Public Comment Summary Report

Han Script Single Character IDN Generic Top-Level Domains

Open for Submissions Date:

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Closed for Submissions Date:

Friday, 16 August 2024

Summary Report Due Date:

Monday, 02 September 2024

Category: Technical

Requester: ICANN org

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Outcome:

ICANN org appreciates the comments submitted by the community on the Proposed Considerations for the Application of Han Script Single Character IDN Generic Top-Level Domains (the "proposal"). ICANN org received 16 comments on the proposal. One comment agrees with the proposal. The other comments provide additional suggestions or disagree with the proposal.

These comments will be forwarded to the Chinese, Japanese, Korean Generation Panels (CJK GPs) for their analysis and for them to finalize their feedback.

Section 1: What We Received Input On

In preparation for the New gTLD Program: Next Round, ICANN org worked with the CJK GPs to seek their guidance on string similarity concerns for single character gTLD applications in the Han script. This was based on the Phase 1 Final Report on the Internationalized Domain Names Expedited Policy Development Process (IDN EPDP Phase 1 Report). The CJK GPs agreed that the work already done in the Root Zone Label Generation Rules (RZ-LGRs) sufficiently addresses the technical and linguistic concerns around string similarity for single character Han script TLDs. Feedback was requested on the proposal shared by the CJK GPs.

Section 2: Submissions

The following organizations and individuals provided feedback.

Organizations and Groups:

Name	Submitted by	Initials
Internet Society of China	Rui Zhong	ISC
Coremail	秀诚 吴	CM
Research Center for Collation and Standardization of Chinese Characters	Yiyun Zhang	BNU
Chinese Generation Panel	Wei Wang	CGP
Chinese Academy of Social Sciences	Bojiang Zhang	CASS
Teleinfo	Fazhen Zhang	TI
China Internet Network Information Centre	Xin Zhang	CNNIC
China Academy of Information and Communications Technology	Na Xing	CAICT
ICANN Business Constituency		BC

Individuals:

Name	Affiliation (if provided)	Initials
Vanda Regina Teijeira Scartezini	NOMCOM	VR
Nikesh B Simmandree		NB
Jiankang Yao		JK
Romia Lasmin Nafisa	At-Large community EURALO	RL
Wenbin Ruan		WR
Baojun Liu	Tsinghua University	TU
Shuangxin Chen		SC

Section 3: Summary of Submissions

ICANN org received 16 comments on the proposal.

"VR" comments that issues related to the Security and Stability Advisory Committee (SSAC) discussion for Chinese Han script are now considered solved, therefore "VR" supports allowing Chinese Han single characters for the new round of gTLDs, which is expected in 2026.

The Chinese Generation Panel (CGP) clarifies that in the Proposal for a Chinese Script Root Zone LGR (Chinese RZ-LGR), CGP established a rule set for repertoire and variant characters. The Chinese RZ-LGR addressed the issue of variant label generation. The Chinese RZ-LGR makes no distinction between single-character labels and multiple-character Chinese labels.

The submission from the CGP stated that "As the co-chair of CGP, I hold the view that as a team, CGP, should NOT and has NOT be involved in registration policy discussions on single character issue; while as an individual, every CGP member does has right to express his/her personal opinion on registration policy. Therefore, I encouraged CGP members to share a diversity of viewpoints on this issue with ICANN during the public comment period."

The China Internet Network Information Centre (CNNIC) comments that single character TLDs may be more likely to cause confusion and misunderstanding among users due to visual similarity, semantic similarity, due to polyphonic and polysemantic characters. It is difficult to resolve the semantic confusion caused by Han script single character TLDs using the current string similarity evaluation process.

CNNIC suggests that this proposal should be treated with caution, given these potential risks. CNNIC also recommends that more research should be conducted into the semantic confusion problem posed by Han script single characters, and that stricter measures be taken to protect the rights and interests of users in the Chinese community.

The ICANN Business Constituency (BC) repeats their comment on Phase 1 EPDP on IDNs: "BC holds its neutral position but strongly urges the Board to call for a cross-community consultation on this issue prior to making any decision. Proper policy consultation with the ccNSO and the GAC is essential as hundreds of single-character Han scripts are used as abbreviations of country, territory, and geographic names in daily life. For example, ".**" is a Han-script for "Rice" in Chinese and Japanese, or an abbreviation of "America" in Japanese. At this point, BC believes that an immediate examination of the Draft language of Geographic Names in the new AGB should take place. The cross-community consultation should help evaluate whether the current objection process is sufficiently enough, or if a prohibitive list of single character Han script.... is a workable approach."

The BC further queries the following:

- "• Does ICANN org believe that taking advice from the GAC, ccNSO, and ALAC and evaluating if a prohibitive list of single character Han script is a workable approach? If ICANN org does not believe so, then what is ICANN org's plan on addressing Han script single-character country and territory names and other geopolitical sensitive names?
- What is the ICANN org's expectation on the number of applications for Han script single character TLD?
- Some members of the BC also raised concern on potential confusion among single-character and two-character TLDs which would require extensive case-by-case or contextual analysis in the string similarity review process. Such a process could be time and cost consuming, and eventually put the whole application process at a higher risk."

The BC does not believe the string similarity review, or the community objection process are sufficient to prevent confusion related to geographic names and suggests that ICANN org should arrange for the CJK GPs to develop a prohibitive list regarding strings that may be confused with geographic names.

The BC also suggests that SSAC should be asked for updated advice regarding single-character IDNs.

"NB" comments that both Traditional Chinese and Simplified Chinese should be taken into consideration.

"RL" emphasizes the need for careful consideration of cultural, technical, and user experience factors. RL recommends implementing a review mechanism to ensure cultural appropriateness, conducting thorough technical testing to address compatibility and security issues, and establishing fair allocation processes to prevent domain squatting and ensure equitable access. RL also suggests conducting the impact assessment on the domain name space and developing strategies to manage any potential adverse effects, ensuring a balanced and effective implementation.

The following 10 comments (ISC, CM, BNU, CASS, TI, CAICT, JK, WR, TU, SC) recommend to not open up the Han script single character TLD in the next round of gTLDs and provide the rationale for their comments.

The Internet Society of China (ISC) notes that a single character contains multiple meanings due to the polysemy and the evolution of old characters over time. New vocabulary is introduced by using the combination of existing characters. It is difficult to determine the meaning of a single character TLD and it may provide convenience for bad actors to use the loopholes of understanding confusion for phishing.

Coremail (CM) comments that Han script single character IDN TLDs may bring more difficulties and challenges to anti-phishing and anti-spam work as they are not easily recognizable in textual contexts. CM believes that the risks associated with opening up Han script single character TLDs far outweigh the possible benefits.

The Research Center for Collation and Standardization of Chinese Characters (BNU) comments that based on the characteristics of the Chinese language and practicality associated with using single Chinese characters, it is currently not advisable to open top-level domains for single Chinese characters.

The Chinese Academy of Social Sciences (CASS) comments that the Han script single character TLDs can increase the risks of phishing while the demand for such TLDs among the Chinese community is unknown. In 2013, the State Council released the Common Standard Chinese Characters Table which contains 8,105 standardized Chinese characters. The proposal does not consider whether the TLDs are bound by this table, and how to solve the emerging problems in case of conflict.

CASS also suggests that SSAC should reassess the issue and provide more detailed conclusions.

Teleinfo (TI) comments that single character top-level domains may harm the interests of their existing user groups and other Han script gTLD registry operators in the last round may feel the same way. TI strongly believes that delegation of Han script single-character IDN gTLDs should be disallowed in the next round.

The China Academy of Information and Communications Technology (CAICT) notes the SSAC recommendation for a very conservative approach to the delegation of single-character top-level domains and also notes that not all CJK GP members support allowing the Han script single character TLD. Therefore, CAICT requests a re-evaluation of the issue.

CAICT also suggests that the ICANN Board should communicate with ccNSO, ALAC, GAC and other organizations, especially representatives from countries and territories where the Han script is used to reach consensus on the issue.

"JK" does not support the single character TLD and notes that the single character TLD is not supported in the ccTLD policy. JK comments that the Proposal does not reflect a more conservative way as recommended in the SSAC report.

"WR" comments that a single Chinese character cannot accurately express a geographical name and is easily confused with brand or trademark names. Therefore, before single characters of the Han script used as geographical names are allowed to be applied for as TLDs, their legal compliance and public interest implications should be fully assessed.

"TU" comments that "homophone attacks" and "domain name semantic attacks" are difficult to solve through technical means alone. Single character Chinese TLDs, due to their conciseness, are easily susceptible to being used for phishing and other malicious activities.

"SC" comments that the majority of Chinese characters only have a clear meaning when they are used in two-syllable or multi-syllable words.

Section 4: Analysis of Submissions

The sixteen comments received will be submitted to the CJK GPs for their consideration, further analysis, and incorporation in the final Proposal, as needed. As per the Phase 1 Final Report on the Internationalized Domain Names Expedited Policy Development Process, the final Proposal from the CJK GPs will be used to determine next steps.

Section 5: Next Steps

As next steps, ICANN org will share the feedback with CJK GPs for reviewing their proposal. Based on the final proposal from CJK GPs, ICANN org will determine next steps for implementation.