

ISO/IEC JTC 1/SC 25: Interconnection of Information Technology Equipment
Working Group 1: Home Electronic System (HES)

**TITLE: Confirmed minutes: forty-eighth meeting held at Lyon, France, 20–23
October 2008**

SUMMARY:

The 48th meeting of the international standards committee on Home Electronic System (WG 1) was held during the week of 20 October 2008 at Lyon, France. Administrative matters, liaison reports, activity reports, and discussion of the key projects of WG 1 occupied the 1st day. The 2nd, and 3rd days were devoted to the introduction of various technical papers, activity reports, and discussion of various detailed organizational and technical issues. The 4th and final day was devoted to completion of technical discussions, wrap up, preparation of action items and resolutions, scheduling and the preparation of new work items.

ATTENDEES:

<u>Name</u>	<u>Country</u>	<u>Status</u>	<u>Affiliation</u>
Mr. Robert Bothe	Belgium	Expert	Niko
Mr. Jo Walling	Canada	Expert	Consultant
Mr. Michael Ding	China	Expert	IGRS Engineering Lab Ltd./Lenovo
Mr. Xiaobing Guo	China	Expert	Lenovo/IGRS
Mr. Cong Wang	China	Expert	CESI
Mr. Luc Baranger	France	Expert	FFIE/AIE
Mr. Juha Vartiainen	Finland	Expert	SFS
Mr. Hans Langels	Germany	Expert	Siemens AG
Mr. Kazuyuki Yamamoto	Japan	Expert	Panasonic Electric Works, Ltd.
Mr. Jin-Seok Bae	Korea	Expert	KATS
Dr. Ho-In Jeon	Korea	Expert	Kyung-won University
Mr. Yong Wan Kim	Korea	Expert	KATS
Dr. Jun Hee Park	Korea	Expert	ETRI
Mr. Woojin Shim	Korea	Expert	SK Telecom
Dr. Young-Sung Son	Korea	Expert	ETRI
Mr. Eric van Nijhuis	The Netherlands	Expert	Philips
Dr. Per Kaijser	Sweden	Expert	KNX Sweden
Dr. Jack Xi Chen	UK	Expert	De Montfort University
Dr. Dritan Kaleshi	UK	Expert	University of Bristol
Dr. Alistair Munro	UK	Expert	University of Bristol
Mr. Stephen Pattenden	UK	Expert	TAHI
Mr. Ron Ambrosio	USA	Expert	IBM Research
Mr. Alan Messer	USA	Liaison	UPnP Forum/Samsung Electronics
Ms. Florence Otieno	USA	Observer	TIA
Dr. Tim Schoechle (Secretary)	USA	Expert	CyberLYNX Technology
Dr. Walter von Pattay	SC 25	Secretary	ZVEI
Dr. Ken Wacks (Convener)	USA	Expert	TIA, Home Systems Consultant
Ms. Grace Wei	USA	Expert	Intel Corporation
Mr. Gabriel Barta		Ex Officio	IEC

PROCEEDINGS: [Note that numbering corresponds to agenda items and may not follow in numerical order.]

Monday, 20 October 2008, 9:20 am.

1. Opening of the Meeting.

The Convener, Dr. Ken Wacks welcomed the WG 1 participants to Lyon and expressed his appreciation to Mr. Baranger of FFIE and the French National Committee for the meeting arrangements. Dr. Wacks then welcomed those attending the meeting and he introduced Mr. Jean Francois Lingnereux of Union Technique de l'Électricité (UTE). Mr. Lingnereux also welcomed the attendees to Lyon and extended an invitation to participate in a special reception to be hosted on Thursday evening at the Hotel La Reine Astrid. The Convener then asked the participants to introduce themselves individually.

2. Review and approval of agenda

A proposed agenda for the meeting N1337 *Proposed Agenda for Meeting (Lyon, 20–23 October 2008)* was presented.

2.1 Update of participant roster/ mailing list

The Membership roster and WG 1 reflector lists were presented. The Secretary requested that each participant review the roster and reflector lists and update any information on it, with special attention to the e-mail address, if one exists. The Secretary reported that the minutes and the agenda had been posted on the WG 1 website and the participants and National Bodies had been duly notified by email.

2.2 Review of agenda and assignment of new contributions

Various new contributions and a proposed document register were reviewed and items were assigned to the agenda. After further discussion, the proposed Agenda was amended and adopted.

3. Approval of unconfirmed minutes of the previous meeting

3.1 Review of previous meeting minutes

The Convener reviewed document N1339 *Unconfirmed Minutes: 47th meeting held in Milan*, the unconfirmed minutes of the previous meeting, which included the resulting resolutions and action items. Various corrections and additions were proposed at the meeting. They were discussed, and the minutes were then confirmed by consensus of the Working Group and issued as WG 1/N1347 *Confirmed Minutes: 47th meeting held in Milan*.

3.2 Review of previous meeting action items

The Convener reviewed document N1331 *WG 1 Action Items from Milan meeting*. He then called the attention of the meeting to the program of work.

4. Liaison Reports

The Convener called the attention of the Working Group to the topic of liaison reports.

4.1 IEC TC 100—Audio/Video

No report was available.

4.2 ISO/IEC JTC 1/SC 25/WG 3—Premises Wiring (von Pattay)

Von Pattay reported on activities in SC 25/WG 3 noting that an amendment to premises cabling on channel performance specification up to 1 GHz had been published and that work now was focusing on how to distribute the performance requirements to various parts of the cabling. Amendments to home cabling on Baluns and plastic optically fibre were under development.

4.3 CENELEC TC 205/WG 5—Residential Gateway (Pattenden)

No report was available.

4.4 ISO TC 205/WG 3—Building Automation & Protocols (Wacks)

Wacks presented document N1351 *Liaison Report from ISO TC205/WG3*.

4.5 ISO/IEC JTC 1/SC 27—Info Tech Security Techniques (Kaijser)

Kaijser reported on work with SC 27 on Security Requirements Part 1. He undertook to draft a thank-you report by the end of the meeting. He further reported that work on External Security Part 4 had not been as successful, noting that SC 27/WG 4 had been disbanded cooperation with SC 25. He further noted that the 25N1408 *List of SC 25 and WG Liaisons as of 2008-10-07* (25 Lyon 11) needed to be updated.

4.6 ISO/IEC JTC 1/SC 32/WG 2—Metadata (Schoechle)

Schoechle reported that SC 32/WG 2 (Metadata) had met in Sydney in late May.

4.7 ISO/IEC JTC 1/SC 25—Interconnection of IT Equipment (Wacks)

No report was available.

4.8 CENELEC TC 205/WG 16—Smarthouse (Pattenden)

Pattenden reported on the activities of CENELEC TC205 WG 16. He reported that he and Munro had attended a 10 September meeting in Barcelona on Smarthouse and interface with services. He noted that the meeting had seven attendees from the UK, Germany, and Spain, and that the meeting had focused on definitions. He undertook to provide a report to WG 1.

4.9 EIA/CEA R7—Home Networks (Wacks)

Wacks reported on the current activity in the Consumer Electronics Association (CEA) R7 committee. He reported that the group was actively discussing topics related to digital telephony, power line carrier, interface to IEEE 1394, and Digital Living Network Alliance (DLNA). He noted that the next meetings were scheduled for mid October.

4.10 IEC TC 59—Household Appliances (von Pattay)

No report was available.

4.11 IEC TC61—Safety of Household Electric Appliances (Wacks)

No report was available.

4.12 IEC TC86—Optical Fiber (von Pattay)

No report was available.

4.13 JTC 1—Information Technology (Farance)

No report was available.

4.14 ITU-T SG 15—Optical and other network transport infrastructures (Yamamoto)

No report was available.

4.15 IEC TC 79—Alarm Systems (Baranger)

Baranger reported that IEC TC 79 had been sleeping until now, but had been re-started due to the recent growth of IT transmission of alarm signals. He undertook to provide a report.

4.16 Broadband Forum—Digital Subscriber Line (Wacks)

No report was available.

4.17 UPnP Forum— (Messer)

No report was available.

4.18 GridWise Architecture Council (Ambrosio)

Ambrosio reported on the activities of the GridWise Architecture Council. He began by providing background on the group, noting that the U.S. Congress had adopted legislation in 2007 that called on the National Institute of Standards and Technology (NIST) to work with GridWise to identify standards needed to implement “smart grid” technology. He noted that several working groups had been formed, including “home-to-grid”, “vehicle-to-grid”, and a business and policy group. He further reported that a conference/workshop had been conducted recently in Washington during 22-26 September, known as the *GridWeek*, and that he and Wacks had participated.

A discussion followed on the scope of WG 1 interest in “smart grid” technology. Langels suggested that it was a power engineering problem that lay outside the scope of WG 1, and that the topic should perhaps be dealt with in various IEC committees. Pattenden responded that the problem involved energy management application profiles requiring input from WG 1. Ambrosio responded that home-to-grid and vehicle-to-grid interoperability was not a power engineering problem, but rather it involved home networks, gateways, and interfaces to appliances and services within the home. It was suggested that IEC TC13 *Equipment for Electrical Energy Measurement and Load Control* had been revived and might be relevant. Wacks noted that it might be a mistake to consider the electrical meter as the “gateway” to the home (i.e., as a “radio-under-glass”) and the problem should be considered from a broader (home electronic) system perspective. Barta called attention to IEC TC57 *Power System Control and Associated Communications*, suggesting possible liaison or coordination with WG 1. Ambrosio noted that TC 57/WG 19 dealt with requirements and application profiles for management up to the meter. Other relevant IEC groups mentioned, were TC 8 *System Aspects for Electrical Energy Supply*, TC 59 *Performance for Household Electrical Appliances*, and TC 77/SC 77A *Electromagnetic Compatibility/emissions and signaling*.

The Convener asked Ambrosio to propose additional liaisons to appropriate IEC committees. He noted that it was his view that power utilities generally saw themselves facing a regulatory problem rather than a technical problem, and the perspective of WG 1 would be important to the successful implementation of smart grids.

4.19 SC 25/PTTT—Project Team Taxonomy and Terminology (Kaijser)

Kaijser reported that the SC 25 Project Team Taxonomy and Terminology (PTTT) would be meeting this week. He noted that it was preparing a 3rd working draft (25N1567) on taxonomy and a 1st working draft (25N1568) on terminology. The Convener noted that time would be allocated on Wednesday.

5 Activity Reports

The Convener deferred the topic of Activity Reports until later in the meeting.

6. Review and discussion of the HES work program

6.1 Discussion of *HES Introduction*

No new contributions were presented and no discussion was conducted.

6.2 Discussion of *HES Terminology (01.01.03: TR 15044)*

No new contributions were presented and no discussion was conducted.

6.4 Discussion of *HES Application Services and Protocol (01.04.02-01: CD 29104)*

Jeon presented a discussion on CD 29104 Centralized Management Protocol (CMP). He presented document 25N1543 that contained comments from the ITU-T regarding issues raised by the Broadband Forum (formerly known as the DSL Forum) and he asked the WG for guidance on how to proceed. He called attention to documents 25N1514 (ITU-T letter) and 25N1516 (ETSI/DSL letter). After discussion, it was the consensus of the meeting that Jeon should call Robin Mersh and propose as meeting or written technical input from his group regarding CD 29104.

6.9 Discussion of *HES Reference Implementation: Home Network Security (01.09: 24767)*

The topic of home network security was then discussed. It was noted that project ISO/IEC 24767-3 External Security had reached an impasse due to the lack of expertise within WG 1 and the lack of interest and/or expertise within the liaison group SC 27 *Information Technology Security Techniques*. It was noted that within the relevant SC 27 working group, only 4 NBs were represented, with two declining to participate and the other two unable to offer a Rapporteur. It was further noted that the concerns of WG 1 and of ISO/IEC 24767-3 went beyond conventional information security topics to include access rights and appliance control. After discussion it was the consensus of the meeting that the project must be put on hold for now.

6.3 Discussion of *HES Architecture (01.04.01: 14543-5-1, -2, -3, -4)*

The topic of HES Architecture was then discussed. Ding presented document N1346 *Introduction to Intelligent Grouping and Resource Sharing (IGRS) — A Technical White Paper*.

5 Activity Reports

The Convener returned to the topic of Activity Reports. Yamamoto reported that the *Alice Forum* had finally been concluded after 30 years. Pattenden reported on a CENELEC workshop.

The Convener then adjourned the meeting at 6:30 p.m. until the next day at 9:00 am.

Tuesday, 21 October, 9:00 am.

6.4 Discussion of *HES Application Services and Protocol (continued)*

The meeting returned to the topic of HES Application Services and Protocol. Son presented document N1349 *Necessity of Maintenance Standard for Home Network* and he asked WG 1 for guidance on the level of interest in such a project proposal. There was a discussion of the general problem of home network management and need or appropriateness of a potential NWIP on this topic. Son undertook to provide a further proposal.

6.3 Discussion of *HES Architecture (continued)*

The topic of the WG 1 Roadmap was then discussed. Schoechle presented N1341 The Roadmap of WG 1, 2008 Edition. After discussion, it was apparent that something beyond the SC 25 *Programme of Work* maintained by the SC 25 Secretariat was needed for internal WG 1 activities. Schoechle undertook to develop format and document to more clearly describe the WG 1 work program.

6.8 Discussion of *HES Interoperability (01.07.01: 18012-2)*

The topic of HES interoperability was then discussed. Kaleshi presented document N1352 *Interoperability status discussion – presentation*. Ambrosio presented document N1350 CD 18012-2 Interoperability working draft and a proposed resolution of comments. A detailed technical discussion then ensued regarding certain aspects of the proposed real-time event-bus model described in the draft, including “time-stamping,” temporal relationships between events, asynchronosity, latency requirements, and the like in a real time process control system.

The Convener then adjourned the meeting at 6:00 p.m. until the next day at 9:00 am.

Wednesday, 22 October, 9:10 am.

The Convener re-convened the meeting and introduced Mr. Gerd Weking, the new Chairman of SC 25. Mr. Weking then further introduced himself and welcomed the WG 1 experts.

6.5 Discussion of *HES Network Layer and Transport Layer Protocol*

No new contributions were presented and no discussion was conducted.

6.6 Discussion of *HES Process Interfaces (01.05.xx: 10192-x)*

No new contributions were presented and no discussion was conducted.

6.7 Discussion of *Residential Gateway (01.03.02: 15045-2)*

The topic of HES Gateway was then discussed. Schoechle presented document 25N1589 *Voting Report on SC 25 N 1528: ISO/IEC 3rd FCD 15045-2: IT - Home electronic system (HES) gateway – Part 2: Modularity and protocol*. Schoechle noted that although the FCD had received substantial support (12 out of 18), it had received 6 negative votes. He further noted that three of the negative votes contained identical comments. He then presented a proposed resolution of comments for discussion.

The discussion focused on the “Gateway Link” protocol specified in the document to be used for the internal linking between gateway modules and the accompanying list of requirements

(that had been established and agreed upon at the previous WG 1 meeting in Milan). The draft specified the use of DDS/RTPS (Data Delivery Service/Real Time Publish Subscribe) published in 2008 by the Object Management Group (OMG), an approved reference originator (ARO) for ISO/IEC. The negative commentors wanted this protocol changed to ISO/IEC 29341 (UPnP). The project editor and other gateway working party experts did not regard UPnP as appropriate for this purpose with respect to the requirements. The debate hinged on issues similar to those covered earlier in the interoperability “event-bus” discussion (*i.e.*, temporal relationships between events in real-time systems). Experts representing the negative comments then challenged the requirements, suggesting that a study of use-cases be conducted to quantify the requirements. Following a lengthy discussion, a working party was formed to propose possible solutions (Langels, Kaijser, Ambrosio, Kaleshi, Schoechle, Yamamoto, Wacks and Wei).

6.8 Discussion of *HES Interoperability (continued)*

The meeting then returned to the topic of interoperability and the proposed FCD 18012-2. Kaleshi presented slides and a discussion on the earlier topic of “time stamping” and event-bus dealing with temporal relationships between asynchronous events in real-time systems.

7. Working Party Assignments

The Convener introduced and summarized the HES work program and scheduled discussions on various topics by working parties.

The Convener then adjourned the meeting at 6:00 p.m. until the next day at 9:00 am.

Thursday, 23 October, 9:15 am.

The Convener re-convened the meeting and returned the meeting to reports of working parties.

8. Reports from project editors on Working Party activities

The Convener asked the project editors to provide any remaining reports on their working parties/editing committees and conclude their work.

6.7 Discussion of *Residential Gateway (continued)*

After further discussion, it was the consensus of the meeting to resolve the problem and allow the FCD to advance by 1) deleting the GL protocol specification, and 2) re-visiting the requirements once again. This consensus was formalized and unanimously agreed to as follows and was immediately reported in N1353 *Gateway Action Agreement – Lyon*:

Gateway Action Agreement – Lyon

STATEMENT OF WORK: 2008-10-23

Working Party – ISO/IEC 15045-2 Gateway

Membership:

Ron Ambrosio (US Expert)
Per Kaijser (SE Expert)
Dritan Kaleshi (UK Expert)
Hans Langels (DE Expert)
Tim Schoechle (US Expert) (Project Editor)
Grace Wei (US Expert)
Ken Wacks (Ex Officio – WG 1 Convener)
Kazuyuki Yamamoto (JP Expert)

Task:

- A. Resolution of comments
- B. Prepare document for FCD with recommendation for endorsement by WG 1 and by the participants' National Bodies. To do this one of following alternatives will be adopted for GL-link protocol:
 - 1. No protocol specified
- C. To address point B.1 above the WP will:
 - 1. Complete work by 2008-12-01
 - 2. Review requirements as published in the existing document (25N1528)
 - 3. Remove all protocol specification parts
- D. Forward revised FCD/FDIS text to SC 25 for distribution/ballot

As project editor, Schoechle undertook to conduct two ballot resolution working party calls by November 30 if possible, and, if no agreement could be reached in the working party, the RoC as presented and discussed would stand. It was the consensus of the meeting that the document should be sent again for FCD ballot in time for consideration at the next WG 1 meeting in order to finalize it for subsequent FDIS ballot, and a resolution was proposed to SC 25 accordingly.

The Convener then asked for a report from the Interoperability working party.

6.8 Discussion of *HES Interoperability (continued)*

The meeting then returned to the topic of interoperability and the proposed FCD 18012-2. Ambrosio reported that progress had been made by the working party on the RoC, but that further work remained. He undertook to conduct multiple ballot resolution working party calls by November 30 if possible. It was the consensus of the meeting that the document should be sent again for FCD ballot in time for consideration at the next WG 1 meeting in order to finalize it for subsequent FDIS ballot, and a resolution was proposed to SC 25 accordingly.

6.5 Discussion of *HES Network Layer and Transport Layer Protocol*

No new contributions were presented and no discussion was conducted.

6.6 Discussion of *HES Process Interfaces (01.05.xx: 10192-x)*

No new contributions were presented and no discussion was conducted.

6.3 Discussion of *HES Architecture (continued)*

The topic of HES Architecture was again discussed. Ding presented a proposed draft of document N1355 *Resolution of comments on SC 25 N 1521: ISO/IEC 2nd FCD 14543-5-1: IT –HES Architecture – Intelligent grouping and resource sharing for HES Class 2 & Class 3 – Part 5-1: Core Protocol*. Ding undertook to resolve comments on IGRS parts, 3, 5, 6, and 21 by 1 December and provide RoCs and FCD texts to Wacks and Schoechle for distribution by the SC 25 Secretary.

The topic of UPnP was discussed. Messer provided a slide presentation on UPnP and the UPnP Forum.

9. Administrative

9.1 Update Program of Work

The Convener then formed a working party to update the work program.

9.2 Electronic document distribution

The Convener called attention to the WG 1 website at <hes-standards.org> (user=hes; PW=wg1).

9.3 Liaison changes and requests

No liaison changes or requests were proposed.

9.4 Resolutions

Proposed resolutions were drafted and adopted unanimously.

10. Outreach and promotion

Nothing was reported or proposed.

11. New issues and business

No further new business was proposed.

12. Review of action items, assignments, deliverables, and schedule for next meeting

Action items from the meeting were discussed, compiled, and issued as document N1354 *Action items for WG 1 from the Lyon meeting*.

13. Closing of the meeting

The Convener thanked Mr. Baranger of FFIE and the French National Committee for the meeting arrangements and for the excellent administrative support. He then thanked Mr. Jean Francois Lingnereux of Union Technique de l'Électricité (UTE) for the facilities and hospitality, and specifically for hosting the special reception hosted on Thursday evening at the Hotel La Reine Astrid.

The Convener then thanked the participants for their hard work and contributions. He further requested that the members remind those not in attendance of the importance and timeliness of the WG 1 work and encourage them to focus on attending meetings and providing contributions. The Convener then adjourned the meeting at 5:10 p.m.

UPCOMING MEETING SCHEDULE:

WG 1	April 2009	Canada (pending invitation)*
WG 1/SC 25	7–10/11 September 2009	China

* date and venue are subject to change

**WG 1 N1354**

***ACTION ITEMS FOR WG 1 FROM THE Lyon MEETING
23 October 2008***

1. **Schoechle** undertook to reorganize the agenda format in accordance with the program of work
2. **Schoechle** will develop a simplified program of work.
3. **Ambrosio** will explore liaisons with electric utility-related IEC TCs (e.g., TC57, TC8, TC13, EU Smartgrids committee, etc.).
4. **Jeon** will 1) call Robin Mersh and propose a meeting, 2) ask for written liaison inputs within three weeks, 3) update the CMP FCD texts using the input, and 4) send the text to Wacks and Schoechle. **Schoechle** will then forward to SC 25 for FCD ballot.
5. **Jeon** will finish WiBEEM Parts 2 and 3 for review by **Schoechle** and **Wacks** end of November for format. **Schoechle** will then forward to SC 25 for CD ballot.
6. **Schoechle** will convene gateway working party and complete action agreement (WG1-N1353) by 1 December to submit revised text of 15045-2 and RoC for FCD/FDIS ballot.
7. **Ambrosio** will convene Interoperability working party and complete work on FCD text by Wednesday 26 November.
8. **Ding** will resolve comments on IGRS parts, 3, 5, 6, and 21 by 1 December and provide FCD texts to Wacks and Schoechle.
9. **Langels** will explore relevance of a building maintenance standard for HES.
10. **Son** will prepare preliminary proposal/presentation/paper for possible new work on maintenance standards for home systems for discussion at next meeting of WG 1.