INTERNATIONAL ORGANIZATION FOR STANDARDIZATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC 1/SC 2/WG 2

L2/04-028

Universal Multiple-Octet Coded Character Set (UCS)

ISO/IEC JTC 1/SC 2/WG 2 N 2696

2004-01-22

Title: Presentation Foils from National Workshop on Unicode, New Delhi, Sept 24-26,

2003

Source: V.S. Umamaheswaran – <u>umavs@ca.ibm.com</u>

References:

Action: For information to WG2

Distribution: ISO/IEC JTC 1/SC 2/WG 2

At the request of our convener Mr. Mike Ksar, I have packaged the set of foils (modified slightly) that I had presented at the National Workshop on Unicode, New Delhi, Sept 24-26, 2003, organized by the Ministry of Information and Communication Technology, India. Some of you involved with JTC1/SC2/WG2 and the Unicode Technical Committee may find it of some use.

In particular, slide number 4 of the second presentation – on page 14 – titled 'Framework for Discussion' was also used in WG2 meeting M44 during our ad hoc on Tibetan. It is a gist of the principles to follow while proposing additions or changes to the standard.

V.S. Umamaheswaran umavs@ca.ibm.com IBM Toronto Lab, Canada

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Topics

- > Unicode and ISO/IEC 10646
- > UCA and 14651
- > Processes
- > Guidelines for Proposals
- > Organize the Expertise

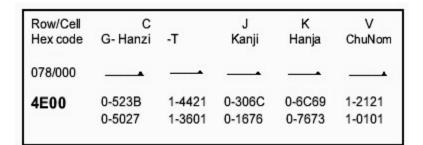
	Unicode	10646		
Code Space	0 to x10FFFF	0 to x10FFFF*		
Repertoire	Same	Same		
Supp. Planes	Same	Same Same		
BMP non CJKV	Same			
BMP CJKV	Single Col	CJKV Cols		
Chart Creation	Common DB	Common DB		

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Unicode and ISO/IEC 10646



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	Unicode	10646			
Publication	Web; Book	Edition + Amds			
	Dot Release	(1 volume end of 2003)			
	Book Style	ISO Style			
Conformance	=Level 3	Levels 1, 2, 3			
		(use 3 for Indic)			
BiDi	Defined	Refers to			
		Unicode			
Normalization	Defined	Refers to			
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Unicode and ISO/IEC 10646

	Unicode	10646		
Combining	Property + TRs+ Text	List + Minimal Info		
Format Chars	Property	Some Listed		
Script Info	Lot of Detail	Minimal		
Annotations	Many more	Some in Annex		
Naming Rules	uses 10646	Defined		

<u> </u>								
	Unicode	10646						
Properties + Processing Rules	Defined	Out of scope						
UTF-8,-16, -32/UCS4	Same	Same						
Compressions	Defined	Not included						

Conforming to Unicode will automatically conform to 10646 Level 3 plus lots more

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Unicode Collation Algorithm and ISO/IEC 14651

- Synchronized with Each Other
- Share same Concepts for Weights Categories and Tailoring
- Tailoring Required in Both
- Default Weights and Repertoire Identical in Both
 generated from the same data base
- 14651 Editions + Amds versus UCA Versions

Conforming to UCA will also conform to 14651 plus more functions

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Processes

	In	Further progression			
Stage ⇒	Initial proposal	Account to the second	accept	Pipeline and Unicode Database	Beta Publication Web plus Book Database

111								
	WG2 Stage	Initial	Provisi	Final	WG2	SC 2	JTC 1	ITTF
	\Rightarrow		onal accept	1 T. C.	Bucket	Ballot	Ballot	Publication
		Sai	ance	ance				
		In process within WG2					Furthe	er progression
L								

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Processes

	In	proces	Further progression		
Stage ⇒	proposal	Provisi onal accept ance	accept	Pipeline and Unicode Database	Beta Publication Web plus Book Database

2 Ballots Draft, Final 12-18 months

141								
	WG2 Stage	Initial	Provisi	Final	WG2	SC 2	JTC 1	ITTF
	⇒		onal accept ance	**************************************	Bucket	Ballot	Ballot	Publication
	In pro			ess with	in WG2		Furthe	r progression

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Processes

- ➤UTC has additional procedures for preparing and processing Technical Reports
- ➤ See FAQ page at Unicode site

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Processes

- Membership in SC2
 - National Bodies
 - Ex: INCITS in USA, SCC in Canada, BIS in India
 - Roster on SC2 site www.dkuug.dk/JTC1/SC2
- Membership in UTC
 - Review by all members and experts
 - Voting by Corporate Members
 - Government of India is a Corporate Member
 - Roster on Unicode site.

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Proposal Guidelines

Do your homework

? Check if Already encoded?

(see http://www.unicode.org/standard/where/)

- Check Charts in Unicode V4
- Also charts in TRs
 - TR15 Normalization charts
 - TR10 Collation charts
 - TR21 Case map charts
 - TR24 Script charts
- > or for legacy sets ICU Charmaps or equivalents

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Proposal Guidelines

- ➤ May be in a block with recognized name ..
- ➤ Search Nameslist file in Unicode Database

Name could be in Annotations

Shape in standard can be a variant (see handout page 2)

➤Is it a Glyph (from a Font for example?)

http://www.unicode.org/reports/tr17/#Characters vs. Glyphs

and TR 15285 – Character Glyph Model

http://isotc.iso.ch/livelink/livelink/fetch/2000/2489/Ittf Ho

me/PubliclyAvailableStandards.htm??Redirect=1

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Proposal Guidelines

- Character may be under considerationLook in Unicode Pipelinehttp://www.unicode.org/alloc/Pipeline.html
- Check if previously considered and rejected http://www.unicode.org/alloc/rejected.html
- ➤ Also for any accepted pending scripts:

 http://www.unicode.org/pending/pending.html

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Proposal Guidelines Do your homework

For entire script - check out the ROADMAPS:

http://www.unicode.org/roadmaps http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html

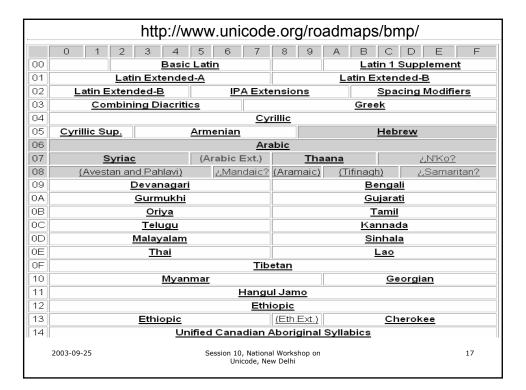
Already encoded- **Bold text** in Roadmap proposal accepted

- (Bold text between parentheses)

under consideration (Text between parentheses) exploratory ¿Text between question marks? possible future – no suggestions ??? hot links for latest proposal included

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Proposal Guidelines Do Your Homework

- ? Can the character be represented as sequences ? Remember no Duplicate Representation
- Indic conjuncts fall into this category
- Check out Chapter 9 of Unicode 4.0
 (Examples in handout last 3 pages)
- http://www.unicode.org/standard/where/, and
- http://www.unicode.org/faq/char_combmark.html

Proposal Guidelines

Other proposals may exist elsewhere in draft form especially with archaic / minority scripts

Ex: Kharoshthi, Brahmi, Surashtrian .. proposals

Ask / network on the public discussion lists http://www.unicode.org/consortium/distlist.html

indic@unicode.org is set up for Indic

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Universal Multiple-Octet Coded Character Set (UCS)

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Use Latest

Title: Principles and Procedures for Allocation of New Characters and Scripts and handling of Defect Reports on Character Names (Replaces N2352, N 2002 and N1876)

Ad hoc group on Principles and Procedures (Edited by: V.S. Umamaheswaran) Source: References: See references section in the document Action: To be considered by SC 2/WG 2 and all potential submitters of proposals for new

characters the repertoire of ISO/IEC 10646, and for new collection identifiers ISO/IEC JTC 1/SC 2/WG 2, ISO/IEC JTC 1/SC 2 and Liaison Organisations

www.dkuug.dk/JTC1/SC2/WG2/principles.html

Annex A: Information Accompanying Submissions

Annex F: Formal criteria for disunification

Annex G: Formal criteria for coding precomposed characters

Annex H: Criteria for encoding symbols

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WHEN YOU ARE CERTAIN A NEW PROPOSAL IS WARRANTED

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646³
Please fill all the sections A, B and C below.

(Please read Principles and Procedures Document for guidelines and details before filling this form.)

See http://www.dkuug.dk/JTC1/WG2/docs/summaryform.html for latest Form.

See http://www.dkuuq.dk/JTC1/WG2/docs/principles.html for latest roadmaps.

See http://www.dkuuq.dk/JTC1/WG2/docs/principles.html for latest roadmaps.

Prepare the Proposal Summary Form www.dkuug.dk/JTC1/SC2/WG2/summaryform.htm

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Proposal Guidelines Proposal Summary Form

- > Contains several questions to be answered
- See Submitter's Responsibilities in Form
- Most related to the previous checking steps
- Additional Information to assist in evaluation by UTC and WG2
 - ➤ Unicode Properties, Evidence of use, References
 - > Information about submitters & others consulted
 - > Preferred location, Glyphs/Font for publications

Facilitates evaluation by UTC, WG2 and other experts worldwide

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Organize the Experts Some Observations / Suggestions

- > Workshops are Educational
- Formal review and Consensus Process helps in consolidated national positions
- Participation by Regulators (Governments), User
 Communities and Industry is important
- Possibly re-activate BIS working group
- Be present at UTC and ISO committees with some Continuity of Participation
- Maximize use of e-discussion lists free dialog
- Continue to Prepare and disseminate Resources and Education material

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Unicode Issues Dravidian Group Kannada, Malayalam, Tamil & Telugu

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Characters added in V4.0

(in response to latest request from India)

OCBC KANNADA SIGN NUKTA OCBD KANNADA SIGN AVAGRAHA

(from TNG Keyboard Layout)

0BF3 TAMIL DAY SIGN (Naal)
0BF4 TAMIL MONTH SIGN (Maatham)
0BF5 TAMIL YEAR SIGN (Varudam)
0BF6 TAMIL DEBIT SIGN (Patru)
0BF7 TAMIL CREDIT SIGN (Varavu)
0BF8 TAMIL AS ABOVE SIGN (Merpadi)
0BF9 TAMIL RUPEE SIGN (Rupai)
0BFA TAMIL NUMBER SIGN (Enn)

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Additions in V4.0

Additions to text of Chapter 9 to address several of the requests in latest input from Gov of India and from other inputs.

Some examples:

Added text - where users are to look for the DANDA **DOUBLE DANDA** characters (in the Devanagari block). and

> **OCCD KANNADA SIGN VIRAMA** * preferred name is halant

See handout charts and names list for Annotations added.

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Framework for discussion

- Respect Stability Policy
 - > No removal of existing character
 - No relocation / reordering of existing code positions
 - > No name changes
 - ➤ No changes to existing canonical equivalences / normalization
 - > No new multiple spellings
 - > No new encoding model
 - If sequences satisfy the requirement no new character needed (Ch 9)
- Suggestions that can be entertained
 - > Text for FAQ, Tech Note, Standard for better understanding
 - Possible new sequences
 - > Annotations where appropriate
 - New characters only with evidence
 - > Deprecation only with strong justification

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Packaging Results of Discussion

For each Dravidian Script Categorize issues as:

- Proposal for FAQ material
- Proposal for Unicode Technical Note
- Proposal for Explanatory text
- Proposal for Annotation
- Proposal for Deprecation
- Proposal for New Character

Assign an Owner for Each

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