

**HYDROGRAPHIC SERVICES IMPROVEMENT ACT
HYDROGRAPHIC PRODUCTS QUALITY ASSURANCE PROGRAM
PROPOSED POLICY EXPLANATION**

ADMINISTRATIVELY RESTRICTED – NOR FOR PUBLIC DISSEMINATION

Definitions

Hydrographic products – any publicly or commercially available product produced by a non-Federal entity that includes or displays hydrographic data.

Hydrographic data – information acquired through hydrographic or bathymetric surveying, photogrammetry, geodetic, geospatial, or geomagnetic measurements, tide and current observations, or other methods, that is used in providing hydrographic services.

Hydrographic services – hydrographic services means

- the management, maintenance, interpretation, certification, and dissemination of bathymetric, hydrographic, geodetic, geospatial, geomagnetic, and tide and current information, including the production of nautical charts, nautical information databases, and other products derived from hydrographic data;
- the development of nautical information systems; and
- related activities.

The Act

The Hydrographic Services Improvement Act of 1998, as amended by the Hydrographic Services Improvement Act Amendments of 2002 (codified as 33 USC 892b.), directs:

1. IN GENERAL – The Administrator –
 - A. By not later than 2 years after the date of enactment of the Hydrographic Services Improvement Act Amendments of 2002, shall, subject to the availability of appropriations, develop and implement a quality assurance program that is equally available to all applicants, under which the Administrator may certify hydrographic products that satisfy the standards promulgated by the Administrator under section 303(a)(3) of the Act;
 - B. May authorize the use of the emblem or any trademark of the Administration on a hydrographic product certified under subparagraph (A); and
 - C. May charge a fee for such certification and use.

Section 303(a)(3) referenced above states that the Administrator shall “promulgate standards for hydrographic services provided by the administration.”

Statement of Policy

NOAA will act in accordance with the following policies in fulfilling its responsibilities under the Hydrographic Services Improvement Act (as amended).

1. NOAA interprets the Act as intending to stimulate the development of hydrographic products by the private sector. The intent of NOAA's participation in this private sector activity is to provide the public a measure of confidence in the content, quality, and adherence to published standards of the resulting hydrographic products. NOAA interprets the Act in a broad sense. Therefore, "standards" and "quality assurance program" are considered to be generic terms that apply to any means of satisfying the intent of the Act and the intent of NOAA's participation, and which are within NOAA's authorities.
2. Standards, and quality assurance tests and procedures, will preferably be written in collaboration with those affected, not just written and promulgated by NOAA. In some instances, NOAA may adopt an existing standard or quality assurance program, rather than originate one. NOAA may develop standards and quality assurance tests on its own initiative should it be deemed beneficial for those standards and tests to be established before the appearance of a particular hydrographic product. This approach may be used to stimulate the production of a product that NOAA anticipates would be beneficial. All standards, tests, and procedures shall be publicly available.
3. The level to which standards are developed, and to which quality assurance is performed, may vary for different hydrographic products. For example, certification for manufacturers making exact copies of NOAA products may be implemented in a substantially differently manner from the certification of a complex cartographic product. NOAA considers all such "standards" and "certifications" as meeting the intent of the Act.
4. NOAA will work, to the extent practicable, through existing, recognized, standards and certification bodies. This will permit the use of proven methods of developing, documenting, and implementing standards and certification. It will leverage NOAA's resources with those of such bodies. It will provide a more widely accepted result than had NOAA promulgated a standard solely under its own name.
5. NOAA will establish the required Quality Assurance Program for hydrographic products. The Quality Assurance Program will have general procedures that apply to all hydrographic products, and specific tests and procedures that apply to specific hydrographic products. The specific quality assurance tests and procedures for a particular hydrographic product will be based on the standards identified by NOAA or written collaboratively with the affected parties.
6. Non-Federal entities may submit to NOAA hydrographic products for which they propose that standards be written, the Quality Assurance Program applied, and certification offered. This opportunity shall be equally available to all.

7. Certification of a specific hydrographic product under the Quality Assurance Program will be at the option of NOAA. However, certification will be the goal in cases where NOAA decides to write or adopt standards. Any non-federal entity will be permitted to submit for certification hydrographic products that it asserts are compliant with NOAA-promulgated standards.
8. Certification of products under the Program will mean that the hydrographic product has been found to meet the documented requirements of the Quality Assurance Program. Certification conveys no express or implied warranty as to the merchantability or fitness for a particular purpose; conveys no express or implied liability on the part of the Government of the United States for the hydrographic products; and conveys no automatic, direct or indirect NOAA endorsement of any product or service.
9. NOAA may audit companies and hydrographic products it has certified. Such audits may include, but are not limited to, companies, products, processes, use of the NOAA emblem; and examination of manufacturers' public claims. NOAA may decertify hydrographic products based on its findings, but producers shall be notified and provided a reasonable opportunity to correct deficiencies before a hydrographic product is decertified.
10. NOAA does not intend to write standards and perform quality assurance for every proposed hydrographic product submitted. NOAA will select those deemed appropriate for standards and certification by taking into account:
 - the magnitude of the public benefit and enhancement of public safety that would be achieved compared to the commitment of resources that would be required;
 - the breadth of support for standards and certification among all the affected communities;
 - the practicality of writing and enforcing an effective standard;
 - the availability of suitable, similar products that may already meet the needs of the public;
 - NOAA's expertise related that needed to write an appropriate standard;
 - availability of resources; and
 - other relevant criteria as they become apparent.

In general, NOAA does not intend to write standards and certify products that would be used to meet the nautical chart and publications carriage requirements mandated in the Code of Federal Regulations and elsewhere. The federal government already provides official products for this purpose, and there are valid safety reasons for maintaining a single complying product.

11. Use of the NOAA emblem on certified hydrographic products will require separate written permission. Use of the NOAA emblem must satisfy an interest of the

Agency, and must not result in embarrassment to the Agency. If the NOAA emblem is used on products that include other data or products, clear indication shall be made as to what is NOAA certified. The inclusion of other data or products will not constitute any endorsement of, or favoritism toward, the other data or products by NOAA.

12. NOAA may charge for its standards and certification activities such sums as may be permitted or required under this Act, or under other statutory authorities.
13. In all matters, NOAA will proceed in a manner that maximizes public safety.

Discussion of the Policy

Paragraph 1.

NOAA interprets the Act as an attempt to increase the richness of the suite of hydrographic products available to the public, and to ensure their safety. In addition, NOAA interprets the Act to include “services” as meeting the definition of “hydrographic products,” and may choose to write standards, quality assurance tests and procedures, and to certify appropriate services. Nautical chart updating services, or an electronic navigational chart distribution services, are examples of services that NOAA may consider a “hydrographic product” for the purposes of the Act. In these cases, appropriate standards, tests, and certification may be provided.

Many tools within NOAA’s authority may be used to meet the purposes of the Act. Depending on the complexity of the hydrographic product, and the amount of risk the public would be exposed to, NOAA expects to select from its toolkit the simplest means of establishing new products and providing a measure of confidence in the content, quality, and adherence to standards for those products. Thus, NOAA is interpreting “standards”, “quality assurance” and “certification” as generic terms describing an outcome rather than as a specific formalism or document.

For example, where non-Federal entities are reproducing copies of NOAA products such as the Tide Tables, NOAA provides print-ready files. In this case, a “standard” may be a simple business agreement, in which the manufacturer agrees to certain standards of quality and behavior. Further, because the complexity is low, self-certification might be used as the means of quality assurance and certification.

A partial list of authorities available to NOAA that satisfy the intent of the Act include: business licenses, Agent Agreements, no-cost contracts, self-certification, adoption of industry standards, use of existing certification authorities and organizations...

Paragraph 2.

Participation by the affected communities in writing standards and QA tests provides an important guarantee that there is broad need for standards and certification, and that the resulting standard and certification meet the needs of those communities. Relevant communities might include: manufacturers, users, regulators, resellers, developers of products that use certified hydrographic products such as datasets, and manufacturers of competing or substitute products.

Participation in the drafting of standards and quality assurance tests and procedures must be substantive and continuing by the designated members of the affected communities. The responsibility will lie with the non-Federal entity proposing a hydrographic product for standards and certification to produce a broadly based group of acknowledged representatives of affected groups, and to secure their participation in the writing of standards, and quality assurance tests and procedures.

Paragraph 3.

No discussion.

Paragraph 4.

NOAA does not have the expertise to run a national standards program. Neither does NOAA have a pool of excess labor to devote to these activities. The use of existing standards and QA bodies is seen as a way to follow existing proven ways to arrive at a quality output, and a way to leverage NOAA's resources.

Paragraph 5.

The procedures in the general part of the Quality Assurance Program will be the administrative procedures necessary for its implementation. For example, procedures by which non-Federal entities submit a proposed hydrographic product for the development of standards and certification will be specified in the general portion of the Program.

It is anticipated that each hydrographic product will then require specific quality assurance tests and procedures unique to that product. These will be developed collaboratively as part of the standards writing activity.

Paragraph 6.

No discussion.

Paragraph 7.

The Act leaves the certification of hydrographic products as optional for NOAA. The assumption will be, however, that if NOAA undertakes to write standards, it intends to offer certification of the resulting hydrographic products. In general, NOAA will not undertake to write standards and quality assurance tests and procedures if it can foresee that it will not offer certification.

The decision to offer certification will be made on a case-by-case basis. Circumstances that may cause standards to be written, but certification not offered might include:

- a resulting standard for which NOAA lacks confidence in the safety implications of products that might meet that standard;
- lack of consensus among the affected organizations writing the standard and quality assurance tests and procedures;
- failure of adoption of the drafted standards by the participating standards-writing body;

- standards that negatively impact the intent of the Act, such as those that might exclude existing, suitable products; or standards for the benefit of a single company alone;
- adopted standards that are specious; or
- other relevant reasons as they become apparent.

Paragraph 8.

NOAA does not intend to certify products as suitable for any specific purpose such as for use as a backdrop in Automated Identification Systems. Certification only means that there is a documented standard, documented tests and procedures to measure compliance of a hydrographic product with the standard; and that the subject hydrographic product has been through the tests and procedure, and was determined to be compliant with the standard.

Paragraph 9.

Further information on audits and decertification will be specified in the general portion of the Quality Assurance Program. The decertification process will include a due process provision for any product being decertified.

Paragraph 10.

NOAA does not interpret the Act as merely a way to provide manufacturers a marketing claim for a particular product, or as a means for a manufacturer to differentiate his product from his competition, although that might be a resulting side effect.

In addition, the Act directs NOAA to “promulgate standards for hydrographic services provided by the administration,” and then directs NOAA to “... implement a quality assurance program ... under which the Administrator may certify hydrographic products that satisfy the standards.” One interpretation of this requirement is that, since NOAA makes official nautical charts which satisfy federal chart carriage regulations, then NOAA must write standards for those official products and certify privately made products as also satisfying chart carriage federal regulations. NOAA does not adopt this interpretation of the Act.

Instead, NOAA interprets the Act as intending to call forth new products, not substitutes for official ones being provided by the Administration. Thus “hydrographic products” are other “products that include or display hydrographic data.” It is unfortunate that the Act appears to require standards for official charts, but then directs a quality assurance program for other products. This appears to leave unresolved where standards for those other products come from.

In actuality, it is the many other items included in the term “hydrographic services” for which congress intended NOAA to write standards, and to help non-Federal entities

develop new products. This interpretation reflects the Committee report¹ accompanying the Act in which congress explicitly provided examples of non-NOAA products as the intent of the Act, and explicitly excluded official nautical charts as being “hydrographic products.”

Further, there are valid safety reasons for maintaining a single, official nautical chart or publication where federal regulations mandate carriage, and for not certifying private products for that same purpose. These reasons include:

- removing any confusion as to what products meet the federal regulations;
- having all vessels making navigation decisions on exactly the same information, particularly in meeting situations or at night;
- the timeliness and accuracy of updates and their distribution;
- the status of non-NOAA quality controlled data that may be included on private hydrographic products;
- liability for other information when packaged with a certified “hydrographic product”; and
- the impracticality of NOAA policing all substitute official products – products on which data changes weekly.

Exceptions to this intention might include cases where NOAA specifically prepares a carriage-compliant product for manufacture and distribution by the private sector.

Paragraph 11.

As before, the presumption will be that use of the NOAA emblem will be permitted if NOAA proceeds with standards and certification. However, the use of the NOAA emblem will be carefully monitored. In particular, it will be carefully monitored to insure that the use of the emblem is not done in a manner to imply the endorsement of any manufacturer; any other data, service or product that may be packaged with a certified hydrographic product; or any particular use of a certified hydrographic product.

Paragraph 12.

No discussion.

Paragraph 13.

No discussion.

¹ 105th Congress, Report, House of Representatives, 105-485, Hydrographic Services Improvement Act of 1998, Report to accompany H.R. 3164.