Outline of International Telework Symposium

Telework which is a flexible working style making use of ICT to work regardless of time and place, that strives for a work/life balance for the worker, has proved to be an efficient work method for improving both efficiency and productivity. It is also expected to yield good results in a variety of areas such as maintaining manpower at a time of a shrinking population and more old people and fewer children being born, revitalizing regions, and reducing the burden on the environment.

The Japanese government is working towards a goal of having 20% of the working population engaged in telework by the year 2010, and formulated a "Doubling of the Telework Population Action Plan" in May 2007. The government as a whole is promoting the advancement of telework.

In order to contribute to the steady and rapid implementation of the action plan, MIC held an International Telework Symposium at the Keidanren Hall in Tokyo on November 28, 2007. More than 300 people from Japan and overseas who work to promote telework participated in the symposium, with lectures by specialists from the United States, Canada, Germany, the United Kingdom, France, Finland and Japan, and there was an animated exchange of opinions on the realization of work/life balance and the improvement in productivity through telework.

Each of the presenters lectured on the significance of promotion and current situation of telework in their country, and there are a number of countries where the idea of telework has already penetrated well (the ratio of teleworkers in various countries* includes 24.6% in the United States, 21.8% in Finland, 17.3% in the United Kingdom, and 16.6% in Germany. In the United States, there are 111,549 federal employees who are teleworkers). There were also reports concerning the fact that middle managers are the ones causing a bottleneck in introducing telework. There were also a number of other highly interesting statements, as shown below.

- It is important to tackle this in an ongoing manner, managing it by bringing together the three processes of people, ICT and real estate (facility costs etc.).

- Large companies have some experience of telework but, in the EU, smaller companies are catching up.

- The real issue in promoting telework is managers.

- People tend to share a resistance to change. The way in which they share the win-win situation is important. Rather than forcing...
people into it, it is important to broaden it by encouraging people.

- One can become a better manager through communication, planning and training. The existence of teleworkers is also a training opportunity for managers.

In addition, after the conference, and as a conclusion to the symposium, there was a closing discussion with all of the lecturers as panelists. There was a discussion on the realization of life/work balance and the improvement in productivity through telework.

**The contents of the principal exchanges of opinion during the closing discussion**

- What is necessary for middle managers? And what sorts of things yield results?
  - Just the fact of there being communication. It is important to continue saying this through the promotional organizations.
  - It is effective to show examples of success from other divisions and to get managers to experience telework for themselves.
  - It is important for managers to know that this is a win-win approach. It is not a legal issue.

- Aren't there any problems with information security and privacy?
  - A personal computer's security can be protected with technology. Making mistakes is a people or rules issue. Telework brings to the surface problems with security policy. It is possible to increase security through the introduction of telework.

- What needs to be done in order to promote telework among government employees?
  - In the United States, there is a legal obligation to promote telework at the federal level, with punitive clauses in place. In addition, with the progress of e-government and greater automatization, the environment is becoming more friendly to telework. If telework is introduced for care needs, the flex-time option also becomes possible.
  - In the United States Patent and Trademark Office, a system is in place by which employees can work whenever they wish between the hours of 5:30am and 10:00pm, for a total of 80 hours over two weeks.

- How is it possible to evaluate an improvement in productivity?
  - This is not simple as it is difficult to differentiate elements in measurements. Using benchmarks is effective.
  - Target management is effective. There are also businesses where measurements can be taken from cases cleared.
  - If tasks are clarified, then measurements can be made. It is also possible to set team goals.
  - This is possible with measurements that use a properly defined process.

Furthermore, details of this symposium can be obtained on our website (Japanese only) at [http://www.soumu.go.jp/joho_tsusin/telework/index.htm](http://www.soumu.go.jp/joho_tsusin/telework/index.htm)

*Reference: European Commission SIBIS project (2002 survey)*
## Program

<table>
<thead>
<tr>
<th>Contents</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greetings</td>
<td>Mr. Tsutomu Sato</td>
</tr>
<tr>
<td></td>
<td>Senior Vice-Minister for Internal Affairs and Communications</td>
</tr>
<tr>
<td>Lecture 1</td>
<td>Ms. Susan Garms, Director, Canadian Telework Association</td>
</tr>
<tr>
<td>Telework in North America</td>
<td>(Senior Consultant in Telework Solutions, Bell Canada)</td>
</tr>
<tr>
<td>Lecture 2</td>
<td>Mr. Werner B. Korte, Director, Empirica GmbH</td>
</tr>
<tr>
<td>Telework in Europe and Germany</td>
<td></td>
</tr>
<tr>
<td>Lecture 3</td>
<td>Mr. Toshiharu Aoki, Chairman, Japan Telework Association</td>
</tr>
<tr>
<td>Promotion of Telework in Japan</td>
<td></td>
</tr>
<tr>
<td>Lecture 4</td>
<td>Ms. Meryl Hershkowitz, Managing Attorney, Trademark Law Office, United</td>
</tr>
<tr>
<td>Telework in the Government of the United States</td>
<td>States Patent and Trademark Office</td>
</tr>
<tr>
<td>Lecture 5</td>
<td>Ms. Tiina Hanhike, Project Coordinator, Ministry of Labour, Finland</td>
</tr>
<tr>
<td>Telework in Finland</td>
<td></td>
</tr>
<tr>
<td>Lecture 6</td>
<td>Ms. Nicole Turbé-Suetens, Director, Distance Expert, Ex-member of French</td>
</tr>
<tr>
<td>Telework in France and Telework Promotion Policy in EU</td>
<td>governmental mission on telework</td>
</tr>
<tr>
<td>Lecture 7</td>
<td>Ms. Shirley Borrett, Development Director, The Telework Association (UK)</td>
</tr>
<tr>
<td>Telework in the UK</td>
<td></td>
</tr>
<tr>
<td>Closing discussion</td>
<td>Coordinator</td>
</tr>
<tr>
<td>(wrap-up remarks)</td>
<td>Professor Yasuo Suwa, Graduate School of Policy Science, Hosei University</td>
</tr>
<tr>
<td></td>
<td>Panelists</td>
</tr>
<tr>
<td></td>
<td>All lecturers from various countries and Mr. Masahiko Fujimoto, Director,</td>
</tr>
<tr>
<td></td>
<td>Information Applications Promotion Office, MIC</td>
</tr>
<tr>
<td>Closing speech</td>
<td></td>
</tr>
</tbody>
</table>

Scene from closing discussion

Information poster
Results of International Telecommunication Union’s 2007 World Radiocommunication Conference

Introduction
The 2007 World Radiocommunication Conference (WRC-07) was hosted by the International Telecommunication Union (ITU) in Geneva (Switzerland) from October 22 to November 16, 2007. The ITU is a specialized international organization that was established with the aim of promoting international cooperation for the improvement of telecommunications and their rational use, and counts 191 member countries. The WRC works to revise radiocommunication regulations that order on a global scale matters such as the allocation of frequencies internationally. It is the biggest among the various ITU conferences and holds meetings every 3-4 years. Approximately 2,800 numbers from 164 countries participated. The Japanese delegation consisted of 80 representatives from MIC, telecommunications operators and broadcast operators.

At the general meeting held on the first day, Mr. Francois Rancy was elected chairman. Seven committees and six working groups were established to conduct deliberations.

Results of Deliberations on Major Agenda Items
(1) Securing of future frequencies for IMT (third and fourth generation mobile communications systems) (Agenda item 1.4)

The decision was taken to secure frequencies totaling a 428MHz bandwidth as new frequencies for use in IMT (third and fourth generation mobile communications systems). In concrete terms, the frequencies are as shown below:

(1) 3.4 - 3.6 GHz 200MHz range
(2) 2.3 - 2.4 GHz 100MHz range
(3) 698 - 806 MHz 108MHz range
(4) 450 - 470 MHz 20MHz range

Within these, each country will subsequently use the frequencies it wishes for the realization of IMT.

As far as Japan is concerned, promotion is being considered for (1) and (3) (partial for (3)) which pose few problems with existing businesses. It became clear at the conference that over 100 countries worldwide will be using mobile communications systems in the 3.4GHz range. It can be said that the fact that the 3.4GHz band has now become available will act as a foothold for Japan and other countries worldwide in moving towards the realization of fourth generation mobile communications systems.

The realization of fourth generation mobile communication systems is expected be seen after 2010 and will bring with it the possibility of image transmission on a par with optical fiber. With the frequencies now reserved, the ITU is now expected to move seriously into international standardization activities for fourth generation mobile communications systems. Japan should participate fully in international standardization activities and will considerably strengthen its involvement in the future.

With the results obtained at this conference, it will be possible to encourage investment in equipment development by manufacturers with a view to commercialization, and the mobile communications business is expected to develop further with the creation of new types of mobile contents etc.
Securing of future frequencies for IMT (third and fourth generation mobile communications systems) (Agenda item 1.4)

IMT-Advanced is a fourth generation mobile communication system that will make it possible to have speeds of 100 Mbps when moving at high-speed and 1 Gbps when moving at slow speed, and is expected to be achieved around 2010.

<--> shows interconnections between systems where interconnection of networks is possible without the place or user being set.

(2) Regarding the 2.5 GHz band, which will be given priority of satellite communications or terrestrial mobile communications? (Agenda item 1.9)
As a result of the decision that was taken the 2.5 GHz band (2500 - 2690 MHz band) to be used for IMT-2000 at the 2000 conference (WRC-2000), a number of countries, including Japan, are using it also for mobile phones using satellites, even though global demand for terrestrial mobile communications has been increasing. There was discussion at the conference as to whether use of this band for satellites should be limited or not. As a result, it was decided to give priority worldwide to terrestrial mobile communications and to severely limit the electric power emitted by satellites. However, it was also decided to include certain exceptions such as Japan's N-STAR satellite which is used for mobile communications during emergencies.

(3) The rights and wrongs of controlling the frequency of devices such as mobile phones for the earth-exploration satellite (Agenda items 1.2 and 2.0)
A discussion was held on whether the power emitted by mobile telephones should be controlled in order to protect the earth-exploration satellites which will go into service in the future from the frequencies used terrestrially. There was a strong movement from Europe and others to severely strengthen the power limits in the 1.4 GHz band which Japan uses for its mobile communications systems and the 10.6 GHz band which it uses for its broadcasting relay radio stations, but the conclusion of the discussion was a recommendation with no binding power.

(4) Securing frequencies for air traffic control (Agenda item 1.6)
The decision was taken to use on a worldwide basis the VHF band (112 - 117.975 MHz) and the 5091-51510 MHz band that was proposed by Japan in order to meet the needs of air traffic control and aeronautical data communication. Furthermore, with regard also to the 5000 - 5030 MHz band which Japan plans to use for its quasi-zenith satellite system, there were proposals from the United States and others for them to be attributed to aeronautical data communication, but as a result of opposition from Japan and Europe, the situation was taken to make them exempt.
Securing frequencies for air traffic control (Agenda item 1.6)

(5) The rights and wrongs of securing frequencies for short-wave radio (Agenda item 1.13)
Having reviewed the allocation of frequencies in the short-wave band, there was an investigation as to whether new bandwidths should be secured or not for short-wave radio. There was a stand off between Europe which was seeking an additional allocation for short-wave broadcasts, and Asia, the United States, Africa and the Arab countries which do not require a frequency allocation from the standpoint of adverse effects on existing business. As a result of deliberations, it was decided not to increase the allocation on an international basis.

(6) Topics for the next WRC (Agenda item 7.2)
The agenda have been decided for the next WRC (WRC-11) which is planned to be held in 2011. The main ones are as shown below.

- In which ways should radiocommunications regulations address the fusion of communications and broadcasting and new technologies that go beyond the framework of mobile and fixed (wide band radio access, broadcasting to wireless terminals etc.)?

- Investigation of international regulations pertaining to the introduction and penetration of low-power radio stations such as electronic tags (RFID) and cognitive radio (investigating interference to other radio stations and the rights and wrongs of shared global control channels).

- Investigation of sharing conditions for IMT and TV broadcasting regarding the UHF band that was designated for IMT use this time.

Also, the four agenda shown below that were proposed by Japan were all picked up. Relevant frequency bands are shown in brackets.

- Agenda for investigating ways in which frequencies can be secured for terrestrial transfer of data measured by satellite telescopes [37 - 38 GHz]

- Agenda for investigating ways in which frequencies can be secured for short-wave marine radars for measuring water velocity and current direction on the surface of the sea [part of 3 - 50 MHz]

- Agenda for investigating priority handling of air traffic control communications using satellites [1.6 GHz band]

- Agenda for investigating frequency use for sensors used for earth exploration that are built in to the international space station and for the joint Japanese-American-Canadian-European radio astronomy observation plan [275 - 3000 GHz]