

International Organization for Standardization (ISO), which is now used in the fields of library science and technical research. (cf. *Duden—Wörterbuch geographischer Namen*, preface, pp. XXII–XXXI, for the applied transliteration-transcription systems.)

The delegation of the Federal Republic of Germany feels that the development of different transliteration systems should, if possible, be avoided for nationally or areally localized writing systems and for separate fields of science and technology. In both cases, the purposes of a standard international transliteration system readily understandable by and usable for all countries and research fields would be hampered by the creation of differing, localized transliteration systems.

It is therefore proposed that the Conference should recommend the adoption of a single standard international transliteration system for the rendering of non-Roman alphabets and/or characters into the Roman alphabet based on the ISO transliteration system.

It will also be necessary to develop transcription systems for the various language areas. Such transcription systems would be intended for internal use within the various language areas. For the Federal Republic of Germany,

the Duden editorial staff² has been working together with philologists (Arabic, Slavic etc.) on transcription keys for various writing systems. So far, transcription keys have been set up for Arabic, Bulgarian, Greek (ancient and modern), Persian and Russian. Keys for other writing systems are presently being developed.

In the case of countries having an ideographic writing system (such as Chinese or Japanese), the use of the official conversion system into the Roman alphabet proposed by those countries is recommended: in Japan, for example, the Romanization system based upon the Kunreisiki method.

In areas where historically established name forms differ from those used under the officially adopted conversion system, the duplication of names will have to be accepted. The historically older form would appear first; for example, in German: "Hwangho", with the Chinese transcription "Huanghe" "Peking", with the Chinese transcription "Beijing".

² Duden is the officially approved spelling system for the German language used in all schools. In cases where proper spelling forms are in doubt, information is provided by the Duden editorial staff.

METHODS OF TRANSLITERATION

Paper presented by Hungary*

The need to transpose names from other writing systems to one's own according to an approximate translation exists in Hungary and in other countries.

In our opinion, the only feasible method of international standardization would be to use the symbols of the international phonetic alphabet for letter-for-letter substitution of letters. In this manner, the phonetic form may be retained.

* The original text of this paper appeared as document E/CONF. 53/L.14.

Another solution may be the transliteration from one language to another. Either one of these practices may be a starting point towards international standardization, although experience may indicate the need for another international alphabet. This practice, of course, does not involve transcription. It may help since identical symbols may be used for different reigning systems. There would be a basic number of symbols corresponding to all of the letters of a specific writing system. Thus the problem of transliteration might be solved if only the selected symbols are used.

ROMAN-LETTER SPELLING OF TOPONYMS FROM OTHER WRITING SYSTEMS

Paper submitted by the United States of America*

The number of toponyms from areas where non-Roman writing systems are used runs into the millions and tens of millions. In fact, for a names authority such as the Board on Geographic Names in the United States, such toponyms represent a major and vital problem. The board must have workable and consistent procedures for deriving Roman-alphabet spellings of names in the Cyrillic Slavic area, Greece, the Arabic-Persian area and much of Asia.

Toponyms from non-Roman alphabets are written in either alphabetic or non-alphabetic writing systems. For each non-alphabetic writing system a transcription system must be worked out, that is, a one-to-one substitution of Roman letter symbols for distinctive sounds or ranges of sounds, or phonemes. For non-Roman alphabets, although transcription systems can be elaborated, the preference is for transliteration systems, that is, one-to-one substitution of Roman-letter symbols for non-Roman letters (graphemes). Thus in transcription we are dealing with sound units, in transliteration with written symbols.

* The original text of this paper, prepared by J. G. Mutziger, Office of Geography, Department of the Interior, appeared as document E/CONF.53/L.27.

In deciding whether to transcribe or to transliterate toponyms written in a given non-Roman alphabet, the board evaluates each alphabet from the point of view of its efficiency as a writing system for the language concerned.

If the alphabet offers, on the whole, a good analysis of the sounds of the language or languages concerned, as is the case with the various Cyrillic alphabets and the Greek, Arabic, Persian and Amharic alphabets, a transliteration system is worked out. If, on the other hand, a given alphabet is poor in representing the sounds of the language concerned, in that it does not distinguish distinctive sounds, as is true of the Tibetan alphabet and the Mongolian alphabet in use prior to the present Cyrillic Mongolian alphabet, or is marked by the inclusion of symbols for phonetic details no longer present in the language, as with the Tibetan alphabet, a transcription rather than a transliteration system is used.

From the standpoint of the United States Board on Geographic Names, there are general principles to be followed in elaborating a transcription or transliteration system or in evaluating one for adoption.