# A Well-Founded Framework for Assessing IT-Systems by the Suriname Ministry of Finance

Addendum I - Practical Application of the Assessment Framework

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# A Well-Founded Framework for Assessing IT-Systems by the Suriname Ministry of Finance Addendum I - Practical Application of the Assessment Framework

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at the research group of INFORMATION SYSTEMS DESIGN faculty of ELECTRICAL ENGINEERING, MATHEMATICS AND COMPUTER SCIENCE DELFT UNIVERSITY OF TECHNOLOGY

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Chapter

### **Budget Cycle Organization**

This chapter provides the practical application of the 'Organization As Is' model of the assessment framework on the Budget Cycle Organization. As defined in the assessment framework, this model constitutes the construction of organization. Sections 1.1, 1.2, 1.3 and 1.4 respectively represent the practical application of the 'organizational system', 'business process', 'actor role distribution' and 'information distribution' conceptual models of the 'Organization As Is'. The 'organizational system', 'business process' and 'information distribution' models denote the ontological model of the organization. These models are presented in the DEMO methodology as described in the assessment framework. The 'business process' and 'actor role distribution' models denote the implementation model of the organization. These models are presented in tables specifically defined for the assessment framework.

#### 1.1 Organizational System

The Directorate of Finance is the branch of the Ministry of Finance that focuses on every aspect concerning government expenditures, which are based on the annual operational government budget<sup>1</sup>. The complete process from the determination of the budget to the accounting and auditing of the government expenditures lies within the responsibility of the Directorate of Finance. This process is called the budget cycle and consists of five phases [*Van Financien Ministerie*, 2007]; the budget preparation phase, the budget determination and approval phase, the budget execution phase, the audit phase and the accounting phase. The preparation and the determination and approval phase focus on changing the state of the budget from proposed budget to operational budget. The execution phase deals with government expenditures based on the budget. The audit and the accounting phase focus on the transactions carried out in the execution phase.

It should be noted that the budget cycle is carried out by all Government Ministries, not only the Directorate of Finance. Since the other Ministries have an essential role in the execution of the budget cycle, the government departments concerned with the budget cycle are chosen to be the focus organization of this report. The 'Budget Cycle Organization' has been identified conform the notion of government subsystem as defined in the assessment framework. Figure 1.1 and table 1.1 respectively constitute the DEMO Action Transaction Diagram and Transaction Result Table of the 'Budget Cycle Organization'.

<sup>&</sup>lt;sup>1</sup>further referred to as the budget

Transaction	Resulting P-fact		
T01 Operationalize budget	Budget B for Year Y has been operationalized		
T02 Propose budget	Budget B for Year Y has been proposed		
T03 Approve budget	Budget B has been approved		
T05 Operationalize budget change	Budget change BC for Year Y has been operationalised		
T04 Aprove budget change	Budget change BC for Year Y has been operationalized		
T09 Grant periodic fund	Periodic fund PF has been granted		
T08 Grand incidental fund	Incidental fund IF has been granted		
T10 Approve incidental fund	Incidental fund IF has been approved		
T13 Process order	Order O has been processed		
T11 Deliver order	Order O has been delivered		
T12 Pay order	Order O has been paid		
T19 Process salary	Salary S has been processed		
T20 Realize Salary	Salary S has been realized		
T22 Pay Salary	Salary S has been payed		

Table 1.1

Transaction Result Table for the Budget Cycle Organization

#### 1.1.1 Budget Preparation, Determination and Approval

The primary of objective of budget preparation, determination and approval phase is annually obtaining an operational government budget. The budget cycle organization consists of three elementary (internal) actor roles responsible for processes concerning these phases; the budget deliverer, proposed budget deliverer and the budget changer. The actor roles are currently fulfilled by employees (actors) of different departments within the Directorate of Finance and the Line Ministries. The external (composite) actor roles concerned with these phases are the Line Ministers and the Suriname National Assembly (DNA). Concerning the budget preparation, determination and approval two (2) business processes are identified: the budget delivery process and the budget change process. The budget delivery process consists of transaction T01 (operationalize budget), T02 (deliver proposed budget) and T03 (approve budget). This process concerns the annual delivery of the government budget including the approval of the DNA. The budget change process consists of transaction T05 (change budget) and transaction T04 (approve budget change).

#### 1.1.2 Budget Execution

The budget execution phase is concerned with the business processes that focus on the government expenditures based on the budget. Government expenditures concern the payment of government salaries and non-complimentary services and goods delivered to government organizations. In addition, operational fundings are granted for the execution of expenditures. The budget cycle system consists of elementary (internal) actor roles responsible for processes concerning the budget execution: the order processor, the order paymaster, the salary processor, the salary calculator, the salary paymaster, the periodic funder and the incidental funder. The actor roles are currently fulfilled by employees (actors) of the different departments within the Directorate of Finance and the Line Ministries. The external (composite) actor roles concerned with the budget execution are the Line Ministers, the Council of Ministers, the order requester and the order deliverer. The order requester role is fulfilled by employees of the line ministries that have the competencies to request a delivery. The Ministries grant these competencies on the basis of their own rules, therefore the actor role is considered to be composite and external. The order deliverer role is fulfilled by any individual or organization that delivers non-complimentary products or services to the government. Government expenditures concern the payment of government salaries and non-complimentary services and goods delivered to government organizations. There are three (3) business processes concerning government expenditures; order process, order payment process, salary process. The order process consists of transaction T13 (process order) and transaction T11 (deliver order). The order payment process consists of only one transaction T12 (pay order). The salary process consists of transaction T19 (process salaries), transaction T20 (realize salary) and transaction T22 (pay salary).

#### 1.1.3 Budget Funding

According to 'Comptabiliteits wet' - Article 16 expenditures may only be executed after the Minister of Finance has granted funds on behalf of the expenditures. Funds may only be granted after the budget's declared operational. In other words the funds are mainly based on an operational budget. There exist two types of operational fundings; periodic fundings and operational fundings. The periodic fundings are granted on behalf regular expenditures. This includes the salary payments and payment of regular service or product deliveries. Incidental fundings are granted on behalf of payments based on the so called policy plans and extremely large expenditures. For example, the financial resources for specific projects. The actual payment of such processes is exactly the same as the order payment. The periodic funding process consists of exactly one transaction T09 (grant periodic funding). The incidental fundinc process consists of transaction T08 (grant incidental funding) and transaction T10 (approve incidental funding). The elementary roles concerned with the funding process are the periodic funder and the incidental funder. The incidental funding process is initiated by the line ministers, where as the funding is approved by the council of ministers.

#### 1.2 Business Processes

#### 1.2.1 Budget Delivery Process

The delivery of the annual budget (T01) is annually self-initiated. In order to complete this process, the proposed budget should be delivered (T02) by every line-ministry and decided on (for approval) (T03) by the DNA. This process will be referred to as the budget delivery process.

As described above, the budget delivery process is annually self-initiated (T01/rq), the 'budget deliverer' (A01) then produces guidelines for the budget structure <sup>2</sup> (T01/pm). The budget instructions are presented to the 'proposed budget deliverer' (A02) as a request to deliver the proposed budget (T02/rq). After receiving the instructions (T02/pm), the 'proposed budget deliverer' creates the proposed budget (T02) in conformity with the instructions and delivers it to the 'budget deliverer' (T02/st). If the proposed budget is not conform the budget instruction, A02 is requested to change it (T02/rj, T02/rq). This loop continues until the proposed budget is accepted.

After the acceptance (T02/ac), the proposed budget is presented for approval to 'DNA' (T03/rq). 'DNA' then debates on the contents of the proposed budget (T03) and makes a decision (T03) in terms of an approval, rejection or change on the proposed budget (T03/st). In the case of a rejection or change in the proposed budget, the 'budget deliverer' again presents instructions to change the proposed budget (T02/rq) conform the remarks from the 'DNA'. This loop continues until the budget is accepted. An approved budget is accepted (T03/ac) and declared operational (T01, T01/st and T01/ac).

By law the annual government budget should be declared operational on the first (1st) of January of the running year. The law also enforces that the government budget may be declared operational if and only if the 'DNA' has approved it. This means that the budget should be approved before the first of January of the running year. The annual budget is made operational after the President confirms the budget, by signing it, and the Minister of Internal Affairs makes a declaration in the Suriname Government Gazette<sup>3</sup>. The government budget is a law and therefore made operational as such.

<sup>&</sup>lt;sup>2</sup>dutch:begrotings aanschrijving

<sup>&</sup>lt;sup>3</sup>Staatsblad van de Republiek Suriname

Figure A.1 and table A.1 respectively constitute the DEMO process step diagram and action rule table for the budget delivery process. Table A.3 is hte BID-activity table for the budget delivery process.

#### 1.2.2 Budget Change Process

During the budget year <sup>4</sup> any line-minister may request for a change in the budget (T05). The request for a change implies the deliverance of a new proposed budget. Nevertheless a budget change can just be declared operational after the approval of 'DNA' (T04). This result in the second identified process referred to as the budget change process.

When the changes to be made are presented (T05/rq) to the budget changer (A05), the changes are formulated in a formal writing (T05/pm) and presented to 'DNA' (T04/rq). Analogous to the budget delivery process, the 'DNA' debate on the contents of the budget change (T04/pm) and makes a decision (T04) in terms of an approval or a rejection (T04/st). In the case of a rejection the budget changer rejects the decision (T04/rj) and the process stops, implying that the changes will not be implemented in the current budget (T05/qt). If the budget change has been approved, the decision is accepted (T05/ac) and the changes are implemented in the current budget (T05). The new budget is declared operational (T05/st and T05/ac) as described in the previous section. Since the operational budget is a law, the change in the budget is a change in the law and therefore treated as such.

Figure B.1 and table B.1 respectively constitute the DEMO process step diagram and action rule table for the budget delivery process. Table B.3 is the BID-activity table for the budget delivery process.

#### 1.2.3 Order Process

The order process is initiated by the 'order requester' (CA1000), by presenting the order form (T13/rq). The overall credit and the authority of the requester are then checked (T13/pm, 13/dc). The 'order processor' (A13) then promises (T13/pm) or declines (T13/dc) to deliver the order. If the order is declined the process stops (T13/qt), implying that the order will not be delivered. A promised order, results in a request for a delivery (T11/rq) to an external deliverer (CA2000).

If it is not possible to deliver the requested product <sup>5</sup>, the delivery is declined and the complete order process is stopped (T13/qt). If the deliverer promises to deliver the product, the delivery-order is formally placed (T11/pm). The product is now prepared (T11) and the product and the invoice are delivered (T11/st). If the 'order processor' is satisfied with the delivery and the invoice information is correct, the order is accepted (T11/ac). The order is now concluded (T13, T13/st, T13/ac). In any other case the order is rejected (T11/rj) and the complete order process is stopped (T13/qt).

Figure B.1 and table B.1 respectively constitute the DEMO process step diagram and action rule table for the order process. Table B.3 is the BID-activity table for the order process.

#### 1.2.4 Order Payment Process

The process is initiated by the delivering company, mentioned in the order process, by presented the received payment order (T12/rq). The 'order paymaster' (A12), evaluates if the delivery is fulfilled and decides if the bill should be paid <sup>6</sup>. If it is decided that the bill should not be paid (T12/dc), the process is stopped (T12/qt). If the deliverer still thinks that he should be paid, he is allowed to file another request. In case the payment is promised (T12/pm), the bill is paid (T12, T12/st) and the process is concluded (T12/ac).

 $<sup>^4</sup>$ begrotingsjaar

<sup>&</sup>lt;sup>5</sup>With 'product' is meant a tangible or non-tangible good delivered to the government. This therefore also includes services.

<sup>&</sup>lt;sup>6</sup>the rules for the approval of the payment, are defined, but considered irrelevant at this point of the research

Figure D.1 and table D.1 respectively constitute the DEMO process step diagram and action rule table for the Order Payment process. Table D.3 is the BID-activity table for the order payment process.

#### 1.2.5 Salary Process

The salary process is self-initiated (T19/rq, T19/pm) by the salary administrator (A19). The salaries are then realized (T20/rq, T20/pm and T20) and delivered (T20/st). If mistakes are made, the salaries are rejected (T20/rj) and recalculated (T20). Otherwise, the salaries are accepted T20/ac) and paid (T22). The salary process is concluded (T19, T19/st, T19ac) after all the salaries are paid.

Figure E.1 and table E.1 respectively constitute the DEMO process step diagram and action rule table for the salary process. Table E.7 is the BID-activity table for the salary process.

#### 1.2.6 Periodic Fund Process

Comtabiliteitsbesluit - Artikel 13 obliges the Minister of Finance to grant expenditure funds (without request) to the line ministries. These funds are granted during the execution of the periodic fund process, which is self-initiated (T09/rq). The current credit and the budget of every Line Ministry is checked before the periodic fund is calculated (T09/pm and T09) and granted (T09/st and T09/ac). The funds are granted after the Minister of Finance signs the fund documentation. The funds are allocated for operational expenditures. Other expenditures, such as projects, are funded when needed. These incidental funds are granted during the execution of the incidental fund process (T08).

Figure F.1 and table F.1 respectively constitute the DEMO process step diagram and action rule table for the periodic fund process. Table F.3 is the BID-activity table for the periodic fund process.

#### 1.2.7 Incidental Fund Process

The line minister requests an incidental fund (T08/rq) for expenditures other than the operational expenditures. The 'incidental funder' (A08) then promises to process the fund request (T08/pm) or not (T08/dc). This promise is made on the basis of the current financial margin of the requesting ministry. The Council of Ministers makes a decision for the authorization of the fund (T10/pm, T10/ex, T10/st). If the funding is not approved, the funding process is stopped (T10/rj, T08/qt). If the funding is approved, the funding is properly processed (T08/ex). By signing the incidental fund documentation, the Minister of Finance grants the incidental fund (T08/st).

Figure G.1 and table G.1 respectively constitute the DEMO process step diagram and action rule table for the incidental fund process. Table G.3 is the BID-activity table for the incidental fund process.

#### 1.3 Actor Role Distribution

#### 1.3.1 Budget Delivery Process

Thesaurie Inspectie has the institutional responsibility for the initiation of the budget delivery process (T01/rq, T01/pm and T02/rq). The financial department (BFZ) of any line ministry is responsible for delivering the proposed budget (T02/pm, T02/ex and T02/st). Thesaurie Inspectie checks the delivered proposed budget and decides of the proposed budget is acceptable (T02/rj, T02/ac). If the proposed budget is accepted the President presents it to the National Assembly (DNA). Constitutionally, the president is the only one who may present the proposed budget for approval. The budget is a law and therefore presented for approval to the National Assembly. The decision to approve

the budget (T03/pm, T03/ex) is made by the 'DNA', which is granted a political authority. If the budget is disapproved (T03/rj) in terms of changes or a complete rejection, Thesaurie Inspectie presents the remarks for adapting the proposed budget to the line ministries (T02/rq). If the budget is approved (T03/ac), the President signs the budget and the Minister of Internal Affairs makes a declaration in the Suriname Government Gazette<sup>7</sup>(T01/ex, T01/st, T01/ac). In other words the budget is declared operational. The president is the only one who may declare a law operational and therefore possess the constitutional authority to do so.

Note here that the actor role 'budget deliverer' (A01) is assigned to several actors. The political responsibility is assigned to the Minister of Finance. As described in the authorization rules in the authority hierarchy of the assessment framework, constitutional responsibility overrules political responsibility. For this reason, The President takes over the 'budget deliverer' role for the execution of process step T03/rq. In addition, The President and the Minister of Internal Affairs collectively fulfill the 'budget deliverer' for operationalizing the budget (T01/ex, T01/st). Collectively, they possess the constitutional authority for executing these process steps.

In addition, the authority hierarchy defined the notion of operational delegation, where the execution of I and D activities is delegated to actors on lower level of the hierarchy. Thesaurie Inspectie, as an operational department of the Ministry of Finance, is operationally delegated to execute the I- and D- activities of the process steps of which the Minister of Finance is responsible for.

The institutional responsibility for actor role 'proposed budget deliverer' (A02) is a case of political delegation. The political responsibility is assigned to the line minister.

Tables A.2 and A.7 respectively depict the actor responsibility table and the BID-actor table for the budget delivery process.

#### 1.3.2 Budget Change Process

The budget change is presented by the requesting line minister (T05/rq) to the Minister of Finance (T05/pm). Thesaurie Inspectie formulates the change in a formal writing (T05/pm). As is the case with every law proposal, the President formally presents the budget change to the 'DNA' (T04/rq). The decision to approve the budget change (T04/pm, T04/ex) is made by the 'DNA', which is granted a political authority. Disapproving the budget change (T04/rj) implies that the budget change is not enforced (T04/sp). If the budget is approved (T04/ac), the President signs the budget change and the Minister of Internal Affairs makes a declaration in the Suriname Government Gazette (T05/ex, T05/st, T05/ac).

Note here that the actor role 'budget changer' (A05) is assigned to several actors. The political responsibility is assigned to the Minister of Finance. As described in the authorization rules in the authority hierarchy of the assessment framework, constitutional responsibility overrules political responsibility. For this reason, The President takes over the 'budget changer' role for the execution of process step T03/rq. In addition, The President and the Minister of Internal Affairs collectively fulfill the 'budget deliverer' for operationalizing the budget (T01/ex, T01/st). Collectively, they possess the constitutional authority for executing these process steps.

In addition, the authority hierarchy defined the notion of operational delegation, where the execution of I and D activities is delegated to actors on lower level of the hierarchy. Thesaurie Inspectie, as an operational department of the Ministry of Finance, is operationally delegated to execute the I- and D- activities of the process steps of which the Minister of Finance is responsible for.

Tables B.2 and B.7 respectively depict the actor responsibility table and the BID-actor table for the budget delivery process.

<sup>&</sup>lt;sup>7</sup>Surinaams Staatsblad

#### 1.3.3 Order Process

The order process is geographically carried out at the line ministries. Any department of a line ministry may request the delivery for a product (T13/rq). The department BFZ is institutionally responsible for the correct execution of the order process (T13). The execution of the activities during this process is institutionally delegated to sub-departments of BFZ. The sub-department CKB (Centrale Krediet Bewaking) is institutionally delegated to decide if the order may be placed (T13/rj or T13/pm) on the basis of the available credit of the line ministry and the authority of the ordering department to place that specific order. The sub department INKOOP is institutionally delegated to place the order (T11/rq) at the delivering company. The delivering company is responsible for the delivery of the order (T11/pm, T11/dc, T11/ex, and T11/st).

When the order is delivered, the sub-department INKOOP signs the delivery receipt, this implies that this department insures that the delivery has actually been done and the he is content with the delivery. If INKOOP is not content with the delivery the complete order process is stopped (T11/rq, T13/qt). If INKOOP is content with the delivery, the sub-department checks the initial order form with the delivering companies invoice (for the price) and the delivering companies' delivery receipt (for actual delivery). If one of these three factors is not correct the complete order process is stopped (T11/rq, T13/qt). If all of these factors are correct, RECU presents a payment order to the delivering company, this may be translated as a statement of the acceptance of the delivered product (T11/ac) and a promise to pay for the order (T12/pm).

In can now be concluded that the delivered product is accepted if and only if the delivery has actually been done and the invoice price coincides with the initial agreed price. In the first instance, this says that RECU has the authority to accept (T11/ac) or (T11/rj) the delivered product, because this departments checks both conditions. In the case, where the ordering department is not content with the delivered product, the INKOOP department does not sign the delivery receipt, since the product is than send back. This means that one of the conditions (the actual delivery) is already negative. In such a case it is the INKOOP department that decided not to accept (T11/rj) the delivered product. The observation here is that the coordination act T11/ac (acceptance of the delivered product) is only executed by the RECU department. The opposing coordination act T11/rj (rejection of the delivered product) is executed either by INKOOP (when actual delivery is rejected) or RECU (when the invoice price does not coincide with the initial agreed price).

The initial order request was done by the ordering department. The actual acceptance of the delivery is done by INKOOP (T11/ac). The activities for the execution, statement and acceptance of the order process lies within the responsibility of the ordering department. However, the process within the Line Ministries including granted authorities for ordering departments are separately and decided on by the Line Ministries. Therefore, the actual activities and assigned responsibilities is UNKNOWN within the framework of this report.

Note that the RECU department presents a government payment order to the delivering company, implying that the delivering company is insured of payment. In other words the order payment has been promised. According to 'Comptabiliteits wet' - Article 22expenditures based on the government may only be paid or promised to be paid, by the Minister of Finance or on behalf of the Minister of Finance. In the second case, the Minister of Finance politically delegates the execution of these actions to a department. RECU is a sub department of the Line Ministries and therefore not under responsibility of the Minister of Finance. Granting RECU the authority to promise the order payment is incorrect according to the rules of delegation, but also according 'Comptabiliteits wet' - Article 22. In the order payment process, the payment is promised again, but at another point of time. It will, then, be explained what happens if the order payment is declined (even though the payment was already promised during the actual order process).

Tables C.2 and C.7 respectively depict the actor responsibility table and the BID-actor table for the order process.

#### 1.3.4 Order Payment Process

During the order process the ordering department received a payment order from the RECU department (T11/ac). This action, is insurance for the ordering department that the payment will be executed. Nevertheless, *Comtabiliteits wet - Artikel 22* states that every claim on the government budget is settled or paid by the Minister of Finance. In other words, the Minister of Finance is politically responsible for every settlement and payment based on the government budget. The decision to actually execute payments is politically delegated to the department COMPTABILITEIT. It can be concluded that COMPTABILITEIT has been granted the institutional authority and responsibility for actual payment (T12).

The delivering company presents the payment order (T12/rq). COMPTABILITEIT makes a decision, based on current credits of the involved line ministry and the correctness of the payment order (T12/rj or T12/pm). The actual payment is delegated to CBD (Centrale Betaaldienst) (T12/ex, T12/st).

The observation here is that the payment for delivery is promised in the order process by presenting the payment order (T11/ac) and in the order process (T12/pm). Accepting a delivered product and presenting the payment order obliges the government to 'pay the bill'. Nevertheless, the acceptance of the delivery product is the responsibility of the line ministry and the payment is the responsibility of the Ministry of Finance. In the unfortunate case where the delivery is accepted (T11/ac) and the payment is rejected (T12/rj) a political solution is needed. This is beyond the scope of this report.

Tables D.2 and D.7 respectively depict the actor responsibility table and the BID-actor table for the order payment process.

#### 1.3.5 Salary Process

The salary process is initiated (T19/rq, T19/pm, T120/rq) by the personnel department PZ (personeels zaken) of the line ministries. The Line Minister is politically responsible for the calculation of the salaries of the concerned ministry (T20). The calculation is politically delegated to the financial department BFZ, which institutionally delegates it to its sub-department CKB. If the calculated salaries are correct and complete, the salary list is presented for payment (T22/rq).

According to *Comtabiliteits wet - Artikel 22* every claim on the government budget are settled are paid by the Minister of Finance In other words, the Minister of Finance is politically and constitutionally responsible for every settlement and payment based on the government budget. The decision to actually execute payments is delegated to the department COMPTABILITEIT. It can be concluded that COMPTABILITEIT has been granted the institutional authority and responsibility for actual payment (T22). COMPTABILITEIT makes a decision, based on current credits of the involved line ministry and the correctness of the salary list (T22/rj or T22/pm). The actual payment is delegated to CBD (Centrale Betaaldienst) (T22/ex, T22/st).

Tables E.2 and E.7 respectively depict the actor responsibility table and the BID-actor table for the order payment process.

#### 1.3.6 Periodic Fund Process

The Minister of Finance is politically responsible for periodically granting expenditure funds. Thesaurie Inspectie, as an operational department of the Ministry of Finance, is operationally delegated to execute the I and D activities of the process steps of which the Minister of Finance is responsible for.

Tables F.2 and F.7 respectively depict the actor responsibility table and the BID-actor table for the periodic fund process.

#### 1.3.7 Incidental Fund Process

The Minister of Finance is politically responsible for franting incidental funds. Thesaurie Inspectie, as an operational department of the Ministry of Finance, is operationally delegated to execute the I and D activities of the process steps of which the Minister of Finance is responsible for.

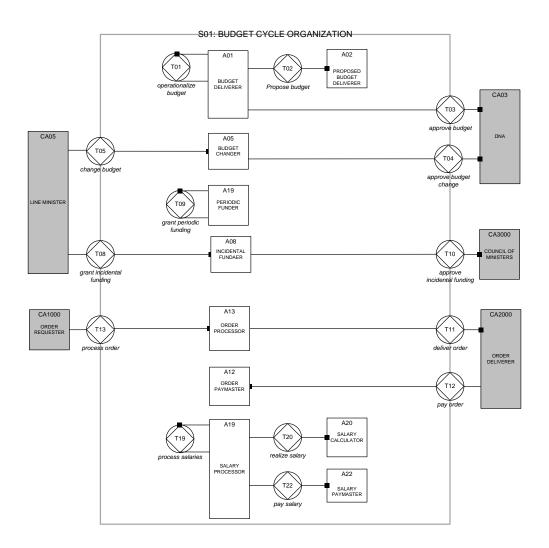
Tables G.2 and G.7 respectively depict the actor responsibility table and the BID-actor table for the incidental fund process.

#### 1.4 Information Distribution

Object class	CREATE	USE	
BUDGET		T01/rq, T02/rq, T03/rq, T04/rq, T05/rq	
B is for Y	T01/rq	T02/pm, T03/pm, T04/pm, T05pm	
B is for LM	T01/rq	T02/rq, T05/pm, T03/pm, T04/pm	
B has been operationalized	T01/ex	T01/st, T01/ac, T09/ex, T08/ex	
B has been proposed	T02/ex	T02/st, T02/ac, T03/rq, T03/ex	
B has been approved	T03/ex	T03/st, T03/ac, T03/rj, T01/ex	
INCIDENTAL FUND		T08/rq	
IF is based on B	T08/rq	T08/pm, T10/rq	
IF has been granted	T08/ex	T08/st, T08/ac, T12/pm, T12/dc	
IF has been approved	T10/ex	T10/st, T10/ac, T08/ex	
PERIODIC FUND		T09/rq	
PF is based on BG	T09/rq	T09/pm	
PF has been granted P	T09/ex	T09/st, T09/ac, T12/pm, T12/dc, T22/pm, T22/dc	
ORDER		T13/rq	
O is requested by OR	T13/rq	T13/pm, T11/ac, T12/pm, T12/dc	
O is delivered by OD	T11/rq	T12/ex, T12/st	
O is based on F	T13/pm	T11/ac, T12/pm, T12/dc	
O has been processed	T13/ex	T13/st, T13/ac	
O has been delivered	T11/ex	T11/st, T11/ac, T11/rj,T12/pm, T12/dc, T13/ac	
O has been paid	T12/ex	T12/st, T12/ac	
SALARY		T19/rq	
S is for M	T19/rq	T20/rq, T22/ex	
S regards E	T19/rq	T20/rq, T22/ex, T22/st	
S is based on PF	T19/rq	T19/pm, T22/pm, T22/dc	
S has been processed	T19/ex	T19/ex, T19/st	
S has been realized	T20/ex	T20/st, T20/ac, T20/rj, T22/pm, T22/dc, T22/ex	
S has been paid	T22/ex	T22/st, T22/ac, T19/ex, T19/st	
LINEMINISTRY		T01/rq	
EMPLOYEE		T19/rq	
ORDER REQUESTER		T13/rq	
ORDER DELIVERER		T11/pm	
YEAR		T01/rq	
PERIOD		T09/rq	
MONTH		T19/rq	

Table 1.2

Information Use Table for the Budget Cycle Organization



 $\label{eq:Figure 1.1}$  ATD of the Budget Cycle Organization

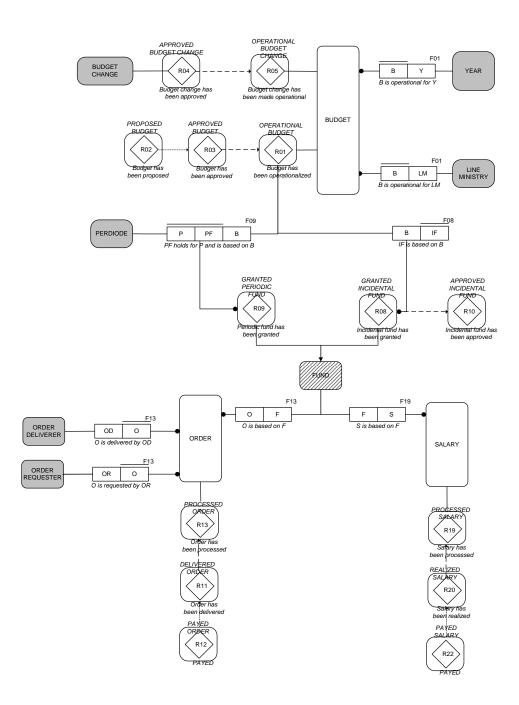


Figure 1.2
FRD of the Budget Cycle Organization

Chapter

### **Existing IT systems**

This chapter provides the practical application of the 'Existing IT system' model of the assessment framework. The existing IT systems adressed in this report concern the IT systems supporting the Budget Cycle Organization. As defined in the assessment framework, this model constitutes the functional model of IT systems under investigation. The functional model, as described in the assessment framework, consists of the 'function identification', 'subsystem identification' and 'user distribution' model. The models are presented in tables specifically defined for the assessment framework. The production of these tables for each business process of the Budget Cycle Organization can be found in the corresponding appendices. Note that the electronic support table (EST) is not explicitly defined, rather the information provided in this table is integrated in the remaining tables of the functional model. The entry colors depicted these tables coincide with the the entry colors of the corresponding EST.

Section 2.1 provides a concise description of the concerning IT-(sub)systems. Section 2.2 provides an evaluation of these IT systems on the basis of the functional model of the IT systems, presented in the produced tables.

#### 2.1 Description of Existing Systems

Financin Information System (FINIS) is the largest information system used within the Directorate of Finance. It mainly supports the operational processes of Budget Cycle Organization. FINIS is an integrated system consisting of four subsystems; begroting systeem, BUCS, betaalsysteem and grootboeksysteem. The actual calculation of salaries is done with a salary calculation system, which is not electronically integrated with FINIS.

#### 2.1.1 FINIS Begroting Systeems

The 'begroting systeem' as a sub system of FINIS is used for the input of the budget, changes in the budget and fundings. The actual calculation and/or determination of the budget and the fundings is not supported by the 'begroting systeem'. Based on the functionality of the 'begroting systeem', it can be concluded that this subsystem should consist of two (2) main components. A component supporting the input of the budget or budget changes. And a component supporting the input of operational funding. Note now the analogy of the focus point of these defined components and the budget delivery process, the budget change process, the periodic fund process and the incidental fund process of the Budget Cycle Organization. The provided functionality of the 'begroting systeem' are provided in the Function Identification Tables (FIT) of these processes.

The corresponding Subsystem Identification Tables (SIT) depicts which activities are supported by the 'begroting systeems'. The users of the 'begroting systeem' are provided in the User Identification Tables (UIT) of the above mentioned processes.

#### 2.1.2 FINIS BUCS and Salary Calculation System

BUCS as a subsystem of FINIS supports the complete order process, part of the order payment process and part of the salary process. The Salary Calculation System supports a part of the salary process.

BUCS provides relevant information needed for the approval of an order (T13/rj or T13/ac). In the case of an approval, BUCS provides the possibility to insert the order, check the credit and state the approval. This means that the accept act of T13 (process order) is partly electronically implemented by BUCS. The check if the requester has to authority to place the order, is still manually performed. The credit information is calculated by BUCS, partly by funding information electronically transmitted by the 'begrotingsysteem' and earlier expenditures stored in the system's database. The delivery of the order (T11) is completed after the accept act. BUCS provides the order information needed for the approval of the delivery. In the case of an approval, BUCS provides the the possibility for inserting the completion of the delivery and the invoice (recieved from the deliverer) and printing the payment order. The functionalities, implemented in BUCS, supporting the order process are performed by employees of the (sub)department BFZ. The SIT of the order process depicts the activities of this process, which are supported by BUCS. The corresponding entries of the FIT of the order process depict the actual services this subsystem provides. A subset of the users of BUCS are depicted in the UIT of the order process.

The approval of the order payment (T12/pm) is supported by BUCS; clicking the approved button (displayed by the BUCS'system) is the electronic implementation of the promise action. BUCS provides the relevant information on which the approval is based on. Parts of this information is electronically transmitted by the 'begroting systeem' and parts are stored during the execution of the order process. The functionalities implemented in BUCS, supporting the order payment process are performed by employees of the department Comptabilitiet. The SIT of the order payment process depicts the activities of this process, which are supported by BUCS. The corresponding entries of the FIT of the order payment process depict the actual services this subsystem provides. A subset of the users of BUCS are depicted in the UIT of the order payment process.

The insertion of salaries and the salary payment approval are supported by BUCS. The salary calculation system supports the salary calculation. The salary specifications are manually produced and inserted in the calculation system and processed. The calculated salaries (T20/ex) are printed on paper (T20/st). The printed lists are inserted in the BUCS system (T20/rj, T20/ac) and send (with a button click) for payment (T22/rq). The approval for the payment of the salaries (T22/pm) is performed with a button click. The salary calculation system is maintained and used by the department CEBUMA. The documentation of the salaries (T20/ac) and the request for the payment of the salaries (T22/rq), via BUCS, is performed by the sub departments of the financial department. The approval for the payment, via BUCS, is performed by the Comptabiliteit department. The functionalities implemented in BUCS and the salary calculation system, supporting the salary process are performed by employees of the department Comptabilitiet. The SIT of the salary process depicts the activities of this process, which are supported by BUCS and the salary calculation system. The corresponding entries of the FIT of the salary process depict the actual services this subsystem provides. A subset of the users of BUCS and the complete set of the users of the salary calculation system are depicted in the UIT of the salary process

#### 2.1.3 FINIS Betaal Systeem

The 'betaalsysteem' supports the order and salary payment by displaying payment information and providing the possibility to electronically confirm the payment. The payment information (inculding the approval) is electronically transmitted from BUCS. The 'betaalsysteem' is used by the CBD department. The SIT of the order payment process and the salary process depicts the activities of these process, which are supported by the 'betaalsysteem'. The corresponding entries of the FIT of the order payment process and the salary process depict the actual services this subsystem provides. The users of the 'betaalsysteem' are depicted in the UIT of the order payment process and the salary process.

#### 2.1.4 FINIS Grootboek Systeem

...

#### 2.2 Evaluation of Existing Systems

The evaluation of the IT systems explained in the previous section will be based on the information provided in the Function Consistency Tables (FCT), User Consistency Tables (UCT) and Subsystem Identification Tables (SIT). As the assessment framework described, the FCT depicts the (in)completeness and (in)correctness of the provided functionality. The UCT depicts shows the correctness of the user assignment. The SIT depicts which activities are electronically supported by the concerning subsystem. This table provides an opening for discussion on IT system integration.

In this evaluation only 'abnormalities' in the tables will be adressed. For the FCT table this means the entries containing the term <code>inconsistent</code> . The entries containing <code>incomplete</code> will not be adressed, it is assumed that it was choosen not to provide electronic support to the concerning activities. From the UCT the entries containing the terms <code>correctly taken over</code> and <code>inconsistent</code> are adressed. From the SIT cases where IT integration seem incorrect are adressed.

#### 2.2.1 CEBUMA as user of the Salary Information System

The salary information system supports the process steps concerned with the salary calculation (T20/rq, T20/pm, T20/ex, T20/st). In the BID-actor table (table E.7) CKB was marked as the responsible department for the I- and D- activity of these process steps. In the UIT table CEBUMA was marked as the department using the salary information system in executing the I- and D0 activity of these process steps. In addition, in the FIT it is stated that the actual calculation (I activity) is completely electronically replaced by the functionality of the salary calculation system. It can be concluded that CEBUMA only inserts the salary information in the calculation system and prints the calculated salaries. However, the salary information is produced by the CKB as stated in the BID-actor table thus CKB is responsible for this information. In addition, if something goes wrong with the salary list, CEBUMA is not the first to hold responsible, yet this department it the first to 'touch' the salary list.

Note here, that the assignment of user roles is the responsibility of the Directorate of Finance and not of the vendor. With the information the BID-actor table and the UCT provide, such inconsistency may be discussed and straightened

#### 2.2.2 Integration of the Subsystems Supporting the Salary Process

The salary process is an example of a business process which is supported by more than one (three) subsystems. The calculation of the salaries (T20) is supported by the salary information system. The FINIS BUCS supports the salary payment request and approval (T20/rq, T22/pm). In addition the FINIS betaalsysteem supports the actual salary payment (T20/ex, T20/st).

The calculated salaries produced by the salary information sytem are currently printed out and inserted in the FINIS BUCS system (see also the FIT depicted in table E.4). It can be concluded that these subsystems are not (porperly)integrated. The best case scenario would be an electronic transmission of the salaries from the salary information system to the other. The FINIS BUCS and FINIS betaalssysteem share a centralized database, implying an integration of these systems. Of course, this was already expected, since both subsystem are part of one integrated system.

#### 2.2.3 Electronic Support for the Order Request

The order request is electronically supported by the FINIS BUCS system. In the BID-actor table (table E.7), the ordering department is responsible for the order request (T13). The UIT (table D.8) depicts the CKB department as the user of the supporting functionality for this process step. As explained in the assessment framework, a subject fulfilling an internal actor role is aloud to take over an insert act(D-act) from an external actor role. It is not always possible for the subject fulfilling an external actor role to access (internal) information systems. In the case of the order request, the ordering department can not access the FINIS BUCS systems. In addition CKB is responsible for the promise act (T13) of the order process. Therefore it is said (see UCT table C.9) that CKB has correctly taken over the user role from the ordering department.

Appendix

Α

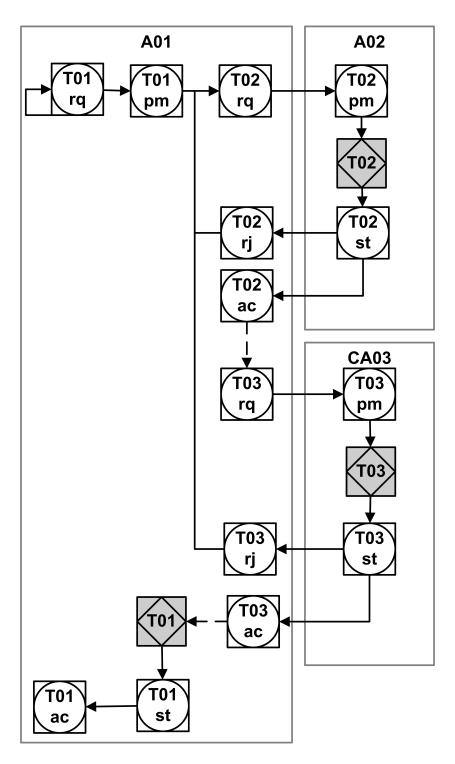
## **Budget Delivery Process**

Actor	Agendum	Condition	Action
A01	REQUESTED T01(B,Y)		PROMISE T01(B,Y)
			REQUEST T01(B,Y+1)
	PROMISED T01(B,Y)	DO FOR ALL LINE MINISTRIES	REQUEST T02(B,Y)
	STATED T02(B,Y)	PROPOSED BUDGET IS NOT AC-	REJECT T02(B,Y)
		CEPTED	
		PROPOSED BUDGET IS ACCEPTED	ACCEPT T02(B,Y)
	REJECTED T02(B,Y)		REQUEST T02(B,Y)
	ACCEPTED T02(B,Y)		REQUEST T03(B,Y)
	STATED T03(B,Y)	BUDGET IS NOT APPROVED	REJECT T03(B,Y)
		BUDGET IS APPROVED	ACCEPT T03(B,Y)
	REJECTED T03(B,Y)		REQUEST T02(B,Y)
	ACCEPTED T03(B,Y)		EXECUTE T01(B,Y)
			STATE T01(B,Y)
	STATED T01(B,Y)		ACCEPT T01(B,Y)
A02	REQUESTED T02 (B,Y)		PROMISE T02(B,Y)
	PROMISE T02(B,Y)		EXECUTE T02(B,Y)
			STATE T02(B,Y)
CA03	REQUESTED T03(B,Y)		PROMISE T03(B,Y)
	PROMISED T03(B,Y)		EXECUTE T03(B,Y)
			STATE T03(B,Y)

 $\label{eq:A.1} \mbox{Action Rules Budget Delivery Process}$ 

Process	Role	Delegation/	Institutional	Political/
step		Propagation		Constitutional
T01/rq	A01			Minister of Finance
T01/pm				Minister of Finance
T02/rq				Minister of Finance
T02/pm	A02		BFZ	Line Minister
T02/ex			BFZ	Line Minister
T02/st			BFZ	Line Minister
T02/rj	A01			Minister of Finance
T02/ac				Minister of Finance
T03/rq				The President
T03/pm	CA03			DNA
T03/ex				DNA
T03/st				DNA
T03/rj	A01			Minister of Finance
T03/ac				Minister of Finance
T01/ex				The President, Minister of
				Internal Affairs
T01/st				The President, Minister of
				Internal Affairs
T01/ac				Minister of Finance

 $\label{eq:A.2} \mbox{Actor Responsibility Table for the Budget Delivery Process}$ 



 $\label{eq:Figure A.1} \mbox{PSD of the Budget Delivery Process}$ 

Proces Step	B-act	I-act	D-act
T01/rq	initiate budget operalisation		
T01/pm	promise budget operalisation	produce guidelines for the budget structure	document budget instruction
T02/rq	request budget proposal	provide guidelines for budget structure	present budget instructions documentation
T02/pm	promise budget proposal	process guidelines for budget instructions	read budget instructions documentation
T02/ex	produce budget proposal	produce proposed budget information	document proposed budget
T02/st	present budget proposal	provide proposed budget information	present a proposed budget documentation
T02/rj	reject budget proposal	check single proposed budget	read proposed budget documentation
T02/ac	accept budget proposal	check single proposed budget	read proposed budget documentation
T03/rq	request budget approval	provide proposed budget information	present proposed budget documentation
T03/pm	promise budget approval	process proposed budget information	read proposed budget information
T03/ex	decide budget (dis)approval	debate budget information	sign budget approval
T03/st	state budget (dis)approval	provide budget approval	present signed budget approval documenta-
			tion
T03/rj	reject budget approval	process approval	read approval documentation
T03/ac	accept budget approval	process approval	read approval documentation
T01/ex	operationalise budget	declare budget operational	sign budget documentation
T01/st	operationalise budget	declare budget operational	sign budget documentation
T01/ac	accept operationalised budget	process operationalise budget information	document operationalised budget

Table A.3 BID-activity table for the Budget Delivery Process

D-Function																	input operational budget
I-Function																	
B-Function																	
Proces Step	T01/rq	T01/pm	T02/rq	T02/pm	T02/ex	T02/st	T02/rj	T02/ac	T03/rq	T03/pm	T03/ex	T03/st	T03/rj	T03/ac	T01/ex	T01/st	T01/ac

Table A.4 Function Identification table for the Budget Delivery Process

D-Function		incomplete								supported							
I-Function																	
B-Function																	
Proces Step	T01/rq	T01/pm	T02/rq	T02/pm	T02/ex	T02/st	T02/rj	T02/ac	T03/rq	T03/pm	T03/ex	T03/st	T03/rj	T03/ac	T01/ex	T01/st	T01/ac

Table A.5 Function Consistency Table for the Budget Delivery Process

D-system																	FINIS begrotingssyteem
I-system																	
B-system																	
Proces Step	T01/rq	T01/pm	T02/rq	T02/pm	T02/ex	T02/st	T02/rj	T02/ac	T03/rq	T03/pm	T03/ex	T03/st	_T03/rj	T03/ac	T01/ex	T01/st	T01/ac

Table A.6 Subsystem Identification Table for the Budget Delivery Process

Proces Step	B-actor	I-actor	D-actor
T01/rq	Minister of Finance		
T01/pm	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
T02/rq	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
T02/pm	BFZ	BFZ	BFZ
T02/ex	BFZ	BFZ	BFZ
T02/st	BFZ	BFZ	BFZ
T02/rj	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
T02/ac	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
_T03/rq	The President	The President	The President
_T03/pm	DNA	DNA	DNA
T03/ex	DNA	DNA	DNA
T03/st	DNA	DNA	DNA
T03/rj	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
T03/ac	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
T01/ex	president and the Minister of Internal Af-	Minister of Internal Affairs	The President
	TalfS		
T01/st	The president and the Minister of Internal Affairs	Af- Minister of Internal Affairs	The President
T01/ac	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie

Table A.7
BID-actor table for the Budget Delivery Process

D-user																	Thesaurie Inspectie
I-user																	
B-user																	
Proces Step	T01/rq	T01/pm	T02/rq	T02/pm	T02/ex	T02/st	T02/rj	T02/ac	T03/rq	T03/pm	T03/ex	T03/st	T03/rj	T03/ac	T01/ex	T01/st	T01/ac

Table A.8 User Identification Table for the Budget Delivery Process

D-user																	Correct
l-user																	
<b>B-user</b>																	
tep	T01/rq	T01/pm	T02/rq	T02/pm	T02/ex	T02/st	T02/rj	T02/ac	T03/rq	T03/pm	T03/ex	T03/st	T03/rj	T03/ac	T01/ex	T01/st	T01/ac

Table A.9
User Consistency Table for the Budget Delivery Process

Appendix

В

**Budget Change Process** 

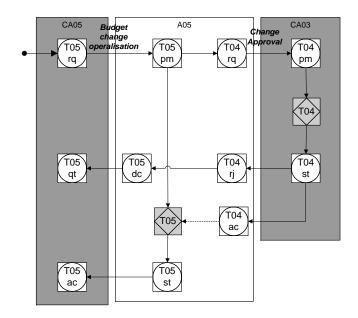


Figure B.1
PSD of the Budget Change Process

Actor	Agendum	Condition	Action
A05	REQUESTED T05 (CH,Y)		PROMISE T05(CH,Y)
	PROMISED T05 (CH,Y)		REQUEST T04(CH,Y)
	STATED T04(CH,Y)	CHANGE IS NOT APPROVED	REJECT T04(CH,Y)
		CHANGE IS APPROVED	EXECUTE T05(CH,Y)
			STATE T05(CH,Y)
	STATED T05(CH,Y)		ACCEPT T05(CH,Y)
CA03	REQUESTED T04(CH,Y)		PROMISE T04(CH,Y)
			EXECUTE T04(CH,Y)
	PROMISED T04(CH,Y)		STATE T04(CH,Y)
CA05	UNKNOWN		REQUEST T05(CH,Y)
	REJECTED TO4(CH,Y)		QUIT TO5(CH,Y)
	STATED T05(CH,Y)		ACCEPT T05(CH,Y)

 $\label{eq:continuous} \mbox{Table B.1}$  Action Rules Budget Change Process

Process	Role	Delegation/	Institutional	Political/
step		Prpopagation		Constitutional
T05/rq	CA05			Line Minister
T05/pm	A05		Thesaurie Inspectie	Minister of Finance
T04/rq			_	The President
T04/pm	CA03			DNA
T04/ex				DNA
T04/st				DNA
T04/rj	A05		Thesaurie Inspectie	Minister of Finance
T05/qt	CA05		•	Line Minister
T04/ac	A05		Thesaurie Inspectie	Minister of Finance
T05/ex			•	The President, Minister of
				Internal Affiars
T05/st				The President, Minister of
				Internal Affiars
T05/ac	CA05			Line Minister

 $\label{eq:change_process} \mbox{Table B.2}$  Actor Responsibility Table for the Budget Change Process

Proces Step	B-act	I-act	D-act
T05/rq	request budget change	provide changes	present documentation of changes
T05/pm	promise budget change	process changes	read documentation of changes
T04/rq	request change approval	provide changes	present documentation of changes
T04/pm	promise change approval	process changes	read documentation of changes
T04/ex	decide change (dis)approval	debate changes	sign approval documentation
T04/st	state change (dis)approval	provide approval	present approval documentation
T04/rj	reject change approval	process approval	read approval documentation
T05/qt	quit budget change		
T04/ac	accept change approval	process change approval	read change approval documentation
T05/ex	operationalise budget change		sign budget change documentation
T05/st	operationalise budget change		sign budget change documentation
T05/ac	accept operationalised budget change	process operationalised budget change	document operationalised budget change

Table B.3
BID-activity table for the Budget Change Process

												a
D-Function												input budget change
I-Function												
b-runction												
step	T05/rq	T05/pm	T04/rq	T04/pm	T04/ex	T04/st	T04/rj	T05/qt	T04/ac	T05/ex	T05/st	T05/ac

Function Identification table for the Budget Change Process

D-Function	mplete	incomplete	ımplete									supported
I-Function D-	inc	inc	inc									Ins
B-Function												
Proces Step	T05/rq	T05/pm	T04/rq	T04/pm	T04/ex	T04/st	T04/rj	T05/qt	T04/ac	T05/ex	T05/st	T05/ac

Table B.5 Function Consistency table for the Budget Change Process

D-System												FINIS begrotingssysteem
I-System												
B-System												
Proces Step	T05/rq	T05/pm	T04/rq	T04/pm	T04/ex	T04/st	T04/rj	T05/qt	T04/ac	T05/ex	T05/st	T05/ac

Subsystem Identification table for the Budget Change Process

Table B.6

Line Minister Line Minister The President DNA DNA DNA DNA Thesaurie Inspectie Line Minister	pectie	Line Minister Line Minister The President DNA DNA DNA	Line Minister Line Minister The President DNA
ine Minister he President NA	pectie	ine Minister The President NA NA NA	Line Minister The President DNA
he President NA NA NA NA NA NA NA ine Minister	pectie	he President DNA DNA DNA	The President DNA
NNA NNA NNA Thesaurie Insp		NA NA NA	DNA
ONA ONA Thesaurie Insp		NA NA	DNA
ONA Thesaurie Insp Line Minister		JNA	
Thesaurie Insp Jine Minister			DNA
ine Minister		Thesaurie Inspectie	Thesaurie Inspectie
Thesaurie Inspectie		Thesaurie Inspectie	Thesaurie Inspectie
The president a fairs	The president and the Minister of Internal Af- Ninister of Internal Af- Ninister	Minister of Internal Affairs	The President
The president a fairs	The president and the Minister of Internal Af-   N fairs	Minister of Internal Affairs	The President
Minister of Finance		Thesaurie Inspectie	Thesaurie Inspectie

Table B.7
BID-actor table for the Budget Change Process

D-User												Thesaurie Inspectie
I-User												
B-User												
- da	T05/rq	T05/pm	T04/rq	T04/pm	T04/ex	T04/st	T04/rj	T05/qt	T04/ac	T05/ex	T05/st	T05/ac

Table B.8
User Identification table for the Budget Change Process

D-User												correct
I-User   I												0
B-User												
Proces Step	T05/rq	T05/pm	T04/rq	T04/pm	T04/ex	T04/st	T04/rj	T05/qt	T04/ac	T05/ex	T05/st	T05/ac

Table B.9 User Consistency table for the Budget Change Process

Appendix

C

**Order Process** 

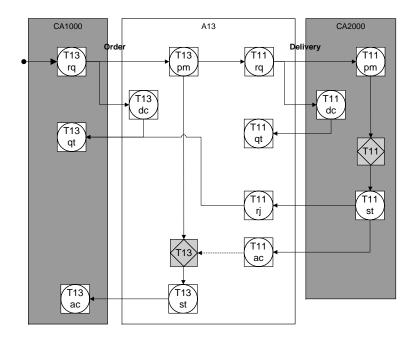


Figure C.1
PSD of the Order Process

C Order Process 43

Actor	Agendum	Condition	Action
A13	REQUESTED T13(O)	CREDIT AND AUTHORITY ARE	DECLINE T13(O)
		NOT ACCEPTED	
		CREDIT AND AUTHORITY ARE AC-	PROMISE T13(O)
	PROMEST TANCO	CEPTED	DECLIECE E11 (O)
	PROMISED T13(O)		REQUEST T11(O)
	DECLINED T11(O)		QUIT T11(O)
	STATED T11(O)	DELIVERY OR THE INVOICE ARE	REJECT T11(O)
		NOT CORRECT	A COURT TIAL (O)
		DELIVERY AND THE INVOICE ARE	ACCEPT T11(O)
		CORRECT	
	ACCEPTED T11(O)		EXECUTE T13(O)
			STATE T13(O)
CA1000			REQUESTE T13 (O)
	DECLINED T13(O)		QUIT T13(O)
	REJECTED T13(O)		QUIT T13(O)
	STATED T13(O)		ACCEPT T11(O)
CA2000	REQUESTED T11 (O)	UNKNOWN	DECLINE T11(O)
		UNKNOWN	PROMISE T11(O)
	PROMISED T11(O)		EXECUTE T11(O)
			STATE T11(O)
	REJECTED T11(O)		STOP T11(O)

Table C.1
Action Rules Order Process

Process	Role	Delegation/	Institutional	Political/
step		Prpopagation		Constitutional
T13/rq	CA1000		Ordering department	Line Minister
T13/dc	A13	CKB	BFZ	Line Minister
T13/qt	CA1000		Ordering department	Line Minister
T13/pm	A13	CKB	BFZ	Line Minister
T11/rq		INKOOP		Line Minister
T11/dc	CA2000			Delivering company
T11/qt	A13	INKOOP	BFZ	Line Minister
T11/pm	CA2000			Delivering Company
T11/ex				Delivering Company
T11/st				Delivering Company
T11/rj	A13	INKOOP, RECU	BFZ	Line Minister
T13/qt	CA1000		Orderding department	Line Minister
T11/ac	A13	RECU	BFZ	Line Minister
T13/ex			Orderding department	Line Minister
T13/st			Orderding department	Line Minister
T13/ac	CA1000		Orderding department	Line Minister

 $\label{eq:c.2} \mbox{ Table C.2}$  Actor Responsibility Table for the Order Process

Proces Step	B-act	I-act	D-act
_T13/rq	request order	provide order information	fill out order form
T13/dc	decline order request	check credit	read credit and funding documentation
		check authority	read authorithy documentation
T13/qt	quit order		
T13/pm	promise order request	check credit	read credit and funding information
		check authority	read authorithy information
T11/rq	request order delivery	provide order information	present order form
T11/qt	quit delivery		
T11/rj	reject delivery	check delivery	read order form
		check invoice information	receive invoice
T13/qt	quit order		
T11/ac	accept order delivery	check delivery	read order form
		check invoice information	receive invoice
			document invoice information
		produce payment information	document payment form
T13/ex	NNKNOWN	NMVNOMN	
T13/st	UNKNOWN	UNKNOWN	
T13/ac	UNKNOWN	UNKNOWN	

Hable C.3
BID-activity table for the Order Process

D-Function input order information	read credit and funding information	read credit and funding information	print order information	display order information	display order information	input invoice information save order payment information			
I-Function	check credit	check credit				produce order payment information			
B-Function									
Proces Step   B-Function T13/rq	T13/dc	T13/qt T13/pm	T11/rq T11/qt	T11/rj	T13/qt T11/ac		T13/ex	T13/st	T13/ac

Table C.4 Function Identification table for the Order Process

D-Function	supported		supported	supported		supported incomplete		supported incomplete	supported	supported			
I-Function	supported	anardinoani	supported incomplete						,	supported			
B-Function													
Proces Step	113/rq T13/dc	T13/qt	T13/pm	T11/rq	T11/qt	T11/rj	T13/qt	T11/ac			T13/ex	T13/st	T13/ac

Table C.5 Function Consistency table for the Order Process

D-System	FINIS BUCS FINIS BUCS	FINIS BUCS	FINIS BUCS FINIS BUCS	FINIS BUCS	FINIS BUCS FINIS BUCS		
I-System	FINIS BUCS	FINIS BUCS			FINIS BUCS		
B-System							
Proces Step	T13/rq T13/dc	T13/qt T13/pm	T11/rq T11/qt T11/rj	T13/qt T11/ac	T13/ex	T13/st	T13/ac

Table C.6 System Identification table for the Order Process

Proces Step	B-actor	L-actor	D-actor
T13/rq	Ordering department	Ordering department	Ordering deparment
T13/dc	CKB	CKB	CKB
		CKB	CKB
T13/qt	Ordering department	Ordering department	Ordering deparment
T13/pm	CKB	CKB	CKB
		CKB	CKB
T11/rq	INKOOP	INKOOP	INKOOP
T11/qt	INKOOP		
T11/rj	INKOOP, RECU	INKOOP, RECU	INKOOP, RECU
		RECU	RECU
T13/qt	Ordering department		
T11/ac	RECU	RECU	RECU
		RECU	RECU
		RECU	RECU
T13/ex	UNKNOWN	UNKNOWN	
T13/st	UNKNOWN	UNKNOWN	
T13/ac	UNKNOWN	UNKNOWN	

BID-actor table for the Order Process

D-User	CKB	CKB	Inkoop	Inkoop, Recu	RECU RECU			
I-User	CKB	CKB			RECU			
B-User								
Proces Step	T13/dc	T13/qt T13/pm	T11/rq T11/qt	T11/rj T13/qt	T11/ac	T13/ex	T13/st	T13/ac

Table C.8
User Identification table for the Order Process

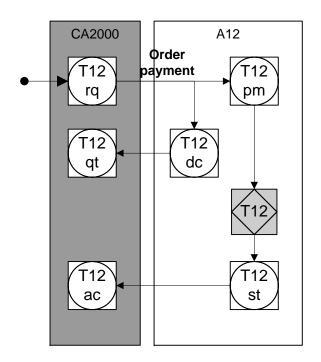
D-User	correct	correct	correct	correct	correct	correct correct			
I-User	correct	correct				correct			
B-User									
Proces Step	T13/dc	T13/qt T13/pm	T11/rq T11/qt	T11/rj	T13/qt T11/ac		T13/ex	T13/st	T13/ac

Table C.9
User Consistency table for the Order Process

Appendix

D

## **Order Payment Process**



 $\label{eq:Figure D.1} Figure \ D.1$  PSD of The Order Payment Process

Actor	Agendum	Condition	Action
A12	REQUESTED T12 (O)	PAYMENT ORDER IS NOT AC-	DECLINE T12(O)
		CEPTED	
		PAYMENT ORDER ARE ACCEPTED	PROMISE T12(O)
	PROMISED T12(O)		EXECUTE T12(O)
			STATE T12(O)
CA2000	DECLINED T12(O)		QUIT T12(O)
	STATED T12(O)		ACCEPT12(O)

Table D.1

Action Rules Order Payment Process

Process	Role	Delegation/	Institutional	Political/
step		Prpopagation		Constitutional
T12/rq	CA2000			Delivering company
T12/dc	A12		Comptabiliteit	Ministry of Finance
T12/qt	CA2000			Delivering company
T12/pm	A12		Comptabiliteit	Ministry of Finance
T12/ex		CBD	Comptabiliteit	
T12/st		CBD	Comptabiliteit	
T12/ac	CA2000			Delivering department

 $\label{eq:constraints} \mbox{Table D.2}$  Actor Responsibility Table for the Order Payment Process

Proces Step B-act	B-act	I-act	D-act
T12/dc	decline order payment	check credit	read credit and funding documentation
		check authority	read order form
		check payment information	read payment form
T12/pm	promise order payment	check credit	read credit and funding documentation
		check authority	read order form
		check payment information	read payment form
T12/ex	realize payment	pay order	read payment form
		confirm payment	document payment confirmation
			present payment receipt
T12/st	realize payment	pay order	read payment form
		confirm payment	document payment confirmation
			present payment receipt

Table D.3 BID-activity table for the Order Payment Process

D-Function	read credit and funding information display order payment information	read credit and funding information display order payment information	read order payment information input order payment confirmation print order payment receipt	read order payment information input order payment confirmation print order payment receipt
I-Function	check credit	check credit		
B-Function				
Proces Step B-Function	T12/dc	T12/pm	T12/ex	T12/st

Table D.4 Function Identification table for the Order Payment Process

D-Function	read credit and funding information		supported	supported		supported	supported	supported	supported	supported	supported	supported
I-Function	check credit	incomplete	incomplete	supported	incomplete	incomplete						
B-Function												
Proces Step   B-Function	T12/dc			T12/pm			T12/ex			T12/st		

Table D.5 Function Consistency table for the Order Payment Process

D-System	FINIS BUCS FINIS BUCS	FINIS BUCS FINIS BUCS	FINIS BUCS FINIS BUCS FINIS BUCS	FINIS BUCS FINIS BUCS FINIS BUCS
I-System	FINIS BUCS	FINIS BUCS		
B-System				
Proces Step   B-System	T12/dc	T12/pm	T12/ex	T12/st

Table D.6 System Identification table for the Order Payment Process

Proces Step   b-actor	B-actor	I-actor	D-actor
T12/dc	Comptabiliteit	Comptabiliteit	Comptabiliteit
		Comptabiliteit	Comptabiliteit
		Comptabiliteit	Comptabiliteit
T12/qt	Delivering company		
T12/pm	Comptabiliteit	Comptabiliteit	Comptabiliteit
		Comptabiliteit	Comptabiliteit
		Comptabiliteit	Comptabiliteit
T12/ex	CBD	CBD	CBD
		CBD	CBD
			CBD
T12/st	CBD	CBD	CBD
		CBD	CBD
			CBD

Table D.7
BID-actor table for the Order Payment Process

D-User	comptabliteit comptabiliteit	comptabiliteit comptabiliteit	CBD CBD CBD	CBD CBD CBD
I-User	compatabiliteit	comptabiliteit		
Proces Step   B-User	T12/dc	T12/pm	T12/ex	T12/st

Table D.8
User Identification table for the Order Payment Process

D-User	correct	correct	correct correct correct	correct correct correct
I-User	correct	correct		
B-User				
Proces Step B-User	T12/ dc	T12/pm	T12/ex	T12/st

Table D.9
User Consistency table for the Order Payment Process

Appendix

E

**Salary Process** 

Actor	Agendum	Condition	Action
A19	REQUESTED T19 (SA, M)		PROMISE T19 (SA, M)
			REQUEST T19(SA, M+1)
	PROMISED T19(SA, M)	DO FOR ALL EMPLOYEES	REQUEST T20(SA, M)
	STATED T20(SA, M)	SALARY CALCULATION IS NOT	REJECT T20(SA, M)
		ACCEPTED	
		SALARY CALCULATION IS AC-	ACCEPT T20 (SA, M)
		CEPTED	
	ACCEPTED T20 (SA,M)	DO FOR ALL SALARIES	REQUEST T22 (SA,M)
	DECLINED T22(SA,M)		REQUEST T20(SA,M)
	STATED T22 (SA,M)		ACCEPT T22(SA,M)
	ACCEPTED T22(SA,M)		EXECUTE T19(SA,M)
			STATE T19(SA,M)
	STATED T19 (SA,M)		ACCEPT T19 (SA,M)
A20	REQUESTED T20(SA,M)		PROMISE T20(SA,M)
	PROMISE T20(SA,M)		EXECUTE T20(SA,M)
			STATE T20(SA,M)
A22	REQUESTED T22(SA,M)	SALARY IS NOT ACCEPTED	DECLINE T22(SA,M)
		SALARY IS ACCEPTED	PROMISE T22(SA,M)
	PROMISED T22(SA,M)		EXECUTE T22(SA,M)
			STATE T22(SA,M)

Table E.1
Action Rules Salary Process

E Salary Process 67

Process	Role	Delegation/	Institutional	Political/
step		Prpopagation		Constitutional
T19/rq	A19		PZ	Line Minister
T19/pm		CKB	BFZ	Line Minister
T20/rq		CKB	BFZ	Line Minister
T20/pm	A20	CKB	BFZ	Line Minister
T20/ex		CKB	BFZ	Line Minister
T20/st		CKB	BFZ	Line Minister
T20/rj	A19	CKB	BFZ	Line Minister
T20/ac		CKB	BFZ	Line Minister
T22/rq		RECU	BFZ	Line Minister
T22/dc	A22		Comptabiliteit	Minister of Finance
T22/pm			Comptabiliteit	Minister of Finance
T22/ex		CBD	Comptabiliteit	Minister of Finance
T22/st		CBD	Comptabiliteit	Minister of Finance
T22/ac	A19	N/A	N/A	N/A
T19/ex		CBD	BFZ	Line Minister
T19/st		CBD	BFZ	Line Minister
T19/ac			PZ	Line Minister

 $\label{eq:constraints} \mbox{Table E.2}$  Actor Responsibility Table for the Salary Process

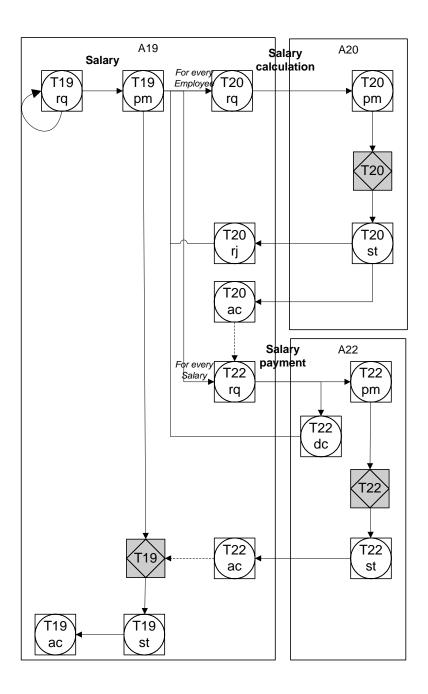


Figure E.1
PSD of the Salary Process

Proces Step	B-act	I-act	D-act
T19/rq	initiate salary process		
T19/pm	promise salaries	produce salary information	document salary information
T20/rq	request salary realization	provide salary information	present salary documentation
T20/pm	promise salary realization	process salary information	present salary documentation
T20/ex	produce salary	calculate salary	document salaries list
T20/st	state salary	provide salary	present salary list
T20/rj	reject salary	check salary	read salary list
T20/ac	approve salary	check salary	read salary list
		produce payment information	document payment form
T22/rq	request salary payment	provide payment information	present payment form
T22/dc	reject payment	check credit	read credit and funding dcumentation
		check correctness of payment information	read payment form
T22/pm	promise payment	check credit	read credit and funding dcumentation
		check correctness of payment information	read payment form
T22/ex	realize payment	pay salary	read payment form
		confirm payment	document payment information
			present payment receipt
T22/st	realize payment	pay salary	present payment information documentation
		confirm payment	document payment information
			present payment receipt
T22/ac	N/A		
T19/ex	realize payment	pay salary	present payment information documentation
		confirm payment	document payment information
			present payment receipt
T19/st	realize payment	pay salary	present payment information documentation
		confirm payment	document payment information
			present payment receipt
T19/ac	N/A		

Table E.3 BID-activity Table for the Salary Process

Proces Step	B-Function	I-Function	D-Function
T19/rq			
T19/pm			
T20/rq			input salary information
T20/pm		process salary information	read salary information
T20/ex		calculate salary	save salary list
T20/st		provide salary	print salary list
T20/rj			
T20/ac			input salary list
		produce salary payment information	save salary payment information
T22/rq		provide salary payment information	display salary payment information
T22/dc		check credit	read credit and funding information
			display salary payment information
T22/pm		check credit	read credit and funding information
			display salary payment information
T22/ex			read salary payment information
			input salary payment confirmation
			print salary payment receipt
T22/st			read salary payment information
			input salary payment confirmation
			print salary payment receipt
T22/ac			
T19/ex			read salary payment information
			input salary payment confirmation
			print salary payment receipt
T19/st			read salary payment information
			input salary payment confirmation
E			print salary payment receipt
T19/ac			

Table E.4 Function Identification table for the Salary Process

D-Function			supported	supported	supported	supported	supported	supported	supported	supported	supported	supported	supported	supported	supported	supported	supported	supported	supported	supported		supported	supported	supported	supported	supported	supported	
D-F			dns	dns	dns	dns	dns	dns	dns	dns	dns	dns	dns	dns	dns	dns	dns	dns	dns	dns		dns	dns	dns	dns	dns	dns	
I-Function			incomplete	supported	supported	supported	incomplete	incomplete	supported	supported	supported	incomplete	supported	incomplete														
B-Function																												
Proces Step	T19/rq	T19/pm	T20/rq	T20/pm	T20/ex	T20/st	T20/rj	T20/ac		T22/rq	T22/dc		T22/pm		T22/ex			T22/st			T22/ac	T19/ex			T19/st			T19/ac

Table E.5

Function Consitency table for the Salary Process

<b>Proces Step</b>	B-System	I-System	D-System
T19/rq			
T19/pm			
T20/rq			Salary Information System
T20/pm		Salary Information System	Salary Information System
T20/ex		Salary Information System	Salary Information System
T20/st		Salary Information System	Salary Information System
T20/rj			
T20/ac			FINIS BUCS
		FINIS BUCS	FINIS BUCS
T22/rq		FINIS BUCS	FINIS BUCS
T22/dc		FINIS BUCS	FINIS BUCS
			FINIS BUCS
T22/pm		FINIS BUCS	FINIS BUCS
			FINIS BUCS
T22/ex			FINIS betaalsysteem
			FINIS betaalsysteem
			FINIS betaalsysteem
T22/ex			FINIS betaalsysteem
			FINIS betaalsysteem
			FINIS betaalsysteem
T22/ac			
T22/ex			FINIS betaalsysteem
			FINIS betaalsysteem
			FINIS betaalsysteem
T22/ex			FINIS betaalsysteem
			FINIS betaalsysteem
			FINIS betaalsysteem
T19/ac			

Table E.6 System Identification Table for the Salary Process

D-actor	PZ	CKB	CKB	RECU	Comptabiliteit	Comptabiliteit	Comptabiliteit	Comptabiliteit	CBD	CBD	CBD	CBD	CBD	CBD		CBD	CBD	CBD CBD CBD							
I-actor	PZ	CKB	CKB	RECU	Comptabiliteit	Comptabiliteit	Comptabiliteit	Comptabiliteit	CBD	CBD		CBD	CBD			CBD		CBD							
B-actor	Zd	CKB		RECU	Comptabiliteit		Comptabiliteit		CBD			CBD			N/A	CBD		CBD	N/A						
Proces Step	T19/rq	T19/pm	T20/rq	T20/pm	T20/ex	T20/st	T20/rj	T20/ac		T22/rq	T22/dc		T22/pm		T22/ex			T22/st			T22/ac	T19/ex		T19/st	T19/ac

Table E.7

D-User			CEBUMA	CEBUMA	CEBUMA	CEBUMA		CKB	RECU	RECU	Comptabiliteit	Comptabiliteit	Comptabiliteit	Comptabiliteit	CBD	CBD	CBD	CBD	CBD	CBD		CBD	CBD	CBD	CBD	CBD		
I-User				CEBUMA	CEBUMA	CEBUMA			RECU	RECU	Comptabiliteit		Comptabiliteit															
B-User																												
da	T19/rq	T19/pm	T20/rq	T20/pm	T20/ex	T20/st	T20/rj	T20/ac		T22/rq	T22/dc		T22/pm		T22/ex			T22/st			T22/ac	T19/ex			T19/st		- 107E	119/ac

Table E.8
User Identification Table for the Salary Process

D-User			inconsistent	inconsistent	inconsistent	inconsistent		correct		correct	correct	correct	correct	correct	correct													
I-User				inconsistent	inconsistent	inconsistent			correct	correct	correct		correct															
B-User																												
tep	T19/rq	T19/pm	T20/rq	T20/pm	T20/ex	T20/st	T20/rj	T20/ac		T22/rq	T22/dc		T22/pm		T22/ex			T22/st			T22/ac	_T19/ex			_T19/st			T19/ac

Table E.9 User Consistency Table for the Salary Process

**Appendix** 

F

## **Periodic Fund Process**

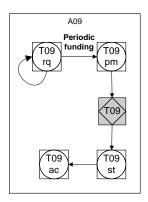


Figure F.1
PSD of Periodic Fund Process

Actor	Agendum	Condition	Action
A09	REQUESTED T09		PROMISED
	(LM,BG,P)		T09(LM,BG,P)
			REQUEST
			T09(LM,BG,P+1)
	PROMISED T09		EXECUTE T09 (LM,BG,P)
	(LM,BG,P)		
			STATE T09 (LM,BG,P)
	STATED T09 (LM,BG,P)		ACCEPT T09 (LM,BG,P)

 $\label{eq:F1} \mbox{Table F.1}$  Action Rules Periodic Fund Process

Process	Role	Delegation/	Institutional	Political/
step		Prpopagation		Constitutional
T09/rq	A09		Thesaurie Inspectie	Minister of Finance
T09/pm				Minister of Finance
T09/ex		Thesaurie Inspectie		Minister of Finance
T09/st				Minister of Finance
T09/ac				Minister of Finance

 $\label{eq:Table F.2} \mbox{Actor Responsibility Table for the Periodic Fund Process}$ 

Proces Step	B-act	I-act	D-act
T09/rq	initiate periodic funding	provide funding information	
T09/pm	promise periodic funding	check current credit	read credit documentation
		check budget information	read budget documentation
T09/ex	realize funding	calculate periodic fund	read credit documentation
			read budget documentation
			document periodic funding
T09/st	grant periodic fund	provide periodic fund information	sign periodic fund documentation
T09/ac	N/A		

Table F.3 BID-activity table for the Periodic Fund Process

D-Function		display credit information	display budget information	display credit information	display budget information	input and print granted periodic fund		
I-Function								
B-Function								
Proces Step B-Function	T09/rq	md/60L		T09/ex			T09/st	T09/ac

Table F.4 Function Identification table for the Periodic Fund Process

D-Function		supported	supported	supported	supported	supported		
I-Function		incomplete	incomplete	incomplete				
B-Function								
Proces Step	T09/rq	T09/pm		T09/ex			T09/st	T09/ac

Table F.5 Function Consistency table for the Periodic Fund Process

Proces Step	B-System	I-System	D-System
T09/rq			
T09/pm			FINIS begrotinssysteem
			FINIS begrotinssysteem
T09/ex			FINIS begrotinssysteem
			FINIS begrotinssysteem
			FINIS begrotinssysteem
T09/st			
T09/ac			

Table F.6 System Identification table for the Periodic Fund Process

Proces Step B-actor	B-actor	I-actor	D-actor
T09/rq	Thesaurie Inspectie	Thesaurie Inspectie	Thesaurie Inspectie
T09/pm	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
		Thesaurie Inspectie	Thesaurie Inspectie
T09/ex	Thesaurie Inspectie	Thesaurie Inspectie	Thesaurie Inspectie
		Thesaurie Inspectie	Thesaurie Inspectie
T09/st	Minister of Finance	Minister of Finance	Minister of Finance
T09/ac	Minister of Finance		

Table F.7 BID-actor table for the Periodic Fund Process

D-User		Thesaurie Inspectie Thesaurie Inspectie	Thesaurie Inspectie	Thesaurie Inspectie	I nesaurie inspectie		
I-User							
B-User							
Proces Step	T09/rq	T09/pm	T09/ex			T09/st	T09/ac

Table F.8
User Identification table for the Periodic Fund Process

D-User		rrect	rrect	correct	rrect	rrect		
I-User D		5	S .	S .	5	5		
B-User								
Proces Step	T09/rq	T09/pm		T09/ex			T09/st	T09/ac

Table F.9
User Consistency table for the Periodic Fund Process

Appendix

G

## **Incidental Fund Process**

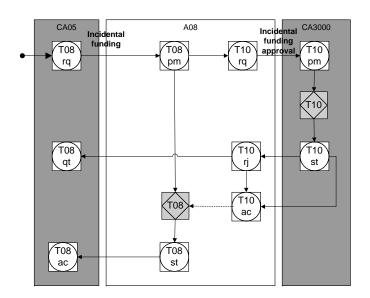


Figure G.1
PSD of Incidental Fund Process

Actor	Agendum	Condition	Action
A08	REQUESTED		PROMISE T08(VM,BG)
	T08(VM,BG)		
	PROMISED T08(VM,BG)		REQUEST T10(VM,BG)
	STATED T10(VM,BG)	FUNDING IS NOT APPROVED	REJECT T10(VM,BG)
		FUNDING IS APPROVED	ACCEPT T10(VM,BG)
	ACCEPTED T10(VM,BG)		EXECUTE T08(VM,BG)
			STATE T08(VM,BG)
CA05	UNKNOWN		REQUEST T08(VM, BG)
	REJECTED T10(VM,BG)		QUIT T08(VM, BG)
	STATED T08(VM, BG)		ACCEPT T08(VM, BG)
CA3000	REQUESTED		PROMISE T10(VM,BG)
	T10(VM,BG)		
	PROMISED T10(VM,BG)		EXECUTE T10(VM,BG)
			STATE T10(VM,BG)

 $\label{eq:G1} \mbox{Table G.1}$  Action Rules Incidental Fund Process

Process	Role	Delegation/	Institutional	Political/
step		Prpopagation		Constitutional
T08/rq	CA05			Line Minsiter
T08/pm	A08		Thesaurie Inspectie	Minister of Finance
T10/rq				Minister of Finance
T10/pm	CA3000			Council of Ministers
T10/ex				Council of Ministers
T10/st				Council of Ministers
T10/rj	A08		Thesaurie Inspectie	Minister of Finance
T08/qt	CA05			Line Minsiter
T10/ac	A08		Thesaurie Inspectie	Minister of Finance
T08/ex			Thesaurie Inspectie	Minister of Finance
T08/st			Thesaurie Inspectie	Minister of Finance
T08/ac	CA05			Line Minsiter

Table G.2

Actor Responsibility Table for the Incidental Fund Process

Proces Step	B-act	I-act	D-act
_T08/rq	request incidental funding	provide incidental funding information	document incidental funding documentation
T08/pm	promise incidental funding	check credit history	read credit documentation
		check financial margin	
		check operational budget information	read budget documentation
T10/rq	request incidental fund approval	provide incidental funding information	present incidental fundind documentation
T10/pm	discuss incidental funding	process incidental funding information	read incidental fundind documentation
T10/ex	decide on incidental funding	debate incidental funding	sign incidental funding approval
T10/st	state decision	provide incidental funding approval	present incidental funding approval docu-
			mentation
T10/rj	check decision	process incidental funding approval	read incidental funding approval documen-
			tation
T08/qt	quit incidental funding		
_T10/ac	check decision	process incidental funding approval	read incidental funding approval documen-
			tation
T08/ex	grant incidental fund	process incidental funding information	document incidental funding
T08/st	grant incidental fund	provide incidental fund information	sign incidental fund documentation
T08/ac	accept incidental fund		receive incidental fund

Table G.3 BID-activity table for the Incidental Fund Process

Proces Step	<b>B-Function</b>	I-Function	D-Function
T08/rq			
T08/pm			display credit information
			display budget information
T10/rq			
T10/pm			
T10/ex			
T10/st			
T10/rj			
T08/qt			
T10/ac			
T08/ex			input granted incidental funding
T08/st			
T08/ac			

Table G.4

Function Identification table for the Incidental Fund Process

Proces Step	B-Function	I-Function incomplete incomplete incomplete	D-Function supported incomplete supported supported
T100 7.70	L'american		
108/rq			
T08/pm		incomplete	supported
		incomplete	incomplete
		incomplete	supported
T10/rq			
T10/pm			
T10/ex			
T10/st			
T10/rj			
T08/qt			
T10/ac			
T08/ex			supported
T08/st			
T08/ac			

Table G.5 Function Consistency table for the Incidental Fund Process

Proces Step T08/rq	B-System	I-System	D-System
T08/pm			FINIS begrotingssysteem
			FINIS begrotingssysteem
T10/rq			
T10/pm			
T10/ex			
T10/st			
T10/rj			
T08/qt			
T10/ac			
T08/ex			FINIS begrotingssysteem
T08/st			
T08/ac			

Table G.6 System Identification table for the Incidental Fund Process

Proces Step	<b>B</b> -actor	I-actor	D-actor
T08/rq	Line Minister	Line Minister	Line Minister
T08/pm	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
		Thesaurie Inspectie	
		Thesaurie Inspectie	Thesaurie Inspectie
T10/rq	Minister of Finance	Minister of Finance	Minister of Finance
_T10/pm	Council of Ministers	Council of Ministers	Council of Ministers
T10/ex	Council of Ministers	Council of Ministers	Council of Ministers
T10/st	Council of Ministers	Council of Ministers	Council of Ministers
T10/rj	Thesaurie Inspectie	Thesaurie Inspectie	Thesaurie Inspectie
_T08/qt	Line Minister	Line Minister	Line Minister
_T10/ac	Thesaurie Inspectie	Thesaurie Inspectie	Thesaurie Inspectie
T08/ex	Minister of Finance	Thesaurie Inspectie	Thesaurie Inspectie
708/st	Minister Finance	Minister of Finance	Minister of Finance
T08/ac	Line Minister		

Table G.7

BID-actor table for the Incidental Fund Process

Proces Step	B-Users	I-Users	D-Users
T08/rq			
T08/pm			Thesaurie Inspectie
			Thesaurie Inspectie
T10/rq			
T10/pm			
T10/ex			
T10/st			
T10/rj			
T08/qt			
T10/ac			
T08/ex			Thesaurie Inspectie
T08/st			
T08/ac			

Table G.8 Users Identification table for the Incidental Fund Process

D-Users		correct	correct								correct			
I-Users														
b-Users														
tep	T08/rd	T08/pm		T10/rq	T10/pm	T10/ex	T10/st	T10/rj	T08/qt	T10/ac	T08/ex	T08/st	T08/ac	

Table G.9
Users Consistency table for the Incidental Fund Process

## **Bibliography**

Ministerie van Financien (2006), *Toegang Tot de Overheidsbegroting*, Ministerie van Financien.

Ministerie van Financien (2007), Meerjaren Ontwikkelingsplan.