



**E-MONITORING AND E-REPORTING WORKSHOP**

Pacific Islands Forum Fisheries Agency Headquarters, 31 March – 1 April 2014  
Honiara, SOLOMON ISLANDS

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**Scientific data and E-Reporting**

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**31 March 2014**

**Peter Williams**

# Scientific data and E-Reporting

## WCPFC E-Monitoring/E-Reporting Workshop

FFA Conference Centre, Honiara, Solomon Islands

31 March – 1 April 2014

Peter Williams, SPC



# Presentation outline

## Scientific data standards

- What currently exists ...
- What needs to be done to better support E-Reporting ...

## SPC E-Reporting initiatives

- SPC's role in E-Reporting
- eTUNALOG
- eTUBS

# Scientific data standards

What currently exists ...

## WCPFC

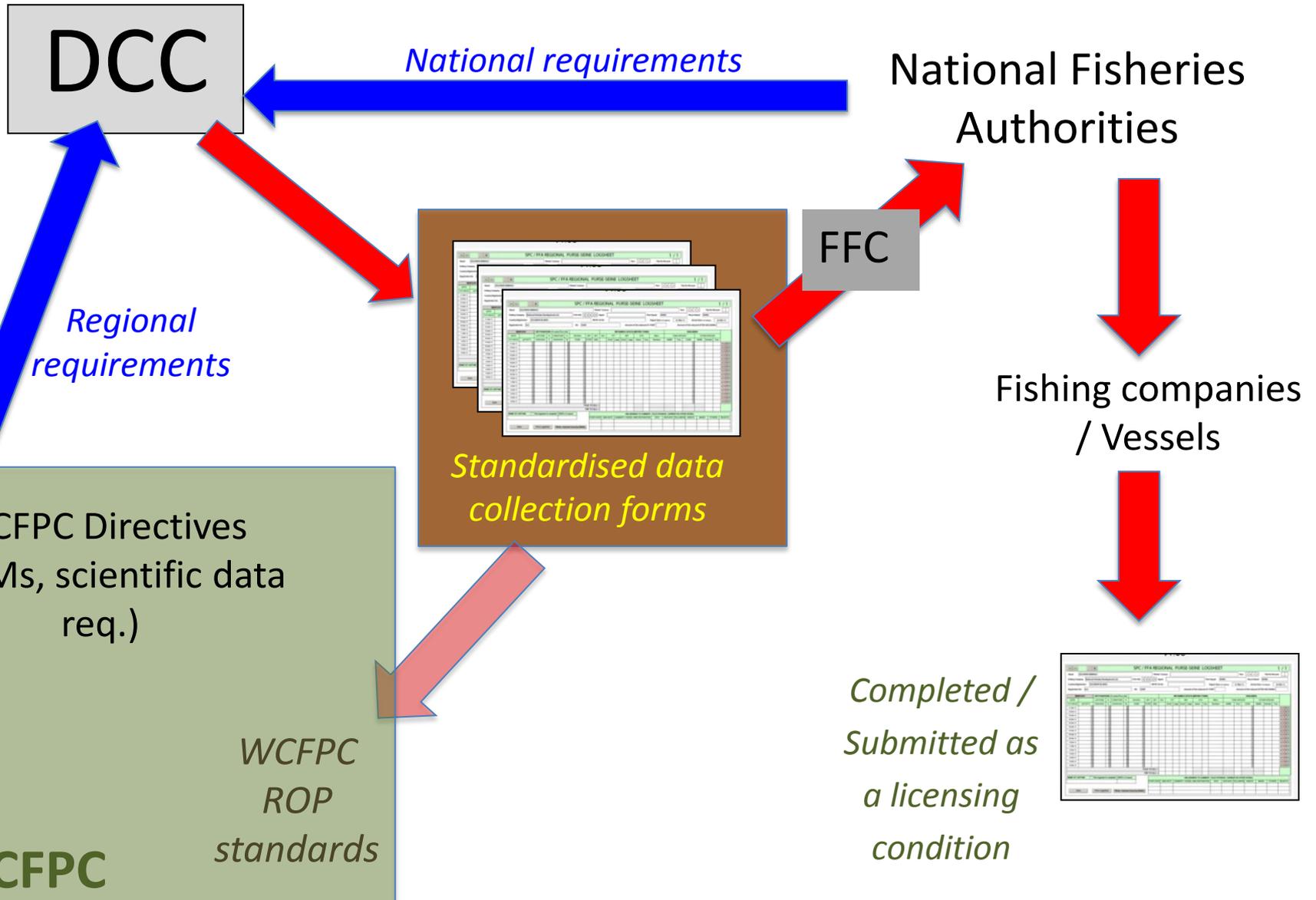
- “Scientific data to be provided to the Commission”
- WCPFC Regional Observer Programme (ROP) minimum data standards

## SPC/FFA Data Collection Committee (DCC)

- Established in 1995
- SPC and FFA staff, but also WCPFC and NMFS data collection experts and invited countries (two) on rotational basis
- Regional standard data collection forms
- Logsheets, observer, port sampling and unloadings forms
- Vessels licensed to fish in SPC/FFA member country EEZs
- Clear links to WCPFC scientific data standards

# Scientific data standards

What currently exists ...



# Scientific data standards

**Problem** : Lack of TECHNICAL information on data fields for E-Reporting System providers ...

(identified in Dunn & Knuckey)

*A positive step ...*

**DCC9** (9<sup>th</sup> Meeting of the DCC / 17-18 March 2014)

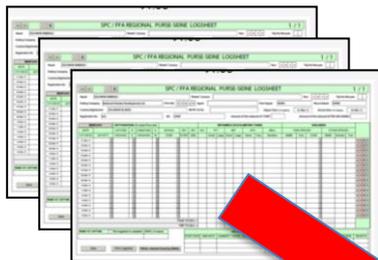
- Acknowledged the move to E-Reporting
- New role to produce technical level information on standard scientific data fields
- An initial example for review and ongoing work...
- Input to WCPFC E-Reporting data standards...

# Scientific data standards

## DCC9 (17-18 March 2014)

### SPC/FFA Regional Standard data fields – PURSE SEINE LOGSHEET

- Tabulate data fields from the regional purse seine logsheet
- Provides the necessary TECHNICAL detail...
- Nothing new ... Uses existing standardised data...
- Consistent with WCPFC Scientific data requirements...



ANNEXA.

#### SPC/FFA REGIONAL STANDARD DATA FIELDS – PURSE SEINE OPERATIONAL LOGSHEET DATA

Draft – version 0.3 – 27<sup>th</sup> March 2014 ... NOT FOR RELEASE

This table sets out the SPC/FFA regional minimum standards for operational logsheet data fields collected in the WCPFC tropical purse seine fishery, as proposed by DCC9 (March 2014). This table is, *inter alia*, directed to third-party E-Reporting providers who have been contracted to provide systems to record logbook information on-board purse seine vessels. This table provides the precise requirements for data formats and data validation prior to submission to the national and regional fisheries authorities.

TRIP						
FIELD	Data Collection Instructions	Field format notes	Validation rules	NAF CODE	XML TAG	WCPFC
TRIP IDENTIFIER	Internally generated. Can be NATURAL KEY or unique integer. NATURAL KEY would be VESSEL + DEPARTURE DATE					
VESSEL NAME		CHAR(10) UPPER CASE	Must be consistent with the FFA Vessel Register	NA		Y
COUNTRY OF VESSEL REGISTRATION		CHAR(2) ISO 3166-1 alpha-2 two-letter country code	Must be consistent with the FFA Vessel Register	IS		Y
VESSEL REGISTRATION NUMBER	PROVIDE the VESSEL attributes which should be consistent with the attributes stored in the FFA Regional Vessel Register	UPPER CASE CHAR(10)	Must be consistent with the FFA Vessel Register			Y
FFA VESSEL REGISTER NUMBER		UPPER CASE INTEGER(5)	Must be consistent with the FFA Vessel Register			N
UNIVERSAL VESSEL		INTEGER(10)	Must be consistent with the FFA Vessel Register			N

- Data field and description
- Instructions for collection
- Specific field picture/format
- Data Validation requirements
- Specific NAF code / XML tag
- WCPFC field ?

# SPC E-Reporting initiatives

SPC's mandate is, *inter alia*, to provide technical assistance to its member countries, WCPFC, FFA, PNA ...

E-Reporting products (eTUBs and eTUNALOG) are examples of SPC responding to member countries requests

SPC is also expected to provide assistance to member countries using third-party E-Reporting products (e.g. PNG/NFA iFIMS/FIMS), for e.g.

- Data loaders for national databases
- Advice on how to submit data to regional agencies
- Etc.

# SPC E-Reporting initiatives

## Scope of trials

- Operational catch/effort data
  - LOGBOOKS and OBSERVER data
- Improve EFFICIENCY and TIMELINESS of data collection
- INTEGRATION of data into NATIONAL and REGIONAL data systems
- Better understanding of implementation issues
- Purse seine initially, extending to longline

# eTUNALOG: Electronic Logbook Reporting

Electronic Logsheet Management

Main | Logsheets | FAD Records | Application Parameters | About eTUNALOG



**SPC / FFA REGIONAL PURSE-SEINE LOGSHEET** 1 / 1

Vessel: SULLOCHON EMERALD    Fleet / License:    Year: 2011    Trip No. this year: 1

Fishing Company: National Fisheries Development Ltd    FFA ID: 515020    Agent:    Port Depart: NCRD    Place Onboard: NCRD

Country/Registration: SULLOCHON ISLANDS    MOPC ID No:    Depart Date (mm/dd/yyyy): 01-Mar-11    Arrive Date (mm/dd/yyyy): 30-Mar-11

Registration No: 942    RC: 942A    Amount of fish onboard AT START:    Amount of fish onboard AFTER UNLOADING:

MINDAY		SET POSITION (12 rows if set used)				RETAINED CATCH (METRIC TONS)										DISCARDS				
DATE	ACTIVITY	LATITUDE	IN	LONGITUDE	Q	SCHOOL	SET	SET	SHJ	FFY	SET	OTH	WELL	TUNA SPECIES		OTHER SPECIES				
0700-0800		Coordinates	D	Coordinates	W	CODE	START	END	Small	Large	Small	Large	None	None	Numbers	WEIGHT	CODE	WEIGHT	None	
01-Mar-11																				
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31-Mar-11																				
PAGE TOTALS																				
TRIP TOTALS																				

NAME OF CAPTAIN:    This logsheet is complete    DATE (mm/dd/yyyy):

UNLOADS TO CANNERY, COOL STORAGE, CARRIER ON OTHER VESSEL

START DATE	END DATE	CANNERY / VESSEL AND EXTRACTOR	WGT	DISPATCH	FOLLOWING	SHRDS	RESDS	OTHERS	REJECTS

Save    Print Logsheet    FINAL: Submit Data by EMAIL

SPC Purse Seine Electronic Logsheet Management System



# eTUNALOG – 2013 trials

- 14 vessels since June 2013: SI, NZ, FSM, US and RMI
- Three versions were trialed (*updates thanks to user feedback*)
- Easy learning curve (standard content/layout)
- Data transmission via vessel email - efficient
  - For NFAs and SPC: XML format – 5 to 15kb
  - For companies: 'Flat' PDF format – 4 to 8 kb

## 2014 work plan includes ...

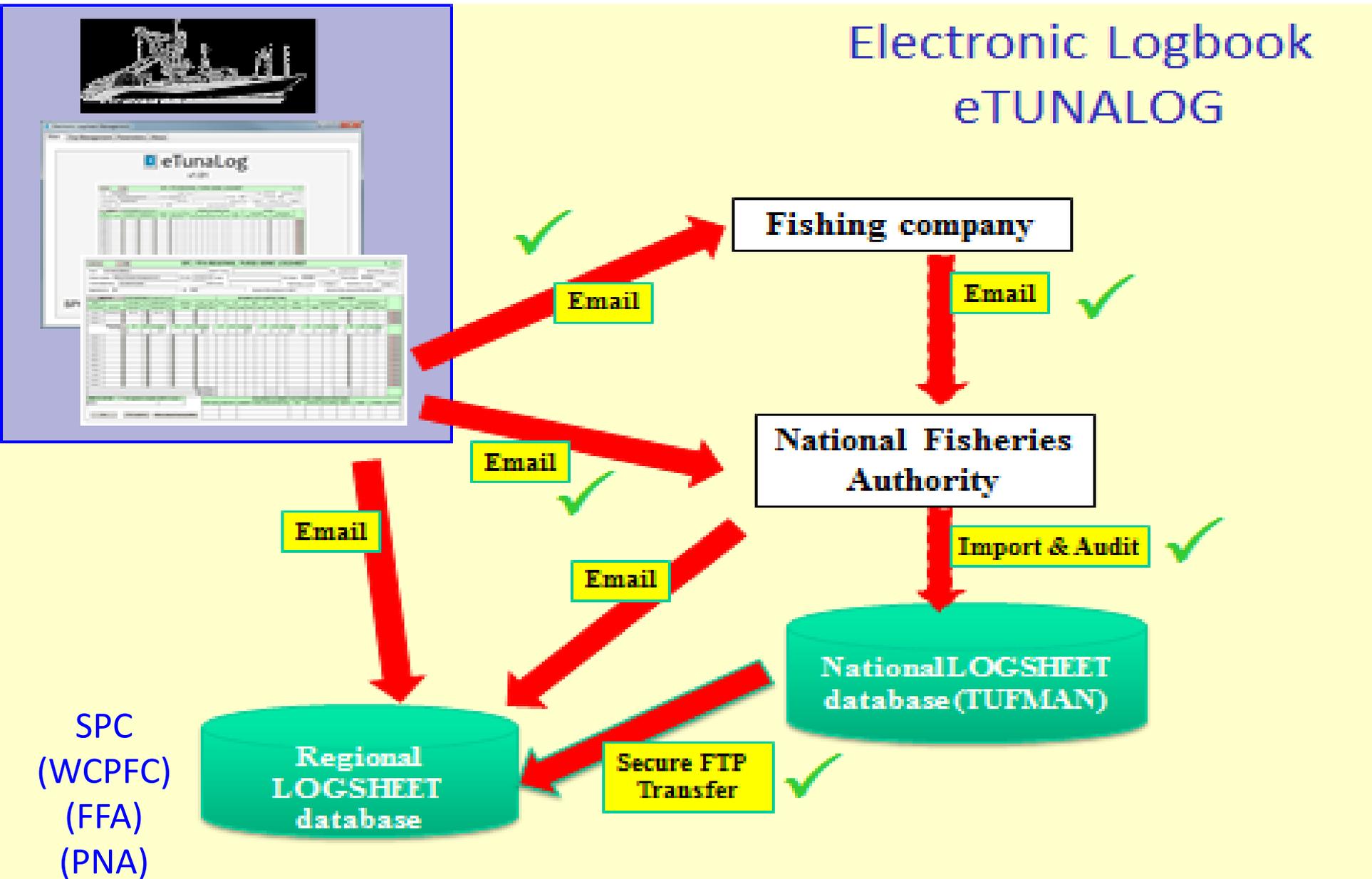
- Expand the number of vessels for trials (see fleets above)
- Longline eTUNALOG

# eTUNALOG – Data integration

- National database systems (TUFMAN) have the data loader for eTUNALOG data
- FSM, RMI and Sol. Is. are uploading eTUNALOG data into their national TUFMAN databases
- The data are audited as a part of the import process ensuring quality ...

.. More information on eTUNALOG is available at the SPC-OFP web site

# Data Flow - eTUNALOG



# Onboard observer data entry (eTUBs)

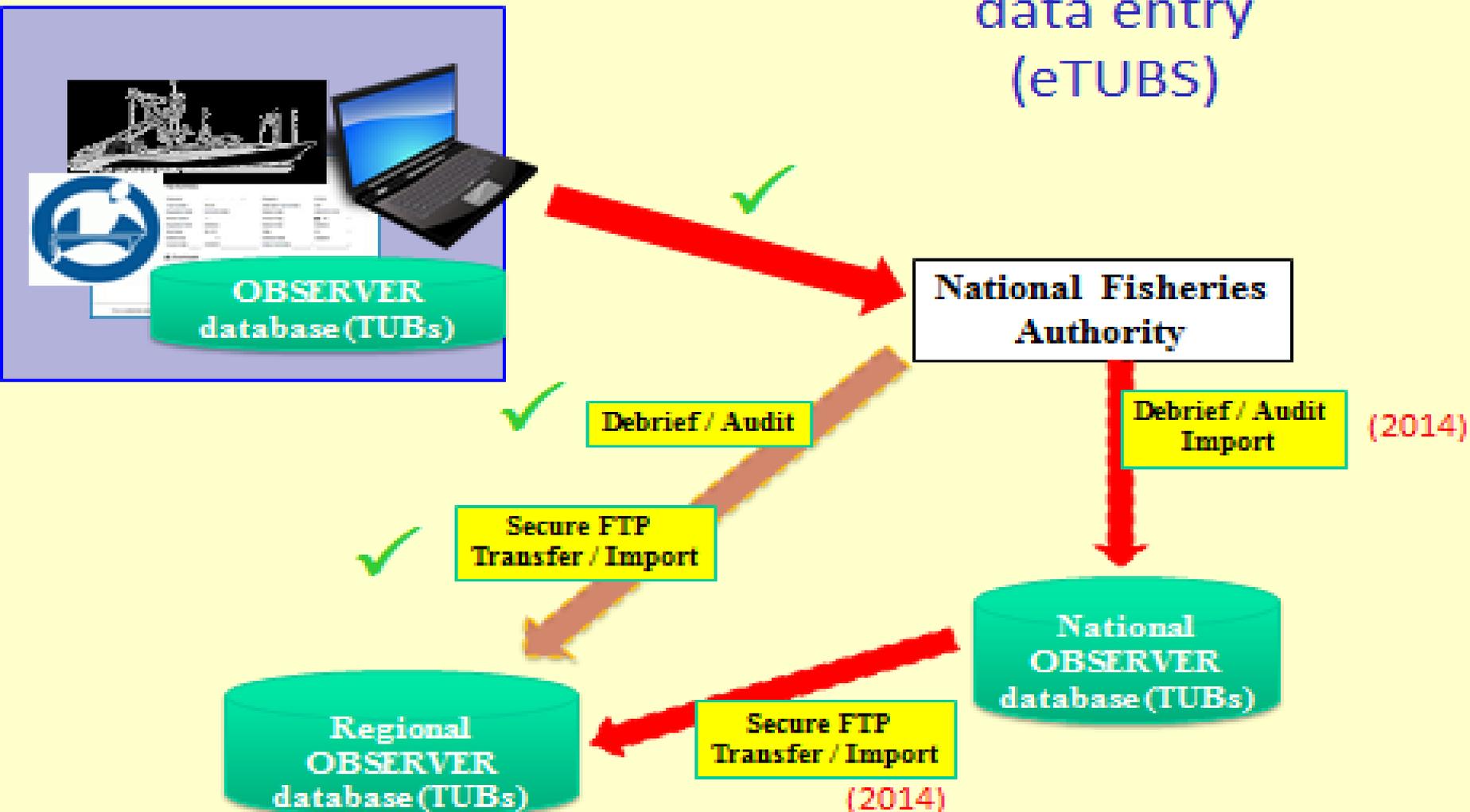
- Database system used by the observer to enter data on-board the vessel
- Identical database system used at SPC, WCPFC and FFA
- Comprehensive online checks to ensure data quality
- During 2013 .... 5 observers were trained - 7 trips conducted

# eTUBs – Outcomes / Lessons learnt

- Data quality >90% accuracy / Comprehensive online checks
- Very positive feedback from Observers
- Use tablets to record catch/size data (2014 work plan)
- CRITICAL needs for implementation
  - *Adequate TECHNICAL support in countries*
  - *Integrated E-Debriefing tools need to be developed (RIMF)*
  - *Basic computer training in courses to observers*

# Data Flow with eTUBs - Observer E-Reporting

On-board observer  
data entry  
(eTUBS)



# Thank you

