

## “The Mongol script encoding – 2018”

### Meeting Summary

On 20 November 2018, Bolorsoft LLC sponsored and organised “The Mongol Script encoding-2018” meeting focused on current situation and problems of the Mongol script implementation, and discussion on available proposals for improving Mongol script encoding. The meeting was organised at the Mongolian University of Science and Technology and was open to the public. Forty-two people with the following affiliations and user representatives of the Mongol script attended the meeting.

- National Security Council of Mongolia
- Office of the President of Mongolia
- International Association for Mongol studies
- National Council for Language Policy of Mongolia
- Ministry of Education, Culture, Science and Sports of Mongolia
- Ministry of Foreign Affairs of Mongolia
- Communications Regulatory Commission of Mongolia
- Institute of Language and Literature, Mongolian Academy of Science
- Division of Innovation and Information, Mongolian Academy of Science
- Institute of Education, Ministry of Education, Culture, Science and Sports of Mongolia
- Confederation of Mongolian Journalists
- Mongolian University of Science and Technology
- National University of Mongolia
- Mongolian National University of Education
- Telecom Mongolia
- Bolorsoft LLC
- Khümüün bichig newspaper by Montsame Mongolian news agency (A newspaper in Mongol Script)
- Khökh tenger (Blue Sky), NGO of Mongol script users
- Mongol bichig (Mongol script), Facebook group
- Individual Expert of Typography, People’s Republic of China

Among the attendees, there were academician D. Tumurtoogo, Prof. Sh. Choimaa, honored by a state title *People’s Teacher* who were involved in the encoding of the Mongol script from the 1990’s, Prof. S. Dulam, who also has the title *People’s Teacher*, prominent scholar and the chair of the National Council for Language Policy of Mongolia, and other scholars and experts of linguistics and computer science and users of the Mongol script in computer (A list of the attendees is attached to this document).

### Opening session

The meeting moderator Dr. D. Badarch opened the meeting and conveyed a greeting from Lisa Moore, chair of the Unicode Technical Committee. T. Namnan, the vice-rector of the Mongolian University of Science and Technology, made a speech and sent best wishes for the successful meeting. S. Badral conveyed best wishes from Dr. Yu. Namsrai and Dr. M. Erdenechimeg, pioneers of the Mongol script encoding, passed their apologies for not attending the meeting.

## **Presentations**

The following presentations were presented at the meeting.

1. D. Lhagvasuren - “*Problems in the Mongol script encoding*”  
(Adjunct Professor of Biology,  
National University of Mongolia,  
user representative of the Mongol script)
2. T. Jamyansüren (Expert of typography) - “*Solutions for the problems of the Mongol script encoding: Refined phonetic model*”  
S. Badral (Software engineer)
3. T. Serchmaa (Software engineer) - “*Future of the Mongol script software*”
4. Liang Hai (Individual expert) - “*The Mongolian script: What is going on?*”

Due to the absence of presenters, two presentations “*MNS4932:2000 standard*” by B. Undraa, Mongolian Agency for Standardization and Metrology, and “*Improved phonetic model*” by B. Enkhdalai, Communications and Information Technology Authority, which were in the meeting program were not presented. A copy of the paper *Improved phonetic model* was available and distributed to attendees and discussed in the meeting (For papers presented at the meeting see attachments).

## **Conclusion and recommendation**

The meeting was very productive and efficient. Comments and discussions on the problems and issues presented in the above papers made the following conclusions.

1. Mongolian scholars have been paying attention to the Mongol script encoding since the 1990s. Among them, Dr. M. Erdenechimeg, Dr. Yu. Namsrai, Dr. Sh. Choimaa played critical roles in the first proposal to encode Mongol script. They met Inner Mongolian scholars and made a negotiation to submit a joint proposal to the Unicode Consortium, to confirm their standards in both countries, and to implement the Users’ convention. According to this negotiation, Mongolia confirmed its national de facto standard *Mongolian character encoding* in 2000. While it took a decade for Inner Mongolia to establish their standard. Finally, in 2013, the Inner Mongolian standard was approved by the Inner Mongolian National Committee.
2. Since the 1990s, computer operating system has been developing very fast. As a result, many more opportunities are now available which can be used to improve the Mongol scrip encoding.
3. Research works on the Mongol script encoding have been continued in Mongolia. Several people defended PhD degrees in this area. The Bolorsoft LLC has co-operated with these scholars. They conducted research under the supervision of Dr. M. Erdenechimeg, Yu. Namsrai and Sh. Choimaa to clarify the Mongol script features and its typographical changes occurred during the historical periods of the Mongol script development based on the written sources related to 13th-21th centuries. The outcome of this research is the “*Refined phonetic model*” designed to solve current encoding problems. In addition, it is worth to note that Mongolia now has experts who have been participating in the Unicode Consortium workshops and meetings, and obtained required knowledge and experience to work with UNICODE and to produce technological solutions.
4. Unfortunately, Inner Mongolian scholars have not yet made such advancements which some experts developed in Mongolia. In Inner Mongolia, scholars mostly concentrated on issues of the Mongol script but not technological problems to encode. Their position that does not address

concrete problems of encoding has been the main obstacle for the two countries to collaborate. This situation is also crucially criticised by the individual Unicode expert. The individual expert attended the meeting, had a critical position towards the situation in Inner Mongolia.

Attendees at the meeting issued below recommendations and decided to inform all organisations in charge of the Mongol script encoding.

1. Because of its phonetic nature, the Mongol script encoding started with the phonetic model, and all attendees had an agreement that the Unicode phonetic model of the Mongol script is the right model, and it needs further improvement. Other models can be discussed in the future, concerning technological advancements.
2. At the meeting, advantages and disadvantages of a *Graphetic model* proposed by Liang Hai; an *Improved phonetic model* proposed by Communications and Information Technology Authority of Mongolia; and a *Refined phonetic model* proposed by Bolorsoft discussed in comparison. Mongolian experts and the Unicode expert considered that the *Improved phonetic model* is incompetent. As a result, all of the participants considered the *Refined phonetic model* proposed by Bolorsoft, was the best available solution to current problems.
3. Important decisions should not base on a single opinion of only one or two individual experts who work for government authority, instead should base on academic research evidence of multiple experts, and this should be a requirement in the national policymaking. Therefore, the attendees recommended submitting *Refined phonetic model* proposed by Bolorsoft LLC as the national de facto standard of Mongolia and present this model to Inner Mongolia. If experts in Inner Mongolia acknowledge the *Refined phonetic model*, then it is essential for Mongolia and Inner Mongolia to join and propose the *Refined phonetic model*, as an accepted proper solution of both countries, to “Unicode Mongolian Working Group Meeting 3” to be held in Ulaanbaatar, from 3 to 5 April 2019.

Meeting moderator: D. Badarch



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“Монгол бичгийн кодчилал - 2018” хуралд оролцогчдын бүртгэл

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