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## ISOC (Internet Society) における 考え方

インターネットが持つべき・維持すべき特長としては、以下の 6 つが共通認識とされている。(a) グローバル性、(b) マルチ・カルチャー、(c) 自由と匿名性、(d) 公正性、(e) コモンズ性、(f) 機会の提供。

## (1) 「グローバル」が前提

インターネットは、似たように見えるかもしれない 電話と郵便のシステムと以下の点において、本質的に異なる。

インターネットは、グローバルなサービスを前提としており、位置に関する透明性を持っている。IP アドレスおよびドメイン名、さらに、DNS を用いた IP アドレスとドメイン名の対応関係においても、地理的制約は存在しない。このような条件において、IP アドレスとドメイン名は、グローバルな空間で唯一性を実現させなければならない。さらに、IP アドレスが割り当てられたコンピュータとの通信、DNS サービスの提供は、該当するコンピュータが、世界中のどこに存在していても可能でなければならない。また、特に TLD(Top Level Domain)を提供するサーバは、複数存在することが可能であること前提であり、同じサービスを提供可能な複数のサーバが世界中に分散し運用されている。

## (2) 「個人」を尊重

組織・国 を 越えて、「個人の活動」を支える。“IP for Everyone” が、この考え方を 象徴している。個人が形成する“{地理的制約を持たない}コミュニティー”を尊重する。

### (3) 「動くもの」を尊重

#### (2-a) We reject king, president and voting. We believe in rough consensus and running code (by Dr.David Clarke at INET92 in Kobe, Japan)

『法律ではなくコンセンサス』で運営されるべき。その理由は、以下の点にある。

- ・ グローバルな空間
- ・ 環境変化への迅速な対応
- ・ 適用範囲・領域の拡大への対応
- ・ マルチステークホルダー
- ・ 個人の重要性・尊重

さらに、インターネットの運用に関わる重要な設備や構造に関しては、「動かし続けること」に、最高の優先度を置いている。すなわち、『民主導で{正常に}動かし続けること』が実現可能な体制を確立しなければならない。

#### (2-b) 「自律分散」と「実現方法の多様性」

ルート DNS サーバと TLD を提供するサーバに関しては、複数の同じサービスを提供可能なコンピュータを、意図的に、地理的に分散配置することで、様々な事故に対するサービスの継続性・持続性を実現している。特に、ルート DNS に関しては、(i) 一年に 3 回以上 対面での会議を持ち、その運営品質の向上を実現、(ii) 異なる実装方法を意図的に採用、によって、技術と環境の変化に迅速に対応、(iii) エニキャスト技術を用いて、複数の同じサービスを提供可能なコンピュータを、意図的に、地理的に分散配置することで、攻撃や事故に対する堅牢性を担保している。その結果、ルート DNS システムに関しては、電話の交換機などの設備で発生する故障、障害、事故、サービス停止のような状態には陥らない。さらに、DNS の健全な運用は、ルート DNS のみでは不可能であり、すべての DNS サーバの運用者の健全な運用が行われなければならない。

ドメインの中で定義される名前と対応する IP アドレスには、特に制限はなく、各ドメインの運用管理者が名前を決定し利用することが可能となっている。

(4) 「マルチステークホルダー」

「民主導」での関係者から構成されるコミュニティーを形成する。官(=国)は、このマルチステークホルダーの、重要な構成員であり、適切なコミュニティーおよび構成員・組織のエンドースを行うとともに、良好な運営を実現する環境の形成・維持・発展を支援するに資する国内外での活動が期待されている。

Internet Society (ISOC; <http://www.internetsociety.org>)

## **The Internet is for everyone**

### Mission:

By connecting the world, working with others, and advocating **for equal access to the Internet**, the Internet Society strives to make the world a better place.

To promote the open development, evolution, and use of the Internet **for the benefit of all people throughout the world.**

- Facilitates open development of standards, protocols, administration, and the technical infrastructure of the Internet.
- Supports education in developing countries specifically, and wherever the need exists.
- Promotes professional development and builds community to foster participation and leadership in areas important to the evolution of the Internet.
- Provides reliable information about the Internet.
- Provides forums for discussion of issues that affect Internet evolution, development and use in technical, commercial, societal, and other contexts.
- **Fosters an environment for international cooperation, community, and a culture that enables self-governance to work.**
- Serves as a focal point for cooperative efforts to promote the **Internet as a positive tool to benefit all people throughout the world.**
- Provides management and coordination for on-strategy initiatives and outreach efforts in humanitarian, educational, societal, and other contexts.

With these strategic underpinnings in place, the Internet Society has identified and undertaken a number of projects to demonstrate its commitment to the mission. Many of these have been initiated by over 90 **Chapters** or as a result of more than 65,000 **individual** and 145 **organizational** member desires. Others have been undertaken through the efforts of the Trustees, and Internet Society staff in Reston, Geneva, and around the globe.

## Internet for Everyone, by Vinton Cerf on in April 1999.

<http://www.internetsociety.org/internet-everyone>

The Internet is in its 11th year of annual doubling since 1988. There are over 44 million hosts on the Internet and an estimated 150 million users, world wide.

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Ultimately, we will have interplanetary Internet relays in polar solar orbit so that they can see most of the planets and their interplanetary gateways for most if not all of the time.

- ✓ The Internet is for everyone - but it won't be if it isn't affordable by all who wish to partake of its services, so we must dedicate ourselves to making Internet as affordable as other infrastructure so critical to our well-being. While we follow Moore's Law to reduce the cost of Internet-enabling equipment, let us also seek to stimulate regulatory policies that take advantage of the power of competition to reduce costs
- ✓ **The Internet is for everyone, - but it won't be if Governments restrict access to it, so we must dedicate ourselves to keeping the network unrestricted, unfettered and unregulated. We must have the freedom to speak and the freedom to hear.**
- ✓ The Internet is for everyone - but it won't be if it cannot keep up with the explosive demand for its services, so we must dedicate ourselves to continuing its technological evolution and development of the technical standards the lie at the heart of the Internet revolution. Let us dedicate ourselves to the support of the Internet Architecture Board, the Internet Engineering Steering Group, the Internet Research Task Force and the Internet Engineering Task Force as they drive us forward into an unbounded future.
- ✓ **The Internet is for everyone - but it won't be until in every home, in every business, in every school, in every town and every country on the Globe, Internet can be accessed without limitation, at any time and in every language.**
- ✓ The Internet is for everyone - but it won't be if it is too complex to be used easily by everyone. Let us dedicate ourselves to the task of simplifying Internet's interfaces and to educating all who are interested in its use.
- ✓ **The Internet is for everyone - but it won't be if legislation around the world creates a thicket of incompatible laws that hinder the growth of electronic commerce, stymie the protection of intellectual property, and stifle freedom of expression and the development of market economies. Let us dedicate ourselves to the creation of a global legal framework in which laws work across national boundaries to reinforce the upward spiral of value that Internet is capable of creating.**
- ✓ The Internet is for everyone - but it won't be if its users cannot protect their privacy and the confidentiality of transactions conducted on the network. Let us dedicate ourselves

to the proposition that cryptographic technology sufficient to protect privacy from unauthorized disclosure should be freely available, applicable and exportable. Moreover, as authenticity lies at the heart of trust in networked environments, let us dedicate ourselves to work towards the development of authentication methods and systems capable of supporting electronic commerce through the Internet.

- ✓ The Internet is for everyone - but it won't be if parents and teachers cannot voluntarily create protected spaces for our young people for whom the full range of Internet content may be inappropriate. Let us dedicate ourselves to the development of technologies and practices that offer this protective flexibility to those who accept responsibility to provide it.
- ✓ The Internet is for everyone - but it won't be if we are not responsible in its use and mindful of the rights of others who share its wealth. Let us dedicate ourselves to the responsible use of this new medium and to the proposition that with the freedoms Internet enables comes a commensurate responsibility to use these powerful enablers with care and consideration. For those who choose to abuse these privileges, let us dedicate ourselves to developing the necessary tools to combat the abuse and punish the abuser.

I hope Internauts everywhere will join with the Internet Society and like-minded organizations to achieve this easily stated but hard to achieve goal. As we near the milestone of the third millennium, what better theme could we possibly ask for than making the Internet the medium of the new millennium?

Internet IS for everyone - but it won't be unless WE make it so.

Given by Vint Cerf at Computers, Freedom, and Privacy on April 7, 1999.

## How the Internet works

The Internet works because open standards allow every network to connect to every other network. This is what **makes it possible for anyone to create content, offer services, and sell products without requiring permission from a central authority.** It levels the playing field for everyone and it's the reason why we have a rich diversity of applications and services that many of us enjoy today.

The global Internet consists of tens of thousands of interconnected networks run by service providers, individual companies, universities, governments, and others. The Internet is that it's a network of networks that needs to operate around the world as if it were one.

Like policy, the technical coordination of the Internet has common characteristics:

- Open,
- Independent,
- Run by non-profit membership organizations that work together to meet the needs everyone.

**This self-regulation has been the key to the successful growth of the Internet and is flexible enough to adapt to changing future needs.**

**We also reach out to non-governmental organizations, regulatory and governmental bodies.**

**Internet Ecosystem** is the term used to describe the organizations and communities that help the Internet work and evolve. These organizations share common values for the open development of the Internet. The Internet Ecosystem term implies that the rapid and continued development and adoption of Internet technologies can be attributed to the involvement of a broad range of actors; open, transparent, and collaborative processes; and the use of products and infrastructure with dispersed ownership and control.

Organizations that make up the Internet Ecosystem include:

- ✓ **Technologists, engineers, architects, creatives, organizations** such as the Internet Engineering Task Force (IETF) and the World Wide Web Consortium (W3C) who help coordinate and implement open standards.
- ✓ **Global and local Organizations** that manage resources for global addressing capabilities such as the Internet Corporation for Assigned Names and Numbers (ICANN), including its operation of the Internet Assigned Numbers Authority (IANA) function, Regional Internet Registries (RIR), and Domain Name Registries and Registrars.
- ✓ **Operators, engineers, and vendors** that provide network infrastructure services such as Domain Name Service (DNS) providers, network operators, and Internet Exchange Points (IXPs)
- ✓ **Internet Users** who use the Internet to communicate with each other and offer services
- ✓ **Educators** that teach others and build capacity for developing and using Internet technologies, such as multilateral organizations, educational institutions, and governmental agencies
- ✓ **Policy and Decision Makers** that provide local and global policy development and governance.