

Independent Assurance Report

To the management of the National Development Council:

Scope

We have been engaged, in a reasonable assurance engagement, to report on National Development Council (NDC) management's assertion that for its Certification Authority (CA) operations at Taipei and Taichung, Taiwan, throughout the period April 1, 2019 through March 31, 2020 for its CAs as enumerated in Appendix for SSL Baseline Requirements and Network Security Requirements, NDC has:

- Disclosed its SSL certificate lifecycle management business practices in its:
 - Government Root Certification Authority Certification (GRCA) Practice Statement V1.5; and
 - Government Certification Authority Certification (GCA)
 Practice Statement V1.9; and
 - Certificate Policy for the Government Public Key Infrastructure (GPKI) V2.0

including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on the GRCA and GCA websites, and provided such services in accordance with its disclosed practices

 Maintained effective controls to provide reasonable assurance that:



- the integrity of keys and SSL certificates it manages is established and protected throughout their lifecycles; and
- SSL subscriber information is properly authenticated for the registration activities performed by GCA.
- Maintained effective controls to provide reasonable assurance that:
 - logical and physical access to CA systems and data is restricted to authorized individuals;
 - the continuity of key and certificate management operations is maintained; and
 - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity
- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum

in accordance with the WebTrust Principles and Criteria for Certification Authorities – SSL Baseline with Network Security V2.4.1.

Certification authority's responsibilities

NDC's management is responsible for its assertion, including the fairness of its presentation, and the provision of its described services in accordance with the WebTrust for Certification Authorities – SSL Baseline with Network Security Version V2.4.1.



Our independence and quality control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies International Standard on Quality Control, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Auditor's responsibilities

Our responsibility is to express an opinion on management's assertion based on our procedures. We conducted our procedures in accordance with attestation standards established by the American Institute of Certified Public Accountants/CPA Canada. This standard requires that we plan and perform our procedures to obtain reasonable assurance about whether, in all material respects, management's assertion is fairly stated, and, accordingly, included:

- (1) obtaining an understanding of GCA's SSL certificate lifecycle management business practices, including its relevant controls over the issuance, renewal, and revocation of SSL certificates, and obtaining an understanding of GRCA and GCA's network and certificate system security to meet the requirements set forth by the CA/Browser Forum;
- (2) selectively testing transactions executed in accordance with



disclosed SSL certificate lifecycle management practices;

- (3) testing and evaluating the operating effectiveness of the controls; and
- (4) performing such other procedures as we considered necessary in the circumstances.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Relative effectiveness of controls

The relative effectiveness and significance of specific controls at GRCA and GCA and their effect on assessments of control risk for subscribers and relying parties are dependent on their interaction with the controls, and other factors present at individual subscriber and relying party locations. We have performed no procedures to evaluate the effectiveness of controls at individual subscriber and relying party locations.

Inherent limitations

Because of the nature and inherent limitations of controls, GRCA and GCA's ability to meet the aforementioned criteria may be affected. For example, controls may not prevent, or detect and correct, error, fraud, unauthorized access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection of any conclusions based on our findings to future periods is subject to the risk that changes may alter the validity of such conclusions.

Opinion

In our opinion, throughout the period April 1, 2019 to March 31, 2020, NDC management's assertion, as referred to above, is fairly stated, in all



material respects, in accordance with the WebTrust Principles and Criteria for Certification Authorities – SSL Baseline with Network Security V2.4.1.

This report does not include any representation as to the quality of GRCA and GCA's services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities – SSL Baseline with Network Security V2.4.1, nor the suitability of any of GRCA and GCA's services for any customer's intended purpose.

Use of the WebTrust seal

GRCA and GCA's use of the WebTrust for Certification Authorities – SSL Baseline with Network Security Seal constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.

KPMG

Certified Public Accountants

Taipei, Taiwan, ROC

KPM6

May 25, 2020



Appendix – List of Root and Subordinate CAs¹ in Scope

	Root CA Certificate	
	Subject	Issuer
	O=Government Root	O=Government Root
	Certification Authority	Certification Authority
	C=TW	C=TW
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	1f9d595ad72fc20644a580086	RSA(4096 bits)
	9e35ef6	Subject Key Identifiers: cc cc
	Signature Algorithm:	ef cc 29 60 a4 3b b1 92 b6 3c
	sha1RSA	fa 32 62 8f ac 25 15 3b
	Not Before: 2002-12-05	
	09:23:33 p.m.(UTC+8:00)	
	Not After: 2032-12-05	
GRCA	09:23:33 p.m.(UTC+8:00)	
	Thumbprint Algorithm: sha1	
	Thumbprint	
	f48b11bfdeabbe94542071e64	
	1de6bbe882b40b9	
	Thumbprint Algorithm: sha2	
	Thumbprint	
	7600295eefe85b9e1fd624db7	
	6062aaaae59818a54d2774cd	
	4c0b2c01131e1b3	
	Additional Information	Remark
		Self-signed by 1 st
		Generation of GRCA
		Root Certification
		Authority
		Cross Signed with
		GRCA-G2

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 $^{^{1}}$ There are 3 other Sub-CAs, MOICA, MOEACA, and HCA, owned by different Government Agencies will covered by other independent audits.



	Root CA Certificate	
	Subject	Issuer
	O=Government Root	O=Government Root
	Certification Authority	Certification Authority
	C=TW	C=TW
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	00b64b8807e223eec85c12ada	RSA(4096 bits)
	60e06a1f2	Subject Key Identifiers: d5 67
	Signature Algorithm:	1d e0 9c 7a 2c 9c cb c5 98 e7
	sha256RSA	1d 07 26 2a 86 ec 74 cd
	Not Before: 2012-09-28	Key Usage: Certificate
	04:58:51 p.m.(UTC+8:00)	Signing, Off-line CRL
GRCA -	Not After: 2037-12-31	Signing, CRL Signing (06)
GRCAT-	11:59:59 p.m.(UTC+8:00)	
UZ	Thumbprint Algorithm: sha1	
	Thumbprint	
	b091aa913847f313d727bcefc	
	8179f086f3a8c0f	
	Thumbprint Algorithm: sha2	
	Thumbprint	
	70b922bfda0e3f4a342e4ee22d	
	579ae598d071cc5ec9c30f123	
	680340388aea5	
	Additional Information	Remark
		■ Self-signed by 2 nd
		Generation of GRCA
		Root Certification
		Authority
		■ Cross Signed with GRCA



	Root CA Certifica	tte(Cross Signed)
	Subject	Issuer
	O=Government Root	O=Government Root
	Certification Authority	Certification Authority
	C=TW	C=TW
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	34756f0a697580f7553d9be9	RSA(4096 bits)
	1cca1ea4	Authority Key Identifiers:
	Signature Algorithm:	cc cc ef cc 29 60 a4 3b b1
	sha256RSA	92 b6 3c fa 32 62 8f ac 25
	Not Before: 2012-09-28	15 3b
	05:13:29 p.m.(UTC+8:00)	Subject Key Identifiers: d5
	Not After: 2032-12-05	67 1d e0 9c 7a 2c 9c cb c5
	09:23:33 p.m.(UTC+8:00)	98 e7 1d 07 26 2a 86 ec 74
GRCA	Thumbprint Algorithm: sha1	cd
(New-with-	Thumbprint	Basic Constraint: Subject
Old)	2d257912db3da9bbfbad2814	Type=CA
Old)	4722fcf6d7de02cb	Path Length
	Thumbprint Algorithm: sha2	Constraint=None
	Thumbprint	Key Usage: Certificate
	febf42f9be5abfddb8175d010	Signing, Off-line CRL
	239f9036fe90d333e708e13cc	Signing, CRL Signing (06)
	5eedffd52d0a97	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 1 st
	http://grca.nat.gov.tw/reposit	Generation of GRCA
	ory/CRL_SHA2/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA-G2
	[1]2.16.886.101.0.3.1	
	[2]2.16.886.101.0.3.2	
	[3]2.16.886.101.0.3.3	
	[4]2.16.886.101.0.3.4	
	[5]2.16.886.101.0.3.0	
	[6]2.23.140.1.2.2	



	Root CA Certifica	te(Cross Signed)
	Subject	Issuer
	O=Government Root	O=Government Root
	Certification Authority	Certification Authority
	C=TW	C=TW
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	325c893b2638910c257764f3	RSA(4096 bits)
	48d0ada5	Authority Key Identifiers:
	Signature Algorithm:	d5 67 1d e0 9c 7a 2c 9c cb
	sha256RSA	c5 98 e7 1d 07 26 2a 86 ec
	Not Before: 2012-09-28	74 cd
	05:07:12 p.m.(UTC+8:00)	Subject Key Identifiers: cc
	Not After: 2032-12-05	cc ef cc 29 60 a4 3b b1 92
	09:23:33 p.m.(UTC+8:00)	b6 3c fa 32 62 8f ac 25 15
GRCA	Thumbprint Algorithm: sha1	3b
(New with	Thumbprint	Basic Constraint: Subject
Old)	ceef601f67b133a50875ddc58	Type=CA
	26b0d22cb41e9e9	Path Length
	Thumbprint Algorithm: sha2	Constraint=None
	Thumbprint	Key Usage: Certificate
	90fa98d646dd5f00602d68d1	Signing, Off-line CRL
	7dd76b55ee51cda3d3922f0d	Signing, CRL Signing (06)
	bdd10480f5990acd	D 1
	Additional Information	Remark
	CRL Distribution Point:	CA certificate of 2 nd
	http://grca.nat.gov.tw/reposit	Generation of GRCA
	ory/CRL2/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA
	[1]2.16.886.101.0.3.1	
	[2]2.16.886.101.0.3.2	
	[3]2.16.886.101.0.3.3	
	[4]2.16.886.101.0.3.4	
	[5]2.16.886.101.0.3.0	



	Root CA Certifica	ate(Cross Signed)
	Subject	Issuer
	CN = Government Root	O=Government Root
	Certification Authority -	Certification Authority
	G1.5	C=TW
	O = 行政院	
	C = TW	
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	33e54ad1c06f18314a9c894e	RSA(4096 bits)
	028bccf3	Authority Key Identifiers:
		cc cc ef cc 29 60 a4 3b b1
	Signature Algorithm:	92 b6 3c fa 32 62 8f ac 25
	sha256RSA	15 3b
	Not Before: 2017-07-19	Subject Key Identifiers: cf
	10:43:37 a.m.(UTC+8:00)	ea 9e 13 53 05 f1 34 7b 7d
	Not After: 2020-07-19	bf a5 ad 1f e1 06 ce 4f 00
GRCA	10:43:37 a.m.(UTC+8:00)	91
(G1.5 with	Thumbprint Algorithm: sha1	Basic Constraint: Subject
G1)	Thumbprint	Type=CA
	83cc399570a3b4e97ea9d962	Path Length
	310cb1c686ca929a	Constraint=None
	Thumbprint Algorithm: sha2	Key Usage: Certificate
	Thumbprint	Signing, Off-line CRL
	a423a33493b31953226df964	Signing, CRL Signing (06)
	77627dbd056756704211001	
	b6161fb5f8299dc3a	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 1.5
	http://grca.nat.gov.tw/reposit	Generation of GRCA
	ory/CRL_SHA2/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA
	[1]2.16.886.101.0.3.1	
	[2]2.16.886.101.0.3.2	
	[3]2.16.886.101.0.3.3	
	[4]2.16.886.101.0.3.4	
	[5]2.16.886.101.0.3.0	
	[6]2.23.140.1.2.2	



	Root CA Certifica	ate(Cross Signed)
	Subject	Issuer
	O=Government Root	CN = Government Root
	Certification Authority	Certification Authority
	C=TW	O = 行政院
		C = TW
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	00a3943b6f102651ceba5391	RSA(4096 bits)
	23749a2a2a	Authority Key Identifiers:
	Signature Algorithm:	cf ea 9e 13 53 05 f1 34 7b
	sha256RSA	7d bf a5 ad 1f e1 06 ce 4f
	Not Before: 2017-07-19	00 91
	10:51:48 a.m.(UTC+8:00)	Subject Key Identifiers: d5
	Not After: 2020-07-19	67 1d e0 9c 7a 2c 9c cb c5
	10:51:48 a.m.(UTC+8:00)	98 e7 1d 07 26 2a 86 ec 74
GRCA	Thumbprint Algorithm: sha1	cd
(G2 with	Thumbprint	Basic Constraint: Subject
G1.5)	41485ffba23d5525502f9a9a4	Type=CA
	2c54e010c34e7cf	Path Length
	Thumbprint Algorithm: sha2	Constraint=None
	Thumbprint	Key Usage: Certificate
	dd9c545d6b645c2bfbe1b6ec	Signing, Off-line CRL
	b60376006464e97bb1304b7	Signing, CRL Signing (06)
	978cfe83a4099b227	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 2 nd
	http://grca.nat.gov.tw/reposit	Generation of GRCA
	ory/CRL1_5/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA-G1.5
	[1]2.16.886.101.0.3.1	
	[2]2.16.886.101.0.3.2	
	[3]2.16.886.101.0.3.3	
	[4]2.16.886.101.0.3.4	
	[5]2.16.886.101.0.3.0	
	[6]2.23.140.1.2.2	



Root CA Certifica	ate(Cross Signed)
Subject	Issuer
O=Government Root	O=Government Root
Certification Authority	Certification Authority
C=TW	C=TW
Certificate Related	Key Related Information
Information	
Serial Number:	Subject Public Key:
00fee626678141435c5faea	RSA(4096 bits)
9f2db4ba66f	Authority Key Identifiers:
Signature Algorithm:	cc cc ef cc 29 60 a4 3b b1
sha1RSA	92 b6 3c fa 32 62 8f ac 25
Not Before: 2012-09-28	15 3b
05:13:29 p.m.(UTC+8:00)	Subject Key Identifiers: d5
Not After: 2032-12-05	67 1d e0 9c 7a 2c 9c cb c5
09:23:33 p.m.(UTC+8:00)	98 e7 1d 07 26 2a 86 ec 74
Thumbprint Algorithm:	cd
sha1	Basic Constraint: Subject
Thumbprint:	Type=CA
361366368816ac3b016f92e	Path Length
eff83ea5fc3dab2f2	Constraint=None
Thumbprint Algorithm:sha2	Key Usage: Certificate
Thumbprint:	Signing, Off-line CRL
d87aad615fe7c2385032244	Signing, CRL Signing (06)
d08cdfe06eb005675aa1892	
d6e5b82780f19fb87f	
Additional Information	Remark
CRL Distribution Point:	■ CA certificate of 2 nd
http://grca.nat.gov.tw/reposi	Generation of GRCA
tory/ CRL/CA.crl	Certification Authority
Certificate Policy:	signed by GRCA
[1]2.16.886.101.0.3.1	
[2]2.16.886.101.0.3.2	
[3]2.16.886.101.0.3.3	
[4]2.16.886.101.0.3.4	
[5]2.16.886.101.0.3.0	
	Subject O=Government Root Certification Authority C=TW Certificate Related Information Serial Number: 00fee626678141435c5faea 9f2db4ba66f Signature Algorithm: sha1RSA Not Before: 2012-09-28 05:13:29 p.m.(UTC+8:00) Not After: 2032-12-05 09:23:33 p.m.(UTC+8:00) Thumbprint Algorithm: sha1 Thumbprint: 361366368816ac3b016f92e eff83ea5fc3dab2f2 Thumbprint Algorithm:sha2 Thumbprint: d87aad615fe7c2385032244 d08cdfe06eb005675aa1892 d6e5b82780f19fb87f Additional Information CRL Distribution Point: http://grca.nat.gov.tw/reposi tory/ CRL/CA.crl Certificate Policy: [1]2.16.886.101.0.3.1 [2]2.16.886.101.0.3.2 [3]2.16.886.101.0.3.3 [4]2.16.886.101.0.3.4



	Root CA Certific	ate(Cross Signed)
	Subject	Issuer
	O=Government Root	O=Government Root
	Certification Authority	Certification Authority
	C=TW	C=TW
	Certificate Related	Key Related Information
	Information	
	Serial Number:	Subject Public Key:
	00b559e7070725ad626294	RSA(4096 bits)
	d512e7771554	Authority Key Identifiers:
	Signature Algorithm:	d5 67 1d e0 9c 7a 2c 9c cb
	sha256RSA	c5 98 e7 1d 07 26 2a 86 ec
	Not Before: 2012-09-28	74 cd
	05:13:29 p.m.(UTC+8:00)	Subject Key Identifiers: cc
	Not After: 2032-12-05	cc ef cc 29 60 a4 3b b1 92
GRCA	09:23:33 p.m.(UTC+8:00)	b6 3c fa 32 62 8f ac 25 15
(New with	Thumbprint Algorithm:	3b
Old	sha1	Basic Constraint: Subject
SHA256	Thumbprint:	Type=CA
with no OV	5c9137b9cfa3901f01693a2	Path Length
OID)	be12a964bcb3823f9	Constraint=None
	Thumbprint Algorithm:sha2	Key Usage: Certificate
	Thumbprint:	Signing, Off-line CRL
	72ac428bb715df5dc1af875	Signing, CRL Signing (06)
	79308e8cc2ebfa588686b56	
	7292fd70eeb0fee8b7	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 2 nd
	http://grca.nat.gov.tw/reposi	Generation of GRCA
	tory/CRL_SHA2/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA
	[1]2.16.886.101.0.3.1	
	[2]2.16.886.101.0.3.2	
	[3]2.16.886.101.0.3.3	
	[4]2.16.886.101.0.3.4	
	[5]2.16.886.101.0.3.0	



	Subordinate C	CA Certificate
	Subject	Issuer
	OU=政府憑證管理中心	O=Government Root
	O=行政院	Certification Authority
	C=TW	C=TW
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public
	00ffbde2d9bca94aed15261c4	Key:RSA(2048 bits)
	1f0787e55	Authority Key Identifiers:
	Signature Algorithm:	cc cc ef cc 29 60 a4 3b b1
	sha1RSA	92 b6 3c fa 32 62 8f ac 25
	Not Before:2003-03-03	15 3b
	02:51:23 p.m.(UTC+8:00)	Subject Key Identifiers: e4
	Not After: 2023-03-03	dc 17 6f 22 aa ce f8 c8 21
GCA	02:51:23 p.m.(UTC+8:00)	1a d2 ab ce 53 8e 4e da 18
	Thumbprint Algorithm: sha1	7c
	Thumbprint	Basic Constraint: Subject
	55c3239b776cf6e353e97be8	Type=CA
	44f55593cb5112bb	Path Length Constraint=0
	Thumbprint Algorithm: sha2	Key Usage: Certificate
	Thumbprint	Signing, Off-line CRL
	30ce409631120a0c5ac548ab	Signing, CRL Signing (06)
	fb231789a847411c3818a56e	
	9b06feb1723ce797	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 1 st
	http://grca.nat.gov.tw/reposit	Generation of GCA
	ory/CRL/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA
	2.16.886.101.0.3.3	



	Subordinate C.	A Certificate
	Subject	Issuer
	OU=政府憑證管理中心	O=Government Root
	O=行政院	Certification Authority
	C=TW	C=TW
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	31ee58efb5c1a48f9aedf475d	RSA(2048 bits)
	db8a5c1	Authority Key Identifiers:
	Signature Algorithm:	d5 67 1d e0 9c 7a 2c 9c cb
	sha256RSA	c5 98 e7 1d 07 26 2a 86 ec
	Not Before: 2013-01-31	74 cd
	11:22:34 a.m.(UTC+8:00)	Subject Key Identifiers: d1
	Not After: 2033-01-31	18 67 c3 57 fe 12 9a 91 6b
GCA – G2	11:22:34 a.m.(UTC+8:00)	5f 5f 31 ea 3e c2 84 87 fb
	Thumbprint Algorithm: sha1	bd
	Thumbprint	Basic Constraint: Subject
	44b9ede7b3f9ed56ff53b7e91	Type=CA
	e4031f517e78db8	Path Length Constraint=0
	Thumbprint Algorithm: sha2	Key Usage: Certificate
	Thumbprint	Signing, Off-line CRL
	1f992b635905fc0eecedaabce	Signing, CRL Signing (06)
	af9741d77778dd838de92b5b	
	b5111722f4631d6	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 2 nd
	http://grca.nat.gov.tw/reposit	Generation of GCA
	ory/CRL2/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA-G2
	2.16.886.101.0.3.3	



	Subordinat	e CA Certificate
	Subject	Issuer
	OU=政府憑證管理中	O=Government Root
	心	Certification Authority
	O=行政院	C=TW
	C=TW	
	Certificate Related	Key Related Information
	Information	
	Serial Number:	Subject Public Key:
	088dd2963b8b629c194	RSA(2048 bits)
	e3200da77ce2c	Authority Key Identifiers:
	Signature Algorithm:	d5 67 1d e0 9c 7a 2c 9c cb
	sha256RSA	c5 98 e7 1d 07 26 2a 86 ec
	Not Before:	74 cd
	2013-01-31 11:22:34	Subject Key Identifiers: d1
	a.m.(UTC+8:00)	18 67 c3 57 fe 12 9a 91 6b
	Not After: 2033-01-31	5f 5f 31 ea 3e c2 84 87 fb bd
GCA – G2	11:22:34	Basic Constraint: Subject
(with no OV	a.m.(UTC+8:00)	Type=CA
OID)	Thumbprint Algorithm:	Path Length Constraint=0
	shal	Key Usage: Certificate
	Thumbprint: d234ec3a5a85471c265	Signing, Off-line CRL
	edaf9811bead817ac9bc	Signing, CRL Signing (06)
	c c c	
	Thumbprint	
	Algorithm:sha2	
	Thumbprint:	
	5e9fccb153c7802bab1b	
	5f5015c6643a8bd18cce	
	fcaacedfbad4e21d67c3	
	d5b	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 2 nd
	http://grca.nat.gov.tw/re	Generation of GCA
	pository/CRL2/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA-G2
	2.16.886.101.0.3.3	
		I



	Subordinate C.	A Certificate
	Subject	Issuer
	OU=組織及團體憑證管理	O=Government Root
	中心	Certification Authority
	O=行政院	C=TW
	C=TW	
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	5678ecdf55417830bc1edc8f	RSA(2048 bits)
	dd948ead	Authority Key Identifiers:
	Signature Algorithm:	cc cc ef cc 29 60 a4 3b b1
	sha1RSA	92 b6 3c fa 32 62 8f ac 25
	Not Before: 2004-03-11	15 3b
	03:00:22 p.m.(UTC+8:00)	Subject Key Identifiers: 64
XCA	Not After: 2024-03-11	7e 3f e8 07 ef b7 22 e7 02
ACA	03:00:22 p.m.(UTC+8:00)	72 63 1f 28 40 6e 63 e1 cc
	Thumbprint Algorithm: sha1	a6
	Thumbprint	Basic Constraint: Subject
	d6b89a044595fd46ff2ada02b	Type=CA
	ac01a0fc9797a00	Path Length Constraint=0
	Thumbprint Algorithm: sha2	Key Usage: Certificate
	Thumbprint	Signing, Off-line CRL
	52ef981ba85bc054c597f09c	Signing, CRL Signing (06)
	6cacb134b7df97d61feaee251	
	7f4dbd82bf8ecca	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 1 st
	http://grca.nat.gov.tw/reposit	Generation of XCA
	ory/CRL/CA.crl	Certification Authority
	Certificate Policy:	signed by GRCA
	2.16.886.101.0.3.3	



	Subordinate CA Certificate	
XCA – G2	Subject	Issuer
	OU=組織及團體憑證管理	O=Government Root
	中心	Certification Authority
	O=行政院	C= TW
	C=TW	
	Certificate Related	Key Related Information
	Information	
	Serial Number	Subject Public Key:
	00c2a5ac510401d390f42600	RSA(2048 bits)
	365f8a863c	Authority Key Identifiers:
	Signature Algorithm:	d5 67 1d e0 9c 7a 2c 9c cb
	sha256RSA	c5 98 e7 1d 07 26 2a 86 ec
	Not Before: 2014-01-02	74 cd
	02:37:36 p.m.(UTC+8:00)	Subject Key Identifiers: 5b
	Not After: 2034-01-02	ee 15 6a 49 17 1c 6a 80 4d
	02:37:36 p.m.(UTC+8:00)	e8 5e e7 45 aa ff 80 c7 a0
	Thumbprint Algorithm: sha1	40
	Thumbprint	Basic Constraint: Subject
	20c887e650218e3343ace1c1	Type=CA
	2081ef9027fd3460	Path Length Constraint=0
	Thumbprint Algorithm: sha2	Key Usage: Certificate
	Thumbprint	Signing, Off-line CRL
	b2ee26fd0be0f80cc2473785	Signing, CRL Signing (06)
	cf9e98905a73630e8dabf12ae	
	b968bb4d81a2dd6	
	Additional Information	Remark
	CRL Distribution Point:	■ CA certificate of 2 nd
	http://grca.nat.gov.tw/reposit	Generation of XCA
	ory/CRL2/CA.cr l	Certification Authority
	Certificate Policy:	signed by GRCA-G2
	2.16.886.101.0.3.3	



Assertion of Management as to its Disclosure of its Business Practices and it Controls Over its Certification Authority Operations during the period from April 1, 2019 through March 31, 2020

May 25, 2020

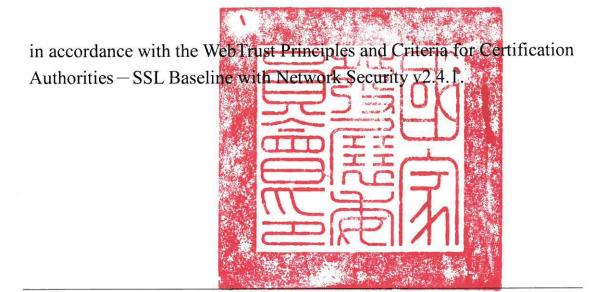
The National Development Council (NDC) operates the Certification Authorities (CAs) services known as Government Certification Authority (GCA) and provides SSL CA services. A full listing of the Root CAs and Subordinate CAs owned by NDC¹ and their respective functions is in appendix to this assertion letter.

NDC management has assessed its disclosures of its certificate practices and controls over its SSL CA services. Based on that assessment, in providing its SSL and non-SSL (only Principle IV) Certification Authority services at Taipei and Taichung, Taiwan, throughout the period April 1, 2019 to March 31, 2020, GRCA, GCA, and XCA has:,

- disclosed its SSL certificate lifecycle management business practices in its:
 - GRCA Certification Practice Statement V1.5; and
 - GCA Certification Practice Statement V1.9; and

¹ There are 3 other Sub-CAs, MOICA, MOEACA, and HCA, owned by different Government Agencies will covered by other independent audits.

- XCA Certification Practice Statement V1.8; and
- Government Public Key Infrastructure Policy V2.0 including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on the GCA website, and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and SSL certificates it manages is established and protected throughout their lifecycles; and
 - SSL certificate subscriber information is properly authenticated for the registration activities performed by GCA
- Maintained effective controls to provide reasonable assurance that :
 - logical and physical access to CA systems and data is restricted to authorized individuals;
 - the continuity of key and certificate management operations is maintained; and
 - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity
- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum



National Development Council