# Construction industry systems, implementation, support and training



# **The Cheops Cash Flow Facilities – Part 1**

#### April 2013

The Cheops cash flow facilities are generally not well understood by users. Some users don't know that the facility exists, others use some of the features, and a very small number use the cash flow facilities extensively.

Firstly, let's explain the terminology. When Cheops uses the term 'cash flow', we really mean revenue and cost flow. That is, we mean the invoices that we issue to our clients (revenue), and the invoices and claims that we receive from our suppliers and subcontractors, together with our salaries & wages, etc. (costs). The actual movement of cash flowing into and out of our bank account is another matter, and this occurs some time later (depending on payment terms and other factors). The currently available Cheops facilities do not attempt to predict this cash movement with any depth, beyond some simple assumptions.

Part 1 of this paper opens the discussion about cash flow, and Part 2 takes the discussion a step further and relates cash flow to the Cheops 'Business Forecasting' module.

# What's the purpose of this?

To successfully manage any business, it is not only necessary to manage the **value** of income and expenses (to ensure that we make a margin), it is also necessary to manage the **timing** of these transactions (to ensure that we have adequate funds to meet our obligations).

So if we can predict our monthly income and expenses for each project, then we can consolidate these individual project amounts for the total business. We can then plan if and/or when we may have surplus funds to place on deposit, or we require the use of any overdraft facilities.

The degree of accuracy of these predictions obviously depends on a number of factors – how well we can predict our progress on site, the skill of our team members, and other factors.

# Background

Much of the current theory relating to cash flow came from work done by F J Bromilow at the Division of Building Research of the CSIRO in the 1960s and 1970's. Bromilow's work began with the publication of a predictive model for construction time estimation in 1969.

A study was published by Bromilow and Henderson in 1974, and the model was improved and a further work was published by Bromilow and Davies in 1978. The model has become an important tool in the Australian industry.



The purpose of Bromilow's work was to achieve the forward planning of large programs of building works in Government works departments and similar institutions. A computer model of an industry-based standard curve was subsequently accepted and progressively updated. Work based on that of Bromilow and his colleagues has become widely known as the Bromilow model.

This work is the basis of the CSIRO 'Fincash' software which is widely used today, and which is the basis for the Cheops calculations.

# Working at the Project level



We begin by tackling our projects individually. Armed with our construction program and our budget, we know the project duration, and we know the total revenue and cost. We then set about calculating the revenue and costs for each month in the program.

This is where we need the skill of the project team. With some accuracy, they must be able to estimate the value of supplier and subcontractor claims, and wages for the month, as well as the value of the head contract progress claim.

Do this for each month of the project program. Remember that after practical completion of the project, there will still be expenses (as we receive the final invoices and claims, and maybe some retention releases), and possibly revenue also.

The estimation of the expenses may be carried out at the total project level (for simple projects), or it is done at the trade or package level, and Cheops allows a choice of methods. Typically, a project administrator would estimate the cash flow for each trade package, by logically spreading the cost of the trade package across the programmed duration for the trade.

The spread may be linear or based on a formula. We need to consider factors such as the number of working days in a particular month (eg. Christmas, Easter, etc.) and 'spikes' in the expenses when expensive equipment is delivered and/or installed at a particular date. We may also need to consider the likely weather in a particular season.

Revenue is always estimated for the total project, and often this is the simpler estimation, as once we have worked out our costs, it is usually a simple task to then estimate our progress claim.

# **Overhead Expenses**

Overhead expenses may also be estimated in this same manner. In the case of overheads, we may only have expenses, but possibly we may have interest income also. We can estimate the cash flow for overheads in exactly the same manner as a construction project.

# **Company Cash Flow based on Project Cash Flows**

Once we have estimated the cash flow for each of our projects, it is then simply a matter of consolidating this data and reporting the total company position. The accounting specialists may then overlay their assumptions regarding the movement of actual cash.

# What does Cheops provide?

Before we begin, we need to understand the various features in Cheops, and so I have compiled an outline of where Cheops deals with cash flow, and how it operates.

#### In the Cheops Project:

'Formula Cash Flow' gives us the facility to enter a project total value and overall duration, and produce a table of monthly values. These values may then be graphed. This can be used to produce a set of cash flow results by varying the duration of a project, to see what effect that change has on the monthly values. This is a broad estimate of cash flow without doing the detailed work.

'Cash Flow Entry' allows us to enter the estimated monthly values for revenue and expense. At project commencement, we may enter a target, and then as construction progresses each month, we may enter our prediction from the current time to project completion. We adjust our prediction each month based on actual revenue and expenses achieved up to that point of time.

Reports allow us to view our progress, both as a graph, and as a table of values.

#### In the Cheops Company:

We may set our chosen default level for cash flow entry for future projects, ie. project, cost group, or lowest item level.

A report shows us the various projects revenue and expense, with a consolidated total for the company.

# **Cheops Cash Flow Menu Options**

Listed here are the menu options for the project and company.

Projects			
Entry	Formula Cash Flow	CASHFL	Calculates the S-Curve cash flow based on the value and duration entered.
	<b>Escalation Factors Maintenance</b>	ESCFACT	Allows the establishment of monthly escalation factors.
	Calculated Cash Flow Type	CFT	Sets the detail of data entry. Cash Flow may be managed at the overall Project level, at the Group level, or at the lowest available breakup level. The project will inherit the company default, and this may be modified before any cash flow data is entered.
	Calculated Cash Flow Entry	CFE	The entry of detailed project cash flow.
	Lock Targets	TARGLOCK	Provides the ability for the original target cash flow to be locked.
Reports	Formula Cash Flow	CASHFL	This is the same option as the one above under 'Entry'. Calculates the S-Curve cash flow based on the value and duration entered.
	Cash Flow Report	CFR	Provides a monthly table of expense and revenue.
	Graph Cash Flow	GRAPHCF	Provides a graph of the cash flow generated by the formula.
	Target v's Actual Predicted	CFTVAP	Shows a table of values and a graph.
Company			
Entry	Cash Flow Type (Parameters Menu)	CASHFLT	Determines the default 'type' for new projects. Cash Flow may be managed at the overall Project level, at the Group level, or at the lowest available breakup level.
	Cash Flow Entry (Sundries Menu)	CFE	The entry screen for project cash flow. Entry may be done through each project, or centrally through the company menu.
Reports	Forecast Cash Flow Report (Projects > Forecast Costs Menu)	FCFR	Shows the expenditure and revenue for the selected projects – One table for expenditure and one table for revenue, with the net cash flow and cumulative totals.
	Cash Flow Report (Projects > Project Reports Menu)	CASHFL	Provides an S-Curve calculator. Enter a project value and duration, and the system provides a table of monthly values.

Cash flow entry set at the trade level (Cost Group)

# **Project Cash Flow Entry**

In the project, enter the cash flow by entering the monthly values for expenses and revenue. Please refer to the Cheops **Task Instruction 40** for full details regarding the actual data entry.

# Cash flow entry set at the project level

📸 TR01 -	Enter Cash Flow A	mounts						_ 🗆 🗵		📸 TROO - E	nter Cash Flow A	mounts						_	
Eile Help										<u>E</u> ile <u>H</u> elp									
Project:		TR01 💌	? Training Job 0							Project:		TR00	? Training Job	00					
Cost Report	<u>N</u> o: 🔽 ∐arget	TARGET 💌	?							Cost Report	No: 🔽 Iarget	TARGET	• ?						
Details fo	r 'RO'		This Period	Update Sumr	hary	Opening Cas	h Position:	0.00		Details for	'01-50'		This Perio	d 🖂 Update Summ	nary	Opening Ca	sh Position:		0.00
Forecast Fire	nal Revenue:		0.00	Last Report	MAY12	Total Revenu	ie:	1,432,800.00		Forecast Fin	al Cost:		7,370.0	B Last Report	MAY12	Total Rever	iue:		0.00
				Run On:	21 JAN 2013	Total Costs:		1,437,300.00						Run On:	21 JAN 2013	Total Costs:		271,8	50.02
				Cut-Off Date:	31 MAY 2012	Retentions H	eld:	0.00						Cut-Off Date:	31 MAY 2012	Retentions H	Heldt		0.00
						Retention Re	lease:	0.00								Retention R	elease:		0.00
						Close Cash p	osition:	-4,500.00								Close Cash	position:	-271,8	\$50.02
						Forecast Mar	gin:	-4,500.00	1							Forecast Ma	irgin:	86,5	i00.00
			T									1 .							
Cost Ref. TR01	Description Training Job 01	982,800,00	MAY13 81,926,10	JUN13 126 482 40	JUL13 176 787 90	AUG13 278,836,20	SEP13 310 456 80	202.659.30		Cost Ref. 01-01	Description Council Fees	Budget 1 850 00	MAY12	JUN12 1.850.00	JUL12	AUG12	SEP12	OCT12	⊢∸∣
BEV	Revenue	1 432 800.00	97,430,40	153 309 60	236,412,00	363 931 20	273 664 80	170 503 20		01.02	Lenal Fee:	3,450,00	-	3,450,00					+
PO	Risk and Opportuni	1,402,000.00	01,400.40	100,000.00	200/412.00	000,001.20	210,004.00	110,000.20		01.02	Water Roard Eess	1,690,00	-	1 690.00					╞ <sub>┻┙</sub> ╿
	rink and opportun	×								01.23	Foreman	79,000,00	11 295 71	11 295 71	11 295 71	11 285 71	11 285 71	11 285 71	+
<u> </u>			-							01.20	Leading Mand	59,200,00	9 229 57	0 220 57	0 220 57	0 220 57	0.320.57	0 220 57	+
			-							01.20	Cite Cafety Officer	50,300.00	0,320.37	0,020.01	10.016.67	10.016.67	10.016.67	10.016.67	+
			-							01.00	Cite Date(y Onice)	60,100.00	10.010.07	10.010.07	10,010.07	10,010.07	10,010.07	10,010.07	+ I
			_							01-52	Site GA Officer	3,100.00	1,018.87	1.053.00	1.053.00	1.053.00	1.052.00	1.053.00	Ļ.
		-								00-00	rencing & moarding	\$ 7,370.00	1,052.06	1,002.00	1,002.00	1,052.00	1,052.00	1,052.06	ا <sub>ج</sub> ا
			ď					Þ					•					D	
''#'' = Brou	ight Forward		Cash Flow	balance for Cos	Reference RO is	s: 0.00 Alloc	ate <u>S</u> ave	Egit		''#'' = Brouj	ght Forward		Cash Flow b	alance for Cost R	eference 01-50 i	: -0.02 Allo	cate Sav	e Egi	n
d:\cssp\TR	01lbotgralCFEI4.8.24						7	7/4/2013 6:31 PM		d:\cssp\TR(	00lbotgra)CFE14.8.24							7/4/2013 6:	23 PM

Once the cash flow values have been entered, you may then produce the 'Target v's Actual/Predicted' report. Note that in this particular project example, the 'predicted' revenue and expenses are considerably delayed from what was originally intended by the 'target' figures.

#### 'Target v's Actual/Predicted' report.



Period	Target Costa	Autoria Contai	Predicted Dodlar	Target Revenue	Actual Pavenue	Predicted Revenue
00112						
NOV12	632,660,00	194.673.00		642,000,00		
DIC12	2,556,854.00	709.075.00		2646.600.00	100.405.00	
JAN13	2,663,400.00	436.317.00		2,760,000,00	1218.277.00	
FERIS	2,002,000.00	230.101.00		3.091.200.00	500.305.00	
MAR G	3209354430			3,201,600,00		
APRIO	3,515,998,00			3 645 200 00		
MAYT13	3.941.832.00			4064000.00		
CT III CT	4387 \$75.00			4.525.400.00		
JUL 13	6.115728.00			6,299,200.00		
40013	5,859,480.00			8.072.000.00		
5(F1)	7244.440.00			7.507,200.00		
6(10)	6.522,840,00			6 #52 000 00		
N0v13	6.44170430			9825.600.00		
66010	8.162.096.00			9.494.400.00		
LAN14	7.893.554.00			II. 1999 2000 000		
70.014	6.606.232.00			0.0444.800.00		
MAR NE	6.636.872.00			5340.000.00		
AFR14	4667.584/00			4557,600,00		
MAY 14	415480400			4305,600,00		
201114	3726780.00			3,064,000,00		
301.18	3 409 152 00			3 632 800 00		
A0014	1,491,504.00			1,546,800.00		
Totals	105,555,000,00	1840-466.005	1	140.406.000.00	1,066,706-00	

© Graeme Bottrill 2013

**Note**: The actual revenue values on the above reports come from the certified/tax invoice value for the following month. That is to say, a certified value dated

March, is attributed as revenue earned in February, on the basis that the February claim is usually certified in the following month. In this way, Cheops aligns the costs with the revenue earned for the same period.

# **Cash Flow Report for the Project**

						CAS	H FLOW	REPOR	T - APR1	3					
						PROJ	ECT: 9	35 - Breakfa	st Point 6F	2 Endeavou	r				
						PRINT	ED ON: 1	9:53:09 15 /	APR 2013						
Cost Reference	Description	Forecast Final Cost	Monthly Cost	Cost to Date	Accruals	Total Cost to date	Left to Spend	APR13	MA 1413	JUN13	JUL13	AUG13	SEP13	OCT13-JUNI6	Ballance
935	Breakfast Point 6F2 End	15,105,718	28,849	12,578,344	0	12,578,344	2,527,373	0	0	0	D	Û	0	0	2,527,373
	Total	15,105,718	28,849	12,578,344	D	12,578,344	2,527,373	D	0	D	D	0	0	D	2,527,373
	Revenue	15,430,845	771,127	0	0	13,429,085	2,001,760	0	0	0	D	0	0	0	2,001,760

# **Graph Cash Flow**



# **Company Cash Flow Reporting**

The cash flow data entered for each project, may then be consolidated for the company

Project	Description	APR13	MA Y 13	JUN13	JUL13	AU G 13	SEP13	OCT13	NOV13	DEC13	JAN14	FEB14	MAR14-JU N99	Total
Expenditure					<u> </u>	<u> </u>					<u> </u>	<u> </u>	· · · · ·	
933	Wyong Hospital Integrated Education Cen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
935	Break fast Point 6F2 En de avour	700,000.0	770,000.0	800,000.0	766,068.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,036,068.67
939	Waterside Estate Stage 10 Acoustic Wall	750,000.0	535,106.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,285,106.45
941	Kmart City Link Plaza Queanbeyan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00
942	Graythwaite Rehabilitation Centre	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
946	The Hills Shire Council	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00
957	Cromehurst SSP	75,000.00	156,608.3	400,000.0	700,000.0	850,000.0	793,000.0	550,000.0	400,000.0	400,000.0	200,075.2	99,384.75	0.00	4,624,068.41
958	Tamworth Hospital Stage 2, EWP 6 & MW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00
959	Erko Apartments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
960	RPA NW Precinct	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00
-	Total Expenditure	1,525,000.	1,461,714.	1,200,000.	1,466,068.	850,000.00	793,000.00	550,000.00	400,000.00	400,000.00	200,075.28	99,384.75	0.00	8,945,243.53
Revenue	<b>1</b>	1												
933	Wyong Hospital Integrated Education Cen	0.00	0.00	0.00	000	00.0	0.00	00.0	0.00	0.00	0.00	0.00	000	00.0
935	Breakfast Point 6F2 Endeavour	400,000.0	520,000.0	480,000.0	360,000.0	4,675.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,764,675.56
939	Waterside Estate Stage 10 Acoustic Wall	194,217.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	194,217.56
941	Kmart City Link Plaza Queanbeyan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
942	Graythwaite Rehabilitation Centre	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
946	The Hills Shire Council	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00
957	Cromehuist SSP	72,513.33	304,248.9	354,961.7	770,769.4	1,096,209.	283,037.3	561,424.7	435,912.8	190,136.4	0.00	0.00	0.00	4,069,214.40
958	Tamworth Hospital Stage 2, EWP 6 & MW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00
959	Erko Apartments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00
960	RPA NW Precinct	0.00	0.00	00.0	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	00.0
	Total R evenue	666,730.89	824,248.92	834,961.71	1,130,769.	1,100,885.	283,037.37	561,424.76	435,912.87	190,136.41	0.00	0.00	0.00	6,028,107.52
	Cash Flow	-858,269.1	-637,465.9	-365,038.2	-335,299.2	250,885.18	-509,962.6	11,424.76	35,912.87	-209,863.5	-200,075.2	-99,384.75	0.00	-2,917,136.01
	Cumulative Cash flow	-858,269.1	-1,495,735.	-1,860,773.	-2,196,072.	-1,945,187.	-2,465,150.	-2,443,725.	-2,407,812.	-2,617,675.	-2,817,751.	-2,917,136.	-2,917,136.	

# **Examples of Cheops Cash Flow Screens**

# **Revenue View** - Select the revenue line.

😪 952 - E	Inter Cash Flow Am	ounts								_	
<u>File</u> <u>H</u> elp											
<u>P</u> roject:	Γ	352	?	UTS Thomas	Stre	et Building					
Cost Repor	t <u>N</u> o: 🗖 <u>T</u> arget	MAR13	· ?	31 MAR 2013	CUF	RENT					
Details fo	or 'REV'	Last Period		This Period	ΓU	Ipdate Summa	ary	Opening Ca:	sh Position:	-423,	070.14
Forecast F	inal Revenue:	110,503,086.00		110,503,086.00	La	ast Report	MAR13	Total Reven	ue:	25,485,2	229.00
Monthly Re	evenue:	1,218,276.50		556,964.96	Ru	un On:	22 MAR 2013	Total Costs:			0.00
					Cu	it-Off Date:	31 MAR 2013	Retentions H	leld:		0.00
				1 000 700 00				Retention R	elease:		0.00
Lotal Reve	enue to date:	1,411,741.04		1,968,706.00				Close Cash ;	oosition:	25,062,1	158.86
Left to Hed	ceive: ious Cash Elour	109,091,344.96		1 070 701 00				Forecast Ma	rgin:	3,733,7	335.75
TOLAFFIEW	ious Casri Filow.			1,070,721.00					-		
Cost Ref.	Description	Budget		MA	R13	APR13	3 MAY13	JUN13	JUL13	AUG13	
952	UTS Thomas Street	E 106,569,753.00									
REV	Revenue	110,503,086.00	►	2,366,134.00		3,656,260.00	4,274,758.00	4,918,218.00	4,781,058.00	5,488,801.00	
RO	Risk and Opportunity	I									
L											
<u> </u>											
			•								►
''#'' = Bro	ught Forward	C	ash	Flow balance for	Cos	t Reference F	EV is: 83,049,1	51.00 Alloo	ate <u>S</u> a	ve <u>E</u> >	şit
d:\cssp\95	2 botgra CFE 4.8.24									9/4/2013  5:	.08 PM

Details for 'REV'	Last Period	This Period
Forecast Final Revenue:	110,503,086.00	110,503,086.00
Monthly Revenue:	1,218,276.50	556,964.96
Total Revenue to date:	1,411,741.04	1,968,706.00
Left to Receive:	109,091,344.96	108,534,380.00
Total Previous Cash Flow:		1,878,721.00

Forecast Final Revenue – Last Period:	The approved adjusted head contract value as at last period (Feb 13 in this example)
Forecast Final Revenue – This Period:	The approved adjusted head contract value as at this period (Mar 13 in this example)
Monthly Revenue – Last Period:	The value of the certified progress claim(s) for last period. (Feb 13 in this example) Note this is NOT the total to date as at last period, just the value for the period.
Monthly Revenue – This Period:	The value of the certified progress claim(s) for this period. (Mar 13 in this example) Note this is NOT the total to date as at this period, just the value for the period.
Total Revenue to date – Last Period:	The value of certified progress claims (tax invoices) up to and including the last period. (Feb 13 in this example)
Total Revenue to date – This Period:	The value of certified progress claims (tax invoices) up to and including this period. (Mar 13 in this example)
Left to Receive – Last Period:	The remaining contract value still to be billed, as at last period.
Left to Receive – This Period:	The remaining contract value still to be billed, as at this period.
Total Previous Cash Flow:	

**Expenses View** - Select the expense line (or one of the expense lines where the cash flow is to be entered at the group or lowest cost code level).

😤 952 - Er	nter Cash Flow Am	ounts								_	
<u>File H</u> elp											
<u>P</u> roject:		352 🔄	?	UTS Thomas	Stree	et Building					
Cost Report	<u>N</u> o: 🗖 <u>T</u> arget	MAR13	· ?	31 MAR 2013	CUR	RENT					
Details fo	r '952'	Last Period		This Period	_ Up	odate Summa	ary	Opening Cas	h Position:	-423,0	070.14
Forecast Fir	nal Cost:	106,769,751.95		106,769,750.25	Las	st Report	MAR13	Total Reven	ue:	25,485,2	229.00
Monthly Co:	st:	436,316.83		230,100.66	Ru	n On:	22 MAR 2013	Total Costs:			0.00
Cost to Date	в:	1,410,364.90		1,640,465.56	Cut	-Off Date:	31 MAR 2013	Betentions H	leld:		0.00
								Betention Be	elease:		0.00
Total Cost t	o date:	1,410,364.90		1,640,465.56				Close Cash r	nosition:	25 062 1	158.86
Left to Sper	nd:	105,359,387.05		105,129,284.69				Earoo ant Mar		2 722 2	225.75
Total Previo	ous Cash Flow:			0.00				FUIECast Ma	igin.	3,733,3	555.75
Cost Ref.	Description	Budget		MA	R13	APB13	3 MAY13	JUN13	JUL13	AUG13	
952	UTS Thomas Street I	E 106,569,753.00	►	l							
REV	Revenue	110,503,086.00		#2,366,13	4.00	3,656,260.00	0 4,274,758.00	4,918,218.00	4,781,058.00	5,488,801.00	
RO	Risk and Opportunity	I									
					_						
			_		_						
			_								
			_								
			•								
,		_			_						
"#" = Brou	ight Forward	С	ash I	Flow balance for I	Lost	Reference 9	52 is: 105,129,2	284.69 Alloc	ate <u>S</u> a	ve E <u>x</u>	it
d:\cssp\952	2 botgra CFE 4.8.24									9/4/2013 5:	08 PM

Details for '952'	Last Period	This Period
Forecast Final Cost:	106,769,751.95	106,769,750.25
Monthly Cost:	436,316.83	230,100.66
Cost to Date:	1,410,364.90	1,640,465.56
Total Cost to date:	1,410,364.90	1,640,465.56
Left to Spend:	105,359,387.05	105,129,284.69
Total Previous Cash Flow:		0.00

Forecast Final Cost – Last Period:	The forecast final cost from forecast entry as at last period (Feb 13 in this example)
Forecast Final Cost – This Period:	The forecast final cost from forecast entry as at this period
	(Mar 13 in this example)
Monthly Cost – Last Period:	The actual costs for last period.
	(Feb 13 in this example)
	Note this is NOT the total cost to date as at last period, just the value for
	the period.
Monthly Cost – This Period:	The actual costs for this period.
	(Mar 13 in this example)
	Note this is NOT the total cost to date as at this period, just the value for
	the period.
Cost to date – Last Period:	The actual costs up to and including the last period. (Feb 13 in this
	example)
Cost to date – This Period:	The actual costs up to and including this period. (Mar 13 in this example)
Left to Spend – Last Period:	The remaining forecast cost, as at last period.
Left to Spend – This Period:	The remaining forecast cost, as at this period.
Total Previous Cash Flow:	

**Risk and Opportunity View** – Select the 'Risk and Opportunity line to enter the cash flow for the net value of risks and opportunities, as entered in the Risk and Opportunity entry.

# **Summary View** – Right hand side of screen.

-423,070.14
25,485,229.00
0.00
0.00
0.00
25,062,158.86
3,733,335.75

Opening Cash Position:	The cash liquidity held on the project. In this example, the negative value
	indicates a cash deficit on the project.
Total Revenue:	Total certified progress claims and sundry debtor invoices.
Total Costs:	Total invoices and other costs received.
Retentions Held:	Retentions held on subcontractors, based on subcontract payments made.
Retention Release:	
Close Cash Position	
Forecast Margin:	The current margin (savings/overrun from cost report)

# **Other Related Functions**

Up to this point, we have been discussing 'cash flow' at the project level, and as related to invoices entered (debtors and creditors). The following menu options contain the word '*cash*', but now attempt to address cash flow from the perspective of actual cash.

WIP / Cash Flow Report (Projects > Forecast Costs Menu)	WIPCASHFL	Not really related to cash flow in the same light as we are discussing here.
Cash Position (Projects > Forecast Costs Menu)	CASHPOS	Shows the true cash position. That is, total cash out v's total cash in.
Short Term Cash Flow Report (Projects > Forecast Costs Menu)	CASHFL	Based on due dates for creditors transactions

#### The WIP / Cash Flow report shows

the invoiced revenue and expense, and the actual cash revenue and expense, as at the selected period. The report shows the current theoretical 'liquidity' on the project (not actual cash, because it is based cheques but not on presented cheques).

#### WORK IN PROGRESS / CASH FLOW

Cost Report Period MAR13 Cutoff 31 MAR 13 COMPANY: NBC - Northern Beaches Constructions Ptv Ltd

PRINTED ON: 09:06:12 14 APR 2013 Northern Beaches Constructions Pty Ltd

Project Code	Description	Total Invoiced (Excl GST)	Actual Cost (Excl G ST)	Profit <loss></loss>	Total Received (Excl GST)	Total Paid (Excl G ST)	Variance
000	Northern Beaches Const - Overhe	0.00	-7,442.06	7,442.06	0.00	-8,444.06	8,444.06
001	NBC Maintenance Works						
2	Woolworths Itd - Repair door and fram	33.00	30.00	3.00	33.00	0.00	33.00
3	Woolworths Ltd - Fix laeking freezer c	500.00	0.00	500.00	363.64	0.00	363.64
100	NBC Service/Maintenance Works						
N1	Repair roller shutter	0.00	40.00	-40.00	0.00	0.00	0.00
W1	Repaint door frame	0.00	70.00	-70.00	0.00	0.00	0.00
200	NBC - Tendering Costs						
410	Dee Why Industrial	624,300.00	208,890.51	415,409.49	112,500.00	100,359.87	12,140.13
411	'The Point' Apartments	0.00	23,676.00	-23,676.00	0.00	2,506.00	-2,506.00
412	Sandgate Masonic	0.00	1,800.00	-1,800.00	0.00	1,800.00	-1,800.00
414	Lahey Project	159,565.00	0.00	159,565.00	0.00	0.00	0.00
416	Residence for Mr & Mrs House - Linden	0.00	0.00	0.00	0.00	0.00	0.00
418	Menzies	0.00	0.00	0.00	0.00	0.00	0.00
420	Construction Management Job	0.00	710.00	-710.00	0.00	0.00	0.00
421	Adelaide Job	0.00	11,430.00	-11,430.00	0.00	0.00	0.00
422	Metronode	5,740.00	7,942.00	-2,202.00	0.00	0.00	0.00
466	Metronode	5,740.00	1,542.00	-2,202.00	0.00		0.00

The **Cash Position** report shows the true cash position by using the presented cheques for expenses and cash receipts for revenue. The report shows the true 'liquidity' in actual cash terms.

#### TRUE CASH POSITION

Cost Report Period MAR13 Cutoff 31 MAR 13

PROJECT: NBC -

PRINTED ON: 09:10:42 14 APR 2013

Project Code	Description	Cheques Presented	Progress Claims Received	True Cash Position
000	Northern Beaches Const - Overheads	-8,444.06	0.00	8,444.06
001	NBC Maintenance Works	0.00	396.64	396.64
100	NBC Service/Maintenance Works	0.00	0.00	0.00
200	NBC - Tendering Costs	0.00	0.00	0.00
410	Dee Why Industrial	100,359.87	112,500.00	12,140.13
411	'The Point' Apartments	2,506.00	0.00	-2,506.00
412	Sandgate Masonic	1,800.00	0.00	-1,800.00
414	Lahey Project	0.00	0.00	0.00
416	Residence for Mr & Mrs House - Linden Way	0.00	0.00	0.00
418	Menzies	0.00	0.00	0.00
420	Construction Management Job	0.00	0.00	0.00
421	Adelaide Job	0.00	0.00	0.00
422	Metronode	0.00	0.00	0.00
423	Logan Office	0.00	0.00	0.00
PLANT	NBC Plant	0.00	0.00	0.00

# The Short Term Cash Flow report

shows what is due to creditors and what is due from debtors at each of three entered dates. The creditors and debtors values are based on the aged invoices reports. Note that this does not take account of direct debits, interest income, etc. If it is not in creditors or debtors, it is not considered here.

#### SHORT TERM CASH FLOW REPORT BY DUE DATE

COMPANY: NBC - Northern Beaches Constructions Pty Ltd

PRINTED ON: 09:14:21 14 APR 2013

|--|

Totals for Company NBC

Due By 30 APR 13	Due By 31 MAY 13	Due By 30 JUN 13	Due After 30 JUN 13	Total Due
738,651.50	0.00	0.00	0.00	738,651.50
124,707.51	0.00	0.00	7,645.00	132,352.51
613,943.99	0.00	0.00	-7,645.00	606,298.99
	Due By 30 APR 13 738,651.50 124,707.51 613,943.99	Due By 30 APR 13 Due By 31 MAY 13   738.651.50 0.00   124.707.51 0.00   613.943.99 0.00	Due By 30 APR 13 Due By 31 MAY 13 Due By 30 JUN 13   738,651.50 0.00 0.00   124,707.51 0.00 0.00   613,943.99 0.00 0.00	Due By 30 APR 13 Due By 31 MAY 13 Due By 30 JUN 13 Due After 30 JUN 13   738.651.50 0.00 0.00 0.00   124.707.51 0.00 0.00 7.645.00   613.943.99 0.00 0.00 -7.645.00

16,674.83

96,221.81 112,896.64