

**Comments on the Unicode Codepoints and IDNA Internet-Draft
(draft-ietf-idnabis-tables-02.txt)**

by

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Introduction

NIDA (National Internet Development Agency of Korea) appreciates this Internet-draft document on the Unicode Codepoints and IDNA.

We have carefully reviewed the Unicode Codepoints and IDNA Internet-Draft with professionals from Korean Agency for Technology and Standards (National Body of ISO and IEC), the National Institute of The Korean Language, etc.

Comments on the Hangul codepoints.

We have classified the Hangul Unicode codepoints like the followings.

1. Hangul Jamo (U+1100 - U+11FF)

Internet Draft:

```
1100..1159 ; PVALID # HANGUL CHOSEONG KIYEOK..HANGUL CHOSEONG YEOR
115A..115E ; UNASSIGNED # <reserved>..<reserved>
115F..1160 ; DISALLOWED # HANGUL CHOSEONG FILLER..HANGUL JUNGSEONG FIL
1161..11A2 ; PVALID # HANGUL JUNGSEONG A..HANGUL JUNGSEONG SSANGAR
11A3..11A7 ; UNASSIGNED # <reserved>..<reserved>
11A8..11F9 ; PVALID # HANGUL JONGSEONG KIYEOK..HANGUL JONGSEONG YE
11FA..11FF ; UNASSIGNED # <reserved>..<reserved>
```

These characters in Hangul Jamo block are used for composing Hangul syllable blocks. They cannot be used alone. Since modern Hangul syllables must be represented by using the code positions in Hangul syllable block (U+AC00 – U+D7A3), this Hangul Jamo block is not needed for Korean IDN.

In addition, we do not allow Old Hangul letters for Korean IDN.

Recommendation:

```
1100..1159 ; DISALLOWED # HANGUL CHOSEONG KIYEOK..HANGUL CHOSEONG YEOR
115A..115E ; UNASSIGNED # <reserved>..<reserved>
115F..1160 ; DISALLOWED # HANGUL CHOSEONG FILLER..HANGUL JUNGSEONG FIL
1161..11A2 ; DISALLOWED # HANGUL JUNGSEONG A..HANGUL JUNGSEONG SSANGAR
11A3..11A7 ; UNASSIGNED # <reserved>..<reserved>
11A8..11F9 ; DISALLOWED # HANGUL JONGSEONG KIYEOK..HANGUL JONGSEONG YE
11FA..11FF ; UNASSIGNED # <reserved>..<reserved>
```

2. Bangjeom (U+302E, U+302F)

Internet Draft:

302A..302F ; PVALID # IDEOGRAPHIC LEVEL TONE MARK..HANGUL DOUBLE D

A Bangjeom is a notation in Hunminjeongeum for representing tones for Hangeul syllable blocks. It is a combining mark and therefore they cannot be used alone. It must be appended to a Hangeul syllable block. Therefore, it is not needed for Korean IDN.

Recommendation:

302E ; DISALLOWED # HANGUL SINGLE DOT TONE MARK = single dot Bangjeom
302F ; DISALLOWED # HANGUL DOUBLE DOT TONE MARK = double dot Bangjeom

3. Hangeul Compatibility Jamo (U+3131 - U+318E)

Internet Draft:

3131..318E ; DISALLOWED # HANGUL LETTER KIYEOK..HANGUL LETTER ARAEAE

Hangeul Compatibility Jamo in this block is used alone to represent fullwidth Hangeul consonant and vowel letters individually. There is a risk using these characters for IDN because the combination of them might be visually confusable to Internet users. For instance, ‘ㄱ ㅏ.kr’ (U+3131 U+314F) IDN can be confused with the ‘가.kr’ (U+AC00) IDN.

Furthermore, when we apply a current normalization, ‘ㄱ ㅏ’ (U+3131 U+314F) is actually transformed to ‘가’ (U+AC00). As a result, these two Korean IDNs become one and the same.

Recommendation: DISALLOWED

4. Hangeul codepoints in Enclosed CJK Letters and Months character code table

Internet Draft:

3200..321E ; DISALLOWED # PARENTHESIZED HANGUL KIYEOK..PARENTHESIZED K
3250..32FE ; DISALLOWED # PARTNERSHIP SIGN..CIRCLED KATAKANA WO

We do not allow parenthesized and circled Hangeul characters for Korean IDN.

Recommendation: DISALLOWED

5. Hangeul Syllables (U+AC00 - U+D7A3)

Internet Draft:

AC00..D7A3 ; PVALID # <Hangeul Syllable>..<Hangeul Syllable>

This block is used for representing 11,172 modern Hangeul syllables.

Recommendation: PVALID

6. Halfwidth Hangul variants (U+FFA0 - U+FFDC)

Internet Draft:

```
FF01..FFBE ; DISALLOWED # FULLWIDTH EXCLAMATION MARK..HALFWIDTH HANGUL
FFBF..FFC1 ; UNASSIGNED # <reserved>..<reserved>
FFC2..FFC7 ; DISALLOWED # HALFWIDTH HANGUL LETTER A..HALFWIDTH HANGUL
FFC8..FFC9 ; UNASSIGNED # <reserved>..<reserved>
FFCA..FFCF ; DISALLOWED # HALFWIDTH HANGUL LETTER YEO..HALFWIDTH HANGU
FFD0..FFD1 ; UNASSIGNED # <reserved>..<reserved>
FFD2..FFD7 ; DISALLOWED # HALFWIDTH HANGUL LETTER YO..HALFWIDTH HANGUL
FFD8..FFD9 ; UNASSIGNED # <reserved>..<reserved>
FFDA..FFDC ; DISALLOWED # HALFWIDTH HANGUL LETTER EU..HALFWIDTH HANGUL
```

We do not allow Halfwidth Hangul variants for Korean IDN.

Recommendation: DISALLOWED