

SUPPORTING STATEMENT
NCEI Send2NCEI web application
OMB CONTROL NO. 0648-0024

A. JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary.

The NOAA National Centers for Environmental Information (NCEI) “Send2NCEI” or “S2N” web application is a modernized, web-enabled representation of basic descriptive metadata for earth, ocean and atmospheric observation data that was originally embodied in the analog (paper) NOAA Form 24-13 “Data Documentation Form” or “DDF”. In 1994, Executive Order 12906 established the National Spatial Data Infrastructure and directed each agency to “document all new geospatial data it collects or produces... using the standard under development by the FGDC...”. In 2010, the FGDC adopted the ISO 19115/19139 suite of standards for use by Federal agencies to document geospatial data.

The voluntary information collection using the S2N web application or other representations of the DDF facilitates NOAA and others in Federal, State, or local governments, academic institutions, non-profit organizations, and others to provide clear descriptive information (metadata) about marine data. The information requested in S2N identifies the data provider and data collector(s), dates that data were collected, and other information that make marine data useful to other researchers and future users of the described data.

The S2N web application reorganizes descriptive information collected into an XML file that conforms to the internationally recognized and FGDC-approved ISO19115-2 Geospatial Metadata standard and the ISO19139 Geographic information Metadata XML schema implementation. A significant advantage for a data provider using S2N is that the information is collected through a series of short form pages that provide suggestions for entries from NCEI-provided standard responses. The data provider may opt to use suggested entries or to enter free text in the form spaces.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

NCEI is the designated long term US repository for oceanic, terrestrial, and atmospheric geospatial data and information (hereafter, collectively referred to as “earth sciences data”) and an internationally designated World Data System repository for sharing earth sciences data. The information collected by S2N is used by NCEI in the processes of acquiring, processing, quality controlling, and archiving earth sciences data. The information collected by S2N may also be distributed with related earth sciences data to the community of data consumers to enable them to better understand and make use of those data.

After review and acceptance for the repository by NCEI staff, scientists and others use the geospatial metadata collected using S2N to discover the existence of earth sciences data

available for additional scientific re-use through web portals, geospatial clearinghouses (e.g., data.gov), and other web services. The S2N information collection web form facilitates creating suitable metadata to enable data discovery in these portals by collecting specific characteristics such as the dates during which data were collected, the area where data were collected (both by sea or sea region name and by latitude/longitude bounding coordinates), and ships/platforms used to collect geospatial earth sciences data or information.

To fully understand geospatial earth sciences data, specific characteristics (e.g., variable/data type, unit of measure, quality flags, etc.) are extremely important documentation that enable future users to fully understand and use these data. By using S2N, this information may be collected at a relatively high level of specificity, with consistent representation of similar information across multiple information collection instances (submissions).

Information collection about the data provider (e.g., name, address, institutional affiliation) is used by NCEI to establish communications with the data provider in the event there are questions or problems with submitted data or metadata. Additionally, other relevant individuals (e.g., names, roles) and bibliographic information (e.g., title, abstract, suggested author list, related publications) make it easier to provide proper attribution about the source of data held in the NCEI repository and to provide additional context and aid understanding of the data for future data users.

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. NOAA's National Centers for Environmental Information will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. As an archival repository, original data and information archived and stewarded by NCEI are not subject to Data Quality Act provisions.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.

The Send2NCEI web application requires access to the internet and a web browser to enable a data provider to fill in a series of short form elements by entering free text or by selecting terms from an NCEI-provided list.

The Send2NCEI web application is available online for public review at <http://www.NCEI.noaa.gov/submit/s2n>. Because the Send2NCEI web application interacts in real time with an NCEI-supplied database, it is not effective to print the short forms for offline use. The (obsolete) NCEI Data Documentation Form (paper NOAA Form 24-13) collects essentially the same information as the Send2NCEI web application.

The geospatial metadata and data files sent to NCEI using the Send2NCEI web application will be made available to the public over the internet if those metadata and data files are accepted by NCEI for inclusion in the NCEI long term repository.

4. Describe efforts to identify duplication.

In 2009, the Federal Geographic Data Committee (FGDC) published a report reviewing eleven ISO 19115 metadata editing tools (see www.fgdc.gov/metadata/iso-metadata-editor-review). All but one of the listed tools require downloading and installing some type of software on a local computer system, often with a monetary or personnel cost for installing, configuring and managing the software. Many of the software packages are from non-US sources and would require significant security reviews to be allowed to be installed on many organizational computer systems. Send2NCEI requires no download or installation tasks and is available for use at no cost.

No tools that have an OMB control number have been found to exist that provide the two main characteristics of the Send2NCEI web application: 1) assist with creating ISO 19115 compliant metadata to describe a geospatial data set and 2) attaching the described geospatial data files in a bundle that is easily forwarded to the National Centers for Environmental Information as a request to archive.

5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

Because Send2NCEI is a web application, no software or other technology is necessary other than a standard web browser application (e.g., Firefox, Safari, Chrome) and an internet connection. Send2NCEI is designed to make the creation of complete, international standards-compliant (ISO) geospatial metadata simpler for all users by providing drop-down choices for frequently used descriptors (e.g., names of organizations or ships) and eliminating the need for a Send2NCEI user to understand the complexities of the ISO 19115 Geospatial Metadata standard. Send2NCEI also enables users to attach data files to the metadata created using the web application and send the combined metadata and data to NCEI in one web-based Submission Information Package.

6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

The National Centers for Environmental Information are widely recognized in the earth sciences data community as the largest archival collection of freely-available earth, ocean and atmospheric observations. Submissions of earth sciences observation data by non-Federal entities or non-Federally-funded entities to be archived at NCEI are completely voluntary, but are important for making sure that valuable observations and other data are preserved and accessible for future research purposes. Federal entities and Federally-funded entities are expected to make data and metadata collected using Federal funds accessible and available for the long term in accordance with the 2013 Executive Order “Making open and machine readable the new default for government information”.

If the information collection supported by S2N for data sent to NCEI is not conducted, the expected results are twofold: 1) earth sciences data, typically collected with significant Federal financial support may not be made discoverable and accessible to a broad audience of data consumers and 2) additional scarce resources will be expended by NCEI to create and organize metadata to document each request to archive earth sciences data. The Send2NCEI web

application is designed to support an ‘as needed’ or ‘on demand’ frequency of use, so a data provider may use S2N only when appropriate.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

Not applicable.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A Federal Register Notice published on January 3, 2018 (83 FR 356) solicited public comments. No comments were received.

NCEI encourages S2N users to provide feedback and comments about usability features, such as the layout or help guidance on each tab within the application. When received, NCEI software developers record and address comments and other suggested improvements in follow-up design enhancements.

A revised average time response estimate is based on alpha- and beta-test results using the Send2NCEI web application from NCEI and other federal staff and public testing during the Federal Register Notice review period.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

No payments, gifts or other remuneration were provided to any respondents of the Federal Register notice.

10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.

No assurances are provided regarding confidentiality. Inclusion of identifying information (e.g., name, email address) in the comments form is voluntary. Identifying information in the Send2NCEI web application user profile is required to maintain the account and to comply with mandatory standard metadata requirements for geospatial data in accordance with Executive Order 12906. The personally identifiable information is covered under the Privacy Act System of Records Notice COMMERCE/NOAA-11: [Contact Information for Members of the Public Requesting or Providing Information Related to NOAA's Mission](#). An amended notice was published on January 12, 2017 (83 FR 3721) and became effective February 21, 2017.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

Not applicable.

12. Provide an estimate in hours of the burden of the collection of information.

Public reporting burden for this collection of information is estimated to vary from 30 minutes to 60 minutes per response with an average of 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining needed metadata, and completing and reviewing the collection of information. These estimates are based on alpha- and beta-test results using the Send2NCEI web application from NCEI and other federal staff and public testing during the Federal Register Notice review period.

The initial information collection activity is estimated to take .75 hour (about 45 minutes), which includes creating a user account, entering at least the minimum information needed to submit a Submission Information Package, reviewing some ancillary information (help text and tips), and submitting the package to NCEI. Subsequent responses using the same user account information and reusing existing information in the Send2NCEI web application.

NCEI estimates that 200 hundred respondents will use the Send2NCEI web application at least once each year, but there may be at least 100 repeat respondents during a year, for a total of 300 responses per year. An electronic version of the paper form that collects the same information (NOAA Form 24-13) is also available, with the same time burden, as an alternate to the Send2NCEI web application, but use of this form has been deprecated.

This type of information is typically collected and sent to NCEI by graduate students or data managers. Assuming a labor rate at the Federal GS-8 Step 5 level (\$45,003/year or \$27.65/hour in 2018), the total cost of labor for 300 hours (300 responses x .75 hour/response x \$27.65/hour) would be approximately \$6221 per year for all responses or approximately \$20.74/response.

13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).

Capital and start-up costs are not applicable because equipment required for this information collection (i.e., a computer connected to the internet, standard browser software, office management software for recording information, etc.) are standard office/laboratory equipment managed and operated by all anticipated respondents.

Operations and maintenance costs for required equipment (listed above) are not applicable because these costs are part of routine business operations.

14. Provide estimates of annualized cost to the Federal government.

NCEI will incur no additional costs beyond normal labor costs for staff labor or equipment

procurement, operation and maintenance. NCEI estimates that an NCEI employee will require 60 minutes to review and assess the information provided by a Respondent to this information collection. Using a (average) labor rate at the Federal GS-11 Step 5 rate (\$77,109/year or \$36.95/hour in 2018) and anticipating 300 responses per year, the approximate annualized cost to the Federal government is \$11,085.

15. Explain the reasons for any program changes or adjustments.

The average response time has been adjusted to 45 minutes, from 1 hour.

16. For collections whose results will be published, outline the plans for tabulation and publication.

Not applicable.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.

Not applicable.

18. Explain each exception to the certification statement.

Not applicable.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

The Send2NCEI web application does not employ statistical methods.