Ukrainian Numbering, Naming and Addressing Operation Center

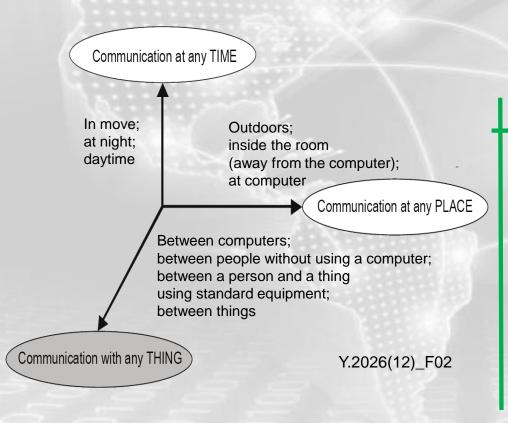
The security issues on IdM systems within convergence networks

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Convergence paradigm



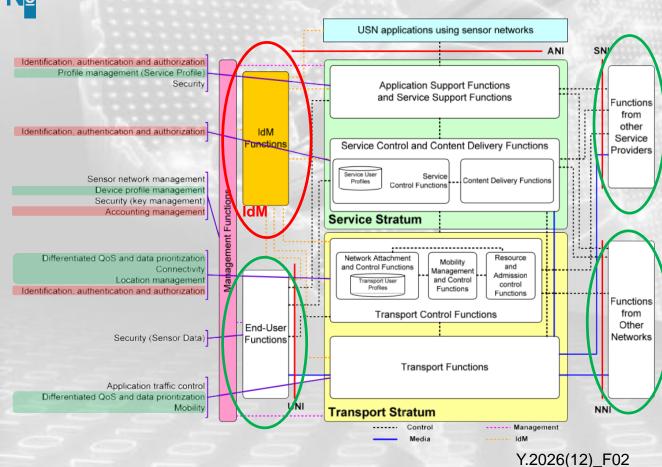
5 aspects:

- 1) Access
- 2) Interaction & Interconnection
- 3) NNA
- 4) Services
- 5) Rates and Tariffs

Forming the basis of a convergent environment in which (1) **any user** in (2) **any time** and in (3) **any place**, using (4) **any own identifier** (s) and (5) **own device** (s), can receive from (6) **any chosen operator** the necessary (7) **service "here and now"**

Regulation and consumer protection in a converging environment, Report ITU-D, March 2013

Overall functional architecture model

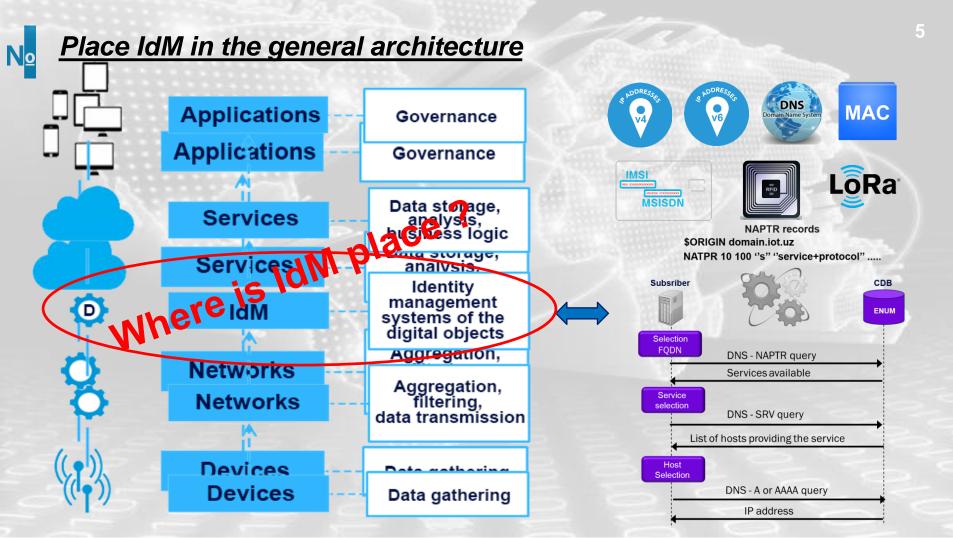


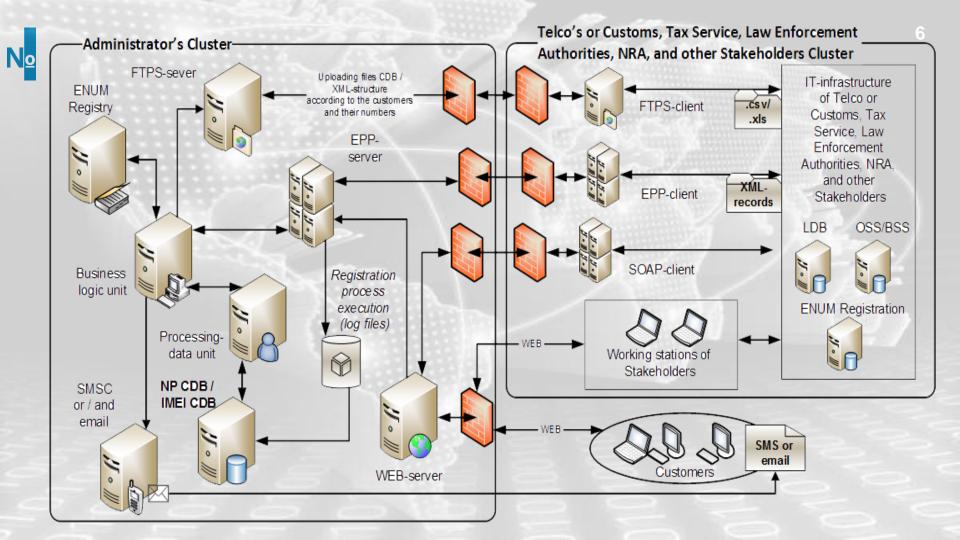
ANI	Application Network Interface
USN	Ubiquitous Sensor Network
UNI	User network interface
SNI	Service node interface
NNI	Network-to-network interface
ldM	ID Management



Principles for identifiers

- Identifiers must be found within any network and any protocols' environment
- Identifiers must respond to multiple requests to ensure compatibility for both open and proprietary systems
- > The identifier must be able to point to geolocation
- Identity procedures must support multi-level access
- > Identifiers can be "smart" and "stupid", both must be functionally separated
- > The metadata identifiers must be separated from the object itself







IdM/DNS and security

DNS Server of Service

Web resource Response on **Service**

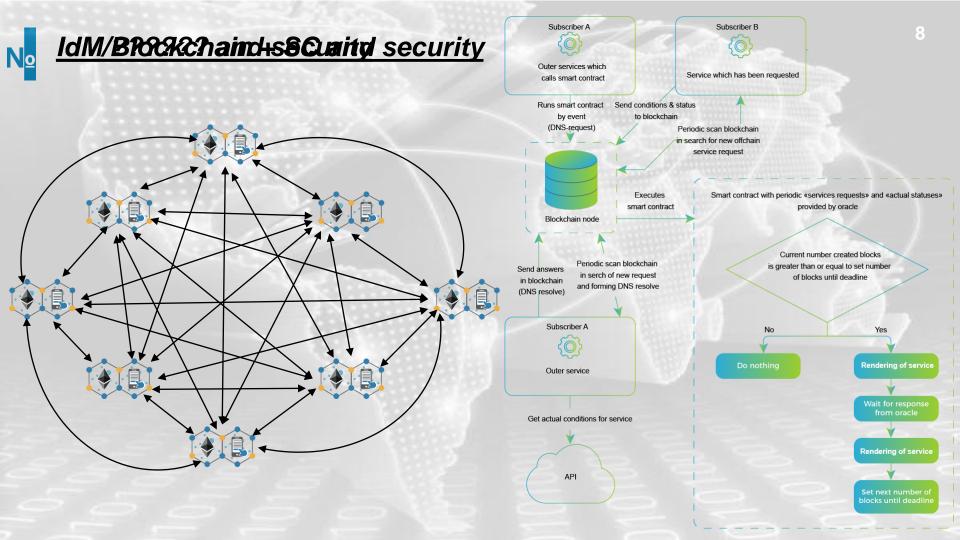
> Query on **Service**: <number>.0.8.3.e164.arpa

Subscriber B Response on **Service**

Response on **Service** service:<local-part>@<domain-part>

Subscriber A Query on **Service** Proxy Server of Service

Proxy/DNS Server of **Service** on <domain-part>



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Thanks! Questions?

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