Connectivity Industry Consortium (CIC)

The Universal Standard for Point of Care Connectivity

Fourth CIC Technical Meeting Summary

January 8, 2001. Orlando, Florida

This memo summarizes the essential details of the Point of Care Connectivity Industry Consortium's (CIC) Fourth Technical Meeting, held in conjunction with the HL7 Laboratory Automated and Point-of-Care Testing Special Interest Group (LAPOCTSIG) on January 8, 2001, in Orlando, Florida. Forty individuals from eighteen CIC member organizations as well as five members of the HL7 LAPOCTISIG attended this joint meeting. The participants reviewed the CIC's technical proposals and the plans to transition the Consortium's proposals and membership to chartered standards development organizations. All of the meeting's objectives were met, and the Consortium remains on schedule to complete the technical proposals in February 2001.

1. EXECUTIVE SUMMARY

The Connectivity Industry Consortium held its fourth major technical meeting on January 8 2001, in Orlando, Florida. This technical meeting was held as a joint session with the HL7 Laboratory, Automated and Point-of-Care Testing Special Interest Group (LAPOCTSIG). Forty individuals from eighteen CIC member organizations, as well as five HL7 LAPOCTSIG members attended this meeting.

The technical objectives of this meeting were to prepare the EDI and Device Lower-Layer proposals for ballot, and to continue development work on the Device Upper-Layer proposal. In addition, the attendees reviewed the CIC's Sunset plan, and discussed the process and timeline for balloting the technical proposals.

Since the last technical meeting (July 27, 2000), the technical teams have completed development of two of the three technical proposals that will comprise the CIC work product. The Consortium will focus all its technical efforts on the remaining proposal, the Device Upper-Layer communication specification. The Consortium plans to have this proposal completed by the end of February.

The Consortium is on schedule to have a balloted and approved proposal by the spring of 2001. The Consortium has negotiated relationships with several chartered standards development organizations (NCCLS, HL7, and IEEE) that will accept the CIC proposals for approval, publication and future enhancement.

The NCCLS (www.nccls.org) has agreed to establish a Point-of-Care Committee within the Area Committee on Automation to review, publish and extend the complete CIC proposal set. Two sections of this document will be developed by other standards development organizations. HL7's LAPOCTSIG (www.hl7.org) will develop and extend the CIC"s EDI proposal, and the IEEE 1073 committee (www.ieee.org) will acquire and enhance the Device Lower-Layer proposal.

2. PARTICIPANTS

Attendance at the Orlando joint CIC-LAPOCTSIG meeting totaled 40 individuals representing 18 organizations from 11 states and 5 countries. The participants and their organizations are summarized below.

	PARTICIPANTS	ORGANIZATIONS
IS/IT companies	15	6
POC/IVD companies	21	8
POC customers/users	2	2
Others	2	2
Total	**40**	**18**

3. TECHNICAL PROGRESS

3.1 Summary

The Consortium achieved the technical milestones planned for the Orlando meeting.

The meeting participants reviewed the CIC EDI proposal with the LAPOCTSIG members. Several harmonization issues were identified and addressed. The CIC EDI proposal is on schedule to transition to the LAPOCTSIG over the next few months.

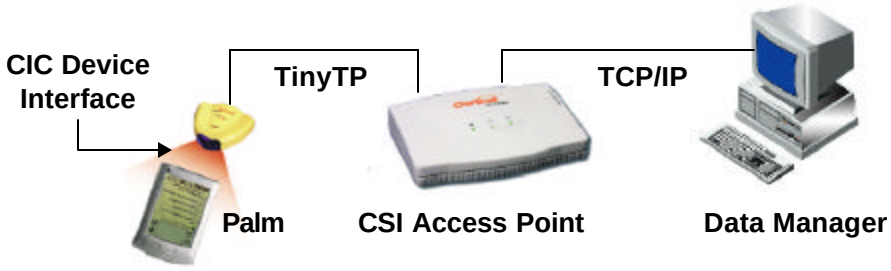
Attendees also reviewed the CIC Access Point proposal, finding no need for additional development or editing. The following day, January 9, this proposal was reviewed with the IEEE 1073 committee. This committee formally approved a Project Authorization Request to enable them to accept the CIC proposal for publication as an IEEE standard by spring of 2001.

The attendees' final technical task was to continue work on the Bi-directional (Device Interface Upper-Layer) proposal. The participants addressed three principle issues: Error Handling, Device Status, and Device Events. The members made excellent progress toward resolving these three issues. The Device Upper-Layer technical team will take this input and fold it into their proposal document.

In addition to these technical goals, the attendees reviewed the CIC's Sunset strategy, balloting process and timeline. The Consortium is on schedule to have a balloted and approved proposal by the spring of 2001.

3.2 Prototype

David Ma of Clarinet Systems (www.clarinetsys.com) demonstrated a prototype CIC-compatible IR access point.



In this demonstration, an application running on a Palm device sent data via the CIC Device Interface to an Access Point. The Access Point, configured according to the CIC Access Point specification, routed the traffic over TCP/IP to a Data Manager service running on a personal computer. To demonstrate the bi-directional nature of the interface, the Data Manager resent the data from the handheld back to the Palm device.

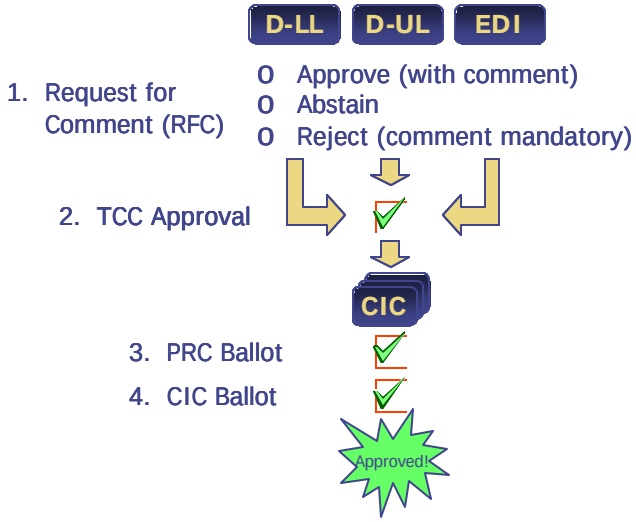
4. REMAINING TIMELINE, BALLOTING

The January 8 2001 Orlando meeting represents the fourth and last planned CIC technical meeting. Since the last technical meeting (July 27 2000), the technical teams completed

development of two of the three technical proposals that comprise the CIC work product. Over the remaining weeks of its lifetime, the Consortium will focus all its technical efforts on the remaining proposal, the Device Upper-Layer communication specification. The Consortium plans to have this proposal completed by the end of February.

The Consortium is on schedule to have a balloted and approved proposal by the spring of 2001. The Consortium has negotiated relationships with several chartered standards development organizations (NCCLS, HL7, and IEEE) that will accept the CIC proposals for approval, publication and future enhancement.

A detailed description of the Consortium's balloting process was presented at the meeting. The following figure summarizes this process.

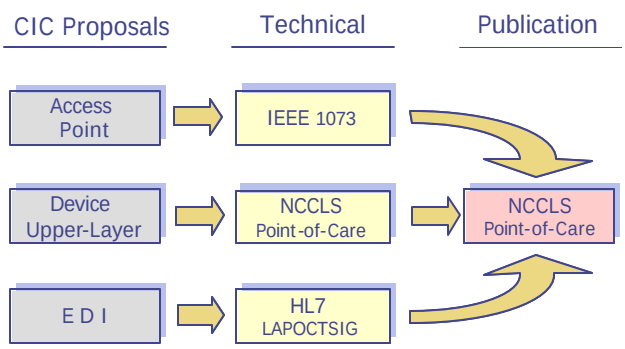


Prior to commencement of the formal balloting process, the three technical proposals will be distributed to the CIC membership for a comment period. Members will have three options for response: (1) Approve, with or without comments, (2) Reject with comment, (3) Abstain. If the individual proposals pass this comment period, the Technical Coordinating Committee (TCC) will compile the proposals into a single document, which will then be formally balloted by the Consortium.

The Consortium's bylaws govern this balloting process. At each stage, 66% of the votes cast, with at least 60% of the membership participating, are required for approval. First, the Provider Review Committee (PRC) will ballot the CIC proposal. If the PRC passes the proposal, the document will be sent to the entire CIC membership for approval. Once the document passes this membership ballot, it is formally approved as the CIC point-of-care connectivity proposal, and the technical teams' work is complete.

5. SUNSET PLAN

The CIC has formalized relationships with the NCCLS, HL7, and IEEE that will allow these organizations to accept, cooperatively publish and extend the CIC connectivity proposals. The following figure illustrates the expected evolution of ownership responsibilities for the CIC proposals.



According to this plan, the NCCLS will publish the complete point-of-care connectivity standard. This document will consist of several chapters, two of which will be produced and edited by the HL7 LAPOCTSIG and the IEEE 1073 committee.

This transition scheme presents several opportunities for CIC members to continue to contribute to the evolution of point-of-care connectivity standards after the sunset of the CIC organization. Members may join any of the following chartered standards development organizations:

- NCCLS Point-of-Care subcommittee,
- IEEE 1073 committee,
- HL7 LAPOCTSIG

An initial survey of the meeting participants showed very strong interest in continuing participation in and support of these efforts. The following table summarizes this interest.

ORGANIZATION	INDIVIDUALS
HL7 LAPOCTSIG	16
IEEE 1073 Committee	10
NCCLS Point-of-Care Subcommittee	12

6. JANUARY 8TH MEETING ATTENDEES

6.1 Attendance Summary

Total Attendance:	**40 individuals,**
	18 organizations
Geographic Distribution:	**11 states,**
	5 countries

	PARTICIPANTS	ORGANIZATIONS
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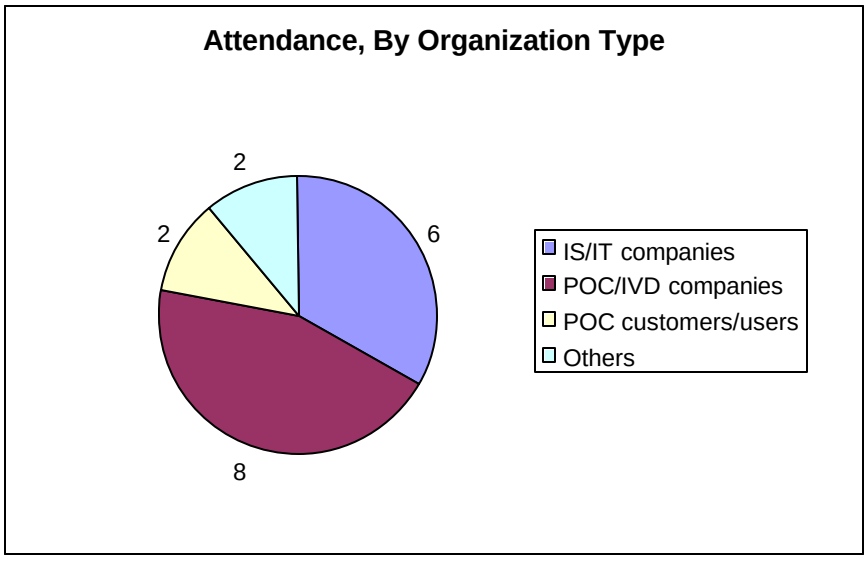

6.2 Attendees, By Organization

40 individuals from 18 organizations attended the San Francisco CIC Technical Meeting.

AGILENT TECHNOLOGIES				
Higgins	Mike	Device	Palo Alto	CA
Perry	Jeffrey	V.P., Chief Technical Officer	Palo Alto	CA
ARUP LABORATORIES				
Hawker	*Charles*	*HL7 LAPOCTSIG*	*Salt Lake City*	*UT*
BAYER DIAGNOSTICS				
Prego	Teresa	Requirements Liaison	Medfield	MA
CONNECTIVITY INDUSTRY CONSORTIUM				
Uleski	Bob	Device	Carmel	IN
CLARINET SYSTEMS				
Dua	Sanjeev	Device	Milpitas	CA
Ma	David	Device	Milpitas	CA
COMTROL				
Minker	Dave	Device	Bridgewater	MA
Ritten	Roger	Device	Maple Grove	MN
GE MEDICAL SYSTEMS				
Schluter	Paul	Device, EDI	Milwaukee	WI
INSTRUMENTATION LABORATORIES				
Azer	Anwar	Device	Lexington	MA
Fannon	Bill	Device	Lexington	MA
I-STAT CORPORATION				
Maund	Mark	Device, EDI	East Windsor	NJ

LIFESCAN				
Cross	Suzanne	CIC President	Milpitas	CA
Dunka	Lou	Device	Milpitas	CA
Kitahara	Jon		Milpitas	CA
Kugizaki	Rodney	EDI	Milpitas	CA
Lebo	Rick	EDI	Danville	PA
Morgan	Rorie	EDI	Milpitas	CA
Narsipur	Deepak	EDI	Milpitas	CA
Trefil	Imre	Device	Milpitas	CA
MEDICAL AUTOMATION SYSTEMS				
Anderson	Marcy	Device	Harrisburg	PA
Fetters	Chris	CIC V.P., Secretary	Harrisburg	PA
Keller	Billie	Administrative Assistant	Harrisburg	PA
Menke	Greg		Charlottesville	VA
Mullins	Wayne	EDI	Charlottesville	VA
Nelson	Eric		Charlottesville	VA
THE MT. SINAI HOSPITAL				
Jacobs	Dr. Ellis	Provider Review Committee	New York	NY
ORTHO - CLINICAL DIAGNOSTICS				
Narang	*Manish*	*HL7 LAPOCTSIG*		
RADIOMETER				
Graversen	Nils		DENMARK	
Soerensen	Allan	Device, EDI	DENMARK	
ROCHE DIAGNOSTICS				
Greenburg	Alan	Device	Indianapolis	IN
Knafel	*Andrzej*	*HL7 LAPOCTSIG*	*SWITZERLAND*	
Phillips	David		Indianapolis	IN
Rastgooy	Kamran	EDI	GERMANY	

SHARED MEDICAL SYSTEMS				
Gordon	*Louis*	*HL7 LAPOCTSIG*		
TELCOR, INC.				
Cederdahl	Mark		Lincoln	NE
Seaton	Mike	EDI	Lincoln	NE
Terrano	Jim	EDI	Lincoln	NE
TEPE TECHNOLOGY				
Kunac	*Bucent*	*HL7 LAPOCTSIG*	*TURKEY*	

*Attendees in italics are representatives of HL7.