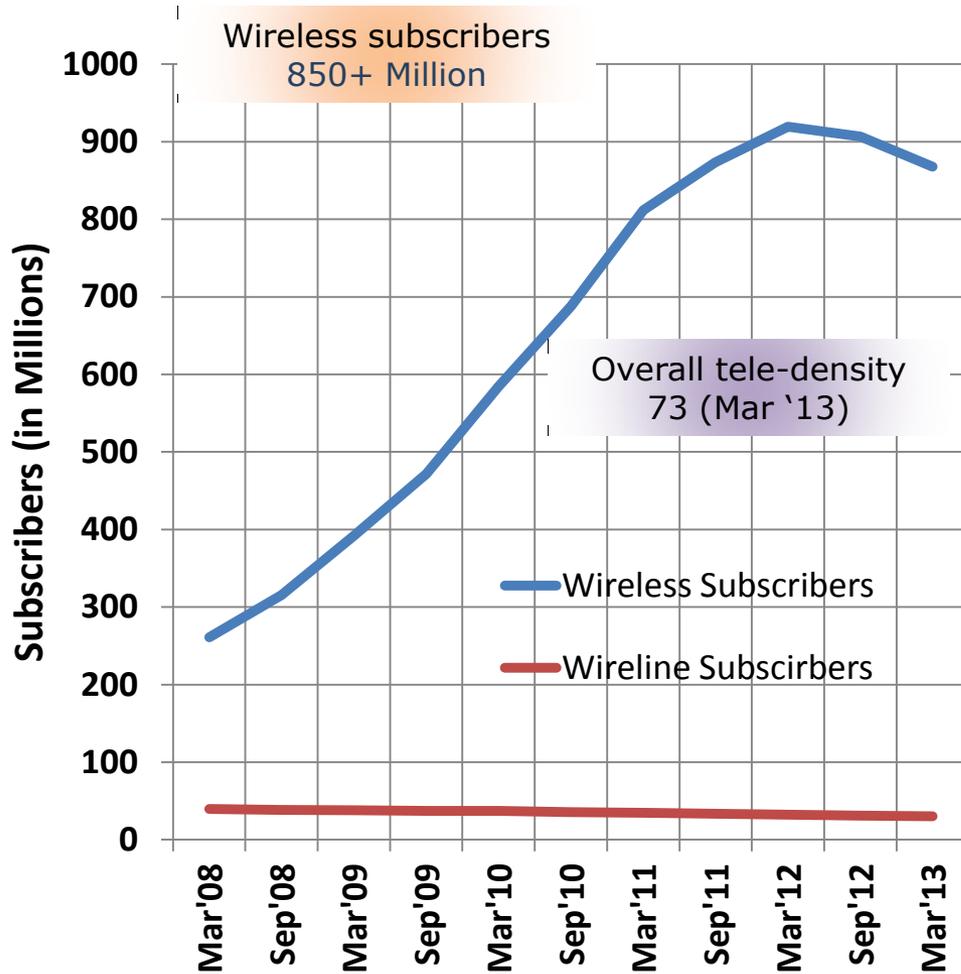


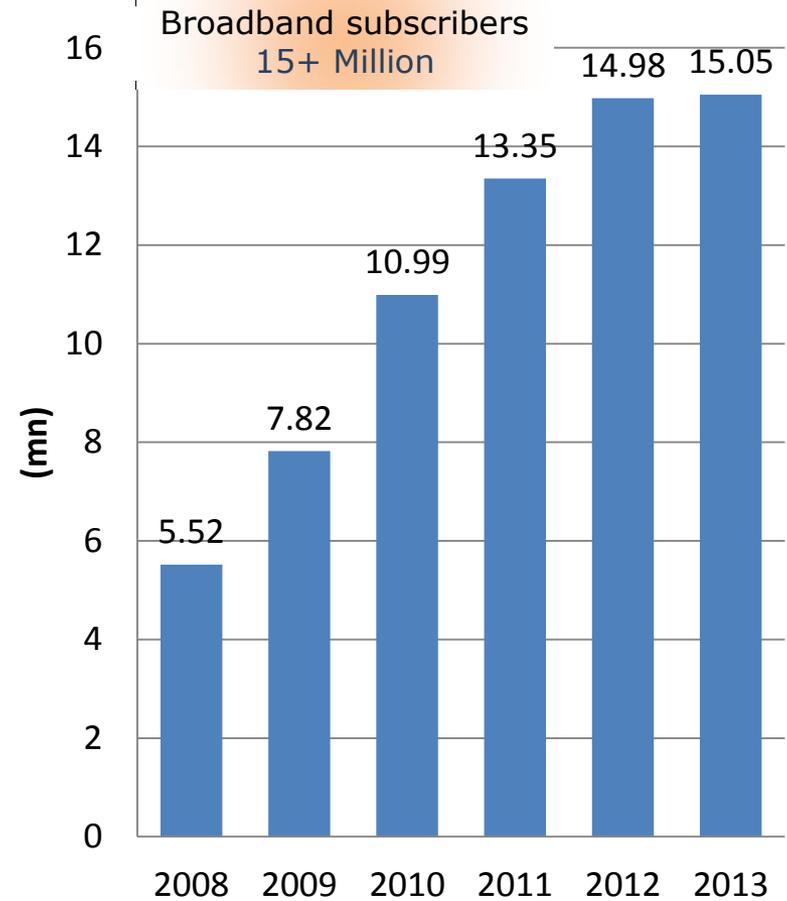
Telecommunications Standards Development Society India (TSDSI)

Indian Scenario

Telecom



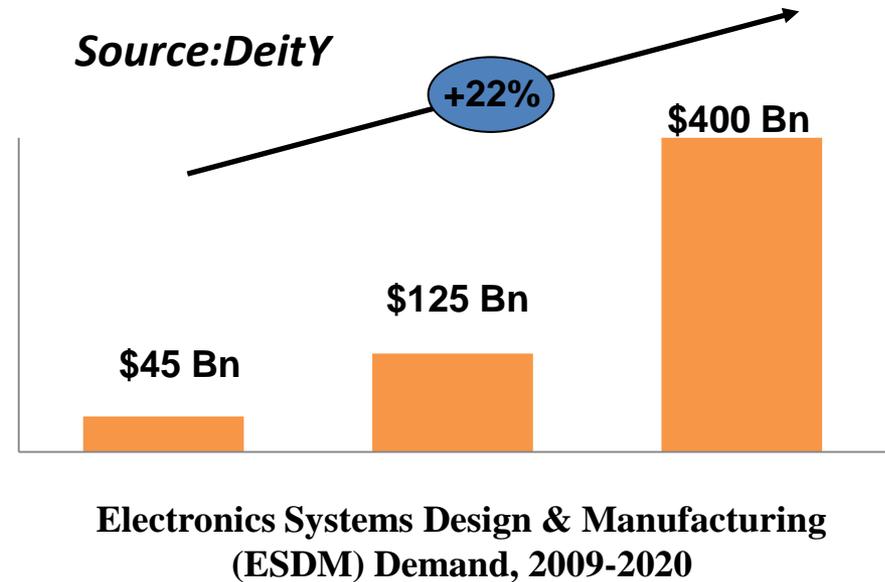
Broadband



Source: The Indian Telecom Services Performance Indicator Reports, TRAI

Telecom Product Sector: A perspective

- India's electronics demand expected to grow exponentially at 22% per year
 - 30% semiconductor component
- At current production levels of ~5% of demand, electronics import bill will outstrip oil import bill by 2020



Telecom Product Sector: A Perspective

- Few telecom products made in India
 - Components are still 100% imports
 - High outflow of foreign currency \$\$
- No common interface to represent Indian industry and also Indian requirement
- Could not leverage 80's success- C-DoT
- Only country in the top telecom market with no umbrella body focussing on standards
- Marginal value addition
 - In-significant contribution in IPRs, patents

India seems not well-positioned for telecom product manufacturing

Indian Presence in Standards

- Modest (practically nil till recently)
 - CeWIT, IIT Bombay and Tejas Networks among few exceptions
- Indian presence in major wireless standards bodies 3GPP, 3GPP2 meagre
 - Requires participant to be a member of a partner SDO of 3GPP/3GPP2 to participate
 - With no India SDO participation Indian entities have become members of ETSI or TTA to participate
 - Not a scalable model

Synergize with all Telecom stakeholders...

- Manufacturers
- R&D centres
- Academic institutions
- Service providers

.... with the object of ***facilitating coordinated development of Standards for Telecom, especially suited to Indian environment***

Membership Types

Primary Member

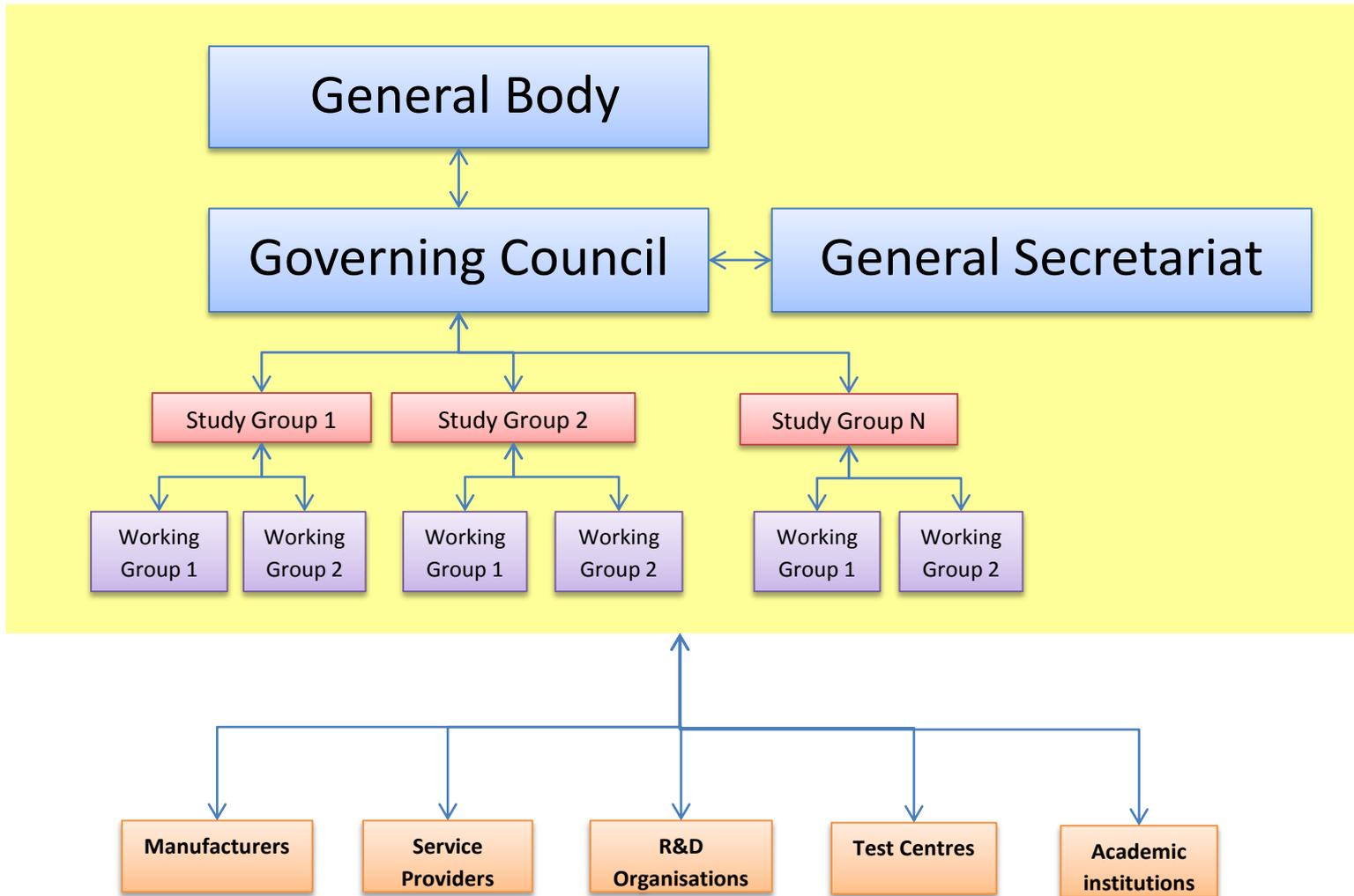
- Entities registered in India including Academic institutions

Associate member

- Associations of Stakeholders
- Foreign Entities

Guest / Observer / Expert

Structure



Working Groups

- Radio Networking and Spectrum
- Core Networks
- Machine-2-Machine
- and some more

Proposals brought in by members

Discussions among WG/SG members

Consensus (and voting) based approval

Academia

- Indian academia needs to play leading roles
 - Driving research problems relevant for Indian scenario
- Catalyst for Indian technology companies
 - Start-ups and manufacturing

Can we ever miss the lead 4G+ and beyond?

