

**Root DNSSEC KSK**  
Administrative Ceremony  
Safe #1 Equipment Maintenance

Tuesday February 11, 2020

Root Zone KSK Operator Key Management Facility  
1920 East Maple Avenue, El Segundo, CA 90245

This ceremony is executed in accordance to the DNSSEC Practice Statement for the Root Zone KSK Operator Version 4th Edition (2016-10-01)

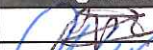








## Abbreviations

<b>AUD</b> = Third Party Auditor	<b>CA</b> = Ceremony Administrator	<b>CO</b> = Crypto Officer
<b>EW</b> = External Witness	<b>FD</b> = Flash Drive	<b>HSM</b> = Hardware Security Module
<b>IW</b> = Internal Witness	<b>KMF</b> = Key Management Facility	<b>KSR</b> = Key Signing Request
<b>OP</b> = Operator	<b>PTI</b> = Public Technical Identifiers	<b>RKSH</b> = Recovery Key Share Holder
<b>RKOS</b> = RZ KSK Operations Security	<b>RZM</b> = Root Zone Maintainer	<b>SA</b> = System Administrator
<b>SKR</b> = Signed Key Response	<b>SMK</b> = Storage Master Key	<b>SO</b> = Security Officer
<b>SSC</b> = Safe Security Controller	<b>SW</b> = Staff Witness	<b>TCR</b> = Trusted Community Representative
<b>TEB</b> = Tamper Evident Bag (AMPAC: #GCS1013, #GCS0912, #GCS1216 or MMF Industries: #2362010N20, #2362011N20)		

## Participants

Key Ceremony roles are described on <https://www.iana.org/help/key-ceremony-roles>

**Instructions:** At the end of the ceremony, participants sign IW's script. IW records the time of completion.

Title / Roles	Printed Name	Signature	Date	Time
CA	Andres Pavez / PTI		2020 Feb 11	23:17
IW	Aaron Foley / PTI			
IW_Backup	Jonathan Denison / ICANN			
SSC1_A	Marilia Hirano / PTI			
SSC1_B	Sabrina Tanamal / PTI			
Locksmith	Richard Bowen / Industrial Lock and Security			
SA	Brian Martin / ICANN			
EW	Subramanian Moonesamy			
EW	Arbogast Fabian			

**Note: By signing this script, you are declaring that this document is a true and accurate record of the Root DNSSEC KSK ceremony to the best of your knowledge, and you agree that your personal data will be processed in accordance with the ICANN Privacy Policy available at <https://www.icann.org/privacy/policy>**

## Instructions for Root DNSSEC KSK Administrative Ceremony

The Root DNSSEC Key Signing Key (KSK) Administrative Ceremony is a scripted meeting where individuals with specific roles perform tasks related to support the operation of the root zone KSK. Administrative Ceremonies include all ceremonies that do not require use of the private key component of the root zone DNSSEC KSK, such as enrollment or replacement of a trusted role, media deposit or extraction, equipment acceptance testing or maintenance, etc. The process is audited by a third party firm for compliance with SOC 3 framework. The script and recordings are published online for the wider Internet community to review.

### Ceremony Guidelines:

- The CA leads the ceremony
- Only CAs, IWs, or SAs can enter and escort other participants into Tier 4 (Key Ceremony Room)
- Dual Occupancy is enforced. IW with CA or SA must remain inside Tier 4 (Key Ceremony Room) if participants are present in the room
- CAs, IWs, or SAs may escort participants out of Tier 4 (Key Ceremony Room) at the CA's discretion only if Tier 5 (Safe Room) is not occupied during the ceremony
- All participants are required to sign in and out of Tier 4 (Key Ceremony Room) using the visitor log
- The SA starts filming before the participants enter Tier 4 (Key Ceremony Room)
- Ceremony participants follow the script step by step
- CA reads each step aloud prior to its performance
- Upon completion of each step, IW announces the time of completion, records the completion time, and initials their copy of the script
- Ceremony participants who notice a problem or an error during the ceremony should interrupt the ceremony. Ceremony participants agree on a resolution before proceeding
- Questions and suggestions for improvement are welcome and can be discussed at any time or after the ceremony during the ceremony debrief

Unplanned events (**exceptions**) during the ceremony are evaluated, documented, and acted upon. It is the CA's sole responsibility to decide on proper actions after consulting with the IW. In either case, an exception is regarded as an incident, and incident handling procedures are enacted.

### Key Management Facility Tiers:

- Tiers 1-3: Consist of the facility areas between the outside environment and the Key Ceremony Room
- Tier 4: Consists of the Key Ceremony Room and is subject to Dual Occupancy
- Tier 5: Consists of the Safe Room (a cage only accessible from the Key Ceremony Room) and is subject to Dual Occupancy
- Tier 6: Consists of Safe #1 (Equipment Safe) and Safe #2 (Credentials Safe)
- Tier 7: Consists of the HSM stored in Safe #1 (Equipment Safe) and the safe deposit boxes installed in Safe #2 (Credentials Safe)

Some steps during the ceremony may require the participants to tell and/or confirm identifiers comprised of numbers and letters. When spelling identifiers, the phonetic alphabet shown below must be used:

Character	Code Word	Pronunciation
A	Alfa	AL-FAH
B	Bravo	BRAH-VOH
C	Charlie	CHAR-LEE
D	Delta	DELL-TAH
E	Echo	ECK-OH
F	Foxtrot	FOKS-TROT
G	Golf	GOLF
H	Hotel	HOH-TEL
I	India	IN-DEE-AH
J	Juliet	JEW-LEE-ETT
K	Kilo	KEY-LOH
L	Lima	LEE-MAH
M	Mike	MIKE
N	November	NO-VEM-BER
O	Oscar	OSS-CAH
P	Papa	PAH-PAH
Q	Quebec	KEH-BECK
R	Romeo	ROW-ME-OH
S	Sierra	SEE-AIR-RAH
T	Tango	TANG-GO
U	Uniform	YOU-NEE-FORM
V	Victor	VIK-TAH
W	Whiskey	WISS-KEY
X	Xray	ECKS-RAY
Y	Yankee	YANG-KEY
Z	Zulu	ZOO-LOO
1	One	WUN
2	Two	TOO
3	Three	TREE
4	Four	FOW-ER
5	Five	FIFE
6	Six	SIX
7	Seven	SEV-EN
8	Eight	AIT
9	Nine	NIN-ER
0	Zero	ZEE-RO

## Act 1: Initiate Ceremony

### Sign into Tier 4 (Key Ceremony Room)

Step	Activity	Initials	Time
1	CA confirms with SA that audit cameras <b>1</b> and <b>3</b> are recording. Note: Audit camera 2 is not recording because there are no production materials placed on the ceremony table.	<i>[Handwritten Initials]</i>	21:27
2	CA confirms that all participants are signed into Tier 4 (Key Ceremony Room) log, then performs a roll call using the participants list on page 2.	<i>[Handwritten Initials]</i>	21:28

### Emergency Evacuation Procedures and Electronics Policy



Step	Activity	Initials	Time
3	CA reviews emergency evacuation procedures with onsite participants.	<i>[Handwritten Initials]</i>	21:29
4	CA explains the use of personal electronic devices during the ceremony.	<i>[Handwritten Initials]</i>	21:29
5	CA briefly explains the purpose of the ceremony.	<i>[Handwritten Initials]</i>	21:30

### Verify the Time and Date

Step	Activity	Initials	Time
6	IW enters UTC date (year/month/day) and time using a reasonably accurate clock visible to all in Tier 4 (Key Ceremony Room): Date and time: <u>20201021 21:31</u> Note: All entries into this script or any logs should follow this common source of time.	<i>[Handwritten Initials]</i>	21:31

## Root DNSSEC Script Exception

### Exception Details

Step	Activity	Initials	Time
1.	IW writes the details of the ceremony exception: Act: <u>2</u> Step(s): <u>2</u> Page(s): <u>6</u> Date and Time: <u>2020/02/11</u>		23:14
2.	IW describes the exception(s) and action(s) below.		23:15

SSC1-A was unable to open the safe due to malfunctioning hardware. Escorted out by IW2 to verify combination with other SSC. Locksmith contacted manufacturer and they suggested the issue was a faulty logic board and the dial will require drilling. Ended ceremony to discuss steps going forward.



## Act 2: Safe #1 Equipment Maintenance

### Open Equipment Safe #1

Step	Activity	Initials	Time
1	CA and IW transport a flashlight, phillips screwdriver, change key tool and escort required personnel into Tier 5 (Safe Room.)	<i>[Signature]</i>	21:34
2	SSC1_A opens Safe #1 while shielding the combination from the camera. Note: SSC will begin by rapidly spinning the dial counter-clockwise in order to charge it.		
3	Complete the safe log by following the steps below: a) SSC1_A removes the existing safe log, then shows the most recent page to the audit camera. b) IW provides the pre-printed safe log to SSC1_A. c) SSC1_A writes the date and time, then signs the safe log where "Open Safe" is indicated. d) IW verifies this entry then initials it.		

### Replace Combination Lock on Equipment Safe #1

Step	Activity	Initials	Time
4	The locksmith performs the following tasks to replace the combination lock: a) Remove the current Kaba Mas X-09. b) Install a new Kaba Mas X-10.  Note: CA and IW will provide assistance to the locksmith if necessary. The new lock is preconfigured with Single Combination Mode and default combination of 50-25-50.		

## Set New Combination for Equipment Safe #1

Step	Activity	Initials	Time
5	<p>CA and SSC1_A prepare for the safe combination change by performing the following steps:</p> <p><b>Note:</b> If the access plate on the safe door has already been removed, skip the steps a) and b).</p> <ol style="list-style-type: none"> <li>a) Locate the rectangular plate secured to the interior side of the safe door and remove the screws securing it using a phillips screwdriver.</li> <li>b) Slide out the 3-1/2 x 12 inch steel plate covering the interior side of the combination dial.</li> <li>c) Insert the change key tool in the interior side of the combination dial.</li> <li>d) Press the button located at the interior side upper left corner of the safe door to release the bolt.</li> </ol>		
6	<p>SSC1_A enters the <b>CURRENT combination</b> by performing the following steps:</p> <ol style="list-style-type: none"> <li>a) Charge the dial by rapidly spinning the dial counter-clockwise until numbers are displayed.</li> </ol> <p><b>Note:</b> A key symbol is displayed, which indicates "Change Key" mode.</p> <ol style="list-style-type: none"> <li>b) Continue spinning the dial counter-clockwise to the first number of the combination, then stop at the selected number.</li> <li>c) Spin the dial clockwise to the second number of the combination, then stop at the selected number.</li> <li>d) Spin the dial counter-clockwise to the last number of the combination, then stop at the selected number.</li> <li>e) Spin the dial clockwise until you see the symbol "SL" (Select Mode) is displayed.</li> </ol> <p><b>Note:</b> Repeat steps a) to e) if the symbol "SL" did not display.</p> <ol style="list-style-type: none"> <li>f) Turn the dial counter-clockwise, then stop at number "01" to select Single Combination Mode operation</li> <li>g) Turn dial clockwise until the symbol "EC" (Enter Combination) is displayed.</li> </ol> <p><b>Note:</b> Immediately perform succeeding steps to avoid timeout</p>		
7	<p>SSC1_A enters the <b>NEW combination</b> by following the steps below:</p> <ol style="list-style-type: none"> <li>a) Spin the dial counter-clockwise to the first number of the combination, then stop at the selected number.</li> <li>b) Spin the dial clockwise to the second number of the combination, then stop at the selected number.</li> <li>c) Spin the dial counter-clockwise to the last number of the combination, then stop at the selected number.</li> </ol> <p><b>Note:</b> Repeat step 6 if any errors occur.</p> <ol style="list-style-type: none"> <li>d) Spin the dial clockwise for the display to cycle through the new combination. SSC1_A should verify the new combination.</li> <li>e) Remove the Change Key tool when "PO" (Pull Out Change Key) is displayed. The Change Key symbol will disappear and "CC" (Confirm Combination) will appear.</li> <li>f) Enter the <b>NEW combination</b> once again for confirmation.</li> <li>g) Spin the dial clockwise after "OP" with a right arrow (OPen right) is displayed, continue dialing to the clockwise to retract the lock bolt. The new combination is now set.</li> </ol>		



## Verify New Combination and Close the Equipment Safe #1





Step	Activity	Initials	Time
8	SSC1_A performs the following steps: a) Return the Change Key tool to IW b) Reinstall the cover plate to the safe door. c) Return the screwdriver to IW Note: DO NOT close the Safe door.		
9	SSC1_A and SSC1_B performs additional tests on the dial if necessary. Note: DO NOT Close the Safe door.		
10	SSC1_A writes the date and time, then signs the safe log where "Change Combination" and "Close Safe" are indicated. IW verifies the safe log entries, then initials it.		
11	SSC1_A returns the safe log inside Safe #1, closes the safe door, pulls up on the handle, and ensures it's locked by spinning the dial at least two full revolutions each way, counter-clockwise then clockwise. CA and IW verify that the safe is locked and the "WAIT" light indicator is off.		

## Test the Equipment Safe #1 and Exit the Safe Room



Step	Activity	Initials	Time
12	SSC1_A opens Safe #1 while shielding the combination from the camera. Note: SSC will begin by rapidly spinning the dial counter-clockwise in order to charge it.		
13	SSC1_A removes the existing safe log, writes the date and time, then signs the safe log where "Open Safe" and "Close Safe" is indicated. IW verifies this entry then initials it.		
14	SSC1_A returns the safe log back to Safe #1, closes the safe door, pulls up on the handle, and ensures it's locked by spinning the dial at least two full revolutions each way, counter-clockwise then clockwise. CA and IW verify that the safe is locked and the "WAIT" light indicator is off.		
15	SSC1_B repeats the steps 12 to 14.		
16	CA, IW, and any escorted personnel leave Tier 5 (Safe Room), returning to Tier 4 (Key Ceremony Room).		

## Act 3: Close the Administrative Ceremony


### Participants Sign IW's Script

Step	Activity	Initials	Time
1	CA reads all exceptions that occurred during the ceremony.		23:15
2	CA calls each attendee on the participants list to proceed to the ceremony table and sign IW's participants list. <b>All signatures declare that this script is a true and accurate record of the ceremony.</b>		23:17
3	CA reviews IW's script, then signs the participants list.		23:17
4	IW signs the list and records the completion time.		23:17

### Sign Out of Tier 4 (Key Ceremony Room) and Stop Recording

Step	Activity	Initials	Time
5	CA requests that an SA stop the audit camera video recording.		23:18
6	CA and IW ensures that all participants are signed out of Tier 4 (Key Ceremony Room) log and escorted out of Tier 4 (Key Ceremony Room.)		23:19

### Bundle Audit Materials

Step	Activity	Initials	Time
7	<p>IW makes a copy of their script for off-site audit bundle containing:</p> <ul style="list-style-type: none"> <li>a) Copy of IW's administrative ceremony script.</li> <li>b) Audio-visual recording.</li> <li>c) IW's attestation (Appendix B).</li> </ul> <p>All TEBs are labeled <b>Root DNSSEC Administrative Ceremony Safe #1 Equipment Maintenance</b>, dated and signed by IW and CA. An off-site audit bundle is delivered to an off-site storage.</p>		23:45

## **Appendix A: Audit Bundle Checklist**

### **1. Administrative Ceremony Script (by IW)**

Hard copies of the IW's administrative ceremony script, including notes and attestation. See Appendix B.

### **2. Audio-Visual Recordings from the Administrative Ceremony (by CA)**

One set for the audit bundle.

### **3. Other items**

If applicable.

## Appendix B: Administrative Ceremony Script (by IW)

I hereby attest that the Administrative Ceremony was conducted in accordance to this script.  
Any exceptions that occurred were accurately and properly documented.

IW: **Aaron Foley**

Signature:



Date: 2020 Feb 11

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Administrative Ceremony  
Safe #1 Equipment Maintenance

Tuesday February 11, 2020

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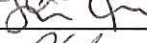






## Abbreviations

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SSC1_A	Marilia Hirano / PTI			
SSC1_B	Sabrina Tanamal / PTI			
Locksmith	Richard Bowen / Industrial Lock and Security			
SA	Brian Martin / ICANN			
EW	Subramanian Moonesamy			
EW	Arbogast Fabian			
SSC1-Former	Anand Mishra			

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- CAs, IWs, or SAs may escort participants out of Tier 4 (Key Ceremony Room) at the CA's discretion only if Tier 5 (Safe Room) is not occupied during the ceremony
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- The SA starts filming before the participants enter Tier 4 (Key Ceremony Room)
- Ceremony participants follow the script step by step
- CA reads each step aloud prior to its performance
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- Questions and suggestions for improvement are welcome and can be discussed at any time or after the ceremony during the ceremony debrief

Unplanned events (**exceptions**) during the ceremony are evaluated, documented, and acted upon. It is the CA's sole responsibility to decide on proper actions after consulting with the IW. In either case, an exception is regarded as an incident, and incident handling procedures are enacted.

### Key Management Facility Tiers:

- Tiers 1-3: Consist of the facility areas between the outside environment and the Key Ceremony Room
- Tier 4: Consists of the Key Ceremony Room and is subject to Dual Occupancy
- Tier 5: Consists of the Safe Room (a cage only accessible from the Key Ceremony Room) and is subject to Dual Occupancy
- Tier 6: Consists of Safe #1 (Equipment Safe) and Safe #2 (Credentials Safe)
- Tier 7: Consists of the HSM stored in Safe #1 (Equipment Safe) and the safe deposit boxes installed in Safe #2 (Credentials Safe)



Preamble

Some steps during the ceremony may require the participants to tell and/or confirm identifiers comprised of numbers and letters. When spelling identifiers, the phonetic alphabet shown below must be used:

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D	Delta	DELL-TAH
E	Echo	ECK-OH
F	Foxtrot	FOKS-TROT
G	Golf	GOLF
H	Hotel	HOH-TEL
I	India	IN-DEE-AH
J	Juliet	JEW-LEE-ETT
K	Kilo	KEY-LOH
L	Lima	LEE-MAH
M	Mike	MIKE
N	November	NO-VEM-BER
O	Oscar	OSS-CAH
P	Papa	PAH-PAH
Q	Quebec	KEH-BECK
R	Romeo	ROW-ME-OH
S	Sierra	SEE-AIR-RAH
T	Tango	TANG-GO
U	Uniform	YOU-NEE-FORM
V	Victor	VIK-TAH
W	Whiskey	WISS-KEY
X	Xray	ECKS-RAY
Y	Yankee	YANG-KEY
Z	Zulu	ZOO-LOO
1	One	WUN
2	Two	TOO
3	Three	TREE
4	Four	FOW-ER
5	Five	FIFE
6	Six	SIX
7	Seven	SEV-EN
8	Eight	AIT
9	Nine	NIN-ER
0	Zero	ZEE-RO

## Act 1: Initiate Ceremony

### Sign into Tier 4 (Key Ceremony Room)

Step	Activity	Initials	Time
1	CA confirms with SA that audit cameras 1 and 3 are recording. Note: Audit camera 2 is not recording because there are no production materials placed on the ceremony table.	<i>[Signature]</i>	23:56
2	CA confirms that all participants are signed into Tier 4 (Key Ceremony Room) log, then performs a roll call using the participants list on page 2.	<i>[Signature]</i>	23:57

### Emergency Evacuation Procedures and Electronics Policy

Step	Activity	Initials	Time
3	CA reviews emergency evacuation procedures with onsite participants.	<i>[Signature]</i>	23:58
4	CA explains the use of personal electronic devices during the ceremony.	<i>[Signature]</i>	23:58
5	CA briefly explains the purpose of the ceremony.	<i>[Signature]</i>	23:58

### Verify the Time and Date

Step	Activity	Initials	Time
6	IW enters UTC date (year/month/day) and time using a reasonably accurate clock visible to all in Tier 4 (Key Ceremony Room): Date and time: <u>20201021 23:58</u> Note: All entries into this script or any logs should follow this common source of time.	<i>[Signature]</i>	23:58

## Root DNSSEC Script Exception


### Exception Details

Step	Activity	Initials	Time
1.	IW writes the details of the ceremony exception: Act: <u>2</u> Step(s): <u>2</u> Page(s): <u>6</u> Date and Time: <u>2020/02/11</u>	<i>[Signature]</i>	00:20
2.	IW describes the exception(s) and action(s) below.	<i>[Signature]</i>	00:20

SSC\_Fomer was unable to open  
the ~~safe~~ safe due to malfunction.  
Closing ceremony to discuss next  
steps.

## Act 2: Safe #1 Equipment Maintenance

### Open Equipment Safe #1

Step	Activity	Initials	Time
1	CA and IW transport a flashlight, phillips screwdriver, change key tool and escort required personnel into Tier 5 (Safe Room.)		23:18
2	SSC1_A opens Safe #1 while shielding the combination from the camera. Note: SSC will begin by rapidly spinning the dial counter-clockwise in order to charge it.		
3	Complete the safe log by following the steps below: a) SSC1_A removes the existing safe log, then shows the most recent page to the audit camera. b) IW provides the pre-printed safe log to SSC1_A. c) SSC1_A writes the date and time, then signs the safe log where "Open Safe" is indicated. d) IW verifies this entry then initials it.		

### Replace Combination Lock on Equipment Safe #1

Step	Activity	Initials	Time
4	The locksmith performs the following tasks to replace the combination lock: a) Remove the current Kaba Mas X-09. b) Install a new Kaba Mas X-10.  Note: CA and IW will provide assistance to the locksmith if necessary. The new lock is preconfigured with Single Combination Mode and default combination of 50-25-50.		

## Set New Combination for Equipment Safe #1

Step	Activity	Initials	Time
5	<p>CA and SSC1_A prepare for the safe combination change by performing the following steps:</p> <p>Note: If the access plate on the safe door has already been removed, skip the steps a) and b).</p> <ol style="list-style-type: none"> <li>Locate the rectangular plate secured to the interior side of the safe door and remove the screws securing it using a phillips screwdriver.</li> <li>Slide out the 3-1/2 x 12 inch steel plate covering the interior side of the combination dial.</li> <li>Insert the change key tool in the interior side of the combination dial.</li> <li>Press the button located at the interior side upper left corner of the safe door to release the bolt.</li> </ol>		
6	<p>SSC1_A enters the <b>CURRENT combination</b> by performing the following steps:</p> <ol style="list-style-type: none"> <li>Charge the dial by rapidly spinning the dial counter-clockwise until numbers are displayed.</li> </ol> <p>Note: A key symbol is displayed, which indicates "Change Key" mode.</p> <ol style="list-style-type: none"> <li>Continue spinning the dial counter-clockwise to the first number of the combination, then stop at the selected number.</li> <li>Spin the dial clockwise to the second number of the combination, then stop at the selected number.</li> <li>Spin the dial counter-clockwise to the last number of the combination, then stop at the selected number.</li> <li>Spin the dial clockwise until you see the symbol "SL" (Select Mode) is displayed.</li> </ol> <p>Note: Repeat steps a) to e) if the symbol "SL" did not display.</p> <ol style="list-style-type: none"> <li>Turn the dial counter-clockwise, then stop at number "01" to select Single Combination Mode operation</li> <li>Turn dial clockwise until the symbol "EC" (Enter Combination) is displayed.</li> </ol> <p>Note: Immediately perform succeeding steps to avoid timeout</p>		
7	<p>SSC1_A enters the <b>NEW combination</b> by following the steps below:</p> <ol style="list-style-type: none"> <li>Spin the dial counter-clockwise to the first number of the combination, then stop at the selected number.</li> <li>Spin the dial clockwise to the second number of the combination, then stop at the selected number.</li> <li>Spin the dial counter-clockwise to the last number of the combination, then stop at the selected number.</li> </ol> <p>Note: Repeat step 6 if any errors occur.</p> <ol style="list-style-type: none"> <li>Spin the dial clockwise for the display to cycle through the new combination. SSC1_A should verify the new combination.</li> <li>Remove the Change Key tool when "PO" (Pull Out Change Key) is displayed. The Change Key symbol will disappear and "CC" (Confirm Combination) will appear.</li> <li>Enter the <b>NEW combination</b> once again for confirmation.</li> <li>Spin the dial clockwise after "OP" with a right arrow (OPen right) is displayed, continue dialing to the clockwise to retract the lock bolt. The new combination is now set.</li> </ol>		

## Verify New Combination and Close the Equipment Safe #1

Step	Activity	Initials	Time
8	SSC1_A performs the following steps: a) Return the Change Key tool to IW b) Reinstall the cover plate to the safe door. c) Return the screwdriver to IW Note: DO NOT close the Safe door.		
9	SSC1_A and SSC1_B performs additional tests on the dial if necessary. Note: DO NOT Close the Safe door.		
10	SSC1_A writes the date and time, then signs the safe log where "Change Combination" and "Close Safe" are indicated. IW verifies the safe log entries, then initials it.		
11	SSC1_A returns the safe log inside Safe #1, closes the safe door, pulls up on the handle, and ensures it's locked by spinning the dial at least two full revolutions each way, counter-clockwise then clockwise. CA and IW verify that the safe is locked and the "WAIT" light indicator is off.		

## Test the Equipment Safe #1 and Exit the Safe Room

Step	Activity	Initials	Time
12	SSC1_A opens Safe #1 while shielding the combination from the camera. Note: SSC will begin by rapidly spinning the dial counter-clockwise in order to charge it.		
13	SSC1_A removes the existing safe log, writes the date and time, then signs the safe log where "Open Safe" and "Close Safe" is indicated. IW verifies this entry then initials it.		
14	SSC1_A returns the safe log back to Safe #1, closes the safe door, pulls up on the handle, and ensures it's locked by spinning the dial at least two full revolutions each way, counter-clockwise then clockwise. CA and IW verify that the safe is locked and the "WAIT" light indicator is off.		
15	SSC1_B repeats the steps 12 to 14.		
16	CA, IW, and any escorted personnel leave Tier 5 (Safe Room), returning to Tier 4 (Key Ceremony Room).		



## Act 3: Close the Administrative Ceremony

### Participants Sign IW's Script

Step	Activity	Initials	Time
1	CA reads all exceptions that occurred during the ceremony.	<i>[Signature]</i>	00:21
2	CA calls each attendee on the participants list to proceed to the ceremony table and sign IW's participants list. <b>All signatures declare that this script is a true and accurate record of the ceremony.</b>	<i>[Signature]</i>	00:23
3	CA reviews IW's script, then signs the participants list.	<i>[Signature]</i>	00:23
4	IW signs the list and records the completion time.	<i>[Signature]</i>	00:23

### Sign Out of Tier 4 (Key Ceremony Room) and Stop Recording

Step	Activity	Initials	Time
5	CA requests that an SA stop the audit camera video recording.	<i>[Signature]</i>	00:23
6	CA and IW ensures that all participants are signed out of Tier 4 (Key Ceremony Room) log and escorted out of Tier 4 (Key Ceremony Room.)		

### Bundle Audit Materials

Step	Activity	Initials	Time
7	<p>IW makes a copy of their script for off-site audit bundle containing:</p> <ul style="list-style-type: none"> <li>a) Copy of IW's administrative ceremony script.</li> <li>b) Audio-visual recording.</li> <li>c) IW's attestation (Appendix B).</li> </ul> <p>All TEBs are labeled <b>Root DNSSEC Administrative Ceremony Safe #1 Equipment Maintenance</b>, dated and signed by IW and CA. An off-site audit bundle is delivered to an off-site storage.</p>		



## **Appendix A: Audit Bundle Checklist**

### **1. Administrative Ceremony Script (by IW)**

Hard copies of the IW's administrative ceremony script, including notes and attestation. See Appendix B.

### **2. Audio-Visual Recordings from the Administrative Ceremony (by CA)**

One set for the audit bundle.

### **3. Other items**

If applicable.

## Appendix B: Administrative Ceremony Script (by IW)

I hereby attest that the Administrative Ceremony was conducted in accordance to this script. Any exceptions that occurred were accurately and properly documented.

IW: Aaron Foley

Signature:



Date: 2020 Feb

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