The Internet Corporation for Assigned Names and Numbers

NEWS RELEASE

Brussels ♦ Sydney ♦ Washington ♦ Los Angeles

FOR RELEASE: Immediate

MEDIA CONTACTS:

Brad White
Director of Media Affairs, ICANN
Ph. +1 202.429.2710
brad.white@icann.org

Michele Jourdan
Corporate Affairs
Ph. +1 310.301.5831
michele.jourdan@icann.org

Unallocated IPv4 Internet Addresses Soon to be Consumed

Depletion of Network Addresses Spurs Calls for More Rapid
Adoption of Newer IPv6 Protocol

Marina del Rey, CA… January 19, 2010… The available pool of unallocated Internet addresses using the older IPv4 protocol has now dipped below the 10 percent mark. There are now just 24 address blocks (each block is about 16-million IP addresses) that ICANN has not yet allocated to the Regional Internet Registries around the world.

ICANN, the Internet Corporation for Assigned Names and Numbers, is the entity that is responsible for the global coordination of the Internet's unique number and address identifiers.

"This is the time for the Internet community to act," said Rod Beckstrom, ICANN's President and Chief Executive Officer. "For the global Internet to grow and prosper without limitation, we need to encourage the rapid widespread adoption of the IPv6 protocol."

IPv6 is the new protocol the Internet engineering community designed to cope with the increased demand for IP addresses, which are the unique identifiers that allow computers to communicate with one another over the Internet and to which DNS servers translate domain names. IPv4 addresses contain only 32 bits of data, while IPv6 addresses contain 128 bits.

Technical experts agree that the single biggest advantage of IPv6 is its capacity to accommodate Internet growth. For example, if all IPv4 address could fit within a Blackberry, it would take a storage device the physical size of the Earth to contain all available IPv6 addresses. There are 300 trillion trillion trillion possible IPv6 addresses. The smallest IPv6 address blocks that an Internet Service Provider (ISP) would typically allocate, of which there are over 2.3 million trillion, each contain more than 18 million trillion Internet usable

network addresses – far more than the entire world uses today with IPv4. These are available to any ISP or company in every corner of the globe.

Estimates are that it will probably take at least a couple of years to completely deplete the available pool of unallocated IPv4 addresses, but the adoption of IPv6 addresses will offer a number of advantages:

- There will be plenty of IP addresses for every organization or individual.

- Every machine/device could have its own address, simplifying network designs and also allowing for easier remote configuration.

- As the so-called "Internet of things" expands, there will be enough network addresses to accommodate trillions of devices, so alternative network addressing schemes will not be necessary.

- The new larger address space will open the door to a whole new generation of online devices.

"Quite simply it comes down to the fact that IPv6 is the future of the Internet," said Beckstrom. "The Internet now defines communication and commerce and to accommodate its explosive worldwide growth we need to act now to guarantee an online future that accommodates growth with few limitations."

"This is a key milestone in the growth and development of the global Internet," noted Axel Pawlik, Chairman of the NRO. "With less than 10 percent of the entire IPv4 address range still available for allocation to RIRs, it is vital that the Internet community take considered and determined action to ensure the global adoption of IPv6. The limited IPv4 addresses will not allow us enough resources to achieve the ambitions we all hold for global Internet access. The deployment of IPv6 is a key infrastructure development that will enable the network to support the billions of people and devices that will connect in the coming years," added Pawlik.

Beckstrom added that it is important that the public understand that many of the blocks of IPv4 addresses that have been allocated to registries have not yet been distributed to the public, so there will be no immediate global shortage of IPv4 addresses at the consumer level.

<center>###</center>

To read more about IPv6, go here: http://www.icann.org/en/announcements/factsheet-ipv6-26oct07.pdf.

To read the news release of the Number Resource Organization (NRO), the official representative of the five Regional Internet Registries (RIRs), go here: http://www.nro.net/media/less-than-10-percent-ipv4-addresses-remain-unallocated.html

About ICANN:
To reach another person on the Internet you have to type an address into your computer - a name or a number. That address has to be unique so computers know where to find each other. ICANN coordinates these unique identifiers across the world. Without that coordination we wouldn't have one global Internet. ICANN was formed in 1998. It is a not-for-profit public-benefit corporation with participants from all over the world dedicated to keeping the Internet secure, stable and interoperable. It promotes competition and develops policy on the Internet's unique identifiers. ICANN doesn't control content on the Internet. It cannot stop spam and it doesn't deal with access to the Internet. But through its coordination role of the Internet's naming system, it does have an important impact on the expansion and evolution of the Internet. **For more information please visit: www.icann.org.**

About the Number Resource Organization (NRO):
The Number Resource Organization (NRO) is the coordinating mechanism for the five Regional Internet Registries (RIRs). The RIRs – AfriNIC, APNIC, ARIN, LACNIC, and the RIPE NCC – ensure the fair and equitable distribution of Internet number resources (IPv6 and IPv4 addresses and Autonomous System (AS) numbers) in their respective regions. The NRO exists to protect the unallocated Internet number resource pool, foster open and consensus-based policy development, and provide a single point of contact for communication with the RIRs. Learn more about the NRO at www.nro.net/media.