# 1394 PWG Meeting

May 15, 2000

## 1. Meeting Attendees

The list of attendees included:

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| Shigeru Ueda | Canon |
| James DePoy | Canon Information Systems |
| Lee Farrell | Canon Information Systems |
| Fumio Nagasaka | Epson |
| Brian Batchelder | Hewlett Packard |
| Dave Kuntz | Hewlett Packard |
| Karen Van der Veer | Hewlett Packard |
| Jerry Thrasher | Lexmark |
| Don Wright | Lexmark |
| Mike Fenelon | Microsoft |
| Satoshi Fujitani | Ricoh |

## 2. Administrivia

Don Wright provided the details for the next PWG meeting:

- July 10-14
- Hyatt Fisherman's Wharf, San Francisco
- 555 North Point Street
- Phone: (415) 563-1234
- Rate: $185
- Register at www.fapo.com/ieee1284.htm

He also referenced the 2000 schedule for future PWG meetings:

- Sep 11-15 Chicago
- Oct 23-27 Boston
- Dec 4-8 San Diego

## 3. Agenda

Greg LeClair could not attend, so Brian Batchelder led the meeting. He provided the agenda topics:

- 1394.3 Draft Comments Discussion
- Next Steps for the 1394 PWG
  - Common format
  - Device profiles
  - Profile for 1284.4
  - Peer-to-peer solutions
  - Device Enumeration Protocol
  - SSDP/UPnP
  - JetSend
- Future meetings

Brian explained that this meeting is a *PWG* meeting—not an official IEEE 1394.3 meeting. Therefore, although the group can discuss the 1394.3 Draft, they cannot take any formal action.

## 4. Previous Minutes

No one at the meeting could produce a copy of the Minutes for the February meeting. There was no review.

## 5. 1394.3 Draft Comments Discussion

There were no comments on the draft to discuss.

Don Wright explained that the Ballot Body invitations will go out soon. It is expected that the Ballot Response Committee meeting will not occur before September.

## 6. Next Steps for the 1394PWG

### 6.1 Future Scope

What should be the extent of the group's future scope? Should we concentrate on refining 1394.3 printing only, or 1394 printing in general, or should we broaden the scope to include printing on new interfaces (e.g., Bluetooth)? It was suggested that any new interface issues should be declared out of scope for this group—but a recommendation could be made for the PWG to form a new subgroup to address this topic.

It was suggested that the group should at least define a means for allowing "basic print functionality" to work on a reliable basis—without having to install or load many items. It would be nice to know that 1394.3-compliant devices could simply work together once they are connected.

There was some concern that if this group did not establish additional *normative* specification/profiles, then the different O/S vendors might implement different methods of achieving the printing function. It is desirable to avoid this possible divergence.

Brian pointed out that the group's original scope included the definition of a printing profile. He suggested that we should first focus on 1394.3 to complete our work. The group could then follow up with other 1394 printing.

Jerry Thrasher asked a question about comparing the 1394.3 solution to the alternative of using IP over 1394 for printing. Ricoh had demonstrated IPP over IP over 1394 at the recent WinHEC conference. Jerry is curious whether the footprint for that solution was much larger than a 1394.3 solution. No one present had quantitative data to offer a comparison of the two implementation alternatives.

### 6.2 Common Format

It was noted that several different organizations have encountered the problem (and desire) of defining a common printing format—including the following groups:

- UPnP
- 1394.3

- Jini
- Bluetooth
- HAVi

It was noted that the Bluetooth organization has its own subgroup to address printing. HP has already put out a press release claiming that they are taking a leadership role in defining the printing profile(s). There was some concern that if this is truly intended to be a "standard," then it would be useful for this information to be more generally available outside of the Bluetooth organization.

It was noted that the Bluetooth organization has not coordinated with many Printer vendors on this effort—other than HP.

Both JetSend and UPnP were identified as possible considerations under this topic.

## 6.3 Device Profiles

It was suggested that HAVi and AV/C could be considered as possible profiles. MFP, scanners, and other device profiles were also suggested. There was some concern that this group does not have the proper expertise to adequately address MFP and/or scanner devices. It was generally agreed that this should be left to other, more appropriate, groups.

Is it reasonable to discuss implementing HTTP over 1394.3?

Brian led the group in a brainstorming effort to create an outline of what a "printer profile" should mean and what characteristics it should include. The following list was generated:

- Compliance
- Device discovery
- Device communication
  - transport
    - initiator requirements for SBP-2 target printer
  - applications
    - job management
    - data format
    - device management
- Internationalization
- Informative examples

The following items were identified as possible "profile content":

- Service names
- Configuration ROM entries
- Events
- References to other documents

Essentially, it should include whatever information is necessary for an implementor to ensure that a device is able to print successfully (interoperably.)

### 6.4 Profile for 1284.4

No one could remember what this topic was about—nor why it would be desirable. It was suggested that Microsoft might have once considered the ability to communicate to all devices over the same port. Mike Fenelon said that as far as he knows, this is not the case currently. The topic was not discussed further.

### 6.5 Peer-to-Peer Solutions

The problem of multi-instance Initiators was raised, but the group decided to defer the topic discussion as a lower priority.

### 6.6 Device Enumeration Protocol

Brian mentioned that DEP is a Microsoft proposal within the 1394TA organization. This was primarily developed to handle device enumeration over bridges. However, no one present was familiar with the details of this protocol.

Nagasaka-san suggested that a “target enumeration protocol” should be declared out-of-scope for the group.

### 6.7 SSDP

The Simple Service Discovery Protocol (SSDP) is an Internet-Draft submitted by Microsoft to the IETF. It was reported that the document can be found at the IETF website: www.ietf.org. However, there was some question as to whether the document has expired—and if it is still available.

The basic question of “How will 1394 and UPnP work together?” was raised. Because UPnP is IP-based and 1394.3 is not, this issue needs attention. Which group will be responsible for addressing this? Perhaps the UPnP activity should set up a subgroup that deals with the general issue of handling non-IP devices? Several of the attendees also participate within the UPnP activity. It was suggested that this topic should be discussed at the next UPnP Printing meeting.

Nagasaka-san asked the group to consider whether this issue should be addressed as a native 1394 solution—or via a Proxy.

There was a long discussion about the possibility of a device using UPnP talking to a proxy that is connected to a 1394 Printer. Is this a practical approach? Is it a realistic concern? The group agreed that the individuals attending the UPnP activity should consider this concept, and a continued liaison between the two groups should be maintained.

### 6.8 JetSend

It was suggested that JetSend should be considered under the topic of “common format”.

## 7. Future Work

Brian suggested that future 1394 PWG meetings should be driven by the level of activity that happens next. It was generally agreed that the group should not meet until a specific proposal is generated.

MOTION: Brian Batchelder moved that the following two work items should be accepted as future tasks for the group:

- Solving "the multi-instance Initiator problem"
- 1394.3 Printing Profiles

VOTE: The motion passed without opposition.

MOTION: Brian Batchelder moved that the July meeting should only be held if a draft proposal for at least one of the work item topics is distributed by the end of May. [It is expected that a complete proposal will be distributed by June 26.]

VOTE: The motion passed without opposition.

ACTION: Brian Batchelder will issue a "call for proposal(s)" on the two work items.

Meeting adjourned.

## 8. Open Action Item Summary

========== Previous Action Items ==========

1. Greg LeClair will propose a mapping from the API entries to transport operation and the API itself.
2. Greg LeClair – Update OUI usage document with editorial changes from meeting discussion. Re-post it to the PWG1394 web site for comment and discussion in Durham.

========== New Action Items ==========

3. Brian Batchelder will issue a "call for proposal(s)" on two work items:
    - Solving "the multi-instance Initiator problem"
    - 1394.3 Printing Profiles