

SAINT2005 Panel:

Service Platform and Network Infrastructure for Ubiquitous Services

Ubiquitous Service Platform for Future Mobile Systems

- From mITF point of view and operator's point of view

Masayoshi Ohashi
KDDI R&D Laboratories

mITF objectives and structure

- **Objectives:**

To realize Future Mobile Communications Systems and Services such as **the forth-generation mobile communications systems and mobile commerce services**, at an early date by performing research and development activities, making studies on standardization, conducting coordination with related bodies, collecting information, and carrying out promotional and educational activities, and thereby contribute to a healthy utilization of radio spectrum.

- **Establishment** : June 25, 2001 (Secretariat :ARIB)

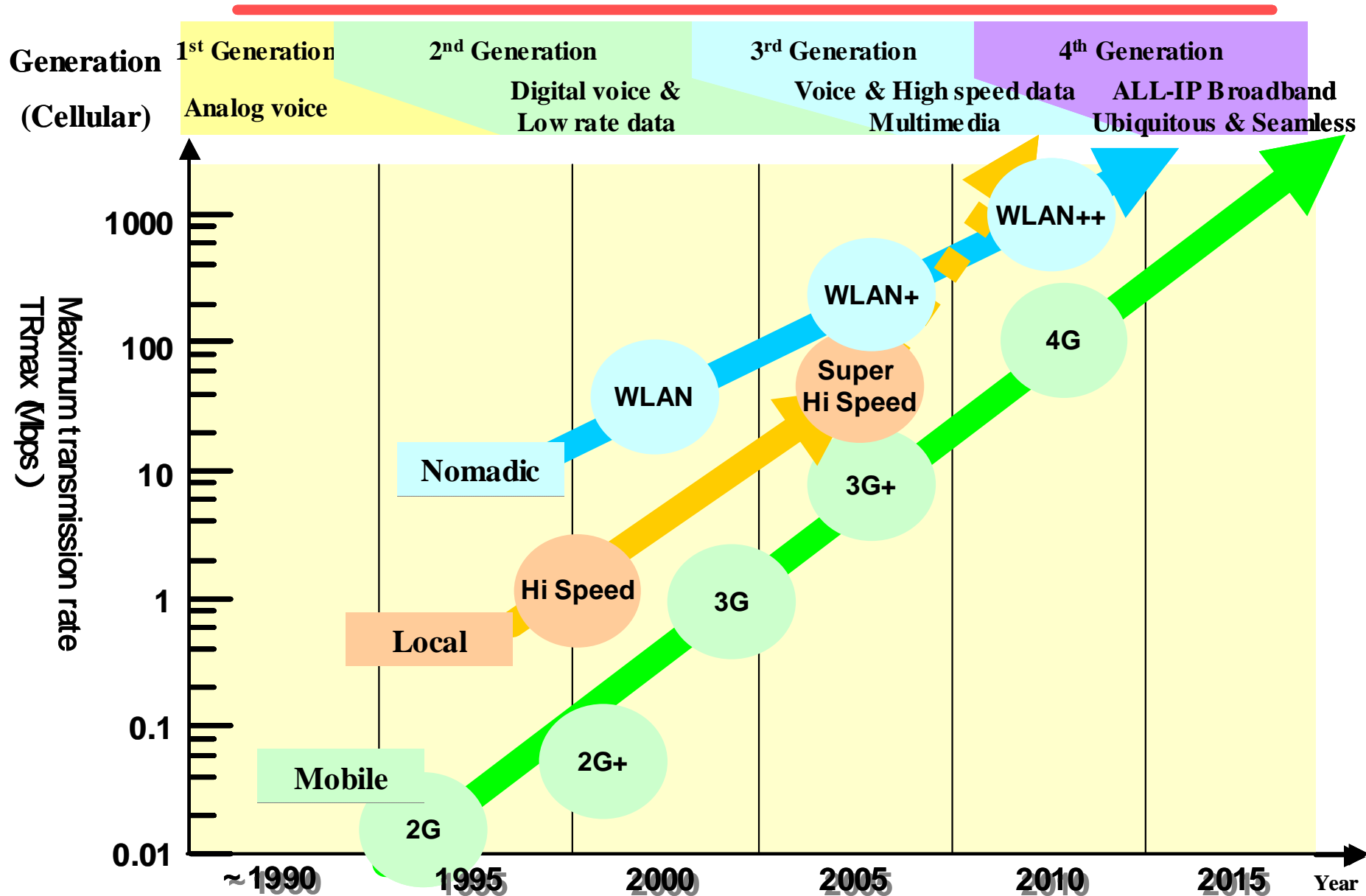
- **Members** (as of May, 2004)

- General members : 97
- Individual members : 11
- Special members : 2 (ARIB and TTC)

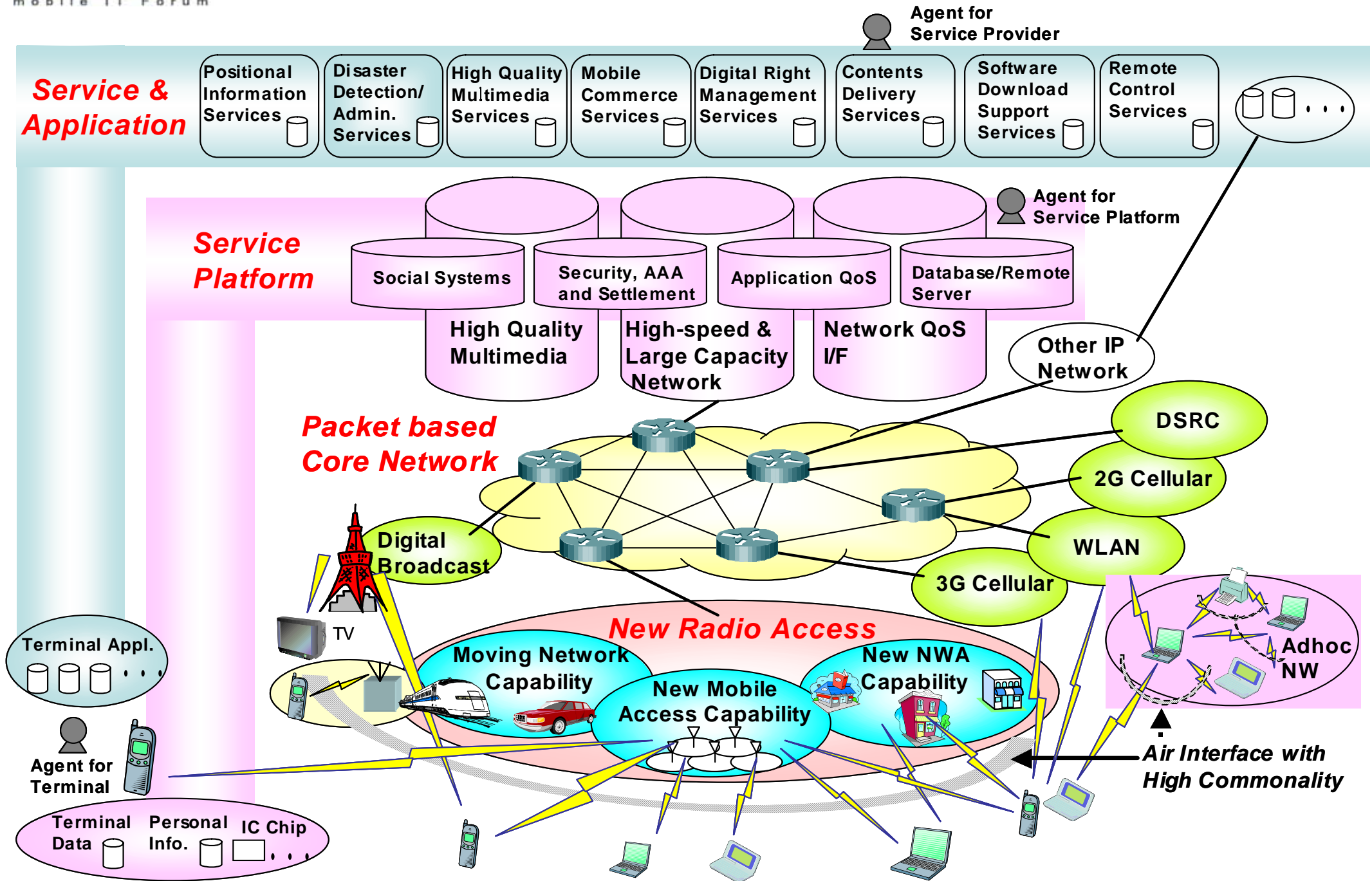
- **Current main activities**

- Future Mobile Communications Systems (systems beyond IMT-2000)
- Mobile Commerce

System evolution scenario



Reference Model of 4G Mobile System (2003 version)



Three Categories of Service Platform Reference Model

1. User Convenience

- User interface
- Agent
- Terminal processing capability / usable hours / external interface
- Terminal reconfigurability

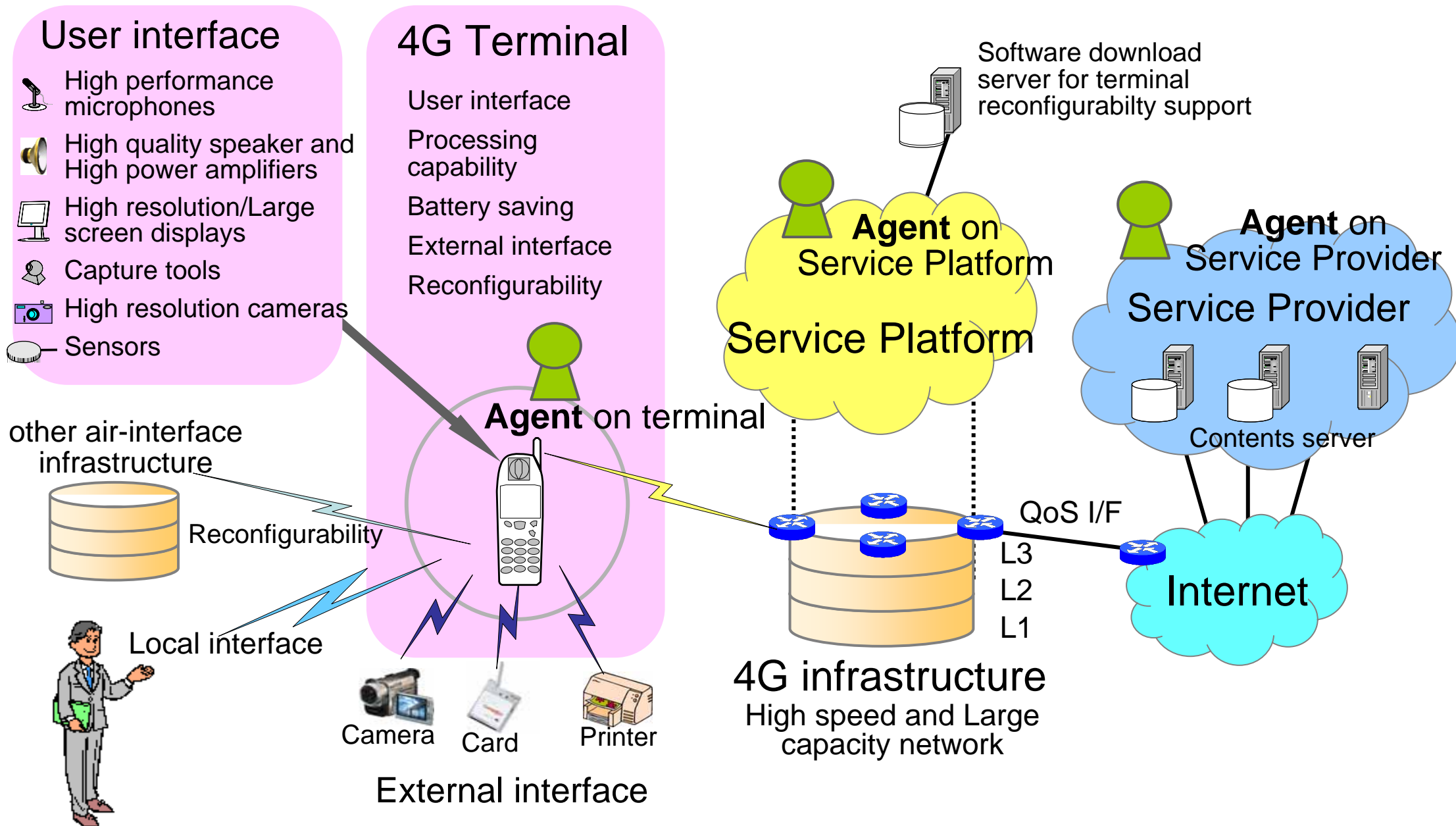
2. Advanced Service

- High-quality multimedia
- Information input
- Location/navigation
- Remote sensing/control

3. System Management


- QoS
- Security / authentication / authorization / accounting
- Database / remote server
- Society / environment adaptation feature

SP reference model : User Convenience




SP reference model : Advanced Service

Position detection and Navigation service




Object position detection and notification




Indoor-outdoor Navigation

High quality multimedia service




Virtual reality




High quality AV contents delivery and display


Remote control service





Capture tools




Intelligent appliances



Sensors

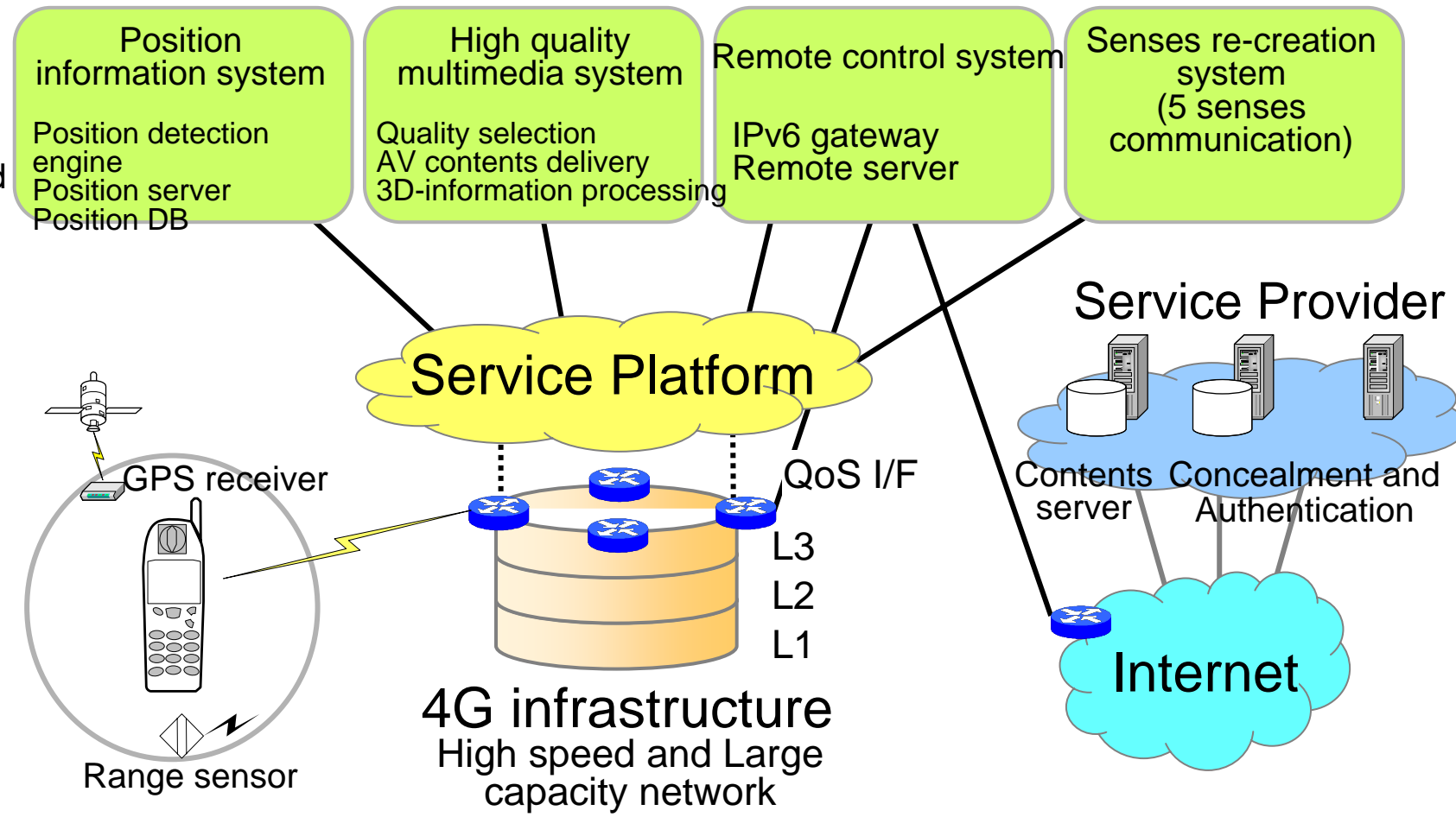
Cars and Bikes



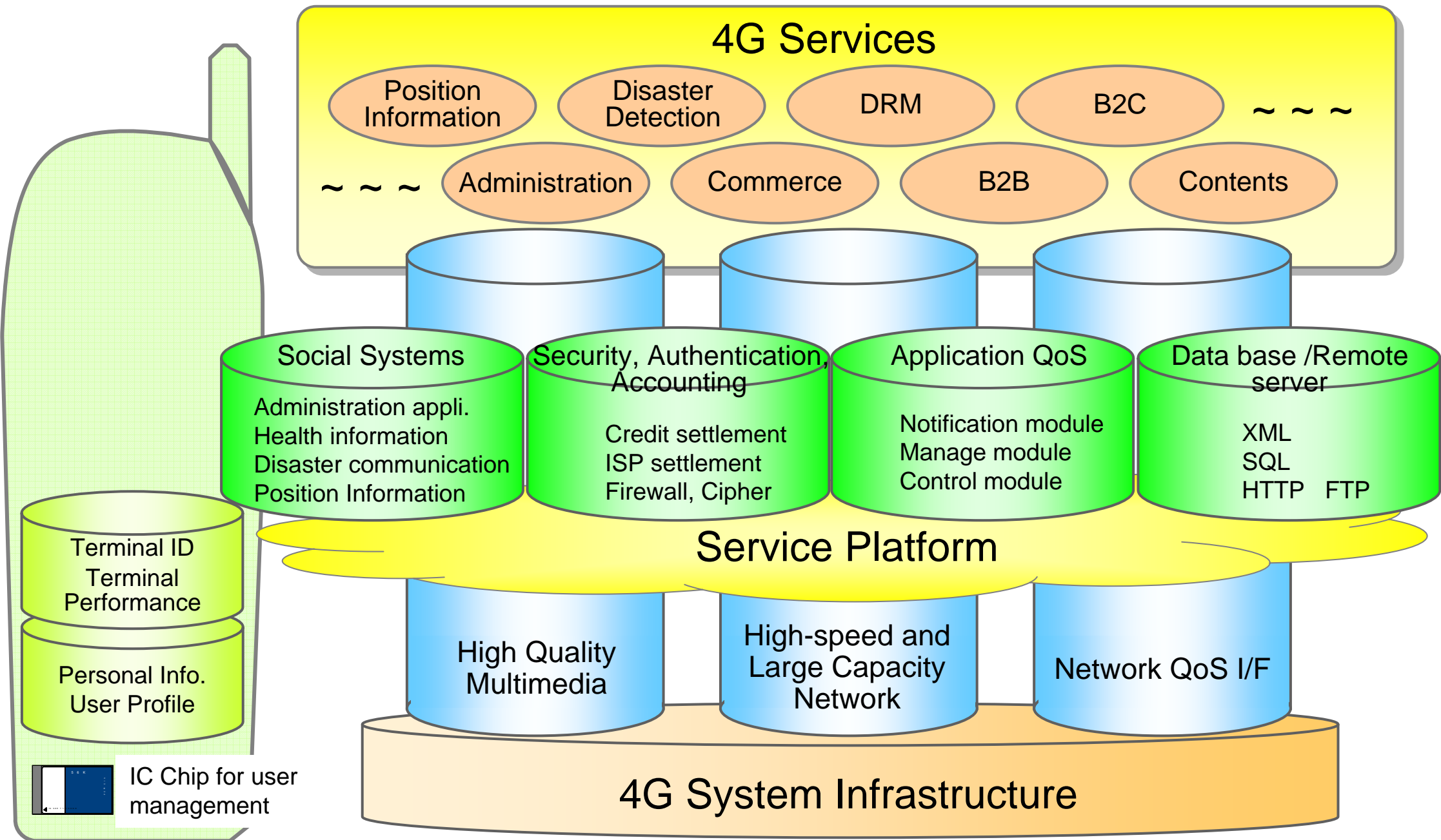
Medical Welfare apparatus

User interface

- High performance microphones
- High quality speaker and High power amplifiers
- High resolution/Large screen displays
- Capture tools
- High resolution cameras
- Sensors



SP reference model : System Management



Conclusions and mITF goal

- mITF has identified necessary features for beyond 3G mobile systems.
- Service platform has an important role as a common basis for realizing such features.
- It is envisaged that **future services are being provided by advanced mobile terminals with the cooperation of 4G service platform and a number of service providers.**
- ◆ mITF goal is to realize the future mobile communications systems beyond IMT-2000. To achieve this goal, it is strongly required to promote research and development activities in various areas.
- ◆ To facilitate the R&D and standardization in a smooth and efficient manner, it is indispensable for the concerned parties to work closely with one another, so that they can share information and promote R&D and standardization activities.

Ubiquitous service platform from a mobile operator's view

From an operator's point of view, the following points should be emphasized

- Reasonable **tariff**
- **Reliability** and **QoS**
- Provide sufficient **security** and ensure **privacy** of users
- Should be attractive for service providers as well as users
(e.g., Location Platform or Music Downloading Platform)

