

A world map with a light blue background and dark blue landmasses, centered behind the text.

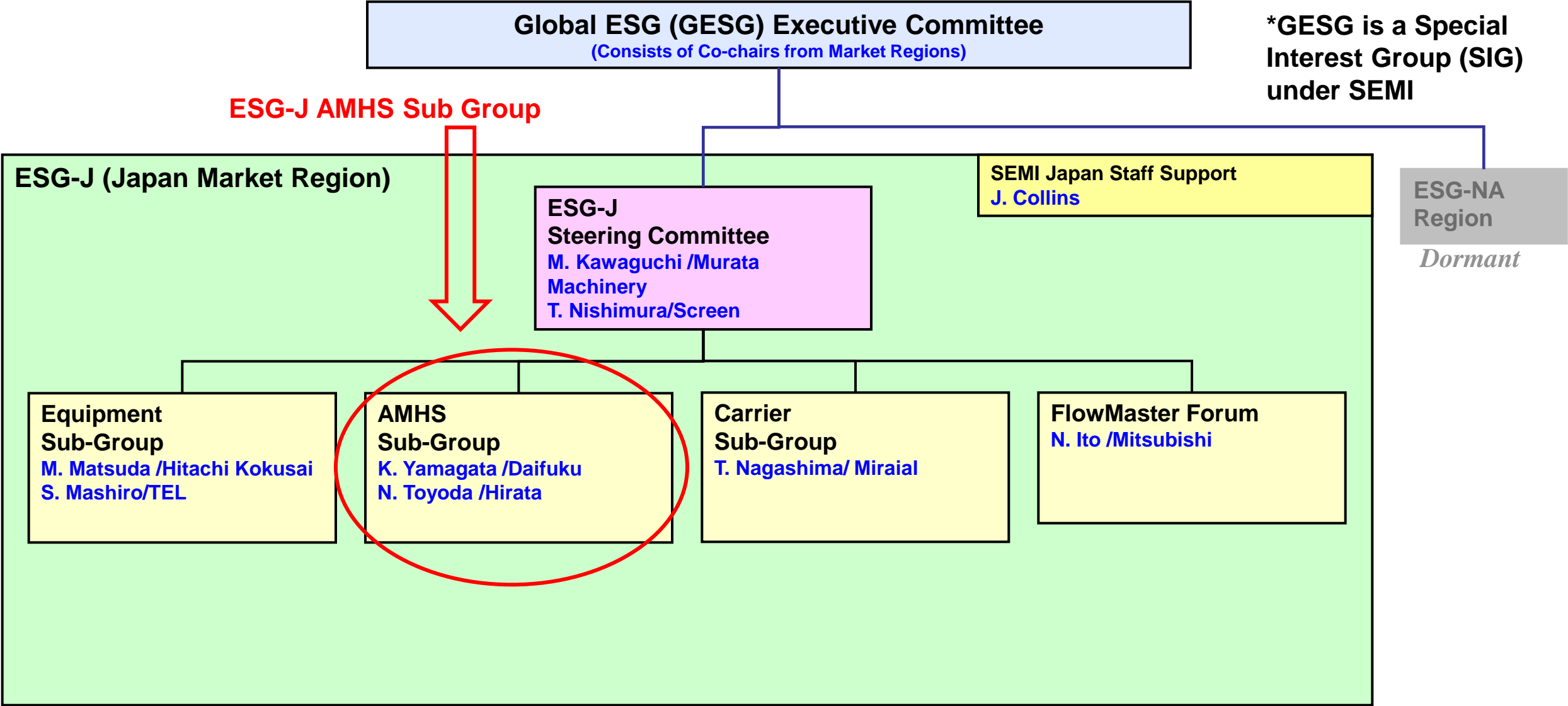
# Consideration about the automation of TEM WF

R 0.4b

2018/3/22

ESG-J AMHS Sub-Group

# ESG-J Organization



# ESG-J AMHS Sub-Group Members

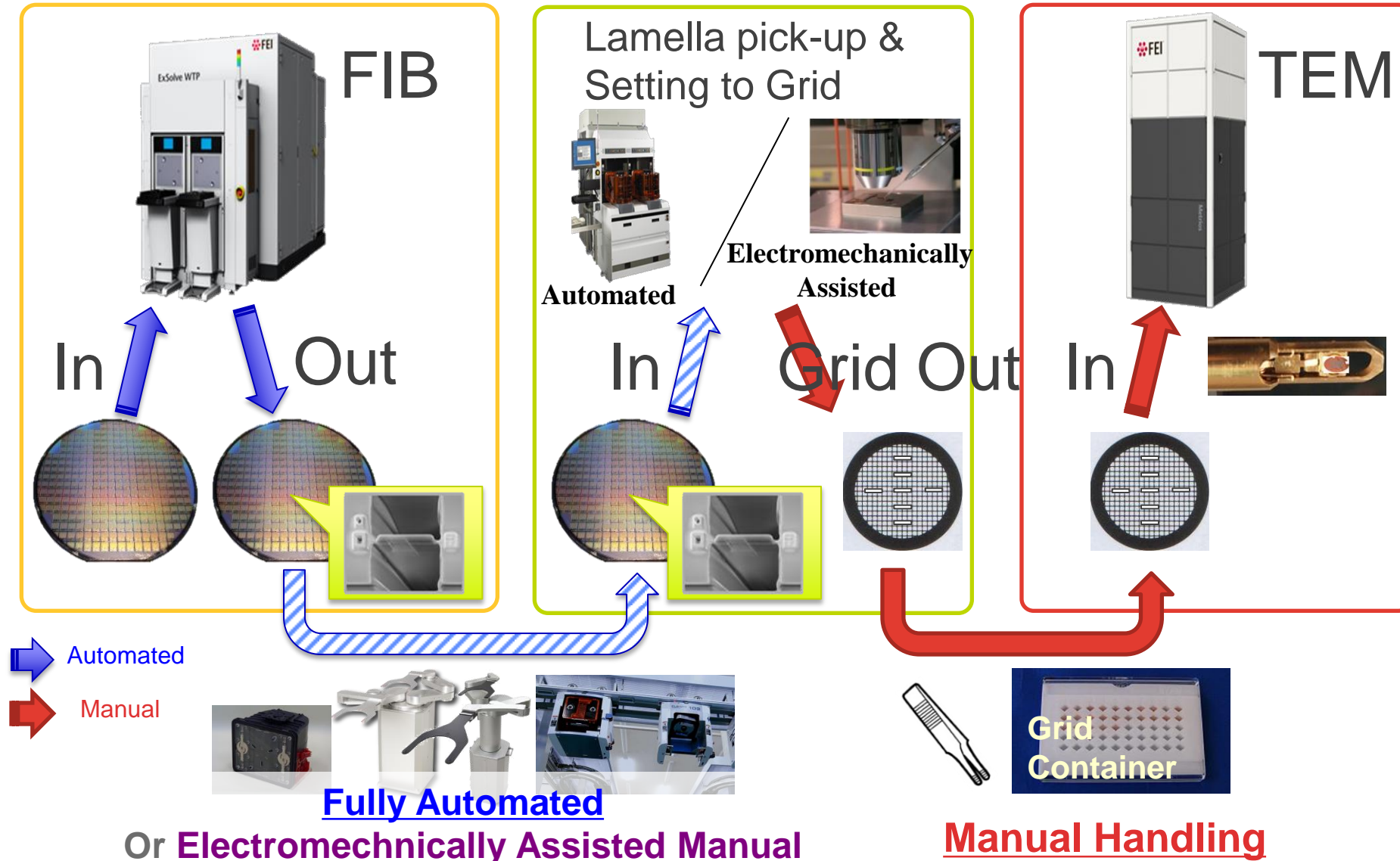
As of Mar. 22, 2018

Company	Vote	Role	Note
Murata Machinery, Ltd.	Y	Co-chair	
DAIFUKU Co., Ltd.	Y	Co-chair	
Hirata Corporation	Y	Co-chair	
SINFONIA TECHNOLOGY CO., LTD.	Y		
TDK Corporation	Y		
Daihen Corporation	Y		
Rorze Corporation	Y		
Tokyo Electron, Ltd	N		Non-V member
Hitachi Kokusai	N		Non-V member
Hitachi High-Technologies Corp.	N		Non-V member
Yamamoto Planning	N		Advisory member (non-V)
Acteon NEXT	N		Advisory member (non-V)
Shin-Etsu Polymer Co., Ltd.	N		Non-V member
Miraial Co., Ltd.	N		Non-V member
Dainichi Shoji K.K.	N		Non-V member

# Contents

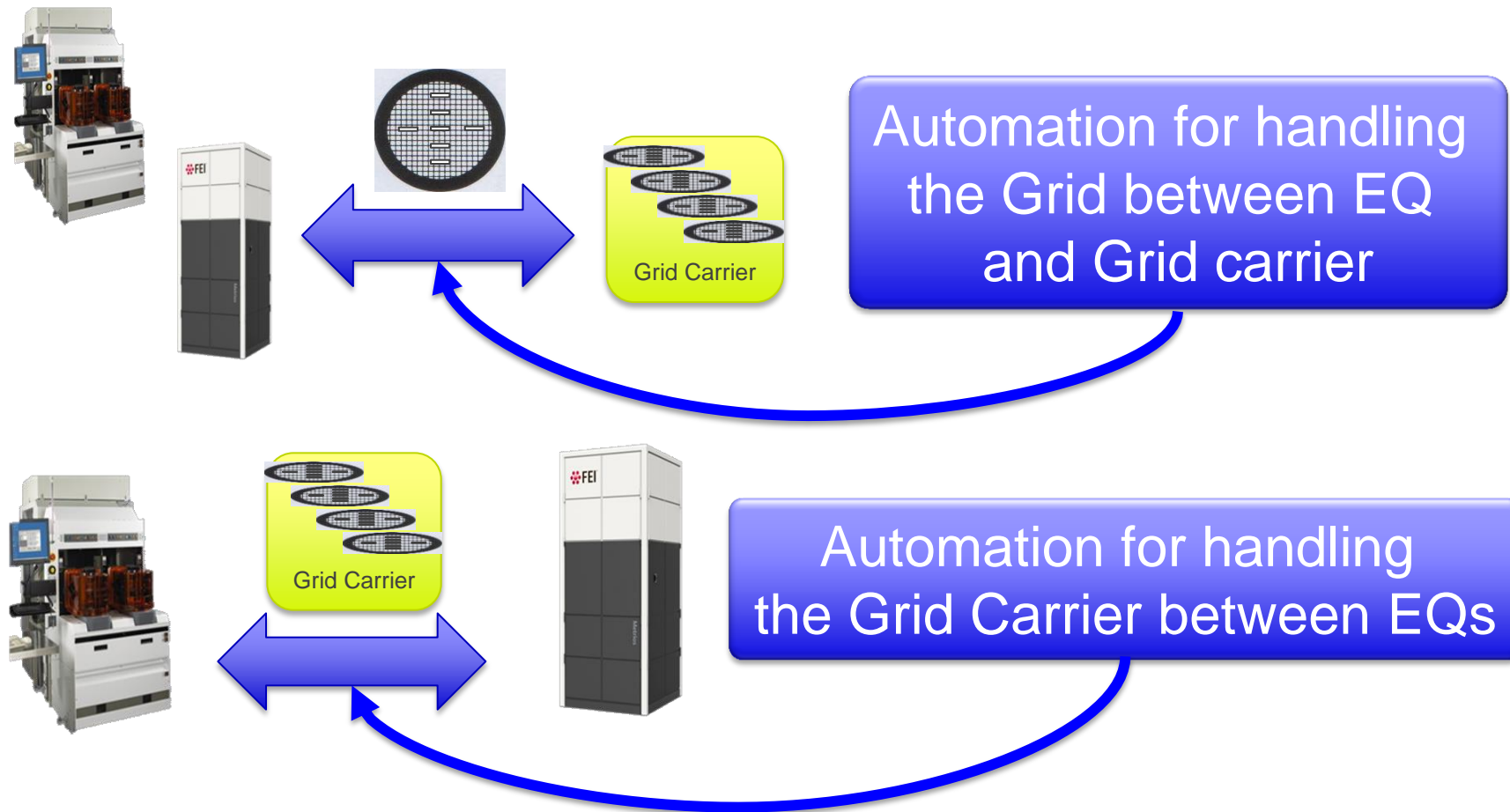
- ❖ Current situation of TEM WF
- ❖ Rough image of Automation
- ❖ Q1: What is a “Purpose” of automation?
- ❖ Q2: What is the condition for automation?

# Current situation of TEM WF



**Question: Where automation is required?**

# Rough image of Automation



The following information is required to start feasibility study.

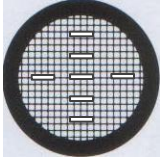
- ◆ What is a “Purpose” of automation?
- ◆ What is the condition for automation?

**End User’s guidance is crucial for developing useful Standards**

# Q1: What is a “Purpose” of automation?

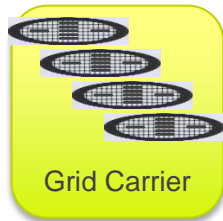
- ◆ Is the purpose of automation only not to lose the grid?
- ◆ Do you need automation like the image of previous page?
  - Grid management? (Storage, ID, etc.)
  - Throughput?
  - Environment control? (N2 purge inside of grid carrier etc.)
- ◆ What is the scope of automation  
you requests automation maker to design?

# Q2: What is the condition for automation?



## Grid

- Variation
- Dimension
- Material
- Contactable area



## Grid Carrier

- Shape (Tray, Box like FOUP...)
- Dimension
- Weight



## Locations

- Handling/Traveling distance (EQ - EQ, Grid Carrier – TEM stage etc.)
- Throughput (Grid per hour?)
- Detail dimension of TEM stage that grid is placed
- Other requirement