

발표주제2

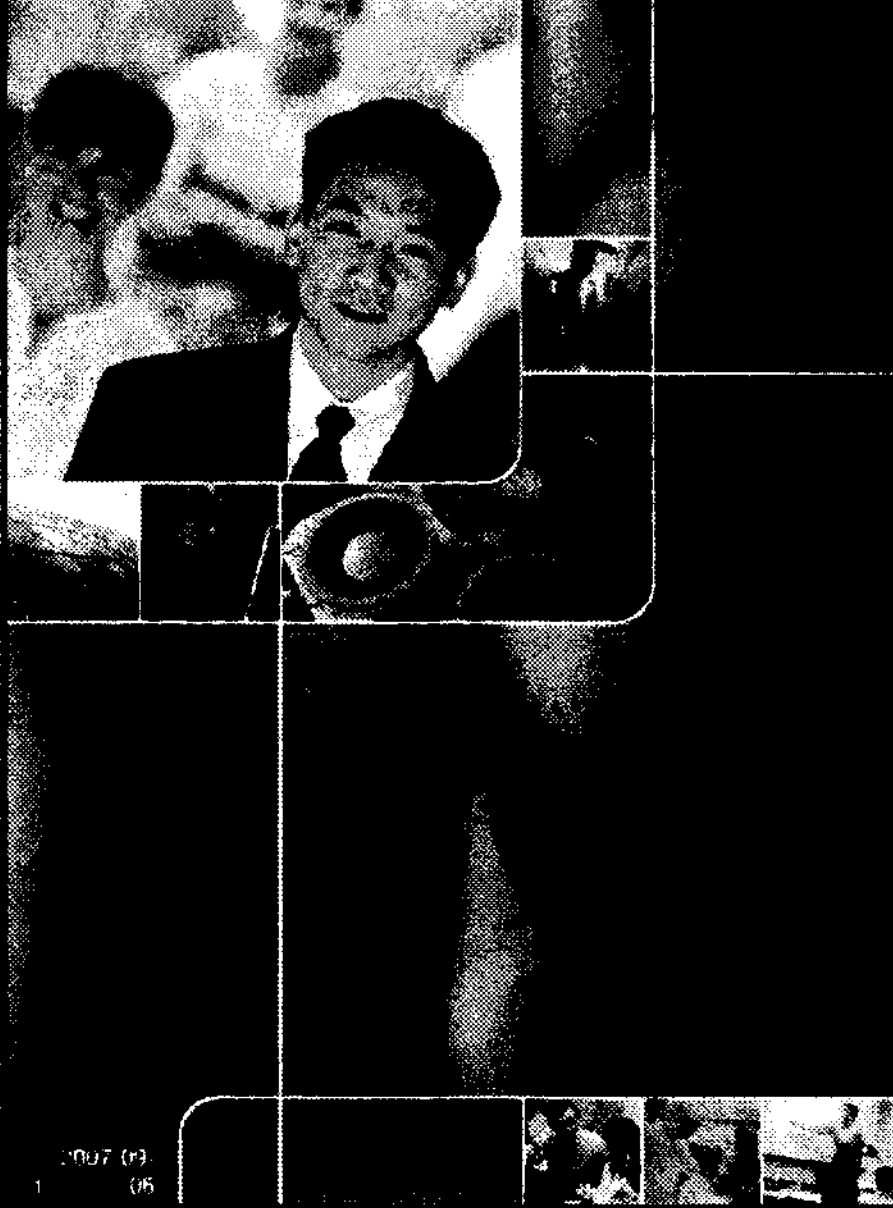
# SEMI Standards Programs

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조현대 사장  
Semi Korea



# SEMI Standards Programs



HD Cho  
SEMI Korea



## Outline

- The SEMI International Standards Program
  - History
  - Operations Today
  - Korea Standards Activities

# SEMI® : The Global Association



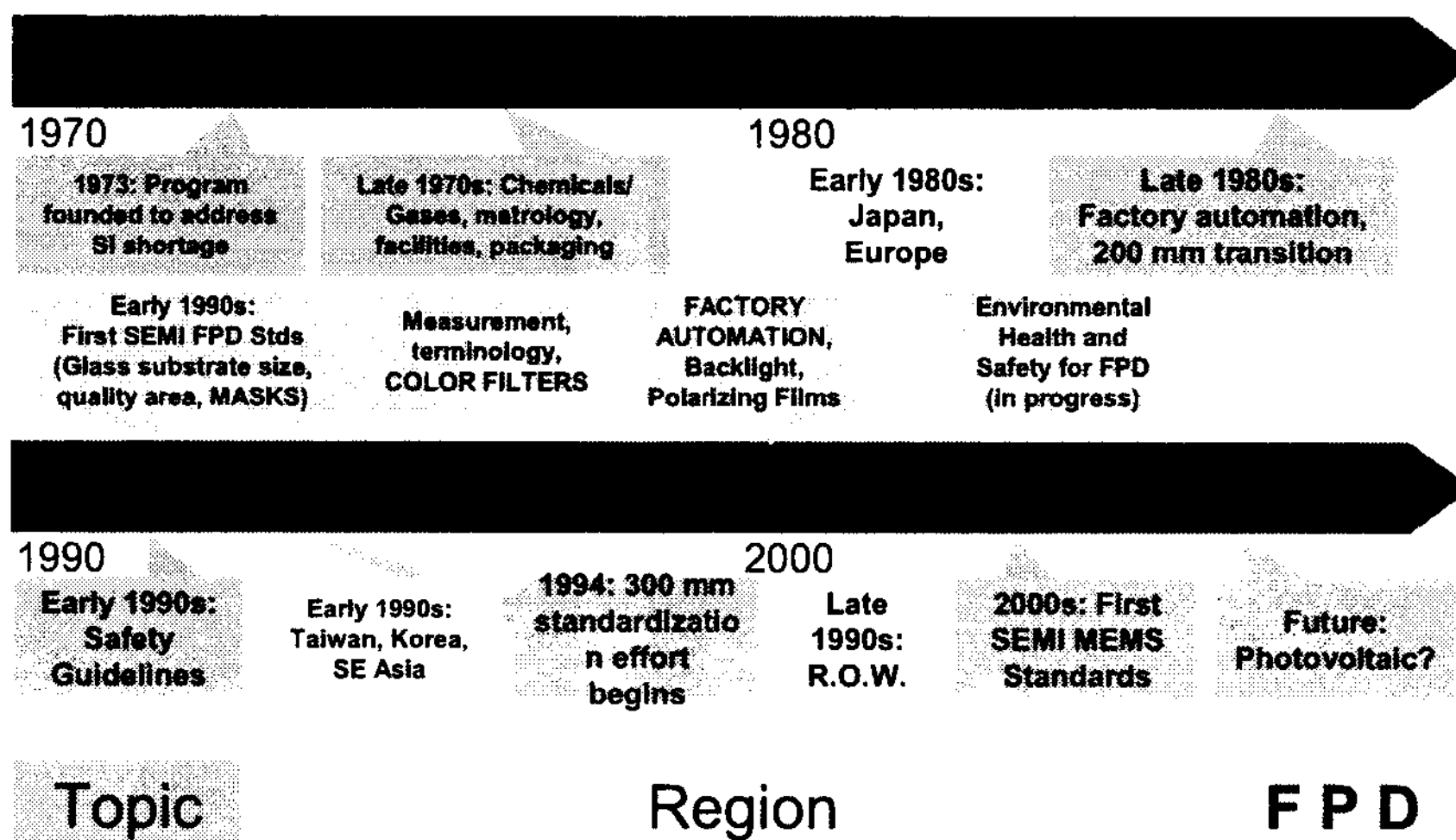
**SEMI delivers access to:**

- Information
- Global Markets
- People—from governments to customers

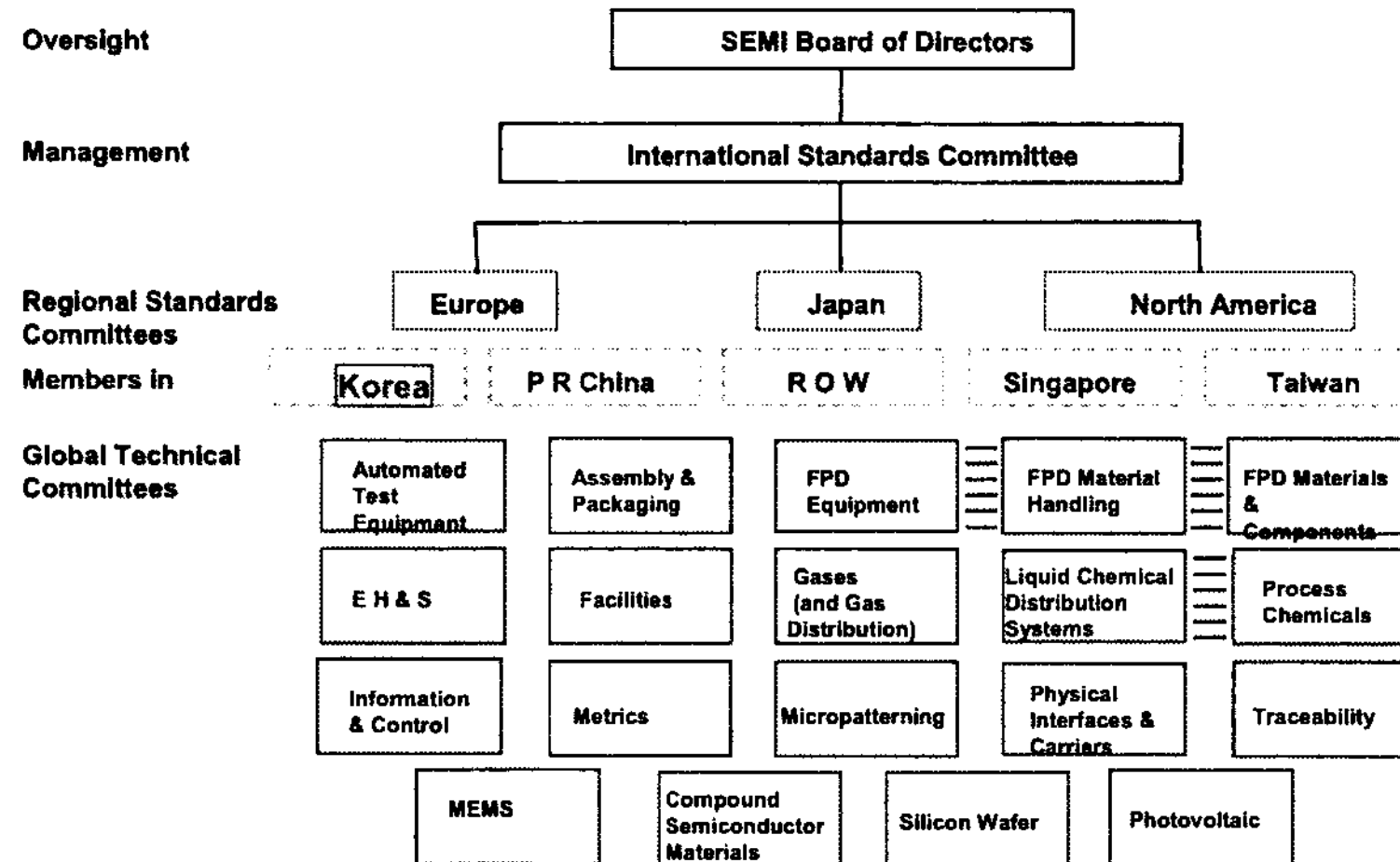
**SEMI products and services include:**

- Expositions: SEMICON®, FPD
- Market research & statistics
- **International Standards**
- Public policy/EHS
- Technical & Business Conferences
- Industry Publications:  
*Semiconductor Manufacturing Magazine*
- Website: [www.semi.org](http://www.semi.org)

# SEMI® International Standards Program History of SEMI Standards



## The SEMI® Standards Program Today



## A Few Facts

- > 1,500 Standards volunteers currently enrolled in the Program
- 19 global technical committees, > 200 task forces active
- Over 770 Standards and Safety Guidelines published
- About 200 new documents and revisions under development
- 22 SEMI staff in 6 regions and SEMI HQ
  - Ms. Hyun Cha/SEMI Korea has been supporting SEMI Standards activities for many years

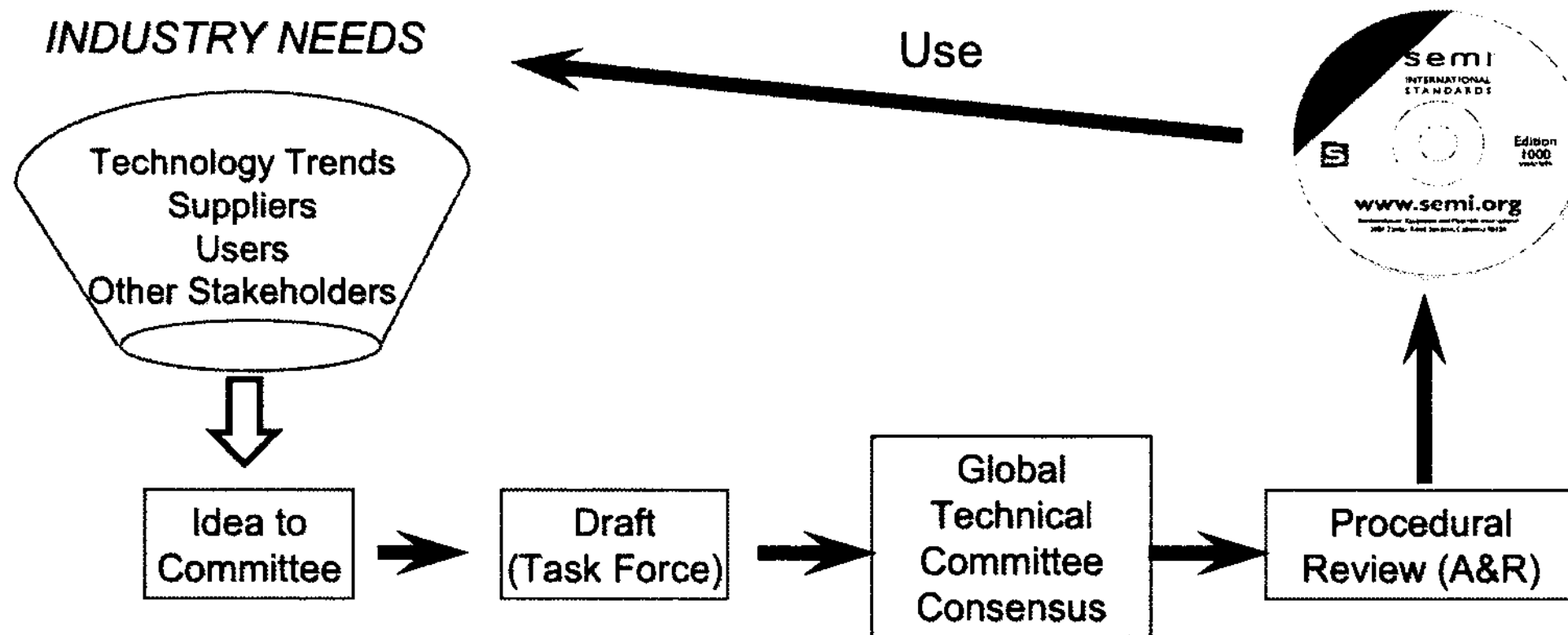
## A Few Facts (cont'd)

- Migration to semiconductor-*related* activities began in the early 90's, followed by several others
- Standards have been on the forefront of any major technology node or market shift
  - Terminology
  - Common product or equipment parameters
  - Software interfaces

## SEMI® International Standards Program – How is it organized?

- Program is guided by formal *Regulations* approved on an international basis
- Meetings for document development are conducted in North America, Japan, and Europe – as of 2001 also in Korea and Taiwan
- Moving to electronic communications and document development has reduced need for travel and increased flow of communication
- Worldwide distribution of document drafts and ballots enables global consensus
- Working relationships with regional consortia and standards developing organizations help provide additional technical expertise

## The SEMI® Standards Program Today: Standards Development Life Cycle



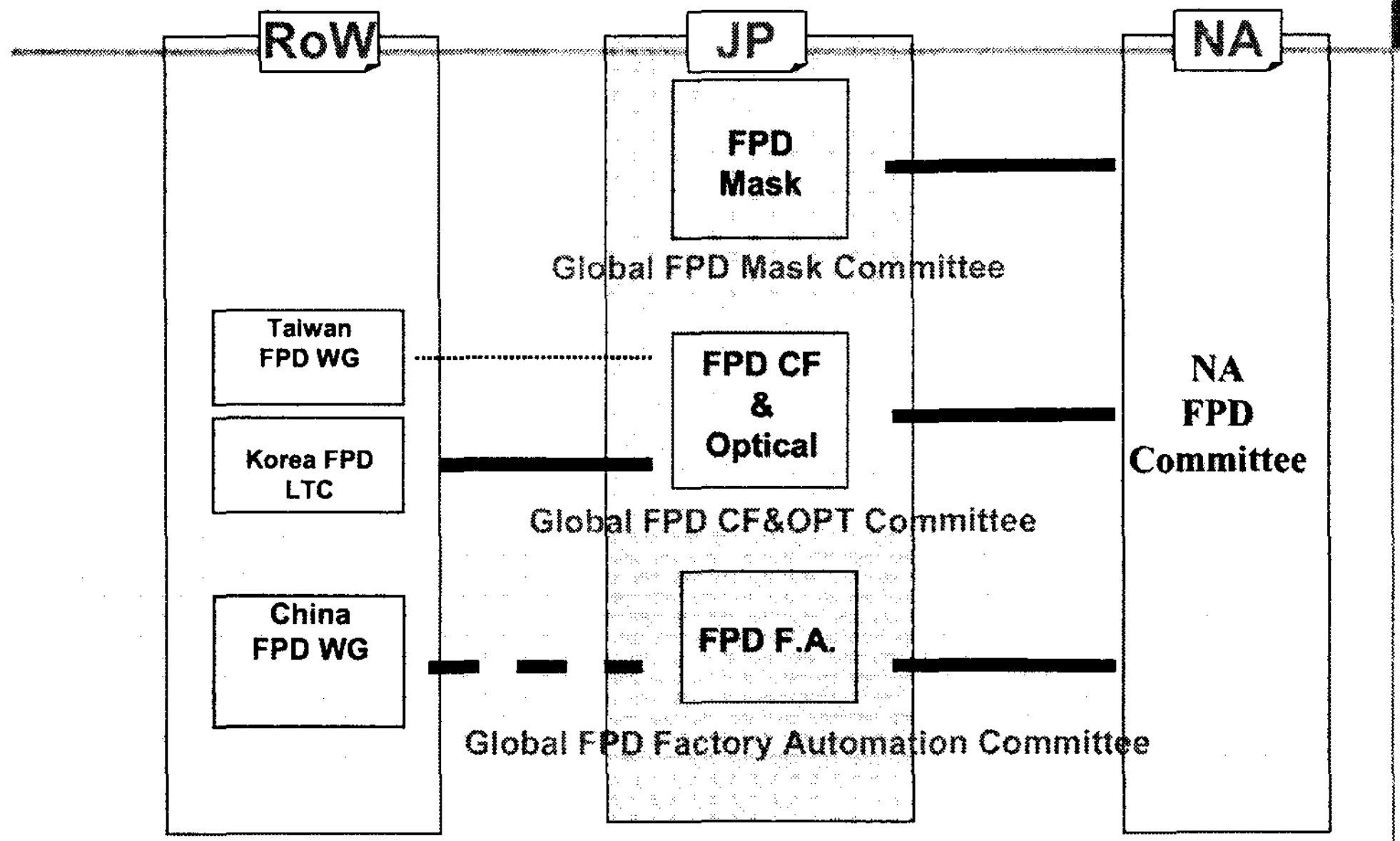
## Standards Volume List

1. Equipment Automation Hardware (E) - 109
2. Equipment Automation Software (E) - 105
3. Facility (F) - 107
4. Safety Guidelines (S) - 25
5. Flat Panel Display (D) - 44
6. Gases (C) - 41
7. Materials (M) - 80
8. MEMS (MS) - 4
9. Microlithography (P) - 50
10. Packaging (G) - 99
11. Process Chemicals (C) - 39
12. Silicon Materials & Process Control (MF) - 68
13. Traceability (T) - 27

**Total : 13 volumes 798 documents**

Version: March 2007

# Organization for SEMI FPD Standards Activities



# Korea FPD STD Committee History(1)

- ◇ Jun. 5, 2000 SEMI FPD Standards Workshop in Seoul
- ◇ Sep. 5, 2000 Kick-off of Korea FPD WG- 3 sub WGs
  - Equipment WG
  - Glass Substrate WG
  - Backend WG
- ◇ Sep. 2001 Realigned FPD WG
  - Equipment WG, Materials & Components WG
- ◇ Nov. 2001 Initiated 3 New Task Force Teams
  - Panel Defect Inspection
  - Backlight Measurement
  - Backlight Terminology

Started to develop 3 new FPD documents for backlight and panel defect (Mura) inspection



## Korea FPD STD Committee History(2)

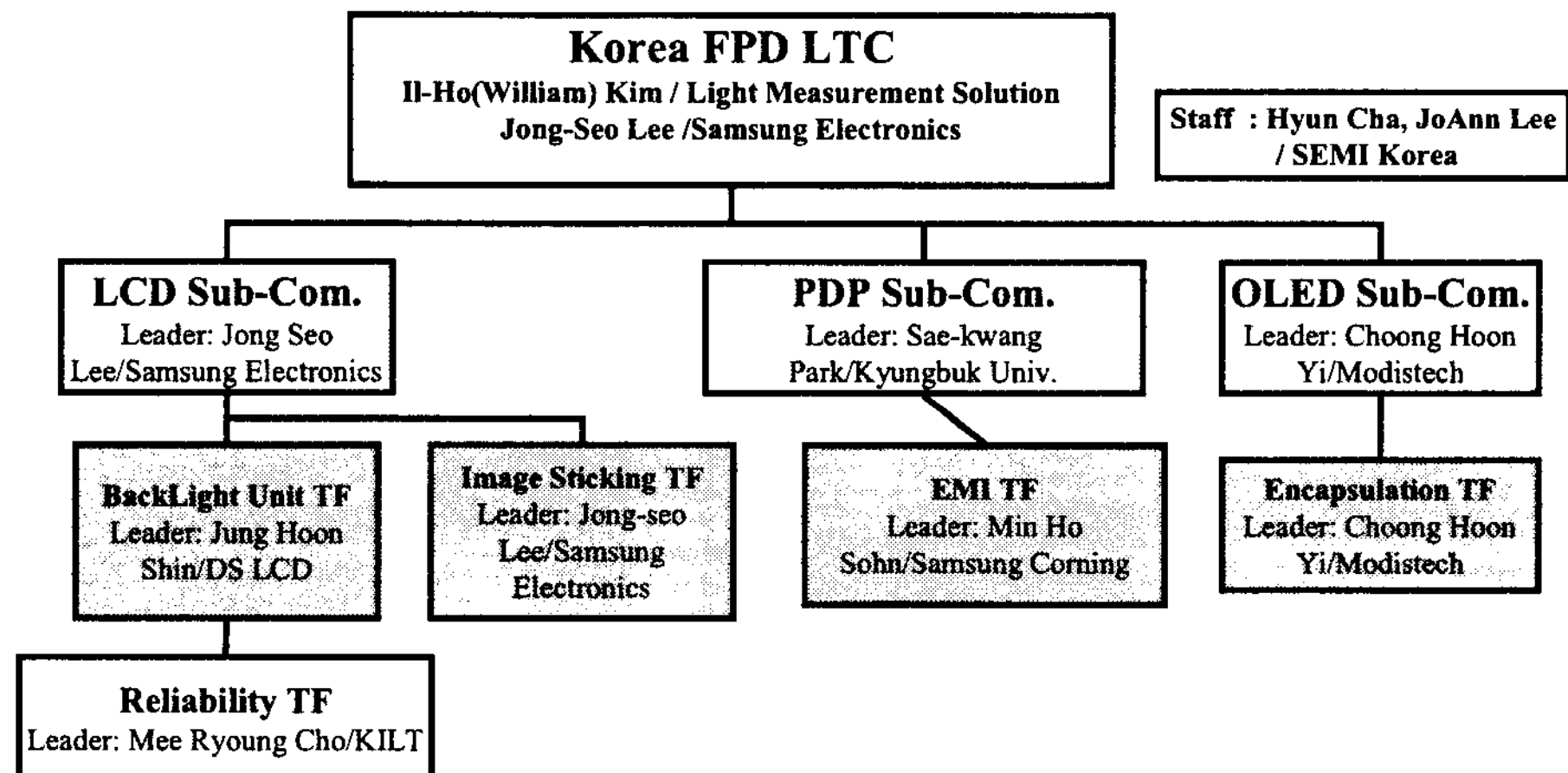
- ◇ Jun. 2003      **2 New Standards Documents in Publication**  
Backlight Terminology  
Backlight Measurement
- ◇ Oct. 2005      **Reliability TF Kick-off**  
Team Leader: Mee Ryoung Cho, KILT
- ◇ Nov. 2005      **D36-1101(#4183) Revision: Terminology of Backlight Units**  
Passed Yellow Ballot and Committee Review  
In Procedural Review
- ◇ Mar. 2006      **D36-1101(#4183) : published**
- ◇ Jul. 2006      **Promoted to Local Technical Committee**
- ◇ Oct. 2006      **New SNARF for BLU Reliability**
- ◇ Aug. 2007      **Formed Sub-committee for PDP and OLED**  
**Submitted 3 new SNARFs in each sub-committee**

## Developed Documents by Korea FPD STD Committee

- 1) SEMI D33-0703 (2003/05/27)  
New Standard: Measuring Method of Optical Characteristics for Backlight Unit
- 2) SEMI D36-1103 (2003/09/03)  
New Standard: Terminology for LCD Backlight Unit
- 3) SEMI D41-0305 (2005/01/28)  
New Standard: Measurement Method of SEMI Mura in FPD Image Quality Inspection



## Organization Chart



## Current Activities

- 3<sup>rd</sup> Korea FPD STD Technical Committee Meeting
  - 1) Date: Aug. 30, 2007 during IMID 2007
  - 2) Location: Hotel Inter-Burgo
  - 3) Attendance: 20 from panel makers, suppliers and academia
  - 4) Meeting Summary: 3 SNARFs have been passed through the meeting
    - LCD: Image Sticking
    - PDP: EMI emission standardization of PDP panel
    - OLED: Measurement of encapsulation properties