L2/02-018

To: UTC

Re: CJK Numeric Value Data Table

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The only property values in Chapter 4 of The Unicode Standard that are not available in machine readable format are *Table 4-7. Primary Numeric Ideographs* and *Table 4-8. Ideographs Used as Accounting Numbers*, copied at the end of this document.

We propose that a data table for these values be added to the next appropriate version of the UCD. The contents could look something like the following, with the values P and A to distinguish Primary from Accounting. The proposed name is CJKNumericValues.txt, although the precise name is not important.

This simply matches the content of the Unicode Standard, so could conceivably be added in 3.2, if the UTC desired. **Note:** the actual ideographs in the comments below would not be present in the file, at least until such time as we decide to allow UTF-8 data in data file comments. They are provided here to help double-check the values.

```
96F6; P; 0
4E00; P; 1
4E8C; P; 2
4E09; P; 3
56DB; P; 4
4E94; P; 5
516D; P; 6
4E03; P; 7
516B; P; 8
4E5D; P; 9
5341; P; 10
767E; P; 100
5343; P; 1000
5104; P; 100000000
 96F6; P; 0
                                                  # 四
                                                  # 五
                                                  # 六
                                                  # 七
                                                  # 八
                                                  # 九
                                                 # +
                                                   # 万
5146; P; 100000000000 # 兆
58F9; A; 1
58F1; A; 1
                                                  # 壹
58F1; A; 1

5F0C; A; 1

8CAE; A; 2

8D30; A; 2

5F10; A; 2

5F0D; A; 2

53C3; A; 3

53C2; A; 3

53C1; A; 3

5F0E; A; 3

8086; A; 4
                                                   # 壱
                                                  # =
                                                  # 貮
                                                  # 弐
                                                  # 式
                                                  # 参
```

```
4F0D; A; 5
                    # 伍
9678; A; 6
                    # 陸
9646; A; 6
                    # 柒
67D2; A; 7
634C; A; 8
7396; A; 9
62FE; A; 10
                    # 拾
4F70; A; 100
                    # 佰
964C; A; 100
                    # 陌
4EDF; A; 1000
                    # 仟
842C; A; 10000
```

## **Future Additions**

In addition, we should collect other ideographs that can have numeric values for addition to a future version, such as the following:

```
5169; N; 2# 兩 liang35EFF; N; 20# 廿 shorthand used in bookkeeping/newspapers5345; N; 30# 册 shorthand used in bookkeeping/newspapers
```

The following tables are screen-shots from the Unicode Standard, Chapter 4.

## Table 4-7. Primary Numeric Ideographs

```
U+96F6
                  0
U+4E00
                  1
U+4E8C
                  3
U+4E09
U+56DB
                  4
                  5
U+4E94
U+516D
                  6
U+4E03
U+516B
                  8
                  9
U+4E5D
U+5341
                  10
U+767E
                  100
                  1.000
U+5343
U+4E07
                  10,000
U+5104
                  100,000,000 (10,000 \times 10,000)
U+5146
                  1,000,000,000,000 (10,000 \times 10,000 \times 10,000)
```

## Table 4-8. Ideographs Used as Accounting Numbers

1	U+58F9, U+58F1, U+5F0C <sup>a</sup>
2	U+8CAE <sup>a</sup> , U+8D30 <sup>a</sup> , U+5F10 <sup>a</sup> , U+5F0D <sup>a</sup>
3	U+53C3, U+53C2, U+53C1 <sup>a</sup> , U+5F0E <sup>a</sup>
4	U+8086
5	U+4F0D
6	U+9678, U+9646
7	U+67D2 <sup>b</sup>
8	U+634C
9	U+7396
10	U+62FE
100	U+4F70 <sup>a</sup> , U+964C
1,000	U+4EDF
10.000	U+842C