

2.5 Policy on the Review of Information Products (Institutional and Peer Review)

Policy

All information products, and especially interpretative, analytical and methodological products, for which Statistics Canada is solely or jointly responsible, are subject to review prior to release outside the Agency. The review should ensure that their content is compatible with the Agency's mandate as a government statistical agency, and that they adhere to the generally accepted norms of good professional practice.

These reviews consist of *institutional* review for all information products, and *peer* (professional) review for interpretative, analytical and methodological products (with exceptions as specified in the Procedures).

Definitions

Information Products are any texts (including graphics and quantitative results) published in paper or electronic form, or presented to the public.

Products requiring peer and institutional review include all interpretative information products, whether or not causal inferences are drawn, analytic products, even those of an entirely descriptive nature, and methodological products, even those describing existing methodologies used in the generation of "official" statistics. Products representing "work in progress" provided outside Statistics Canada require peer and institutional review, as do products delivered as formal oral presentations.

Institutional review is intended to ensure that information products disseminated to the public are free of material which would compromise the Agency's reputation for quality, professionalism, non-partisanship, objectivity and neutrality.

Peer (Professional) review is a technical assessment by recognized professionals in the relevant discipline(s). Peer review should ensure that analyses and interpretation are methodologically sound, well-supported, consistent with the definitions and other characteristics of data, cognizant of the current research literature as appropriate, that terminological conventions have been respected, and that pertinent limitations of the data used have been articulated.

Employees for the purposes of this policy include deemed employees.

Analysis includes a wide range of texts (with any associated graphics, tables and other quantitative results) including those that are intended to be accessible to a broad audience, those focusing on a single data set or data series, and those intended for a scholarly audience which include more complex methods and reasoning, and make extensive reference to the broader research literature.

Responsibilities and Specific Procedures

Institutional and peer review is a line management responsibility and is carried out as part of normal line management processes.

Directors are responsible for determining the nature and extent of the institutional and peer review required for any given information product produced by their division. Directors are also responsible for

managing its execution and monitoring its application to the product including consultation, at the Director's discretion, with the responsible Director General, Assistant Chief Statistician, and the Chief Statistician.

In the case of deemed employees at Research Data Centres, the role of "director responsible" will be undertaken by the director (or above) so appointed, member of the Analysis Steering Committee, or a designate thereof.

When analytical or methodological products implicate divisions in addition to that of the author, the author's Director may involve the additional divisions' Directors in the institutional review.

Where Directors or above are authors, responsibility for institutional review rests with the next higher level of authority.

Peer reviewers should be selected so that their relationship to the author does not constrain criticism.

External peer reviewers should be included where appropriate, and especially in cases where the product is judged to be of a potentially controversial nature.

When external peer review is done, Directors will ensure that:

- a) papers or publications undergoing such a review are held and treated as confidential by the reviewer(s);
- b) when possible, the identity of the reviewer(s) remain unknown to the author;
- c) reviewers collectively span an appropriate range of competencies with respect to the topic covered by the paper or publication, including subject matter, techniques and methods, and underlying data.

Directors are responsible for maintaining a formal system of documentation tracking the process for each peer and institutional review, as well as maintaining on file copies of the peer and institutional reviews and documentation of the author's responses to the reviews, bearing in mind the provisions of the Access to Information Act.

When it becomes functional, Directors should ensure that a new software application, the Analysis Activity Database (AADB) is fully used for all analytical activity in their divisions, including the tracking of the peer and institutional review process for each information product.

Annex A – Guidelines for Peer Review

Peer review should cover the following:

- professional assessment of the author's interpretations and conclusions;
- avoidance of statements that are not statistically valid or justifiable;
- ensuring that interpretive statements can be linked to reported measurements or to established methods or to the scholarly literature;
- assessment of methods used, including treatment of complex sample designs;
- validation of the correspondence between numbers or data patterns cited in the text and any supporting tables or charts; and
- ensuring that data quality limitations have been flagged where appropriate.

The following examples provide guidance on the type of peer review required according to the nature of the product.

(1) **Stand alone analytic study/monograph published by Statistics Canada:** Generally two peer reviews (with the option of additional reviews if judged necessary), at least one of which would be external to the Agency

(2) **Methodological study published in professional journal, e.g., JASA.:** Journal's peer review process sufficient.

(3) **Official "working paper" distributed outside the Agency:** At least two internal reviews.

(4) **"Program Reports" for Divisions or programs:** Peer review not applicable.

(5) **Descriptive analysis of the type found in the Canada Year Book:** Peer review by Division(s) responsible for the data.

(6) **Descriptive analysis associated with regular time series data:** routinely reviewed analyses such as monthly releases of key economic indicators need not be subject to additional peer or institutional review.

(7) **Articles in Statistics Canada compendia or flagships:** Peer review process of the compendium or flagship in collaboration with the originating division.

(8) **Interpretative analysis published in a social science journal** such as the Canadian Journal of Economics: Journal's peer review process sufficient.

(9) **Interpretative or analytic products published in external journals** which do not have their own peer review mechanisms: Generally two peer reviews (with the option of additional reviews if judged necessary).

(10) **Papers presented at professional conferences, including Statistics Canada's conferences, (with or without proceedings):** If there is no printed paper, then a "dry run" presentation to Statistics Canada colleagues is sufficient; if there will be a printed paper made available, then one or two internal peer reviews prior to presentation.

(11) **Descriptive analysis issued in regular statistical publications:** Peer review by the Divisions explicitly identified with the data analyzed.

(12) **Paper submitted for inter-governmental meetings:** At least two internal reviews.

(13) **Analysis at an exploratory stage, distributed to a pre-identified and strictly limited audience, solely to solicit professional comment** (such material would be explicitly unavailable for citation): At this stage only, no peer review necessary.

Annex B – Guidelines for Institutional Review (IR)

1. While Directors (and above) are responsible for the execution of the IR process in their respective areas, they are encouraged to seek advice, generally within Statistics Canada, concerning text that they believe contains statements that may be subject to damaging misuse or misunderstanding. When they seek such help, their advisors should be explicitly informed that they are acting within the IR, and not the peer review process.

Members of the Analysis Steering Committee, ACSs, the CS, senior staff in the centralized analytical units, and the Director of Communications Division should be regarded as helpful resources concerning the IR process in general, and for specific items mentioned in these guidelines.

2. IR is concerned with all aspects of what the media will see concerning an information product. Therefore, all the following documents, in both official languages, are subject to the IR: the main text of a publication, Preface, Highlights, photos and graphics, coverage in *The Daily*, design and planned content for the cover and title pages, and internet-based versions of the document(s). Communications Division should be regarded as an essential partner in the process of institutional review of any document for which the news media are the primary audience.

All these documents should be checked to ensure that the Agency's objectivity, neutrality, and reputation for quality, professionalism, and non-partisanship has not been compromised by inappropriate statements related to government policies, or to interest group sensitivities.

If conclusions about currently sensitive issues remain, after all the IR steps have been completed, the Director should consider informing his or her DG, ACS or the Chief Statistician about the publication.

3. Coverage in *The Daily* is subject to last-minute changes designed to improve style, grammar or presentation. The Director of Communications Division ensures that no editorial change that alters meaning or nuance is made without the explicit authorization of the author division. However, given the deadlines and the senior management review process that takes place with *The Daily*, the Director of Communications Division has full discretion concerning contacts with authors for possible review of last-minute changes to texts. Disagreements over proposed editorial changes will be resolved by the respective directors.

4. Documents entered into the IR process should contain no gaps (missing information or "information to be provided later") in the text, tables or charts. If reviews of partial documents are ever undertaken, every attempt must be made subsequently to have the entire and complete document reviewed with the previously missing sections highlighted.

5. Although IR can be applied separately to the components of a manuscript and to the associated documents intended for concurrent release to the public or press, the publication should not be released until IR has been completed on all parts of the manuscript and these associated documents.

6. Care must be taken to ensure that any conclusions with regard causality are properly supported either by the data actually analysed in the study, or by suitable reference to the published peer-reviewed research literature.

7. Directors are expected to implement IR with regard to works of Statistics Canada authors (including deemed employees) for which Statistics Canada is not the publisher but which directly arise from their work as employees of Statistics Canada. However, the specific steps of the IR process in such cases may differ from those applicable to Statistics Canada publications.

Publications by researchers who are or have been deemed employees, and are using results derived from analysis of Statistics Canada data at an RDC, but which was not part of the “proposed output” in their deemed employee contract, are not subject to IR.

As a related matter, license and publishing agreements should ensure that Statistics Canada data and information are identifiable in all information products supplied by other distributors, and appropriate credit given to Statistics Canada. At the same time, directors should consider that generally, a disclaimer is not appropriate in connection with employees' work that is published elsewhere, nor with use of data from third parties within Statistics Canada publications.

8. Where a product is closely related to a matter of government policy, and is not associated with the release of new data, Directors may also seek input from key stakeholders in order to assess compliance of the information product with the principles of IR.

9. The concerns that the IR process is designed to address should normally be brought to bear at many stages of the development of an information product, including at the conception stage. These concerns should be communicated to participants in relevant training programs or courses. Directors should take steps to brief all new analysts, and any other analysts who have not yet been informed, about the kinds of concerns that underlie this Policy.

10. If key persons are thanked in an acknowledgement statement that may implicate them in the consequences of the publication, they should concur with the use of their names and with the descriptions of what they contributed.

11. Although institutional and peer reviews are separate, an important element of IR is confirmation that the Peer Review process has been properly carried out.