

# IEC TC65 Plenary Tokyo Conference Report



Japan Electric Manufacturing Instruments Manufacturer's Association(JEMIMA)  
IEC TC65 Plenary Tokyo Conference 2008 Preparatory Committee  
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(IEC TC65 Domestic Advisory Committee, Committee Member)

## 1. Introduction

The Plenary Conference(general meeting) and its related working group committee meeting(WG) of IEC TC65(Technical committee: 65 Industrial Process Measurement & Control System) were held from 12<sup>th</sup> May, 2008 to 23<sup>rd</sup> May, 2008 at Keio Plaza Hotel in Shinjuku, Tokyo.

## 2. Outline of IEC

TC65 is one of the Technical Committee(TC) of International Electrotechnical Commission(IEC) which is an international standardization organization of electric and electronic fields. IEC TC 65 is in charge of the international standardization of industrial process measurement, control and automation of continuous process and batch process.

IEC TC65 Plenary Conference is a general meeting which is held in every 18 months taking turns in each country. During the plenary conference, the technical committee(TC), working group(WG) which carries out the business, maintenance team(MT) and the project team(PT) etc. are get together to confirm and solve the total direction, the progress and the task.

25 official participating members(P member) including Germany, the chairing country, and France, the secretary country and 15 observation members(O member) are participating TC65.

TC65 has issued 183 international standard and the important standard such as 4-20mA standard signal, EMC standard, functional safety stand, PLC standard and fieldbus standard which are essential to the industrial process. Especially the international harmony concerning the safety and the security and the interoperability to realize the multivendor environment are much more important for the healthy market competition and the permanent development of industry.

## 3. Outline of IEC TC65 Plenary Tokyo Conference

“IEC TC65 Plenary Conference Tokyo 2008” was held in Japan first time in the memorable year of TC65 40<sup>th</sup> anniversary since IEC TC65 was inaugurated in 1968. More than 150 specialists who represented each country participated 15 conferences(plenary conference and WG conference) from 15 countries. Especially 73 specialists participated TC65 Plenary Conference and this was the biggest plenary conference since the establishment.

A lots of Chinese and Korean technical people participated in this conference and it was one of the most characteristic things in this conference. It is an important thing to develop the close cooperation between Asian countries.



Participants of TC65 Plenary Conference (23<sup>rd</sup> May)

## 4. Timetable of Conference

As shown in the timetable shown below, mainly the working group conference was held in the first week. The second week the SC conference and TC65 conference were held together with the working group(WG) conference. Also 20<sup>th</sup>(Tuesday) the welcome banquet was held hosted by JEMIMA and on 21<sup>st</sup>(Wednesday) the Industrial Automation Forum(workshop) was carried out. On the other hand we planned dinner by each working group to deepen the mutual understanding among each working group members and the participants enjoyed the conversation apart from the business.

**Timetable for IEC TC65 Meetings TOKYO 2008** (AM: 8:30-11:45, PM:13:15-16:30)

**1:Akebono Room 2:Aozora Room 3:Asahi Room 4:Mitake Room**

**JEMIMA**  
Japan Electric Measuring Instruments  
Manufacturer's Association

List of Meetings	12(Mon.)		13(Tue.)		14(Wed.)		15(Thu.)		16(Fri.)		17(Sat.)		18(Sun.)		19(Mon.)		20(Tue.)		21(Wed.)		22(Thu.)		23(Fri.)	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
TC65AG																1								
SC65A																1								
SC65B																	1							
SC65C																				1				
SC65E																					1			
TC65																						1	1	
SC65C/JWG10	2	2	2	2	2	2	2	2	2	2														
SC65E/JWG5					1	1	1	1	1	1														
SC65B/WG5																								
SC65E/WG2					3	3	3	3	3	3										2	2	2	2	
SC65B/WG6										4	4	4				3	3							
SC65C/MT9 & WG11															2									
TC65/WG10																			2					
SC65B/WG14																								
SC65E/WG7																								
Industrial Automation Forum (Workshop)																								
Industrial Automation Forum (Workshop) Buffet																								
TC65 Welcome Banquet																								
WG Dinner																								
Secretariats & Business Room																								

Industrial Automation Forum (Workshop)

Industrial Automation Forum (Workshop) Buffet

TC65 Welcome Banquet

WG Dinner

Secretariats & Business Room

Chigi Room (4F) 9:00-16:00

Nishiki Room (4F) 16:30-18:30

Chigi Room (4F) 18:00-20:00

SC65C/MT9 & WG11 / TC65/WG10 / SC65B/WG14 / SC65E/WG7 / Taskul Room (42F) 18:00-20:00

SC65B/WG5 / Taskul Room (42F) 18:00-20:00

SC65E/JWG5 / Taskul Room (42F) 18:00-20:00

SC65B/WG6 / Mitake Room (42F) 18:00-20:00

Chigi Room (4F) 18:00-20:00

SC65E/WG2 / Cornet Room (43F) 18:30-20:30

HIKARI Room (47F)

Timetable for IEC TC 65 Meetings Tokyo 2008 (Table: List of Meeting)

## 5. The Number of Participants

156 specialists participated the TC65 and SC65 plenary meetings and WG meetings from 15 countries. The meeting was held in Japan so it was natural that the largest numbers of Japanese participants were attended. 22 specialists participated from China, 19 specialists from the United States of America, and 15 specialists from Germany. The details of the participants in each conference were as shown in the table below.

List of Meetings	No. of Participants	Canada	China	Denmark	Finland	France	Germany	Italy	Japan	Korea	Russia	Sweden	Switzerland	Netherlands	UK	USA
		<b>156</b>	<b>4</b>	<b>22</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>15</b>	<b>2</b>	<b>62</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>6</b>
1 TC65AG	31	2	0	1	2	2	2	1	6	4	0	0	1	0	4	6
2 SC65A	58	3	9	1	2	3	6	0	13	5	0	1	1	2	4	8
3 SC65B	57	2	13	1	2	3	7	1	10	5	0	1	1	2	3	6
4 SC65C	58	3	11	1	2	4	6	1	10	7	0	1	1	2	3	6
5 SC65E	53	3	13	1	2	4	7	1	8	0	0	1	1	2	3	7
6 TC65	75	4	17	1	2	4	7	2	13	7	0	1	2	2	4	9
7 SC65C/JWG10	12	0	4	1	0	0	1	1	4	0	0	0	0	0	0	1
8 SC65E/JWG5	23	0	5	0	0	2	1	0	10	0	0	0	0	1	0	4
9 SC65B/WG5	15	0	3	0	0	0	3	0	5	0	2	0	0	0	0	2
10 SC65E/WG2	9	1	1	0	0	0	4	0	2	0	0	0	1	0	0	0
11 SC65B/WG6	10	0	1	0	0	1	1	1	5	0	0	0	0	0	0	1
12 SC65C/MT9 & WG11	25	1	4	0	0	2	2	1	8	3	0	0	0	0	1	3
13 TC65/WG10	14	2	2	0	0	1	2	1	4	0	0	0	0	0	1	1
14 SC65B/WG14	11	0	5	0	0	0	0	0	3	0	0	0	0	0	1	2
15 SC65E/WG7	8	0	0	0	0	0	2	1	3	0	0	0	0	0	1	1
16 Workshop	141	2	1	1	2	4	8	1	101	7	0	0	0	1	4	9

Number of participants (by each meeting)

## 6. Activities of four Sub-Committee which consists of TC65

### 1) SC65A(System Aspects)

SC65A deals with Electro Magnetic Compatibility (EMC) and whole system related items such as function safety etc. Especially functional safety standard is applied to other TC areas which is called horizontal standard. TC65 is proceeding to cooperate with related TCs in IEC and ISO as a leading TC. Also we have already started the activities on EMC considering the function safety.

### 2) SC65B(Devices and Process Analysis)

SC65B deals with the standardization of hardware and software of industrial instruments which covers the relatively simple instruments such as thermometers and flow meters and also the complicated instruments such as PLC and analyzers. SC65B is dealing the compatibility of these equipments, performance evaluation and the function definition etc. TC65 puts much emphasis on functional safety and the safe PLC project and the evaluation guide line project of process control system were started. It is an important topic for Japan that Professor Goto of Tamagawa University was appointed as a convener of WG5 which deals with thermometer related fields. He is the first Japanese convener in TC65 history.

### 3) SC65C(Industrial Networks)

SC65C deals with the industrial networks such as fieldbus. Last year the standard of industrial real time Ethernet including the proposal from Japan were published as IS. This time the schedule of the revision of standard was decided and also SC65C reported the progress and discussed the safety standard of industrial networks, the maintenance cycle of existing wired fieldbuse standards.

Regarding wireless networks which attract people's attention recently, SC65C has decided to set up the ad hoc group which investigate the direction and expected roles of IEC TC65. This enables to accelerate the movement to set up the internationally unified standard and we would like to continue to carry out the proposal activities representing Japan and this activity will contribute to set up the international standard of industrial networks which are the key factors both measurement and control systems.

### 4) SE65E(Devices and Integration in Enterprise Systems)

SE65E deals with to record the function and the characteristic electronically and also deals with the systems and tools to support engineering including the diagnosis and the maintenance. SC65E defines the international standard to integrate the Enterprise-Control System and also carries out to set up the international standard of Field Device Tool(FDT) for the diagnosis of industrial equipment. Also to set up the international standard such as OPC-UA to realize the communication between the equipments which do not rely on the platform. At the same time SC65E makes an effort to standardize the measures to describe the function and characteristic of various kinds of industrial equipments and also carries out the standardization how to deal it electronically. This system enables to accelerate the efficiency to adopt the electronic system to record to cope with the related electronic data covering the whole life cycle of automation system. Many industries have strong interests on this activity because the electronic and automation system have been developed partially but this technology integrated various kinds of items within the plant including the business management.

## 7. Industrial Automation Forum(IA Forum)

Industrial Automation Forum(IA Forum) was held on 21<sup>st</sup> May with a purpose to exchange the technical information such as the latest technology trend related the TC65 standardization activity between Japanese engineers and the professionals from the participated countries and the scope of standardization and more than 150 people participated.

IA forum was carried out consisting of two parts that is the “Japanese Industrial Forum” in the morning and the “IEC Automation Forum” in the afternoon. The topics such as the intrinsic safety standard, wireless Radio Wave standard, cyber security, automation of automobile were presented by the professionals from each industry, government and university with a purpose to introduce the Japanese participation to the international standardization.

In the afternoon session IEC TC65 technical professionals reported the electro magnetic compatibility, function safety, system integration, OPC-UA, EDD/FDT, electronic database of function and characteristic, international standard activities in IEC TC65 regarding wireless etc. and the latest condition of technology.



IA Forum in Keio Plaza Hotel (21<sup>st</sup> May)

Time	Subject	Presenter
9:00	Welcome and Introduction	Roland Heidel
9:10	<i>JAPANESE INDUSTRY FORUM</i>	
9:10	International Standardization Activities in JAPAN	Akira Izumi (Ministry of Economy, Trade and Industry)
9:40	Globalization of Japanese Standards for Explosion Protection	Kouichi Masuki (Explosion Protection Committee of JEMIMA)
10:10	International Industrial Wireless Standardization and Radio Regulatory Ordinance in Japan	Shusaku Shimada (Governmental Council of MIC member, Japanese Frequency Regulatory Chair, Voting Member of IEEE802.11 and IEEE802.15)
10:40	<i>BREAK</i>	
11:00	Improving Plant Data Sharing and Cyber Security on Networked Monitoring and Control Systems for Utility Facilities	Masatoshi Takano (Technical Committee on Instrument and Control Networks of SICE, Toyota Motor Corporation)
11:30	A Future of Cars Driven by Electronics	Prof. Seichi Shin (Univ. of Electro-Communications - Tokyo)
12:00	<i>LUNCH</i>	
13:00	<i>IEC AUTOMATION FORUM</i>	
13:00	Device Integration (EDDL, FDT and FD)	Christian Diedrich (65E WG4 & WG7)
13:25	OPC-UA	Hans Peter Otto (65E WG8)
13:50	Enterprise Control	Dennis Brandl (65E JWG5)
14:15	Product Data	Peter Zgorzelski (65E WG2)
14:40	<i>BREAK</i>	
14:50	Wireless	Martin Zielinski (ISA SP100 & FF)
15:15	Industrial Network Installation	Francesco Russo (65C JWG10)
15:40	EMC	Bernd Jaekel (65A WG4)
16:05	Functional Safety	Hartmut von Krosigk
16:30	End	
	<i>Social gathering Buffet</i>	

Time Table: Subject, Presenter List (IA Forum Program)

## 8. Welcome Banquet

In the evening of 20<sup>th</sup> May the welcome banquet was held to welcome the IEC members from overseas and IEC international members, government officials from the Ministry of Economy, Trade and Industry, top management of electric companies and Japanese technical people were exchanged the information each other actively.(Participants: About 200 people)

The secretariat considered the following points.

- (1) Promote mutual friendship among TC65 committee members
- (2) Adopt the decent and dignified style but not too rigid
- (3) Introduce a part of the Japanese culture and give a enjoyable time

During the welcome banquet the secretariat planned the cultural exchange through the Japanese tea ceremony and the Japanese traditional attraction etc.



## 9. Summary

The committee decided to hold the next plenary meeting at Cape Town in South Africa and closed the two-week conferences safely. Finally TC65 chairman expressed the sincere thanks to the related organization and the staff who contributed to hold the plenary meeting in Tokyo. On behalf of IEC TC65 Domestic Advisory Committee I would like to express our sincere gratitude to the Ministry of Economy, Trade and Industry extended the support and understanding for the opening of the conference, the related organization, the related corporation and all the staff who contributed to prepare the opening of this conference and at the same time I strongly hope that this plenary Tokyo meetings enables to strengthen the Japanese influence to IEC TC65 and contribute to the development of Japan and also to the industry all over the world.

As a secretary of preparatory committee I am very pleased to close IEC TC65 Plenary Conference in Tokyo successfully which we have been preparing about 22 months.

Making good use of my experience I would like to promote the further activities for the development of Japanese industry. Please support and cooperate us from now on.