

SCIENTIFIC INTEGRITY

I. Purpose

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10 This Directive establishes Department of Homeland Security (DHS) policies and
11 procedures to promote Scientific Integrity. This Directive replaces Directive 026-07 and
12 implements the January 27, 2021, Presidential Memorandum on Restoring Trust in
13 Government Through Scientific Integrity and Evidence-Based Policymaking.

II. Background

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15 Science and engineering play a critical role in the Department’s mission to protect the
16 homeland. From the development and deployment of technologies to support our operators,
17 to the development of evidence-based policy, scientific integrity is critical to ensuring the
18 Department serves the American people.

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20 The responsibility for upholding scientific integrity lies with the entire homeland security
21 enterprise workforce. To ensure the Department meets its expectations, DHS has
22 designated a Scientific Integrity Official (SIO) to lead and oversee the implementation of this
23 policy. The SIO is empowered with the independence necessary to support the review and
24 assessment of scientific integrity concerns and enforce corrective and administrative actions.
25 The SIO, in conjunction with the Chief Science Officer (CSO), shall advocate for appropriate
26 engagement of scientific leadership in decision-making.

III. Scope

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28 The policy set forth in this Directive applies to all scientific activity conducted, funded, or
29 otherwise supported by DHS (“DHS-sponsored”). Scientific integrity is the responsibility of
30 the entire DHS workforce. For this reason, this policy applies to all DHS personnel, political
31 appointees, trainees, interns, and advisory committee members, when they propose,
32 conduct, or review DHS-related science or communicate about DHS science and scientific
33 activities, and to all levels of DHS personnel who manage or supervise scientific activities
34 and use scientific information in decision-making.

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36 The Scientific Integrity Policy set forth in this Directive also applies to DHS contractors,
37 cooperators, partners, co-regulators, permittees, lessees, grantees, and volunteers when
38 conducting or supporting DHS’s scientific activities.¹

¹ DHS will develop and require inclusion of express scientific integrity standards and requirements in all contracts and agreements, which shall be issued via policy or guidance following issuance of this Directive.

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To instill in the DHS research community at large a culture of scientific integrity and maintain the visibility of scientific integrity Department-wide, DHS will: (i) post this Directive prominently on its website; (ii) educate DHS employees, contractors, and collaborators who conduct or support DHS scientific activities on their rights and responsibilities related to scientific integrity; (iii) conduct town halls on scientific integrity; and (iv) issue related policies and guidance.

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IV. Policy

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It is DHS policy to create and support a culture of scientific integrity across all fields and disciplines of research, development, testing, and evaluation (RDT&E). The federal definition of “scientific integrity” is “adherence to professional practices, ethical behavior, and the principles of honesty and objectivity when conducting, managing, using the results of, and communicating about science and scientific activities. Inclusivity, transparency, and protection from inappropriate influence are hallmarks of scientific integrity.”²

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This policy focuses on the following key areas:

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A. Promoting a Culture of Discovery and Integrity

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Freedom of inquiry, open discussion, and public access to data are critical to a healthy scientific ecosystem. Science and public trust in science thrive in an environment free from political and otherwise inappropriate influence. It is the policy of the Department to:

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1. Promote free and open discourse about DHS-sponsored research unless prohibited by law, national security concerns, or Executive Order.

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2. Encourage the publication of scientific research in open literature, when appropriate, while ensuring correct attribution of contributions to scientific work.³

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3. Encourage open discussion of scientific work and research (whether in a scientific or a public forum or with the media) and publication of scientific findings. Those covered by this policy are free to discuss their personal opinions on scientific and technical subject matter, provided they do not represent their personal views as those of DHS or the U.S. Government.

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4. Prohibit political interference and other types of inappropriate

² *A Framework for Federal Scientific Integrity Policy and Practice*, January 2023. Available at <https://www.whitehouse.gov/wp-content/uploads/2023/01/01-2023-Framework-for-Federal-Scientific-Integrity-Policy-and-Practice.pdf>

³ OSTP Memorandum on Ensuring Free, Immediate, and Equitable Access to Federally Funded Research, August 25, 2022. Available at <https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf>

75 influence in the design, proposal, funding, conduct, review,
76 management, evaluation, and reporting of DHS scientific activities
77 and the use of DHS scientific information.

- 78 5. Prohibit restrictions (unless enumerated by federal law, national
79 security concerns, or Executive Order) that limit or reduce the
80 availability of DHS science and scientific products outside of
81 normal budgetary or priority-setting processes.
- 82 6. Require that DHS personnel and others covered by this policy
83 represent their contributions to DHS scientific work fairly and
84 accurately and neither accept nor assume unauthorized and/or
85 unwarranted credit for another's accomplishments. To be named
86 as an author, contributors must make a substantial intellectual
87 contribution to a scientific work (whether through writing or editorial
88 revision of critical intellectual content) and must approve and agree
89 to be accountable for all aspects of the work.
- 90 7. Ensure independent review of scientific facilities, methodologies,
91 and other scientific activities as appropriate to ensure scientific
92 integrity.
- 93 8. Prohibit research misconduct and the use of improper methods or
94 processes in conducting research.^{4, 5}
- 95 9. Require that DHS personnel covered by this policy adhere strictly
96 to federal ethics laws and standards, disclose potential financial
97 and impartiality conflicts to DHS or Component ethics counsel, and
98 follow the advice of the cognizant ethics counsel with regard to
99 whether recusals, disclaimers, or other ethics actions will address
100 potential conflicts of interest.
- 101 10. Require that non-federal individuals and entities covered by this
102 policy adhere to conflict-of-interest provisions in DHS contracts
103 and agreements, and to other applicable federal law, regulations,
104 and policies, including the DHS policy set forth in this Directive.
- 105 11. Require that all research involving the participation of human
106 subjects, their data, or their biospecimen and the use of non-
107 human animals, is conducted in accordance with established laws,

⁴ *Federal Policy on Research Misconduct*, Notification of Final Policy, Office of Science and Technology Policy, 65 Fed. Reg. 76,260 (December 6, 2000). Available at <https://www.federalregister.gov/documents/2000/12/06/00-30852/executive-office-of-the-president-federal-policy-on-research-misconduct-preamble-for-research>

⁵ DHS Directive 069-01, "Research Misconduct." Available at https://www.dhs.gov/sites/default/files/publications/mgmt/knowledge-creation-and-management/mgmt-dir_069-01-research-misconduct_revision-00.pdf

108 regulations, DHS policies, and the ethical considerations
109 addressed therein.

110 12. Ensure recognition and prompt action to address and prevent
111 Scientific Integrity Policy violations that have a disproportionate
112 impact on underrepresented groups or undermine the equitable
113 delivery of Federal Government programs.

114 13. Ensure that DHS personnel and contractors receive scientific
115 integrity guidance and/or training as part of new employee
116 orientation so they are aware of their responsibilities under this
117 Scientific Integrity Policy. DHS also will provide periodic scientific
118 integrity training to DHS personnel and contractors who propose,
119 review, conduct, manage, use the results of, and communicate
120 about DHS science and scientific activities biannually. This training
121 will be conducted in coordination with the DHS Compliance
122 Assurance Program Office (CAPO) and will be tracked to ensure
123 completion by all those covered by this policy.

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125 **B. Professional Development for Scientists**

126 The Department is committed to supporting and facilitating, as permitted by law, the
127 professional development of its federal scientists and engineers. It is the policy of
128 the Department to:

- 129 1. Encourage timely publication of research in peer-reviewed,
130 professional, scholarly journals, DHS technical reports, and
131 publications or other appropriate outlets.
- 132 2. Support attendance and presentation of research at professional
133 meetings including workshops, conferences, and symposia.
- 134 3. Promote service on editorial boards, as peer reviewers, or as
135 editors of professional or scholarly journals.
- 136 4. Encourage participation in professional societies, committees, task
137 forces, and other specialized bodies of professional societies.
- 138 5. Permit government scientists to receive honors and awards for
139 contributions to scientific activities to the extent allowed by law,
140 and discoveries, and to accrue the professional recognition of such
141 honors or awards.
- 142 6. Perform outreach and engagement activities, such as speaking to
143 community and student groups, as part of their official duties.

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C. Supporting Decision-making Processes

To support the decision-making process, it is the policy of DHS to:

1. Ensure the quality, accuracy, and transparency of scientific information used to support policy and decision-making including:
 - a. Use scientific information that is subject to well-established scientific processes.
 - b. Ensure that scientific data and research used to support policy decisions undergo review by qualified experts, where feasible and appropriate, and consistent with law.
 - c. Adhere to the Office of Management and Budget Final Information Quality Bulletin for Peer Review.⁶ When independent peer reviews of scientific products are conducted by contractors, a conflict-of-interest review shall be conducted for all reviewers.
 - d. Reflect scientific information appropriately and accurately and ensure that it is free of misinformation; and make scientific findings or conclusions considered or relied on in policy decisions publicly available online and in open formats, to the extent practicable.
2. Where legally permissible and appropriate, enable scientists to directly participate in policy and management decisions for which they are the agency subject matter expert in order to ensure that the science is accurately represented and interpreted.
3. Ensure the accuracy of communication of the science upon which a policy decision is based.
4. Ensure that the SIO, with input from other scientific officials, develops a transparent mechanism for DHS employees and others covered by this policy to express differing scientific opinions. When an agency employee, who is substantively engaged in the science informing an agency policy decision, disagrees with the scientific data, interpretations, or conclusions that are to be relied upon for that decision, the employee is encouraged to express that opinion complete with rationale and in writing. If differing scientific opinions are not resolved during internal deliberations, they can be part of

⁶ Office of Management and Budget. "Final Information Quality Bulletin for Peer Review." *Federal Register*. Doc. 05-769, January 14, 2005. Available at: <https://www.federalregister.gov/documents/2005/01/14/05-769/final-information-quality-bulletin-for-peer-review>

179 peer review charge questions with the results publicly available.
180 When there is no peer review, the differing opinion will be
181 represented in the agency deliberative documents for the decision
182 maker's consideration.

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D. Protections

It is DHS policy to assure the protection of DHS scientists and others covered by this policy from retribution, retaliation, or reprisal and, in consultation with the DHS Office of the General Counsel (OGC), to:

- 188 1. Select and retain candidates for scientific and technical positions
189 based on the candidate's scientific and technical knowledge,
190 credentials, experience, and integrity, and hold them and their
191 supervisors to the highest standards of professional and scientific
192 ethics.
- 193 2. Promote diversity, equity, inclusion, and accessibility in the
194 scientific workforce and to create safe workspaces that are free
195 from harassment and discrimination. Support scientists and
196 researchers including, but not limited to, Black, Latino, Indigenous
197 and Native American persons, Asian Americans and Pacific
198 Islanders, and other persons of color; members of religious
199 minorities; lesbian, gay, bisexual, transgender, queer, and intersex
200 (LGBTQI+) persons; persons with disabilities; persons who live in
201 rural areas; and persons otherwise adversely affected by
202 persistent poverty or inequality; and advance the equitable delivery
203 of Federal programs.
- 204 3. Protect from prohibited personnel practices (as defined in 5 U.S.C.
205 2302(b)), individuals who (i) in good faith report allegations of
206 compromised scientific integrity, and (ii) (in the absence of a
207 finding that the individual compromised scientific integrity) agency
208 employees and others covered by this policy alleged to have
209 compromised scientific integrity.
- 210 4. Prevent supervisors, managers, and any other agency leadership
211 from intimidating or coercing scientists or others covered by this
212 policy from proposing scientific research topics or, once selected,
213 altering scientific data, findings, or professional opinions or
214 inappropriately influencing scientific advisory boards.
- 215 5. Comply with whistleblower protections, specifically:
- 216 a. By protecting employees from prohibited personnel
217 practices (as defined in 5 U.S.C. 2302(b)), especially

218 those who in good faith uncover and report allegations of
219 loss of scientific integrity, as well as those DHS
220 employees alleged to have compromised scientific
221 integrity in the absence of a finding that the individual
222 compromised scientific integrity.

223 b. By complying with the requirements of (i) the
224 Whistleblower Protection Act of 1989, and its expanded
225 protections enacted by PL 103-424 and the
226 Whistleblower Protection Enhancement Act of 2012; (ii)
227 the National Defense Authorization Act's expansion of
228 certain whistleblower protections to employees of federal
229 government contractors, subcontractors, and grant
230 recipients. 41 USC 4712; and (iii) Presidential Policy
231 Directive 19, which prohibits supervisors from taking,
232 failing to take, or threatening to take or fail to take any
233 action affecting an employee's eligibility for access to
234 classified information in reprisal for making a protected
235 disclosure.

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237 **E. Ensuring the Free Flow of Scientific Information**

238 DHS shall facilitate the free flow of scientific and technological information and
239 support scientific integrity in the communication of its scientific activities, findings, and
240 products. DHS will disseminate its scientific and technological information to the
241 extent allowed by national security requirements, privacy policies, and classification
242 standards, and in a responsible manner. It is the policy of DHS to:

243 1. Ensure that scientific findings and products are not suppressed,
244 unreasonably delayed, or altered for political purposes and are not
245 subjected to inappropriate influence.

246 2. Ensure that the work and conclusions of agency scientists and the
247 work and conclusions of work funded/supported by the federal
248 government are accurately represented in agency
249 communications. If documents significantly rely on a scientist's
250 research, identify them as an author, or represent their scientific
251 opinion, the scientist(s) shall be given the option to review the
252 scientific content of proposed documents.

253 3. Ensure that agency scientists may communicate their scientific
254 activities objectively without political interference or other
255 inappropriate influence, while at the same time complying with
256 agency policies and procedures for planning and conducting
257 scientific activities, reporting scientific findings, and reviewing and
258 releasing scientific products within the law. Scientific products

259 (e.g., manuscripts for scientific journals, presentations for
260 workshops, conferences, and symposia) shall adhere to agency
261 technical review procedures.

262 4. Require that technical review and clearance processes include
263 provisions for timely clearance and expressly forbid censorship,
264 unreasonable delay, and suppression of objective communication
265 of data and results without scientific justification.

266 5. Ensure that scientific information is accurately represented in
267 responses to congressional inquiries, DHS personnel testimony,
268 and other requests.

269 6. Accurately represent the work and conclusions of agency
270 scientists in agency social media communications and that agency
271 scientists are appropriately guided on use of social media, which
272 includes but is not limited to blogs, social networks, forums, and
273 micro blogs, consistent with the Department's communication
274 policies.

275 a. When communicating on social media in their personal
276 capacities, subject to limitations of government ethics
277 rules and obligation to protect nonpublic information,
278 DHS scientists may express their personal views and
279 opinions and may name their agency, in the context of
280 biographical information, as long as it is clear in context
281 that they are not speaking on behalf of, or as a
282 representative of, the Department.

283 b. If those covered by this policy choose to disclose their
284 position at or relationship with DHS on their personal
285 social media, a disclaimer clarifying that the account or
286 communication represents personal views may be
287 appropriate.

288 c. Social media managers are responsible for correction of
289 any errors pointed out by DHS scientists whose work is
290 represented in DHS social media.

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292 **F. Ensuring Accountability**

293 To ensure accountability, it is the policy of DHS to:

294 1. Ensure correction of the scientific record, implementation of
295 recommendations to prevent loss of scientific integrity in the future,
296 and enforcement of administrative actions when findings
297 substantiate allegations of a loss of scientific integrity, through the

298 SIO, the Scientific Integrity Committee, or other appropriate
299 means.

300 2. Encourage and facilitate early informal or formal consultation with
301 the SIO to seek advice on preventing a situation of concern, to
302 determine if it is a potential violation of the Scientific Integrity
303 Policy, and to ascertain if it should be referred elsewhere in the
304 agency for resolution.

305 3. Provide clear guidance on how to formally and confidentially report
306 concerns and allegations of Scientific Integrity Policy violations.
307 Those who report concerns and allegations need not be directly
308 involved or witness a violation.

309 G. Federal Advisory Committees

310 Federal Advisory Committees (FACs) are an important tool for supporting the
311 credibility, quality, and transparency of the Department’s research portfolio. The
312 Department shall adhere to the Federal Advisory Committee Act and develop policies,
313 in coordination with the General Services Administration and consistent with the
314 guidance on lobbyists serving on FACs. This includes Management Directive (MD)
315 2300 on Committee Management.⁷ The Committee Management Office (CMO)
316 exercises control and lends oversight to all DHS Federal Advisory Committees and
317 related committees.
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320 V. Procedures

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322 DHS procedures focus on prevention by encouraging employees to identify situations early
323 that could lead to losses of scientific integrity. All DHS employees and others covered by this
324 policy are encouraged to contact the SIO to request advice and assistance with any
325 questions related to potential losses of scientific integrity. The SIO will hold office hours to
326 provide advice and assistance and can also be contacted at Scientific_Integrity@hq.dhs.gov.
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328 If advice and assistance does not resolve the issue, an allegation may be filed. To report an
329 allegation of the loss of scientific integrity, submit it in writing to the SIO or the Office of the
330 Inspector General (OIG) (<https://www.oig.dhs.gov/hotline> or 1-800-323-8603). The SIO will
331 coordinate with OIG if there are any allegations of losses of scientific integrity.
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333 Reporting Allegations

334 Allegations may be submitted by individuals or entities, internal or external to DHS. An initial
335 notice of an allegation of a loss of scientific integrity reported to the SIO or OIG should
336 contain the following information:

⁷ DHS Management Directive 2300, “Committee Management.” Available at <https://www.dhs.gov/sites/default/files/2022-03/Management%20Directive%202300.pdf>

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- The name and organization of the person(s) submitting the allegation and the name and organization of the person(s) alleged to have committed the misconduct or actions leading to the loss of integrity.
 - A description of the alleged loss of scientific integrity that includes:
 - Date
 - Circumstances
 - Location
 - An explanation of how the allegation relates to the loss of scientific integrity and that demonstrates the impact of the alleged loss of integrity.
 - A statement explaining any personal or professional extenuating circumstances, non-scientific disagreements or conflict(s) of interest the person making the allegation has with the subject(s), entity(ies), or situation(s), named in the allegation.

Notification Upon Receipt of an Allegation of Research Misconduct

351 Upon receipt of an allegation, the SIO will refer the allegation to the OIG. If the OIG
352 receives the allegation directly, OIG will contact the SIO to discuss the allegation, as
353 appropriate. The OIG will inform the SIO about its decision regarding disposition of losses
354 of scientific integrity. OIG will also inform the SIO of the status of any OIG action being
355 investigated on a quarterly basis. OIG will coordinate with the SIO and Scientific Integrity
356 Committee as needed to improve scientific integrity policies and processes.
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358 VI. Authorities

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- A. Title 6, United States Code, Section 182(10-14), “Responsibilities and Authorities of the Under Secretary for Science and Technology.”
 - B. Presidential Memorandum of January 27, 2021, “Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking,” 86 FR 8845 (February 10, 2021).
 - C. Presidential Memorandum of March 9, 2009, “Scientific Integrity,” 74 FR10671 (March 11, 2009).
 - D. National Science and Technology Council, *Protecting the Integrity of Government Science*, January 2022. Available at [https://www.whitehouse.gov/wp-content/uploads/2022/01/01-22-Protecting the Integrity of Government Science.pdf](https://www.whitehouse.gov/wp-content/uploads/2022/01/01-22-Protecting-the-Integrity-of-Government-Science.pdf)
 - E. Office of Science and Technology Policy Memorandum of December 17, 2010, “Scientific Integrity”. Available at <http://www.whitehouse.gov/sites/default/files/microsites/ostp/scientific-integrity-memo-12172010.pdf>
 - F. Office of Science and Technology Policy Memorandum of August 25, 2022, “Ensuring Free, Immediate, and Equitable Access to Federally Funded

381 Research". Available at [https://www.whitehouse.gov/wp-](https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf)
382 [content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf](https://www.whitehouse.gov/wp-content/uploads/2022/08/08-2022-OSTP-Public-Access-Memo.pdf)
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- 384 G. Office of Science and Technology Policy, "Federal Research Misconduct
385 Policy," 65 FR 76260 (December 6, 2000).
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387 H. DHS Directive 069-01, "Research Misconduct."
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389 I. DHS Designation 00-10005, "Designation of the Chief Science Officer."
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391 J. DHS Designation 00-10006, "Designation of the Scientific Integrity Official."
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393 VII. Definitions

- 394 A. **Allegation**: A formal accusation of a suspected loss of scientific integrity.
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396 B. **Conduct of Science**: The formulation of hypotheses, study design, testing,
397 data collection, systematic review, statistical analysis, interpretation, findings,
conclusions, and peer review.
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399 C. **Decision-making/policy-making**: The (1) development of policies or making
400 determinations about policy or management; (2) making determinations about
401 expenditures of Federal agency funds; (3) implementing or managing activities
that involve, or rely on, scientific activities.⁸
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403 D. **Engineer**: An individual whose responsibilities include the application of
404 mathematical, physical, and engineering sciences to solve problems. This
405 includes, but is not limited to, Federal engineers, contractors, and trainees. It
406 does not refer to individuals with scientific and technical training whose primary
job functions are in non-scientific roles (e.g., policymakers, communicators).
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408 E. **Ethical behavior**: Conduct that complies with the applicable federal law,
409 standards, and policies given the context, including those governing research
410 ethics, federal employee ethics, contractor conflicts of interest and
411 procurement integrity, protection of human subjects, and humane use and
412 treatment of non-human animals in research. In the context of this Scientific
413 Integrity Policy, it means honesty, lawfulness, equity, and professionalism in
connection with DHS conducted, funded, or sponsored research.
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415 F. **Inclusivity**: The practice of intentionally ensuring full participation of all people
and all groups, including marginalized, underserved, and underrepresented

⁸ This definition is consistent with that used in the Report "Protecting the Integrity of Government Science," and was adapted from the definition of "Decision-makers" in NOAA's Scientific Integrity Policy (see <https://www.noaa.gov/organization/administration/nao-202-735d-2-scientific-integrity>).

416 contributors, without bias or prejudice. Full participation is enabled through
417 equitable access and fair treatment in the organization. Inclusivity also means
418 asking questions and conducting scientific activities that serve diverse
419 constituencies and contribute to the equitable delivery of Government services.
420 For example, in the context of human subjects research, full participation
421 happens when researchers, oversight committees, and human subjects
422 themselves have equal access to and treatment in research studies, no matter
423 the individual's role. Inclusivity happens when the perspectives of those
424 persons who are studied are accounted for in the design and execution of
425 research studies. Particularly in situations when human subjects may be
426 recruited from marginalized, underserved, or underrepresented populations,
427 their voices should be heard to deflect any concerns about exploitation or
428 unfairness.

- 429 G. **Inappropriate influence**: The attempt to shape or interfere in scientific
430 activities or the communication about or use of scientific activities or findings
431 against well-accepted scientific methods and theories or without scientific
432 justification.^{9,10}
- 433 H. **Interference**: Inappropriate, scientifically unjustified intervention in the
434 conduct, management, communication, or use of science. It includes
435 censorship, suppression, or distortion of scientific or technological findings,
436 data, information, or conclusions; inhibiting scientific independence during
437 clearance and review; scientifically unjustified intervention in research and data
438 collection; and inappropriate engagement or participation in peer review
439 processes or on federal advisory committees.
- 440 I. **Loss of Scientific Integrity**: The failure to comply with the Scientific Integrity
441 Policy or to adhere to the principles of honesty, objectivity, and transparency,
442 professional practices, or ethical behavior when conducting, managing, using
443 results of, and communicating about science and scientific activities.
- 444 J. **Misinformation**: Incorrect, misleading, or misattributed information.
- 445 K. **Objectivity**: The quality of being explicit, unbiased, honest, and impartial.
- 446 L. **Policy**: Laws, regulations, procedures, administrative actions, incentives, or
447 voluntary practices of governments and other institutions.

⁹ Examples may include 1) suppressing a decisionmaker's ability to offer the best judgment based on scientific information; 2) preventing the use of best available science; 3) insisting on preclearance of a scientific product for purposes other than providing advance notification or opportunity to review for technical merit; 4) suppressing, altering or delaying the release of a scientific product for any reason other than technical merit or providing advance notification; or 5) removing or reassigning scientific personnel for the purposes of undermining the science; 6) using scientific products that are not representative of the current state of scientific knowledge and research (for example because of a lack of appropriate peer review, poor methodology, or flawed analyses) to inform decision-making and policy formulation; or 7) misrepresenting the underlying assumptions, uncertainties, or probabilities of scientific products. This is not intended to be an exhaustive list.

¹⁰ Differences of scientific opinion do not rise to the level of inappropriate influence.

- 448 M. **Political interference**: Interference conducted by political officials and/or
449 motivated by political considerations.
- 450 N. **Professional practices**: Conducting oneself with the qualities that are
451 characterized by skill, competence, professional ethics, and courtesy.
- 452 O. **Quality assurance**: The systematic monitoring and evaluation of scientific
453 activities to ensure that standards of quality, information security, and scientific
454 integrity are being met.
- 455 P. **Research misconduct**: Fabrication, falsification, or plagiarism in proposing,
456 performing, or reviewing research, or in reporting research results or ordering,
457 advising, or suggesting that subordinates engage in research misconduct.
458 Research misconduct does not include honest effort or differences of opinion.¹¹
- 459 Q. **Retaliation**: Per 5 U.S.C. § 2302(b)(8), the taking or failing to take or
460 threatening to take or failing to take a personnel action with respect to any
461 employee or applicant for employment because of any disclosure of
462 information that the employee or applicant reasonably believes evidences any
463 violation of any law, rule, or regulation or gross mismanagement, a gross
464 waste of funds, an abuse of authority, or a substantial and specific danger to
465 public health or safety if such disclosure is not specifically prohibited by law
466 and if such information is not specifically required by Executive Order to be
467 kept secret in the interest of national defense or the conduct of foreign affairs.
468 Per Pub. L. 112-199 § 110
- 469 R. **Science**: The full spectrum of scientific endeavors, including basic science,
470 applied science, evaluation, engineering, technology, economics, social
471 sciences, and statistics, as well as the scientific and technical information
472 derived from these endeavors.
- 473 S. **Science communication**: Communicating science and scientific activities to a
474 lay audience.
- 475 T. **Scientific activities**: Activities that involve the application of well-accepted
476 scientific methods and theories in a systematic manner, and includes, but is
477 not limited to, data collection, inventorying, monitoring, statistical analysis,
478 surveying, observations, experimentation, study, research, integration,
479 economic analysis, forecasting, predictive analytics, modeling, technology
480 development, and scientific assessment.
- 481 U. **Scientific integrity**: The adherence to professional practices, professional
482 ethics, and the principles of honesty and objectivity when conducting,
483 managing, using the results of, and communicating about science and

¹¹ This definition is consistent with that contained in OSTP, Federal Policy on Research Misconduct, December 6, 2000. See <https://www.govinfo.gov/content/pkg/FR-2000-12-06/pdf/00-30852.pdf>.

484 scientific activities. Inclusivity, transparency, and protection from inappropriate
485 influence are hallmarks of scientific integrity.

486 V. **Scientific Integrity Official**: A senior career employee designated as an
487 agency's lead to oversee implementation and iterative improvement of
488 scientific integrity policies and processes consistent with the provisions of
489 authorities enumerated above.

490 W. **Scientist**: An individual whose responsibilities include collection, generation,
491 use, or evaluation of scientific and technical data, analyses, or products. This
492 includes, but is not limited to, Federal scientists, contractors, and trainees. It
493 does not refer to individuals with scientific and technical training whose primary
494 job functions are in non-scientific roles (e.g., policymakers, communicators).

495 X. **Transparency**: Ensuring all relevant data and information used to inform a
496 decision made or action taken is visible, accessible, and consumable by
497 affected or interested parties, to the extent allowable by law.
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499 VIII. Responsibilities

500 A. The **Under Secretary for Science and Technology (USST)** is responsible for
501 promoting a culture of Scientific Integrity. The USST:

502 1. Provides leadership for the Department on scientific integrity by leading
503 through example, upholding scientific integrity principles, and regularly
504 communicating the importance of scientific integrity.

505 2. Ensures that Department activities associated with scientific and
506 technological processes are conducted in accordance with the policy
507 through training, coordination, and awareness of scientific integrity.

508 3. Ensures all supervisors and managers comply with the Scientific Integrity
509 Policy and ensure accountability for those who do not.

510 4. Designates a senior agency career employee with demonstrated, senior-
511 level technical expertise in scientific methods and practices, agency-
512 appropriate qualifications, and scientific credentials for the role of CSO to
513 serve as an advisor on scientific issues.

514 5. Ensures that the Scientific Integrity Policy considers, supplements, and
515 supports agency plans for forming evidence-based policies, including the
516 evidence-building plans required by 5 U.S.C. 312(a) and the annual
517 evaluation plans required by 5 U.S.C. 312(b).

518 6. Provides adequate resources and funding to implement this policy
519 including staffing, monitoring, evaluation and reporting, and training.

- 520 7. Supports and respects the SIO's independence, recommendations, and
521 designation of and agency compliance with corrective scientific actions
522 when violations of this policy are substantiated.
523

524 B. The **Chief Science Officer (CSO)** serves as the senior advocate and advisor
525 for science, technology, and engineering. The CSO:

- 526 1. Serves as the principal advisor to the USST on scientific issues and
527 ensures that the agency's research programs are scientifically and
528 technologically well-founded, of operational relevance to DHS, and
529 conducted with scientific integrity.
- 530 2. In cooperation with the SIO, oversees the implementation and
531 improvement of policies and processes affecting the integrity of research
532 conducted, funded, overseen, or otherwise sponsored by the agency, as
533 well as policies affecting the Federal scientists who support the research
534 activities of the agency.
- 535 3. Supports the SIO's designation of and agency compliance with corrective
536 scientific actions when violations of this policy are substantiated.
537

538 C. The **Scientific Integrity Official (SIO)** is a non-political, senior level DHS
539 employee (e.g., Scientific Professional or Senior Executive Service) with
540 demonstrated technical expertise in scientific methods and practices who is
541 responsible for coordinating, implementing, and ensuring compliance with the
542 policies and procedures established in this Directive. In exercising this
543 responsibility, the SIO:

- 544 1. Is a designated, full-time equivalent, career employee who holds a
545 permanent tenured appointment and has agency appropriate scientific
546 credentials.
- 547 2. Reviews all DHS allegations of potential losses of scientific integrity.
- 548 3. Convenes and chairs the Scientific Integrity Committee.
- 549 4. Coordinates with the Office of Public Affairs (OPA) to develop public
550 communications guidance to promote transparency and free flow of
551 scientific and technological information, consistent with privacy, security,
552 ethics, research compliance, and proprietary considerations.
- 553 5. Oversees implementation and improvement of scientific integrity policies
554 and processes. Serves as the primary Department contact for questions
555 regarding scientific integrity and ensuring scientific integrity activities and
556 outcomes are appropriately reviewed and adjudicated.

- 557
558
6. Leads training and outreach initiatives to facilitate employee awareness and understanding of this policy.
- 559
560
7. Serves as a neutral point of contact for receiving scientific integrity questions, concerns, and allegations of compromised scientific integrity.
- 561
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563
564
8. Ensures allegations of a loss of scientific integrity and supporting materials are received by OIG, as necessary, and maintains a status report of responses to allegations as a means of monitoring the progress toward resolution.
- 565
566
9. Leads efforts to update this policy at least every two years and any accompanying guidance, as appropriate.
- 567
568
10. Reports to the USST and coordinates directly with the CSO for matters involving scientific integrity.
- 569
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572
11. Coordinates with the DHS OGC (Technology Programs Law Division and Ethics and Compliance Law Division), OIG, CAPO, Office of Human Capital, OPA, Office of the Chief Information Officer, and other offices, as necessary.
- 573
574
575
12. Reports potential criminal conduct and apparent waste, fraud, or abuse uncovered during the course of investigating an allegation of compromised scientific integrity.
- 576
577
578
13. Keeps the CSO and the USST informed on the status of the implementation of this policy and any compliance concerns, as warranted.
- 579
580
581
14. Delegates responsibilities to other scientific integrity officials in subcomponents of DHS and its Components, as allowed, and chairs regular meetings of all DHS scientific integrity officials.
- 582
15. Publishes an annual scientific integrity report, described below.
- 583
584
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16. Ensures that DHS and its Components establish, as necessary, clear administrative actions for substantiated violations of scientific integrity policies, designating responsibility for each aspect of the administrative actions to ensure accountability.
- 588
589
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592
- D. The ***Scientific Integrity Committee*** is an *ad hoc* committee convened by the SIO to oversee implementation and iterative improvement of scientific integrity policies and practices. It will include representatives from OGC, the Chief Human Capital Office, the Evaluation Officer, the Chief Data Officer, the Statistical Official, applicable Compliance Assurance Program Office Manager

593 (portfolio-based equities), Component subject matter experts, and outside
594 subject matter experts as deemed necessary by the SIO. Members of the
595 Scientific Integrity Committee:

- 596 1. Coordinate with the SIO in implementing the Department's scientific
597 integrity policies and processes.
- 598 2. Act as liaison between the committee and their respective
599 organizational units.
- 600 3. Coordinate with the relevant DHS office to correct the scientific
601 record in accordance with any OIG findings, if required.
- 602 4. Assist with training and policy assessments, updates, and amendments.

603
604 E. **DHS Component Heads** ensure Component compliance with the policies
605 and procedures in this Directive. Each DHS component:

- 606 1. Designates a representative to serve on the Scientific Integrity
607 Committee, at the request of the SIO, and ensures Component
608 cooperation as needed.
- 609 2. In selecting candidates for scientific positions, ensures that the
610 selection is based upon their scientific and technological
611 knowledge, credentials, experience, and integrity.

612
613 F. **DHS Program Managers** facilitate and promote publication and
614 dissemination of scientific and technological findings for DHS projects,
615 consistent with privacy, security, ethics, research compliance, and
616 proprietary considerations.

617
618 G. The **Office of Public Affairs (OPA)** is responsible for coordinating and
619 responding to media interview requests about the scientific and technological
620 dimensions of the Department's work. OPA:

- 621 1. Ensures DHS scientists and engineers are permitted to speak to the
622 media and the public in an official capacity, consistent with ethics rules
623 and DHS policy, about scientific and technology matters based upon
624 their official work when there is appropriate coordination with their
625 immediate supervisor and OPA.
- 626 2. Facilitates the free flow of scientific and technological information,
627 consistent with privacy, security, ethics, research compliance, and
628 proprietary considerations.
- 629 3. In response to media interview requests about the scientific and
630
631

632 technological dimensions of the Department's work, identifies
633 spokespersons who can, in an objective and nonpartisan fashion,
634 describe and explain these dimensions to the American people.

635 4. Provides training for DHS scientists to interact with the media and
636 in training scientists in scientific communication for the public,
637 including the use of social media.

638 5. Provides written explanations and an appeal mechanism for any
639 denials of requests of DHS scientists to communicate their work in
640 an official capacity.

641 6. Responds to all requests from DHS scientists and media contacts
642 in a timely manner consistent with the requirements from the
643 specific request.
644

645 H. The **Evaluation Officer**, the **Chief Data Officer**, and the **Statistical Official**
646 are responsible for incorporating scientific integrity principles into the
647 Department's data governance and evaluation approaches. The statutory
648 positions required to be designated by agencies by the Foundations for
649 Evidence-Based Policymaking Act of 2018 (Public Law 115-435) include the
650 Evaluation Officer, the Chief Data Officer, and the Statistical Official.
651 Specifically, the Evaluation Officer:

652 1. Oversees or conducts assessment of the coverage, quality, methods,
653 effectiveness, objectivity, scientific integrity, and balance of the
654 portfolio of evaluations, policy research, and ongoing evaluation
655 activities of the agency, in consultation with other methodologists,
656 such as the Statistical Official, when appropriate.

657 2. Oversees or conducts management of agency-wide evaluation
658 standards and requirements to ensure the scientific integrity of the
659 agency's evaluation activities.

660 I. **Managers and supervisors** will:
661

662 1. Comply with and ensure that DHS and its employees comply with
663 the Scientific Integrity Policy; listen, advise, and report allegations
664 of compromised scientific integrity; and take action as appropriate.

665 2. Be aware of and uphold the principles and requirements in this
666 policy. Lead through example by upholding scientific integrity
667 principles and communicating the importance of doing so.

- 668 3. Report any knowledge of potential losses of scientific integrity to
669 the SIO, OIG, or other scientific integrity officials.
- 670 4. Refrain from committing prohibited personnel practices (as defined
671 in 5 U.S.C. 2302(b)) against agency employees and others subject
672 to this policy who in good faith uncover and report allegations of
673 compromised scientific integrity, as well as agency employees
674 alleged to have compromised scientific integrity in the absence of a
675 finding that the individual compromised scientific integrity.
- 676 5. Consult, as appropriate depending upon the nature of the
677 allegation, with the SIO, human resources officer, contracting and
678 grant personnel, ethics officer, OIG, OGC, the Privacy Office,
679 CAPO, and the Office of Civil Rights and Civil Liberties.
- 680 6. Ensure that all media requests for government scientists receive a
681 timely response.

682
683 J. **Employees** shall:

- 684 1. Be aware of the principles contained in this policy and how the
685 policy applies to their duties.
- 686 2. Comply with this policy.
- 687 3. Adhere to accepted standards of professional ethics and practices
688 of the relevant research/scientific communities so as to ensure
689 scientific integrity.
- 690 4. Consider reporting to the SIO, OIG, or any scientific integrity
691 officials any knowledge of compromised scientific integrity.
692

693 **IX. Monitoring and Evaluating Scientific Integrity**
694 **Activities and Outcomes**

695 DHS will develop and implement an evaluation plan to regularly measure, monitor and
696 evaluate ongoing scientific integrity activities and outcomes. The plan shall include, at a
697 minimum, the expected metrics to collect and report on activities, outcomes, and critical
698 metrics for regular assessment and iterative improvement.

699 The SIO, with input from the Scientific Integrity Committee and other science
700 integrity points of contact as appropriate, is responsible for generating and making
701 prominently available on the agency's public facing website an annual report to
702 DHS leadership on the status of scientific integrity within the Department. The
703 report shall highlight scientific integrity successes, accomplishments, or progress

704 across the Department such as any new scientific integrity hires, training,
705 enhancements to scientific integrity policies, etc., identify areas for improvement
706 and develop a plan for addressing critical weaknesses, if any. It will include the
707 number of formal administrative investigations, informal requests for assistance,
708 inquiries, and appeals involving alleged or actual deviations from the Scientific
709 Integrity Policy and the number of investigations and pending appeals. Annual
710 Reporting will also include anonymized individual closed scientific integrity case
711 summaries. These summaries can be posted in a timely manner after completion
712 of inquiries and/or incorporated into the annual report. The identities of
713 complainants, respondents, witnesses, and others involved in the investigations
714 shall be protected.
715

716 **X. Reporting Allegations**

717 If a DHS employee or other person covered by this Directive believes that someone has
718 been inappropriately and/or politically influenced to alter or suppress DHS-related scientific
719 or technological data, findings, or conclusions, they have the right to file a complaint of loss
720 of scientific integrity.
721

- 722 A. All allegations of losses of scientific integrity shall be reported to the OIG via the
723 OIG hotline (<https://www.oig.dhs.gov/hotline> or 1-800-323-8603).
724
- 725 B. The OIG will receive the allegation and investigate the alleged loss of scientific
726 integrity.
727
- 728 C. If the OIG investigates and substantiates allegations of a loss of scientific
729 integrity, it will notify the SIO and Scientific Integrity Committee, as needed,
730 provide its findings to the appropriate personnel for correction of the data,
731 findings, or conclusions, and refer the matter to the supervisor of the individual
732 who engaged in the loss of scientific integrity for appropriate action.
733
- 734 D. Retaliation against DHS personnel or others covered by this Directive for
735 reporting information on potential loss of scientific integrity is prohibited.
736
- 737 E. Disputes that may arise regarding whether DHS should participate in interviews
738 and other public information-related activities pertaining to scientific integrity will
739 be resolved using OPA dispute resolution procedures developed in accordance
740 with this Directive.
741

742 **XI. Related Policies**

743 **Diversity, Equity, Inclusion, and Accessibility (DEIA) in Addressing and Strengthening**
744 **Scientific Integrity and the Disproportional Impact of Scientific Integrity Policy**
745 **Violations on Underrepresented Groups.** Policies, practices, and agency culture to
746 promote diversity, equity, inclusion, and accessibility in the scientific workforce and Federal

747 workforce at large and to create safe workspaces that are free from harassment and
748 discrimination are foundational for achieving a culture of scientific integrity. Because of
749 existing power structures, racism, sexism, discrimination, and other forms of bias in the
750 workplace, scientific integrity and DEIA policies may intersect in many places. Similarly,
751 scientific integrity entails greater transparency into research processes and policy-making
752 outcomes. The agency will review and address potential Scientific Integrity Policy violations
753 that have a disproportionate impact on underrepresented groups or weaken the equitable
754 delivery of agency programs.

755 **Public Access.** Policies and practices that help to ensure that publications, data, and other
756 outputs of government-funded research are equitably and publicly available to other
757 researchers, innovators, students, and the broader public, including underserved
758 communities, consistent with the 2022 OSTP Memorandum on Ensuring Free, Immediate,
759 and Equitable Access to Federally Funded Research.

760 **Human and Animal Subject Protections.** For the protection of human subjects engaged in
761 socio-behavioral and clinical research, requirements and ethical principles for Federal
762 departments or agencies (conducting or supporting such research) as applicable, are set
763 forth in the Federal Policy for Protection of Human Research Subjects (the Common Rule)
764 set forth at Title 6 C.F.R. Part 46, the Belmont Report¹², and the FDA Policy for the
765 Protection of Human Subjects set forth at Title 21 C.F.R. §§ 50, 56, 312, and 812.

766 To protect the welfare of animals used in research or other activities conducted or supported
767 by federal departments or agencies, compliance with the Federal regulations and policies
768 governing animal care and use is required, including regulated species under the United
769 States Department of Agriculture Animal Welfare Act (AWA) and regulations (AWAR), the
770 Public Health Service Policy on Humane Care and Use of Laboratory Animals (PHS Policy)
771 administered by the National Institutes of Health, Office of Laboratory Animal Welfare, and
772 the Guide for the Care and Use of Laboratory Animals.

773 **Scientific Integrity with Research Security.** Scientists are encouraged to interact with the
774 broader scientific community as well as to engage with collaborators with a commitment to a
775 shared research environment of openness, transparency, honesty, equity, fair competition,
776 objectivity, and democratic values. However, some foreign governments are working
777 vigorously in contradiction with these values to acquire, through both licit and illicit means,
778 U.S. research and technology. Research security policies, such as the National Security
779 Presidential Memorandum 33 (NSPM-33) and subsequent Guidance for Implementing
780 NSPM-33, must harmonize with scientific integrity policies by both guarding against foreign
781 abuses and protecting intellectual property rights, while ensuring the scientists maintain
782 honesty, objectivity, transparency, and professional and ethical behaviors.

783 **Foundations for Evidence-Based Policymaking Act (“Evidence Act”).** Scientific integrity
784 is a foundational component of Federal policies and data infrastructure investments
785 supporting information quality, access, protection, and evidence building and use. The

¹² The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research* (April 18, 1979).

786 Evidence Act, also anchored in scientific integrity, called on agencies to strategically plan
787 and organize evidence building, data management, and data access functions to ensure an
788 integrated and direct connection to data and evidence needs. Title II of the Act – the OPEN
789 Government Data Act - requires federal agencies to make public data assets available
790 online, using open standards, machine-readable, open formats, and without restrictions
791 (other than intellectual property rights) that would impede use. The metadata associated with
792 open government data assets is made available through the Federal Data Catalogue at
793 data.gov. Title III – the Confidential Information Protection and Statistical Efficiency Act
794 (CIPSEA) of 2018 - requires agencies to enable statistical agencies to uphold their
795 fundamental responsibilities to provide timely, relevant, credible, and objective data and
796 statistics and to maintain public trust. Agencies should consult OMB’s implementing
797 guidance, (including OMB M-19-23, OMB M-20-12, and OMB M-21-27, and Statistical Policy
798 Directive 1) to ensure that scientific integrity policies and procedures complement and
799 reinforce related requirements of the Evidence Act. Agency Learning Agendas and Annual
800 Evaluation Plans, required by the Evidence Act, are posted on agency websites, and linked
801 at Evaluation.gov.

802 **Notification and Federal Employee Antidiscrimination and Retaliation Act (“No FEAR**
803 **Act”)**. Federal agencies are required to be held accountable for violations of
804 antidiscrimination and whistleblower protection laws. Under the No FEAR Act, agencies must
805 pay for settlements, awards, or judgments against them in whistleblower and discrimination
806 cases out of their own budgets.

807 **Dual Use Research of Concern.** The United States Policy for Oversight of Life Sciences
808 Dual Use Research of Concern stipulates that additional review is required for scientific
809 research that could be directly misapplied to pose a significant threat with broad potential
810 consequences to public health and safety, agricultural crops and other plants, animals, the
811 environment, materiel, or national security.
812

813 **XII. Questions**

814 Any questions or concerns about this Directive should be addressed to the SIO or the
815 Associate General Counsel for Technology Programs Law Division.

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817