

**Root Zone KSK Operator Function  
Termination Plan  
Version 1.1  
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## 1. Introduction

ICANN currently serves as one of the responsible entities in the Root Zone signing process. On behalf of the U.S. Department of Commerce (DoC), ICANN as part of the IANA Function contract provides Root Zone Management services that include, but are not limited to, issuing, managing, changing and distributing DNS keys in accordance with the specific requirements of the DoC. ICANN's role is currently associated with generating and maintaining the Key Signing Key (KSK) for the Root Zone.

The DoC requires ICANN to establish a termination and transition plan in the event that ICANN is required to relinquish its role and associated duties as the Root Zone Key Signing Key Operator. This document identifies the steps that ICANN will take if required to transition its duties and responsibilities as the Root Zone Key Signing Key (KSK) operator to another entity. The termination and transition process will be carried out under the direction and guidance of the DoC.

Circumstances that may trigger a transition of duties may include, but are not limited to a corporate merger, acquisition, bankruptcy, catastrophic disaster or other situations that would require a permanent termination of the Root Zone Key Signing Key operations. ICANN will be responsible for cooperatively transferring the Root Zone Key Signing Key Operator role and providing the successor with the relevant logs and audit information necessary to continue the operations.

## 2. Scope and Exclusions

This document is a high level plan for terminating the ICANN Root Zone Key Signing Key Operator Function and transferring the Key Signing Key operator responsibility to its successor without the interruption of the Root Zone publishing activities.

The transition activities will necessitate a KSK rollover from the Root Zone- Key Signing Key Operator to the successor. This document does not address the technical specifications of a KSK rollover, but focuses on the procedural aspect of the transition process.

As part of a transition or termination, ICANN is not under any obligation to provide any information that is considered to be proprietary to its business operations, other than the information provided under any required audits of the Root Zone Key Signing Key Operations. It will be the successor's sole responsibility to create a process that adheres to the specific requirements of the DoC.

During a KSK Operator Function transition it is assumed that the current key management facilities will no longer be used and the new entity has built comparable facilities, functions, and personnel approved by DoC. In this case KSK Operator Function

## 3. Roles and Responsibilities

### 3.1. ICANN Policy Management Authority (PMA)

The PMA is comprised of ICANN representatives from each functional group who are responsible for running the Root Zone KSK Operator Function. The PMA consists of two types of members: voting members and subject matter experts. All critical decisions related to the DNSSEC operations within ICANN are made by this group.

### **3.2. U.S. Department of Commerce (DoC)**

The US DoC is responsible for overseeing the successful operation of the Root Zone. The DoC will have the authority to initiate a termination and transition process for the Root Zone Key Signing Key Operator Function. The DoC will be Root Zone Zone Signing Key (ZSK) Operator. The Root Zone ZSK Operator will serve in an advisory role to the parties involved in an approved transition. In addition, the Root Zone ZSK Operator will also ensure that the integrity of the transition process remains intact to include ZSK rollovers and supporting documentation.

### **3.3. ICANN KSK Operations Security (IKOS)**

ICANN KSK Operations Security is responsible for managing the information to be transferred to the Key Signing Key Operator Successor in conjunction with relevant third party auditors.

### **3.4. Root Zone Key Signing Key Operator (KSKO)**

Successor The KSKO Successor is the entity that has been authorized by the DoC to assume the responsibilities of the Root Zone Key Signing Key Operator.

The KSKO successor is responsible for creating policies and procedures and provisioning an environment that will accommodate the DNSSEC operations for the Root Zone Key Signing Key Operator at the DoC's direction.

## **4. DNSSEC Root Zone Key Signing Key Operator Termination Flow**

The technical transition of the Key Signing Key Operator role will require a rollover of the Root Zone's Key Signing Key. The following procedure will act as the plan for the transition of duties:

1. The ICANN DPS Practices Manager will be notified of an occurrence that may require the permanent termination of the ICANN Root DNSSEC operations and transfer of the Key Signing Key operator responsibility to a successor. The notification will be made by sending an email or written correspondence to the DPS Practices Manager. This notification may come from the DoC.
2. The ICANN DPS Practices Manager will chair a PMA meeting to determine the impact of the occurrence that would affect ICANN's ability to continue operations as the Root Zone Key Signing Key Operator. An occurrence that would lead to the Root Zone KSK operator's inability to continue these operations would be escalated to ICANN's executive management.
3. The ICANN PMA will notify the DoC (unless DoC provided the initial notice referred to in step 1) and the Root Zone ZSK operator of the occurrence that would prevent ICANN from continuing as the Key Signing Key Operator.
4. The ICANN PMA will engage DoC and the Root Zone ZSK Operator to create a schedule of events for the proper transition of duties to the appointed Root Zone KSKO Successor, once the DoC approves the transition.
5. The technical steps for conducting the transition will occur by rolling over the Root Zone's KSK and include:

- a. KSKO Successor generates a new KSK using their key management procedures and equipment.
  - b. At the next ICANN KSR signing ceremony, KSKO Successor equipment is brought alongside ICANN equipment to include the successor's key in the RZ DNSKEY RRset and facilitate an orderly 5011 KSK roll-over to the successor.
  - c. ICANN announces the roll-over using the channels stipulated in the DPS.
  - d. When the required 30 days notice has elapsed, the successor may seamlessly take over the KSK Operators responsibilities without further interaction with ICANN.
6. ICANN will transfer to the successor the relevant logs and audit information that may be valuable for the continued operations of the Root Zone Key Signing Key.
  7. The Key Signing Key Operations will be considered to be transitioned once the DoC confirms that the KSKO Successor's systems and processes are functioning as designed, at which point ICANN will destroy the private component of the previous TA.

## 5. Contact Information

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