International Workshop on Strategic Framework for eGovernance – Learning about Europe's best practices

Chandigarh, India
18-20 October 2004

"After attaining Swaraj (Self Governance)
We need to have Suraj (Good Governance)"
Mahatma Gandhi

Vikas Kanungo

Chairman & Secretary General
The Society for promotion of e-Governance
New Delhi – India.
Phone : +91- 9810260617
vikaskanungo@egovindia.org

Jeremy Millard

Danish Technological Institute
Denmark
Phone: **+45 72 20 14 17**

CONTENTS

1   Executive summary

Between 18 and 20 October 20, e-GovIndia 2004, the three day International workshop on "Strategic Framework for eGovernance (Learning about best European Practices)" took place successfully at the Confederation of Indian Industries auditorium in Chandigarh, *the City Beautiful.*

The workshop was jointly organized by The Society for Promotion of eGovernance in India and the Danish Technological Institute. The inauguration of the workshop was performed by His Excellency Justice O. P. Verma, Governor of Punjab State and Chief Administrator of Chandigarh. The keynote address was delivered by Mr. Krishna Giri, Government Sector Leader, ASEAN/South Asia, IBM.

Distinguished Indian speakers came from DARPG (Department of Administrative Reforms and Public Grievance), MIT (Ministry of Information Technology, the Government of India), the Governments of Punjab, Haryana and Tamilnadu States, and the Chandigarh Administration. Six European Speakers delivered presentations on the status and future prospects of eGovernment in their own countries as well as at the European level.

Among the delegates were government representatives from a number of different Indian States, Chief Information Officers, faculty and students from Punjab Engineering College, IIITM Gwalior and many other distinguished eGovernance experts.

The workshop was sponsored by IBM India and Quark India; supported by STPI (Software Technology Parks of India), Punjab Engineering College, Chandigarh IT Club and the SUS college of Engineering Mohali.

Planning and all arrangements for the workshop were carried out as a cooperative and combined task between Vikas Kanungo of the Society for the Promotion of EGovernment in India, and Jeremy Millard of the Danish Technological Institute in Europe.

The organisation of the workshop was made possible through the special support of Mr. Vivek Atray, Director IT, Chandigarh Administration, Dr. Sanjay Tyagi, Director, Software Technology Parks of India, Mohali & Chandigarh, Prof. V. Rihani , HOD Electronics, Punjab Engineering College, Director Antoinette Mousalli of Euromax Solution (Europe) Limited and Mr. Parminder Sehgal , MD , Quark India Limited who went out of their way to provide necessary infrastructure, local support in Chandigarh and travel assistance to the speakers and delegates.

The workshop was a great success and revealed the remarkable similarity of basic issues and concerns across all the areas of eGovernance shared by India and Europe, for example:
- The need for clear policy, strategic and IT frameworks, including regulatory and legal aspects.
- The related issue of both national/state level and continent-wide interoperability, including technical, legal, regulatory, institutional, organisational and cultural interoperability as well as in relation to civil servant and decision-makers' mindsets.
- The as yet unmet challenge of meeting user needs and making government and the services it provides user-centric, whether end users are citizens or businesses.
- Related to this is the underdeveloped potential for eDemocracy and eParticipation in both Europe and India.
- The important issue of the digital divide is again linked to this, in terms both of access and the skills needed.
- The technology building blocks underlying eGovernment remain a prime challenge in both Europe and India.
- Security and privacy are critical issues in Europe and are moving fast up the agenda in India
- The need for political will and clear long-term change management strategies at the very top of policy and decision-making structures is apparent in both continents, but sometimes difficult to achieve in a world where other issues crowd out agendas and concerns
- A critical issue is the need for continuing and increasing the focus on funding, finance and the cost-benefits of eGovernment.
- Last but not least, both India and Europe are still "learning about learning" in eGovernment, i.e. how to learn from and be inspired by the rich experiences of others, without falling into the trap of thinking one size fits all or that a solution which works well in one place, time and context can be transferred elsewhere, as is, and achieve similar success.

The resounding success of the workshop is illustrated by the fact that it clearly identified and articulated each of these overarching issues, as well as many others of importance. It became, already on its first day, a forum for the discussion and sharing of both visionary and practical ideas, lessons and solutions between all the participants, regardless of their geographic background and area of interest.

Both India and Europe are epitomised by their long history, internal diversity, rich experiences and the possession of large reservoirs of creative talent and potential. The workshop showed beyond doubt that the time is now ripe to vigorously pursue joint initiatives in all areas of eGovernance and that the ultimate success of the workshop will depend upon whether or not it can assist in launching and strengthening such activities for the mutual benefit of both continents. These include:

1. Setting up a joint Indo–EU eGovernance resource centre in India which will be designed to act as an hub for exchange of practices between India and Europe and also as a research hub for European-Asian ICT initiatives.
2. Design and launch of an eGovernance knowledge management tool (KMT) for eGovernance learning practices in India and Asia, based on the functionalities and experience of the Beep (Best eEurope Practices) project, funded by the EC Fifth Framework IST Programme coordinated by the Danish Technological Institute, and the eEurope Awards Programme coordinated by the European Institute of Public Administration.
3. Making e-GovIndia an annual event organised jointly by India-EU participation, and incorporation of the event in the Indian, Asian, EU and European events calendars.
4. Establishing an eAwards initiative for Asian eGovernance projects along the lines of the eEurope Awards for eGovernment and eHealth coordinated by the European Institute of Public Administration.
5. Enhanced participation of Indian government agencies and academic institutions in association with EU partners in calls for proposals issued by the EC and its various international cooperation and EU-India Strategic Partnership programmes.
6. An online forum titled "governance" has been created as a follow-up of the workshop comprising of all the speakers of the workshop and additional members from various state governments In India. The group had 68 members at the end of November 2004 and is growing.

This workshop report has been written and edited by Vikas Kanungo (Chairman & Secretary General of The Society for Promotion of eGovernance) and Jeremy Millard (Danish Technological Institute). Contributions were made by Michael Blakemore (University of Durham, UK), Edwin Horlings (RAND Europe), Christine Leitner (European Institute of Public Administration), Antoinette Moussali (Euromax Solutions, UK), Graham Shelley (Euromax Solutions, UK), and Louise Thomasen (Danish Technological Institute).

2 eGovernance development in India and Europe

2.1 Evolution and present status of eGovernance in India

The concept of eGovernance in the Indian sub-continent has its origins during the 1970s with a focus on the development of in-house government applications in the areas of defence, economic monitoring, planning and the deployment of IT to manage data intensive functions related to elections, census, tax administration, etc. The efforts of the National Informatics Centre (NIC) to connect all the district headquarters during the eighties was a very significant development. From the early nineties, IT technologies were supplemented by ICT technologies to extend their use for wider sectoral applications with a policy emphasis on reaching out to rural areas and taking in greater inputs from NGOs and the private sector. There has been an increasing involvement of international donor agencies under the framework of eGovernance for development in order to catalyze eGovernance laws and technologies in developing countries.

While the emphasis has been primarily on automation and computerisation, state governments have also endeavoured to use ICT tools for connectivity, networking, setting up systems for processing information and delivering services. Every state government has taken the initiative to form an IT task force to outline an IT policy document for the state, and citizen charters have started appearing on government websites. The following table showcases some of the recent eGovernance projects implemented by various state governments.

State/Union Territory	Initiatives covering departmental automation, user charge collection, delivery of policy/programme information and delivery of entitlements
Andhra Pradesh	e-Seva, CARD, VOICE, MPHS, FAST, e-Cops, AP online—One-stop-shop on the Internet, Saukaryam, Online Transaction processing
Bihar	Sales Tax Administration Management Information
Chattisgarh	Chhattisgarh Infotech Promotion Society, Treasury office, e-linking project
Delhi	Automatic Vehicle Tracking System, Computerisation of website of RCS office, Electronic Clearance System, Management Information System for Education etc
Goa	Dharani Project
Gujarat	Mahiti Shakti, request for Government documents online, Form book online, G R book online, census online, tender notice.
Haryana	Nai Disha
Himachal Pradesh	Lok Mitra
Karnataka	Bhoomi, Khajane, Kaveri
Kerala	e-Srinkhala, RDNet, Fast, Reliable, Instant, Efficient Network for the Disbursement of Services (FRIENDS)
Madhya Pradesh	Gyandoot, Gram Sampark, Smart Card in Transport Department, Computerization MP State Agricultural Marketing Board (Mandi Board) etc
Maharashtra	SETU, Online Complaint Management System—Mumbai
Rajasthan	Jan Mitra, RajSWIFT, Lokmitra, RajNIDHI
Tamil Nadu	Rasi Maiyams–Kanchipuram; Application forms related to public utility, tender notices and display
North-Eastern States	
Arunachal Pradesh,	Community Information Center. Forms available on
Manipur, Meghalaya,	the Meghalaya website under schemes related to
Mizoram & Nagaland	social welfare, food civil supplies and consumer affairs, housing transport etc.

Source : PC Quest Article

At a micro level, these projects have ranged from IT automation in individual departments, electronic file handling and workflow systems, access to entitlements, public grievance systems, service delivery for high volume routine transactions such as the payment of bills and tax dues for meeting poverty alleviation goals through the promotion of entrepreneurial models, and the provision of market information. The thrust has varied across initiatives, with some focusing on enabling the citizen-state interface for various government services, and others focusing on bettering livelihoods. For governments, the more overt motivation to shift from manual processes to IT-enabled processes may be increased efficiency in administration and service delivery, but this shift can also be conceived as a worthwhile investment with high potential returns.

eGovernance evolution in India – challenges before stakeholders

A close examination of both government and commercial development of eGovernance in India since 1996 shows that, although much effort has been made in the creation of infrastructure and internal information handling by government bodies and the public service providers, the diffusion of technologies for eGovernance has been rather slow. This may primarily be attributed to the following factors:

- **Lack of IT literacy and awareness regarding benefits of eGovernance**
  There is general lack of awareness regarding the benefits of eGovernance as well as the process involved in implementing successful G2C (government to citizen), G2G (government to government) and G2B (government to business) projects. The administrative structure is not geared for maintaining, storing and retrieving governance information electronically. The general tendency is to obtain data from files (print) as and when required rather than using Document Management Systems (DMS) and workflow technologies. Lately, where DMS and workflow technologies have been used, this has successfully enabled a perceptible lightening of the workload of ordinary staff.

- **Underutilisation of existing ICT infrastructure**
  To a large extent, computers in government are used for the purpose of word processing only, resulting in their underutilisation for data mining and for supporting management decisions. The time gap between the procurement of the hardware and the development of custom applications is so large that by the time applications are ready for use, the hardware is often obsolete.

- **Attitude of government departments**
  The psychology of government civil servants is often quite different from that found in the private sector. Traditionally government staff have derived their status and role from the fact that they are important repositories of government data. Thus, any effort to implement DMS and workflow technologies or bring about change in the system, is met with strong resistance.

- **Lack of coordination between government department and solution developers**
  The design of any application requires very close interaction between the government department and the agency developing the solutions. At present, the users in government departments do not contribute enough to the design of solution architectures. Consequently, solutions are developed and implemented which do not address the requirements of eGovernance projects and hence do not get implemented.

- **Resistance to re-engineering of departmental processes**
  The successful implementation of eGovernance projects requires a great deal of restructuring of administrative processes, and a redefinition of administrative procedures and formats, both of which meet resistance in almost all departments at all levels. Additionally, departmental MIS executives generally lack expertise in exploiting data mining techniques, updating and collection of real time content for websites, etc. Therefore, the content of eGovernance portals is often unreliable or full of gaps. In such a scenario, it is difficult for any eGovernance solution to achieve its intended results.

- **Lack of infrastructure for sustaining eGovernance projects at national level**
  Infrastructure to support eGovernance initiatives does not exist within government departments. The problem is that government departments are not equipped to project their clear requirements, nor are there any guidelines for involving the private sector. Whatever efforts have been made by various government organisations may be defined as islands of computerization. Infrastructure creation is not guided by a uniform national policy, but is dependent on the needs of individual officers championing a few projects. Therefore, necessary networking and communication equipment is either non-existent in government departments, or if it does exists, it does not serve any tangible purpose as far as the requirements of eGovernance projects are concerned. The use

of connectivity options provided by government agencies like NICNET, etc., is very limited for data transmission purposes between various locations, viz. district, state, centre, etc., and is mainly used for e-mail and Internet purpose only.

Most state governments have formed their own IT task force and have their IT policies in place. Although policies may have lofty goals, much seems to have happened only in automation and computerisation The drawback is that these IT policy documents are not prepared in relation to the requirements and inherent capabilities of the state, but are based on the surveys and strategies used by other nations or other states. Although it is very useful to take examples from the successful eGovernance strategies of other states and countries, it is equally essential to customise state policies based on a careful study of the parameters applicable to the particular state in question. A tentative action plan has been prepared by the Government of India and presented to the World Bank. It is available at the GOI website http://www.mit.gov.in

2.2   Evolution and present status of eGovernance in Europe

Over the past five years the concepts of government and governance in Europe have been dramatically transformed. Not only is this due to increasing pressures and expectations that the way we are governed should reflect modern methods of efficiency and effectiveness (that governments should 'do more for less' year on year), but also that government should be more open to democratic accountability.

This cauldron of change is now finding itself once again brought to the boil by the impact of new digital technologies on government. Many claim that eGovernment enables both efficiency and democracy to be met more cheaply and easily than previously envisaged, and that the application of ICT enables government to reduce the trade-off there has traditionally been between these two admirable goals. But the new technologies go much further than this. They are starting to redefine the landscape of government by changing the relationships (power and responsibility) between players – between service providers and industry, between the public, private and third sectors, and between government and citizen.

New forms of governance are emerging in Europe, reflecting inter alia changing organisational and economic structures, with profound consequences for the way we understand and exercise citizenship. It is clear that eGovernance is not just about putting government services online and improving their delivery, but also constitutes a set of technology-mediated processes that could change the broader interactions between citizens and government. Governments are starting to understand that they must be flexible and innovative, become networked and 'joined-up' with each other and with private and civic sector partners, and become more responsive to different user needs.

Despite these changes and new ways of thinking and acting, actual progress on the ground as it affects users (citizens and businesses) has been very patchy. Drawing lessons from EU benchmarking and surveys of progress over the last five years, the key conclusions on the supply side of European eGovernment are:

- Services provided by a single centralised administrative unit have higher levels of online service delivery. For example, income tax is generally the responsibility of a centralised treasury office. It can be put online with a single application suitable for all tax payers and has the highest rollout of any eGovernment service. Other centrally coordinated services that are well represented are job search, VAT, corporate tax and customs declarations.
- Services provided by decentralised and multiple local agencies are less well developed. In this case, some service providers may have well developed on-line systems but these suffer from interoperability problems between agencies because of lack of open technical platforms, different organisational structures and incompatible processes.
- Complicated administrative procedures require important back office reorganisation to transform complex transactions into simple procedures, which has not yet happened on a significant scale.

Overall, key conclusions on the demand side of European eGovernment are:

- There is relatively high demand for information and services related to local public administrations and local communities, rather than national centralised systems.
- Demand in 2003 shows that:
  - 35% of users of European eGovernment services access information services
  - 18% communicate with the public authority, e.g. via email and/or submit forms (communication services)
  - very few fill in tax returns or pay for a licence (transaction services).
- User surveys point to the need for high quality but relatively simple, non-complex services requiring the input of little or no personal information and related to the local or community level.
- One of the main service quality issues is the need to ensure multiple channel access to government services through a variety of both electronic and non-electronic media. This will both

- assist in tackling the digital divide and in meeting the large variety of individual needs citizens and businesses have, depending on where and when they wish to access services and the nature and type of service required.
- There is some lack of trust in electronic services regarding security and confidentiality of information and payments, and in relation to national ('big brother') systems.
- There remains widespread lack of awareness and still significant non-interest in eGovernment.

From the above, it is clear that there has been an eGovernment supply-side push in Europe over the last two to three years, which demonstrates the success of initiatives like the eEurope 2002 Action Plan, but that this has been focused upon services directly generating revenue for government, such as company tax, VAT, customs declarations, income tax, procurement, etc. These also tend to be the eGovernment services which are easiest to implement as they are provided centrally (thus minimising implementation costs and maximising the scale of returns), as well as being relatively simple administrative procedures with a high degree of pre-existing standardisation. In contrast, the eGovernment services which do not generate direct revenue for government, which are based on existing complex and differentiated procedures, and which are provided by sub-national agencies, have not been rolled out to the same extent. Unfortunately, it seems that these tend to be those most favoured by users.

The overall conclusion must be that, at present, there is a very significant mis-match between the supply of and the demand for eGovernment services in Europe which could threaten the budgetary and investment strategies for eGovernment, as well as raise fundamental questions about the overall rationale, policies and strategies being followed. Most, though not all, European countries are also lagging behind the global leaders when it comes to eGovernment services roll out and particularly in the quality and maturity of services.

However, there is also clear evidence of significant cost savings both to the government agencies involved as well as to enterprises using eGovernment services, for example in the eProcurement and eCustoms fields. The disposition of these savings varies significantly from case to case, depending on the particular institutional and political circumstances prevailing, and range from fewer and/or re-deployed staff, higher quality services, lower fees to customers, etc. Such savings can thus help meet some of the 'more for less' demand being placed upon government in many countries and contexts. Thus, making European government more productive by adopting eGovernment has already been shown to be a realistic and achievable goal. However, this entails much more than investing heavily in service roll-out, the main European achievement to date. To ensure government becomes 'efficient' and 'lean' also means investment in simplifying its structures and processes, and rethinking these (maybe from scratch) before digitising and automating them.

In conclusion, it is clear that Europe needs to start focusing much more seriously and overtly on developing user-centred eGovernment services by listening to users and responding to user demands and needs more than it has to date. The next big challenge is ensuring that eGovernment services are widely used, and that such use leads directly to user needs fulfilment and demonstrable benefits for individuals, families, communities and the society and economy as a whole.

2.3   Euro-India eGovernance cooperation

India and Europe are both significant players in shaping the emerging multilateral world order. India is potentially of great geo-strategic importance to Europe with its status as the world's largest multilateral democracy with a high diversity of religions, cultures and ethnicities, and its emergence as the largest power in South Asia. With its vast pool of talented researchers in ICT and its knowledge and reach in the South Asian Region, India can act as a knowledge hub and a knowledge resource centre for the European community, thus providing EU organisations and other agencies access to the Asian eGovernance market. An increased participation and exchange of practices in ICT and eGovernance will ensure better access to Asian market for European businesses. At present, 80% of companies undertaking ICT business with India are from the United States. This status could change with increased interaction between Indian and European professionals, civil servants and politicians.

eGovernance initiatives have only recently started in India. With government now seen as one of the biggest buyers of ICT solutions, there is a clear opportunity for ICT organisations in Europe to assist the Indian government achieve the goals specified in the National Action Plan for eGovernance. A beginning has now been made at the eGovIndia 2004 International Workshop in Chandigarh (October 2004) where the Indian strategic framework for eGovernance was discussed in the context of eGovernance in Europe. The response of the Indian government has made it clear that much scope exists for exchanging good

practices and ideas with Europe, and thus assist India save resources by not reinventing the wheel. This could provide unprecedented opportunities for European ICT experts in the Indian eGovernance market of INR 2500 Cr. (approximately Euros 5 billion) per annum, and with a growth rate of 9% per annum. In a similar way, India as a developing country, with constraints on government spending, has developed many innovative projects providing eGovernance services to citizens and businesses in the most cost-effective manner. Europe, in turn, can learn a great deal from this, particularly in the context of European enlargement and the entry of many 'transition' economies into the EU.

Relations between India and the EU have strengthened since the first EU-India Summit in Lisbon in 2000, with ever more meetings at all levels – including business and civil society – and extensive dialogue and cooperation on political, geo-political and multilateral issues, including economic and trade questions.[1] The recent EU-India Summit, in the Hague (8 November 2004) reiterated and endorsed the EU-India Strategic Partnership and proposed an Action Plan for its implementation, including the strengthening of economic partnership through sectoral and regulatory policy dialogues.

The EU and India already have an extensive Information Society dialogue. This should be further strengthened to exchange best practices and address market access concerns on regulatory frameworks (internet governance, privacy, security) and for electronic communications (e.g. mobile aspects, universal service). It could also be useful to initiate pilot projects in social priority sectors, such as health, education and 'government on line', as well as the full development and exploitation of good practice and dialogue on all issues concerning eGovernance, together with joint research and implementation initiatives.

---

[1] Source Document: Brussels, 16.6.2004 , COM(2004) 430 final Communication From The Commission To The Council, The European Parliament And The European Economic And Social Committee, 'An EU-India Strategic Partnership' {SEC(2004) 768}.

3   The purpose of the workshop

3.1   Timing and role of the workshop

eGovernance is an area of importance whose time has come. Events, seminars and conferences are being organised in various parts of the world, to learn from the experiences of different countries and governments, and assist in developing appropriate eGovernance models that will work effectively. At the ground level also, many initiatives are being taken with great enthusiasm to turn traditional government into responsive, networked and joined-up government, using ICT both as an enabler in this transformation process as well as an additional channel for organising government itself and for delivering services. Government officials are under pressure to perform and innovate in order to improve the quality of administration and the delivery of services to citizens and businesses. With the current President of India being a renowned scientist, and the Prime Minister a leading economist and former civil servant, eGovernance and civil service reform initiatives are receiving unprecedented priority. In addition, there is pressure to be competitive internationally and increasing demand from citizens who now have access to the Internet and who can see the services offered to citizens in other parts of the world.

In the midst of such hectic activity taking place in India, prominent individuals and organisations in academia, government and the ICT industry, decided to found the Society for the Promotion of eGovernance (SPEG) in February 2004 as a non-profit body to fuel the movement of eGovernance with a view to contribute to the achievement of our President His Excellency Shri A.P.J. Abdul Kalam's vision of making India a developed country by 2020. During participation by SPEG members in the EuroIndia 2004 Conference (Delhi, 24-26 March 2004), contact was made with the Danish Technological Institute (DTI) and discussions centred around how the Beep project on learning practices developed as part of the EU's Information Society Technologies Programme, between 2001 and 2003, could be exploited within an Indian context. These discussions quickly revealed many synergies and potential mutual benefits between the goals of this project, DTI's other activities and collaborators and SPEG's mission to assist government agencies learn about and from good practices in eGovernance in both Europe and elsewhere.

A decision was made to rapidly develop relationships and initiatives between SPEG and DTI and its European partners, including the European Institute of Public Administration (EIPA), focused in the first instance on an international workshop organised in collaboration with Indian Government officials, academia, political leaders and other eGovernment stakeholders and their counterparts in Europe. Thus, the event 'eGovIndia 2004 – Strategic Framework for eGovernance (Learning about Best European Practices)' was launched. The venue selected was Chandigarh which, as a Union territory and capital of the two states of Punjab and Haryana, was deemed the ideal venue for central government and agencies from two state governments to come together with academia and industry. The choice of Chandigarh enabled the participation of government representatives from the entire north of India. The Honourable Governor of Punjab and the Chief Administrator of Justice (Retired), O.P. Verma, gave his consent to encourage and bless the initiative by inaugurating the workshop and delivering the keynote address. The month of October was chosen as the weather is very pleasant at this time of year.

On the European Side, Jeremy Millard of DTI and Antoinette Moussalli of Euromax Solutions (Europe) cooperated with Vikas Kanungo of SPEG to design the workshop programme and organise the participation of six European organisations and speakers, including Christine Leitner of EIPA, Michael Blakemore of Durham University (UK), Edwin Horlings (RAND Europe) and Louise Thomasen from DTI. The workshop provided an ideal platform for interaction and exchange of ideas between the Indian and European eGovernment stake holders. Many potential joint initiatives, along with dialogue for collaboration on similar projects, like the eGovernment assessment framework of India and the Common Assessment framework developed by EIPA in Europe, were discussed.

Strategic outcomes of, and conclusions from, the workshop are presented in section 5 of this report.

3.2   Workshop aims and objectives

"After attaining Swaraj (Self Governance)
We Need to Have Suraj (Good Governance)"
Mahatma Gandhi

The application of ICT (Information and Communication Technologies) to public services, or eGovernment as it is known popularly, offers exciting and efficient ways of tackling the challenges of improving the quality and access of service delivery, especially to the poor. In India, the past two years have seen significant initiatives in eGovernment by the central as well as state governments. The National Action plan on eGovernance is making significant allocation for implementing eGovernance with a budget of INR 2500 crore ($ 5 billion) annually). Many government agencies have been starting eGovernance projects over recent years, some of which are very successful whilst others less so, but the efforts are fragmented thereby inhibiting seamless and efficient operation of the services they are designed to enable. There is a need for a coherent pan-Indian approach.

e-GovIndia 2004 is first among the series of workshops to be conducted jointly by The Society for Promotion of eGovernance (SPEG)", New Delhi, along with the Danish Technological Institute, with the mission of assisting eGovernment stakeholders in India learn about the best practices being followed in other parts of the world. The workshop at Chandigarh was being conducted in collaboration with Chandigarh Administration and focused on eEurope best practices. The workshop was supported by STPI Mohali and Punjab Engineering College. IBM was the main sponsor for the event. The workshop programme was designed by an international advisory panel and was aimed to be multidisciplinary, including technology, procedural and policy developments. The organisers aimed to achieve the following objectives through this workshop:

- Enable excellence in Government services
- Establish India as a knowledge hub for the world in the provision of eGovernment solutions
- Equip workshop delegates with the knowledge that will enable government to offer high quality services to citizens and business reducing administrative costs.
- Address issues related to the improvement in the efficiency of inter-administration communication to harness the full potential that interoperable eGovernment projects bring.
- To assist government agencies faced with poor take-up of services and expensive implementations.

Finally, the organisers also aimed to promote joint actions by Indian and European stakeholders in order to enrich their experience through the validation of each other's initiatives concerning common approaches to the key aspects of seamless eGovernment services, such as citizen identification, security, interoperability including data definitions and procedures.

3.3   Workshop themes and goals

The key goals of the Workshop were to:
- present and discuss examples of good practice in India and in Europe
- add value to the dissemination activities designed to showcase the excellent examples of eGovernment services in Europe and in India
- launch an eGovernment knowledge base for India
- establish India as a knowledge hub in the world
- equip delegate with knowledge that will enable governments to offer high quality services to citizens and businesses in India whilst reducing costs.

The key themes of the Workshop were:
- an introduction to the status quo of eGovernment in India and Europe
- key decision makers' views on eGovernment
- defining the case for eGovernment
- using knowledge effectively to deliver eGovernment
- developing effective tools to deliver eServices
- security and authentication strategies
- policy development for successful eGovernment
- definition of technological requirements for eGovernment.

3.4   Workshop structure

After the opening and keynote sessions, the workshop programme comprised six tracks:

1. **Track I: Understanding eGovernance for development**. This first track consisted of a description of the present status and future planning of European eGovernance initiatives, as well as the plans of the Indian Government.

2. **Track II: Project assessment framework and benchmarking tools for eGovernment**. This comprised the presentation of benchmarking and project frameworks used by developed countries in Europe as well as the assessment frameworks being developed and deployed by the Indian government. The session was designed to impart knowledge to delegates that would empower them to make sensible decisions when planning eGovernment projects.

3. **Track III: Best practices in eGovernance.** The best eEurope practice (Beep(framework project was discussed with a specific emphasis on eGovernance. During this session the eGovernance knowledge management tool and best practice resource for India, already containing examples of the best Indian eGovernance projects, was launched.

4. **Track IV: Citizen identification systems and smartcards**. Given that the first task of eGovernment is to be able to identify the citizen or business accessing the service, the aim of this session was to discuss the issue of creating an architecture for secure and interoperable eGovernment electronic identity services and transactions..

5. **Track V: eGovernment leadership milestones**. Expanding Electronic Government is one of the government-wide initiatives mentioned by the Prime Minister of India in the 'Common Minimum Programme'. This track was designed to update managers on current business management processes and techniques, as well as proven strategies to equip eGovernment leaders with the fundamental knowledge to conduct the business of government in a digital world.

6. **Track VI: Making eGovernment a reality – an implementation roadmap**. On the basis that providers of digital government services need to progress beyond the mere display of information and focus on how to manage the delivery of information services to customers, this session planned to outline a general roadmap for implementing eGovernance solutions in phases.

3.5   The venue: Chandigarh

Chandigarh is a India's youngest city, planned by the famous French architect Le Corbusier in the 1930s. It is the capital of the States of Punjab and Haryana, but does not belong to either of them. Instead, it is a Union Territory, which means that the City is under the direct administration of the Government of India and not constituted as a state with its own legislative assembly. A Union Territory in India is something like the District of Columbia in the USA.

Chandigarh is well known for:
- planning and architecture
- quality of life
- high educational level
- pollution-free environment
- low crime rates
- aware and active citizens.

The total population of Chandigarh is 900,914 (2001 Census), and is overwhelmingly urban. The urban area of Chandigarh is much larger and about four times more densely settled than its rural area. Men outnumber women in Chandigarh, one reason being that many men who are employed in the city find it more affordable or convenient to leave their wives and children in their native village or towns. Population growth between 1991 and 2001 has been very rapid.

In terms of total literacy, nearly 82 per cent of Chandigarh's population is literate. This is much higher than the national figure of 65 per cent.

CHANDIGARH (U.T.)
Figures at a glance - 2001

1	Number of districts					1
			Total	**Rural**	**Urban**	
2	Area in sq. km.		114	34.66	79.34	
3	Total Population					
		Persons	900914	92118	808796	
		Males	508224	56837	451387	
		Females	392690	35281	357409	
4	Decadal Population Growth 1991-2001					
	Absolute		258899	25932	232967	
	Percentage		+40.33	+39.18	+40.46	
5	Population Density (persons per sq. km)					
			7903	2658	10194	
6	Sex Ratio (no. of females per 1000 males)					
			773	621	792	
7	Population of 0-6 yrs*					
	Absolute					
		Persons	109293	14007	95286	
		Males	59238	7562	51676	
		Females	50055	6445	43610	
	% of Total Population					
		Persons	12.13	15.21	11.78	
		Males	11.66	13.30	11.45	
		Females	12.75	18.27	12.20	
8	Literacy					
	Absolute					
		Persons	647208	59547	587661	
		Males	384563	40178	344385	
		Females	262645	19369	243276	
	Literacy Rate					
		Persons	81.76	76.23	82.36	
		Males	85.65	81.54	86.16	
		Females	76.65	67.17	77.53	

* 6 yrs means completed 6 years as on 1.3.2001

			Total	Rural	Urban
9	**Urban Slum Population**				
		Persons	107098	-	107098
		Males	62747	-	62747
		Females	44351	-	44351
10	**Sex Ratio of Urban Slum Population**		-	-	707
11	**Slum Population of 0-6 yrs**				
	Absolute				
		Persons	21777	-	21777
		Males	11321	-	11321
		Females	10456	-	10456
	% of Total Population				
		Persons	20.33	-	20.33
		Males	18.04	-	18.04
		Females	23.58	-	23.58
12	**Slum Literacy**				
	Absolute				
		Persons	47317	-	47317
		Males	33730	-	33730
		Females	13587	-	13587
	Literacy Rate				
		Persons	55.46	-	55.46
		Males	65.59	-	65.59

Chandigarh Technology Park

Chandigarh is the first planned city in the country and still maintains its status as one of the best managed cities in the country. The excellent social infrastructure, large green spaces, and its compact size, make Chandigarh an ideal work environment. The quality of life in the *City Beautiful* is comparable to the best cities across the world.

A 111 acre site has been allocated by the Administration for a Technology Park near Kishangarh, for attracting technology companies to set up their facilities. Major companies are being allotted land, and other companies are to be given built-up space in the Park. The Administration is creating only the basic infrastructural facilities from its own funds, and is developing the area like any other urban sector of Chandigarh. The construction of buildings would be carried out by the companies themselves in the large campuses and the built-up space would be developed by a leading developer with whom the Administration would enter into a Joint Venture Agreement. Infosys has already been selected as the main anchor for the Park, and an MoU has been signed, while formal allotment is yet to take place.

Other applications from eligible sub-anchor companies have been received for allotment of land. An Entrepreneur Development Centre is also being set up in collaboration with the Chandigarh Housing Board at the Park. The Centre participates in various national and international events to promote Chandigarh in general and the Technology Park in particular.

For More Information : http://www.chandigarh.nic.in

4   Workshop tracks

4.1   The Keynote Plenary

4.1.1   Welcome address – Vikas Kanungo, Chairman, The Society for Promotion of eGovernance

The welcome address to the International Workshop was given by Mr. Vikas Kanungo, Chairman of the Society for Promotion of eGovernance. He welcomed all present and invited the Governor of Punjab and Administrator of the UT, Chandigarh to formally open the proceedings.

Background to Indian governance

The governance of India consists of 50 ministries, 28 States, 7 Union Territories (including Chandigarh which has much independence, and answers to the Union Government in Delhi, not to the State of Punjab), 670 Districts, 6,000 Blocks, 600,000 Villages, and 1 million schools. The population in 2003 was 1,049,700,000 on a land area of 3,287,263 sq. km..

4.1.2   Inaugural address – His Excellency, Justice O. P. Verma (Retd.). Governor of Punjab and Administrator UT Chandigarh

His Excellency, Justice O.P. Verma, delivered the inaugural address to all present. He talked of the "Dream of every Nation" to have an efficient and transparent government environment. He stressed the fact that in his view good governance requires eGovernment to be efficient, transparent and ensure access by all. There should be clear cost benefits and real citizen focus. He described applications already in place in the Punjab which include IT centres where citizens can access services, for example, payment of water and electricity bills, registration of births and deaths, issuing senior citizen cards, provision of disability services and bus passes. Coming soon, in what he called the second phase, was the procurement of housing programmes and the involvement of education, followed by online access to telephone bills.

His Excellency went on to stress that eGovernment is a revolutionary process which can give officials and citizens access to a wide range of documents and information relating to local government. He said he understood that a concerted effort was needed to ensure that governments of every nation become eGovernments in order to ensure transparency and access for all. This access to more and more facilities, he stated, would make citizen's lives more comfortable.

He repeated his welcome to the group of international speakers present, and said that he and others were relying on them to provide the Government of Punjab and the Chandigarh Administration with assistance and guidance in the design and provision of eGovernment services. He finished by saying that he was confident that the International Workshop would produce valuable conclusions which could help Chandigarh and other Indian municipalities to move forward.

His Excellency finally wished all present every success during their deliberations and in a traditional ceremony, lit the flame that declared the International Workshop in session.

4.1.3   Keynote address – Krishna Giri, Government Sector Leader ASEAN/South Asia IBM

Krishna Giri, Government Sector Leader ASEAN/South Asia IBM, Business Consulting Services gave the keynote address. He started by responding to Justice Verma's address and said that it was good to hear the Governor of Punjab putting so much importance on eGovernment. He said that "as an old Indian" he was pleased to hear that eGovernment is making so much progress in India. He went on to quote Mahatma Ghandi: "Self governance is good governance".

He introduced IBM's "on demand agenda" and described a citizen-centred government as one of the biggest changes in India. This would increase the importance of citizens who now had to be addressed in the same way as private sector shareholders, and who have thus assumed major importance as the main focus of government.

The "on demand government" approach is based on four pillars, so that government must be:
1. focused – must have clear goals
2. variable – developing new models such as private public partnerships
3. responsive – different government levels and entities working together to share information, cooperation between departments and administrations
4. resilient – with sound technology and business infrastructures.

The on-demand approach focuses on the value and supply chains of end-to-end eGovernment, and putting the jigsaw puzzle pieces together consisting of technology, processes and people. We need to consider why is eGovernment required, how it can be implemented and what are the gains.

Singapore is a good example of an integrated on-demand government, which is not so much about the technology but more about:
• good sound strategy
• internal efficiency
• openness of standards and communication channels
• transferability of systems and experiences.

Krishna Giri described a paradigm shift from top-down to bottom-up. There is a need for cultural change, strong leadership often driven by champions (important in a hierarchically-oriented society), and the change from a push/task government orientation moving to pull/service orientation. It is necessary to use positive language to promote eGovernment. It must be ready, nimble, quick, now, proactive, sustainable. There is also a need to change organisational behaviour, but this can be more difficult in India since many civil servants live in enclaves that protect them from the difficulties of society.

India has set itself very ambitious targets in alleviating poverty and improving education, health, trade and investment. This can only be implemented by addressing the fundamentals of everyday life by taking four steps:
1. Set the vision (such as primary education, defeating AIDS), and break this down into a series of milestones along with the intermediate transformation steps. In other words, compartmentalise the supply chain into plug'n'play type modules.
2. Build the transformation roadmap, based on business components, processes, activities, applications, and infrastructure. For example, security applications need to be componentised so they can be used everywhere and anytime.
3. Create the on-demand operating environment, optimise the IT through componentisation enabling plug'n'play flexibility measured by KPIs (Key Performance Indicators), and based on the principles of citizen-centric, integration, simplification and unification.
4. Extend the impact through widespread roll-out, for example the eCitizen portal in Singapore, New York State, Manitoba, and Denmark. We must also remember that everywhere is unique but also the same. One size does not fit all, thus there is a need for componentisation and flexibility.

There are many good examples in India, such as the recent launch of an Indian educational satellite to provide eLearning in rural schools. There are many possibilities for the integration of services and locational history. It is also now possible to be told by email that the person who sat next to you on a flight 2 weeks ago now has SARS, so that positive action could be taken.

Finally, Krishna Giri stressed the importance of introducing performance indicators in any eGovernment programme, and stated that he saw the negative aspects of eGovernment simply as 'challenges'. When asked about the digital divide, he responded that this was clearly a major problem for government.

4.1.4   First Session Chair – N Singh Kalsi (Punjab), Managing Director, Punjab Information and Communication Technology Corporation Ltd,

N Singh Kalsi, in charge of IT Strategy for the State of Punjab, first looked at the need for good governance. He described the old model "if it moves tax it, if it keeps moving regulate it, and if it stops subsidise it", and defined corruption as "monopoly plus discretion minus accountability times authority". The average Indian is understandably cynical about government, so the disintermediation of the power of the civil service is important. There are 8 aspects of good governance:

- the rule of law
- transparency
- accountability
- responsiveness
- effectiveness and efficiency
- equity and inclusiveness
- consensus orientation
- participation.

A citizens' charter is needed which recognises different stakeholders, although this also means it could be difficult to reach a shared vision, including citizens, business, visitors and government itself. Government in India needs to be re-invented to become smaller and smarter, and also to support socio-economic growth. The present largely bureaucratic government rarely measures results, and normally only the number of people and the size of the budget.

N Singh Kalsi described the old model of government as "information-government-citizen" compared with the new model of "government-information-citizen". India is somewhere along the eGovernment Gartner hype-cycle which starts with a technology trigger, rises to an inflated expectation, descends into the trough of disillusion, climbs again up the slope of enlightenment, and finally reaches the plateau of productivity.

A key issue is the per capita bandwidth to enable multi-channel access and delivery, including the PC, kiosks, fax, radio, TV, SMS. India has generally under-utilised its bandwidth, but this now gives the country a strategic opportunity to enable rapid development, even though it should be remembered that basic electricity infrastructure is still uneven, with frequent power cuts.

Finally, N Singh Kalsi proposed a roadmap for Indian eGovernment based on sound policies, core infrastructures, core applications and departmental applications (such as land mapping). The overall philosophy must be to think big, start small and grow fast.

4.1.5   Workshop themes and goals – Jeremy Millard, Danish Technological Institute

Jeremy Millard of the Danish technological Institute outlined the workshop themes, goals and structure, as described in section 3 of this report.

He started his presentation by thanking his European colleagues for the interest they had shown in contributing to the International Workshop. He then stressed that although the Indian audience could learn much from European experiences, it was considered by all speakers equally as important for Europeans to learn about the experiences and interesting projects and programmes already being implemented in India. This would be a truly two-way exchange of information and experiences and one from which we must all benefit.

Finally Jeremy Millard stressed that the workshop would actively encourage interactive discussion between the audience and the speakers, and that all present should use this valuable opportunity to network and develop new contacts. He further said that he and his colleagues considered this to be a very important venture, and one which everyone had an interest in strongly supporting.

4.2 Track I: Understanding eGovernance for development

4.2.1 Track Chair – Shri N. S. Kalsi, IAS, Secretary IT, Government of Punjab

Shri N. S. Kalsi introduced the first track of this International Workshop as one providing an overview and starting point for later presentations and discussions by reviewing and summarising some of the main issues and status of eGovernment in both India and Europe. During the following discussions, some consensus was reached that in both Europe and India future focus needs to be a lot more on citizen (and business) centric services which are localised rather than "McDonaldised", which don't always view tradition as the enemy even though modernisation and a business approach is necessary, and which recognises that real change will only come in the minds of the people, especially the civil servants.

4.2.2 eGovernance European perspective – Antoinette Moussalli, Euromax Solutions, UK

Antoinette Moussalli described the current situation of eGovernment at the European level and particularly from the perspective of the European Union. eGovernment is defined by the European Commission as the use of ICT in public administrations combined with organisational change and new skills in order to improve public services and democratic processes and strengthen support to public policies. eGovernment is an enabler to realise a better and more efficient administration. It improves the development and implementation of public policies and helps the public sector to cope with the conflicting demands of delivering more and better services with fewer resources.

eGovernment enables the public sector to maintain and strengthen good governance in the knowledge society. This means:

1 a public sector that is open and transparent: governments that are understandable and accountable to the citizens, open to democratic involvement and scrutiny
2 a public sector that is at the service of all – user-centred public sector will be inclusive, that is, will exclude no one from its services and respect everyone as individuals by providing personalised services
3 .a productive public sector that delivers maximum value for taxpayers' money – it implies that less time is wasted standing in queues, errors are drastically reduced, more time is available for professional face-to-face service, and the jobs of civil servants can become more rewarding.

Overall, the European public sector is being challenged to:
- help boost economic growth and innovation
- cut red tape, eliminate queues, high quality services,…
- close the democratic deficit, restore democratic ownership
- cope with demographic change, e.g. ageing, immigration
- safeguard liberty, justice, security
- deepen internal market and convergence in enlargement
- optimise multi-level governance (local…regional …national...European...international)
- and…all of this within tight budgets … lean and attractive…

Antoinette Moussalli explained the European eGovernment Roadmap to address key issues and opportunities, published in September 2003, and its background and key elements. Firstly, there is a need to advance multi-platform access, identity management, interoperability, pan-European services and innovation , Secondly, the exchange and use of good practice needs to be accelerated. Thirdly, focus must be placed on the financing the eGovernment, including its economics, costs and benefits, and the development of suitable indicators.

The roadmap also draws upon the eEurope 2005 Action Plan which is developing a set of 18 actions, to speed up the development of eGovernment and reinforce eGovernment priorities. Key actions include:
- Ensuring access to public services for all citizens, through investment in multi-platform approaches (PC, digital TV, mobile terminals, public access points etc).
- Ensuring trust and confidence in online interaction with governments, safeguard the privacy of data, and properly addressed authentication and identity management issues.
- Making electronic public procurement easier and more widely available.

- Defining, developing and implementing pan-European eGovernment services and promoting their use, in order to facilitate people's freedom of movement in the internal market, and help to establish a true sense of European Citizenship.

Research programmes are also a part of the eGovernment roadmap. There is at least ten years of research, starting in 1994 with a focus on ICT for central government, progressing through systems and services for administrations in the late 1990s, and today channelled largely through the Information Society Technologies Programme focusing on services to citizens and business, trust and security, interoperability, eDemocracy and measuring impacts.

There are also a number of other support and promotion programmes, such as eTEN (eTrans-European Networks) which promotes cross border and other multi-national public eServices, and IDA (Interexchange of Data between Administrations) promoting fully pan-European services especially G2G.

The roadmap also takes account of the wider European policy context, particularly the Lisbon Agenda, launched in 2000, which aims to enable Europe "to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion". The European Research Area (ERA) has also recently been established in order to create a Europe-wide 'internal market' in research and development.
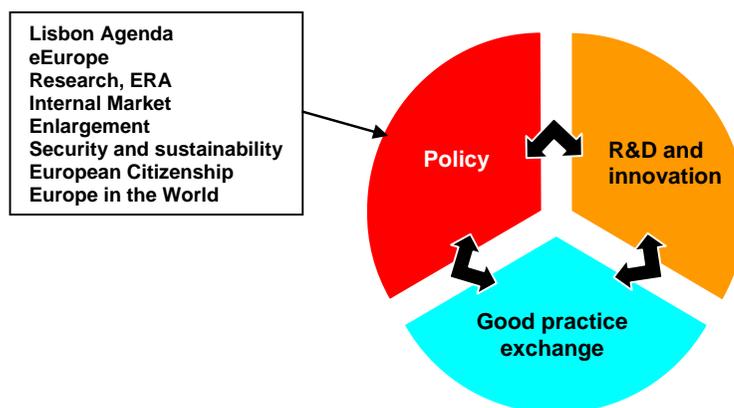
the eEurope initiative is currently the most significant vehicle for promoting eGovernment at European level and was recently assessed by leaders of national eGovernment initiatives:
- Broadband connections for all administrations:
    - good progress, need to monitor and exchange on innovative use of broadband
- Interoperability:
    - high priority, progress on European Interoperability Framework, need to pursue actions (R&D, eTEN, relationship to legal requirement, e.g. Services Directive), liaison with industry
- Interactive and multi-platform public services:
    - good progress in online services but less on multi-platform provision; need for strategies related to policy objectives, architectures, and experience exchange
- Public procurement:
    - good progress
- Good practice exchange:
    - EU Good Practice Framework to develop fully in 2005; encourage and support further good practice exchange initiatives
- Benchmarking and indicators:
    - need for demand-side indicators and measurement (take-up and impact); process to be put in place towards an improved measurement framework.

Antoinette Moussalli concluded by reminding the audience that eGovernment in Europe has come a long way in a very short space of time, and that the pace of change seems set to continue and the next years which will surely bring changes in the way the governments of Europe work and interact with their customers. On the table are possible changes in service delivery models and the advent of more pan-European, and possibly the development of some trans-global, services. In the age of the remote call centres located all over the world dealing with customers in Europe, it may not be long before tenders are

being seen all over the world with nations competing to deliver a whole range of services across the globe. We do of course have a lot to do before then.

4.2.3   eGovernance development perspectives – Michael Blakemore, University of Durham

Michael Blakemore presented the headline experiences of eGovernment development in Europe and elsewhere over recent years, and identified the key challenges presently being reviewed at a European level. In this context he sees the term 'development' as not about the global north-south divide but the way in which economies develop.

At the EU eGovernment Ministerial Conferences in 2001, there was a focus on the automation of government processes. By 2003 there was an acknowledgement that back-office re-invention, eProcurement, are crucial processes, and that they often are not directly visible to citizens. In 2004, the focus has now shifted to the targets of the eEurope 2005 Action Plan, and an acknowledgement has been made that they are more difficult to meet in most countries, leading to a reappraisal of the relationship between government and citizens. Citizens still tend to be seen as consumers of government services but they can also be innovators, thus moving away from the notion of a passive recipient. The consumerist approach perhaps needs to be re-balanced with the obligations of citizenship.

There is also today much concern with time and cost. The just-in-time economy versus the 'now' demands of the consumer. Are we moving to a neo-futurist celebration of speed, flexibility and technological capacity? Everything has all been promoted as being so positive. There is also now a tyranny of global eGovernment benchmarks and metrics, so that individual public administrations have a fear of slipping down the league lists.

Michael Blakemore asked the question "what is the 'ideal' political system for successful eGovernment"? Research perhaps points to small, clean sheet, 'liberal authoritarian' states which are able to leap-frog over others in progress to eGovernance, such as in Malaysia and Singapore. Are we in danger of mixing 'strategy' with a 'central plan'? Most so-called strategies are really central plans rather than business strategies which can change to reflect changing reality and take account of success and failure. We need to remember the nature of strategy and the fact that there is often a strategy paradox, in that strategy needs to reflexive and will change, yet in a democracy change is seen as failure by the opposition.

He also asked what do we really mean by 'modernisation', and is it just a smokescreen for cost reductions and downsizing? Do we really mean that 'modernisation' is about the externalisation of risk? In this context, we need to examine the cost-benefits of eGovernment and how can we deliver 'sustainable' benefits. There is now a move from measuring access to a focus on 'civil society', but concerns remain over the 'democratic deficit'. There is a clear European trend away from one electronic channel to multiple channels of delivery based on lessons learned from eCommerce.

Is it really possible to change government organisations? We need to confront the behaviour of bureaucracy and the dilemma of public-private-partnerships (do they really save money), outsourcing, privatisation and accountability. There are also strong demands for changing the composition of the civil service through training, skills, ethos. Lessons can be learned from the utilities, the railways etc., but also from IT failure and IT sharing and integration problems. There is a clear demand for localism and direct links to citizens in local government, perhaps including the utilisation of intermediaries. Why does 'paperless' government seems to lead to a demand for more printers, papers, and filing systems? Perhaps we need a new theory of re-disorganising agencies'?

Are organisations 'virtual' entities that require minimal human input (automation, expert systems, artificial intelligence), or is knowledge and human capital fundamental to the operation of government? Knowledge and knowledge management are vital components of eGovernment development.

Finally, Michael Blakemore asked what we mean by 'innovative government', and how can citizens 'see' the benefits of eGovernment? Is there real democratic accountability within a governance system of "rules, processes and behaviour that affect the way public administrations function" (White Paper on European Governance, COM(2001)428, 25 July 2001), and do citizens really want to interact primarily through electronic means to do this?

Overall, Michael Blakemore concluded that we need a more cultural approach to eGovernment based on a proper, reflexive strategy rather than a central plan. In 2004 a body of experience is emerging in terms of technology, organisation, etc., but new tensions are arising such as between national and local government, not to mention the drives towards pan-European services. In drawing on this experience and

resolving these tensions it will probably be a mistake to set new performance targets in whatever follows the eEurope 2005 framework.

4.2.4 eGovernment Indian perspective – Dr. Vinay Dharamadhikari, Sr. Director, EGovernance Group, Dept. of IT, Ministry of Communication and Information Technology, Government of India

Dr. Vinay Dharamadhikari explained that his presentation was not the official Indian government perspective on eGovernment, but the perspective of one Indian citizen. In many ways the current situation is very unsatisfactory as the Indian government spends 6 rupees to deliver 1 rupee of development. Administrative reforms are thus urgently necessary, coupled with IT business development.

Indian citizens are, however, not starting from scratch as they already experience quite a lot of eGovernment, such as rail ticket reservations, ATMs, voting machines. CBSE on the Internet, IT kiosks and, of course, mobile phones. The benefits of IT are its traceability, non-repudiation and accountability. This enables many government processes to change from tedious and time-consuming activities to easy, simple and relatively quick transactions. For example, eProcurement and reverse auctions can cut delays and costs. On the other hand, road transport checkpoints for border taxes are still a huge problem because the back-offices are not geared to cope and have not been changed.

Dr. Vinay Dharamadhikari drew a number of lessons from failures in computerisation in the Indian public sector and in eGovernment. First, there are too many projects implemented in separate and unlinked modules which enable manual queue jumping by high up officials. More seamless and integrated systems are needed, as in the Bhoomi example. Second, eGovernment projects should only be viewed as tools to facilitate efficiencies (especially financial efficiencies) in a business context. For example, revenues should accrue from savings and cost recoveries in services like land records, birth and death certificates, etc. Improvements can only come if the administration is prepared to save its own resources.

The US Standish Group has published "Chaos: recipe for success", which has evaluated over 1,000 ICT and eGovernance projects, and concluded that 23% ICT projects were total failures, 28% were successes, and the balance of 49% were in-between. In contrast, in India there has not yet been such comprehensive and independent assessment of actual successes and failures, amongst the thousands of IT and eGovernment projects driven by various champions at District, State and central government levels. This needs to be rectified, as there is a pressing need to understand failures so lessons can be learnt from them. "Those who do not learn from history are condemned to repeat its mistakes."

IT projects tend to be more successful in China than in India because of fiscal decentralisation, giving greater control and localisation. Similar institutional reforms need to take place in India. This is particularly the case in the social sectors (such as health and education) where resources need to be redeployed. Overall in India, governance and cohesion are relatively weak, and this is affecting productivity. The initiatives being taken by the Society for the Promotion of eGovernance (SPEG) are therefore needed to act as an animator.

Most eGovernment projects in India are vendor-driven. The Indian government has provided the physical infrastructure and industry has provided the software development but not for localisation and local use. Thus, the great mass of Indian citizens are still bereft of the benefits of eGovernment. There are exceptions, of course, such as railway reservations and Bhoomi, but a change is needed away from vendor-driven to citizen centred eGovernment.

4.3 Track II: Project assessment framework

4.3.1 Track Chair – Vijay Kumar, Additional Commissioner of Income Tax

In his introductory statement ,Vijay Kumar, Additional Commissioner of Income Tax, explained that for eGovernment in India "we have got to have decent projects that add value, lower costs, are transparent and without discrimination." The focus must be the customer. The aim is equal treatment for all. Vijay Kumar gave the example of an illiterate widow who earns a meagre pension and signs with her thumbprint. eGovernment should also be able to help her.

He recounted his work in computerising the tax department, training staff, overcoming the objections of the unions, staff and others, and endeavouring to make taxpayers into stakeholders. The turn around of tax

returns has been reduced from 11 to 3 months. One way in which computerisation has resulted in cost gains is by lowering the interest due on tax refunds – quicker refunding means lower costs. The inland revenue service also outsources tasks to become more efficient.

Assessment frameworks must be developed for each type of organisation, and focus both on the hidden as well as the explicit benefits and costs. The ultimate assessment test is that a process continues successfully long after the initial project. In conclusion, Vijay Kumar stated that India does not need Einsteins, but people with sufficient intelligence, who are pure of heart and have the right mentality.

The Society for the Promotion of eGovernance came into existence to serve and support these goals in India, as well as good governance and better services generally.

In his closing remarks, Vijay Kumar emphasised the need to "keep it simple" – the less government is involved, the simpler it will be. He urged those involved in eGovernment to keep government's role as low as possible, because bureaucracy will only make it more complicated, creating additional stakeholders and evaluators.

4.3.2   Assessment systems and tools used in Europe – Christine Leitner, European Institute of Public Administration

Two of the most important elements of policy assessment in the European Union are:
- benchmarking – an essential part of the Open Method of Coordination (introduced by the so-called Lisbon Goals in 2000 and being followed by all EU Member States)
- the dissemination and exchange of good practices – one of the proposed actions of the eEurope 2005 Action Plan.

Christine Leitner discussed a recent project aimed at the evaluation of good practices, namely the eEurope Awards Programme. During the period 2003-2005, this programme focuses on collecting and showcasing eGovernment and eHealth case studies through major European conferences.

The assessment or evaluation of good practice case studies requires (a) a fair, independent, and transparent process, and (b) three independent reviewers as is usual in the EU's Framework Research Programmes. For its assessment, the programme uses a wide and flexible set of criteria. The seven evaluation criteria for the eGovernment case studies (some of which are weighted) are:
1. use of ICT (e.g. OSS, multi-access platforms, PKI)
2. innovativeness
3. managing eGovernment implementation (e.g. coordination, removal of barriers to pan-European services)
4. real practical results and impacts
5. functionality
6. visibility
7. valuable learning points and transferability

For eHealth case studies, criteria 3 and 6 were dropped as the focus is on the user side only.

The final eEurope Awards Programme Conference on eGovernment will be held in the UK in autumn 2005, and is likely to focus on back-office reorganisation, leadership and management.

The eEurope Awards initiative has raised a number of questions, such as:
- are such assessment criteria relevant and sufficient to cover the whole spectrum of eGovernment?
- what would one administration want to learn from another?
- can effective exchange of good practices be done at a European level?

Finally, Christine Leitner briefly pointed towards a number of other assessment instruments, such as the Common Assessment Framework used by the European Institute of Public Administration (www.eipa.nl) and the Balanced eGovernment Index or Begix (www.begix.de).

During the discussion it was noted that SPEG would like to collaborate in order to assess to what extent eGovernment projects have been successful in different departments and regions. This would help eGovernment by stimulating the providers of eGovernment services, public as well as private.

4.3.3   eGovernment Project Assessment Framework in India – Shri K. Jayakumar, IAS, Director IT, Directorate of Administrative Reforms and Public Grievances

Shri Jayakumar's Directorate looks at good and bad practices in public service provision. He showed a video of a good practice tackling the digital divide through rural eGovernment services in Gujarat State, in which information on what government has to offer is provided via the local milk cooperative, which has one PC that can also use the local language and script. A type of citizen charter is important in this context, i.e. are citizens eligible for certain schemes, what sorts of documents they have to provide and what decisions do they have to take. He illustrates the transformation in the countryside, for example, by providing an online check of entitlements, allowing people to ask for information on pensions or to ask for hand pump repairs.

It is necessary to define eGovernment before focusing too much on technology. It entails governance in general, including such issues as equity, participation, and the rule of law. The role of government is changing to that of facilitator and enabler, and its functions are being decentralised.

In 2002 a National Action Plan for eGovernment in India for 2003-2007 was drafted and an agenda was approved. The aim is to go from islands of success to widespread adoption. Core projects make up about 70% of the resources focusing on infrastructures and integrated services, but focus is also being placed on HRD, training, service maintenance. Considerable progress has been made in many states and key initiatives have been taken in specific sectors (for example, taxation and agriculture).

Shri K. Jayakumar presented an assessment framework based on a wide range of different methods, such as balanced scorecards, a life cycle approach to policy assessment, comparing operations (how) with results and impacts (what and why), and similar. A crucial question is where the assessment should focus: on gains at the bottom of the learning curve (as in States with a low level of eGovernment development, such as Bihar) or on (repeated) gains at the top in highly developed eGovernment States? Above all, it is necessary to obtain a clear understanding of accountabilities of outcomes.

A General Programme Logic Model (cf. the Logical Framework Approach) has been adopted composed of two part and several sub-parts:
- A. Operations (how) – is the thing being done right (efficiency):
  - 4. input
  - 5. processes
  - 6. process outputs
- B. Results (what and why) – are the right things being done (effectiveness)
  - 4. programme outcomes
  - 5. agency outcomes

This logic model was used to develop an eGovernment roadmap which focuses upon re-purposing existing initiatives as well as starting new ones, and recognising that there are many opportunities to fail, including false starts, lack of business approach, too much detail, no transition plan, complacency. A major question is how to overcome government silos: different government services are providing similar services. Instead, it would perhaps be advisable to cluster services in the front office and support them with a seamless back office.

Reasons for success have also been recognised, including:
- business driven
- managed scope
- resourced for sustainable momentum
- good governance (decision and programme management)
- change management

The Action Plan called for four phases of eGovernment, and Indian governments are now generally moving from phase 2 to phase 3:
1. information access
2. expanded access and interaction
3. redesign around the customer
4. building knowledge-based government.

4.4 Track III: Best practices in eGovernance

4.4.1 Track Chair – Shri Karan A. Singh, IAS, Finance cum IT Secretary, UT Administration, Chandigarh

Shri Karan A. Singh introduced the track by stressing the importance of understanding the successes and failures of others when designing eGovernment solutions. This is particularly important in the context of the Indian National Action Plan for eGovernment, and the access available to between 1,000 and 2,000 Indian cases. Europe and India need to learn from, and support, each other in eGovernment development, and move forward together.

4.4.2 Best eEurope Practices system – Jeremy Millard and Louise Thomasen, Danish Technological Institute

Jeremy Millard and Louise Thomasen introduced and described the overall conceptual approach of the EU-supported Beep, Best eEurope Practices project (http://www.beepknowledgesystem.org), which is currently being adapted and upgraded to form the basis of a knowledge management tool for eGovernance in India. Based upon both Indian and European expertise and experience, the knowledge management initiative is designing, developing and implementing an eGovernance good practice exchange and learning framework for use in India. The overall concept is simple and consists of three main levels, each subject to a quality filter to ensure that the contents both contain relevant and rich material, and that it is also presented in a clear, accessible and easy to use manner:
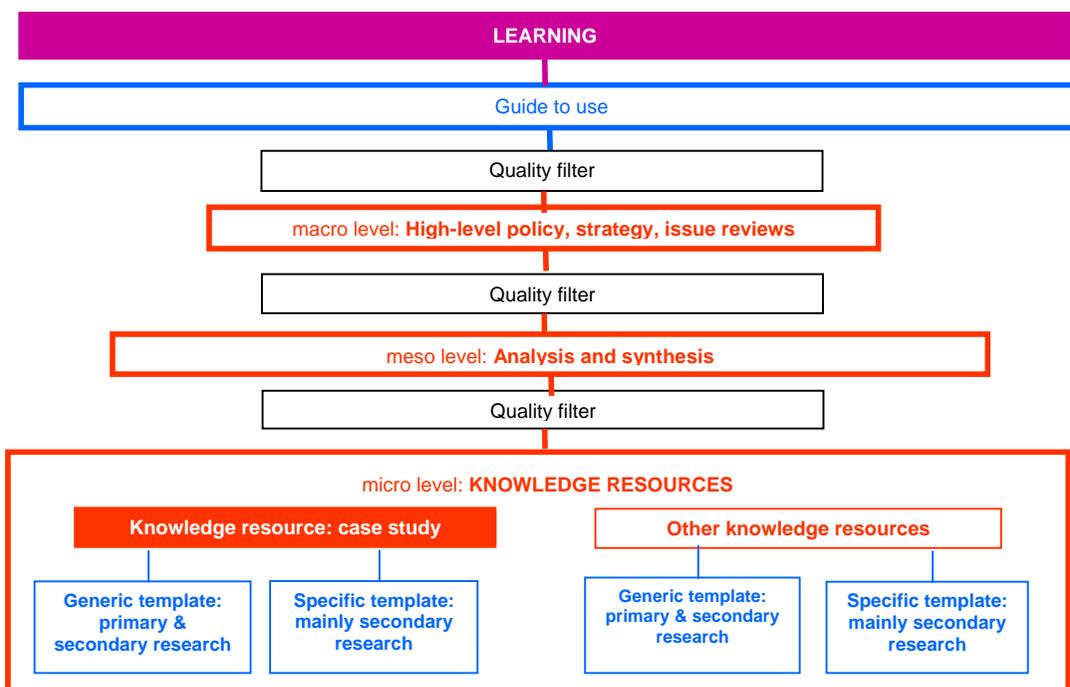
- Micro level: consists of knowledge resources, mainly case studies but could also be event reports, technology applications, stakeholder agreements, legislation, etc. Each knowledge resource is presented either in a specially designed template or in the original template depending on the provenance of the resource and the convenience of the user of the knowledge tool.
- Meso level: consists of analyses of selected knowledge resources from the micro level (as well as other material where relevant), and could include for example good practice syntheses of a number of case studies, such as presenting the main features a large number of income tax eGovernment services, drawing out the main lessons about what seems to work, what does not,

why, and in what types of context. Again, a standard template will be applied unless it makes sense from a user perspective not to do so.

- Macro level: draws in turn upon the resources of the micro and meso levels (as well as other material where relevant) to present high level policy, strategy and issue reviews, for example the digital divide policy implications of a number of case studies and analyses of eGovernment projects in rural villages.

Each knowledge resource from the micro level, as well all analyses and policy reviews from the meso and macro levels, will be presented in the knowledge base accompanied by a short 'guide' which summarises in a standard format three attributes:

i) Map – i.e. the resource is defined in relation to a taxonomy of subject matter (domains, objectives and key factors) as well as a taxonomy of characteristics (such as geographical location, size, stakeholders, ICT used, etc.) These sophisticated mapping definitions enable the knowledge base to both be searched for very specific types of resource, and for research to be undertaken on these types.

ii) Validation – i.e. the results of expert evaluation of the resource on the basis of agreed criteria. Note that this evaluation is about the performance, for example, of the case study itself, and should not be confused with the quality control filter which simply ascertains whether a resource is relevant and presented in sufficient and clear detail. Thus, a 'bad practice' case study could be made available in the knowledge base if it is well presented, relevant and of sufficient detail, and if useful lessons can be learned from its experience, even though it performs 'badly' and thus receives a poor expert evaluation. In addition to expert evaluation, provision will also be made for self evaluation by the resource owner, and/or third party evaluation by the users of the knowledge base.

iii) Transfer and learning – briefly summarises both:
- the context of the resource: the necessary context for understanding and using the resource, e.g. legal, institutional, cultural and technical contexts
- application: summary advice of how the lessons from the resource can be applied to the knowledge base user's own situation.

Finally, templates and support are provided for ensuring that the knowledge base tools and contents are actively used in eGovernance learning situations. These could include:
- individual learning
- joint learning (mentoring or pairing)
- peer learning
- training, both traditional and on-line
- workshops, conferences
- discussion groups
- on-line fora
- Communities of Practice, Research and Policy

4.4.3 Process-based eGovernance (case study of Tiruvarur District, TamilNadu State – Shri Uma Shankar, IAS, Commissioner, Disciplinary Proceedings, Salem, TamilNadu

Umashankar provided an excellent example of an Indian good practice eGovernment case study by describing the initiatives and results in the District of Tiruvarur in the State of Tamil Nadu, southeast India.

Tiruvarur District is a severely challenged area of 1.1 million people with high levels of poverty, gender discrimination, illiteracy, and is also highly prone to environmental disasters like drought, cyclone and flooding. The project started in February 1999, and was implemented in a phased manner, starting from May 1999 till June 2002, in seven Taluk offices, ten block offices and the District Collector's office. The case involves a significant integration of local services, resulting in 26 on-line services including land registry, old age pensions, benefits, rural development, noon meal scheme, scholarship for economically poor students, Panchayat monitoring, digital signature, etc., and runs over a wireless network resulting in an increasingly paperless office in the administration.

Under the system implemented, each and every employee who was hitherto working on manual mode was assigned a user id and password to work online. In order to combat severe digital divide problems, younger or otherwise more ICT-savvy members of a family of the Government employees were allowed to access the passwords of their relatives in order to use the system on their behalf. This enables younger members to act as intermediaries for the elderly. Benefits have also included drastically reduced time to authorise and issue certificates and licenses, and local governance overall has been considerably

improved. Many certificates still rely, of course, on other certificates, for example a widow's certificate is dependent upon the husband's death certificate, so the need for even greater information integration remains an on-going issue. There are also other related projects in other parts of Tamil Nadu, such as: using webcams to connect ill villagers with hospitals for diagnosis; using teleconferencing for women's groups in villages to communicate with the District Commissioner, etc..

Overall, the project is very high profile and has been very well received by citizens in the area, as well as by a wider audience through videos, a CNN news feature, etc., although mainly at a national and international level. Of particular significance is the fact that this project has been driven forward to success by a local champion, Umashankar himself, by showing considerable leadership. Paradoxically, the new District Commissioner is not interested in the project, but it is working on in spite of this.

So far, however, the project remains isolated in one District of the State, as other Districts have not taken up the application. This seems to be because technical support is not available in many places, and there remains a general lack of awareness at State and District levels about the success of the project. There are probably also 'not invented here' syndromes, as well as the usual status and hierarchy issues, so that, for example, a major District in the north of the country may not wish to be seen copying an application from the poorer south. There is also the desire among many civil servants to build their own ICT empires. In order to be really successful, a citizen database is needed at State rather than District level in order for the lessons learnt and solutions developed to be widely exploited.

More generally, India needs a broadband backbone network in order to succeed in eGovernment at State and local levels. However, the top decision-makers are still totally unaware of this vital requirement, as they are about the huge advances made by open source software and the potential this has.

4.5   Track IV: Citizen identification systems and smartcards

4.5.1   Track Chair – Shri Uma Shankar, IAS, Commissioner, Disciplinary Proceedings, Salem, TamilNadu

Shri Uma Shankar introduced the track by reminding the audience that all eGovernment services which go beyond the simple one-way access of generic information require that citizen and business users be specifically and securely identified on an individual basis. Value-added eServices cannot be rolled out and taken up unless robust identity management systems are put in place, and that these have the users' full confidence both that their identities are secure and protected, and that their data are not compromised, misused or fall into the wrong hands.

4.5.2   User identity systems solutions for India – Krishna Giri, Government Sector Leader ASEAN/South Asia IBM

Kríshna Giri made his presentation around a number of questions:
- how do we know who you are?
- what services can we offer you?
- what are the success stories?
- what are our credentials?

A number of biological features are used in identity management, including fingerprints, face and voice recognition, iris scans, hand geometry, signatures, each with its own level of false rejection. Post 9/11 there is a focus on various combinations of these, as well as looking at new possibilities such as body odour, DNA, fingernail beds, and multi-modal combinations such as fingerprint scanner into mobile phones. Multiple biometrics are expensive, although they have an attraction since they reduce the number of false rejections. The more a system delivers access to benefits, the more attractive it is to organised crime, so multiple biometrics are increasingly necessary.

For each of these a number of basic characteristics are required, including universality, uniqueness, permanence, and collectability. Questions which need to be asked once a person has been verified are:
- is this person who he says s/he is?
- is the person eligible for a service?
- which services is s/he eligible for?

Kríshna Giri gave the example of MyKad in Malaysia, the world's first multi-purpose smartcard for citizens, which is secured by a biometric thumbprint, and features the following applications:
- government: applications: identification, drivers licence, passport details, health information
- non-government applications: PKI, ATM facilities (money cash withdrawal), 'Touch'n'Go' transit card.

The MyKad smartcard is built on end-to-end programme management with a large number of cooperating shareholders, including the government, the police, the road transport industry, and the private sector. The practical lessons learnt include the need:
- for strong project management
- for cross-agency collaboration – this has sometimes been problematic with agencies not always wanting to share information and citing privacy and data protection as reasons not to release data
- to coordinate at all levels and across all agencies
- to communicate with citizens – it is important that ordinary people know the value of the card and what it can be used for
- to ensure the availability of sufficient card acceptance devices, including for the launch phase, otherwise people will not use them, so there are large up-front investments needed
- for a contingencies plan, i.e. back-up strategies
- for acceptance of the card in regions not covered by the pilots.

Rolling out smart cards like MyKad is greatly assisted if a country has a comprehensive population database, as in Malaysia. The legally warranted life of the MyKad smartcard is six years, although by then, of course, the technical possibilities will have changed. If a card is not used for six months then it is automatically deactivated, although it can be reactivated again. Some of the costs of $8 to £10 per card are being refunded by the banks.

Similar initiatives are taking place in Singapore and the next stop is Indonesia, and another example is the work IBM is doing for the US Homeland Security and Immigration services. The Indian government could afford up to $2 per smartcard per person for a population of 1 billion, but the rest has to be financed by users themselves, other agencies, and the private sector, including the banks.

4.5.3　Understanding the eGovernment policy context and the role of identity management – Edwin Horlings, RAND Europe

Edwin Horlings explained how pan-European identity management infrastructures are a key priority for the development of pan-European eGovernment services, because of:
- increasing dependence on on-line transactions
- ICT technologies do not recognise national borders
- need to find ways to guarantee that we know who we are dealing with in transactions, if we are to achieve a reduction in transaction costs

He pointed out that a pan-European service can only be successful if it embodies the needs of cross-border users, and it is structured around common interoperable infrastructures. In the context of eGovernment, the relevance of Identity management depends on the type of information exchange:
- one-way flow, where generic information is accessed – this normally only needs identity management when information is being accessed by special groups
- two-way flow, where users:
  – access front office services in which the government does not see your personal information and where you can use a pseudonym
  – access back-office services in which identity is needed to make the services function.

The Europe Union is looking for a pan-European approach focusing on interoperability, including on cross border issues and transactions between governments and businesses. eInclusion to tackle the digital divide is also a key theme. There are three preconditions for effective electronic identity management:
1. interoperability – the usefulness of an identity is related to its acceptance and recognition
2. the process of issuing and managing an identity must be accepted as secure and trustworthy
3. scale, i.e. the more organisations use a given system the more valuable it becomes.

There are severe challenges, however. Electronic identity can provide citizens and governments with a larger variety of potential services that a normal paper-based one, but dentity management involves a set of complex processes which are even more difficult for pan-European eGovernment services than for traditional services. There are two major problems. First, the need to overcome national differences in order to create and implement federative electronic identity management approaches. Second, there is a

need for strict adherence to EU data protection principles and security mechanisms to avoid undermining trust and confidence in eGovernment.

European sectoral initiatives include:
- health smartcards for patient files
- virtual private networks for students
- electronic signatures for online tax declaration
- customs declarations before arrival at the border.

There are national initiatives in EU Member States, such as the Austrian citizen card, the Italian smartcard for selected eGovernment services, and the Estonian national identity card. However, these national initiatives mean that there is little cross-border cooperation, hence the EU focus on interoperability.

European experience relevant for India include:
- start small but think big
- go first for proof of concept, then explore options and develop the technical and organisational base
- gather good practice information..

Discussions revolved around the observation that India needs a population register to underpin identity cards. India has a pilot Register in 20 Districts, which is expected to become a national project. In addition more than 1million people have no residential address, and many households do not have a unique address Seasonal migration also exists. The Electoral Roll has a house numbering exercise in operation. Already available is the election entitlement card, and other such cards, so persuading people to spend money to convert a single card may be difficult.

4.5.4 Income Tax Ministry eInitiative – Sanjai Kumar Verma, Assistant Commissioner, Income Tax

The Tax Ministry has all-India status and is currently running a number of eInitiatives:
- reduce compliance costs
- improve customer experiences
- provide eAccessible accounts for citizens.
- establish declared service levels and measure them transparently.

Currently there are 510 tax offices in cities, with 60,000 employees overall. The tax base has risen in the last two years from 10,000,000 taxpayers to 31,400,000 current PAN (Personal Account Number) holders. The expectation is thus to keep increasing the base of taxpayers. the reason why this number has been so low, is not so much because of tax evasion, but more because India has a largely agricultural economy, agriculture being exempt from tax, and because many people are too poor to pay tax. Current income tax payments are around 1,000,000 crore (1 crore = 10 million) rupees.

The Taxnet (paying online) service will be available in 516 cities by the end of 2004, which will incorporate the electronic credit of overpayment direct to bank accounts. Accountants will be able to act as intermediaries, using digital signatures, from October 2004. Tax filing online is also being developed, currently the Form '2E Naya Saral' is being trailed in 12 cities.

An all-India Call Centre has been established, with the national number 01234-2438000. Email responses can be sent to www.incometaxindia.gov.in. There is a gentle move away from the assumption that all citizens cannot be trusted, to a form of partial trust with audit potential. It is very difficult, however, to plan for a significant increase in electronic audit, since the economy is largely cash-based – the use of electronic cash cards accounts for no more than 1% of turnover in India, and plastic transactions are barely 2% of total transactions. There is significant non-declaration by business.

Discussion centred on the question that, as India reduces non-compliance with income tax laws, there may be an increase in non-compliance in Europe as labour market tensions lead to a greater informal economy and local bartering in some countries? A related issue was the potential of pro-active electronic income tax services, where government accesses all data needed to calculate income tax, from its own archives and from employers and banks, in order to send a completed tax declaration to citizens for confirmation. Such eServices are very successful in those European countries which have a comprehensive population database and a conducive legal framework, and the question is to what extent can such systems be gradually introduced into India?

4.6 Track V: eGovernment leadership milestones

4.6.1 Track Chair – Shri Ashok Khemka, IAS, OSD Rules, Government of Haryana State

Shri Ashok Khemka introduced the track by underlining the importance of leadership and responsible management when introducing eGovernment. As the presentations in this track demonstrate, the changes which public administrations need to go through when introducing eGovernment are often far reaching and very profound, so serious thought and action needs to be given to training, especially of managers, and to the development and implementation of appropriate policies and strategies.

4.6.2 Training for successful leadership in European eGovernment – Christine Leitner, European Institute of Public Administration

Christine Leitner set out the following challenge: strong government at all levels, a complex set of knowledge and skills is required for eGovernment beyond simply technical matters, and the strategic need is to embed theses skills pervasively across the public service.

EU Member States are slowly responding to the challenge. The informal network of EUPAN (EU Public Administrations Network) undertook an HRM study which showed there is a need for implementing leadership, and relevant EU ministers will adopt recommendation in 2005. However, there is great diversity of responsibilities and training. The EU lacks comparison between Member States

Public administration training systems in Europe tend to be highly de-centralised with responsibilities widely scattered and only the smallest Member State of Luxemburg has a centralised training school. EIPA (European Institute of Public Administration) was established in a political environment as a non-profit organisation, funded by the European Commission and the Member States but independent of the European Commission. It's core task is provide services, training and consultancy to Member States in all areas of public administration, for example by seconding faculty staff to Member States to assist in coordinating public administration training. EIPA is a truly European institution, but is not a member of the EU structure.

Training programmes have been launched at various levels. One example is Finland, where a programme was initiated but not very successfully at first due to lack of support from the top level. The training programme was an update of a "traditional" leadership approach into an Information Society context, and was designed around 4 to 8 modules of two days each, taking place on a Friday and Saturday. The small number of participants were very satisfied, but a more general understanding of the need for such training was not obtained as many of the decision makers thought such training would not be needed for at least 10 years. Since then, however, the Finnish Prime Minister has made it clear that management should attend and has thus provided a top-down push. In another example in the Netherlands, modular training of junior middle managers took place four times a week. There have also been attempts in the EU's New Member States, but very often the people who register to attend send someone else. A more successful example is a programme in Italy for top and mid-level management devolved to and undertaken at regional level .EIPA is presently consulting it's European network in order to understand how to do it better.

There are some essential leadership skills needed for dealing with eGovernment processes (based on an OECD assessment):
- IT skills, both basic IT literacy and more specialist IT skills
- internal and external information management, including privacy protection and managing and responding to feedback mechanisms
- Information Society skills, including ICT capabilities, trends and strategies
- management and business skills, such as organisational culture, management of change, risk management, cooperation and public private partnerships, etc.

There are many successful examples from Member States, but a "European curriculum" does not exist. The relevance of the need for training is often not sufficiently recognised by decision makers and managers in the public sector, and a lack of commitment is still an obstacle for many initiatives. Talks are, however, currently taking place about setting up a leadership training scheme for launch in 2005.

Finally, Christine Leitner posed the question about whether India had such programmes for training of leadership in eGovernment and received the answer that there is an Indian national training programme.

4.6.3   Information policy and strategy – Michael Blakemore, University of Durham

Michael Blakemore started by posing the question: "What are the necessary strategies that are in place to support information?". Citizens and business have to be treated as customers and answers will be required to the following questions:
- who are they? (identity)
- where are they? (location)
- what do they require? (integration, sharing, rules and legislation).

Citizens and businesses also need to be partners of the public sector, and there are therefore questions about what they can add for citizens services as well as what they can do and what governments cannot. There is the issue of diluting and de-regulating government data monopolies, and Michael Blakemore saw an emerging strategic tension between privacy and security regarding the hitherto data monopolies of governments.

The EU Public Sector Information (PSI) Green Paper and a Directive from December 2003 proposed the basic principles of not creating new monopolies, the reuse information and the imposition of professional charges for government information. Should such charges simply cover costs or should they enable a reasonable return on investment? What are appropriate cost-recovery models? The upper limit for charges set in the 2003 Directive is without prejudice to the right of Member States or public sector bodies to apply lower charges or no charges at all, and Member States should encourage public sector bodies to make documents available at charges that do not exceed the marginal costs for reproducing and disseminating the documents.

Michael Blackmore thus concludes that PSI essentially poses the question of "who pays?". It is clear that PSI should be available and is vital for economic activity and growth, as well as for democracy and accountability. For example, companies need good information about the availability of skilled labour, where to locate their business, etc. In most cases such information has already been paid for at least once through taxation, but it is often disparately held across government in multiple formats and structures, therefore needing integrated systems and structures as well as collection, enhancement, presentation, dissemination and support of users, all of which cost money. Access to, and control over, information is also often a form of departmental power, so information politics add turbulence.

Which PSI costs should therefore be charged for? In the United Kingdom there tends to be a relatively commercial attitude toward public information sharing, but also based on the following principles:
- Only totalitarian governments keep essential information from their citizens
- Why should citizens pay for information twice?
- Different legacy information systems, means there is an integration cost
- NSDI (National Spatial Data Infrastructure, India) – how do we fund it?
- Information is power, and information sharing and integration can be perceived as a threat.

We still have the principles of freedom of information and human rights, but after 9/11 a lot of "data scrubbing" has taken place, that is removing information from the public arena. There is also the issue of data protection where governments should protect citizens data privacy and confidentiality. For example, when changing his address and submitting data to public databases, Michel Blakemore tries to introduce noise into the system by making subtle changes to the way the same address is presented in order to make him more difficult to trace. There is a much less clear identification of ethical and good practice in the re-use of PSI and what government can and cannot do with PSI.

What should governments do and not do? For example, in the case of environmental databases. In the UK there is a NIMBY syndrome, meaning "not in my back yard", i.e. people want things like prisons, power stations, factories, quarries, electricity pylons and mobile telephone masts, but not near them. In the case of flooding in the English city of Durham, a hotel was about to be sold to the Marriot chain when the government published a database showing that the land upon which the hotel is standing is liable to flood. This dramatically and immediately lowered the value of the land and jeopardised the sale. The hotel owner, and citizens generally, have no legal rights to challenge the government, even though such databases can potentially destabilising the housing market and cause individuals huge personal losses, as well, of course, as give them huge gains. This is an ethical dilemma as clearly such information needs to be in the public domain, but it is doubtful whether the private sector would do this if they would thereby be liable for being sued. One private sector solution has been to commercially sell such information, not in terms of land liable to flood or not flood which is always a subjective judgement, but simply giving incontrovertible facts such as historic and verifiable water levels, thereby leaving the user to draw their own conclusions. Even this may not be an ideal solution, however, as such data can require expert interpretation, thus making it very difficult for ordinary members of the public to use it without employing

professional intermediaries. Governments clearly do have a role in supporting a private information market and mitigating such problems as much as possible.

In the US national mapping is available free of charge due to the freedom of information act. This means that the available mapped data are always out of date, more so than in a country like Ghana, some maps being 53 years old. The information landscape is changing as is demand. It is not possible to know in the future who the customers will be for PSI and which information they will demand. One of the problems is modes of funding.

Post 9/11 there is much talk of degraded information, i.e. how to filter out information of use to a potential terrorist, even though the same information can be bought from French and Russian satellites.

One cost model is so-called residual costs in which a charge is made to recover the cost of sending and servicing the information. However, this still leaves the dilemma of actually accounting for such costs within a large public sector organisation. In many such cases, the revenue accrues to a separate finance department, so the department doing the work to provide and send the information will have no incentive to do so if it cannot itself keep the sales revenue, as well as the fact that such work inevitably takes resources away from the department's core tasks.

Commercial partnerships between public and private sectors can be very important, and there are examples of commercial information markets where information is only collected once the customer has placed the order, such as in mapping data where field-to-customer only takes 24 hours. What is the kind of information market we want to stimulate? Examples like this show that not much money is to be made in selling data but a lot can be made in its use. It's what you do with the information that's important. One of the reasons the so-called SARS epidemic, which did not kill that many people compared to, say, AIDs, was taken so seriously was that it threatened the communication routes and meeting places of rich business people. There can be value-added resellers, but there are also concerns over unfair competition and copyright abuse, such as when organisations like the BBC, which receive much of their revenue from the public purse, enter into competition with private sector firms. It is difficult to balance supply and demand for information in the electronic age. Such information is necessary for location-based and citizen-based eServices.

There are also wider governance and legislation issues, such as the international and global information infrastructure. There is often a paradox of scale and resolution. In the case of Eurostat (the European Statistical Office) low resolution, common denominator, data are collected from EU Member States, and are then used as the basis for European policy making. This raises serious doubts about policy efficiency and effectiveness when relying on such low grade data. Another example is GSDI (Global Spatial Data Infrastructure): you can use and do it anywhere you like, as long as you do it the American way. Another example are the patents taken out on biological organisms and processes, such as natural remedies for AIDS, raising questions of data colonisation and colonialism. There is a paradox of privacy and authentication.

4.6.4   eGovernment strategic framework for the next five years – Jeremy Millard, Danish Technological Institute

Jeremy Millard reported one of his favourite quotations, i.e. from Alan Mather (UK eEnvoy) who recently said: "eGovernment isn't any different from government. It just might better, sooner." Government itself is multifarious and needs to fulfil different roles and pursue different policy goals, which may not always be compatible:

1   The search for savings: dynamic, productivity-driven and value for money concept and set of institutions ('more for less') – here the user is seen as a tax-payer
2   The search for quality services: inter-active, user-centred, individualisable, inclusive services, maximising fulfilment and security – here the user is seen as a consumer
3   The search for good governance: open, transparent, accountable, flexible, democratic – here the user is seen as a citizen and voter

Jeremy Millard asked what is role of the 'e' in achieving the above?

Many of the successful examples from Europe demonstrate the dramatic increases in transparency which can result from eGovernment implementation and which benefit both government and industry alike in terms of improvements to the overall quality and functioning of internal work processes, change management and organisational arrangements. The greater clarity, simplicity and measurement which transparency brings in its wake makes it relatively easy to focus on increasing efficiency and productivity

where these are too low, thus improving all round performance, and lays the basis for an improved strategic focus by the organisations involved and much better coordination between the public and private sector. This often has the added benefit of enabling more rapid, more accurate and closer compliance with both national as well as EU rules and regulations, where the latter apply, for example in the areas of procurement, internal markets, customs, legal and registration requirements, labour markets, etc. This has two advantageous effects. It significantly improves the functioning of local, regional and national economies, and it strengthens EU wide competition, trade and employment as part of the Internal Market. This makes it much easier, for instance, for companies, and in particular SMEs, in one Member State to extend their markets and supply chains across borders, as well as for much more accurate and rapid matching of job-seekers with appropriate work opportunities wherever these may be.

Implementing eGovernment does involve substantial investment costs, which can become an insurmountable obstacle if budgets are tight. There is a strong case for proposing much greater effort in sharing technical development and systems investments in order not to re-invent applications and to share the costs in case of failure or when budgets are exceeded. The use of open source, code-sharing and de-facto standards needs to be driven more systematically by central governments and at the European level to ensure fully open technical platforms. This is not a question of standardising data definitions but rather, for example, requiring that any and all such definitions are modelled in the same language, such as XML, in order to encourage sharing and interoperability.

The learning curve to achieve all the above is long and difficult, and the barriers numerous. Moreover, where greater productivity is achieved through investment in simplification and the roll out of more open technical platforms, care must be taken to simultaneously invest in the quality and quantity of services being offered. As we have seen, simplification also implies greater transparency and access, and thus the greater chance that political and citizen scrutiny can be effectively exercised. Thus, the efficiency and technical questions cannot ultimately be separated from considerations of quality, eGovernance and eDemocracy.

Making government more productive by adopting eGovernment has already been shown to be a realistic and achievable goal. However, this entails much more than investing heavily in service roll-out, the main European achievement to date. To ensure government becomes 'efficient' and 'lean' also means investment in simplifying its structures and processes, and rethinking these (maybe from scratch) before digitising and automating them. But, overall and despite some forerunner examples, eGovernment investment within Member States has to date tended to leave established organisational structures and processes largely in place. A form of 'government process re-engineering' is required which tends to go through four stages:
1. in traditional government, citizens and businesses have to interact with each single government agency
2. since the early 1990s, and the widespread position in Europe today, front office re-engineering means that citizens and businesses only have to interact with one front office (one-stop-shop), which then coordinates with the various departments or agencies.
3. back-office re-engineering means that the front office coordinates with re-engineered back-office processes, rather than traditional departments or agencies, and become citizen-oriented rather than institution-oriented.
4. in the future, though some examples exist, total re-engineering of government processes involves a total rethink of the way front- and back offices interact with each other and with citizen and business users.

Indeed, Jeremy Millard pointed out that rethinking things before automating them, has become absolutely crucial if the Internet and the powerful technology developed around it are to be put to efficient use. A dual investment focus upon simplifying back-office processes, to improve productivity, and raising the quality of front-office eServices as experienced by users, for example by enhancing user fulfilment through multiple channelling and individualised access, will ultimately drive a virtuous win-win circle.

There needs to be a transformation of government to prioritise the production and distribution of public goods ('content') rather than public administration ('control'), with a re-vitalised public service ethic and high skill, high value staff . This means:
1. down-sizing and centralisation of the back office, control, function, even up to national and international levels
2. up-sizing and de-centralisation of the front office (content) to provide high quality, simple, localised, personalised, services
3. (r)e-balancing government, i.e. freeing up and redeploying resources: a smaller and smarter back office and bigger and better front office.

Jeremy Millard concluded by underlining his view that, although the above vision is both a powerful and practical medium-term strategy, it is not itself a panacea despite leading eGovernment policy makers decisively in the right direction. The 'front-office' / 'back-office' dichotomy can only take the debate so far, as many eGovernment issues cannot be reduced to one or other of these two categories. For example, is Customer Relationship Management a back-office or front-office function? Clearly it is both, and there are many such examples. In the sense that the debate is about the control (back-office) function versus the content (front-office) function, there has of course been a clear separation historically, but as in the future we move towards 'intelligent content', it will no longer be possible to distinguish between the two (the content will itself be in control), and the dichotomy will become redundant. Even though this is probably still ten years or more away, governance (including service delivery) will have, to all intents and purposes, outgrown 'bureaucracy'.

4.6.5   Jagriti e-Sewa: digital divide to digital unite – J.S. Sandha, CEO Jagriti e-Sewa

J.S, Sandha presented an actual case study of an ICT-enabled platform for rural needs and youth employment. In many areas there is a large pool of relatively well educated youth who are unemployed, and ICT can assist in solving this problem.

The vision is services providing urban amenities in rural areas (PURA), as well as better government. The mission was also to improve the quality of life. The project concepts are:
- a low-cost ICT solution
- appropriate technology and a hybrid service delivery model
- diverse services (urban, rural, eGovernment)
- stress on agriculture (extensive supports to farmers)
- local franchise (kiosks) based on local needs
- low-cost project (within 75,000 rupees)
- knowledge centres, similar in concept to the telecottage movement in Europe.

Service types include:
- rural:
  – contract farming
  – medicinal crops (e.g. an online framers' training manual on medicinal crops)
  – organic farming
  – soil and water testing
  – backward and forward linkages in the rural economic chain
- urban:
  – selling cash cards
  – selling insurance
  – money transfer
  – courier services
  – travel and other reservations

One of the principles is to focus on services giving a low unit profit but a high turnover, such as cash cards and reservations, which translates into a healthy profit and a recurring income, and on services requiring a local focus and which can capitalise on the skills and education of the youth unemployed. A high unit profit with low turnover is not attractive and results from ignorance.

A crucial aspect is the exploitation of technology available now (Linux and open source) rather than waiting for new technology tomorrow.

J.S, Sandha reported that the Jagriti e-Sewa project concept is currently being run in six Districts in Punjab State. Future plans are to include more Districts and expand out of the Punjab. Overall lessons include:
- some services are sure successes
- rural youth need hand-holding
- it is difficult to convince people to change, especially in agriculture
- such projects needs full-time promoters – the Jagriti e-Sewa project has an advisory panel consisting of an economist, an expert on water resources, and an agricultural expert.

4.7 Track VI: Making eGovernment a reality – an implementation roadmap

4.7.1 Track Chair – Lalit Yagnik, Regional Executive Architect, IBM Singapore

Lalit Yagnik introduced and the track and described IBM's concept for eGovernment as developing through a series of waves:
- Wave 1: on-line government
- Wave 2: interactive government
- Wave 3: integrated government
- Wave 4: on-demand government

It should be possible to leapfrog over intermediary waves and go straight to on-demand government. There are many good examples as to how this can be done, including:
- food chain tracking and support, especially for poor people who get subsidised food
- hospital patient and doctor tracking system based on presence and availability using mobile technology
- identifying the location of an ambulance in relation to the location of the emergency call, using GIS

Lalit Yagnik also stressed the need for a balance between services and eServices, as well as for cultural change, and the benefits of innovating across different domains, for example food and transport (as in the example above), telecoms and education (as in eLearning), etc. He also pointed to the use of automation to reduce fraud.

4.7.2 The components of an eGovernment implementation roadmap – Christine Leitner, European Institute of Public Administration

Christine Leitner started by pointing out the aims of eGovernment as the desire to remove red-tape, to be a key enabler of seamless services, to truly become a meaningful agent of change and modernisation, and needing commitment and knowledge. Then she listed the necessary components of an eGovernment roadmap as follow:
- strong political and administrative leadership
- vision, strategies and clear objectives
- funding, including via public-private-partnerships
- appropriate change management strategies, including a common understanding between all actors involved
- effective and flexible project management
- a strategic framework for the assessment of benefits
- collaboration, coordination and dialogue
- customer / citizen focus
- seamless solutions, and re-engineering of back-offices
- favourable legal and regulatory environments, including for data protection
- inclusion and tackling of the digital divide
- enhancing the skills of all those involved
- …and time !

4.7.3 Re-organising the back-office and changing the public administration – Jeremy Millard, Danish Technological Institute

Jeremy Millard presented the findings of a major research project recently completed for the European Commission, which surveyed over 2,500 examples of the best European eGovernment initiatives. The analysis showed how the reorganisation of government back-offices can successfully take place providing benefits both for government itself as well as for end users, whether citizens or businesses. It also identified ten major strategy options presently being pursued by leading edge eGovernment case studies in Europe, many of which are being implemented together:

A. No or minor structural and process changes:

    1   Digitisation of largely unchanged back-offices – typically where existing back-offices are already integrated, so are easy to digitise without significant changes enabling high quality eServices to be implemented for users.

B. Back-office structural change strategies:
    2   Deep reorganisation of back-offices – where existing back-office arrangements are complex, unintegrated and maybe in crisis, so that significant reorganisation is required, normally starting from scratch, in order to implement high quality services for users.
    3   Back-office clearing house – where existing back-office arrangements are relatively complex and often unintegrated but are difficult to change, a separate data exchange mechanism is established.
    4   Centralisation of back-office functions – a rationalisation of back-offices and their functions (e.g. data storing and management) to increase efficiency, make savings and provide one point of contact for users

C. Front-office structural change strategies:
    5   De-centralisation of front-office functions – often in parallel with the centralisation of the back-office, this recognises that users require local physical contact and/or local electronic customisation, as well as local content, thus following the subsidiarity principle adopted in Europe which requires decisions and powers to be devolved to the lowest levels of government as long as they can thereby be both efficient and effective.
    6   Generic types of interaction between user and agency – provides important economies of scale by modularising common back-office and front-office service components, whilst retaining flexibility to adapt to specific requirements.
    7   Portals – a user-centred approach which presents bundles of existing services in a manner and context suitable for particular user activities or profiles, rather than reflecting existing back-office arrangements.

D. Process change strategies – when back offices are able to share data and resources amongst themselves and with third parties, various pragmatic options about the locus of service initiation, control and responsibility are available:
    8   Pro-active services –services are offered by the agency which require little or no initiative from, or action by, the user.
    9   User self service – users are enabled to take more responsibility and initiative, so they can determine, largely on an individual basis, precisely where, when and how the service is to be used. This can also be termed 'me-government'.
   10   Intermediation – take up can be increased by involving qualified or specialised intermediaries who typically initiate and also implement the service on behalf of the user. Intermediaries can be undertaken by family, friends, voluntary organisations or paid professionals, who become involved because the user him/herself does not have the awareness, interest, time, skills or knowledge to access and use the service.

Overall, there are demonstrable and clear links between reorganising government back-offices and the electronic public services experienced by users. Back-office reorganisation thus matters a great deal:
- within public sector agencies by reducing costs, increasing productivity, more flexibility, simpler organisational structures, greater interoperability, improving staff working conditions, etc.
- at the front-end for users by reducing the number of offices to visit, faster, cheaper more accessible services, fewer errors, more transparency, new possibilities, better service fulfilment, greater ease of use and greater user control.

The first strategic decision is whether existing coordination and integration between offices and agencies involved in producing a service can be improved without structural changes, for example, by only adding or changing an electronic gateway and electronic data interchange, or whether some degree of reorganisation seems to be necessary. (Strategy 1). However, as a first step in a long term strategy, this may be a good starting point to achieve quick results, as well as providing a platform for further steps. In most cases, however, structural reorganisation is considered necessary to improve cost effectiveness and/or the quality of service. As several offices and agencies are invariably involved, this becomes a complex process of inter-organisational change, which is highly dependent on the character and the traditions of the organisations involved, their legal and cultural environment, and many other factors. If structural changes are necessary, three basic strategies or models have been identified for improving coordination and integration between different back-offices:
- Integration of previously separated and differentiated workflows into one inter-organisational workflow to which all agencies involved are obliged to adhere. (Strategy 2)

- Setting up a clearing house as an additional office between existing agencies and offices to provide services such as the conversion of data exchange formats, integrate data bases, etc. (Strategy 3).
- Centralisation of previously separated back offices by placing them under one common management, as well as by integrating data bases. (Strategy 4)

In relation to improving the quality of services and the user-orientation of the front-offices, another set of three structural strategies has been identified:

- This strategy aims to improve user orientation by bringing front office functions closer to the user by decentralising services and/or moving them into physical offices which users frequent for other purposes. (Strategy 5)
- As many services are built from very similar elements, standardisation of modules is a strategy which improves cost effectiveness as well as making services easier to use so that the user does not have to completely re-learn from scratch how to use a service they are using perhaps only once a year. (Strategy 6)
- There is a tendency to combine and integrate services of different back offices with one face towards the user in portals which attract attention, give orientation, provide contextual information as well as common auxiliary (or horizontal) services. (Strategy 7)

Finally, a decision also has to be taken about where the initiation of the service process should start, who is in control of the data, who has responsibility for service levels, availability, etc. Three different process-driven strategies are being used in this context:

- In the proactive mode, the agency takes more and more responsibility and control and is more likely to initiate a service by collecting data and submitting declaration or application proposals to the user which s/he only needs to confirm. This implies a high degree of centralisation of data and may come into conflict with privacy interests and obligations. (Strategy 8)
- An alternative option is to hand more and more responsibility and control over to the user so that they themselves are in a position to initiate a service and determine how it is used. Here, the user has a much greater overview of his or her data and what is being done with them. (Strategy 9)
- The third option is to hand responsibility and control partially or wholly to an intermediary. This is not unique to eServices as this already happens a great deal with traditional services, but the electronic medium adds potential by enabling existing intermediaries to use more efficient services. However, it can also increase the need for intermediaries because of digital divide issues which exclude some users from direct control over the new eServices they previously used themselves as traditional services. (Strategy 10)

The above three back-office strategies, three front-office strategies and three process strategies, together with the first strategy requiring no or little change to structure or process, are not mutually exclusive. For a given service, any combination can, and often is, seen in practice..

4.7.4 Getting organised locally and meeting the needs of users – Antoinette Moussalli, Euromax Solutions, UK

Antoinette Moussalli provided an overview of the local eGovernment approach in Europe and provided a structured guidance list for local administrations. The challenge is to give all citizens and businesses access to the world wide web, to empower citizens and enable them to participate in local decision making, to convince colleagues within the administration, and to win political support for new ways of doing things.

Antoinette Moussalli outlined the main principle of a programme for a local eGovernment plan:

- think big – scale fast
- have a vision
- know where you want to go and how you intend to get there
- start with small projects – avoid disasters
- implement pilots to test effectiveness
- success wins support
- failure breeds derision.

She also discussed the components of such a plan, starting with the need to understand that everybody has a role and needs to contribute to making the plan a success. It is also necessary to obtain political backing as politicians can make or break the plans, so that your ideas needs to be sold as potential vote winners for them, for example as ways of enhancing the democratic process and/or saving cash to spend on other programmes. Colleagues and fellow civil servants are not traditionally trained to consider the big picture and tend to be focussed on departmental objectives, have closely defined areas of individual

responsibility and think of knowledge as power which must be protected rather than shared. It is often very difficult for them to change with modernisation which means learning new ways of doing things, sharing knowledge and speaking and interacting with other departments. They thus need supporting by appropriate change management strategies, counselling support and training. A powerful way to effect the necessary changes is to identify eChampions and generally to organise local key movers and enablers by involving key managers and decision makers. It is a good idea to start at the top as senior manager can not only influence others, they can also tell them what to do. Try to ensure that every department has their eChampion.

As part of this process it is important not to let eService delivery lose the personal touch, otherwise know as 'call centre syndrome'. Put in place helplines with real people and enable instant messaging services and videoconference facilities where possible. eGovernment is about getting clients more involved so don't cut them off, bring them nearer. Not everyone is prepared to interface with a machine, so it is a good idea to retain at least one personal service counter (a one stop shop), and incorporate training with assisted internet access points for clients who want it. Such outlets can also be used as locations for testing new interface technologies, so locate as many as possible in places used regularly by clients, for example in libraries and community centres. Overall, be creative and site these in social and recreational areas, especially those used in the evening. Internet cafés can also play a vital role training people in the use of information technology. Government support at all levels may be needed to set up and serve targeted groups in the community, and these can also be used to enhance local economic development by supporting civic sector activities.

Both Citizens and businesses pay taxes so they have a right to have a say in the way services are delivered. As part of every transaction, feedback should be sought on the effectiveness, efficiency, helpfulness and content of both traditional and eServices. Produce and publish regular reports detailing comments and include actions taken to improve performance. Citizen fora and citizens' panels, recruited from the local community to inform and test new technologies and services, can be especially helpful. Make a point of not always recruiting the same individuals, but try to change the cohort at least annually, so that overall a wide representation of the community mix is achieved. Sometimes, a small retainer or 'sweetener' is necessary to recruit and keep representatives actives. Young peoples' panels, recruited from schools and youth centres, are particularly useful, and in some places it may be useful to target the under 16–18 group. When doing this, address issues important to young people, such as bullying, drug abuse and the environment, and try to set up interaction with experts via instant electronic messaging and refer on to specialist agencies for help where appropriate. Also, setting up dedicated user groups, specially chosen because they reflect some particular need or interest, will often be important. For example, people with disabilities giving feedback on websites, service provision, access issues, etc. By targeting potential consumers of specific services, useful information may be obtained about the design of new service provision and access.

Finally, Antoinette Moussalli pointed out that we need to be beware of accidental discrimination. eGovernment can only enhance local democracy and inclusion if there are programmes in place to support this, and the administration needs to advertise its strategies for inclusion so that everyone knows what is on offer. In this context, translation services can offer a lifeline to minority groups. Do not forget also that privacy and confidentiality are the keys to ensuring client support, so be prepared to explain what measures are in place to ensure this, in everyday language, and help people understand that everything is being done to ensure that personal information is stored and handled in a secure way.

4.7.5   Information and participation for eGovernment – Michael Blakemore, University of Durham

Michael Blakemore reminded us that eGovernment is not a magic bullet. As eGovernment implies modernising government, the process we go through is pregnant with uncertainty. How do we deal with such uncertainty? Can we model the uncertain outcomes of a policy or initiative – things seldom go completely to plan, and have unforeseen consequences. For example, in many developing countries, giving women knowledge, through ICT uptake, which they do not traditionally have access to can foment a social revolution, as with the Bedouin in Jordan. We therefore need to prepare for non-linear and turbulent outcomes, which can de-stabilise traditional societies.

Michael Blakemore articulated a series of rhetorical questions which we need to consider when implementing eGovernment. In all societies there is a turbulent interaction between disintermediation (removing the intermediaries and automating processes) and new forms of mediation (remediation using new physical intermediaries). How does this affect notions of inclusion and exclusion? How can we overcome the paradox of inclusion – those who need the services most are those most excluded from the technologies? Exclusion can be viewed as unevenly modulating unevenness. Is exclusion actually needed

for capitalism to thrive, through competition? Where are the eG overnment consumers? Do we need a re-focus away from the 'rights' of consumers to the 'rights and obligations' of consumers? What really is 'active citizenship' and norms of behaviour, and does it lead to a new form of exclusion?

In designing eGovernment for disability it has been stated that products and services designed with the needs of the disabled in mind are easier to use by most other people too. In reaching the stages of consumption there are so many hurdles to overcome. There may be spaces for the disabled on trains, but how do you get to the train? There may be technologies for the socially excluded, but how do you provide them with the necessary skills, or the opportunities to acquire the skills? High cost technologies and services are needed.

The are also a number of other paradoxes. In terms of electronic identity, authentication and security, there is the paradox of integration and the viral analogy. There is also a paradox of access and 'inter-visibility' through new forms of citizen surveillance, impacts on privacy, and the 'disappearance of disappearance'. There is a fear of function-creep. Hence there is a critical accompanying need to link eGovernment to 'open government' and a flow of information to citizens and business through appropriate information infrastructures. Above all, there is a need to build trust and public confidence. At what stage does civil disobedience kick in to counteract governmental control?

Citizenship requires participation, democracy, communication and empowerment. Local information systems, rather than global systems, are more likely to work and "have the potential to become a new and effective tool in functional and social reorganisation" by enabling significant changes in the ways that people communicate, in particular through interactivity.[2] Perhaps here we see the value of virtual communities, but again the research literature warns that communication needs to have a reason, a focus, and an authority.

"A good information and communication service is determined by the achievement of three objectives:
1. serviceability: organisational competence and efficiency
2. interactivity: effective communications
3. inter-organisational relations: e.g. the partnerships between different actors and institutions."[3]

This introduces a concern that most eGovernment systems and services are actually treating people as data objects, or political subjects (to whom something is given or from whom something is required), and not as citizens. Citizens require the opportunity to influence and mould these technologies, and this is best achieved at local level.

Citizenship and identity are strongly related, yet government would like us to still be a citizen of the State, whereas the recent UNDP Human Development Report argues "a sense of identity and belonging to a group with shared values and other bonds of culture is important for individuals. But each individual can identify with many different groups. Individuals have identity of citizenship (for example, being French), gender (being a woman), race (being of West African origin), language (being fluent in Thai, Chinese and English), politics (having left-wing views) and religion (being Buddhist)". Therefore how can we rationalise the singular 'Digital Citizenship" with the complexes of belonging and identity?

How do we relate the rights of citizenship with the obligations of citizens – the civic society concept is being used to link the two issues. However, the obligations of citizens not only require action (doing something to support civic society), but also require a passive acceptance of surveillance (being monitored to 'protect' civic society0. It is easy to construct a visionary epic from the impact of new ICTs, peopled by cyborgs and digitised into a utopian landscape of limitless expressive leisure, or alternatively a bleak wasteland of panoptic centralisation"[4]

Maybe one of the considerations for digital citizenship is that it can only occur from the local level upwards. The European Union is a significantly variegated entity. However, to consider the local requires us to seriously question the viability of pan-European large-scale eGovernment systems. Perhaps what we need to do is to underpin technologies and methodologies to allow local and regional systems to work together? Some recent research on ICTs and the New Member States of the EU notes that "Information Society strategies should be integrated into the broader development of a knowledge-based society. Thus ICTs would be seen much more as enablers for economic, political, social and intellectual growth than goals in themselves" and "the development of a vision statement and its translation into goals and means will be

---

[2] Berra, Mariella. (2003). Information communications technology and local development. *Telematics and Informatics* 20 (3): pp. 215-234.
[3] *op cit.*
[4] Golding, Peter. (2000). Forthcoming Features: Information and Communications Technologies and the Sociology of the Future. *Sociology* 34 (1): p. 181.

deeply rooted in a context-related analysis of the conditions (strengths and weaknesses) of a country or a region. Considerable variations in these conditions and needs, both between the CCs themselves, and with EU15 countries, are expected".[5] This research again sees ICTs not as something to achieve homogeneity, but to manage heterogeneity.

Electronic citizenship is seen as having a trans-national role in debates surrounding the environment – environmentalism. "To what extent, then, can environmentalism, as one of the new social movements, contribute to the creation of a global civil society which will act as a constraint to global techno-capitalism? The truth is that the establishment and development of a trans-national — or in this case, a European-wide — public space by means of environmental Netactivism cannot wholly be dismissed"[6]

The Institute of Public Policy Research in the UK strongly promotes participation, suggesting that government should "create and support a National Centre of E-Democracy Excellence which goes beyond merely reviewing innovative experience and brings together social scientists, policy practitioners and technologists to explore new ways in which digital technology can support and enhance citizen centred-democratic processes".[7]

Should we regard different gendered concepts of citizenship? A gender critique would argue that we have been concentrating too much on civil concepts: "by highlighting social, rather than civil, citizenship (and by implication 'governance') we enhance the moral relationship between citizens which requires involving more women actively in the formal political process, improving conditions for women in work and revising the state's responsiveness to care roles".[8]

Is the presence of citizenship more clearly articulated where those in a community are strongly dependent on the maintenance of a common resource? In the Netherlands the 'Watership' could be seen as a clear common dependence on the management of the dikes. This could conform to the concept of 'group rights', where "Group rights might, in contrast, qualify as rights of citizenship, on condition that special treatment for the group can be shown to be necessary on grounds of equality".[9]

Electronic citizenship may threaten the democratic nature of citizenship as traditionally articulated: "Citizenship – hitherto confined to well-bounded physical and geographical sites such as city-states, communes and the territorial limits of the nation-state – will irresistibly expand to embrace communities and societies hitherto 'un-democratized'. It is as though the logic of the deregulated market has found its perfect instrument in the Web".[10] Also: "the conclusion to be drawn is that with the globalization of society, the political dimension tends to shrivel into insignificance. Democratic citizenship cannot enter or penetrate the world technological order, which seems to obey only the rules of its own dynamics".[11] The latter paper noted that for this reason the Group of Lisbon had refocused on the concept of 'civil society', so we may be ignoring those developments if we continue to promote some form of electronic citizenship.

4.7.6   Finding technological solutions to protect privacy in eGovernment – Edwin Horlings, RAND Europe

Edwin Horlings described how the Dutch government aims to deploy privacy-enhancing technologies (PET) to technologically enhance the protection of personal data at all levels and in all institutions of government, and preparing for this by running pilot projects to introduce PET in a back-office setting. The main result was that the technology and the institutions are not ready for a practical application. The objective and subjective reasons why institutions are reluctant to experiment with PET have been

---

[5] Bogdanowicz, Marc, Jean-Claude Burgelman, Clara Centeno, Elisaveta Gourova, and Gérard Carat. (2003). *Factors of regional/national success in Information Society developments: Information Society strategies for candidate countries* (volume 8, number 10 (October) First Monday. [cited October 9 2003]:
http://www.firstmonday.org/issues/issue8_10/bogdanowicz/index.html
[6] Tsaliki, Lisa. (2003). *Electronic citizenship and global social movements*, volume 8, number 2, February, First Monday [cited February 11 2003]. http://firstmonday.org/issues/issue8_2/tsaliki/index.html.
[7] Kearns, Ian, Jamie Bend, and Beatrice Stern. (2002). *e-participation in local government.* London: Institute for Public Policy Research. June, 38 p.
[8] Preece, Julia. (2002). Feminist Perspectives on the Learning of Citizenship and Governance. *Compare* 32 (1): pp. 21-33.
[9] Miller, David. (2002). Group Rights, Human Rights and Citizenship. *European Journal of Philosophy* 10 (2): pp. 178–195.
[10] Hand, Martin, and Barry Sandywell. (2002). E-topia as Cosmopolis or Citadel: On the Democratizing and De-democratizing Logics of the Internet, or, Toward a Critique of the New Technological Fetishism. *Theory, Culture & Society* 19 (1-2): pp. 197–225.
[11] Strijbos, S. (2002). Global citizenship and the real world of technology. *Technology in Society* 23:, p.532.

examined, and recommendations can be made for a strategy to remove the obstacles and encourage the acceptance of PET The strategy consists of an information and awareness campaign, structural financial commitment, and continuous monitoring of technological developments. Above all, successful introduction requires cooperation with all stakeholders.

Privacy-enhancing technology (PET) is a collection of ICTs that enhance the protection of personal privacy in information systems —in combination with organisational and physical protection measures— by preventing the unnecessary or unwanted processing of personal data or by raising the level of control that citizens have over their own data. PET can also eliminate or intentionally diminish data. PET is a supplement to, rather than a substitute for, standard privacy-enhancing measures (PEM).

PET covers a wide range of functionalities. Identification and authorisation are considered privacy-enhancing technologies, but they only control access to systems and databases, essential to the reliability and integrity of systems but only superficial to privacy protection. The four core functionalities of PET are:

- Anonymity: the use of a service or source of information is protected such that the identity of the user (e.g. a citizen) is impossible to discover, from the perspective of the sender as well as the receiver of the information.
- Pseudonymity: the user can access a service or source of information under a pseudonym (created by means of an algorithm) so that personal information can be accessed and linked without revealing the user's identity. Pseudonymity has two additional characteristics:
  – Authenticity: to authenticate the individual or information system without revealing an identity.
  – Non-repudiation: to ensure that even under pseudonymity transactions cannot later be denied (e.g. an on-line payment).
- Unlinkability: when a service is used on several occasions, the instances of its use by a single user cannot be linked.
- Unobservability: the service or source of information is protected so that its use by a specific individual cannot be detected.

PET can be used in various locations. The literature, private sector research, and the attention of policy makers is mostly focused on the relation between citizens and government. Privacy is, however, probably more vulnerable in the back office. The processing of personal data within institutions is generally rich in identity and primarily requires a robust system of identification and authorisation. The most fruitful environment of PET that fulfils the four core functionalities concerns the exchange of personal data between institutions.

Solutions to protect privacy will be custom-made rather than off-the-shelf, if only because the links between databases are generally customised. The architecture of the system will have to be designed so that PET functionalities are incorporated in an integral fashion. It is, however, important to understand that PET is not the panacea for privacy protection in any single institution. Firstly, in any network of linked government databases the level of protection is defined by the weakest link. Inadequacies in one institution can affect the entire network. And secondly, privacy-enhancing technologies are a strong supplement to the grand objective of privacy protection, but they cannot function adequately without a reliable set of privacy-enhancing measures.

The results of the Dutch pilots show that the time is not yet ripe for the introduction of privacy-enhancing technologies, even in the form of limited test projects. It has been possible, however, to chart the interests and objections, preferences and perceptions of stakeholders in different institutions at different levels of government. This has provided insights into the obstacles and opportunities of PET, such as they are.

PET is not just a new technology, they are virtually unknown and certainly unproven in a government environment. The notion of applying a new, unproven, and custom-made technology of unknown costs to an otherwise well-functioning information process is a barrier no government institution appears to be willing to take. The introduction of PET is consequently impossible without a powerful stimulus by central government. And swift intervention is needed if government is to stay on top of the growing connectedness of public institutions and the ensuing privacy problems.

A number of recommendations can be made aimed at raising the likelihood of finding sites for successful pilot projects. These recommendations are to wage an active information and awareness campaign, to make a structural financial commitment, and to continuously monitor developments in privacy-enhancing technology. PET can only be successfully introduced throughout the Dutch government —and by extension in any government anywhere— if the problem is tackled in full cooperation with all stakeholders.

The Netherlands is currently among the first movers in the area of PET, along with such countries as Canada and Germany. However, in the long run an international approach is needed. Technological

privacy protection requires the standardisation of technologies, strong legal foundations, financial commitment, and cooperation across jurisdictions. The legal foundations of privacy protection, as well as the subjective and objective obstacles to the introduction of PET, are presumably more or less identical throughout the European Union. A more fruitful approach would be to tackle the issue on a European scale with cooperation and coordination across Member States.

5   Issues arising from the workshop and further cooperation

5.1   Main issues

What is remarkable about the workshop presentations and discussions is how similar basic issues and concerns are across all the areas of eGovernance in India and Europe. At the contextual level, of course, there are many differences: different stages of development and different specificities in terms of the detailed challenges and opportunities being faced. But when these are examined in terms of types of issues, challenges and opportunities there are significant synergies and areas of common concern which provided a unique framework for joint discussion between all participants during the workshop.

The main issues arising from the workshop can be summarised as follows:

- The need for clear policy, strategic and IT frameworks, including regulatory and legal aspects, and the difficulties of establishing these on a national/state basis, let alone continent-wide, despite the widespread recognition of the potential benefits.

- The related issue of both national/state level and continent-wide interoperability (technical, legal, regulatory, institutional, organisational, cultural and in terms of civil servant and decision-makers' mindsets) needed to provide universal and integrated services as well as joined-up government.

- The as yet unmet challenge of meeting user needs and making government and the services it provides user-centric, whether end users are citizens or businesses. In both India and Europe much eGovernment progress to date has been supply-side and vendor driven, but the time is ripe in both continents to re-balance this focus in favour of users. There is a need now to listen to, engage with and respond to users, especially by focusing on what users need, the complementarity of different delivery channels (both electronic and traditional), the possible role of citizen charters and the maximisation of the transparency and simplicity of government.

- Related to this is the underdeveloped potential for eDemocracy and eParticipation in both Europe and India. This should be part of a wider notion of active citizenship, and the challenges this presents both in terms of readily available, affordable, secure and robust technology, as well as the accompanying need to reconfigure our joint notions and structures supporting open, pluralistic and democratic societies.

- The important issue of the digital divide is again linked to this, not only in terms of access (which is acute especially in rural areas in both continents), but also the skills needed and the life quality and economic benefits which eGovernment services should be providing for all the population and for all types of businesses and civic organisations.

- The technology building blocks underlying eGovernment remain a prime challenge in both Europe and India. Although each continent is at a different stage, this contrast is less than may appear with the enlargement of the EU to 25 Member States in May 2004. This is seen in relation to the basic telephony network but also to the next big challenge of widespread broadband, both of which are overlain by the huge success and continuing potential of mobile and wireless applications and the promise of leap-frogging for many apparently less developed regions and institutions.

- Security and privacy are critical issues in Europe and are fast moving up the agenda in India. This is both because of the vast movements of data around the networks, with the related threat of cyber crime and intrusion, but also to preserve data and individual privacy and support the growth of eTransactions and ePayments and the significant spin-off benefits these provide for all concerned.

- The need for political will and clear long-term change management strategies at the very top of policy and decision-making structures is apparent in both continents, but sometimes difficult to achieve in a world where other issues crowd out agendas and concerns. Nevertheless, both are needed to change public sector cultures and engender new forms of civil service ethic which continues the proud traditions of public service but combines this with a new flexibility and a user-centric mindset. It is also needed as part of the wider modernisation of the public sector and the

restructuring of public institutions and organisations around improving public service reach and quality as well as cost efficiency, including the re-engineering of work processes and new forms of active cooperation with the private and civic sectors.

- Of critical concern is the need for continuing and increasing the focus on funding, finance and the cost-benefits of eGovernment. Strong but still patchy evidence from both India and Europe point to the significant potential efficiencies and productivity increases which eGovernment can support. However, this is a difficult issue for all governments at whatever level as eGovernment typically requires significant up-front investment with often uncertain payback modalities, and which needs to be seen within the wider investment strategies of economic, social and regional development. A strong focus on realising the potential savings and productivity increases which eGovernment can bring, as part of a wider cost-benefit analysis approach within government, is a long term strategic issue.

- Last but not least, both India and Europe are still "learning about learning" in eGovernment, i.e. how to learn from and be inspired by the rich experiences of others, without falling into the trap of thinking one size fits all or that a solution which works well in one place, time and context can be transferred elsewhere, as is, and achieve similar success. In both continents we still see too many examples of adopted solutions which are not prepared in relation to the requirements and inherent capabilities of the recipients, but which are based on the surveys and strategies used by others. Although it is very useful to take examples from the successful eGovernance strategies of other states and countries, it is equally essential to customise policies based on a careful study of the parameters applicable to the particular state in question. We need to recognise the potential benefits of accessing and sharing good practices, particularly on a trans-continental basis as the shared relevance of the above issues has demonstrated. This should be done through dialogue and mutual support, which favours plurality and difference where this is beneficial to people's lives and a healthy economy and society. Both Europe and India have demonstrated in their recent history the tolerance and foresight necessary to do this, and are already reaping the huge rewards which it delivers.

The resounding success of the workshop is illustrated by the fact that it clearly identified and articulated each of these overarching issues, as well as many others of importance. It became, already on its first day, a forum for the discussion and sharing of both visionary and practical ideas, lessons and solutions between all the participants, regardless of their geographic background and area of interest.

Both India and Europe are epitomised by their long history, internal diversity, rich experiences and the possession of large reservoirs of creative talent and potential. The workshop showed beyond doubt that the time now is ripe to vigorously pursue joint initiatives in all areas of eGovernance and that the ultimate success of the workshop will depend upon whether or not it can assist in launching and strengthening such activities for the mutual benefit of both continents.

As mentioned in section 2.3, the EU and India already have an extensive Information Society dialogue. This should be further strengthened to exchange best practices and address market access concerns on regulatory frameworks (internet governance, privacy, security) and for electronic communications (e.g. mobile aspects, universal service). It could also be useful to initiate pilot projects in social priority sectors, such as health, education and 'government on line', as well as the full development and exploitation of good practice and dialogue on all issues concerning eGovernance, together with joint research and implementation initiatives.

5.2   Further cooperation

The success of the workshop in bringing together a large number of key experts and stakeholders from both India and Europe is not only judged by the identification and dialogue around common issues as identified above, but also by spin-off initiatives and further cooperation already identified and initiated. Just some of these are mentioned below, as others remain under initial discussion.

1. **Setting up a joint Indo–EU eGovernance resource centre in India** which will be designed to act as an hub for exchange of practices between India and Europe and also as a research hub for European-Asian ICT initiatives. This will assist both India and Europe leverage their respective good practices and experiences, and provide access for European experts to Asian government agencies.
   - India will be an ideal location for such an eGovernance resource centre because of the availability of a large pool of eGovernance researchers at competitive costs, and the economy

of operation for organising interactions between experts from Europe and Asia on a continuous basis.
- The resource centre will provide a channel for, and support to, individual or joint training activities, both intensive or on-going, and through workshops or online through eLearning and eSupport.
- Financial support will be sought from the Indian Government, the EC and its various international cooperation and EU-India Strategic Partnership programmes, and from the private sector.
- The time line for planning and decision is six months from the workshop (end October 2004).

2. **Design and launch of an eGovernance knowledge management tool** (KMT) for eGovernance learning practices in India and Asia. This is based on the functionalities and experience of the Beep (Best eEurope Practices) project funded by the EC Fifth Framework IST Programme and coordinated by the Danish Technological Institute, and the eEurope Awards Programme coordinated by the European Institute of Public Administration.
- The KMT will incorporate good practice case studies and other relevant material, resources and templates for learning and training, and a quality seal based upon the eGovernance assessment frameworks of various countries in Asia and the EU. The latter will also be used to assist third parties assess the feasibility, resources and implementation modalities of eGovernance projects.
- Financial support for Phase 1, November 2004 to May 2005 (design and launch of the KMT) is based on joint sourcing by SPEG and DTI. Support for Phase 2, post May 2005 (build content and additional tools, expand elsewhere and international cooperation) will be sought from the same plus the Indian Government, the EC and its various international cooperation and EU-India Strategic Partnership programmes, and from the private sector.

3. **Making e-GovIndia an annual event** organised jointly by India-EU participation, and incorporation of the event in the Indian, Asian, EU and European events calendars.
- The e-GovIndia annual event can be a platform for launching more regular and focused workshops and seminars around India, as well as providing content, speakers and other inputs to European conferences and workshops.
- Financial support will come from joint sourcing by SPEG and DTI.

4. **Establishing an eAwards initiative for Asian eGovernance** projects along the lines of the eEurope Awards for eGovernment and eHealth coordinated by the European Institute of Public Administration.
- Financial support will be sought from Indian and EU sources.

5. **Enhanced participation of Indian government agencies and academic institutions in association with EU partners** in calls for proposals issued by the EC and its various international cooperation and EU-India Strategic Partnership programmes.
- Progress and modalities will depend on funding conditions and availability.

6. **An online forum titled "governance" has been created as a follow-up of the workshop** comprising of all the speakers of the workshop and additional members from various state governments In India. The group had 68 members at the end of November 2004 and is growing.

6   Annex 1 – Workshop programme

Monday 18 October 2004

The Keynote Plenary

Start Time	End Time	Topic	Speaker
09.30 am	09.55 am	Welcome Address	Vikas Kanungo Chairman, SPEG
09.55 am	10.30 am	Inauguration and Keynote Address1	*His Excellency Justice (Retd.) O.P.Verma Governor Punjab, Haryana and Chief Administrator Chandigarh
10.30 am	10.45 am	Keynote Address2	Krishna Giri, Government Sector Leader, ASEAN/South Asia, IBM Business Consulting Services
10.45 am	11.15	First Session Chair	N Singh Kalsi (Punjab), Managing Director, Punjab Information and Communication Technology Corporation Ltd
11.30 am	11.45 am	Workshop theme and Goals	Jeremy Millard Danish Technological Institute

Track I : Understanding e-Governance for Development
Chair: Mr. N.S. Kalsi (IAS), Secretary IT, Govt. of Punjab and MD Punjab Infotech Limited

Start Time	End Time	Topic	Speaker
12.15	12.30 pm	Introduction of Track and its goals	Chair
12.30 pm	12. 45 pm	eGovernance – European perspective and present status	Antoinette Moussalli Euromax Consultants (Europe) Limited
12.45	1.00 pm	eGovernance – development perspectives	Michael Blakemore University of Durham (UK)
1.00 pm	1.30 pm	eGovernance Indian Perspective	Dr. Vinay Dharamadhikari, Sr. Director, Department of Information technology, Govt. of India
1.30 pm	1.45 pm	Panel Discussion	Delegates and speakers

Track II: e-Government Project Assessment Framework and Benchmarking Tools

Chair: Shri Vijay Kumar (I.R.S.), Additional Commissioner , Income Tax Department , Aligarh, Govt. of India

Start Time	End Time	Topic	Speaker
3.00 pm	3.10 pm	Introduction of Track and its goals	Chair
3.10 pm	3.40 pm	Assessment systems and tools used in Europe	Christine Leitner European Institute of Public Administration
3.40 pm	4.10 pm	e-Government Project Assessment Framework in India	Shri K. Jayakumar, Director IT, Directorate of Administrative Reforms and Public Grievances, Govt. of India
4.10	4.30	Panel Discussion	Speakers and Delegates

Panel Discussion and Networking Meetings 5.00 pm – 7.30 pm

Tuesday19th October, 2004

Track III: Best Practices in eGovernance

Chair: Shri Karan A. Singh, Finance cum IT Secretary, UT Administration, Chandigarh, Govt. of India

Start Time	End Time	Topic	Speaker
9.00 am	9.20 am	Introduction of and its Track goals	Chair
9.20 am	10. 30 am	Best eEurope Practices System	Jeremy Millard Danish Technological Institute
11.15 am	12.00	Process based eGovernance (Case Study of Tiruvarur distt.)	Uma Shankar Commissioner Disciplinary Proceedings, Salem, Tamilnadu
12.40 pm	1.15 pm	Panel Discussion	Speakers and Delegates

Track IV: Citizen Identification Systems and Smartcards
Chair: Shri Uma Shankar, IAS, Commissioner , Disciplinary Proceedings, Salem Tamilnadu, Govt. of Tamil Nadu

Start Time	End Time	Topic	Speaker
02.30 pm	02.45 pm	Introduction to track and its goals	Chair
02.45 pm	3.30 pm	Multipurpose national Identity card project in India	Krishna Giri Partner, Public sector, Regional leader – ASEAN/SA, IBM Business Consulting Services
3.30 pm	4.00 pm	Government User Identity for Europe	Edwin Horlings RAND Europe
4.30 pm	5.00 pm	Income Tax Ministry eInitiative	Sanjai Kumar Verma, Assistant Commissioner, Income Tax

Panel Discussion and networking Meetings   05.00 pm – 7.30 pm

Wednesday 20th October, 2004

Track V: : e-Government Leadership Milestones
Chair: Shri Ashok Khemka (IAS), OSR Rules, Govt. of Haryana

Start Time	End Time	Topic	Speaker
9.30 am	9.45 am	Introduction to track and its goals	Chair
9.45 am	10.00 am	Training for successful leadership in European eGovernment	Christine Leitner, European Institute of Public Administration
10.00 am	10.30 am	Information policy and strategy	Michael Blakemore, University of Durham (UK)
11.00 am	11.30 am	e-Governance foresight – strategic planning for the next five years	Jeremy Millard, Danish Technological Institute
11.30 am	12.00	Jagriti e-Sewa: digital divide to digital unite	J.S. Sandha, CEO Jagriti e-Sewa
12.00	1.00 pm	Round Table with all invited speakers	

Track VI: Making e-Government a reality – an implementation roadmap

Chair: Shri Lalit Yagnik , Regional Executive Architect, IBM Singapore Pte. Ltd.

Start Time	End Time	Topic	Speaker
2.30 pm	3.00 pm	Introduction to track and its goals	Chair
3.00 pm	3.15 pm	The components of an eGovernment implementation roadmap	Christine Leitner, European Institute of Public Administration
3.15 pm	3.45 pm	Re-organizing the back-office and changing the PA	Jeremy Millard, Danish Technological Institute
3.45 pm	4.15 pm	Getting organized locally and meeting the needs of users	Antoinette Moussalli, Euromax Solutions (UK)
4.15 pm	4.45 pm	Technology infrastructures for eGovernment	Edwin Horlings, RAND Europe
4.45	5.15	Information and participation for eGovernment	Michael Blakemore, University of Durham (UK)
5.15 pm	6.00 pm	Round Table with all invited speakers	

Close of workshop and networking meetings   6.00 pm – 7.30 pm

7   Annex 2 – Workshop sponsors, organisers and supporters

7.1   Society for the Promotion of e-Governance

The Society for Promotion of E-Governance (SPEG) is a not-for-profit organisation organised as a Society, duly registered with Registrar of Societies, New Delhi vide registration no S-48415 of 2004 under Societies Registration Act, 1860. SPEG is also registered as non profit organisation under Section 12AA (1)(b) of Income Tax Act,1961 vide registration no DIT(E)2004-2005/9- 883/03 /446, dated 21.7.2004, and have been granted approval under section 80-G of Income Tax Act,1961, vide letter no DIT(E)/2004-2005/9-883/03/732 dated 21.7.2004. The society is promoted by professional IT personnel, senior officers of the government involved in e-governance, lawyers and other distinguished personnel. It is not aligned to any political or business interests.

SPEG's main objectives are inter alia:
- a)   To promote the use of information and communication technologies as a tool for providing good and transparent governance with a view to facilitate efficient, transparent growth and development in economy with the endeavour to make it available to every citizen of the country.
- b)   To strive itself to a position as an organisation committed to promote eGovernance by combining the best that the specialised institution in the country have to offer, into a holistic programme.
- c)   To assist transition to electronic Government (eGovernment) up to electronic democracy (eDemocracy)

The Society is committed to promote e-governance as a tool for good ,transparent governance at the door step of citizen and to provide platform for diffusion of knowledge coupled with interaction with eminent personalities representing national / international forum.

7.2   Danish Technological Institute

Danish Technological Institute's mission is to promote sustainable growth and innovation by facilitating interaction between research, businesses, government and the wider society, including product development, consultancy and training The Institute has approximately 850 employees, making it a central player in the provision of accredited technological services to industry and public policy development. The Institute is a private, independent, non-profit institution accredited by the Danish authorities to provide technological services to business and the community. The Institute employs experts in numerous fields in 40 centres organised under the auspices of the six divisions that define the main parameters for their work:
- Innovation in Society and Business
- Informatics
- Industry and Energy
- Productivity and Logistics
- Building and Construction
- Materials

DTI's Centre for Competence, IT and Analysis has about 30 employees, and has offices in greater Copenhagen and Aarhus. Half of the employees are primarily engaged in activities concerned with policy analysis and evaluations at national and international levels, also outside the European Community, particularly in North America, and in the new economies in India, Malaysia and China, where the centre is involved in policy development relating to the information society and an evolving learning economy.

The centre has built up a considerable socio-economic expertise in policy analysis with involvement of public and private actors. Our activities focus mainly on an emerging learning economy and the changes societies are undergoing as the result of a growing penetration of ICT and globalisation, both in the public and private sectors.

7.3   STPI : Software Technology Parks of India, Ministry of Information Technology, Govt. of India

The Government of India has declared software as one of the extreme focus area for growth of exports. Therefore, Govt. of India announced a special scheme to promote software exports called "The Software Technology Park (STP) Scheme". This scheme is implemented through Software Technology Parks of India (STPI) which is an autonomous society of Ministry of Information Technology, Govt. of India. Salient features of the STPI Scheme include:

- Approvals are given under Single Window Clearance Mechanism
- Projects Costing upto US$ 10 Millions with Indian Investment & NRI funds on non-repatriable basis are cleared by local STP authorities at centre level itself
- 100% Foreign Equity is permitted
- All the imports in the STP units are completely duty free
- Import of Goods on loan, free of cost & lease basis is permitted
- Re-export of Capital Goods brought on loan/lease/free of cost is permitted
- Domestic purchases are completely excise duty free
- Domestic purchases are eligible for the benefit of deemed exports to the suppliers
- The sales in Domestic Tariff Area (DTA) are permissible up to 50% of the value of Exports
- STP units are exempted from corporate income tax up to the year 2010.

7.4   Punjab Engineering College

Punjab Engineering College (PEC), a Deemed University, is one of the pioneer institutions of India. Since its inception, the institute has oriented itself towards reaching the zenith in educational excellence. The college enjoys a distinct position of leadership in the field of technology and has become a national leader in imparting technical education.

PEC is a diverse blend of academic disciplines, such as Electronics and Electrical Communication, Computer Science, Information Technology, Mechanical, Civil etc offering courses in both Bachelor of Engineering (B.E) and Masters of Engineering (M.E).It hosts some of the world class contemporary facilities for modern engineering and has created a milieu that promotes excellence in every walk of technology. The college does not provide cells and gibbets but emphasizes on high quality basic as well as application based research activities.

7.5   European Institute of Public Administration

Founded in 1981, the European Institute of Public Administration (EIPA) is a non-profit organisation incorporated under Dutch Law and the only institute of public administration with a truly European character, linked to the European Union and providing a variety of services to national administrations and the EU institutions in support of their tasks and responsibilities related to European integration. The mission of the Institute is to make a practical contribution to the European integration process by way of training, consultancy, applied research, and publications on the EU institutions and decision-making processes, EU policies, law, and public management and governance.

For many years EIPA has supported the work of the European Public Administration Network (EPAN) where EIPA enjoys observer status and EIPA scientific staff attend meetings of the various groups at all levels of the network (e.g. EIPA is currently setting up the EPAN website in cooperation with the Irish and Dutch Presidency).

EIPA has a vast network of public administrations, which includes the public administrations institutes and networks (such as NISPAcee, the Network of Institutes and Schools of Public Administration in Central and Eastern Europe), universities and visiting experts in and form the EU and accession countries. EIPA has worked in close co-operation with the EU institutions, the OECD, and research institutes and universities in the EU and the Accession Countries, but also in the USA and Asia.

7.6 Euromax Solutions (Europe) Limited

The Director of Euromax Solutions (Europe) Limited, Antoinette Moussalli, is an experienced consultant in the field of e-Europe, Modernising Government and the development of electronic and internet based methods for the delivery of a whole range of public services, including government, economic development, health and education. Antoinette had key roles in local government for over 20years. She was instrumental in developing a number of local authority based eGovernment projects and programmes.

As an acknowledged specialist in the field she was charged with setting up and managing London Connects, the agency that has brought together the 33 London boroughs to deliver eGovernment. She has led a number of transeuropean working groups focussing on eGovernment, eHealth, eDemocracy, eSecurity and the role of ICT in local economic development. She has represented the United Kingdom on the steering group of the Telecities transeuropean network and was Vice President of the transeuropean REVES network focussing on local economic development supported by information technology. She has been an active steering group member of the Global Cities Dialogue, whose membership comprises 130 cities across the world, as well as the Midjan Group a specialist group attached to the International Union of Telecoms. She has also been an active member of the Sustainable Cities and Towns Campaign, promoting sustainability. Antoinette has considerable experience of developing both private and public sector partnerships to fund and develop eGovernment and other projects. She has helped deliver a number of training programmes in eGovernment and other aspects of eEurope to both the public sector and industry. Antoinette has a degree in Psychology and Sociology and now runs her own consultancy company

7.7 RAND Europe

RAND Europe is an independent think tank that serves the public interest by performing rigorous, impartial analyses of problems facing society. By disseminating its analyses and ideas, it also informs public debate. RAND Europe was established in 1992 as an independently chartered European unit of the original U.S. think tank RAND, with offices in the Netherlands, Germany and the United Kingdom, and performs research throughout Europe. RAND Europe currently has research programmes in the areas of Surface Transport and Aviation, Health and Society, Information Society, and Defence and Security.
Within the overall context of RAND research, RAND Europe is an independent think tank staffed mainly by Europeans, whose clients are European governments, institutions, and firms, and whose rigorous, impartial analyses attack the hardest problems these clients face. Through such analyses, RAND Europe is:

- Helping European governments and other clients manage the sweeping changes underway – European integration, restructuring, and the information revolution.
- Applying advanced, independent research and analysis to complex problems under conditions of uncertainty – where the problems themselves, much less the solutions, are not well defined.
- Addressing European challenges in light of experiences –successes as well as shortcomings– in the United States and elsewhere in the world.

RAND Europe has a substantial stream of work for governments and the private sector in many European countries, as well as major efforts for the European Commission. Our headquarters is in Leiden, the Netherlands and we have offices in Cambridge, UK and Berlin, Germany. Our approach is to utilise to the greatest extent possible the global resources of RAND worldwide. To this end, the current proposal envisions project leadership from our Dutch office, with major contributions from our British and German offices and drawing on the extensive expertise in RAND's US offices. Moreover, we are extensively networked with other European organizations, including researchers from consultancies, institutes, foundations, and leading universities.

7.8 Durham University

Professor Michael Blakemore of Durham University is a geographer whose activities have focused on access to information, spanning information science, history, official statistics, e-government and e-society strategy and policy, and international development.

Until 2000 his activities concentrated on building commercial information services disseminating official statistics, first for the UK Labour Market (Nomis), and then for Eurostat, UNIDO and the ILO, with up to 15

staff and a turnover of £0.75 million a year. This has led to expertise in information pricing and dissemination strategy, organisational behaviour, user needs, metadata and training.

He has advised national and international governments and organisations, have communicated widely on information, government and society, and is active in applied research that develops debates regarding access to information, freedoms and obligations, information value, cost and pricing, and the uses of information within the processes of globalisation. He is an experienced international speaker, having given over 100 conference and seminar presentations around the world, from small group seminars to large international audiences, and to the public, researchers, senior management and decision-makers. He is author and co-author of over 140 publications.

His current projects focus on the nature of ICTs and public sector information within Europe and developing countries. This includes work such as e-learning strategies within higher education in Jordan, the local consumption of ICTs in remote rural Jordanian communities, and in the context of the UK and the European Union, the outcomes of strategy within government and civil society. It also involves research that aims to balance the debates regarding freedom of information, access to information, and the privatisation of public sector information.

7.9   IBM India Limited

IBM India Limited, a subsidiary of IBM Inc. (International Business Machines Corporation), was set up in September 1999. IBM has been present in India since 1992, then through a joint venture with the Tata Group. Since its inception, IBM India has expanded its operations considerably with offices in 14 cities and regional headquarters in Bangalore, New Delhi, Mumbai, Kolkata and Chennai. The company has emerged as one of the leaders in the Indian Information Technology (IT) Industry.

IBM India's products and services portfolio includes the e-business capabilities, products, services and partner network to help large and small enterprises plan, build and implement the e-business infrastructure they need to thrive in the Internet economy. Linux support has further enhanced IBM's e-business infrastructure enabler capability. IBM is the only company in the world that offers end-to end solutions to the customers from hardware to software, services and consulting. The company also offers finance and leasing facilities to its customers.

7.10 Quark India Development Center (IDC)

IDC is Quark's largest R&D center worldwide. The work culture here is based on team collaboration, cooperation, and united goals, established by R&D employees from many different offices.

Quark creates world-class software by following an integrated product development strategy, with clear and defined roles for each team. Quark continues to transform the face of desktop publishing with world-class products for media-independent publishing for workgroups and enterprises. Today, Quark maintains its industry leadership with a product line that ties together traditional print publishing and content management for publishing and non-publishing enterprises.

8   Annex 3 – Workshop participants

Name	Position	Organisation	eMail
Rahul Jain		NIC Haryana	rahul@hry.nic.in
Ch. Radhakumari	Professor	Shri satya Sai Institute of Higher Learning	radhakumari_c@yahoo.com
Avnash Chourasia	Director	Force 3 (NGO)	chaurasia_avinash@yahoo.com
Anand Khanna	Chairman , Corporate Services	Institute of Management technologies	akhanna@imt.ac.in
Ashok Gupta	Director	Unicorn Books Pvt Ltd .	
Puneet Kalia	Student	IIITM Gwalior	er_kalia2002@yahoo.com
Prashant Roy	Student	Nalsar University of Law	prashantroy@gmail.com
Prabhjeet Singh	DIT, Punjab	DIT Punjab	pskukreja@hotmail.com
Vipin Sharma	Superintending Engineer	BSNL	vipinsharma55@yahoo.com
Lalitsen Sharma	Lecturer	Jammu University	lalitsen@yahoo.com
Rama Bhardwaj	Professor		rama_bhardwaj@yahoo.com
Valkar Bairagi	e-Governance and Public Services manager	IIITM Gwalior	valkal4u@rediffmail.com
Shah Mohhamad Sanuel Haq			sanaulhq@yahoo.com
S.S. Duggal	Technical Director	NIC haryana	duggal@hry.nic.in
Swayam Prakash Ranjan		IITM Gwalior	swayam@ceonsolutions.com
Thierno Seydou Diop	Director	Planet Finance Senegal	tdiop@planetfinance.org
Arun Kumar		DIT Punjab	
Sanjay Tyagi	Director	Software Technology parks of India	sanjay@stpm.soft.net
V. Rihani	H.O.D.	Punjab Engineering College	vrihani@rediffmail.com
Rita Mahaja	Lecturar	Punjab Engineering College	
Kultar Nat	President	Coveda Technologies Private Limited	knat@coveda.com
Naveen Manglani	General Secretary	Chamber of Chandigarh Industries	
Susheel Kumar	Principal Systems Analyist	NIC Haryana State Unit	susheel@hry.nic.in
Jatinder Bahl		B2 Solutions	
Anjani bagaria	Deputy Manager (Institutional Business)	UTI Bank	anjani.bagaria@utibank.co.in
S.K. Bijlani	President	Magnus Engineers Private Limited	excel@magnusconsultants.com
Naresh Batra	CEO	Intelleflex Corporation	
Amarjit Singh Tanda	EDP manager	Labour Bureau, Ministry of Labour, Govt. of India	astanda@hub.nic.in
Surji Singh	Joint Director	DIT Punjab	
Gurpreet Lehal	Scientific Officer	NIC haryana State Unit	gurpreet@hry.nic.in
Amit Mittal	System Analyist	NIC Haryana State Unit	amit@hry.nic.in
Mohhamad Faraz Abbasi	e-Governance and Public Services Manager	IITM Gwalior	faraz_abbasi@indiatimes.com
R.K. Arora	Director	Ashish Softech. Pvt. Limited	raj@ashishsoftech.com
Ajay Goel	Additional Comissioner of Income Tax	Department of Income Tax, Govt. of India	ajay@incometaxindia.gov.in
Manish Vig	Director International Business Group	ICL Certifications Limited	intnetwork@iclcertifications.com
Jaswinder Singh	Ms. Admin	STPI Mohali	jaswinder@stpm.soft.net

P.V. Gupta	Assistant Comissioner of Income Tax	Department of Income Tax	pra_kar@yahoo.com
Dr. S.C. Dhawan	ADIT	Chandigarh Administration	
Mukul Mahajan	Director	Tetra Information Services	mukul@tetrain.com
Sumita Thapar	Consultant	Center for Advocacy and Research	cfarasam@ndf.vsnl.net.in
J.S. Sandha	CEO	Jagrit e-Seva	jsandha@vsnl.net
Shantunu Gupta	MD	Antariksh Technologies Private Limited	shantanu@antarikshonline.com
Bhuvan Chaturvedi	Manager Corporate relations	IMS Dehradoon	
Anil k. Prashar	Center Head	SPIC, Chandigarh	
Girish Sharma	Comissioner Income tax	Department of Income Tax, Chandigarh	
Naveen Sawhney			sawhneynaveen@yahoo.com
Sarup Paul	Student	ABV-IITM	paulsarup@iiitm.ac.in
Komal Karrar	Corporate Lawyer		komal_kakkar@yahoo.co.in
Piyush Gupta	General Manager	NISG	piyush.gupta.nisg.org
V. Prakash	Chief Executive Officer	Prateek Consultancy	vprakash@prateekindia.com
Rajkumat Prasad	Chief Executive Officer	Commonwealth Center of e-Governance, India Chapter	rajkumar@electronicgovindia.net
Sunil Gupta	Head Information Systems	Economic research Unit, Joint Plant Committee, Min. of Steel	aditia@giasdl01.vsnl.net.in
Vivek Kango	Senior Member	USIT	vkango@usit.co.in
Ravi Gupta	Editor	I4D magazine	ravi.gupta@i4donline.net
Jeremy Millard	Senior Consultant	Danish Technological Institute	jeremy.millard@teknologisk.dk
Christine Leitner	Senior Lecturer	European Institute of Public Adninistartion	c.leitner@eipa-nl.com
Antoinette Moussalli	Director	Euromax Solutions (Europe) Limited	antoinetmoussalli@hotmail.com
Michael Blakemore	Professor	University of Durham UK	michael.blakemore@durham.ac.uk
Edwin Horlings	Senior Analyst	RAND Europe	horlings@rand.org
Louise Thomasen	Consultant	Danish Technological Institute	louise.thomasen@teknologisk.dk
Graham Shelley	Senior Consultant	Euromax Solutions (Europe) Limited	antoinetmoussalli@hotmail.com