Decision Tree for issues in the Media Size Self Describing Names Syntax in

the PWG Media Standardized Names Standard

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File: media-size-decision-tree-010510.doc

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Its clear from the reactions to the set of requirements and the 6 issues raised, that we really need a decision tree for the identified issues for our telecon, rather than considering the 6 issues directly. This document has such a decision tree. The call in info is:

Monday, May 14, 1-2 PM PDT (4-5 PM EST)
Phone: (415) 228-4883, passcode: 74584#
(Xerox folks: 8*534-6413) [confirmation code: 5954723]

Definition of the term "Field"

For purposes of this discussion, the term "Field" means a part of the Media **Size** Self Describing Name, that is separated by a special character, namely "_", which is easily scanned for and cannot occur except as a field separator.

Agreed Requirements

The boiled down requirements (thanks, Bill), that we think we can all agree to are:

- 1. Intent is program to program communication of media names. It is not intended for use as internal representation within a program.
- 2. Names are to contain size information so that Recipient Software (Client or Printer) that receives an unrecognized name can still determine the intended size. Constraints and limitations include cut sheet only, definition of only English and Metric dimensional units, restrict the names to use the characters for IPP keywords
- 3. Although primarily intended for machine readability, Names should have some relation to common names. Also, Names should be structured to present some useful information if presented directly to a user when the names are not recognized by the machine, which includes both the name of the media size and its dimensions.
- 10. Be able to register additional Media Names, including new Class field/Naming authorities, after the standard is approved.

12, 13 Design the syntax to facilitate parsing by Recipient (Client and Printer) Software

However, the following detailed design decision issues need to be resolved. We are trying to decide between one or a combination of the following syntactic methods:

```
a. original UPnP/HTML way (but with _ field separator): iso-a4_210x297mm,
na-letter_8.5x1lin
b. Maui (D03-D07) way: iso-a4.2100-2970, na-letter.8500-11000
c. Portland decision: iso_a4_210-297, na_letter_8.5-11
d. All 1000ths of mm: iso-a4.210000-297000, na-letter.215900-279400
e. Units as a separate third field: iso-a4 210-297 mm, na-letter 8.5-11 in
```

Decision Tree

From the unanimous decision on the May 2 telecon for method a and the email push back since then, we are only considering combinations of methods a, c, and e. The decision tree has several branches, depending on the answers that we agree to:

1. Should there be a separate Class Field (separated by underscore from the Media Name field) which must always be present and which is used to indicate the naming authority, standards body, country, geographic region, or application area? So far we have the following classes: na, iso, jis, jpn, prc, roc, om (for other metric), oe (for other english). Examples:

```
YES: iso_a4_210..., na_letter_8.5... goto 3
NO: iso-a4_210..., na-letter_8.5... goto 2
```

2. (not separate class field, the class information is part of the Name Field separated by a hyphen): Does the class part of the Name Field have to be present? If it does, then we need to invent some miscellaneous class part, such as "oe" for other english and "om" for other metric. If we don't, then we just omit the class part when we can't think of a good class part. Examples:

```
YES: om-folio_210...or eu-folio_210 goto 4
NO: folio_210... goto 4
```

3. (Separate Class Field): Can the Class Field contain a hyphen? Examples:

```
YES: vend-lexmark_neat-size_7...

custom-lexmark_neat-size_7

x-lexmark_neat-size_7...

NO: lexmark_neat-size_7...

custom_lexmark-neat-size_7...

goto 4
```

4. Do non-standard names invented by *users* have to be syntactically distinguishable with a "custom" Class Field in order to submit to Printers that have been configured to indicate that they support custom sizes? Examples:

```
YES: custom_new-size_7... goto 5
```

```
NO: new-size_7... goto 5
```

5. Do non-standard names invented by *system administrators* which they use to configure their Printer supported capabilities have to be syntactically distinguishable with a "custom" Class Field? Examples:

```
YES: custom_new-size_7... goto 6
NO: new-size 7... goto 6
```

6. Do printer vendors need non-standard sizes that aren't registered (or do they simply register their size names as new standardized size names)?

```
YES: goto 7 NO: goto 8
```

7. (Vendor names must appear) For non-standard sizes invented by Printer vendors that aren't registered does the vendor's name have to appear somewhere in the media name? Examples:

```
a. In Class: lexmark_neat-size_7... goto 8
b. In Class: vend-lexmark_neat-size_7... goto 8
c. In Class: custom-lexmark_neat-size_7... goto 8
d. In Name: na_lexmark-neat-size_7... goto 8
e. neither: na_neat-size_7... goto 8
```

8. Do we want to limit the units to mm and in forever in standardized names?

```
Yes: goto 9 No: goto 9
```

9. Do the units have to appear explicitly in the Dimensions Field (or does the Class Field imply the units)? If we choose the NO case, we have to answer: what happens when new Class Field names are registered. Examples:

```
YES: iso_a4_210x297mm, na_letter_8.5x11in goto 10 NO: iso-a4_210x297, na-letter_8.5x11 goto 11
```

10. (explicit dimensions): Should the character that separates the smaller from the larger dimension be "x" or "-"?

11. (implicit dimensions): Should the character that separates the smaller from the larger dimension be "x" or "-"?

- 12. Should the standard say anything about what the Recipient Software does if it detects that the Media Class and Media Name combination don't match the Dimensions Field? Choices are MUST/SHOULD/MAY for:
 - a. Its outside the scope of the standard

- b. Its implementation-dependent
- c. Use the Media Class and Media Name combination as the intended size
- d. Use the Dimensions Field as the intended size
- e. Reject/ignore/substitute the name, since it is in error