

NGN as a new service and business creation platform

July 23, 2007
@ NGN workshop 2007

Tetsuo Takemura
Hitachi, Ltd.

HITACHI
Inspire the Next

Contents

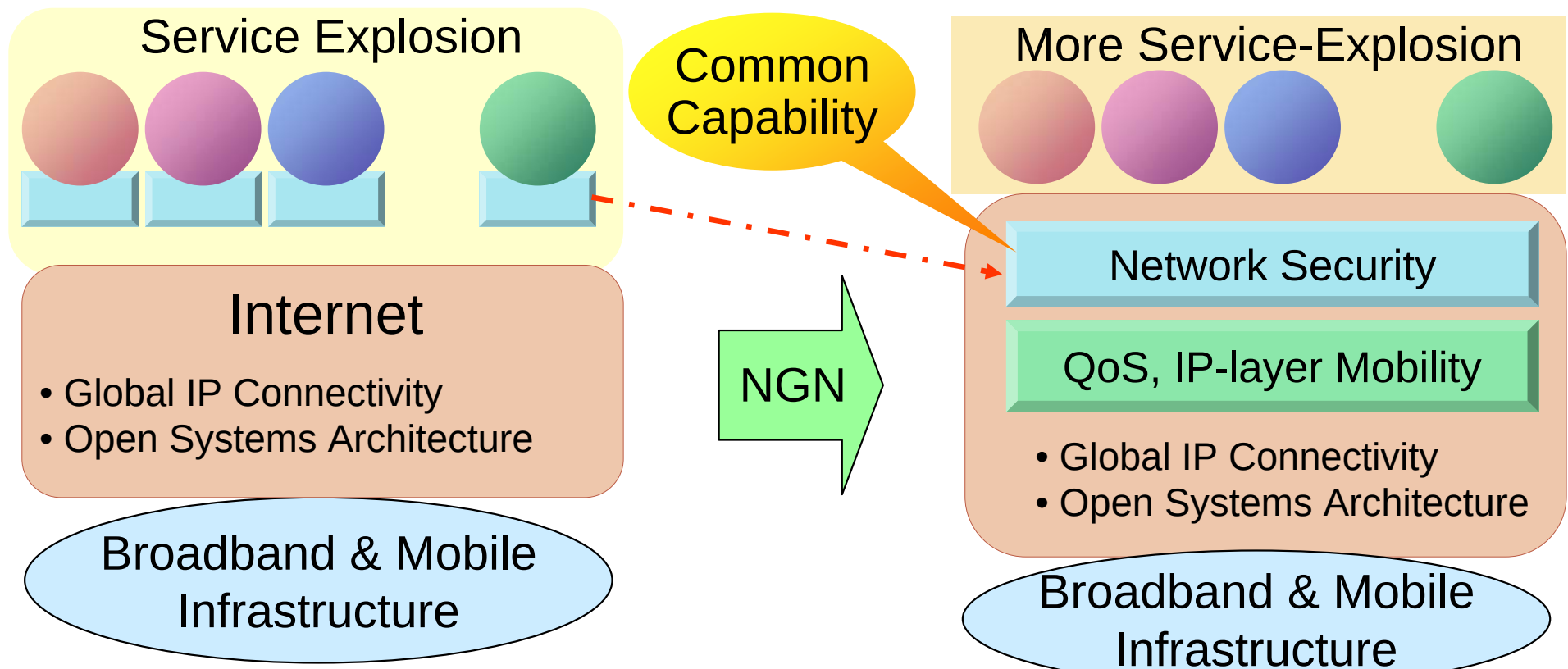
1. A Trend toward Next Generation Network
2. NGN as a Service Platform for Total Solutions

Internet Benefits

- Global IP Connectivity
- Open Architecture: Separation of Services and Infrastructures

Internet Issues

- The Limitation of Best-effort Paradigm, Network Security, and Network-layer Mobility



① Drawbacks of the Open System Architecture

- Not all the end users have ability to manage network security issues like cyber attacks, malicious access, identity theft, etc..

② Inefficiency of Host-based Architecture

- Some of the required network capabilities can't be achieved by host-based architecture cost-effectively.

③ Service Managements beyond the Border between Providers

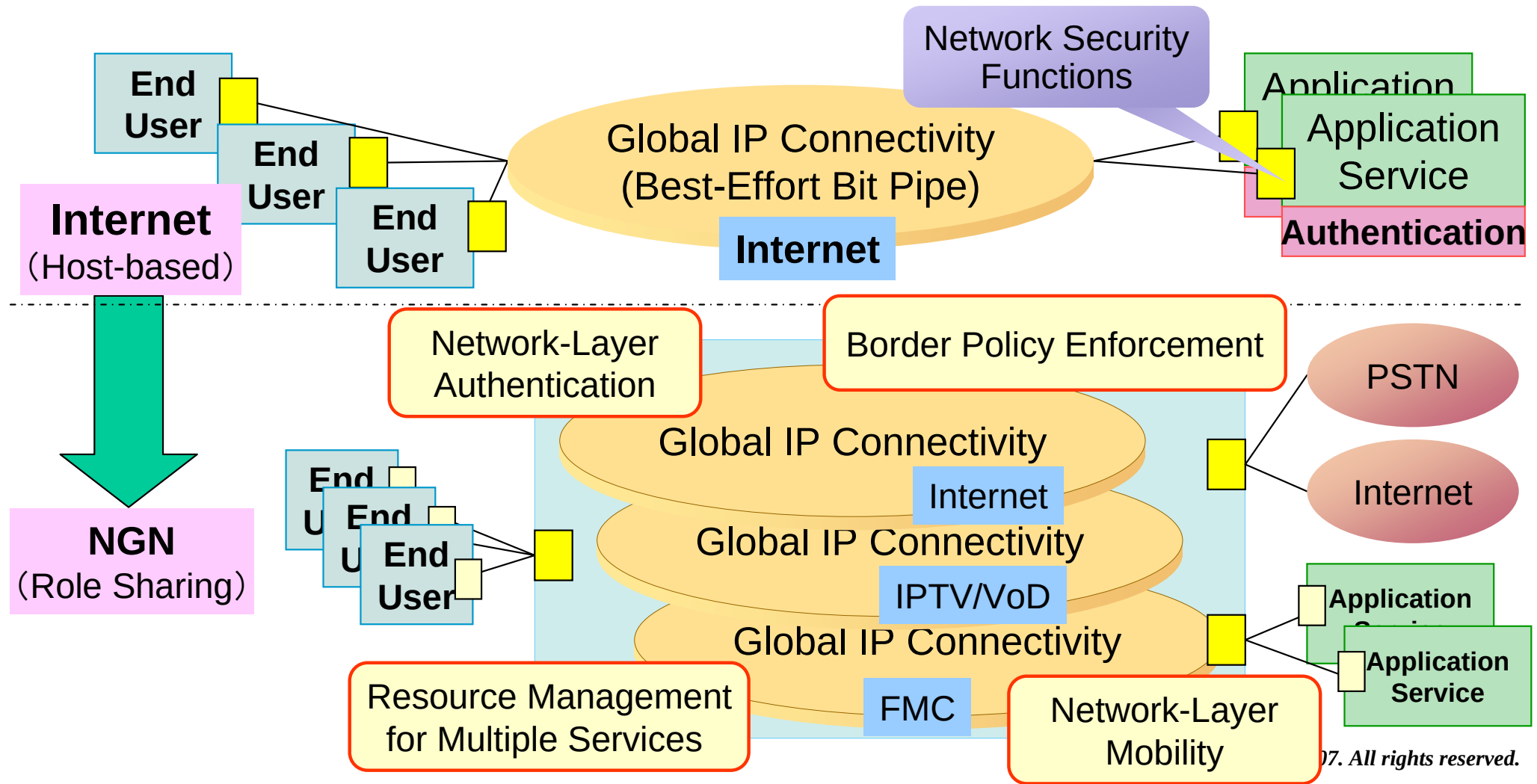
④ Provider's Service Models over the Flat-rate Business Environment

Sustaining the flexible service creation environment of the Internet, Transforming it to a reliable and trustworthy social infrastructure.

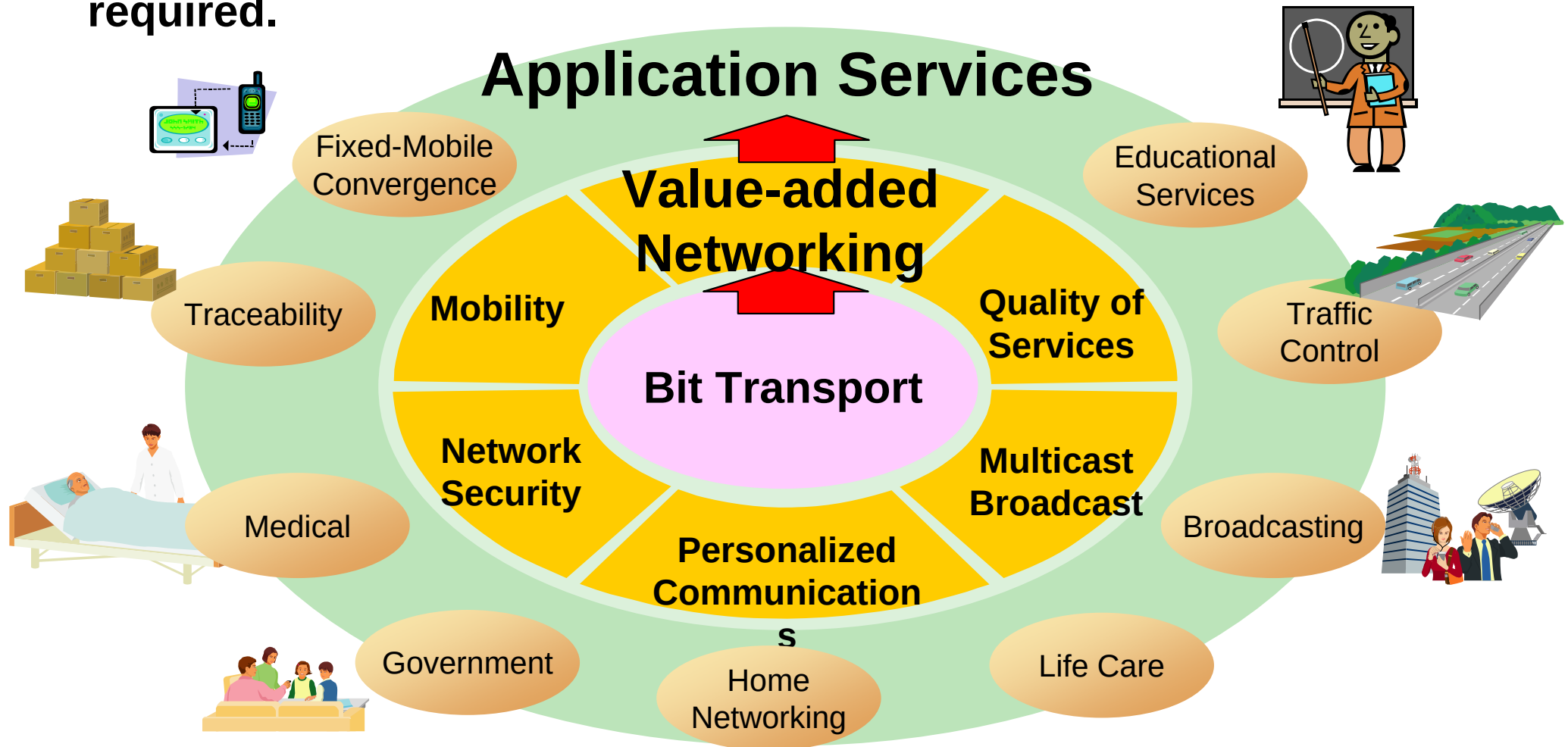
3

NGN Network Service Structure

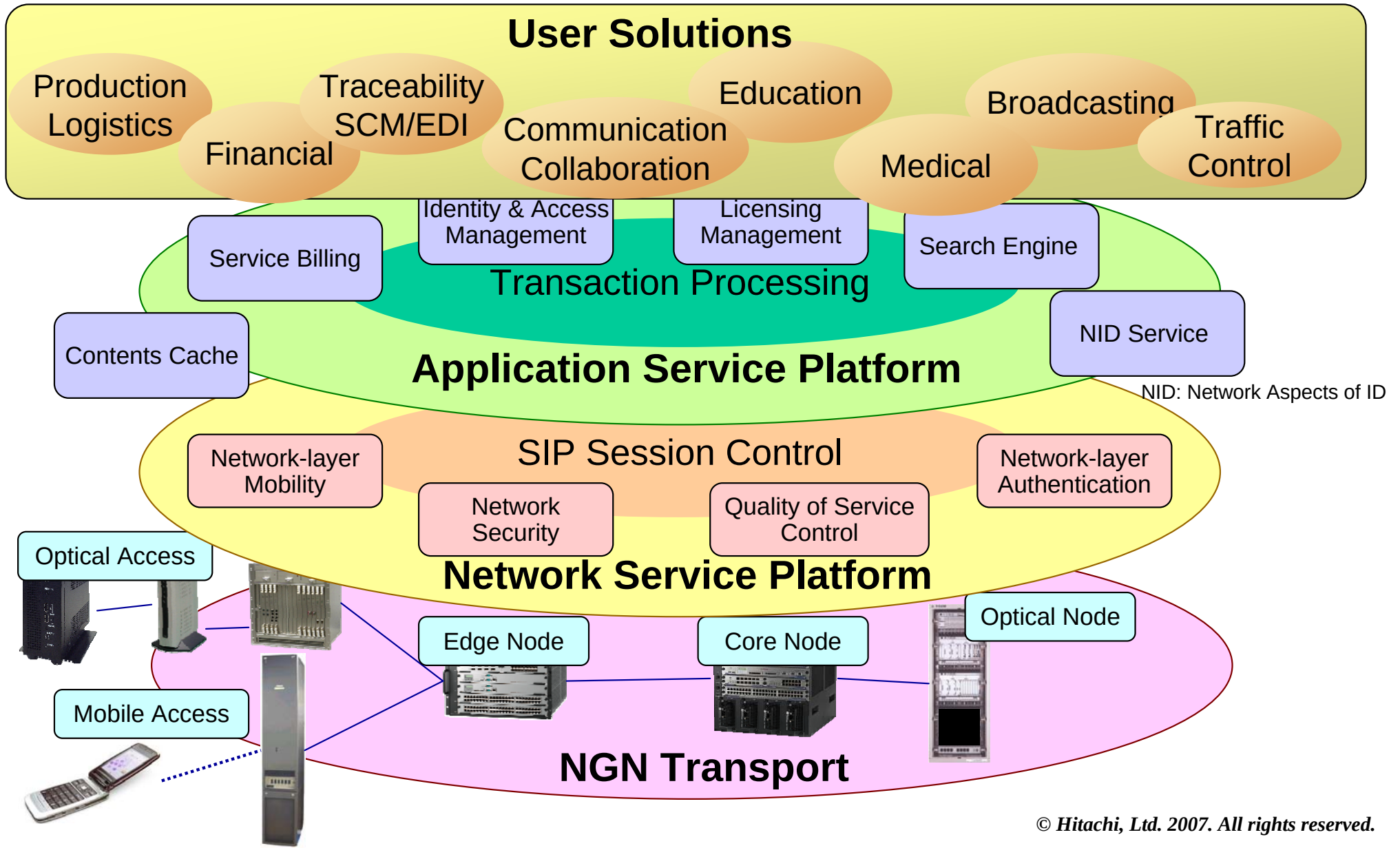
- Various technologies and standards are being developed for network-layer capabilities: QoS, security, mobility, ...
- Real location of network service functions between hosts/end-users and networks should be a key for the developments.



- NGN principle: Value-added networking through the network services like QoS and mobility.
- Is it sufficient from the viewpoints of end users or service providers?
- Platform capabilities beyond the value-added networking are also required.

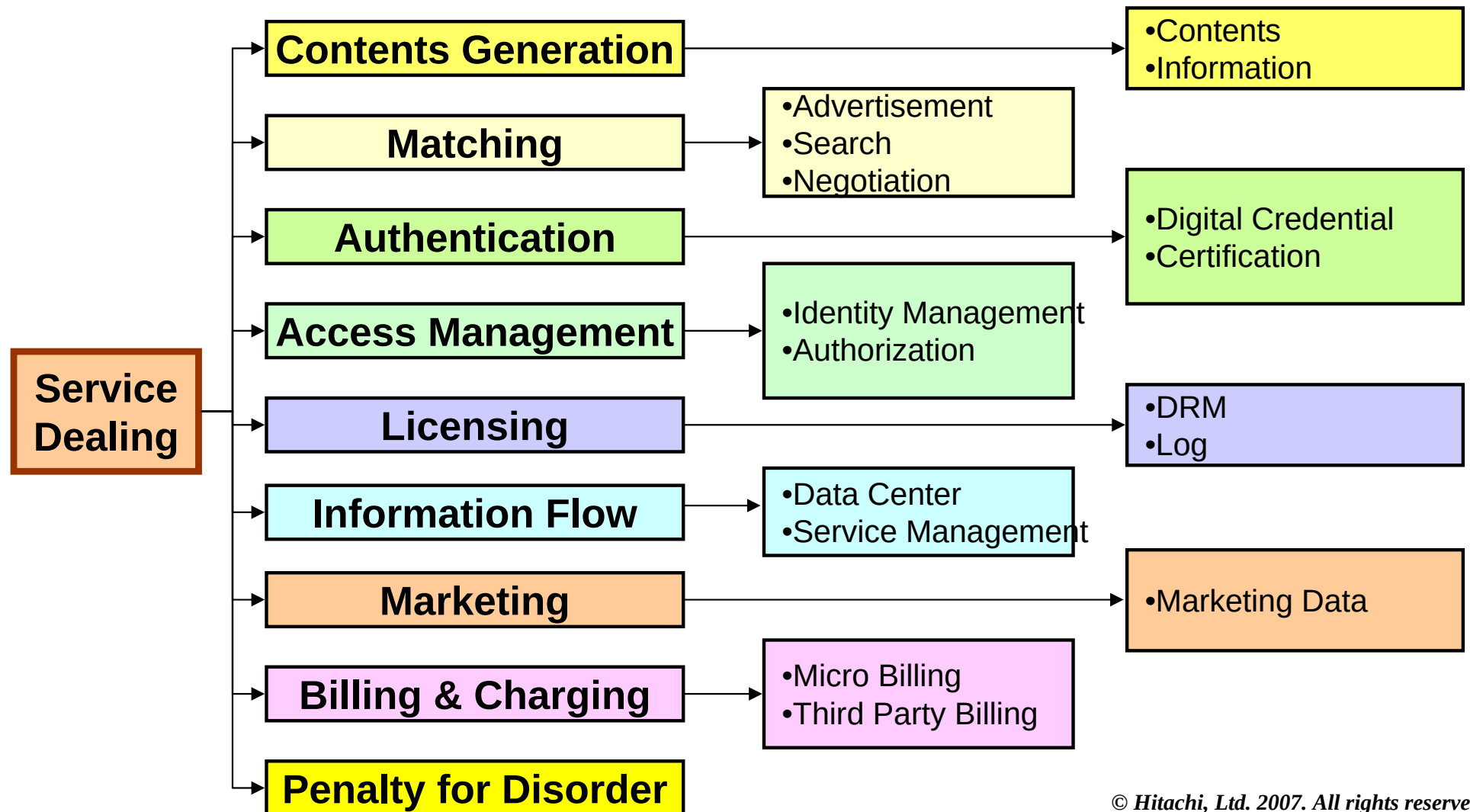


- Some common capabilities can be shared by application services.
 - Billing, identity management, licensing management, ...

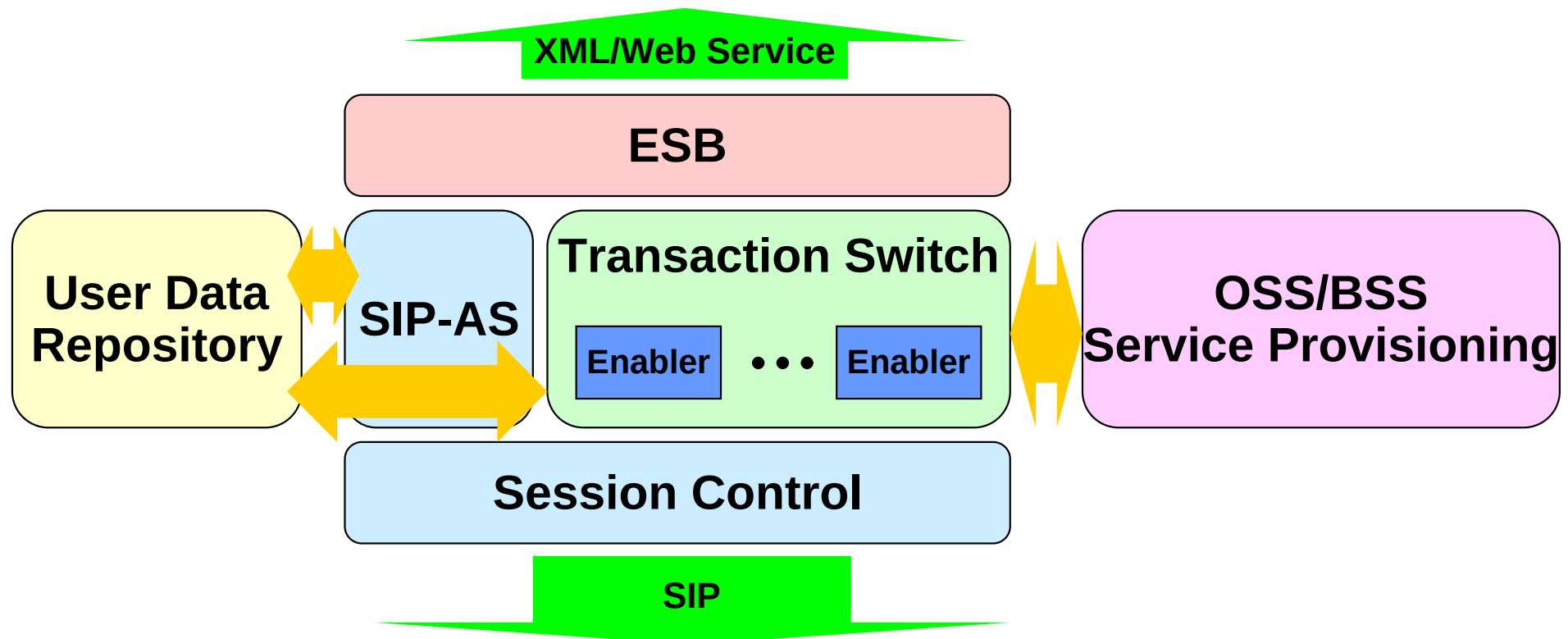


Then, what is “Service”?

- Many of the service dealing functions can be shared by various application services.
- NGN with the application service platform will become a virtual market place for exchanging and converging business flows.



- Service Platform provides a service execution and provisioning environment.
- The border between computer systems and network systems should be redefined.
- The service model for the flat-rate business environment will be crucial to such an architectural evolution.



- **While sustaining the flexible service creation environment of the Internet, transforming it to a reliable and trustworthy social infrastructure.**
- **Network Service Platform**
 - Reallocation of network service functions between hosts/end-users and networks should be a key for the NGN developments.
- **Application Service Platform**
 - Some common capabilities can be shared by application services.
 - Service structure and service model for exchanging and converging business flows

Thank you!

NGN Workshop
July 23, 2007

Hitachi, Ltd.

HITACHI
Inspire the Next