In the slides of “coordination between C, J and K” presented in CDNC Shanghai meeting, ICANN gave some coordination principles about repertoire, variant mapping and variant types as follows:

* Each CJK panel creates an LGR
* Each LGR includes a repertoire and variants
* If an LGR includes Han characters:
* the variant MAPPINGS must agree for all three panels
* the variant TYPES may be different
* the repertoires may be different

The meaning of “Variant mappings to agree”

* If any LGR defines a variant pair A <--> B
	+ ALL OTHER LGRs that contain A
		- must also contain B
		- must also contain the mapping A ---> B
	+ ALL OTHER LGRs that contain B
		- must also contain A
		- must also contain the mapping B ---> A

If the LGR from my Panel does NOT use variants

* The variant mappings must still be defined
* The variant mappings must agree with all other LGRs
* The variant type can be set to BLOCKED

If the LGR from my Panel uses variants?

* The variant mappings must agree with all other LGRs
* The variant type can be set to either BLOCKED or ALLOCATABLE
* The variant types do not have to agree across LGRs.

After the discussion with Japan representatives and Korean representatives during ICANN 51, we’d like to give some comments to the above principles:

1. A clear and detailed definition of “variant mappings” is needed

The meaning of A<-->B and A-->B and B-->A is ambiguous, causing different understandings of “variant mappings”. For example, A and B could be exchangeable code points in CGP and Chinese language environment, which is well known and acknowledged by J and K; A and B could also exist in Japanese language environment, but the RELATIONSHIP between A and B is “Old Form and New Form” and treated as independent code points.

 C, J and K discussed about this ambiguity and intend to elaborate “variant mappings’ as

[A code points family/set/cluster whose code point members have “different visual forms, the same pronunciations and the same meanings as the corresponding official forms in the given language contexts”[[1]](#footnote-1), but are NOT necessarily exchangeable.]

1. If the LGR from my Panel does NOT use variants, “allcoatable” and “blocked” are NOT enough to describe all cases, a code point could be “NEITHER allocatable NOR blocked”, which means, a code point could be “INDEPENDENT”.

|  |  |  |  |
| --- | --- | --- | --- |
| **Code Point** | **Allocatable Variant** | **Blocked Variant** | **Tag** |
| 一 (U+4E00) | -- | 壱 (U+58F1)壹 (U+58F9)弌 (U+5F0C)   | und-hani |
| 壹 (U+58F9) | -- | 一 (U+4E00) 壱 (U+58F1)弌 (U+5F0C)   | und-hani |
| 弌 (U+5F0C) | 一(U+4E00)  | 壹 (U+58F9)壱 (U+58F1)  | und-hani |
| 壱 (U+58F1) | 壹(U+58F9) | 一 (U+4E00)弌 (U+5F0C) | und-hani |
| 一 (U+4E00) | -- | -- | und-Jpan |
| 壹 (U+58F9) | -- | -- | und-jpan |
| 弌 (U+5F0C) | -- | -- | und-jpan |
| 壱 (U+58F1) | -- | -- | und-jpan |

As listed above, in Chinese language environment, “variants mappings” means those 4 code-points are exchangeable, for any given single code point of this “variant mappings“ family, the other code points could be either “Allocatable” or “Blocked”. But in Japanese environment, the exactly same 4 code points are all independent individual existence, they are not “allocatable” or “Blocked” for the others, the allocation of one code point doesn’t affect the others.

To illustrate it better, let’s take “国” (country) and “國”(country) as an example. In Mainland China, Taiwan and Hongkong, if the “.中国” or “.中國” was applied, the other one should be allocatable or blocked because “国” and “國” are exchangeable. However, “国” and “國” are new form and old form respectively, and independently used in Japanese language context. For “中国(ちゅうごく)” and “紀伊國屋(きのくにやしょてん)”, “国” and “國” cannot be exchanged. Accordingly, if the “.紀伊國屋” was applied, “.紀伊国屋” could be allocated to other applicants following JPRS’s current regulations.

Generally speaking, if someone applies for A label as a Japanese TLD, this label should be generated following JGP regulations, which treat A label and B label as two independent labels, and B label could be allocated to other applicants later (A and B are two variant labels). However, if someone applies for A label as a Chinese TLD, this label should be generated following CGP regulations, which treat A and B as exchangeable strings and then B should be allocatable or blocked and belong the same applicant.

**That’s why the unified variant mapping table should have language tag. And the final merged label generation rules should be a language tag based solution, language tag should be an important parameter in the generation rules (at least for C, J and K).**

1. 1 Report on Chinese Variant in Internationalized Top-level Domain [↑](#footnote-ref-1)