



Food and Agriculture  
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Commission des Thons de l'Océan Indien



COMMON OCEANS

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# E-MARIS VALIDATION WORKSHOP

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**APPLICATION SCOPE,  
ORGANISATION & DEVELOPMENT**

### SCOPE

- ▶ The global aim of the e-MARIS project is to replace the current manual process with a web-based centralized system that would allow CPCs to declare their information and help the IOTC Secretariat in assessing the Compliance Status of each CPC.

# SCOPE

- ▶ e-MARIS should cover all requirements, both for Compliance and Science
- ▶ e-MARIS should cover the whole process:
  - ▶ information calls
  - ▶ information submission
  - ▶ reporting & compliance evaluation
  - ▶ production of reports & other compliance products

# SCOPE

- ▶ information calls
  - ▶ schedule / reminders
  - ▶ content of the call: what to report
  - ▶ follow-up

# SCOPE

- ▶ information submission:
  - ▶ one central location for all submissions
  - ▶ submission through the system, with instant feedback
  - ▶ possibility to update submissions
  - ▶ visible submission status

# SCOPE

- ▶ reporting & compliance evaluation:
  - ▶ constantly visible reporting status
  - ▶ after evaluation by IOTC, visible draft compliance status

# SCOPE

- ▶ production of reports
  - ▶ «national reports» on science information (CPCs)
  - ▶ «implementation reports» on CMMs (CPCs)
  - ▶ compliance reports (IOTC)
  - ▶ other reports as per future needs



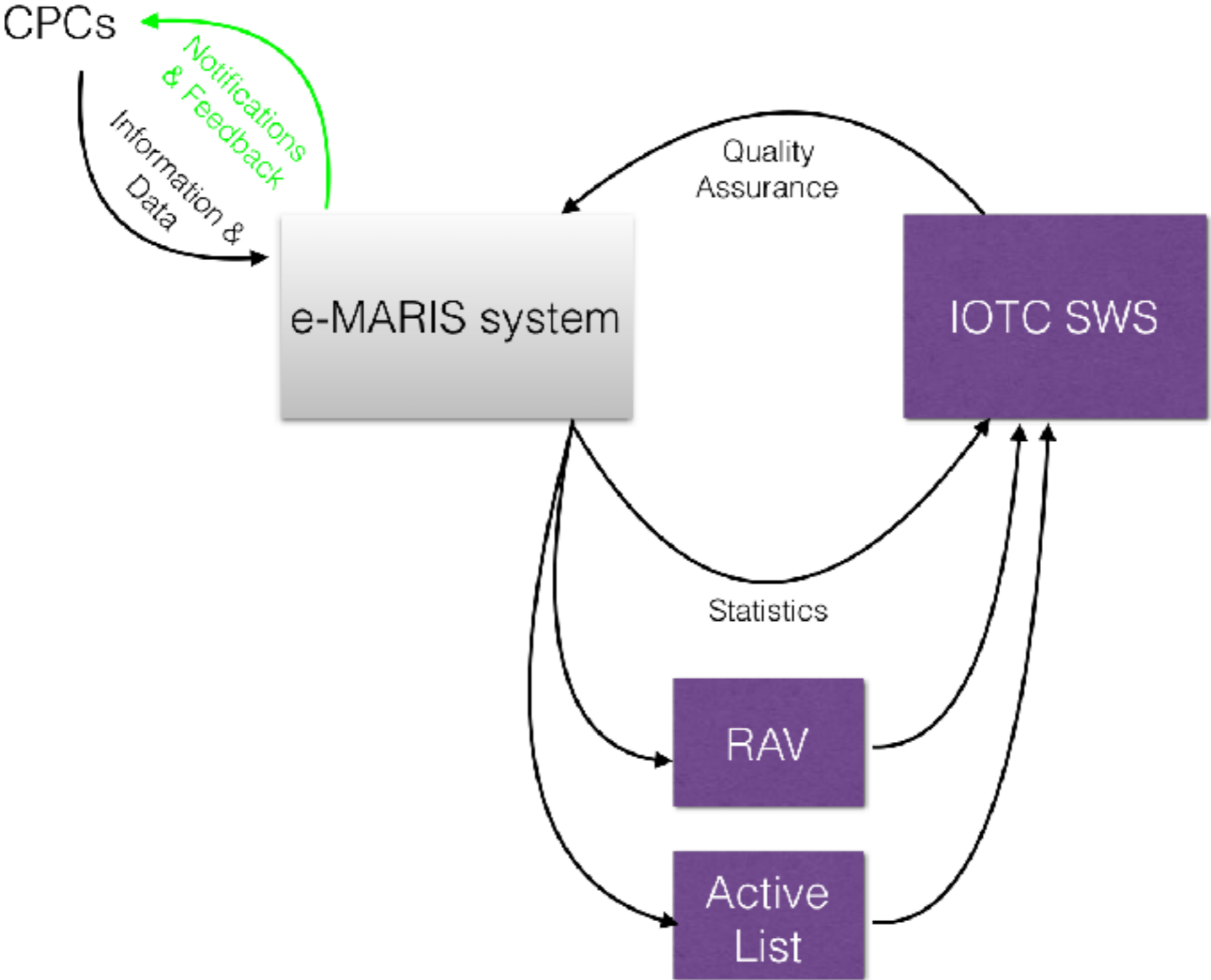
# SCOPE

- ▶ other compliance products:
  - ▶ live reporting and draft compliance status
  - ▶ individual CPCs compliance scorecard
  - ▶ global CPCs compliance scoreboard
  - ▶ any other product as per future needs

# GLOBAL ORGANISATION

- ▶ Proposed organisation comes from results of IOTC (and other tRFMOs) requirements & processes review
- ▶ It takes into account the existing IOTC systems
- ▶ It tries to be as close as possible to the current processes in place, to minimise disruption

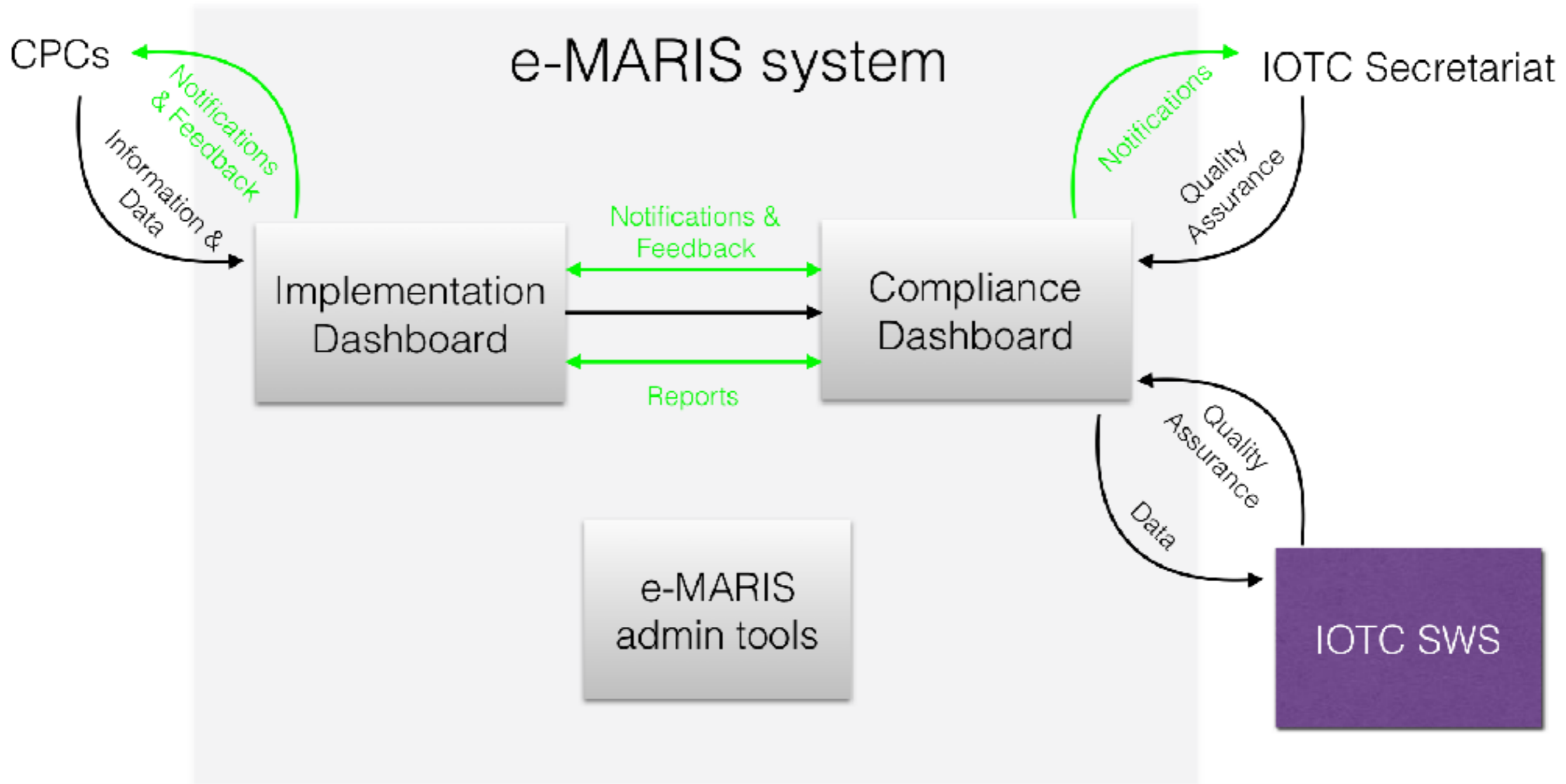
# GLOBAL ORGANISATION



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- ▶ **Implementation Dashboard for CPCs** (see the submission requirements, answer questions, submit requested documents and data, get feedback from IOTC Secretariat, etc.)
- ▶ **Compliance Dashboard for IOTC** (see submission status for each CPC, interact with CPCs, build Compliance reports, etc.)
- ▶ **Administration tools for IOTC** (manage users, build Implementation Report templates, manage notification schedule, perform administrative tasks, etc.)
- ▶ **Links to the IOTC Statistical Working System** (sending CPC data submissions to it and retrieving validation and QA information from it)

# GLOBAL ORGANISATION



## TECHNICAL REQUIREMENTS

- ▶ System requirements:
  - ▶ Hardware: preferably a Virtual Machine
  - ▶ Software: open-source, proven technologies
  - ▶ Reliability: must be running 24/7/365
  - ▶ Security: must comply with the IOTC Data Access rules & policies

## TECHNICAL REQUIREMENTS

- ▶ Information storage:
  - ▶ Statistical data: existing solution used by IOTC
  - ▶ e-MARIS information, data and files: ad-hoc

## TECHNICAL REQUIREMENTS

- ▶ Application hosting:
  - ▶ Local: on a physical server running on the Secretariat's premises
  - ▶ Cloud: deployed on a remote (virtual) server, maintained by a third-party provider



# DEVELOPMENT

- ▶ The scope of e-MARIS is rather massive, as evidenced by the number of features proposed above and the importance it would have within the IOTC processes.
- ▶ To avoid overly long development time and the numerous issues that plague software projects that try to do too much at once, it is recommended to adopt a progressive, modular approach
- ▶ A first phase could be to work with the selected software developers to identify the main features for e-MARIS, and evaluate the time and resources for their implementation, which would help prioritize development.

# DEVELOPMENT

- ▶ 1. CPC-facing features:
  - ▶ a. Signing in and out, user access privileges etc.
  - ▶ b. displaying the list of requirements
  - ▶ c. submitting the required data and storing it
  - ▶ d. updating and displaying the reporting status.
- ▶ 2. IOTC-facing features:
  - ▶ a. Signing in and out, user access privileges, managing user accounts etc.
  - ▶ b. Managing requirements sets and requirements.
  - ▶ c. Validating CPC submission.

# DEVELOPMENT

- ▶ For the roll-out of e-MARIS, it is recommended to also use a progressive approach:
  - ▶ 1. Start with a few selected CPCs and a limited set of requirements, and guide them through using e-MARIS to submit the required information.
  - ▶ 2. Get their feedback, both in terms of what works and what doesn't.
  - ▶ 3. Fix issues, improve features, add missing features.
  - ▶ 4. Iterate by adding more CPCs/requirements. Do this for each new feature.