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Documents

**Differences between SNA93 and  
ESA95**

An attempt to update a study from 1997 in view of developments that have taken place in Europe in the period 1997–2006 as related to ESA95

## **1. Introduction**

STD/NA/RD(97)15 written by Esben Dalgaard, Statistics Denmark provided a comprehensive and systematic review of the differences between SNA93 and ESA95 expressing the state of affairs of the two standards when reviewed a few years after they were released in the mid-1990s.

In 2006, about 10 years later and a few years before launching revised versions of SNA and ESA, the differences between the existing two systems have been reviewed again, to provide valuable background information as input for the revision work at the time when the SNA update is about to be completed.

The author of this updated study has followed the work in Eurostat as a permanent participant of the GNI (former GNP) Committee in the period 1993-2006. This committee is a forum that has initiated and monitored conceptual developments in relation to ESA, particularly ESA95, but also issues related to its predecessor ESA79. During the period 1997-2006 under review, more than 20 problem areas have been taken up and will be reviewed in this updated study. These problem areas may not all be relevant for the overriding specific issue on depicting differences between SNA and ESA, but are nevertheless covered for their possible use and information purposes.

On the other hand, the author has not seen it as his task to make a corresponding review on the part of the SNA development, taking it for granted that this is embodied in the ongoing SNA review and updating itself.

This updated study on the SNA – ESA differences is organized in the following way. In chapter 2, the main differences between SNA93 and ESA95 in the 1997 study – in total 29 issues - is presented in a more condensed way than originally by Esben Dalgaard. It is done by summarizing the content of the 29 issues in three boxes, one box for each category of differences. The categories used are “More specific treatment in ESA95 than in SNA93” (box 1); “Deviations between ESA95 and SNA93” (box 2) and “Topics not covered in ESA95 but in SNA93, or vice versa” (box 3). Chapter 3 lists and describes in a summarized way another new set of 24 issues, in referring to developments on conceptual ESA matters that have taken place in the period 1997-2006. Chapter 4 introduces the same way of illustrating the differences as made in chapter 2 – or rather limited to the first two categories - enabling the readers to have a total view of the differences by combining the two chapters 2 and 4. They are presented mostly in an exclusive way, although there are a few examples on issues from the first period coming back in the second period when taking up problems of new aspects to a previous problem area.

It should be added that the relevance to the all-important issue of finding the conceptual differences between SNA and ESA is not always evident to decide. Often the problem areas presented in chapter 3 are bundled up with both conceptual and practical aspects belonging to a given problem area. This is reflected in the two-sided task of this management committee in Eurostat. First, it should monitor the conceptual side to see to it that the ESA principles, definitions etc. are complied with and actually followed in the national accounting work of the EU Member States and other European countries that are committed to ESA95 (like Iceland and Norway). Second, it should monitor the national practices on the current

estimations to see to it that the countries are contributing to “best practices”, that the national accounts data are comparable across countries and thus respect certain quality standards that are set by Eurostat and the GNI Committee. The presentation below in chapters 3 and 4 takes a broad view on these questions, in including some issues that may seem to be exclusively practical and non-conceptual issues to readers. A reservation has been indicated to such cases when presented in the boxes of chapter 4, however.

## **2. Main differences between SNA93 and ESA95 in the 1997 study**

SNA93 and ESA95 aimed at fully consistent guidelines between the two, while in text rather presented in two different ways. The blue book of SNA93 has a textual approach giving strong weight to the rationale behind the contents presented. The blue book of ESA95 contains a text that gives stronger weight to a well-defined, articulated and precise presentation of the contents.

The 1997 report first introduces the principal reasons why differences in fact have occurred:

1. EU calls for strict international comparability with an important role for ESA95 in administrative and fiscal use, prohibiting the more flexible approach taken in SNA93.
2. ESA95, by lagging a few years behind SNA93 and for some good reasons, stated – but in footnotes only - that it wanted to deviate from SNA on certain issues.

The 1997 report grouped the differences between the two systems under three headings, containing altogether 29 items:

### **1. More specific definitions in ESA95 than in SNA93**

- a. Market vs. non-market distinction
- b. Intermediate consumption vs. gross fixed capital formation borderline
- c. Household production of goods recording practice
- d. Taxes on products coverage
- e. Tour operators output valuation
- f. Gross capital formation main types
- g. Output valuation options
- h. Symmetric input-output tables technology assumptions
- i. Property income recording
- j. Transactions in securities classification options
- k. Capital account breakdown
- l. EU-specific classifications
- m. Terminology employed

**2. The ESA deviating from the SNA, either clearly or more questionably so**

- a. Rest of the world construction activity
- b. Subsidies on products vs. social benefits in kind borderline
- c. Debt cancellation
- d. Financial holding corporations sector classification
- e. Financial corporations regulating agencies' sector classification
- f. Repurchase agreements classification
- g. Foreign exchange swaps classification

**3. The ESA not covering certain topics of the SNA, or vice versa**

- a. Satellite accounts
- b. Economies in transition
- c. High inflation
- d. Multiple exchange rate systems
- e. Parallel treatment of interest under inflation
- f. List of definitional changes from SNA68
- g. BOP vs. rest of the world vs. IIP relationships
- h. List of expert group meetings
- i. Economically active population and unemployment (in ESA)

In the following – for each of the 29 items – the differences between the SNA93 and ESA95 treatments are summarized in the given three boxes. See Annex 1 for more details of the 1997 report.

<b>Box 1. More specific treatment in ESA95 than in SNA93</b>		
<i>Items</i>	<i>Treatment in SNA93</i>	<i>Treatment in ESA95</i>
1a. Market/non-market distinction	Ch.6 (6.45, 6.49, 6.52) sets out principles and definitions, that may resolve potential borderline cases a priori rather than by applying the 50 per cent criterion in explicit stepwise procedure	Ch.3 (3.33-3.36) adopts a top-down approach that starts by looking at the ownership to institutional units that the producers (local KAUs) belong to, then examining relationship between revenue from sales and costs of production for the producers in applying the 50 per cent criterion in six steps
1b. Intermediate consumption vs. gross fixed capital formation borderline	Ch.6 (6.158) and ch.10 (10.64) explain treatment of small tools without giving a value threshold required for recording as GFCF	Ch.3 (3.70, 3.108) adopts the convention for such a threshold, i.e. 500 ECU (euro) in 1995 prices, to be indexed by a price index for small tools

1c. Household production of goods recording practice	Ch.3 (3.46) includes in analogous manner the household production of goods to goods sold on the market	Ch.3 (3.08b) introduces a convention for EU countries, i.e. such production of goods should be significant, applying only to agricultural products and own-account construction of dwellings
1d. Taxes on products coverage	Ch.7 (7.62, 7.69d, 7.70e) and ch.8 (8.54) need to be clarified on several points for car registration taxes and stamp taxes	Ch.4 (4.20) records car registration taxes and stamp taxes as taxes on products. Same treatment applies to EU Common Agricultural Policy for monetary compensatory amounts collected on exports. Treatment is however other taxes on production/other subsidies on production for the under/over-compensation of VAT from the EU flat rate system (4.23g and 4.37d).
1e. Tour operators output valuation	No specific rule (in ch.6)	Ch.3 (3.62) measures output by full expenditure made by travellers to tour operators providing packaged tours
1f. Gross capital formation main types	Main types of GCF defined for GFCF, changes in inventories and acquisitions less disposals of valuables (without special conventions)	Ch.3 (3.126) with supplementary convention for acquisitions of valuables by jewellers and art dealers (always as CII) and museums (as GFCF), to avoid frequent reclassification between the three GCF main types
1g. Output valuation options	Ch.6 (6.218) prefers output at basic prices, but allows output at producer's prices	Ch.3 (3.47) requires output valued at basic prices without exception
1h. Symmetric input-output tables technology assumptions	Ch.15 (15.147) favours the product technology	Ch.9 (9.58) finds the choice difficult; recommends the use of mixed technology in practice, combined with supplementary information
1i. Property income recording	Ch.8 (8.14) is uncertain about treatment of property income receivable by mutual funds	Ch.4 (4.49b) clarifies to record such income as other interest receivable by the appropriate shareholders on an accrual basis

1j. Transactions in securities classification options	Ch.11 (11.79-11.81) provides two options for sub-classifications, one for categories short-term and long-term, the other rather specifies financial derivatives	Ch.5 (5.53) adopts the second option: securities (other than shares) excluding financial derivatives and financial derivatives
1k. Capital account breakdown	Capital account as a whole (III.1)	Capital account (III.1) split into two accounts: (III.1.1) Change in net worth due to saving and capital transfers, and (III.1.2) Acquisition of non-financial assets account
1l. EU-specific classifications	Activity and product classifications applied: ISIC Rev.3 and CPC	Activity and product classifications applied: NACE Rve.1 and CPA; In addition: EU residents and non-EU residents breakdown
1m. Terminology employed	A: Institutional unit engaged in production = Enterprise; B: Basic unit for production and generation of income accounts = Establishment	A: Producer, and then indicates what is appropriate B: Local kind-of-activity unit (local KAU)

**Box 2. Deviations between ESA95 and SNA93**

<i>Items</i>	<i>Treatment in SNA93</i>	<i>Treatment in ESA95</i>
2a. Rest of the world construction activity	Ch.14 (14.101) uses the general one year rule also for construction when separating out a notional resident unit in the rest-of the world.	Ch.2 (2.09b footnote) makes an exception to the one year rule concerning construction activity which constitutes GFCF, thus always treatment as resident units, never notional units in the ROW
2b. Subsidies on products vs. social benefits borderline in kind borderline	Annex 1 (para.54) treats all current transfers from government to producers as subsidies, even if they benefit specific groups of the population or all households	Ch.4 (4.38j) treats government payments to market producers that benefit specific groups of the population in context of social needs/risks – when having a legally established right - as government consumption expenditure (subsequently social benefits in kind and actual household consumption)

2c. Debt cancellation	Ch.12 (12.52) treated as capital transfer in capital account and simultaneous extinction of a claim in financial account, and ch.11 (11.23 on debt assumption) to be reflected in the financial account as new contractual arrangements	Ch.4 (4.165) sets out exceptions for certain cases where debt cancellation and debt assumption rather is deemed to be purely financial transactions
2d. Financial holding corporations sector classification	Ch.4 (4.100) classifies according to type of financial activity, and in other financial intermediaries if no single type is clearly predominant	Ch.2 (2.43 footnote 9) classifies all these companies in other financial intermediaries (due to purposes defined by the EMI/ECB)
2e. Financial corporations regulation agencies' sector classification	Ch.4 (4.86) classifies in central bank sub-sector all agencies which regulate or supervise financial corporations or financial markets	C.2 (2.47 footnote 10) classifies in financial auxiliaries sub-sector all such agencies other than the central bank (due to purposes defined by the EMI/ECB)
2f. Repurchase agreements classification	Ch.11 (11.32, 11.72, 11.83) classifies these under loans, except under other deposits if included in broad money	Ch.5 (5.46f, 5.81d) classifies short-term part under other deposits, and other part under loans (long-term)
2g. Foreign exchange swaps classification	Ch.11 (11.33) as exception to general rule when central bank acquires foreign exchange from a domestic bank with commitment to reverse later (to be treated as loan in financial account)	Ch.5 (5.76 footnote 8), not to be treated as loan (although text (5.76) refers to similar exceptions to general rule as useful)

<b>Box 3. Topics not covered in ESA95 but in SNA93, or vice versa</b>		
<i>Items</i>	<i>Treatment in SNA93</i>	<i>Treatment in ESA95</i>
3a. Satellite accounts	Ch.21 on satellite analysis and accounts, and introduced also in ch.2 (section E.3) and ch.20 (sections C.1 and F.1)	-
3b. Economies in transition	Ch.19 sections C on expenditures by enterprises on behalf of employees and D on public, national private and foreign controlled sectors	-
3c. High inflation	Ch.19 section G as example of adaptation to various circumstances and needs	-

3d. Multiple exchange rate system	Annex A to ch.19 on treatment of official multiple exchange rate systems, also in ch.7 (items of taxes and subsidies on products) and in ch.14 (14.80-84)	-
3e. Parallel treatment of interest under inflation	Annex B to ch.19 as suggested treatment under significant inflation, and introduced in ch.19 (19.83)	-
3f. List of definitional changes from SNA68	Exhausted list of changes in Annex I (plus 100 items)	-
3g. BOP vs. rest of the world vs. IIP relationships	Annex II, and referred to IIP in ch.14 (14.76, 14.156)	-
3h. List of expert group meetings	List of meetings held (1986-1992) during the revision (Annex VI)	-
3i. Economically active population and unemployment (in ESA)	-	Ch.11 sections on economically active population (11.10) and unemployment (11.20-21)

### **3. Developments since 1997 relating to ESA95**

#### **3.1 Presenting additional issues**

The GNP (later GNI) Committee has dealt with various matters that have a bearing on the possible relationships or even disclose differences between ESA95 and SNA93. Documents of the GNP/GNI Committee meetings starting from late 1996 to the latest held in July 2006 have been reviewed in search for such cases and thus more items to be added to the 29 items previously listed. In the first place, the list below has not been categorized into the three breakdowns (for the boxes etc.). By the very fact that these issues have been under great scrutiny and thus a strong attention, the first heading “More specific treatment in ESA95 than in SNA93” should apply to them all (marked 1A that might be added to list 1 above).

The additional items of problem areas related to the period 1997-2006 and ESA95 are listed below. The order of the items is more or less following the sequence of the accounts in ESA95.

1. FISIM
2. Insurance measurement
3. Dwelling services
4. Minor repair activity by owner-occupiers

5. Garages
6. VAT treatment
7. VAT repayment to non-market units
8. Stamp duties on dwellings
9. Government licences and fees
10. Car registration taxes paid by households
11. Import duties paid by non-residents
12. Compensation of employees in kind
13. Imputed social contributions
14. Capital consumption on roads, bridges etc.
15. Reinvested earnings on direct investment
16. Interest to insurance policy holders
17. Software and large databases
18. Mineral exploration
19. Entertainment, literary and artistic originals
20. Intangible non-produced assets
21. Classification of national bodies acting for EC
22. Treatment of the UK rebate
23. Definition of GNP
24. Definition of the territory

Summary description of the individual problem areas follows.

### **3.1 FISIM**

ESA95 (8.14, 8.24 and 9.33) does not allocate FISIM to user sectors as the general rule, i.e. the former treatment in treating the output as the intermediate consumption of a nominal sector for this item, and an adjustment (with a negative sign) added to make GDP invariant. ESA95 provides however in Annex I the consequences or changes to be made in the ESA chapters if FISIM is to be allocated.

In a Council Regulation from 1998 (448/98), the MS were required to carry out calculations in accordance to the methods described in the annex and to transmit the results after 5 years (from 2003). In Commission Regulation 1889/2002, the following methods were specified to be applied from 1 January 2005 (as main deadline, with derogation to a few countries):

1. Calculation and allocation of FISIM among domestic user sectors using the reference rate:
  - a. Internal reference rate for allocating domestic FISIM to be determined as the ratio of interest receivable on loans between S122 and S123 to the stocks of loans between S122 and S123
  - b. External reference rate to be used to calculate imports and exports of the new FISIM is the average interbank rate weighted by the ratios of loans and deposits between S122 and S123 on the one hand, and non-resident financial intermediaries on the other hand, which are included in the balance sheet of financial intermediaries
2. Calculation of FISIM at constant prices by applying the FISIM margins of the base period to the current stocks of loans and deposits

3. Allocation of FISIM among industries' intermediate consumption based on the stocks of loans and deposits for each industry – or, if this information is not reliable, on the output for each industry.

SNA93 (6.124-131 and Annex III) accepts some flexibility in the FISIM treatment. Although in the annex the system recommends a single method of estimating the value of FISIM, two alternative methods of allocation of FISIM to users are permitted, either allocated to the industries and sectors of the total economy or to a nominal industry or sector, the former being described in the annex with also the consequences for the presentation of the accounts. This flexibility is seen most clearly in 6.126, stating that some countries may prefer to continue to use the convention of SNA68 whereby the whole of the output is recorded as the intermediate consumption of a nominal industry, and GDP invariant to the size of the estimated output.

### **3.2 Insurance measurement**

ESA95 (3.63) defines the output of financial intermediation services – and particularly insurance services – and more detailed explanations on insurance can also be found in Annex III Insurance, including the definition of insurance, classifications, relations with social insurance, treatment in accounts and numerical examples. Clear guidance on some of the practical problems is lacking, however. A Task Force was therefore set up in 2002 to identify problems in the implementation of ESA95 rules for the measurement of output in life and non-life insurance, and to assess best recording practices and to compare sources and methods. The Task Force came up with 7 recommendations (1 below relating to premiums earned, 2 to premium supplements, 3 and 4 to claims due, 5 to netting the holding gains and losses, 6 to allocation of insurance output by uses, and 7 to reinsurance). The GNI Committee agreed on these, but added another recommendation in cases leading to implausible results. Eurostat has also derived a checklist for insurance estimates in national accounts (12 items structured under headings for output measure, output measure: premiums and claims, output measure: premium supplements, output measure: exclusion of holding gains/losses, reinsurance output measure, and use of insurance output).

Recommendations from the GNI Committee on insurance measurement thus read as follow:

1. Treat reinsurance commissions as negative reinsurance premiums
2. Exclude from premium supplements income earned by the investment of own funds. In lack of direct information the split can be achieved on the basis of the ratio own funds/own funds plus technical reserves
3. Include the equalisation provision in the output algorithm (as part of claims due)
4. Exclude claims management costs in the calculation of claims due to policy holders
5. Exclude holding gains/losses (realised and unrealised) from the insurance output calculation (from premium supplements and from the change in life insurance provision). A possible method can be found in annex 3 (section II) of document CPNB/336 rev.1

6. Allocate the final use (FC/IC) of the insurance output by analysing the insurance products and identifying the user sectors. A possible product breakdown is the accounting directive's classification of 10 classes of business set out in article 63
7. Calculate premiums supplements on transactions between "direct" insurers and reinsurers, and on imports of direct insurance services. The estimation of premium supplements can be restricted to cases of significant cross-border transactions.
8. In cases where the application of the ESA95 output algorithm in para 3.63 (account taken of the recommendation 1-7 above) leads to implausible results (such as negative output, negative value added, swings in the service charge that do not reflect the reality), the sum of costs method will be an acceptable alternative to estimate the service charge. Countries that opt for this estimation method should apply it consistently over time.

SNA Annex IV includes a detailed description of the treatment of insurance, social insurance and pensions. A great number of paragraphs in chapters 3, 4, 6, 7, 8, 9, 11, 13 and 14 provide information on different aspects of insurance, such as insurance premiums and claims, insurance corporations and pension funds, insurance industry and services, and insurance technical reserves.

### **3.3 Dwelling services**

ESA95 (3.64) states that output of services of owner-occupied dwellings should be valued at the estimated value of rental that the tenant would pay for the same accommodation, taking into account factors such as location, neighbourhood amenities etc. as well as the size and quality of the dwelling itself. In principle, several estimation methods are available, the so-called stratification method, the user-cost method, the self-assessment method and administrative assessment methods. Due its great importance and strong divergences found in the national practices, this area was chosen as the very first in the attempt to harmonise the GDP estimation practices among the European countries already in the early 1990s. A new attempt then became necessary with the new countries that had problems to meet the rules and decisions that had been made earlier.

A new Commission Regulation from 2005 states that MS shall:

1. Apply the stratification method based on actual rentals in order to compile the output of dwelling services, and use tabular analyses or statistical techniques to derive significant stratification criteria
2. Make use of actual rentals due for the right to use an unfurnished dwelling under all contracts relating to privately-owned dwellings in order to compile imputed rentals. Rentals for furnished dwellings may also be used if scaled down so as to exclude payment for the use of the furniture. In countries where the privately rented sector is small, exceptionally, duly increased public rentals may be used to enlarge the basis for imputed rentals

In exceptional and duly justified cases, however, MS may:

3. Apply other objective methods, such as the user-cost method. No justification shall be required for use of the user-cost method in compiling the output of owner-occupied dwellings, provided that both of the following conditions are met: (a) privately rented dwellings must represent less than 10 % of the dwelling stock; and (b) the disparity between private and other paid rentals must exceed a factor of three. Within three years of the date of adoption of the Regulation the GNI Committee shall review the functioning of the user-cost method.
4. MS using a base year approach shall extrapolate a given base year figure using appropriate quantity, price and quality indicators.

SNA (6.89) states the main principles in valuing the housing services produced by owner-occupiers in the same way as in ESA95, but without giving any reference to the use of the stratification method or the user-cost method.

### **3.4 Minor repair activity by owner-occupiers**

ESA95 (3.77b) has adopted the criterion of dividing expenditures that owner-occupiers have on current repairs into typically landlords' and typically tenants', the former excluded from final consumption and treated as intermediate consumption in producing housing services, the latter included in final consumption. In ESA79, all expenditures on minor repairs borne by the owner should be treated as intermediate consumption.

SNA93 (6.27) addresses the same split for small repairs into intermediate consumption and household consumption expenditure. "Do-it yourself" repairs to consumer durables and dwellings carried out by members of the household are excluded from the production boundary, materials purchased treated as final consumption expenditure, however. Another issue is major renovations or extensions to dwellings treated as fixed capital formation and recorded separately.

### **3.5 Garages**

ESA95 (3.64) states that garages used by the owner of a dwelling for final consumption purposes, even if separate from the dwelling, are included in the imputed output of dwelling services. This is a wider scope than earlier in ESA79 (that excluded garages separate from the dwelling in imputed dwelling services).

SNA93 (in 6.89) does not particularly mention garages as part of services of owner-occupied dwellings.

### **3.6 VAT treatment**

ESA95 (4.17) defines a value added type tax to be recorded on a net basis, while more specific information is given in the input-output framework chapter (chapter 9). Amended ESA95 text to 4.27 and other paragraphs states that VAT to be recorded may be derived from

two sources, amounts evidenced by assessments and declarations or cash receipts. Further guidance is introduced for either of the two regimes.

The underlying issue on what should be considered the VAT amount to be recorded in national accounts has led to substantive discussions in Eurostat and the GNP Committee, dealing also with issues such as write-off and cancellation of bad debts, and VAT fraud. It has been proposed to introduce a method of evaluation of VAT fraud “without purchasers’ agreement. First attempts were made on basis of the difference between theoretical VAT and VAT receipts. Then a method was suggested based on an analysis involving methods for calculating household consumption expenditure and using HBS as the source, suggesting that the difference between consumption declared in HBS and consumption deduced from fiscal data represents the amount of sales on which sellers received a VAT that they did not pay to tax authority. VAT on these transactions could be seen as a minimum estimate on VAT fraud “without purchasers’ agreement, since consumption from HBS, even after adjustment, are always likely to be underestimated. It further led to a modification known as “the French method” – recommended by Eurostat - that consists of three parts: (1) calculation of theoretical VAT, (2) analysis of differences between theoretical VAT and VAT receipts, (3) adjustment of uses excluding VAT and of branch production. Formula for this:

$$\text{VAT fraud “without agreement”} = \text{Theoretical VAT} - \text{VAT receipts} - \text{delays} - \text{loss of revenue (fraud with agreement or fraud “with complicity”)}$$

In order to calculate VAT fraud “without complicity”, the figure for fraud “with complicity” is deducted (i.e. those limited to unregistered production units – sales covered by adjustment for hidden labour, those activities for which such an adjustment is taken into account). This deduction then could be calculated by multiplying these corrections to the adjusted production figures of the various branches of activity by the corresponding additional sales (“black sales”) by official VAT rates. Further discussion into the discrepancies between theoretical VAT and VAT receipts led to a Draft Commission Decision with revised formula:

$$\text{VAT evasion “without complicity”} = \text{Theoretical VAT receipts less actual VAT receipts less time differences less insolvencies less missing receipts (evasion “with complicity”)}$$

GNI Committee Recommendation on VAT fraud (2004) provided more explicit text than before, and Eurostat underlining this basically as an exhaustiveness issue. Four recommendations were put forward:

1. Value added created in activities that are not reported to VAT authorities (with or without the complicity of the customer) is to be included in the national accounts.
2. VAT paid by customers but not passed on to the VAT authorities by the seller due to fraud (without complicity) is to be included in the purchaser’s price of the good or service. The value of this VAT is to be included in the operating surplus of the seller and not in D211. VAT evaded in fraud with complicity is not recorded in the accounts, because it is not paid.
3. MS should document their methods for ensuring compliance with recommendations 1 and 2 of their ESA95 Inventories (in chapter 7 and section 3.25 respectively). In so far this is not yet the case, MS should update their Inventories to this effect.

4. MS should – at least every five years – make a comparison of theoretical VAT and D211, analyse the discrepancy and include the results in section 3.25 of their ESA95 Inventory. Annex to the GNI Committee Recommendation on VAT fraud explains the calculation of theoretical VAT and the comparison with VAT receipts.

SNA93 (6.207-214) gives the main principles of recording VAT in the national accounts, advocating the net system of recording VAT and also discussing valuation issues related to VAT. More specific information regarding the recording of the VAT flows is given in the supply and use tables and input-output chapter (chapter 15).

### **3.7 VAT repayments to non-market units**

ESA95 does not explicitly specify the treatment of VAT repayments to non-taxable persons, and to taxable persons for their exempt activities. In ESA chapters 9 (from 9.44) and 10 (10.52), deductible vs. non-deductible VAT is addressed, but whether VAT repaid to non-market units should be treated as if it were deductible VAT has been questioned and raised as an issue for clarification for the purpose of the definition of GNI. Following discussion and country opinions, a Commission regulation on the treatment of repayments of VAT to non-taxable persons and to taxable persons for their exempt activities states that repayments of VAT incurred on purchases shall be treated in ESA95 as other current transfers (D7) or capital transfers (D9), and not as if they were deductible VAT. Other current transfers in this context would actually mean miscellaneous current transfers (D75). Capital transfers would probably here mean other capital transfers (D99), when flows are related to fixed assets (VAT on fixed assets being repaid).

SNA93 does not specifically address this issue of VAT repayments.

### **3.8 Stamp duties on dwellings**

ESA95 (4.20) states that stamp taxes on the sale of specific products (such as alcoholic beverages or tobacco) and on legal documents or cheques are part of taxes on products. In ESA79, however, treatment was unclear and clarifications have been sought - to conform with ESA95 - that registration charges paid in the form of stamp duties should be recorded as registration charges within taxes on products, this taking precedence over recording them under the name of stamp duties within other taxes linked to production. Concerning registration charges on the change of ownership of financial assets when these are paid in the form of stamp duties, these should also be recorded within taxes on products.

SNA93 (7.70e) states however that stamps on legal documents or cheques are taxes on the production of business or financial services, i.e. other taxes on production (D.29), while stamp taxes on the sale of specific products (such as alcoholic beverages or tobacco) are treated as taxes on products.

### **3.9 Government licences and fees**

For producer units, ESA95 (4.23e) restricts the recording of the licenses and fees paid to government to be recorded under taxes on production to a narrower range of payments than does ESA79. The payment is regarded as the purchase of a services if the government carries out checks on the suitability or safety of the equipment employed, on the professional competence of the staff employed, or on the quality or standard of the goods and services produced as a condition for granting such a license (unless the amounts charged are out of proportion to the cost of the checks carried out). For households, a similar situation pertains with ESA95 (4.80d) excluding from current taxes on income, wealth etc. payments for a range of licences. These are instead regarded as payments of government services, the borderlines indicated in 3.71e, 3.76h and 4.79d.

SNA93 (7.55) states that the borderline between taxes and payments of fees for services rendered is not always clear cut in practice. The criteria for treatment as purchases of services from government are set out as in the ESA95, including also carrying out some other form of control which it would otherwise not be obliged to do.

### **3.10 Car registration taxes paid by households**

ESA95 (4.20d) states that car registration taxes are recorded under taxes on products. The scope of taxes on products under ESA95 is also no longer restricted to taxes payable by producer units. Car registration taxes payable by households in their capacity as consumers are reclassified from (presumably) miscellaneous current transfers in ESA79 to taxes on products in ESA95.

Car registration taxes are not explicitly mentioned in SNA93, although (in 7.70) it is stated that taxes on the use of fixed assets (such as cars) are treated as other taxes on production (i.e. not as taxes on products).

### **3.11 Import duties paid by non-residents**

Customs duties on extra-EU imports may be paid in the MS of first entry or in the MS of destination. When residents of the latter pay customs duties in the former, there will be a discrepancy on the customs duties levied on those two countries' imports and import duties collected by those two countries. This is termed the "import duties paid by the non-residents" also called "Rotterdam effect" (imports via Rotterdam). In principle, only import duties paid (at home or abroad) by resident units are to be recorded in D2121 (Import duties). In practice, the "import duties paid by the non-residents" effect is only relevant for a few MS, among which the Netherlands and Austria, which should continue to make adjustments in their national accounts.

This is an issue not addressed in SNA93 (7.66).

### **3.12 Compensation of employees in kind**

ESA95 (3.71b, 3.76b, 4.05-06) clarifies borderline between wages in kind (and final consumption expenditure) and intermediate consumption. Two changes as compared with ESA79 have been introduced, i.e. ESA95 includes the provision of sports and recreation facilities for employees and their families with compensation of employees in kind, while recorded as intermediate consumption of employers before, and the valuation of own-produced goods and services provided to employees by their employers is at basic prices, while in ESA79 valued at the sum of the costs of production (producer's profit equal to zero by convention).

SNA93 (7.40f) refers to sports, recreation or holiday facilities for employees and their families among the types of goods and services provided by employers to their employees and treated as wages and salaries in kind. The list of items in 7.40 (however not claimed to be exhaustive) does not include item bonus shares distributed to employees – an item being included in ESA95 (4.05). Furthermore, in 7.38 it states that when such goods and services are produced by the employer, they should be valued at producers' prices.

### **3.13 Imputed social contributions**

ESA95 (4.88-89) classifies social insurance schemes into 3 categories: a) social security schemes, b) private funded social insurance schemes and c) unfunded social insurance schemes. Social insurance schemes organised by government for their own employees are classified either as private funded schemes (if special reserves are recognised) or as unfunded social insurance schemes. Private funded social insurance schemes include insurance companies and autonomous pension funds, and non-autonomous funds. Employers' imputed social contributions (D.122) are associated to employers operating unfunded social insurance schemes. In principle, D.122 should be determined by reference to employers' future obligations to provide benefits (based on actuarial considerations similar as for insurance premiums). However, this is often not possible in practice. It is suggested that four different methods could be identified for use, in particular the benefits-paid method estimated equal to the unfunded benefits paid, and a wage-share method estimated as reasonable percentage of wages and salaries paid to employees (D.11), the percentage derived possibly from actuarial estimates made elsewhere or from the ratio of social contributions to wages and salaries of employees covered by another scheme. Two other variants are also listed, the benefits-paid method with a correction factor, and full actuarial estimates made by national accountants.

Recommendations from the GNI Committee have been provided in order to give further guidance in the area of imputed social contributions:

1. Member States currently use variants of either the benefits-paid or the wage-share method to estimate employers' imputed social contributions (D122). For own resource purposes, the methods and sources currently employed by MS adequately measure the size of imputed contributions.
2. When significant changes to unfunded pension schemes for government employees occur, the methods and sources for estimating imputed contributions must be reviewed.

3. Pension reforms other than complete system changes generally do not have immediate impacts on the quality of D122 estimates. During major revisions, MS should investigate the need for changing their sources and methods.
4. The benefits-paid method is more sensitive to changes. This method must be adapted immediately when an unfunded pension system for a significant number of government employees is changed, e.g. as a consequence of privatisation.

SNA93 (8.63) introduces the same three main types of social insurance schemes into 3 categories: social security schemes, private funded schemes and unfunded schemes. In 8.73, it is referred to the benefits-paid method, i.e. the text stating that the benefits actually paid in the current period may nevertheless provide the best available estimates of the contributions and associated imputed remuneration.

### **3.14 Capital consumption on roads, bridges, etc.**

ESA95 (6.03) states that consumption of fixed capital must be calculated for all fixed assets (except animals). Thus, it is clear that the scope of CFC has increased in ESA95 to include roads, bridges etc. Annex 7.1 refers to examples of highways, streets, roads, bridges, elevated highways and tunnels under category of other structures, relevant fixed assets in this case and for which consumption of fixed capital is required. In 2002, the GNP Committee set up a Task Force on the consumption of fixed capital on roads, bridges etc. - as a matter of priority and with high quantitative impact on GDP and GNI - to examine current practices, evaluate the assumptions used and make proposals aimed at improving the comparability of estimates across MS.

The GNI Committee approved the following 7 recommendations from the Task Force:

1. Verify the proper market – non-market distinction in the PIM, and where necessary, extra industry or sector detail should be introduced.
2. Countries should review whether all gross fixed capital formation in public infrastructure is properly allocated to activities, in particular where the activities are non-market (checklist of public infrastructure asset categories suggested)
3. Government GFCF in construction works should be split into residential buildings, non-residential buildings and public infrastructure (civil engineering) whenever possible, and roads should be separated from other infrastructure assets whenever possible
4. Ensure consistency of GFCF time series also for the early years or within the initial capital stock estimates used in the PIM
5. The theoretically correct approach is to distinguish the main components of infrastructure assets in the PIM and to use separate lifetimes for each component, or if not possible, to use an estimate of the weighted average of the different components. In the absence of reliable country-specific information, a central average lifetime estimate of 55 years is recommended for roads and a range of 50 to 60 years is acceptable so as to take into account temporal shifts in the composition of new GFCF. Countries that use lifetimes outside this range should support their decision by evidence. For infrastructure assets other

than roads, the same lifetimes as for roads should be used in the absence of reliable country-specific information.

6. Lifetime assumptions should be investigated at least every 5 to 10 years
7. Some kind of bell-shaped retirement function should be used for public infrastructure; the simultaneous exit assumption is only acceptable as long as the GFCF time profile for the retiring and the new vintages is sufficiently stable and GFCF levels are sufficiently similar to ensure that is no significant impact on consumption of fixed capital.

SNA93 (6.186) states that capital consumption needs to be calculated for all types of structures including roads, bridges, dams, etc.; even though the estimated services may be very long for some of these structures, they cannot be assumed to be infinite. More specifically, in 10.72 the SNA93 indicates that the service lives for such structures may be very long – perhaps a century or more.

### **3.15 Reinvested earnings on direct investment**

ESA95 (4.64) defines reinvested earnings on direct foreign investment (D43) as operating surplus of the direct foreign investment enterprise, plus any property incomes or current investment receivable, minus any property or current transfers payable (including actual remittances and current taxes payable on income etc.). This definition - and the requirements given for the treatment according to the proportion of ownership (4.66), and time of recording when they are earned (4.67) - is entirely in line with the OECD's Benchmark Definition of Foreign Direct Investment and with the IMF's Balance of Payments Manual (5<sup>th</sup> edition). Reinvested earnings on foreign direct investment was identified as a so-called transversal issue by Eurostat in assessing the GNI compilation of the MS under ESA95, a large and most variable transition item that needed further guidance through the use of and investigation in Task Forces. A special questionnaire was also submitted to record MS's practices. It covered questions on institutional arrangements, compilation methods, identification and capture of direct investment enterprises, foreign direct investment survey specifications, measurement of profits and distributed earnings, validation methods, special cases (SPEs) and retropolation experiences.

Recommendations on the measurement of reinvested earnings from the Task Force on Reinvested Earnings in 2005 were the following, each of them relevant for the harmonisation of GNI across countries, and among them 1,2 and 6 considered most important:

1. Some countries have not yet established a system to calculate/estimate reinvested earnings, owing to a lack of FDI surveys. TF recommends that such systems be introduced promptly.
2. The income definition of "Current Operating Performance Concept" should be used, but in practice it is acceptable to cover a reduced number of companies which are considered to contribute most to extraordinary results. Thus the COPC may be applied to the biggest companies plus holding companies, whilst others can be collected on an "all-inclusive" basis.
3. Dividends should be recorded on an accruals basis, but in practice countries can continue with existing (generally cash) recording practices until the introduction of direct reporting systems.

4. Dividends paid from exceptional capital gains should be recorded as FDI disinvestments, and not affect reinvested earnings.
5. Contributions to cover losses should be recorded in the Financial Account and not as direct investment income.
6. Account should be taken of indirect FDI relationships, so that at minimum one of the following simplified rules should be met: i) the coverage of indirect links of ownership above 50 %, or ii) the coverage of (direct and indirect) links of ownership above 10 %, calculated as the simple product of the subsequent links of ownership along a chain.

SNA93 (7.122) provides the same definition as ESA95 (4.64).

### **3.16 Interest to insurance policy holders**

ESA95 (3.63) requires the inclusion of the entire amount of premium supplements, i.e. all property income. The ESA95 definition of output of insurance services does not mention the item supplementary payments in the form of distributed profits. These should be considered as claims, if they are not paid back to the insurance in the form of premium and contribution supplements that are additional to actual premiums and contribution payable. ESA79 requires the inclusion of imputed interest accruing to insurance policy holders only. See also 3.2 Insurance measurement above.

SNA Annex IV does not give a specific interpretation on this particular issue. It has a reference however to the same mentioned difference that creates a difference between the two ESA versions.

### **3.17 Software and large databases**

ESA95 (3.105b, 3.110b, 3.114b) states that purchases of software and large databases to be used in production are recorded as intangible fixed assets with gross fixed capital formation (GFCF), as is own-account production of these items. This new treatment coupled with no explicit guidance on the recording of such expenditure back in the earlier standards, the usual interpretation has been that ESA79 and SNA68 treats expenditures on software which is bought as an integral part of a major hardware as GFCF, but software purchases or developed independently as intermediate consumption. Apart from the differences between ESA79 and ESA95, the implementation of the latter treatment has been facilitated from studying a long series of aspects to software measurement in at least two Task Forces, from which eventually 15 recommendations were worked out for the countries to consider. Eurostat has also derived a checklist for software estimates in national accounts (22 items structured under headings for marketed output of software services, output for own fixed capital formation, intermediate consumption, gross fixed capital formation, household final consumption expenditure, changes in inventories, exports and imports, and consumption of fixed capital.

Recommendations of the GNI Committee on measurement of GFCF in software are listed as follow:

1. All expenditure on packaged and custom software (not for embedding/bundling or subcontracting) should be treated as GFCF, provided the software is used for more than one year and its value is above the ESA95 threshold for small durables.
2. GFCF should include services purchased that are required to install software (i.e. installation costs).
3. Subcontracting of software services should be treated as intermediate consumption.
4. Software purchased for embedding in or bundling with computers, equipment or other software should be treated as intermediate consumption.
5. Maintenance and repair of software should be treated as intermediate consumption.
6. A separate estimate for software produced for own fixed capital formation should be made.
7. The estimate should be derived from labour input data, either specifically collected or from statistics on ISCO category 213 (computer professionals). An appropriate level of compensation of employees should be used to value this labour (e.g. derived from average wages in NACE 72).
8. An adjustment factor should be applied to estimate the time spent on software development of the employees in ISCO 213. This factor could be maximum 50 %.
9. Special attention should be given to the own-account output of NACE 72, which should include an estimate for the production of software originals, including games. However, the time spent on producing custom software should not be included in the calculation of own-account output.
10. Intermediate consumption, consumption of fixed capital and a mark-up for net operating surplus should be included in the estimate of own-account output. Ratios derived from the production structure of NACE 72.2 or 72 could be used here.
11. An estimate for household final consumption expenditure on software, including games, should be made that is independent of the output estimates.
12. An attempt should be made to identify the software content of the relevant codes of the Combined Nomenclatures in the foreign trade statistics.
13. Imports and exports of software goods should be valued at full value rather than the value of the carrier only.
14. The data on computer services and royalties and license fees in the balance of payments need to be carefully examined to identify any payments related to software.
15. Consumption of fixed capital on software should be included in output of non-market producers.

SNA93 (10.92-93) states that computer software, purchased on the market or produced for own use, that is expected to be used in production for more than one year is treated as an intangible fixed asset, and acquisitions of such software treated as GFCF. Software to include large databases is clarified and valuation guidance is provided. Other aspects such as those clarified in the abovementioned ESA95 recommendations are not comprehensively dealt with, while mentioned in e.g. Annex I Changes from the SNA68.

### **3.18 Mineral exploration**

ESA95 (3.71a and 3.105b) states that mineral exploration expenditures comprising costs of actual test drilling, aerial or other surveys, transportation costs etc. are excluded from intermediate consumption but instead included in gross fixed capital formation. Since ESA79 also recorded expenditures after the decision to work the deposit as gross fixed capital formation, the ESA95 increases the scope of GFCF by the amount of exploration expenditures incurred prior to the decision to work or deposit.

SNA93 (6.166, 10.90-91) states that expenditures on mineral exploration – whether successful or not – are needed to acquire new reserves, and are, therefore, all classified as gross fixed capital formation. This includes as well costs incurred to make it possible to carry out tests (aerial or other surveys, transportation costs etc.).

### **3.19 Entertainment, literary and artistic originals**

ESA95 (3.67, 3.105b) states the production of originals is a two-stage process, the output of the first stage being an intangible fixed asset. Valuation guidance is provided (price paid if sold, if not sold basic price paid for similar originals, its production costs (but not mentioning with a mark-up) or the discounted value of future receipts expected from using it in production). In second stage, the owner of the asset may use it directly or to produce copies in subsequent periods, or license other producers to make use of the original in production. The entertainment, literary or artistic originals are treated as gross fixed capital formation, i.e. acquisitions, less disposals, of intangible fixed assets. In ESA79, such output was outside the production boundary.

Recommendations from the GNI Committee were provided in order to give further guidance on contents, valuation, data sources and depreciation model in this new area:

1. Originals should be defined to include as a minimum - films, TV and radio stock programmes, literary works and musical works. Other originals should be included if they meet all of the following four criteria: (i) the item must be covered by copyright, (ii) the work should have primary artistic intent, (iii) the item must satisfy the capitalisation criterion the same as for any capital item to be included as GFCF, (iv) the item is not covered elsewhere in the national accounts.
2. TV and radio stock programmes should include fiction, drama, documentaries, music, arts, history and education programmes.
3. The value of film, TV and radio programme originals should be measured by production costs, including a mark-up for operating surplus. Production costs should include any royalty payments made for the use of other originals.
4. The value of literature, music and photographic/image originals should be measured by the modelling of royalty flows, using a certain formula.

5. Countries should examine existing direct data collections from the originals-producing industries to determine if new questions could be added to assist measurement of originals. Collection of royalties data from rights management agencies should ensure that there are breakdowns for inter-agency transfers and also for cross border royalty flows.
6. Originals should be depreciated with a model which leads to fast depreciation in the early years of the originals' lives. Service lives should be set between 5-10 years.

SNA93 (6.143-146) states the production of originals is a two-stage process, the output of the first stage being an intangible fixed asset that belong to the producer of the original, for sale or for own-account gross fixed formation. In second stage, the owner of the asset may use it directly or to produce copies in subsequent periods, or license other producers to make use of the original in production. Valuation guidance is provided (when mentioning production costs, it is with a mark-up).

### **3.20 Intangible non-produced assets**

In ESA95 (3.67, 3.70f), sales and purchase of licences for the use of intangible non-produced assets (patents, trade marks, copyrights etc.) are recorded under output and consumption respectively. The sale of the intangible asset is however negative fixed capital formation. ESA79 regarded this as property income payments.

SNA (6.146, 7.92) treats fees, commissions or royalties as payments for services rendered by the owner, and these services are valued by the fees, commissions, royalties etc. received from the licensees. Although the payments are usually described as “royalties”, they are treated as purchases of services produced by the owners of the patents, not as property income.

### **3.21 Classification of international bodies acting for EU**

This is a sector classification issue. Eurostat has decided that if institutional bodies which perform market regulation activity and distribute subsidies cannot be split into those which do the market regulation and those which do the distribution of subsidies, then these units should be classified in the sector general government if their costs incurred in market regulation compared to the total costs are less than 80 %.

This is an issue relevant for ESA only (not for SNA).

### **3.22 Treatment of the UK rebate**

The UK is granted a so-called “rebate” as a correction in respect of budgetary imbalances, i.e. all other MS pay correspondingly more to the EU budget in order to finance the UK rebate. Due to different practices among the MS, i.e. treating this alternatively as VAT resource (D2) or as other current transfer (D7), it has been recommended for the own resource flows that the

UK rebate should be recorded as miscellaneous current transfers (D.75) in the national accounts of all MS.

This is an issue relevant for ESA only (not for SNA).

### **3.23 Definition of GNP**

GNP is no longer a concept of ESA95 and SNA93. It is replaced by GNI, however defined to be identical by GNP (see 7.16 of SNA93 and 8.94 of ESA95).

In the ESA context, the calculation of GNI in ESA95 is made more explicit than in ESA79. The GNI definition by adding to GDP primary income receivable from the rest of the world less primary income payable to the rest of the world, imply not only the inclusion of compensation of employees (D1) and property income (D4) in this respect, as in ESA79, but also adding subsidies (D3) receivable from the rest of the world, mainly from the Institutions of the European Union, and deducting taxes on production and imports (D2) payable to the rest of the world, main to the Institutions of the European Union.

### **3.24 Definition of the territory**

ESA95 (2.05, five items listed) and SNA93 (14.9, same content listed more condensed in three items) both provide a general definition of the economic territory of a country.

The ESA95 Regulation provides such a general definition of economic territory. In addition and more specifically in a Commission Regulation on the Definition of Economic Territory, the meaning attributed to ESA 2.05 (and 2.06) is further clarified. The term geographic territory is understood to comprise the MS territories as listed in the Annex to this Regulation. E.g. the territory of Denmark is defined without the Faroe Islands and Greenland, and the United Kingdom defined exclusively as Great Britain and Northern Ireland.

## **3.2 *The 24 additional issues alternatively presented in boxes***

Each of the new or additional issues reviewed in section 3.1 has been grouped with one of the three headings used in chapter 2. This is done in order to classify and systemize the issues by type. By this, box 1 in chapter 2 is extended by adding to it box 1 (cont) in section 3.2 below. It adds to 30 such issues. Similarly, box 2 (cont) is the continuation of box 2, in total 12 issues. Likewise, box 3 (cont) - however short – adding to box 3 makes 11 such issues. There may be overlaps between the issues of the first part (until 1997) and those of the second part (1997-2006), such as 1d and 9 on the taxes/government services borderline. By the counts, 1 of 5 issues listed are referring to actual deviations between ESA95 and SNA93, while more than half the issues are merely clarifications for more details, but still an important aspect of the study.

***1 (cont). More specific definitions in ESA95 than in SNA93***

- 2 Insurance measurement
- 3 Dwelling services
- 4 Minor repair activity by owner-occupiers
- 7 VAT repayment to non-market units
- 9 Government licences and fees
- 11 Import duties paid by non-residents
- 12 Compensation of employees in kind
- 13 Imputed social contributions
- 15 Reinvested earnings on direct investment
- 16 Interest to insurance policy holders
- 17 Software and large databases
- 18 Mineral exploration
- 19 Entertainment, literary and artistic originals
- 20 Intangible non-produced assets
- 23 Definition of GNP
- 24 Definition of the territory

***2 (cont). The ESA deviating from the SNA, either clearly or more questionably so***

- 1 FISIM
- 5 Garages
- 6 VAT treatment
- 8 Stamp duties on dwellings
- 10 Car registration taxes paid by households
- 14 Capital consumption on roads, bridges, etc.

***3 (cont). The ESA not covering certain topics of the SNA, or vice versa***

- 21 Classification of national bodies acting for EU
- 22 Treatment of the UK rebate

<b>Box 1 (cont). More specific treatment in ESA95 than in SNA93</b>		
<i>Items</i>	<i>Treatment in SNA93</i>	<i>Treatment in ESA95</i>
2 Insurance measurement	Annex IV adds to a great number of paragraphs in 9 different chapters a detailed description of the treatment of insurance, social insurance and pensions.	Annex III provides detailed explanations on insurance, including the definition of insurance, relations with social insurance, treatment in accounts and numerical examples. Further, the GNI Committee has agreed on 8 recommendations related to premiums earned and supplements, claims due, gains and losses, allocation of output by uses and reinsurance, for clearer guidance on implementation issues. Eurostat has derived a checklist for monitoring these issues, and accepted alternatively using the sum of costs method when faced with implausible results.
3 Dwelling services	Ch.6 (6.89) states the main principle in valuing the housing services by owner-occupiers.	Ch.3 (3.64) states the main principles in valuing the housing services by owner-occupiers. Further to detailed legal text on this issue from the 1990s, more complex situations found in new MS made necessary a new (2005) Commission Regulation that justified the use of user-cost method under given conditions, and further clarified some other issues.
4 Minor repair activity by owner-occupiers	Ch.6 (6.27) addresses the issue of small repairs by owner-occupiers.	Ch.3 (3.77c) has adopted a criterion for dividing expenditures into typically landlords' and tenants'. Above all, this clarifies and changes principle followed in ESA79.

7 VAT repayment to non-market units	SNA93 does not specifically address this issue	ESA95 does not explicitly specify treatment, but Commission Regulation on the treatment of repayments of VAT to non-taxable persons and to taxable persons for their exempt activities states that repayments of VAT incurred on purchases be treated as other current transfers (D7) or capital transfers (D9), and not as if they were deductible VAT
9 Government licences and fees	Ch.7 (7.55) states that the borderline between taxes and payments of fees for services is not always clear	Ch.4 (4.23e) restricts the taxes on production part to a narrower range of payments than in ESA79, more instead regarded as payments of government services
11 Import duties paid by non-residents	Not addressed in SNA93	Referred to as the “Rotterdam effect”, relevant for a few MS only, import duties to be paid only by residents (at home or abroad)
13 Imputed social contributions	Ch.8 (8.73) refers to the benefits-paid method as providing the best available estimates for this item	Ch.4 points to alternative methods, wage-share method besides benefits-paid method (and two other variants). GNI Committee has provided 4 recommendations for further guidance in the area of imputed social contributions
15 Reinvested earnings on direct investment	Ch.7 (7.122) defines this concept and the requirements for treatment, etc.	Ch.4 (4.64, 4.66, 4.67) defines this concept and the requirements for treatment, time of recording, etc. Clarifications sought on national practices through a special questionnaire, issues of reinvested earnings measurement further investigated in 2005 Task Force that furthered 6 recommendations

16 Interest to insurance policy holders	Annex IV provides a specific interpretation of this issue	Ch.3 (3.63) has a similar reference to this issue, but clarification needed on supplementary payments of distributed profits for this
17 Software and large databases	Ch.10 (10.92-93) states new treatment as gross fixed capital formation	Ch.3 (3.105b, 3.111b, 3.114b) states new treatment as GFCF (with exceptions). Further, the GNI Committee has agreed on a long series of aspects of software measurement for clearer guidance, in terms of 15 recommendations. Eurostat has also derived a checklist of 22 items for monitoring the software estimates in national accounts.
18 Mineral exploration	Ch.6 (6.166) and 10 (10.90-91) states new treatment as gross fixed capital formation	Ch.3 (3.71a, 3.105b) states new treatment as GFCF; but clarification sought on ESA79 timing of such expenditures, since partly treated as GFCF, although mainly as intermediate consumption
19 Entertainment, literary and artistic originals	Ch.6 (6.143-146) states the production of originals as a two-stage process (original first and then use of copies), providing guidance on valuation also	Ch.3 (3.67, 3.105b) states the production of originals as a two-stage process (original first and then use of copies), providing guidance on valuation also. Further guidance on contents, valuation, data sources and depreciation model provided in 6 recommendations from the GNI Committee
20 Intangible non-produced assets	Ch.6 (6.146) and 7 (7.92) treats fees, commission or royalties as payments for services	Ch.3 (3.67, 3.70f) treats sales and purchase of licences for use of intangible non-produced assets (patents, trade marks, copyrights, etc.) as output and consumption of services, in contrast to treatment as property income in ESA79

23 Definition of GNP	Ch.7 (7.16) replaces and defines GNP as GNI	Ch.8 (8.94) replaces and defines GNP as GNI; clarifying in this context the flows of subsidies and taxes on production and imports receivable from and payable to rest of the world, including the EU
24 Definition of the territory	Ch. 14 (14.9) provides a general definition of the territory of a country	Ch.2 (2.05) provides a general definition of the territory of a country, but clarified further for each MS in a Commission Regulation

**Box 2 (cont). Deviations between ESA95 and SNA93**

<i>Items</i>	<i>Treatment in SNA93</i>	<i>Treatment in ESA95</i>
1 FISIM	Ch.6 (6.124-131 and Annex III) accepts some flexibility in the FISIM treatment, whether to allocate to users, or not (using instead nominal industry or sector)	Ch.8 (8.14, 8.24) and ch.9 (9.33) does not allocate FISIM to user sectors as a general rule, while providing in Annex I the consequences or changes to be made in ESA chapters if FISIM is to be allocated. Council Regulation from 1998 allowed the MS to carry out trial calculations within 5 years, while Commission regulation from 2002 required specific methods to be followed from 2005 (derogation for a few countries to 2006/2007), in terms of calculation and allocation of FISIM among domestic users sectors using certain reference rates, allocation of FISIM among industries' intermediate consumption, and calculation of FISIM at constant prices.
5 Garages	Ch.6 (6.89) does not mention garages as part of services of owner-occupied dwellings, but probably not including them when separated from the dwelling (as in the former system of ESA)	Ch.3 (3.64) includes garages also when separated from the dwelling

6 VAT treatment	Ch.6 (6.207-214) gives the main principles of recording VAT in the NA, in Ch.15 providing more specific information on the VAT flows in the input-output framework, and recording at accruals basis	Ch.4 (4.17) and Ch.9 states the main principles of VAT recording. Amended ESA text in 2000 states VAT to be recorded in NA as derived from amounts evidenced by assessments and declarations or cash receipts. Further in 2004, GNI Committee recommendations on how to treat VAT fraud, of which one part (without complicity) to be treated as value added and operating surplus (not VAT), another part (with complicity) to be deducted due to insolvencies and missing receipts. These adjustments mean closer to VAT actually paid (time-adjusted) than to a full accruals based VAT.
8 Stamp duties on dwellings	Ch.7 (7.55) states that stamps on legal documents or cheques are other taxes on production, while stamp taxes on sale of specific products (such as alcohol beverages, tobacco) are taxes on products	Ch.4 (4.20) states that stamp taxes on legal documents or cheques are part of taxes on products, like those on the sale of specific products
10 Car registration taxes paid by households	SNA93 does not mention this issue explicitly, except that taxes on the use of fixed assets (such as cars) are treated as other taxes on production (not as taxes on products)	Ch.4 (4.20e) states that car registration taxes are recorded under taxes on products; such taxes payable by households (as consumers) are reclassified to taxes on products as well
12 Compensation of employees in kind	Ch.7 (7.38) states goods and services in kind produced by the employer should be valued at producers' prices	Ch.4 (4.06) states that such goods and services should be valued at basic prices
14 Capital consumption on roads, bridges, etc.	Ch. 10 (10.72) indicates that the estimated service lives for such structures (including roads) may be very long – perhaps a century or more	Recommendation from the GNI Committee fixes a central average lifetime of 55 years (range 50-60 years) for roads in absence of reliable country-specific information

<b>Box 3 (cont). Topics not covered in SNA93</b>		
<i>Items</i>	<i>Treatment in SNA93</i>	<i>Treatment in ESA95</i>
21 Classification of national bodies acting for EU	-	Relevant for ESA only, criterion provided for classifying institutional bodies by sector
22 Treatment of the UK rebate	-	Probably relevant for ESA only, no specific information in ESA95, providing now guidance for recording as miscellaneous current transfers

### **3.3 Two more issues: swaps and illegal activities**

First, one item that has already been amended in ESA95 and SNA93:

#### 25 Swaps

According to ESA95 (4.47), and similarly stated in SNA93 and BOP5th Manual, all flows of interest under swap arrangements are to be considered as interest included in property income. The rationale behind was the “cost of capital principle” to get a “fair” measure of the exact cost of capital for a borrower. Soon, however, this treatment was considered as raising some conceptual problems, and different classification as financial account transactions was proposed and finally approved in 1999. This reclassification in ESA95 will keep a full consistency between international standards, SNA93, BOP Manual and ESA95. The new treatment is set out in European Parliament and Council Regulation, amending Council Regulation No 2223/96 on the reclassification of settlements under swap arrangements and under forward rate agreements.

Second, one item that has been discussed intensively in the GNI Committee, while the interpretation finally agreed on is that illegal activities should be implemented as part of the system, thus conceptually part of ESA95 as it is part of SNA95:

#### 26 Illegal activities

Illegal activities are added to the list here merely because this issue has created hard discussions in the GNI Committee over recent years. This issue is an exhaustiveness issue that involves in measuring difficult activities for the national accounts, not really considered a conceptual issue any more. The view finally agreed upon is that ESA95 requires estimates for illegal production in the national accounts. References are ESA95 (1.13g, 1.42 and 3.08). SNA93 is equally clear about this. To prepare for the inclusion of illegal activities in ESA95, a Task Force was set up on this issue, concluding in 2003 that illegal activities could not be included in the NA estimates in near future, but in 2005 examining this question again to see if significant progress has been made. The outcome was more positive in this round and Eurostat made proposals for next steps to be taken. Illegal activities needed to be included and

Eurostat has stated that decisions have to be made on potential reservations on GNI for this issue. It would, however, be sufficient to concentrate on what are likely to be most significant illegal activities; production of and trade in drugs, prostitution and smuggling of alcohol and tobacco.

**In conclusion, it should be made clear that the abovementioned issues may not necessarily be exhaustive for this purpose. The presentation is an attempt to record in a transparent and systematic way through boxes the given issues that have been dealt with in Eurostat at numerous meetings of the GNI (formerly GNP) Committee. In that sense, this note might be taken as a contribution – although an important one – to the study on differences between SNA93 and ESA95. Parallel investigations or studies on developments related to SNA93 are not considered here (except touched upon occasionally, such as for swap arrangements).**

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