ISO TC46/SC2
Conversion of written languages
Conversion des langues écrites
Конверсия письменных языков

Doc Type: **Disposition of Comments**
Title: **Disposition of Comments to DIS 15924**
        (Information and documentation —
        Code for the representation of names of scripts)
Source: **Michael Everson, editor**
Status: **For information to ISO TC46/SC2**
Action: **ACT**
Date: **2001-10-03**

The DIS ballot began 2000-08-10 and closed 2001-01-10 with the following result.

P-Members:	19	O-Members	22 (23)
P-Members Approving:	11	O-Members Approving:	1 (2)
P-Members Disapproving:	3	O-Members Disapproving:	0
P-Members Abstaining	0	O-Members Abstaining:	3
P-Members not voting:	5	O-Members not voting	18

Required to pass from FDIS to IS:
        66% majority of P-Members voting — 11 Yes = 73%, 3 No = 27%
        less than 25% negative votes among all votes cast — 13 Yes = 77%, 3 No = 23%

ISO 15924 is approved.

Country	Member	Participation	Voted	Last modified (CET)
Argentina	IRAM	O	-	-
Armenia	**SARM**	**P**	**Approval**	**2000-12-07**
Australia	SAI	O	-	-
Austria	**ON**	**P**	**Disapproval (comments)**	**2001-01-18**
Belgium	IBN	O	-	-
Bulgaria	BDS	O	-	-
Canada	SCC	O	-	-
China	**CSBTS**	**P**	-	-
Czech Republic	**CSNI**	**P**	-	-
Egypt	**EOS**	**P**	**Approval**	**2000-12-04**
Ethiopia	**QSAE**	**P**	-	-
Finland	**SFS**	**P**	**Approval**	**2001-01-10**
France	AFNOR	O	-	-
Germany	**DIN**	**P**	**Approval**	**2001-01-03**
Greece	**ELOT**	**S**	**Approval with comments**	**2001-01-18**
Hungary	MSZT	O	-	-
Iran	**ISIRI**	**P**	-	-
Ireland	**NSAI**	**P**	**Approval with comments**	**2001-01-09**
Israel	**SII**	**P**	**Approval**	**2000-08-28**
Italy	**UNI**	**P**	**Approval**	**2001-01-09**
Japan	**JISC**	**P**	**Disapproval (comments)**	**2001-01-05**
Korea, DPR	**CSK**	**P**	-	-
Korea, Rep. of	**KATS**	**P**	**Disapproval (comments)**	**2001-01-15**
Mexico	DGN	O	-	-

Mongolia	**MNCSM**	**P**	**Approval**	**2000-08-31**
Netherlands	NEN	O	-	-
Norway	NSF	O	-	-
Poland	PKN	O	-	-
Portugal	IPQ	O	Abstention	2001-01-12
Romania	ASRO	O	-	-
Russian Fed.	**GOST R**	**P**	**Approval**	**2000-12-19**
Slovakia	SUTN	O	-	-
South Africa	SABS	O	Approval	2000-11-07
Spain	AENOR	O	-	-
Sweden	SIS	O	Abstention	2001-01-05
Tanzania	TBS	O	-	-
Thailand	**TISI**	**P**	**Approval**	**2001-01-11**
Turkey	TSE	O	-	-
Ukraine	DSTU	—	Approval with comments	2001-01-09
United Kingdom	BSI	O	Abstention	2000-12-13
USA	ANSI	O	-	-
Yugoslavia	SZS	O	-	-

Greece

1. Add the Minoan script, which is different than the Cypro-Minoan script. The term Minoan Script is used in the Bibliography for a Script whose historic evolution was made through the use of several different systems: ProtoLinear, Linear A, Linear B, and in parallel, Minoan Hieroglyphics.

Rejected. There seems to be some confusion about the Aegean scripts; "Minoan hieroglyphic" does not appear in script sources available at present to the editor. It is safer that this be handled by the Registration Authority in consultation with the RA-JAC and Greek NB after approval of the standard.

> **NOTE: The ISO/CS has suggested that ISO 15924 needs to have a *Registration Authority*, not a *Maintenance Agency*. It is proposed to accept this recommendation of the ISO/CS; the FDIS will be edited to reflect this.**

2. Delete the Phaistos scripts, because actually the famous present of ELOT, the Phaistos Disk (~1600 B.C.) is a monument of Minoan Hieroglyphics, not a script of its own.

Accepted. Phaistos will be moved to annex B pending further discussion by the Registration Authority in consultation with the RA-JAC and Greek NB after approval of the standard.

> **NOTE: The ISO/CS has informed us that if we want to have the codes freely available on a website (which TC46/SC2 has always wanted) then the codes themselves should not be part of the actual standard, but only on the RA's website. It is proposed to accept this recommendation of the ISO/CS. This means that the Tables on pp. 7-16 of the DIS will be deleted before the FDIS is published, and Annex B will likewise be deleted.**

Japan

1. We do not accept the maintenance agency mentioned in Annex A. The MA should be more linguistically experienced internationally recognized organization.

Rejected. The RA is a linguistically experienced Irish company which has considerable international recognition. The RA participates actively in the work of ISO/IEC JTC1/SC2, JTC1/SC2/WG2, JTC1/SC2/WG3, ISO TC46/SC2, TC46/SC3, TC46/SC4, TC46/SC11, TC37/SC1, TC37/SC2, TC37/SC3, and CEN TC304. The RA participates in the work of the ISO 639 RA-JAC (language codes) and the IETF language code registry (RFC 3066). The RA *originated* the NP 15924 and provided the editor for the project. The editor is also a member of the UTC committee responsible for the publication of the Unicode Standard ("the Book committee"), and maintains the Roadmaps for script additions to the UCS on behalf of SC2 and the UTC.

The Japanese comment did not propose any other body for the role of the RA, so no further action could be taken in any case.

2. A.3.1: We do not approve members from UNICODE Technical Committee. JTC1/C2 should well represent information technology side. Inclusion of UTC makes inclination to technology side.

Accepted. See response to Irish comment 7 below.

3. (Editorial comment) French title of Table 1 has an error (trois).

Accepted.

Ireland

Ireland approves the DIS with the following comments.

TECHNICAL
1. Clause 2. Add "ISO/IEC 9541-1:1991 Information technology – Font information interchange – Part 1: Architecture" referenced in clause 3.4.

Accepted.

2. Clause 2. Add "ISO/IEC 10646-2:2001 Information technology – Universal Multiple-Octet Coded Character Set (UCS) – Part 2: Supplementary Planes"

Accepted.

3. Clause 3.1. Replace "is a collection of" with "encompasses".

Accepted. No change is required to the French text.

4. Clause 3.9. Rewording this definition as follows: "Form of a script which is so distinctive a rendering as to almost be considered to be a unique script in itself".

Accepted. No change is required to the French text.

5. Change Clause 4.5 to:
"For the purpose of allocating additional script codes, ISO has designated a Maintenance Agency for ISO 15924. ISO maintains a list of Maintenance Agencies and Registration Authorities on the Internet at
    http://www.iso.ch/infoe/agency/agenlist.html
The ISO list identifies the Maintenance Agency and where the Maintenance Agency has published materials related to this standard on the Internet."

Accepted. This change ensures that if the RA changes, the standard need not be revised. The French text is also changed. A corresponding change must be made to annex A.1 and annex A.3.1.1.

6. Code list: There is an error in numbering the ranges of the private use characters, and also an overlap with the numeric code assigned to Jpan. In order to be useful, there should be a large number of private codes; as the numeric range 900-999 only gives one hundred positions, it is proposed that the range Qaaa-Qacz or 900-977 be reserved for private use. In that case the numeric code for Jpan should be changed to 980.

Accepted.

7. Annex A.3.1. Eight representatives on the MA-JAC is really too many for efficient communication. It seems that one representative from each of the groups listed ought to be sufficient. Additionally, in an ISO standard it may not be permitted to refer explicitly to the UTC. If (and only if) it is not, then SC2/WG2 should appoint two members.

ISO 15924/MA-JAC is composed of:
• 1 representative of the Maintenance Agency (see clause 4.5);
• 1 representative of the ISO 639-2/RA;
• 1 representative of ISO/IEC JTC1/SC2/WG2 (nominated by ISO/IEC JTC1/SC2)
• 1 representative of ISO TC46 (nominated by ISO TC46);
• 1 representative of the Unicode Technical Committee (nominated by the UTC).
The three technical committees may nominate substitute representatives.

Accepted. Comparing comment 2 from Japan, the UTC should be deleted from this, and WG2 should have 2 representatives. In addition, a representative from ISO TC37 should be added as per the Austrian comments. This will bring the number of voting menbers to 6, of which a majority will be 4 (cf. annex A.3.6). The text should read:

> **ISO 15924/RA-JAC is composed of:**
> **• 1 representative of the Registration Authority (see clause 4.5);**
> **• 1 representative of the ISO 639-2/RA;**
> **• 1 representative of ISO TC46 (nominated by ISO TC46);**
> **• 1 representative of ISO TC37 (nominated by ISO TC37);**
> **• 2 representatives of ISO/IEC JTC1/SC2 (nominated by ISO/IEC JTC1/SC2/WG2)**
> **The ISO technical committees may nominate substitute representatives.**

EDITORIAL
8. Ireland would very much prefer only to have one representation of the name Hangul in the standard. We would prefer the deletion of BOTH of the superfluous transliterations for Hangul which appear in parentheses throughout. The addition of these transliterations adds nothing to the standard but draws attention to the fact that Korean transliteration is unstandardized.

Rejected. This request runs counter to the request by the Korean NB; the only compromise seems to be to keep the terms as they are in the DIS, namely, "Hangul (Hangŭl, Hangeul)".

Republic of Korea

Since we do not have detailed information about DIS 15924 and the recent changes made to CD 15924, we would like to make sure that the following comments of Korea national body be reflected to DIS 15924.

1. Script name Hangeul vs. Hangul
Since we have ISO TS 11941 for transliteration of Hangeul, we would like to transliterate Hangeul into Latin using that TS.

We clearly mentioned this fact to the editor (?) of this CD at the London meeting in 1998, in our comments (in our document K260 dated in Jan. 1999) regarding CD 15924, and at the Paris meeting in 1999. We strongly request that our request be reflected in DIS 15924 this time.

The names of scripts given in this standard are *names*, not *transliterations*. The name *Hangul* is widely known as the name of the Korean script in the English language. As a compromise, and as is reflected in the Disposition of Comments to the ballot on CD 15924, both common transliterations are given in parentheses.

We have already used the transliteration in ISO TS 11941 for ISO/IEC 10646 and ISO 3166-2.

Hangul is used as the name of the script in ISO/IEC 10646. In ISO 3166, actual transliteration is performed. The list of names here is the usual name in English and French, such as *Cyrillic* and *cyrillique*, not a transliteration like *kirillica* (for *кириллица*), etc.

Suggestion. Change "Hangul" to "Hangeul" in English.

Rejected. This request runs counter to the request by the Irish NB; the only compromise seems to be to keep the terms as they are in the DIS, namely, "Hangul (Hangŭl, Hangeul)".

2. Script name hangûl in French
Since there is no French phoneme corresponding to eu as in Hangeul, it is not possible to write down Hangeul 'correctly' in French.

"Correctly"? The name of the script in the French language is conventional, in a long-established tradition.

We would like to point out that ISO TS 11941 is transliteration into Latin, not into English and, therefore, TS 11941 can be used for both English and French versions.

This is not correct. ISO 15924 gives codes for the *names of scripts*. In English and French the names "Hangul" and "hangûl" are used, and are pronounced according to English and French phonetics respectively. Compare ISO 639, where the *names of languages* are used (Korean, coréen).

Considering these facts, we would like to use Hangeul both as script names both in English and in French. (Of course, we understand that some French people would pronounce hangeul as something like hanjeul.)
Suggestion. Change "hangûl to "hangeul" in French.

Rejected. The traditional name for the script in French is *hangûl*. *All* French people (not some of them) would pronounce "hangeul" as "hanjeul". The transliterated names have been added in parentheses as for English.

3. Hangeul is not a syllabic script
The numeric code element for Hangeul seems to indicate that Hangeul is a syllabic script.

Hangeul symbols can be decomposed into letters corresponding to phonemes. As we understand it, therefore, Hangeul IS an alphabetic script, NOT a syllabic script.

In contrast, Hiragana (410), Katakana (411), and Yi (460) are good examples of syllable scripts, since symbols in these scripts cannot be further decomposed into letters corresponding to phonemes.

In case classification are to be made, change the category of Hangeul from syllabic scripts (400-499) to left-to-right alphabetic scripts (200-299).

Confirmed. This comment was accepted in the Disposition of Comments on CD 15924, and the DIS used the numeric code 286 for Hangul.

4. Kh, Khn - alias for Hangeul + Han
We did not propose this alias.
Suggestion: We request that we delete "Kh, Khn - alias for Hangeul + Han" in all Tables.

Confirmed. This comment was accepted in the Disposition of Comments on CD 15924, and the codes were deleted from the DIS.

Gugyeol - Annex A: scripts under consideration for future editions of ISO 15924
Gugyeol has been under investigation for inclusion in ISO/IEC 10646, although no conclusion has been reached yet.
Suggestion: Add "Gugyeol" to Annex A.

Confirmed. This comment was accepted in the Disposition of Comments on CD 15924, and Gugyeol appeared in annex A of the DIS.

Austria

General comments. Austrian comments on the CD in question have not been given due consideration and decisions have been taken at the ISO/TC46/SC2 meeting in Berlin at which we were unable to be present. We wish to emphasize that the Secretary of SC2 looked into the matter and we thus hope that the comments particularly related to the French denomination of scripts will be reexamined.

Due consideration was indeed given to the Austrian comments. The disposition of comments on CD 15924 was distributed on 1999-06-16 (www.evertype.com/ standards/iso15924/document/cd15924-dispcom.pdf). The response to the Austrian comments was as follows:

Comments on the Austrian Yes vote:

These comments are all of an editorial nature with regard to grammatical and orthographic issues in the French version of the standard, and so have not been reproduced here. They are all accepted in principle (but in principle only) pending verification. Extensive verification of French terms will take place before the DIS ballot is sent out.

Note that European and North American native speakers of French expert in script matters participated in the development of the standard. In any case, the *names* are not normative in this standard any more than they are in ISO 639. It is the *codes* that are normative.

In addition we propose close examination of identical denominations of languages (given in ISO 639-1 and 639-2) and scripts and thus close collaboration with ISO/TC37.

Noted. This was already done in successive drafts of the document; see clause 4.3. In general ISO 639 codes were used where applicable. In some instances, the ISO 639 codes were not used, in preference to a set of OpenType script codes, which had already been implemented by industry; the developers of OpenType have in turn agreed to use ISO 15924 as new script codes are added to their specification. The advantage here is that the world has only one set of script codes.

This comment has pointed out the importance of collaborating with TC37, and so it seems sensible to add a representative of TC37 to the RA-JAC.

After careful examination and study of the present DIS 15924 we are very sorry indeed to disapprove of the document in question.

Noted.

The technical reasons for this negative judgement of ours are the following.

1. Kharoṣṭhī (not "°thi" as it is written inaccurately [cf. Brāhmī with the same long ī] throughout the DIS)…

Noted. The form "Kharoṣṭhī" will be used in the published standard. This is an editorial comment, not a technical comment.

… one of the first two Indian scripts (lipi- ƒ.), created in the 4th or 3rd cent. BC, is bluntly miscategorized; for it definitely does not belong to the Brāhmī family as is implied by its number, being "305" throughout the given document. Quite on the contrary, Kharoṣṭhī, being a script developed or invented independently and put to use for more than a millennium from North West India up to Central Asia, is derived from an Aramaic model, the direction of writing, therefore, being right to left. The only common feature it shares with the Brāhmī is the vowel a being inherent in the consonant signs;

It was considered that this feature (the inherent -*a* together with the modification of base syllable with vowel signs) is the essential feature unifying the two scripts; directionality was not considered to be the primary identifying factor. (Chinese can be written right-to-left!) From Richard Salomon's article "Brahmi and Kharoshthi" in Daniels & Bright: "Despite their superficial differences, Brāhmī and Kharoṣṭhī are systematically of essentially the same type, namely diacritically modified consonant syllabic scripts, or *alphasyllabaries*."

… for more details cf. H. Falk's Schrift im alten Indien *(Tübingen 1993), p. 84ff, a book we direly miss, as many others, in the bibliography on p. 23.*

The bibliography contains works which were consulted in drawing up the standard.

Be that as it may, this Indo-Aramaic script has to be re-categorized, giving it a number between 100-199…

Rejected. However, owing to the fact that Kharoṣṭhī is not *derived* from Brāhmī, the term "Alphasyllabic scripts" will be used to replace the term "Brāhmī-derived scripts". But most of the scripts are derived from Brāhmī.

…a group which in our opinion should be renamed as "right-to-left scripts" as neither the Kharoṣṭhī nor any other script having this direction of writing with the exception of Avestan is strictly speaking alphabetic in the sense that also the vowels are given their full graphic expression.

Rejected. The term "right-to-left alphabetic scripts" accurately describes the scripts so classified. M. O'Connor's article "Epigraphic Semitic scripts" in Daniels & Bright discusses the issue but no conclusion is made. Users of ISO 15924 will know what is meant.

2. Concerning numbering and categorization we have to deplore a second, even greater blunder: What is called "Cuneiform, Old Persian" has nothing to do whatsoever with the 'right-to-left scripts', with which it is grouped by no. "105". The Old Persian Cuneiforms are written the other way round, left to right, and as already the name indicates, this script, invented on the initiative of Darius the Great in 522/521 BC on the basis of the then used cuneiform scripts (Akkadian and Elamite), belongs to the first group (000-099).

Accepted. From David D. Testen's article "Old Persian Cuneiform" in Daniels & Bright: "Although inspired by cuneiform, the Old Persian script is essentially an alphabetic writing system—its only clear relation to cuneiform lies in the sign ⬧ for the non-Persian sound /l/, the character for which is clearly based on cuneiform ⬧ *la*." Old Persian could be moved to "left-to-right alphabetic scripts" (as it is not a right-to-left script), but as it is semisyllabic as well, it does no harm to reassign it to the Hieroglyphic and Cuneiform; it will have the number 025. Note that Ugaritic Cuneiform was *also* misidentified, as it is a left-to-right alphabetic script and must have its number reassigned to 270.

3. The last reason, why we can't accept the given DIS, is that well-known and very important Indo-Iranian scripts are simply not included: e/g. the Persian script which with its well-established varieties (Shekaste etc.) is more differentiated form its Arabic source than the Pahlavi (which is included) from its Aramaic, on the Iranian, and Grantha on the Indian side.

Rejected. At this stage, additions to the list should be handled by the Registration Authority in consultation with the RA-JAC and Austrian NB after approval of the standard. Procedures for this are clearly given in clause 4.5. This does not seem to be a sufficient "technical" reason for disapproving the standard.

Conclusion: the Present DIS for the reasons given above, therefore, needs thorough revision.

"Thorough revision" is not called for considering the rather minor points raised here. In any case, perhaps Austria will consider that 1) the term "alphasyllabary" mediating the classification of Kharoṣṭhī, 2) the reassignment of Old Persion to Hieroglyphic and Cuneiform, and 3) the fact that Persian issues can be accommodated by consultation with the RA, will satisfy their comments to the DIS. The French terms will also be revisited one last time before publication.

Hence, the DIS should not be accepted by any sensible and responsible person or organization and is thus rejected by the Austrian Technical Committee responsible for the subject dealt with in said DIS.

The editor would like to go on record as objecting to this comment. ISO 15924 has been developed with the input of a great many experts and has already been "preadopted" by implementors in the IT field.

Vienna, 2001-01-08. Comments prepared by Prof. Dr. Chlodwig H. Werba, University of Vienna; Prof. Dr. Otto Back (particularly concerning the CD) and the Technical Officer, Magdalena Krommer-Benz, M.A.

Ukraine

Contents (English and French version)
1. Amend title of clause 3 to "Terms and definitions"

Accepted.

2. Bring into line pages number in "Contents" to pages number in the text.

Accepted.

3. Correct tables number in according to their titles in the text of standard.

Accepted.

4. Add to annexes their status in parentheses (see 6.1.2 of ISO/IEC Directives, Part 3, 1997)

Accepted.

Normative References
5. The list shall be introduced by the following wording (the text of the wording – see in 6.2.2 of ISO/IEC Directives, Part 3, 1997)

Accepted.

6. Clause 1; 4.1; etc. Note. Delete colon after the "Note" (see 6.5.1 of ISO/IEC Directives, Part 3, 1997)

Rejected. That clause does not specify that colons shall not be used; colons and hyphens are found in many ISO standards following the word NOTE.

7. Annexes. For the description of the two types of annex, see 6.3.8 and 6.4.1 of ISO/IEC Directives, Part 3, 1997

Noted.

8. Annex A. The word "normative" shall be placed on a separate line (see 5.2.6 of ISO/IEC Directives, Part 3, 1997)

Accepted.

9. Amend referenced number "Membership to A.3.1.1 (see French version)

Accepted.

10. Annex A.3.5. For reference it is unnecessary to use the term "clause". Correct to "describe in 4.1".

Accepted.

11. Annex "References" shall be entitled to Annex C.

Accepted.