

The Encoding of Chinese Variants and Specification for Font Production in Hong Kong (PI: Prof. Lu Qin; 2012/13)

The main objective of this project is to specify Chinese character variants at the character level and encode all Chinese character variants used in Hong Kong so that computer systems can include supports of these variants in different applications. In Chinese, a single character under the same style or typeface may still have different shapes called Chinese variants. Hong Kong uses the traditional Chinese writing system similar to that of Taiwan. In our previous project (AF/212/99) entitled “The Building Blocks of ISO 10646 Migration in Hong Kong - Fonts and Tools”, we have helped HK government to produce The Hong Kong Glyph Specification based on components. But component based specification has limited use because is difficult for vendors to seek verification on the conformance of their products. There are also applications where the different written styles of the same logical character are required to be included in the same document requiring variants to be separately encoded and specified at the character level. This project will make use of a new enabling technology called the Ideographic Variation Sequence (IVS) recently developed by Unicode Consortium to help encoding character variants. Based on the encoded variants, a supplementary Hong Kong Character Glyph Specification will be developed to make the glyph specification much easier to use and verify.