Requirements for TINA Platform towards Information Sharing Business

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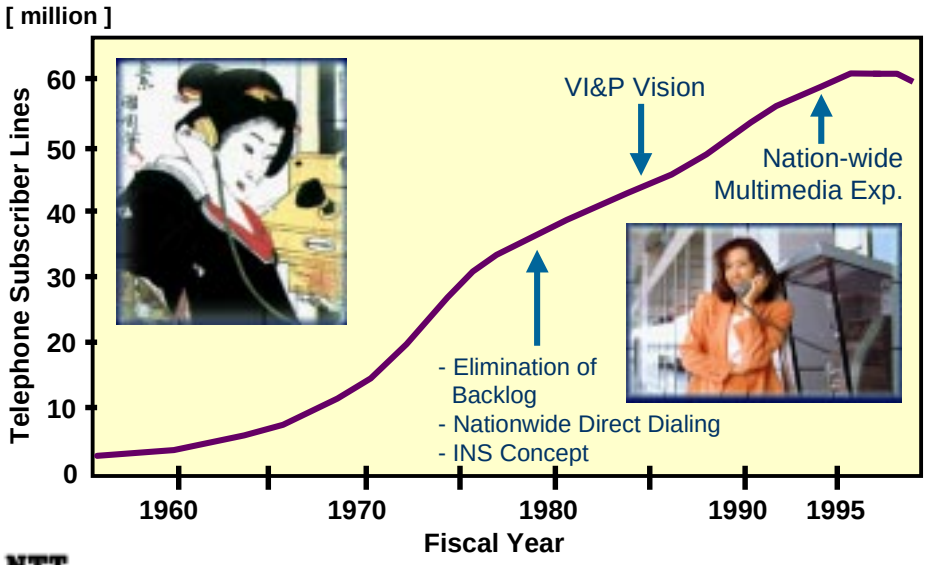
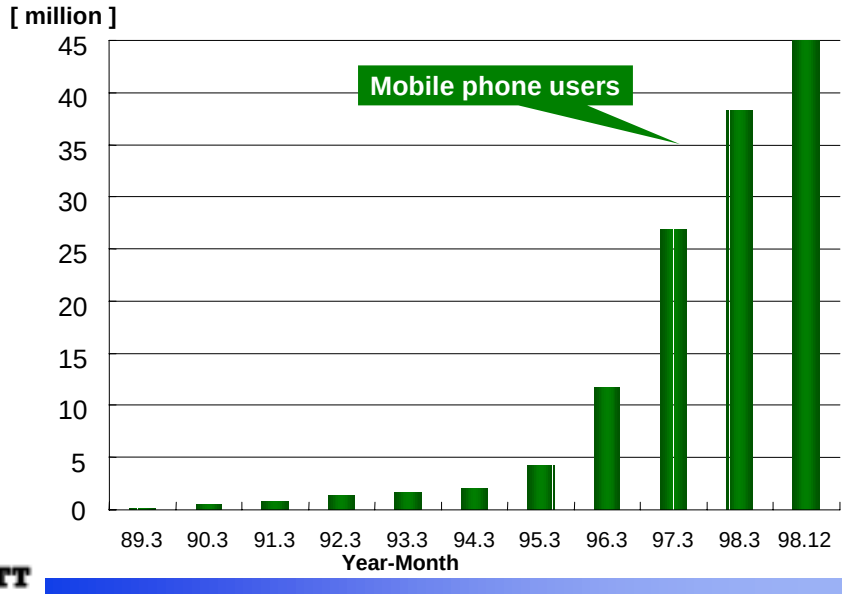
Long-term Trend of Telephone Business

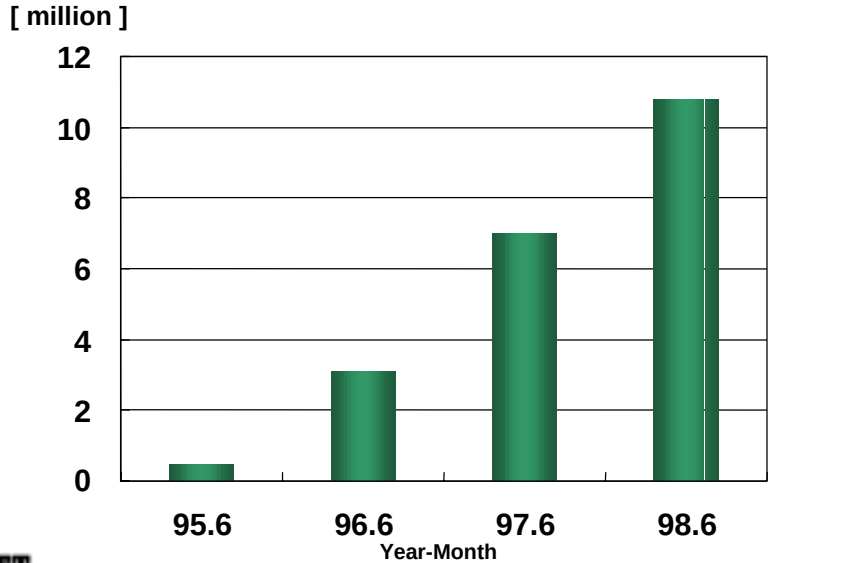


Mobile phone



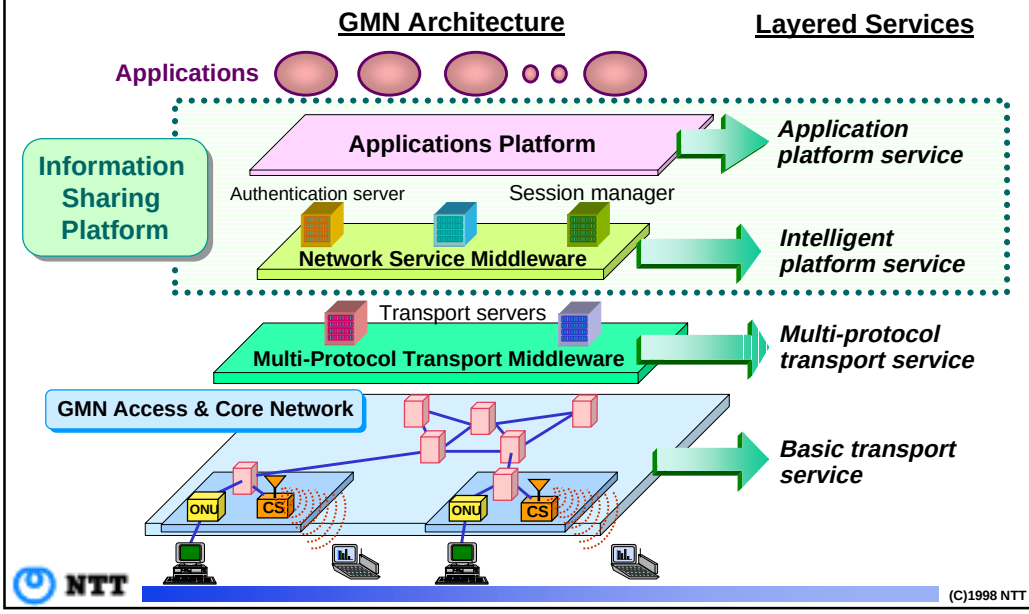
NTT

Internet users

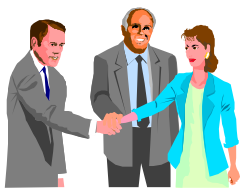


NTT

GMN Architecture and Layered Services



Information sharing Platform



Customer
Service Provider
Network Carrier

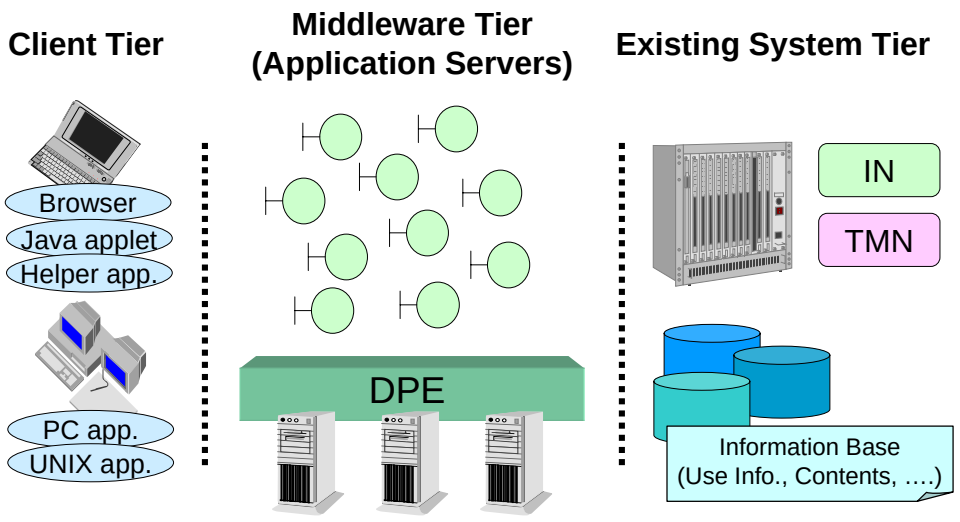
Networking Platform

APIs

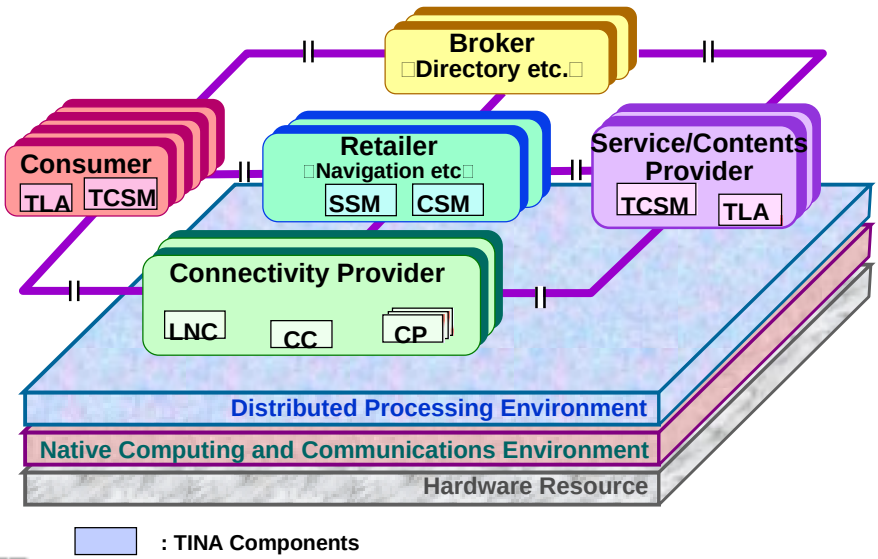
Components

Routing
Authentication/ Security
Mobility
Call control
Plug & Play
Seamless Network and User software handling
Safe and Reliable network environment
Etc.
Access Control
Resource Mgmt
Directory
Accounting

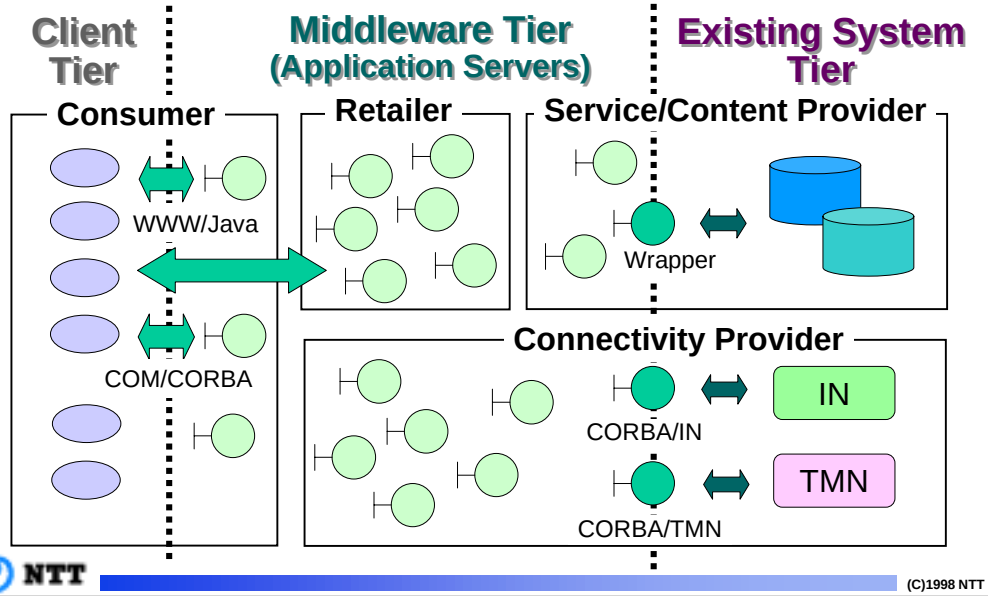
Emerging System Integration



TINA Business Model



Middleware in Enterprise Environment



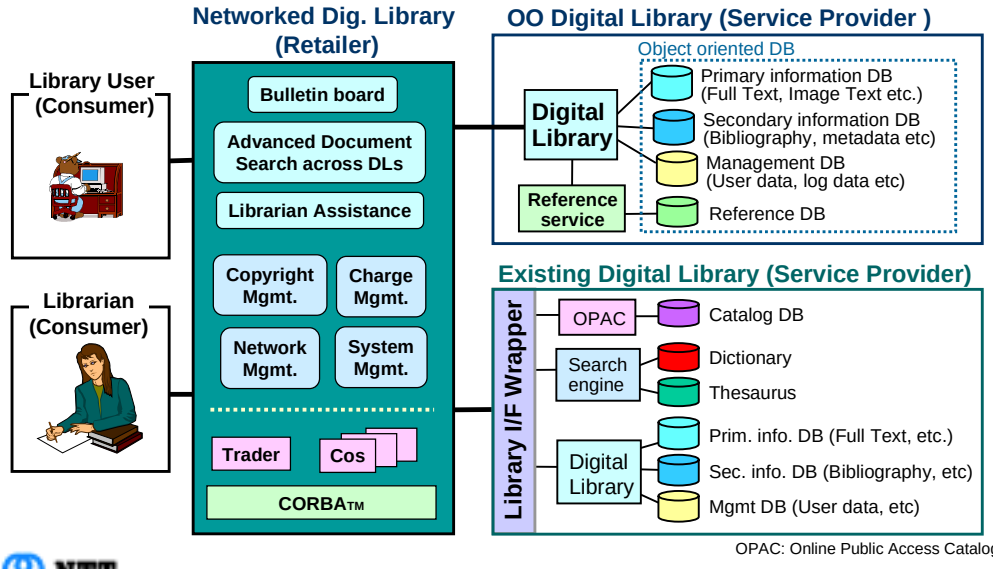
TINA-related activities in NTT

- Ret interface standardization in OMG
  (in cooperation with Hitachi, GMD Fokus, DT)
  - to realize middleware tier for Telecom Bus.
- Networked Digital Library
  - to retail integrated View of existing Content databases
- IP management system
  - to integrate emerging Mgmt System with existing Mgmt systems keeping scalability
- DPE in Exchange system
  - to provide open Network Service Interfaces keeping Telecom-grade Availability

Requirements to DPE from Development related to Ret Interface

- **Functional:**
  - Support of Transactional characteristics in delivering User events to large-scale and distributed Customer Base
  - Event Channels Manageability to provide flexibility for System Deployment
  - Security services including secure communication, authentication, authorization, and access control
- **Non-functional:**
  - As of ordinary Information Systems

Networked Digital Libraries: - NetLibra -



OPAC: Online Public Access Catalog

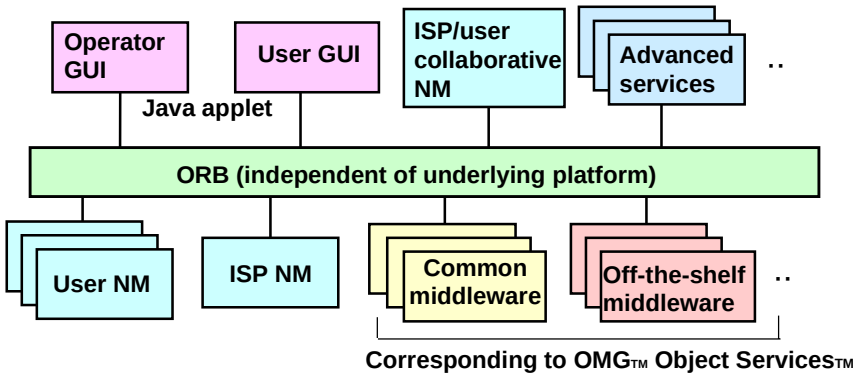
Requirements to DPE from Networked Digital Library

- Functional:
  - Security, in particular interoperable Solutions across multiple Domains
  - Information Base Integration with standardized manner, e.g., Query and Meta-data mgmt.
  - Intelligent and reliable Resource Locator for the Federation among heterogeneous and distributed Digital Libraries
- Non-functional:
  - High availability

IP Network Mgmt system - MOAI -

(Multi-layered Operations system for Advanced IP networks)

System configured with set of independent software modules

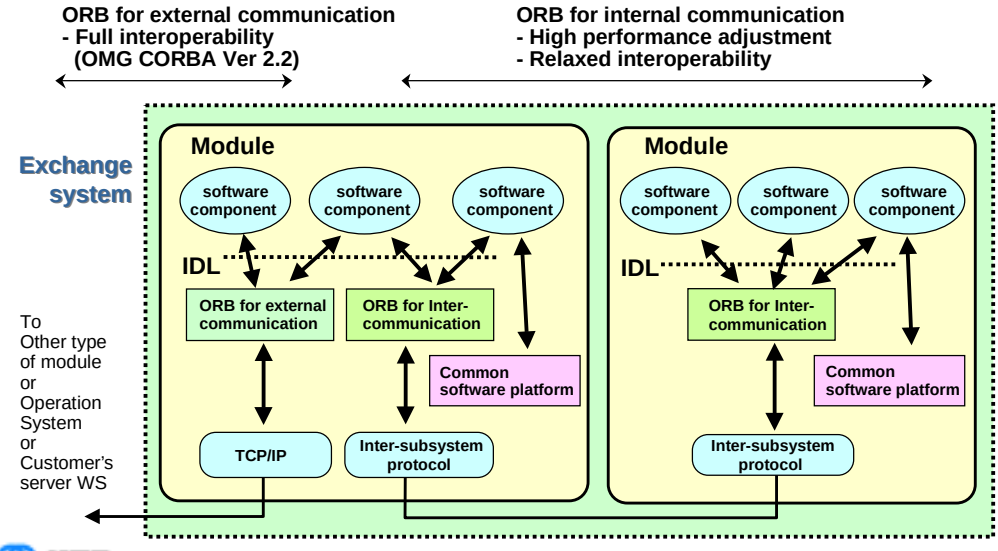


This project is tightly coupled with OMG™ activities

Requirements to DPE from IP Network Management system

- Functional:
  - Reliable and manageable notification service
  - Sophisticated Supports for Integrating Network Resource Information and Computational Design
- Performance
  - High availability, possibly fault tolerant as well
  - Scalability in ORB and other related Object Services and Domain Interface, especially in geographically-distributed Subsystems

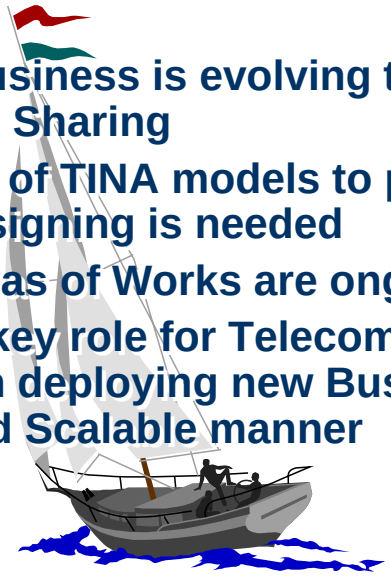
RT DPE for Exchange system



Requirements to DPE from RT DPE for Exchange system

- Non-functional:
  - High performance: optimized implementation for multi-processor telecom node
  - The same grade of availability and reliability as telecom service system, e.g., IN
- Functional:
  - Flexibility for service system evolution and customization

Conclusion



- Telecom Business is evolving towards Information Sharing
- Breakdown of TINA models to practical System Designing is needed
- Several Areas of Works are ongoing
- DPE plays key role for Telecom Business in deploying new Business in Flexible and Scalable manner