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Second field trip by the Brazilian delegation to the Triselec Multimedia Resources Centre, Lille, (October 2001

Cities and New Information and Communication Technologies

NICT development: a factor of exclusion or integration for human development?

The explosion of the Internet access market, the boom in increasingly portable computer tools, their coupling with mobile phones, and the development of geographic information systems, have all drastically changed our economies, education and cultures over the past thirty years. In this sense, it has been as great a technological revolution as the advent of the telephone or electricity, whose benefit to humanity no-one would dispute.

The circulation of information has clearly become a powerful economic lever given that trade and financial flows are closely bound up with these techniques at the global level. This major role of media and communication technologies, which makes communication possible virtually instantaneously, must be stressed because it is instrumental in implementing global strategies by eliminating the boundary effects that only yesterday protected a particular country or city. In some cases, these tools are also becoming powerful instruments of freedom, just as radio broadcasting, television and then fax were before them. They can also be formidable when used for terrorism or disinformation.

But behind these challenges and choices, which depend more on how they are used,

is the question of whether or not NICT development should be mainstreamed into access to those essential services that have the potential to ensure a decent, dignified, life.

The speed of adaptation of young children in our developed countries demonstrates the extraordinary capacity of these tools to become educational and knowledge-building instruments. And in fact, there are innumerable regions where people who cannot read or count are quite at home with pocket calculators.

And so the real question is: will the world NICT map will be shaped in response to the market and leave out most of the populations in developing countries? Public authorities and all international organizations will clearly have to integrate into their concerns today's resolve to disseminate this technological revolution equitably throughout the world, given that the power of intelligence, along with water, energy or natural resources, is essential to human development.

This issue, which is entirely devoted to these technologies, clearly demonstrates how through diverse experiences, these tools can be powerful levers for integration, health or education, just as they are for economic and urban development.

Jean-Pierre Dufay Vice-président «Pôle Ville»

Role of the MDP in promoting new information and communication technologies (NICT) in African local authorities

Jean Pierre Elong Mbassi, Coordinator - Lilian Nyazika-Dodzo, Task Officer - and Eric Vigan, Data Processing Manager and Webmaster - Centre Régional d'Information sur la Décentralisation (CRID) - PDM

The New Information and Communication Technologies (NICT) are a tool for the capitalization of information and for communicating and networking that can be placed at the service of African local authorities. They enable local initiatives to draw on an excellent framework for promotion and interchange with other local authorities. They give people in local communities a means to educate and inform themselves and take an active part in the management of local affairs.

he Municipal Development Partnership (MDP) is fully aware of the disparities in the use and appropriation of NICT between African local authorities and those in the North, together with the disparities in the capacity of their respective general publics to use these technologies. But the MDP is convinced that NICT use is essential simply to enable them to exist and be taken into consideration in the contemporary world. That is why the MDP's task was firstly to develop a website, which is now the benchmark site on decentralization, economies and local finance for most of the search engines (www.pdmnet.org); secondly to connect all national associations with local jurisdiction and a significant proportion of African cities to the Internet and develop their web pages; and thirdly to set up a real web portal dedicated to African cities and local authorities (www.africities.org).

The decision to set up an Intranet network linking the region's national associations of local authorities should help to disseminate the web culture rapidly within this region's authorities. National associations of local authorities in the following countries are now connected to the Internet and equipped with computers: Burkina Faso, Cameroon, Cape Verde, Central Africa, Congo, Ivory Coast, Gambia, Ghana, Mali, Mauritania, Niger, Nigeria, Senegal and Chad. The MDP provides these associations with technical assistance to train their webmasters in developing and updating their own websites. The MDP has a dedicated server at its headquarters in Cotonou to host websites of the associations and cities.

The MDP team is presenting the Gambia Association of Local Government Authorities (GALGA) with a computer and Internet equipment. The MDP also makes abundant use of the Internet potential to facilitate the African network of decentralization actors. It has set up a website dedicated to a forum for dialogue on decentralization (www.ddialogue.org) funded by USAID. This website gathers information on decentralization, encourages exchanges of experience and proposes discussions. A network of national teams has formed around this website, which proposes topics for debate to each of the countries according to their individual priorities. In addition to the six initially participating countries (Benin, Burkina Faso,

Ivory Coast, Guinea, Mali and Senegal), Ghana has joined the regional network and contacts have been developed to set up a network in Togo and Cameroon.

Pending the opening of the above portal, in principle early in 2004, the website www.africities.org provides information on the Days of the African Commune (still known as the Africities Summit), one of the focal events organized by the MDP. The Africities website contains materials, discussion summaries, and resolutions of various Africities Summits together with information on the preparation and arrangements for participation in the future summit. For your information, the next Africities Summit will be held in Yaoundé, Cameroon, from 2 to 6 December 2003.

All the foregoing shows that the MDP is very active in the NICT field and seeks to help to bridge the gap between Africa and the rest of the world in this field. NICT development and appropriation by all the African local actors is a major challenge for the successful participation of Africa in globalization dynamics. Meaningful examples of the public's use of the Internet in the city (cybercafés) and in rural areas (Internet terminals for telephony and mail) show that the NICT development potential in Africa is highly promising.

But the enthusiasm and perseverance with which the MDP is tackling this task must not obscure the many difficulties to be met before NITC use by African local authorities can become a widespread, daily reality. The first of these difficulties is access to electric power. Although this problem seems to have been solved in big cities, this is far from being the case in small towns and rural areas. There will therefore be no NITC development in Africa without first extending access to electric power at affordable costs.

The second obstacle is due to the poor development of Internet access to infrastructure: underdevelopment of telephone networks and satellite connections, with virtually no radio loops, no high-speed Internet capacities (with the notable exception of countries of Southern Africa and Senegal). Without a determined effort to develop these facilities, it will be difficult for Africa to join the bandwagon and catch up on NICT development.

The third obstacle is an institutional and legal one. NICTs are introducing new relationships between the components of society because they make access to information more democratic. In principle, relationships based on access to information are becoming less hierarchic and more horizontal. But in most African countries, institutions and legislation have not yet adjusted to this new situation and quite

Villes en développement December 2002 - n°58 commonly, public monopolies providing access to telecommunications still purport to maintain control over access to Internet resources by charging users exorbitant landing fees to connect to the network by satellite, or by deliberately delaying the use of certain technologies (such as radio loops) that would facilitate the extension of Internet access and would reduce the cost.

The last difficulty is related to training, which concerns not so much the training of technicians whose adjustment to the new technologies is acknowledged as being remarkable, but that of the decision-makers for whom the web culture is perceived as a threat rather than an opportunity. That is why the MDP insists that African local authorities must be put in contact with their colleagues from other regions who have made the cultural change to the information society, to make them aware of the potential for improvement of local governance that is enabled by good NICT use. It is also why the MDP is in favour of developing a decentralized cooperation ap-

proach aimed at closing the digital gap with Africa. For this purpose, it is ready to collaborate with everyone desirous to participate in interchange and in the development of local NICT development initiatives.



"Geographic Information", a new strategic challenge

Joseph Grégoire, Afigéo

The boom of the new economy is doubtless behind us – which does not imply by any means that the progress it has unleashed is halted. Of course, this new economy is first and foremost the Internet, electronic messaging, laptops, start-ups, and a new conception of communication, information and space management. But at the same time as all the New Information and Communication Technologies (NICT) have been (and still are) developing, other tools have continued to progress, somewhat overshadowed by these technologies but also made possible by them to some extent.

his is particularly true for "Geographic (or Geomatic) Information", which can be defined as a cross between geography and information science. Its use by authorities began in the 1980s. This tool, which was initially confined to the technical departments to meet thematic mapping requirements, is now spreading like wildfire.

An explosion of services with a geo-localized content

GIS¹, GPS², orthophoto maps, computer-aided mapping – geographic information is embodied in diverse abbreviations, tools and concepts, each more attractive than the other. Behind what some people would take as barbarisms, are in fact highly efficient operational data processing tools that render very simple, but increasingly essential services.

From the on-line digital cadastre accessible for all the services in a city, to the introduction of a regional consultation Intranet for the public, from 3D display of a development project to network management, "Geographic Information" finds its way into all activities, all services (for examples of practical applications, see: http://www.telecomville.org). A tool for communication, management, long-range planning, decision aid and analysis – geomatics is multipurpose. So multi-purpose that it is sometimes difficult to talk about it in simple terms and to structure its development.

Cities and local authorities are increasingly taking initiatives in this field. They invent, innovate and develop tools with a high technological content, based on the use of geographically localized data and capable of being run on all today's data processing equipment.

The achievements of many cities and local authorities:

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- All the services of a city can access the Commune's Geographic Information System through a user-friendly consultation interface (to consult the cadastre, the local planning programme, the natural hazard prevention plan, the establishment of retail outlets, etc.),
- These services provide input for the GIS source database, through automatic data processing procedures that may be portable,
- They use GIS as a tool for communication, analysis or regulatory verification,
- The public can access public GIS information through an open communication network.

In the future, the use of geographic information should continue to be part of everyone's daily life. Cities will continue their efforts to develop new services in which geographic information is likely to play an increasing part. A new European satellite positioning system, Galileo, is undergoing development. More and more uses are being developed, such as health, safety, agriculture, risk management, waste management, geomarketing and intelligent transport.

And although the NICT boom is behind us, its development is continuing. Access to the web network is continuing to progress and technological capacities are increasingly user-friendly and efficient (high speed, portable service, etc.). All these geographic information tools and services based on data processing tools will naturally benefit from progress of NICT whether in terms of network connection coverage (which is progressing) or efficiency of applications software.

New challenges to be met

However, despite active ongoing development, geographic information as an activity is still little known and underused.

Villes en développement December 2002 - n°58 There are major challenges to be met before this activity can be developed efficiently.

In 2002, the French Association for Geographic Information³ identified the main, increasingly urgent steps required to develop this activity towards local and regional authorities:

• Make the institutional complexity of French administration less constraining as regards Based on these observations, AFI-GéO has recently set up an interest group specifically dedicated to local authorities and local actors. This group will implement its first measures in 2003 (see http://afigeo.fleximage.fr/fra me.php?label=interets). Its aim is to address all these challenges. Behind these issues specific to activity development for a category of actors (authorities), there are three more general aims:

- 1. Geographic Information
- System or GIS 2. Global Positioning System
- 3. AFIGéO www.afigeo.asso.fr
- 4. Large-scale reference system: set to become the joint national reference system, the basic infrastructure of future Geographic Information Systems. Five components are planned (images, topography, parcelling plan, zoning and addresses).



development of this sector (strong requirement for better structuring and better data sharing).

- Better represent local authorities who although they are key development actors in this sector, both as data producers and users, cannot make themselves heard at national level or by local policy-makers.
- Encourage the emergence of a clearer, more efficient legislative framework (dispersion of legal references, legal vagueness in data use and dissemination, etc.).
- Ensure that training and "skills" definition is developed.
- Facilitate the introduction of standards and reference systems that are accepted and used by the greatest number of people.

- Define the activity (legally and structurally),
- Provide consistent structuring of all the data at national and European level (including the implementation of the RGE⁴),
- Promote geographic information as a strategic development imperative.

Given that geographic information is a growing activity and that the services it provides meet needs that are both public (regulations, public consultation, local democracy) and private (geomarketing, intelligent logistics), it has substantial strategic implications for local, regional and national development. Widespread awareness is now necessary if geographic information is at last to be recognized as a strategic component of development.

There is at present no precise management of the amounts of waste collected by the "catadores". The computerized acquisition of these data together with those of the other cooperatives will enable the volumes to be known in real time for the city of Rio.

Information and communication technologies vs development

Ahmed Dahmani, Senior Lecturer, COBEA, Université Paris Sud

The key event of the past twenty years is unquestionably the advent of information and communication technologies (ICT) and biotechnologies – two major innovations that are already making profound changes to economies, societies, cultures and globalization.

he reality covered by the upsurge into economies of ICTs alone is that of a real socio-economic, political and cultural transformation. Besides the information technologies themselves, this change concerns engineering, design, production and corporate structure. ICTs are tending to redefine the roles of information, its flows and uses by structures and organizations in the economy and society. Work organization, the training and education system, artistic creation, cultural production and even social relationships are also affected. The upheavals have been such that some people have developed the new economy concept, which has since been given a rough time after the bankruptcy of a large number of start-ups and the fall of the stock market valuation of ICT sector companies.

In overall terms, this ICT expansion, which is still in its early stages (markets and technologies are still far from mature), is working according to the same traditional divide between the North and the South. The characteristic of ICT geography worldwide is that its planning and use is heavily concentrated in the developed economies. What is commonly called the *digital divide* or *gap*, which has been inadequately measured and addressed, is liable to exacerbate already-existing development disparities. The technological difference is great and ICT development in developing countries is up against several obstacles: lack of a sound market, illiteracy and poor telecom infrastructure.

There is thus a very real digital divide between the North and the South. And the basic requirements and priorities of developing countries are well-known: food (particularly water), health (hospitals, medicines) and education (infrastructure, counselling, teaching tools). In these conditions, ICTs are definitely not on the list of priorities. But the UNDP and a number of international institutions (UN. WB, EU, UNESCO, ITU, EYC.) or forums (Davos, G8, etc.), are multiplying initiatives, reports and recommendations to "put ICT at the service of human development". The Okinawa G8 Summit even drew up a charter on the information society and the creation of a Digital Opportunity Task Force (DOT). The idea behind it is that technology has always been a powerful tool at the service of human development and poverty alleviation. And at present, faster technological change and containment of costs can offer many advantages to developing countries. ICTs can be a new lever for development, a new opportunity for those countries that undertake to develop them.

This assuredly generous vision seems rather utopian as it is unlikely that the digital divide will narrow for most countries in the South. The low mobility of ICTs and the lack or inefficiency of technological capacities in developing countries excludes these countries over the short and medium term from this great technological adventure offered by ICTs. And the low purchasing power and prohibitive costs of these ICTs is a major obstacle to their access and use by most people in developing countries.

Initiatives towards liberalization and privatization of the telecommunications sector created by international organizations and bodies, should make it possible to develop and modernize infrastructure and increase the connectivity of developing countries to the networks. In fact, in most cases, with the opening up of markets to the outside world, international (private and public) operators are only interested in incomeproducing segments and urban customers. This may account for the spectacular development of cellular telephony in developing countries, although another reason is that this system provides considerable services to agents in places where fixed telephone networks are non-existent or obsolete. And the access of developing countries to the information

society should cause the State's strategic role to be reaffirmed because the telecommunications sector cannot be dominated by the private sector and by a commercial rationale.

However, by the very nature of the practices and applications of ICTs, most of which still remain to be invented, they would provide direct access to tools, products and services previously underused by most people. Many experiences show the advantages and possibilities they offer to individuals and groups in developing countries, which include access to a plurality of information, transparency of political competition and defence of human rights. The same is true of the promising prospects that the Internet could open up in terms of access to sources of learning and knowledge: distance learning, teleconferencing, networking of documentation centres and libraries, etc. - provided that this learning and knowledge is more equitably distributed and not totally governed by the market. International cooperation can be useful in helping to expand uses and creating contents specific to developing countries by introducing training and technical assistance programmes.

Lille Métropole-Rio de Janeiro decentralized cooperation: new technologies at the service of the economy of solidarity and environ-

mental management

Paulo Pais, Decentralized Cooperation Manager – Lille Métropole Patrick Vandamme; Human Resources Manager – Triselec Lille

Adecentralized cooperation project implemented by Lille Métropole Urban District Council with policy-makers in Rio de Janeiro is more than a mere exchange of experience in waste management as it forms part of an economic development approach based on real solidarity and sustainability, thanks mainly to the use of new technologies.

he "integrated waste management in Rio de Janeiro" project is part of a longstanding cooperation programme, initiated in 1992 at the Rio Conference on sustainable development, between Lille Métropole Urban District Council and the Rio de Janeiro municipal urban cleaning company (Comlurb), under the auspices of the World Federation of United Cities (UTO). This project benefits from substantial co-financing by the European Union.

The project aims to improve the environment of Rio over the long term by setting up consistent, sustainable management of urban waste. For this purpose, Comlurb has particularly supported the creation of scavengers' cooperatives, called "catadores", which collect a large amount of recyclable waste and are actively involved in the cleaning up of some poor districts in the city. Some of them have even been equipped with mobile phones enabling them to be linked up to the Comlurb switchboard to respond to inhabitants' requests. The activity of the scavengers' cooperatives will particularly be optimized through the purchase of new equipment such as presses and fork lift trucks, and

multimedia computer kits, which will soon also be installed in the scavengers' cooperatives. They are intended to provide support for their activity management and integrate them into the future School for Urban Cleanness which is the second project priority, by providing them with distance training and professionalization tools.

The initial project did not include the new technologies. The idea of using them emerged in March 2001 during a visit by a delegation from Comlurb to Triselec Lille, a household refuse sorting plant in the city of Lille. This facility, which is the biggest in France, includes a Multimedia Resources Centre which is the first to receive a ministerial label of approval in France.

The Brazilian delegation naturally wanted to transfer not only the concepts but, above all, the in-house multimedia tools developed to professionalize the Operators.

The concept is quite simple. It consists in bringing training to the workplace, developing tools based on new technologies, encouraging interactivity, using the capitalization and definition of knowledge to facilitate appropriation, which will at last have become accessible to all, including to the semi-literate and illiterate.

On this last point, Triselec Lille has been developing a basic knowledge learning system for reading, writing and counting for a number of years. This



Les interventions en bidonville au Maroc: une évaluation sociale prefaced by Mohamed M 'Barki, Secretary of State for Housing, by Navez-

Bouchanine.-Rabat:ANHI, 2002.-302 p., phot., bibliogr.

A critical and empirical assessment of slum clearance measures in Morocco. The aims of this study are to improve present measures through a better understanding of their weaknesses or past failures, to make public authority investments cost-effective and to aim for greater efficiency and synergy with investments of other actors. *Contact: www.anhi.ma* **Méditerranée, économies en marche** - Paris:AFD 2002.-128p., tabl., map, phot., ann.

The Agence Française de Développement gives a summary of its partnerships and its policy on the Mediterranean world. Three main themes are covered: business competitiveness (investment capital in Morocco, professional training in Tunisia and the economy of the Palestinian territories), urban development (the Euro-Mediterranean project, municipalities and reconstruction in Lebanon, French urban observatories in the Mediterranean countries), agricultural development and water management (farming in the Maghreb, water in Morocco and the irrigation challenge). *Contact: www.afd.fr* Les métiers de la ville: des métiers pour une gestion urbaine rénovée.-Rabat:INAU: Paris: L'Harmattan.2003 .- 212 p., fig., tabl. This publication contains eight papers presented at an international symposium on "Urban Occupations", organized by the Institut National d'Aménagement et d'Urbanisme in Rabat, in cooperation with the Jacques Berque Centre and the Ecole National d'Architecture, on 11 May 2001. The aim of this symposium was to study urban occupations as carried out today and as they should be carried out tomorrow, and the actors whose role it is to "study", "think", "make", "manage" or transform" the city.

Contact: www.inau.ac.ma

Villes en développement December 2002 - n°58 distance education is provided by an organization located 18 km from Triselec Lille. The employees are linked up by videoconferencing and make use of on-line work, document sharing and remote cooperation work.

The dedicated tools include Apprendtri software developed with the University of Lille for staff professionalization, which develops not only knowledge and learning but also knowhow. It contains an assessment system based on multiple choice questions. It has been developed as a hypermedia tool which by delivering oral instructions, can provide training for all the staff, including people who are illiterate or of foreign origin. It includes a search engine and photographic databases and can be used in a total quality approach to sorting while meeting customer specifications. Its design architecture makes it a tool that can be adapted to needs and work situations or sorting methods. It can just as easily be used for induction training as for continuous training. Oral instructions can be given in any language. Another tool has been developed for health and safety training. It is an interactive oral tool designed to make employees aware of the risks incurred and thus prevent accidents. These are the tools that will be transferred and adapted to

Rio. They will be introduced into UNI-COM, the Comlurb corporate university in the School of Urban Cleaning. However, professionalizing people by bringing knowledge to the workplace is not sufficient, and this has been confirmed by an audit on scavengers, made in November 2001.

In the conceptual scheme of the School of Urban Cleaning, it is planned to set up on-line cooperative accounting and management tools in a Multimedia Common Resources Pool.

By introducing an accounts system into the cooperatives, the aim is to enhance clarity of the scavengers' activity both as regards the quantities of collected materials and their incomes. On-line centralization and compiling of the cooperative management charts will provide the opportunity to set up a genuine materials exchange and, through pooling, to negotiate contracts directly with the industrial recyclers and guarantee the volume and quality of materials

The cooperatives' group, which was initially intended to exist physically, will be able to exist "virtually" tomorrow and will yield substantial economies of scale. Triselec Lille has also set up a

It will be possible for the new presses installed in the pilot scavengers cooperatives to be computer-controlled and mainstream data into the network to ensure better product management and marketing



Paulo Pais, Communauté urbaine de Lill

"Price and Market Observatory" for its own use, which will be placed on-line and will pave the way for information sharing, exchanges of international purchasers' address books and consequently a better vision of world markets. It is not impossible that on-line spot sales can ultimately be made on the different continents.

And so that is how globalization, and one of its symbols, the new technologies, can be placed at the service of the interests of the most underprivileged and the environment.

It may well seem too utopian but it is already reality in Lille Métropole and tomorrow in Rio de Janeiro!



Urban development programme in the Maghreb "The City on the city" in Fès

This seminar on 20, 21 and 22 March provides opportunities for discussions and analysis between international researchers and Moroccan practicians and decision-makers. Based on plenary session conferences and workshops, it aims to explore the problems of developing the city on the city. The four priority work areas are: historic fabrics, informal neighbourhoods, urban projects and coproduction of the city. The full presentation text and the participation and registration details can be viewed on the Jacques Berque website. www.ambafrance-org.ma/cjb

Institut des Métiers de la Ville

The Institut des Métiers de la Ville. a decentralized cooperation structure set up between the Paris Ile-de-France (Greater Paris) Region and the Hanoi People's Committee to promote the exchange of urban planning and transport knowhow, has just opened a website. It provides information on the institute's activities, on-line studies and reports and an events agenda, etc. An online research engine can be used to find all locally available documents, such as books, studies, drawings and maps. It is also possible to view free of charge a press digest of urban issues in Vietnam, drawn from the French, English and Vietnamese press. Contact: www.imv-hanoi.com

News on cooperation



This conference, organized by the General Directorate of International Cooperation, will be held on 20 and 21 March at the International Conference Centre, avenue Kléber, Paris, and will gather some 400 French and European public and private operators specializing in development. Major issues discussed will include the multilateral donor institutions' strategy in South Asia and the Mashreq countries, and progress in the harmonization of procedures and the untying of aid will be reviewed.

All information on the first and second conferences held in 2001 and 2002 can be found on the Ministry of Foreign Affairs website, www.diplomatie.gouv.fr/cooperation/dgcid/ multilaterale/rfcm.html

Contact: Cellule de Mobilisations sur les Projets Multilatéraux, Secretariat 33 1 53 69 41 52 E-mail: liliane.felix@diplomatrie.g ouv.fr Partnership agreement between Cities Alliance and Isted

Cities Alliance and Isted have decided to pool their resources to promote better capitalization and dissemination of knowledge generated by Cities Alliance projects and experiences in cities of developing countries. This partnership will give rise to activities such as the publication of a Villes en Développement issue devoted to Cities Alliance and the creation of a regular section on Cities Alliance in this bulletin, indexing in Urbamet of documents produced by Cities Alliance, translation into French of a few "key" documents, dissemination of information to education institutes and universities, and joint organization of seminars and workshops. These dissemination activities will mainly be targeted at French-speaking countries. Contact: Anne Charreyron-Perchet acharreyron-perchet@isted.com

ISTED

Jean-Didier Blanchet has succeeded Jean Smagghe as President of Isted since 2 January 2003 and as co-ordinator of the International

Geographic Information Systems and sustainable water management

GIS systems provide the opportunity to mobilize human and institutional capacities,



structure regional planning and make public action more efficient. They enable different t y p e s

of public and private actors to work together and establish local partnerships while developing more decentralized management. They also provide decision-makers with material for regional planning and environmental management and can be

used by the public to access information quickly.

At a time when sustainable water management has become a major challenge, and in the wake of the World Summit on Sustainable Development (Johannesburg, September 2002), Isted and the National Council for Geographic Information (CNIG) with the help of the Directorate of Research, Science and Engineering of the Ministry of Public Works, Transport, Housing, Tourism and the Sea (DRAST/METLM) have prepared a paper on French experience of geographic information systems applied to water management, for the Third World Water Forum to be held in Kyoto from 16 to 23 March 2003. "Geographic Information Systems

and Sustainable Water Management" presents concrete case studies with a view to enriching thinking on the use of new information and communication technologies dedicated to the environment. This publication is intended to be disseminated widely to foreign partners. It follows on from a document drawn up with IAURIF for the special session of the United Nations General Assembly (June 2001) devoted to a first assessment of the Habitat II Conference, "GIS for Involvement and Decision-making", and will be followed by the publication of a further collection of experiences on the application of GIS to hazards. Contact: anne.baron@i-carre.net

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