

Ubiquitous Open Platform Forum (UOPF)

-----Toward Easy-to-use Non-PC broadband

February 21th, 2005
Satoshi Ishiyama
NTT Communications

■ Purpose of UOPF

UOPF shall collectively propose New Broadband Service Infrastructure from the users' perspective. Which is;
Reliable cross connection with “user-friendly, easy to use and secure” between any ISP and Manufacturers.

We thereby contribute to creating New Market.

■ Established on Feb.10th.2004

■ Adviser Mr. Hori, CEO Dream Incubator Inc. Dr. Murai, Representative WIDE

■ Observer Ministry of Internal Affairs and Communications

■ Foundation members

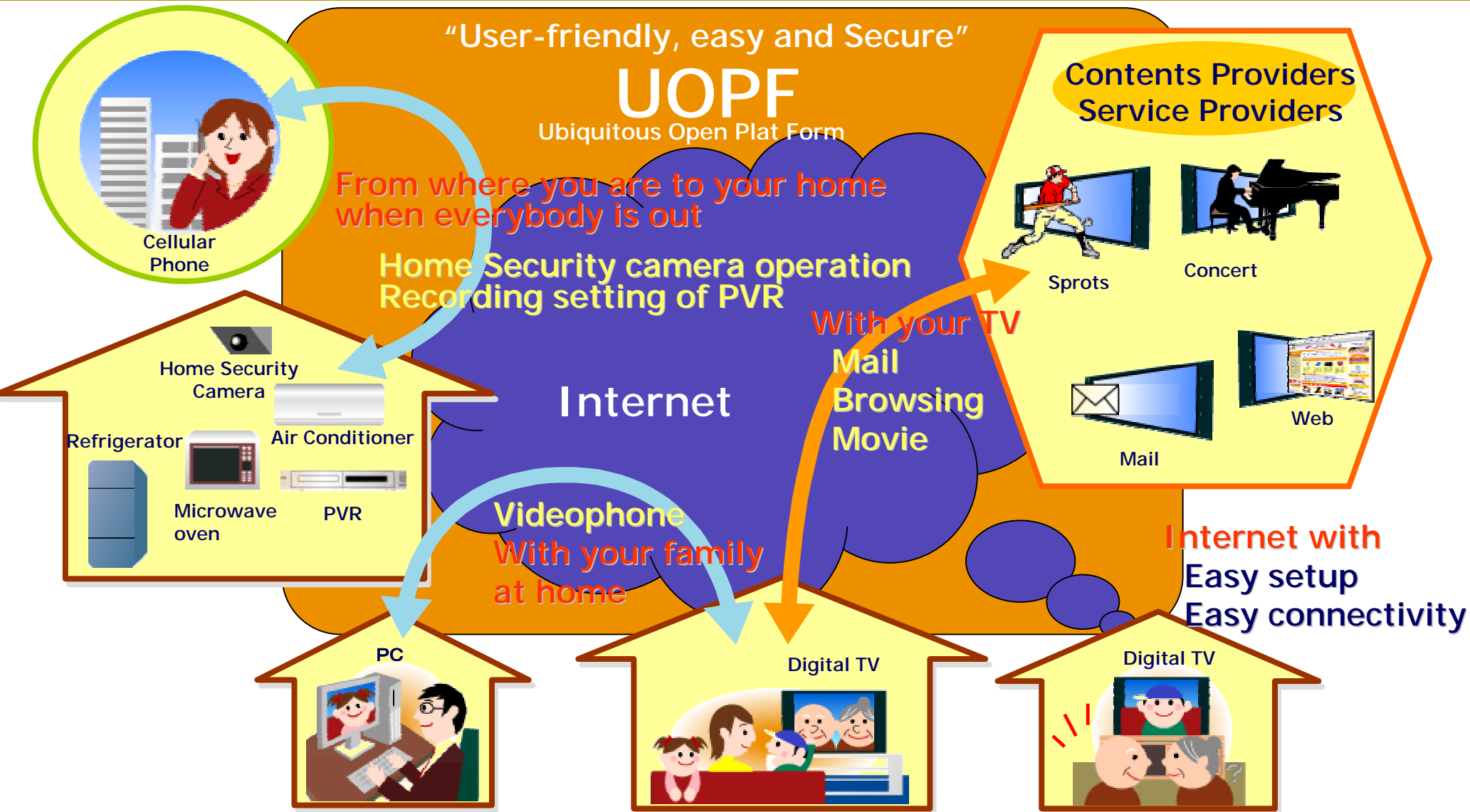
NTT Communications, KDDI, SANYO Electric, SHARP, SONY,
Sony Communication Network, Toshiba, NIFTY, NEC, Pioneer, Hitachi, Ltd.
Matsushita Electric Industrial Co., Ltd., Matsushita Electric Works, Ltd., Mitsubishi Electric

UOPF Member Companies (Alphabetical Order)

- 1. ACCA Networks Co.,Ltd.
- 2. ACCESS CO.,LTD.
- 3. AOS Technologies, Inc.
- 4. BICOM Corporation
- 5. BIP SYSTEMS CORPORATION
- 6. BUFFALO INC.
- 7. Bussan Microelectronics Corp.
- 8. Central Security Patrols Co., Ltd.
- 9. CHITA MEDIAS NETWORK INC
- 10. Cisco Systems,Inc
- 11. corega K.K.
- 12. Eizo Nanao Corporation
- 13. 4D Networks,Inc
- 14. Fractalist inc.
- 15. FUJITSU ACCESS LIMITED
- 16. FUJITSU LIMITED
- 17. FUJITSU LSI SOLUTION LIMITED
- 18. Hitachi, Ltd.
- 19. Hitachi Hybrid Network Co.,Ltd.
- 20. INDEX Corporation
- 21. Internet Initiative Japan Inc.
- 22. ITOCHU TECHNO-SCIENCE Corporation.
- 23. JAPAN TELECOM CO.,LTD.
- 24. JasomiNetworks
- 25. KDDI CORPORATION
- 26. KING TSUSHIN KOGYO Co.,LTD.
- 27. Matsushita Electric Works, Ltd.
- 28. Mitsubishi Electric Corporation

- 29. NEC Corporation
- 30. NEC Micro Systems, Ltd.
- 31. NIFTY Corporation
- 32. NTT Communications Corporation
- 33. NTT DATA SANYO SYSTEM CORPORATION
- 34. NTT Software Corporation
- 35. Oki Electric Industry Co.,Ltd.
- 36. Panasonic Network Services Inc.
- 37. PIONEER CORPORATION
- 38. POWEREDCOM, Inc.
- 39. Qubitstar Systems Inc.
- 40. Ricoh Co.,Ltd.
- 41. SANYO Electric Co., Ltd.
- 42. SEIKO EPSON CORPORATION
- 43. Sharp Corporation
- 44. Softfront
- 45. Sony Communication Network Corporation
- 46. Sony Corporation
- 47. TOKYO ELECTRIC POWER COMPANY
- 48. TOSHIBA CORPORATION
- 49. TOYO Corporation
- 50. TOYOTA InfoTechnology Center Co.,Ltd.
- 51. VeriServe Corporation
- 52. VeriSign Japan K.K.
- 53. Wind River Systems, Inc.
- 54. YAMAHA CORPORATION
- 55. Yamatake Corporation

Application Examples

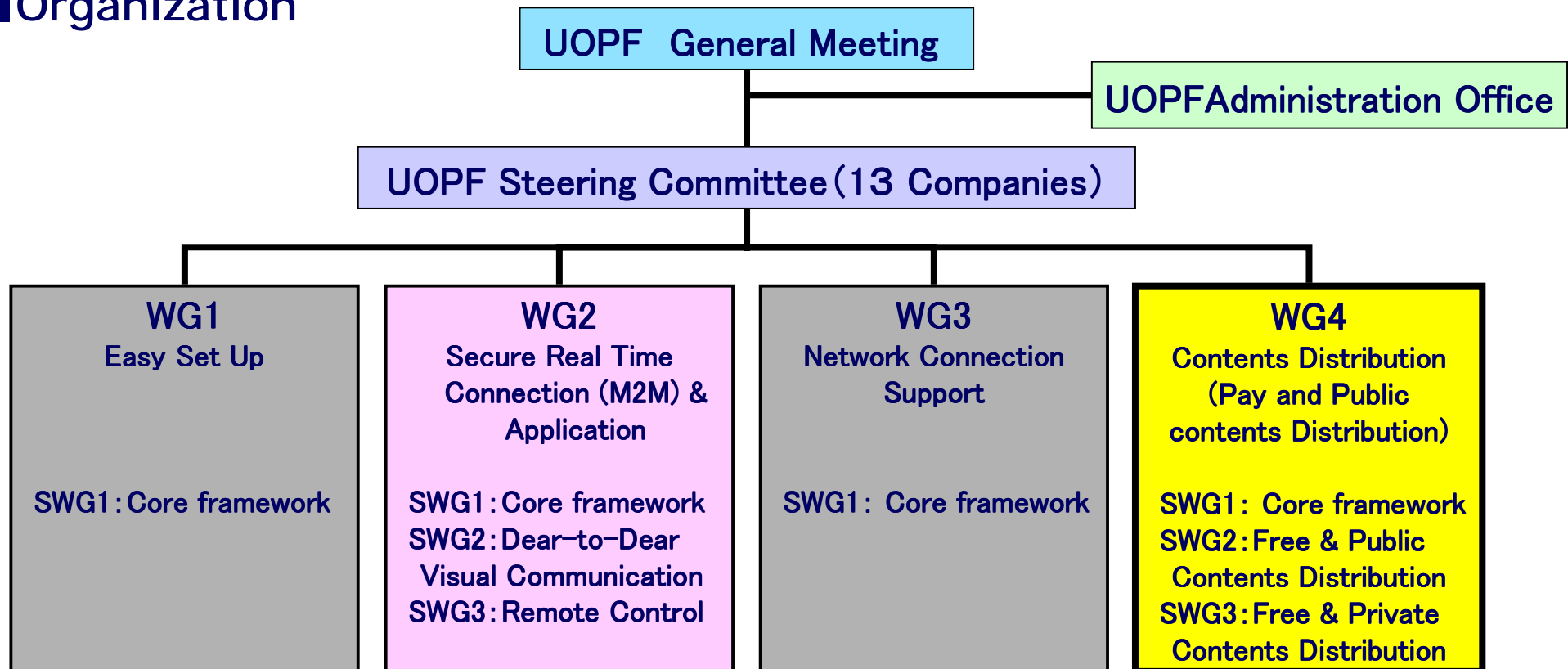


Objective and Organization

■ Objective

- Establishment of Ubiquitous Open Platform(Open and common infrastructure)
- Investigate of Framework for improving users convenience with application and content providers.

■ Organization



WG1 Easy-to-set up, Easy-to-operate for Everyone.

**Avoid barriers to get wired to the Internet and Provide easy interfaces as a part of CE.
Requirement Specification is available for the members now.**

WG2 Secure, Simple and Low Cost M2M real-time connections.

**Smooth, Clear and Live Visual Communications with Digital TV.
CE Remote control from outside directly.
8 Specification drafts are under clearing now.**

WG3 User support guidelines.

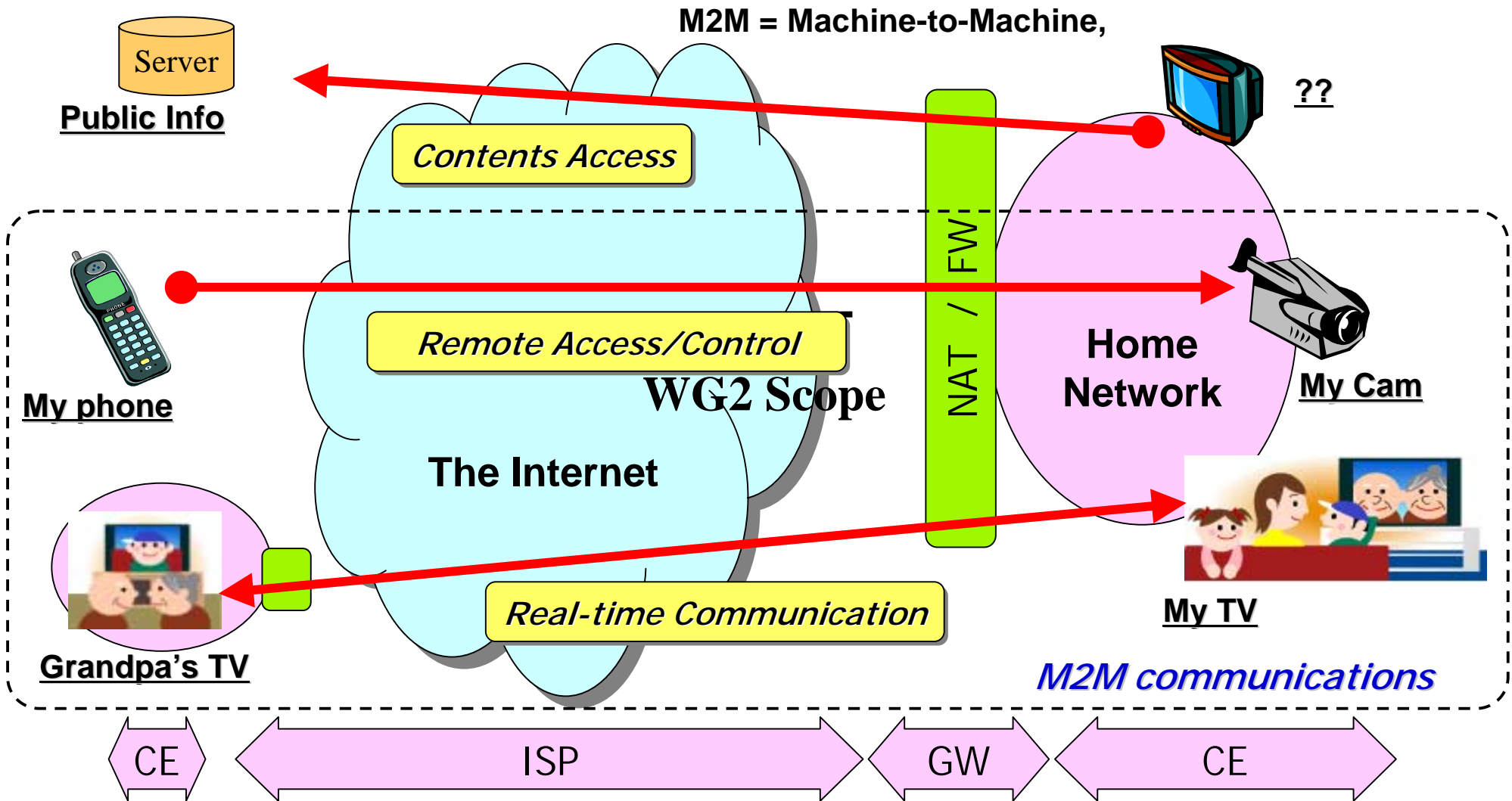
**Terminology and 'Display of Network Connection Information'
2 Guideline drafts are under clearing now.**

WG4 Contents Distribution.

Enable users to collect various contents using CEs via broadband "Simple, Secure and Easy" ways.

- definition of contents distribution models**
- technology evaluation and verification**
- collaboration with related industry groups**

WG2 Scope



Interoperability for M2M communication

WG2 SWG1

Core framework of M2M
communication specs
Chair: T.Yamasaki@NTT Com

WG2 SWG2

Dear-to-Dear Visual Communication
w/DTV
Chair: T.Yamasaki@NTT Com

WG2 SWG3

Remote Control, Remote Access to
CEs at home
Chair: S.Matsuzawa@Toshiba

•Security

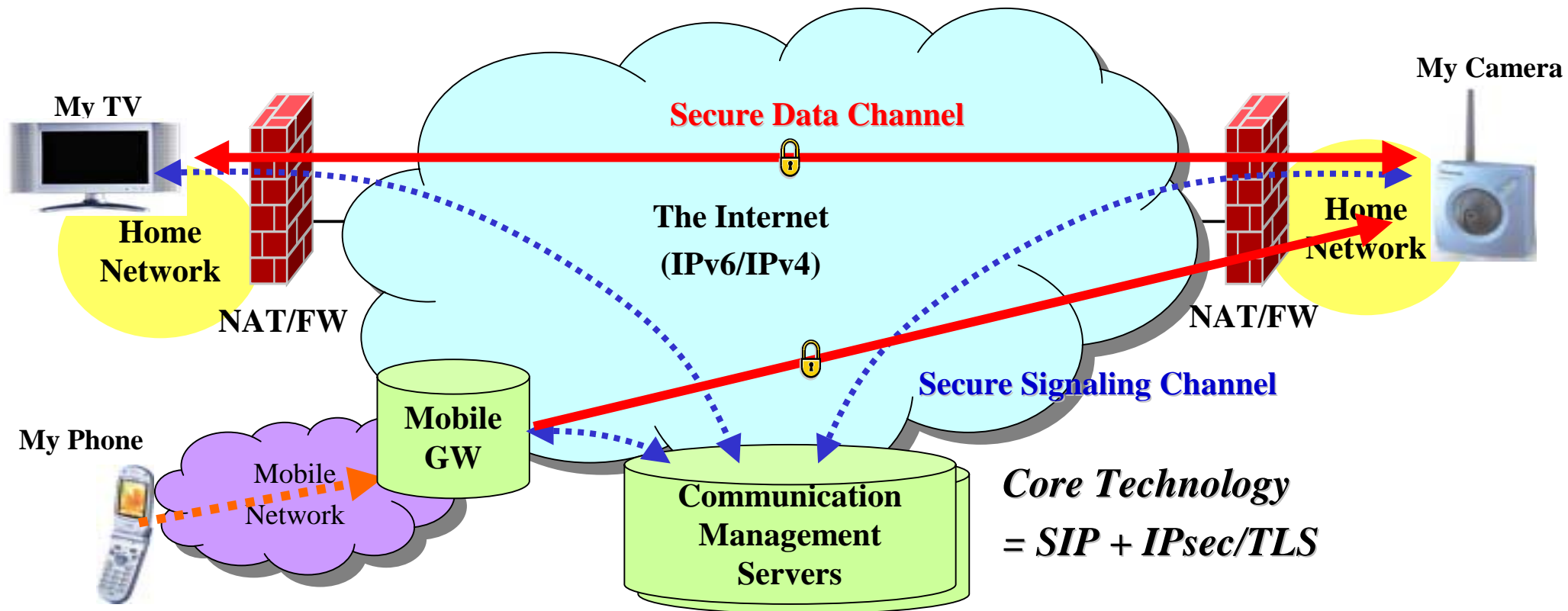
- ID Authentication (Who is calling me up? No more spoofing, spamming)
- Access Control per ID (Only you can ring me...)
- Privacy of ID presence (not to be a target of attacks)
- Privacy of communications (Encryption)
- Real-time Firewall/NAT Traversal (no “always open to any”)

•Simplicity

- Auto Configuration
- No additional configuration for security functions

•Low cost

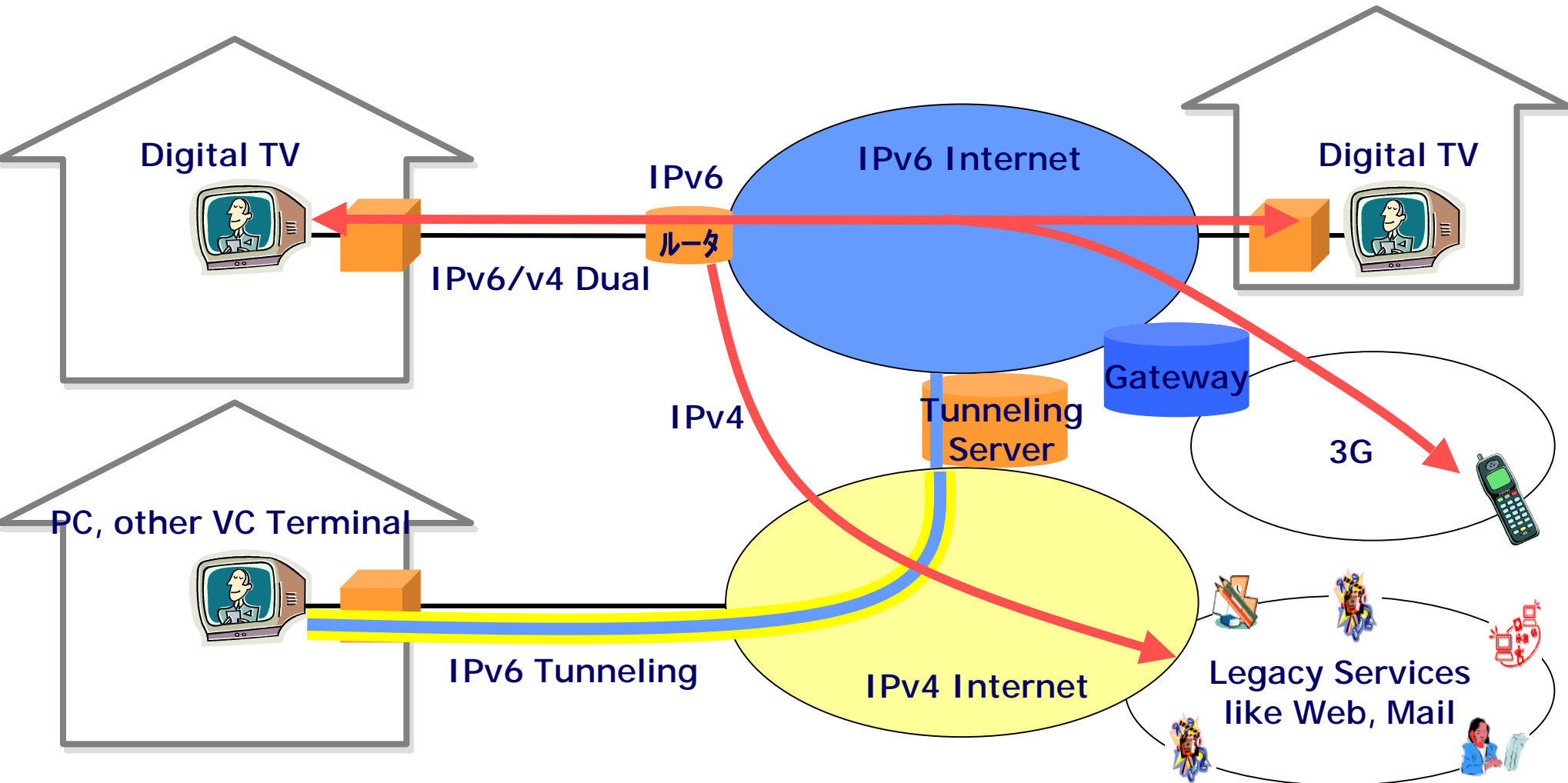
- For ISP, no more middle boxes, no more additional operation
- For CE, no more CPU power and memory space



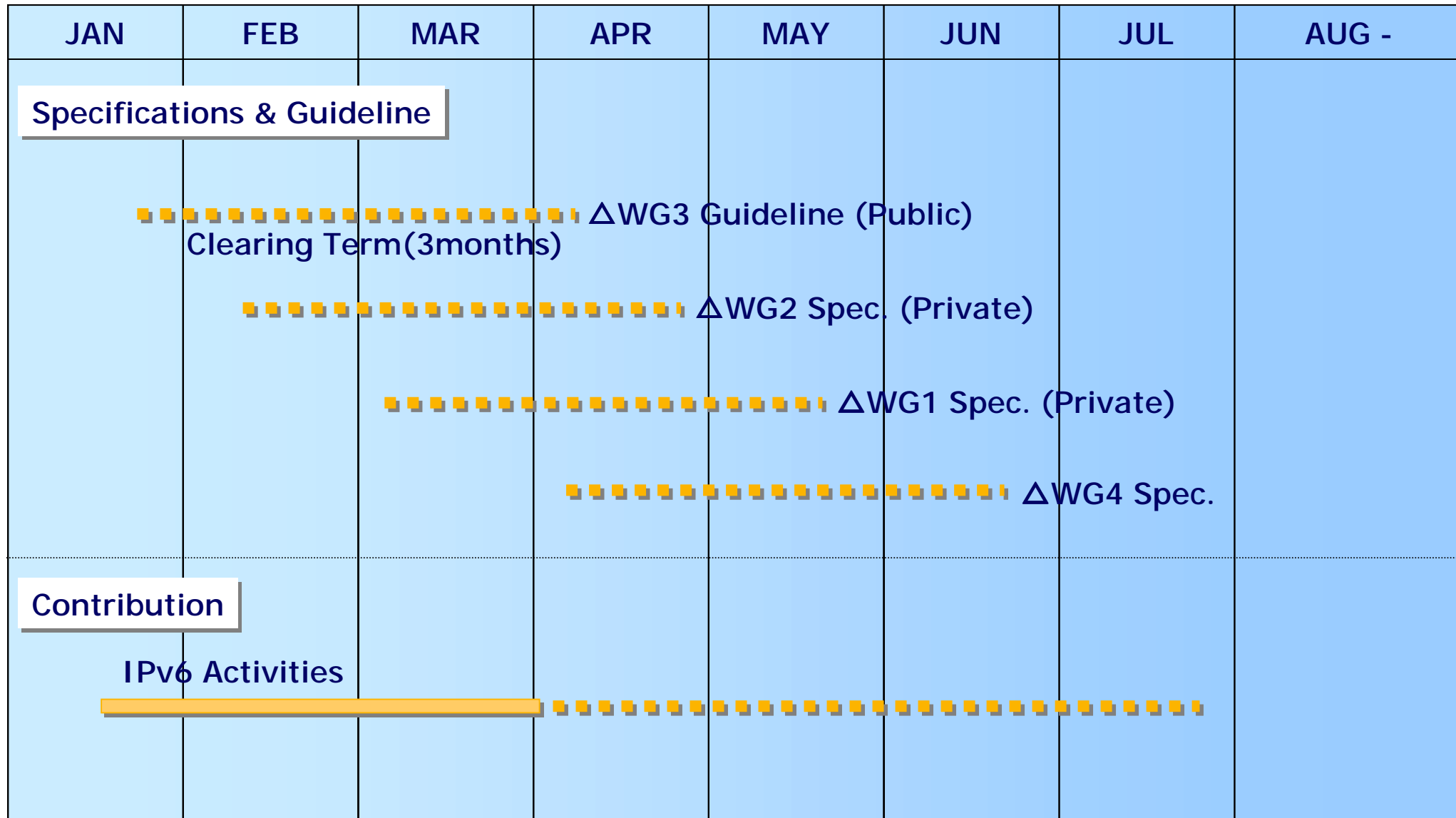
Technical Barriers to Be Solved

- How to pass through NAT/Firewall of IPv4?
- IPv6 will be ideal network but limited coverage.

Combination of IPv4 & IPv6



Roadmap 2005



Positioning of UOPF

