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THE NETHERLANDS

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Section 1. Introduction

This paper gives a short description of all the issues and new recommendations of the 2008 SNA/new ESA and their potential effect on the Dutch GDP/GNI. The recommendations which truly affect GDP/GNI are discussed more extensively and their impact is quantified as good as is currently possible. It should be mentioned explicitly here that the impact estimations are provisional. The final figures will only become available in 2014.


Section 2 discusses all the 44 issues, the new guidelines as well as their impact on the Dutch National accounts, and more specifically their quantitative impact on GDP/GNI.

In addition to the 44 original issues, another 3 issues have been identified which may impact GDP/GNI. These are discussed in section 3.

Annex 1 gives an overview of the impact of the revised ESA on the main aggregates, GDP and GNI for the year 2007. The overall impact of the new recommendations ranges between 1.79% and 2.62% of GDP and 2.07% and 2.55% of GNI. The most important single change is due to treatment of R&D-expenditures as capital rather than current costs (between 1.36% and 1.75% of GNI).

Annex 2 gives the response to the questionnaire on the impact assessment of the introduction of the revised ESA95.

Annex 3 gives a summary overview of all the 44 issues, their impact on GDP/GNI and the flows and stocks affected.

Section 2. Issues and recommendations

This section discusses all the 44 issues and recommendations as well as their impact on the Dutch National accounts.

1. Repurchase agreements

Issue: A repurchase agreement (repo) involves the sale of securities or other assets with a commitment to repurchase equivalent assets at a specific price. The market for repos has evolved since the 1993 SNA and contrary to earlier suggestions, on-selling has almost become universal.

Recommendation: The treatment of repos has been under discussion for some years but there is still insufficient agreement on how to improve the recording. So, the recommendation is not changed and the 2008 SNA only gives some clarifications regarding on-selling.

1 Many staff members from the Departments of National Accounts and Government Statistics have contributed to this paper.
2. Employers’ retirement pension schemes

Issue: In case of unfunded government employer schemes, the pension entitlements should be included in the core accounts. In the Netherlands, this applies only to unfunded pension schemes for the military. These entitlements still have the be valued, but the amounts involved are rather small and limited because the scheme is more like an early retirement scheme for active military personal between 55 and 65 years of age. After 65 years of age their pension entitlements become part of the funded pension scheme for all civil servants. The unfunded scheme is gradually phasing out, as all new military personal, for all their retirement/pension entitlements, are currently included in the funded pension scheme for civil servants. These unfunded military pensions are a true exception to the general situation, as for the remainder the Netherlands by law only has funded employer schemes. So, these unfunded military pension entitlements have to be valued and included in the core accounts with the revision of the ESA, but this change does not affect GDP/GNI.

In addition, Dutch residents may be employed by foreign governments with unfunded pension schemes. In this case their entitlements should be recorded as financial claims. By definition unfunded pension schemes do not generate any property income (attributed to the Dutch policy holders). Therefore, this issue does not affect GNI.

The pension entitlement of unfunded social security schemes should also be recorded. In the Netherlands this encompasses the AOW (General Old Age Pensions Act). However, these entitlements are only included in supplementary tables and not in the core accounts.

Sources and methods: possibly a small number of Dutch residents are employed by foreign governments with unfunded pension schemes. For example, Dutch personnel of foreign embassies, consulates and/or international organizations in the Netherlands and Dutch cross-border workers who are employed by neighbouring governments. In practice, however, it is nearly impossible to collect a complete set of data on their pension entitlements. The amount would also be negligible in respect of the total of more than 600 billion euro funded Dutch pension entitlements. It is therefore safe to conclude that in the Dutch situation the effort of collecting these data is not in balance with the potential benefits.

3. Employee stock options

Issue: Employee stock options are a common tool used by companies to motivate their employees. The 2008 SNA explicitly includes the value of the stock options as a form of compensation of employees in kind. This issue has been discussed by Eurostat in 2002 and the recommendations have already been included in the estimates of the compensation of employees.

Sources and methods: The inclusion of employee stock options does not have an impact on GDP in the Netherlands, but GNI has been affected somewhat due to change in the compensations of employees paid to non-residents and the compensation of employees received by Dutch residents working abroad. The magnitude of this change is not very clear as the value of the employee stock options is not separately specified. Data on payments of wages and salaries to non-residents is monthly available from administrative records. Data on receipts of wages and salaries are derived from income tax records and therefore only useful for the final year estimates.

4.a Non-performing loans

Issue: The financial crises of the 1990s led to renewed interest in the statistical treatment of non-performing loans. The purpose of the review is to determine what criteria should be applied in the SNA to the writing-off of non-performing loans and to make sure that they are consistent with the other major
Recommendation: Loans continue to be recorded at nominal values in the main accounts with interest accruing until a loan is repaid or cancelled by mutual agreement. However, on the asset side of the balance sheet two memorandum items with respect to loans are added. The first is the nominal value of the loans deemed to be non-performing. The second should be the “fair” value of non-performing loans (NPLs), or, if this is not available, their nominal value less expected losses. In addition, interest receivable on NPLs should be shown as an “of which” item. The recording of NPLs as memorandum items should be standard for both the government sector and the financial corporations sector. If they are significant for other sectors, or for loans with the rest of the world, they should be shown as supplementary items. This issue does not affect GDP/GNI.

4b. Valuation of loans and deposits

Issue: The valuation of loan positions and deposits are subject to alternative perspectives. Nominal or face value valuation might be misleading because of the risk of default and/or changes in interest rates. This difference becomes apparent when the loans are traded. However, these valuation issues are equally applicable to non-traded loans. Business accounting standards are considering using the concept of fair value for the valuation of loans as if they were traded.

Recommendation: It has been discussed whether the SNA should introduce a valuation other than nominal for deposits and loans. However, in this respect the SNA (and ESA) are not changed: both financial instruments remain to be recorded at their nominal value. This issue does not affect GDP/GNI.

5. Non-life insurance services

Issue: Several instances of massive insurance claims, notably those from the 11 September terrorist attack, focused attention on the measurement of non-life insurance services when catastrophic losses occur. This necessarily involves considering the treatment of reinsurance also. The output of insurance services as calculated using the 1993 SNA algorithm depends on the balance of premiums and claims (on an accrual basis). Output can therefore be extremely volatile (even negative) following major catastrophes, and this volatility impacts on GDP and balance of payments (reinsurance). The objective of the review is to propose measures that would be more consistent with the perception of production in this activity. In particular, medium- to long-term aspects of non-life insurance are to be taken into consideration. The issue will also cover the measurement of production of non-life insurance services in volume terms.

Recommendations: A number of recommendations have been made to improve the recording of output of insurance. In order to improve the recording of output of insurance, it is recommended to use adjusted claims in the algorithm to calculate output, which will avoid most of the undesirable and counter-intuitive volatility resulting from the 1993 SNA algorithm. A consequence of this is that net premiums receivable and adjusted claims due will no longer be necessarily equal period by period. This issue affects GDP/GNI, but the impact has not yet been quantified.

The 2008 SNA further recommends, that for exceptionally large claims, the payment of the claim may be recorded as a capital transfer rather than, as normal, a current transfer. Concerning the treatment of catastrophic losses, it is recommended that following a catastrophe, the total value of the claims related to the catastrophe, as obtained from insurance industry information, may be recorded as a capital transfer from the insurance corporations to the policyholders. When information on claims related to the catastrophe cannot be directly identified, the disaster-related claims could be estimated as the difference
between the actual claims and the adjusted claims in the period of the catastrophe. However, Eurostat has not taken a decision yet on the treatment in the revised ESA. If the decision is taken to treat catastrophic losses as capital transfers, it should in our view be accompanied by an operational definition.

In the USA a catastrophic loss is apparently defined as follows: any single event is treated as a disaster if either the associated property losses or the insurance payouts exceed 0.1 percent of GDP. For the Netherlands this amounts to approximately 500 mln. euro (in prices of 2005). The last disaster with such an impact was presumably the Great Flood of 1953, when large parts of the coastal provinces were flooded.

When such a catastrophe occurs, it will probably be difficult for insurers to specify the exact value of claims related to the disaster. Most of the catastrophes occur in a very short period (only one or perhaps a few days), while the claims on (re)insurance companies can go on for years after the incident. For insurers the catastrophe-related consequential losses will be very difficult to administer. Besides, when time goes by, it becomes more difficult to distinguish claims related to this catastrophe from ‘regular’ claims.

Disasters and catastrophes not only cause a large increase in claims on the insurers, but they also will be confronted with higher costs. Claim research and investigation will be intensified, personnel has to make overtime or extra temporary workers will be hired to deal with the larger number of claims. These changes are reflected in the estimates of intermediate consumption, compensation of employees and output.

Recording catastrophic losses as capital transfers rather than insurance claims will have a positive impact on GDP/GNI. The impact may be substantial, depending on the size of the disaster.

Lastly, it is recommended to recorded reinsurance transactions on a gross basis. In the 2008 SNA, reinsurance is treated in exactly the same way as direct insurance and not, as now, netted against direct insurance. This is particularly important for transactions with the rest of the world. This issue affects the non-life insurance premiums and claims but does change any of the macro-aggregates.

We are not aware of any changes in the volume measurement of non-life insurance services.

6a. Financial services

Issue: The business of financial corporations has undergone a structural transformation towards an increasing importance of portfolio management of financial assets with the aim of generating holding gains and a decreasing importance in simple intermediation. The definition of financial corporations and of financial services needs examining to ensure all the activities of financial corporations are adequately captured in the SNA. The review will also cover the measurement of production of financial services in volume terms.

Recommendation: The definition of a financial service is expanded to give due weight to the increase in services other than intermediation, specifically risk management and liquidity transformation. Further, the inclusion of margins on foreign exchange dealing and dealing in securities should be more prominent in the description of explicit fees for financial services.

These margins on foreign exchange dealing and dealing in securities were already explicitly included in the output definition of the ESA95. Other financial services are now described more elaborately, like services provided in turn for explicit charges and services associated with the acquisition and disposal of financial assets and liabilities in financial markets. Nevertheless, these kinds of services have already been included in the output definition and therefore will not lead to changes in GDP/GNI.
FISIM: In the method presently recommended, no FISIM has to be calculated between resident financial intermediaries (FIs) but there are FISIM between resident FIs and non-resident FIs. The present draft chapter of the new ESA states that FISIM has no longer to be calculated on any interbank loan or deposit.

For the calculation of exports and imports of FISIM, which have different currencies components, it was recommended in the 1998 Regulation – and this remains recommended – to have several “external” reference rates, in order to obtain more reliable results. This implies the split of loans and deposits according to the currency (or groups of currencies) in which they are denominated. Each “external” reference rate is to be calculated on transactions (loans and deposits) between resident FIs and non-resident FIs in the relevant currency. This recommendation is now extended to “internal” reference rates: if resident FIs, for their resident customers, to a significant extent provide loans and take deposits denominated in foreign currencies, it is recommended to have several “internal” reference rates, according to the currency component.

For practical reasons, however, most Member States have until now only calculated one “internal” and one “external” reference rate, and this possibility of single “internal” and “external” rate is kept in the draft revised ESA chapter. But it has to be considered that an improvement of the calculation of FISIM may require the use of several “internal” and “external” reference rates.

Lastly, the ECB has proposed a couple of modifications to the calculation method of FISIM which relate to the default risk and term-premium on a deposit or loan. A CMFB Task Force is expected commence this year to formulate recommendations on the methodology for the calculation of FISIM. This will be done in such a manner that possible revisions of the methodology can be implemented in the ESA-revision in 2014. In order to save time for the Task Force, the ESA-law will be structured in such a manner that possible revisions can be done within the normal comitology-procedure.

These recommendations may have an impact on GDP/GNI. It should be kept in mind that changes in de exports/imports of FISIM have an effect on GDP but, with the exception of FISIM-imports of non-market producers, not on GNI as the changes are counterbalanced by interest receivable and payable to the rest of the world.

Sources and methods: Statistics Netherlands currently calculates both FISIM between resident financial intermediaries (FIs) and also between resident FIs and non-resident FIs. Eliminating FISIM between resident FIs will decrease both production and intermediate consumption, but will have no impact on GDP. Eliminating FISIM between resident FIs and non-resident FIs will lead to adjustments in the exports and imports of these services which will impact GDP.

In order to simply quantify these adjustments, crossborder interest payments between FIs were used to estimate crossborder interbank FISIM. For the years 2007 to 2009, crossborder interbank interest on deposits and loans were around 70% of the total of these crossborder interest flows (both inward and outward). This percentages was used to recalculate FISIM on exports and imports. The effect on GDP varies from 193 mln. in 2007, to -1587 mln. in 2008 and -1823 mln. in 2009. GNI is not affected as the changes in FISIM are counterbalanced by interest receivable and payable to the rest of the world.

The implications of the recommendation to use several “internal” and “external” reference rates have not yet been quantified.

6b. Allocation of the output of central banks

Issue: The 1993 SNA recommends that the services of central banks be measured on the basis of receipts from fees, commissions, and financial intermediation services indirectly measured (FISIM). This
method sometimes results in unusually large positive or negative estimates of output. In 1995, the ISWGNA therefore decided to allow countries to measure the output of central banks, as a second best, at cost. However, the ISWGNA did not provide further guidance on the implications of this method. The review seeks to clarify the impact of the different roles that central banks perform on the nature of their output and the appropriate valuation and allocation to associate with the output of central banks.

**Recommendation:** Separate establishments should be established for units of the Central Bank undertaking market and non-market production when the difference is significant for the accounts as a whole. The non-market activities are to be regarded as acquisition of collective services by general government with a matching transfer from the Central Bank to the Government, so there is no net cost to the Government for these services. Market output is provided on an individual basis to all sectors of the economy against payment for the services.

When the interest rate set by the Central Bank is so high or so low as to imply the inclusion of an implicit tax or subsidy, these should be explicitly recorded as such if they are significant. These taxes or subsidies will be shown as receivable by and payable by government but with a matching transfer from the government to the Central Bank in the case of a tax and a transfer from the Central Bank to government in the case of a subsidy.

In **ESA95**, the output of the Central Bank is, by convention, to be measured as the sum of costs, i.e. its intermediate consumption, compensation of employees, consumption of fixed capital and other taxes less subsidies on production. FISIM does not have to be calculated for the Central Bank. This recommendation is not changed in the revised **ESA**.

Commissions and fees for directly measured services invoiced by the Central Bank both towards resident and non-resident units should be allocated to these units. Only the part of the total Central Bank output (sum of costs less commissions and fees) which is not sold has to be, by convention, allocated to the intermediate consumption of other financial intermediaries: sub-sectors S.122 Deposit taking corporations except the Central Bank and S.125 Other financial intermediaries except insurance corporations and pension funds – in proportion to the respective value added of each these sub-sectors.

To equilibrate the accounts of the sub-sectors S.122 and S.125, the amount of their respective intermediate consumption of the service provided by the Central Bank is to be counterbalanced by a current transfer (classified under other miscellaneous D.759) received from the Central Bank, for the same amount.

In the Netherlands, the total output of the central bank is only allocated to S.122 Deposit taking corporations and the counterbalancing current transfer is not recorded. This has to be adjusted as part of the overall revision of the National accounts. It does not affect GDP/GNI.

7. **Taxes on holding gains**

Issue: Taxes on capital gains are treated as taxes on income and deducted from income while the tax base (the realized holding gains) is not included in the SNA definition of income.

Recommendation: After discussion it was concluded that taxes on holding gains will continue to be shown as current taxes on income and wealth. The SNA/ESA is not changed.

8. **Interest under high inflation**

Issue: It has long been recognized that high inflation can distort measures of interest, since a portion is required simply to counteract the real holding losses that occur for financial instruments that are not
indexed for inflation. However, contrary guidance is given by the 1993 SNA (see Annex B to chapter XIX) and the OECD (see chapter 7 of Inflation Accounting - A manual on National Accounting under Conditions of High Inflation, 1996).

By the 1970s, when inflation was an important problem throughout much of the world, the treatment of interest under high inflation was considered an important issue for national accounts. However, in the last decades, inflation ceased to be a major phenomenon throughout the world.

Recommendation: In the SNA it is therefore recommended that the search for a single universally accepted treatment of interest under high inflation remains on the research agenda. The SNA/ESA is not changed.

9. Research and development (R&D)

Issue: The 1993 SNA does not recognize the output of R&D as capital formation, despite the fact it is thought to be a major contributor to future economic growth. If the SNA were to be changed, should all expenditure on R&D, or only some, be recorded as capital formation? Can all the practical difficulties of deriving satisfactory estimates be overcome, for example by using expenditure data collected in accordance with the Frascati Manual, and obtaining appropriate deflators and service lives?

The 2008 SNA recommends R&D to be treated as gross fixed capital formation. By convention R&D for which no market transactions exist should be valued at cost. The information collected in accordance with the Frascati manual will provide estimates of R&D expenditure.

According to the revised ESA (paragraph 3.66) the output of R&D services is measured as follows:

a) R&D by specialised commercial research laboratories or institutes is valued at the revenues from sales, contracts, commissions, fees, etc. in the usual way;

b) the output of R&D for use within the same enterprise should, in principle, be valued on the basis of the estimated basic prices that would be paid if the research were sub-contracted commercially. However, in practice, it is likely to have to be valued on the basis of the total production costs;

c) R&D by government units, universities, non-profit research institutes, etc. is usually non-market production and is thus valued on the basis of the costs of production. Revenues from the sale of R&D by non-market producers of R&D are to be recorded as revenues from secondary market output.

Expenditure on R&D should be distinguished from that on education and training. Expenditure on R&D does not include the costs of developing software as a principal or secondary activity.

All R&D expenditure that is sold or is expected to bring a benefit in the future to its owner (including for the public in the case of R&D undertaken by government) is included within the asset boundary. Only R&D for which evidence is available that it is not intended to generate economic benefits at the time of its completion is excluded.

With the inclusion of R&D in the asset boundary, patented entities will no longer be separately identified as such in the system, but they will be subsumed into R&D assets.

Sources and methods: Data on R&D capital expenditure are obtained from the Dutch satellite accounts on knowledge that has been developed to measure the role of knowledge in the economy in more detail. In anticipation of the upcoming revision of the ESA, R&D expenditure is already capitalised in the Dutch satellite accounts on knowledge. The main sources for R&D output estimates are surveys based on
the Frascati Manual (OECD 1993 and 2002). These surveys yield data on gross expenditure, financing and subcontracting of R&D. The translation to national accounting concepts of supply and use comprises of several steps.

R&D investments are based on domestic R&D use (both purchased and produced on own-account). Under the new guidelines it is recommended that ‘In principle, R&D that does not provide an economic benefit to its owner does not constitute a fixed asset and should be treated as intermediate consumption’. In line with the recommendations of the Eurostat Taskforce on R&D, the only R&D that is excluded from capitalisation in the Dutch satellite accounts on knowledge is R&D purchased by the R&D industry. This latter R&D is registered as intermediate consumption because it is assumed that these kind of purchases will be resold (separately or as part of new R&D output) to a new owner outside the R&D industry. All other R&D is expected to provide an economic benefit to its owners according to the revised ESA guidelines.

R&D investments are treated like any other fixed asset in the Dutch national accounts and the Dutch growth accounts. The Perpetual Inventory Model (PIM) is used to convert the investment time series into capital stock and to calculate the consumption of fixed capital of past and current investments. The Dutch PIM is fully consistent with the guidelines of the OECD handbook “Measuring Capital” (2001). The service life of R&D assets is estimated with the help of the age distribution of patents from the Dutch Patent Registry. It is assumed that expensive patents have a longer service life than the cheaper patents. Therefore an unweighted and a weighted average service life is calculated. The distribution of patent values derived from the PatVal report (2005) is used to calculate the weighted average service life. We estimated the unweighted average service life of patents a little bit over 7 years. The weighted average service life of patents amounts to almost 18 years. As a result 12 years is taken as the average service life of patents and subsequently for all R&D assets. For two industries an exception is made. The average value of patents in the chemical manufacturing industry is above average, while in the electro technical manufacturing industry it is below the average. Therefore, service lives of the chemical and electro technical manufacturing industries are set at 15 and 9 years respectively.

Estimated size: When R&D is capitalized, GDP increases with the total investments in own-account and purchased R&D for market producers. For non-market producers GDP increases with the consumption of fixed capital on all past own-account and purchased R&D investments. For market and non-market producers an increase of GDP of respectively 5459 and 3587 mln. euro is estimated. The total effect on GDP equals 9047 mln. euro.

The methodology of the R&D satellite accounts is not finalized yet. Changes in the methodology could change our R&D estimates. We expect however that the effect will not exceed 2 percentage points of the current GDP. The total effect on GDP could thus vary between 7903 and 10190 mln. euro.

10. Patented entities

Issue: In the 1993 SNA patented entities are treated as non-produced assets, but royalty payments are by convention recorded as payments for services. This inconsistency has now been removed by recording patented entities as produced assets (under intellectual property products; research and development). The associated royalty payments are recorded as GFCF rather than intermediate consumption. This change in registration of patented entities affects GDP/GNI.

Recommendation: With the inclusion of R&D in the asset boundary, patented entities will no longer be separately identified as such in the system, but they will be subsumed into R&D assets (see issue 9).
11. Originals and copies

Issue: Following the 1993 SNA’s introduction of computer software as capital formation, it became more evident that the SNA does not provide guidance on the treatment of originals and copies as distinct products. Should expenditures on originals and copies both be recorded as expenditure (on new goods) on the basis that originals are distinct from copies, or should originals be considered as being analogous to a stock of copies, and so expenditure on a copy partly (or mostly) reflects a sale of an existing good? How should the transactions in copies be recorded?

Recommendation: The act of creating an original leads to the acquisition of a fixed asset if the original satisfies the conditions of an asset, that is it can be a source of economic benefit to the owner over a period of years. These benefits derive from allowing other units to use the content of the original by means of issuing licences for a fee. These benefits are in addition to any benefits that the owner of the original receives from using the original himself.

Licences may be issued for use by one or a specified number of users or may be issued with permission to reproduce copies. These are referred to as licences to use and licences to reproduce respectively.

Licences to use: A copy of a licence to use purchased with a single payment for use over a multi-year period may be treated as GFCF if it is to be used in production for more than one year. However, if annual payments are made for a licence to use without a long term contract, the payments are treated as payments for a service under an operating lease.

Licences to reproduce: For a licence to reproduce, the relevant question is whether the holder of the original divests itself of part or all of the responsibility to issue and service copies under licences to use. If so, it should be recorded as a sale of (part of) the original. Otherwise, it should be recorded as payments for a service under an operating lease.

Estimated size: between -307 mln. euro and zero.

Sources and methods: At the time of the last benchmark revision (2001), it was assumed that all software was purchased with upfront payments. Furthermore, software is often used for several years: it is often too expensive for corporations to change software packages from year to year. It was therefore decided to capitalise all purchased software licences. Nowadays, using (multi-)annual licences is more common. This could lower gross fixed capital formation. It is therefore expected that the change in treatment in licences has a negative effect on GDP.

Generally speaking, two different kind of contracts may exist. The first kind of contract consists of the purchase of a licence to use of the software for an infinite time, often accompanied by a service contract than can be renewed annually. The SNA recommendations in this case are: If there is a large initial payment followed by a series of smaller payments in succeeding years, the initial payment is recorded as gross fixed capital formation and the succeeding payments as payments for a service. For this kind of contract, there is in principle no change in registration between the 1993 and the 2008 guidelines.

The second kind of contract consists of the combined purchase of a licence to use the software and a service contract, both issued for the same predetermined period. This period can be either a year or several years. After this period has ended, the licensee can determine whether to renew the contract or not. When the period is for only a year at a time, the purchase should be recorded as the purchase of a service, not as gross fixed capital formation.
More often, the contract has a predetermined time period of several years, although payments are made yearly. The SNA recommendations in this case are: *If a copy of a licence to use is purchased with annual payments over a multi-year contract, and if the licensee assumes all the risks and rewards associated with economic ownership of the copy, this may be regarded as the acquisition of an asset under a financial lease.* Since the purchase includes a service contract, it is not completely clear whether the licensee assumes all the risks. Since the licensee does assume all rewards, it seems fair to assume that he also assumes all risks. Theoretically, the best option would be to break the contract into two parts: the financial lease of the copy and yearly payments for the service contract. In practice, it is not clear whether this is possible.

At the moment, no reliable information is available on what part of software licences is purchased with what kind of contract. Therefore, it is not directly clear what the effect of the revised guidelines is. A new survey will be set up to ask companies separately about purchases of software packages (to be classified as gross fixed capital formation) and yearly payments for software licences (to be classified as intermediate consumption). The first survey takes place over the year 2009. Results are expected at the end of 2011. A reliable estimate can only then be made.

In order to obtain a rough breakdown into the different kind of contracts used we have investigated the practices of Statistics Netherlands itself in purchasing software. At Statistics Netherlands, about 75 percent of the expenditures is on software packages, while the remaining 25 percent consists almost completely of multi-year contracts of licences to use. This suggests that for 2007 (when there were few one-year contracts), all purchased software should be treated as gross fixed capital formation. In this case, the effect on GDP is therefore zero.

It is however not sure that Statistics Netherlands is representative for all purchasers of software. Perhaps others use one-year licenses more often. Therefore an assumed 5 percent of the (current) investments in purchased software has been taken as an upper limit of the effect on GDP\(^2\).

In practice it is very well possible that part of the service contracts that accompany the copy are also recorded as gross fixed capital formation or that part of the multi-year licenses are recorded as intermediate consumption. It is often not possible to split the multi-year contracts into the software licence and service contract. The way the contract will be recorded depends on whatever part the respondent thinks is most important. This problem applies however for the guidelines of both the current and the revised ESA. Any effect on GDP of an improved delineation between the purchase of the copy and the service contract is therefore not an effect of different guidelines, but the effect of better methods or data sources.

12. **Databases**

*Issue:* The non-financial asset category computer software is to be changed to computer software and databases with a subsequent breakdown between software and databases. All databases holding data with a useful life of more than one year are fixed assets. The value of the software component of databases, the database management system (DBMS), is to be recorded elsewhere as a software asset. The remaining value of the database should only include the costs involved in converting the data from one

\(^2\) This results in an amount of -307 mln. euro. This comprises both purchases of pre-packaged software and customized software. Purchases of the latter are expected to be completely assigned to GFCF. This means that the implicit percentage of pre-packaged software that is treated as intermediate consumption is higher than 5 percent. Furthermore, for non-market producers the effect on GDP is caused by a decrease in consumption of fixed capital (as the decrease in GFCF is matched by an increase in consumption of own production). Since depreciation in software is typically lower than GFCF in software, this also increases the implicit percentage of pre-packaged software that is treated as intermediate consumption. For these reasons, we expect the effect to be closer to zero than to the upper limit.
medium/format to that required by the DBMS, including the application costs (setting up the structure of the database, loading metadata, etc.) but excluding the costs of acquiring the data themselves.

Sources and methods: The Dutch ICT survey asks respondents for the number of employees working on software production. This number of employees is used (in combination with other data) to estimate the amount of money that is spend on own account software. This estimate includes the value of the database management system (DBMS), since the construction of the DBMS is the production of software. A new ICT survey will also ask respondents about the purchases of software. Since a DBMS is a software program, the purchase of the DBMS is already recorded as the purchase of and investment in software.

At the moment, we have no good ideas on how to measure the part of the databases that is not included in the software estimates. The best way to get an estimate without double counting between software and databases is to include a question on databases in the two ICT surveys. However, this is not easy, since reducing the administrative burden is an important political issue.

Some more research on the topic is needed, since it is not yet possible to quantify investments in databases. This issue would presumably have a positive impact on GDP/GNI.

13. Other intangible fixed assets

Issue: The 1993 SNA describes this item as consisting of new information, specialized knowledge, etc. not elsewhere classified items, whose use in production is restricted to the units that have established ownership rights over them or to other units licensed by the latter (see the annex of Chapter XIII). No specific examples of items to be included have yet emerged.

Recommendation: The category will be retained but will be renamed as other intellectual property products.

14. Cost of ownership transfer

Issue: The cost of transferring ownership of financial assets is treated as current expenditure while that for non-financial assets is treated as capital expenditure. The initial question was whether costs of ownership transfer on non-financial assets should continue to be treated as capital expenditure or be treated as current expenditure. The review was expanded to cover the treatment of costs of ownership transfer on disposal of an asset, including terminal costs, and the period over which costs of ownership transfer should be written off via consumption of fixed capital.

Recommendation: The costs of ownership transfer of non-financial assets will continue to be treated as fixed capital formation and that for financial assets remains to be treated as current expenditure.

Costs of ownership transfer on acquisition of an asset should be written off over the period the asset is expected to be held by the purchaser rather than over the whole life of the asset. Costs of ownership transfer on the disposal of an asset, and also terminal costs (for example dismantling costs) should also be written off over the period the asset is held but recorded when they are actually incurred. When this recommendation on terminal costs cannot be followed for lack of adequate data, these costs should still be recorded as gross fixed capital formation but written off as consumption of fixed capital in the year of acquisition.

For non-market producers, the changes in the consumption of fixed capital results in changes in value added, non-market production and consumption of own services.
Sources and methods: In the Netherlands, acquisition cost are currently much higher than disposal cost. On the one hand, this is the effect of taxes on the purchase of land and existing buildings and dwellings. On the other hand, there have recently been no disposals of nuclear reactors or other environmentally dangerous buildings. Therefore, the effect of the change in registration of the acquisition cost is expected to be much larger than the effect on the disposal cost.

Currently, transfer of ownership cost on buildings and dwellings are written off over the whole life of the asset (approximately 36 years), whereas the transfer of ownership cost on land is written off in the year it is incurred. For all three types of transfer of ownership cost, the new treatment will result in different estimates of consumption of fixed capital. However, only for non-market producers this change in consumption of fixed capital will lead to a change in GDP. Since Dutch non-market producers by assumption do not purchase existing dwellings, only consumption of fixed capital on transfer of ownership cost on buildings and land may alter GDP.

The new consumption of fixed capital on transfer of ownership cost by non-market producers is estimated with the Perpetual Inventory Method. For estimating the average time that buildings are held, it is important to notice that non-market producers sell few buildings. In 2007, the sales of buildings by non-market producers equals 0.6 percent of their total net capital stock of buildings. This would indicate that the average building is held for 166 years, which is much longer than the average service life of the buildings (approximately 36 years). No reliable data is available on the age of purchased existing buildings. It is assumed that the average purchased existing building has an age of half the average service life of the buildings. This means the average purchased existing building is 18 years old, and will on average be used in service for another 18 years.

Non-market producers (primarily general government) purchase land for two main reasons. The first reason is to use it for their own buildings or for public infrastructure. This land has a service life that might reach infinity. The second reason is to develop the land into residential areas. In the second case, the land is mostly sold to property developers, so that the land is actually owned for only a few years, if not less. No good data is available on these specific uses. Three scenarios are therefore explored. In the first scenario, land is used for 18 years (the same length as buildings). In the second scenario, land is used for 10 years, whereas the third scenario land is used for 3 years.

For transfer of ownership cost on non-residential buildings, the consumption of fixed capital (CFC) is estimated at 19 mln. euro, whereas the CFC for transfer of ownership cost on land is 264 mln. euro (scenario 1), 338 mln. euro (scenario 2) or 340 mln. euro (scenario 3). The total estimated consumption of fixed capital lies therefore between 283 and 358 mln. euro. With the current method, non-market CFC on transfer of ownership cost is 362 mln. euro. Therefore, the effect of the new method on non-market CFC and thus on GDP/GNI lies between -79 and – 4 mln. euro.

15. Cost of capital services

Issue: Capital services provided by non-financial assets to the production process are not explicitly defined by the 1993 SNA. The OECD manual Measuring Capital defines capital inputs as the actual or estimated pure economic rent payable; that is, by the sum of consumption of fixed capital, expected holding gains/losses and the capital, or interest, costs. The rental, paid by the user of a rented non-financial asset to the owner, covers both the costs incurred by the owner in providing the service and the capital services rendered by the asset to the owner. For non-financial assets used by the owner, capital services appear implicitly as part of the gross operating surplus. How should the concept of capital services be articulated in the SNA?

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3 This is coincidentally the same service life as transfer of ownership cost on dwellings, on which data is available.
Recommendation: Capital services for assets used in market production are implicitly included within the 1993 SNA but are not separately identified. Given the importance of identifying them for productivity measurement and other analysis, a new chapter has been added to the 2008 SNA explaining the role and appearance of capital services in the system and stressing the desirability of calculating capital services, capital stock and consumption of fixed capital in an integrated and consistent manner (see Chapter 20: Capital services and the national accounts).

No changes are made to standard entries in the accounts to show capital services but an explanation is provided of how optional, supplementary items or tables could be derived and presented.

16. Government and non-market producers: cost of capital of own assets

Issue: When summing costs to measure non-market output, the 1993 SNA recommends that the value of the services provided by a producers own non-financial assets should be measured as consumption of fixed capital. This means that neither a return on capital to these assets nor, equivalently, an opportunity cost of capital is recognized. This leads to an inconsistency with the rental that would have to be paid if the assets were rented. Should the SNA recommendation be changed and the cost of consumption of fixed capital be replaced with capital services (consumption of fixed capital, expected holding gains/losses and the capital or interest costs)?

Recommendation: After extensive discussion, it was concluded that a return to fixed capital owned and used by non-market producers should not be included in the estimation of the output of those producers in addition to estimates of consumption of fixed capital. So the 2008 SNA (as well as the revised ESA) has not been changed on this issue.

17. Mineral exploration

Issue: Expenditures on mineral exploration are classified in the 1993 SNA as gross fixed capital formation. The rationale is that mineral exploration creates a stock of knowledge about the reserves that is used as input in future production activities. The question has been raised as to whether this knowledge should be seen as independent of the stock of economically exploitable reserves or whether this leads to double accounting when both discovered stocks of resources and stock of exploration are capitalized.

Recommendation: The 2008 SNA continues to make a distinction between the act of exploring for mineral deposits (treated as a produced asset) and the mineral deposits themselves (treated as non-produced assets). The terminology for exploration has been changed to mineral exploration and evaluation to match the term used in the International Accounting Standards and the definition of the terms will also be brought into line with the IASB definition.

Besides some clarification with respect to valuation of mineral exploration, the 2008 SNA has not been changed.

18. Right to use/exploit non-produced resources, between residents and non-residents

Issue: Except for land, transactions between residents and non-residents relating to the right to use or exploit non-produced resources have not been fully elaborated in the 1993 SNA. For land, a notional resident unit is created that is deemed to purchase the land while the non-resident is deemed to purchase a financial asset (equity) of the notional unit. Should the treatment of land be extended to other non-produced resources such as water, fish, etc. or should there be alternative treatments?

National resident units are to be created when a non-resident unit:
- is the legal owner of land,
- has a financial lease on a building or other immovable structure
- has a licence to extract natural resources over a number of years.

It is probable that the holder of a licence to use the radio spectrum of a country is resident except for geographically small countries where cover is provided by facilities in neighbouring countries. Extraction of static or land-based natural resources on a short-term basis does not lead to the creation of a notional unit. In these cases, a fee for one-time extraction represents the sale of an asset. Illegal extraction should be recorded as an uncompensated seizure. A fishing vessel becomes resident only if the operator establishes a base in the country in question, otherwise the residence of the vessel remains that of the operator, regardless of the area in which it is fishing. In principle, illegal fishing should be recorded as uncompensated seizure.

The creation of notional units may potentially affect GNI as, in the case of licences to extract natural resources, the rent is paid by a (notional) resident unit rather than a non-resident. The same applies to the financial lease on buildings, where interest is paid by a (notional) resident unit rather than a non-resident. However, in the Netherlands, licences to extract/use natural resources, in our case subsoil assets and radio spectrum, are all issued to resident units (although sometimes foreign owned). This issue therefore does not affect GNI.

19. **Extension of the assets boundary and government gross capital formation to include expenditures on weapon systems**

Issue: The 1993 SNA divides military acquisitions into offensive weapons and their means of delivery, and all other. The former are excluded from capital formation regardless of their life length. This treatment implies that defense is not a service provided by government using military hardware as associated assets. Further, weapons that have already been expensed can actually be taken out of stock for use or for exports and would have to be balanced by a negative component in government final consumption. Should the line between gross capital formation and intermediate consumption be drawn differently?

The 2008 SNA recommends that all expenditure by the military that meets the definition of being used in production over a period in excess of one year is to be treated as capital formation, regardless of the nature of the expenditure or the purpose intended for it. All equipment is to be treated as fixed capital formation except for consumables, which is treated as inventories. Separate items will identify weapons systems within fixed capital formation and military inventories apart from other inventories.

Expenditures on weapon systems are to be reclassified from government final consumption expenditure to government gross fixed capital formation. This will increase the fixed assets (capital stock), which results in an increase of consumption of fixed capital for the government sector. This additional consumption of fixed capital increases GDP/GNI. Furthermore, consumables like ammunition are now treated as inventories. The extension of the asset boundary therefore also affects the changes in inventories.

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4 The expected change in inventories will on average be (close to) zero. A positive change in inventories in one year will often lead to a negative change in inventories in the next. As a long term trend, one would expect the military inventories to be a more or less fixed percentage of the intermediate consumption of these military goods. With slowly increasing defence expenses, one would therefore on average expect very small increases in inventories. If we assume that the changes in military inventories are between -15 and 15 percent of the (average) consumption of military goods, this would lead to a change in military inventories between -10 and 10 mln. euro.
Sources and methods: Time series of expenditures on weapon systems by the government sector are included in the time series of gross fixed capital formation. Together with an estimation of the service lives this serves as an input for the Perpetual Inventory Method (PIM). With the PIM, the capital stock and consumption of fixed capital are calculated.

In the expenditures on weapon systems we distinguish five categories: 1) Weapons and tanks, 2) Transmitting sets, measuring equipment, navigation systems etc., 3) Cars and armoured cars, 4) Warships, and 5) Aeroplanes.

At the moment, expenditures on weapon systems are only available from 2001 onwards. More extensive time series for expenditures on weapon systems will be constructed in the next few years. For now, complete time series for expenditures on weapon systems have been composed with the assumption that the growth rate of weapon systems equals the growth rate of other GFCF in the industry defence activities.

In addition to these time series, an estimation of the service lives had to be made for the different asset categories. Service lives are under investigation. Since reliable estimates are not yet available, a range of service lives has been chosen for each asset category to achieve an upper- and lower limit for consumption of fixed capital. For weapons and tanks, the service life is set between 15 and 30 years. For transmitting sets, measuring equipment, navigation systems etc., the range is between 5 and 20 years. For cars and armoured cars, the service life is set between 5 and 15 years. Warships and aeroplanes received service lives between 20 and 35 years.

The resulting CFC, and the total effect on GDP/GNI, is between 725 mln. euro (with low service lives) and 826 mln. euro (with high service lives).

20. Land improvements

Issue: The 1993 SNA records improvements to land as gross fixed capital formation, but in the balance sheet such improvements are included with land itself (a non-produced asset). Should land be split into two, with one part recorded as a fixed asset and the other part recorded as a non-produced asset? If so, how should the separation be made? One option is to distinguish between land that is in, or nearly in, its natural state as a non-produced asset and the remainder as a fixed asset. Another option is to separate land from the improvements made to it, and record the former as a non-produced asset and the latter as a fixed asset.

Recommendation: In future land improvements will be shown not only as gross fixed capital formation but as a produced asset distinct from natural land. Costs of ownership transfer on land should be treated as fixed assets and included with land improvements. The total value of a plot of land is to be considered as the sum of the land improvements on the plot (if any) plus the value of the plot in its unimproved state. The latter is described simply as land.

This issue encompasses only a change in registration whereby land and land improvements are separately classified. There is no change in either gross fixed capital formation or consumption of fixed capital. The effect on GDP/GNI is therefore zero.

21. Contracts, leases and licences

Issue: The 1993 SNA refers to contracts, leases and licences in a number of contexts but there is no overview that sets out the principles of the appropriate treatment of all such arrangements. Further, clarification is desirable concerning several specific points:
1. **the definition and treatment of operating and financial leases on fixed assets,**

2. **when legal constructs should be recognized as assets,**

3. **whether tradable government permits should be treated as assets,**

4. **can sub-contracting lead to the creation of an asset,**

5. **can a difference between a contract price and the corresponding prevailing price affect the treatment of existing leases.**

Extended discussion on the five points listed in the issue description led to the following recommendations:

1. The definition of operating and financial leases will be clarified. In particular it will be clear that a lease may be a financial lease even if it is not for the whole of the life on a fixed asset. A new form of lease, a resource lease, will be introduced to cope with the case where all the benefits from using a natural resource in production fall to the lessee but the resource remains on the balance sheet of the legal owner. This is a clarification rather than a change. The resource lease is a specification of an operating lease.

2 and 4. Most contracts do not represent assets but two cases exist when they may. The first case applies to contracts where one party agrees to provide goods or services to the second party in the future at a stated price or to permit the second party to use non-financial assets belonging to the first party on agreed terms. A contract may represent an asset when a price difference appears between the price specified in the contract and the market price for a comparable product or rental of a non-financial asset, and the second party to the contract is legally and practically able to take advantage of this difference by transferring the delivery of the product or the rental to a third party. The second case is when contracts (permits) that allow the second party to undertake some activity for which permission is a necessary requirement allow that party to obtain some degree of monopoly profits in the exercise of the sanctioned activity.

This is also a clarification rather than a change. The value of the contracts remain to be recorded under non-produced assets (AN.22 Contracts, leases and licences) and sales and purchases of these contracts remain to be classified under Acquisitions less disposals of non-produced assets (NP).

3. Government permits to undertake specific activities, even when these are limited in number and may be competed for by auction or similar competitive application, are to be recorded as taxes. If the permit covers multiple periods, the tax should be recorded on an accrual basis if government has an obligation to refund the value of the unused part in the case of a revocation or surrender. If government has no such obligation, the whole of the payment is recorded as a tax when paid. In addition the acquisition of an asset is recorded. As with transferable contracts just described, whether or not an asset is recorded in respect of a permit, if the initial holder of the permit can legally and practically sell the permit higher than its current value, this is also regarded as an asset.

This is a clarification rather than a change.

5. The value of an asset is to be determined taking account of the returns to the asset payable under the terms of the lease and not on the basis of returns that might be received in the absence of such a lease.
Discussion also clarified that when the benefits of a natural resource are shared between the lessee and the lessor, a financial lease should be construed to exist between the two parties.

22. **Goodwill and other non-produced assets**

**Issue:** The 1993 SNA records goodwill (as purchased goodwill) only when an enterprise is sold, and it treats purchased goodwill for corporations and unincorporated enterprises differently. Should goodwill continue to be recognized only when purchased or should internally generated goodwill be recognized? Should purchased goodwill be treated the same way for corporate and unincorporated enterprises? Should the balance sheet recognize assets such as brand names, trademarks, franchises, etc.

**Recommendation:** Because it is usually not possible to separate goodwill from other entities such as customer lists, franchise arrangements, mastheads, logos etc. that add value to an enterprise, the category of purchased goodwill will be changed to purchased goodwill and marketing assets. Entries will continue to be recorded only when the value of such entities is evidenced by a sale but the possibility of a marketing asset being sold independently of the sale of the entire enterprise is noted.

For all enterprises, whether incorporated or unincorporated, the value of purchased goodwill and marketing assets will be valued as the takeover value of the enterprise less the value of other assets and liabilities identified in the SNA for the enterprise. This represents a change for incorporated enterprises and makes their treatment consistent with unincorporated enterprises (in the 1993 SNA, the sale/purchase of an incorporated enterprise or a quasi-corporation, purchased goodwill represents the excess of the purchase price of its shares and other equity over their value just prior to the sale/purchase).

Although some of the value of purchased goodwill and marketing assets is due to productive activity, they will continue to appear under the heading of non-produced assets, though at a higher level in the hierarchy than previously, specifically at the same level as natural assets, and contracts, leases and licences.

The change in the valuation of purchased goodwill of incorporated enterprises may affect the value of the transactions in non-produced assets (NP. 3 Purchases less sales of goodwill and marketing assets). However, as purchased goodwill and marketing assets remain in the category non-produced assets, there will be no impact on GDP/GNI.

23. **Obsolescence and depreciation**

**Issue:** Consumption of fixed capital is defined in the 1993 SNA in general terms as the decline, during the course of the accounting period, in the current value of the stock of fixed assets owned and used by a producer as a result of physical deterioration, normal obsolescence or normal accidental damage. This decline is expressed in the average prices of the period, but the 1993 SNA does not give guidance about whether the prices to be used should relate to the general price level or whether they should be asset specific.

**Recommendation:** In the SNA 2008, it is explained that the prices in question should be the prices of an asset of constant quality.

**Sources and methods:** This change consists only of a clarification of the SNA. In the Netherlands, consumption of fixed capital is already estimated in prices of an asset of constant quality. Therefore, this issue will not lead to any change in the Dutch national accounts (no effect on GDP).
24. **Public-private partnerships (PPPs) including BOOT-schemes**

Issue: Public-Private Partnerships (PPPs) are complex legal arrangements designed to share the control and the risks and rewards of a set of fixed assets between a private enterprise and a public unit, normally a unit of the general government sector. In most PPPs, the assets are legally owned and used by the private enterprise to produce a specified category of services for several years, and then the government gains operational control and legal ownership of the assets, often without payment. The 1993 SNA treatment of operating and financial leases are not sufficient to derive an appropriate accounting treatment for PPPs and there are no other guidelines given about PPPs. There are two major issues to be resolved. The first is to decide whether the private enterprise or the government is the economic owner of the fixed assets. The second is to decide the appropriate recording for transactions between the private enterprise and the public unit during the period covered by the PPP-arrangement.

The treatment of PPPs is extensively discussed in Chapter 20 Government accounts of the revised ESA, but the guidelines have been adopted already in the current ESA. There is no effect on GDP/GNI.

The text on PPP in the revised ESA is still under discussion. The draft minutes of the ESA Review Group 19-20 November 2009 states the following: 
*It was considered that the notion of “control” in the context of PPP needed clarifying and the section on PPP in chapter 20 needed redrafting. It was also suggested to replace in the draft chapter “control” by elements helping to assess the "risks and rewards" criteria. These aspects will be discussed in the December 2009 meeting of the FAWG. The Members of the ESA 95 Review Group will be consulted on the results of this discussion.*

25a **Ancillary units**

Issue: The 1993 SNA specifies that units conducting only a specified list of activities designated as ancillary should not be treated as separate units but their costs should be consolidated with the units they serve. This means that when accounts for a region are compiled, head offices and other ancillary units located there are excluded if the units they serve are located outside the region. This results in a difference between ancillary units located abroad, which are treated as separate units, and those that are resident but distant from their related enterprises. Should the principle of not treating ancillary units as separate units be changed and what are the consequences throughout the accounts?

Recommendation: The 2008 SNA recommends that if an establishment undertaking purely ancillary activities is statistically observable, in that separate accounts for the production it undertakes are readily available, or if it is in a geographically different location from the establishments it serves, it may be desirable and useful to consider it as a separate unit and allocate it to the industrial classification corresponding to its principal activity. However, it is recommended that statisticians do not make extraordinary efforts to create separate establishments for these activities artificially in the absence of suitable basic data being available.

Furthermore, like the 1993 SNA, an institutional unit will continue to be separately identified when it is non-resident.

This issue may have an effect on the industrial classification of a unit but it does not affect GDP/GNI.

25b. **Holding companies, special purpose entities, trusts**

Issue: As part of the innovation in financial markets and asset management over the last decade, several forms of separate entities have come into existence that only hold assets or liabilities but do not engage in production. Such entities are separate new or existing legal structures assigned for specific
purposes such as specialized portfolio management of assets and debts, restructuring agencies, special purpose entities, shell companies, limited liability partnerships or trusts. Should these entities be treated as ancillary and merged with their related enterprises, or should they be treated as separate units? If they are separate units, to which sector should they be allocated?

**Holding companies:** Holding companies are not ancillary units; the functions they perform to control and direct subsidiary companies are not ancillary activities. The 1993 SNA classifies them as non-financial or financial corporations depending on the classification of their subsidiary companies. In future, holding companies will all be treated as other financial institutions.

**Special Purpose Entities (SPEs):** Resident SPEs will not be treated as separate institutional units unless they satisfy the criteria for qualifying as institutional units. Their output should be valued at cost if no market valuation is available. Non-resident SPEs are always to be classified as separate institutional units. SPEs are to be classified by sector and industry according to the principal activity of the SPE.

**Investment funds:** Investment funds that are created as legal entities, even without employment, should be treated as institutional units. Their output should be valued at cost if no market valuation of their output is available. These units are to be classified as other financial institutions.

**Restructuring agencies:** If the restructuring agency acts only to implement pre-specified government policy and bears no risk in the transformation of financial instruments connected with the restructuring, the agency is regarded as a non-market unit and part of the general government sector. If the restructuring agency puts itself at risk in the transformation of the assets and liabilities of the units in difficulty and if it can determine the costs it can charge for the restructuring activity, it is treated as a financial corporation. Whether it is publicly controlled or a private financial corporation is determined using the usual criteria. When government uses a restructuring unit to channel funds to a unit in financial difficulties and the restructuring unit derives its main resources from activities other than acting as an agent of government, these funds should be shown as payable and receivable by the government and unit concerned directly and not routed via the restructuring agency.

The reclassification of all holding companies to S.127 Captive financial institutions does not affect GDP/GNI.

Non-resident SPEs have been recorded in the Dutch National accounts since the last benchmark revision of 2001. Currently, these non-resident SPE’s are all classified in the subsector “Other financial intermediaries”, but some of these SPE’s may have principal activities that would justify a reclassification to the non-financial corporate sector. This issue will be taken up in the coming benchmark revision and may lead to a reclassification of these units. However, this will not affect GDP/GNI.

The recommendations concerning investment funds are already applied in the Netherlands.

In the Netherlands, any restructuring agencies are part of the central government.

**25c. Treatment of multi-territory enterprises**

**Issue:** The 1993 SNA follows the Balance of Payments Manual in allowing for a single enterprise run as a seamless entity with substantial operations in two or more economic territories to be regarded as having a centre of economic interest in each of the countries where it is recognized by the tax and licensing authorities, but only when the activity is operating mobile equipment such as ships, aircraft and railways. In these cases, the possibility is for all the enterprises transactions to be allocated to the countries of registry in proportion to the financial capital that the countries have contributed or their share of equity in the enterprise. Should this treatment be extended to other activities, for example hydro-electric schemes on
border rivers and pipelines? Should reference be made to joint sovereignty zones and zones of joint jurisdiction?

Recommendation: The treatment of multi-territory enterprises will be extended to cover activities such as hydro-electric schemes on border rivers and pipelines. The transactions of multi-territory enterprises operating in zones of joint sovereignty or joint jurisdiction will be prorated to the territories concerned using criteria to be specified in the BPM.

This issue may have an impact on GDP as production, exports and imports may be changed but not on GNI because the changes are counterbalanced in the primary incomes. The impact on GDP has not been quantified yet, but is presumably very small.

25d. Non-resident unincorporated units

Issue: The Balance of Payments Manual (BPM) indicates that establishments of enterprises located in a country different from the country of residence of the parent should be treated as notional units, resident in the country where located under certain conditions. The SNA discusses non-resident unincorporated enterprises rather than establishments. Should the SNA and BPM be more closely aligned?

The 1993 SNA simply states that an unincorporated enterprise owned by a non-resident institutional unit should be treated as a notional resident unit in the country where it is located. It is agreed that physical presence is not necessary; units involved in financial intermediation and operating leasing are examples where physical presence is not essential. The requirement to have a full set of accounts is too restrictive; if a unit engages in production it should be treated as a notional resident unit in the host country. Being subject to the income tax laws of the host country rather than necessarily paying income tax is a preferred criterion. The list of criteria should be taken to be indicative and a unit may be treated as a notional resident unit even if not all criteria are met.

This is a clarification rather than a change. As unincorporated units owned by a non-resident institutional unit are already accounted for in the Dutch National accounts, there will be no change whatsoever.

25e. Non-resident SPEs controlled by government

Issue: Is special treatment required for non-resident units established abroad by government for fiscal purposes?

The term securitization vehicle is reserved for units that only undertake securitization of assets. These are to be classified as other financial institutions. Securitization based on a future flow of revenue is not the sale of an asset but borrowing. If a non-resident SPE borrows, the economic substance is best reflected by imputing a borrowing by the resident parent from the SPE at the same time as the SPE incurs a liability to a foreign creditor. Although this principle has general validity, it will be applied only for non-resident SPEs created by government for fiscal purposes.

This issue relates to financial flows and stocks. It does not affect GDP/GNI. This type of financial construction has not yet occurred in the Netherlands.

26. Cultivated assets

Issue: The definition of cultivated assets has been tightened as follows: “cultivated assets cover livestock for breeding, dairy, draught, etc. and vineyards, orchards and other trees yielding repeat
products whose natural growth and regeneration are under the direct control, responsibility and management of institutional units”. The words in italics replace the words “that are” in the 1993 SNA.

Sources and method: The Netherlands is a densely populated country. Apart from a few wild animals there is no flora or fauna whose natural growth and regeneration is not under the direct control, responsibility and management of some institutional unit. The fauna whose growth and regeneration is not under direct control is either not controlled at all (fishes in lakes and the sea) or does not yield repeat products (birds, boars). The only yield that fauna whose growth and regeneration is not under direct control might deliver is the value of the hunting licences issued. In the current national accounts the value of this type of fauna is already recorded under non-produced assets. There is no effect on GDP.

27. Classification and terminology of assets

Issue: Should the classification of non-financial assets be revised in light of the review of a wide range of non-financial assets? Is the tangible/intangible dichotomy still of primary importance in the classification?

The asset classification and terminology has been adjusted in the 2008 SNA. This change has no effect on GDP/GNI.

28. Amortization of non-produced assets

Issue: The final report of the ISWGNA in 2001 on mobile phone licenses includes a brief discussion of the issue of the amortization of intangible non-produced assets. Can a way be found to show the impact on net worth of the decline in the value of non-produced assets due to production via transactions rather than as other changes in the volume of assets?

Recommendation: Despite the theoretical attractions of showing the decline in value of non-produced assets as a cost of production, as yet no satisfactory method of doing so has been agreed. As a result, the present treatment of showing the decline in the value of non-produced assets in the other changes in assets account will be maintained.

29. Assets boundary for non-produced intangible assets

Issue: The category other non-produced intangible assets in the 1993 SNA was a placeholder intended to accommodate any new assets of similar type to those in the general category which did not fall in the more specific headings. However, this heading has been used in some instances to cover the securitization of future receipts of government. Should the heading continue to be included in the classification hierarchy and if so, what sort of items should be included in it?

Recommendation: The use of SPEs controlled by government as securitisation vehicles was covered as part of the discussion of issue 25 concerning units. It was agreed that a future stream of revenue is not regarded in the System as an asset. Securitisation based on such a stream should therefore be recorded as borrowing. The category “other intangible non-produced assets” has been dropped in the 2008 SNA.

30. Definition of economic assets

Issue: The SNA should provide a clear definition of what constitutes an asset that is consistent with where the asset boundary falls in respect of currently known entities, as well as providing guidance for determining whether entities that appear in the future fall within the asset boundary. It should be accompanied by guidance on how assets should be valued. Does the definition in the 1993 SNA need further elaboration?
Recommendation: Expanded text building on the existing definition of an asset will cover issues such as the responsibility for risk in relation to determining ownership, demonstrable value and contingent obligations. This is a clarification rather than a change.

31. Water as an asset

Issue: When water is no longer free, how should the charge for it be treated? Although a large share of the charges represents distribution costs, is there an element that should be treated as giving rise to rent in a similar way to land or mineral resources? How should the use of water as a sink for waste be treated?

Recommendation: The 2008 SNA gives the following definition: “water resources consist of surface and groundwater resources used for extraction to the extent that their scarcity leads to the enforcement of ownership or use rights, market valuation and some measure of economic control. If it is not possible to separate the value of surface water from the associated land, the whole should be allocated to the category representing the greater part of the total value.”

This is a clarification rather than a change.

32. Informal sector

Issue: An extract from the resolution on statistics of employment in the informal sector adopted by the Fifteenth International Conference of Labour Statisticians (January 1993) is reproduced as an annex to chapter IV in the 1993 SNA. The resolution, among other things, provides an international statistical definition of the informal sector. However, the SNA does not amplify on the definition or provide guidance on its application in a national accounting context. Given that the informal sector accounts for a substantial portion of production in many countries, such guidance has often been requested.

In Chapter 25 of the 2008 SNA “Informal aspect of the economy”, issues regarding the informal sector are extensively discussed. This is a clarification rather than a change.

33. Illegal activities

Issue: Since the publication of the 1993 SNA, the handbook Measuring the Non-observed Economy has considered in detail and provided recommendations on the recording of illegal activities such as bribery, extortion and money laundering in addition to theft and fencing (handling of stolen goods). The review should consider to what extent the recommendations included in the Handbook on the recording of production and redistribution of income from such activities should be included in the updated SNA.

Recommendation: The 1993 SNA makes clear that the fact that an activity is illegal is not in itself a reason to exclude it from the SNA accounts. The publication of the Non-observed Economy handbook provides welcome advice about how in practice reasonable estimates might be made for some of the more important illegal activities. The 2008 SNA refers to this handbook and quotes some examples. However, the recommendations in the handbook that theft and bribery should be included in output are felt to be inconsistent with the SNA production boundary and these activities will not be treated as production. Pilfering from current production is also not recorded as output.

So the recommendations concerning illegal activities have hardly changed and are merely clarifications. In the Netherlands, these activities are not yet included in the National accounts figures. Nevertheless, some provisional estimations are available yet.

Sources and methods: According to SNA/ESA, both illegal and underground activities should be accounted for. The borderline between underground and illegal activities may not always be completely
clear. However, since both should be included in the accounts, it is not necessary to delineate the exact borderline between the two.

Statistics Netherlands has made several estimates for the illegal economy over the years. Until now these estimates were not included in the national accounts figures, in line with the current practice in Europe. As part of the last benchmark revision estimates for the year 2001 were made on the following illegal/underground activities:

- Production of and trade in heroin, cocaine XTC and cannabis.
- Prostitution
- Illegal activities in the temporary employment sector
- Illegal gambling
- Fencing
- Illegal copying

The estimates are not based on official statistics and most data sources are found outside Statistics Netherlands. Sources used are for example reports issued by the Ministry of Justice and the Ministry of Health, welfare and Sport. A more detailed description of the sources used is found in the two reports mentioned in note 5. Here, only a brief enumeration of the sources for the estimation of the different illegal activities is given.

**Heroin, cocaine, xtc and cannabis:** A number of sources is used such as the number of addicts, the amount of drug confiscated and price information on drugs available by internet.

**Prostitution:** The estimates on prostitution services is based on price information of prostitutes’ services, the average number of services rendered by prostitutes and the number of prostitutes working in the Netherlands.

**Illegal activities in the temporary employment sector:** Estimates are based on research from a private research institute in the Netherlands.

**Illegal gambling:** Estimates are based on a report issued by the Netherlands Gaming Control Board.

**Fencing:** The number of reported criminal offences is used combined with assumptions made on the sale price of stolen goods.

**Illegal copying:** Estimates are merely based on assumption of sales, intermediate and final consumption expenditure on illegal copies.

The data related to illegal activities cannot simply be added to the supply and use tables as it is very likely that part of the illegal economy is already included in the regular estimates. For example, it is very likely that the electricity used in growing cannabis is already accounted for in the use table, either as intermediate consumption or as final consumption of households. To prevent this kind of double counting, for each of the illegal activities estimates have been made of the part that is already included.

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5 The first estimates for the year 2001 were made by Smekens M. and Verbruggen, M. “The illegal economy in the Netherlands”, 2005. The results of this study were used in De Heij, R. “Linking the illegal economy to national accounts”, 2007. In this study illegal activities were incorporated in a detailed supply and use table and the problem of double counting was tackled.
Explicit introduction of illegal activities in the supply and use table of 2001 means additional output of approximately 3200 mln. euro (corrected for implicitly included transactions). Additional intermediate consumption is estimated at 215 mln. euro. This means that inclusion of illegal activities raises GDP by around 3000 mln. euro for the year 2001. The overview below shows the contribution of each category of illegal activities to GDP as part of an (aggregated) SUT for 2001. For the year 2007, the contribution of illegal activities to GDP is about 3800 mln. euro (or approximately 0.66% of GDP).

Overview: An aggregated SUT

Supply table, 2001

<table>
<thead>
<tr>
<th>Industry</th>
<th>Illegal production implicitly included in the supply table</th>
<th>Heroin and cocaine</th>
<th>XTC-production</th>
<th>Cannabis / “Coffee shops”</th>
<th>Prostitution/services</th>
<th>Gambling</th>
<th>Fencing</th>
<th>Illegal copying</th>
<th>Domestic production (bp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods and services</td>
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<td></td>
<td></td>
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<tr>
<td>Regular goods and services</td>
<td>-827</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heroin</td>
<td>0</td>
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<tr>
<td>XTC</td>
<td>360</td>
<td>140</td>
<td>1086</td>
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<td></td>
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<tr>
<td>Cannabis</td>
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<td>Prostitution services</td>
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<td>Services of managers of prostit.</td>
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<td>Illegal temp. empl. services</td>
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<td>Gambling</td>
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<td>Fencing</td>
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<tr>
<td>Illegal copies</td>
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<tr>
<td>Trade margin on illegal goods</td>
<td>870</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total supply of illegal act.</td>
<td>-827</td>
<td>870</td>
<td>360</td>
<td>140</td>
<td>1086</td>
<td>290</td>
<td>330</td>
<td>520</td>
<td>150</td>
</tr>
</tbody>
</table>

Use table, 2001

<table>
<thead>
<tr>
<th>Industry</th>
<th>Illegal consumption implicitly included in the use table</th>
<th>Heroin and cocaine</th>
<th>XTC-production</th>
<th>Cannabis / “Coffee shops”</th>
<th>Prostitution/services</th>
<th>Gambling</th>
<th>Fencing</th>
<th>Illegal copying</th>
<th>Domestic production (bp)</th>
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</thead>
<tbody>
<tr>
<td>Goods and services</td>
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<tr>
<td>Regular goods and services</td>
<td>-799</td>
<td>40</td>
<td>24</td>
<td>119</td>
<td>52</td>
<td>160</td>
<td>30</td>
<td>20</td>
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<tr>
<td>Heroin</td>
<td>0</td>
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<td>XTC</td>
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<td>Cannabis</td>
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<td>Prostitution services</td>
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<td>Gambling</td>
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<td>Fencing</td>
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<td>Illegal copies</td>
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<tr>
<td>Trade margin on illegal goods</td>
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<tr>
<td>Total supply of illegal act.</td>
<td>-279</td>
<td>0</td>
<td>40</td>
<td>70</td>
<td>119</td>
<td>52</td>
<td>160</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Value added (gross, bp)</td>
<td>-548</td>
<td>870</td>
<td>320</td>
<td>70</td>
<td>967</td>
<td>238</td>
<td>170</td>
<td>480</td>
<td>130</td>
</tr>
</tbody>
</table>

6 Recently research has been pursued within Statistics Netherlands to construct time series of illegal activities for the period 1995-2010. First preliminary results show that total value added (not corrected for double counting) created by illegal activities never exceeds 1.0% of GDP in this period.
34. Government transactions with public corporations: earnings from equity investment and capital injections

Issue: The 1993 SNA treatment of withdrawals from quasi-corporations differs from that of payment of dividends from corporations. Dividends are always assumed to be from current earnings, but withdrawals from quasi-corporations may not be. Public corporations are often quasi-corporations and the treatment accorded quasi-corporations allows government to manage the pattern of withdrawals from one year to another for political reasons. Should the SNA be amended to limit this possibility and if so which of two possibilities is recommended? The first option is to bring the treatment for quasi-corporations more into line with that for corporations in respect of large and exceptional payments (like super-dividends) as well as of capital injections made by the government as the owner. The second option would be to adopt an approach for public corporations similar to that for direct investment enterprises and show redistributed earnings (or losses) of public corporations as accruing in the government accounts and then reinvested in (or withdrawn from) the equity of the corporation.

Recommendation: In the 2008 SNA, only regular distributions from the entrepreneurial income of corporations are to be recorded as dividends. Exceptional payments from public corporations as well as quasi-corporations are recorded as withdrawals from equity. And exceptional payments from government to public (quasi-)corporations are recorded as capital transfers. This new guidance represents a change for the SNA, but these recommendations were already adopted in ESA. There is no effect on GDP/GNI.

The option to follow the same principle for public bodies as for non-resident units in recording reinvested earnings exactly matching current entrepreneurial income has not been adopted.

35. Tax revenues, uncollectible taxes and tax credits

(a) Definition and coverage of taxes

Is it necessary to clarify the definition of taxes in the 1993 SNA and the distinction between the payment of taxes and payments for services?

(b) Accrual recording of taxes

The 1993 SNA describes the conceptual basis on which taxes should be assessed as accruing. Some practical flexibility is allowed in order to ensure that uncollectible taxes are not shown as accruing. Should greater precision be given about the degree of flexibility that is acceptable in relation to (i) the time when accrual is deemed to take place and (ii) the amounts to be shown as accruing?

(c) Tax credits

The 1993 SNA does not give guidance on the treatment of tax credits although the Government Finance Statistics Manual does. In order to correct this omission, a choice has to be made between recording these as a reduction in government tax receipts and recording some or all as government expenditure. Which alternative should the SNA adopt?

Definition and coverage of taxes

Taxes are usually described as unrequited because, in most cases, the government provides nothing directly in exchange to the individual unit making the payment or nothing commensurate. However, there are cases where the government provides something to the individual unit against the payment in the form of the direct granting of a permit or authorisation. An issue of concern is how to treat payments to
government for permission to use certain natural assets or to undertake certain activities when the number of permits is limited and the fees are much higher than the administrative cost of issuing the permits.

The outcome of this part of the discussion under Contracts, Leases and Licences was as follows: Government permits to undertake specific activities, even when these are limited in number and may be competed for by auction or similar competitive application, are to be recorded as taxes. If the permit covers multiple periods, the tax should be recorded on an accrual basis if government has an obligation to refund the value of the unused part in the case of a revocation or surrender. If government has no such obligation, the whole of the payment is recorded as a tax when paid. In addition the acquisition of an asset is recorded. As with transferable contracts just described, whether or not an asset is recorded in respect of a permit, if the initial holder of the permit can legally and practically sell the permit than its current value, this is also regarded as an asset.

**Accrual recording of taxes**

In general taxes are to be recorded as accruing when the taxable event to which the tax relates occurs. Some flexibility is allowed in two cases. One of these relates to taxes on income and provides for the time of recording to be when the tax liability is assessed with some measure of certainty. The other refers to taxes arising from activities in the parallel economy when the timing of the taxable event is unlikely to be known. In this case also the time of recording will be the time of assessment.

In assessing the amount of taxes accruing, care must be taken not to include tax unlikely ever to be collected. Three methods of ensuring this is not so are recommended. The first method is the time-adjusted cash basis under which the amounts are initially recorded when paid and then adjusted to the time the liability to pay tax was incurred. The other two methods assess from the outset the amounts likely to be collected. The second method (net recording of taxes) adjusts the initial estimate of tax accruing by a coefficient reflecting the degree of non-collection in the recent past. The third method (gross recording of taxes) records realistic estimates of total taxes accruing but records the difference between the accruals estimate and actual receipts as a capital transfer in favour of the defaulting payers.

**Tax credits**

Some subsidies or social benefits are made available via the tax system in the form of tax credits, and the incidence of linking payment systems with the tax collection system is increasing. Tax credits represent tax relief and so reduce the tax liability of the beneficiary. If the relief is greater than the liability, and the beneficiary actually receives the excess, these are described as payable (sometimes non-wastable) tax credits. It is recommended that the whole amount of the payable tax credit be recorded as government expenditure as well as noting the amount of the payable tax credit drawn back in tax paid. This would then allow comparison to be made with presentations on a net basis, where only the excess of the payable tax credit over the tax liability is shown.

This new guidance represents a clarification in the 2008 SNA, but these recommendations were already adopted in ESA. There is no effect on GDP/GNI.

36. **Public/private/government sectors delineation**

Issue: According to the 1993 SNA, two factors determine whether a corporation or non-profit institution is controlled by government and thus falls into the public sector. One factor is the degree of control exercised by government. Concern has been expressed about the mainly financed phrase cited in respect of non-profit institutions. The determination of control in respect of special purpose vehicles (SPVs), notably created in the context of public private partnerships (PPPs) or securitization, is not always clear cut. The second factor is about economically significant prices. Concern has also been expressed
over possible ambiguity in this concept. Is it possible to give greater content to the description without going so far as to prescribe a fixed proportion of costs to be covered by sales?

To further clarify the delineation between government and private control of units in the economy, the Task Force on the Harmonisation of the Public Sector Accounts has developed extended guidelines to amplify the meaning of control and economically significant prices. For control, a set of eight indicators useful for corporations and a set of five for non-profit institutions are put forward. None of these indicators is determining of control taken in isolation and not all the indicators have to be satisfied but together they give an enhanced view of what is meant by control. There are some general guidelines given on economically significant prices and some more detailed guidance on when a unit supplying products to government should be regarded as a market producer.

A decision tree showing the delineation between the government, public and private sectors has been included in the 2008 SNA.

After discussion, the ESA Review Group agreed that pre-eminence would be given to the qualitative analysis. The threshold of 50% would be kept and used as practical guidance for difficult cases where the qualitative analysis does not make it possible to decide. The different terms used in the 50% test need to be defined precisely. In particular, a clear definition of the net interest charge to be included in the costs for the purpose of the test has to be provided. The last sentence of paragraph 20.33 will be redrafted to indicate that in the long run expenditure should be covered by income. It was also agreed that chapters 20 and 3 would be revised to reflect these conclusions. In particular, the text relating to the qualitative analysis should be further developed; the content of the costs in the quantitative test amended; and consistency between the various chapters ensured.

The above agreement on substance will be reported to the Directors of National Accounts at their next meeting in January 2010. The Financial Accounts Working Group will discuss again the draft chapter 20 with a view to providing further suggestions for improvements in terms of drafting and consistency. Eurostat will produce, in the future, a general guidance note covering the market – non market delineation.

37. Granting and activation of loan guarantees

Issue: Loan guarantees have a significant impact on economic behaviour, especially when issued by government. The 1993 SNA treats guarantees as contingent liabilities and thus has no record of the existence of the guarantee until it is activated. Further, the treatment of flows arising at the activation is not explicit. Should obligations arising from guarantees be recognized when guarantees are granted, particularly regarding those guarantees for which it is possible to make reasonable estimates of expected future claims?

Recommendation: It is proposed that three classes of guarantees be recognized. The first of these is composed of those guarantees provided by means of a financial derivative, such as a credit default swap. These derivatives are actively traded on financial market. The derivative is based on the risk of default of a reference instrument and so not actually linked to an individual loan or bond. Incorporating the transactions connected with establishing this sort of financial derivative presents no new features for the SNA.

The second class of guarantees, standardized guarantees, is composed of the sorts of guarantees that are issued in large numbers, usually for fairly small amounts, along identical lines. There are three parties involved in these arrangements; the borrower, the lender and the guarantor. Either the borrower or lender may contract with the guarantor to repay the lender if the borrower defaults. The classic examples are export credit guarantees and student loan guarantees. Here, although it is not possible to establish the
likelihood of any one loan defaulting, it is not only possible but standard practice to estimate how many out of a batch of similar loans will default. If the guarantor is working on purely commercial lines, he will expect all the fees paid, plus the property income earned on the fees, to cover the expected defaults. This is exactly the same paradigm as operates for non-life insurance and it is proposed that a similar treatment be adopted for these guarantees, to be described as standardized guarantees. This will involve including transactions and balance sheet items parallel to those for non-life insurance, including the generation of output and payments of a fee supplement and a service fee by those taking out the guarantees. If the guarantor is part of general government and deliberately sets the fees below the level of expected defaults, a subsidy is to be imputed to the guarantee holders.

The third class of guarantees, described as one-off guarantees, consists of those where the loan or the security is so particular that it is not possible for the degree of risk associated with the loan to be calculated with any degree of accuracy. In most cases, the granting of a one-off guarantee is considered a contingency and is not recorded as a financial asset/liability. (As an exception, one-off guarantees granted by governments to corporations in certain well-defined financially distressed situations and with a very high likelihood to be called might be treated as if these guarantees were called at inception.) Otherwise, no change is proposed for recording these in the accounts. If a fee is charged, this is recorded as a payment of a service at the time of payment. If a call is made under a guarantee, a capital transfer is recorded from the guarantor to the guarantee holder at the time of default or, in cases where the guarantor obtains an effective claim on the guarantee holder, a financial transaction (including increases in equity participation).

The minutes of the ESA Review Group of 19-20 November state the following on guarantees and debt assumptions: “The draft new ESA (paragraph 20.261) introduces the recording of a debt assumption when series of partial calls of guarantees are observed, or anticipated. The fact that there are series of calls should be examined as an indication of debt assumption. Full disclosure of information should be required at least in the form of memorandum items.

Also, in periods of distressed situations (new ESA paragraph 20.259), one-off guarantees implying a very high likelihood to be called would be treated as if these guarantees were called at inception. SNA (paragraph 17.212) also creates an exceptional treatment in the case of financial distress. However, several delegates considered that ESA should define rules that will remain consistent through time, and it was suggested that ESA paragraph 20.259 would be deleted or rewritten. Memorandum items could be a possibility.”

Since there is not yet a final recommendation on this issue, its impact cannot be assessed completely. In case of standardized guarantees it may be possible that subsidies have to be imputed from the general government to the beneficiaries.

38a. **Change of economic ownership (as term)**

**Issue:** The principle of ownership is central to the determination of the timing of recording of transactions in financial and non-financial assets (including transaction in goods). However, the 1993 SNA does not explicitly define ownership. Does the term economic ownership better reflect the underlying economic reality by reflecting risks and rewards of ownership? Should the SNA draw a distinction between legal, physical, and economic ownership?

**Recommendation:** The updated SNA is to give guidance on the difference between legal ownership and economic ownership and recommend that assets be recorded on the balance sheets of the economic rather than the legal owner. For a non-financial asset, the user and not the legal owner may assume economic ownership if the legal owner agrees that the user is entitled to the benefits deriving from using
the asset in production in return for assuming the risks involved. Similarly when products change hands, it is the unit who assumes the risks in the case of destruction, theft, etc. who is the economic owner. Ownership is also associated with assuming risk in the case of financial assets. Physical custody alone is seldom if ever a sufficient criterion for attributing ownership in the SNA. When the time of recording depends on change of ownership, it is in general the change of economic ownership that is intended but this is to be clarified in a case-by-case basis.

This is a mere clarification in the SNA and does not lead to changes in GDP/GNI.

38b. Assets, liabilities and personal effects of individuals changing residence (migrant transfers)

Issue: The flows of goods and changes in the financial account arising from a change in residence of individuals are treated as imputed transactions in the Balance of Payments Manual. These flows are offset in the capital account by capital transfers called migrants transfers. The 1993 SNA is not explicit on the treatment of these flows. Since no change in ownership occur. Should the changes in financial claims and liabilities due to change in residence of individuals be treated as reclassification in other changes in volume account?

The updates to the SNA and to the BPM will confirm that when an individual changes his country of residence, there is no change of ownership of the non-financial assets, and financial assets and liabilities owned by that person. All that is required is a reclassification of the appropriate country of residence of the (economic) owner of these items. As such, it is more appropriate that the changes be recorded in the other changes in the volume of assets account than as capital transfers. Consumer durables appear only as a memorandum item in the balance sheets. They may feature as a memorandum item in the other change in volume of assets account but should not appear as trade in goods.

GDP/GNI is not affected by this change in registration.

39a. Meaning of national economy

Issue: In the 1993 SNA, the concept of the national economy is discussed in terms of economic territory of a country for which two contradicting criteria are used: administered by a government and free circulation of persons, goods and capital. The criteria need to be clarified. Clarification is also needed between domestic and national economy.

Greater precision has been given to the definition of national economy and the use of the word domestic, especially given the time-sanctioned use of gross domestic product as a measure of activity within the national economy.

GDP/GNI is not affected by this clarification.

39b. Predominant center of economic interest (as term)

Issue: With globalization, there are an increasing number of institutional units with connections to two or more economies. The concept of predominant center of economic interest has been put forward to address this issue.

In order to associate only one economy with a unit (or individual) that has connections with two or more economies, it is agreed to identify the most significant of these connections and to refer to this as the country where there is a predominant centre of economic interest.

GDP/GNI is not affected by this clarification.
39c. Residence of entities with little or no physical presence

Issue: For enterprises and other entities with little or no physical presence, the criteria of production and location that are used in the 1993 SNA to help determine residence are not very relevant. Should the jurisdiction that allows the creation of and regulates the entity be considered as the determining the entity's predominant centre of interest?

Recommendation: Consistent with the recommendations under issue 25d, it is accepted that a unit may be established in an economy even though it may have little if any physical presence.

Statistics Netherlands has already included these units already in the 2001 benchmark revision of the National accounts.

GDP/GNI is not affected by this clarification.

39d. Non-permanent workers

Issue: The number of non-permanent workers with connections to two or more territories has grown substantially in recent years. Would it be useful to prepare supplementary presentations for countries where the number of non-permanent resident persons is significant, bringing together relevant components of contract services, compensation of employees, workers remittances and migrants transfers with the numbers of short-term non-resident workers? Can the residence concept be more closely harmonized with demographic, tourism, and migration statistics and any remaining differences spelt out?

There is growing analytical interest in the number of people resident in one economy and working in another or having strong association with a country other than that of their current residence. In order to meet this interest, a more detailed classification of D.75 Miscellaneous current transfers has been introduced, distinguishing D.751 Current transfers to NPISHs, D.752 Current transfers between resident and non-resident households and D.753 Other miscellaneous current transfers.

Two other cases relating to residence have been clarified. One of these was to confirm that the present exceptions to the residence of individuals in the case of ships crews, students and patients. Students and patients remain residents of their home country regardless of the length of study or treatment (respectively). Ships crews are resident in the country where they spend most time other than on board ship.

The other case related to the migration of a company. Usually, what appears to be a migration is in reality either a transaction between two enterprises or disinvestment and exports from one country and imports and capital formation in another. However, there is provision under EU law for a company to migrate. In this case the change of residence should be registered as an other changes in the volume account (SNA para 26.42). ESA has to make clear the circumstances under which this is possible.

These clarification do not affect GDP/GNI.

40. Goods for Processing

Issue: The 1993 SNA and the Balance of Payments Manual treat the goods sent abroad for processing differently. The 1993 SNA only records gross flows in the case of substantial processing (reclassification of the good at three-digit CPC). The Balance of Payments Manual, as a practical matter, suggests a convention that all processing be assumed substantial and therefore gross flows are recorded. Can a distinction be made between the different levels of processing? Further, the position is that when goods are sent abroad for processing, no change in ownership takes place and thus there are no actual transactions.
It is mentioned that the current treatment of goods for processing in the 1993 SNA was to facilitate input-output analysis. Is this still a valid reason to record goods for processing on a gross basis or does the advent of globalization and the increasing amount of goods processed abroad suggest a change in practice would be appropriate?

The recommendations on goods for processing in the 1993 SNA and in BPM5 are complex and not well understood. This is demonstrated in the form the question was posed in the description of the issue. During investigation of the issue, it proved that the fundamental question to be addressed was not the degree of processing involved but whether recording of imports and exports should follow a change of ownership recording or that of physical movement. The recommendation is for the former, that is for recording on a change of ownership basis. This is a change from the 1993 SNA, affecting the recording of transactions within the national economy as well as international transactions. This has implications for the input-output tables, which on the proposed basis will reflect the economic basis of production (what does each unit contribute to the production process) rather than the physical technology as heretofore.

This recommendation and that on merchanting (issue 41) recognise that many goods move from one country to another without entailing a consequential payment from the recipient country to the sending country. For economic analysis, the financial consequences take precedence over the physical movements, though it is recognised that there may be some interest in this also. For this reason, and to assist in controlling the accuracy of data available for a range of statistics, the recommendations have implications for the way in which the physical movement of goods, captured in merchandise trade statistics, is reconciled with the international flows to be recorded in the BOP and SNA. This is being addressed in conjunction with trade statisticians.

Revised ESA: on the issue of goods for processing, the draft minutes of the Meeting of the Directors of Macro Economic Statistics (meeting 27 January 2010) state: “the net treatment based on the change of ownership principle was approved. However, concerns were expressed by the Directors on the impact of the net treatment on macroeconomic data. To address this, the Directors agreed to create a task force that will, in the short term, further raise awareness of the impact of the net treatment on the different statistics and, in the longer term, examine the issue of practical implementation in national accounts. The Task Force will, in particular, take into account the results from the UNECE/OECD/Eurostat Expert Group on globalisation.”

The change of gross registration to net registration does in principle not have an impact on GDP/GNI.

41. Merchanting

Issue: Merchanting is defined in the Balance of Payments Manual as the purchase of a good by a resident (of the compiling economy) from a non-resident and the subsequent resale of the good to another non-resident, without the good entering the merchant’s economy. The SNA does not cover the topic. The existing definition of merchanting may capture activity that is part of the production process in an increasingly globalized and inter-connected world, which is not the intent behind the definition of merchanting activity. Therefore, there is a need for a clear and precise definition of merchanting; arising out of this there needs to be clear guidance on whether merchanting (when redefined) should be recorded on a net or a gross basis and under goods or services.

The activities concerned are global manufacturing, global wholesaling and retailing and commodity dealing. Most commodity dealing is undertaken by means of transactions in financial derivatives. Only when actual settlement in terms of the nominated commodity takes place would transactions considered here take place.
The case is the reverse one to that of goods for processing; there is a change of ownership and consequences for financial flows but the goods purchased do not enter the country where the purchaser is resident. Including all goods bought and sold by retailers and wholesalers (or by manufacturers) in both imports and exports would inflate those figures by including goods never present in the economy. It is recommended, therefore, that goods acquired by global manufactures, wholesalers and retailers and those cases of commodity dealing being settled in the commodity should be recorded as negative exports on acquisition and positive exports on disposal. The difference between the two appears in exports of goods (consistent with the goal of a zero global balance on goods) but appears as the production of a service in the merchant’s economy, consistent with margins applied to domestically produced goods. In the case where goods are acquired in one period and not disposed of until a subsequent period, they will appear in changes in inventories of the merchant even though these inventories are held abroad. The same requirement for improved recording of merchandise trade applies to merchanting as applies to goods for processing.

In the Netherlands, merchanting is recorded under the export of services. The recommended change in classification does not affect GDP/GNI.

42. Retained earnings of mutual funds, insurance companies and pension funds

Issue: In the 1993 SNA, retained earnings of an entity are generally treated as the income and saving of the entity, rather than the owner. However, exceptions are made for life insurance companies, pension funds and foreign direct investment companies, where there is an imputed outflow to the policyholders, beneficiaries, or owners (respectively), with an equal financial account inflow from them. The ESA 95 introduces a similar treatment for mutual funds by imputing a distribution of retained earnings to the investors and a subsequent reinvestment in the fund. Should the SNA follow this treatment to have a more consistent treatment of various forms of collective investment schemes?

It is recommended that the SNA adopt the concept of an investment fund, which would include mutual funds and money market funds but not pension funds. For investment funds there would be a distribution of property income to the shareholders in the fund with subsequent reinvestment in the fund. New categories of property income payable and receivable would be introduced, distinguishing dividends distributed to, and retained earnings attributed to, investment fund shareholders. In addition, a new financial asset category, investment fund shares will be introduced and will cover the reinvestment of the distributed income (as well as purchases and sales of mutual fund shares).

This recommendation has already been implemented in ESA95. It has affected GNI, because of changes in investment income attributable to collective investment funds shareholders received from and paid to abroad.

43a. Treatment of index-linked debt instruments

Issue: The guidance in the 1993 SNA about how transactions relating to index-linked debt instrument are recorded is not precise. When the principal is indexed, the redemption value is not known until maturity; as a result, interest flows are not known before maturity. What should be recorded for interest and principal repayment in the period before maturity? Further, for some instruments, the indexation may lead to valuation gains. How should these be recorded?

The guidance in the 1993 SNA is that interest on a loan where the principal is index-linked, is determined as the difference between the eventual redemption price and the issue price. Because the final redemption price is not known before redemption, the amount of interest payable in a year can only be approximated until redemption.
It is recommended that the principle underlying the calculation of interest in the case where an instrument is linked to a potentially volatile index should be changed. In this case, the amount of interest due each period should be calculated by reference to the expected redemption value of the instrument and not subsequently revised. At redemption, the sum of interest recorded over the life of the instrument will not necessarily be equal to the redemption value less the issue value. Any difference will be recorded as a holding gain or loss.

Sources and methods: This change consists largely of a clarification of the SNA. Possibly the division of the accrued interest over the years will be slightly adjusted. As interest paid to and received from abroad will also be adjusted, this may have a small effect on the annual GNI-estimates.

43b. Debt indexed to a foreign currency

Issue: For debt instruments with both principal and coupons indexed to a foreign currency, the currency of account is important for distinguishing transactions from holding gains and losses. The results may be different from an assessment made on the basis of the currency of settlement. Does this mean that debt indexed to foreign currency should be treated in the same way as foreign currency debt, that is as if denominated in foreign currency?

It is recommended that debt instruments with both principal and coupon payments indexed to a foreign currency should be classified and treated as though the instrument is denominated in that foreign currency. Exchange rate variations are treated as holding gains. In the 1993 SNA, such exchange rate variations were treated as interest.

This change may affect GNI as far as transactions with the rest-of-the-world are concerned. As this is quite a specific issue applying to specific transactions (presumably only separately recognized in the balance of payments details), it is suggested to resolve this issue in cooperation with the Dutch central bank.

43c. Interest at concessional rates

Issue: Loans with concessional interest rates could be seen as providing a transfer from lender to borrower. Should such transfers be recognized in the SNA? Although there is no clear definition of what is a concessional loan, the guidance in the External Debt Guide suggests features such as an intention to convey a benefit and occurrence in a non-commercial setting (usually government-to-government). If concessional loans are not recognized in the core accounts, should the concessional amounts be considered as supplementary information where they are significant?

The question of how to recognize the consequences of concessional debt is very important, especially for developing countries. However, the means of incorporating the impacts within the SNA are still not agreed, although several suggestions have been advanced. Most of these involve some degree of variation from the normal SNA rules. Therefore, this item is added to the research agenda.

Revised ESA: In cases where Government grants loans with interest rates below market rates, should the reduction of the interest rate be seen as a social benefit (for households) or a subsidy (for corporations)? This issue has been addressed in the December 2009 meeting of the Financial Accounts Working Group (FAWG) and it has been decided to sent out a questionnaire to all Member States.
43d. **Fees payable on securities lending and gold loans**

Issue: Neither the 1993 SNA nor the Balance of Payments Manual discusses the issue of fees payable on securities lending and gold loans. The fee for securities lending is for putting a financial instrument at the disposal of another unit, but it does not fit with the definition of interest when the legal ownership is transferred but the economic risks and rewards of the ownership remain with the original owner. The fee payable on gold loans appears to be a payment for services as gold in this instance is non-monetary gold.

Recommendation: It is proposed that all fees payable to the owners of securities used for securities lending and to the owners of gold used for gold loans (whether from allocated or non-allocated gold accounts) be recorded by convention as interest.

Sources and methods: This change consists largely of a clarification of the SNA. The fees concerned are currently registered under P.1, P.2 and D.41, because it has not always been clear what the right place would be. With 2008 SNA, they will always be registered under D.41. This change may have an impact on GDP but not on GNI (in case non-residents are involved, production and export and/or imports may change, but this is counterbalanced by changes in interest). The impact on GDP is presumably rather small.

44. **Financial assets classifications**

Issue: Continued innovation in financial markets since the 1993 SNA was written means a review of the classification used for financial instruments is appropriate. Suggestions for change arise for most of the present categories.

**Monetary gold and SDRs**

(a) Should monetary gold be treated as a financial asset rather than as a valuable?

(b) The 1993 SNA classifies Special Drawing Rights (SDRs) as assets without corresponding liabilities arguing that IMF members do not have an unconditional liability to repay their SDR allocations. However, SDR allocations have attributes of liabilities because interest is payable on them and a country terminating IMF membership would be required to repay its obligations including any SDR allocations. Also, the IMF Monetary and Financial Statistics Manual recommends that the value of allocated SDRs be shown both on the assets and liabilities side of the balance sheets of central banks, which is in accordance with the IMF’s SDR Department’s guidance to member countries. Should SDR allocations be considered liabilities in the SNA?

**Deposits and loans**

(c) The criteria to make the distinction between deposits and loans are not clear. Recent financial innovations raise questions about the continuing analytical usefulness of the distinction. A particular problem is when a position between two parties, especially financial institutions, is seen as a deposit by one party and a loan by the other. Should the SNA maintain a distinction between loans and deposits?

(d) When and under what circumstances do loans that are traded become securities? This is important because virtually all loans are tradable and trading has increased. It also affects market valuation since securities are valued at market price in the SNA and loans at nominal values.
Securities other than shares

(e) With financial derivatives treated as a separate instrument in the 1993 SNA, it would be appropriate to introduce the term debt securities to replace securities other than shares.

(f) Should there be a distinction between different types of financial derivatives, for example between forwards and options as well as the inclusion of employee stock options (see issue 3) in this category?

Monetary gold and SDRs

It is proposed to treat SDRs as being a liability of countries receiving the allocations and to record allocation and cancellation of SDRs as transactions. The asset and liability aspects of SDRs will be recorded separately. As this change is limited to financial flows and stocks, it does not affect GDP/GNI.

As a result of the changed treatment of SDRs, it is proposed to show monetary gold and SDRS as separate sub-items under the previous combined heading. This has already been pursued in the ESA95.

Other gold as a financial asset

Enquiries have revealed a difference in accounting for allocated gold accounts and unallocated gold accounts and similar distinctions for other precious metals. An allocated gold account gives the holder outright ownership of identifiable physical gold and is equivalent to a custody record of title. An unallocated gold accounts provides a claim by the holder against the account provider which is denominated in gold. In effect, the account is denominated in gold. It is proposed that unallocated gold accounts should be treated as financial assets and liabilities and classified with deposits in foreign currency. Allocated gold accounts would continue to be treated as valuables or inventories as at present. Unallocated accounts in other precious metals should be treated similarly to unallocated gold. If the treatment extends to other commodities, a review would be necessary to consider if the treatment should be extended further.

Deposits and loans

The distinction between deposits and loans will be maintained. In a full from whom to whom analysis of the holdings of loans and deposits, there should be no problem in distinguishing loans from deposits. However, when this full detail is not available, it may not always be possible to identify loans from deposits when both parties to the transaction are banks. Therefore a category interbank positions (AF.221) is introduced to covert this ambiguity. This is already pursued in ESA (short term loans among MFI’s should be classified under deposits).

It is not proposed to change the guidance on traded loans. A loan should be reclassified as a security only if there is evidence of a market for the loan and market quotations are available. A one-off sale of a loan does not make it a security. No separation of loans into traded and non-traded categories is proposed.

Securities other than shares

The terminology of this item is changed to debt securities.
Financial derivatives

A distinction is made between options and forwards, and employee stock options are shown separately (see issue 3).

Further consequences for the classification of financial assets

Discussions of other items have consequences for the classification of financial assets. Arising from issue 42 on the treatment of mutual funds, changes have been made to the heading and breakdown of equity to show investment funds shares separately and within investment funds to show money market funds separately. Quoted shares have been renamed listed shares. As a consequence of issue 37 on guarantees more detail has been introduced in to the category on insurance technical reserves and under issue 5 the terminology regarding the use of the term provision has been changed.

These changes and clarifications relate to financial flows and stocks and do not affect GDP/GNI.

Section 3. Other issues

Apart from the 44 issues to be considered during the SNA update process, another 3 issues have been identified which may have an impact on GDP/GNI. These are discussed below.

1: Treatment of small tools

Issue: ESA 95 paragraph 3-70 e) (1) defines a threshold for the split between gross fixed capital formation and intermediate consumption:

"By convention, in the ESA, all expenditure on such durables, which does not exceed 500 ECU (in prices of 1995) per item (or when bought in quantities, for the total amount bought), should be recorded as intermediate consumption"

In the new ESA the 500 euro boundary is expected to be dropped. This implies that expenditures on small tools are shifted from intermediate consumption to GFCF. This may potentially affect GDP/GNI.

Sources and methods: The Investment Survey for fixed tangible assets is the most important source for the compilation of GFCF figures for the Dutch national accounts. This annual enterprise survey covers the manufacturing industry, trade, hotels, restaurants and repair, transport, storage and communication and financial and business activities (excluding real estate activities). For all other industries sources are not sufficiently detailed to allow for any exclusion of small tools.

The Investment Survey for fixed tangible assets includes only amounts that round off to the nearest 1000 euro. This implies that investments below 500 euro are not included (in conformity with the 500 euro boundary). However, because of the rounding off (investments of 501 euros and higher are rounded off to 1000 euros), GFCF might be slightly overestimated in the current situation.

If the 500 euro threshold is dropped, the overestimation is in theory compensated by underestimation (as investments between 1 and 499 are rounded off to 0). Thus, while GFCF is slightly overestimated in the current situation, the estimates of GFCF would be appropriate if the threshold would be dropped. On the other hand, as small expenditures on tools tend to be classified under current expenditures in business statistics, a slightly upward adjustment of GFCF may be warranted. All in all the effect on GDP/GNI is negligible
2: **Construction activities abroad for less than one year (ESA-specific issue)**

Issue: In the ESA 95, construction site offices abroad are treated as resident corporations abroad even when they last less than one year if their output is GFCF. This exception, linked to the nature of the output (GFCF), was introduced in ESA 95 only for practical reasons which are no longer relevant.

This exception will not be included in the new ESA in order to ensure its consistency with the 2008 SNA and with the recommendation of the Task Force Rest of the World.

This recommendation affects GDP as it changes the export and import of construction services. However, it does not affect GNI as in the ESA95 these flows were included in property income from/to abroad.

3: **Valuation of output for own final use by households and corporations to include a return to capital (not on the original issues list)**

Issue: The 2008 SNA recommends that when estimating the value of the output of goods and services produced by households and corporations for own final use, it is appropriate to include a return to capital as part of the sum of costs when this approach is used for estimating output in the absence of comparable market prices. However, no return to capital should be included when production for own final use is undertaken by non-market producers.

The 1993 SNA did not include the return to capital in estimating the output of goods and services produced for own final use by households and corporations.

Sources and methods: This change may have only a small impact on household consumption of own production but a potentially higher effect on own account capital formation. In 2007, own account capital formation amounts to about 5000 mln euro in the Netherlands. If the interest on longterm government bonds is taken as a proxy of the return to capital (currently about 4 percent), then GDP/GNI would increase by an upperlimit of about 200 mln. euro. The amount is presumably substantially lower as the estimates of own account software production (about half of total own account capital formation) already includes a certain profit margin.
## Annex 1: Impact of main differences on key aggregates, revised ESA95, 2007

<table>
<thead>
<tr>
<th>No.</th>
<th>Issue</th>
<th>% of GDP</th>
<th>% of GNI</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Non-life insurance services</td>
<td>small</td>
<td>small</td>
</tr>
<tr>
<td></td>
<td>- adjusted claims</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- catastrophic losses</td>
<td>zero but potentially large</td>
<td>zero but potentially large</td>
</tr>
<tr>
<td>6a</td>
<td>Financial services - FiSIM</td>
<td>between -0,32 and 0,03</td>
<td>negligible</td>
</tr>
<tr>
<td>9</td>
<td>Research and development</td>
<td>between 1,38 and 1,78</td>
<td>between 1,36 and 1,75</td>
</tr>
<tr>
<td>10</td>
<td>Patented entities</td>
<td>included in R&amp;D</td>
<td>included in R&amp;D</td>
</tr>
<tr>
<td>11</td>
<td>Originals and copies</td>
<td>between -0,05 and 0</td>
<td>between -0,05 and 0</td>
</tr>
<tr>
<td>12</td>
<td>Databases</td>
<td>small</td>
<td>small</td>
</tr>
<tr>
<td>14</td>
<td>Cost of ownership transfer</td>
<td>between -0,01 and 0</td>
<td>between -0,01 and 0</td>
</tr>
<tr>
<td>19</td>
<td>Military weapons</td>
<td>between 0,13 and 0,14</td>
<td>between 0,12 and 0,14</td>
</tr>
<tr>
<td>25c</td>
<td>Treatment of multi-territory enterprises</td>
<td>negligible</td>
<td>zero</td>
</tr>
<tr>
<td>33</td>
<td>Illegal and underground activities</td>
<td>0,66</td>
<td>0,65</td>
</tr>
<tr>
<td>36</td>
<td>Private/public/government sector delineation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43a</td>
<td>Treatment of index-linked debt instruments</td>
<td>zero</td>
<td>negligible</td>
</tr>
<tr>
<td>43d</td>
<td>Fees payable on securities lending and gold loans</td>
<td>negligible</td>
<td>zero</td>
</tr>
</tbody>
</table>

**Estimated total impact 44 issues - low estimate**

- 1,79 of GDP
- 2,07 of GNI

**Estimated total impact 44 issues - high estimate**

- 2,62 of GDP
- 2,55 of GNI

### ESA specific:

1. Treatment of small tools
   - negligible
   - negligible

2. Construction activities abroad for less than one year
   - zero
   - zero

3. Valuation of output for own final use by households & corporations to include a return to capital
   - between 0 and 0,03
   - between 0 and 0,03

(not on the original issues list)
Annex II: Impact assessment on the introduction of the revised ESA95

Country: The Netherlands
Date: March 2010

Part II – Implementation of the revised ESA95

2.1. Human resources

2.1.1. Please indicate an estimate of the additional human resources needed for implementing the revised ESA95:

<table>
<thead>
<tr>
<th>36</th>
<th>Person-months</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-15</td>
<td>Number of posts</td>
</tr>
</tbody>
</table>

We only took into account the additional resources for research into the 44 issues, developing methodology and estimations. We have not included here the rather intensive research pursued, and still ongoing, on pensions and especially R&D.

Combined with the revision of ESA95, we intend to have a full-scale benchmark revision. Including the above research, we estimate that this will require about 250 person-months in total (covering some 50-60 posts).

Furthermore, the revision of the time-series warrants additional resources. The latest revision of the time-series, based on the 2001 benchmark revision, encompassed a total of about 360 person-months (including the development of new methodology and related ICT-systems). For the next revision of time-series (which in general will be 10 years longer), we expect, as a consequence of improved efficiency, new compilation tools and focus on less detail, a total investment of approximately 240 person-months.

2.1.2. Please indicate which will be option(s) followed by your organization:

- [x] Recruit permanent staff
- [x] Recruit temporary staff
- [x] Contract studies on specific issues
- [x] Other, please specify: reprioritation of tasks within the NA-department and within the research department

The second and third option will heavily depend on the availability of additional funding, both from within Statistics Netherlands and from outside. In the latter case, we have an arrangement with the Ministry of Finance that additional EU-requirements will be (partly) funded by putting available extra resources.
2.1.3 Please describe specific training needs that you might have during the implementation of the revised ESA95:

Several meeting will be organized internally on the conceptual changes of the revised ESA, the points of departure, and the organization and planning of the full benchmark revision process. At the moment we have a total number of about 200 potential revision projects, including the 44 issues of the revised ESA.

2.2. Infrastructure

2.2.1. Please indicate whether you will need to make additional infrastructure investments (IT, offices) for implementing the revised ESA95:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As such the revised ESA95 does not warrant extra investments in infrastructure. However, a variety of IT-systems have to be updated and extended to meet the demands of the new Transmission Programme. This applies particularly to the institutional sector accounts, several analytical tools and data delivery programmes. In addition, tools for time-series compilation may need to be developed and/or amended. This work will be pursued by IT-specialist and computer programmers outside the NA-department.

2.2.2. Will you develop/acquire specific software tools?

<table>
<thead>
<tr>
<th></th>
<th>Yes, outsourcing</th>
<th>Yes, in house</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

If yes, please specify

2.3. Horizontal issues

2.3.1. At the level of data sources, do you plan to make any additional improvements in the short- medium term (for example, launching new inquiries/surveys)?

Yes, currently we are in the middle of a major process of redesigning our economic statistics, whereby the emphasis is on modernising the business register (so that statistical units become more compatible with fiscal units), reducing the response burden (by relying more on administrative data sources, like VAT for the estimation of sales) and improving the collection and quality of data on the largest 200-300 corporations. Another major objective is to increase the efficiency and quality of data processing of national accounts and other areas through improvements in estimation techniques and control procedures.

2.3.2. Will these improvements have a potentially significant impact on GDP?
These improvements may potentially have an impact on GDP, but as these projects are not yet finalized and/or implemented their impact is not yet clear.

2.3.3. Do you plan to further investigate what are the main users' needs before releasing the revised ESA95 figures?

Yes, we will discuss the revision of the ESA95 with our advisory board on macro-economic statistics and with our main users such as the Netherlands Bureau for Economic Policy Analysis, the Dutch central bank, the Ministries of Finance, Economic Affairs and Social Affaires, etc.

2.3.4. Do you consider that the implementation of the revised ESA will imply significant additional work for data providers?

No, some additional data needs may arise. However, because of strong political pressure to reduce the administrative burden of statistical surveys, it will be very difficult to add any substantial data requests.

2.4. Financial resources

2.4.1. Please indicate the estimated amount (euro or national currency) for implementing the revised ESA95:

<table>
<thead>
<tr>
<th>Total (Euro or national currency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>of which (expressed in percentage of the total) :</td>
</tr>
</tbody>
</table>
| Human resources (%)
| Infrastructure (%)
| Horizontal (%)
| Other, please specify (%)

This question is very difficult to answer as it heavily depends on what one includes/excludes; see our reply to question 2.1. The average wage bill per person (without additional charges for internal overhead) is ranging between 60,000 and 70,000 euros.

2.5. Global assessment

2.5.1. In your view what will be the main difficulties that you will face during the next years?

The main difficulty arises from the combination of the major redesign of the compilation process of economic statistics and the implementation of a full benchmark revision, including the revised ESA95. The results of the redesigned source statistics probably will not become available in time for full inclusion in our benchmark revision of calendar year 2014 (and reporting year 2010).

2.5.2. Are plans currently being made to address these difficulties?

We have already started with the set up of the organization of the revision process, the planning of activities and the specification of the product outcomes. The overall project encompasses all the statistical products of the National accounts, thus including the satellite accounts, stretches out for 3 to 4 years (and about 50-60 statistical officers) and covers about 200 topics for potential revision.
We do not have yet a scheme how to exactly incorporate the redesigned source statistics into our National accounting systems. Especially in the first period the reliability of the new statistics may be difficult to evaluate and a combination of all available data sources (old and new, annual and quarterly) may be needed for benchmarking the National accounts and securing the economic growth estimates.

2.5.3. Will you take advantage of this opportunity to address specific issues in order to further improve national accounts or meet specific user needs?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As stated before, the introduction of the revised ESA95 will also be used to introduce new source data en new estimation methodologies. Among others, we will also use this opportunity to realign National accounts with our newly developed satellite accounts.
Annex III: Update of the 1993 SNA, the 44 issues and their impact on GDP/GNA

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>GDP Code</th>
<th>GNI Code</th>
<th>Description</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repurchase agreements</td>
<td>No</td>
<td>No</td>
<td>(A)F</td>
<td>Financial transactions/assets</td>
</tr>
<tr>
<td>Employer retirement pension schemes</td>
<td>No</td>
<td>No</td>
<td>(A)F,63</td>
<td>Pension entitlements</td>
</tr>
<tr>
<td>Employee stock options</td>
<td>No</td>
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<td>Non-performing loans (NPLs)</td>
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<td>Memorandum item: nominal value NPLs</td>
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<td>Memorandum item: fair value NPLs</td>
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<td>D.41</td>
<td>Of which item: interest receivable on NPLs</td>
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<td>Valuation of loans and deposits; write-off and interest accrual on impaired loans</td>
<td>No</td>
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<td>Currency and deposits</td>
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<td>Non-life insurance services</td>
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<td>Non-life insurance premiums</td>
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<td>Yes</td>
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<td>Non-life insurance claims</td>
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<td>Allocation of the output of central banks</td>
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<td>Taxes on holding gains</td>
<td>No</td>
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<td>D.5</td>
<td>Current taxes on income, wealth, etc.</td>
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<td>Interest under high inflation</td>
<td>No</td>
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<td>Yes</td>
<td>Yes</td>
<td>P.32</td>
<td>Collective consumption expenditure</td>
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<td>Yes</td>
<td>P.51</td>
<td>Gross fixed capital formation</td>
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<td>Yes</td>
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<td>Right to use/exploit non-produced resources, (non-resident)</td>
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<td>Classification of institutional sectors</td>
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<td>19. Military weapons</td>
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<td>20. Land improvements</td>
<td>No</td>
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<td>21. Contracts and leases of assets</td>
<td>No</td>
<td>No</td>
<td>ANP</td>
<td>Acquisitions less deposits of non-produced assets</td>
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<td>22. Goodwill and other non-produced assets</td>
<td>No</td>
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<td>Purchases less sales of goodwill and marketing assets</td>
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<td>23. Obsolescence and depreciation</td>
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<td>No</td>
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<td>24. BOC/SC schemes</td>
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<td>25a. Ancillary units</td>
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<td>25b. Holding companies, special purpose entities</td>
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<td>25c. Treatment of multi-territory enterprises</td>
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<td>26. Amortisation of non-produced assets</td>
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<td>27. Classification and terminology of assets</td>
<td>No</td>
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<td>Non-financial assets</td>
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<td>28. Amortisation of non-produced assets</td>
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<td>29. Asset boundary for non-produced intangible assets</td>
<td>No</td>
<td>No</td>
<td>AN229</td>
<td>Other intangible non-produced assets (1993 SNA)</td>
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<td>30. Definition of economic assets</td>
<td>No</td>
<td>No</td>
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<td>31. Valuation of water</td>
<td>No</td>
<td>No</td>
<td>D46</td>
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<td>32. Illegal and underground activities</td>
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<td>No</td>
<td>DAF5</td>
<td>Equity and investment fund shares</td>
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<td>34. Tax revenues, uncollectible taxes and tax credits</td>
<td>No</td>
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<td>Taxes on production and imports</td>
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36 Private/public/government sector delineation
Guarantees, contingent assets and constructive obligations
Yes Yes S Classification of institutional sectors
Other current transfers

37 Change of economic ownership
Assets, liabilities and personal effects of individuals
Yes No Nb (AF)36 Nb D7 Provisions for calls under standardised guarantees

38a Change of economic ownership
Guarantees, contingent assets and constructive obligations
No No Nb D9 Capital transfers
Nominal holding gains and losses

38b Change of economic ownership
Application of the accrual principle to debt in arrears.

38c Change of economic ownership
No No (AF)36 Nb D7 Other current transfers

39a Meaning of national economy
No No S1 Total economy Clarification
S1 Total economy

39b Predominant center of economic interest
No No S1 Total economy Clarification

39c Residence of entities with little or no physical presence
No No S1 Total economy Clarification

39d Non-permanent workers
No No D7 Miscellaneous current transfers Further specification

40 Goods sent abroad for processing
Exports and imports of goods and services

41 Merchandise
Exports and imports of goods and services

42 Retained earnings of mutual funds, insurance corporations
Investment income attributable to collective investment fund shareholders Already introduced in ESA

43a Treatment of index-linked debt instruments
Yes Yes D41 Interest

43b Debt indexed to a foreign currency
No No D41 Interest Debt instruments

43c Interest at concessional loans
No No D7 Other current transfers not yet decided (FAWG)

43d Fees payable on securities lending and gold loans
Yes No P1 P2 Intermediate consumption
P61 & P71 Interest

44 Financial assets classification
No No AF Financial transactions/assets

1 Treatment of small tools (ESA-specific issue)
Yes Yes P2 Intermediate consumption
P51 Gross fixed capital formation

2 Construction activities abroad for less than one year
Yes Nb P51 & P71 Exports and imports of services

3 Valuation of output for own final use by households and corporations to include a return to capital (not on the original issues list)
Yes Yes P1 P31 Individual consumption expenditure
P51 Gross fixed capital formation

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