STATISTICS DENMARK

Statistics Norway
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MZ:2002:8*

Report from a short-term mission on

A Product based accounting system

16 September - 3 October 2002

TA for the 'Bridging Support Program to Strengthen the Institutional Capacity of the National Statistics, Mozambique

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1 Executive summary

The main purpose of the mission is to make a proposal to the first draft model of a product based cost accounting system. The system aims at satisfying INE´s requirements of a modern statistical agency, and the requirements by the donors providing INE with support 2003-07, based on a budget support concept. The present accounting system at INE does not provide managers with sufficient financial information, for example regarding costs per product. Therefore, a non-integrated Excel application may be a temporary solution in order to obtain such information.

- The proposed draft model describes the structure of an object plan, which consists of a chart of object codes for cost centres (responsibility and authority) and for products.
- The chart of object codes for the cost centres has been adapted to the organisational structure of INE (appendix 3.2), and the products produced at INE have been classified into four different categories, which signifies separate accounting objects to which expenditures can be allocated (appendix 4).
- In order to facilitate the test of the model, an Excel application (a prototype) has been designed. The data processed in the application is received from the time reports and the expense registration.

According to the Terms of References, the draft model presented in this report should be in test use after the end of this mission (2002-10-04). The test will show whether or not the model presenting the object plan, i.e. a multidimensional accounting is a sustainable solution. In the absence of an integrated financial management system, the Excel application is designed to facilitate an earlier introduction of the model.

With regard to the complexity of the model, It is to be recommended that the test of the application should be conducted during a second short term mission. An advisor should be present during the test period to submit a standard documentation regarding work flow, information flow, functions and user manuals.

2 Introduction

2.1 Background

INE has requested a short term technical assistance within the Scandinavian Bridging Support Programme to start the development of a cost accounting system based on products. To successfully design such a system, the "consulting team" has focused on the creation of an object plan, e.g. chart of object codes for cost centres and products. The chart of object codes is used for classifying accounting objects, subsidiary to the present chart of accounts and must be individually adapted according to the specific information need at INE. The implementation of time reporting is however a necessary requirement to achieve the objectives and also of importance to facilitate the arbitrary methods of allocating indirect costs in order to obtain a more accurate cost per product.

The mission was conducted according to the Terms of Reference[1] and aims at supporting INE´s strategy to build a modern statistical institution also in the field of financial management and administration. The main task of the mission was to identify distinctive and measurable objects i.e. the expense/cost centres and products.

2.2 Pre mission experience

A pre mission[2] within the same area took place in Mozambique in 1999, conducted by Mr. Bengt Anderson. One of the findings in Mr. Andersons' report was INEs need of a follow-up system that provides the managers with operational information. With regard to this issue, the recommendation in the report is to use two object fields, one for expense/cost centres (responsibility/authority) and one for products.

A similar short term mission was conducted in Lesotho in 2001[3]. There are close points of similarity between the findings in the two reports. The recommendation is to use a chart of object fields comprising organisational coding and project coding. The organisational coding is at par with the cost centre structure and the project coding with the chart of object codes.

2.3 The objective and output of the mission

This report will provide necessary information about the mission, the output and the model developed during the mission. The report is structured along two components:

- The model describing the overall idea of the accounting plan, i.e. the chart of accounts and the chart of objects. The present chart of accounts is to be considered as sufficient and focus will therefore be on describing the chart of object codes for expense/cost centres and products.

[1] Appendix 2
[2] 1.8 A chart of objects, Finance and Administration routines, Mozine 1999:4
[3] Report from a mission to the Bureau of Statistics, Maseru, Lesotho

- An Excel application supporting the test use of the model. The test will determine whether or not the Excel application is a sustainable solution.

This cost accounting system should provide managers at INE with information about the costs for each expense/cost centre and the costs per product. Together with other financial and operational information, the managers at INE will be able to make better decisions regarding the allocation of scarce resources and better evaluations of the organisational performance.

2.4 The structure of the report

This report is structured in conformity with DANIDAs reporting structure for short-term missions:

- The introduction provides background information about the mission, the mission team, the objectives and the demanded output.
- The following part gives a description of the mission activity's and the method used for mapping, analysis and presentation.
- The ending chapter provides a presentation of the model and what it consists of. The chapter ends with a recommendation for the next step and other issues to be taken under consideration.

2.5 The duration of the mission and the mission team

The mission started on the 2nd of September with preparatory work in Sweden. The mission abroad was conducted from Monday 16th September to Friday 4th October. The mission ended with supplementary work in Sweden during the weeks 41 to 43.

The mission was conducted by:

Mr. Tomas Kjerf, team leader of the mission abroad, Financial Expert in the area of financial performance and management, senior consultant from the Swedish National Financial Management Authority.

In Maputo 2002-09-22-- 10-01

Mr. Robert Jäverlind, Financial Controller and consultant from Statistics Sweden.

In Maputo 2002-09-15 -- 09-28

Mr. Martin Eriksson, Financial Management Consultant from the Swedish National Financial Management Authority.

In Maputo 2002-09-15 -- 10-04

Mr. Anders Ejdemark, overall coordinator and team leader, senior consultant from the Swedish National Financial Management Authority.

3 Activities during the mission

3.1 Gathering information and mapping

- The mission started with preparatory work in Sweden.
- Meetings were scheduled to discuss the Terms of Reference for the mission. This included the objectives, the model, the manuals and the expected output.
- A meeting was appointed with employees at Statistics Sweden (SCB) who have experience from similar missions to Lesotho and Latvia.
- Exploring INEs webpage and gathering information about the organisational structure.
- Reports on pre-missions to Mozambique and other African countries were read and discussed.

3.2 Structuring the information

- The first week in Mozambique consisted of meetings at INE with the President, Directors, head of departments and other employees. Information about INEs needs and expectations were discussed and a draft model was presented by the team.
- Regular briefings with Mr. Hans Erik Altvall, the Coordinator of the Scandinavian Bridging Program, regarding the Terms of Reference, the mission and the expected output.
- In consultation with the Directors and the head of departments, the most comprehensible and sustainable solution would be a modified draft model, with regards to the structure and method of distributing costs to products.

3.3 Presentation of findings and recommendations

A workshop was arranged on the 30th of September, with focus on presenting and explaining the findings during the mission. The purpose of the workshop was to introduce the concept to the President of INE, the Directors, the head of department and other employees intended to work with the new system.

Main issues at the workshop were:

- Explaining the mission objectives.

- Explaining the chart of object codes.
- Explaining the distribution of costs to products.
- Group discussions.
- Joint reporting of the discussions and of the mission in general and the next step at INE.

At the end of the mission a training session with seven participants was conducted. The purpose of the session was to explain how to use the Excel application in order to process the data.

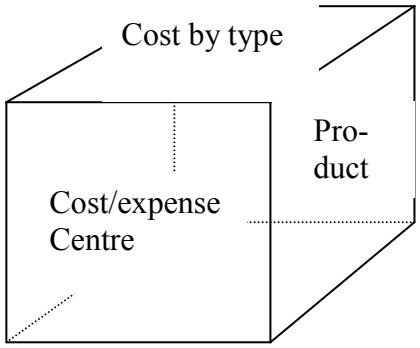
4 The model – object plan

The present accounting system does not give adequate financial information to the management. It is not possible to add budgets or follow-up on cost centres or products. There is also a problem with the present IT-system, not allowing adding modules in an efficient way. The present accounting system has only one accounting string allowing state budget execution and budget control. Furthermore, it is based on the principle of cash accounting.

The object plan makes it possible to make a multi-dimensional structure that is not limited to hierarchical accounting. It permits the structured information on how the funds are allocated.

A multidimensional accounting system is to some extent also possible within the framework of the Chart of Accounts only (without object fields). The codes for accounts would then be built in a hierarchical order where the highest level would represent sectors and expense/cost centres and lower levels (further digits) represent nature of expense for example.

The object plan adds a dimension to the accounting plan, thus making it reflect a three-dimensional structure. The particular costs could be visualised from different perspectives as costs only, as costs per cost centre, as costs per product or as costs per cost centres and products.



A standard model for an object plan might allow e.g. 8 fields. Each of these contains a pre-defined number of positions that can be used to enter a code. If for example one field is defined to have 8 positions we may reserve position 1 (or the first digit in the code) to represent heading, the second to represent subheading, the third and fourth for description and the last for subdivision of the description.

0	Heading (Seldom used)
1	Heading
11	Subheading or group
111	Code

112	Code
1121	Sub code
11211	(and so forth)
12	Subheading or group
121	Code
2	Heading
-	
9	(Usually used for undistributed expenses)

The object fields, when added together with type of cost, give the actual accounting string that should be entered into the accounting system. In integrated financial management systems, the accounting strings are integrated into the system. In non-integrated financial management system the accounting string has to be entered in every module using the information. The following example is a fictive code string that could be entered in the accounting system.

Chart of accounts	Chart of object codes		
Account	Expense/cost centre	Products	*And so forth*
62211	1111	3456	7654

4.1.1 The expense centre field

When designing a chart of object codes, all costs must first be allocated to an expense/cost centre. Depending on the organisational structure within the agency, the chart of object codes are categorised according to organisational units or functions.

All organisational units must be assigned a specific code in order to enable the calculations of the total expenses/costs for each. The expense/cost centre structure at INE are categorised according to the organisational chart. There are three different levels of hierarchy in the coding structure, the presidential level, the directorate level and the department level (appendix 3.1 and 3.2).

4.1.2 The product field

To enable the allocation of costs to different objects, specific codes are necessary. In general this output-related object is called a performance, which refers to the end product. The products at INE have been categorised into four different groups:

- Overhead products
- Economic Statistics
- Demographic, Vital and Social Statistics and
- Publications

All products subsidiary to the four categories above have been assigned unique product codes which signifies separate accounting objects to which costs can be allocated (appendix 4).

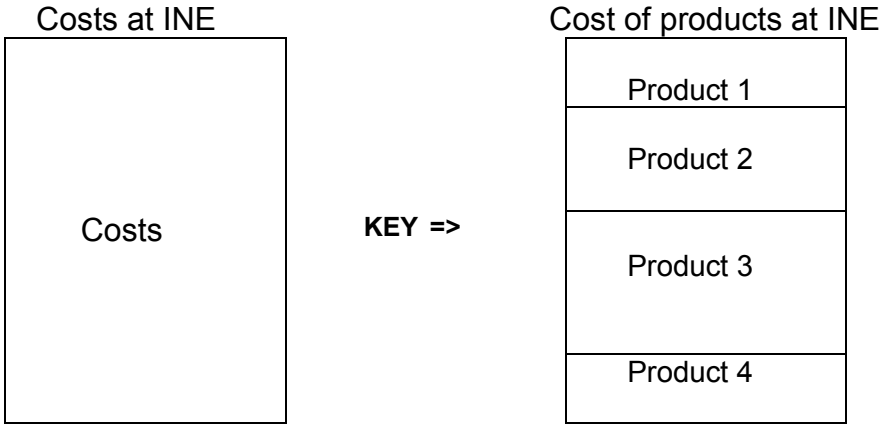
4.2 Distribution of costs

4.2.1 Distribution key

In order to allocate indirect costs to separate accounting objects, the identification of a distribution key is of great importance. The distribution key should:

- Correlate sufficiently well with costs
- Be possible to quantify and measure
- Be related to the expense/cost centres

The time reported on each specific product in relations to the time reported by the whole workforce of INE, could be a fair and reliable distribution key.



4.2.2 Time reporting

As a distribution key, the time reporting should reflect the actual amount of days spent on each specific product. In order to minimise the risk for deviations, the days/hours worked must correlate with actual salary payments. Therefore, it is to be assumed that the most effective measure is monthly time reports containing days worked. The collection of more detailed time reporting would presumably not be cost effective.

The time reports are the basis of the cost distribution and it is therefore of great importance to develop comprehensible time reporting procedures. It is to be recommended that the Directors and heads of departments are responsible for collecting and submitting the reports. However, this responsibility may of course be delegated within the directorate or department.

4.2.3 Calculations

One ideal way of allocating costs to each product is to calculate a price per day and then charge the products with the number of days worked for each product according to the time reports and the price per day. To calculate a price per day you need for example information about indirect and direct costs, total number of workdays for the employees and how the days are divided between external and internal products. The present accounting system does not give that information and they are very difficult to estimate. Considering this and the fact that INE has limited experience in calculation of prices we propose a more simple method to allocate costs for each product.

The chart of object codes will give the direct costs connected to each product and we will have to estimate the indirect costs by which each product should be charged with to get the total costs. The key is derived from the time report and the number of days that the employees indicate that they have worked with each product every month in the time reports. The indirect costs are allocated to each product according to the days worked in relation to the total days worked on all products.

Example

In the first step salary costs (which we assume to be $ 100 in this example) at INE are distributed to each product (both to internal/overhead and external products) according to the percentage below, calculated by days on the product divided with the total days (which we assume to be 10 days in this example). This will give you an estimate of the costs also for overhead products.

Total salary costs: $100

Product	Worked days	% of total days	Indirect Costs
Administration	5 days	50%	$ 50
Consumer price index	2 days	20%	$ 20
Foreign Trade Statistics	1 day	10%	$ 10
Health Statistics	2 days	20%	$ 20
Total	10 days	100%	$ 100

In the second step the direct costs from the accounting system for the external products is added (which we assume to be $ 70 in this example).

Total direct costs: $ 70

Product	Direct costs
Consumer price index	$ 40
Foreign Trade Statistics	$ 0
Health Statistics	$ 30
Total	$ 70

In the third step salary costs calculated on overhead products have to be distributed between the external products ($ 50 on administration). We also have to distribute other costs than salaries registered on overhead products. The distribution is done comparing worked days only between each external product and the total days worked on external products.

Salaries on overhead products: $ 50

Other costs on overhead products: $ 50

Total costs on overhead products: $ 100

Product	Worked days	% of total days	Overhead costs
Consumer price index	2 days	40%	$ 40
Foreign Trade Statistics	1 day	20%	$ 20
Health Statistics	2 days	40%	$ 40
Total	5 days	100%	$ 100

In the fourth step all costs, indirect costs (first step) as well as direct costs on the external products (second step) and overhead costs for the external products (third step) are sum up to the total costs for the external products.

Product	Total Cost	
Consumer price index	$ 100	($ 20 + $ 40 + $ 40)
Foreign Trade Statistics	$ 30	($ 10 + $ 0 + $ 20)
Health Statistics	$ 90	($ 20 + $ 30 $ 40)
Total	$ 220	($ 50 + $ 70 $ 100)

4.3 The Next step

The next step is to prepare and to conduct a test use of the model and the application. A decision must be taken to start the test. INE has to decide whether or not the object plan reflects factual structures. Are the expense/cost centres and products linked firmly to the actual organisation and production? With regard to this issue it is recommended that appendix 3.1 and 4.1 are examined in detail before launching the next step.

In order to test the model an Excel application has been designed. The application is a tool to collect process and produce sufficient cost information based on the model i.e. the object plan. There are two kinds of data input necessary in order to obtain the final cost per product; time reports and a book-keeping sheet designed according to the accounting string.

If the test of the model is successful and the application is approved, this could be used as a non-integrated accounting system. However, if the application is regarded to be unmanageable, the model might be useful with an alternative technical solution.

There are a few questions that should be answered before conducting the test:

- Should the test include all products or only a few?
- Should the test include the whole of INE or part of it?
- Should the test be based on actual figures attained from the book-keeping or on fictive information?
- Should the data be computerised or processed manually?

It is also of importance to formulate measurable test objectives:

- Is the model structured in such a way providing management level with sufficient information?
- Is the Excel application user friendly and does it offer a sustainable solution?

It is to be recommended that INE, in the near future, organise the test use as a formal project, limited in time and with specific objectives. The working team has to be given means and adequate support to conduct the test. This support should be given by an advisor who can explain the model and the application and teach methods for evaluation.

4.4 Possible issues for next mission

The ToR mentions a second mission to further develop the cost accounting system. It would be an advantage if the second mission took place during the test period.

The main issue for the next short-term mission could be as follows:

- An adviser should support the test team to accomplish the objectives, the model and the supporting application and evaluate the outcome of the test and give recommendation on the implementation step.
- The adviser could have the task to document the obstacles and problems identified when testing both the model and the application. This information would be necessary for further development of the model and the application.
- The adviser should also instruct how to use the applications and explain the model. This would constitute a valuable support to the test team while testing.
- Further more it could be a task for the adviser to produce the documentation of the application during the test period. The documentation should be done in the standard approved by INE. When accomplished, it could include administrative information, work- and information flow charts, data function, technical description and user manual.

We recommend a short-term mission to support the test team to conduct, document and evaluate the test.

Appendix 1 Personnel Met

Mr. Joao Dias Loureiro, President of INE
Mr. Manuel Da Costa Gaspar, Vice President of INE

Mr. Arao Balete, Director of DCI
Mr. Azarias Marcos Nhanzimo, Director of DESE
Mrs. Destina Eduardo Sidonio Winge, Director of DIMOVIS
Mr. Luis Mungamba, Director of DICRE
Mrs. Maria Manuela Da Csta Xavier, Director of DARH
Mr. Saide Dade, Director of DCNIG

Mr. Antonio Adriano, Chef of Cartografia
Mr. Antonio Jose Ferreira Junior, Chef of DESE
Mr. Cristovao Muhaio, Chef of DCI
Mr. Domingos Mateus Maringue, Chef of DAF
Mr. Firminio Alberto Guiliche, Chef of DCNIG
Mr. Jorge Utui, Chef of DICRE/External relations
Mr. Marcelino Francisco Da Silva, Chef of Difusao
Mrs. Zuraida Khan, Chef of Estatisticas sociais

Mr. Alexandre Mondlane, Chef of Maputo province
Mr. Luis Magaure, Chef of Reparticoes/DARH
Mr. Paciencia Lucia Moiane, Chef of Maputo city

Mr. Bo Lundholm, Statistics Sweden (SCB)
Mr. Hans-Erik Altvall, Team leader for the Scandinavian programme
Mr. Jury Köll, Statistics Sweden (SCB)
Mr. Mogens Grosen Nielsen, Long term advisor

Appendix 2 Terms of Reference

TERMS OF REFERENCE
Within the Scandinavian Bridging Support Programme

For a first short term mission 16 September - 4 October 2002

To start to develop

A Cost Accounting System at INE, based on products and activities

1. Background

INE has adopted a strategy to build a modern statistical institution also in the field of management and administration with result-based formal and informal management as the major fundament. Key concepts are distinct and measurable objectives, user's satisfaction, transparency and staff-encouragement.

INE initiated in 2001, with respect to this strategy, a project to identify and define information that every Head needs in order to run a modern statistical agency. A long-term objective is to systematically establish a solid Integrated Management Performance Information System (MIS) with key indicators that should be easily accessible when a Head makes plans and budget and monitors the results.

The ongoing project gives priority to information about

- *Budget and Financial Result for a product and activities linked to the product measured through a full cost accounting system based on time reporting and time budgeting on product level*

The project gives also priority to other information - not to be dealt with within this mission - such as

- Quality on product level measured e.g. through an annual quality survey to each product manager and with quality declarations included in the product description
- Users satisfaction on product level measured e.g. through customers satisfaction surveys
- Competence of staff, need for further training and follow-up of new training - based on individual plans for each staff
- Staff satisfaction measured through an annual staff satisfaction survey

The intention is that INE annually will report on changes and developments compared with the previous year by answering questions, such as:

- *How much does it cost to run INE and how much does every product and service cost?*

- How is the production output in relation to objectives, e.g. reports published in time?
- How satisfied are the users with INE's products and services and their quality?
- How satisfied is the INE staff with the work situation?
- What type of competence is lacking at INE?

With regard to accounting, INE is a part of the system under responsibility of Ministry of Planning and Finance, which is followed by all Government Departments. INE follows the state accounting system with separate codes for 30 different items and most of them are rather common in the accounts. The present system is operated manually, though INE in recent years attempted to develop a homemade IT accounting system in MS Access.

The present state accounting system does not satisfy INEs need with respect to the strategy to build a modern statistical agency with financial management. The major reason is that the state accounting system does not give information about cost for a product, for activities linked to a product and about the funding.

However, the new state accounting system that is under development aims to be more flexible and detailed. It is expected that the new system will satisfy also most of INEs specific requirements.

Apart from INEs own wish to have a product/activity-based cost accounting system, the Scandinavian Support Programme requests this system to enable support 2003-07 based on a budget support concept

The principle idea behind the forthcoming Scandinavian programme is that this will provide support to INE as an entity and not to specific projects. INE will have the responsibility to make use of and account for the funds in a proper and transparent way through a product based cost accounting system.

The new cost accounting system must be flexible enough to allow new products/activities to be included in the support, whenever these appear. It must show how the foreign support complements INEs own resources in order to produce a specific statistical product. As the support is planned to include statistical activities outside INE but within SEN (National Statistical System), the system must also cater for this possibility.

2. Objective of this mission

The objective of this mission is to assist INE to start developing scope and contents of a cost accounting system at INE with the objective to show "full cost" for every product and how the cost is funded. In designing the new system, INE will take into account the results that can be foreseen of the ongoing financial management reform programme in the Ministry of Finance and Planning

3. Expected output of this mission

- A first draft model - a prototype - for test use in at least a few of INEs products.
- The model will include manuals with financial and administrative procedures that INE will have to follow. A first draft to these manuals should be prepared in this first mission.

A second short-term mission is planned to the period February - April 2003

4. Major Activities in the bridging year

The assistance in the bridging year will be divided in 5 main phases:

1. A "kick-off" Seminar on 11th of February 02 for Heads at INE with the purpose to describe the main features and reasons of a full cost accounting system and its use for annual performance reporting.
2. An exploratory short-term mission in September/October 2002- which these ToR deal with - with the purpose to develop the first draft model and to define needs for information on time use within INE that can be collected in a separate Statistics in Action Course (STAC). In house training and other competence development activities of INE's account section will be an important task during the short-term mission. There will also be meetings with the various Heads as well as a workshop to further promote the need for improved financial management and to discuss and present the new accounting system.
3. A STAC with a survey on time use within INE to cover staff and activities at INE with the purpose to analyse the activities and to trace the costs. The course is intended to take place during 2-3 months in the period February - April 03.
4. A second short-term mission, preferably when the STAC is through and its result can be used to further develop the Accounting system.
5. A Workshop for all Heads at the same time on the new draft model.

The work must include the provincial branches of INE, taking into consideration that a substantial part of the expenses takes place at provincial level.

It is anticipated that the work to further develop, establish and consolidate the new cost accounting system will continue during INEs new 5-year plan, 2003-07.

There will be parallel support on improving management instruments by providing INE with a modern accounting system (*accounting assistance and quarterly review of project account statements)*. This support will include a junior accountant/auditor to be attached to INE's accounting section on full-time to May 2003. An essential part of this consultancy will be allocated to in house training.

5. Counterparts

The President of INE - Mr. João Loureiro - together with the Director of INE/DARH - Ms Manuela Xavier and the Director of INE/DICRE (who is INE's Director for the Scandinavian Programme) - Mr Luis Mungamba - will be the main counterparts.

Mr Maringe who is the Head of Department of Administration and Finance, Mr Luis Magaure from the same Department as well as INE's financial assistant in the Scandinavian Programme - Ms Zaqueu - will work close together with the consultants. One staff member at INE/DICRE/DISI (Informatics) will also participate in the development work.

6. Consultants

The Swedish National Financial Management Authority (ESV) will provide the main assistance to INE. ESV participates also in the State Financial Management Project. Messrs Tomas Kjerf - mission head - and Martin Eriksson ESV and Robert Jäverlind Statistics Sweden will carry out the first mission in September. Mr Eriksson is fluent in Portuguese.

Mr Anders Ejdemark, ESV will act as the home coordinator for the mission

7. Period for the first mission

The first mission will take place 16/9 - 4/10 in Maputo.

Mr Kjerf will start his assignment in Maputo 23/9 and work 7 days in Maputo and 8 days at home that is totally 15 days. He will leave Maputo 1/10.
Mr Eriksson will start his assignment in Maputo 16/9 and leave Maputo 4/10. He will work 15 days in Maputo and 10 days at home that is totally 25 days.
Mr Jäverlind will start his assignment in Maputo 16/9 and leave Maputo 27/9. He will work 10 days in Maputo and 5 days at home that is totally 15 days.

Mr Ejdemark will spend 4 working days as home coordinator for the mission.

Workplan for ESV staff for this first mission is enclosed to these ToR.

There will be specific consultants and Terms of Reference for the Statistical Technical Assistance for the Statistics in Action Course (STAC).

8. Reporting

The consultants will have regular briefings and meetings on the work with the Management at INE. They will also - together with INE - have regular briefings and meetings with Danida as planned lead donor in the Scandinavian Support Programme or whenever the Scandinavian donors require

INE will report on the work in the meetings with the Steering Committee for the Support Programme.

9. Finalization of the Report

The consultants will prepare a draft report to be discussed with INE before leaving Maputo. They will submit a final draft to INE for final comments within one week of the end of the mission. Statistics Denmark as Lead Party will print the final version within 3 weeks of the end of the mission.

These Terms of Reference were prepared by (date and name)

/ / ……

Approved by/in the name of the President of INE (date and name)

/ / ……

Appendix 3.1 Responsibility and Authority

Chart of objects codes for Cost Centres

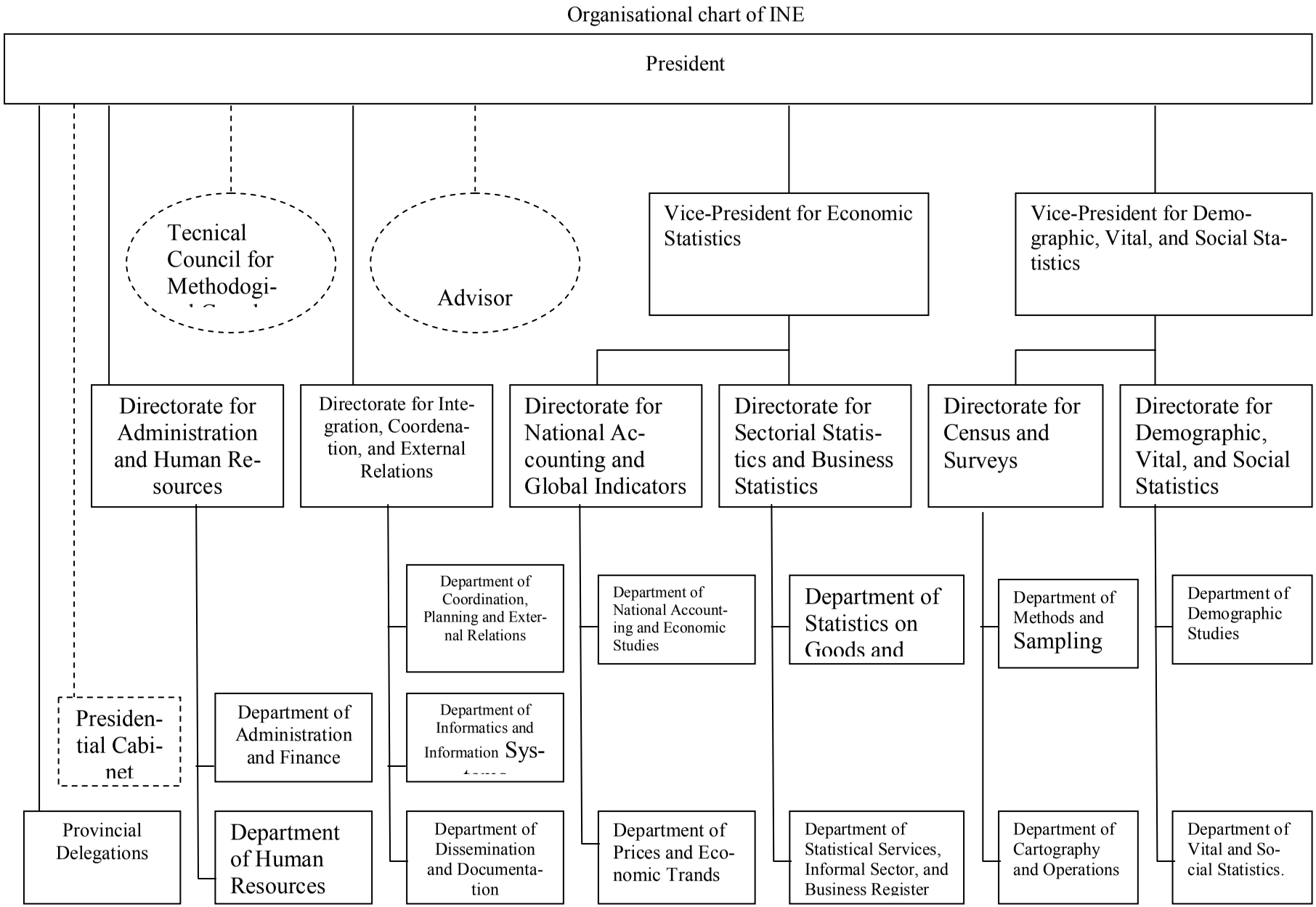
1	
1.1	
1.1.01	Provincial Delegation Maputo city
1.1.02	Provincial Delegation Maputo
1.1.03	Provincial Delegation Inhambane
1.1.04	Provincial Delegation Gaza
1.1.05	Provincial Delegation Manica
1.1.06	Provincial Delegation Sofala
1.1.07	Provincial Delegation Tete
1.1.08	Provincial Delegation Zambezi
1.1.09	Provincial Delegation Nampola
1.1.10	Provincial Delegation Niassa
1.1.11	Provincial Delegation Cabo Delgado
2	
2.1	
2.1.01	Presidential Cabinet GP
3	
3.2	*Directorate for Administration DARH*
3.2.00	Management and staff
3.2.01	Department of Administration and Finance DAF
3.2.02	Department of Human Resources DHR
4	
5	
5.1	*Directorate for Integration DICRE*
5.1.00	Management and staff
5.1.01	Department of Coordination, Planning and external Relations DCPRE
5.1.02	Department of Informatics and Information Systems DISI
5.1.03	Department of Dissemination and Documentation DDD
6	
7	*Economic Statistics VPINE/EE*
7.0	Management and staff
7.1	*Directorate for National Accounting ans Global Indicators DCNIG*
7.1.00	Management and staff
7.1.01	Department of National Economic Studies DCNEE
7.1.02	Department of Prices and Economic Trends DPC
7.2	*Directorate for Statistics and Business Sectors DESE*
7.2.00	Management and staff
7.2.01	Department of Statistics on Good and Environment DEBA
7.2.02	Department of Statistical Services, Informal Sector and Business Register DESICC
8	*Demographic, Vital and Social Statistics VPINE/DEMOVIS*
8.0	Management and staff
8.1	*Directorate for Cencus and Survey DCI*

8.1.00 Management and staff
8.1.01 Department of Methods and Sampling DMA
8.1.02 Department of Cartography and Operations DCO

8.2 Directorate for Demographic, Vital and Social Statistics DEMOVIS

8.2.00 Management and staff
8.2.01 Department of Demographic DED
8.2.02 Department of Vital and Social Statistics DEVS

Appendix 3.2 Cost centres



Appendix 4.1 Products

Chart of object cods for products

Account code	Designation of the account
1	*Overhead costs*
101	Administration
102	Education and Training
103	Personnel meeting
104	Planning
105	Production Support
2	*Economic Statistics*
201	Agriculture Census 2000-2001
202	Annual Commerce Statistics
203	Annual Industry Statistics
204	Annual National Accounts
205	Border crossing statistics
206	Business Census 2002
207	Business Register
208	Consumer Price index
209	Environmental statistics
210	Foreign Trade Index
211	Foreign Trade Statistics
212	Informal Sector Survey 2003
213	NGO-statistics
214	Prod Price Index
215	Quarterly Economic Indicators
216	Quarterly National Accounts
217	Short term statistics on Construction
218	Short term statistics on Harbours and Airports
219	Short term statistics on Hotels and Restaurants
220	Short term statistics on Manufacturing
221	Short term statistics on Service sector
222	Short term statistics on Transport
223	TIA
224	TIA 2002
225	Tourism Statistics
3	*Demographic, Vital and Social Statistics*
301	DHS 2003
302	Education statistics
303	ESDEM
304	Gender statistic
305	HBS 2002
306	Health statistics
307	Household Survey
308	IAF
309	INJAD 2001
310	Population and Housing Census 1997
311	Population Projections

312 QWICK 2002
313 Social statistics
314 Social welfare
315 Statistics on Crime and Justice
316 Statistics on Culture
317 Statistics on Labour Force
318 Statistics on Press
319 Statistics on Sports

4 Publications
401 Other publications
402 Statistical year book

Appendix 4.2 Product list

Overhead costs (joint internal products)

1 Administration
2 Education and Training
3 Personnel meeting
4 Planning
5 Production support

Products with an external receiver (final product of a process)

Economic Statistics group

1 Annual National Accounts
2 Agriculture Census 2000-2001
3 Annual Commerce Statistics
4 Annual Industry Statistics
5 Border crossing statistics
6 Business Census 2002
7 Business Register
8 Consumer Price index
9 Environment statistics
10 Foreign Trade Index
11 Foreign Trade Statistics
12 Informal Sector Survey 2003
13 NGO-statistics
14 Prod Price Index
15 Quarterly Economic Indicators
16 Quarterly National Accounts
17 Short term statistics on Construction
18 Short term statistics on Harbours and Airports
19 Short term statistics on Hotels and Restaurants
20 Short term statistics on Manufacturing
21 Short term statistics on Service sector
22 Short term statistics on Transport
23 TIA
24 TIA 2002
25 Tourism Statistics

Demographic, Vital and Social Statistics group

26 Population and Housing Census 1997
27 Household Survey
28 IAF
29 HBS 2002
30 QWICK 2002
31 INJAD 2001
32 DHS 2003
33 Population Projections
34 Statistics on Culture
35 Statistics on Crime and Justice
36 Statistics on Labour Force
37 Statistics on Press
38 Statistics on Sports
39 Health statistics
40 Education statistics
41 Social welfare

42 ESDEM
43 Social statistics
44 Gender statistic

Publications group

45 Statistical year book
46 Other publications

Appendix 5 User manual for the Excel application

The Excel application presented in this appendix is a tool to collect, process and produce sufficient cost information. By following the step by step procedure described in this manual, the user will be able to process the data input and produce cost information.

Data input:
There are two kinds of data input necessary in order to obtain the final cost information.

- Time reports
- Expense registration (book-keeping)

The time reported by every employee is collected at cost centre level. Each cost centre has been assigned a number in the Excel application, 1, 2, 3, 4 etc. In column "M" the total time reported is summed up for every employee belonging to a cost centre.

In the"summary" sheet, the total amount of days worked for the whole workforce at INE is distributed to each product and summed up. The column "C" in "summary" is linked to column "C" in the "distribution" sheet.

The "expense registration" sheet is where all expenses are registered. When an invoice or a salary is paid, these transactions have to be registered with the *account, date, description, cost centre, product, financier and amount* in the "expense registration" sheet.

Data process:

The column "C" in the "distribution sheet" is the basis for calculating the distribution key. The key is the days reported on each product divided by the total amount of days worked by the whole workforce at INE. The percentage key is used to distribute the salary costs.

The salary costs are to be found in the "expense registration" sheet by sorting according to the account code for salaries. The sum of the salary costs is transported to cell "E3" in the "distribution sheet. In order to obtain the salary cost per product, the key is used to facilitate the distribution of salaries. The percentage of days per product is to be multiplied by the total salary cost in column "E" in the "distribution" sheet.

Next step is to distribute the direct costs that have been registered on a final product. These costs are obtained by creating a pivot chart on the basis of the "expense registration".

Finally, the overhead and indirect costs have to be distributed by once again the distribution key. The overhead cost is the sum of all salary costs registered on overhead products and the indirect costs are the costs registered on production support and found in the pivot chart.

Data output:

The output is the total cost per product. The total cost is the sum of column "E", "F" and "H" in the "distribution sheet". The costs included in the total cost are salaries, direct costs and indirect costs.

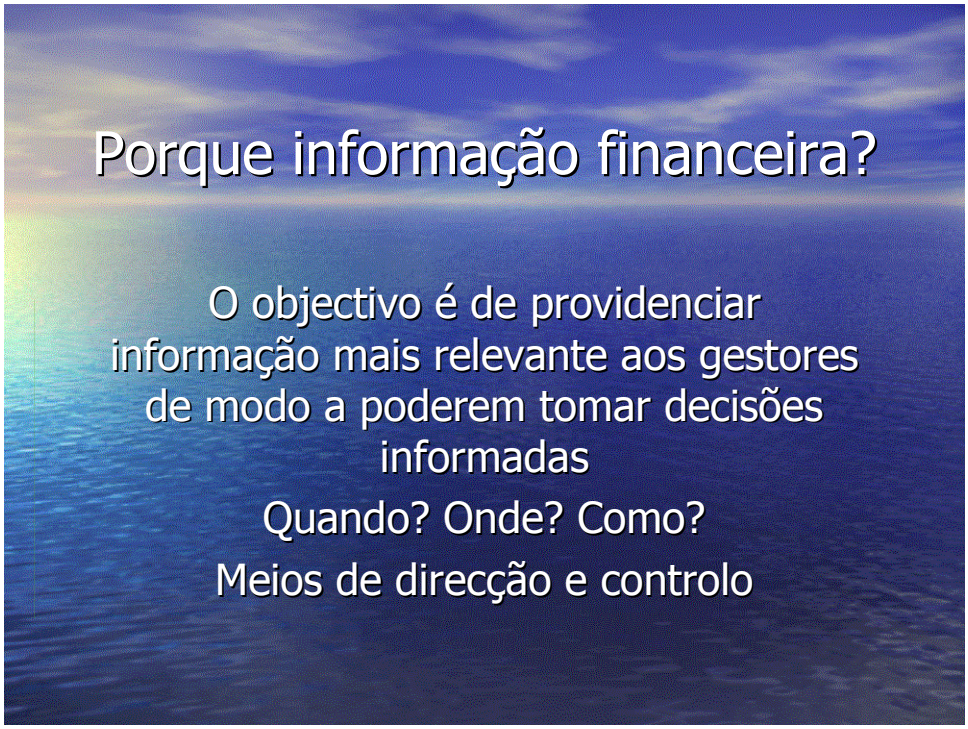
Appendix 6 Glossary

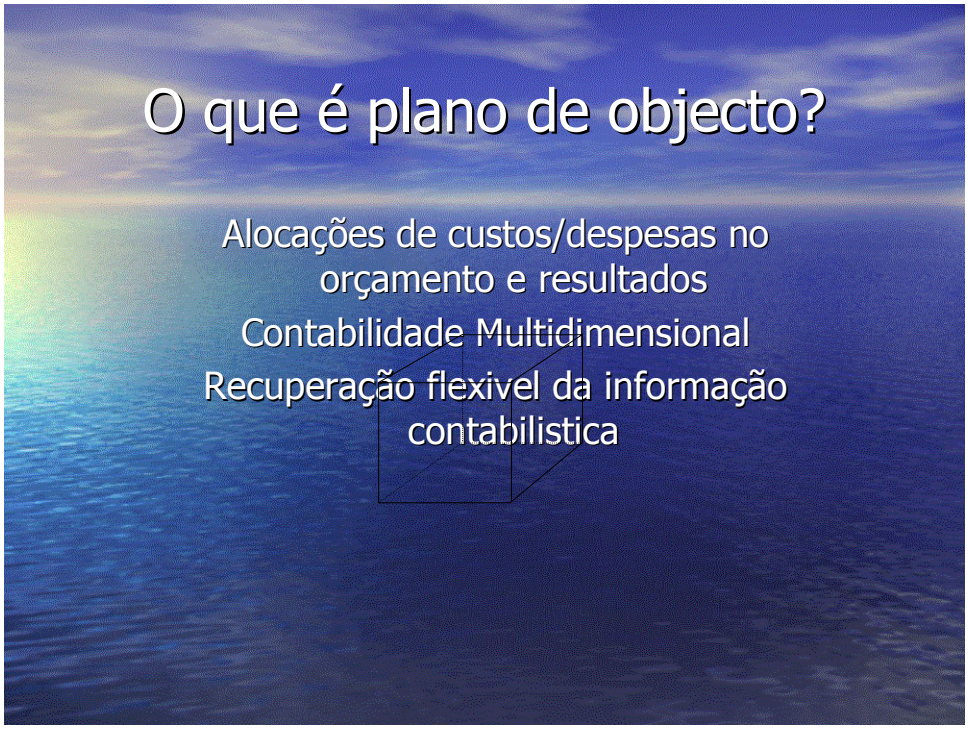
Accounting string – cadeia contabilístico
Accounting system – sistema contabilístico
Activities – actividades
Appropriation – apropriação
Chart of accounts – plano de contas
Chart of objects – plano de objectos
Code string – codificação
Cost – custo
Cost centre – centro de custo
Cost by type – natureza de custo
Cost unit – unidade de custo
Donor – doador
Expenditure – despesas
Expense centre - centro de despesa
Expense objective – objectivo de despesa
Final performance/product – desempenho/produto final
Financier – financiador
General ledgers – diário geral
Heading – titulo
Direct cost – custo directo
Indirect cost – custo indirecto
Object – objecto
Object fields – localização do objecto
Process – processo
Product – produto
Subdivision – subdivisão
Sub-heading – subtítulo
Time registration – registo do tempo

Appendix 7 References

Name	Title
Bo Lundholm Arne Knochenhauer	"Assistance to the Bureau of Statistics, Lesotho Budgeting and Financing". Report from a mission to the Bureau of Statistics, Maseru Lesotho LESSATAT 2001:7
Bengt Anderson	"Finance and administration routines". Report from a mission to INE, Maputo, Mozambique RSASTAT 1997:7
Tomas Kjerf	Um Método para a elaboração de um plano de objectos ESV 2001

Appendix 8 PP slides - workshop

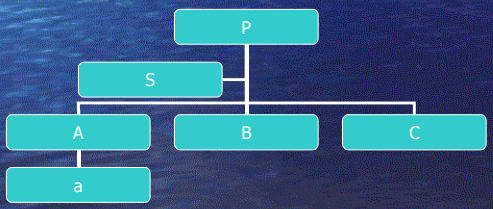




O que constitui o plano de objecto?

Responsabilidade e autoridade

- O organigrama descreve a delegação da responsabilidade e autoridade
- O campo de centro de custos constitui a reflexão do organigrama

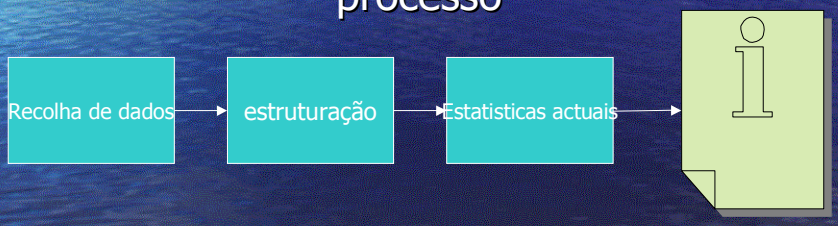


Code	Name
O	P
1	A
1.1	a
2	B
3	C
4	S

Produto

Do ponto de vista da utilidade existe a necessidade por parte do receptor

Desempenho relativo aos resultados do processo



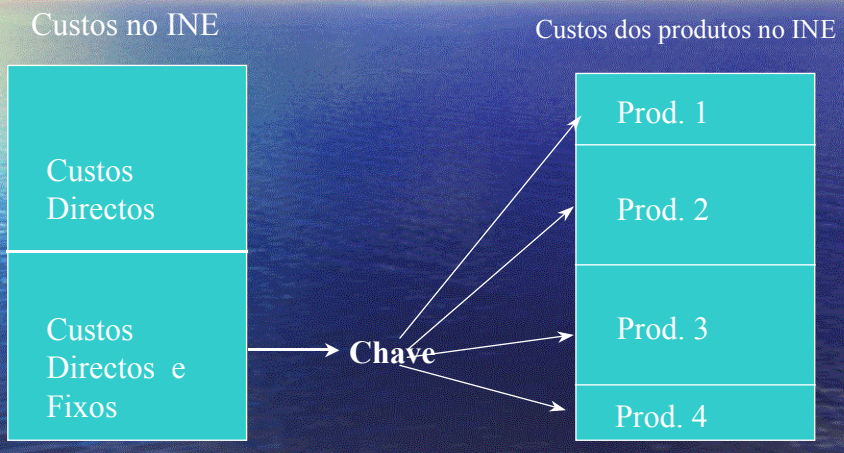
O plano de códigos do objecto

Tipo de custo	Centro de custo	Produto
Despesas de Salários	Direcção A Departamentos	Estatisticas I
Despesas de transportes	Direcção B Departamentos	Estatisticas II
E etc.	E etc.	E etc.

Porque distribuir custos?

- Na qualidade de gestor no INE, se pode querer conhecer o custo final de cada produto dentro da sua Direcção/Departamento para poder tomar decisões informadas.
- Diálogo melhorado sobre custos de operações e o fianciamento do INE com o Governo, Ministérios, Financiadores e utentes.
- Consciencia e eficacia de custos.

Distribuição de custos



Chave = tempo de trabalho por produto

CHAVE=Folha de Registo de Tempo

Lista de produto	Produto Codigos	Dias / Funcionarios	Dias / Funcionarios	Dias / Funcionarios	Dias / Funcionarios
Custos Fixos	1				
Administração	1001	5			4
Planificação	1002				
Relacões externas	1003				
Educação e Formação	1004		2		
Encontros de pessoal	1005			2	
Suporte da produção	1006	2			
Estatisticas economicas	2				
Contabilidade Nacional Anual	2001				
Contabilidade Nacional Trimestral	2002			2	
Indicadores Economicos Trimestrais	2003				
Estatisticas das ONGs	2004				
Inquerito do sector Informal 2003	2005			2	
Indice de Preço ao Consumidor	2006	10	2		

Custos Directos

Os custos directos são registados com base num produto externo especifico

-**CPI 2006** (Custos de impressão de uma publicação sobre Indice de Preço ao Consumidor)
-**HS 3002** (Fax utilisado somente para o Inquerito aos Agregados Familiares)
-**TS 2018** (maquina fotocopiadora utilizada para Estatisticas Turisticas)

Registo de Custos/ Despesas

Conta	Data	Descricao	Centro de Custo	Produto	Financiador	Montante
10001	01-sep	Salário	4.2	1001		80000
10001	02-sep	Salário	4.3	1001		80000
10001	03-sep	Salário	4.4	2007		160000
10001	04-sep	Salário	7.1	2009		40000
10001	05-sep	Salário	7.2	3008		40000
10001	06-sep	Salário	7.3	4001		100000
20002	07-sep	Computador	7.3	1004		5000
20002	08-sep	Computador	3.1	2003		1000
20002	09-sep	Computador	3.1	2009		760
20002	10-sep	Computador	3.3	1004		900
30003	11-sep	Material	5.1	1004		100
30003	12-sep	Material	5.6	2020		200

Custos Indirectos/Fixos

Custos Indirectos são custos comuns para alguns ou todos produtos.

- Salários (as pessoas trabalham com produtos diferentes)
- Suporte do produto 1005 (maquina de Fax ou Fotocopiadora utilizada para diversos produtos)
- Administração 1001

Produtos Fixos

- Administração
- Planificação
- Relações Exteriores
- Educação e Formação
- Encontros de Informação com os Funcionários
- Suporte de produção

Exemplo, Distribuição de Salários (1)

Custo Total de Salários: **$100**

Produto	Dáas de Trabalho	% de dias totais	Custo de Salário
1001 Adm.	5 dáays	50%	$ 50
2006 CPI	2 dáays	20%	$ 20
2020 FTS	1 dia	10%	$ 10
3014 HS	2 dáays	20%	$ 20
Total	10 días	100%	$ 100

Exemplo, Custos Directos (2)

Custos Directos: **$ 50**

Produto	Días de Trabalho	% de días Totais	Custos Directos
2006 CPI	-----	-----	$ 30
2020 FTS	-----	-----	$ 0
3014 HS	-----	-----	$ 20
Total	-----	-----	$ 50

Exemplo, Distribuição de Custos Indirectos e Fixos (3)

1001 Custos Administrativos: **$ 50**

1005 Suporte de produção: **$ 100**

Produto	% de días totais sobre o produto externo	Custos Indir. E Fixos Distribuidos	Custo Total por Produto
2006 CPI	40 %	$ 60	
2020 FTS	20%	$ 30	→
3014 HS	40%	$ 60	
Total	100%	$ 150	

Exemplo, Custo final por produto (4)

Produto	Custo Final	
2006 CPI	$ 110	($ 20 + $ 30 + $ 60)
2020 FTS	$ 40	($ 10 + $ 0 + $ 30)
3014 HS	$ 100	($ 20 + $ 20 + $ 60)
Total	$ 250