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The Political Economy of the Information Society - A Southern View

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Parminder Jeet Singh and Anita Gurumurthy
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Political Economy of the Information Society: A Southern View

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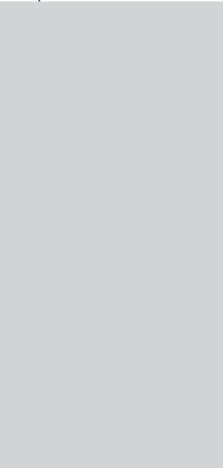


Parminder Jeet Singh and Anita Gurumurthy



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Political Economy of the Information Society: A Southern View

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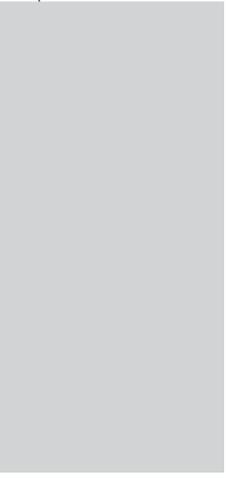
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This paper discusses the World Summit on the Information Society (WSIS) process and its positive outcomes in terms of Internet governance, and negative outcomes in terms of its failure to establish a financing mechanism for Information and Communication Technology for Development (ICTD). It proposes the concept of an 'Information Society for the South', which captures the systemic issues of institutional and structural changes that are required in the South to capitalise on the development opportunities presented today - better than the term ICTD does. At national and sub-national levels, a clear distinction needs to be made between the economic growth aspect of ICTs, and their use to build a new socio-development infrastructure. The need for a more effective global polity for our increasingly inter-connected and interdependent world is something that cannot be disregarded. It concludes by recognising the imperative for powerful South-South alliances to be built for evolving a new paradigm of a development-oriented information society for the South.

The Rise and Rise of Neo-Liberalism

Neo-liberalism is principally a political project of embedding market values and structures not just within economic, but also within social and political life. Its objective is a reshaping of power relations.¹

Neo-liberal ideology in today's world has generated such a momentum that while it is easy to critique it, most have found it difficult to resist it. A lot of work has gone into looking into reasons of its triumph, especially in the past decade, and two significant reasons suggested are the end of the cold war – with the twin elements of collapse of communist ideology and emergence of a uni-polar world – and the rapid strengthening of economic globalisation fueled by the emergence of new ICTs that enable real-time coordination of financial flows as well as manufacturing processes, and lately also the flow of some kinds of labour, across the world.

The collapse of the USSR, under the weight of its unsustainable political and economic systems, caused a cascade of ideological and political losses for the political left throughout the world. The politics of equity and social justice was put on the defensive, and in this space, neo-liberalism took on respectability – emerging from the fringes of being a reactionary far-right ideology nurtured in some universities and think-tanks.

¹ Garry Rodan, Neoliberalism and Transparency: Political Versus Economic Liberalism, Working Paper No. 112, September 2004, Murdoch University, <http://www.warc.murdoch.edu.au/wp/wp112.pdf>

The phenomenal rise of economic globalisation, while itself taking some strength from emerging dominance of rightist politics, has had even greater impact. As markets became global, nation-state based governance mechanisms became increasingly inadequate to respond to the new conditions. “While the world economy is becoming increasingly globalised, political authority remains fragmented and anchored in territorial states”.² The political reality of the world did not allow the needed structural and institutional transformation in the arena of global governance. Neo-liberalism filled in the spaces left by these governance inadequacies by proclaiming markets as the best, and natural, arbiter of issues of our collective lives.

The fact was that while one could critique the neo-liberal approach, there were no credible alternatives coming forth to address a situation that was changing significantly – since, among other things, an enhanced level of globalisation was an inescapable fact. Historical events have combined with the strengthening of the coalition of dominant interests in a manner that has given little time or space for alternative political conceptions to stand up to the neo-liberal avalanche. And since suspicion of politics and the state is one of its central tenets, as neo-liberalism gained strength and respectability, it gave its verdict on the systemic in-efficiencies of governance institutions in developing countries as being due to too much governance, and advocated withdrawal of the state, ceding more and more spaces to the free-play of the markets. Through some progressive adjustments to establish itself, like moving from the Washington Consensus to a post-Washington Consensus, neo-liberalism acted through multi-lateral financial institutions, the World Bank and the IMF, to force itself on developing countries.

It helped the neo-liberal cause that the middle classes in most developing countries were by now disillusioned with post-colonial visions of self-rule led prosperity and frustrated by their political and governance systems. They were quite willing to consider apolitical alternatives that derided the state and its institutions. Globalisation also brought them visible gains – and these classes were happy to be co-opted in a global network of increasing prosperity, and close their eyes and minds to the socio-economic situation in the rest of their society. Politics for them was becoming a needless reminder of the misery of the majority, and they were happy to find apolitical legitimacies for their socio-economic aspirations that neo-liberalism offered.

But the fact also remained that neo-liberalism had stepped into a historical stream – and had to contend with the ideological, as well as institutional-structural baggage of the yester-years. These included the welfare state, public infrastructure, pro-labour policies and representative global governance systems like the UN. To that extent, it had to keep a slightly reactive stance and negotiate its path forward. The post-war liberal welfare state remained an entrenched and respected governance form. And development ideology for poorer countries remained mainstream, and still consisted mostly of state-led large scale efforts, based on redistributive policies.

Neo-liberalism had to work from within this social construction. It began with establishing the belief that global competitiveness of the economy was the source, more than anything else, of greatest benefits for all citizens, and that of course required great fiscal austerity. Cutting down on welfare spending and privatising the public sector was therefore but necessary. And since labour demands needed to be reined in to keep economies competitive, it was preferable to make institutional and structural changes which diminished labour’s negotiating power. However, it was politically difficult to directly target development spending in developing countries, so prescriptions of reduced spending, user-fees and private partnerships were progressively ‘advised’ through multi-lateral funding channels. But such moves had always to contend and negotiate with traditional development ideology of the government and other development actors, and therefore were moderated – to different extents in different countries – in their impact on the development landscape in the South.

² “Global Markets and Global Governance: The Prospects for Convergence” by John Gerard Ruggie. www.ksg.harvard.edu/cbg/CSRI/publications/ruggie_global_markets_and_global_governance.pdf

Neo-Liberalism Meets Information Society (IS)

Towards the late nineties, it was obvious that the new ICTs had a bigger role and impact than even its most prophetic admirers had predicted. The world probably stood at the turn of an epoch vis-à-vis social organisation of human societies and neo-liberalists became active on the presented opportunity. There were some elements here, in what was being called as the emergence of an information society (IS), which already gelled well with fundamentals of neo-liberalism, and other suitable ones could be added to this new concept, since the theoretical terrain of this new kind of a society was not fully formed. There was a great opportunity to construct a brand new social paradigm which was unsullied by 'illogical ideologies' with which neo-liberalism had repeatedly to contend with.

A good thing, from the neo-liberal point of view, was that the IS concept built on the prior ones of 'new economy' and 'knowledge economy' with only minor changes. The primacy of the conceptions of economics over the social and the political was clear here. So the IS was able to be presented as a kind of a-historical, ideology-free and apolitical system, where the laws of market reigned supreme and which presented such a perfect system of managing economic enterprise that the need for political and social institutions that hitherto provided the framework for such activity, as well as the back-up against its undesirable side-effects, were left with a minimal role. Social policy based interventions were mainly for the purpose of managing market imperfections but the new ICT-based market system tended towards such perfection that these interventions were needed much less than ever. In fact such interventions could come in the way of the perfect operation of the ICT-based market systems, and hence were abjectly undesirable. Globally, the markets, using IT, will seek out the 'most competitive' resources across borders, and thus be friendly to poorer nations; and within countries. There were new possibilities for markets to reach even remote rural areas piggybacking on an ICT infrastructure.

The stage was apparently set for the ultimate triumph of the market, and along with it of neo-liberal ideology. There were congruities between this ideology and the new technologies that promised hyper-efficient systems. While markets are supposed to be the social mechanism for connecting value to value, neo-liberal ideology raises such a paradigm to the level of social and political theory. Neo-liberal ideology works on the principle of encouraging the most valuable and excluding laggards; and the new ICTs provided the infrastructure that enables such networking of the valuable and exclusion of those less so. Castells considers power of the new ICTs basic to the reach and strength of globalisation today:

The flexibility of this global economy allows the overall system to link up everything that is valuable according to dominant values and interests, while disconnecting everything that is not valuable, or becomes devalued. It is this simultaneous capacity to include and exclude people, territories and activities that characterises the new global economy as constituted in the information age.³

According to Castells 'networks' are the chief organisational form of the information age:

Networks are the appropriate organization for the relentless adaptation and the extreme flexibility that is required by an interconnected, global economy - by changing economic

³ "Information Technology, Globalization and Social Development". Manuel Castells. UNRISD publication, 1999.

demand and constantly innovating technology, and by the multiple strategies (individual, cultural, political) deployed by various actors, which create an unstable social system at an increasing level of complexity.⁴

Extending the above analysis,⁵ it will not be inappropriate to consider the entire globalised economy as one network, or 'the network'. The basic construct and rules of this new organisational form are similar to that of the institution of the market. A network also survives on exchange of value, and is unaccountable to any structural entity that it connects, other than the principle of providing greatest 'economic value' to its constituents. However, 'networks' do not in any way suggest equality of its constituents. There are hierarchies and inequalities in networks, and while organisational hierarchies also tend to structure unequal levels, inequalities keep increasing in networks, where inherently, greater connectedness brings increasingly more power, and exclusion keeps getting worse. These issues will be discussed later in this paper.

For the neo-liberals, the globalised economy or 'the network' – a new name for a supposedly perfect market (networked economy seems to be emerging as the preferred term over earlier concepts of new economy and knowledge economy) – was now incontestably supreme, with the information intensity and factor mobility provided by ICTs having greatly mitigated most of its possible imperfections. An important quality of such an institutionalised network is its inherent intelligence and therefore autonomy, whereby the economic no longer needed the framework of the social or the political. This was quite exciting to the proponents of neo-liberalism who had strong distrust of social and political influences on economic activity.

And it was increasingly a network that was global in its reach, to those valuable to it, but also global in its exclusion. Its exclusionary power also reached where none suspected it could. For example, many of the US middle class who took pride in the greatness of their country and 'knew' that they would always have good jobs found themselves displaced by the 'more valuable' ones from developing countries like India. Increasingly, even for the richer countries there were few public policy choices in face of the network juggernaut. To be valuable to the network alone counted. And weak-hearted welfare policies could compromise competitiveness. If the governments were concerned for their citizens then political and social policy needed to focus on improving the competitiveness of the national economy as a whole, and the network-worthiness of each citizen.

The terms information economy or knowledge economy have been mainstream in the business world since the nineties, and the un-interrupted high economic productivity in US during the late nineties was attributed to the new ICTs and their impact on business. The public policy angle that the US saw in these developments was to advocate a Global Information Infrastructure⁶ – the technology grid of 'the networked economy'. Europeans, typically the conservatives, but not upto resisting the onslaught of 'the network', popularised the term 'information society', which still defined itself mostly in economic terms. The social policies generally bring up the rear in most IS documents of the European Union (EU), and are intended to clean up the more extreme exclusions that the network may inflict. Such efforts have generally been clubbed under 'e-inclusion' strategies.⁷

⁴ Ibid.

⁵ Castells' analysis does not categorise global economy itself as 'a network', and only calls it the 'dominant system' with its efficient mechanisms of inclusion and exclusion. However, it is logical to consider the global economy, also called the networked economy, itself, in its present IT-enabled connectedness and flexibility, as 'the network of networks'.

⁶ www.eff.org/Infrastructure/Govt_docs/gii_co-op_iitf.agenda

⁷ See EU's website on its IS approach. http://europa.eu.int/information_society/index_en.htm

We have seen above how the efficiency of new information and communication platforms – signified in ‘the network’ – was captured in ideological terms as heralding the triumph of autonomous self-interest based competitive interactions, ie the market, and the social-political paraphernalia of the neo-liberal ideology. A central role of the private sector in the IS was also advocated on the strength of another important argument – that the new technology breakthroughs had been made possible singularly because of private sector innovation. (This is certainly not true, because public institutions, ranging from defense labs to public universities, and community networks contributed a good part of the innovation that is behind the ICT revolution). And hence, as technologies became more and more important in our social life, the private sector as the ‘natural leader’ of the technology field claimed increased role in all social and public affairs. It began to play a major role, directly and surreptitiously, in areas which hitherto were clearly public policy matters, and were managed by public institutions. Setting inter-operability technology standards,⁸ and seeking rents through occupying such a position, is only one such area of usurpation by the private sector. The private sector could even begin to determine how government-citizen interactions should be managed through technology interfaces, and it could dictate whether public service connectivity could or not be provided. Struggling with technology ignorance, and mostly inadequate to rapid organisational innovations that were required to optimise the power of the new technologies, the public sector seemed to retreat rapidly against the onslaught. Neo-liberal thinkers inside and outside governments were of course ready with socio-political theories to justify such abdication as the duty of the public authorities.

So the great force and potential of technological breakthroughs which constitute the new ICTs were appropriated dexterously by the neo-liberal ideology to its advantage. The other contesting ideologies – of welfare state, values of equity and social justice, and public sector led development – were left nonplussed under an offensive they had not been prepared to contend with. However, as we will discuss in a later section of this paper, such a connection between neo-liberal thought and social impact of these technology breakthroughs, which constitute common human heritage, was hardly as obvious as is made out. In fact, the converse could be truer, and the implications of new roles of the public and the communal in the new social paradigm may even be stronger.

⁸ Some inter-operability standards get set through market domination in certain software areas which have crucial ‘platform’ features like desktop operating software and MS office suite of Microsoft, and through anti-competition practices for some other software that need to plug into these platforms. Some standards are set by industry consortia in very non-transparent manner, while others may be set by more institutional structures like the ICANN, which undertakes the important function regarding governance of the Internet, and has disproportionately large private sector domination.

Development in the Information Age

Neo-liberalism does have a great negative impact on the disadvantaged section in the North; however its devastation in the South is certainly greater. It is interesting to trace the impact of the new ICTs on the development scene in the South, and the ideological underpinnings of a new sector in development known as 'ICT for Development' (ICTD), that has emerged in the last decade. Traditional development activity – whether in area of basic infrastructure development, agriculture extension, education, health, women's empowerment or rural credit – in most developing countries has been state-led, even if with vastly varying effectiveness and impact. Non-state actors like NGOs, CBOs and some private partners acted mostly within a wider public policy sphere which directed overall development effort. As the new ICT phenomenon exploded on the world's horizon this traditional development sector⁹ was furthest from considering any role of these new technologies in their work. For them these technologies were mostly about affluence and the corporate sector. And their own arena was exactly the opposite of these.

So the ICTD thinking largely did not arise from the traditional development sector in developing countries.¹⁰ It came from the North, wrapped in a neo-liberal cloak. Among the early prophetic statements about the new technologies, many concerned their wondrous possibilities for abolishing poverty and addressing the under-development of the South. These statements came from the new ICT fascinated technocrats as well as from the more informed social and political thinkers. In 2000 when G-8 countries developed a vision of the emerging information society – the Okinawa Charter on Global Information Society – they proposed the priorities for developing countries as well. And to chart the way forward for these countries they established a Digital Opportunities Task Force, more commonly known as the DOT Force. DOT Force had a strong private sector representation, while some North-based NGOs and some governments from developing countries were also included. The agenda certainly appeared to be driven by the North, and the outcome documents stuck to a dominant private sector led and economy centered view of IS. The DOT Force report¹¹ recommended that national e-strategies “should commit, in particular, to the establishment of an enabling, pro-competitive regulatory and policy framework as well as the associated institutional policy-making and regulatory capacity, including self-regulatory mechanisms....”

The report also observed that,

.....access to, and effective use of the tools and networks of the new global economy, and the innovations they make possible, are critical to poverty reduction, increased social inclusion and the creation of a better life for all.

Three members of the DOT Force – the consulting firm Accenture , US-based non-profit organisation Markle Foundation and the United Nations Development Programme (UNDP) – separately wrote another,

⁹ “Traditional development sector” is a tentative term used to distinguish it from the ICTD sector.

¹⁰ This analysis while generally true of the developing world, draws mainly from the South Asian experience. There may be some exceptions to this generalisation, for instance, the Brazilian government took up an Information Society program in Brazil in 2000.

¹¹ “Digital Opportunities for All : Meeting the Challenge” www.itu.int/wsis/docs/background/general/reports/26092001_dotforce.htm

more elaborate report, the Digital Opportunities Initiative (DOI) report,¹² which presented an ICTD framework similar to that found in the DOT Force report. It called for a five-fold approach on ICTD (also advocated by DOT force report) – infrastructure, policy, enterprise, human capacity and content and applications. To these basic elements was added a sixth one of a strategic compact between various stakeholders, which was supposed to provide the overall framework for working on these crucial elements of ICTD. The DOI report also advocated that,

Initiatives that are planned and managed using a business model are likely to be more sustainable and have a more substantial impact.

The report thus introduced the language of business models in the field of development. This was in sync with, and even a conceptual advance over, the formulations pushed by World Bank and some other donors for user fees and private sector partnerships in core development activities in the South, in a manner that was often insensitive to the real context of the poor and disadvantaged.

These policy reports by DOT Force and DOI were followed with aggressive measures on the ground. An 'International eDevelopment Resource Network' was set up as a forum for policy advice to developing countries on various issues of ICTs and ICTD. Such policy advice mostly veered to neo-liberal visions of liberalisation, privatisation and global economic integration, with some follow-through policies addressing exclusion and poverty.

UNDP and Markle Foundation continued an association in a Global Digital Opportunity Initiative that provided policy support for developing countries in ICTD area. UNDP offices in developing countries adopted the DOI framework as their ICTD policy. Many other multi-lateral and bilateral donors also adopted these DOT Force and DOI frameworks, and pushed them in their policy and programme interventions in developing countries. UN ICT Task Force came as the successor to these initiatives, but it was also dominated by private sector participation, and its reports were mostly done by North-based experts and had little contribution from traditional development actors in the South.

The ICTD policy and projects that came out under the influence of these frameworks promoted private sector leadership in development and governance reforms, and at the community level prioritised revenue models from ICTD interventions over sustained developmental outcomes, for which systemic social investments into new structures and institutions for development delivery are required.

This was the time when, at the UN, neo-liberal ideology was making significant headway in capturing development agenda. In a swing to the other extreme, from World Bank and IMF style structural adjustment policies of the nineties for development and poverty alleviation, development was now suddenly sought to be cast in terms of few measurable goals, the Millenium Development Goals (MDGs) – with little attention to the more structural causes of under-development. MDGs served well to highlight stark realities of the world and the most urgent tasks facing humanity, pulling back from a macro-economic obsession aimed at successful global integration of national economies. But the MDG agenda was incorporated into UN development discourse in a manner that appeared to cast statement of specific objectives and goals in the shape of development strategy, which was an effective way to kill strategy.

¹² Apart from the North centred nature of the authorship of the report, almost all the experts whose contributions are acknowledged in the report are from the North as well.

Conforming to the mould, the DOT Force, DOI and UN ICT Task Force type of initiatives attempted, in a contorted and highly artificial manner, to invent some direct connections between ICTs and each of the MDGs. Everyone wanted to be on the bandwagon, without being ready to bell the cat. ICTD was projected in form of quick-fix solutions for specific development problems. But there seemed to be a hesitation to recognise that the ICTD required a more systemic approach. And apart from the implications of the central role of the public sector in planning and leading such approach, it requires some political choices and trade-offs to be made by the global, national and local communities. And that these choices for each community were situated in specific social and historical contexts.

A recent UN ICT Task Force report observes:¹³

Rather than taking the approach to systematically “problematize” ICT in development policy and programs, there has been a tendency among practitioners to depict ICT almost as a “black-box” solution, and a solution situated within a “win-win” world of common interests between developed and developing countries.

A piece-meal solution based approach relying on bottom-up initiatives built on win-win participation of all stakeholders without looking at the systemic implications and requirements for IS possibilities and transformations, and the hard public policy choices implied, serves to distract developing countries from the real possibilities and the real task in shaping a development-oriented IS.

So while these dominant ICTD frameworks freely speak of opportunities in terms of easier to access information and knowledge for all, and of infrastructural requirements that will provide such equitable access, they fail to highlight that the political choices that need to be made for these to happen lie in arenas that are much contested. It is well for G-8 to endorse the DOT force report which, among other things asserts that,

The members of the DOT Force are convinced that the basic right of access to knowledge and information is a prerequisite for modern human development.

However, these countries were found to oppose Intellectual Property Rights (IPR) discussion at the World Summit on the Information Society (WSIS) on the ground that this is an issue for the World Intellectual Property Organisation (WIPO), and at WIPO to stonewall effort by developing countries to bring in a ‘treaty for access to knowledge’ on the argument that such a thing does not fall under the mandate of WIPO.

Similarly, while all ICTD documents recognise that universal access to connectivity infrastructure is the very foundation of ICT-enabled development processes, it needs to be seen what effect does bringing telecom services under World Trade Organisation (WTO) regime have on curtailing policy independence of developing countries¹⁴ in taking large-scale public efforts in setting up telecom infrastructure that meets the needs of all people and stimulates structural and institutional changes towards a development-oriented IS.

¹³ “Innovation and Investment: Information and Communication Technologies and the Millennium Development Goals” – Report Prepared for the United Nations ICT Task Force in Support of the Science, Technology & Innovation Task Force of the United Nations Millennium Project. www.unmillenniumproject.org/documents/Innovation%20and%20Investment%20Master.pdf

¹⁴ See “ICTs and Social Development: The Global Policy Context” by Cees Hamelink <http://www.acca21.org.cn/info21/link/bg/info/4/icts.htm#TopOfPage>

WSIS - A Political Litmus Test for ICTD

The WSIS itself arose from a very apolitical context. Riding the obsession with a 'new economy', grand techno-centric visions of new development opportunities were proposed for developing countries in the late nineties. The International Telecommunications Union (ITU), which was being sidelined from its long standing role as global telecom regulator due to the rapid development of ICTs, and the quick neo-liberal institutional responses to it like the WTO telecommunications agreement, found the ICT-development connection a good way of seeking resurrection. It proposed holding a WSIS during its 1998 Plenipotentiary Conference in Minneapolis. Meanwhile, United Nations Educational, Scientific and Cultural Organisation (UNESCO), which was still recovering from its NWICO¹⁵ bruises also appeared to be interested in exploring the social dimensions of the new ICTs. UNESCO also was interested in holding a WSIS kind of event, and apparently the possibility of holding such an event jointly with ITU was also mooted¹⁶. The reasons why this did not happen eventually are not clearly known, but it could be presumed that the intense political nature of NWICO discussions was too fresh in the minds of the countries of the North, chiefly the US, for such a proposal to pass muster. The ITU proposal was more neutral, and its technology-centered vision of IS was certainly less threatening. And to the extent that the new ICTs were already seen by the dominant interests as a key vehicle to reach out, and strengthen, their economic, cultural, social and political influence, such a global meet could even be useful to neo-liberal agenda. Against this backdrop, the UN mandated the ITU to hold WSIS in two phases – 2003 in Geneva and 2005 in Tunis – and set for WSIS the task of exploring the role of new ICTs in meeting the MDGs, and,

...to marshal the global consensus and commitment required to promote the urgently needed access of all countries to information, knowledge and communication technologies for development so as to reap the full benefits of the information and communication (*UN Resolution A/RES/56/183, December 2001*).

It was apparent from the very beginning that and most actors that came to WSIS approached it from entirely different perspectives, and WSIS remained a confused arena. The neo-liberal forces apparently were confident that the ambiguities among those who could be opposed to their agenda – as well as the sheer power of the new ICT phenomenon and the impetus it had given to economic globalisation – would cause the further strengthening of their conceptions of the IS at the WSIS. However, as will be seen from an analysis of WSIS outcomes later in this section, neo-liberal forces were in fact on the retreat in the last lap of WSIS when the challenge to their untenable logic and arguments become quite strong. The more democratic spaces of the WSIS allowed a diversity of voices to rise, and for some coalitions of common interests to build, that could resist a neo-liberal domination of the IS agenda, if not completely block it.

The WSIS process is in fact a good indicator of the legitimacy, or rather the lack of it, on which the dominant vision of the IS projected hitherto as a 'natural', win-win, and more or less 'consensual' model,

¹⁵ Some politically very divisive debates on the New World Information and Communication Order that took place in UNESCO in 1970s . US walked of the UNESCO on this issue . See "Who Speaks for the Governed, WSIS, civil Society and limits of multistakeholderism. Economic and Political Weekly, Vol XLI No 3, 2006.

¹⁶ See 'Will the Real WSIS Please Stand-up?' by Sean O Siochru for a background of WSIS. <http://www.crisinfo.org/content/view/full/246/>

and packaged and sold with huge resource investments, stood. And while this dominant conception of the IS did condescend a little, through its ICTD offshoot, to take account of some development needs of developing countries, it was quite impatient with the political processes that could contest its IS vision on more equal grounds of a UN Summit.

WSIS can be seen from two very different vantages – one, as a process that was unable to confront the neo-liberalisation of the development agenda within the UN, and could even be blamed for taking such a trend further; and two, as the possible beginning of a more legitimate discourse on IS that brought to the table, issues of human rights in the IS on the one hand, and of the central role of public policy in shaping the IS on the other. These two sets of issues were simply not listed on the agenda of the pre-WSIS IS discourse discussed earlier.

In assessing WSIS for its positive side, one needs to see it as a start of a process more than for its substantive outcomes. Its value requires to be measured in the legitimisation of a wider and more democratic global engagement with IS that it made possible. This opens up spaces for IS discourse to be appropriated by those who represent the interests of the disadvantaged, especially the governments of the South and civil society actors.

The Geneva phase of WSIS had two advantages over the later Tunis phase of WSIS. It took place when the initial excitement about ICTs was still unsullied, and the contours of the 'new world' still quite hazy and there was ample room for a happy collective visions of a new society. This phase concerned itself with higher level principles, and the more general issues of the IS, leaving 'real' decisions for the second phase. The Geneva phase was characterised by civil society led campaigns for shaping a rights-based agenda for the information society. While the success of these campaigns was mixed, the contours of the information society discourse were certainly changed forever – in becoming more plural from the dominant apolitical conceptions of a market-led IS.

So strongly political are the real issues of the IS debate that, predictably, the real decisions did not get made even in the second phase in Tunis. However, the discussions and negotiations around these 'hard issues' exposed the supposed consensual view of an IS, and the mainstream ICTD framework. The three issues that dominated the Tunis phase were of financing ICTD, implementation and follow-up of WSIS and Internet governance. A quick round-up of the WSIS discussions and outcomes in these areas gives a good indication of the political economy issues involved in the IS terrain.

Financing ICTD: In accepting as everyone ostensibly did – and the Geneva documents noted with great rhetoric¹⁷ – that the new ICTs represented an unprecedented historical opportunity to transform many aspects of our social organisation in desired directions – the moot question for the Tunis phase was how to ensure that the benefits of these technologies reached everyone. Given such high levels of perceived benefits, and noting that unlike many other human needs, for example food and energy sources, ICTs and their benefits had many un-rivalrous¹⁸ elements, it could have been expected that public strategies for funding such a basic and convergent infrastructure would be high on global public policy agenda. However,

¹⁷ See the opening parts of the Geneva Declaration of Principles at <http://www.itu.int/wsis/docs/geneva/official/dop.html>

¹⁸ Rivalrous goods are those which when used by one decreases in availability for others. Un-rivalrous goods/services are those, like knowledge, the use of which by anyone does not deplete the common pool.

the governments of the North, and the private sector, which was very visibly and strongly present in WSIS multistakeholder spaces, certainly did not think so. Not only were they not willing at all to engage on a public goods approach to financing ICTs,¹⁹ that was advocated by many civil society actors, the governments of the North were not even willing to accept that there was any reason at all to consider the need and justification for ICT financing at a level different from normal development financing.

As an information and communication infrastructure that represents an entirely new basis for organising a whole range of social and economic processes, there was a sound logic to see the new ICTs as an essential public infrastructure. The fact however is that the same infrastructure that is seen by some as a potentially 'equalising field' for faster development with greater equity among countries and among sections of society, is also seen by other interests as the crucial economic infrastructure around which a new set of comparative advantages need to be built for protecting their economic, social and political dominance. Therefore, the upshot at WSIS was that the stranglehold of the dominant conceptions of IS prevailed over and prevented the question of 'whether basic connectivity and basic ICT capacities constitute a normal economic service that should be subject to market forces, or 'whether they qualify strongly to be considered public goods that are best produced by public funds and provisioned in a non-rivalrous and non-excludable manner' from being taken up in any earnestness, much less resolved. So the WSIS verdict was – 'no new provisions or channels for ICTD financing'.

Thus, in the emerging new society – an important political economy issue – the distinction between the core infrastructural elements that need to be of public nature and the super-structural turfs of competition and private sector enterprise²⁰ – was completely de-legitimised. The IS, according to dominant conceptions, was to basically be the arena of the private sector – and the role of the public sector was to provide 'enabling conditions' for private sector activities – which mostly consisted in providing a light-touch regulatory framework, and did not include basic infrastructural and similar socio-political responsibilities.

While the North and the private sector were eager for one un-divided global arena for the 'knowledge' or 'network' economy to function, they were not ready to consider the same global arena, and the same logic of network effect and network externalities that unpins globalisation, for even an elementary redistribution of resources. **So the world was to be one economy but not one society**, and not even the rudimentary one political unit. This very lopsided conception of a global information society was in keeping with neo-liberal ideology.

Some innovative ideas for re-distribution of global resources which could support ICT development in poorer regions were suggested. A Digital Solidarity Fund was proposed which was to be financed by deducting one percent from all public sector purchases of IT equipment in the North. Others suggested taxes on micro-chip sales, Internet domain registration and spectrum allocation for funding ICT expansion in developing countries. However, such global taxation proposals met with predictable responses from the governments of the North. .

Advocates of such progressive efforts tried the logic of network externalities to convince those already entrenched in positions of strength on the network to make financial contributions towards universal

¹⁹ See "Financing the Information Society in the South: A Global Public Goods Perspective by Pablo Accuosto and Niki Johnson. <http://rights.apc.org/documents/financing.pdf>

²⁰ To use Keynesian terms – the distinction between Social Overhead Capital and Directly Productive Activity.

extension of the technology network. On both, the substantive logic – that new ICTs represent a high-value convergent infrastructure that supports a great range of beneficial social activity – and on the instrumentalist logic – that those who are already on the network gain by its extension and therefore should pay for it – committing special funding strategies for ICT expansion in the South seemed justified. The lack of political and social content in the proposed global IS was starkly clear in the lack of any progress on financial commitments for this purpose.

What however did happen at WSIS was that in the course of discussions on financing, the dominant conception of IS infrastructure as primarily a private sector was strongly challenged. Most developing country delegates made it clear that they did not see the private sector being able to provide universal connectivity or affordable software and hardware to most people in their countries. There were strong appeals for public funding for such infrastructural elements of the IS. Their appeal was echoed by civil society actors who developed arguments on funding ICTD based on a public goods principle. Even if the WSIS outcomes do not reflect these impassioned arguments in any major way, the text of the outcome documents, in stressing the role of public financing of ICT infrastructure at many places, does testify to these contestations.²¹ Additionally, the debates around financing in WSIS have also served to build momentum and open up conceptual spaces outside the official processes on the issue of public goods nature of IS infrastructure.

WSIS implementation and follow-up: This component of negotiation in the Tunis phase consisted in deciding (1) who will do what, to take action for moving towards the ambitious goals laid down in the WSIS documents, especially in the Geneva Plan of Action, and (2) what processes will be put in place to secure a continued global public policy engagement on IS issues after WSIS. Clear outcomes in these areas are important for any global event of a scale of WSIS, and in this case they were even more important because the IS discourse was still in its infancy, and continued and greater global public policy engagements with IS issues was evidently required.

However, by the time discussions on implementation and follow-up came up in the later stages of the Tunis phase, governments of the North appeared to be on a kind of a retreat mode on WSIS. The financing debates had thrown them on a defensive against both Southern governments and civil society. They also had to play defensive on issues like IPR, open source software and transfer of technology. On most discussions at WSIS governments of the North (more specifically the US, EU and Australia), were finding themselves increasingly defending against what was broadly seen as progressive agenda. Most actors at WSIS were increasingly refusing to uncritically accept the dominant versions of IS, and new uncomfortable question arose by the day. Those very countries that had been so proactive in shaping the IS lexicon during the times of the DOT Force – began to now shy away from IS debates.

At the final stages of negotiation, around the third and final prepcom²², governments of the North adopted a poorly concealed strategy of sabotaging every proposal that sought to come up with credible implementation and follow-up processes. The convoluted logic they used for this purpose was easily penetrable. One could easily see that these countries were really looking for closing the WSIS process in a hurry. For example, as one of the last rounds of negotiations on implementation opened, the US raised objections to the proposed

²¹ See Willie Curie's report on debates on financing at WSIS – the role of civil society, and the useful text in the outcome documents stressing the role of public finance at <http://www.apc.org/english/news/index.shtml?x=31483>

²² Preparatory committee meetings for the Tunis summit.

heading of the chapter that was to deal with this issue which simply was 'implementation mechanism'. The US delegate argued that the word 'mechanism' suggested too much of a real process or structure, and that they were completely against any such thing. This kind of stalling of negotiations on extremely flimsy grounds indicated the increasingly vehement de-legitimisation by some countries of the very basis of WSIS. The countries of the North also used other untenable arguments to block any real progress on this issue like expressing the opinion that a summit was not competent to issue directions or even suggestions to different UN agencies to look into or take up implementation of IS issues. Such undermining of the political authority of an official UN summit was quite consistent with neo-liberal ideology.

Since it was tactless to declare that they were basically through with the WSIS, the countries of the North brought one 'un-negotiable principle' to all negotiations and lobbying meetings on the implementation/follow-up issue – that there should be no new financial implications for implementation/ follow-up activity (not only in the sense of substantive expenditure for meeting goals laid in the Geneva Plan of Action, but even for the purposes of any procedural activity like the setting up of a follow-up structure or mechanism), and also that there should be no new body or organisation for this purpose. The same governments that spent considerable resources to sell their version of IS ideas in the earlier years, and still do through arenas more 'friendly' to them, were unwilling to contribute a little to do the same thing on platforms which were more representative and political, and where their dominant conceptions could be challenged. It was clear that these governments were going to blatantly use their economic power, and control over global policy spaces, to achieve their objectives and ignore dissent.

The cynicism of the governments of the North towards real public policy engagements on IS issues was so acute that they did not even agree to the minimalist demand of many actors at WSIS for establishing an Economic and Social Commission (ECOSOC) on the IS which was already an established mode of follow-up for some UN summits. Finally, it was agreed to ask the existing ECOSOC Commission on Science and Technology for Development to take up WSIS follow up. This Commission was set up with a narrow technology focused agenda that befits its name; and to equate IS to a set of technology issues itself amounts to going back on accepting the much wider context of IS developments that Geneva Declaration of Principles lays out. And this is especially brazen in light of the fact that the EU has its own ambitious IS project, and that an IS commission or similar body is a recommended institutional arrangement for EU members. Moreover, the EU and the US have been having regular structured bi-annual consultations on IS issues for over a decade now.

In the end, the rich and powerful countries did succeed in sabotaging the possibility of any real outcomes on the issue of implementation and follow-up. However, in their refusal to engage with the real imperatives of WSIS beyond Tunis, countries of the North made their IS politics unambiguously evident. The myth of a 'consensual' win-win conception of the IS also stood debunked.

Internet governance: The issue of Internet governance (IG) had greatest visibility in the WSIS, which also served to partly eclipse other equally important issues. The reason for its importance and visibility was that this one issue represented well drawn political lines and was hence poised to be an intensely fought battleground. It represented perhaps the first IS issue on the global scene that had unmistakable "global" implications, and therefore to be legitimate, IG needed to be representative of the entire global community. The nature of issues implicated in IG were also of such 'here-and-now' quality that they could not be treated with the benign neglect that characterises global public policy response to most global issues – like global warming or nuclear stock-piling.

What was called for to govern the Internet was a credible and legitimate global political formulation, something the neo-liberals were keen to avoid at all cost. For neo-liberal interests, a truly representative governance of the Internet meant setting just the wrong precedent for the information society – nurtured carefully by them as a natural arena of private sector dominance with no political strings. As discussed earlier, the greatest victory of neo-liberal interests was in the fact that while the economy had stretched globally, the polity was unable to do so, and this incongruence had given unprecedented ‘autonomy’ to the market. Protecting this fundamental advantage was the most important consideration for these interests in the context of the discussions on IG.

However, since it is difficult to simply refuse legitimate participation to constituencies affected by the governance of the Internet, the status quoist – those who stood for keeping the IG control more or less as it stands today,²³ mostly in the hands of the US government and the private sector, used an ingenious argument. They proposed that there simply was no contestation of interests in the management of the Internet; and that since IG was completely apolitical, it needed no special governance system except simple technical level administration. And for the latter, it was obviously in the fitness of things to let those who have managed it so well till now to continue to do it. At WSIS, not only those who controlled IG at present argued for its apolitical character, but many civil society actors fearful of IG passing into hands of control-minded governments of the South preferred the present controls, even if unjustified on legitimacy terms. And since it appeared un-ethical to argue for one country’s control over an issue which has such strong global implications, many of these civil society groups also preferred to take the expedient route of arguing for the apolitical character of IG to justify status quo on IG.

Such postures – which ranged from political naiveté to deliberate deception – were in many ways, unprecedented. Under these turn of events, the task for advocates from the South who called for more representative IG was uphill. Arguing for appropriate governance structures for the Internet obviously required first and foremost, the loud and clear assertion of the political nature of IG. The arguments in this context are relatively straight-forward²⁴ but the intransigence of the US and the private sector, and in this case helped by the stand of much of civil society from the North, made the task of progress on the IG issue really difficult. WSIS negotiations over IG were ominous for the manner in which issues like governance, representation and political legitimacy were debated, and for the colonisation by neo-liberal ideology of new political arenas formed in the ferment of the IS, to which existing socio-political institutions were unable to respond adequately

The stance of the US on the IG issue was blatant; it had control over the Internet, and it was not going to let go. And to make this position a little more diplomatic, it arrogated to itself an ‘historic role’ in managing the Internet, using this argument as a valid reason for continuing with the status quo arrangement.

Unfortunately for the US and other status-quoists, the defenders of the dominant neo-liberal conception of IS at WSIS split on this issue, and the EU broke rank with the US. This split galvanised a lot of substantive negotiations on IG, and some outcomes as well. Though the essential nature of IG has not changed at present, the WSIS documents make a clear statement on both the political nature of IG, and the legitimate

²³ Read publications of the Internet Governance Project at www.internetgovernance.org, especially “Internet Governance: the State of Play” for a description of how the Internet is governed at present.

²⁴ See various publications of the Internet Governance Project on this issue

role of all countries, and other actors in its management. WSIS has set up both a process of multi-lateral and multistakeholder negotiations for further changes in IG as well as mandated a policy discussion space – to be called the Internet Governance Forum (IGF).²⁵ IGF will be a significant new age institution – an organisation that is a multistakeholder partnership dealing with some very significant and substantive global governance issues. This was a major substantive outcome from the WSIS.

For all its limitations of substantial outcomes, WSIS has certainly managed to challenge, and at least to some extent, also upstage the neo-liberal discourse and conception of IS that was being built and propagated in pre-WSIS times. At the very least, it has debunked the myth of a global consensus on IS and ICTD thinking. However, since the power of the new ICTs is real, and their social impact unmistakable, it is now necessary for progressive forces to construct alternative socio-political visions an IS, and build an IS theory rooted in the socio-political struggles of disadvantaged countries and sections of society.

²⁵ See the Tunis Agenda at www.itu.int/wsis/docs2/tunis/off/6rev1.html

The IS Context in the South

While the neo-liberal moorings of ICTD were chiefly due its Northern origins, a couple of conditions in the South provided fertile ground for the furthering of a market-led ICTD paradigm. One, the governments of the South saw ICTs chiefly as an export opportunity in areas of software, hardware and IT-enabled services. These sunrise industries countries seemed to be offering considerable new economic opportunities in countries like India, Taiwan and Philippines, and most developing countries sought to imitate these successes. However these industries mostly served the emergence of the IS in the North, and, partly, the domestic business sector. A systemic application of ICT opportunities for development priorities of the South has not been seriously considered by most Southern governments. ICTD has remained the territory of IT and telecommunication ministries in most of these countries, who view it in its limited implications for economic growth. Telecom ministries in developing countries have mostly been caught in the whirlwind of telecom expansion – chiefly telephony, especially mobile telephony, but also the Internet. The dominant paradigm of telecom expansion at present in most of these countries is private sector led. And the IT ministries are mostly engaged in developing conditions to promote the local IT industry.

So, while these ministries do address important national priorities, they have a disproportionate private sector orientation. They are preoccupied mainly with promoting IT and telecom industries and hence increasingly more comfortable with the lingua of the IT and telecom MNCs, with whom they have had to transact intensively. They also have to grapple with the fast-changing realities of these sectors. Under these circumstances, these ministries have mostly been inadequate to the task of developing a viable ICTD vision that considers all aspects of social development.

In pursuance of their primary tasks, these ministries mostly remain in a reactive mode in engaging with the needs of global and local industry, and their orientation and ecology has not at all been tuned to anchoring and implementing ICTD policies that are responsive to development priorities. The new opportunities opened by ICTs require new thinking in the development arena at structural and institutional levels. This task is better dealt with by those levels of governments that are into core developmental activity. Meanwhile, the dominant ICTD models, promoted by North-based donor agencies have found easy resonance with IT and telecom ministries and their growing private-sector orientations. This has served the ground for establishing neo-liberal ICTD formulations in governmental echelons in the South.

The second condition that has encouraged the adoption of the neo-liberal ICTD paradigm, and linked to the first one above, is that the rate of technology change in these last few years has been too much for the normally conservative government officials to grasp. In these times of rapid technology changes, technology companies have assumed disproportionate power and have become the de facto advisors on technology policy and application in development and governance activity. ICTD and e-governance policy and practice are mostly discussed and decided in symposia and conferences dominated by big private sector technology companies. This factor, as also discussed in an earlier section of this paper, established private sector leadership, and thereby the neo-liberal basis, of ICTD and the emerging IS, even more firmly in the countries of South as well.

The third condition that provided good ground for establishment of neo-liberal ICTD frameworks in the South has been the attitude of traditional development actors, especially those from civil society, to the IS phenomenon. The emergence of ICTs was also the time when the development sector was most involved

in fighting the negative effects of economic globalisation and neo-liberal policies. Most development actors responded to the IS discourse in manner that saw the IS phenomenon only in its economic aspect of fueling globalisation, and therefore expansion of ICTs was often considered a 'natural enemy'. The relationship between the new ICTs and globalisation is indeed of a strong mutual enhancement. So while the views and the fears of these advocates were justified, they did not account for the power of the IS phenomenon. ICTs are available to be used also in aid of development priorities as they have been used by neo-liberal forces for furthering their interests. The refusal to engage with ICT possibilities and IS changes, only gives strength to the dominant forces, and also leads to missing strong opportunities for deploying new technologies towards pressing development objectives. This non-engagement of traditional development actors²⁶ with the ICT and IS phenomenon has led to the growth of a new class of ICTD NGOs that often have no development background and have ideological persuasions often quite at variance with traditional development thought and practice. Being more inclined to 'pragmatism' rather than political, they may not find anything amiss in the dominant neo-liberal ICTD models.

²⁶ As noted earlier, this generalisations draws from ICTD experience in South Asia. This generalisation may or may not hold as strongly for some other parts of the developing world. For example, the situation in Latin America is somewhat different.

The Tide May Be Turning on ICTD

Times are however changing, and the short span of 5-7 years across which these changes have been taking place testifies to the epochal nature of the present era. As discussed earlier, at the global level, the early formulations of ICTD and IS offered by the North have been challenged strongly by the South, though the above described conditions in the South that also informed governmental and civil society participation in the WSIS did limit the scale and scope of the challenge mounted by the South. Most delegates from the South at WSIS were from IT and telecom ministries; private sector players remained the closest cohorts of government delegations; and much of the civil society from the South remained quite apolitical and was more interested in show-casing ICTD projects, than contesting positions during negotiations. However, conditions have been changing within the South on all the factors discussed in the last section, promising possibilities of a new development oriented vision of ICTD and IS.

Many more non-IT and telecom ministry actors within governments have understood the new technology opportunities, and are now becoming active in using them in their developmental work. These new ICTD actors come from both development ministries at central government²⁷ levels, and, increasingly also, from state and local government levels. These development actors bring a traditional development orientation to the use of ICTs for development, and their whole approach is often quite different from that adopted by ICTD models propagated by IT ministries. They have greater understanding of the implications of revenue models forced too early upon ICTD projects; when they work with private partners, the purpose is not to maximise the latter's business opportunities but to extract the greatest value from the partnership; they have lesser patience with regulatory controls that inhibit local connectivity solutions and even try to find ways around the regulations; they are more often found to espouse open source both for lower long term costs as well due to an ideological orientation towards non-commercial approaches; and they also are more likely to be friendly towards free-content practices rather than being IPR-minded.

As for the leadership of the technocrat and the private technology companies in all aspects of ICT application, it has been greatly eroded by an increasing familiarisation of many development actors with new technologies. This loss of agenda determining power of the technology companies has also been triggered by clear failure in many places of first generation IT applications in development and governance which were vendor-driven. Many actors now understand the basic principles and paradigms behind these new technologies and their applications, and recognise that the role of the technologists and the technology vendor is to provide support as per requirements that need to be developed by users with some understanding of the basic principles and paradigms of technology.

Non-governmental development actors are also now more familiar with the new technologies and more convinced of their power to further development agenda. They are now increasingly looking to the application of these technologies in their areas of work, even if still often overwhelmed and perplexed by dominant paradigms of ICTD that they see around them. At levels of policy advocacy too, they see the need to challenge dominant paradigms of technology and its socio-political context – at global, national as well as local levels – and develop new paradigms that are articulated in the context and priorities of development in the South.²⁸

²⁷ The terminology of government tiers used here is the common one in South Asia.

²⁸ Many civil society policy advocates in the area of global trade regimes and IPR have grasped the connections to IS debates, and have begun engaging with them.

Constructing a New Theory of an IS that Works for the South

Both from an examination of the IS discourse at the global level, and from changes on the ground in the South, it appears that time is ripe for development actors to challenge and replace dominant ICTD and IS models with new IS theories and concepts that are development oriented and based on people's social, political and economic rights. An integrated global market is quite the wrong place to begin developing an IS framework. Social, cultural and political imperatives need instead to take precedence over, and determine the framework for, the economic.

It is however important to realise that in refuting neo-liberal models of ICTD and IS, one cannot simply go back to where things were before the new technologies emerged. The power of ICTs and their far-reaching impact on our social life is real and has to be contended with. In fact, they need to be exploited for progressive social change, and it is necessary to understand the structural and institutional changes needed for this purpose and to invest in them. We must first comprehend the nature and the far-reaching significance of the changes taking place all around us. The nature of market and business interactions have changed; social communication is greatly impacted; organisational structures and activities have changed dramatically; fundamental changes have occurred in all domains – from education, entertainment, to government and banking. The new context has to be appropriated in theory and practice for building a new development framework in the IS.

Social and political theorists of the IS, especially those concerned with actively exploring and engaging with the possibilities of development and positive social change, need to stay in the mainstream; to theorise and act for the purpose of and with the possibility of change. In these transitional times, the politics of opposition is not enough. There is a very important role for the politics of construction – to propose alternatives and invest in them. In the emerging IS, progressive actors who may have been marginalised and excluded hitherto from arenas of influence in guiding change have much greater collaborative opportunities. Susan George puts it very effectively in her 'A short history of neo-liberalism'²⁹

Look at it this way. We have the numbers on our side, because there are far more losers than winners in the neo-liberal game. We have the ideas, whereas theirs are finally coming into question because of repeated crisis. What we lack, so far, is the organisation and the unity which in this age of advanced technology we can overcome. The threat is clearly transnational so the response must also be transnational.

It is first of all necessary that the dominant ICTD and IS theory and its concepts are problematised and deconstructed. Such an exercise serves as a good point of departure for developing a new ICTD theory, or a theory of IS for the South. The concept of an 'IS for the South' captures systemic issues of institutional and structural changes that are required to capitalise the development opportunities presented today better than the term ICTD. The latter also has some historical baggage of established concepts that need to be unpacked. Concepts may be harmless on the surface, and even provisionally useful, but they are the tools that extend ideological domination and help establish socio-political frameworks that push specific social agenda. For example, celebrated concepts of ICTD, like enabling environment, capacity building and

²⁹ "A Short history of neo-liberalism: twenty years of elite economics and emerging opportunities for structural change", www.globalexchange.org/campaigns/econ101/neoliberalism.html

multistakeholderism, despite their seemingly utilitarian and pro-development content have come to signify deep ideological meanings. In their established usage they contribute to constructing a neo-liberal socio-political framework of ICTD that cannot be seen as beneficial for the disadvantaged. Such a deconstruction of some illustrative concepts of ICTD is attempted below.

Enabling environment: An appropriate enabling environment is undoubtedly necessary for the all-round effort needed in order to seize the ICTD opportunity. However, what really this term means in ICTD – what actor it is intended for and what is expected from that actor in terms of enabling behaviour – are central issues that need to be examined. In ICTD discourse today, this term is generally used to determine, and proscribe, the role of the public sector in ICTD. The manner in which the term ‘enabling environment’ has come to be understood is described by a UN ICT Task Force document³⁰ as follows:

Traditionally, an “enabling environment” is characterized by competition, open markets, predictability, transparency, enforcement and legal recourse. These attributes are essential but not always sufficient. Additional elements are needed to promote ICT for development, including: increasing attractiveness to business to stimulate investment, supporting change management funds/universal funds to break initial barriers, building human and institutional capacity, and promoting social responsibility on the part of the private sector.

The prescription is for the public sector to stay at arm’s length, other than of course to create the most perfect conditions for the private sector to shape the IS. The possibility that the public sector could have a far greater and a much more basic role in developing the IS infrastructure and leading IS changes is not a part of the concept of ‘enabling environment’ as the term is dominantly used. Obviously, such a conception has a strong bias in favour of market ideologies.

The WSIS documents also carry this term in the text that describes the role of governments in implementing the WSIS outcomes.

At the national level, based on the WSIS outcomes, we encourage governments, with the participation of all stakeholders and ***bearing in mind the importance of an enabling environment (emphasis added)***, to set up a national *implementation* mechanism (Tunis Agenda, paragraph 100).

What is of interest is to note that the term ‘enabling environment’ was introduced in the text by a delegate from the North at the last stages, in midst of intense negotiations on ‘substantive’ implementation issues, and was barely noticed by the actors from the South. Similar language was also proposed and introduced at the same time in the sessions on global level implementation responsibilities, effectively distinguishing the role of the public sector from the private and delimiting what governments can and must do. This small addition, which went unchallenged, has far-reaching implications for the institutional basis of the emerging IS. The inability of delegates from the South to recognise and resist this strategy illustrates strongly how development agenda can get compromised due to the lack of theoretical capacities with respect to IS issues among South-based development actors

³⁰ Global Forum on Promoting Enabling environment for Digital Development (Berlin, 19-20 November 2004) - Informal summary - www.unicttaskforce.org

Capacity building: Capacity building, another important concept in ICTD, has also taken specific political economy hues. Within the dominant IS paradigm, institutional capacity building implies training regulators for a pro-market telecom policy, while individual capacity building is seen as training 'knowledge workers' to fit into global ICT value chains. There are much greater, and often more crucial, capacity requirements both at institutional/ organisational and individual/community levels for shaping the IS opportunity for development, but these are greatly under-theorised, and mostly ignored.

Richard Stallman, the founder of Free Software Movement, is very critical of such attempts at 'capacity building' which basically are means for downloading dominant neo-liberal concepts on the South. In relation to the capacity building activity of WIPO termed as 'technical assistance', he observes:

WIPO's "technical assistance" is structured to bribe patent officials lawfully, with foreign resort junkets, and train them to repeat megacorporate propaganda.³¹

During the last stages of IG negotiations in the Tunis phase of WSIS, capacity-building was proposed as an olive branch by Canada to placate strong demands from the South for introducing development agenda into discussions on IG. The US was on the back-foot resisting demands for opening up IG policy spaces to other governments and non-government actors. Meanwhile, neo-liberal forces were also keen to avoid putting developmental agenda into IG. The demand for an Internet Governance Forum (IGF) to address public policy debates on IG issues was emerging as one of the minimum demands. At this point, the Canadian delegation came up with a new proposal that received good support from many actors, including from among North-based civil society. Canada proposed the following: (1) that the text relating to the IGF in the WSIS outcome documents under negotiation be moved to a the section which dealt with issues of 'promoting development' and thus it sought to proscribe the kind of policy issues that could be discussed in the Forum, and (2) lest anyone began to take an expansive view of 'development' which would again have brought to the table some important political economy issues, 'capacity building' was sought to be defined as the main function of the IGF. So the need for public policy spaces, which was the real issue of contention in these discussions on an IGF, was sought to be reduced to seeking avenues for teaching those actors who were not suitably capacitated about what constituted policy in the IG area.

This proposal in the IG negotiations was strongly opposed by actors from the South; "capacity building" could not be an option to a rightful participation on public policy issues that impacted them.

Multi-stakeholder partnerships (MSPs): One term that really came of age first in the ICTD discourse and then at WSIS, is 'multistakeholderism'. MSP represents cross-sectoral partnerships, and can potentially connote a useful strategy for employing energies and competencies of different actors synergistically for ICTD. However, the actual content of the term has acquired a strong private sector bias, and is mostly used to delegitimise political contestations and political systems.

At the local and implementation level, the MSP approach, as suggested above signifies a new form of cooperation between public, private and civil society actors in exploiting the ICTD opportunity in a manner that is a win-win situation for all partners. While such new opportunities for convergent action are certainly present and needed to be maximised, the manner in which the MSP concept has been used for de-

³¹ Posting dated 26/7/2005 on WSIS – CS plenary mailing list. <http://mailman.greenet.org.uk/mailman/listinfo/plenary>

politicising development is significant to note. A good illustration of the reductionism of this notion to a TINA (there is no alternative – a Thatcher-ite³² term used to push neo-liberalism) type of doctrine is in the following quotation from an issue paper on MSPs by Global Knowledge Partnership,³³ – the ‘leading international multi-stakeholder network’ in the ICTD arena,

.....in developing countries, an increasing proportion of development aid is being delivered through CSOs. Furthermore, through the help of information technology, civil society organisations are becoming increasingly vocal and organised in pursuit of their advocacy goals. ... With this new political force comes a choice. Civil society groups can either play an advocacy or campaigning role. Or they can become part of the solution, drawing on their local knowledge, capacity for innovation and trust of the general public to contribute in partnership to sustainable solutions.

In a review³⁴ of this issue paper, Sean Ó Siochru comments on the above remark and similar others in the paper and builds a strong critique of the dominant conception of MSPs,

This amazing aside, not even central to the argument, directly implies that advocacy and campaign groups in civil society are part of the problem – if they want to be part of the solution, they should join partnerships. A la George W. Bush, in this version of MSPs you have a choice: you are with us or against us. You can be part of the problem, or join us and be part of the solution Thus from the perspective of civil society, or at least that large part that believes there are deep-seated structural problems needing urgent attention, the application of MSPs as proposed here can be considered only where there is little dispute over the basic power relations and structural factors in the issue. Unfortunately, this is rather restrictive when the global circumstances are taken into account.

At global levels, the MSP construction chiefly represents participation of private sector and civil society in public policy spaces. While WSIS saw a greater official role for the private sector and civil society than any other global governance forum, there are two significant aspects of this issue worth taking note of. One, that the presence of civil society seemed often to provide a cover for and legitimise a greater private sector role in the WSIS, and in the IS discourse generally. Two, the accent on multistakeholderism, and promoting new alternative global platforms for IS policy discussion, was often used to further undermine legitimate global governance bodies like those of the UN, and thus played to the designs of the US-led governments of the North. We have seen earlier how the multistakeholder spaces of the DOT Force kind of initiatives were employed. The need to promote multistakeholderism was also quoted during WSIS discussions by Northern governments for resisting giving lead roles to different UN agencies in implementing various action lines of Geneva Plan of Action. Similarly, the concept was also used to argue for status quo in IG, against efforts for more legitimate political governance of IG.

³² Referring to the former Prime Minister of UK, Margaret Thatcher, who was one of the main neo-liberal proponents in the eighties.

³³ www.globalknowledge.org/gkps_portal/index.cfm?menuid=178&parentid=179

³⁴ Ibid.

Civil society from the South present at WSIS mostly comprised the new class of ICTD NGOs who were less involved in the debates and issues arising through the political negotiations and more interested in seeking ICTD solutions 'in cooperation with all actors'. Such posturing has meant that multistakeholderism often comes at the expense of political contestations, and to the detriment of purposeful advocacy for more structural changes. The need for such critical engagement cannot be overemphasised in the case of an emerging IS.

Political Economy of a People-Centred and Development-Oriented IS

The WSIS commits the world community to an inclusive, people-centred and development-oriented IS.³⁵ The architecture of a people-centred and development-oriented IS calls for a new progressive IS theory that builds upon the various insights emerging from the arenas of action, struggle, and contestation closer to the ground in the IS that is taking shape around us. Much of these, are still distant from the locations of debate, discussion and policy-making, including the WSIS.

An economy that uses the power of the new ICTs to produce and distribute goods and services more efficiently will be an essential feature of such an IS. As discussed in the first part of this paper, the possibilities of connected-ness and information-richness that constitutes the concept of a networked society has been theorised as a perfect platform for managing self-interest based competitive interactions between actors so as to maximise output. This, it is apparently propounded, can be achieved over the super-efficient ICT platforms, without any great need for socio-political correctives that are needed to address imperfect market systems. Such a colonising of the IS phenomenon by neo-liberal ideology, as we discussed, is highly opportunistic. There is nothing in the new ICTs and their attendant possibilities to equate IS essentially with markets and neo-liberalism. New ICT-based systems basically allow much higher levels of 'complexity management', and this has some significant implications for social organisation. Managing market complexities better – hopefully, in a more transparent and equitable manner – is just one such possibility. ICT-based system innovations also provide far-reaching possibilities to manage social collaboration better across levels of complexities in a manner that could previously not be imagined. This suggests new possibilities to restructure socio-political institutions appropriately to meet the new contexts.

To go back to the Castells's 'network theory', referred to earlier in this paper, while the new social organisational form of networks certainly induces much higher efficiencies of interaction and exchange, there are important downsides to a social organisation that is built over the 'networks' paradigm. Typically, the actions in a networked environment though apparently highly efficiency inducing, also tend to 'create an unstable social system at an increasing level of complexity'.³⁶ So while ICTs manage some complexities, they can introduce new ones.

In the new social paradigm, while 'the network' may always triumph, its human constituents may not. "Networks - all networks - ultimately come out ahead by restructuring, whether they change their composition, their membership, or even their tasks. The problem is that people, and territories, whose livelihood and fate depend on their positioning in these networks, cannot adapt so easily".³⁷ This point of departure is extremely significant for theorising equity and social justice frameworks for the IS.

It is an important task for social policy therefore to mediate the competitiveness and flexibility of the 'network' through countervailing forces of collaboration, stability and structurality. Such mediation calls for

³⁵ Geneva Declaration of Principles

³⁶ Castells. Op cit.

³⁷ Ibid

transformation in socio-political systems, that can engage with the new possibilities in the changing context of social organisation.

We are witness to multiple contestations around IS issues. The challenge to dominant models by free wireless infrastructure enthusiasts, the free and open source movement, and the proponents of open content systems on one hand, and the wider question of the new roles of and relationship between the public, private and the community sectors on the other, capture the political economy landscape of the emerging IS, which represent the urgency for a fundamental rethinking of socio-political systems. At the base of any rethinking in this context is the important political economy question of determining whether – and to what relative degrees, and in what structural arrangements – the new IS opportunities should be employed exclusively for promoting self-interest based competition, and for protecting the privilege of the winners as a continued incentive for even greater and more vigorous competition, or if they should also create conditions to promote and nurture collective action through collaboration, supported by fair and democratic governance, towards common values and interests.

The World Bank's 'World Development Report 2006: Equity and Development' has adopted some interesting positions. The report stresses the issues of equity in public policies and calls for a greater recognition that "public action should aim to level the playing field by expanding access to opportunity".³⁸

The distinction between 'the play' and 'the playing field' is an important illustration of the implications of political economy. Level playing field is a metaphor for 'equal opportunity' which is required to be achieved by public policy to ensure that all 'players' have equitable chance for various socio-economic outcomes. Some new playing field issues arise in the IS context, over and above the social and political aspects of access to livelihoods, health and education opportunities, fair market access and practices, effective legal and governance systems, social security nets etc.

The IS context is one where the increasing connectedness between playing fields effectively makes for a bigger playing field. This can be easily understood in terms of global market integrations, but IS implications also reach other socio-political aspects of social organisation as well.³⁹ Obviously, this implies new 'leveling issues', and a need for new forms of public (and community) action, as exhorted by the World Bank report.

³⁸ Quoting Francisco Ferreira, one of the report's principal authors from http://ourworld.worldlearning.org/site/News2?JServSessionIdr006=peigvhae32.app8b&page=NewsArticle&id=7614&news_iv_ctrl=1341

³⁹ An issue which also need consideration, but will be skipped here is whether the constituents have consented to such an extension of the playing field and the implied subjugations and controls, or if the extension is a co-option that is presented as a *fait accompli*. Also significant is the question of what such an extension means for concerns about cultural distinctiveness and diversity and how they may be addressed. These issues are not discussed here in much detail, since the paper deals with the narrower political economy questions in the IS, but these issues are equally important and require separate treatment. It is significant that the civil society declaration at the end of the Geneva phase of WSIS uses the plural 'information societies' instead of the singular conception of one information society. (See "Shaping Information Societies for Human Needs" at www.itu.int/wsis/docs/geneva/civil-society-declaration.pdf)

Constructing a Level IS Playing Field - A New *Common* Infrastructure of the IS

Infrastructure has traditionally been considered a playing field issue, and the default public policy responsibility for its provision is a widely accepted canon of political economy. However, in relation to competitive economic activity that leverages various infrastructures and to the extent there is a possibility of connecting the revenues from such activity to a model for financing the infrastructure, usage fees may be charged for infrastructure use. Charges are also levied for the sake of rationalising/optimising infrastructure usage to the extent that its use is rivalrous. If such a usage fee model is really mature and returns on it good enough, the private sector can also be expected to provide infrastructural services, and such a model is encouraged within the bounds of public policy and of the required conditions for service provision to society. Since most infrastructures leverage some amount tangible of and intangible public resources, it is also important to check the financial outflows to private players within reasonable and justified limits.

The IS with a new and extended 'playing field' brings in significant and new infrastructural issues. Therefore the need to conceptualize and build the necessary common infrastructures as essential elements of the new playing field is an important social and political task. Public institutions by default have this role and bear this responsibility. The logic of a public model for providing the common infrastructure for IS is further enhanced by two features of the IS. One, both connectivity – connection between things and people – and information, are theoretically non-rivalrous – meaning neither connectivity nor information is consumed by its 'usage' and therefore providing it to one is not at the expense of providing it to another. In fact, these 'services' are anti-rivalrous in that every usage can potentially enhance the quantity/quality of both 'connectivity' and 'information', whereby the marginal cost of use of a 'connectivity and information' infrastructure can actually be negative. A discussion below of some important aspects of such an IS infrastructure as it obtains in reality will illustrate its special characteristics. The second reason that calls for a greater public role in IS infrastructure has to do with the fact that the IS, especially in the South, is essentially in the early phases of its institutional and structural development. This aspect of IS will be dealt with in the next section dealing more specifically with the situation in the South.

The IS is based on a set of infrastructural elements which can together be called the IS infrastructure. These can be seen in three parts – the connectivity infrastructure, which provides connectivity between the IS constituents; the software infrastructure, which consists of the software which underpins much of IS activities; and the content infrastructure, which consists of the platforms – systems as well as institutions – of information and knowledge sharing. All these aspects of the IS infrastructure have specific features that makes IS infrastructure unique, and provide the basis for a new political economy approach to shaping the IS. Not only is this infrastructure common in the sense most infrastructure are meant to be common to a large set of socio-economic activities, they are *common* in an added sense that they increase in value as more people use it. Therefore IS infrastructure can be construed not only as non-rivalrous but as an anti-rivalrous *commons*.

The fact that the value of the infrastructure increases as more people use it, leads to a tendency among private players who may be providing these infrastructural services, often on strengths of monopolistic or oligopolistic factors or other significant public concessions, to build unfair incumbency advantages. This can in fact tend to reduce the value of services, drive up costs artificially and inhibit innovation – precisely the

set of virtues which are argued in favour of greater private sector role. Such a situation also allows private players to profit unfairly by exploiting common public resources. Such a tendency has been seen in all areas of the common IS infrastructure described below. A quick reconnaissance of the private–public–community fault-lines in these area of IS infrastructure is attempted below.

Connectivity infrastructure: The connectivity infrastructure of the IS seems excludable and rivalrous. But open spectrum wireless connectivity completely transforms the paradigm of connectivity. Even in the case of wired connectivity, whether at the level of the last-mile cables or the backbone service, the capacity of the network is greatly under-utilised at present. Even in highly connected countries like the US, upto seventy percent of fibre optic infrastructure lies un-used. Technological innovations also seem to be able to quickly multiply the carrying capacity of installed wired infrastructure. However telecom companies have no incentive to encourage innovations in this direction. This compounds the issue of criminal wastage of existing capacity because companies cannot find the right revenue models for getting people to utilise existing connectivity. The unutilised connectivity is also not available to be used to promote socially beneficial usages like developing ICT-based systems and institutions for providing education, health services and better governance. In its initial stages, such system building does not often provide good revenue models. The benefit of public funding of such crucial infrastructure therefore becomes obvious.

Meanwhile, even as excess capacity lies unutilised, the prevailing model of telephony is still based on PSTN.⁴⁰ The switch to Internet Protocol (IP) based telephony, which utilises connectivity capacity many time more efficiently, does not happen just because incumbent telecom companies are not sure how it will affect their revenue models. This situation adds to wastage of current capacity, as well as inhibits further innovation in the direction of more efficient use of infrastructure. The cost-benefit ratio of a common connectivity infrastructure with rapid technology innovations coupled with its all-round social and developmental benefits keeps falling so rapidly that the case of public provisioning of this infrastructure today is very strong. If multiple connectivity networks provide the advantages which come with competition, it is also true that laying of parallel infrastructure by many players for a service, which is increasingly commoditised, can be quite wasteful. Apart from a public provisioning model for stimulating beneficial social and development activity, a regulated public utility model⁴¹ for connectivity may be more appropriate for areas with some mature demand for connectivity.

With the maturing of WiFi class wireless technology which uses shared unlicensed spectrum, the paradigm of connectivity has been transformed completely. Meshed networks where each user node also acts as a network transmitting node make connectivity infrastructure function as real anti-rivalrous *commons*. Each user actually increases the capacity of the network, rather than taking anything away from it. Putting up public infrastructure for backhaul connectivity between local, regional and international nodes, and using local unregulated wireless networks for last-mile connectivity is a widely propagated model today.⁴² However, the dominant telecom model and the entrenched interests that go with it have been working hard at obstructing

⁴⁰ Public Switched Telephone Network – the currently dominant telephony paradigm.

⁴¹ See “Bob Frankston: Connectivity is a Utility” at <http://muniwireless.com/community/guests/869> and other articles at <http://muniwireless.com>

⁴² See “Broadband Marxism” by Chris Sprigman & Peter Lurie at www.networkideas.org/news/apr2004/news21_Broadband_Marxism.htm

these possibilities. More than 300 municipalities in the US are developing public wireless infrastructure⁴³ and this is being opposed as an anti-competition move by telecom firms, some of whom have succeeded in initiating legislative activity at state government levels to block such public connectivity infrastructure.

Software infrastructure: Similar issues in software are as widely discussed and debated. In fact, the issue of free and open source software versus propriety software is one of the most visible IS debates today. The issue of whether the activity of MNCs who control much of the dominant software promotes value creation, innovation and lowering of costs, and whether their propriety models serve to increase the reach of the benefits of new technologies is highly debatable. While most of the big propriety software companies began as nimble enterprises fired by a high degree of innovation, their present profitability mostly represents unfair incumbency dividends, collecting rent from standard-setting and anti-competition advantages.

The Free and Open Source Software movement (FOSS) has, in many ways, shown far greater value creation and innovation. Not only does it allow greater and more wide-spread use of software and thus increase all-round socio-economic productivity, but the FOSS model also promotes software improvement by users as they take benefit from it. This may be in form of reporting bugs or actually addition to the software code. Such collaborative production efforts, themselves organised around ICT-based networks, represent another example of anti-rivalrous *commons*.

A good part of FOSS work, like language computing software in many countries, is publicly funded. The relationship between public institutions and community groups most active in FOSS activity is often uneasy. (Such constraints are also seen between 'free infrastructure' enthusiasts and public institutions that may be looking at the best solutions to provide connectivity to citizens in disadvantaged areas.) However, a new alignment of this relationship is necessary for bringing the best benefits to people, especially in the South where resource optimisation is a big priority and well-planned developmental activities are required in most sectors. Public organisations need to promote FOSS through large scale adoption of FOSS in their activities, since the public sector alone has the muscle to tilt the scale advantage that incumbent propriety software companies mostly rely on. The public sector implementing various development activities can also guide/lead community-based FOSS efforts towards specific social and developmental purposes, and also plug in through public investment such areas in software production which are under-developed through general community processes of open source software development. Public authorities have the responsibility to determine standards of inter-operability, and their large-scale adoption of FOSS can take away the unfair incumbency and standard-setting advantage that many propriety companies thrive on. They also need to determine public standards on inter-operability in a manner that favours open source. Many governments are taking a bold stand on this issue.

The Norwegian government recently declared that "proprietary formats will no longer be acceptable in communication between citizens and government."⁴⁴ The Indonesian government plans to launch its own branded open source desktop software.⁴⁵ Similar efforts are being led by many governments.

⁴³ 'WiFi for Masses'. http://www.technologyreview.com/articles/05/08/wo/wo_081905hellweg.asp

⁴⁴ "Proprietary Formats No Longer Acceptable in Communication with Government" at www.andwest.com/weblog/tatle/agenda/2005/06/27/Norwegian_Minister_Proprietary_Standards_No_Longer_Acceptable_in_Communication_with_Government.html

⁴⁵ Open Access concept is also endorsed by Geneva Plan of Action www.eetimes.com/press_releases/prnewswire/showPressRelease.jhtml?articleID=X367663&CompanyId=1

Content infrastructure: Similar contestations of far-reaching consequences are seen in the arena of content creation, distribution and sharing. The new economy, or the knowledge economy, works on the premise that 'information' and 'knowledge' is the most valuable commodity, and considerable private sector effort has been invested in commoditising and IPR-protecting information and knowledge. Information and knowledge have traditionally been relatively freely shared. However, while the dominant IS paradigm comprises increasing control over, and commoditisation of information, some unprecedented possibilities of open information sharing are also characteristic of the IS. 'Open content'⁴⁶ sharing licenses are becoming increasingly popular, and have even destabilised established institutional practices. When the Royal Society, the oldest scientific organisation in Great Britain, recently took a stance against open access⁴⁷ journals, many of its fellows, including Nobel Laureates, wrote an open letter⁴⁸ to the President of the society criticising this stand.

Wikipedia is an online encyclopedia, based on an open and free content sharing model which is written collaboratively by *volunteers*, and allows online access for contributing and editing to all. Such a chaotic free-for-all platform may be expected to contribute very little meaningful content. However Wikipedia's founder Jimmy Wales has set ambitious targets – 'Wikipedia should achieve a "Britannica or better" quality'.⁴⁹ Recently, an investigation by the 'Nature' magazine found that 'Wikipedia comes close to Britannica in terms of the accuracy of its science entries'.

Started in 2001 as a non-profit venture, Wikipedia has more than 3,200,000 articles, including more than 941,000 in the English-language version, and more than 846,000 registered users.⁵⁰ Content on Wikipedia is not entirely without problems and controversies. However, this anti-rival *commons* of information and knowledge, where users of content also contribute to it, has shown possibilities of collaboration that not many could have imagined.

A 'new citizens' media taking advantage of such new ICT possibilities is also taking shape, and is already forcing traditional media to acknowledge its strength. In this new media paradigm consumers of news are also the contributors of it. Some newspapers have also been trying hybrid models through co-opting citizens' media. Tentatively and gradually, but surely enough, citizen's media has begun to challenge traditional media which today is mostly captured by MNCs. For example, in the recent referendum in France on the new EU constitution, while most of the mainstream media seemed to favour a 'yes' vote, the campaign for a 'no' vote' relied on word-of-mouth, the Internet, blogs and fly-posting⁵¹ and succeeded.

Unlike connectivity and software issues, the new information sharing, or the open content, paradigms, have significant political implications of their own other than the political economy implications of the private-public roles of production and service provision. This aspect further complicates the contestations around 'open content' in a three-way play between the private, public and community sectors. Information has always been a political commodity, and many countries are anxious to control the free flow of information

⁴⁶ Like Creative Commons (www.creativecommons.org)

⁴⁷ Open Access is also endorsed by Geneva POA

⁴⁸ www.frsopenletter.org

⁴⁹ <http://en.wikipedia.org/wiki/Wikipedia>

⁵⁰ Ibid

⁵¹ news.bbc.co.uk/2/hi/europe/4559361.stm

over the Internet which threatens the establishment. China and Saudi Arabia are among the main censors of online content. China recently also blocked access to Wikipedia. In these and many other countries, progressive forces are stifled by governmental control over information flows. Interestingly, big MNCs that have freely used the slogan of freedom, and propagated the sanctity of the right to free expression wherever it suited their business agenda, as in running down public policy regimes at various times, capitulate easily when their economic interests are threatened in confronting mighty states like China. Microsoft, Yahoo and Google (a company that promised 'to do no evil') have in recent times submitted to Chinese authorities on content censorship and surveillance issues.⁵² China is just too big a market to lose in standing by any set of political ideals. It is clear how weak market players are in carrying political ideologies on their shoulders, since economic gains will always be the supreme arbiter of their decisions. Their professions of ideologies at times that are convenient to them therefore need to be seen in this light.

Apart from community produced and openly shared content, of which many new possibilities have opened up, the role of public investments in producing socially relevant and developmental content, and making it universally and freely available over digital platforms is also an issue in focus. Producing and distributing such social content, which is intended to reach to most people, under conventional IPR regimes greatly under-optimises its reach and effectiveness. It is important for publicly funded producers of such content to figure out how revenue generation from and other benefits of IPR restrictions imposed on such content compare with the imperative to allow the content to reach and be used by as many people as possible without constraints of the transaction costs associated with conventional frameworks of content distribution. This issue is more relevant in the digital age because of near zero cost of content reproduction. Unconstrained access to public information is one of the best opportunities for governance reforms in the countries of the South.

The above is only a quick review of the arenas of contestation vis-à-vis the emerging IS. It is meant to be illustrative both of the far-reaching implications of the changes that are taking place, as well as of the new socio-political opportunities for progressive social transformation. With respect to the IS, considerable realignments between the relative positions and power of the domains of the public community and the corporate sectors need to be sought and achieved.

An IS For the South

The theoretical and practical possibilities to reclaim the political spaces for progressive ideologies have been discussed above. In terms of the various IS issues discussed in the above section, strong political contestations are taking place both in the North and the South. However within the dominant neo-liberal world order, current geo-politics favour countries of the North. This is the reason that many countries of the North, for example the Scandinavian countries, even while pursuing progressive IS policies within their countries (note the Norwegian policy on open source software discussed earlier, and also that many of these countries do support public connectivity infrastructure), have very different stances at global policy forums like the WSIS. They join the US and the EU, and as we have seen earlier, the positions of these entities have remained obstructive to any progressive IS agendas for the South.

Though issues like outsourcing related job losses, along with worsening terms for labour, may have some political implications in the North, it is unlikely, at least in the near future, that a strong challenge to the dominant neo-liberal conception of the IS will emerge from the North. The contestations and social movements traced above to discuss the context of and developments in the IS will contribute to some shifts in the North, but these are unlikely to pose a complete challenge to the dominant paradigm. Already, we see that the energies of the FOSS movement have been co-opted to a good extent by mainstream IT industry, even though it may be argued that this is a 'victory' for progressive agenda.

The differing priorities for the North and the South on IS issues is elucidated in the case of open content debates. In the North, and increasingly in the South, the issues of access to scientific and other such 'common-heritage' information, and of citizen's media has attracted the most attention. While these are important for the South as well, the issue of appropriating the new digital opportunities and building enabling institutional systems requires greater emphasis on development content including simple "non-scientific" information that needs to be reached to the vast majority of population left out of the mainstream knowledge and education frameworks.

This is not to minimise the impact of the IS developments on the societies of the North. Community-based action and advocacy in the North have challenged and influenced the public sphere in decisive ways. Similarly the open connectivity infrastructure movement is also making important gains, and finding acceptance in the mainstream. The city of Stockholm for example already offers connectivity 'as a public service on commercial terms',⁵³ and similar models seem to be gaining ground in many cities all over the North. The contestations on content issues too are resulting in important institutional adjustments and new common grounds are being negotiated.

Also, equity and social justice concerns are central to all societies and so institutional approaches that prioritise the disadvantaged are equally valid in the contexts of the North. However, the techno-social dialectic in the North is more mature; and the political implications and choices for the North are at a very different level from those for the South – in meeting IS opportunities and addressing concomitant challenges in the process. For example, it is instructive that most political activists in the IS arena in the North have

⁵³ <http://www.stokab.se/templates/StandardPage.aspx?id=306>

mostly been radically un-trusting of public authorities and have been working against rather than with them, albeit on agenda that concern rights. Southern activists engage with their governments in complex ways and confrontation may coexist with strategies of collaboration.

In the South, the IS opportunity represents a complete discontinuity, which to fructify requires conscious efforts and investment of a completely different magnitude. It is not enough to provide correctives to a dominant trend, as may be the case with activism in the North; in the South, a whole new construct of a new way forward has to be built for societies that are stuck with chronic under-development. So while contestations with the state remain squarely on the table for most development activists in the South as well, the need to work together on new development opportunities is irrefutable and important. The way forward requires to be paved not in a manner that would amount merely to a co-option into North-centered IS conceptions, but through a new vision of an IS which meets its context and objectives. The biggest difference in the approaches for the South and the North is that in the South the public sector has to take a leading role in building the infrastructural elements of the IS. While often the IS contestations in the North are between the private sector and the community sector, and the community sector is seeking significant realignment of the relationship, the role of the public sector in the South – because of its stage of development – may still be very crucial. The ‘oppositional’ IS discourse in the North as described in the last section needs to be moderated with a constructive engagement between community and public sector.

As has been discussed earlier, building an IS infrastructure will require strong public effort and investments. It was argued earlier that many intrinsic features of IS infrastructure provide the justification, and the context for such public and community investments. In the case of the South, such investments are also be justified in the leapfrogging possibilities for institutional and structural transformation contained in the new paradigms, not only critical for systemic change but equally significant from an opportunity cost point of view.

Apart from concerns for equalising opportunities – discussed earlier in terms of the ‘playing field’ – the extent of public funding responsibility for infrastructure is also determined by the maturity of the socio-economic usage of the infrastructure, as well as the perceived importance of the infrastructure to lead important socio-economic changes. For example, all developed countries built their present socio-economic strengths on heavy investments into industrial age infrastructure – roads, railways, electricity, transportation, and of course health, education and social security of the people. The private sector was not in a position to provide such infrastructure, and itself needed it to be in place to be able to function. So, while the new ICTs in the North have grown and still grow in a certain dialectic with its socio-economic systems, the conditions in the South are vastly different. The shift to a higher development trajectory through the deployment of IS possibilities requires a more elaborate, deliberate and systematic engagement than what markets and the private sector can be expected to provide. The public sector therefore has a central role in building the new IS infrastructure, and orchestrating the structural and institutional conditions for effecting a systemic shift.

Part of the neo-liberal project has also concerned the valourisation of an ‘autonomous’ transition to an IS that is led purely by market expansion without specific public policies, plans or investments. The fact that mobile telephony has seen an exponential growth over the last few years in practically every country and this has followed telecom privatisation in most countries has been used as an illustration of the triumph of neo-liberalism in the ICT and IS arena. An article in *The Economist*,⁵⁴ published around the time when

⁵⁴ http://www.economist.com/printedition/displaystory.cfm?Story_ID=3742817, “The real digital divide”, *The Economist*, Mar 10th 2005

financing debates at WSIS were most intense, has used the argument of private sector led mobile telephony revolution to question donor supported ICTD initiatives employing computers and telecentres in villages. The essence of the article is that telephones, especially mobile telephones, are useful for the poor, judging from their huge demand, and that computers and the Internet are of no use. The article thus implies that the South should be content with mobile phones and also be reassured that the market would not fail to respond to demand, if at all there was any real need for computers and the Internet. The World Bank has also repeatedly celebrated the mobile telephony phenomenon in a similar manner, using it as the proof that markets will mostly be able to lead the IS transformations in the South.⁵⁵ The mantra offered is – markets will bring ICTs, and ICTs more markets, and this virtuous cycle will determine the IS for the South.

From a development viewpoint, it is important to understand that the IS is not about telephony, but by its very definition, about the far reaching transformation in societal institutions that the Internet and its associated technologies make possible. ICT infrastructure, ICT hardware and software, ICT capacities and ICT based content systems are the starting point for such institutional/ organisational transformation that contains the promise of a paradigm shift in achieving development goals. It cannot be expected that markets by themselves will fulfill any of these crucial needs. Strong policy interventions and substantial public investments are certainly needed for this purpose

The IS opportunity is for societies to plan and determine such structural and institutional transitions that are appropriate to meet their developmental objectives. The IS architecture needed for making the transition to a comprehensive IS based development strategy requires a country wide IS infrastructure – which includes connectivity, access, hardware and software as well as capacities at individual, community and institutional/ organisational levels. It also includes a content production and sharing infrastructure that breaches the existing boundaries of the dominant education and knowledge paradigm which has not benefited the majority. In most under-developed areas it may be necessary for public authorities to invest in providing connectivity to all, and promoting the use of this connectivity for developing new and appropriate social and developmental systems and institutions. Similarly, efforts and investments have to be made into making available the hardware and software needed for such activities. Information and knowledge are important development enablers, and leading new institutional and structural developments around IS opportunities in the area of 'content' can have great impact. However all of these concern important political choices – at local, national as well as global levels. .

It is evident that a proper and adequate political response to the new situation of a global IS must come from the South. The threat to this is in the various forms of co-option into the dominant IS framework; whether it is of selective inclusion of some countries - actually only some sections of these countries – into the lucrative global value chains of a networked economy through various forms of outsourcing, or the promise of donor funding for some other developing countries and LDCs for infrastructural development as long as they accede to the dominant IS paradigm. The benefits of global trade, as well as globalised organisation of manufacturing and IT-enabled services, need certainly be appropriated by developing countries. However, it may not be necessary that this be done on the terms of the dominant IS models. On the contrary, using a deliberate design and the resources of the state for leading appropriate IS changes

⁵⁵ "Financing Information and Communication Infrastructure Needs in the Developing World: Public and Private Roles" - draft for discussion. [http://lnweb18.worldbank.org/ict/resources.nsf/a693f575e01ba5f385256b500062af05/04c3ce1b933921a585256fb60051b8f5/\\$FILE/financingICT_Draft.pdf](http://lnweb18.worldbank.org/ict/resources.nsf/a693f575e01ba5f385256b500062af05/04c3ce1b933921a585256fb60051b8f5/$FILE/financingICT_Draft.pdf)

in these countries will both make them stronger global players in the networked economy as well as benefit everyone within the country more equitably. The bluff of the private-sector led IS, where the public sector has little or no role to play, needs to be called.

While such a re-look at the IS context and opportunities in the South require reassessment a whole range of policies, some key imperatives are discussed below.

IS Policy at the National Levels

At national and sub-national levels, a clear distinction needs to be made between the economic growth aspect of ICTs and its use to build a new social development infrastructure. Many requirements of a policy and enabling environment to achieve best results on the two fronts are common. However, there can often be a policy trade-off and this needs to be negotiated politically. In countries like India, for example, the interests of the domestic IT sector and the urban middle class, which have high stakes in India's position in the global value chain in the IT and ITES industry, may often be in conflict with subsidised telephony for rural areas, policy support for open source software, more open regimes for knowledge and content sharing on digital platforms etc.

The most important imperative at national and sub-national levels therefore is to see the core ICTD opportunity and activity-space as distinct from that of ICTs for markets and economic growth. The locus of development of policy and action for ICTD needs to go out of the IT and telecom ministries into core development sectors. A new focal point within governments that is oriented exclusively to the development aspects of ICTs and geared to developing an ICT-based development infrastructure in collaboration with other departments dealing with developmental issues is an important and urgent requirement for most developing countries. The major mandate of this IS or ICTD focal point – which should be at the level of a full-fledged ministry – must be to systematically evaluate the IS opportunities in context of national priorities, and take up necessary activities to achieve them. This ministry will need both to develop a strong theoretical orientation towards a development-oriented IS – for which it may need to depend a lot on South based IS research capacities in the NGO and academic sectors – as well as take up the task of leading large-scale systemic changes that constitute an IS built through an deliberate design in pursuance of national priorities. South-based civil society requires to develop strong conceptual as well as advocacy capacities which will need some investments and a new orientation

IS Policy at Global Levels

The need for a more effective global polity for our increasingly inter-connected and inter-dependent world is something that cannot be disregarded for long. The difficult issues concerning Internet Governance constitute only the more obvious case in point. Everything in the IS seems to easily flow across national boundaries whether it is about issues of taxation or consumer protection associated with e-commerce, or content issues connected to crime, developing software and connectivity standards, to issues of safeguarding local cultures, and of ensuring labour regulations and environment-friendly standards. A lack of global political response to this new situation of a global IS has essentially meant control by the powerful – the dominant and entrenched interests. Such control is often attempted to be masqueraded in different terms for ideological respectability – for example as promotion of free trade, or as some 'historical role' (as in the US stand on IG), and stays un-challenged by legitimate public policy structures, including the UN system, whose inefficiencies are regularly cited by these interests in defense of such designs. The consequent political vacuum, as discussed in the first part of the paper is filled in by neo-liberal ideology – which really represents a working solidarity of the dominant interests. Working actively for new global political systems

that are adequate to the needs of an emerging IS is an important and urgent task. In this process, civil society, always suspicious of the tyrannies of governments, needs to realise that such a global political space cannot just be wished away – it is either filled in by appropriate political dispensations, or appropriated by the dominant interests. New forms of civil society association in global public spaces however need to be evolved at the same time, and some work on this issue is already underway. These re-alignments also need to be strengthened.

Through strengthening of global political engagements, some specifically core IS issues need to be re-negotiated. The international communication backbones need to serve all countries and all people equitably. A public goods perspective for this infrastructure and the implications for such a perspective for global growth and prosperity have to be explored. Similarly in terms of the software infrastructure – of software which underpins all IS activities – the standard setting aspects need to be publicly-owned and basic software required for IS activities need to be provided as public goods. Content sharing and needed IPR frameworks have to be politically and publicly negotiated and not enforced through existing dominant controls over technology and networks, as is sought to be done today.⁵⁶ In establishing the public goods nature of much of the basic IS infrastructure across the globe – whether in the form of connectivity, basic software or content infrastructure – the need for public investments, and for re-distribution of resources to less developed regions for developing this basic IS infrastructure becomes a global priority. Such re-distributive policies alone can serve the creation of an equitable and just global IS.

At a more practical level, working within the existing global development paradigm, while challenging it at a political level, it is necessary that in engagement with the donor community, a good case is made for investing in an ICT-based development infrastructure which is conceptualised as distinct from economic infrastructure. On development aid, the donor and lending community seems to operate from a dilemma of whether more resources need to be pumped into developing countries' existing development activities or if funding needs to target investments in institutional mechanisms that make for more efficient use of existing resources. Advocates of neo-liberalism have used the latter line of argument to cut down direct investments into development, and instead divert it to supporting market-based structures with minimum public intervention, with an implied assertion that markets ensure the best utilisation of resources, even in the scenario of development needs. Infrastructural and institutional investments in ICT-based development gives a *via media* between these two donor approaches. The investments in ICTD are not direct development investments, but they go into making development activity much more effective and efficient. Developing countries need to develop a good case for such 'efficiency-inducing' investments that are not necessarily linked to the supremacy of a certain set of institutions – the markets, and concomitant institutions that prop up the markets – in inducing efficiencies. Efficiencies of development investment today are best achieved by developing an ICT based development infrastructure as described earlier.

However, agreements about efficiencies are premised upon agreements about the objectives of development. And here, the neo-liberal agenda, pushed by Northern governments and supported by many international donor agencies, may differ in significant ways from traditional development thought built on the canons of equity and social justice. It is important therefore that powerful South–South alliances are built, with participation from across sub-national and local governments as well as traditional civil society and grassroots organisations, for evolving a new paradigm of a development-oriented IS for the South.

⁵⁶ Technology companies often get together and determine standards for embedding IPR controls within dominant technology platforms. The term Digital rights Management is the umbrella term referring to such attempts. See http://en.wikipedia.org/wiki/Digital_rights_management