

Future Application - Broadband Application-

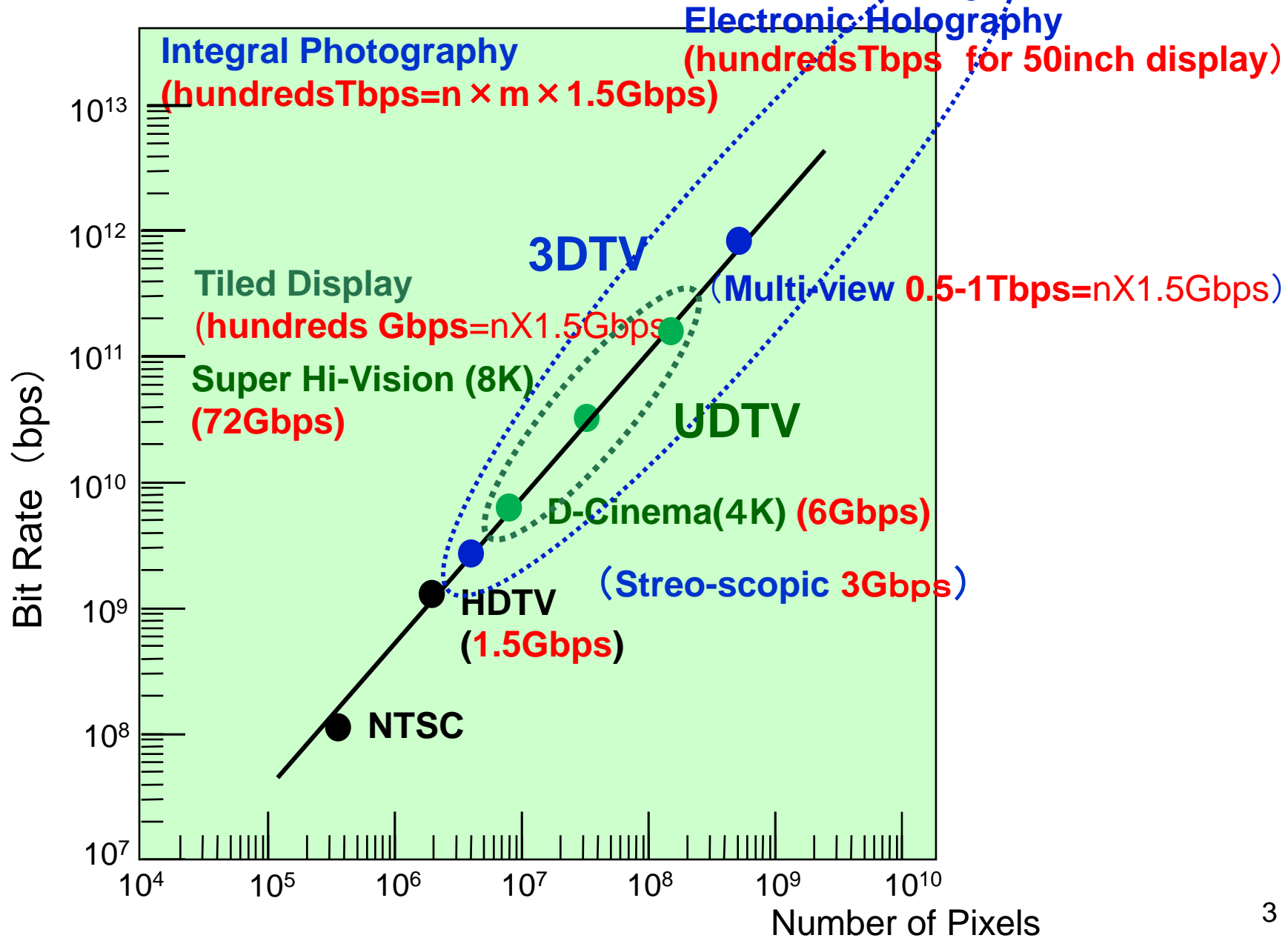
Video Services

Kazumasa Enami
Director General
Keihanna Research Laboratories
NICT

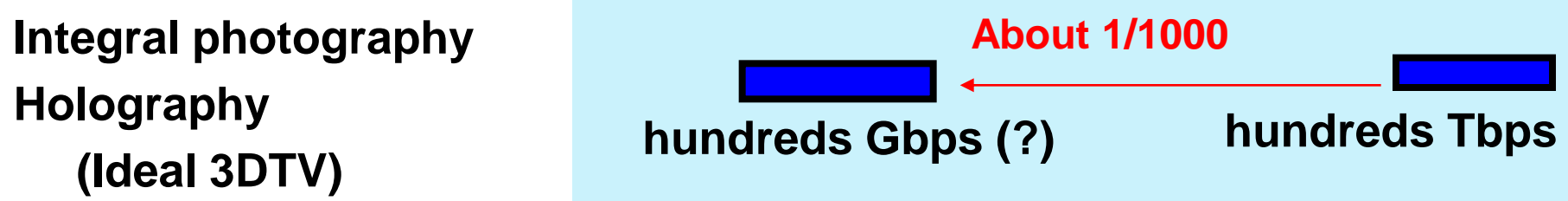
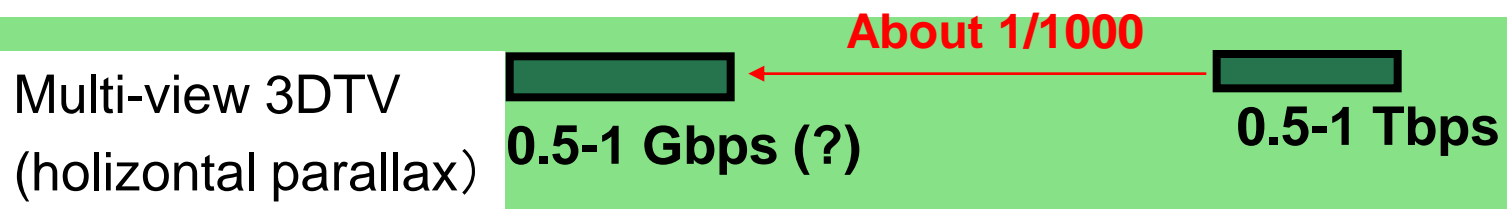
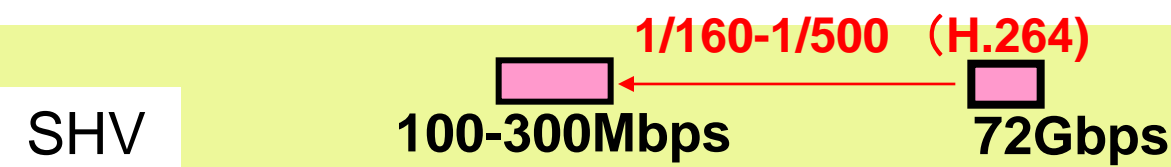
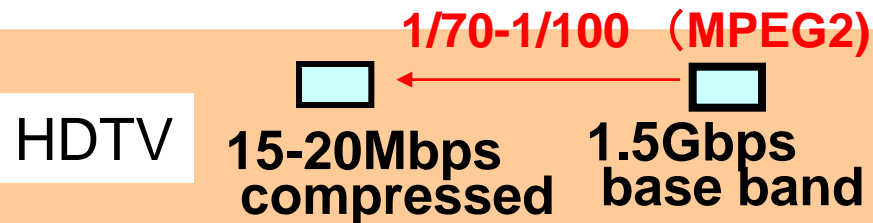
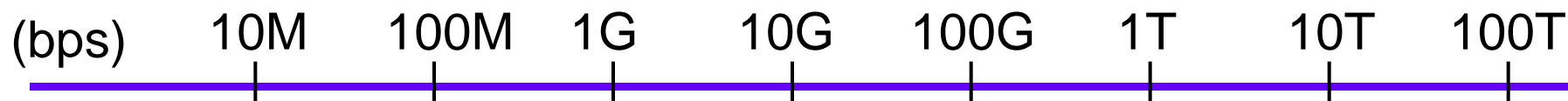
Video services are key applications for New Generation Network.

- IPTV
 - Multicast, Download service, VOD
- Up-stream of Video information
 - Video Home Page
 - Video Meta-Verse (i.e. Second life)
 - Central Monitoring System for Security
- Digital Signage
 - Town Advertisement (Huge Screen on Building, at Station, in Stadium)
 - Store Advertisement , Retail network
- Super Presence
 - UDTV: 4K(Digital Cinema), 8K(Super-Hivision)
 - 3DTV: Multi-view, Integral Photography, Electronic Holography
 - Multi-modal and Interaction system

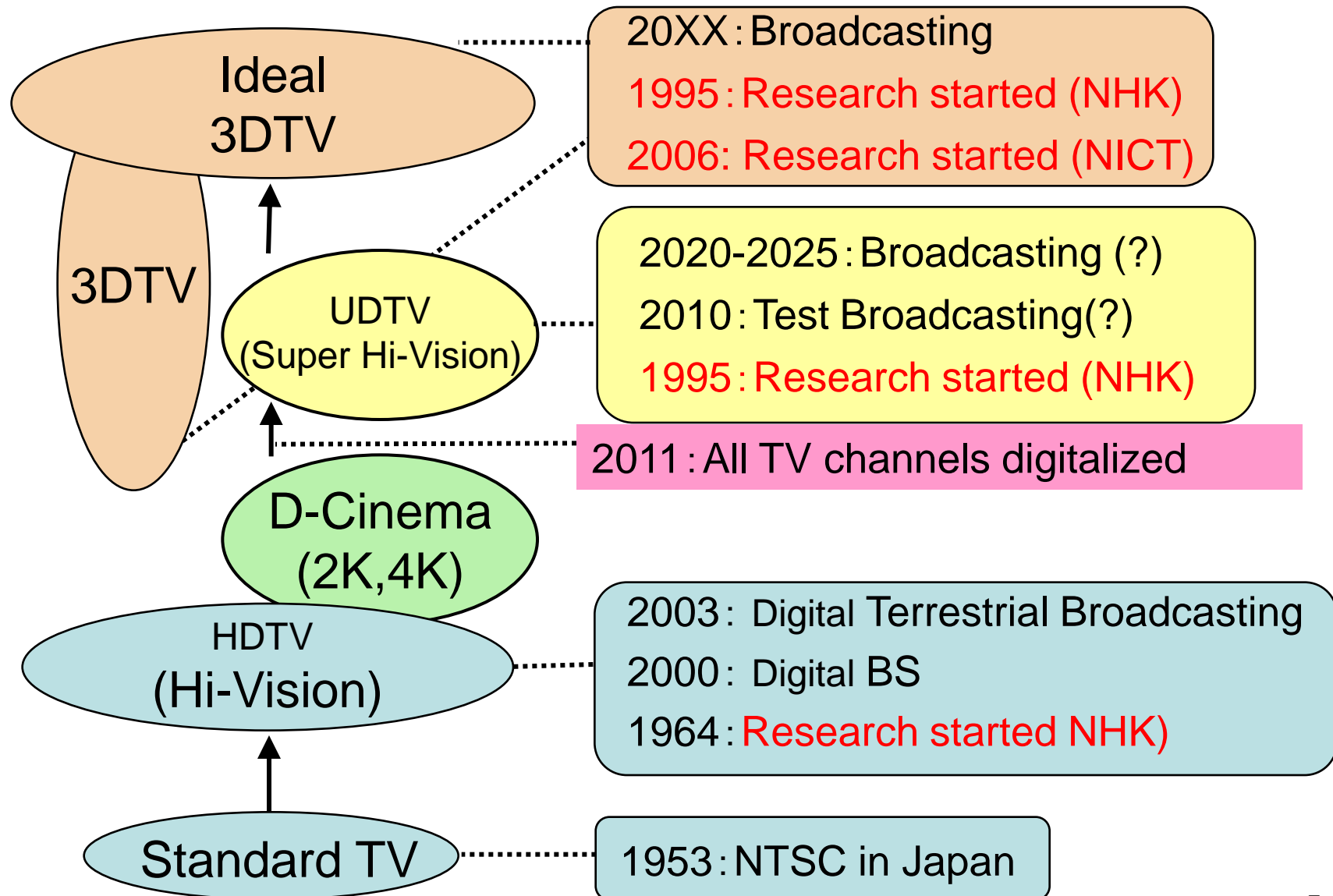
Data Rate of Video formats



Data Rate of Compressed Video Signals



Future Television



Requirements for New Generation Network

- **Ultra-high Speed**: to distribute UDTV and 3DTV video signals with the data rate of T bps
- **Broader band width**: to up-load lots of video streams from home, office, and city
- **Low latency**: for smooth interaction, less than several tens of milliseconds
- **Plug and Play** : to adapt various kinds of video formats
- **High stability** : to be used as a basic distribution infrastructure
- **High reliability and security**: to protect from illegal use
- **Quick response**: for smooth channel zapping
-
-
-

Ultra-Realistic Communications Forum

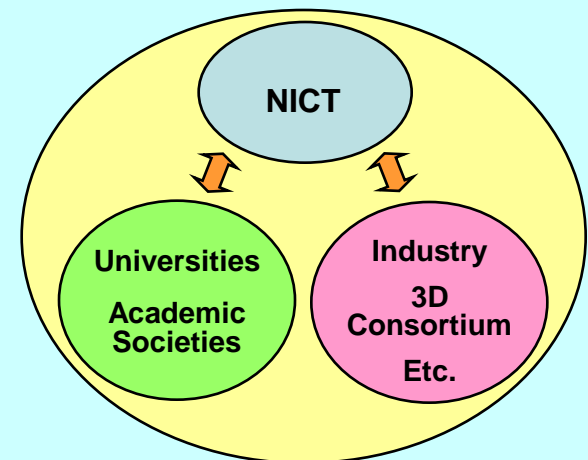
- On March 7, 2007, the URCF was established with the participation of industry, universities, the Ministry of Internal Affairs and Communications (MIC), and the NICT.
- The URCF promotes the development of technologies relating to HD images, 3D images, hyper-realistic sound, and multi-sensory communications.

Objectives

- Contribute to the advancement and development of technologies relating to HD images, 3D images, hyper-realistic sound, and multi-sensory communications
- Actively and efficiently promote R & D, verification experiment, standardization, etc.
- Create the most advanced ultra-realistic communications

Activities

- Hosting symposia and workshops
- Verification experiment
- Standardization
- Participating in various technical exhibitions
- Support of various research project
- Corporation with related consortia and academic societies



<http://www.scat.or.jp/urcf/>