

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, D.C. 20503

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MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM:

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SUBJECT:

Improving Implementation of the Information Quality Act

Introduction

The purpose of this Memorandum is to reinforce, clarify, and interpret agency responsibilities with regard to responsibilities under the Information Quality Act (IQA).¹ In 2002, the Office of Management and Budget issued *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Disseminated by Federal Agencies*² ("*Guidelines*"). The principles and core responsibilities described in the *Guidelines* remain sound and relevant for agency practice; however, additional guidance is required to address changes in the information landscape and to incorporate best practices developed over time.³ This Memorandum updates implementation of the *Guidelines* to reflect recent innovations in information generation, access, management, and use, and to help agencies address common problems with maintaining information quality.

Background

Prudent decision making depends on reliable, high-quality information. Congress has long recognized that federal agencies should make decisions using the best data reasonably available, and Congress has entrusted OMB with the statutory role of ensuring that federal

² Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, 67 FR 8452 (Feb. 22, 2002), *available at*

https://www.federalregister.gov/documents/2002/02/22/R2-59/guidelines-for-ensuring-and-maximizing-the-quality-objectivity-utility-and-integrity-of-information.

¹ Treasury and General Government Appropriations Act, 2001, Pub. L. No. 106-554, § 515(a) (2000) (as codified at 44 U.S.C. § 3516, note).

³ *Id.* at 8458 (contemplating the evolution of standards with experience and the need for additional implementation guidance); *cf.* Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility and Integrity of Information Disseminated by Federal Agencies, 66 FR 49,718, 49723 (September 28, 2001); John D. Graham, Memorandum for the President's Management Council (October 4, 2002), *available at*

https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/omb/inforeg/pmc_graham_100402.pdf.

agencies collect, use, and disseminate information that is fit for its intended purpose.⁴ Within OMB, the Office of Information and Regulatory Affairs (OIRA) works with agencies to maintain information quality standards.

Implementing statutory requirements in the IQA, the *Guidelines* provide a framework for oversight of the quality of information disseminated by the federal government⁵ throughout its lifecycle, which includes creation, collection, pre-dissemination review, transparent and reproducible use, and ultimately correction and disposition.⁶ The *Guidelines* impose three core responsibilities on federal agencies:

- 1. Agencies must embrace a basic standard of quality and consider quality in their information dissemination practices.
- 2. Agencies must develop information quality assurance procedures that are applied before disseminating information.
- 3. Agencies must develop an administrative mechanism for affected parties to request that agencies correct information of inadequate quality, with an appeal process and annual reports to OMB.

In response to the *Guidelines*, agencies prepared agency-specific guidelines setting forth procedures to ensure information quality. This Memorandum directs agencies to update their guidelines within 90 days along the following parameters.

1. Information: Fitness for Purpose and Pre-Dissemination Review

The IQA requires agencies conduct pre-dissemination review of their information products.⁷ During this review, each agency should consider the appropriate level of quality for each of the products that it disseminates based on the likely use of that information. The *Guidelines* explain that quality encompasses utility, integrity, and objectivity. Utility refers to the

⁴ See, for instance, the Federal Reports Act of 1942; the Budget and Accounting Procedures Act of 1950; the Paperwork Reduction Act of 1980 and its 1995 amendments; the Information Quality Act; and the Foundations for Evidence-Based Policymaking Act of 2018, Pub. L. No. 115-435, 132 Stat. 5529 (2019).

⁵ "Dissemination" means agency initiated or sponsored distribution of information to the public. *See* 5 C.F.R. 1320.3(d) (defining "Conduct or Sponsor"). Dissemination does not include distribution limited to government employees or agency contractors or grantees; intra- or inter-agency use or sharing of government information; and responses to requests for agency records under the Freedom of Information Act, the Privacy Act, the Federal Advisory Committee Act or other similar law. This definition also does not include distribution limited to correspondence with individuals or persons, press releases, archival records, public filings, subpoenas or adjudicative processes. *See Guidelines*, 67 FR at 8460.

⁶ Other guidelines implementing the IQA include the Final Bulletin for Agency Good Guidance Practices, 72 FR 3432 (2007).

⁷ Guidelines, sec. III.2, 67 FR at 8459 ("As a matter of effective agency information resources management, agencies shall develop a process for reviewing the quality (including the objectivity, utility, and integrity) of information before it is disseminated. Agencies shall treat information quality as integral to every step of an agency's development of information, including creation, collection, maintenance, and dissemination. This process shall enable the agency to substantiate the quality of the information it has disseminated through documentation or other means appropriate to the information.").

data's utility for its intended users and for its intended purpose. Integrity refers to the data's security. Objectivity refers to whether the disseminated information is accurate, reliable, and unbiased as a matter of presentation and substance. The focus on the information's usefulness is critical; the *Guidelines* recognize that "information quality comes at a cost,"⁸ and "that some government information may need to meet higher or more specific quality standards than those that would apply to other types of government information,"⁹ depending on the information's expected use. The touchstone is "fitness for purpose"; information destined for a higher-impact purpose must be held to higher standards of quality.¹⁰

The *Guidelines* characterize a subset of agency information as "*influential scientific*, *financial, or statistical information*" *that is held to higher quality standards*. This is scientific, financial, or statistical information that "the agency can reasonably determine ... will have or does have a clear and substantial impact on important public policies or important private sector decisions." For instance, the *Principal Federal Economic Indicators*¹¹ are an example of influential statistical information. In the context of a policy decision, a specific piece or body of information is "influential" when it is a principal basis for a decision by a federal decisionmaker, that is, if the same decision would be difficult to reach in that information's absence or if the information. Even if a decision is very important, a particular piece of information supporting it may or may not be "influential," depending on whether the decision could be reached in the information's absence. Each agency is authorized to define whether information is "influential" given the nature of issues for which the agency is responsible.

Identifying "Influential" Information

Implementation Update 1.1: Drawing on experience implementing the Guidelines, agencies should revisit the parameters for identifying "influential information." Agencies should provide specific guidance to program managers for determining the amount and type of pre-dissemination review necessary. Agencies should identify specific types of information the agency produces that are "influential" and should provide a rigorous process for determining whether types of information not specifically listed by the guidelines qualify as "influential."

The *Guidelines* explicitly gave agencies the discretion to define "influential" in the context of their specific missions. Rather than tailor the definition, many agencies simply adopted OMB's statement that "the agency can reasonably determine ... [what information] will have or does have a clear and substantial impact on important public policies or important private sector decisions." Agencies should provide greater specificity to enable program

⁹ Id. at 8452.

⁸ Id. at 8453.

¹⁰ Id. at 8453.

¹¹ The Principal Federal Economic Indicators (PFEIs) are the major statistical series that describe the current condition of the economy; examples include the unemployment rate, the Gross Domestic Product, and agricultural prices and crop production. Some aspects of quality assurance for PFEIs are articulated in *Statistical Policy Directive on Compilation, Release, and Evaluation of Principal Federal Economic Indicators*, 50 FR 38,932 (Office of Mgmt. & Budget Sept. 25, 1985).

managers to determine if information is "influential" early in the information generation process and to impose suitable control measures.

Peer Review of Influential Scientific Information

Implementation Update 1.2: When using scientific information, including third-party data or models, to support their policies, agencies must ensure compliance with the requirements of OMB's Information Quality Bulletin for Peer Review.

Implementation Update 1.3: When conducting peer review, agencies should ensure reviewers are asked to evaluate the objectivity of the underlying data and the sensitivity of the agency's conclusions to analytic assumptions.

Implementation Update 1.4: When influential information that has been peer reviewed changes significantly (e.g., as a result of the peer reviewer comments, additional agency analysis, or further consideration), the agency should conduct a second peer review.

The *Guidelines* emphasize the importance of peer review as a tool for determining fitness of scientific information for policy purposes. For the subset of scientific information that is "influential," peer review is a required component of pre-dissemination review, as described in OMB's *Final Information Quality Bulletin for Peer Review (Bulletin)*.¹² The *Bulletin*'s purpose is to increase the quality and credibility of scientific information used by the government. The *Bulletin* includes requirements for the selection of reviewers and transparency of the review, as well as guidance on selecting the appropriate mechanism for peer review and the importance of providing explicit instructions to reviewers (i.e., a peer review charge). Even after the 2004 *Bulletin*, only some agencies have robust peer review mechanisms.

Proper peer review includes, *inter alia*, that agencies peer review complex models underlying economically significant regulations before submitting those draft regulations to OIRA under Executive Order 12866. Moreover, agencies must send OIRA the required annual reports of completed peer reviews of influential scientific information. These reports are essential for OIRA to monitor agency compliance with the standards of the IQA.

2. Downstream Use of Data

Below we discuss additional data access policies promulgated by OMB to both increase taxpayer return on federal investment and to spur private sector innovation. Furthermore, there is a growing consensus within both government and the private sector that emphasizes the importance of secondary use of data—analyzing data for a purpose other than the primary one for which it was collected. These federal data access policies, in conjunction with responsibilities under the *Guidelines*, require agencies to ensure they have clear policies for evaluating and communicating the fitness-for-purpose of data made available to the public.

¹² Office of Mgm't & Budget, Exec. Office of the President, OMB M-05-03, Memorandum for the Heads of Executive Departments and Agencies: Issuance of OMB's "Final Information Quality Bulletin for Peer Review" (2004), *available at* <u>https://www.whitehouse.gov/wp-content/uploads/2017/11/2005-M-05-03-Issuance-of-OMBs-</u>Final-Information-Quality-Bulletin-for-Peer-Review-December-16-2004.pdf.

Public Access to Government Information (Open Data)

Implementation Update 2.1: When an agency makes information originally collected or developed by other Federal agencies available to the public in a cross-agency dissemination, each agency is responsible for the quality of the information they contribute, and that responsibility should be clearly communicated to the public.

Implementation Update 2.2: Agencies should provide the public with sufficient documentation about each dataset released to allow data users to determine the fitness of the data for the purpose for which third parties may consider using it. Robust practices may include developing a standard template or framework that provides data users with the relevant information. Safeguarding privacy and confidentiality is vital in the context of open data.

The Open, Public, Electronic, and Necessary Government Data Act;¹³ OMB Circular No. A-130 Managing Information as a Strategic Resource;¹⁴ and OMB Memorandum M-13-13: Open Data Policy-Managing Information as an Asset¹⁵ require agencies to collect and create information in a way that supports public transparency as well as downstream, secondary information dissemination and processing by third parties, thereby making government information accessible, discoverable, and usable. Third parties include entrepreneurs, state, local, and tribal governments, scientists, private sector stakeholders, and non-governmental advocacy organizations. With respect to transparency, the Federal government has developed a number of cross-agency products (e.g., dashboards, data visualizations, and scorecards) through which information from various agencies is made available to the public in a consolidated manner. In these dissemination contexts, as in the publication of joint reports, each agency is responsible for the quality of the information that they contribute to the cross-agency product. OMB policy emphasizes that, when data are made available to the public, potential users must be provided with sufficient information to understand which agency is responsible for the quality of the data being disseminated, as well as the data's strengths, weaknesses, analytical limitations, security requirements, and processing options.¹⁶

Additionally, OMB policy requires agencies to ensure that privacy and confidentiality are fully protected and that data are properly secured so that open data do not disclose personally identifiable information. Agencies must account for the 'mosaic effect' of data aggregation, which occurs when the information in an individual dataset, in isolation, may not pose a risk of identifying an individual (or threatening some other important interest such as security), but

¹⁴ Office of Mgm't & Budget, Exec. Office of the President, OMB Circular No. A-130, *Managing Information as a Strategic Resource* (2013), *available at*

https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/circulars/A130/a130revised.pdf.

¹³ The Open, Public, Electronic, and Necessary (OPEN) Government Data Act, Pub. L. No. 115-435, 132 Stat. 5534 (2019) (Title II of the Foundations for Evidence-Based Policymaking Act of 2018).

¹⁵ Office of Mgm't & Budget, Exec. Office of the President, OMB M-13-13, Memorandum for the Heads of Executive Departments and Agencies: Open Data Policy—Managing Information as an Asset (2013), *available at* https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2013/m-13-13.pdf.

¹⁶ See id. at 4 (defining open data, third principle, importance of robust meta data and preference for the use of nonproprietary models to facilitate transparency and secondary use by the public).

when combined with other available information, could pose such risk. The mosaic effect demands a risk-based analysis, often utilizing statistical methods whose parameters can change over time. The federal government maintains various resources for assisting agencies with this analysis. For example, the Federal Committee on Statistical Methodology periodically updates guidance for agencies on applying statistical disclosure limitation methods to publicly available datasets and provides technical assistance on applying these methods.¹⁷

Re-use of Existing Agency Program Data

Implementation Update 2.3: Agencies should consider the potential for using existing data sources from both inside and outside the agency for statistical and research purposes, while protecting privacy and confidentiality.

Implementation Update 2.4: When designing or improving data collection systems, Departments should actively solicit comment from their statistical, research, and evaluation agencies about potential downstream uses. Agencies should describe such uses in the Information Collection Request submitted to OMB for review under the PRA.

Implementation Update 2.5: If agencies are considering secondary analysis of data that includes personally identifiable information, the agencies should coordinate with their Senior Agency Official for Privacy to meet all privacy requirements and manage privacy risks.

Implementation Update 2.6: Agencies should develop procedures for clearly documenting and communicating the quality of administrative data that have the potential to be used for statistical purposes.¹⁸

OMB Memorandum M-14-06: "Guidance for Providing and Using Administrative Data for Statistical Purposes,"¹⁹ encourages agencies to create statistical information more efficiently through greater use of information that the Federal Government has already collected for programmatic, regulatory, or administrative purposes.²⁰ For instance, secondary analysis of administrative data may be used to evaluate how well the policy or program that collected the

 ¹⁷ Fed. Comm. on Stat. Methodology, *Statistical Policy Working Paper 22: Report on Statistical Disclosure Limitation Methodology* (2d version 2005), *available at* <u>https://nces.ed.gov/FCSM/pdf/spwp22.pdf</u>.
 ¹⁸ Per OMB M-14-06, "statistical purposes" would include use of the data for research and program evaluation so long as the analytic approach is to describe, estimate, or otherwise analyze the characteristics or experience of groups, "without identifying the individuals or organizations that comprise such groups." Office of Mgmt. & Budget, Exec. Office of the President, OMB M-14-06, Memorandum for the Heads of Executive Departments and Agencies: Guidance for Providing and Using Administrative Data for Statistical Purposes 4 N.2 (2014) (citing Confidential Information Protection and Statistical Efficiency Act of 2002, Pub. L. No. 107-347, §502(9)(A)), *available at* <u>https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2013/m-14-06.pdf</u>.

²⁰ "Administrative data," for purposes of M-14-06 and this Memorandum, "refers to administrative, regulatory, law enforcement, adjudicatory, financial, or other data held by agencies and offices of the government or their contractors or grantees (including States or other units of government) and collected for other than statistical purposes. Administrative data are typically collected to carry out the basic administration of a program, such as processing benefit applications or tracking services received. These data relate to individuals, businesses, and other institutions." *Id.* at 4 n.1.

information is working. This practice, which must be conducted in a manner that respects privacy and confidentiality, increases the value of the existing data, reduces costs associated with collecting new data, and reduces burden on respondents.

The bipartisan Commission on Evidence-Based Policymaking²¹ and the National Academies of Sciences, Engineering, and Medicine (the National Academies)²² have called for increased use of existing Executive Branch program data for evaluating the effectiveness of government programs and policies. To increase the integrity of analyses based on such data, the National Academies recommends a comprehensive quality framework that includes evaluating and documenting the timeliness, relevance, accuracy, accessibility, coherence, integrity, privacy, transparency and interpretability, and granularity of each data source used. Reports by both bodies emphasize the importance of protecting personal information and discuss approaches for maintaining privacy and confidentiality while increasing access for statistical purposes.²³ The Foundations for Evidence-Based Policymaking Act of 2018 codifies these concepts as agency responsibilities. Among other things, agencies must develop evidence-building plans, identify the data needed to build evidence, and unless expressly prohibited by law, make their data available upon request to any statistical agency or unit for purposes of developing evidence.²⁴

3. <u>Reproducibility of Influential Information</u>

The *Guidelines* include a "reproducibility standard" for influential information. The purpose of the reproducibility standard is to increase the credibility of federal decisions. The standard requires that influential analyses must be disseminated with sufficient descriptions of data and methods to allow them to be reproduced by qualified third parties who may want to test the sensitivity of agency analyses. This is a higher standard than simply documenting the characteristics of the underlying data, which is required for all information (as discussed in the previous section).

Models and Machine Learning

Implementation Update 3.1: Consistent with the Office of Science and Technology Policy's 2010 Memorandum for the Heads of Executive Departments and Agencies: Scientific Integrity, agencies should ensure that influential information is communicated transparently by "including a clear explication of underlying assumptions; accurate contextualization of uncertainties; and a description of the probabilities associated with

²¹ Comm'n on Evid.-Based Policymaking, *The Promise of Evidence-Based Policymaking* (2017), *available at* <u>https://www.cep.gov/cep-final-report.html</u>.

²² Nat'l Acads. of Sci., Eng'g, and Med., *Innovations in Federal Statistics: Combining Data Sources While Protecting Privacy* (2017), *available at* <u>https://www.nap.edu/catalog/24893/federal-statistics-multiple-data-sources-and-privacy-protection-next-steps</u>.

²³ The National Academies and the Commission reports adopt the definition of statistical purposes used in OMB M-14-06. When blending survey and administrative data, the National Academies calls for a more comprehensive quality framework to include dimensions that capture interoperability concerns, including timeliness, relevance, accuracy, accessibility, coherence, integrity, privacy, transparency and interpretability, and granularity.
²⁴ Pub. L. No. 115-435.

both optimistic and pessimistic projections, including best-case and worst-case scenarios. "25

Implementation Update 3.2: When an agency has performed analysis using a specialized set of computer code, the computer code used to process it should be made available to the public for further analysis, if consistent with applicable law and policy.

Often influential information includes both an analysis and the underlying data, and both should be made available to the public absent contrary concerns such as privacy. In the context of results generated by, for instance, a statistical model or machine augmented learning and decision support,²⁶ reproducibility requires, at minimum, transparency about the specific methods, design parameters, equations or algorithms, parameters, and assumptions used.

Non-Government Information

Implementation Update 3.3: Agencies should ensure that when using non-government sources to create influential information they communicate to the public sufficient information on the characteristics of the data and analysis, including its scope (e.g., temporal or demographic), generation protocols, and any other information necessary to allow the public to reproduce the agencies' conclusions.

Non-government information such as data or a model may be influential in a government decision. The *Guidelines* apply to "information that is not created by the Federal Government when agency use of that information provides the appearance of representing agency views (e.g., being relied upon to support a rulemaking, risk assessment, or agency policy)." Examples of non-government information that federal agencies have used as the basis of important public policy decisions include scientific research published in peer-reviewed journals, data submitted by industry or non-governmental organizations in response to agency Requests for Information, and information generated by state, local, tribal, or international governments. Newer sources of non-government party information include data generated from web scraping exercises, data purchased from the private sector (e.g., credit-card transactions or utility company records of water or energy use), and data generated by sensors and satellites.

Access to and Considerations for Protecting Data

Implementation Update 3.4: Agencies should prioritize increased access to the data and analytic frameworks (e.g., models) used to generate influential information. All data disclosures must be consistent with statutory, regulatory, and policy requirements for protections of privacy and confidentiality, proprietary data, and confidential business information.

²⁶ Currently, structured and unstructured machine learning are common forms of artificial intelligence used in a policy context. The *Guidelines*, however, apply to other current and future forms of artificial intelligence if they are used to create information disseminated by the Federal government.

²⁵ John P. Holdren, Office of Sci. & Tech. Pol'y, Memorandum for the Heads of Executive Departments and Agencies: Scientific Integrity (2010), *available at*

https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/scientific-integrity-memo-12172010.pdf.

Implementation Update 3.5: Agencies should explore methods that provide wider access to datasets while reducing the risk of disclosure of personally identifiable information. In particular, tiered access offers promising ways to make data widely available while protecting privacy. Implementation of such approaches must be consistent with principles for ethical governance, which include employing sound data security practices, protecting individual privacy, maintaining promised confidentiality, and ensuring appropriate access and use.

To ensure reproducibility, the *Guidelines* set an expectation of access to data underlying influential information, subject to "compelling interests such as privacy, trade secrets, intellectual property, and other confidentiality protections."²⁷ Since the 2002 *Guidelines*, the technology for allowing protected access to data has progressed significantly. New approaches to secure data access using cutting-edge technologies reduce the risk of re-identification and therefore may mitigate certain privacy risks associated with providing such access. Risk reduction techniques include creating multiple versions of a single dataset with varying levels of specificity and protection (sometimes referred to a "tiered access").²⁸

The virtue of tiered access is that data users who wish to conduct activities with a statistical purpose without first obtaining special authorization have access to the versions of the data in the least restricted tiers, allowing them to conduct research while protecting confidentiality. Such approaches to increasing access to data for statistical purposes could be considered by more federal agencies, thereby allowing stakeholders to replicate analyses and explore the sensitivity of the conclusions to alternative assumptions while accessing only the data they need. As agencies consider adding intermediate tiers between fully open and fully closed, they must build in sufficient controls to monitor who is accessing the data and allow access only for authorized purposes.²⁹

4. Requests for Correction

The *Guidelines* require agencies to establish administrative mechanisms to allow the public to submit a "request for correction" (RFC) when disseminated information does not comply with agency guidelines, as well as an opportunity request reconsideration of the agency's initial decision on a RFC.

²⁷ Guidelines, sec. V(3)(b)(ii)(B), 67 FR at 8460.

²⁸ Access to the most restricted versions is limited to authorized researchers for approved statistical and research purposes. Such access often takes place in secure physical or virtual enclaves. To maintain confidentiality, less restricted versions typically sacrifice specificity or granularity in exchange for easier access. *See, e.g., Comm'n on Evid.-Based Policymaking, supra* note 21, at 23–46. Data query tools run analyses without ever revealing individual records. The least restricted, and least specific, data released by federal agencies are often public use files, which mask individual records in order to maintain confidentiality or aggregate data such as in tabular form. To reduce the risk of re-identification, agencies apply statistical disclosure limitation methods, such as data swapping or recoding, to publicly available datasets. *See, e.g.*, Fed. Comm. on Stat. Methodology, *supra* note 17.

Processing Timelines

Implementation Update 4.1: Agencies should revise their procedures to reflect more realistic timelines for RFCs. Revised procedures should, at minimum, provide that agencies will not take more than 120 days to respond to an RFC without the concurrence of the party that requested the request for correction.

Agencies frequently unilaterally extend their own deadlines for replying to RFC, taking a year or more to provide a substantive response. Excessive response times do not allow for correction in a timely manner. Agencies should set and adhere to reasonable timelines, not to exceed 120 days, for a response without the concurrence of the requester.

Sharing Draft Responses with OMB Prior to Release

Implementation Update 4.2: In its response to an RFC, agencies should not opine on the requestor's or the agency's policy position.

Implementation Update 4.3: The agency response should contain a point-by-point response to any data quality arguments contained in the RFC and should refer to a peer review that directly considered the issue being raised, if available.

Implementation Update 4.4: Agencies should share draft responses to RFCs and appeals with OMB prior to release to the requestor for assessment of compliance with the above norms.

The process described here is designed to challenge technical information that drives policy, not to debate the policy itself. At times, agencies have failed to respond fully to the technical challenges posed by requestors. Under the IQA and *Guidelines*, an agency should respond thoroughly to substantive RFCs, including by making clear, as fully as practicable, the data underlying the challenged information, the methodologies the agency used to analyze the data, the reasons for use of such methodologies, and any peer reviews addressing the agency's analysis.

Appeals Requests

Implementation Update 4.5: To ensure the integrity of the appeals process, agencies should ensure that those individuals reviewing and responding to the appeals request were not involved in the review and initial response to the RFC.

Agencies usually forward RFCs and appeals requests to the office that released the information at issue for consideration, deliberation, and generation of the draft response. While that practice is permissible, the same individuals who opine during the initial response should not participate in the appeals process. Because the RFC process described here should focus on interpretation of technical/scientific information, at both the initial and appeals request level, the staff reviewing any appeals should be versed in the process of interpreting the type of evidence in question (e.g., financial, scientific, or statistical information). Agencies should have

procedures in place to ensure that the staff reviewing appeals is independent of the staff who prepared the initial response, and forms an independent judgment of the RFC. Likewise, staff reviewing appeals should be sufficiently senior that they are effectively able to disagree with the assessment of colleagues who prepared the initial response. Some agencies have established a panel of senior managers to review appeals. A panel of senior managers can be an effective mechanism to ensure that the issues raised in the appeals are given independent consideration by competent and fair-minded decision-makers.