

THE PHILIPPINE INFORMATION INFRASTRUCTURE (PII)

PII Policy Study Report Annex

The PII Framework

Submitted by the

DEPARTMENT OF TRANSPORTATION

AND COMMUNICATIONS (DOTC)

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All proposals submitted, opinions made and positions stated in this " PII Framework Proposal " are those of the authors and they do not reflect those of the Department of Transportation and Communications (DOTC) of the Republic of the Philippines and of the respective institutions that the authors currently represent.

EXECUTIVE SUMMARY

We need not look any further than to one of the most influential voices in world development to gain important insights into the role of information and communications technologies (ICTs). From Mr. James Wolfensohn, President of the World Bank comes this statement:

The information revolution makes understanding knowledge and development more urgent than ever before.

New communications technologies and plummeting computing costs are transforming distance and eroding borders and time. The remotest village has the possibility of accessing a global state of knowledge beyond the dreams of anyone living a century ago and more quickly and cheaply than anyone had imagined only a few decades ago. Distance education has the potential to extend learning opportunities to millions of people who would otherwise lack access to quality education...

To place this quote into the context of the Philippines, we refer to a recent statement of Dr. Felipe Medalla, Secretary of Socio-Economic Planning, National Economic and Development Authority. He has characterized the economic framework and the philosophy of the Estrada Administration as follows:

The most important goal of the Estrada Administration's economic program is sustained, broad-based, and non-inflationary economic growth which reduces absolute poverty through efficient, honest and fair taxation, judicious use of public funds, and the generation of sufficient job and livelihood opportunities. In short, the basic objective is sustained and equitable economic growth or kaunlaran para sa lahat.

To achieve this goal the Estrada administration will:

1. Establish clear, simple, transparent, consistent and uniformly applied set of rules which govern the private sector and its interaction with the government.
2. Maintain a clear delineation of private sector and public sector roles or functions, with the private sector performing the business and entrepreneurial functions and the private sector playing a supportive but vital role. The business of business is business; and the business of government is to provide efficiently and effectively the climate and the services that are needed, so that business can become more productive and competitive, and capable of creating wealth and employment opportunities for everyone who wants to work. (And we know that our countrymen want to work. Millions of them take great risks by going abroad to find gainful employment). The most important role of government is the provision of essential public goods and services such as the maintenance of peace and order, the protection of the environment, and the provision of infrastructure and basic education and health services.
3. Promote a competitive environment for Filipino firms both at home and in relation to the rest of the

world. Firms and businesses will survive and grow because they are efficient and competitive, and not because they are protected from foreign competition or are the favorites of some government officials. (We must learn from past experience, however, that an important key to maintaining our global competitiveness is the avoidance of excessive and unsustainable foreign borrowing that result in an artificially strong peso, which inevitably collapses as soon as foreign funds are no longer easily available.)

4. Adopt policies and implement a public investment plan that will engender a strong rural-based middle class. This class will not only supply food and raw materials to other sectors of our economy. It will also be engaged in rural but non-farm economic activities and will purchase services and manufactured goods in towns and cities all over the country, thereby contributing to the decongestion of Metro Manila and the progress of urban middle class households in regions other than the national capital region.

5. Maintain a sound and stable macroeconomic environment. Policies designed to accelerate growth and reduce poverty will fail if the macroeconomy is unstable and unpredictable.

The Philippines Information Infrastructure Policy Study (PIIPS) Report gives careful consideration to each of these recommendations.

SUMMARY OF RECOMMENDATIONS

This report is the conclusion to a series of consultations with carriers, application developers, Internet service providers, equipment manufacturers government departments, associations and educators. To initiate the consultations, a kick-off meeting was held in Manila in October 1997. This was attended by over fifty individuals with an interest in Philippine Information Infrastructure (PII) development. An audience of over two hundred representatives attended the First National PII Conference held in Manila in May 1998, from various sectors and regions of the Philippines. The findings from the consultations held between October and May were presented at this Conference and feedback was gathered for the development of an action plan. Further consultations were held with PIIPS advisory groups, and other key resource individuals and organizations during September and November of 1998.

Extensive surveys undertaken under Module 2 of the PII Policy Study identified the following key areas as the priority areas for follow-up:

- Universal access including infrastructure and the appropriate services;
- Interconnection among networks including the regional and global networks;
- Regulation that provides a reasonable balance between competition and regulation;
- Investment in the PII with support for the private sector, R&D, culture and content, etc.;
- Information security to assure privacy for users;
- Increased consumer awareness and learning opportunities from the PII;
- Protection of intellectual property rights;
- Promotion of technical innovation through the encouragement of strategic initiatives;
- Government services including improved information access and a more strategic approach to government procurement;
- Institutional reform, including the establishment of a PII Implementation Council.

Further consultations were undertaken and an analysis of the issues was carefully developed. The final results of this analysis are described in the following as the Overarching Thrusts of this PII Policy Study Report. These thrusts/themes help to guide the reader in identifying the areas of concentration of this Report.

OVERARCHING THRUSTS

In many instances, new approaches are recommended for jump-starting the implementation of the Philippine Information Infrastructure. These recommendations in many cases will require a changed mindset and serious consideration of new approaches on the part of all stakeholders.

In the first instance, the government will need to become more proactive in identifying policy and regulatory issues that could potentially hamper PII development while closely monitoring and enforcing policies and regulations that are already in place. Industry and business groups must see the necessity for cooperation with each other as well with government so that broader national and regional objectives can be achieved.

Increased effort, resources and budgets will need to be invested. A coordinated effort and the sharing of costs and resources between stakeholders will help to achieve these objectives.

STRENGTHENING REGULATIONS

The role of government is to, “ Establish clear, simple, transparent, consistent and uniformly applied set of rules which govern the private sector and its interaction with the government” as well as to “ provide efficiently and effectively the climate and the services that are needed, so that business can become more productive and competitive, and capable of creating wealth and employment opportunities... The most important role of government is the provision of essential public goods and services

The report makes recommendations related to the institutional framework of the PII and examines the roles of four key organizations involved in the PII. The analysis includes two existing organizations:

- The National Information Technology Council;

- The National Telecommunications Commission.

And two newly proposed organizations:

- The Office of the Chief Information Officer;

- The Philippine Information Infrastructure Implementation Council.

An outline of the new responsibilities and focus of these organizations and a series of recommendations are presented under Sections 4.5 and 5.2 of the report.

THE APPROPRIATE ENVIRONMENT

The appropriate environment required for sustaining the advancement of the PII is described under the following themes:

- Governance, Policy Development and Regulatory Reform; and,

- The Information Infrastructure.

New developments such as convergence, the Internet and electronic commerce are examined. Priority issues and critical bottlenecks, such as interconnection, universal access, regulatory reform, are also taken into account.

Underpinning the PII is an assumption of co-operation and co-ordination between various government departments and with stakeholders from the private sector, institutional and other sectors.

Promoting increased awareness of the PII, the development of new and appropriate strategies, policies and guidelines for the PII, improved planning and increased monitoring are indicators of such cooperation.

Sections 4.2, 4.3 and 4.4 provide extensive analysis of the appropriate environment for the PII. Sections

5.1, 5.4 and 5.5 include a series of Recommended Actions and Schedules as follow-ups.

EXTENDING THE REACH OF THE PHILIPPINE INFORMATION INFRASTRUCTURE

The private sector has played a very positive role in the development of the physical infrastructure for the PII. There is more than enough backbone capacity already in place in many part of the country to meet foreseeable demand

The Philippines is rightly proud of its policies that have succeeded in attracting considerable investments in telecommunications. However, there is now a requirement to extend the benefits of such infrastructure to a broader sector of the economy and to the rural and remote areas of the country.

The potential benefits of the existing infrastructure could be maximized for Filipinos through non-discriminatory interconnection of networks, a review of tariffs and costing of services and an increased attention to universal access. New approaches to extending services would allow the Philippines to make significant advances by aggressively promoting new services such as electronic commerce and investing in common government e-mail and information services.

Sections 3.2, 3.4 and 3.6 provide a review of the current situation, while section 4.2 under Model User and section 4.3 The Information Infrastructure provide the broader review and analysis. Section 5.1

Recommendation: Maximizing Existing Infrastructure, and Section 5.4 Recommendation: New Approaches to Extending Services, provide the recommended actions and schedules for follow-up.

REFOCUSING ON KNOWLEDGE AND INFORMATION ACCESS

There is a need for a change in mind-set when giving consideration to the growth of the PII. A balance must be struck between the development of the physical infrastructure and the development of new applications and content driving the PII.

The PIIPS Report makes a number of proposals including:

Efforts must be strengthened to commit increased resources to the information and knowledge sectors of the country. A parallel track approach that gives equal weight to extending both the infrastructure and the knowledge economies is required. For this purpose:

- The creation of one or more centers of excellence for PII development would help to focus on the knowledge and information aspects of PII development;
- Updating intellectual property legislation and implementing a Public Key Infrastructure are essential for unlocking the Philippine potential for content development;
- Investing in the knowledge sector particularly in research and development related activities, is a requisite joint initiative for the government and the private sector.

Section 3.6, and Sections 4.1, 4.3 and 4.4 provide extensive analysis of the knowledge and information sectors. Sections 5.1, 5.4 and 5.5 provide a series of recommended actions and schedules as follow-ups.

STRATEGIC INITIATIVES

Initiatives to stimulate the deployment of broadband networks are proposed. The focus is on applications and services that will benefit from an upgraded Internet service. Broadband Internet Protocol and asynchronous transfer mode (ATM) networks will need to be installed to develop expertise in the design, management and use of these high-speed networks. The networks would be built on top of the existing Synchronous Digital Hierarchy (SDH) infrastructure and will be used to support applications including software development companies and human resource development and business type applications. The ATM network can also act as a gateway to the Association of the Southeast Asian Nations (ASEAN) ATM test-bed, enabling the Philippines to play a significant role in the development of applications for high-speed international networks.

Everywhere it went the PII Policy Study Team was met with requests for recommendations that would show early and visible results.

The establishment of an ATM and broadband pilot network would allow:

- the development of expertise in broadband and ATM technologies applications development;
- gateway access to the APII and GII networks, and
- service testing and development.

The significance of this recommendation is that it would support advanced multimedia content creation and development, an area in which Filipinos have a considerable degree of skill. Sections 3.3, 4.3 and 5.3 provide an analysis of this situation.

INFORMATION ANALYSIS and DISSEMINATION

One of the key themes dealt with throughout the report is the need to collect, analyze and make information broadly available in a more efficient manner. Information to promote awareness raising in government, in the private sector and at the public level is considered essential for the development of the PII.

With this goal in mind, this report includes extensive reviews and analysis in Section 4.2 Tracking Progress, and Medium and Long Term Planning and in Section 4.4 Awareness Raising. Recommendations to promote better access to information concerning the PII are included in Sections 5.5 and 5.6.

The PII is not sustainable without an adequate commitment to new sources of funding and resources. The long-term benefits of the PII are seen as significantly outweighing the cost of the required investment

BENEFITS OF THE PHILIPPINE INFORMATION INFRASTRUCTURE

The benefits of investment into the PII occur in various forms. Studies and reports from other countries have shown them to have important social and economic impacts.

These include the ability of the PII to provide:

- Improved communication and information exchange within the nation and with other nations - to promote national identity, disseminate public information and educate people.
- Improved productivity in government and in the private sector.
- Improved international competitiveness.

New economic opportunities that were not previously envisioned.

The completion of this study marks the beginning of very long process that is required for reaching the required consensus for developing the laws, policies and regulations to herald in the PII. Because the Philippine Information Infrastructure reaches into every sector of society there is a need to spread the net widely and to involve every region of the country in the consultations

THE PHILIPPINE INFORMATION SOCIETY

The purpose of the discussion that follows is to broaden the analysis and give fuller consideration of where the PII fits into the national developmental context. For this purpose we need to first provide the reader with a definition and vision of "information infrastructure" and the "information society" and therefore refer to a recent OECD publication.

From a definitional perspective it is difficult to differentiate global information infrastructure (GII) concepts from global information society (GIS) concepts since they are often used interchangeably.

There are those who view the developments of the infrastructure, including the physical, service and policy infrastructure (GII) as a precursor to the emergence of a global information society (GIS); others view a GII concept as providing more emphasis on the economics of development of an information society, while GIS is viewed as providing emphasis on the social aspects of such a society. By placing equal emphasis on GII and GIS, OECD Ministers stressed the necessity of both the economic importance in developing global information infrastructures in terms of creating economic activity and jobs, and the necessity to use these developments to improve societal goals and aspirations.

Information societies are being formed by three inter-related long-term trends:

- social and cultural changes brought about by increased communications and by spreading and deepening literacy;
- shifts in the structure of economic development leading to a greater role for the service sector;
- technical change, in which the enabling technologies underlying communications and information are increasing quickly in capacity and capability, while decreasing rapidly in cost.

There are also a number of defining characteristics of an information society:

- information is seen and used as an economic resource for increased efficiency, effectiveness, responsiveness, innovation, and to maintain and increase the competitiveness of the private sector;
- an emerging and growing information industry, with three components: content, delivery, and information processing. The information content provider sector is marked by rapid growth. An important sub-sector becomes concerned with intellectual property rights;
- people "consume" more information, both for daily living activities and as citizens in carrying out civic responsibilities and exercising civil rights. Public access to educational, social, political and cultural information is facilitated by the development of supporting information systems. In other words, the range of social benefits that become increasingly available will help to broaden the choices for Filipino society at large.

It needs to be noted however that an information society raises all sorts of governance related issues: legal, technical, ethical, and social. Some of the more obvious examples include:

- Can the market be left to address privacy issues and intellectual property issues?

- What about impacts on employment on the unskilled on rural areas or on the disadvantaged?
- What are the educational requirements for success in a knowledge-based economy, for the young, for the middle-aged worker, for women?

An increasing reliance on the service sector has significant social implications in terms of displacement of unskilled workers in favor of those with more specialized skills. This has serious implications for training and human resources development. It also means that universal access policies must move onto a dual track – bringing basic access to all Filipinos, and providing access to advanced services as well, for those who can make use of them. Thus, information management strategies become increasingly vital to the efficient use of national resources and for ensuring that nations are not permanently divided into information- skilled “haves” and “have-nots”.

The ever-increasing pace of technical change implies that nations must push forward faster and faster to at least keep abreast, in some meaningful way, with advanced technology and the applications that it makes possible. R&D capabilities must be carefully focussed and advanced skills obtained and kept current through training and through ongoing contact and technology transfer with other nations.

The policy development actions that the government undertakes will have a wider impact than just on the speed of development of the PII. This report calls for attention to intellectual property rights legislation, including acts concerning copyright and trademark. Such improvements in the legal environment will be of general benefit for the advancement of the Philippine business community, to potential foreign companies and investors and certainly, to the firms and individuals concerned with the content and applications layer of the PII.

Similarly, there is no clear boundary between the PII and the Philippine Information Society (PIS) when it comes to the access to knowledge and information. This report deals with issues related to the PII and the access to and the reach of government services. In a complimentary way, this is shown to have a broader impact on the PIS, to government effectiveness in the provision of services for the purpose of increasing access to educational, health and other related types of services.

Such a broader policy orientation, which we refer to as our Philippine IS theme, recognizes that the PII is only a means to a greater end, and suggests strongly, that access to information, and to information creation and management capabilities, should not be rationed in a burgeoning information society.

LIST OF ANNEXES

Annex Subject

A. Philippine Information Infrastructure (PII)

Policy Study Project

Final Report: Summary of Reports,

Analysis and Recommendations

Submitted to CIDA and the DOTC by the

team of Canadian consultants to the PII Project

B. Republic Act 7925

(An Act to Promote and Govern the

Development of Philippine Telecommunications

and the Delivery of Public Telecommunications Services) (March 1, 1995) and its Implementing Rules and Regulations

(NTC Memorandum Circular No. 8-9-95)

C. Republic Act 6849

(An Act Providing for the Installation,

Operation, and Maintenance of Public Telephones

in each and every Municipality in the Philippines, appropriating funds therefor and for other purposes)

(February 8, 1990)

D. Executive Order No. 59

(Prescribing the Policy Guidelines for Compulsory Interconnection of Authorized Public

Telecommunications Carriers in Order to Create a Universally Accessible and Fully Integrated Nationwide Telecommunications Network and Thereby Encourage Greater Private Sector Investments in

Telecommunications) (February 24, 1993)

and its Implementing Rules and Regulations

(NTC Memorandum Circular No. 9-7-93)

E. Executive Order No. 109

(Policy to Improve the Provision of Local Exchange Carrier Service) (July 12, 1998)

and its Implementing Rules and Regulations

(NTC Memorandum Circular No. 11-9-93)

F. Executive Order No. 190

(Approving and Adopting the National Information Technology Plan 2000 and Establishing the National Information Technology Council <NITC>) (July 19, 1994)

G. Executive Order No. 436

(Policy Guidelines to Govern the Operations of

Cable Television in the Philippines) (September 9, 1997)

H. Executive Order 468

(Providing for the Creation of a National Council for

the Promotion of Electronic Commerce in the Country) (February 23, 1998)

I. Executive Order No. 469

(Amending Executive Order No. 190 dated 19 July 1994 Approving and Adopting the NITP2000 and Establishing the National Information Technology Council <NITC>) (February 23, 1998)

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INTRODUCTION

The emerging global information society seeks to achieve the shared vision of human enrichment and people empowerment. Today, progress in communications and information technologies is changing the way people live, study, work, do business and interact with each other. Ultimately, this new knowledge-based society will define its citizens.

The new global information society is launching the world into a revolution that, in turn, will bring humanity into the Age of Information. Hand in hand with this change is the creation of a new economic order.

The common view is that this emerging economic order will serve the critical needs of people all over

the world regardless of race, social and economic standing and geographic location. It will promote equal opportunity for its citizens. It will deter the emergence of two classes of people: those who have access to the benefits of communications and information and those who do not have access.

The Critical Need for an Information Infrastructure

The new knowledge-based economy demands the development, deployment and operation of an information infrastructure that will have the broadest coverage possible. The ultimate objective is to establish a global information infrastructure that will develop from the internetworking of regional and national information infrastructures. Every region and nation in the world, therefore, must develop, deploy and operate their respective information infrastructure.

An information infrastructure has at its core the interactive high-speed, broadband multimedia, multi-services communications and information networks. Such a "network of networks" is seamlessly provided over interconnected and interoperable communications facilities. Extending out from these backbone networks are the access facilities that reach out to the users wherever they may be to ensure the widest coverage at costs affordable to all.

The global information infrastructure will guarantee the ubiquity of advanced communications applications and services as well as universal access to information.

In this context, universal access and, eventually, universal service are vital elements in the establishment of a global information society that can truly serve humanity. They are the ultimate goals of the global information infrastructure and of its integral components: the regional and national information infrastructures.

A National Information Infrastructure for the Philippines

Today, many countries are in the process of evolving their own information infrastructure. Most of them have already started to reform their respective legal, regulatory and policy regimes in order to create an environment that will allow the favorable and sustainable development of their national information infrastructure.

Nations who are successful in creating such an environment can evolve to a knowledge-based economy faster. A well-developed national information infrastructure gives a country the competitive edge and provides its citizens with a higher quality of life.

The Philippines as a nation is not an exception. To be globally competitive and to be able to bring the benefits of the Information Age to its people, it must keep up with worldwide developments and manage the fast evolving changes as they take place. The country must develop its own information infrastructure - the Philippine Information Infrastructure (PII).

This is not to say that the Philippines still does not have even just the foundations of a national information infrastructure. In fact, there are already significant portions of the PII that are now either already operational or are in the process of planning and implementation. While there is no doubt that the PII is just at its very early stages of development, it is already work in progress.

The PII and What it Means to Filipinos

The PII promises great economic, social and cultural benefits to the citizens and residents of the Philippines. The PII itself will provide tremendous opportunities for Filipinos. Among other things, the planning, implementation and operation of PII facilities and related projects will lead to the creation

of more jobs.

A developed national information infrastructure will also help alleviate the poverty of people and spread growth more equitably. As envisaged, the PII will play a major role in the provision of basic people-oriented services such as distance education, life long learning, tele-medicine and health care.

In general, the government will need the PII to improve its ability to deliver vital public services to the people. The PII will help empower the citizens and will help them improve their work productivity leading to the improvement of their standards of living. It will definitely be a positive factor in strengthening and enriching the social and cultural fabric of the Filipino people. All said, the PII would be the key ingredient in the national effort to accelerate the entry of Filipinos to the Information Age.

A national information infrastructure like the PII will alter the way a nation's citizens and residents live, learn, work and communicate with each other both within the country and around the world. It will ensure the country's ability to respond to the emerging societal changes. The country cannot afford to miss this rare opportunity to join the bandwagon of economic progress. The benefits are simply too immense to be ignored. In fact, it will be a real tragedy if this opportunity is allowed to pass.

The PII in the Context of a Global Vision

The Philippines must share the vision of many other nations in the world by developing and deploying its own national information infrastructure. This vision is to enable all the citizens and residents of a nation to have equal access to other people and to information that are relevant to them regardless of where they are located and at costs they can afford. Evidently, this vision has been developed to benefit the citizens of nations. For the Philippines, it is the Filipino people who will benefit from a national information infrastructure.

This global vision has provided the impetus for the Philippines to get started on the long and arduous drive towards the goal of accelerating the development of the PII. It is also this vision that has given impetus to the PII Policy Study Project and has led to the conceptualization of the project.

The PII Policy Study Project

The PII policy study project is the first major step towards the development of a national information infrastructure for the Philippines. As the first major PII initiative, it must be recognized that it came primarily from the visionary mind and the pioneering efforts of the Undersecretary of Communications, the Honorable Josefina T. Lichauco. She is the first Filipino to "champion" the need for a national information infrastructure for the Philippines.

To accomplish this objective, the NITC adopted a six-component strategic thrust "T-I-G-E-R-S" and formulated its NITP2000 development plan. The NITP, in turn, tasked the DOTC with the responsibility for the "T" (Telecommunications) component, focusing on the development of the Philippine Information Infrastructure (PII).

The DOTC and CIDA jointly funded the implementation of the PII Policy Study Project. Two sets of consultants for the project were involved: one team was composed of experts from Canada retained for the project by CIDA and another team was composed of Filipino consultants retained by the DOTC.

The PII project was intended to identify and address issues and concerns affecting the development of

the PII. A consultative process was developed for the project to ensure the significant involvement of people in government, private sector and civil society who will make decisions for PII programs and projects. The project was also designed in order to clearly present and effectively explain what it takes to develop a national information infrastructure.

The PII Policy Study Project used traditional research and survey methods as well as new study techniques. The use of the Internet, for example, enabled the project's study teams to keep abreast of the current worldwide developments. It also allowed the team members to establish direct connections with people who were involved in similar undertakings for their respective countries.

The Final PII Study Outputs

The final PII policy study outputs were distilled from intensive studies and researches conducted by the project's study teams. They also represent the results of the consultations made with as many of the identified interested parties in the PII as possible. More than three hundred representatives from both the government and the private sector participated in the project. More than fifty of these participants acted as key resource persons to the project. Participants from the private sector, Filipinos and foreigners alike, represented a cross-section of the industry.

The PII Framework Proposal, on the other hand, is a complementary report to the Final Study Report. It is not intended to be a separate and distinct output from the Final Study Report. The work on this Framework Proposal was in fact closely and carefully coordinated with that on the Final Study Report. It was developed from the same study processes and methods adopted and implemented for the PII Policy Study Project and which were used in the preparation of the Final Study Report.

PII Stakeholders' Expectations from the Project

The project was undertaken on the basic assumption, eventually proven correct, that the PII has a broad base of interested parties from both the government and the private sector as well as from non-government organizations and the civic society, in general. They are those who are referred to in this framework proposal as the "PII stakeholders".

Evident from the results of the consultative process adopted for the project was that the participants who come from this broad base of interested parties - the identified PII stakeholders - were expecting that the results of the project will be presented in terms of practical, actionable and workable proposals. The stakeholders, in turn, will have to act upon these proposals before they can become concrete action plans and programs, strategic initiatives and specific projects, policy and investment decisions and legal reform measures.

Some of the stakeholders echoed their concern that the study teams would merely present an essay about the PII and their perspective of where the Philippines is now and how it should move forward to develop its national information infrastructure. Such a manner of presentation can be valid and relevant and may provide significant contributions to the development effort for the PII particularly the conclusions and recommendations they may embody. It was, however, clear that the stakeholders were expecting more. Many of the stakeholders were clearly anticipating that the project would address specific concerns and issues from a more pragmatic plane. Many sought definitive and realizable proposals rather than just broad conclusions and recommendations.

Generally, they expected the final study output to contain definitive action-oriented and issue-specific action plans and high-impact strategic initiatives that will demonstrate the benefits of the PII. They were also advocating appropriate constitutional, legislative, policy and regulatory reform measures to

facilitate the acceleration of the PII development process. This prompted the Filipino team to respond and the result of their work is the PII Framework Proposal that they have so carefully crafted.

The PII Framework Proposal

The Filipino consultants developed the Framework Proposal for the PII as a platform from where they were able to present and defend their thesis for each of the integral parts of the proposed PII framework. Every plan and proposition in the PII Framework Proposal was formulated based on underlying concepts, philosophies and positions taken on specific problems, needs and issues.

The Filipino consultants also anticipated the need to match the proposed PII framework against the government's national policy framework and long-term national development plan along with other constraints and limitations.

After a thorough review, revision and evaluation by the government and private sector decision-makers and planners and other PII stakeholders, this proposal can be adopted as the "PII Framework for Development." With an official stamp of approval from government, it will become a very important guide to the implementation of an accelerated and rationalized development process for the PII.

The basic outline of the proposed PII Framework for Development is presented at the end of this chapter as Exhibit 1.

The Values of the Project's Final Study Outputs to the PII Development Process

The PII Final Study Report and the PII Framework Proposal taken together represent an important step towards the realization of the dream of many Filipinos to achieve progress and to experience the benefits that are promised by the global information society. It is expected that the project's final study outputs will reach a significant segment of the PII stakeholders and will be able to provide them with a clearer and a more focused vision of the PII. Accurate and relevant information about the PII should lead to a better understanding of the role that a national information infrastructure like the PII can play in the nation-building process.

The final study outputs also identified what should be done and who should be responsible for certain tasks in order that the sustained development of the PII can be ensured. They defined the options open to the Philippines for it to become an active participant in the universal effort to bring about the new and emerging global information society.

One of the achievements of the project that can be cited even at this stage was that the PII consultative process served as an effective platform for the launching of a virtual advocacy movement for the PII. This movement was able to acquire a much broader based acceptance and support for the PII. This movement is also aimed at ensuring a clear and correct understanding of what the PII is. This effort must address the Filipino people starting from the leaders of government, the private sector and the civil society.

Sustaining the Momentum for the PII

It is evident that after the PII Policy Study Project is completed, there must be continuity rather than an impasse. The progress that has been attained for the PII so far must be continued and sustained. It is critical that the DOTC continues to take the lead role in the PII development process.

To provide further focus and impetus, the PII Framework Proposal is recommending the creation of a separate body to support both the DOTC and the NITC in their respective responsibilities and tasks related to the development of the PII.

Some of the stakeholders consulted, on the other hand, are proposing that after the PII policy study has been completed, a strategic national development plan for the PII must be initiated. It should adequately cover and reconcile the many diverse, sometimes duplicitous or conflicting, efforts of the various private sector enterprises that are involved in the development, deployment and operation of the PII. It should also consider all the different development plans that are already operational and those that are in the process of either planning or implementation.

A master plan can then be developed to integrate all the different plans of the different groups involved in the PII development process. This strategic plan, as proposed by its proponents and espoused in this PII Framework Proposal, should cover all possible areas of concern and address the identified issues and needs in more comprehensive terms than how they were treated in this policy study.

Among other things, the master plan should be able to answer such questions as how much will be the total cost of building even just the physical infrastructure component of the PII.

There are certainly many other areas of concern that require more adequate coverage than how they were handled in the PII policy study. It can also be safely predicted that more issues, needs and concerns will surface as changes in lifestyles, technological advancements and other radical transformations continue to take place in the world.

There is no doubt that the PII development is dynamic. The continuing studies developed to support it should be equally dynamic. There is also no doubt that the PII should be developed in a timely, orderly and well coordinated manner so that the nation will be able to adequately meet the challenges of the times.

Having taken the first step, the crucial part now comes with the need to maintain the momentum of PII development.

Potential Threats to PII Development

The Philippines is now a country that is fully conscious of the need to join the march to the Information Age. It is, however, possible for a developing country like ours to fail to act on time as it becomes so engrossed with its many other more pressing social, political and economic problems. This threat is now even more pronounced as the country starts to face more serious problems due to the economic crisis that is now slowly but so persistently engulfing its region and the world.

One very serious concern is how the long-term development of the PII can be financed in the face of the serious economic problems that the country is now facing along with economic turbulence that the region and many other parts of the world is now going through.

The information society and the knowledge-based milieu that is now emerging are new, complex and abstract concepts that are not yet completely clear and acceptable to most citizens of the world. Even the leaders of some nations may fail to recognize the value of this evolution for their people. There is, therefore, an urgent need for Filipinos, particularly its leaders and decision-makers to understand these new concepts, appreciate their short, medium and long-term benefits and to promote public awareness, understanding and acceptance for them.

The End of the Project Marks the Beginning of a new PII Development Process

The PII Policy Study Project is a serious and deliberate attempt to respond fully and adequately to what its project teams have determined as the most pressing problems, needs and concerns related to the PII. The project also made a real and concerted effort to define the parameters for setting up an environment

that will be able to not only initiate but also sustain and even hasten the development of the PII.

As the project ends, a new process for the accelerated and rational development of the PII has been clearly identified, defined and given a real substantive form. While a development process has already started for the PII even before the project was initiated, it must now begin to move forward on a new track and at a much faster speed.

The PII Policy Study Project is an initial but major effort whose end marks the beginning of what is expected to be a new, longer and more difficult but on-track course for the PII.

ACKNOWLEDGEMENT

The Filipino consultants to the PII Policy Study Project wish to extend their gratitude to all the PII stakeholders who have participated in the consultations and provided valuable inputs to the project. The participants to the policy study collectively provided the highly significant inputs that provided substance to the study. They also provided the valuable support that ensured the successful and timely completion of the project.

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Above all, they acknowledge the outstanding guidance and support provided to them by the DOTC and its project management team for the PII Policy Study Project. The Department's involvement in the project was led and directed by the Undersecretary of Communications, the Honorable Josefina T. Lichuaco. The Director for Management Information Services (MIS) of DOTC, Ms. Emma E. Hizon, headed the project management team as the project manager. The chief of DOTC's Telecommunications Policy and Planning Division, Engr. Aurora R. Adecer-Rubio, assisted Ms. Hizon in the management of the project. The other staff members of the DOTC who supported and assisted the team in one way or another should also be cited. These officials and staff of the DOTC were all instrumental in their own respective ways of ensuring the successful completion of the policy study project.

Senior officials and executives also provided valuable support to the PII teams of consultants from various government departments, offices and agencies. They included senior officials from the Office of the President, the National Economic Development Authority (NEDA), the Department of Science and Technology (DOST), the National Computer Center (NCC), the National Telecommunications Commission (NTC), and other government departments and agencies. Top-level officials and senior executives from the various private sector organizations, institutions, associations and corporations also participated actively in the broad consultations that punctuated the one-year project.

The participation, on a collective basis, of top-level officials and senior executives from both government and the private sector has been outstanding. This assessment is based not only on the number of participants but more importantly on the very keen interest they have shown, the very enthusiastic involvement they have demonstrated and in the very meaningful inputs that they made to the project.

The list of those who have made substantive contributions to the PII project is long. It was not possible to list all their names in this study output. What is perhaps more important is to state that most of their contributions have found their way, in one way or another, into the proposals being submitted as part of this study output.

The Filipino consultants individually and collectively exerted their best efforts working in coordination with their Canadian counterparts and in close consultation with the DOTC senior officials and members of the project team. They spent long hours at work with a singular objective in mind - to contribute to the development of the PII, as they are truly convinced that the PII is an indispensable resource for the Filipino nation and its people.

As Filipinos themselves, the PII to them was not just the subject matter of a contracted project but a cause that they themselves strongly support and advocate. It was, in the words of one of the consultants, *" something you simply fall in love with" .*

Comments on any of the materials presented in this report entitled the "PII Framework Proposal" will be most appreciated by the Filipino consultants even after the project's work program has already ended. With the project already officially completed, these comments should now be directly addressed to the DOTC.

The Filipino consultants, however, still look forward to opportunities in the future where their proposals as embodied in the PII Framework Proposal herein submitted to the DOTC could be discussed and expounded further.

These proposals, as well as the accompanying vision, definition, principles and other specific positions they have taken in developing their overall framework proposal may be considered as important steps. They are, at best, only the first significant steps taken towards a rational and accelerated development of the PII. Many more steps will have to be taken for the PII.