

PROJECT MANAGEMENT PLAN

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INTRODUCTION

BUSINESS CASE

SGL is a multinational organisation that involves in the manufacturing of hand safety equipment. The company has two sub-companies including PSL and BEL in country X. Products are received from different factories in a warehouse at country X, which also have a testing facility. From this warehouse, it is sold to the customers. Currently, SGL received a purchase order from PSL only. The products are shipped to PSL. PSL unloads, checks and stores the goods and partial deliveries are made to BEL upon their requirements. Both companies, after necessary processing, ships their products again to the warehouse for distribution to the customers. The proposal is to arrange direct shipment from SGL, PSL and BEL to the warehouse to save on the transportation cost as well as the labour for loading and unloading the vehicles. Additionally, this will also improve process accuracy by simplifying the process. The following figure presents the AS-IS and TO-BE situation for the flow of products between three factories and the warehouse.

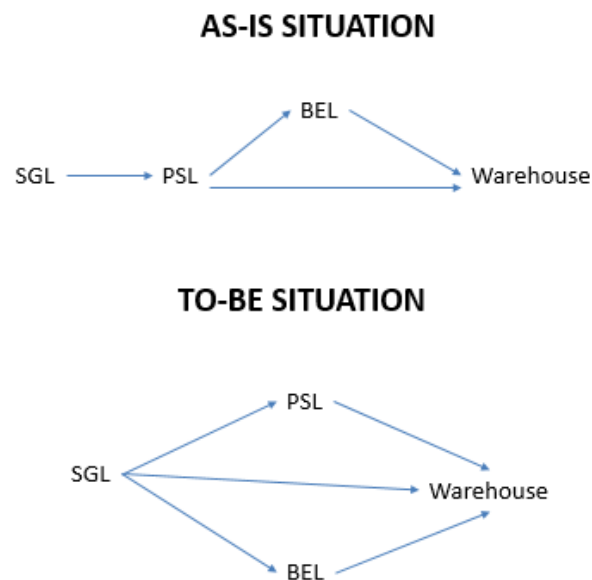


FIGURE 1: AS-IS AND TO-BE SITUATION FOR THE PROJECT

To respond to the project proposal, this document presents a project management plan using PRINCE2 (Projects IN Controlled Environments). PRINCE 2 is project management method that is flexible and can be used for any type of project and it is process- based (Bentley, 2010). The methodology uses procedures and technique to plan the different stages, control the risk management and quality, and to define roles in the enterprise or the organization (Bentley, 2010; Radka, 2017). According to this methodology, the project management process will be based on the following flow of activities:

1. Start-up of project
2. Initiation of the project
3. Directing the project

4. Control stages
5. Manage product delivery
6. Manage stage boundary
7. Closing the project

Considering the specific nature of project under consideration, the principles for each stage of PRINCE2 will be applied.

POTENTIAL BENEFITS

As demonstrated earlier, the core purpose of the project is to reduce the transportation cost of the company under consideration. According to the data of 2019, SGL, which provides final product for the warehouse as well as raw material for PSL and BEL has shipped 1,248 direct containers. Out of these, 714 Full container load (FCL) was for BEL. 208 was for PSL and remaining were for the warehouse directly. Overall, the cost of these 1,248 containers and the situation if these shipments were made directly from SGL has been presented in Table 1 below which indicates huge savings. Besides, the savings on the labour cost for loading and unloading of the vehicles will be added on top of this. As for the project scope is concerned, it will be limited to the transportation, loading and inspection activity of the organisation. For this purpose, changes in the ERP (Enterprise Resource Management) system of the organisation, management structure and product flow will be carried out while keeping other areas of the organisation intact.

TABLE 1: COMPARISON OF TRANSPORTATION COST FOR DIRECT AND INDIRECT SHIPMENTS

	PSL	BEL	Warehouse	Total
FCL to each location	£714	£208	£326	£1,248
Transportation cost of 2019	£527,904			£527,904
Cost for direct shipments	£214,200	£62,400	£97,800	£374,400

STAKEHOLDER ANALYSIS

A stakeholder of a project can be an individual or cooperation that have an interest in the outcomes of the project (Davis, 2014). This would include internal as well as the external stakeholders (Aaltonen, 2011). The review and assessment of each stakeholder of the project are critical as this helps to understand the interest of each stakeholder in the project (Mok, Shen & Yang, 2015; Beringer, Jonas and Kock, 2013). Based on this, the project plan and execution can be aligned to meet the interests of the stakeholders. Moreover, it also helps to better define the project execution strategy (Mazur and Pisarski, 2015). According to PRINCE2 methodology, the project stakeholder must be involved using a common ground and language and the same will be employed for the case under consideration. For the case under consideration, Table 2 provides a stakeholder matrix following by power and interest graph (Figure 2):

TABLE 2: PROJECT STAKEHOLDERS MATRIX

Stakeholder	Type	Power	Interest	Engagement Strategy
Management	Internal	High	High	Progress meetings and approvals will be attained from the management.
Project team	Internal	Medium	High	Daily, monthly and other informal meetings to share updates and progress.
IT team	Internal	High	Medium	The team will be involved throughout the process and their point-of-view will be asked.
Employees	Internal	Low	Medium	Training and development will be arranged for the employees.
Transportation contractor	External	High	Low	Long-term transportation contract will be offered.
ERP solution provider	External	High	Low	Any extra fee for up-gradation or additional features will be paid.
Recruitment agencies	External	Medium	Low	Long-term recruitment contracts will be offered.

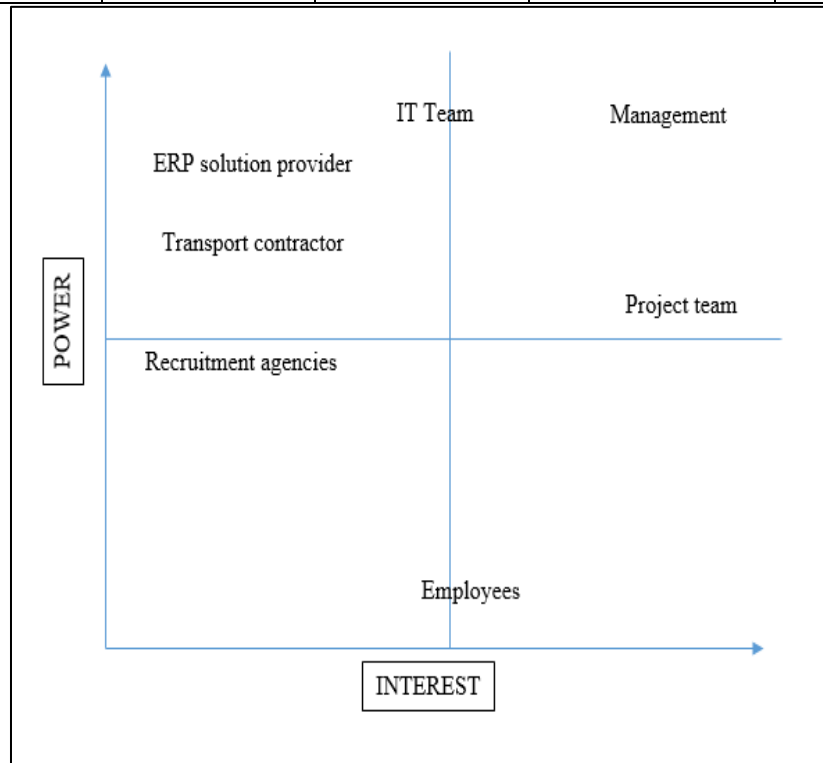


FIGURE 2: STAKEHOLDERS POWER-INTEREST GRAPH

COMMUNICATION PLAN

Communication is one of the most critical requirements for every project irrespective of its nature (Zulch , 2014; Wu et al. 2017). Improper or ineffective communication will result in incomplete information to key stakeholders (Adenfelt ,2010). This will not only result in errors

but will also negatively affect the results of a project (Muszyńska, 2015). For the project under consideration, the report and communication framework is presented as hereunder considering the specific guidelines of PRINCE2 methodology (Table 3).

TABLE 3: PROJECT REPORTING AND COMMUNICATION FRAMEWORK

Reporting/Communication	Frequency	Method	Participants	Responsible
Project team meeting	Daily	Meeting	Project manager, project leads, IT manager	Project manager
Project review meeting	Monthly	Meeting	Project manager, project leads, IT manager	Project manager
Milestone review	Based on milestone timeline.	Meeting	Project manager, project leads, IT manager	Project manager
End review	Six months	Meeting	The management steering committee, Project manager, project leads, IT manager	Project manager
Post-project review	2 months after completion.	Meeting and email newsletter to stakeholders	The management steering committee, Project manager, project leads, project champions, IT manager	Project manager

SMART OBJECTIVES

In accordance with the PRINCE2 approach, the project objectives and goals must be clear and communicated to all stakeholders before project initiation to effective execution (AXELOS, 2013). The following sections provide relevant details for the project:

GOALS

The broader goal of the project is to save the additional cost of transportation and labour for loading and unloading. Currently, products from SGL are first shipped to PSL, where the products of BEL are also loaded and unloaded. Similarly, instead of shipping SGL's products directly to the warehouse, these are also first unloaded at BEL for quality inspection. This does not only involve a notable loading and unloading cost, but it also increases the transportation cost for the company as a whole. The goal is to simplify the process by initiating direct shipments to each company. This will require an investment in the Enterprise Resource Planning (ERP) system of the company, training and development, and staff for quality inspection within the warehouse.

OBJECTIVES

The core objectives of the project under consideration are as follows:

1. To reduce the transportation cost of the organisation by 20 per cent through direct shipments.
2. To reduce the loading and unloading cost by 8 per cent by avoiding consolidated shipments to a single factory.
3. To improve environmental sustainability by minimising transportation activities for the organisation.
4. Simplification of the process and improve the response time to the market by minimising the lead times.

WORK BREAKDOWN STRUCTURE

This section will provide a list of activities that are crucial to complete the project along with the work breakdown structure (WBS) and risk management.

WORK BREAKDOWN STRUCTURE

A work breakdown structure is a graphical representation of the list of activities and small sections that are critical to complete the project. For the project under consideration, the following illustration provides the WBS in accordance with PRINCE2 methodology of project management (Figure 3):

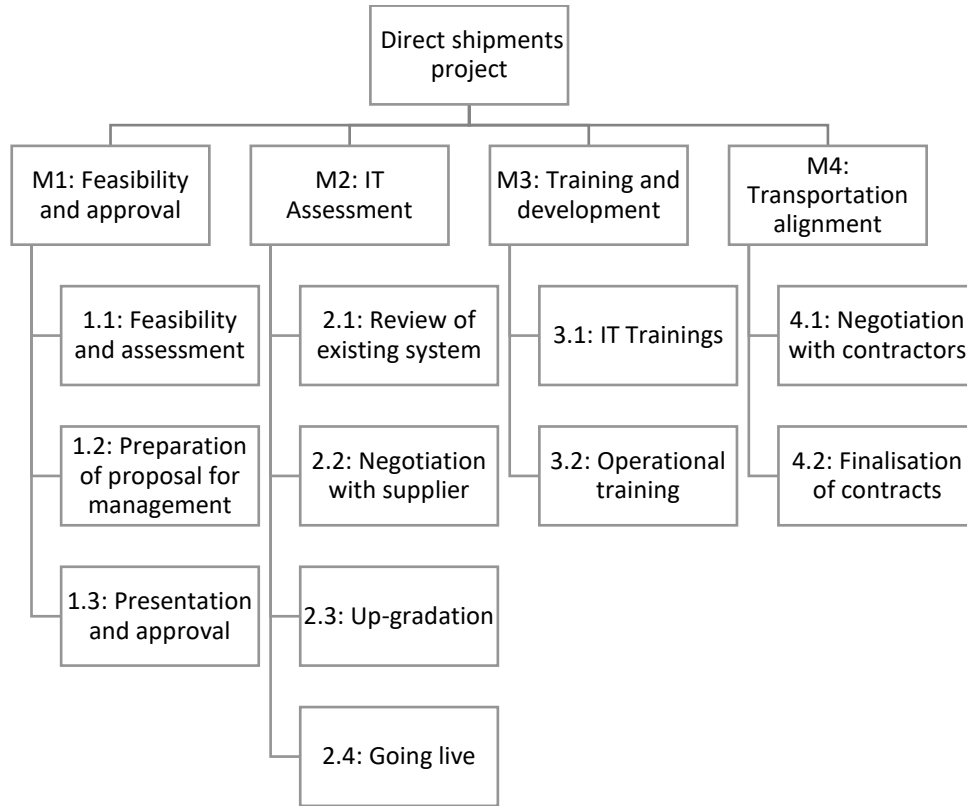


FIGURE 3: WORK BREAKDOWN STRUCTURE OF THE PROJECT

ACTIVITY LIST

For the project under consideration, the following table provides the list of activities along with other necessary details (Table 4):

TABLE 4: LIST OF ACTIVITIES

WBSID	Activity Description	Type	Duration
M1	Feasibility and approval	Milestone	Milestone
1.1	Feasibility and assessment	Activity	3
1.2	Preparation of proposal for management	Activity	2
1.3	Presentation and approval	Activity	1
M2	IT Assessment	Milestone	Milestone
2.1	Review of existing system	Activity	2
2.2	Negotiation with the supplier	Activity	2
2.3	Up-gradation	Activity	3
2.4	Going live	Activity	2
M3	Training and development	Milestone	Milestone
3.1	IT Trainings	Activity	3
3.2	Operational trainings	Activity	3
M4	Transportation alignments	Milestone	Milestone
4.1	Negotiation with the contractors	Activity	2
4.1	Finalisation of contract	Activity	2

RISK MANAGEMENT

It is imperative to critically consider the risks and constraints associated with a project (Moran, 2014; Kutsch and Hall, 2010). Identification of these can help to develop a mitigation plan, which will help to achieve the desired objectives of the project without any major challenge (Chmielarz, 2015). To assess the risks and constraints of a project, the risk management plan is typically used (de Bakker, Boonstra and Wortmann, 2010). In PRINCE2 methodology, this risk management plan provides the ratings or impact of each risk associated with a project along with a mitigation plan (Jun, Qiuzhen and Qingguo, 2011). For the project under consideration, the risk management plan is presented as follows (Table 5):

TABLE 5: RISK MANAGEMENT PLAN OF THE PROJECT

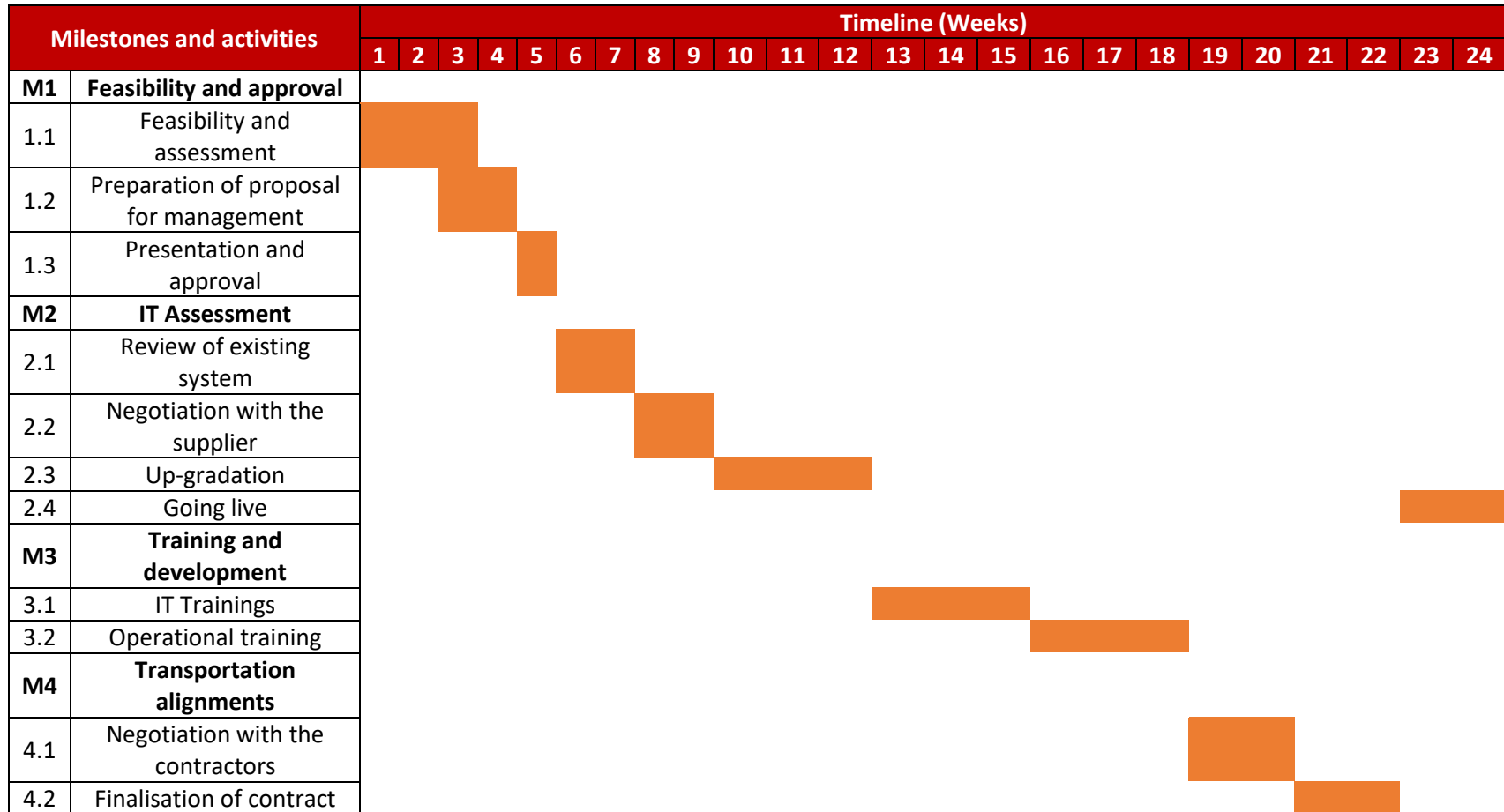
Risk	Likelihood	Impact	Priority	Mitigation plan
Current ERP system might not have the capability to adapt to the suggested changes.	Low	High	High	ERP team will be involved in the implementation of the project. In case of unavailability, the vendor of ERP software will be contacted to add the necessary features.
Staff might not have appropriate training to handle the new system.	Medium	High	High	Training and development of staff will be considered as a critical activity for this project and appropriate training along with refresher training sessions will be planned.
Poor management commitment.	Low	High	High	Management will be involved throughout the process and prior approval will be taken for their engagement and commitment.
Budget overruns due to poor planning.	Medium	Medium	Medium	Planning activity will be critically conducted by considering the role of external factors to minimise budget overruns.
Unavailability of loading/unloading labour for warehouse.	Medium	Medium	Medium	Prior planning and availability will be ensured.
Unavailability or expensive availability of inspection staff at the warehouse.	Medium	Medium	Medium	Prior planning and availability will be ensured.

ACTIVITY SEQUENCING

For planning, the project under consideration has been divided into several milestones. Each milestone has different activities. The project will take six months to complete and the following Gantt Chart presents the timeline and flow of each activity and milestones:

GANTT CHART

The Gantt Chart for the project under consideration is as follows:



PROJECT DURATION

As identified in the risk management plan in accordance with PRINCE2 methodology, project planning is crucial for the success of the project (Wang, Kunc and Bai, 2017). It is imperative to categorically review different activities associated with a project along with the timelines of each to achieve key deliverables of a project (Kerzner, 2017). For the case under consideration, the project has a duration of 24 weeks as a whole. For the individual activities, Table 4 provides duration against each activity:

BUDGET MODELLING

BUDGET AND CUMULATIVE COST

The following table (Table 6) presents a tentative budget for the project:

TABLE 6: BUDGET FOR THE PROJECT

Particulars		Tentative cost
Transportation cost		
Visits to PSL	£	1,300.00
Visits to BEL	£	1,200.00
Visits to Warehouse	£	1,140.00
Total transportation cost	£	3,640.00
Training and development cost		
IT Training	£	1,500.00
Operational training	£	4,200.00
Total training cost	£	5,700.00
Other expenses		
Recruitment expenses	£	2,000.00
IT-upgradation charges	£	24,000.00
Other administrative expenses	£	4,000.00
Misc. expenses	£	3,000.00
Grand Total	£	42,340.00

CASH FLOW

For the project under consideration, the cash flow is presented in Appendix 1 of this report.

PROJECT EXECUTION CHALLENGES

An analysis of project execution challenges is imperative to understand the key success factors of the project. For the case under consideration, resistance due to the existing ERP system, employees, management and staff, training problems and commitment of top management could be among the major challenges. These challenges can be avoided by critically considering the following aspects:

- The ERP system of the company must have the ability to separate ordering to SGL, which will ensure correct records in the database of the organisation.
- The management, as well as staff, must have training on the modified system, its purpose and desired results.
- The commitment of top management is needed, and this project will require an organisational change, which is impossible without capital investment and consistent support from the management.

Moreover, the challenges may also be avoided by employing effective project control mechanism. The primary objective of the project control mechanism is to ensure effective progress of a project towards its actual goals and objectives (Hazir 2015). The control mechanism should ideally have an ability to gauge the progress of a project and based on the feedback, it should suggest an alternate strategy to stay in-line with the objectives of the project (Wang, Kunc and Bai, 2017; Ahmed, 2011). The control mechanism can be developed considering various factors such as the objectives of the project, project milestones, duration and overall nature (Isaac and Navon, 2014; Miranda and Bourque, 2010). For the case under consideration, the project control and monitoring are based on three main areas including milestone review, end review, and post-project review. In each of these reviews, project progress and performance of deliverables will be thoroughly reviewed to decide a way forward for the organisation. Specifically, at each step, the following activities and roles will be involved (Table 7):

TABLE 7: PROJECT CONTROL MECHANISM

Control	Control aims	Participants
Milestone review	Review of performance against each milestone along with performance against budget and deadline.	Project manager, project leads, IT manager
End review	Review of the overall project and performance against deadline, objectives, and budget.	The management steering committee, Project manager, project leads, IT manager
Post-project review	Review of the actual implementation performance of the project to see if everything works as per plan.	The management steering committee, Project manager, project leads, project champions, IT manager

CONCLUSION

The project management plan can be concluded by arguing that the project of direct shipment at SGL will have a potential benefit of more than £250,000 per year. This will require an initial investment in managing the workforce for inspection at a central location along with a renewal contract with the transportation service provider. Besides, major changes in the existing ERP system of the company will be required. Among the key resistances in way of effective implementation, training of the workforce, the commitment of top management and possible challenges in the implementation of new ERP system would be at the top of the list. Nonetheless,

by utilising the mitigation strategy outlined and project control mechanism, these hindrances can be minimised.

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APPENDICES

APPENDIX 1: CASH FLOW STATEMENT

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Total
Cash received							
Approved capital budget	6,334	6,334	6,334	6,334	6,334	6,334	38,004
Savings from the regular operational cost	832	728	732	711	832	844	4,679
Total cash	7,166	7,062	7,066	7,045	7,166	7,178	42,683
Cash paid							
Transportation cost	-	728	728	728	728	728	3,640
Training cost	-	-	-	1,900	1,900	1,900	5,700
Recruitment expenses	-	-	-	2,000	-	-	2,000
Administrative expenses	666	666	667	667	667	667	4,000
IT Up-gradation	-	-	18,000	2,000	-	4,000	24,000
Misc. expenses	500	500	500	500	500	500	3,000
Total cash paid	1,166	1,894	19,895	7,795	3,795	7,795	42,340
Net Cash Flow	6,000	5,168	(12,829)	(750)	3,371	(617)	343
Cash available at the start of month	6,334	7,166	7,062	7,066	7,045	7,166	41,839
Cash available at the end of month	12,334	12,334	(5,767)	6,316	10,416	6,549	42,182

