

IPv6 Readiness Report

komunikasi.gov.my — komunikasi.gov.my

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Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>Audit trail: <https://ipv6.my6.my/audit/a73d46df-4047-4d4f-a015-984fd7003ff3>**Non-Compliant**

MGv6C-1.0

32%**Partial Support****IPv6-ONLY READINESS**Website: **X Not Ready**DNS: **X Not Ready**Email: **X Not Ready****IPv4 ADDRESSES**

203.217.179.111

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	KPKK
Country	MY
ASN	AS17564
ASN Name	GITN-PCN-AS-AP GITN M Sdn. Bhd., MY
Network (CIDR)	203.217.179.110/31

Web Services (35%)

0 / 8

#	CHECK	RESULT	DETAIL
1	AAAA Record	FAIL	No AAAA record found in DNS.
2	Globally Routable IPv6	FAIL	IPv6 address is not globally routable.
3	HTTP over IPv6	FAIL	HTTP is not accessible over IPv6.
4	HTTPS over IPv6	FAIL	HTTPS is not accessible over IPv6.
5	IPv6-Only Reachability	FAIL	Site is not reachable when limited to IPv6-only.
6	TLS Certificate Valid (IPv6)	FAIL	TLS certificate is invalid, expired, or hostname mismatch over IPv6.
7	Dual-Stack (IPv4 + IPv6)	FAIL	Domain is IPv6-only or IPv4-only.
8	HTTP/3 (QUIC)	FAIL	No HTTP/3 support detected.

DNS & DNSSEC (25%)

1 / 5

#	CHECK	RESULT	DETAIL
1	NS Has AAAA Record	FAIL	No nameserver has an AAAA record.
2	NS Reachable via IPv6	FAIL	No nameserver is reachable over IPv6.
3	NS Answers Queries via IPv6	FAIL	Nameserver does not answer queries over IPv6.
4	DNSSEC Validated	PASS	DNSSEC fully validated.
5	Reverse DNS (PTR)	FAIL	No PTR record found.
6	DS Record at Parent	PASS	DS record found at parent zone.
7	RRSIG Valid	PASS	RRSIG signatures are current and valid.
8	Signing Algorithm	INFO	RSASHA256

Email Services (25%) 4 / 6

#	CHECK	RESULT	DETAIL
1	MX Record Exists	PASS	MX record found.
2	MX Server Has IPv6	PASS	MX server has AAAA record.
3	SMTP Reachable via IPv6	FAIL	SMTP is not reachable over IPv6.
4	STARTTLS over IPv6	FAIL	STARTTLS not available over IPv6.
5	SPF Record	PASS	SPF record found.
6	DKIM Selector	INFO	No common DKIM selector found.
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 2 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	203.217.179.111
2	HTTP over IPv4	FAIL	HTTP is not accessible over IPv4.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 39ms TTFB.

Audit Trail & Evidence Record

Verification ID	a73d46df-4047-4d4f-a015-984fd7003ff3
Domain	komunikasi.gov.my
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:06:41 MYT
Finished	07 Mar 2026, 01:07:39 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/a73d46df-4047-4d4f-a015-984fd7003ff3

Integrity Verification

<p>✓ INTEGRITY VERIFIED</p>	
Algorithm	hmac-sha256-v1
Root Hash	d8cb0dcad0df93c4ef3cf8c7b209d6a8ffc70ad5bd992ed4dbeebc6526766bd9
http_headers	974ba57e0bbb4ffb18312fc5ee349aea0686b7bf1f97462540f14b2fa0ae5969
dns_responses	bdb103baee90725068807178a12918074d7f9a4d002394812d97487c4d35775e
tls_handshake	1c7f2aae9e054efc3634bc99ee44552068e53bd9f49f3ce0d29ed5fb1a93ad27
connectivity_log	0a470234db0ad7a259b602c08a1181120f30bbc8c65991ac5401796fb5dd8640
dns_resolution_times	0f140894d3cb2c22703eef4d211e715ff2ee0e53c08baaa7ce09797e607486

Test Node Identity

Os	Linux srv1440888 6.8.0-101-generic #101-Ubuntu SMP PREEMPT_DYNAMIC Mon Feb 9 10:15:05 UTC 2026 x86_64
Hostname	srv1440888
Php Version	8.3.30
Server Ipv4	76.13.221.142
Server Ipv6	2a02:4780:5e:2789::1

DNS Resolution Performance

Comparison of A (IPv4) vs AAAA (IPv6) query times across resolvers and transports. Shows median (p50) and 95th percentile (p95) of 3 samples per tuple.

Resolver	Transport	A p50 (ms)	A p95 (ms)	AAAA p50 (ms)	AAAA p95 (ms)	Delta (ms)
System	Default	6.95	18.52	6.98	7.98	0
Google	IPv4	17.16	35.06	32.79	34.06	+15.6
Google	IPv6	29.94	33.96	28.07	29.99	-1.9
Cloudflare	IPv4	18.01	27.61	10.65	29	-7.4
Cloudflare	IPv6	48.62	59.35	46.91	59.47	-1.7

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 11650
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
komunikasi.gov.my. 300 IN A 203.217.179.111
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 40819
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
komunikasi.gov.my. 21600 IN DS 57364 8 1 E190672E67D9CD9179DC33AE549A1232B2512175
komunikasi.gov.my. 21600 IN DS 57364 8 2 A68C80771110D67A2557FA23906BBC44956B974E9E361EF48F9D8AD0 4727FA67
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 42764
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
komunikasi.gov.my. 300 IN MX 5 ALT2.ASPMX.L.GOOGLE.COM.
komunikasi.gov.my. 300 IN MX 5 ALT1.ASPMX.L.GOOGLE.COM.
komunikasi.gov.my. 300 IN MX 10 ALT3.ASPMX.L.GOOGLE.COM.
komunikasi.gov.my. 300 IN MX 1 ASPMX.L.GOOGLE.COM.
komunikasi.gov.my. 300 IN MX 10 ALT4.ASPMX.L.GOOGLE.COM.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 30867
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
komunikasi.gov.my. 299 IN NS prime.komunikasi.gov.my.
komunikasi.gov.my. 299 IN NS orion.komunikasi.gov.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 409
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
komunikasi.gov.my. 3600 IN TXT "google-site-verification=EGgvvdVsAu-SN6tAt7qhjtbqmYH0RQhKsZISYn2m0v8"
komunikasi.gov.my. 3600 IN TXT "v=spf1 ip4:103.8.147.12/30 ip4:219.92.54.177/32 ip4:103.156.82.32/29 ip4:103.156.83.32/29 include:_spf.google.com ~all"
komunikasi.gov.my. 3600 IN TXT "MS=ms21610124"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 48428
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
komunikasi.gov.my. 300 IN SOA prime.komunikasi.gov.my. rangkai.komunikasi.gov.my. 2026022702 1200 7200 1209600 300
```

RRSIG

```
prime.komunikasi.gov.my. rangkai.komunikasi.gov.my. 2026022702 1200 7200 1209600 300
```

```
SOA 8 3 300 20260329062152 20260227062152 50656 komunikasi.gov.my. SG/zXW3KMo6isjV6XvsYvsGAmGo81nrs5Ay6k9w2r5ubowUsMkK3kAw+
XeN6uUsD99zxlzGjjFpcIG3vuww8qKMrhLlnuLB4Zr/VnIh7jHRVp8Rb pLbDH4i8Av+0GT0RGS+XXr73pVubbbZfz5yWpU1m+JPRGchsMgjJs6x 0Ak=
```

DNSKEY

```
;; communications error to 8.8.8.8#53: timed out
;; Got answer:
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 3190
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
komunikasi.gov.my. 300 IN DNSKEY 256 3 8 AwEAAZrIHxbFRs2rJ7gpB07M5R6HNGsj//8N5t60F0i0rr3JqxHczMEI uqxbkbyz1XKBexv0m85k26KDDMyd4iGuDGrWntLdxvN850sRFJcmCHLg
h9/CWAw4XFsvpYe1gSSuKasdOC/2150nhkcrZJkkenvD8T99GYxskd6p YoN8LmWx
komunikasi.gov.my. 300 IN DNSKEY 257 3 8 AwEAApeWacQukcgUGo1vLnEdd4N72+ZY1Lv91Rx5cTaYaIpPrQ0wzsb TkV2leW3EDVim6efmJmYuCc1PeuXbbdMgMBZ6eyhIKf77KNkMBOfCHh
pUKdGNisDLw0BSnq573gs0ZY81RNGJOAEVmxodQo60ILQBr0INy+DeS2 vLJUo3Sphiq9KYDbvY1v0sMBZF0RlpyFkg6QfvCr6/CDzhLuj8MrwTEm
x0DYbyilSNKDG3JKKtpabYtGMZ6vL8nbU02nyRbvgC3wYBt766YND1s XGUnlua5STauP0CbAjqszMCLQ5fljB+jvC8lFc4ArZRx0kWhY72h+WJJ 8YU3a0s+jNs=
```

DNSSEC_VALIDATION

```
; fully validated
komunikasi.gov.my. 300 IN SOA prime.komunikasi.gov.my. rangkaian.komunikasi.gov.my. 2026022702 1200 7200 1209600 300
komunikasi.gov.my. 300 IN RRSIG SOA 8 3 300 20260329062152 20260227062152 50656 komunikasi.gov.my. SG/zXW3KMo6isjV6XvsYvsGAmGo81nrs5Ay6k9w2r5ubowUsMkK3kAw+
XeN6uUsD99zxlzGjjFpcIG3vuww8qKMrhLlnuLB4Zr/VnIh7jHRVp8Rb pLbDH4i8Av+0GT0RGS+XXr73pVubbbZfz5yWpU1m+JPRGchsMgjJs6x 0Ak=
```


TLS Handshake Evidence

IPV4 Connection

IP Used	203.217.179.111
IP Version	4

```

depth=2 OU = GlobalSign ECC Root CA - R5, O = GlobalSign, CN = GlobalSign
verify return:1
depth=1 C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
verify return:1
depth=0 C = MY, ST = Putrajaya, L = Putrajaya, O = Kementerian Komunikasi, CN = *.komunikasi.gov.my
verify return:1
CONNECTED(00000010)
...
Certificate chain
 0 s:C = MY, ST = Putrajaya, L = Putrajaya, O = Kementerian Komunikasi, CN = *.komunikasi.gov.my
  i:C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
  a:PKEY: id-ecPublicKey, 384 (bit); sigalg: ecdsa-with-SHA384
  v:NotBefore: Jan 29 08:05:28 2026 GMT; NotAfter: Mar 2 08:05:27 2027 GMT
-----BEGIN CERTIFICATE-----
MIIFZTCB0ugAwIBAgIMbkZwCZoUx2kMYfCAoGCCqGSM49BAMDFAXCzAJBgNV
BAYTAKJFRMRkFwYDVoQkEzBHBhG9iYXwTaWduIG52LXNhMSYwJAYDVQQDEEx1HbG9i
YXwTaWduIEVDOyBpViBTU0w0EgMjAxODAEFw0YnJxMjkwODA1MjhaFw0YnZAZ
MDIwODA1MjhaMHQxCzAJBgNVBAYTAKI2MRlWAEYDVQIQIeLQdXRyYWhpeWExEjAQ
BgNVBACTCVB1dHJhamF5YTEfMB0GA1UEChMMS2VtZW50ZXJpYwY4S29tdW5pa2Fz
aTEcMBoGA1UEAwTKi5rb211bmlrYXNpLmdvdi5teTB2MBAGByqGSM49AgEGBSuB
BAAiA2IABLKJufLg+a8IZPn2tU0UiomhvJbhZPWxf02UjLsoIBweq31MoJpt4h0k
Tgm9VJyJligSALVZk8qiGvuFnAU0eU0ThnCiqoDFEwU/v2Bev+H4fycrgviMcVn4j
LcxYMSa6kaOCA2gwggnkMA4GA1UdDwEB/w0EAwIHgDAMBgNVHRMBAf8EAjAAMIIGO
BggrBgEFBQcBAQSBGTB/MEQGCCsGAQUFBzAChjodHRwOi8vc2VjZjJlLmdsb2Jh
bHhNpZ24uY29tL2NhY2VydC9nc2VjY292c3NsY2EYMDIwODA1MjhaMjhaMjhaMjha
AYYRAHR0cDovL29jZ3AuZ2xvYmFsc2lubi5jb20vZ3NlY2NvdnNzbGhMjhaXODBB
BgNVHSAETzBNMEEGCcsGAQQBoDIBFDA0MDIGCCsGAQUFBwIBFiZodHRwczovL3d3
dy5nbG9iYXwzaWduLmNvbS9yZXBvc2l0b3J3J5LzAIBGZngQwBAGIwPwYDVR0fBDgw
NjA0b0kMIYUaHR0cDovL2NhY292c3NsY2EYMDIwODA1MjhaMjhaMjhaMjhaMjha
MDE4LmNybDAXBgNVHREEKjAoghMqLmtvbXVuaWthc2kuZ292Lm15ghFrb211bmlr
YXNpLmdvdi5teTAdBgNVHSEUfjAUBggrBgEFBQcDAQYIKwYBBQUHAwIwHwYDVR0j
BBgwFoAUMHU0dSr+YYCqkEABrtboB0ZuP0gW0YDVR0BBEYFJwr0PKFj4pCSVcM
mkH4Y0578iWMIIBhYKkYBBAHwEIEAgSCAXYeggyFyAXAAAdAcn2gs6frrwRLQ
+BuWiofdzIQ2EzmyLLjgkXm9ZnwAAAZwIyUJGAAAEAwBHMEUCIQD64BBE60Eg
3/D45FI5ImHhbJ915Kt0n5bE06csgBwXwIgcXn5AxxKB5t0D0McMknz/vCsgpvr
axtmA0hSo5+dmKAAfWC0yKcLnR5q86IGsKR6hLdG/h/Gv5U+JeabTuQCSPPG6AAA
AZwIyUGBAAgAAUAAgU7wQDAEgRgIhA0cygH4miekeZerMzxvHhtrk47A3wZRO0
qRaytwtHxzuAiEAsCimkRgdPhI06+8v6ArvI+N28jHx3tgjfmC0mF87jJEA0QM
Y9yY5Zwdq4j2Hoo93q6Pq0SjN3tFm5TD+6Gc/MG+JgAAAzwIyT9JAAAEAwBGMEQC
IbHxQza+7kbaCNAZ32k/Ra2SRdLJI+DVY8s3/kiWYyAiBDHerz6TS5Hvc2Avd2
htpGmjEwhbXpXfE8gnvpvgPAUDAKBggqhkJOP0QDAwNoADBLajEA1Yv7GvjRzi/9
9w7IXG4Voc0tLRKPhwtmPbrB2xgHTjyq4R5VGRMjIMT3g4ZgAjBFNAkLBwyI
b+TyOfvOryWPMu/hSndogKlsxkP6xrzW2fnFR4A1ct3zsM6azndYYfg=
-----END CERTIFICATE-----
 1 s:C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
  i:OU = GlobalSign ECC Root CA - R5, O = GlobalSign, CN = GlobalSign
  a:PKEY: id-ecPublicKey, 384 (bit); sigalg: ecdsa-with-SHA384
  v:NotBefore: Nov 21 00:00:00 2018 GMT; NotAfter: Nov 21 00:00:00 2028 GMT
-----BEGIN CERTIFICATE-----
MIIDAJCCaomgAwIBAgINAe5fIvVCSQX5AZGo3DAKBggqhkJOP0QDAzBQMS0wIgdY
DVoQExthbG9iYXwTaWduIEVDOyBSb290IENBI0gUjUxZzARBGNVBAOTCkdsb2Jh
bFNPZ24xEzARBGNVBAMTCkdsb2JhbFNPZ24wHhcnMTgxmTIxMDAwMDAwWhcnMjgX
MTIxMDAwMDAwWjBQM0swCQYDVQGEWJCRTEZMbcGA1UEChMQR29yYmF5U2lubiBu
di1lZTEEmCQGA1UEAxMdr2xvYmF5U2lubiBFQ0MgT1YUjMIENBIENBIWtgdjAQ
BgqchkJOP0IBBjUrgQQAiGniAATDoRGNZSPHlUG7q6bQA11Pte0ZD/xx44QlFam1
BM4eLeN+fwgwalSbkjzARCM9si/fnOeKNTKALgNmNOHTmV3VfwGboCj6+22HVWZU
VeX/VeIgoW1u7Lja/NDE7RsXaCjggEpMIIBJTAOBGNVHQ8BAf8EBAMCAYyEgYD
VR0TAQH/BAgwBgEB/wIBADAdBgNVHQ4EFgQUWu0dSr+YYCqkEABrtboB0ZuP0gW
HwYDVR0jBBgwFoAUPeYpSjVqB8ohReom3m7e0oPQn1kwPgYIKwYBBQUHAQEEMjAw
MC4GCCsGAQUFBzABhijodHRwOi8vb2NzcDIuZ2xvYmF5U2lubi5jb20vcmlvdHl1
MDYGA1UdHwQ6ApoCeGJWh0dHA6Ly9jcmwwZ2xvYmF5U2lubi5jb20vcmlvdHl1
dCIyNS5jcmwwRwYDVR0fBEAwPjA8BGRVHSAAMDQwMgYIKwYBBQUHAGEWJmh0dHBz
O18vd3d3Lmdsb2JhbHhNpZ24uY29tL2NhY2VydC9nc2VjY292c3NsY2EYMDIwODA1
MGQCMC4LzZGQw5mpNZBmztq8huxKf9/tRUJ5yLl4q6YU+i2fjF2FRBNA64EBmljA
7dk50wIwL9qYB0AphsLmV0LhknrzHZVvtqz7N0aIV18BEIDZQgK3jxyZADjHSH
Suk4mCdW
-----END CERTIFICATE-----
...
Server certificate
subject=C = MY, ST = Putrajaya, L = Putrajaya, O = Kementerian Komunikasi, CN = *.komunikasi.gov.my
issuer=C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
...
No client certificate CA names sent

```

```
Peer signing digest: SHA384
Peer signature type: ECDSA
Server Temp Key: X25519, 253 bits
---
SSL handshake has read 2571 bytes and written 399 bytes
Verification: OK
---
New, TLSv1.3, Cipher is TLS_AES_256_GCM_SHA384
Server public key is 384 bit
Secure Renegotiation IS NOT supported
Compression: NONE
Expansion: NONE
No ALPN negotiated
Early data was not sent
Verify return code: 0 (ok)
---
DONE
```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	0
Connected IP	203.217.179.111
Connect Time	6.11 ms
TTFB	0 ms
Total Time	10002.87 ms
Error	Operation timed out after 10002 milliseconds with 0 bytes received

IPv4 HTTPS (port 443)

HTTP Status	400
Connected IP	203.217.179.111
Connect Time	4.97 ms
TTFB	29.85 ms
Total Time	29.92 ms

Response Headers:

```
[
  "HTTP/1.1 400 Bad Request",
  "Date: Fri, 06 Mar 2026 09:08:50 GMT",
  "Connection: close",
  "Content-Length: 1414",
  "Content-Type: text/html; charset=UTF-8"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.005123 0.011962
TCP Connect IPv4 → port 443	301 0.006555 0.042019

Test Node Network Evidence

Node Profile	dual stack
--------------	------------

Egress Connectivity

IPv4 Egress	76.13.221.142
IPv6 Egress	2a02:4780:5e:2789::1

Sysctl IPv6 Flags

net.ipv6.conf.all.disable_ipv6	0
--------------------------------	---

IPv6 Routes

```
2a02:4780:5e::/48 dev eth0 proto kernel metric 256 pref medium
fe80::/64 dev eth0 proto kernel metric 256 pref medium
default via 2a02:4780:5e::1 dev eth0 proto static metric 1024 pref medium
```

IPv4 Routes

```
default via 76.13.221.254 dev eth0 proto static
76.13.221.0/24 dev eth0 proto kernel scope link src 76.13.221.142
```