



# Communications News

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## TOPICS

### A Proposal for Public Applications for Shared Use by Regional Public Organizations

#### Introduction

Along with promoting the formulation of standard formats for regional information platforms which form the base for inter-connection and coordination of information services that are provided by regional public organizations and the private sector as part of the policy for regional informatization, MIC is also conducting investigations on the usage side. As a concrete platform for these investigations, an application committee was set up within the Association for Promotion of Public Local Information and Communication (APPLIC), made up of regional public organizations, private sector companies, experts, and the government agencies concerned. The committee has been working towards proposing new public applications that can be widely used by regional public organizations in the fields of disaster prevention, medical care, health and welfare, and education.

The following outlines the results of the investigations carried out in fiscal year 2007, and concurrently presents a future image of what can be done through the realization of public applications.

#### Outline of Proposals in Each Field

##### (1) The disaster prevention field

In terms of the disaster prevention field, a proposal was made concerning disaster prevention applications for gathering, sharing and providing disaster prevention information, in order to reduce damage suffered during a disaster.

In the basic proposal from fiscal year 2007, the information related to disaster prevention held by regional public organizations was organized and analyzed and the eight topics of casualty information, overall casualty information, initial information on the state of damage, detailed information on the state of damage, evacuation advice direction information, evacuation location information, damage handling action information and deployment plan information were defined as "Standard Specifications for Disaster Prevention Work Application Units (V0.9)."

In the future, the plan is to work for coordination between governmental organizations such as the Cabinet Office and the Meteorological Agency, while taking the opinions of the regional public organizations into account.

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**International Policy Division,  
International Affairs Department,  
Telecommunications Bureau,  
Ministry of Internal Affairs and  
Communications (MIC)**  
1-2, Kasumigaseki 2-chome, Chiyoda-ku, Tokyo 100-8926, Japan  
Fax: +81-3-5253-5924  
Tel: +81-3-5253-5920

**We welcome your comments via:**  
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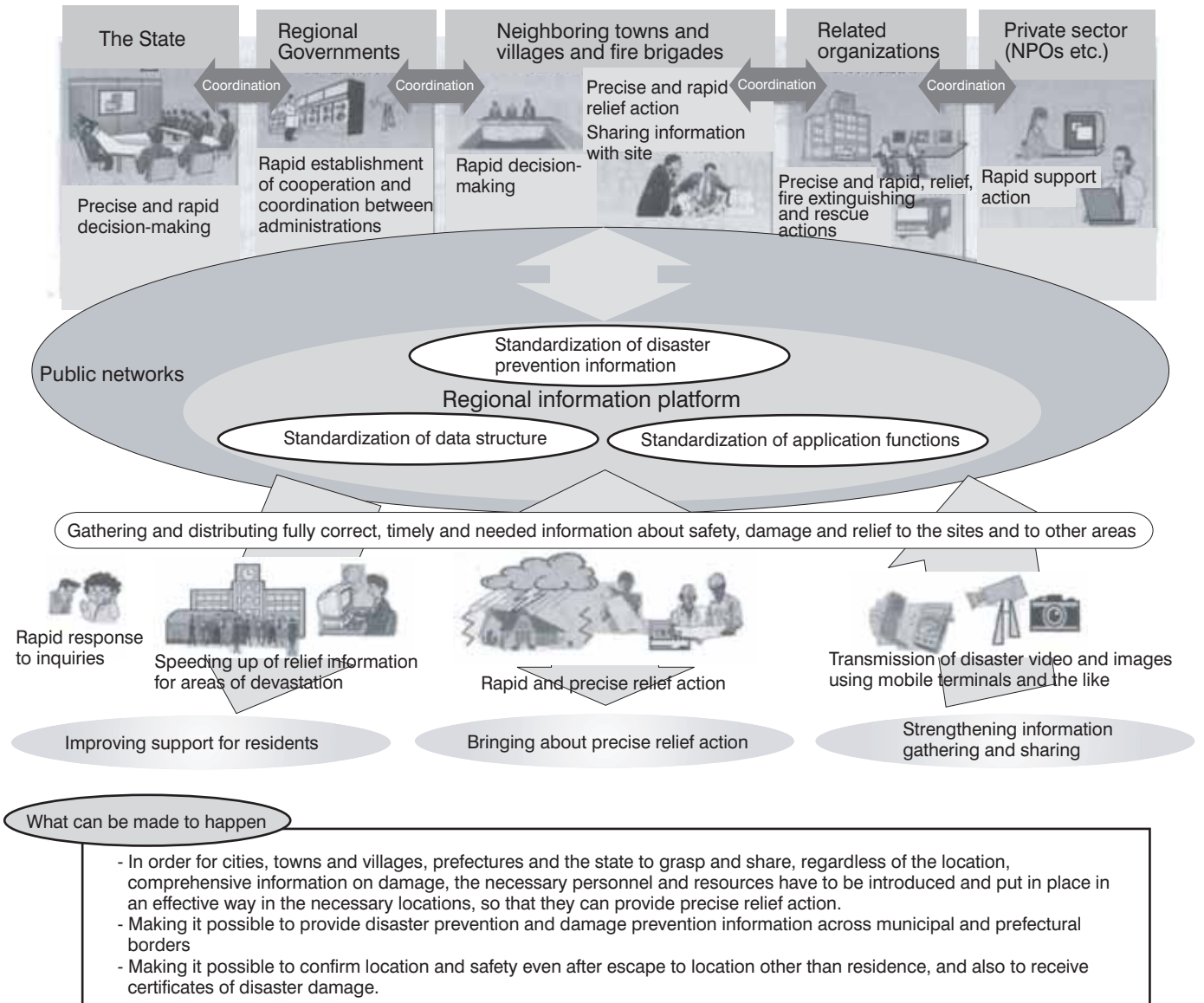
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Also, disaster prevention network installation guidelines were formulated at the same time, incorporating conditions and

installation methods for a network resistant to disaster, as needed for sharing disaster prevention information.

Figure 1 shows an image of the future that can be realized using disaster prevention applications.

**Figure 1: Disaster Prevention Field (Improving disaster prevention ability by sharing disaster-prevention information and supporting disaster prevention work)**



**(2) The medical care, health and welfare fields**

A proposal was made for applications in the medical care, health and welfare fields centering around a lifetime health information base.

The lifetime health information base gathers and accumulates people's individual health information over the long term, and preserves it effectively in a format that can be processed by computer. Consequently, the health information of people which has been spread over various medical and health organizations can be accessed all at once, so that people can work towards

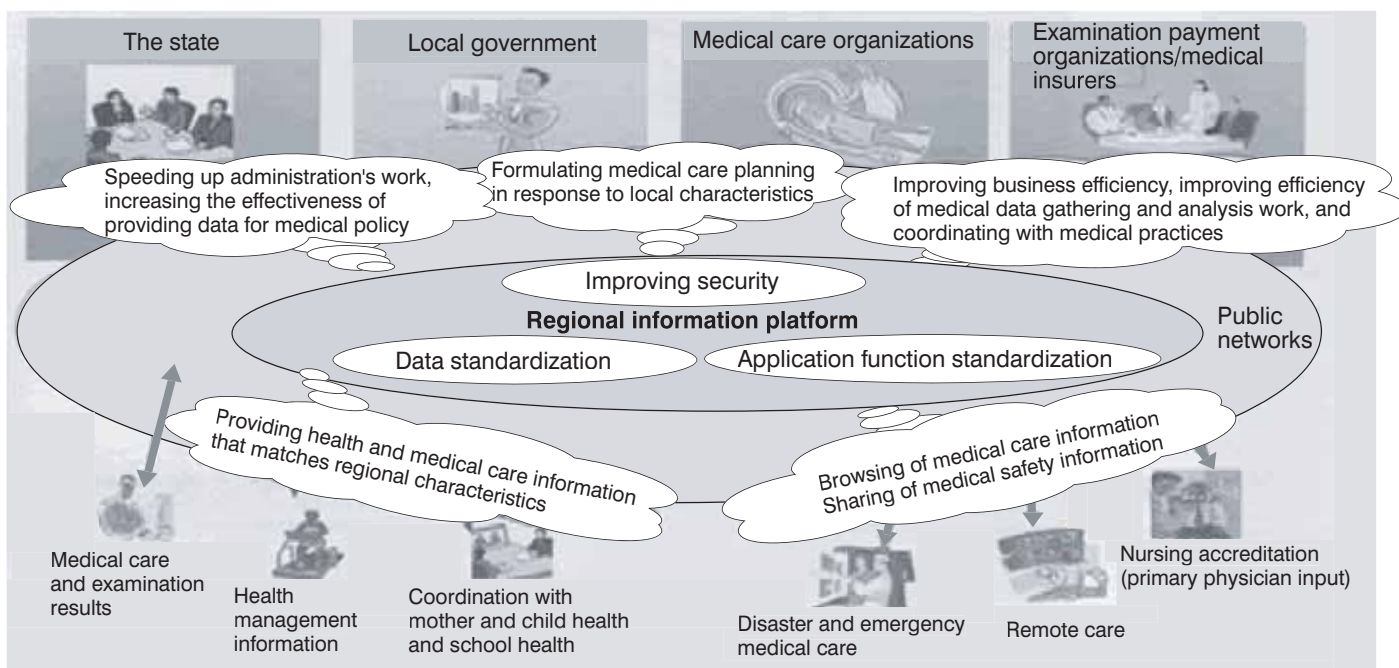
managing their own health. On the other hand, regional public organizations can extract exhaustive anonymous health information which will enable them to implement welfare measures based on this data, such as inoculations for influenza or the like. Also, it will become possible to provide appropriate emergency medical care in order to grasp information ranging from health checks, receipt information, drug doses to the state of health and allergy information of victims, at times of emergency caused by disasters.

With regard to nursing care insurance, a nursing care network

system has been proposed that would be linked to the pertinence of benefits and realizing high quality nursing care and welfare measures. In concrete terms, the aim is for a system that will make it possible to grasp nursing care information in real time by bringing together regional local organizations and nursing service business operators, to enable inputting data electronically concerning home care service plans and service provision records.

Figure 2 shows an image of the future that can be realized using medical care, health and welfare applications

**Figure 2: The medical care, health and welfare fields (Keeping people healthy and preventing disease through a lifetime health information base)**



Providing information to households and regions

Coordinating medical care and nursing organizations

**What can be made to happen**

- By collecting on an individual basis the individual information that is spread between medical and health organizations, it will become possible to get an overall grasp of one's own medical and health information.
- Even when changing the medical organization where one consults, it will be possible to grasp the status of allergies and drug information so that it will be possible to process things appropriately even when getting a second opinion, or traveling or at emergency times.
- Local governments can grasp the situation during an outbreak of influenza or food poisoning and will be able to respond and take preventive measures rapidly.
- It will contribute to formulating medical and nursing preventive measures that match regional characteristics.

**(3) The Educational Field**

A proposal was made for applications that would make possible the promotion of the informatization of school administration and the coordination of information between the educational committee and the general administrative division. With regard to the office work carried out by the educational committee, there was a comparative clarification with the office work standardization model of the standardized formats of the regional information platform, and standardized formats were formulated for information headings and data contents that

need to be processed in coordination with the general administrative division when processing a transfer in schools. Ongoing work is under way for standardization of other office work. In addition, guidelines concerning school informatization as part of the overall informatization plan were also proposed as reference materials in proceeding with the informatization of schools.

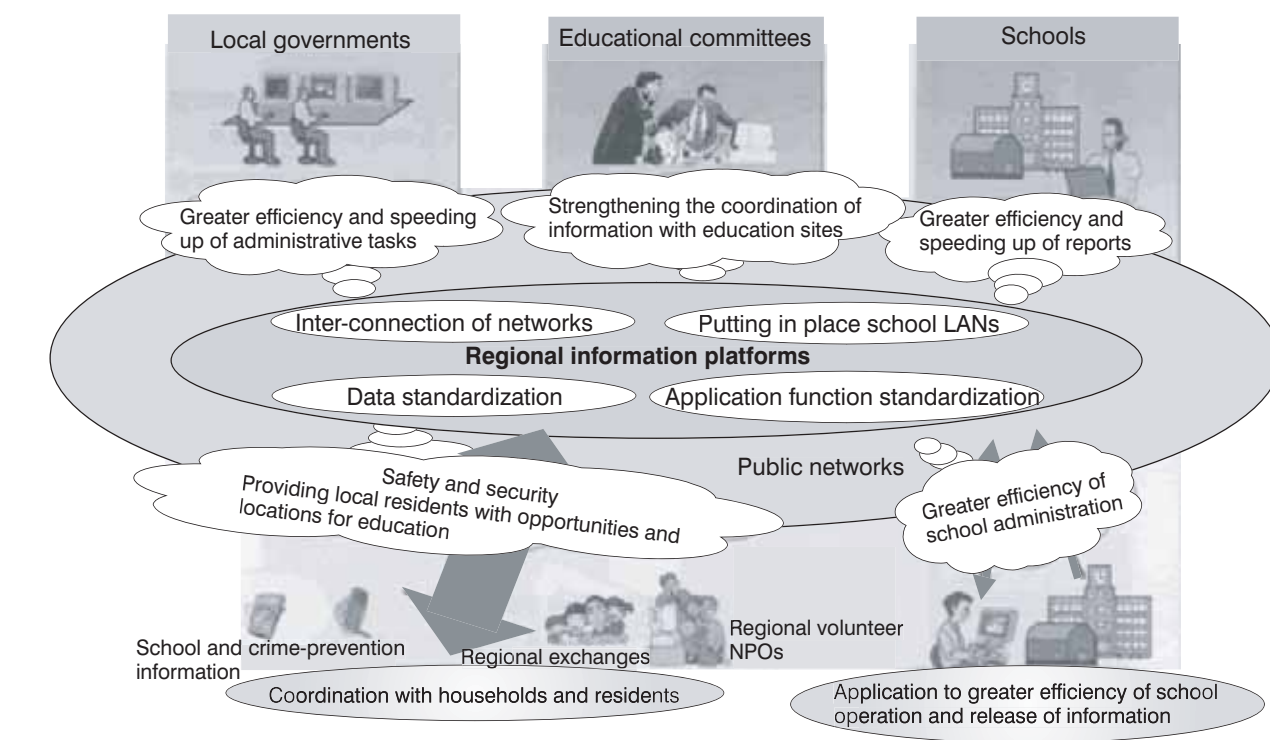
Investigations are also being carried out concerning the sharing of information in coordinating between schools and regions, with 5 pillars being designated as needing to be given priority in informatization, along with

suggestions for various usage scenarios and their main functions.

- 1) A mechanism that enables simple information transmission, update and browsing
- 2) A mechanism for overall, integrated communications with emergency communications as its axis
- 3) A mechanism that enables high-quality viewing and browsing of the activities of students
- 4) A mechanism that enables real-time communications
- 5) A mechanism that enables the building of regional communities

Figure 3 shows an image of the future that can be realized using educational applications.

**Figure 3: The educational field (Regional vitalization due to coordination between schools and regions)**



**What can be made to happen**

- Protecting the safety of students, and contributing to the school activities held in the region
- Making it possible for parents to check on the status of their children when going to and from school and seeking shelter from a disaster.
- Making it possible to conduct easily exchanges with the school such as advising if a child will be absent or notice of events, while protecting personal privacy.
- Reducing the burden of filling in forms and the like when a child changes schools or proceeds to higher education.

**Future Plans**

The applications mentioned above are being investigated under the assumption that they will comply with regional information platforms, and so expansion of usage through

inter-connection and coordination with other regional public bodies, private organizations and the like is also expected.

In the future, there will be inspections of the operational and

technical aspects under actual usage, and along with expansion through additional functions for office work, there will be new versions that will enable even more inexpensive procurement.

**TOPICS**

## P2P Network Experiment Council Symposium

### About the P2P Network Experiment Council

Networks that use the P2P (Peer to Peer) technology present a number of positive aspects such as scalability, redundancy and the dispersal of traffic. On the other hand, in recent years, its darker aspects have become the focus of attention due to the distribution of illegal contents, information leakage and the increase in ISP traffic brought about by the use of file-swapping software, one of the uses of P2P.

Between 2006 and 2007, MIC received reports from the Panel on Neutrality of Networks it had held and the Working Group on P2P Networks, set up under the panel. In order to encourage usage focusing on positive aspects of P2P, MIC set up in August 2007 the P2P Network Experiment Council (Chair: Prof. ASAMI Toru, Graduate School of the University of Tokyo), referred to below as "the council," by bringing together relevant business operators such as P2P technology vendors, communications business operators, distribution business operators, contents holders and the like.

The council has been

formulating Guidelines for P2P Services/Software and conducting experiments using P2P, with the aim of promoting understanding of P2P throughout society, getting technical measurements and determining topics that need to be resolved.

### The Symposium

The P2P Network Experiment Council Symposium was organized by the council and held on February 19, 2008. The symposium saw the introduction of trends in P2P technology and the announcement of the Guidelines for P2P Services/Software (referred to below as "the Guidelines") that were formulated by the council, as well as presentations about demonstrations conducted by various participating companies.

These guidelines aim to create a sense of responsibility for business operators that distribute using P2P and software vendors to provide explanations to users concerning services and software. Among these, service providers have come up with topics for explanations to users concerning operation principles for P2P networks in which users participate, the effects on user terminals, and

measures for offering protection. It is planned for these Guidelines to be used also in demonstrations conducted by the council, with results reflected in the future.

In addition, as an introduction of the approach of the council, there were announcements on distribution mechanisms using P2P by 8 companies that had participated in the experiments, actual examples of business applications, results from the experiments, and expectations from services using P2P.

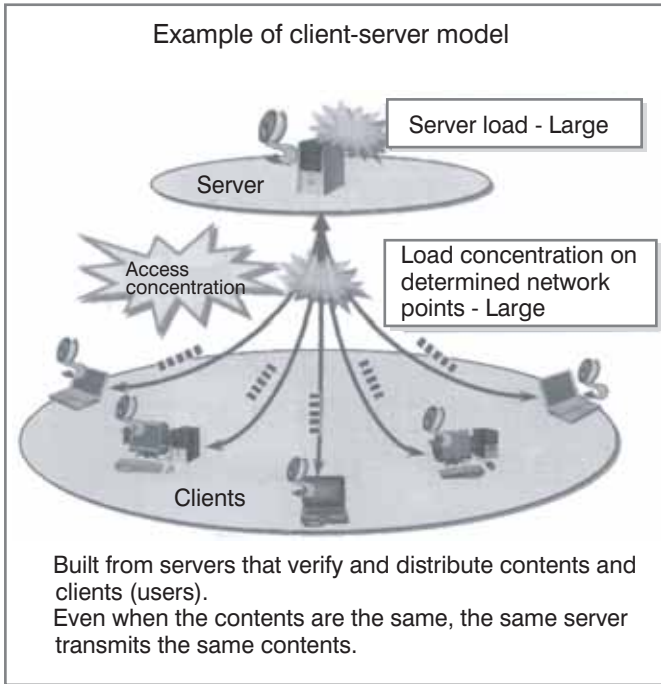
MIC will promote the fostering and penetration of understanding throughout society of P2P technology and its uses, and will continue to support the actions of this council from the point of view of promoting efficient network usage.

The website of the P2P Network Experiment Council can be found at:

[http://www.fmmc.or.jp/p2p\\_web](http://www.fmmc.or.jp/p2p_web)  
(Japanese only)

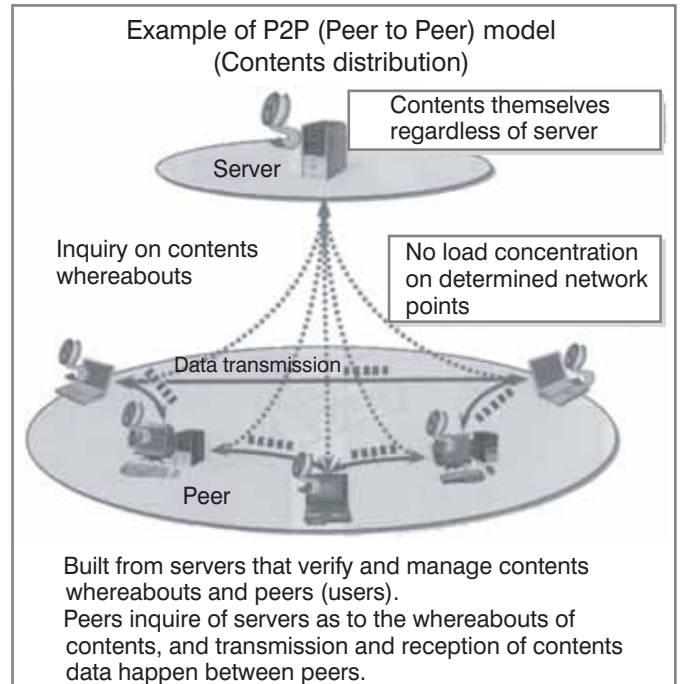
\* Peer to Peer is a format by which a user terminal (a peer) connects to another peer and directly communicates

Characteristics of P2P Networks



When there is greater simultaneous usage of popular contents

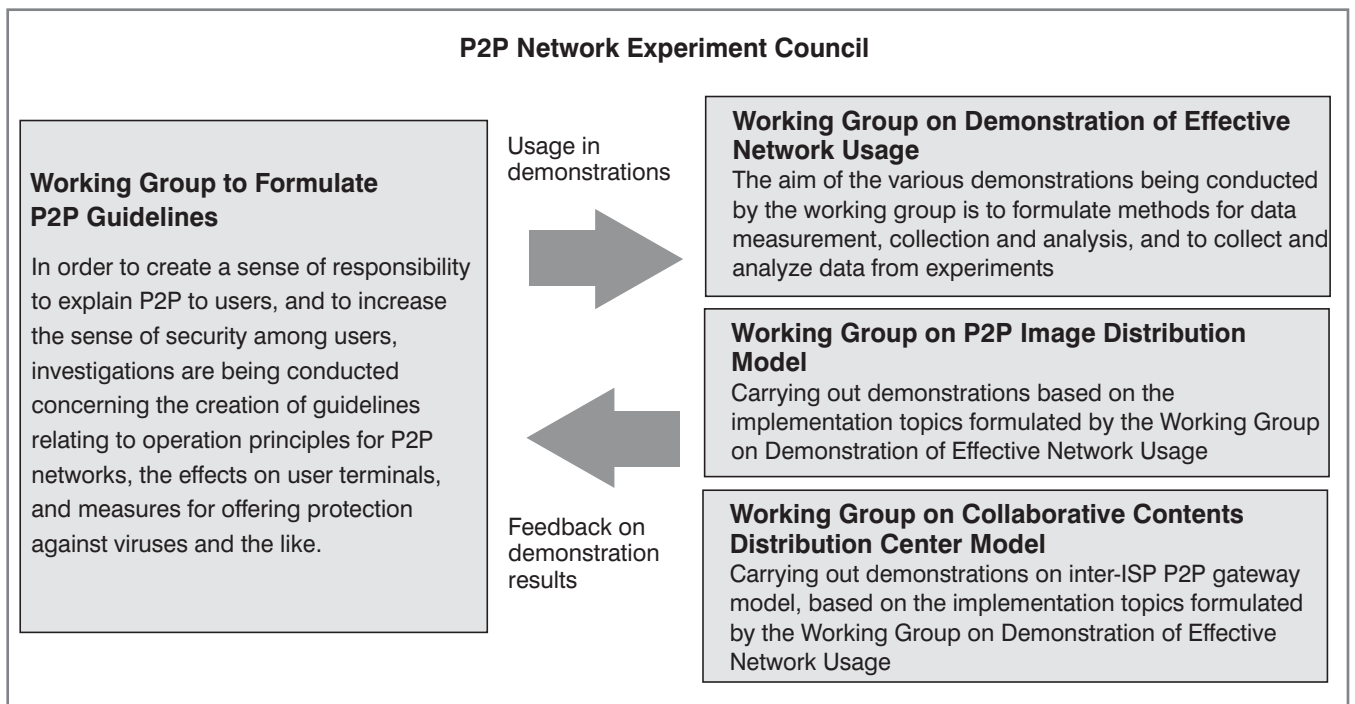
- Demands on the servers are increasing, increasing the load on the servers.
- Servers create circuit congestion on neighboring networks.

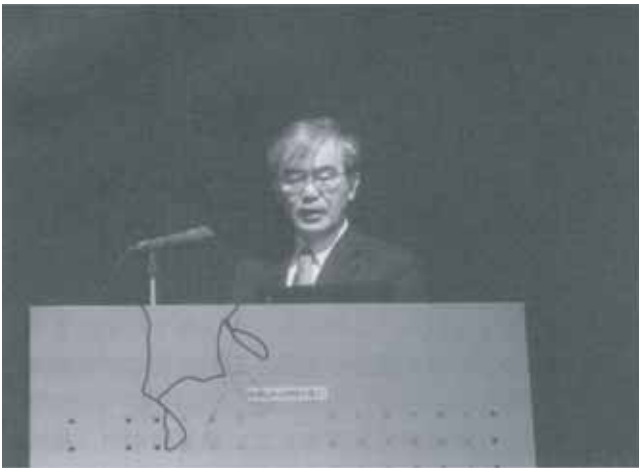


Even if there is greater simultaneous usage of popular contents

- Since it is not the server which transmits the contents, there is little increase in load status
- The occurrence of concentrated load at determined network points is unlikely

P2P Network Experiment Council





Chairman ASAMI Toru of the P2P Network Experiment Council making introductory remarks at the symposium



Taihei KUROSE, Director of the Computer Communications Division, MIC, making introductory remarks at the symposium



Professor ESAKI Hiroshi (Graduate School of the University of Tokyo) of the Working Group to Formulate P2P Guidelines explaining the Guidelines for P2P Services/Software