Ubiquitous Networking/Y.2002

  - specifies that NGN provides various communication capabilities
  - shows communication types for ubiquitous networking and
  - notes that objects include all things that are attached to the network, and some objects can be attached to persons and others can be located remotely with persons
Ubiquitous sensor network/Y.2221

- ITU-T Y.2221 (01/2010), “Requirements for support of ubiquitous sensor network (USN) applications and services in the NGN environment”
  - defines USN as a conceptual network built over existing physical networks which makes use of sensed data and provides knowledge services to anyone, anywhere and at anytime, and where the information is generated by using context awareness.
Work in progress, Q.7/13

• **Y. ipv6-object** Framework of object mapping using IPv6 in NGN
  Targeted for consent in 01/2011

Covers
• Basic concept and requirements for object mapping using IPv6 in NGN
• Layered architecture and identities
• Identity processing mechanism
  – Identifier mapping/binding with IPv6 address
• Procedures (including auto-configuration)
• Applications using identity processing
Work in progress, Q.7/13
<continued>

• Sept 2010: Proposal for development of a new Recommendation on “Object Naming and Addressing for Internet of Things”, included into the living list

• Sept 2010: Proposal for a new standardization initiative for the Internet of Things agreed to be studied as IoT in terms of IPv6
Work in progress, Q.12/13

- **Draft new Y.WoT** - Framework of Web of Things
  - initiated in 04/2010
  - targeted for consent in 02/2012

Summary: with the objective to describe Web of Things, this draft defines the model of Web of Things, identifies detailed requirements, capabilities, and functional architecture for Web of Things.

**Nearest future**

Samples of applications: Fire Detection, Alert Service, medical services notification

**Far Future**

New proposed technologies
Work in progress, Q.12/13
<continued>

• **Draft new Y.UbiNet-hn** - Framework of object-to-object communication for ubiquitous networking

Target completion 05/2011

Based on the conceptual diagram for “connecting to anything” with NGN develops related high-level architecture for object to object communication in support of ubiquitous networking and represents several technical considerations for identification of all objects and providing connectivity to them.