MALACAÑANG
Manila

BY THE PRESIDENT OF THE PHILIPPINES

EXECUTIVE ORDER NO. 893

PROMOTING THE DEPLOYMENT AND USE OF INTERNET PROTOCOL VERSION 6 (IPV6)

WHEREAS, Section 24, Article II (Declaration of Principles and State Policies) of the 1987 Constitution states that, "The State shall recognize the vital role of communication and information in nation-building";

WHEREAS, advanced internet services are now widely used and have become an enabler to social and economic development of all countries, as these services have increased worker productivity and connected local businesses to local and international markets;

WHEREAS, there is a need to promulgate policy directives to promote investment in internet-based infrastructure, applications and services; and to enable continued improvements in various sectors and enhance government operations and services such as but not limited to health care, national security, public safety, education, environment, and the economy;

WHEREAS, one major component of internet-based operations is the Internet Protocol Version 4 (IPv4) addresses which, by industry measure, is now becoming scarce and would be difficult to obtain by 2011, potentially impeding the growth and development of internet-based services;

WHEREAS, the deployment of Internet Protocol Version 6 (IPv6) will help mitigate the problem of IPv4 address exhaustion and will enable continued expansion of the internet in the country; and

WHEREAS, in accordance with Executive Order No. 269 (s.2004), the Commission on Information and Communication Technology (CICT) is mandated to ensure the provision of strategic, reliable and cost-efficient information and communications technology (ICT) infrastructure, systems and resources as instruments for nation-building and global competitiveness;

NOW, THEREFORE, I, GLORIA MACAPAGAL-ARROYO, President of the Republic of the Philippines, by virtue of the powers vested in me by law, do hereby order and direct as follows:
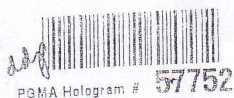
SECTION 1. GENERAL POLICY

The government shall pursue the policy of adapting and promoting modern technology for national benefit. It shall encourage the improvement of the country's ICT infrastructure and ICT-enabled services. To the extent that the exhaustion of IPv4 addresses is threatening to deter growth and development, migration to IPv6 shall be promoted.

SECTION 2. SPECIFIC POLICIES

To ensure the successful implementation and monitoring of this Order, the following policies shall be adopted:

a) All government online services shall be IPv6-compliant and interoperable with IPv4 within two (2) years after the effectivity of this Order;

b) Government procurement of IPv4-only equipment and software shall be prohibited beginning two (2) years after the effectivity of this Order;

c) All government agencies shall include an IPv6 migration plan in their Information Systems Strategic Plans (ISSP);

d) All Internet Service Providers (ISPs) shall be capable of providing IPv6 addresses and services within two (2) years from the effectivity of this Order;

e) Interoperability between IPv6 and IPv4 infrastructure and systems shall be encouraged;

f) Cooperation between and among the government and the private sector to promote and ensure compliance to IPv6 shall be pursued;

g) Capacity-building to address the technical requirements brought about by the new technology and public awareness program shall be instituted and enhanced.

SECTION 3. DEFINITION OF TERMS

The following definitions shall apply within the context of this policy:

a) **Information and Communications Technology (ICT)** – means the totality of electronic means to collect, store, process and present

information to end-users in support of their activities. It consists, among others, of computer systems, office systems, and consumer electronics, as well as networked information infrastructure, the components of which include the telephone, cable, wireless and satellite systems, the Internet, fax machines, and computers.

b) **Internet Protocol** – a standard set of rules for sending and receiving data through the internet. Each computer or device connected to the internet must have a unique IP address in order to communicate with other systems or the Internet.

c) **Internet Protocol Version 4 (IPv4)** – means the first widely deployed version of the Internet Protocol. It uses 32-bit addresses, which limits the address space to 4,294,967,296 (2^{32}) possible unique addresses. It is typically in the form of n.n.n.n ranging from 0.0.0.0 through 255.255.255.255;

d) **Internet Protocol Version 6 (IPv6)** – means the next-generation Internet Protocol version designated as the successor to version 4 (IPv4). It uses 128-bit address which supports 2^{128} (about 3.4×10^{38}) addresses. It is typically in the form of hhhh:hhhh:hhhh:hhhh:hhhh:hhhh:hhhh:hhhh where h is in hexadecimal format numbers ranging from 0 to 9 and A to F;

e) **IPv4-only** – means an equipment is capable of communicating/interfacing using only IPv4;

f) **IPv6-compliant** – means a system is capable to receive, process, and transmit or forward (as appropriate) IPv6 packets;

g) **Interoperability** – means the ability of systems, infrastructures, units, or products to provide services to and accept services from other systems, infrastructures, units, or products.

SECTION 4. CREATION OF AN INTER-AGENCY TASK FORCE (IATF) ON IPv6

A Inter-Agency Task Force (IATF) on IPv6 is hereby created to ensure implementation of this Executive Order. The Task Force shall be composed of the Chairman of the Commission on Information and Communications Technology (CICT), as Head; and Senior Level Officials from the Department of Science and Technology (DOST), Department of Trade and Industry (DTI), Department of National Defense (DND), Department of Budget and Management (DBM), National Telecommunications Commission (NTC), and the private sector

representatives as members. The CICT shall serve as secretariat of the Task Force.

The Task Force shall create an Inter-Agency Technical Working Group (IATWG), composed of government and private sector representatives.

The Task Force shall be organized and hold its first meeting within (60) days from the promulgation of this Executive Order.

The Task force shall cease to operate once all government agencies and ISPs have reported full compliance.

SECTION 5. FUNCTIONS OF INTER-AGENCY TASK FORCE (IATF) ON IPv6

The Task force shall have the following functions:

a) Formulate an IPv6 roadmap;

b) Initiate and manage IPv6 data collection;

c) Develop baseline and metrics for measuring IPv6 usage and benefits in the country;

d) Provide periodic reports to the President through the Chairman of CICT regarding the activities of the Task Force;

e) Promote human capacity-building, including training and awareness on IPv6;

f) Develop a database of IPv6 compliance;

g) Recommend additional policies as may be deemed necessary;

h) Perform other functions as may be assigned by the Office of the President.

SECTION 6. FUNDING

Appropriations for the agency level migration to IPv6 shall be included in the respective agency allocations.
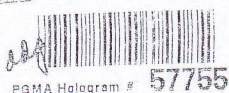
SECTION 7. IMPLEMENTING RULES AND REGULATIONS (IRR)

CICT shall issue the Implementing Rules and Regulations (IRR) within ninety (90) days from the approval of this Order.

SECTION 8. REPEALING CLAUSE

All executive issuances, orders, rules and regulations or parts thereof inconsistent with this Executive Order are hereby repealed, amended, and/or modified accordingly.

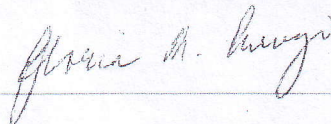## SECTION 9. SEPARABILITY CLAUSE

If any provision of this Executive Order is declared invalid or unconstitutional, the other provisions not affected thereby shall remain valid and subsisting.

SECTION 10. EFFECTIVITY CLAUSE

This Executive Order shall immediately take effect fifteen (15) days after its publication in a newspaper of general circulation.

DONE, in the City of Manila, this 18th day of June in the year of Our Lord, Two Thousand and Ten.

By the President:

LEANDRO R. MENDOZA
Executive Secretary

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