems (e.g. ;Intelligent Multimedia Systems; Interactivity on Internet; Speech recognition; Java virtual machines);
- Conceptual models of representation, organization, and access to information that facilitate mechanisms of participatory democracy.
- Production of prototypes and functional systems for applying proposed technologies and information models.

Application areas:

Computer - Human interface; Computer Networks and Data Base Integration in Public Administration; Network-based computing.

Research Activities:

- Expert systems in planning (92 - 95)
- Speech recognition (92 - 97);
- Metadata in knowledge representation, multimedia and georeferenced data (92 - 97);
- Prototyping with object-oriented languages (92 - 97);
- Create and maintain an Internet debate mail list on information society (97).

Research Projects:

- Project IMS ("Intelligent Multimedia System for Public Consultation") (94 - 97)
- Contribution to project "Public Access to Environmental Information" (96 - 98) [Research Cluster Host: "Society and Institutions"]

Plan outline for 1997 - 2002:

- Completion of the research project IMS ("Intelligent Multimedia System for Public Consultation") (1997);
- Contribution to the research project "Public Access to Environmental Information" (1997 - 1998) [Research Cluster Host: "Society and Institutions"];

- Research on computer-human interface: speech physiology and neuroscience (1997 - 1999);
- Prototyping with Hypertalk and Java (1998 - 2002);
- Publication of a minimum of 8 Cluster related articles (1997 - 2002);

Main References (92-97):

Ferraz de Abreu, P. (1996) "Metadata for Multimedia Systems". *MIT -DUSP Working Papers*, Cambridge 1996.

Johnson, M.A. and Taniguchi, T. (1992) "On-line and off-line computational reduction techniques using backward filtering in CELP speech coders." *IEEE Trans. on Acoust., Speech, and Sig. Proc.*, 40: 2090-2093.

Johnson, M.A. (1992) "Analysis of durational rhythms in two poems by Robert Frost." *MIT Speech Comm. Group Working Papers*, Cambridge, MA, 29-42.

Hasegawa-Johnson, M.A. (1995) "Burst spectral measures and formant frequencies can be used to accurately discriminate stop place of articulation." *J. Acoust. Soc. of Am.*, 98: 2890.

Hasegawa-Johnson, M.A. (in review) "A two-beam model of modal, breathy, and multi-periodic voicing." *J. Acoust. Soc. of Am.*

Johnson, M.A. (1992) "Using beam elements to model the vocal fold length in breathy voicing." *J. Acoust. Soc. of Am.*, 91: 2420-2421.

Johnson, M.A. (1993) "A mapping between trainable generalized properties and the acoustic correlates of distinctive features." *J. Acoust. Soc. of Am.*, 94: 1865.

Johnson, M.A. (1994) "Automatic context-sensitive measurement of the acoustic correlates of distinctive features." *Int. Conf. on Spoken Lang. Proc.*, Yokohama, 1639-1643.

Melo, J.J. (1996) "SPIA-Sistema Pericial para Aplicação e Análise de Índices Ambientais". *5ª Conferência Nacional da Qualidade do Ambiente*. Universidade de Aveiro, 10-12 Abril (1996)

Melo, J.J., Ramos, T., Calmeiro, A.T., Cardoso, S. & Fonseca, F. (1996) "SPIA — an expert system for the construction and analysis of environmental indexes". *Environmental Training in Engineering Education (ENTREE '96) — measuring progress towards sustainable development*. UETP-EEE / University of Sunderland, UK, 4-7 November 1996.

3. Society Research:

Society Frameworks: Ideology, Ethics, Economy and Political Science (theoretical context for the information society); **Society and Institutions:** Planning, Legislation and Public Administration (implementation and functioning of the information society); **Society and People:** Social Movements, Communities and the Individual (personal dimension of the information society)

3.1. Society Frameworks: Ideology, Ethics, Economy and Political Science

Alias: Theoretical context for the information society

Coordinator: Clelia Guinazu, PhD. 'ABD'

Team:

Clelia Guinazu, PhD.'ABD'.; Manuel Azevedo Antunes, PhD. 'ABD'; Pedro Ferraz de Abreu, PhD. 'ABD'; Alejandro Natal, PhD. 'ABD'; Annie Pecastaings, MA; Alfredo Henriquez, MPhil; Angela Cacciarru, Lic.; Ana Delicado, Lic.; Marie McHugh, BA; Omar Ibarra, Lic.

Research agenda:

- Theory of Democracy (e.g. new relationships between representative democracy and participatory democracy; new roles for the state; sovereignty, nationalism and globalization);
- New Institutional Economy and Social change (property rights; transaction costs; collective action; institutional analysis);
- Interdependency of Sustainable Development, Participatory Democracy and Information Technologies in the future Information Society.
- "New Utopia" and the Information Society;
- Opportunities and dangers of new information technologies on citizen rights (e.g. privacy; new value systems);

Application areas:

Social models; Democracy and decision-making models; Information Economics; Ethics on the use of information technologies.

Research Activities:

- Brainstormings (e.g. "Brunch & Brainstorming" at MIT, Dec 96, on "What links Information Technology, Participatory Democracy and Sustainable Development?", with participants from MIT, Harvard, U. Mass., Tufts, and other Universities).

- Geographic Information Systems (GIS), Data-bases and Privacy (93 - 95);
- Information costs (95 - 97);

Plan outline for 1997 - 2002:

- Literature review; Brainstorming sessions and Seminars (1997 - 2002);
- Support Ph.D. thesis research of Clelia Guinazu (1998), Alejandro Natal (1998), Alfredo Henriquez (1999);
- Research on "Information Costs" (1997 - 2000);
- Publication of a minimum of 8 Cluster related articles (1997 - 2002);

Main References (92-97):

Anjo Freitas, M.D.P., Martins, A., Coutinho, M., Fernandes, B. & Sousa, L. (1996) "Serviço social e direitos humanos", *Estudos e Documentos*, série I, nº 9

Cacciaru, A., & Cox-Hollos, K. (1996) "Environmental Economics: Criteria, Inspirations, and New Tendencies" *Vertice XI* [published in Portuguese]

Ferraz de Abreu, P. (1995). "GIS technology: new threat to privacy, new promises for citizen empowerment". Communication at *Planning Support Systems Seminar*, MIT, USA, 1995.

Ferraz de Abreu, P. (in press). "Participacion y Democracia. La toma de decisiones sociales en la nueva Sociedad de Información", *Conferência "Desarrollo, Democracia Y Comunicación"*, Toluca, Universidad Autonoma del estado de Mexico, Outubro (1996)

Hinard de Pádua, M., Duarte, J.C. & von Tunzelmann, G.N. (in press) "Biotechnology in an 'intermediate economy': demand and supply in Portugal". *Int. J. Tech. Manag.*

Henriquez, B. A. *et al* (1994/1995), "Pobreza e Exclusão no Estado Novo", Lisboa, Associação de Estudantes do ISSS, *Textos Didáticos*, nº 24.

Melo, J.J. (1993) "Desenvolvimento sustentado". *Cadernos de Economia* 24.

Natal, A. (in press) "The social dynamics of people's participation", *Proceedings from Canadian Association for Latin America Studies XXX Conference*, York, Canada, October (1996)

Natal, A. (1997) "The Political Economy of Participatory Development". *Ergo Sum*, Ano 5, XX (3).

Natal, A. (1997) "Information Costs", *CITIDEP Working Papers Series*, UK, June 1997.

Resende, J., Delicado, A., Sousa, J., Cardim, M., Roque, R. & Moreira, T. (in press). "A construção social dos iliteratos nas culturas letradas", *Actas do 3º Congresso Português de Sociologia*. Lisboa, 9 de Abril de (1996)

UCD-EI (Melo, J. j. *et al*) (1996) "use of economic instruments — a non governmental perspective / Portugal". in *The Potential Benefits of Integration of Environmental and Economic Policies in the European Periphery (Cohesion Countries)*, relatório final para a DG XI, Comissão Europeia.

3.2. Society and Institutions: Planning, Legislation and Public Administration

Alias: Implementation and functioning of the information society

Coordinator: João Joanaz de Melo, Ph.D.

Team:

João Joanaz de Melo, Ph.D.; Timothy Sieber, Ph.D.; Manuel Azevedo Antunes, Ph.D. 'ABD'; Pedro Ferraz de Abreu, Ph.D. 'ABD'; Alejandro Natal, Ph.D. 'ABD'; Fernando João Moreira, MPhil.; Alfredo Henriquez, MPhil.; Nuno Themudo, MSc.; Dorita Anjo Freitas, MPhil.; Ana Teresa Chinita, MSc.; Fatima Neo, MSc.; Remy Ruiz, MCP; Nuno Vieira, Lic.; Filomena Viegas, Lic.; Teresa Sancho, Eng.; Isabel Noronha, Lic.; Ana Delicado, Lic.; Ana Carla Gordo, Lic.; Jorge Abreu, Eng.; Deolinda Revez, Eng.; Celso Oliveira, Arch.; Antonio Braga, Eng.; Rodrigo Sandoval, Lic.; Jose Ramon, Lic.; Pedro Santos, student; Pablo Jovel, student; Alejandra Mirafuentes, student.

Research agenda:

- Public Participation in Planning and Project Decision Making (e.g. Environmental Impact Assessments, Land Use and Zoning Plans, City Master Plans); Reform of mechanisms and processes for decision-making in public

institutions or other organizations of public interest.

- Impact (degree of correlation) of newly evolving information technologies (IT) on decision-making in public affairs; characterization of the attributes of new IT regarding their enabling/disabling effect on different decision models across time.

- Inventory of current points of least resistance to the introduction of new information technologies in support of practices of participatory democracy: Decision-makers (political and technical) open to participatory democracy; Entities where there already exists information in digital form for public consultation; Legal domains where forms of participatory democracy are already institutionalized (for example, in environmental impact reviews); Thematic areas where the need for information has already been identified, or where there seems to be public demand.

- New IT and accountability in public administration.

- European Union integration, regions, subsidiarity and participatory democracy.

- Dynamics of development and intervention by Non-Governmental Organizations (NGOs) at national and multi-national level.

- Sustainable Social Security; reform of the welfare state and public participation.

Application areas:

Environment; Public Health and Consumer Protection; Public Heritage; Urban Development; Poverty and Social exclusion; Sustainable Development; City Government; Information Infrastructure; Non-Governmental Organizations (NGO); Regional Policy and Administration; European Integration.

Research Activities:

- Low-income housing and public participation (92 - 95)
- Social service in public health (92 - 97);
- Environment policy, sustainable development and public participation (92 - 96);
- Rural development and poverty alleviation (92 - 96);
- Role and functioning of Non-Governmental Organizations (NGOs) (92 - 97);

- Heritage, tourism and public participation (94 - 96);
- Solid urban waste management and public participation (94 - 97);
- Environmental Impact Assessment (EIA) review and public participation (94 - 97);
- Proposal for a MIT Colloquium Series on "Citizenship, Participation and Information Technology: City Government in the new Millennium" (96 - 97);
- Analysis of Society of Information's "Green Book" (96 - 97).

Research Projects:

- Contribution to the IMS project ("Intelligent Multimedia System for Public Consultation") (94 - 97);
- Project "Public Access to Environmental Information" (96 - 98);
- Project "Impacts of EXPO 98" (95 - 98);
- Project Regionet ("Participatory Democracy Models in Administrative Regions, and Information Technologies for Public Information") (96 - 98).

Plan outline for 1997 - 2002:

- Contribution to the completion of the IMS research project ("Intelligent Multimedia System for Public Consultation"), hosted by the "Information Technologies" Research Cluster (1997);
- Completion of the research project "Public Access to Environmental Information" (1997 - 1998);
- Completion of the research project "Impacts of EXPO 98" (1997 - 1998);
- Completion of the research project Regionet ("Participatory Democracy Models in Administrative Regions, and Information Technologies for Public Information") (1997 - 1998);
- Research project proposal on "Non-Governmental Organizations (NGOs) and AIDS" (1997 - 1998);
- Research project proposal on "Comparative Analysis of Portuguese and Mexican NGOs" (1997 - 2000);
- Support Ph.D. thesis research of Pedro Ferraz de Abreu (1998), Alejandro Natal (1998), Nuno Themudo (2001), Dorita Freitas (2002),

Filomena Henriques (2002);

- Support MPhil thesis research of Angela Cacciarru (1998), Ana Delicado (1999);

- Organization of the MIT Colloquium Series on "Citizenship, Participation and Information Technologies in City Government for the new Millennium" (1997 - 1998);

- Analysis of Society of Information's "Green Book"; collaboration with the "Green Book" Portuguese commission (1997 - 2002).

- Position paper on "Development of prevention programs, of health education and advisement relatively to epidemiological diseases with the interaction and participation of the affected population" (1999).

- Publication of a minimum of 12 Cluster related articles (1997 - 2002).

Main References (92-97):

Anjo Freitas, M.D.P. (1992) "O Serviço Social nas políticas sociais: sua evolução nas organizações estatais da RAM entre 1980-1991", *Estudos & Documentos*, Série I, nº 5

Anjo Freitas, M.D.P. (1995) "A saúde escolar em Portugal: problemas e perspectivas", *Estudos e Documentos*, série I, nº 8

Anjo Freitas, M.D.P. (1997) "Insucesso Escolar: dupla exclusão - o Insucesso Escolar no saber e na praxis em saúde", *Intervenção Social*, nº 11/12

Anjo Freitas, M.D.P. & Monteiro (1993), "Prevenção da violência e cuidados de saúde primários", *Madeira Médica*, Ano X, nº 33

Antunes, M. *et al* (1992) "Perspectiva de ONGs de ambiente sobre a Eco 92 - 5 de Junho de 1992". Comité Coordenador "Brasil 92", Lisboa.

Cacciarru, A., & Martins E. (1995) "The Municipality of Mora, Portugal: Some Ecological and Socio-Economic Aspects - Agreement and Discord". *Informação Florestal* 11: 7-16 [in Portuguese]

Chinita, A.T., Pinheiro, M. (1993) "Principais problemas ambientais no sector dos Curtumes. Medidas Internas / Novas Tecnologias" *Pequena e Média Empresa*, III Série, nº 9, pp 99-103

Chinita, A.T. (1996) "A Prevenção, Redução e Reutilização" *Seminário sobre Resíduos Sólidos Urbanos, Tecnologia e Gestão*, APEMETA, FIL, 20 e 21 de Junho 1996, 14 pp.

Costa, R., Santos, N., Pinheiro, M., Chinita, A.T., (1992) "Avaliação de Impacte Ambiental: Uma metodologia para casos com predominância de impactes indirectos", *3ª Conferência da Qualidade do Ambiente*, 5 a 7

Fevereiro, Universidade de Aveiro

DCEA-FCT-UNL (Melo, J. j. *et al*) (1994) "Manual de Avaliação de Impactes Ambientais", Report for DGA.

Ferraz de Abreu, P. (1993) "The Bertaud Model: A two-way mirror on the evolution of information technology's impact on planning for low-income housing". *Biennial International Housing Workshop*, Boston, November 1993.

Ferraz de Abreu, P. & Chito, B. (1997) "Current challenges in environmental impact assessment evaluation in Portugal, and the role of new information technologies: the case of S. João da Talha's incinerator for solid urban waste". in Machado, J. Reis & Ahern, Jack (eds). *Environmental Challenges in an Expanding Urban World and the Role of Emerging Information Technologies*. National Centre for Geographical Information (CNIG), Lisbon, Portugal. 538 pages, pp 1-11.

GEOTA (Melo, J. j. *et al*) (1993) "Metodologia de consulta pública para a implementação de um sistema nacional de gestão de resíduos industriais", *Relatório* executado no âmbito de protocolo com o Ministério do Ambiente.

Henriquez, A.B. (in press) "As políticas sociais de assistência na alvorada de século - O projecto de lei de Hintze Ribeiro". *Estudos & Documentos*, 4.

Martins A. & Henríquez, B. A. (coords). (in press). "*Serviço Social no Feminino*". CPIHTS, Lisboa.

Melo, J.J. & Rosmaninho, L. (1993) "Desenvolvimento sustentável versus crescimento a todo o preço - uma avaliação multiobjectivo das soluções para o novo atravessamento do Tejo em Lisboa". *O Economista* 6.

Melo, J.J. (1995) "Os impactes ambientais das obras públicas - caso-estudo: as novas travessias do Tejo". *O Economista* 8.

Melo, J.J. (1996) "Instrumentos económicos da política de ambiente". *O Economista* 9.

Melo, J.J. (1996) "The new bridge over the Tagus estuary or how not to develop a project", *International Association for Impact Assessment, 16th Annual Meeting (IAIA '96) — Improving Environmental Assessment Effectiveness, Research, Practice and Training*. Estoril, Portugal, 17-23 Junho (1996)

Moreira, F. (1995) "Turismo em Espaço Rural - Enquadramento e Expressão Geográfica no Território Português, Estudos de Geografia Humana e Regional, Portugal: Estudos Gerais B8, Centro de Estudos Geográficos, Lisboa.

Moreira, F., Malheiros, J., André, I., Tinoco, A. & Moutinho, M.C. (1996) "Projecto para um Plano Estratégico de Salvaguarda e Valorização do Património do Vale do Côa". *Actas dos trabalhos de Antropologia e Etnologia*, Vol. XXXV, Fasc. 4, Porto.

Natal, A. (in press) "Providing for the rural poor". *Regiones*.

Pinheiro, M.D., Chinita, A.T., Oliveira, L. (1993) "Auditoria Ambiental: um instrumento para a definição das soluções ambientais na indústria", *Pequena e Média Empresa*, III Série, nº 8, pp 42-52

Santos M.T. (1997) "A Igreja de S. Francisco de Paula - o Encomendante os Artistas e a Obra". MA Thesis. Faculdade de Ciências Sociais e Humanas da Universidade Nova de Lisboa. June 1997.

Sequeira, M., Chinita, A.T., Pinheiro, M. (1993) "Principais problemas ambientais no sector de tratamento de Superfície. Controlo de poluição", *Pequena e Média Empresa*, III Série, nº 11, pp 75-77

Sieber, R.T. (1993) "Public Access and the Urban Waterfront: a Question of Vision". in Rotenberg, R. and McDonogh, G. (eds.) *"The Cultural Meaning of Urban Space"*, Pp.175-193. New York. Bergin & Garvey

Sieber, R.T. (1997) "Urban Tourism in Revitalizing Downtowns: Conceptualizing Tourism in Boston, Massachusetts". in Chambers, E. (ed.) *"Native Tours: Comparative Perspectives on Tourism and Community"*. Albany State University of New York Press.

Themudo, N. & Natal, A. (1996) "Las ONGs. Un mundo de diversidad: diferencias en desafios organizacionales". *Convergencia* (Mexico), Ano 3, 10: 245-270.

3.3. Society and People: Social movements, Communities and the Individual

Alias: Personal dimension of the information society

Coordinator: José Manuel Palma, Ph.D.

Team:

José Manuel Palma, Ph.D.; Timothy Sieber, Ph.D.; Luis Rionda, Ph.D.; Manuel Azevedo Antunes, Ph.D. 'ABD'; Annie Pecastaings, MA; Annie Poignant, MA; Ana Delicado, Lic.; Eliana Calligaris, Lic.; Paula Cristina Afonso, Lic.; Omar Ibarra, Lic.; Joana Veiga, student; Nadia Guadarrama, student.

Research agenda:

- Impact of information technology in people's lives and lifestyles (e.g. Internet vs. television; participative citizen vs. consumer; Internet and social life);

- Electronic-based social movements (e.g. Internet lobbying and demonstration against censorship laws);
- Appropriation of information technologies for local community organization and citizen empowerment;
- Virtual cities and global village in the information society; new concepts of neighborhood;
- Risk and perception of risk in the information society;
- Information technologies and new artistic and cultural expressions;
- Reflections in literature and art of the evolution from direct democracy to representative democracy and participatory democracy;
- The risks of culture massification and uniformization in the information society.

Application areas:

Public participation in Environmental Impact Assessment (EIA);
Humanization of technology and communication; Community organization;
Individual rights

Research Activities:

- Development and access to nature (92 - 94);
- Impact of technology in the lives of rural inhabitants (93 - 94);
- Environmental stress in people's lives: individual's perception of risk in Environmental Impact Assessment public reviews (92 - 97);
- Literature review; Brainstorming and internal debate (95 - 96);

Research Projects:

- Contribution to the project "Impacts of EXPO 98" (95 - 98);
- Contribution to the project Regionet ("Participatory Democracy Models in Administrative Regions, and Information Technologies for Public Information") (96 - 98).

Plan outline for 1997 - 2002:

- Literature review; Brainstormings and internal debate (1997 - 2002);

- Contribution to the completion of the project "Impacts of EXPO 98" (1997 - 1998);
- Contribution to the completion of the project Regionet ("Participatory Democracy Models in Administrative Regions, and Information Technologies for Public Information") (1997 - 1998).
- Contribution to the organization of the MIT Colloquium Series on "Citizenship, Participation and Information Technologies in City Government for the new Millennium" (1997 - 1998);
- Analysis of Society of Information's "Green Book"; collaboration with the "Green Book" Portuguese commission (1997 - 2002).
- Research on the "Interface between Information Technologies and Cognitive and Psycho social Individual Processes" (1997 - 2002);
- Publication of a minimum of 8 Cluster related articles (1997 - 2002).

Main References (92-97):

Antunes, M. (1994) "*Requiem por Vilarinho da Furna - Uma Aldeia Afundada*". Coleção Meia Hora de Leitura, Vol 2, Biblioteca da Universidade Lusófona de Humanidades e Tecnologias, Lisboa, 36pp.

Antunes, M. *et al* (1995) "*Imigração e Associação*". Cadernos CEPAC/1, Projecto "Terra Longe"/Programa HORIZON, Centro Padre Alves Correia, com o apoio do Centro de Estudos da População, Ambiente e Desenvolvimento da Universidade Lusófona de Humanidades e Tecnologias, Lisboa, 119pp.

Palma-Oliveira, J. M. (1992) "Stress Ambiental: Um Selectivo Ponto da Situação e Modelo Explicativo", *Revista Portuguesa de Psicologia*, 28: 13- 77.

Palma-Oliveira, J. M., Garcia-Marques, L., & Jesuino, J. C. (1992) "Imagem do Outro no Grande Público", *Actes du Colloque Images Reciproques France Portugal*. (pp. 69-73). Paris: A.D.E.B.D.A.

Palma-Oliveira, J. M. & João, P. (1992, 1993, 1994, 1995) "Estudo do impacte psico-social do projecto de modernização da Linha do Norte (Geral e pelos 9 Sub-troços com avaliação de atitudes e comportamentos de atravessamento e propostas de mitigação)", SEIA, Lisboa.

Palma-Oliveira, J. M. (1995) "A percepção de risco e as atitudes face à incineradora- avaliação de impactes e medidas mitigadoras psico-sociais" in Borrego, C. (ed.) *Estudos de Impacte Ambiental do Sistema de Tratamento de Resíduos Tóxicos e Perigosos: Componente incineradora e tratamento fisico-quimico*. Instituto para o Desenvolvimento e Ambiente, Universidade de Aveiro.

Palma-Oliveira, J. M. (1996) "The influence of processing goals in a

multitarget multidomain context: the quest for memory organisation", *Psicologia*, 11 (1): 89-97.

Palma-Oliveira, J.M. (1996) "A análise Objectiva e a Percepção de risco ambiental: A assunção da subjectividade e a crónica da morte anunciada da aceitação incondicional", Borrego, C., Coelho, C., Arroja, L. & Figueredo, E. (Eds.) *5ª Conferência sobre a Qualidade do Ambiente* vol 1 ,pp. 121-134, Universidade de Aveiro.

Palma-Oliveira, J.M. & João, P. (1996) "E o Humano? A Psicologia Ambiental na Avaliação de Impactes Ambientais", Borrego, C., Coelho, C., Arroja, L. & Figueredo, E. (Eds.) *5ª Conferência sobre a Qualidade do Ambiente* V. 1 (pp. 183-192). Aveiro:Universidade de Aveiro

Queirós, M.J. & Henriquez, B. A. (1994) "O Trabalho Social da Organização para o Movimento - O Caso da Experiência CERCI", *Intervenção Social*, Ano IV - Nº 10.

Sieber, R.T. (1992) "Anthropology, United States Culture, and the Public - Once Again, New Challenges", *Reviews in Anthropology* 21: 307-315

Project "IMS"

Intelligent Multimedia System for Public Consultation

Coordinator: Pedro Ferraz de Abreu, MSc.

1994 - 1997

Objectives:

The **IMS** project (Intelligent Multimedia System) has as its main goal to test and evaluate the utilization of new information technologies (IT) in the Environmental Impact Assessment (EIA) review process, that is, in support of the Review Commission's work, and, in particular, of the Public Consultation process. The adopted case for a pilot-experience is the EIA for the proposed CTRSU (Solid Urban Waste Treatment Station) of S. João da Talha.

The chosen approach was to design, implement and use a multimedia software prototype, together with interactive Internet-based tools. The objective of this prototype was to test a set of key ideas on technology and system design (e.g. metadata, knowledge representation, inference engines, intelligent manipulation of digital video segments) and a set of hypothesis on the integration of the use of similar systems in the current work processes (intercommunication, data presentation, acquisition and analysis of expert statements and opinions). The case study has, therefore, a *technological analysis* component (advantages and deficiencies put in evidence by the use of the prototype and Internet environment) and a *processual analysis* component (advantages and difficulties in integrating the new IT in today's processes, and in the introduction of innovative models in the evaluation and public consultation processes, enabled by the new IT).

The IMS project is part of Pedro Ferraz de Abreu's Ph.D. thesis research at MIT Urban Studies and Planning Dept.

Methodology:

- Design and programming of the Intelligent Multimedia Prototype and Internet tools;
- Definition of a user-model hypothesis and corresponding information-content, from multiple interviews and literature review;
- Compilation of questions anticipating a FAQ ("Frequently Asked Questions") model, from a panel of experts;
- Collection of respective answers for the FAQ, from formal and informal interviews with decision makers and experts from targeted institutions and NGOs (Non-Governmental Organizations);
- Publication on Internet WWW of the EIA related FAQ/answers, with

Internet-based survey;

- Assisted and non-assisted use of the IMS prototype during review process and public consultation;
- Field survey during Public Audiences for the EIA review;
- Controlled experiment with opinion survey and knowledge tests, before and after using IMS prototype.
- Evaluation of results.

Access to project information:

This system (IMS) is installed and available: at CITIDEP; Ministry of Environment {Sec. of State, IPAMB, DGA, DRARN-LVT}; FCT-UNL; LPN; and GEOTA. Besides several communications and working papers (which can be found on the Internet, at <http://www.citidep.pt/ims/>), the main published article is:

(Ferraz de Abreu, P., Chito, B, 1997) "*Current Challenges in EIA Evaluation in Portugal, and the Role of New Information Technologies: -- The Case of S. João da Talha's Incinerator for Solid Urban Waste*", in Machado, J. Reis & Ahern, Jack (eds). 1997. **Environmental Challenges in an Expanding Urban World and the Role of Emerging Information Technologies**. National Centre for Geographical Information (CNIG), Lisboa, Portugal. 538 pages, pp. 1-11.

Team:

Eng. Pedro Ferraz de Abreu, PhD. 'ABD' (Computer Eng., Artificial Intelligence, Planning), Project Coordinator; Prof. João Joanaz de Melo, Ph.D. (Environment), "Society and Institutions" Research Cluster Coordinator; Prof. José Palma, Ph.D. (Psychology), "Society and People" Research Cluster Coordinator; Eng. Ana Teresa Chinita, MSc. (Environment); Dr. Nuno Vieira, Lic. (Biology); Dr. Angela Cacciaru, Lic. (Economy); Dr. Sofia Santos, Lic. (Psychology); Eng. Deolinda Revez (Environment); Eng. Jorge Mendonça (Mechanical Eng., Quality Control); Dr. Cristina Rebelo Angelo, Lic. (Communications and Media); Idalina Barradas (Communications and Media, student). Also (non-CITIDEP team members): Eng. Madalena Presumido (Environment); Eng. Paula Gama (Environment); Eng. Luisa Nogueira (Environment); Eng. Maria João Leite (Environment); Dr. Pedro Migueis, M.D. (Medicine, Public Health); Eng. Conceição Pereira (Environment).

Funding: The Ministry of Environment (DGA) funds this project, through a protocol with the New University of Lisbon (DCEA/FCT-UNL). The Internet-based indexation of 250 EIA questions / answers was funded by Valorsul.

Project "IMPACTS of EXPO '98"

Urban Redevelopment, Public Culture, and Portuguese National Identity in Contemporary Lisbon: Public Impacts and Perceptions of Tagus River Front Redevelopment, Including EXPO '98

Coordinator: R. Timothy Sieber, Ph.D.

1995 - 1998

Major objectives and purposes of the proposed investigation:

This research project (first begun during Fall 1995) involves an urban anthropological analysis of the current redevelopment of Lisbon's *zona ribeirinha*, and public perceptions and impacts of developments in this rapidly changing urban zone. The scope of the investigation will include both the city's western waterfront on the Tagus River, undergoing significant replanning and redevelopment under the auspices of the Administration of the Port of Lisbon's *Plano de Ordenamento da Zona Ribeirinha* (POZOR), and also the city's eastern waterfront zone now being transformed by the construction of the spectacular new mini-city that will house the upcoming 1998 world's fair, the *Exposição Internacional de Lisboa* (EXPO '98), under supervision of the public-private partnership of Parque EXPO '98 SA.

The project will study, from a social anthropological point of view, new representations of Portuguese culture that are being displayed in these urban transformations, as examples of the emerging contemporary urban public culture being developed and consumed not only among Portuguese themselves, but also projected by Portuguese to foreigners who are increasingly visiting a globalizing Lisbon through international business and

tourism. The investigation will survey several areas of cultural production, and the manner in which they are altering the national capital and in that process reenacting and reinterpreting traditional Portuguese cultural heritage and identity, including (1) new spaces and programs for public recreation and leisure, especially water-related; (2) new architecture and urban design; (3) historic restoration and preservation of the built environment; (4) museum, pavilion, and exhibit development and interpretation; (5) rituals of public celebration and heritage commemoration; (6) touristic programming of all types; and, (7) works of public art.

In relation to all the above areas of physical and cultural planning, a major focus of the research will be to examine the history and development of public dialogue on planning among different segments of the city's, and the nation's, contemporary business, political, scientific and cultural leadership, and between these leadership groups and the citizenry in general. This will involve comparison of evaluations and meanings of the new developments for national and urban leaders, regular citizens, and planners, as well as attention to the broader critical reception of new developments by groups of citizens and opinion-makers, as well as by foreigners in the city as business and tourist visitors. The history of the environmental impact review

processes utilized in planning these sites will also be studied.

Methodology and Plan of the field investigation:

Research methods will include: formal and informal interviewing, focus groups, direct observation, photographic and videographic documentation, and historical and archival research on relevant historical and planning documents. The bulk of the research will consist of extended interviews with a broad sample of Portuguese leaders, planners, opinion-makers, and regular citizens. The research team will interview:

- Relevant public officials linked with POZOR and EXPO '98, particularly in the Camaras Municipais of Lisbon and Loures, especially focusing on uses and outcomes of environmental impact review processes related to POZOR and EXPO '98;

- Design, marketing, and cultural programming staff at Parque EXPO '98 SA, focusing especially on the history of consultations between EXPO '98 staff and broader Portuguese public constituencies, and the role these consultations have played in EXPO planning, especially related to its broad programmatic and design themes;

- POZOR planning staff at the Administration of the Port of Lisbon, especially concerning the ways that broader public, including political and journalistic, responses to early planning have shaped final development outcomes;

- City business leaders,

especially linked with AMBELIS, the Lisbon Development Agency, focusing on the relevance of new developments for Lisbon's global economic leadership.

The team will also conduct on-site interviews, and focus groups, with a broad, stratified sample of public users of newly redeveloped waterfront spaces, including both POZOR and EXPO '98 sites, to ascertain views of regular Portuguese citizens, as well as tourists and visiting business people, on the new developments and their meaning for Portuguese national culture, identity, and global image. New construction and planning of waterfront spaces, works of public art, productions of public celebrations and spectacles, and all other displays of cultural heritage, including key exhibits, events, and performances associated with EXPO '98, will be documented through observation and photographic and videographic recording, wherever it is permissible.

Team:

Prof. Timothy Sieber, Ph.D., Coordinator (Anthropology); Prof. Fernando João Moreira, MA (Geography); Dr. Paula Afonso Fernandes, Lic. (Anthropology, Tourism); Dr. Ana Delicado, Lic. (Sociology); Dr. Cristina Rebelo Angelo, Lic. (Communications); Fernando Castel-Branco Sacramento, BS (Business, Tourism); Joana Veiga Sacramento (Anthropology, student)

Funding:

Fullbright, Universidade Aberta; projected application for JNICT / PRAXIS complementing funds.

Project "Public Access to Environmental Information"

Director: Pedro Ferraz de Abreu

Coordinator: Manuel Antunes, MA.

1996 – 1998

Scope and Problem:

Improving access to environmental information is presently being highlighted at the European Union (EU) level -- where the review of the Directive 90/313/EEC was recently initiated -- since it was recognized as a prerequisite to the sustainability and democratization of the EU. In Portugal, the Ministry of Environment's Regional Agency for "Lisboa and Vale do Tejo" (DRARN-LVT) is responsible for several tasks concerning the environment, such as licensing, environmental impact assessments (EIA) review, monitoring of environmental conditions, etc., which requires continuous collection, storage and processing of information.

There is a wide range of groups or individuals that may request this information, namely municipalities, industry, individual citizens, NGOs. However, similarly to most administrative public services, there is a deficient information infrastructure, as well as lack of information planning and management, basic requisites to provide adequate information, both in quality and quantity. Therefore DRARN-LVT often fails to comply with provisions on public access to environmental information (e.g. Directive 90/313/EEC), restraining public participation and compromising transparency of processes (besides the waste of human and logistic resources involved). In order to address this problem, DRARN-LVT invited CITIDEP to put forward a project proposal. This project fully meets CITIDEP criteria regarding priorities in RD&D initiatives.

Objectives:

- To design an interactive model of information using state-of-the-art information technologies to fulfill information requirements from DRARN-LVT and "applicants" (municipalities, NGOs, investors, etc.);
- To assess suitability of the model and technologies, as perceived by different actors involved (e.g. DRARN, municipalities, NGOs, investors);
- To introduce adjustments (fine-tuning) in the model that increase the level of suitability;
- To identify elements that may be replicable from this case-study to other public administration agencies.

Methodology:

1 - Analysis of the actors needs.

1.1 - Inventory of existing Data Bases (DB), forms, etc. to characterize the current operational system.

1.2 - Surveys targeted at each category of actors.

2. - Development of a conceptual model (organization of data, flows and processes) and implementation using Data Bases, Web, Email. For this purpose a literature review is required to identify the main factors that have influence on the accessibility (models and technologies) considering these specific categories of actors. From those factors a group of variables, used as "criteria of success" will be selected and introduced in the model.

3. - Evaluation of the model and technologies will be carried out by analyzing the behavior (quantitatively) of "criteria of success" (e.g. reply interval, number of requests) from each actor and comparing their performances.

4. - Adjustment of the model.

4.1 - Identification of the bottlenecks by analyzing the most common mistakes, both in terms of model conception and technologies.

4.2 - Progressive introduction of changes, each followed by evaluation of changes on actor performance.

Team:

Pedro Ferraz de Abreu, PhD. 'ABD' (Computer Eng., Artificial Intelligence), Director; Manuel Antunes, PhD. 'ABD' (Sociology), Coordinator; João Joanaz de Melo, PhD (Environment), Principal Science Adviser; Mark Hasegawa-Johnson, PhD (Electronics, Speech recognition), "Information Technology" Research Cluster Coordinator; Fatima Neo (Environmenta Eng.); Nuno Themudo, MPhil (Management, Environment Systems); Antonio Fernandes, Eng. (Electronics & Telecommunications); Ceu Aguiar, Lic. (Social Service); Isabel Noronha, Lic. (Biology); Nuno Vieira, Lic. (Biology); Elsa Florêncio, Lic. (Biology); Pedro Borges, student (Computer Eng.).

Funding:

The Development and Demonstration (D&D) component of this project (implementation of the information system), as well the functional analysis, is funded by DRA-LVT. However, CITIDEP is preparing a research proposal to fund the development and evaluation of the model.

Project "Regionet"

Participatory Democracy Models in Administrative Regions, and
Information Technologies for Public Information

Project Manager: Nuno Vieira, Lic.;

1996-1998

Science Coordinator: J.M. Palma, Ph.D.

Objectives:

The main research question is the role that new information technologies may have in public participation / consultation processes for the implementation of administrative regions in Portugal.

In order to evaluate that role we intend to:

- Analyze the impact of the usage of new information technologies in the participation of the public in information/ public consultation/ opinion gathering processes;
- Create and implement an Internet-based Interactive Information System in order to sustain the public debate on the creation of administrative regions (which and how) in Portugal;
- Test the utility of participation and opinion debate models;
- Deepen the reflection on the concept of participatory democracy, through the evaluation of new information and opinion debate channels;
- Prepare the basis for a new and broader research project, on the comparative study of region models in several European Union countries.

Methodology:

- Literature survey on the subject;
- Content analysis and creation of the question-lists (FAQ model);
- Conception, design and implementation on the Internet of an interactive model made of sequential parts, capable of integrating and forwarding several consultation options and a set of questions and answers, to facilitate the access to information on the regionalization proposals put forward by the political parties;

- Measurement of attitudes and opinions;
- Continuous and systematic evaluation of both the process and the model.

Work Done:

- Literature survey on the subject;
- Systematization of basic concepts related to the subject;
- Survey of background in the process of region policy and implementation in Portugal, after the 25th April 1974;
- Content analysis on proposed legislation and political debate;
- Debate on regional policy with CITIDEP members and invited guests;
- Identification of the issues of the regionalization process;
- Presentation of the project on the Internet.

Team:

Dr. Nuno Vieira, Lic. (Biology), Project Manager; Prof. José Manuel Palma, Ph.D. (Psychology), Science Coordinator; Prof. Rui Ponte, Ph.D. (Earth Sciences), Science Adviser; Prof. Viriato Soromenho Marques, Ph.D. (Philosophy), Science Adviser; Prof. Manuel Antunes, PhD. 'ABD' (Sociology), Science Adviser; Eng. Ana Teresa Chinita, MSc (Environment); Dr. Filomena Henriques, Lic. (Social Service); Dr. Sofia Santos, Lic. (Psychology); Eng. Jorge Mendonça (Mechanical Eng.); Pedro Borges (Electronics Eng., student); Pedro Santos (Environmental Eng., student).

Dr. Simona Florio, MPhil (Economy, European Property Development and Planning); Leonardo da Vinci's grantee, from the University College of London.

Funding:

European Community Program Leonardo da Vinci (one individual Grant); requested to the Portuguese Parliament, and proposals considered to other research programs (Portugal, EU).

CITIDEP International and Inter-Institutional Cooperation

CITIDEP is a Research Center with Headquarters in Lisbon, Portugal, but with multi-national research teams. Therefore, we not only value international cooperation, but also are well positioned to develop and sustain strong ties with researchers and research institutions across the world. Similarly, CITIDEP pursues a multidisciplinary research agenda, and is committed to link research to civil society reform efforts; neither can be achieved without an emphasis on inter-institutional cooperation.

International cooperation within CITIDEP

By its own nature, CITIDEP is in itself an organized form of international research cooperation, with a network of national chapters (Portugal, USA, Mexico) and correspondents (France, UK, Holland, Dominican Republic, Brazil, Argentina) [doc. "CITIDEP Organization"]. Each chapter has organizational autonomy and conducts national / local research, but many research (and project) teams are multi-national [doc. "Research Clusters"] [research project docs], which facilitates as well international contacts and cooperation with local Universities and Research Centers. Here is a sample of CITIDEP associates that have cooperated in common projects and activities with researchers from the Portuguese Chapter:

- IMS (Intelligent Multimedia System) Project: Angela Cacciarru, *U. of Cagliari (Italy)*;
- Proposed colloquium series at MIT: Clelia Guinazu, Massachusetts Institute of Technology - *MIT*, Mark Jonhson-Hasegawa, MIT and *U. California*; Carl Jengtes, MIT; Marie McHugh, *Simmons*; Ana Coito, *Harvard*; Ana Carla Gordo, *U.Mass. (USA)*; Alejandro Natal, London School of Economics - *LSE*; Nuno Themudo, LSE (*UK*); Pablo Jovel, Universidad. Autonoma de Mexico - *UAM*, Alejandra Mirafuentes, Instituto Tecnologico Autonomo de Mexico - *ITAM*; Rodrigo Sandoval, UAM (*Mexico*); Celso Oliveira, *U. S.Paulo (Brazil)*.

International (external to CITIDEP) and Inter-Institutional Cooperation

CITIDEP is actively pursuing formal and informal cooperation with other Institutions. Here is a summary of the most relevant: European Union Institutions:

Cooperation within the European Union is a crucial part of CITIDEP

international cooperation strategy. Accordingly, and despite our incipient condition (less than an year since CITIDEP was created), we recently signed a contract with a EU community program (*Leonardo da Vinci*) to host a researcher from the *University*

College of London, Dr. Simona Florio.

Dr. Florio, an economist who holds a Master degree in European Development, is expected to work with CITIDEP during at least three months, helping the research on local government and participatory democracy, within the project "RegioNet". In the future, we intend to expand CITIDEP EU-related research and training initiatives.

Portuguese Institutions:

Universities:

- Protocol with **DCEA - FCT - UNL** (Environmental Dept. at New University of Lisbon), Prof. Fernando Santana, funded by **DGA** (Ministry of Environment), to support the "IMS" Project (96 - 97).

- **Fullbright** Grant, in connection with **U. Aberta**, for Prof. Timothy Sieber, CITIDEP Scientific Coordinator, supporting the "Impacts of EXPO '98" Project (98).

- Informal cooperation with **GASA - DCEA-FCT-UNL**, Prof. Sousa Camara, regarding Project "IMS" (92 - 97).

Research Centers:

- Cooperation protocol with **CPIHTS** (Centro Português de Investigação em História e Trabalho Social), regarding research projects of mutual interest and internal training (97).

Public Administration:

- Cooperation with **IPAMB** (Instituto de Promoção Ambiental), Eng. Helder Gil; with **DGA**

(Direcção Geral do Ambiente), Eng. Ascenso Pires, Eng. Marques de Carvalho; with **DRARN - LVT** (Direcção Regional de Lisboa e Vale do Tejo), Eng. Madalena Presumido (Ministry of Environment); with **C.M.Lisboa** (Municipality of Lisbon), Dr. João Soares and Eng. Rui Godinho; and with **C.M. Loures** (Municipality of Loures), Eng. Demetrio Alves and Adm. Jose' Manuel Abrantes (Municipal Services of Loures), regarding the public consultation process targeted by the IMS Project (96 - 97).

- Cooperation, supported through service provision contract, with **DRARN - LVT**, Eng. Madalena Presumido (Ministry of Environment), regarding the Project "Public Access to Environmental Information", partially supported by this contract (97).

- Proposal for formal CITIDEP cooperation with the **"Green Book" Commission for the Information Society**, supported by Prof. Simões Monteiro, regarding some of the adopted measures (e.g. 2.2, 2.12) (97).

Non-Governmental Organizations:

- Cooperation with the environmental ADAs (Associações de Defesa do Ambiente) **Geota**, **Quercus** and **LPN**, regarding the "IMS" Project (95 - 97).

Other Private Institutions:

- Cooperation, supported through service provision contract, with Multi-municipal consortium **Valorsul**, Eng. Luis Alves and Eng. Antonio Branco, regarding a sub-project of the "IMS" Project (Internet-based indexation of EIA question / answer list), partially supported by this contract (96).

- Collaboration protocol with private computer services providers, *Basecom*, *Despodata*; for partnerships in consortium - based research, development and demonstration (RD&D) programs (97).

USA Institutions:

Many CITIDEP researchers have strong ties with Boston-area Universities (e.g. MIT, Harvard, U.Mass., Tufts, etc.), either as graduate students, alumni, or faculty. We value highly this relationship, given the outstanding quality of these institutions. CITIDEP is therefore strategically committed to consolidate and expand this relationship with both formal and informal cooperation, as the following examples illustrate:

- Cooperation with *MIT - Dept. Urban Studies an Planning*, Prof. Joseph Ferreira, (Director of the Planning Support Systems Research Cluster), Prof. Michael Shiffer (Director of Computer Resource Laboratory), regarding research related with EXPO 98, invited by Prof. Camara (GASA/DCEA/FCT-UNL), with the support of FLAD (Luso-American Development Foundation) (94 - 96);

- Idem (MIT - DUSP), also with Prof. Bish Sanyal (Head of the Department), and the *PIT/RG* (Planning and Information Technology Student Research Group), regarding the organization of a series of colloquia on "Citizenship, Participation and Information Technologies in City Government" (96 - 97)

- Proposal for the creation of a Portugal-USA Research Network (*PURN*), with headquarters at MIT, having in mind: a) to support cooperation programs and research projects between Portuguese and USA institutions; b) to foster USA-related research in Portugal and Portugal-related research in USA; c) to help create opportunities, linking researchers to host institutions and programs, and facilitate finding the appropriate funding sources, inclusive through combined sponsorship, in both countries. PURN was to be coordinated by Dr. Elizabeth Leeds, Executive Director of MIT - Center for International Studies (CIS) (Dr. Leeds left MIT, and is now the President of the Ford Foundation in Brazil).

This proposal, still being refined, has the support of *FLAD* and the Portuguese *Consul* in Boston (96 - 97).

Proposal for a Colloquium Series at MIT

1997 - 1998

by PIT/RG* and CITIDEP

PROPOSED TITLE: "Citizen Participation and Information Technology: Governing the Cities in the new millennium"

WHERE: At the MIT Dept. of Urban Studies and Planning (DUSP), with joint sponsorship with CIS (Center for International Studies), maybe also the Political Science Dept., and the Science, Technology and Society Program.

PRECEDENT: Build on last MIT Colloquium "Advanced Technology and Low-income Communities"

CITIDEP Objective: Contribute to build a research agenda on Information Technologies and Participatory Democracy, in particular applied to the following areas: City Government, Sustainable Development, and Environmental Impact Assessment.

PIT-RG Objective: Contribute to define the field of "Information Technology and Planning" (or Informational Planning), as a theoretical, methodological area of research in Planning, and in DUSP in particular:

- Build a research agenda and contribute to identify DUSP focus (for PSS - Planning Support Systems Research Cluster, and the future Center for the City and Technology);
- Identify potential candidates for faculty hiring in this domain;
- Provide a focus for current research and technology developments in DUSP in this area, increase visibility of MIT contribution;
- Compile materials pertinent to new advanced courses / new curricula to be offered in this domain;
- Reinforce MIT ties with other research communities in this domain, and with city planners and officers that are shaping the new millennium cities, in USA but also in Europe and in developing countries;
- Identify (or promote edition of new) research journals best represent the field and encourage student/faculty publishing colloquium-related articles.

PROPOSED STRUCTURE:

- Guest speakers: Mayors and Researchers from 3 groups of countries. Latin America (Buenos Aires-Argentina, Portalegre-Brazil); "Nafta" (Mexico-USA-Canada); Europe (Lisboa-Portugal, Madrid / Barcelona-Spain);
- Some sessions by means of video-link, with opportunity to test the use of remote collaborative tools, and participatory technology (student projects)

Current TASK FORCES on the Colloquium:

MIT:







- PIT/RG*: Anne Beamish; Jon Chando; Matthias Baxmann; Mike Allen; Nadine Alameh; Pedro Ferraz de Abreu; Raj Singh.

CITIDEP:






- CITIDEP-Portugal: Pedro Ferraz de Abreu, Cristina Angelo Rebelo, José Manuel Palma, with the collaboration of Viriato Soromenho Marques;
- CITIDEP-Mexico: Rodrigo Sandoval, Pablo Jovel, Alejandra Mirafuentes;
- CITIDEP-UK: Alejandro Natal, Nuno Themudo;
- CITIDEP-USA: Clelia Guinazu, Marie McHugh, Rui Ponte, Eliana Calligaris, with the collaboration of Kim Stevenson, Chantal Benoit-Barne' and Monica Amorim.







If you are interested in helping to organize this Colloquium Series, write to Pedro Ferraz de Abreu (Coordinator), at pfa@mit.edu






* PIT/RG: Planning and Information Technology Research Group (MIT student research group).







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	Alejandra Mirafuentes Lic. student, Political Science, ITAM (99)	Society and Institutions Communication and Media <i>Mexico Chapter</i>
	Alejandro Natal Ph.D. 'ABD', Development Studies, London School of Economics (98); MSc. Development Studies, LSE; MSc. Political Science, UAEM	Communication and Media Society and Institutions <i>UK Chapter</i> <i>Mexico Chapter</i>
	Ambrizeth Lima MA Humanities, USA Lic. Literature, USA	Pedagogy, School Curricula and Open Education <i>USA Chapter</i>
	Ana Carla Moreira Gordo Ph.D. student, Biomedicine, Inst. Ciencias Biomédicas Abel Salazar (01); Lic. Pharmacy, FFL-UL	Pedagogy, School Curricula and Open Education <i>USA Chapter</i>
	Ana Coito Ph.D. Immunology, Harvard	Meta-Research Pedagogy, School Curricula and Open Education Science Council <i>USA Chapter</i>
	Ana Galhardo Lic. Philosophy, FL-UL	Pedagogy, School Curricula and Open Education Society Frameworks Review Committee <i>Portugal Chapter</i>

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	Carl Jengtes Electronics and Telecommunication Eng., MIT	Information Technologies USA Chapter
	Celso Oliveira Ph.D. candidate, Public Health, Harvard (00); MCP, DUSP-MIT	Society and Institutions Brasil Chapter
	Chantal Benoit-Barné PhD candidate, Communications, Boulder, Colorado (00) M.A., Communication, Emerson College B.A., Communication and Journalism (m), U. Québec	Society and Institutions Communication and Media USA Chapter Canada Chapter
	Clelia Guinazu Ph.D. candidate, Political Science, MIT (99) Master in Social Sciences, FLACSO, Buenos Aires Lic. Political Science, Universidad del Salvador	Society Frameworks Society and Institutions USA Chapter Argentina Chapter
	Deolinda Colaço Revez Environmental Eng., FCT-UNL	Society and Institutions Portugal Chapter






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	Emanuel Afonso Architect, ESBAL, Portugal	Society and Institutions <i>Portugal Chapter</i>
	Fatima Neo MSc. Solid Waste Management, IST-UTL; Environmental Eng., FCT-UNL	Society and Institutions <i>Portugal Chapter</i>
	Fernando João de Matos Moreira Ph.D. candidate, Human Geography and Planning, FL-UL (00); MPhil. Human Geography and Regional/ Local Planning, FL-UL	Society and Institutions <i>Portugal Chapter</i>
	Fernando Manuel Ferrão Castel-Branco Business Manager	Society and Institutions Review Comittee <i>Portugal Chapter</i>
	Joana A. da Veiga Sacramento Lic. student, Anthropology, FCSH-UNL	Society and People Society and Institutions General Assembly Chair <i>Portugal Chapter</i>






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	João Joanaz de Melo Ph.D. Environmental Engineering, FCT-UNL	Society and Institutions Mathematical analysis, Models and Simulation <i>Science Council Portugal Chapter</i>
	João Rebelo Angelo Lic. Gestão e Contabilidade, ISEG	Society and Institutions <i>General Assembly Secretary Portugal Chapter</i>
Photo Available Soon	Jorge Edison Ribeiro Ph.D. Biomedical Engineering, Imperial College, London	Pedagogy, School Curricula and Open Education <i>Brasil Chapter</i>
	Jorge Henrique Silvestre Mendonça Mechanical Eng. , FCT-UC	Information Technologies <i>Portugal Chapter</i>
	José Carlos Cima Gomes BS. Pedagogy, EPM-Lisboa	Pedagogy, School Curricula and Open Education <i>Portugal Chapter</i>
	José Henrique da Costa Portela Ph.D., Internet and Teaching Mathematics, Texas A&M University; MSc. Computers and Teaching, U. Minho	Pedagogy, School Curricula and Open Education Mathematical analysis, Models and Simulation <i>Science Council USA Chapter</i>







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	José Manuel da Palma-Oliveira Ph.D. Environmental Psychology, FP-UL	Society and People Society and Institutions <i>Science Council</i> <i>Portugal Chapter</i>
	Jose Ramon Garcia Lic. Political Science and Public Administration, FCP-AP, UAEM	Society and Institutions <i>Mexico Chapter</i>
	Idalina Barradas Lic. student, Communications and Media, ISCP-UL (99)	Communications and Media <i>General Assembly Secretary</i> <i>Portugal Chapter</i>
	Isabel Noronha Lic. Biology, FCL-UNL	Society and Institutions <i>Portugal Chapter</i>







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	Isabel Trindade Lic. Communications and Media, FCSH-UNL	Communication and Media <i>Portugal Chapter</i>
	Kim Stevenson MCP - Master of City Planning, MIT BS Physics, MIT	Society and Institutions <i>USA Chapter</i>
	Luis Miguel Rionda Ramirez Ph.D. Social Sciences, U. Guadalajara ; MPhil. Social Anthropology, Michoacan	Society and People Society and Institutions Science Council <i>Mexico Chapter</i>
	Manuel de Azevedo Antunes Ph.D. 'ABD', Sociology, FCSH- UNL (99); MPhil. Social Sciences, Sorbonne	Society Frameworks Society and People <i>Portugal Chapter</i>
	Mariana Adelaide Roque Craveiro Pereira BS. Tourism, ISLA	Communication and Media <i>Portugal Chapter</i>
	Mark Allan Hasegawa-Johnson Ph.D. Electronic Eng., MIT	Information Technologies Meta-Research Science Council <i>USA Chapter</i>

CITIDEP Member		Research Cluster(s) / Chapter
	<p>Mª Cristina de Oliveira Rebelo Angelo</p> <p>Lic. Communications and Media, FCSH-UNL</p>	<p>Communication and Media</p> <p>Society and People</p> <p>Executive Committee <i>Portugal Chapter</i></p>
	<p>Mª da Graça Borges Castanho</p> <p>Ph.D. student, Portuguese Language Teaching Methodology, U. Minho (00);</p> <p>MA Curriculum and Instruction, Lesley College, USA</p>	<p>Pedagogy, School Curricula and Open Education</p> <p><i>Portugal Chapter</i></p>
	<p>Mª Dorita Pestana A. Freitas</p> <p>Ph.D. student, Social Service, ISSSL (02);</p> <p>MSc. Social Service, Pont. Univ. Católica-SP Brazil</p>	<p>Pedagogy, School Curricula and Open Education</p> <p>Society and Institutions</p> <p><i>Portugal Chapter</i></p>
	<p>Mª Fernanda Alves da Veiga de Oliveira</p> <p>Ph.D. Mathematics, FCT-UNL</p>	<p>Mathematical analysis, Models and Simulation</p> <p>Meta-Research</p> <p>Science Council <i>Portugal Chapter</i></p>
	<p>Mª Filomena da Conceicao Viegas de Sousa Henriques</p> <p>Post-Grad Social Administration, ISSSL;</p> <p>Lic. Social Service, ISSSL</p>	<p>Society and Institutions</p> <p>Pedagogy, School Curricula and Open Education</p> <p><i>Portugal Chapter</i></p>
	<p>Mª Remedios Ruiz</p> <p>MCP - City Planning DUSP-MIT</p>	<p>Society and Institutions</p> <p><i>Dominican Republica Chapter</i></p>

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	Mario Carneiro Computer Networks, consultant	Information Technologies <i>Portugal Chapter</i>
	Nuno da Silva Themudo Ph.D candidate, Social Policy and Administration, LSE (00); MSc. Management of Energy and Environmental Systems, Middlesex U.	Society and Institutions <i>UK Chapter</i>
	Nuno Rodrigo Cidraes Vieira Master candidate, Biology, FCL-UL (00); Lic. Biology, FCL-UL	Information Technologies Executive Committee <i>Portugal Chapter</i>
Photo Available Soon	Pablo Jovel Lic. Political Science and International Relations, UAM	Society and Institutions <i>Mexico Chapter</i>

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