

## TECHNICAL AND COMPLIANCE COMMITTEE

#### **Seventh Regular Session**

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## DATA ENTRY COSTS FOR NOUMEA AND POHNPEI

WCPFC-TCC7-2011/16 18 September 2011

## **ISSUES:**

1. This paper revisits the overall ROP data entry costs for SPC and the costs if the ROP data were entered at WCPFC in Pohnpei.

## **DECISIONS/ENDORSEMENTS:**

2. TCC7 is invited to make a recommendation to the Commission as to which strategy the Commission should adopt for future ROP data entry operations.

## **DISCUSSION:**

- 3. Cost scenarios between Noumea, Fiji and Pohnpei were discussed at the TCC6 and WCPFC7; following a submission by New Caledonia indicating that they would subsidize the ROP data entry activities if it were to remain in Noumea. WCPFC7 decided the data would continue to be entered in Noumea by the science provider SPC. The 2011 budget approved by WCPFC7 was calculated for data entry to occur in Noumea taking into account the New Caledonia subsidy and a project funded by New Zealand that had implications on the staffing costs of some of the senior positions required to manage and qualify the data received by SPC. Both the subsidy and these staff costs are expected to remain for 2012 and the budget costs should be similar to what was requested in 2011.
- 4. It has been reported that the project funding and New Caledonia subsidy will probably expire at the end of 2012. Therefore budgets from 2013 will require revised figures for the cost of Data Entry; noting that there are suggestions on funding in the cost recovery paper (WCPFC/TCC7-2011-09 Rev 1) and also that some member countries have indicated their desire to process their own data. It is not clear whether these countries wish to fund their own data entry staff member or ask for funding assistance from SPC, FFA or WCPFC. Other countries may wish to continue their current arrangements and send their data to SPC to be entered, while some may wish the Commission to enter the data. There are many possible scenarios and this paper only looks at three scenarios to give an idea of the overall costs of ROP

data entry: cost of data entry in Noumea; cost of data entry in Pohnpei; and cost of data entry shared equally between Noumea and Pohnpei.

- 5. Currently SPC enters most of the data, and until recently most of this has been done in Noumea, however there has been some regionalization by placing some data punchers in the countries where great amounts of data are received. SPC has been funding this task from funds received from WCPFC and other donor sources. Currently two SPC data entry persons are placed in Pohnpei.
- 6. Tables 1 and 2 represent an estimate of costs involved in ROP data entry by SPC, and ROP data entry by WCPFC. The total estimated cost for data entry in Pohnpei is US\$843,107 and the data entry cost for Noumea is US\$896,811 making the difference in total costs US\$53,704. However, it should be noted that some of the items are currently funded by extra budgetary sources and may not require funding; they are included in the figures in the tables to show the overall costs of data entry. If extrabudgetary funding expires for these items, funds will be required to maintain data entry management and quality control.
- 7. Table 3and 4 are a hybrid of tables 1and 2, and takes into account that seven data entry persons and a supervisor would be based in Pohnpei at the Commission Secretariat, with the other data entry personnel based in Noumea, under this scenario it is expected that the data will continue to be held by SPC and analysis would remain with SPC, with input from WCPFC where required. The cost for data entry under the Hybrid scheme is US\$860,758. It should be noted that some of these items are currently funded by other sources and would not need to be funded immediately.
- 8. Members are invited to note costs involved and are reminded that future budgets may need to be revisited depending on outcomes for cost recovery and also the decisions made to where data is to be entered.

Table 1 Data Management costs for ROP Collected Data – Noumea and Pohnpei

Costs	Staff	WCPFC	SPC/OFP				
Item	Unit	Pohnpei	Program Noumea	Notes			
ROP Data Analysis/Management							
ROP Data Manager	1	171,115	132,250	1			
ROP Data Quality Officer	1	143,757	132,250	1			
IT Supervision of equipment and Software	.25	0	0	2,9			
Observer Data Collection ( Monitoring advisers)	.05	0	0	3,9			
Commencement costs first year?							
Recruitment	2	43,130	0	8			
Data processing							
Data Registry Clerk	1	18,937	38,000	4,5			
Data Entry (ROP trips) - Purse seine /Carrier	10	189,370	334,000	5			
Data Entry (ROP trips) – Longline	4	75,748	152,000	5			
Sub total		<u>642,057</u>	<u>788,500</u>	0			

Table 2

<u>Materials to support submission of ROP</u> <u>data</u>	Cost per unit	Unit	WCPFC Pohnpei	SPC/OFP Program Noumea	Notes
Printing costs (scans> paper) - LL	0.013	31153	203	203	16
Printing costs (scans> paper) - PS	0.013	123200	801	800	16
Cost of workbooks for observers (Purse seine)	Guam \$19.88 SPC \$13.88	2200	43,736	30,536	10
Cost of Workbooks (Long line)	Guam \$13.00 SPC \$9.59	800	10,400	7,672	10
Cost of freight (Air freight) (PS=700g LL = 400g)	1kg =\$15	1860 kg	27,900	27,900	11
Scanner maintenance and replacement (SIDS)	8 @ \$1500 4@ \$3700	12	26,800	26,800	12
Cost of IT equipment, Computers and Software	\$2000	17	34,000	4,800	13
Cost of Work Stations	\$500	17	10,550	0	13
Travel			9,600	9,600	6
Administration and Ancillary cost	WCPFC \$2180	17	37,060	0	17
Sub Total			201,050	108,311	-
Total Table 1& 2 WCPFC & SPC			843,107	896,811	

## Hybrid Model- (Half data entry in Pohnpei half in Noumea)

Costs	Staff Unit	WCPFC Pohnpei	Staff Unit	SPC/OFP Program Noumea	Notes		
ltem							
ROP Data Analysis/Management							
ROP Data Management/data quality	1	143,757	1	132,250	1		
IT Supervision of equipment and Software	.12	0	.12	0	2,9		
Observer Data Collection ( Monitoring advisers)	.03	0	.05	0	3,9		
<u>Commencement costs</u>	<u>Commencement costs</u>						
Recruitment	1.5	21,565	1.5	12,000	8		
<u>Data Processing</u>							
Data Registry Clerk	1	18,937	1	38,000	4,5		
Data Entry (ROP trips) - Purse seine /Carrier	4	75,748	4	152,000	5		
Data Entry (ROP trips) – Longline	2	37,874	2	76,000	5		
Sub totals		<u>297,881</u>		<u>410,250</u>			

# Similar costing

Materials to support submission of ROP data	Unit Cost	Units	Cost	Notes
Printing costs (scans> paper) - LL	0.013	31,153	405	16

Printing costs (scans> paper) - PS	0.013	123,200	1,620	16
Cost of workbooks for observers (Purse seine)	Guam \$19.88 SPC \$13.88	2,200	37,136	10,15
Cost of Workbooks (Long line)	Guam \$13.00 SPC \$9.59	800	9,036	10,15
Cost of freight (PS=700g LL = 400g)	1kg =\$15	1860 kg	27,900	7
Scanner maintenance and replacement (SIDS)	4 @ \$1500 2@ \$3700	6	13,400	12
Cost of IT equipment, Computers and Software	2000	8	16,000	13
Cost of Work Stations	500	8	4,000	13
Travel		2	9,600	6
Administration and Ancillary cost	WCPFC 2180 SPC 15%	17	33,530	17
Sub Total	_		<u>152,627</u>	
TOTAL for Hybrid	860758			

Notes	s on Table 1-4
1	Noumea technical staff graded at CROP Level 10 (equivalent to I grade). Noting that the senior data manager at SPC/OFP is also frequently involved in Observer data management; Pro forma costs cover all benefits, including housing, dependents education allowance, and 15% administration fees.etc. The fund for these positions is adsorbed currently by project funds from NZ which will probably expire 2013.  For the WCPFC costs, the ROP Data Quality Officer is graded at I level and the ROP Data Manager is graded at J level.
	Pro formacosts cover all benefits, including housing, dependents education allowance, etc.
2	Required to oversee hardware support and database development, etc., but not including ROP data management and auditing.
3	Required to provide ongoing training to data entry staff in the work observer's conduct and how they fill out the forms, and regularly provide responses to resolve issues that arise in the data. At SPC/OFP, this type of work is undertaken by 3 staff in the fisheries monitoring section - WCPFC 2 ROP staff would undertake this role.
4	Data Registry Clerk is graded at the same level as Data Entry staff.
5	Pro forma annual cost for one staff member at SPC/OFP Noumea including all benefits and 15% admin cost is USD 38,000 at USD 1.40 to one Euro. WCPFC cost estimate is US \$18937 for same position.
	SPC would have 8 Data Entry clerks in Noumea and 2 based in Pohnpei, (current status) hence lower costs for Pohnpei based data entry staff in the calculation for SPC.
6	Trip for the ROP Data Quality Officer and for the ROP Data Manager to Noumea/Pohnpei or to Data Consultative Committee meeting.
7	Cost of freight estimated average for 1kg for region - PS work book weighs 700g and long line book weighs 400g.
8	Cost of recruitment 1 <sup>st</sup> year for WCPFC and at SPC positions are currently in place at SPC
9	At SPC/OFP Noumea, this cost is currently absorbed by other SPC/OFP funding.  At WCPFC cost is absorbed by staff costs of the ROP.
10	Printing costs may vary between countries and numbers of copies required. SPC costs are for books to be printed by their own internal SPC Printing Office. – WCPFC costs are calculated from commercial printers in Guam.
11	Costs vary depending on where books are printed and then need to be freighted. This is an estimated average cost per KG of weight by air transport.
12	WCPFC have factored in costs for all countries, in reality many scanners are already in place and this cost would be far less, however replacements would be required eventually.
13	Estimated costs for PC, Screens and Work station, WCPFC would need to purchase these items, whereas SPC already have these in place for ten staff, so costs are for only 4 staff at US\$1200 each.
14	Cost of persons required to supplement data quality control from current staff employed by SPC and WCPFC
15	Cost of workbooks calculated as 50% SPC cost &- 50% Guam Cost
16	Cost of copy paper from scans with PS averaging 56 pages per trip and Longline average 39 pages per trip

When compiling figures, the following assumptions were made to give an overall cost of data entry for all ROP data

- Regardless of where data are entered, analyses will still be carried out by SPC for SC and other WCFPC-related work, so data will be provided to SPC in one form or another.
- Calculations should assume that the sub-regional observer programmes FSM Arrangement, managed by FFA, will change to PNA and will most likely require data entry by SPC or WCPFC (e.g. the length frequency data)
- Calculations take into account the fact that US Treaty may not continue, and include the data entry from these trips to be entered by SPC or WCPFC. Noting that if it is renegotiated successfully FFA would most likely continue to process the data.
- SPC will be required to support the future processing of observer data for domestic fleets from PICs which do not fish outside their zone (i.e. the non-ROP trips). The non-ROP data are important for the scientific analyses conducted by SPC on behalf of the WCPFC, but are beyond the scope of the ROP Database Management costs. The extent of non-ROP data to be entered, where it is to be entered (at SPC or in-country) and the funding to support the management of non-ROP data is not considered in this paper
- Data Manager and Data Quality Officer. The overall cost for each position is currently estimated to be at a professional I or J level at WCPFC and includes all allowance, housing etc and other fees. Costs for these positions at SPC are actual costs since these positions are currently in place.
- The estimates of data entry staff required for the number of trips the ROP will generate is based on the staff recruited to work at SPC/OFP Noumea and or WCPFC Pohnpei to punch only ROP related Data.
- Hybrid Model 50% of data entry staff will be in Pohnpei and 50% in Noumea
- Hybrid model calculations include staff required to manage data entry in both organisations.
- For Hybrid model SPC will continue to be responsible for the overall ROP database