

CWP

Coordinating Working Party on Fishery Statistics

**CWP ad-hoc Task Group on best
practices for streamlining
statistical data workflow and
confidentiality issues**

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Rationale for the Task Group



In response to SDG goals including *SDG 14: Life below water*, many organizations are developing initiatives which promote good governance, participatory decision-making processes and best practices in fisheries.

These include:

- **improving the quality and utility** of fishery and aquaculture data such as streamlining of arrangements for improving consistency
- **reducing discrepancies** among published global and regional datasets
- **reducing the reporting burden** for countries



Streamlining statistical data workflow

CWP 26 identified various actions to further streamline the reporting mechanisms and workflow for capture fishery and aquaculture statistics:

- **Aligning annual data calls and reporting calendars** in order to facilitate data sharing (although may potentially result in a synchronous submission of large amounts of data that may result in pressure points within organizations)
- Implementing **consistent statistical concepts**, standards and definitions
- **Developing mainstream data provisions** which can serve multiple reporting requirements of member countries
- **Improving accessibility of data** through the use of harmonized and accessible formats
- Identifying and **resolving data gaps and discrepancies** through collaborative analysis
- **Improving transparency** through systematic processing and documentation of data sources.

Streamlining statistical data workflow

CWP also agreed that the reporting of national statistics may be further streamlined by:

- **Improving collaboration and exchange of data** among CWP parties through the use of CWP and other international standard classifications
- Developing comprehensive and accessible **data validation, metadata and documentation**, and providing data users **timely and transparent information** in relation to those.
- Providing data users with timely and transparent information on data validation rules, metadata and associated documentation
- Encouraging parties to **identify and share statistical data and reporting issues** such as interpretation and application of standard concepts
- Developing and using comprehensive and accessible **Data Collection Reference Frameworks** (e.g. CWP standard for reference harmonization, catch and effort concepts and classification)
- **Using joint questionnaires**, where possible, to reduce the number of different focal points and thus reduce the reporting burden for the national statistical offices
- Developing and implementing FAIR data principles for **making data findable, accessible, interoperable and reusable**.

Data confidentiality

CWP also discussed **data confidentiality issues which may hamper the dissemination and exchange** of statistical data among CWP parties.

In general, statistical data confidentiality requirements **seek to protect individual identities** including, *inter alia*, aquaculture producers.

Statistical data confidentiality requirements differ from those of the General Data Protection Regulation (GDPR) and CWP parties use **various rules and procedures** to deal with statistical data confidentiality.

Data confidentiality

The responsibility for decisions on the dissemination of statistical data are generally well defined in RFMOs, and CWP highlighted the following points for consideration in further developing statistical data confidentiality requirements. These requirements should:

- **allow metadata from masked data to be published** (i.e. flag the existence of masked data in order to facilitate the possible use of such data under specific conditions)
- consider **temporal limitations** on data confidentiality
- **identify aggregation dimensions and levels**, whereby individual entities can be no longer identified
- provide **clear rules of use for each dataset** through published data access and sharing policies
- consider **exceptions to data confidentiality** rules which may be needed if, for example, the dissemination of data from endangered species is limited by requirements for confidentiality.

Objectives of the ad-hoc Task Group

- Review the statistical data workflow of CWP parties and observers and other relevant cases involved in capture fisheries and aquaculture, and **identify general issues and constraints** which may lead to **discrepancies and replications** in statistical data and **undue data reporting burden** on member countries
- **Review statistical data confidentiality** requirements and rules of CWP parties and other relevant organizations
- Develop best practice guidelines for:
 - **streamlining the reporting mechanisms and workflow** for capture fishery and aquaculture statistics
 - **reducing the overall data reporting burden** on member countries
 - the implementation of statistical data **confidentiality requirements** which protect data confidentiality and promote **comprehensive, transparent and timely dissemination and exchange** of statistical data.

Objectives of the ad-hoc Task Group

The scope of this work concerns domains covered by the CWP Handbook. Where cases of specific interest to CWP Members are identified, this scope may also include the review of the data workflow of CWP observers and other relevant cases which involve countries' multiple reporting requirements to different organizations.

The review of the **statistical data workflow and confidentiality processes** may be split into two streams of work to:

- (1) Review established streamlining processes and **identify strengths, weaknesses and opportunities** arising from these processes.
- (2) Review other relevant workflows and **identify new requirements for streamlining processes** including the use of the CWP Standard for Reference Harmonization.

Activities of the ad-hoc Task Group

During the CWP-26 discussion, it was agreed that the work of TG-workflow may be facilitated through the use of questionnaires and specific work cases. For this reason, a short questionnaire was designed to collect the different practices currently at place in each organization, as part of the CWP task group on best practices for streamlining statistical data workflow, with a focus on confidentiality issues.

Results of this exercise aimed at:

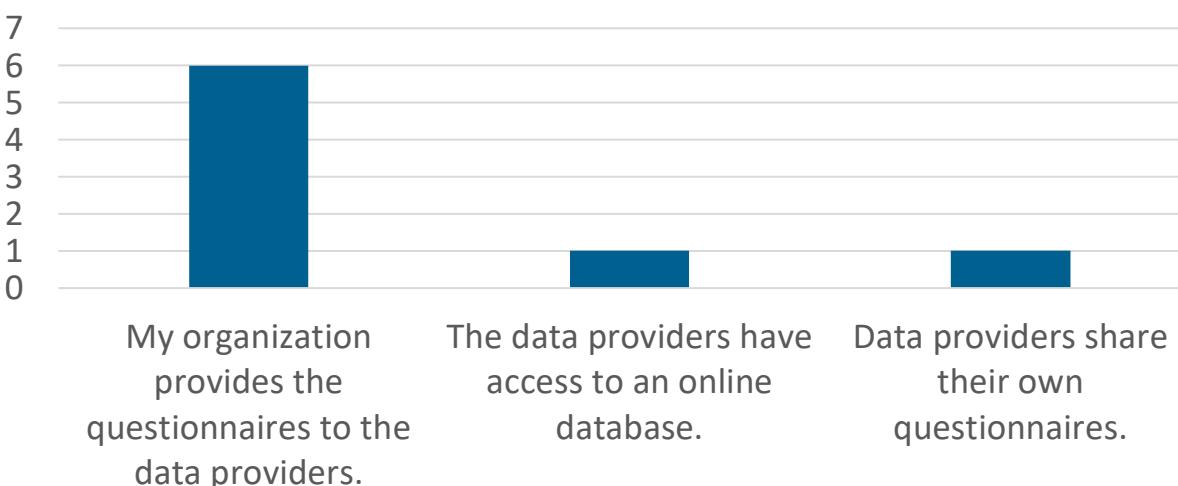
- **reviewing the statistical data workflow** of CWP parties and **identifying general issues** and constraints which may lead to discrepancies and replications in statistical data and undue data reporting burden on member countries
- **reviewing statistical data confidentiality requirements and rules** of CWP parties and other relevant organizations

Questionnaire on Approach to Data Workflow

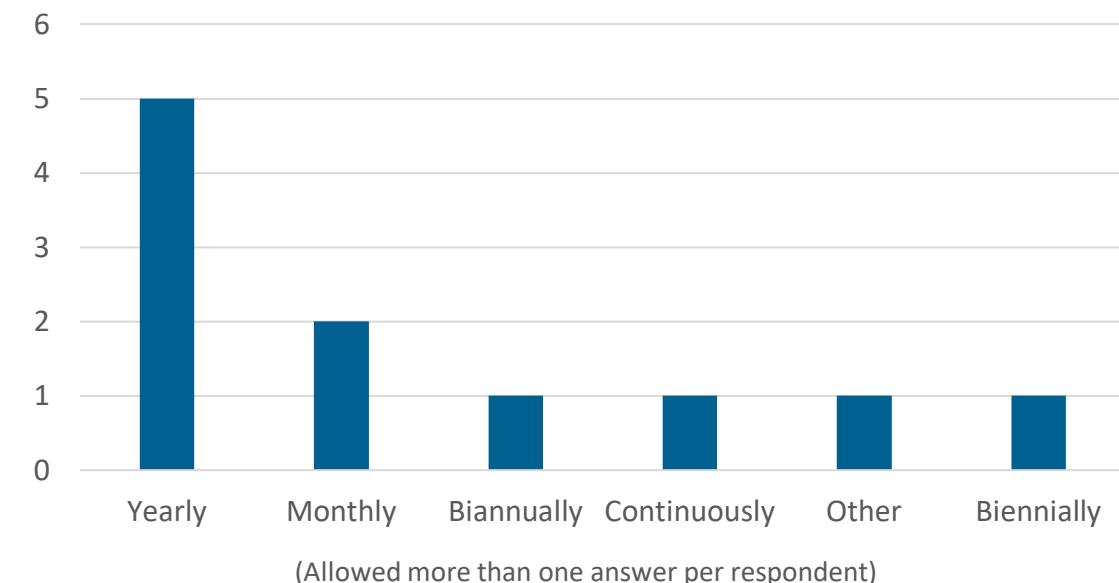
RESULTS:

- Almost all respondents (89 percent) are responsible for data collection and collation.
- In terms of frequency, the majority of respondents receive data yearly or biannually, and 78 percent of respondents make formal data calls (mostly thorough emails), and the majority provide a questionnaire to the data providers.

8w. How is data submitted?



3w. How often is data received/collected?

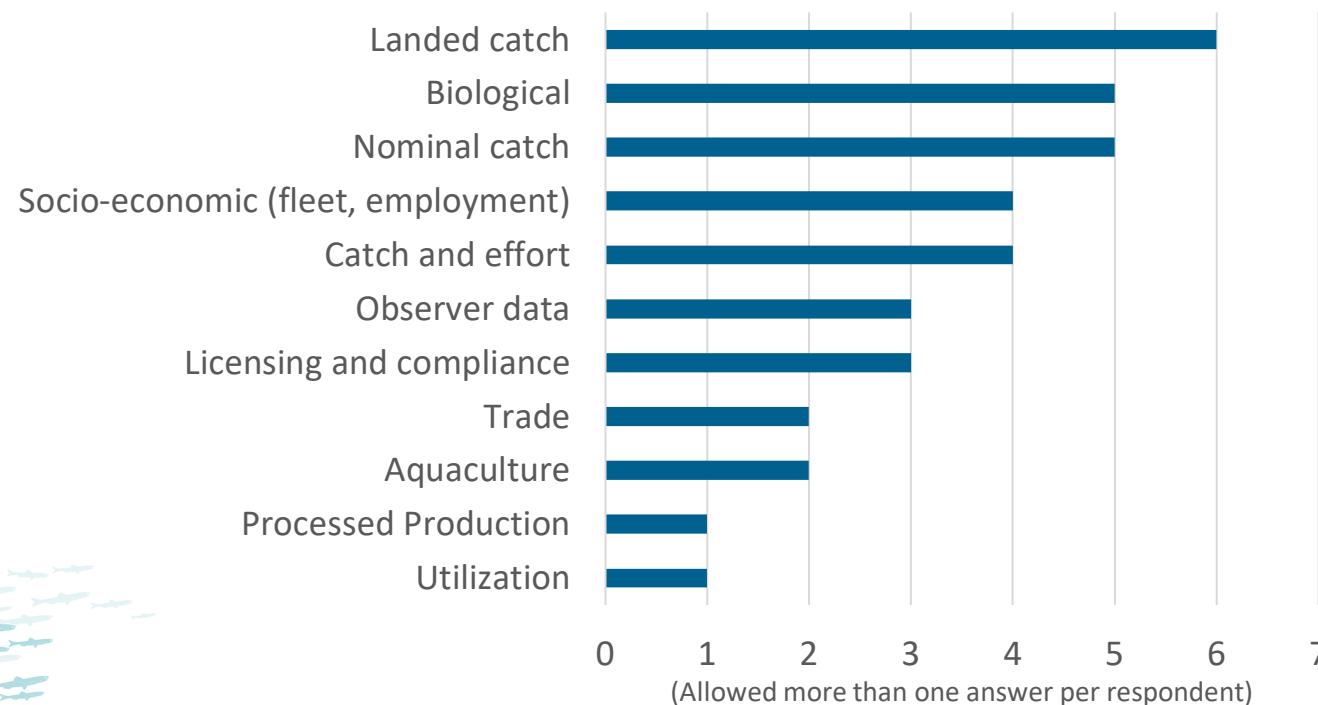


*All figures show the results by
number of answers received*

Questionnaire on Approach to Data Workflow

- Consumption data is not collected by any of the respondents, while aquaculture data and trade data are only collected and collated by 22 percent. The most widely collected data is that of landed catch (67 percent).

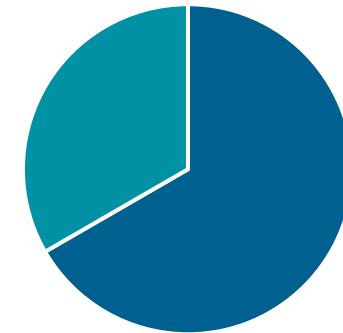
9w. Which data is collected/collated?



Questionnaire on Approach to Data Workflow

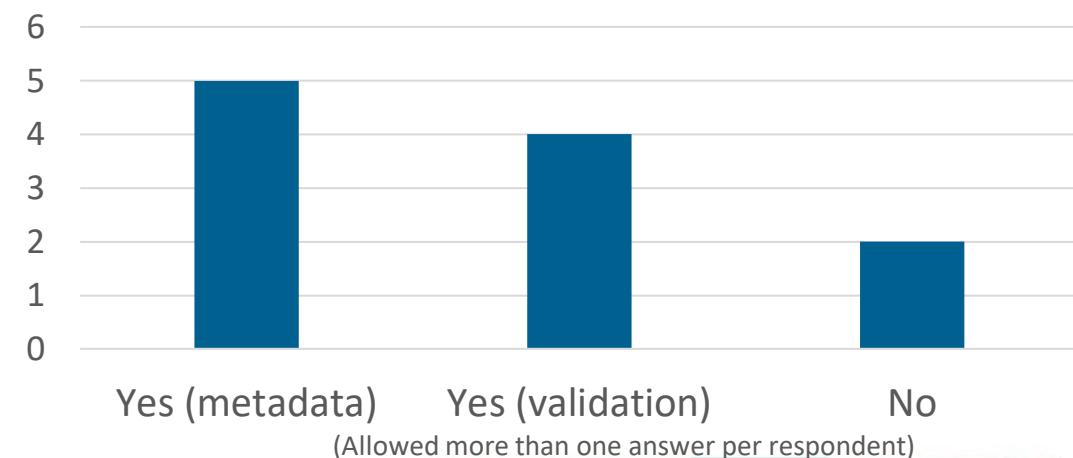
- CWP standard and definitions are widely endorsed (78 percent), while slightly less organizations use other international standards (67 percent). All organizations use ASFIS three-alpha codes to categorize species.
- All respondents indicated that data is shared outside their organization, mostly through online portals accessible to the public, and data goes through a process of validation and standardization before being published
- Most organizations publish either data validation practices or metadata, but only two respondents publish both.

12w. Are other international classifications used in the collection and dissemination of data?

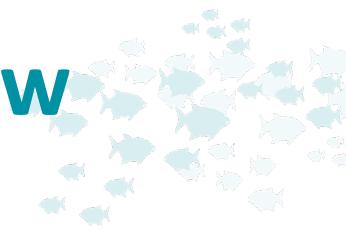


■ Yes ■ No

18w. Do you publish comprehensive data validation practices and metadata?



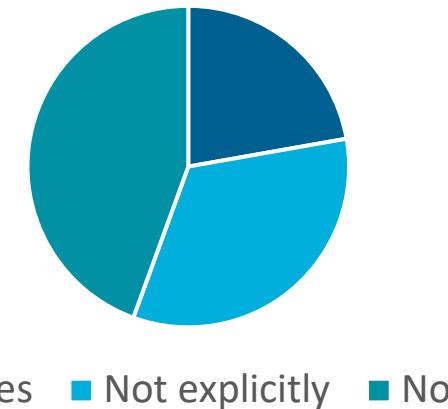
Questionnaire on Approach to Data Workflow



It is important to highlight how organizations are not aligned on other aspects of data workflow.

- 78 percent of respondents do not use (or not explicitly use) Data Collection Reference Frameworks.

19w. Do you use Data collection
reference frameworks?



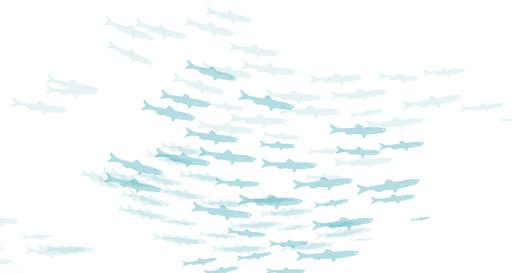
- Most organizations collaborate and/or exchange data with other organizations (78 percent), but a smaller amount (56 percent) uses a joint questionnaire and harmonizes data.



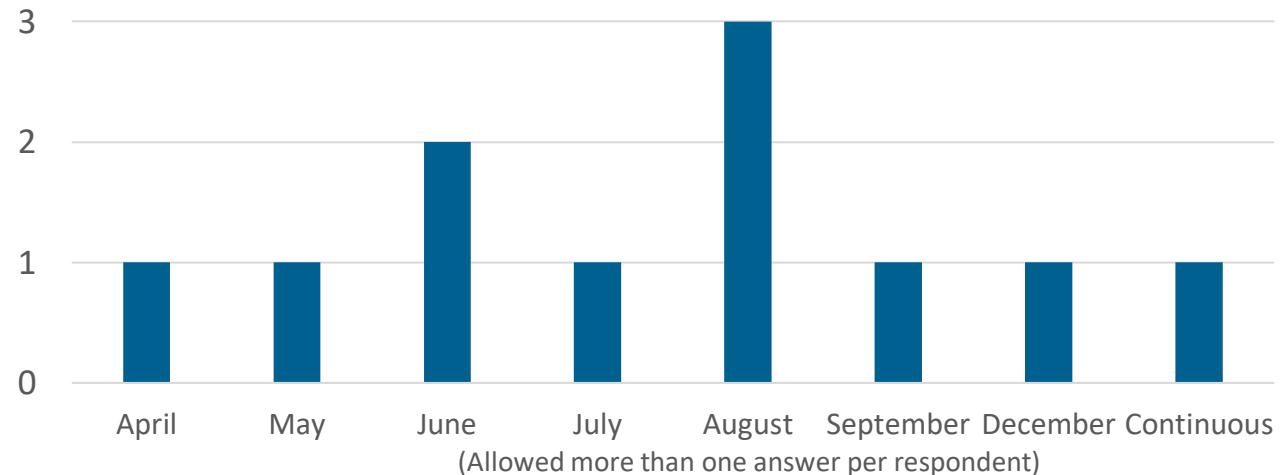
Questionnaire on Approach to Data Workflow



- 89 percent of respondents stated that the deadline for data submission is aligned with internal workflows and deadlines, the deadlines for the data submissions for each organization are spread throughout the year.
- When using estimations to fill data gaps, respondents are almost equally split between positive and negative answers.



6w. What are your organization's deadlines, if any, for the submission of the data?



17w. Are data gaps filled through estimations?



Questionnaire on Approach to Confidentiality

RESULTS:

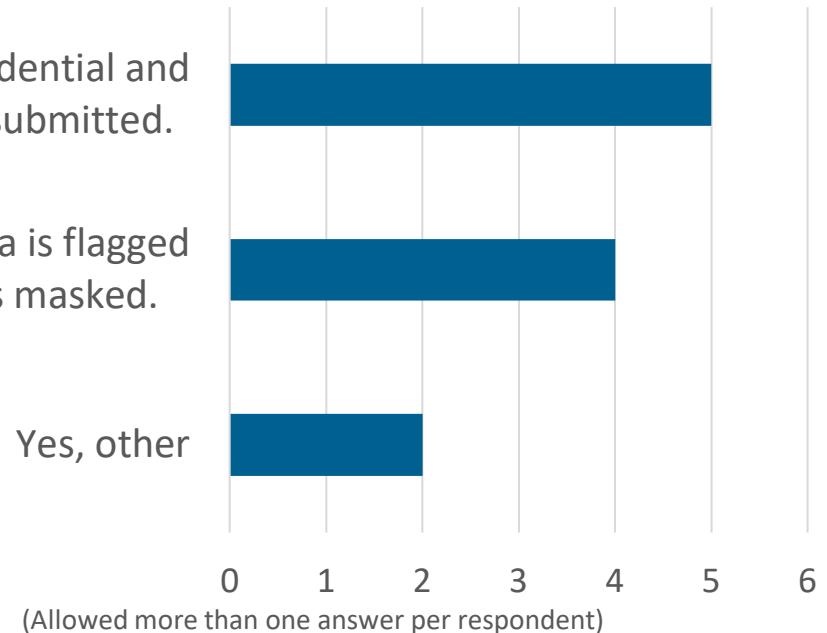
- All organizations receive confidential data from data providers, with the original data (56 percent) or with masked original data (44 percent).
- The large majority of respondents do not share data as confidential even in the case the providers did not flag it as confidential.

1c. Does your organization receive confidential data from its data providers?

Yes, the data is confidential and the original data is submitted.

Yes, confidential data is flagged and original data is masked.

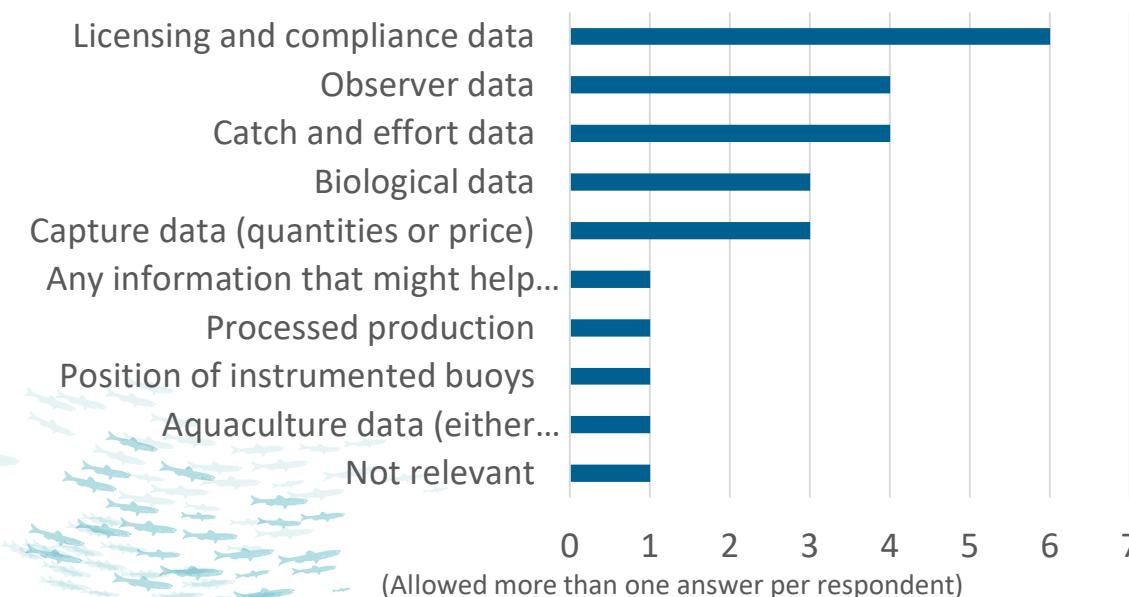
Yes, other



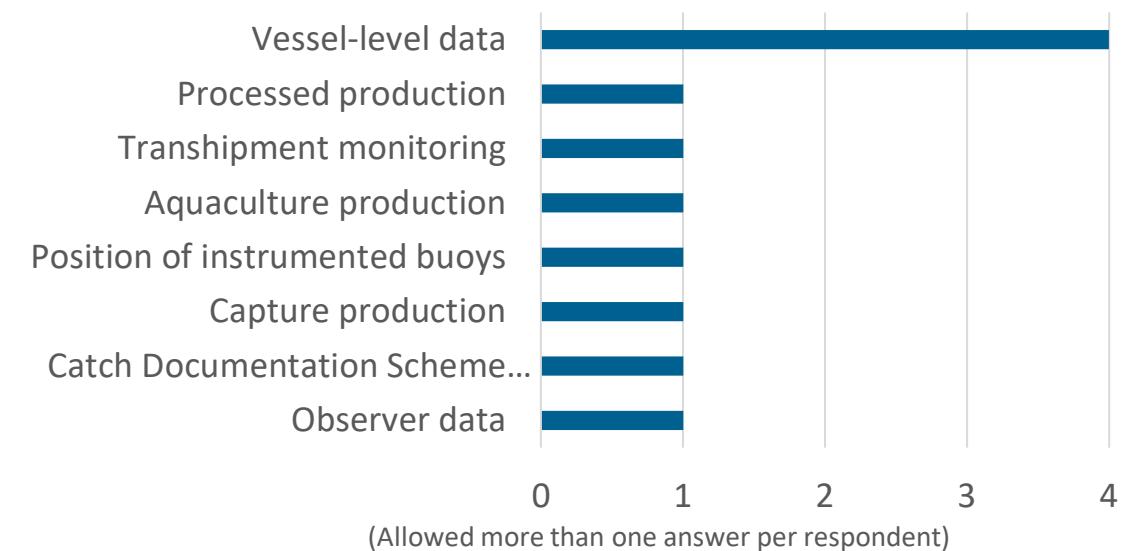
Questionnaire on Approach to confidentiality

- The data considered most confidential is licensing and compliance data, observer data, and catch and effort data. Aquaculture data, on the other hand, was not significantly flagged as confidential. In particular, vessel-level data was given as a common example of data variables considered as being confidential.

3c. Which data does your organization consider as being confidential?



4c. Please provide examples of data variables which are considered as being confidential.



Questionnaire on Approach to confidentiality

- When disseminating data, 56 percent of the respondents indicated confidential data is masked at the most detailed level and at all the subsequent aggregates in which it is included, while 44 percent mask the confidential data but disseminate the aggregates.
- Overall, no temporal limitations are applied to confidentiality rules.

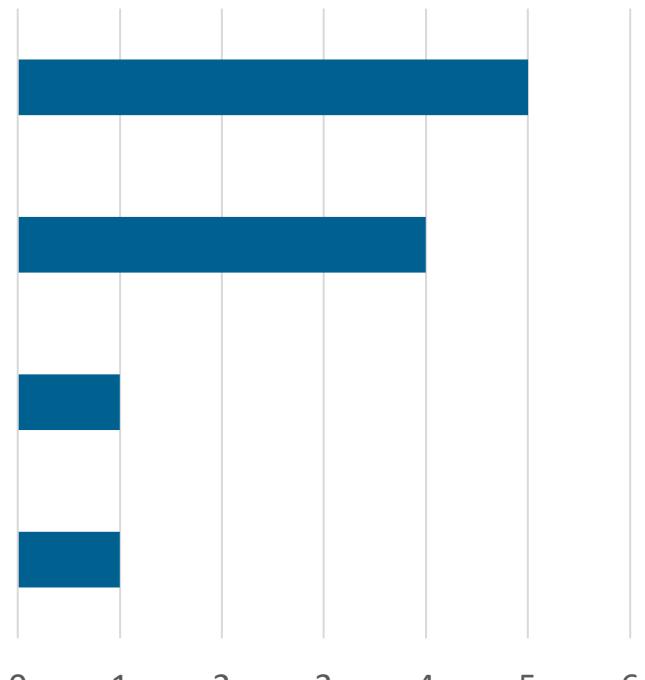
6c. When disseminating data, how does your organization handle confidential data?

You mask the confidential data at the most detailed level but disseminate the aggregates.

You mask the confidential data at the most detailed level and at all the subsequent aggregates in which it is...

You replace confidential data by estimates.

Exclude data where it can potentially identify vessels



(Allowed more than one answer per respondent)

Next steps



These initial results provide a **basis for the TG's discussion on the development of best practice guidelines** for streamlining the reporting mechanisms and workflow for capture fishery and aquaculture statistics as well as for the **implementation of statistical data confidentiality requirements**.

It is envisaged there will be a need to **further expand the coverage of the questionnaire** in order to obtain a more comprehensive overview of the different practices at place in all CWP member organizations. **CWP members that have not filled the questionnaires yet are kindly invited to do so.**

In addition, another proposed step is to **look at these practices in more detail**, starting with some of the organizations that display more similarities in terms of data collection and confidentiality procedures.





Thank you • Merci
Благодарю • ¡Muchas gracias!
謝謝 • شکرا

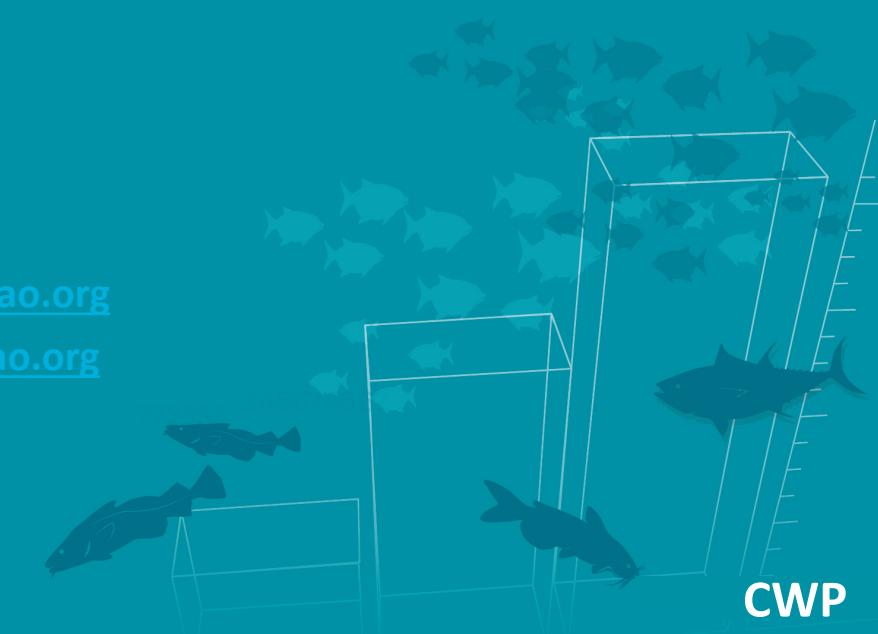
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