

Proposal for Generation Panel for Ethiopic Label Generation Ruleset for the Root Zone

1. General Information

Ge‘ez (ግዕዝ *Gə‘əz*), (also known as Ethiopic) script is an abugida (syllable alphabet) used in the writing systems for several languages of Ethiopia and Eritrea. It is the most commonly used script in the writing systems of the majority of languages spoken in the country. It originated as an abjad (consonant-only alphabet) and was first used to write Ge‘ez, now the liturgical language of the Ethiopian Orthodox Tewahedo Church and the Eritrean Orthodox Tewahedo Church. The earliest known inscriptions in the Ge‘ez script date to the 8th century BC.

The Ge‘ez script has been predominantly used in Semitic languages, particularly Amharic in Ethiopia, and Tigrinya in both Eritrea and Ethiopia. It is also used for Sebatbeit, Me‘en, and most other languages of Ethiopia. In Eritrea it is used for Tigre, and it has traditionally been used for Bilin, a Cushitic language. Tigre, spoken in western and northern Eritrea, is considered to resemble Ge‘ez more than do the other derivative languages. The Ge‘ez script was also used in the writing systems of Oromifa until 1991 before the region’s government decision to change to Latin-based orthographies.

We are proposing the establishment of a label generation panel for the root zone for Ethiopic script. The generation panel proposal has been developed after a thorough review of the Guidelines for Developing Script-Specific Label Generation Rules for Integration into the Root Zone LGR document by the panel.

1.1 Script for which the Panel is to be Established

As described above, the Ethiopic or Ge‘ez script is used in the writing systems of the majority of languages spoken in the country.

The Ethiopic or Ge‘ez script is defined in ISO’s 15924 specification is identified by:

- ISO 15924 four letter script code: Ethi
- ISO 15924 Number: 430
- English Name: Ethiopic (Ge‘ez)

The complete set of character sets in Ethiopic (Ge'ez) script are defined in the following Unicode ranges:

- Ethiopic (Ge'ez): U + 1200 – U + 137F
- Ethiopic Supplement: U + 1380 – U + 139f
- Ethiopic Extended: U + 2D80 – U + 2DDF
- Ethiopic Extended-A: U+AB00 – U + AB2F

However, for the proposed purpose we will limit the use of code points as prescribed in the more recent version of Maximal Starting Repertoire(MSR-2)- to be more specific the panel will use the revised MSR-2 released by the Integration Panel on April 14, 2015. The Unicode range 1380-139F is one of the whole block exclusions in the MSR-2 document, hence it is preemptively out of consideration in the LGR formulation. The entire Unicode points range U + 1200 – U + 137F along with some parts of the Unicode points range in the Ethiopic Supplement block are the focal point of considerations in the LGR formulation for Ethiopic script. Thus, subjected to further considerations as the project progresses, the panel at it stands considers the Unicode points range short listed in the recent version of MSR-2, more specifically the Unicode points range U + 1200 – U + 137F, U + 2D80- U + 2D96, U + AB00 – U + AB0F as its starting repertoire.

1.2 Principal Languages Using the Script

The Ethiopic (Ge'ez) script was developed as the writing system of the Ge'ez language, a Semitic language spoken in Ethiopia and Eritrea. The script is widely used for writing the Ethiopian and Eritrean Semitic languages such as Tigré, Amharic and Tigrinya. In some languages, the script is called fidäl (ፊደል), which means 'alphabet', and individual letters are referred to as fidel. The script is believed by many to have derived from the epigraphic South Arabian script, of Proto-Sinaitic heritage, although there is some dispute surrounding this assertion; some also believe it to have descended from Egyptian hieroglyphic s. Besides Tigré, Amharic and Tigrinya the writing systems that use this script are many and some of them are listed here: Aari, Afar, Alaba-K'abeena, Anuak, Awngi, Basketo, Bench, Bilin, Boro, Burji, Dawro, Dirasha, Dizin, Gamo, Gedeo, Geez, Gofa, Gumuz, Hadiyya, Hamer-Banna, Harari, Kafa, Kambaata, Kistane, Konso, Koorete, Majang, Male, Me'en, Mursi, Qimant, Saho, Sebat Bet Gurage, Sidamo, Silt'e, Suri, Wolaytta and Xamtanga.

1.3 Geographic territories or Countries with Significant User Communities for the Script

A significant number of Diaspora who use Ethiopic (Ge'ez) script are living in United States and some parts of Europe, and due to historical ties the Ethiopic (Ge'ez) script is also used in Eritrea at large and in Djibouti and Israel to a certain degree. The following table lists the countries where significant users communities who are capable of using the Ethiopic (Ge'ez) script are believed to exist.

Country Names
Eritrea
Djibouti
Egypt
United States
Canada
Israel
Europe
Australia

2. Proposed Initial Composition of the Panel

2.1 Panel Chair and Members

The panel at this stage of its establishment phase is composed of 6 members, which is likely to expand in size as well as diversity in professional background as the project progresses. The project members have the prerequisite knowledge and are well equipped to live up to the demands of the tasks that lie ahead.

In the table below a succinct description panel members background is presented.

Name	Short Bio	Designation in the Panel
Dessalegn Mequanint Yehuala	He is a Lecturer and Researcher at the Computer Science Department of the Addis Ababa University. He has extensive research experience in Big data, Open Data as well as digital divides. He actively participates in International forums that involve Information	Chair

	Technology at its heart.	
Mulugeta Seyoum Gebeyaw	He is Assistant Professor in Linguistics, and Deputy Director of Academy of Ethiopian Languages and Cultures. He is a senior Linguist with proper academic and professional experiences. He has conducted various studies, participated in, and organized a number of international and national conferences in linguistics and related issues.	Secretary
Gezahegn Tadesse	He is a Director of Banking Products and Technology Innovation at Awash International Bank. He is a senior Electrical Engineer with a progressive and professional experience of nineteen years in Information Technology and Telecom. His core expertise spans Enterprise Information systems Security, IT Project Managements and Delivery, Infrastructure Solutions mainly for the Banking and Telecom Sector.	Member
Balcha Reba	He is a Director of Communication and IT Standardization and Regulation Directorate at the Ministry of Communication and Information Technology(MCIT). He is heading a Directorate in charge if the development of Communication and Information Technology services & product Standards, Laws, & Frameworks and ICT Regulatory mechanisms. He worked as Director and Acting General Director for the then	Member

	Ethiopian Telecommunication Agency.	
Assefa Kore	He is IT Operation specialist at Ethio-Telecom. Previously, he has worked as Junior Electrical Engineer, IT architect, ISP and VAS operation expert, and Provisioning Analyst at Ethio-Telecom progressively.	Member
Kinfe Micheal Yilma	He is a Senior Legal Researcher at Ethiopia's Justice and Legal System Research Institute, Legal Consultant at PERAGO Information Systems PLC and Adjunct Lecturer-in-Law at Addis Ababa University Law School. He worked as a lecturer-in-law at Hawassa University Law School in Ethiopia. He studied Internet privacy at the University of Oxford, Oxford Internet Institute in 2012. He is an expensively published legal scholar in reputable international journals.	Member

2.2 Panel Diversity

The Ethiopic script Generation Panel is composed of members with various backgrounds and expertise. Each member has experience in one or more of the areas which developing the Ethiopic Label Generation Ruleset for the Root Zone requires. However, as the project unfolds panel member composition size as well as diversity is expected to increase, and particularly we are already in the look out to involve people from Eritrea in order to document the script's use in the country thereby making the panel diversities as rich as it could get.

The table below is a summary of panel members' role in the generation panel and their background.

No.	Name	Designated Role in the Panel	Organization
1	Dessalegn Mequanint Yehuala	Chair, Contact Person and liaison of the Generation Panel to ICANN and to the Integration Panel. Besides, a resource person for DNS, ICANN and Unicode.	Addis Ababa University, Department of Computer Science
2	Mulugeta Seyoum	Secretary, resource person in Linguistics, local culture, customs and practices.	Addis Ababa University, Academy of Ethiopian Languages and Cultures.
3	Gezahegn Tadesse	A resource person in Telecom services and DNS	Awash International Bank
4	Balcha Reba	A resource person in telecom regulatory and standardization processes	Ministry of Communication and Information Technology
5	Assefa Kore	A resource person in DNS and telecommunication regulations	Ethio-Telecom
6	Kinfe Micheal Yilma	A resource person in ICANN	Ethiopia's Justice and Legal System Research Institute.

3. Work Plan

3.1 Suggested Timeline, Listing of Significant Milestones

Activities of developing an LRG proposal for Ethiopic script spread over 6 months; the table below describes the various activities along with milestones on each phase of the project. The Panel plans to start working on the LGR for Ethiopic script in January 2016 and we have targeted the submission of the LGR proposal for Ethiopic script to the Integration Panel in July 2016.

The following are list of activities planned to be carried out:

Phase	Task Description	Duration	Milestone
Phase 1: GP Proposal Preparation	<ul style="list-style-type: none"> • Writing the GP proposal and submitting to ICANN for official announcement. • Conducting deeper analyses of documents about procedures to develop and maintain the label generation rules for Ethiopic script for the Root Zone. • Setting up mailing list for the panel 	December 2015	GP's Proposal Submitted to ICANN and mailing list created.
Phase 2: Working on Components of LGR	<p>Development of Ethiopic LGR:</p> <ul style="list-style-type: none"> • Initial review of previous work and the relevant LGR documents • Identification of code point repertoire for inclusion in the LGR; • Identification of variant rules; • Identification of Whole Label Evaluation (WLE) rules; • Finalization of the proposal documents and creation of the proposal in XML format; • Public Comment announcement and finalization of proposal 	January – May 2016	Preliminary Ethiopic LGR formulated.
	Conducting Sensitization Campaigns locally about the establishment of the Ethiopic GP.	February 2016	Sensitization Campaigns Conducted.
	Conducting Consultative Workshop to gather feedbacks from relevant stakeholders.	April 2016	Feedback gathered.
	Incorporating feedbacks obtained from stakeholders	May 2016	Feedbacks incorporated.
	Submitting a draft Ethiopic LGR report to ICANN (or IP)	June 2016	Draft LGR report Submitted.
	Submitting final Ethiopic LGR report to IP.	July 2016	Final LGR Report Submitted.

3.2 Proposed Schedule of Meeting and Teleconferences

All the group members are based at the same city, Addis Ababa, and conducting face to face meetings once in two weeks time or as appropriate has been agreed.

3.3 Anticipated Need for Logistic Support- Such as Mailing List?

- We can create a Google group mailing list for the GP or ICANN can set up one.
- For conducting the consultative workshop with stakeholders we need ICANN's support for covering expenses related to conference hall rent and refreshment beverages.

3.4 Does the Panel Expect to Call On ICANN Provided Advisors?

The Panel may have to call on ICANN for advisory support if and when situations demands.

References Consulted:,

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2. Integration Panel: Maximal Starting Repertoire — MSR-2 Overview and Rationale, <https://www.icann.org/en/system/files/files/msr-2-overview-14apr15-en.pdf>, REVISION – April 14, 2015.
3. Guidelines for Developing Script-Specific Label Generation Rules for Integration into the Root Zone LGR, <https://community.icann.org/download/attachments/43989034/Guidelines%20for%20LGR.pdf?version=2&modificationDate=1430174479000&api=v2>.
4. About Codes for the representation of names of scripts, <http://unicode.org/iso15924/iso15924-codes.html>, Date Accessed- November 2015
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6. Root Zone LGR Project, <https://community.icann.org/display/croscomlgrprocedure/Root+Zone+LGR+Project>, Date Accessed- November 2015.

7. Procedure to Develop and Maintain the Label Generation Rules for the Root Zone in Respect of IDNA Labels, <https://www.icann.org/en/system/files/files/lgr-procedure-20mar13-en.pdf>.