

Welcome to the
Eastwood Harris Pty Ltd
Primavera P6
Version 7
COST MANAGEMENT
WITH EXPENSES

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Purpose of the Presentation

- To demonstrate the Use of Expenses and Excel for the cost management of Projects at WBS Level.



COST MANAGEMENT USING WBS ACTIVITIES AND EXPENSES

- P6 was developed without the ability to catch and collect costs at WBS Node,
- Many software packages do collect costs at WBS Node which includes SAP,
- This section will outline how one can use WBS Activities and Expenses to manage costs collected by another system and imported into P6.



Set Up the User Definable Fields

In order to import cost at WBS Node I suggest:

- Create a WBS Activity in WBS Node to manage costs.
- Assign Costs to Expenses, then you will not run into issues such as the Cost zeroing out when the Remaining Duration equals Zero as may happen with resources.
- P6 Expenses only have Budget, Actual, Remaining and At Completion cost fields.
- Costs have a number of elements, including Budget, Committed, Received, Quality Checked, Invoices, Outstanding Commitment against contracts and orders, Unallocated WBS funds (Remaining Contingency).



Set Up the User Definable Fields – continued....

To manage these cost fields:

- Set up Expense User Definable Fields to import the costs into.
- Costs in the **Expense User Definable Fields** may then be Global Changed into the appropriate Expense field for reporting and comparing to the Baseline.
- Set up **Activity User Definable Fields** to import the costs into to display the costs in columns as Expense User Definable Fields may not be displayed in Gant chart columns.
- Both the **Expense User Definable Fields** and the **Activity User Definable Fields** are identical and the costs end up in three places, **Expense Costs, Expense User Definable Fields** and



Set Up the User Definable Fields – continued....

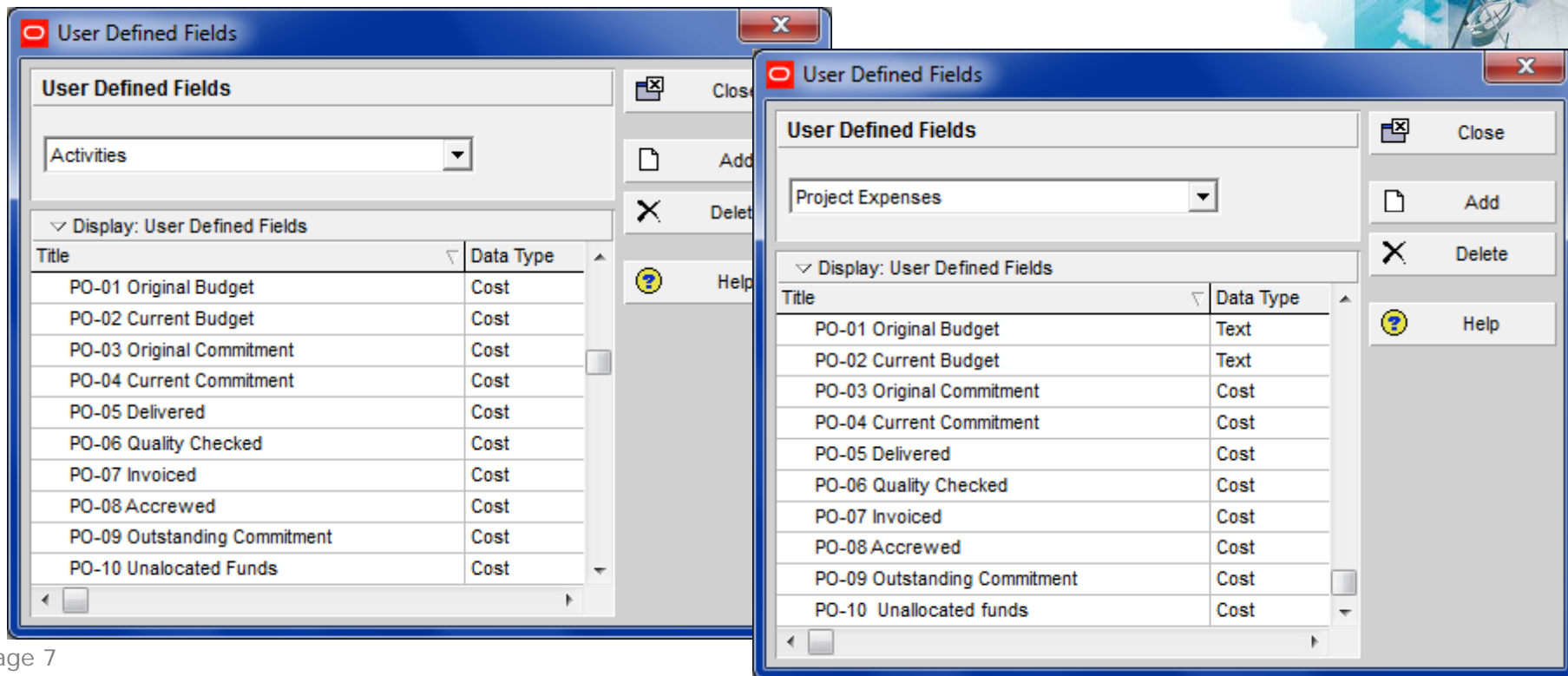
All the following fields contain the same costs:

- **Expense User Definable Fields** which hold all the different types of costs and are used to import costs into.
- **Expense Costs** fields which are populated by a Global Change from the Expense User Definable Fields
- **Activity User Definable Fields** allowing costs to be show in Gantt Chart Columns.



Set Up the User Definable Fields – continued....

- Set up User Definable Fields as per below,
- The Activity and Expense are identical,
- The “PO” prefix keeps the order in the database and keeps the fields together.



The image shows two overlapping screenshots of the 'User Defined Fields' dialog box. The left screenshot shows the 'Activities' dropdown menu, and the right screenshot shows the 'Project Expenses' dropdown menu. Both screenshots display a table of fields with titles and data types.

Title	Data Type
PO-01 Original Budget	Cost
PO-02 Current Budget	Cost
PO-03 Original Commitment	Cost
PO-04 Current Commitment	Cost
PO-05 Delivered	Cost
PO-06 Quality Checked	Cost
PO-07 Invoiced	Cost
PO-08 Accrued	Cost
PO-09 Outstanding Commitment	Cost
PO-10 Unallocated Funds	Cost

Title	Data Type
PO-01 Original Budget	Text
PO-02 Current Budget	Text
PO-03 Original Commitment	Cost
PO-04 Current Commitment	Cost
PO-05 Delivered	Cost
PO-06 Quality Checked	Cost
PO-07 Invoiced	Cost
PO-08 Accrued	Cost
PO-09 Outstanding Commitment	Cost
PO-10 Unallocated funds	Cost

Set Up the User Definable Fields – continued....

All the following fields contain the same costs:

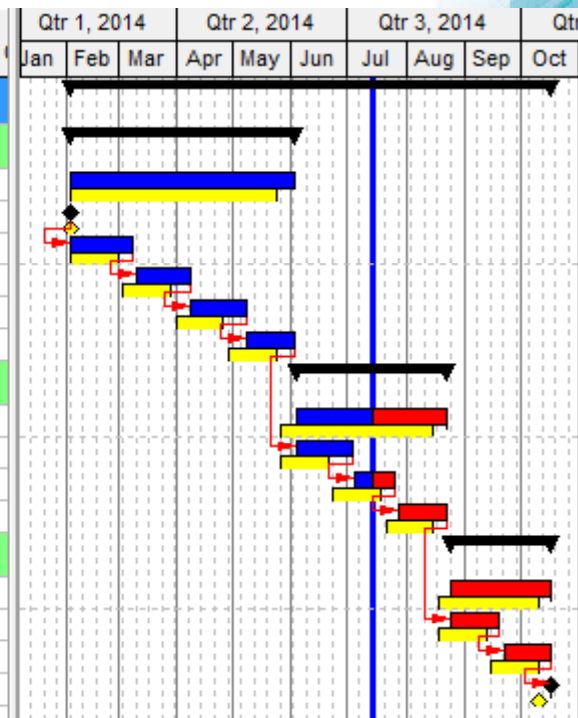
- **Expense User Definable Fields** which hold all the different types of costs and are used to import costs into.
- **Expense Costs** fields which are populated by a Global Change from the Expense User Definable Fields
- **Activity User Definable Fields** allowing costs to be show in Gantt Chart Columns.



Assign Expenses

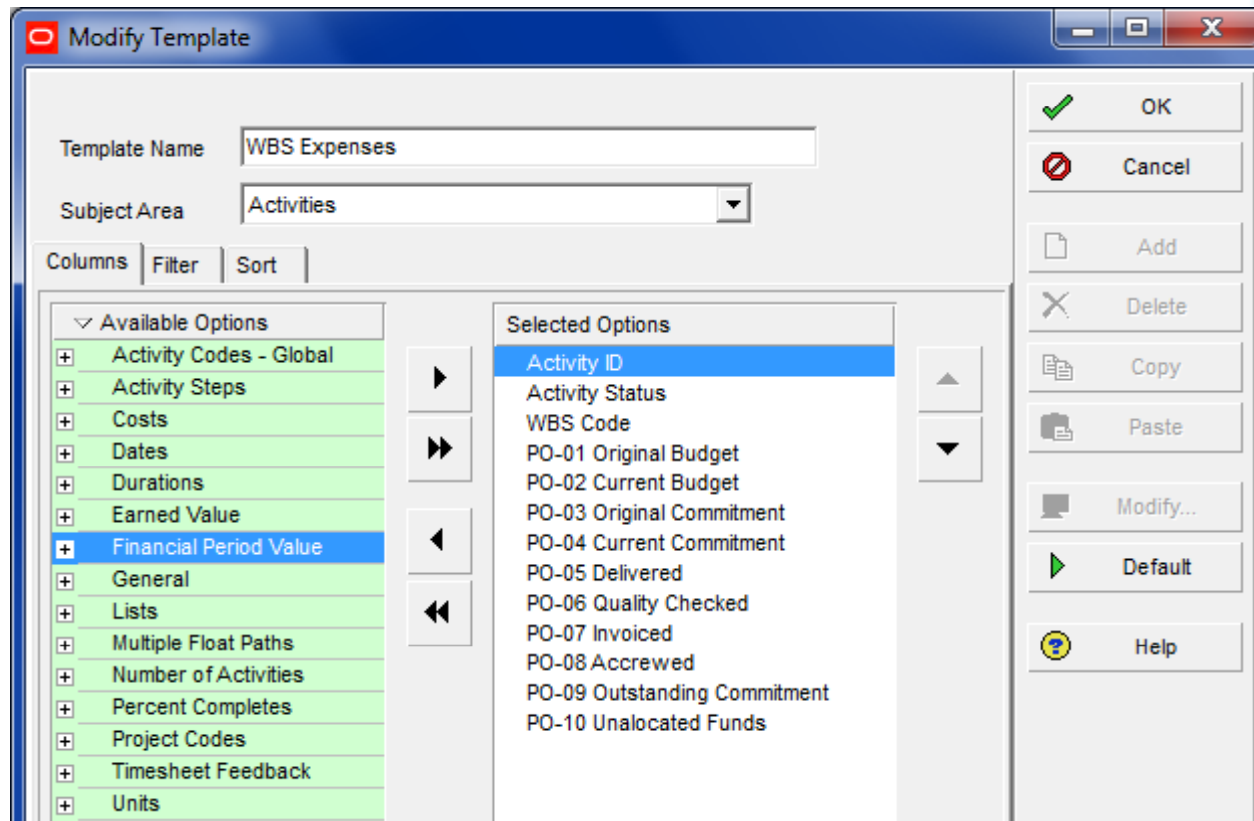
- Assign Expenses against the WBS Activities with their Budget and At Completion Costs,
- Baseline the project,
- Update the Activities.

Activity ID	Orig Dur	BL Project Expense Cost	Actual Expense Cost	Remaining Expense Cost	At Completion Expense Cost	Qtr 1, 2014		Qtr 2, 2014		Qtr 3, 2014		Qtr
						Jan	Feb	Mar	Apr	May	Jun	Jul
WBS Sumr	185d	A\$600.00	A\$198.31	A\$401.69	A\$600.00							
WBS 1	86d	A\$100.00	A\$100.00	A\$0.00	A\$100.00							
WBS-1	86d	A\$100.00	A\$100.00	A\$0.00	A\$100.00							
XX1010	0d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
XX1020	25d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
XX1030	21d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
XX1040	22d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
XX1050	18d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
WBS 2	59d	A\$200.00	A\$98.31	A\$101.69	A\$200.00							
WBS-2	59d	A\$200.00	A\$98.31	A\$101.69	A\$200.00							
XX1070	23d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
XX1080	16d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
XX1090	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
WBS 3	40d	A\$300.00	A\$0.00	A\$300.00	A\$300.00							
WBS-3	40d	A\$300.00	A\$0.00	A\$300.00	A\$300.00							
XX1110	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
XX1120	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							
XX1130	0d	A\$0.00	A\$0.00	A\$0.00	A\$0.00							



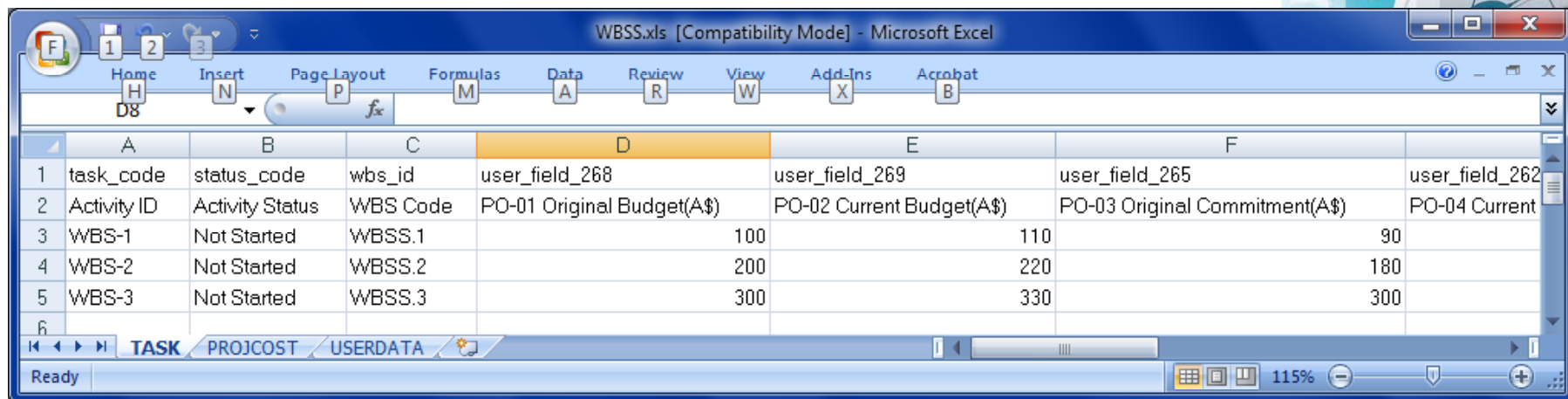
Export the UDS Fields to Excel

- Export the Activity and Expense UDF Fields to Excel to be populated and import, create a template as per below,
- Filter just on WBS Activities:



Update the Spread Sheet & Import

- The Activity and Expenses Spread Sheet will both have exactly the same fields,
- Populate one TASK sheet and Copy & Paste to the PROJCOST sheet,
- Import the data:



WBSS.xls [Compatibility Mode] - Microsoft Excel

	A	B	C	D	E	F	G
1	task_code	status_code	wbs_id	user_field_268	user_field_269	user_field_265	user_field_262
2	Activity ID	Activity Status	WBS Code	PO-01 Original Budget(A\$)	PO-02 Current Budget(A\$)	PO-03 Original Commitment(A\$)	PO-04 Current
3	WBS-1	Not Started	WBSS.1	100	110	90	
4	WBS-2	Not Started	WBSS.2	200	220	180	
5	WBS-3	Not Started	WBSS.3	300	330	300	
6							

Ready 115%

Review Data

- Review the data, the costs should be assigned against the Activity UDFs and the Expense UDFs:

Primavera P6 : WBSS (WBS Summary Activities with Costs)

File Edit View Project Enterprise Tools Admin Help

Layout: WBS Summary Activities with Costs Filter: All Activities

Activity ID	Orig Dur	Actual Expense Cost	BL Project Expense Cost	Remaining Expense Cost	At Completion Expense Cost	PO-01 Original Budget	PO-02 Current Budget	PO-03 Original Commitment	PO-04 Current Commitment	PO-05 Delivered	PO-06 Quality Checked	PO-07 Invoiced	PO-08 Accrued	Q	Q	Q	Q									
														J	F	M	A	M	J	J	A	S	O	N	D	J
WBS Summ	185d	A\$198.31	A\$600.00	A\$401.69	A\$600.00	A\$600.00	A\$660.00	A\$570.00	A\$600.00	A\$200.00	A\$130.00	A\$90.00	A\$110.00													
WBS 1	86d	A\$100.00	A\$100.00	A\$0.00	A\$100.00	A\$100.00	A\$110.00	A\$90.00	A\$100.00	A\$100.00	A\$80.00	A\$60.00	A\$40.00													
WBS-1	86d	A\$100.00	A\$100.00	A\$0.00	A\$100.00	A\$100.00	A\$110.00	A\$90.00	A\$100.00	A\$100.00	A\$80.00	A\$60.00	A\$40.00													
XX1010	0d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
XX1020	25d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
XX1030	21d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
XX1040	22d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
XX1050	18d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
WBS 2	59d	A\$98.31	A\$200.00	A\$101.69	A\$200.00	A\$200.00	A\$220.00	A\$180.00	A\$190.00	A\$100.00	A\$50.00	A\$30.00	A\$70.00													
WBS-2	59d	A\$98.31	A\$200.00	A\$101.69	A\$200.00	A\$200.00	A\$220.00	A\$180.00	A\$190.00	A\$100.00	A\$50.00	A\$30.00	A\$70.00													
XX1070	23d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
XX1080	16d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
XX1090	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
WBS 3	40d	A\$0.00	A\$300.00	A\$300.00	A\$300.00	A\$300.00	A\$330.00	A\$300.00	A\$310.00	A\$0.00	A\$0.00	A\$0.00	A\$0.00													
WBS-3	40d	A\$0.00	A\$300.00	A\$300.00	A\$300.00	A\$300.00	A\$330.00	A\$300.00	A\$310.00	A\$0.00	A\$0.00	A\$0.00	A\$0.00													
XX1110	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
XX1120	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					
XX1130	0d	A\$0.00	A\$0.00	A\$0.00	A\$0.00																					

General Status Expenses

Activity: WBS-3 New Activity: Project: WBSS

Expense Item	Budgeted Cost	Actual Cost	Remaining Cost	At Completion Cost	PO-01 Original Budget	PO-02 Current Budget	PO-03 Original Commitment	Current Commitment	PO-05 Delivered	PO-06 Quality Checked
WBS-3	A\$300.00	A\$0.00	A\$300.00	A\$300.00				A\$310.00	A\$0.00	A\$0.00

Portfolio: All Projects User: admin Data Date: 14-Jul-14 Access Mode: Shared Baseline: WBS Summary Activities with Costs - B1

Global Change UDF into Expense Columns

- Depending on what cost you want put where run a Global Change like the one below:

Modify Global Change

Select Subject Area: Project Expenses

Global Change Name: Apply UDF Values

If	Parameter	Is	Value	High Value
	(All of the following)			
Where	Activity ID	contains	WBS	

Then	Parameter	Is	Parameter/Value	Operator	Parameter/Value
	Budgeted Cost	=	PO-02 Current Budget		
And	Actual Cost	=	PO-07 Invoiced	+	PO-08 Accrewed
And	Remaining Cost	=	PO-09 Outstanding Commitment	+	PO-10 Unallocated funds

Else	Parameter	Is	Parameter/Value	Operator	Parameter/Value
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Buttons: OK, Cancel, Change, Add, Delete, Cut, Copy, Paste

Review Data

- The UDF Values for Activities and Expenses should be the same:

Primavera P6 : WBSS (WBS Summary Activities with Costs)

File Edit View Project Enterprise Tools Admin Help

Layout: WBS Summary Activities with Costs Filter: All Activities

Activity ID	Orig Dur	BL Project Expense Cost	Actual Expense Cost	Remaining Expense Cost	At Completion Expense Cost	PO-01 Original Budget	PO-02 Current Budget	PO-03 Original Commitment	PO-04 Current Commitment	PO-05 Delivered	PO-06 Quality Checked	PO-07 Invoiced	PO-08 Accrued
WBS Summ	185d	A\$600.00	A\$200.00	A\$450.00	A\$650.00	A\$600.00	A\$660.00	A\$570.00	A\$600.00	A\$200.00	A\$130.00	A\$90.00	A\$110.00
WBS 1	86d	A\$100.00	A\$100.00	A\$0.00	A\$100.00	A\$100.00	A\$110.00	A\$90.00	A\$100.00	A\$100.00	A\$80.00	A\$60.00	A\$40.00
WBS-1	86d	A\$100.00	A\$100.00	A\$0.00	A\$100.00	A\$100.00	A\$110.00	A\$90.00	A\$100.00	A\$100.00	A\$80.00	A\$60.00	A\$40.00
××1010	0d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
××1020	25d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
××1030	21d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
××1040	22d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
××1050	18d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
WBS 2	59d	A\$200.00	A\$100.00	A\$120.00	A\$220.00	A\$200.00	A\$220.00	A\$180.00	A\$190.00	A\$100.00	A\$50.00	A\$30.00	A\$70.00
WBS-2	59d	A\$200.00	A\$100.00	A\$120.00	A\$220.00	A\$200.00	A\$220.00	A\$180.00	A\$190.00	A\$100.00	A\$50.00	A\$30.00	A\$70.00
××1070	23d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
××1080	16d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
××1090	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
WBS 3	40d	A\$300.00	A\$0.00	A\$330.00	A\$330.00	A\$300.00	A\$330.00	A\$300.00	A\$310.00	A\$0.00	A\$0.00	A\$0.00	A\$0.00
WBS-3	40d	A\$300.00	A\$0.00	A\$330.00	A\$330.00	A\$300.00	A\$330.00	A\$300.00	A\$310.00	A\$0.00	A\$0.00	A\$0.00	A\$0.00
××1110	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
××1120	20d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								
××1130	0d	A\$0.00	A\$0.00	A\$0.00	A\$0.00								

General Status Expenses

Activity: WBS-1 New Activity Project: WBSS

Expense Item	Budgeted Cost	Actual Cost	Remaining Cost	At Completion Cost	PO-01 Original Budget	PO-02 Current Budget	PO-03 Original Commitment	Current Commitment	PO-05 Delivered	PO-06 Quality Checked
WBS-1	A\$110.00	A\$100.00	A\$0.00	A\$100.00	A\$100.00	A\$110.00	A\$90.00	A\$100.00	A\$100.00	A\$80.00

Portfolio: All Projects User: admin Data Date: 14-Jul-14 Access Mode: Shared Baseline: WBS Summary Activities with Costs - B1

Attached Files

- The following files are available for download in a zip file:
 - **Apply UDF WBS Values.pcf** the Global Change Used
 - **WBS Summary Activities with Costs.plf** the layout used
 - **WBSS.xer** the P6 file used
 - **WBSS.xls** the spreadsheet used
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