

Frequently Asked Questions

Certification of U.S. IOOS Regional Coastal Observing Systems (RCOS)

STRATEGIC OPERATIONAL PLAN

Question (QA SOP):

Section 997.23 d)4)i) and ii) both talk about referring to best practices for Standard Operating Procedures for equipment QA practices and keeping equipment inventories and logs. Is this something that you have examples of?

Answer:

The short answer is that no, there are not any examples that we can point to.

Our intent is to give the applicant flexibility in how they meet this requirement. We expect that most, if not all, applications for certification will come from organizations who work directly with Principal Investigators (PIs) that have years of experience in the operations of coastal observing systems. We think the processes these PIs have in place represent “best practices” for the operation and maintenance of regional observing systems.

The standard operating procedures described by the RCOS to meet the requirements in section 997.23 d) 4) i) and ii), may at a minimum, be a broadly worded statement that is included in all sub-awards stating that sub-contractors should follow industry best practices and manufacturer guidance where applicable, and be prepared to provide documentation upon request.

A RCOS may add language to its standard operating procedure, specifying the need for specific requirements for calibration, validation, logs, record keeping, etc., depending on the experience of the sub-contractor, but this is not required to meet the certification requirements.

Question (QA for HF radar):

There is a question in the IOOS Certification Application that asks the RCOS to describe the standard operating procedures for calibrating, validating, operating, and maintaining equipment owned by the RICE. For HF radar we plan to use standard best practice procedures defined by the National HF Radar Steering Team. We plan to point to this document for the HFR Team's Best Practices: <http://cordc.ucsd.edu/projects/mapping/documents/SCCOOS-BestPractices.pdf>, as it is referenced in the National Plan. Is this sufficient?

Answer:

Yes, for HF radar, it is sufficient to reference this document.

Question (QC and QARTOD):

How does the requirement that all data be quality control (QC) checked apply to those

variables that have new QARTOD manuals approved? Is there a grace period for applying the QARTOD protocols to data? Is it expected that QARTOD protocols will be retroactively applied to historical data?

Answer:

QC must be done for all data (with the exception of Citizen Science data as it is defined in these FAQs). The use of QARTOD protocols, for real time data streams, can be done in a “phased” implementation. QARTOD protocols do not need to be in place, for those variables with approved manuals, prior to certification, but this does not exempt these variables from the QC requirement, and the certification application must describe how a RCOS will implement the QARTOD protocols over an identified period of time.

Question (QC of Citizen Science):

One of the goals of IOOS is to make new data sets available for use by stakeholders. Data from citizen science efforts are an important new data set that we’d like to display, but there are limits to the ability to QC these data. Working with our partners to display this data is a great way for the RAs to contribute to the community and meet our strategic goals. However, some of the citizen science groups simply do not have the data management capacity needed to perform proper data management practices, and frequently, the details on the data collection methods are not clear. Is there any way that data collected through citizen science efforts can be displayed without performing QC on it?

Answer:

The sole exception to the requirement to perform QC on data distributed by the RCOS, is for data collected as part of a “Citizen Science” effort or project. For the purpose of certification, we are defining Citizen Science data ***as any data that is collected by members of the general public who are not trained scientists, often in cooperation with a scientific program.***

It must be obvious to all users that Citizen Science data has not had any QC done to it. For any website display, this data must be clearly marked as such, and for machine to machine transfer it must be flagged appropriately and a disclaimer should be associated with the transmission. Prior to approval of certification, we request that the RCOS share with us its plans for how they would do this.

We have defined Citizen Science data narrowly, and we want to emphasize that we expect QC to be performed on all the data that does not meet this definition, including research data.

Question (Archiving):

Is there a plan at the national level to establish an archive agreement with NOAA’s National Centers for Environmental Information (NCEI) so that each individual RA does not need to establish a separate agreement?

Answer:

IOOS has established a 5-year Service Level Agreement with NCEI (last signed in 2021) to ensure existing pipelines are functioning and properly stewarded. Since each of the 14

archive pipeline agreements contain detailed information on the data sets themselves and on how and when they will move from a provider to the archive (e.g. on the third Thursday of each month a file will be published to a certain FTP site for pickup by NODC.), each RA and data assembly center will manage their own agreements.

Question (RCOS Employee):

The Strategic Operational Plan requires that applicants provide CV's of those individuals serving in the roles identified in §997.23(d)(3) and §997.23(f)(1)(i). What information should be included in the CV and what is the best way to demonstrate that the individuals are qualified and work across the region?

Answer:

In addition to providing some background on the individual's experience and knowledge proving they are capable of performing their work, the CV must clearly describe the roles and responsibilities of the individual in the RCOS. The applicant is responsible for documenting how each individual meets the requirements to be an employee of a certified RCOS. The CV must document that the individual performs one of the three roles identified in §997.23(d)(3) and §997.23(f)(1)(i). To do this, applicants must successfully describe the role and responsibilities of the individual within the RCOS organization.

ORGANIZATIONAL STRUCTURE

Question (solicit input):

In 997.21 b)5)ii asks with what frequency we solicit and receive advice on RCOS diversity, coordination, etc.? What do you mean by 'receive advice'? Who are you thinking provides this advice on this level of operations for the RCOS - external groups, advisors, or contractors?

Answer:

Receiving advice can mean any feedback that informs the RCOS on how it addresses organizational diversity, stakeholder coordination, etc. This could be from partners, stakeholders, your members, perhaps even the Governing Council if it serves in an oversight role. External groups, advisors, and contractors could all fit this requirement. We've left this open to give each RA the opportunity to do as it needs. The key is that the RCOS has a process for actively seeking feedback on how and who it engages with.

Question (application form):

For the application questions, is it true that you will accept EITHER a description or documentation? Or do you need both for each question, if requested?

Answer:

When the requirement asks for a description, **you must provide a description**. This description can be typed directly into the description box in the application form (in this case you do not need to put anything in the documentation box). Or you can provide a brief sentence in the description box letting the reviewer know the description is located in an existing document and provide the specific location of the description in the documentation

box.

When the requirement asks for documentation, you must provide documentation, no description is necessary. Location of the documentation should be provided in the documentation box in the application form.

Question (application form):

There are few differences in the guidance document and the actual application. Many of the sections in the application require both a description and documentation, whereas sections in the guidance document requested one or the other. Do we need to have everything documented?

Answer:

Documentation is only required where the requirements in the rule specify it. Documentation can be provided to point to a description in an existing document when that is being used to meet a requirement that asks for a "description"

A RCOS can refer to a document that has similar, but possibly less, description than is provided in the application as long as it provides sufficient detail to demonstrate that it meets the requirement, but if the description is submitted as text in the application, no referencing a separate document is necessary.

When documentation is required, there should be specific information provided about where each document is located and how it demonstrates meeting the rule requirement. The application should "walk" the reviewer directly to the information.

Public Burden Statement

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995 unless the information collection has a currently valid OMB Control Number. The approved OMB Control Number for this information collection is 0648-0672. Without this approval, we could not conduct this information collection. Public reporting for this information collection is estimated to be approximately 75 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. All responses to this information collection are voluntary, but required to obtain benefits pursuant to the Integrated Coastal and Ocean Observation System Act of 2009 (Public Law 111-11) (ICOOS Act), as amended by Section 103 of the Coordinated Ocean Observations and Research Act of 2020 (COORA) (Public Law 116-271, Title I). The information provided in this information collection will be used by NOAA staff to determine if the entity has successfully met the requirements to be certified as a Regional Coastal Observing System (RCOS). Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to DOC NOAA IOOS: ioos.regions@noaa.gov.