

Can planning mediate between sustainable communities and digital divide?

Judith RYSER

Judith Ryser, Vice-President Isocarp and director CityScope Europe; Cowley Street, London SW1P 3NB, UK, jryser@dircon.co.uk

1 INTRODUCTION

My paper addresses four interdependent aspects of contemporary urban and regional development in a globalising and dematerialising world. It examines the role of planning and governance in fostering sustainable communities while stemming digital divide.

Information and communication technologies (ICT) are making continuous inroads into every aspect of people's lives. However, their unequal geographic and social effects are incompatible with the notion of sustainability and its promise of economic and social justice and care for the planet. Can planning redress digital divide and promote sustainable development? Planning strategies are in the public domain and require democratic governance to make them acceptable to the citizenry. Thus it is a political act to mobilise interactive debate on digital equity and sustainability which provides the context to resort to planning when formalising the outcome of such debates and putting into place mechanisms of implementation. The understanding of universal access to digital communication and of sustainable places and communities derives from this political process which legitimises the reconciliation of contradictory forces.

Governance, planning, digital divide and sustainability have evolved rapidly over recent times. Governance is becoming more transparent, open and accountable due to the shift from representative to participatory and increasingly discursive democracy. This has changed the planning system from a prescriptive to a more interactive mode. At the same time the concept of sustainability has emerged from environmental and ecological concerns and lack of universal access to ICT has produced the notion of digital divide.

Both digital divide and sustainability are global issues, but their occurrence is local, as is remedial action against digital divide and intervention in favour of sustainable development. These issues have to be considered simultaneously at the global level in structural and theoretical terms, and at the local level in practical and operational terms. The Global Forum, an annual international ICT think-tank conference, has addressed many aspects of the rapidly evolving relationship between government, ICT industry, regulator and civil society.¹ It showed that the interplay between international strategies and local policies amounts to a power game. Governments, planners, ICT suppliers and civil society are key players in the quest of a sustainable information society. Their powers vary with their often contradictory interests. An example is the application of redistributive principles to global agreements or local implementation. This means that, within a given system of governance, the role of planning has to take into account its dual function as subject and object of ICT in promoting sustainable communities and curbing digital divide.

London and the English planning system have been selected as illustration because they deal explicitly with sustainability. As the largest city in the European Union (EU) London is able to reflect the complexity of the deliberations presented here.² Its population of 7.4 million (2002 estimate) is expected to rise to 8.1 million by 2016 when it will reach the size of Austria (8.1 million population in 1998). The first directly elected mayor of London has produced his first spatial development strategy for Greater London, 'the London Plan' which is nearing statutory endorsement.³ Presenting London as a sustainable world city (arguably a contradiction in terms) the Plan endorses sustainable communities and condemns social exclusion. Nevertheless, London may be too fragmented to prevent digital divide and too large to achieve sustainability, a challenge lodged by environmentalists on the grounds of London's ecological footprint alone. It is important, therefore to relate the understanding of sustainability, digital divide, governance and planning to the urban region in question and to treat any outcomes with care, if applied to other urban environments.

1.1 DRIVING POWERS OF GOVERNANCE, PLANNING, DIGITAL COMMUNICATION AND SUSTAINABLE COMMUNITIES

Regional and urban development is driven by economic pursuits. Their physical manifestations are mainly generated by the private development industry. However, developers, financiers, land owners, contractors and other key stakeholders of the built environment have to comply with plans and planning guidance while securing clients and users for their developments. Their motivations are not necessarily compatible with social goals and environmental values which governments are responsible to safeguard. Democratic political regimes empower their governments to regulate conflicts between economic, social and environmental forces within the framework of their political goals. One of the regulatory instruments is spatial and land use planning. It is called upon by consensus brokering between conflicting interests in the physical development process.

Regulatory activities have increasingly resorted to ICT. In the UK, the e-government initiative aims to improve access to public services, including planning which, in turn, is used to overcome the digital divide, initially in the areas covered by the planning system. As sustainable communities are one of the new elements of the impending English planning system its contribution to the resolution of digital divide forms an integral part of sustainable community building.

Judging from current inequalities of access to public services, as well as to ICT generally, this neat strategy has not materialised yet, probably because powers and motivations differ between those representing the public, the private and the civic interest.

¹ Judith Ryser. 2000. 2001. 2002. 2003. Synthesis reports. ITEM's International, France <<http://www.items.fr>>

² Of course, worldwide and also in Europe there are other large conurbations. With its 11 million population, the Paris region is similar to London's metropolitan area of some 11 million population; so is the Moscow conurbation or the polycentric urban region of the Ruhr in Germany.

³ Mayor of London. 2002. The Draft London plan. Draft spatial development strategy for Greater London. Greater London Authority

The powers of democratic governance are vested in citizens and their votes to safeguard their collective welfare. Planning powers form an indirect part of this relation. Industry is the driving power behind ICT. It also lies behind digital divide as it is motivated by profit and considers universal access the responsibility of the public sector. What closes the power loop is civil demand for greater social justice and respect for the environment which governments have to pursue if they want to retain their power base. The notion of sustainable community stems from this process.

In the following section, it is proposed to examine the four selected components of urban development and their respective power base to understand how their interplay can potentially shape an economically successful and socially acceptable information society or, conversely, thwart integrated equitable development.

1.2 GOVERNANCE: FROM DEMOCRATIC DEFICIT TO DISCURSIVE DEMOCRACY

As democracy requires engaged citizens, it is not surprising that representative democracy has evolved into participatory and eventually discursive democracy. ICT has certainly facilitated this evolution by making information more widely accessible and citizens more knowledgeable about political issues. If representative democracy engendered the modern planned city in the 19th and first half of the 20th century, participatory democracy took citizens to the streets in the nineteen-sixties to wrest power from government. Added to that more recently, discursive democracy is threatening the prerogatives of elected officials, economic and cultural elites and other technocrats by reclaiming privileged knowledge from them.⁴

e-government is supposed to be about more accountable and user friendly governance. However, withdrawing human contact from public service delivery and enforcement of citizens' obligations may cause alienation.

Even British democracy - with its first past the post system of *de facto* two party confrontational politics and unwritten constitution - has gradually undergone greater pressures from its citizens who want a larger share of decision powers, especially within their own communities. Following the EU initiative, the UK government intends to implement e-government by 2005. How interactive it will be remains to be seen, but thanks to the provision of ICT facilities, information should reach citizens more easily and trigger responses which, hopefully, will influence policies and government action. Increased electoral turnout would indicate a departure from current apathy of disaffected voters. But no attempt has been made yet to study, let alone experiment with e-voting, continuous electronic feedback from the electorate to the policy makers, digital interactive debates or any other ICT driven mechanism which would improve trust of civil society in politicians and thus legitimacy of politics and governance, and by extension planning.

1.3 PLANNING: FROM PROSCRIPTIVE END STATES TO MEDIATED PROCESSES

Since its heydays after the second world war, planning in the UK has undergone a number of fundamental changes. It has basically evolved from a proscriptive end state system to a mediated process. The UK is currently updating its planning legislation⁵ rooted in the 1947 Town and Country Act. It evolves towards frameworks based on longer term visions, together with shorter term specific sustainable community- and/or area-based plans, as opposed to comprehensive countrywide land use allocation and unitary development plans.

The aim of the new UK planning system is to regulate regional development and land use in the public interest – but can it become a better respected public service?

The evolution of ICT has facilitated the shift from proscriptive planning and restrictive development control legislation to looser frameworks open to flexible interpretation. Conceived as a sub-set of e-government, e-planning can take advantage of the political will which is promoting e-government as a means to reduce democratic deficit and voter apathy by bringing government closer to the citizens.

e-Government development and the growth of a seemingly untameable worldwide web are enhancing the use of interactive communication in general, as well as between planners and the planned in preference to one-way instructions. In the past, the public sector kept its information confidential while the private sector invoked commercial secrets. They still do, albeit to a lesser extent. Public consultation and participation has only taken off after protests against secrecy and planning decisions taken behind closed doors with little regard to affected third parties like local communities or single interest groups. In the UK, public planning inquiries are still conducted like quasi tribunals, involving lawyers and public inspectors who are arbitrating like judges, although the government of the day does not have to follow their advice. Now, the government is proposing electronic Planning Portals for which £ 6 million are available, as well as ICT terminals publicly accessible in planning departments for public consultation of on-going planning applications and appeals. These measures should provide better access to planning information for citizens and enable them to participate more actively in the development process.

Planners produce plans and documents; but does more planning equal less sustainable environment?

⁴ Robert A Beauregard. Democracy, Storytelling and the Sustainable City. In: Story and Sustainability. 2003. Barbara Eckstein & James A Throgmorton. MIT Press.

⁵ Planning Green Paper and consultation documents; Planning and Compulsory Purchase Bill; Local Development Frameworks; Planning Obligation: Delivering a Fundamental Change.
http://www.odpm.gov.uk/stellent/groups/odpm_control/documents/contentservertemplate/odpm_index

Liberalisation and privatisation has not spared planning and much planning work is contracted out, with the effect that more planners start to operate in the private sector than in public authorities. No longer a major force of the public sector, planning has lost its dominance over physical development. Negotiation between major stakeholders of changes in the built environment is taking preference over formal development control procedures and emphasis has been shifting from the public good to individual property rights.

These trends are not confined to the UK. The International Manual of Planning Practice (IMPP) published by the International Society of City and Regional Planners (Isocarp)⁶ shows that such trends occur throughout the planning world, despite the wide range of powers, procedures and types of plans currently operating at national, regional and local level in the 63 countries and 5 autonomous regions presented and analysed in IMPP.

1.3.1 ICT: subject and object of planning

What planners share, especially in developed countries, is increasing use of ICT, not least to establish a more democratic relation with citizens, often at the receiving end of planning decisions. At the same time, ICT is regulated by planning. The location of the production of ICT hardware and software and its distribution, as well as the provision of networks under ground and in space for ICT use have all become part of land use and spatial planning. It could thus be construed that, by implication, ICT is both 'subject' and 'object' of planning which, in turn, may influence the role of planning in curbing digital divide.

1.4 EMERGENCE AND DYNAMICS OF DIGITAL DIVIDE

If the proposition "information is knowledge, knowledge is power" is true⁷ the planning system has a lot of potential power as it holds knowledge, including on ICT location and infrastructure development which it controls, together with conventional as well as digital access to its information. By restricting or withholding access to its databases it would affect adversely universal access to, and universal service of digital communication, and thereby seriously hamper empowerment of civil society. The same arguments apply to governments, should they carry out such restrictive practices. Conversely, criteria regarding the safeguard of the public interest do not apply to the private sector. Competition principles dispenses it from supplying either universal access or universal service, traditionally a public sector function delivered by the state as, for example, universal distribution of ordinary mail, or universal health care at the point of need. Civil society would prefer universal services to universal access of ICT, although higher levels of provision of either would contribute to the sustainability of communities.⁸ The debate about these choices has to be put into the context of ICT evolution.

1.4.1 The context of ICT evolution

At the global level, the International Telecommunication Union (ITU), a United Nations specialised agency which confederates governments and industry worldwide is promoting the information society. Its emphasis lies on global open access to digital means of communication, expected to evolve into universal service in the long term. Many other international and intergovernmental organisations, such as the World Trade Organisation (WTO), the United Nations Educational, Scientific and Cultural Organisation (Unesco), the World Intellectual Property Organisation (WIPO), the Organisation of Economic Cooperation and Development (OECD), the European Union (EU)⁹ are also involved in the construction of a borderless cyber-network to achieve seamless digital communication.

"Telephones will not feed the poor, and computers will not replace textbooks. But information and communication technologies can be used effectively as part of the toolbox for addressing global problems".

Yoshio Utsumi, Secretary-General of the International Telecommunication Union at the Global Information Society Summit, Geneva December 2003

Aware of the gradual globalisation of the information society and the worldwide evolution of digital communication the European Union (EU) has made the Information Society a priority. It has produced a number of Directives to liberalise communication infrastructure and services, including telecommunications and audio-visual, universal broadband connection in the public sector and interoperability (compatible software, universal standards for satellite, cable, terrestrial networks and radio frequency). The EU aims to make interactive public services accessible to everyone via broadband and multi-platform terminals (e.g. telecommunication, TV, PC) by the end of 2004 and to provide easy access to the Internet for all citizens at public entry points (PAPI). Overall, the eEurope 2005 programme intends to stimulate development of all three: services, applications and contents, as well as to speed up deployment of secure broadband Internet access.¹⁰ The EU's aim to achieve e-government by 2005 has a direct impact on the planning process which is resorting to the same means of communication.

ICT has penetrated every aspect of human life, at work, in the home, on the move, at play and even at rest. Since 2002 most schools and businesses are online and household connections have doubled in the EU¹¹, e-commerce and related security measures have

⁶ Derek Lyddon and Adriana dal Cin (eds). 2002. International Manual of Planning Practice. Latest edition on CD. Isocarp Secretariat, the Netherlands.

⁷ Domination or Sharing, endogenous development and the transfer of knowledge. The Unesco Press, 1981, p 9

⁸ Jago Petzer's winning poster of the Isocarp Carfax prize in 2001 gives an example of ICT empowerment in the developing world.

⁹ <http://europa.eu.int/scadplus/leg/en/lvb/124193.htm>

¹⁰ COM(2002) 263 final; implementation: OJ C 48 28/02/2003

¹¹ eEurope final report 2002

come on stream in 2003 and many other e-initiatives are being taken up more widely, such as tele-medicine, distance learning, e-transport management and user information, intelligent household appliances and bar-coded labelling of consumer goods. Shared research cyber-networks and mobile, flexible tele-working have become an integral part of 21st century economy.

Digital Access Index (DAI) 2002

= measure of overall ability of individual in a country to access and use ICT. It consists of 8 variables organised into 5 categories (1 infrastructure: fixed and mobile tel/100 pop; 2 affordability: I-net access as % GNI/capita; 3 knowledge: adult literacy & education enrolment levels; 4 quality: bits/capital & adsl/100 pop; 5 usage: I-net users/100 pop) converted into indicators with value 0-1, weighted within its category and averaged to obtain overall DAI value

Sweden	0.85	highest, world
USA	0.78	
UK	0.77	highest, EU
Austria	0.75	
France	0.72	like Slovenia
Latvia	0.54	lowest, EU (25)
Niger	0.04	lowest, world

Source ITU

New ICTs are coming on stream continuously, such as digital TV, latest generation of multi-tasking mobile phones, growing footprint for GES, miniaturisation of communication tools, expanded cyber-services, etc. The increasing number of industry standards is enhancing competition, convergence and price reduction. Together, these developments have contributed towards the exponential uptake of ICT in every walk of life, thereby transforming work practices and lifestyles.

Besides all these advantages, ICT has also brought along drawbacks. In particular, two major problems need to be addressed: protection of privacy and electronic data security.

1.4.2 Advantages and drawbacks of ICT: Free flow of information, privacy and data security

The overwhelming paraphernalia of new ICT instruments have raised citizens' awareness of their right to know. Knowledge of their information rights has also sharpened their determination to obtain protection from information abuse. Security has thus become just as central a preoccupation in cyberspace as in the geo-political sphere.

If the free flow of information is the lifeblood of an innovative society, protection of privacy and electronic data has to form part of civilisation, owing to respect of democratic principles and human rights. However, protection has been eroded continuously since '9/11' (terrorist attacks in the USA). ICT can be used to locate and trace citizens in their daily activities. Already, the UK has the highest number of CCTV surveillance cameras per population (1 for 14 citizens) which raise planning control issues. It is estimated that in London people are photographed some 300 times a day. No wonder that citizens are becoming suspicious of electronic communication and tend to resist e-commerce and even e-communication with the public sector generally.

In the UK, data on citizens which the state is collecting with its compulsory powers is shared increasingly between government departments, quangos (quasi governmental organisations) and with other contracted out and even private bodies, often without the knowledge of the citizens concerned. Opportunities to check and amend such personal data are poor, as citizens have to ask to view specific information while guessing what is collated on them. The proposal to store a host of personal data electronically and invisibly on an identity card as well as on interconnected databases is anathema to citizens in a country ruled by common law and *habeus corpus* rights. Not surprisingly, the human rights lobby is opposing these trends and asking for security and safety guarantees.

Planning data was always a valuable asset. It may not have been by chance that during the cold war the Salzburg Seminars of American Studies held an annual session on planning at which senior planners from centrally planned economies (Eastern Europe) and market economies (Western Europe) exchanged their experiences based on case studies they brought along. Today, being in the public domain, planning and development control has access to the databases which owe their existence to the introduction of advanced ICT. This could give rise to potential misuse, especially where large developments are concerned with substantial betterment and land value gains. Anecdotal experience shows that it is much harder for the general public to come by such planning information. Anything deemed 'confidential', including correspondence between planning authority and planning applicant can be withheld from the public part of local planning committee deliberations.

With increasing digitalisation of data in the public sector on private aspects it is important to agree on an equitable and democratically acceptable balance between open access to, and free flow of information and the protection of privacy, intellectual property and commercial rights. This principle needs to apply also to planning.

1.4.3 Emergence and dynamics of digital divide

Most critically, both the growth of ICT and access to it have evolved very unevenly worldwide, between countries and continents, urban and rural areas, as well as within countries and urban agglomerations. In its action plan, the World Summit on the Information Society (WSIS) held in Geneva in December 2003 sets out the goals for 2015 to redress such inequalities, especially between the developed and the developing world.¹²

Universal access depends on two conditions. It has to be supported by hard and software infrastructure at affordable prices. It also depends on the know-how of those who seek access and their opportunities to acquire necessary skills and overcome psychological barriers. Often, but not necessarily always, this presupposes literacy and numeracy, although the audio-visual dimension of digital

¹² <http://www.itu.int/wsis/documents/listing-all-en-s|1.asp>

communication can compensate for that to some extent. Voice activated communication is evolving and “images are worth a thousand words”, provided they project cross cultural content. There is still the language barrier to consider and the dominance of English on the Internet, despite improvements of machine translation. The free market is hampering the provision of all these facilities worldwide and has led to digital divide, especially between the developed and the developing world, but also within countries, regions and cities, between affluent and poor areas, not least because externalities are neither captured nor redressed.

It is a mute point to find out whether digital divide is aggravating already unacceptable polarisation between rich and poor, enabled and deprived, and exacerbating spatial segregation between and within cities, between dysfunctional and sustainable communities. Most importantly, it has to be established how digital divide can be remedied, who should bear the responsibility and what planning can realistically contribute towards improvement.

1.4.4 The London case

The mayor of London tried to find out what the digital divide actually is in London and how to improve the situation.¹³ In a study of Londoners’ actual Internet access¹⁴ income comes up clearly as the crucial divider between those who have, or could have access to the Internet and the others. When controlling the data for other aspects, such as ethnicity, marital status, household type, social belonging, age or gender, health or disability they appeared marginal.

This revelation was compounded with the findings on attitude. The survey shows that 45% of Londoners had access to the Internet in 2002, (albeit only 16% of those with household incomes under £ 10’400). However, 40% of the remainder (respectively 50% of the lowest income group) said they did not want it. In a city in which income differential is growing not shrinking despite its wealth and low average unemployment, these outcomes are quite alarming.

Household Internet access by household income (%)

Income	Yes	No can't afford	No don't want
<10400	16	35	50
10400-15599	30	20	50
15600-20799	44	16	40
20800-25999	55	10	36
26000-36399	64	5	31
36400-52000	69	2	29
over 52000	80	1	19
all households	445	15	40

Source: Mayor of London. Londoners on-line 2003. GLA

The survey shows that, while people consider passive ‘information’ consumption supplied by television a basic ‘need’, not everybody has the urge to be wired up. Minority groups use e-communication primarily for e-mailing (to keep in touch, often abroad, with family and friends at a cheaper rate than by telephone). E-mailing is followed by ‘education’ (consisting of information gathering not active e-learning) and, for those used to the Internet, job search. These findings challenge the notion that deprived Londoners would benefit most from electronic access to get their social contributions paid, seek a job, or simply obtain help with their various needs, such as health, education, old age or small children. Classified in another way, most Internet activities of Londoners would fall into the category of ‘fun’ with less use of e-government services than Internet shopping, albeit more than banking.

The survey results should not distract from improving digital interaction between the planners and the planned. Judging from the relative high use of the Internet by people who were born well before the widespread use of electronics it is possible to overcome access hurdles. Planning debates should not be left to the media which pick and choose and usually emotionalise subjects, such as tall buildings, favoured by the London mayor, without enabling the public, and especially disadvantaged citizens to influence planning decisions and policies on these matters.

1.4.5 Planning for a balance between digital and physical interaction

It should be remembered that cities are cradles of civilisation, brought about by human interaction with much of it played out in the urban public realm. London’s Hyde Park Corner is a symbol of free speech and Trafalgar Square the traditional locus of popular assembly for protest as well as celebration. Digital interaction cannot replace that and may have its drawbacks, especially for people who are already isolated and confined to their homes due to age or disability for example. Giving everybody a computer at home may be much cheaper than to supply collective infrastructure - such as schools, community halls, health centres, shopping malls, public transport, open spaces, leisure facilities and public realm generally. In the past, such facilities often failed to materialise for cost reasons, despite forming an integral part of traditional planning briefs. Relying on higher densities for their viability, they have reappeared in planning briefs of sustainable communities. Clearly digital communication cannot replace face to face interaction and it may be a planning task to find a balance between electronic and physical provision capable of mutual reinforcement.

It could be argued that replacing the last opportunities of face to face contact between citizens, their elected representatives and their administrators with sophisticated broadband communication will, if anything, create an even greater gulf between them and erode the little trust there is. Yet, without trust and respect desperate people are unlikely to change their attitudes to adopt a more socially accountable behaviour. More people-centred attempts may lure citizens into using ICT, such as the digital champion schemes of Scottish Enterprise which locate access to electronic communication in pubs and supermarkets instead of institutional establishments.

¹³ Mayor of London. 2003. Connecting people: tackling exclusion? An examination of the impact on, and use of the Internet by socially excluded groups in London

¹⁴ [Mayor of London. 2003. Londoners on-line; an analysis of home Internet access from the London Household Survey 2002

Even a goldplated pipe cannot guild what it carries

It should be kept in mind though that not everyone who requires and pays for local public services lives in doom and gloom and the case for putting the lion share of public resources into socially depressed areas and ailing businesses remains to be made. In the USA local authorities are 100% financed from income they raise themselves. What matters to them is to change mindsets gradually which they achieve by small actions with single rules of engagement and constant feedback. e-Government means empowering e-citizens to carry out their own agenda, not necessarily according to the assumptions of technologists. Such a climate of empowerment may even stimulate corporate social responsibility and generate cooperation between citizens, business and local government in the interest of the community as a whole.

One example is the city of Stockholm's political decision to remain in charge of ICT infrastructure. It laid black fibre to every front door. The negative impact on the environment is infinitesimal compared to the multiple trenches which competing companies dug in London until the dot.com bubble burst to the great detriment of the environment and the streetscape. Black fibre gives everyone access to disseminate content, enabling community television networks which exist alongside commercial broadcast operators and public sector communication networks.

1.4.6 Content

Digital infrastructure and terminals only provide the conduits for content which is generated by ICT based providers and/or the users themselves. While Stockholm devolved care of content essentially to third parties, except for its municipal communications, other countries and cities, including the UK and London left both infrastructure and content provision to others, except for government websites which provide mainly one-way information.

Perhaps citizens lack interest in digital access because they do not see the value of information on offer, nor do they believe that they are being heard. Before setting up its earmarked electronic hub for planning data to monitor London's physical development, the Greater London Authority (GLA) should clarify what such a database of planning activities can contribute to enhance sustainable communities and to improve communication with planning authorities by decreasing digital divide while improving service delivery.

Content consists of substance expressed in a certain language. In the UK, the Office of the Deputy Prime Minister (ODPM) responsible for planning and sustainable community development has made £ 660 million available for capacity support of local authorities to take up the benefit of e-government in a 'multi-channel way' and thereby connect them better to local communities. However, often officialdom uses obtuse language which prevents citizens to grasp content and makes them lose interest. Reducing digital divide encompasses the provision of infrastructure, skill training for users, together with change in public sector culture to make content and language more accessible to ordinary citizens.

Not surprisingly, a host of new institutions, such as London based UK online centres, the University of Industry, LearnDirect, CitizensOnline the International Electronic Commerce Research Centre and others have sprung up in response to the government's e-drive. As the restated aim of the English planning system is to regulate regional development and land use in the public interest planning would do well to resort to such resources to enhance its digital voice. Where does this leave the planners? Can they extract some benefits from the e-drive for their profession? And do they have to legitimise their role in the digital divide debate by taking a more forceful stance on the sustainability of communities?

1.5 FROM ENVIRONMENT TO ECOLOGY TO SUSTAINABILITY

It could be argued that what has become a sustainability issue at present was debated under the banner of ecological concerns in the nineteen-eighties and, in turn, formed part of the green movement of the nineteen-sixties which aimed to protect the environment against frantic urbanisation. The focus has thus shifted first from nature to man-environment relations and then to the impact of human activities on the current and future natural as well as man-made environment.

A sustainable community is where economic growth, social justice and environmental quality coexist. It is aided and abated by discursive democracy to guide public debate and by transparent and open governance which translates the resulting consensus into actions for the common good, while respecting future generations.

For arguments' sake, let us assume that sustainable communities are places where social justice, economic well-being and good resource husbandry coexist. That still means that their sustainability relies on people who congregate there and practise discursive democracy. They know that many of their diverse interests depend on communalities for their fulfilment. Therefore they engage in public debate and carry out actions for the common good while upholding respect for future generations. In this process, resorting to ICT amounts simply to adding a tool to their kit. How can planners engage in dynamic interaction with sustainable communities? How much should take place in real space and real time and how much in cyberspace using remote electronic communication? Isocarp is one of the planning lobbies which has debated the role of planning in the information age at its 2001 congress¹⁵.

Eradicating digital divide would be a precondition to assist sustainable communities in achieving their triple goal of healthy economy, equal opportunity and environmental quality. However, such a concept of 'sustainability' may seem idealistic, especially to the custodians of the necessary resources to achieve it. Most likely they have a different interpretation of sustainability. Accountants, for example, speak of 'sustainable business plans' when in fact they siphon off revenue expenditure from existing budgets. They could make a better contribution to sustainability by resolving the seminal dichotomy between capital investment and

¹⁵ Judith Ryser (ed). 2002. 'Honey I shrunk the Space. Planning in the Information Age. Isocarp

revenue costs, and by including externalities so often omitted by developers and officials in their sustainability equations. Providing universal access to ICT is one such externality which should be reintroduced in assessing the sustainability of developments.

ICT user survey results show a lack of interest in ICT access but also increased uptake of ICT use once the access barrier, mainly due to lack of self confidence and skills is broken. Thus, further efforts are required to provide universal ICT access to create a level playing field for citizens and to enable human resource capacity building. Nevertheless, needs of ICT access are not homogeneous and differentiation may be appropriate. Type and degree of ICT provision should become part of briefs for sustainable communities, designed by planners as their contribution to the empowerment of citizens. Let us not forget, however, that other measures are needed besides reducing digital divide to overcome exclusion and achieve self-managed and self-reliant sustainable communities.

2 CONCLUSION

The underlying premise of this paper is that the information society is expected to evolve into a sustainable knowledge society. It asked how planning could enhance citizen-led sustainable communities while reducing incompatible digital divide.

Answers may be more easily identified by relating them separately to the three sustainability criteria identified above: economic growth, social justice and environmental quality.

ICT is seen as a driver of economic growth. Spatial planning can influence the location of ICT firms, the provision of ICT infrastructure and physical access to end users. Designated land use for ICT company clusters, for example in science parks in proximity to higher education and academic research establishments, is expected to generate innovative synergy. However, evidence that physical proximity guarantees interaction is ambiguous.¹⁶ High density, mixed use development privileged by current planning ideology creates favourable conditions for efficient ICT distribution, akin to public transport. Finally, the provision of public premises with easily accessible ICT terminals, preferably combined with ICT training facilities would reduce digital divide. Together, these dispositions could stimulate the local economy.

Secondly, good links between the science park establishments and community based ICT training facilities would offer the local population a better chance to obtain ICT jobs. It would combat both social injustice and digital divide. Similarly, outreach links providing access to ICT skills and jobs in deprived areas would contribute to social justice. Planning gains could also be included in briefs to provide the local population generally with better access to ICT through affordable hardware, software and skill training. This, in turn, would give better access to public services and expand e-government to all segments of the local population, thereby contributing to social justice.

Thirdly, compact development would improve the environment as it would reduce polluting transportation of people, goods, as well as waste. Theoretically, mixed use should curb the need for travel between work and home. Better ICT infrastructure would also reduce journeys by facilitating more homeworking, e-shopping, e-banking or e-learning.

However, all these provisions are subject to human behaviour and freedom of choice. It could be argued that people prefer to live next to their leisure activities rather than to their work, thus commuting would continue even in high density mixed use developments. Similarly, high income and low income households would not choose to live next to each other, despite public social engineering. Home zones without provision for car ownership are not a universal success and high density developments could well become the slums of the future.

A high quality public realm would satisfy all three sustainability criteria as well as making a contribution to future generations. However, transport tends to claim the lion's share of public spaces. In cities where land is at a premium, the public realm enjoys little protection and with growing fear of crime the public realm is threatened by privatisation. This leaves less public spaces for free assembly, face to face encounters, or even just for being there, thus jeopardising '*civitas*' the fundamental *raison d'être* of cities.

Finally, it is wise to remember that a single power cut can bring the whole information society and its ICT powered activities to a stand still. Luckily, human beings have their human intelligence to cope with such crises.

Judith Ryser, CityScope Europe, London January 2004.

¹⁶ for example: Simmie, J & Sennett, J. 1999. Innovative clusters: global or local linkages? In: National Institute Economic Review 170. 87-98; or: Buck, N, Gordon, I, Hall, P, Harloe, M, Kleinman, M. 2002. Working Capital. Life and labour in contemporary London. Routledge