Mission Report

FOREIGN TRADE STATISTICS (FTS)

November 2006

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

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Table of contents

List of abbreviations

CO	Scanstat Coordination Office in Statistics Denmark
Danida	Danish International Development Assistance
DKK	Danish Kroner
DSt	Statistics Denmark
EUR	European Euro
INE	Instituto Nacional de Estatística, Mozambique
LTA	Long Term Adviser
MZM	Mozambique Meticais
NOK	Norwegian Kroner
Scanstat	Consortium between Statistics Denmark, Statistics Norway and Statistics Sweden
SCB	Statistics Sweden
SEK	Swedish Kronor
SSB	Statistics Norway
USD	US Dollars
ZAR	South African Rand

1 EXECUTIVE SUMMARY

1.1 *Major reason for the mission*

This report will refer to, and partly base on, information in the previous mission report (12 April - 25 May 2004), see paragraph 2.2 below. Especially the sections 2.2 and 5.2 **FTS Actions**, appendix 5, pages 26-27, and appendix 14 is essential.

This mission is the 4th visit to the Instituto Nacional de Estatistica (INE) in Maputo (14 - 17 November 2006), on trials to establish a basic production system for Foreign Trade Statistics (FTS). Despite lack of progress, we never allow us to give up, and this time we firmly would like to end up into a system, which is acceptable as a quality-proved pilot system.

A main reason for lack of progress among the FTS staff (apart from that they also has been on rotation between different activities) seems; - despite of all previous efforts, - to be related to proper human resource input combined with some aspects of improper management. The FTS staff seems somehow paralysed when coming to concrete acting and resolving the real tasks in the **FTS Action Plan**.

As a result they never really started to apply IT principles and statistical quality measures when working with raw data from Customs, when converting these data into corrected files ready for publishing. They just have continued with a simple, manual editing (in excel) directly on the data.

This manner is against all good rules for how to build a statistical production system, where one basic demand is that all checking routines are to be the same for every round of data processing (and which by nature is only possible using some data processing technique), and a next demand is to construct this system so that the transformations done will be documented (possible to see later on why and how a single figure in the raw data has been changed).

It is important to understand that the bottleneck is **not** a technical one, rather a problem of human resource allocation and management. The deeper understanding among the staff for **why** things are done in a specific manner, is much more important than blindly operating a software or a ready-made system.

Therefore, the learning effect is much higher, putting up a simple, robust data processing system, which is easy to understand and to work with; -compared with a too ambitious and sophisticated solution. The reason why previous trials have failed is probably that these missions set up too many still-unsolved developmental proposals / tasks. And, that INE and the FTS staff, are not trained to see that, and to make necessary adjustments / simplifications in order to proceed alone.

1.2 *Major progress/achievement duing the mission*

The mission days were shortened of the unforeseen fact the sister of the expert became critical ill, and he had to leave suddenly on Monday 20 November, to reach home. The mission was planned to finish Friday 24 November.

However, it seems that the mission days already implemented has been enough to analyse the status and the current situation, and to draw plans for how it is possible to proceed in developing an acceptable FTS system at the INE.

These days confirmed a lack of system development, as explained in point 1.1 above. The analysis also confirms that the raw data delivered from the MZ Customs, along with special reports from MOZAL and SASOL, is a basis good enough for constructing a FTS pilot system enough to be defended as a quality system.

Using SAS, the expert programmed a first frame of such a system during these days. The principles behind this is to run a few programs (to be made in any kind of proper software tools like SPSS or maybe even CSPro, not necessarily SAS) after these principles:

1. The only manual work to be allowed is to create **FTS raw data** from the CD with Customs raw data (MS Access files), transforming it into excel files of formats with just the variables, fitting further FTS data processing.

2. **Data checking** step by running a program: - the control of value variables, -validity checks of variables like commodity numbers and country codes, -a system for a simplified price control including rough imputation of quantity figures as kg and supplementary measures.

3. **Splitting the Customs data** in two types: - the data, which per definition shall be included in FTS publishing (2 ways, General trade or Special trade), -and data, which according to UN definitions are excluded.

4. **Splitting the FTS data in two files**: - item lines without 'errors', - and items ending up in the ERROR-list.

5. Establishing a **system with manual checking** and correction of the absolute or potential errors in the **ERROR-list**, but set up in a way that all changed will be documented and which can be looked-up later on if a need to prove why changes in the data has been done.

6. Ending up with a last step merging the corrected ERROR-list with the error-free data, - to produce a **file ready for Table-production and publishing**.

The expert left a CD with these results, including the SAS programs. However, this information may only be used as illustrations by the FTS staff, and is incomplete as a prototype of a system as mentioned above.

As a proposal, the expert (on behalf of Statistics Norway), proposes that remaining mission days (aborted because of the unexpected situation) will be used to cooperate with the INE and the FTA staff, to complete the system. In case, this means that the invoiced days for this mission will be as originally planned, with the change that more days are accepted as long-distance work.

In addition there might be a need for a **follow-up mission during the first or second quarter of 2007**, for training the FTS staff in principles and definitions and also for setting this pilot system into a regular production. It would be an advantage if the FTS staff would be able to do retro-perspective data correction for old data back to 2004 or at least 2005, to have comparable time series.

1.3   *Major recommendations*

Based on the finding above, the expert propose the following strategy:

1. **The expert complete a pilot frame system** using SAS, and agree with the FTS staff on how to deal with the remaining details in order to complete the system.

2. For a **temporary period of time the expert may run data processing** on the FTS excel files, prepared by the INE FTS staff. These data files are small enough to be sent by simple email attaches, and output to be returned in the same manner.

3. These programs should as soon as possible **be translated into a software**, which is available in INE, so that INE shall not depend on purchasing new software, - for the FTS staff to be bale to run the programs themselves. If there will be a follow-up mission in 2007, a clear strategy / solution to this converting of the software used, should be found.

4. The expert recommend **to wait** with further efforts using EUROTRACE since some of the proposed components in this pilot solution, -especially the production of an import and export Price Master files and the execution of price controls, plus eventually imputations of bad quantity figures, -are not possible to do in a EUROTRACE system.

5. The expert is in favour of getting the SAS software for INE. **But**, the SAS Institute keep an unfriendly price profile against institutions without high budgets, and it is a hazard, getting into a situation where payment of licenses are not guaranteed in a normal time span (meaning at least 10 years with a predictable size on the license

costs). As long as such aspects are not under control, it is **not recommendable** to make commitments.[1]

6. When a pilot solution has been tested and been accepted, the Project better find a way to **convert all programs into a proper software**, which the INE has long-term access to, and which the FTS staff will be able to learn over time. Then, the FTS staff can modify and adjust programs on a daily basis, and also support IT specialists / programmers later on, when it comes to more complicated changes in the FTS Production system.

7. **IF** this system shows to produce acceptable stable core data for imports and exports, this opens for inclusions of the following use of the imports and export data, **8 and 9 below**:

8. **The MZ Customs data is in particular fitting well for advanced CIF-FOB calculations, targeting the Balance of Payment System, in order to calculate the imports and exports of transport services, and to recalculate CIF imports into FOB imports.**

9. **It opens for the very first calculations of import and export prices, using a system based on unit-value index calculations, with output files directly aggregated up to the National Accounts CPC-MZ level. These files can be directly utilised in the National Accounts Supply- and Use Table systems and includes prices on all FTS products by weighting so-called Representative products/commodities into substitutes for non-representative products.**

2   INTRODUCTION

I would like give thanks to the friendly FTS staff, despite I chocked them with all overwhelming work forecasts, but honest work is the only way to make a person honourable. Mr Cirilo is the same positive minded person as before and this is promising for find a solution.

Especially many thanks to Mr. Lars, the project leader for good taking care, and for acting so prompt when I was facing the difficulties with my sister. Thanks a lot.

2.1   The report and writer

The report is written by Mr. Hans Kristian Ostereng. He is senior adviser at Statistics Norway. He has been working as the Project Leader at the National Statistics Office in Asmara, Eritrea, conducting the work to build a new statistical office for this country. A main aspect of this work has been to plan

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[1] After the report was written there has been a decision on using SPSS as INE already has some experience in this software.

for institutional capacity building and to dealing with management strategies, in addition to constructing new production systems for economic statistics.

The counterparts in the INE has been Cirilo Tembe, and the FTS staff, Armando Tsandzane, Mr Alfonso Uate and Mrs Dionisia Chunguana.

2.2 Background and earlier missions

A <u>first short-term mission</u> on FTS took place in November 2001 with support from the Twinning Arrangement *(MOZINE 2001:10)*. The objective of this mission was to review the current production routines and suggest the basic actions for how to improve.

A <u>second short-term mission</u> on FTS took place during 28th April - 9th May 2003. This mission was to review the status and to give advises about how to proceed.

The <u>third short-term mission</u> took place during *12 April - 25 May 2004* :
MZ:2004:20   **Ref. no. 104.Moz.98   June 2004.**
The main focus under this mission was to set up an *Action List*,
see *appendix 14* in this report; *FTS action plan of implementation*.
The meaning with this list was to break pieces of work down into separate steps, or actions, which should be understandable and possible to do, for the FTS staff.

2.3 The content of the report

- The main part in this report is written in part 1.1, 1.2 and 1.3 above. The rest of the report, paragraph 3 and appendixes below, is just focusing on listing the details and pieces of work needed, in order to proceed with implementing the proposals under point 1 above.

3 MAIN WORK TO IMPLEMENT A PILOT

The listing below is proposed as a plan for completing the proposed PILOT solutions for a FTS system, so to be able to make it fully functional.

Be aware, that the demands for contribution from the FTS staff, and for the supervision and follow up of INE's leaders and in particular Mr. Cirilo, is absolute.
Meaning that is INE's staff is not able to execute the proposed tasks / work, the project will again suffer from getting stuck.

This time, silence from the FTS staff on requests is **not accepted**. On a specific question, there shall be sent an answer, **either** the fully acceptable output (as e.g. a complete data file according to agreed specifications), **or** a prompt answer explaining what is the obstacle to proceed. Unexplained

delays in answering are not accepted as a good cooperation, and the whole project risk to be abandoned by the expert.

Sorry for this strict behavior, but improved self-discipline is the only medicine.

3.1   The FTS staff at INE should do

<u>**The FTS staff and INE has to do the following:**</u>

1. Write by their own an exact file description for the **FTS raw data file**, -the file which will be manually extracted from CD with **Customs raw data** (in MS Access). As a help, is attached the proposed variable list made by the expert in the SAS program, -see the WORD-file   and an illustration of an excel file showing an example about how this can be written. THIS proposal has to be sent back to the expert so that we together can agree to a final format.

2. After that, the FTS staff has to train in doing this **manual data transformation** for all months or quarters, for all years we decide to process. The main training is to learn to do this 100 % exact: NO failures are tolerated!

3. **The FTS definitions** of General Treade and Special trade has to be completed by the FTS staff, by setting up complete lists over combination of Customs Regime (Reg) and Customs Procedure Codes (CPC) defining which flows/goods handling, which shall be selected. This work has to be done in cooperation with proper Customs officials, and the INE leaders has to be responsible to help the FTS staff to arrange for time and access to such technical specialists at the Customs. **Be aware that is not possible for the INE to publish seriously any import and export data, without this piece of work done!**

4. The FTS staff has to get **electronic copies of the Customs Tariff.** IF there has been changes in the Tariff lines (i.e. the commodity numbers) all these changes has to be documented separately! This file(s) are needed to put up a precise Commodity Catalogue as a part of the FTS production system.

5. Convert the **special reports / data, received from Mozal and SASOL** into a item data level format, which is identical to the file format described in point 1 above. These data files shall replace incomplete Customs data. In order to do so, the incomplete Customs data (the item lines), has to be exact identified by clear selection criteria so that they can be automatically removed from the FTS raw files, and replaced by the wanted data.

3.2   The expert will have to do

The expert will do the following based on INE's FTS staff input:

1. **Complete the pilot system** and send the all output (datafiles in text-formats ready for import into Excel, programs as WORD-files able to read, instructions for how to work and use the data files).

2. Together with the FTS staff, agree to a way on **how to correct errors** in the ERROR-list files, and how to document this work / changes, and how to finally merge the data back into a file ready-for-publishing.

3. Take the efforts to **learn, and to get the FTS staff to understand** that computer-work in a data processing system is something absolute: There is only *yes* and *no*, -you are either precise or in-precise. The goal is the deeper understanding of why we follow such strict step-by-step approach in the work when executing a statistical production.

4. Below is a copy of the 2004-report Action Plan, just to remind + check what parts of this plan which is still relevant, -when excluding the work directly connected to the use of EUROTRACE (this was at that time on the agenda).

ACTION PLAN FOR FURTHER DEVELOPMENT OF FTS

A meeting was arranged with Customs/TIMS representatives[2] 20 May 2004. A memorandum was sent the day before, describing the technical problems the INE was facing when working to develop new routines for how to produce FTS.

At this meeting the National Bank and INE representatives[3] together with Customs concluded on a list of actions, which should be implemented both in Customs and in the INE, in close cooperation. These actions should be targeted to solve the main problems pointed on, in the Memorandum distributed before the meeting.

The main points in this action plan is:

The Customs will do, in order to improve the FTS data quality:

Cust-01. Improve quality of Customs officers work on data entry/release of goods. New rules are just to be introduced in the Customs, making Customs leadership able to punish officers who neglect to follow strictly the demands for complete and correct data entry in the Customs declarations, - which also is a basis for improvements of the quality of the statistical data as well.

In specific will this concerns **data input for future index calculations**:
>> Net weight will only be Kg (tonnes as a measure will expire)
>> Quantity will be filled in a proper manner according to the Tariff code
>> Training of officers will be a part of further improvements

Cust-02. Introduce disiplin actions if rules are not obeyed. In total, there should be a much more strict connection between demand for correct declaration data and the clearance (release) of the goods. In future on-line systems, this will take place automatically. Good improvement depends on a higher quality and IT-orientation from the Customs officers involved in Customs clearance.

Cust-03. Improve data quality in declarations for previous years. The Customs (TIMS) plan to start a work, improving the quality of earlier declarations (2000 - 2003). Especially the net weight and the quantity boxes will be investigated in order to replace errors with possible estimation from already acceptable items, or also from external sources like export data from the ZA Customs. The INE was invited to assist in

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[2] IT Management consultant Helen MacQueen, camoz.it@teledata.mz (+258 082 311940) and consultant Alvaso Sousa.

[3] Ines Riquicho from the National Bank, Cirilo Tembe, Armando Tsandzane, Gabriel H. Lemequezani, Claudio Capriano, Paulo Benuesse from INE, Hans K. Ostereng Statistics Norway.

these analysis about the method and how to impute the unacceptable data. This is a generous offer, which the INE could benefit from with a cooperation. These analysis and eventually subsequent improvements of the data quality (in specific connected to index calculations) is of crutial importance, since this might open for starting index calculation for earlier years. To do index calculations, at least one complete year (a base year) of data has to be established. The normal rule is that the base year is changing every year. **It was proposed that Customs create a basic data analysis file, extracting only the fields (DU boxes), which are need for this purpose and copy to CD, to be easy available for the INE/consultants for price investigation analysis. It should contains data for all years in one CD.**

Cust-04. Simplified data deliveries from the Customs to the INE. The Customs will program a new data extraction routine tailor made for data deliveries to the INE, after INE has sent to Customs a data file description. Until now, the system with ACCESS files don't functions safe. The Customs officers are not very familiar with ACCESS and it is easy to do mistakes. Besides; too many confidential data are by now transferred to the INE, which they don't need for statistical production, at this stage of their development.

Cust-05. Develop a more intensive, daily cooperation between Customs/TIMS officers and the FTS staff in the INE. The Customs are willing and positive to cooperate with the INE and the FTS employees in order to <u>correct errors</u> found by validation checks in the INE. Before INE manage to establish a more complex FTS production system, which enable to separate originals from later corrections, it is better that the updating of errors takes place in the Customs (TIMS) system. New data extraction and deliveries can then be made again, until the FTS data INE will use, are of acceptable quality. By choosing this way, the FTS' staff gets a possibility to learn the functionality of the Customs clearance system. This is needed for their participation in development of FTS systems in the INE later on.

Cust-06. Rules for how to <u>re-code occurance of MZ</u> as country in the Customs declarations, to fit the statistical FTS needs. In Customs declaration systems (not only in Mozambique, but worldwide) it is normal that the national country code (like MZ here) occurs. This can have connection to origination rules and to combination of Customs procedures (Regime&CPC combinations), which technically give sense in Customs administrative work. Connected to a statistical purposes and in specific for FTS, these cases have to be re-coded or deleted, depending what kind of goods movement we look at. Such a list over what to re-code or delete, might be included in the data extraction program, but the INE has to describe which rule that has to be implemented.

Cust-07. Integrate DU-simplified in TIMS. Customs plan to integrate the DU-simplified into the TIMS system. This work should be done in close cooperation with the INE, in order to improve the data capture. The DU-s is still missing in the FTS data input at the INE. NB! It is of great importance for the FTS that the Customs integrate the DU-s in the TIMS system as soon as possiblble, since the INE / trade statistics will benefit

from having ALL types of declarations into one and the same Customs declaration system.

Cust-08. Integrate all declarations connected to free zone activities in TIMS. Declarations from the Free Zones will also be integrated in the TIMS system. This has also an impact on the FTS and the definition of official trade statistics. It has to be checked if the MZ free zones are of Industrial types (processing take place) or of Commercial types, since this may have impact on the definition of the trade statistics (See UN Recommendation 1998).

The INE's will do, in order to improve the FTS data quality:

INE-01. Secure good enough hardware/software.: Not relevant

INE-02. Set up a new file description. A new file description has to be set up by the INE and handed over to Customs, see point **Cust-04** above.

INE-03. Check and understand the content of the Reg-CPC-definition Table. The FTS staff has to check and correct the Reg-CPC-definition Table, which is the basis for later extractions, to publish either the General trade system or the Special trade system.[4] It will take some training/practice to get familiar with the interpretation of all the different movements of the goods. For help in this matters INE may contact the staff at Customs DPAV (Department of Tariff and Valuation).

INE-04. Contribute to retrospective analysis on data quality improvements. The INE should try to participate in the retrospective analysis of the 2000-2003 declarations, in order to help the Customs to repair the errors/missing in the data. This is a difficult work and it is a question how INE may find qualified people to participate in this exercise. :
NOT a priority now!

INE-05. Rules for how to re-code MZ. The INE should elaborate a set of rules about how to recode the cases where country code MZ occurs in the FTS data. The best is to first receive data as it is, and examine these items, - especially by studying the regime/CPC types, and then decide what to do with such combinations, see also point **Cust-06** above.

INE-06. Plan for FTS production system stages. There has to be a long-term strategy for error detection and error correction, including practical solutions on how to development routines for error handling in the INE later on. A proposal for how the INE could handle this in the very beginning of EUROTRACE system building and starting with a new data file format, see point Cust-05 above. **Changed: NEW in this** REPORT.

INE-07 - INE-10 below = not relevant any more.

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[4] **General trade**: input/output for warehouses/free zones are included in the trade statistics. **Special trade**: Imports is only goods into free circulation or industrial free zones, exports only directly from free circulation or from industrial free zones.

INE-07. Plan for further use of EUROTRACE. The EUROTRACE software will be installed and utilized, in a first round for complete validation of the codes, like commodity numbers and country codes, plus more. Concerning how to handle the correction of errors found in the FTS data, see point 6 above. A target with this arrangement is to allow the FTS staff to cooperate close and daily with the Customs and to get knowledge about the updating routines in the TIMS system. This knowledge will be a basis for safer development of own FTS production systems in the INE.

INE-08. EUROTRACE Training. A plan for further development and training of EUROTRACE will be made. There should be appointed a data administrator (IT-person) for the system, while the FTS staff is defined as users. When starting in production, the software is best to be installed in a server.

INE-09. Installation of last version of EUROTRACE. If this version don't show up I will assist in getting it available later on.

INE-10. Plan for EUROTRACE study trip. The FTS staff would like to go the their colleagues in Angola, of the reason that they already use EUROTRACE and because the Customs there also use the same clearance system as TIMS. It is of coarse easier when they in addition speak Portuguese, but be aware of the need to practice English for the future.

INE-11. Investigate further use of ZA mirror statistics. In appendix 9 below, is an e-mail done under the preparations for the mission. The meaning was to start to cooperate with the South African Customs or Statistics, to arrange for exchange of import/export data. This information could be a basis for current quality work, and for analysis connected to Index Calculation problems, see actions **Cust-03** and **INE-04** above. **Important: To be done as soon as possbile**

INE-12. Start to publish FTS monthly. It is essential to start publishing the FTS monthly. However, there need to be established a production system first. This system can be based on EUROTRACE databases. A first technique could be to have two database; - one for data error checking, with the error correction done in Customs/TIMS, - and a second the a last storage of corrected data, a EUROTRACE production database. **Important: A next step is to look into better system for regular publishing, including a Calendar!**

APPENDIX 1. Persons met

INE
Mr. Azarias Nhanzimo
Ms. Cirilo Tembe
Mr. Armando Tsandzane
Mr. Alfonso Uate
Ms. Dionisia Chunguana
Ms. Júlia Cravo
Mr. Lars Carlsson

4 APPENDIX 2. Terms of Reference

TERMS OF REFERENCE

for a short-term mission
on
Production Systems for
Foreign Trade Statistics (FTS)

within the Scandinavian Assistance to Strengthen the Institutional Capacity of
INE/Mozambique

Consultant: Mr Hans Kristian Ostereng Statistics Denmark /NSO Asmara, Eritrea

Counterparts: Mr Cirilo Tembe, DESE/DESC
Mr Armando Tsandzane, DESE/DESC
Mr Afonso Uate, DESE/DESC

1. Background

The basis for this mission is the last Foreign Trade Statistics (FTS) report from May 2004 [5].
The work to be done in this ToR is to continue and following-up the recommendations given in this report, and to advise in drawing plans for the coming 1-2 years. Some progress has been made since 2004. It is recommended that the INE and Statistics Norway should do some preparatory work before the mission takes place. It is important that some preparatory work is done, so to increase the efficiency of the technical work during the mission and to prepare for better training of the staff. It is in particular important to analyze and detect if MZ Customs has made any improvements of the quality of the declaration variables: commodity number, weight (kg), quantity, unit (quantity measure) and the values, which is essential for using these data for unit value index calculations and running price control systems. Of these

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[5] See MZ:2004:20 Report, Foreign Trade Statistics (FTS) May 2004. TA for the Scandinavian Program to Strengthen the Institutional Capacity of the National Statistics, Mozambique. Ref.no.104.Moz.98 June 2004.

reasons the expert should be allowed to use up to maximum one week for a preparatory phase, connected to point 6 + 7 below.

This mission will be a direct continuation of the *Recommendations* in the last report, see paragraphs 2.2, 5 and appendix 14. All points in these *Recommendations* should be followed, - unless the preparatory work reveals reasons to deviate and modify these plans. EUROTRACE and other software will be used under the implementation.

2. Main reasons for the mission

The FTS staff at the INE has been enforced, which supposedly is a main reason why the recommendations after the last mission have not been followed up good enough. The FTS staff needs training and advices about how to continue alone with later development and improvements. The NSO leaders in charge need to understand the main steps in building the FTS production routine.

3. Benefactors of the mission

The INE needs to publish regular FTS of good quality based on international standards and definitions. The National Accounts need better quality of the import / export data and also import/export prices. The National Bank, the Customs administration, public administration, others need detailed official FTS of good quality. The MZ Customs can get a valuable feedback from the INE, <u>if</u> the FTS staff enables to develop a professional and efficient data control system.

4. Objectives of the mission

The goal of the mission is to get the INE's FTS staff into regular work running a FTS production routine so that the FTS staff should be more able to continue development work alone. The INE leaders should settle on realistic plans and expectations for (near) future quality of the FTS data. The bottlenecks should be clarified and agreed to. The mission report should conclude on these aspects as a part of FTS development plans.

5. Expected results

With basis in the *Recommendations* and the preparatory work, the following results are expected:
1. The quality of the recent Customs data, and the relation to needs for index calculations and price controls, are clarified and concluded to.
2. A pilot version of the FTS production routine has been set up, following the *Recommendations* as far as possible.
3. A training of the FTS staff in the running the routine and FTS concepts and definitions has been completed.
4. Meeting(s) with MZ Customs (+ National Bank?) and INE's National Accounts, has been held and conclusions made.
5. A strategy meeting with INE's leaders (connected to the FTS) plus the FTS staff, has been held to agree to possible plans for the next 1-2 years.

6. Preparatory work for <u>the INE</u> to complete

Before the mission take place, the INE should do the following:

Inform Statistics Norway about the human resources allocated to FTS and what general qualifications this staff has.

Clarify what kind of IT support the FTS staff is given, and what kind of IT qualifications the FTS staff members have. Give a brief description over the technical installations (PCs, server connections, software), which is reserved for the FTS production routines.

Do the practical preparations for the internal and external meetings and training sessions agreed to in the mission agenda, see point 9 below.

Prepare and send (via email) the data referred to in point 7 C below.

Promptly answer all questions arising under the data analysis work and other preparations for the mission.

7. Preparatory work for <u>the expert</u> to complete

The expert (Statistics Norway) should have a preparatory phase up to maximum 5 working days for the following tasks:

- **A.** Draft proposal for an agenda for the mission (to be done after the preparatory phase). The INE is responsible for the final agenda.
- **B.** Describe and request test data (preferably 2005 item data) from the INE for preparatory work
- **C. Based on this data, set up and execute analysis for the following topics:**
  - Investigate and conclude on the <u>quality</u> of the quantity measures (kg and quantities in other measures, see the *May 2004 report, Appendix 5, point 3., page 27*).
  - Investigate how it might be possible to run a <u>*Price Control* system</u> using the FTS data.
  - Test the quality of the <u>*HS6 - CPC* link-file</u> (which is the link-file between the FTS product codes and the National Accounts *Product List* (based on CPC), - if this file is available.
  - Investigate the possibilities for starting <u>*Index Calculations*</u> on import and/or export data.

8. Timing of the mission

The preparatory work will be executed during the period of March-April 2006.

The mission should take place in the period November/Dezember 2006.

9. Agenda for the mission

An agenda proposal is attached the ToR, see below.

It includes the following:

- Training sessions with the FTS staff, and if possible the LTA for eco-statistics.
- Meeting with all relevant INE leaders to discuss and agree to the FTS work and plans.
- External meeting with Customs about agreements on data deliveries and data quality.
- Meeting / discussions with the National Accounts and BoP people.

10. Report

The report will follow the standard INE project procedures.

Agenda proposal: A = morning session. B = afternoon session.

Week 1:   Day Activity and tasks to do

1A   Welcome / introduction. Common meeting, discuss + agree to the agenda
1B   Briefing + training + practical start with the FTS staff; pc's, servers and work places

2A   **Meeting1**: FTS staff + relevant INE leaders - Presentation of the preparatory work and discussion about what impact it could have on the *Recommendations*.
2B   •1 **FTS staff work**: Setting up and develop technical details on FTS production routines

3A   **FTS staff training1**: FTS consepts and definitions related to the MZ FTS data
3B   EUROTRACE: Work on how to use this software, find out what is the situation and discuss to what degree the FTS staff are able to handle this software

4A   **Meeting2**: Customs and the National Bank - A programme with points to discuss, has to
be   sent 2-3 days in advance
4B   • 2 **FTS staff work**: Setting up and develop technical details on FTS production routines

5A   **FTS staff training2**: Designing system FLOW-charts and documentation (metadata)
5B   •3 **FTS staff work**: Setting up and develop technical details on FTS production routines

Week 2:
6A   **FTS staff training3**: How to organize the folder and file system in the server (pc's)
6B   •4 **FTS staff work**: Setting up and develop technical details on FTS production routines

7A   **Meeting3**: INE's National Account's staff (Nat Bank?) about how to use the FTS data for imp/exp price calculations + imp/exp of transport services
7B   •5 **FTS staff work**: Setting up and develop technical details on FTS production routines

8A   **FTS staff training4**: How to implement and run a price control system
8B   •6 **FTS staff work**: Setting up and develop technical details on FTS production routines

9A   **Meeting4**: INE leaders (FTS) and the FTS staff, discussion on possible future plans
9B   •7 **FTS staff work**: Setting up and develop technical details on FTS production routines

10A FTS staff and the expert: go through the whole system in order to identify bottlenecks, missing parts, halting subroutines; -and agree to what should be done further
10B NSO leaders; closing down meeting + remaining work with FTS staff.

APPENDIX 3.

Pilot solution: Flow chart

INE = FTS Routine – Quarterly data input