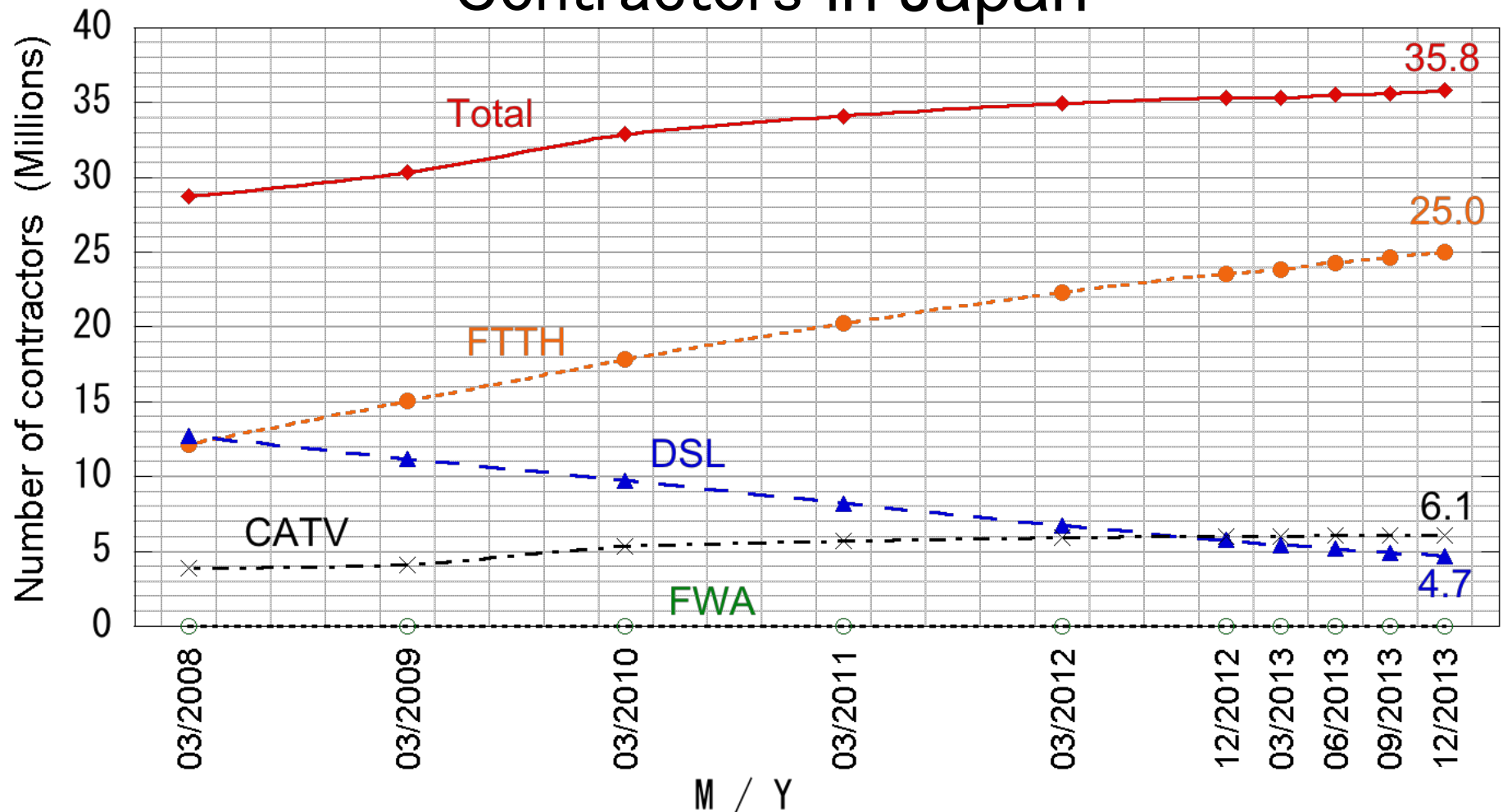


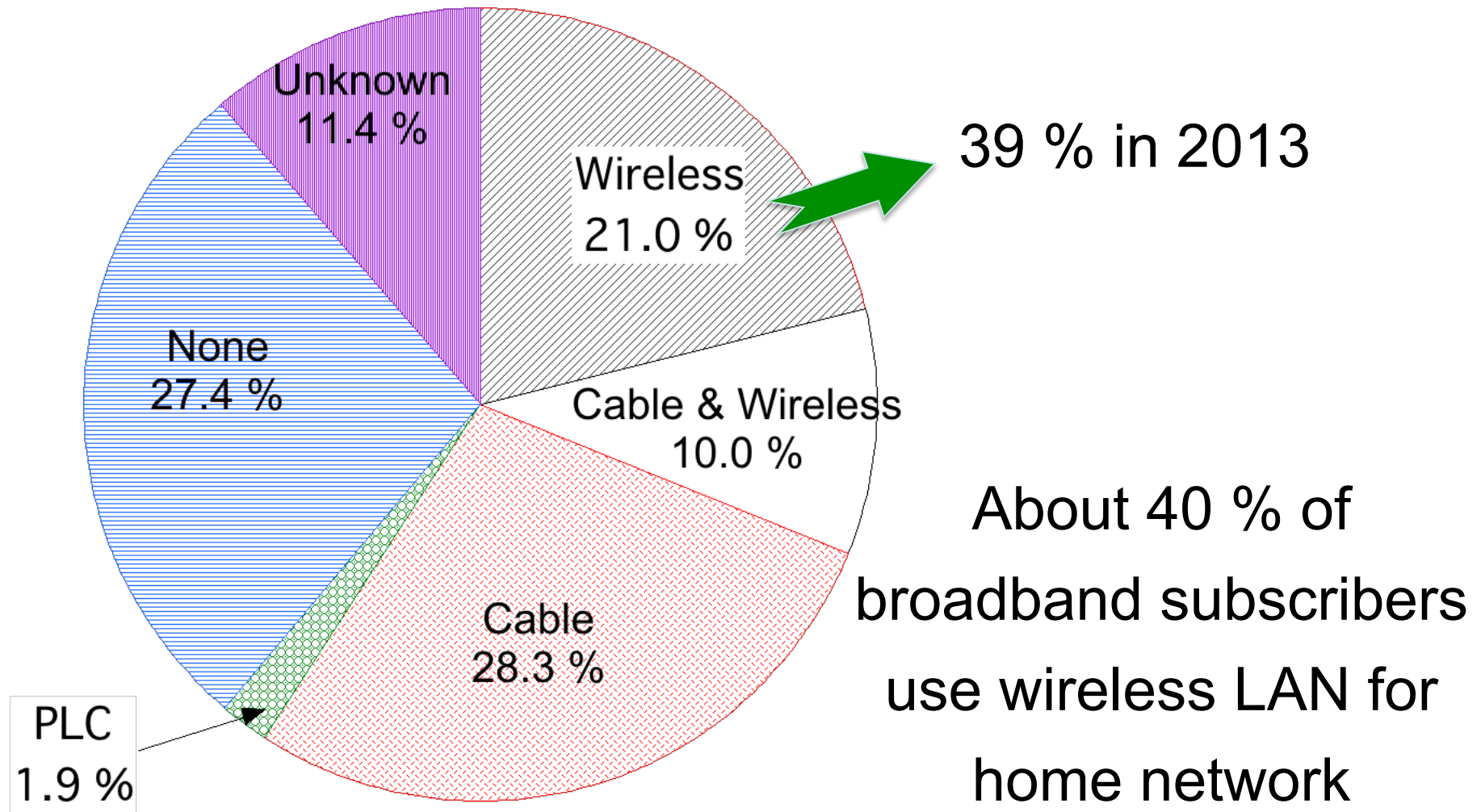
The Numbers of Fixed Broadband Access Service Systems Contractors in Japan



Source: Japan Ministry of Internal Affairs and Communications

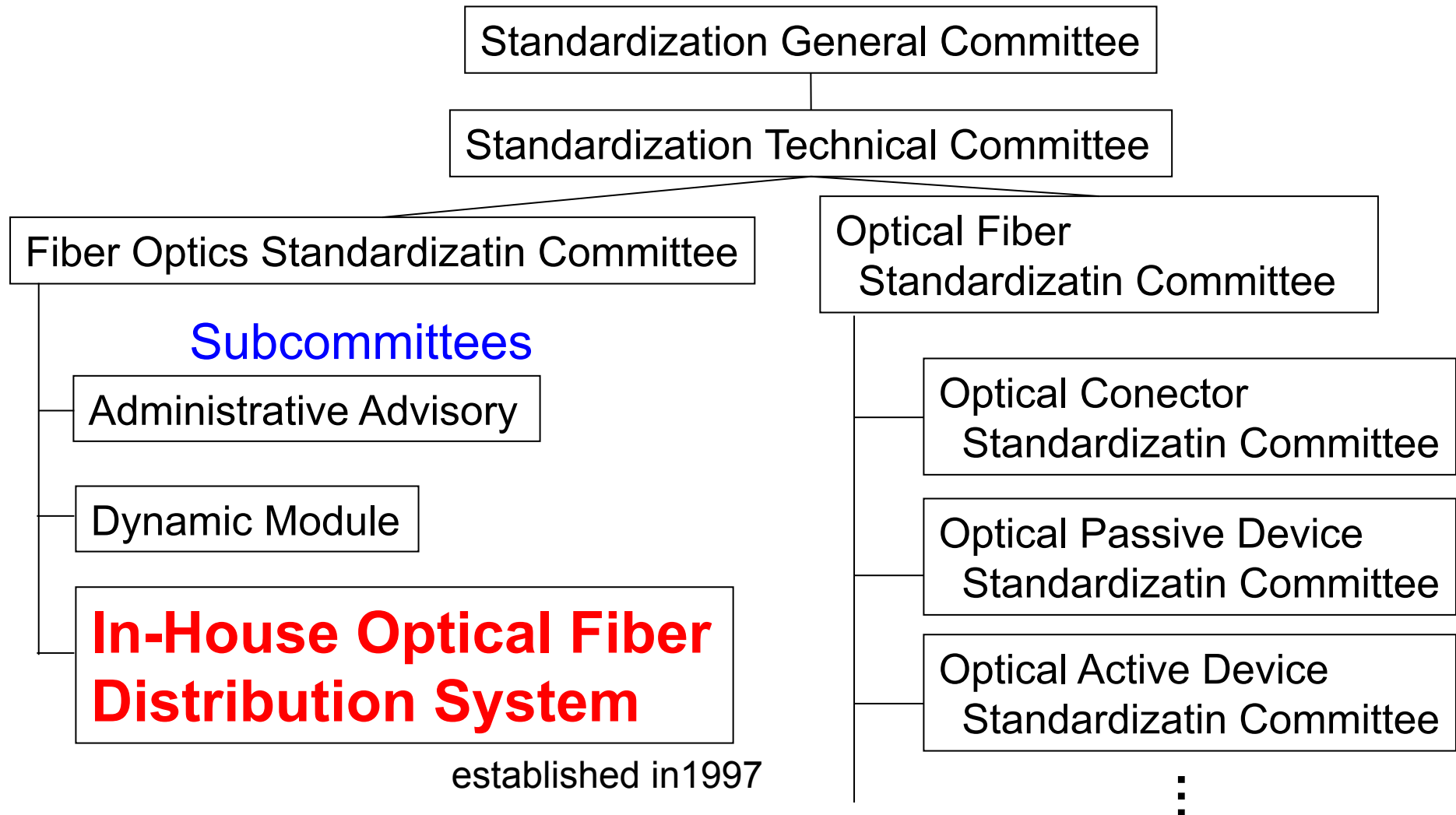
Broadband Access service spread widely in Japan

Media Used for Home Network in Japan



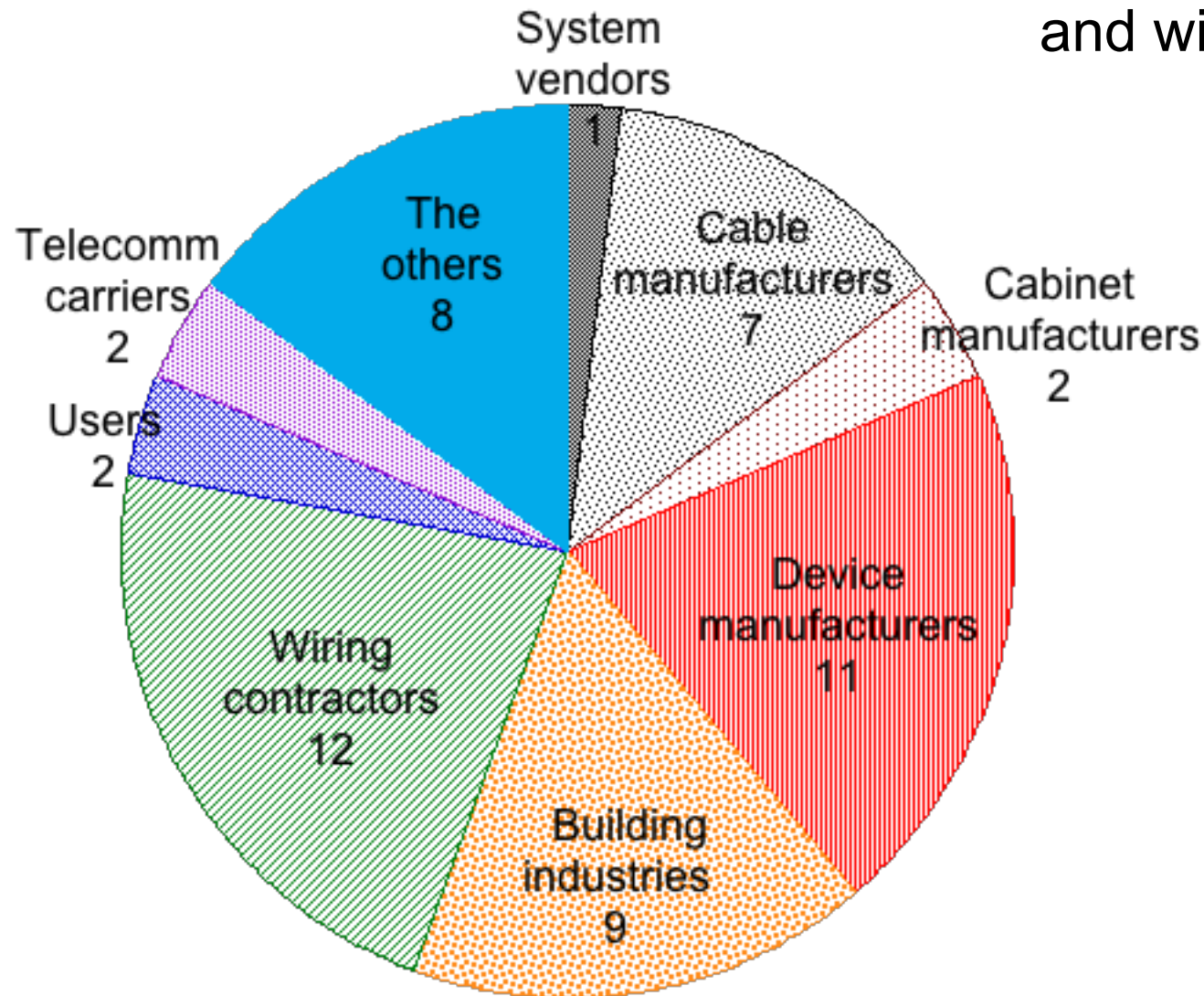
Source: ALICE Forum (Jan. 2009)

Standardization Organization in OITDA (Optoelectronic Industry and Technology Development Association) Japan

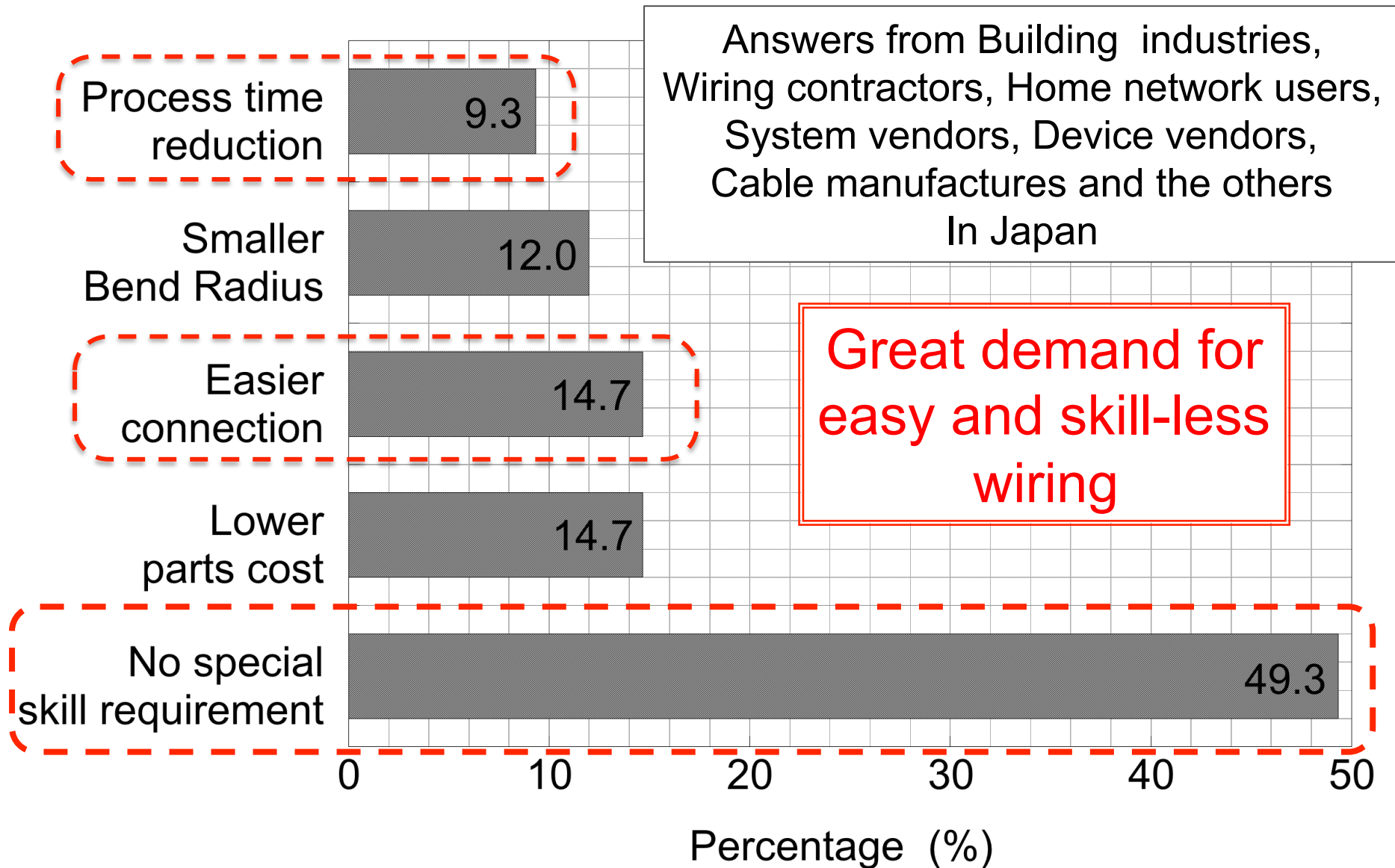


Questionnaire samples

77 answers from OITDA committee members, constructors and wiring contractors



Demands for Optical Wiring



Home Network Status in Japan

- 100Mb/s at present => Wireless may be enough
- NAS in home network and 4k TV require GbE
- 4k IPTV service will be started in 2015
 - => Wired network system will be necessary
- Demand for skill-less and low cost wiring
 - => POF is a greatly promising candidate
 - POF increase market potential of Ethernet

Need standardization

The ATM Forum Specified 50m Physical interfaces

- **AF-RBB-0099.000**

4.1 Infrastructure

This specification includes a home infrastructure reference model, which is described below. This is based on two guiding principles:

1. the required reach is **50 meters** rather than the 100 meters used in the commercial building wiring environment, due to the smaller area of the home. There is an advantage in using a shorter reach from the transmission point of view for both copper and plastic fiber (POF) based systems

- **AF-RBB-PHY-0101.000**

One of the major house developers in Japan installed POF cables in their most luxury model with 3 floors.
Maximum cable length was **28 m**.



Sekisui heim

- Total length : 140m
- Maximum length : 28m (Closet - 3F Bedroom)

