
NATIONAL SECURITY AGENCY/CENTRAL SECURITY SERVICE



INSPECTOR GENERAL REPORT

~~(TS//SI//NF)~~ Report on the Special Study of NSA's
Purge of Pen Register and Trap and Trace Bulk
Metadata



(b)(3)-P.L. 86-36

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(U) OFFICE OF THE INSPECTOR GENERAL

(U) Chartered by statute and the Director, NSA/Chief, CSS, the Office of the Inspector General (OIG) conducts audits, and investigations and inspections. Its mission is to ensure the integrity, efficiency, and effectiveness of NSA/CSS operations, provide intelligence oversight, protect against fraud, waste, and mismanagement of resources, and ensure that NSA/CSS activities are conducted in compliance with the law, executive orders, and regulations. The OIG also serves as ombudsman, assisting NSA/CSS employees, civilian and military.

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OFFICE OF THE INSPECTOR GENERAL
NATIONAL SECURITY AGENCY
CENTRAL SECURITY SERVICE

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TO: DISTRIBUTION

SUBJECT: ~~(TS//SI//NF)~~ Report on the Special Study of NSA's Purge of Pen Register and Trap and Trace Bulk Metadata [redacted] — ACTION (b)(3)-P.L. 86-36
 MEMORANDUM

1. ~~(TS//SI//NF)~~ This advisory report summarizes the results of the review by the Office of the Inspector General of NSA's Purge of Pen Register and Trap and Trace Bulk Metadata [redacted].

2. ~~(TS//SI//NF)~~ On the basis of our observations and review of procedures and documentation, we determined with reasonable assurance that the Agency destroyed Pen Register and Trap and Trace (PR/TT) bulk metadata from its declared systems, databases, and tape and system backups disclosed to us before the PR/TT authority expired on 9 December 2011. Based on our review, no management response is required for this report.

3. (U) We appreciate the courtesy and cooperation extended to our staff throughout the review. For additional information, please contact Mr. [redacted] on 963-0922(s) or via e-mail at [redacted].

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George Ellard
 Inspector General

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(U) DISTRIBUTION:

DIRNSA

SID (T. Shea)

TD [redacted]

cc: EXDIR (F. Fleisch)

COS (D. Bonanni)

DOC (J. DeLong)

D4 [redacted]

OGC [redacted]

ST [redacted]

SV [redacted]

SV4 [redacted]

SV42 [redacted]

S3 [redacted]

S31323 [redacted]

S3531 [redacted]

TE [redacted]

TE6 [redacted]

TV [redacted]

T1 [redacted]

T12 [redacted]

T121 [redacted]

T122 [redacted]

T1222 [redacted]

D4 IG POC [redacted]

OGC IG POC [redacted]

SID IG POC [redacted]

TD IG POC [redacted]

DL d-comply-tasker

DL SIDIGLIAISON

DL TD_REGISTRY

DOJ NSD [redacted]

(b)(6)

IG

D/IG

D1 [redacted]

D11

D12

D13

D14

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**NSA/CSS Office of the Inspector General
ADVISORY REPORT**

~~(TS//SI//NF)~~ **SPECIAL STUDY OF THE AGENCY'S PURGE OF
PEN REGISTER AND TRAP AND TRACE BULK METADATA**

(U) Overview

~~(TS//SI//NF)~~ This report summarizes our special study of the Agency's processes to destroy Pen Register and Trap and Trace (PR/TT) bulk metadata from its declared systems, databases, and backups before the authority expired on 9 December 2011. On the basis of our observations and review of procedures and documentation, we conclude with reasonable assurance that the Agency destroyed PR/TT bulk metadata in the systems, databases, and backups disclosed to us.

(U) Background

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~~(TS//SI//NF)~~ Between July 2004 [redacted] to the expiration of the PR/TT authority on 9 December 2011, the National Security Agency (NSA), with the assistance of certain U.S. telecommunications service providers, collected, processed, and analyzed metadata from Internet communications to obtain foreign intelligence information about the international terrorist activities [redacted]

This activity occurred under a PR/TT authority (renewable every 90 days) granted by the Foreign Intelligence Surveillance Court (FISC).

(b)(1)
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(b)(3)-50 USC 3024(i)

~~(TS//SI//NF)~~ In early 2011, the Signals Intelligence Directorate (SID) conducted an examination of the NSA PR/TT program to assess its value as a source of foreign intelligence information. That examination revealed that the PR/TT program was not producing valuable foreign intelligence information after the program had been reinitiated [redacted]

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~~(TS//SI//NF)~~ On [redacted] 2011, SID requested that the Director, NSA (DIRNSA) terminate the PR/TT program. SID recommended that NSA not renew the PR/TT authority and destroy all bulk metadata collected pursuant to the PR/TT authority. SID identified several limitations that contributed to the program's inability to meet expectations.

1. ~~(TS//SI//NF)~~ [redacted]

[redacted]

(b)(1)
(b)(3)-P.L. 86-36
(b)(3)-50 USC 3024(i)

[Redacted]

2. ~~(TS//SI//NF)~~ [Redacted]

[Redacted]

(b)(1)
(b)(3)-P.L. 86-36
(b)(3)-50 USC 3024(i)

3. ~~(TS//SI//NF)~~ **Other authorities can satisfy certain foreign intelligence requirements that the PR/TT program was designed to meet.** The Supplemental Procedures Governing Communications Metadata Analysis (SPCMA), which SID implemented widely in late 2010, allows NSA to call-chain from, to, or through U.S. person selectors in Signals Intelligence collection obtained under a number of authorities. In addition, notwithstanding restrictions stemming from the FISC's recent concerns regarding upstream collection, FAA §702 has emerged as another critical source for collection of Internet communications of foreign terrorists. Thus, SPCMA and FAA §702 assist in the identification of terrorists communicating with individuals within the United States, which addresses one of the original reasons for establishing the PR/TT program in 2004.

4. ~~(TS//SI//NF)~~ [Redacted]

[Redacted]

(U) DIRNSA's Decision

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~~(TS//SI//NF)~~ On [Redacted] 2011, DIRNSA approved SID's request to allow the PR/TT Order to expire and to destroy all collected bulk metadata from the PR/TT program before the authority expired on 9 December 2011.

~~(TS//SI//NF)~~ NSA Systems and Repositories that Stored PR/TT Metadata

~~(TS//SI//NF)~~ Before the purge, the Agency declared that PR/TT metadata was stored [Redacted]

[Redacted]

[Redacted]

1. ~~(TS//SI//NF)~~ [Redacted] is the Agency's corporate database that ~~(b)(3)-P.L. 86-36~~ accepts metadata [Redacted] into separate partitions, including PR/TT FISA. [Redacted] contained the contact chain summaries and transaction records for PR/TT.

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• ~~(TS//SI//NF)~~ [Redacted] stored the contact chain summaries that document Internet communications between two persons. A contact chain summary shows that a person communicated with another person, their first and last contact dates, and the total number of communications between them.

• ~~(TS//SI//NF)~~ [Redacted]

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(b)(3)-50 USC 3024(i)

• ~~(TS//SI//NF)~~ [Redacted]

• ~~(TS//SI//NF)~~ [Redacted]

2. ~~(TS//SI//NF)~~ [Redacted]

3. ~~(TS//SI//NF)~~ [Redacted]

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4. ~~(TS//SI//NF)~~ [Redacted]

5. ~~(TS//SI//NF)~~ [Redacted]

6. ~~(TS//SI//NF)~~ [Redacted]

~~TOP SECRET//SI//NOFORN~~~~(TS//SI//NF)~~ **Review of NSA's PR/TT Bulk Metadata Purge**

~~(TS//SI//NF)~~ The PR/TT metadata purge was performed from [redacted] (b)(3)-P.L. 86-36 through 9 December 2011. On 2 December and 7 December 2011, the OIG independently observed the Agency's purge processes to destroy PR/TT bulk metadata from its declared systems, databases, and backups (as disclosed by TD). It is important to note that we lack the necessary system accesses and technical resources to search NSA's networks to independently verify that only the disclosed repositories stored PR/TT metadata. As a result, we completed our special study through observation and review of procedures and system documentation for the disclosed repositories only.

~~(TS//SI//NF)~~ During our study, we observed the Knowledge Services [redacted] Team (T1222) and T121 personnel perform system commands to purge PR/TT metadata from Agency systems and databases. At our request, TD personnel provided us with system documentation before and after the purge commands had been performed. This documentation showed that the file systems and tables that stored PR/TT metadata had been deleted from Agency systems and databases. We also observed T1222 submit the backup tapes for secure destruction and obtained copies of receipts signed by destruction personnel.

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~~(TS//SI//NF)~~ However, S3 had completed its purge before we had the opportunity to observe. As a result, we were able to review the [redacted] purge procedures only for reasonableness; we were not able to do the before and after comparisons that we did for the TD systems and databases disclosed to us. S3 did provide system documentation that showed PR/TT metadata files no longer resided in temporary memory of the [redacted] system and confirmed that PR/TT dataflows had been terminated and all other purge procedures had been completed for [redacted] systems according to plan. Refer to Table 1 for the six areas reviewed.

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(U) Table 1. Special Study Results

~~(TS//SI//NF)~~

Review Area	Org.	OIG Review Method	Procedures Adequately Performed?
Tape, disk, and system backup destruction practices	T1222	Observed T1222 submit backup tapes for secure destruction. Obtained copies of receipts signed by destruction personnel. Reviewed procedures and observed T1222 perform commands to purge [redacted]. Obtained system documentation that showed that the file system had been deleted.	(b)(1) (b)(3)-P.L. 86-36 Yes
[redacted]	T1222	Reviewed procedures and observed T1222 perform commands to purge [redacted]. Obtained system documentation that showed that tables had been deleted.	Yes
[redacted]	T1222	Reviewed procedures and observed T1222 perform commands to purge [redacted] for [redacted]. Obtained system documentation that showed that file systems had been deleted.	Yes
[redacted]	T1222	Reviewed procedures and observed T1222 perform commands to purge [redacted]. Obtained system documentation that showed that file systems had been deleted.	Yes
[redacted]	T121	Reviewed procedures and observed T121 perform commands to purge PR/TT metadata from directories and tables. Obtained system documentation that showed that directories, files, and tables had been purged of PR/TT metadata [redacted]	Yes
[redacted] Systems	S3	[redacted] purge procedures were reviewed only for reasonableness. S3 had completed its purge before we had the opportunity to observe. S3 subsequently provided system documentation that showed that PR/TT metadata files no longer resided in temporary memory of [redacted] and confirmed that PR/TT dataflows had been terminated and all other purge procedures had been completed according to plan.	Yes

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~~(TS//SI//NF)~~

(U) Conclusion

~~(TS//SI//NF)~~ On the basis of our observations and review of procedures and documentation, we conclude with reasonable assurance that the Agency destroyed PR/TT bulk metadata from its declared systems, databases, and tape and system backups disclosed to us before the PR/TT authority expired on 9 December 2011.

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(U) APPENDIX

(U) T1222, T121, and S3 Purge Procedures

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~~(TS//SI//NF)~~ Table A1. PR/TT Bulk Metadata Purge Procedures

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(TS//SI//NF)	Dates	Procedure
		<p>[redacted] (S3) terminated [redacted] PR/TT dataflows, purged metadata, and powered down equipment.</p> <p>[redacted] query services [redacted] were deleted to prevent analysts from accessing PR/TT chain [redacted] data stored in [redacted]</p>
b)(3)-P.L. 86-36	12/2/11	<p>Phase 1 – T1222's purge procedures to destroy PR/TT metadata collected [redacted]</p> <ul style="list-style-type: none"> • [redacted] • [redacted] • [redacted] • [redacted] • [redacted] • [redacted]
b)(1) b)(3)-P.L. 86-36	12/7/11	<p>Phase 2 – T1222's purge procedures to destroy PR/TT metadata collected [redacted]</p> <ul style="list-style-type: none"> • [redacted] • [redacted] • [redacted] • [redacted] • [redacted] • [redacted] • [redacted]
	12/7/11	<p>T121's purge procedures to delete sample PR/TT metadata from the [redacted] system:</p> <ul style="list-style-type: none"> • [redacted] • [redacted] • [redacted] • [redacted] • [redacted]
	12/9/11	[redacted]
<p>Note: Before the purge, the Agency had only PR/TT metadata [redacted]</p> <p>* PR/TT metadata obtained before [redacted] had not been saved to the [redacted] As a result, no action was needed by T1222 for the [redacted] during the Phase 1 purge.</p> <p>† The entire [redacted] was deleted during the Phase 1 purge. As a result, no action was needed by T1222 [redacted] during the Phase 2 purge.</p> <p>‡ [redacted]</p> <p>§ [redacted]</p>		

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