

Urge Action on Root Zone Key Signing Key (KSK) Change
(Tentative KSK Rollover scheduled on 11 Oct 2018)

The Internet Corporation for Assigned Names and Numbers (“ICANN”) is planning to roll, or change, the “top” pair of cryptographic keys used in the Domain Name System Security Extensions (“DNSSEC”) protocol, commonly known as the root zone key signing key (“KSK”). ICANN is an accountable and independent global organization striving to ensure a stable and secure global Internet by managing the highest level of the domain name system (DNS) called the root zone. As every Internet query using DNSSEC depends on the root zone KSK for validating destination, this will be a significant change. Operators of validating resolvers, especially ISPs, shall update their systems with the new key before the rollover takes place. This ensures that when users attempt to visit a website, the resolver would be able to validate queries against the new KSK. ICANN has tentatively scheduled the KSK rollover on 11 October 2018.

This is the first time of changing root zone KSK ever since DNSSEC has been enabled in 2010. If you have enabled DNSSEC validation, you must update your system with the new KSK to ensure smooth Internet access for users. Please refer to ICANN’s Quick Guide below for an overview and key milestones: <https://www.icann.org/en/system/files/files/ksk-rollover-quick-guide-prepare-systems-25apr18-en.pdf>

Changing the key involves generating a new cryptographic key pair and distributing the new public component to DNSSEC-validating resolvers. ICANN generated and published the new keys on 11 July 2017. Operators should update at any time prior to the rollover using the new root KSK. However, if you have **NOT** enabled DNSSEC, your system will not be affected by this rollover.

HKIRC urges all concerned parties to take immediate action on checking whether the systems are ready for the new KSK updates and install the new KSK accordingly. If you manage DNSSEC-enabled resolvers for KSK validation, kindly please inform your DNS administrator and technical team to take action and upgrade your system to ensure smooth Internet access for users.

ICANN has published several guides addressing KSK rollover. Operators of validating resolvers may find the references below useful:

Checking the Current Trust Anchors in DNS Validating Resolvers

<https://www.icann.org/dns-resolvers-checking-current-trust-anchors>

Updating of DNS Validating Resolvers with the Latest Trust Anchor

<https://www.icann.org/dns-resolvers-updating-latest-trust-anchor>

What To Expect During the Root KSK Rollover

<https://www.icann.org/en/system/files/files/ksk-rollover-expect-22aug18-en.pdf>

For more details of the Root Zone KSK rollover, please visit <https://www.icann.org/kskroll>

If you have any questions, please contact us at info@hkirc.hk or +852 2319 2303.

Thank you for your attention.

Sincerely,

Hong Kong Internet Registration Corporation Limited