



DATE: 2005-08-22

ISO/IEC JTC 1/SC 2/WG 2

Universal Multiple-Octet Coded Character Set (UCS) - ISO/IEC 10646

Secretariat: ANSI

TITLE: Proposal to add Mahjong symbols to ISO/IEC 10646
 SOURCE: TCA
 STATUS: Contribution from Liaison Member
 ACTION: For consideration by JTC1/SC2/WG2
 DISTRIBUTION: ISO/IEC JTC1/SC2/WG2

A. Administrative

1. Title: Mahjong Symbols
2. Requester's name: TCA
3. Requester type (Member body/Liaison/Individual contribution): Liaison
4. Submission date: 2005/8/22
5. Requester's reference (if applicable): No
6. Choose one of the following:
 This is a complete proposal: Yes
 or, More information will be provided later: No

B. Technical - General

1. Choose one of the following:
 - a. This proposal is for a new script (set of characters): Yes
 Proposed name of script: Mahjong Symbols
 - b. The proposal is for addition of character(s) to existing block: No
 Name of existing block: _____
2. Number of characters in proposal: 42
3. Proposed category (select one from below - see section 2.2 of P&P document):
 A-Contemporary X

B.1-Specialized (small collection) _____ B.2-Specialized (large collection) _____
 C-Major extinct _____ D-Attested extinct _____ E-Minor extinct _____
 F-Archaic Hieroglyphic or Ideographic _____
 G-Obscure or questionable usage symbols _____

4. Proposed Level of Implementation (1, 2 or 3) (see Annex K in P&P document): 1
 Is a rationale provided for the choice? No
 If Yes, reference: _____

5. Is a repertoire including character names provided? Yes
 a. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document? Yes
 b. Are the character shapes attached in a legible form suitable for review? Yes

6. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard? jpg files were provided by the Chinese Foundation for Digitization Technology (CMEX)
 If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: selena@cmex.org.tw

7. References:
 a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?
 No
 b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached? No

8. Special encoding issues:
 Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? No

9. Additional Information:
 Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see <http://www.unicode.org/Public/UNIDATA/UCD.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? No

If YES explain _____

2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)? Yes

If YES, with whom? Bureau of Standard, Metrology and Inspection (BSMI)

If YES, available relevant documents: The contract between BSMI and CMEX

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? More than millions people play manual Mahjong game, and more than ten thousand people play computer or online Mahjong game.

Reference: for example,
<http://www.mj-king.com/modules.php?name=Sections&op=listarticles&secid=1>
<http://www.acergame.com.tw/document/mj.shtml>
<http://kosti.tripod.com/mahjongbasic-big5.htm>
 or to find a lot of relevant information by using the google to search the keyword "mahjong"

4. The context of use for the proposed characters (type of use; common or rare): Play Mahjong with computer (i.e., computer game) or with another people through Internet (i.e., online game).

Reference: for example, <http://www.mjonline.com.tw/>

5. Are the proposed characters in current use by the user community? Yes

If YES, where? Reference: for example, <http://www.mjonline.com.tw/>

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? No

If YES, is a rationale provided? _____

If YES, reference: _____

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? Yes

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? No

If YES, is a rationale for its inclusion provided? _____

If YES, reference: _____

9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? No

If YES, is a rationale for its inclusion provided? _____

If YES, reference: _____

10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? No

If YES, is a rationale for its inclusion provided? _____

If YES, reference: _____

11. Does the proposal include use of combining characters and/or use of composite sequences?

No

If YES, is a rationale for its inclusion provided? _____

If YES, reference: _____

Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? No

If YES, reference: _____

12. Does the proposal contain characters with any special properties such as control function or similar semantics? No

If YES, describe in detail (include attachment if necessary): _____

13. Does the proposal contain any Ideographic compatibility character(s)? No

If YES, is the equivalent corresponding unified ideographic character(s) identified? _____

If YES, reference: _____

D. Proposal

User Community

Mahjong is still a very popular game in Taiwan. Most adult people in Taiwan have experience of playing Mahjong on Chinese New-year vacation. With the developing of computer technology and Internet, there were two new types of Mahjong appeared. The first one is a computer game for which a person playing Mahjong with PC. The second one is an online game for which 4 people playing by means of Internet.

Invention of Mahjong

The true origin of Mahjong is still a mystery and many legends relating to its development are made up to attract potential customers and players. Mahjong which commonly known as “Sparrow” is said to be originated from Ningpo in Chunchu and Warring Period (B.C. 770 -221) of China. Originally, characters and icons were engraved onto the wooden tiles, yet products in various fashions are now available and there are paper cards convenient for outdoor use. It is also said that Mahjong has been played on Noah’s Ark; if so, the game then has a history of more than four thousand years. Nowadays, it is generally believed to start since mid of 19th century because there is no evidence related to it. However, the precise time of its birth is still unknown.

Although the game of card stacking was seen in China since AD 1120, Mahjong is more similar to many ancient card games. One of the games is called “Mahdiao” (“horse-hoisting” literally), which has 40 cards in total and divided into 4 doors; each door has numbers from 1 to 9 together with remaining 4 cards as flowers. The most popular statement is that Mahjong was transformed from this game in Ningpo around AD 1850, where two brothers engraved the card surface onto small tiles made with ivory and bamboos for invention of Mahjong.

Spread of Mahjong

Mahjong spread over the world very quickly: it spread to Japan in 1907 and to USA after 1920. Since there are no formal rules and people playing Mahjong increased, the way to play it also has many changes. Two major changes were made in Japanese rules of Mahjong: firstly, there was no

more scoring according to type of tile arrangement and it was replaced by “hu” competition; secondly, the second winning player had no more score and only the player obtained “hu” may receive money from other 3 players.

When Mahjong was introduced to USA, the introducer simplified the rules and got rid of many details. The game became popular very fast, but many people still thought that the game needed improvement; thus some new rules and special hands of “hu” were added. The new addition created large confusions in USA and for this, the National Mahjong Union published the official American rules. During the period, there are many new changes on Mahjong and everyone looked it as a whole new game.










Type of Mahjong

Mahjong started in mainland China and became popular in Taiwan, Hong Kong, Japan and various places in Europe and USA. It can be divided into two types: (1) 16-tile Mahjong: this is also known as Taiwanese Mahjong, which has 144 tiles inclusive of 8 flower tiles; (2) 13-tile Mahjong: this has 8 flower tiles less than the Taiwanese Mahjong and comes to a total of 136 tiles. Except for Taiwan, the 13-tile Mahjong is most popular in mainland China, Hong Kong, Japan, Europe and USA.


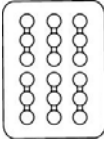
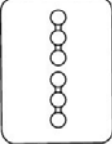
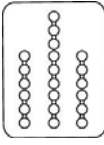
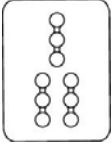
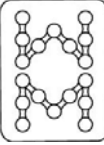
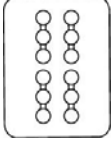
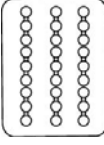
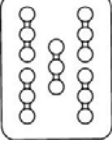
Classification of Mahjong Tiles

Mahjong has total of 144 tiles divided into 7 categories: thousands (4 sets each having 9 titles), bars (4 sets each having 9 titles), pies (4 sets each having 9 titles), dasanyuan (4 sets each having 3 titles), winds (4 sets each having 4 titles), seasons (4 titles) and flowers (4 titles). The glyphs and names of those different Mahjong titles are as follows:


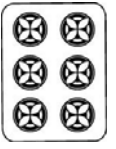

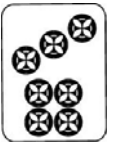
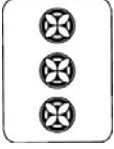
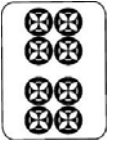
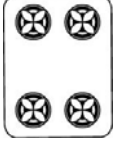
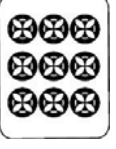
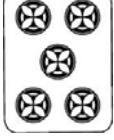
1. THOUSANDS

Glyph	Name	Glyph	Name
	TEN-THOUSAND		SIXTY-THOUSAND
	TWENTY-THOUSAND		SEVENTY-THOUSAND
	THIRTY-THOUSAND		EIGHTY-THOUSAND
	FOURTY-THOUSAND		NINETY-THOUSAND
	FIFTY-THOUSAND		


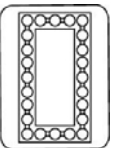

2. BARS

Glyph	Name	Glyph	Name
	ONE-BAR		SIX-BAR
	TWO-BAR		SEVEN-BAR
	THREE-BAR		EIGHT-BAR
	FOUR-BAR		NINE-BAR
	FIVE-BAR		





3. PIES

Glyph	Name	Glyph	Name
	ONE-PIE		SIX-PIE
	TWO-PIE		SEVEN-PIE
	THREE-PIE		EIGHT-PIE
	FOUR-PIE		NINE-PIE
	FIVE-PIE		





4. DASANYUNGS

Glyph	Name	Glyph	Name
	RED-ZHONG		BAI-PLATE
	BLUE-FA		





5. WINDS

Glyph	Name	Glyph	Name
	EASTERN-WIND		WESTERN-WIND
	SOUTHERN-WIND		NORTHERN-WIND

6. SEASONS

Glyph	Name	Glyph	Name
	SPRING		AUTUMN
	SUMMER		WINTER

7. FLOWERS

Glyph	Name	Glyph	Name
	PLUM		BAMBOO
	ORCHID		CHRYSANTHEMUM