Forwarding Armenian Statistics through Twinning

AM09/ENP-PCA/TP/04

MISSION REPORT

on

EXHAUSTIVENESS OF GDP ESTIMATES

ACTIVITY C.1
IDENTIFICATION OF ISSUES

Mission carried out by
Ole Berner, Statistics Denmark
Annette Thomsen, Statistics Denmark

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Version: Final

National Statistical Service Republic of Armenia		Statistics Denmark

Authors' names, addresses, e-mails

Ole Berner
Head of National Accounts
Statistics Denmark
Sejrøgade 11
DK 2100 Copenhagen Ø
E-mail: obe@dst.dk

Annette Thomsen
Deputy Head of Government Finances
Statistics Denmark
Sejrøgade
DK 2100 Copenhagen Ø
E-mail: ath@dst.dk

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List of Abbreviations

BOP	Balance of Payments
BR	Business Register
ESA	European System of Accounts
GDP	Gross Domestic Product
HBS	Household Budget Survey
LFS	Labour Force Survey
NACE	Nomenclature generale des Activitiés économique dans les Communautes Européennes (the industry classification of European Union)
NSSRA	National Statistical Service of Republic of Armenia
SNA93	System of National Accounts 1993 (United Nations)
SNA2010	System of National Accounts 2008 (United Nations)
TAE	Tabular Approach of Eurostat

Executive Summary

Write executive summary if report-core text exceeds 4 pages.

Include main conclusions and highlights from findings.

1. General comments

The main purpose of the mission was to obtain a basic overview of the national accounts system in Armenia, to discuss the basic principles of the ESA (European System of Accounts) and to introduce the European system for full coverage, the Tabular Approach.

The staff of the National Accounts Division made a good and comprehensive introduction to how the national accounts is organised and how it is compiled. In addition, an introduction to the business register was made in order to give a picture of the comprehensiveness.

The MS experts presented the basic principles of the ESA. A discussion of these principles with a special focus on delimitation of the production boundary end residency took place.

Eurostat's Tabular approach (TAE) to exhaustiveness was introduced (see Annex 4). The seven different types of exhaustiveness adjustments (N1-N7), and how to identify and classify them using the producer as a starting point, were discussed in detail using the decision tree in the TAE guidelines. Also the three tables (Table 1, Table 2 and Table 3; see Annex 5) that give the end result of the tabular exercise were discussed with a focus on the output approach and Table 1 A and Table 2A. There was also a first discussion on how to classify the already existing adjustments according to N1-N7. Overall it seems that the already existing adjustments for the non-observed economy will form a good starting point for using the TAE.

Finally, a presentation on publication strategy in general and production and revision policy for the National Accounts was conducted followed by a discussion of some aspects (see Annex 6). A presentation of Statistics Denmark's revision policy was made for the staff of the national accounts and macroeconomic indicators Division, Financial Statistics Division and External Trade and Balance of Payments Division, external stakeholders (Ministry of Finance and Central Bank), and students from the State Economic University of Yerevan.

2. Assessment and results

The National Accounts Division is part of the Macroeconomic Statistics Department, and it consists of 7 persons.

The National Accounts in Armenia are based on the SNA1993. The annual time series cover the period from 1990 and the quarterly time series the period from 1992.

GDP is compiled both from the output side and the expenditure side. The expenditure side includes a statistical discrepancy, revealing the fact that the estimates from the output side are judged to be the most reliable. In the presentation of GDP from the income side the gross (or rather net) operating surplus is calculated residually.

The sources for the compilation of GDP from the output side are mainly

- Information from the business statistics surveys in the NSSRA
- Information on agriculture from the Agricultural Statistics Division
- Information on the financial sector from the Central Bank
- Information on General Government from the Ministry of Finance
- Information on BOP from NSSRA (will be moved to the Central Bank)

- Information from the Integrated Living Condition Survey which includes the Labour Force Survey (LFS) and the Household Budget Survey (HBS)
- Additional information from other statistical divisions, for example social statistics and environmental statistics

The compilation level is rather detailed, 2 or 3 digit NACE.

The information in the business statistics surveys (NACE C, D, E, F, G, I) does not allow a compilation of intermediate consumption. This problem is solved through a small sample survey conducted by the Financial Statistics Division in NSSRA. Intermediate consumption in agriculture derives from other sources which is the same as for output. For both the financial sector and non-market activity the same source is used for the compilation of output and intermediate consumption.

In addition to the compilations based on the above mentioned sources the National Accounts division produces estimates of the non-observed part of the economy. These calculations are made at the NACE-letter level (17 groups) and they amount to 25 percent of GDP. More than half of this value is based on the "Italian" method where the enterprise-based information on employment is confronted with employment information from the Labour Force Survey. Another method, which for example is used in the health sector, is the confrontation of supply and demand.

Other ad-hoc surveys are also used. During 2009 a special survey on the informal sector (all industries) was conducted (by assistance of the Asian Development Bank, ADB) which should serve as a base for informal sector estimates in the non-observed economy as from 2009 annual data.

The business register in NSSRA is a register covering only corporations (a total of 15,000 corporations). It forms the basis for the business statistics surveys.

3. Conclusions and recommendations

3.1 Summary conclusions

The systematic and transparent way in which the figures for the non-observed economy are incorporated in the national accounts is a very good starting point for using TAE. By using the Eurostat guidelines it will be possible to classify the already existing exhaustiveness adjustments according to the types N1-N7 in order to get an overview and a good picture of the current situation both related to coverage and methods used for the calculations.

The adjustments for the non-observed economy are already extensive. They account for 25 percent of GDP.

The LFS (Labour Force Survey) is the main source for estimates of the non-observed economy. When estimating adjustments using the LFS, the output/employment ratio from the surveyed activity by industries is used. In the cases where the LFS is used the assumption behind is that the productivity in the non-observed economy is the same as in the observed economy.

3.2 Recommendations

When estimating adjustments for the non-observed economy using the LFS, alternative methods should be considered. It could be considered whether it would be relevant to only use survey results from smaller enterprises in the calculation of the adjustments for industries where it is possible.

A better coverage of the business register would be important. For example the inclusion of unincorporated enterprises would allow for these enterprises to be included in the business statistics surveys.

When relying on GDP from the output side the compilation of gross value added accounts for the by far largest part of GDP. Using one source for output and another source for intermediate consumption (from a smaller sample) in a number of industries (NACE C, D, E, F, G, I) can however create consistency problems. It should be considered to include relevant information on intermediate consumption in the business statistics surveys in order to get information on these two variables from the same source.

4. Actions before next activity (C2)

The next mission is proposed to take place in September 2011. For the preparation of this mission it has been agreed that:

1. The Document "Eurostat's Tabular Approach to Exhaustiveness, Guidelines" will be translated into Armenian.

2. The Tabular approach exercise will be carried out for the year 2009.

3. The BC experts will complete Table 1A for all industries NACE A-P for the next mission which will take place in September 2011. The BC experts will use the Eurostat guidelines for the Tabular Approach for the completion of Table 1A. The template for Table 1A will be expanded by an extra column (4b) "Adjustments needed and already developed" showing for which types N1-N7 adjustments are already in place. The distinction between public and private corporations and/or different size groups should only be made when it is considered to be relevant.

4. For one industry, NACE G, the BC experts will complete a draft Table 1A no later than 1. July 2011 and send it by e-mail to the MS experts.

5. The MS experts will comment on the draft Table 1A for NACE G no later than 10 days after it has been received.

6. The BC experts will work on Table 2A for the non-exhaustiveness types for which estimates are already available in order to get as far as possible before the next mission.

7. The MS experts will prepare an outline of their plans for implementing ESA2010 (SNA2008) and present it at the next mission.

8. During the next mission the MS experts will assist the BC experts with the functioning of the seasonal adjustments software (Tramo Seats).

9. Purposes of next activity (C2)

   9.1. An in depth evaluation of the draft table 1A completed by the NA staff of the NSSRA.
   9.2. Evaluation of the principles and methods behind the actual adjustments in table 2A and identification of possible improvements of existing methods.
   9.3. Identification of potential adjustments that have not yet been developed.
   9.4. Presentation by the MS experts of their plans for implementation of ESA2010 in Denmark.
   9.5. The MS experts will assist the BC experts with the functioning of the seasonal adjustments software (Tramo Seats).
   9.6. A lining up of the work programme up till mission C3 and a proposal for activities on mission C3.

Annexes

Annex 1. Terms of Reference

Activity C1   Identification of issues

1. Purpose of activity
The purposes of the activity are:
o   To obtain a basic overview of the Armenian national accounts system and its' coverage, its' most important data sources, and the applied methodologies;
o   To discuss the basic definitions and delimitations of ESA;
o   To present and discuss the concepts of the tabular approach;
o   To involve relevant external stakeholders in the discussions.

2. Expected output of the activity
The expected outputs of the activity are:
o   An overview of which areas of the present Armenian national accounts that is not covered by the present sources and methodologies;
o   An overview of existing supplementary studies on the uncovered areas of the Armenian national accounts, and this materials' potential usefulness in improving the coverage;
o   Transfer of the Danish, and in general the European Union, experience concerning production of yearly and quarterly national accounts, including the handling of revision policy;
o   A lining up of work programme for the next activity (C2);
o   To decide upon the preferred timing of the next activity (C2).

3. Project Participants
Mr. Artashes Shaboyan, Member of State Council on Statistics (*BC Component Leader;*)
Ms. Lusya Khachatryan, Head of National Accounts and Macroeconomic Indicators Division;
Ms. Nadezda Astvatsaturova, Main Specialist of National Accounts and Macroeconomic Indicators
Ms. Susanna Khachatryan, Main Specialist of National Accounts and Macroeconomic Indicators

Mr. Ole Berner, Head of National Accounts Division, Statistics Denmark (*MS Component Leader*);
Ms. Annette Thomsen, Deputy Head of Government Finances Division, Statistics Denmark:

External Stakeholders taking part in the activity
The Central Bank of Armenia; Ministry of Finance.

Annex 2. Programme for the mission

Time	Place	Event	Purpose / detail
Monday, morning	Congress Hotel	Meeting with RTA	To discuss the programme of the week
Monday, afternoon	NSSRA	Joint meeting with Component B	Overview of the functioning of the Business Register of NSSRA
Tuesday, morning	NSSRA	Meeting with BC Component Leader and BC Experts	BC Experts presentation of the national accounts of Armenia with focus on 1. the generally applied methodologies 2. the uncovered areas, and 3. the already existing studies hereof
Tuesday, afternoon	NSSRA	Meetings with BC Experts	Discussion of the fundamentals of ESA – the basic concepts and delimitations with focus on how to tackle problems of under-coverage in the European Union.
Wednesday, morning	NSSRA	Workshop	Introduction and discussion of the tabular approach and its' particular relevance for the Armenian national accounts
Wednesday, afternoon	NSSRA	Meetings with BC Experts	Discussions of the actual project relevance of the tabular approach vs. other measures based on improvement of existing, or new, data sources.
Thursday	NSSRA	Workshop with external stakeholders	Discussion of overall production and publishing strategy of national accounts, including revision policy
Friday, morning	NSSRA	Meeting with BC Component Leader	Presentation of MS Experts' findings and agreement on the reached conclusions
Friday, afternoon	NSSRA	Ad-hoc meetings	Final clarifications with BC Experts, preparation of report and presentation for BC Project Leader
Friday, afternoon	NSSRA	Debriefing with BC Project Leader	Conclusions and decisions and their consequences for the next activity and the implied work programme for BC Experts

Annex 3. Persons met

Stepan Mnatsakanyan, President of NSSRA (BC Project Leader)
Artashes Shaboyan, Member of State Council on Statistics (BC Component Leader)
Gagik Ananyan, Member of State Council on Statistics
Lusya Khachatryan,, Head of Macroeconomic indicators and National accounts statistics division
Susanna Khachatryan, Main specialist of Macroeconomic indicators and National accounts statistics division
Nadezhda Astvatsaturova, Main specialist of Macroeconomic indicators and National accounts statistics division
Marlena Khachatryan, Leading specialist of Macroeconomic indicators and National accounts statistics division
Naira Baboyan, Specialist of first category of Macroeconomic indicators and National accounts statistics division
Vazgen Shahbazyan, Specialist of first category of Macroeconomic indicators and National accounts statistics division
Arus Tonapetyn, Specialist of second category of Macroeconomic indicators and National accounts statistics division

Mr. Martin Galstyan, Head of Statistics Department, Central Bank of Armenia
Mr. Ashot Petrosyan, Head of Division, Statistics Department,Central Bank of Armenia

Annex 4. Power point presentation of the Tabular approach to Exhaustiveness

Eurostats Tabular approach

to exhaustiveness of GDP

STATISTICS DENMARK

Background

- Developed for the projects on exhaustiveness of National Accounts with (at the time) EU Candidate Countries
- Incorporates the aspects of Exhaustiveness decision (94/168) by classifying adjustments into 7 types of "non-exhaustiveness"

STATISTICS DENMARK
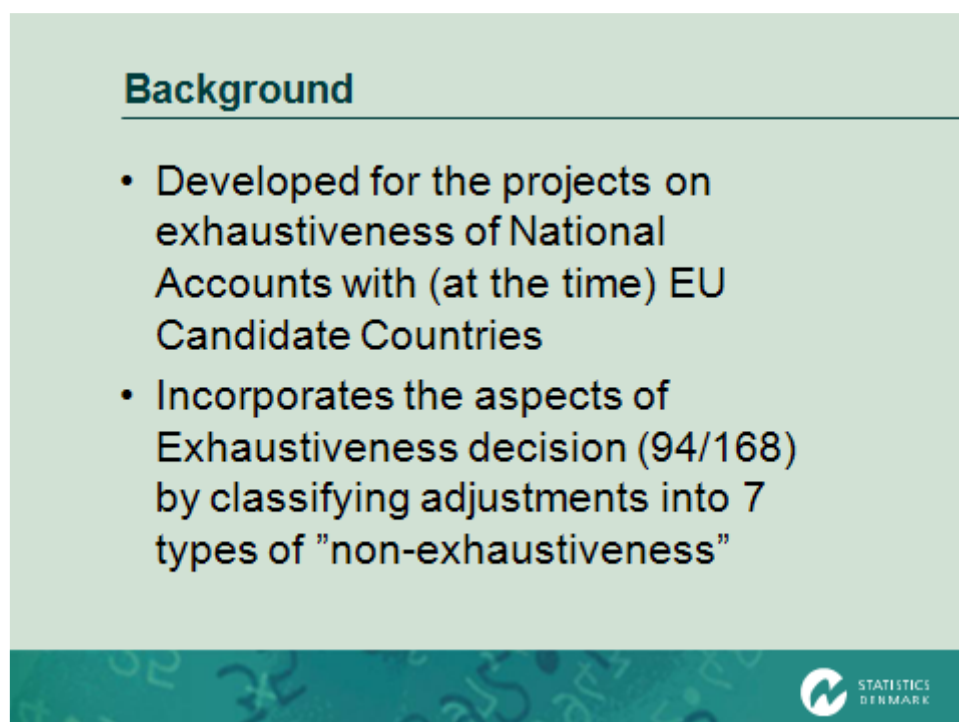
What is the Tabular approach?

- The "tabular approach" derives its name from the tabular framework
- It involves the completion of three standard tables. For the output approach the tables are:
  Table 1A: Elements of non-exhaustiveness
  Table 2A: Exhaustiveness adjustments
  Table 3A: Summary of adjustments
- Similar tables for the expenditure approach but not the income approach

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Purpose of the standard tables

The 7 types of non-exhaustiveness are:
- Clearly defined and distinguished
- Investigated in a systematic way
- Broken down in a standardised way (by type, NACE group and institutional sector)
- Calculated in absolute figures and as percentages of GDP
- Comparable between countries

STATISTICS DENMARK

Tabular approach

- Main objective:
  - produce accurate NA and GDP estimates
  - the distinction between the 7 types is important but not a goal in itself

Focus on the output approach

- GDP balanced:
  GDP(output) = GDP(expenditure) = GDP(income)
- GDP(output) = Output – intermediate consumption + taxes on products – subsidies on products
- Starting point is output approach due to the more uniform data sources; the adjustments are based on a breakdown of producers

Focus on the output approach

- GDP(exp.) = househ. consumption + gov. consumption + chang. in inv. + GFCF + export - import
- Expenditure approach: Data sources less uniform. More than one data source can be used for the same component
- Income approach: In most cases no independent estimate
- Important: Adjustments must be balanced

STATISTICS
DENMARK

7 types on non-exhaustiveness (N1-N7)

FIGURE I

STATISTICS
DENMARK
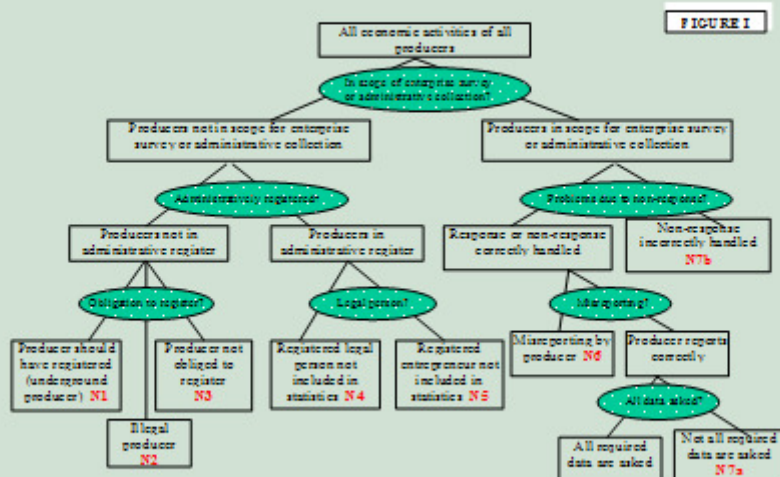
How to distinguish exhaustiveness types:

- The starting point is the producer
- Is the producer in scope for inclusion in statistical data ?
- If YES: non-exhaustiveness adjustment types N6 and N7
- If NO: non-exhaustiveness types N1 to N5

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N1: Producer deliberately does not register

- In order to avoid tax and social security obligations or not to lose social benefits
- Typically includes small producers with income above the set threshold
- Does not include illegal producers (N2) and misreporting of underground activities (N6)
- Methods used: Labour input (LFS), supply-use method, demand–based method, commodity flow

STATISTICS DENMARK

N2: Not registered illegal producers

- Producer deliberately fails to register because he is involved in illegal activities
- Includes prostitution, sale of stolen goods, sale of drugs, smuggling, gambling etc.
- Excludes illegal production of registered producers that report their illegal activities as legal
- Methods used: quantity-price method

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N3: Producer not obliged to register

- The producer has no market output or is below a set threshold
- Involves production for own final consumption, own account gross-fixed capital formation, small scale production of households
- No adjustment needed if implicitly covered
- Method used: HBS, building permits, commodity flow methods, administrative data, time use surveys

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N4: Legal person not included in statistics

- The legal persons (LP) are registered but not surveied due to deficiences of the business register (BR)
- BR excludes certain LP, newly registered LP not included because BR is not updated etc.
- Methods used: register quality surveys, review of update procedures, cross-checking with other administrative sources

STATISTICS
DENMARK

N5: Registered entrepreneurs (REs) not surveyed

- The REs are not included in the BR and/or is excluded from the statistical surveys
- BR excludes some entrepreneurs due to incorrect updating and coding, fx: consultants, private teachers, writers, journalists
- Method used: register quality surveys, cross-checking with other administrative sources, income statements, specialised surveys

STATISTICS
DENMARK

N6: Misreporting by producers

- Under-reporting of revenue (production) and over-reporting of expenditures (intermediate consumption) in order to avoid payment of taxes etc.
- Typically includes concealed sales, hidden secondary activities, cash settlements without receipt, VAT fraud, "envelope salaries"
- Methods used: use of tax audits data, comparisons of average salaries and profits, input/output ratios, special surveys and expert judgement

STATISTICS
DENMARK

N7: Other statistical deficiences

- Data are incomplete or not directly available from surveys (7a) or are incorrectly processed (7b)
- The following items should be considered:
  - 7a: wages and salaries in kind, production for own final use by market producers, tips etc
  - 7b: non-response, valuation techniques, adjustments for accruals etc.

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Some results

- Total exhaustiveness adjustments in 2000:

	Czech Repub.	Esto-nia	Latvia	Lithu-ania	Malta	Hun-gary	Poland	Slovak Rep.	Slo-venia	Ave-rage
%	9,4	11,2	15,1	18,9	5,8	11,9	14,7	14,8	6,2	12,0

Some results

- Exhaustiveness adjustments: relative importance (%) of types N1 to N7 for all 9 countries

Type:	N1	N2	N3	N4	N5	N6	N7	Total
all 9 countries	15,5	6,4	7,9	7,5	5,8	48,6	8,2	100

Some results

- Exhaustiveness adjustments: relative importance (%) of the various institutional sectors

Institutional sector	Non-financial corpo-rations	Financial corporations	General government	House-holds	Non-profit institutions	Total
7 countries	42,4	0,1	0,5	56,6	0,4	100

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Some results

- Exhaustiveness adjustments: relative importance (%) of different economic activities

NACE Section	G trade and repair	D man-ufact.	F con-str.	K real estate	H hotels and rest.	O comm., socal activ.	I trans-port	Other	Total
9 countries	26,3	12,6	12,8	13,0	7,3	8,4	7,8	11,7	100

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Exhaustiveness adjustments by type, economic activity and sector

Institutional sectors and NACE classification	Type of non-exhaustiveness						
	N1	N2	N3	N4	N5	N6	N7
Non-financial corporations		X		X	X	X	X
Financial corporations					X	X	X
General Government					X	X	X
Households	X	X	X	X	X	X	X
NPISH				X	X		
NACE A	X		X		X	X	X
NACE B	X			X	X	X	X
NACE C	X				X	X	X
NACE D	X	X			X	X	X
NACE E					X	X	X
NACE F	X		X		X	X	X
NACE G	X	X	X	X	X	X	X
NACE H	X		X		X	X	X
NACE I	X	X		X	X	X	X
NACE J	X				X	X	X
NACE K	X	X	X	X	X	X	X
NACE L					X	X	X
NACE M	X			X	X	X	X
NACE N	X			X	X	X	X
NACE O	X	X	X	X	X	X	X
NACE P	X	X	X		X		

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Methods to identify and estimate exhaustiveness adjustments

Method used	Type of non-exhaustiveness						
	N1	N2	N3	N4	N5	N6	N7
Labour input method	X		X	X	X	X	
Commodity flow method	X		X				
Supply-use method	X					X	
Expert judgement		X	X	X	X	X	X
Quantity price method		X	X				X
Margin approach		X	X				X
Administrative data			X				
Fiscal and other audit data					X	X	X
Theoretical vs actual VAT						X	
Special or existing survey	X		X	X		X	X
Demand-based method	X						

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Annex 5. Table 1A, 1B, 2A, 2B, 3A, 3B as templates

Eurostat`s Tabular Approach to Exhaustiveness

Guidelines: Annex D1

The Standard Tables

The **"Tabular Approach"** involves the completion of six tables. These are attached:-

- Table 1A   Elements of non-exhaustiveness: Output Approach
- Table 1B   Elements of non-exhaustiveness: Expenditure Approach

- Table 2A   Exhaustiveness adjustments: Output Approach
- Table 2B   Exhaustiveness adjustments: Expenditure Approach

- Table 3A   Summary of adjustments: Output Approach
- Table 3B   Summary of adjustments: Expenditure Approach

Guidelines for the completion of Standard Tables is given in **Annex D2.**

Candidate Country Exhaustiveness Project, 2002					
Table 1A. Elements of Non-Exhaustiveness: Output Approach - for Reference Year XXXX					
NA components by enterprise sector, NACE group and size	**Type of non-exhaustiveness**	**Adjustment Method**			
Detailed breakdown covering all possible elements of non-exhaustiveness	Insert separate lines for types with different adjustment methods	Not needed	Needed but not developed	Name	Ident number (Table 2A)
1	2	3	4	5	6
Public non-financial corporations					
NACE A					
Large units					
Medium-size units					
Small units					
NACE B					
Large units					
Medium-size units					
Small units					
(continued for NACE groups C-P)					
Private non-financial corporations					
NACE A					
Large units					
Medium-size units					
Small units					
NACE B					
Large units					
Medium-size units					
Small units					
(continued for NACE groups C-P)					
Financial corporations					
General Government					
Central and local government units					
Extra-budgetary funds					
NPISH					
Households					
NACE A					
Registered units					
Unregistered units					
Market production					
Production for own use					
- farmers					
- non-agricultural households					
NACE B					
Registered units					
Unregistered units					
Market production					
Production for own use					
(continued for NACE groups C-P)					
Illegal activities					
Production of and trade in drugs					
Smuggling - tobacco					
Prostitution					
Other					

Eurostat's Tabular Approach to Exhaustiveness					
Table 1B. Elements of Non-Exhaustiveness: Expenditure Approach - for Reference Year XXXX					
NA components	**Type of non-exhaustiveness**	**Adjustment Method**			
Detailed breakdown covering all possible elements	**Insert separate lines for types with different adjustment methods**	**Not needed**	**Needed but not developed**	**Name**	**Ident number (Table 2B)**
1	2	3	4	5	6
Household final consumption expenditure					
Purchases of goods and services					
breakdown at COICOP 1- 2- digit level					
Production for own final use					
Agricultural goods					
Other goods					
Production of unincorporated units					
Other HFC components					
Final consumption of general government					
Final consumption of NPISH					
Gross fixed capital formation					
with same breakdown as for Table 1A					
Changes in inventories					
with same breakdown as for Table 1A					
Exports and imports					
Export and import of goods					
Export and import of services					
Purchases of non-residents					
Purchases of residents abroad					
Shuttle trade					

Eurostat's Tabular Approach to Exhaustiveness

Table 2A. Exhaustiveness Adjustments: Output Approach - for Reference Year YYYY in Currency Units ZZ

Adjustment ident number	Adjustment Name	NA Component	NACE code / type of units	Data Sources	Absolute size	Relative size	
						% of component	% of GDP
0	1	2	3	4	5	6	7

Eurostat's Tabular Approach to Exhaustiveness

Table 2B. Exhaustiveness Adjustments: Expenditure Approach - for Reference Year YYYY   in Currency Units ZZ

Adjustment ident number	Adjustment Name	NA Component	COICOP code/ NACE code/ type of units	Data Sources	Absolute size	Relative size	
						% of component	% of GDP
0	1	2	3	4	5	6	7

Eurostat's Tabular Approach to Exhaustiveness

Table 3A   Summary of GVA Adjustments: Output Approach

For Reference Year YYYY   in Currency Units ZZ

Sectors/ NACE Groups	Type of non-exhaustiveness adjustment							Total		Total as in publishe
	N1	N2	N3	N4	N5	N6	N7	Absolute	% of GDP	Absolute
1	2	3	4	5	6	7	8	10	11	12
Non-financial corporations										
Financial corporations										
General Government										
NPISH										
Households										
NACE A										
NACE B										
NACE C										
NACE D										
NACE E										
NACE F										
NACE G										
NACE H										
NACE I										
NACE J										
NACE K										
NACE L										
NACE M										
NACE N										
NACE O										
NACE P										
Total										

Eurostat's Tabular Approach to Exhaustiveness

Table 3B   Summary of GVA Adjustments: Expenditure Approach

For Reference Year YYYY   in Currency Units ZZ

Components	Type of non-exhaustiveness adjustment							Total		Total as included in published GDP	
	N1	N2	N3	N4	N5	N6	N7	Absolute	% of GDP	Absolute	% of GDP
1	2	3	4	5	6	7	8	10	11	12	13
Household final consumption expenditure											
Purchases of goods and services											
Production for own final use											
Other HFC components											
Final consumption of general government											
Final consumption of NPISH											
Gross fixed capital formation											
Changes in inventories											
Exports and imports											
Total											

Annex 6. Four documents on revision policy

Statistics Denmark   29. March 2011
                                                                  /-

Revision policy

Some important aspects:

Major revisions: Major revisions takes place with long intervals, typically 10-15 years. They usually involve the introduction of new statistics. They can also involve introduction of new manuals (e.g. SNA2008) and/or new classifications.

Routine revisions: After the release of the first figures for a quarter/year there will be a period where these figures will be revised a number of times until the "final" (typical annual) figures are produced. These revisions are called routine revisions. In most countries the period with routine revisions are between 2 and 4 years.

Scope of common revision policy: It could be considered whether the revision policy for National Accounts should be coordinated with the revision policies for statistics for General Government and Balance of Payments.

Timetable for revising and finalising the accounts

Table 2.3 illustrates the revision policy (apart from benchmark revisions) for the Danish national accounts followed by Statistics Denmark until 2001. The revision policy is announced to the users so that they always know how many periods will be revised.

Table 2.3: Revision policy of the Danish NA, until 2001

Publishing		Reference Quarter/Year					
Year	Month	Year T, Q1	Year T, Q2	Year T, Q3	Year T, Q4		Year T
T	End June	P					
	End September	R	P				
	End December	R	R	P			
T+1	End March	R	R	R	P		P (SQ)
	End June	R	R	R	R		R (SQ)
	Begin. December						R (AP1)
	End December	R	R	R	R		
T+2	Begin. December						R (AP2)
	End December	R	R	R	R		
T+3	Begin. December						F
	End December	F	F	F	F		

P: First published   SQ: Sum of quarters
R: Revised   AP1: First preliminary annual calculation
F: Final   AP2: Second preliminary annual calculation
-: Figures are published unchanged compared to the earlier published figures.

The revisions of the quarterly figures in December T+1, T+2 and T+3 are made in order to make the quarterly figures consistent with the annual figures.

Timetable for revising and finalising the accounts

Publish/revision of quarters and year(s) **Publish/revision of quarters**

Time of publishing		Reference year/quarter						
		T-3	T-2	T-1	T	T+1	T+2	T+3
		Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Year T	March			▓▓▓▓▓				
	June			▓▓▓▓▓ ░				
	September			░░				
	December	▓▓▓▓ ▓▓▓▓ ▓▓▓▓			░░░			
Year T+1	March				▓▓▓▓▓			
	June				▓▓▓▓▓ ░			
	September				░░			
	December		▓▓▓▓ ▓▓▓▓ ▓▓▓▓		▓▓ ░░			
Year T+2	March					▓▓▓▓▓		
	June					▓▓▓▓▓ ░		
	September					░░		
	December			▓▓▓▓ ▓▓▓▓ ▓▓▓▓	▓▓▓▓ ░░░			
Year T+3	March						▓▓▓▓▓	
	June						▓▓▓▓▓ ░	
	September						░░	
	December				▓▓▓▓ ▓▓▓▓ ▓▓▓▓	▓▓▓▓ ░░░		