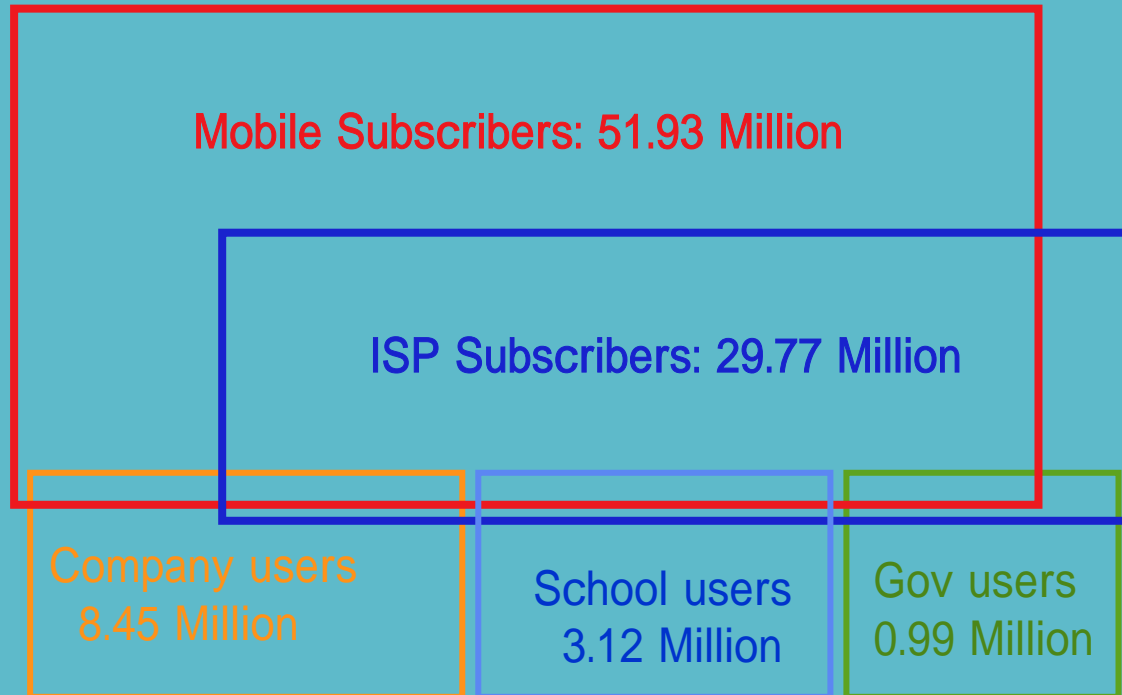


The potential for labelling and filtering of content on mobiles

Akio Kokubu
Internet Association Japan

Internet Population in Japan

- Subscribers of mobile phones with the Internet access are dominant.



**Source: New Media Development Association
2002/2**

Spread of Mobile Phones in Japan

The market share in February 2003

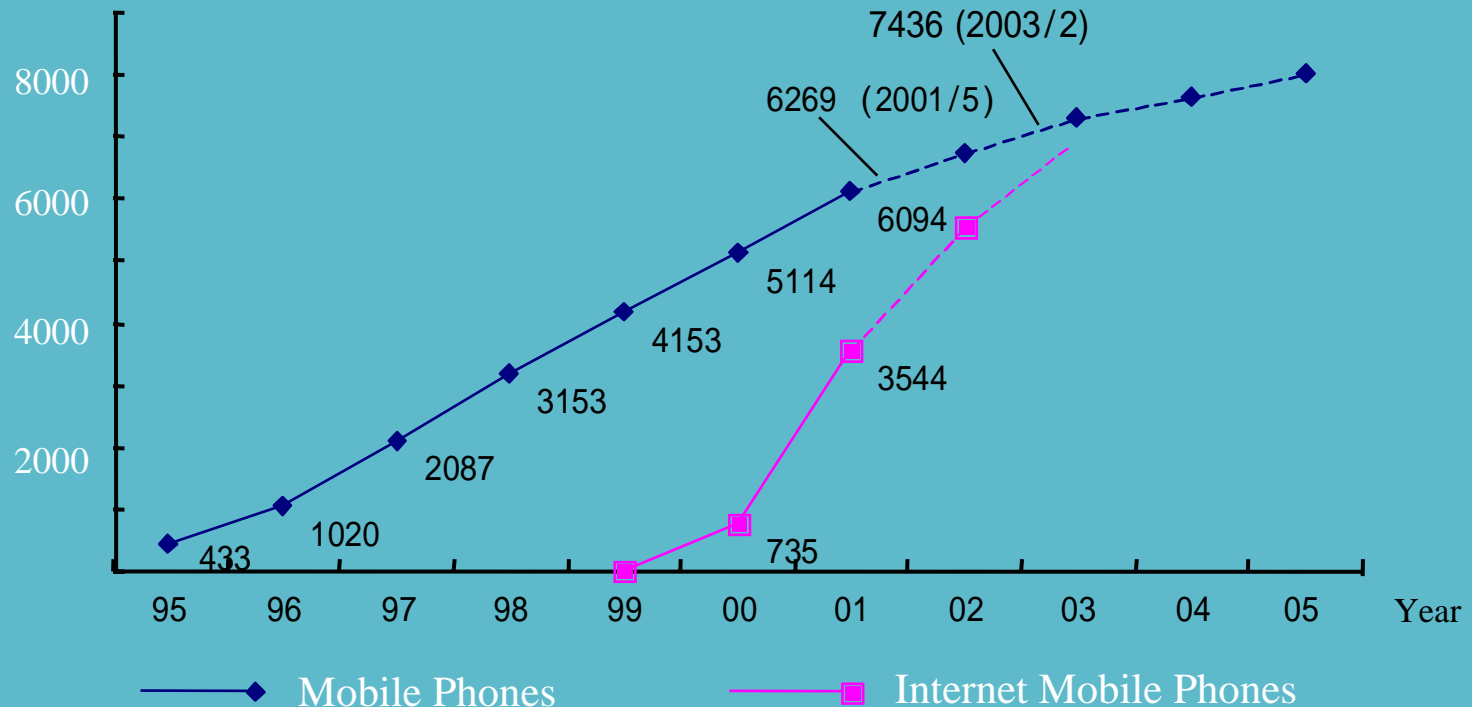
NTT DoCoMo 58.1%

KDDI 18.4%

J-Phone 18.3%

Others 5.1%

10 thousands



Basics of filter systems

- What it is
 - ★ Provides block capability of content on the Internet for minors
 - Filtering with labels (by content providers or by the 3rd party)
 - ★ Filter with keywords
- Filtering software
 - ★ PC-type (e.g. ICRA filter, Internet Explorer)
 - ★ Server-type (e.g. SFS3, commercial products)
- Ethics
 - ★ Who makes settings or controls filter systems
 - PC owners (e.g. parents)
 - Server administrators (e.g. school teachers)
 - ISPs (in their business)
 - Governments?
 - ★ Messages to users are important when content is filtered.
 - Reasons to block
 - Who did it

Why we are working on this

- Free speech or regulation?
 - ★ In principle we do not like regulation. But we have the social responsibility.
 - ★ Balance between free and regulation is important.
 - ★ User-oriented filtering is a tool to go together.
- What we did before on filtering
 - ★ Development of a PC-type and a server-type filtering software compliant with PICS
 - ★ Operation of label bureau with semi-automatic third-party rating tools for text and images on web pages

The technology does not necessarily solve the problem completely

- Block percentage
 - ★ SFS3.02 (with keywords, Google) 93%
 - ★ SFS3.02 (with keywords, URL input) 79%
 - ★ SFS3.02 (without keywords) 48%
 - ★ A blacklist-type commercial product 38%
 - ★ A keyword-type commercial product 96%
- Mistaken block percentage
 - ★ SFS3.02 (with keywords) 7.1%
 - ★ SFS3.02 (without keywords) 0%
 - ★ A blacklist-type commercial product 1%
 - ★ A keyword-type commercial product 10%

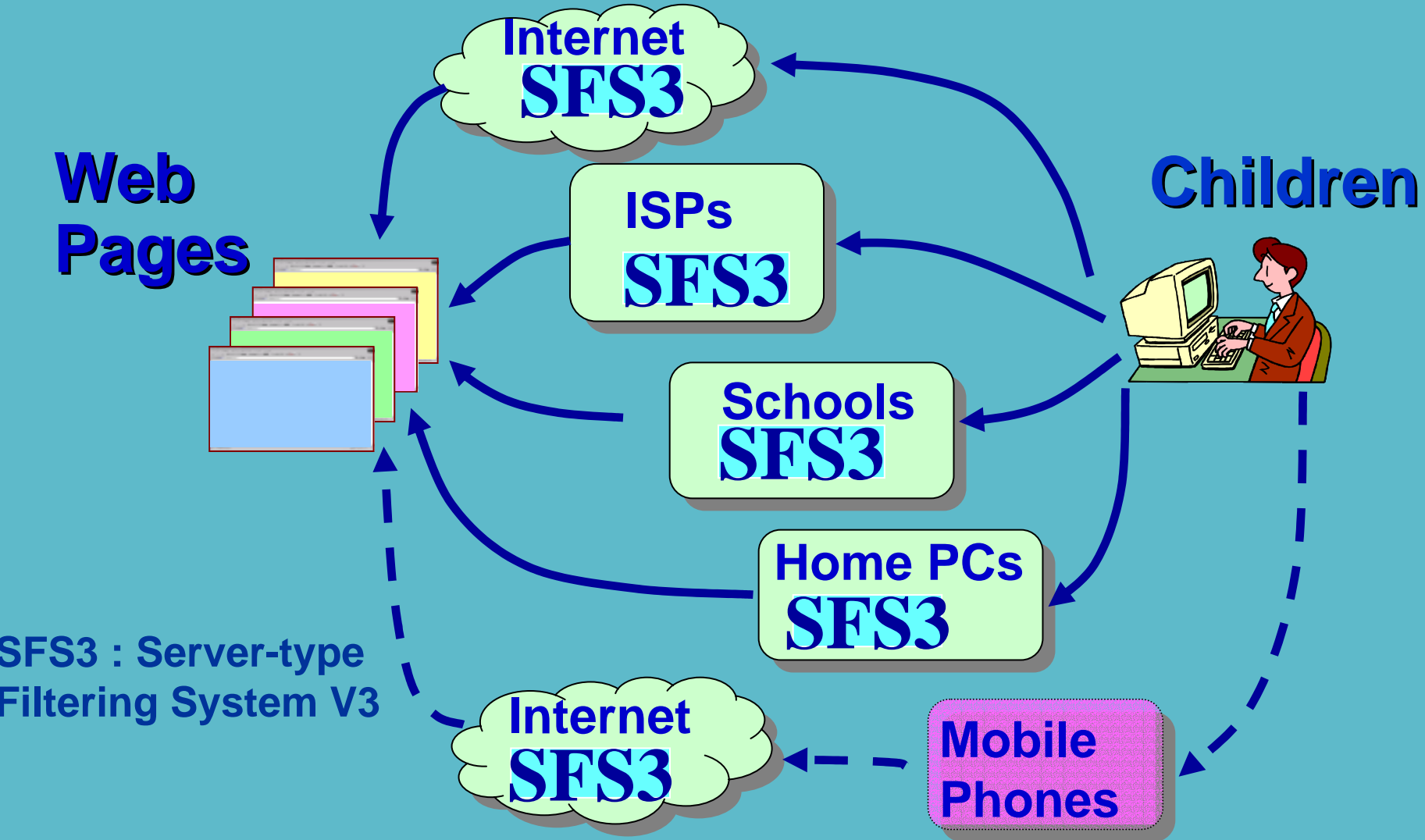
Labelling and filtering of content on mobiles – our next step

- Content on mobiles
 - ★ Mainly text rather than images at present
 - ★ Straight harmful words might not be used in Deai-kei sites.
- What intention in content
 - ★ The most important factor for filtering
 - ★ Understanding of context is necessary.
- It is difficult to implement such capability with current software technologies for automatic handling.
 - ★ Human can understand context. But software can not do it.
 - ★ We need some research and technological developments to realize it.

Labels as meta data on webs

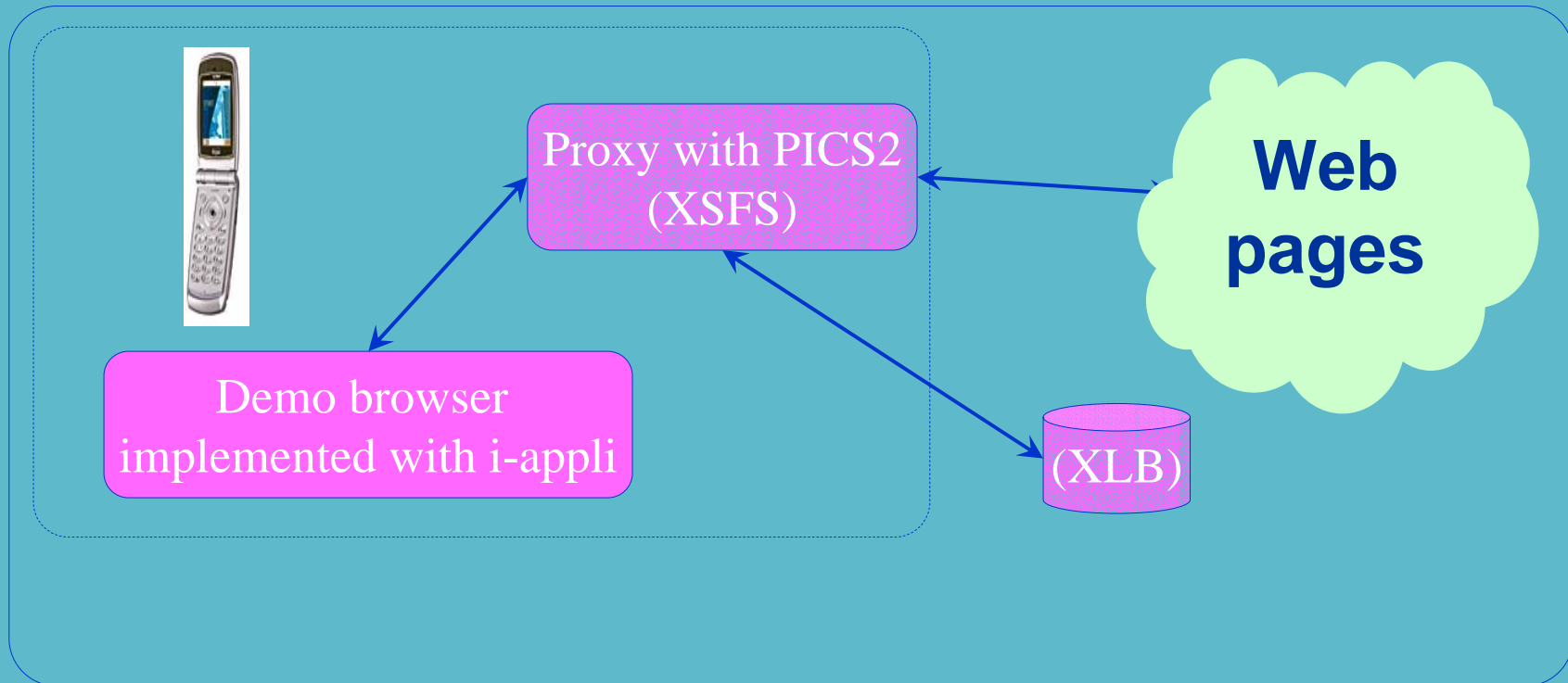
- What we can do for content on mobiles at present
 - ★ Adding labels by hand at third parties to indicate intention to filter inadequate sites for children though we do research work for automatic handling.
- Labels as meta data on webs
 - ★ PICS does not match the recent trend toward XML description on webs.
 - ★ The development of next generation PICS (PICS 2) is needed
 - ★ Written in XML/RDF (RDF: Resource Description Framework)
 - ★ W3C and ICRA are interested in.

Filter possibility with mobile phones



Planned demo Implementation with mobile phones

XSFS: XML/RDF based Proxy-Type Filtering System
XLB: XML/RDF based Label Bureau

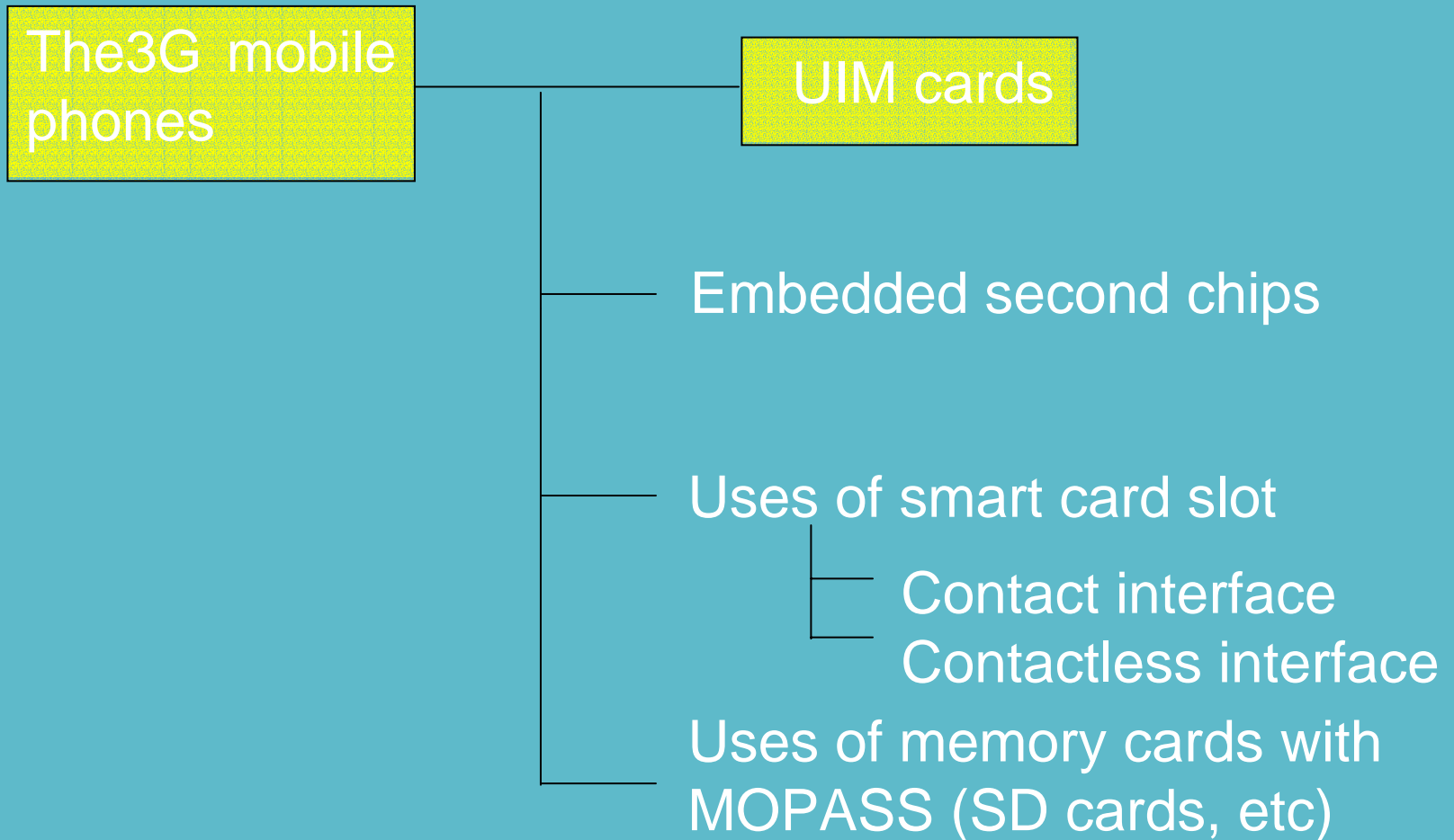


Personal identification

- Uses of UIM chips for identifications
 - ★ It is an advanced version of SIM cards.
 - ★ It is detachable.
- Memory cards with the MOPASS spec
 - ★ Memory card (SD, MMC, ...) with smart card
 - ★ MOPAS stands for Mobile Passport.
 - ★ Hitachi, Toshiba, Panasonic and many
 - ★ It was launched in August 2002



Possible smart chips for the 3G mobile phones



Mobile Phone with smart chip attachment



close

Prototype by Panasonic
for the Sapporo trial

open



Information stored with UIM cards

Basic information

User info, Personal info
Subscriber info
Charge info
Certification
PIN info
Age

Application information

Prepaid fare
Post-pay
Ticket reservation
Credit card number
Remote control
Etc

Card OS

Three technologies for personal identification

Who we are

Biometrics



Phones with camera are available now in Japan. A product with voice recognition is available in Europe.

Smart Cards



What both parties trust

PKI



Who knows us

Thank you.

For further questions, please e-mail to
Kokubu@iajapan.org