PUBLIC-PRIVATE PARTNERSHIPS

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EXECUTIVE SUMMARY

1. 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. PPPs have become important parts of government economic and financial policies with the goal of increasing the efficiency of government production and gaining access to a wider range of financial sources.

2. There are no guidelines in the SNA about PPPs. The SNA treatment of operating and financial leases and other general provisions of the SNA are not sufficient to derive an appropriate accounting treatment for PPPs. Their increasing importance suggests that the revised SNA should describe their major characteristics and indicate to the extent possible the accounting treatments that should apply to them.

3. There are two major issues to be resolved for PPPs. The first issue is deciding whether the private enterprise or the government is the economic owner of the fixed assets. When control and/or the risks and rewards of an asset are shared, there are many factors to consider in deciding which unit is the economic owner of the asset, with the relative importance of the factors likely to vary with each PPP. Deciding which unit is the economic owner of the fixed assets must be done on a case-by-case basis and will normally require intensive study of the contractual arrangements. Thus, it is not possible to state prescriptive rules that will be applicable to every situation. A general description of the factors to consider is all that is feasible. The factors mentioned in Eurostat’s ESA95 Manual on government deficit and debt are relevant for this issue because it is a statistical manual intended to be consistent with the SNA, but they may need to be supplemented.

4. Government financial accountants and their auditors usually will be in a better position to make this decision. As long as the basis on which they make the decision does not conflict materially with SNA principles, their decisions should be accepted for the SNA as well. The International Accounting Standards Board (IASB) is developing specific guidance for financial accountants to use when deciding which unit is the economic owner of the fixed assets. That project is not complete and may not be complete for some time. When it is complete, the results should be reviewed for consistency with SNA principles because they are likely to become a widely accepted international standard.

5. The second issue is how to ensure that the proper transactions are recorded to reflect the underlying realities of the economic activities generated by the PPP. The variety of possible arrangements regarding the use of the assets during the contract and for either an optional or mandatory change in ownership at the end of the contract makes it impossible to write prescriptive rules covering all possibilities. There are, however, some general problems that will arise with most

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1 The title in the list of SNA issues to be considered in the update process is “Build-Own-Operate-Transfer (BOOT) Schemes.” Public Private Partnerships is a more inclusive term that has become accepted in the international discussions of this subject.

2 The views expressed are purely those of the authors and do not necessarily represent the views of their employers. David Watkins and Ian Carruthers of the UK Treasury contributed valuable comments.
PPPs, and it is possible to indicate the principal underlying economic activities that should be demonstrated by the transactions.

6. If the private enterprise is assessed as being the economic owner and the government obtains legal and economic ownership at the end of the contract without an explicit payment, the government has implicitly agreed to purchase the assets. Depending on the circumstances and the information available, the acquisition can be accomplished by gradually building up a financial claim of the government and a liability of the private unit equal to the value of the assets or to impute a capital transfer. If the government is assessed as being the economic owner of the assets but does not make any explicit payment at the beginning of the contract, a transaction must be constructed to accomplish the implicit purchase. The most common suggestion is that the purchase be made with an imputed financial lease because the arrangement is similar to an actual financial lease, but other means of payment are possible, including an operating lease prepayment. In all cases, the correct measure of production should be ensured. The principal difficulty with measuring production occurs when the government is the economic owner of the assets but the capital services of the assets are consumed by the private enterprise in its production, which may require the imputation of an operating lease.

7. Recommendations of the Canberra II group:
   (i) Because of the growing importance of PPPs for government economic and financial policies, a description of PPPs and the general principles for their accounting treatment should be added to the SNA.
   (ii) Economic ownership of the assets referred to in a PPP contract is determined by assessing which units bear the risks, will receive the rewards, and are able to control the assets. The text of the SNA should discuss the principal types of control and/or risks and rewards relevant for PPPs. Given that the relative importance of each factor is likely to vary with each PPP, it is not possible to prescribe rules that will be applicable to every situation. A general description of the factors to consider is all that is feasible. Because statistical offices may not have the resources to evaluate each PPP contract, the decisions of government accountants and their auditors generally should be accepted as long as the methodologies used do not materially contradict the general principles of the SNA. When the IASB guidelines for PPPs have been finalized, the ISWGNA should evaluate them for consistency with SNA principles.
   (iii) The text of the SNA should state that the complexity and variety of PPP contracts precludes the enumeration of detailed rules governing the transactions to be recorded concerning the control and use of the assets. It is desirable for the accounting treatment to reflect a government’s residual interest in assets economically owned by the private unit, the acquisition of operational assets taken into use by a government as economic owner, and the measurement of production.

8. These recommendations would only introduce descriptive language into the SNA and are, therefore, feasible.

9. Questions for the AEG:
   (i) Are PPPs sufficiently important to include a description of them in the revised SNA? Is the description included here acceptable?
   (ii) Given that there is no consensus on how to decide which unit is the economic owner of the fixed assets associated with a PPP, is it sufficient to list several of the indicators that are likely to be important in making that decision? Is the list suggested here acceptable?
   (iii) Given that there is no consensus on the accounting treatment to apply to certain events that are likely to occur with PPPs, is a broad description of these events sufficient?
Public-Private Partnerships

1. Background

1. Public-private partnerships (PPPs)\(^1\) are complex, long-term contracts between private and public units.\(^2\) PPPs normally involve a collection of expensive fixed assets being acquired by a private unit, which then operates and manages the assets to produce and deliver services either to the public unit or to the general public on behalf of the public unit. At the end of the contract, the public unit often acquires legal ownership of the fixed assets, sometimes without payment or for a payment that clearly is less than the market value. The fixed assets are often referred to as infrastructure assets because many of the large projects undertaken by means of PPPs involve the provision of services to the public that government is normally expected to provide, such as transportation, communications, health, and education services.

2. Governments engage in PPPs for a variety of reasons, including the hope that private management may lead to more efficient production and that explicit government debt can be avoided by using private financial sources. Whatever the reason, PPPs have increased greatly in importance since the 1993 SNA was published. PPP contracts frequently generate difficult accounting decisions because legal ownership of the assets may differ from operational control, there may be an advance agreement for the transfer of legal ownership part way through the service lives of the assets, observed monetary transactions may take place at non-market prices, and actual transactions may have to be rearranged to reveal their true economic character. In addition, there are concerns that government policy decisions might be affected by an advance determination by accountants and their auditors of the accounting treatments to be applied to a proposed PPP. That is, if it is determined that the fixed assets to be acquired for use in a PPP are to be treated as government assets, together with the imputation of a corresponding amount of debt, a government might choose not to proceed with the PPP.

2. Current SNA treatment and reasons to change it

3. PPPs are not mentioned in the 1993 SNA. They also are not mentioned in the government finance, balance of payments, or monetary and financial statistics manuals. In August 2004, a chapter on PPPs was added to Eurostat’s *ESA95 Manual on government deficit and debt*,\(^3\) which replaced an earlier chapter on the same subject. This chapter was necessary because of the importance of PPPs for government finance statistics and the lack of guidance in the SNA. Because of the sharply increased volume of PPPs since publication of the 1993 SNA and because of the reports that government behaviour is affected by the accounting and statistical treatments given to PPPs, it has become important to describe these schemes in the SNA.

4. The SNA cannot cover every possibility in full detail. When a specific situation is not covered or not in sufficient detail, one applies relevant general principles or specific guidance for similar situations. In this case, difficulties arise because it is not clear which unit is the economic owner of the fixed assets and because transactions are deliberately created with a legal substance that does not reflect the underlying economic reality.

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\(^1\) PPP is also used in the SNA as an abbreviation for purchasing power parities. The text of the revised SNA should acknowledge this possible confusion.

\(^2\) The use of public and private in the term “public-private partnerships” should be interpreted broadly. The private unit should be a for-profit enterprise, which might be a public corporation. The public unit will normally be a government unit, but it could be a public corporation. Obviously, a PPP contract between a government unit and a wholly owned public corporation would raise many questions about independence. It will often be convenient here to refer to “governments” rather than “public units.” It is also possible for a private non-profit institution to engage in this type of contract in that same way that a public unit would.

\(^3\) Published as section IV.4.2, “Long term contracts between government units and non-government partners.”
5. The most relevant existing general principle regarding economic ownership is the treatment of leases of fixed assets. Leases of fixed assets are classified in the SNA as either operating or financial. A financial lease is viewed as an alternative method of financing the purchase of a fixed asset. Despite some similarities with financial leases—the government makes a series of payments during the life of the PPP contract and then gains legal ownership of a fixed asset at the end of the contract without making an explicit payment—there is a fundamental difference between PPPs and other leases. In an ordinary lease, the legal owner and the user of the asset are different units and the questions to evaluate are whether the legal owner is engaged in any productive activities with respect to the asset and for what proportion of the service life of the asset does the lessee have use of the asset. With a PPP, the legal owner and the user of the asset are the same unit, which makes the two questions about leases used to determine economic ownership irrelevant.

6. Chapter 3 of the SNA states that monetary transactions should be rearranged and non-monetary transactions should be constructed as necessary to bring out the underlying economic relationships. It is not a large exaggeration to say that most discussions of PPPs start with an acknowledgment that they involve monetary transactions whose legal form does not adequately represent the underlying economic relationships and then attempts to devise a method to bring out those relationships. The examples of rearrangements and constructions mentioned in the SNA, however, do not apply to PPPs.

7. Conclusion: There is no mention of PPPs in the SNA and the related principles already included in the SNA are not sufficient to derive appropriate accounting treatments for PPPs. Because of the growing importance of PPPs for government economic and financial policies, a description of PPPs and the general principles for their accounting treatment should be added to the SNA.

3. Issues to be resolved

8. PPPs vary greatly. A general description that includes the most important accounting problems and that could be incorporated in the revised SNA is:

   A PPP is a contractual arrangement in which private enterprise agrees to acquire a complex of fixed assets and then to use those assets together with other production inputs to produce services. Those services may be delivered to the government, either for use as an input to its own production (for example, motor vehicle maintenance services) or for distribution to the public on behalf of the government without payment by the public (for example, education services). In this case, the government will make periodic payments during the contract period and the private enterprise expects to recover its costs and earn an adequate rate of return on its investment from those payments. Alternatively, the private enterprise may sell the services to the public (for example, a toll road), with the price regulated by the government but set at a level that the private enterprise expects will permit it to recover its costs and earn an adequate rate of return on its investment. At the end of the contract period, the government may gain legal ownership and operational control of the assets, possibly without payment. There can be many variations in PPP contracts regarding the disposition of the assets at the end of the contract, the required operation and maintenance of the assets during the contract, the price, quality, and volume of services produced, and so forth.

9. In all PPPs, the private enterprise acquires the fixed assets and is the legal owner of the assets during the contract period. The contract may require, however, that the assets meet the design, quality, and capacity specified by the government, be used in the manner specified by the government to produce the services required by the contract, and be maintained in accordance with standards specified by the government. Furthermore, the assets typically have service lives much longer than the contract period. If the government gains legal ownership of the assets at the end of the contract, it will control the assets, bear the risks, and receive the rewards for a major portion of the assets’ service...
lives. Thus, it frequently is not obvious whether the private enterprise or the government controls the assets and/or will bear the majority of the risks and reap the majority of the rewards.  

Regardless of the decision about economic ownership, there will be accounting problems with respect to the economic activities generated by the PPP. The nature and number of problems depends on the decision about economic ownership and the exact provisions of the PPP contract. In many PPPs, the government obtains legal and economic ownership of the assets at the end of the contract without payment or for a nominal payment. A for-profit enterprise is not likely to agree in advance to make a gift of valuable resources such as the fixed assets of a PPP. Therefore, there likely is some means specified in the PPP contract that is equivalent to the government agreeing to purchase the assets for their market prices. Understanding that arrangement and either rearranging actual transactions or constructing imputed transactions may be necessary to bring out the underlying economic relationships.

Thus, there are two fundamental issues to be resolved for PPPs:

- Is the government or the private enterprise the economic owner of the assets during the contract period?
- How is the control and use of the assets accounted for during the contract period? If the private enterprise is the economic owner of the assets, a part of this issue is determining how to account for the transfer of legal and economic ownership to the government at the end of the contract if the government does not make any payment or if the payment is not equal to the market value of the assets. If the government is the economic owner of the assets during the contract period, a part of this issue is how to account for its purchase of the assets at the beginning of the period when there is no explicit payment and how to show the private enterprise gaining access to the assets during contract period for use in its production process.

To resolve these issues, the Canberra II group considered the existing literature, including that of the financial accounting profession. It also received papers written for the group by the Fiscal Affairs Department of the IMF and by John Pitzer. In parallel, Eurostat revised its chapter in the ESA95 Manual on government deficit and debt and the International Accounting Standards Board (IASB) has been conducting a research project on the topic. After general discussions at four meetings, a questionnaire was prepared asking a series of questions and describing the various options that have been proposed. Participants were asked state their preferences before the April 2005 meeting of the Canberra II group. The subject was further discussed at that meeting, with this issues paper resulting from that discussion. A draft of this issues paper was discussed at the September 2005 meeting of the Canberra II group, with a number of revisions introduced as a result. For reference, the questionnaire is attached as an annex.

4 Control and risks/rewards are alternative concepts for describing economic ownership of assets. There is disagreement about which concept is most appropriate. Both are used here to avoid involvement in the debate.  

5 Most of the literature considered is listed in paragraph 6 of the attached questionnaire. Since the questionnaire was distributed, the IASB issued a set of three draft interpretations about PPPs (referred to as service concessions). These interpretations and comment letters about them that have been received by the IASB are available at:

http://www.iasb.org/current/comment_letters_ifric.asp?showPageContent=no&xml=17_67_83_03062005.htm. Newsletters with updates on the progress of this project are available on the same website.
includes the possibility of additional costs resulting from late delivery, not meeting specifications or building codes, and environmental and other risks requiring payments to third parties; (b) availability risk, which includes the possibility of additional costs or the incurrence of penalties because the volume and/or quality of the services do not meet the standards specified in the contract, and (c) demand risk, which includes the possibility that the demand for the services is higher or lower than expected.

- A second proposal (the UK Accounting Standards Board) states that the economic owner is the unit having access to the benefits of the assets and exposure to the associated risks, which is determined by looking at the extent to which each unit would bear any variations in profits or losses resulting from use of the assets. Relevant factors are likely to be (a) demand risk, (b) the presence, if any, of third party revenues (the greater the reliance on sales to the public, the more the private enterprise should be assessed to be the economic owner), (c) which unit determines the nature of the property (the more the government determines the design, quality, size, and maintenance of the asset, the more it should be assessed to be the economic owner), (d) penalties for underperformance or non-availability (the more likely and more severe the penalties, the more the private enterprise should be assessed to be the economic owner), (e) potential changes in relevant costs (the unit that bears the larger share of increased costs is more likely to be the economic owner), (f) obsolescence, and (g) residual value risk and other arrangements at the end of the contract.

- The third proposal (IASB) suggests that the government is the economic owner if it (a) controls or regulates what services the private enterprise must provide using the assets, to whom it must provide them, and at what price; and (b) controls, through ownership, beneficial entitlement, or otherwise, any residual interest in the assets at the end of the contract, and the residual interest is significant. Condition (b) is satisfied if the government has an option to acquire legal ownership, even if it is not certain to exercise that option.

14. None of these proposals found a strong backing. Rather, it was felt that when control and/or the risks and rewards of an asset are shared, there are many factors to consider in deciding which unit is the economic owner of the asset. The relative importance of each factor is likely to vary with each PPP. Thus, it is not possible to state prescriptive rules that will be applicable to every situation in a satisfactory way. A general description of the factors to consider is all that is feasible. The risks mentioned in the Eurostat manual are relevant for this section because it is a statistical manual intended to be consistent with the SNA, but they may need to be supplemented. The exact language used to describe the factors to take into account is, of course, left to the editor of the revised SNA. Nevertheless, the following is one possibility. The authors of this paper are willing to consult with the editor in determining the final language.

The economic owner of the assets related to a PPP is determined by assessing which unit bears the majority of the risks, which unit is expected to receive a majority of the rewards of the assets, and which unit controls the design, use, capacity, quality, maintenance, and other relevant characteristics of the assets. Some of the factors that might be considered in making this assessment are:

- The degree to which the government controls the design, quality, size, and maintenance of the assets.

- The degree to which the government is able to control the services produced, the units to which the services are provided, and the prices of the services produced.

- Construction risk, which includes the possibility of additional costs resulting from late delivery, not meeting specifications or building codes, and environmental and other risks requiring payments to third parties.

- Availability risk, which includes the possibility of additional costs or the incurrence of penalties because the volume and/or quality of the services do not meet the standards specified in the contract.
• Demand risk, which includes the possibility that the demand for the services is higher or lower than expected.

• Residual value and obsolescence risk, which includes the risk that the asset will be less than their expected value at the end of the contract and the degree to which the government has an option to acquire the assets.

• The presence, if any, of third party revenues—the greater the reliance on sales to the public, the more the private enterprise should be assessed to be the economic owner.

The relative importance of each factor is likely to vary with each PPP. It is not possible to state prescriptive rules that will be applicable to every situation in a satisfactory way. The provisions of each PPP will have to be evaluated in order to decide which unit is the economic owner.

15. It is highly desirable that the treatment of PPPs in the SNA be the same as, or very close to, the corresponding treatment in international financial accounting standards. Because each PPP will have to be evaluated in detail before a decision can be made about economic ownership, the resource demands will be high if a country has several PPPs. Obtaining the information necessary to carry out the evaluations will take a statistical office away from its basic functions and may be beyond its capacity. Moreover, if a statistical office were to make a different decision than the government accountants and their auditors make about a particular PPP, then additional efforts would have to be exerted to acquire the information about the performance of that specific PPP so that the government financial accounting data can be adjusted properly. Such a difference would, in turn, cause difficulties for users attempting to understand and make use of the two sets of data.

16. Unfortunately, the international financial accounting standards for PPPs are not yet settled. The IASB is engaged in a project about PPPs, which are referred to as service concessions. It is expected to include criteria for deciding which unit is the economic owner of the assets. These criteria will apply to all for-profit enterprises that wish to claim they are in compliance with the financial reporting standards issued by the IASB. The criteria will not apply to governments, but the International Public Sector Accounting Standards Board (IPSASB) generally adopts the same guidance for governments unless the special circumstances of government require a modification or supplementary guidance. In this case, it would be most unfortunate for both the private enterprise and the government to report ownership of the same assets or for neither unit to report ownership. Therefore, it is highly likely that identical criteria will be adopted by both the IASB and the IPSASB.

17. Given the growing international acceptance of the financial reporting standards issued by the IASB, the new guidance should lead to usable information for compiling SNA statistics as long as that guidance satisfies the general principles of the SNA regarding economic ownership. The recommendation to rely on government financial accounting information, however, makes it important that the final guidance of the IASB and IPSASB be in agreement with SNA principles regarding economic ownership.

18. Conclusion: Economic ownership of the assets referred to in a PPP contract is determined by assessing which units bear the risks, will receive the rewards, and are able to control the assets. The text of the SNA should discuss the principal types of control and/or risks and rewards relevant for PPPs. Given that the relative importance of each factor is likely to vary with each PPP, it is not possible to prescribe rules that will be applicable to every situation. A general description of the factors to consider is all that is feasible. Because statistical offices may not have the resources to evaluate each PPP contract, the decisions of government accountants and their auditors generally should be accepted as long as the methodologies used do not materially contradict the general principles of the SNA. When the IASB guidelines for PPPs have been finalized, the ISWGNA should evaluate them for consistency with SNA principles.
5. Resolving Accounting Problems of PPPs

19. The variety and complexity of PPP contracts and, in particular, the shifting ownership, control, and use of assets leads to a number of possible accounting problems when recording the transactions generated by a PPP. The text of the SNA does not have space for detailed guidance about every possibility. Instead, the most likely problems and some general guidance on how to deal with them should be stated. As with economic ownership, government financial accounting information is likely to be the primary source of information. It is necessary, therefore, is to understand how those data were compiled so that an assessment can be made about whether they agree or disagree with SNA principles and whether any actual transactions need to be rearranged or non-monetary transactions need to be constructed.

20. The questionnaire (see the annex to this paper) lists several of the important accounting problems other than economic ownership and the various solutions that have been proposed. The discussion at the April 2005 meeting of the Canberra II group, however, did not lead to any preferred solutions. In addition, there was a general sense that it would be wise to wait until the IASB completes its project on PPPs so that the accounting treatments can be harmonized to the extent compatible with SNA principles. For example, if the private enterprise is assessed as being the economic owner and if—as is common—the government obtains legal and economic ownership at the end of the contract without an explicit payment, how is the government’s acquisition of the assets accounted for? One general approach is for the government gradually to build up a financial claim and the private unit gradually to accrue a corresponding liability such that the value of both will equal the expected residual value of the assets at the end of the contract period. Implementing this approach requires existing monetary transactions to be rearranged or new transactions to be constructed using assumptions about expected asset values and interest rates. An alternative approach is to record the change of legal and economic ownership as a capital transfer. The capital transfer approach does not reflect the underlying economic reality as well, but data limitations, uncertainty about the expected residual value of the assets, and contract provisions allowing various options to be exercised by either party could make using a capital transfer prudent.

21. Another important problem arises when the government is assessed as being the economic owner of the assets but does not make any explicit payment at the beginning of the contract. A transaction must be constructed to accomplish the acquisition. The most common suggestion is that the acquisition be made with an imputed financial lease because of the similarity with actual financial leases. The implementation of that choice, however, depends on the specific contract provisions, how they are interpreted, and possibly other factors. For example, a loan could be imputed and actual government payments to the private unit, if they exist, could be rearranged so that a portion of each payment represents repayment of the loan. If there are no actual government payments, then non-monetary transactions could be constructed for the loan payments. Other means of payment by the government for the asset could be an operating lease prepayment if an operating lease is imputed or an intangible asset for the right of the private unit to access the assets for the production of services.

22. A third important problem concerns the measurement of production, which is at the heart of the SNA. Whatever decisions are made about which unit is the economic owner of the assets during the contract period and how the government eventually acquires them, care should be taken that production is correctly measured. Again, there are options and their desirability varies with the exact situation and the availability of data. The difficulty arises when the government is assessed as being the economic owner of the assets but the assets are used by the private unit to produce services. It is desirable to show the value of the capital services as a cost of production of the private unit, but that may require the imputation of an operating lease, which in turn may require a rearrangement of actual transactions or a construction of non-monetary transactions to identify the lease payments. An alternative is to show the cost of capital services in the production account of the general government sector but to classify the output of the government in the same way as the classification of the output of the private unit so that the total output in the economy is correctly classified.

23. Conclusion: The text of the SNA should state that the complexity and variety of PPP contracts precludes the enumeration of detailed rules governing the transactions to be recorded concerning
the control and use of the assets. The appropriate accounting treatment needs to reflect a
government's residual interest in assets economically owned by the private unit, the acquisition of
operational assets taken into use by a government as economic owner, and the measurement of
production.
ANNEX

CANBERRA II GROUP ON THE MEASUREMENT OF NON-FINANCIAL ASSETS

QUESTIONNAIRE ON PUBLIC-PRIVATE PARTNERSHIPS

Introduction

1. At the meeting of the Canberra II Group in September 2004, several options for the various issues related to public-private partnerships (PPPs) were discussed. It was agreed that the options would be summarized and a questionnaire would be distributed so that members of the group can express their preference. The results of the questionnaire will be presented at the meeting in Canberra in March/April 2005 with the goal of reaching a recommendation to be forwarded to the Advisory Expert Group.

2. Please return the attached questionnaire to me (charles.aspden@oecd.org) by 28 February 2005.

Terms and Sources

3. There are many variants of PPPs, and there is no formal definition of the term. The general nature of a PPP is a long-term contract between two units, one of which is often a government (public) unit and the other is often a private enterprise, hence the name. In the variant that causes the most accounting difficulties and is the focus of this questionnaire, the private enterprise agrees to construct or otherwise acquire a fixed asset or a complex of fixed assets and then to operate those assets over an extended period to produce services that either are sold to the government or are sold to the public and are of a nature usually supplied by a government. The land on which the fixed assets are located may also be acquired by the private enterprise or the government may own and implicitly or explicitly lease it to the private enterprise. At the end of the contract, the government obtains legal ownership of the fixed assets and land, often without any explicit compensation or at a price that is clearly less than the market price. The default assumption for this questionnaire is that the government obtains legal ownership of the fixed assets and land at the end of the contract without making any payment identified as a payment for the assets. Some of the proposals listed below make other assumptions.

4. The fixed assets of PPPs are often described as infrastructure assets, but infrastructure is difficult to define. Moreover, these types of contracts can be used for long-term arrangements for the supply of most any type of service consumed by governments in their ordinary activities, such as information technology services, catering services, or vehicle operating and maintenance services. The relevant fixed assets and land of a PPP will be referred to here as “the assets.”

5. There are two fundamental issues to be resolved:

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8 The term Build-Own-Operate-Transfer, or BOOT, scheme has been used in previous papers. Public-private partnership is used more generally and is a more inclusive term. It will be used here with the understanding that it includes BOOT schemes. Service concession and private finance initiative are other terms used for this type of arrangement.

9 The terms “government” and “private enterprise” will be used here. Other pairs of terms that are used in the literature include government and non-government, purchaser and operator, and grantor and operator.
• Is the government or the private enterprise the economic owner of the assets during the contract (question 1)? In all cases, the private enterprise is the legal owner, but PPPs are means of sharing the risks and rewards of the assets. In many cases, the government accepts a dominant share of the risks and gives up some of the rewards through contract terms specifying minimum levels of demand and prices, debt guarantees, and other provisions assuring the private enterprise of an acceptable rate of return. Depending on how the risks and rewards are shared, the economic owner of the assets could be the private enterprise or the government.

• How is the control and use of the assets accounted for during the contract? If the private enterprise is the economic owner of the assets during the contract, a part of this issue is determining how to account for the transfer of legal and economic ownership at the end of the contract. If the government is the economic owner, how did it purchase the assets at the beginning of the contract and how does the private enterprise gain access to the assets for use during contract? This issue is really a set of questions (questions 2 through 7), the composition of which depends on the resolution of the first issue. An additional level of complexity is created by the possibility that either the government or the public could purchase the services produced by the private enterprise.

6. For reference, several of the important papers on public-private partnerships are attached.
   c) International Accounting Standards Board. (1) *IFRIC Update*, September 2004; (2) *IFRIC Update*, December 2004; (3) *Information for Observers* for the IFRIC meeting on 2 December 2004.
   f) John Pitzer, *Accounting for BOOT Schemes*, presented at the Canberra II Group meeting, 1-3 September 2004 (A summary of several proposals).

7. The proposals attributed here to the International Accounting Standards Board are still being developed by its International Financial Reporting Interpretations Committee (IFRIC). IFRIC plans to issue three draft interpretations in early 2005. They will be then subject to public comment and could be revised. Thus, the documents attached should not be attributed officially to the organization. Instead, they should be considered reasonable proposals suggested by an interested party. Because the SNA is not bound by financial accounting standards, any proposal can be considered, regardless of its source or official status.

8. We have described what we think are the implications of the different proposals for both parties to the contract in the summaries of the proposals shown below. Given that there is great interest in government finances, we added some more specific comments on implications for government net lending/borrowing (deficit/surplus in the *ESA95 manual on government deficit and debt*) and levels of government debt.
Question 1: Which unit is the economic owner of the assets at the beginning of the contract?

9. All proposals are descriptive and require judgment to implement, taking at least some of the facts and circumstances into account. They differ in the detail of the factors to be considered and the implied weights to be applied to each factor. The following paragraphs summarize the various proposals in the sources listed above.

10. Eurostat. The assets are recorded as non-government assets only if there is strong evidence that the non-government unit is bearing certain risks attached to the contract. The risk assessment focuses on three main categories of risk: (a) construction risk, which includes the possibility of additional costs resulting from late delivery, not meeting specifications or building codes, and environmental and other risks requiring payments to third parties; (b) availability risk, which includes the possibility of additional costs or the incurrence of penalties because the volume and/or quality of the services do not meet the standards specified in the contract, and (c) demand risk, which includes the possibility that the demand for the services is higher or lower than expected. The risk assessment should determine which party bears a majority of each category of risk. The assets should be non-government assets only if the non-government unit bears the construction risk and either the availability risk or the demand risk. In borderline cases, the disposition of the asset at the end of the contract (residual risk), the existence of any borrowing by the private enterprise that is guaranteed by the government, and possibly other factors should be taken into consideration. If the government is not the main purchaser of the services produced by the private partner then the arrangement has more the features of a concession with the private partner being the economic owner of the asset.

11. United Kingdom Accounting Standards Board (UK ASB). The economic owner is the unit having access to the benefits of the property and exposure to the associated risks. Ownership is determined by looking at the extent to which each unit would bear any variations in property profits or losses. All profit variations considered should be associated with the property as opposed to variations resulting from contract provisions that are not associated with the property. Factors relevant to the assets are likely to be (a) demand risk, (b) the presence, if any, of third party revenues (the greater the reliance on sales to the public, the more the private enterprise should be assessed to be the economic owner), (c) which unit determines the nature of the property (the more the government determines the design, quality, size, and maintenance of the asset, the more it should be assessed to be the economic owner), (d) penalties for underperformance or non-availability (the more likely and more severe the penalties, the more the private enterprise should be assessed to be the economic owner), (e) potential changes in relevant costs (the unit that bears the larger share of increased costs is more likely to be the economic owner), (f) obsolescence, and (g) residual value risk and other arrangements at the end of the contract.10

12. International Accounting Standards Board (IASB). The government is the economic owner if (a) controls or regulates what services the private enterprise must provide using the assets, to whom it must provide them, and at what price; and (b) controls, through ownership, beneficial entitlement, or otherwise, any residual interest in the assets at the end of the contract, and the residual interest is significant. Condition (b) is satisfied if the government has an option to acquire legal ownership, even if it is not certain to exercise that option. Condition (b) is also satisfied if major elements of the infrastructure asset are used up during the contract and are

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10 Technical Note No. 1, How to Account for PFI Transactions, issued by the UK Treasury, provides more details on how to quantify this risk assessment. It is available on the internet at www.hm-treasury.gov.uk/media/D75/C6/PPP_TIF_Technote1.pdf.
required to be replaced or renovated so that the government will control a residual interest that is significant.

13. Donaghue. Donaghue focuses exclusively on BOOT schemes, a subset of PPPs, and which, by definition, have a provision in the contract for the eventual transfer of assets from the private enterprise to the government. The government is the economic owner because the assets usually have a large residual value and the government bears most of the risk of construction shortcomings, price changes, and operating losses.

14. Pitzer. Pitzer makes no proposal in either of the papers listed in paragraph 6, but his views can be summarised as follows. There are many unknowns that will eventually determine the final profitability of the assets and how those profits will be divided between the private enterprise and the government. It is not possible to identify specific criteria and the method of evaluating their effect on the level and division of profits. All of the relevant facts and circumstances should be assessed, and the unit bearing the majority of the risks and rewards should be the economic owner of the assets.

15. Summary. All of the proposals assess the sharing of risks and rewards or control of the assets and, depending on the results of that assessment, identify either the government or the private enterprise as the economic owner of all of the assets. No proposals divide ownership of the assets between the two units. Eurostat has an overriding criterion, which is that if the government is not the main purchaser of the services produced by the PPP then the economic owner of the assets must be the private partner. In effect, Donaghue also has an overriding criterion, which is that if the PPP includes the transfer of the assets to the government at the end of the agreement then the economic owner of the assets must be the government. None of the other proposals have such clear cut, overriding criteria. The UK ASB assessment is more detailed than the Eurostat assessment. The IASB prefers the control criterion to the risks and rewards criterion, but it is not obvious that control is different from risks and rewards. The UK ASB and IASB proposals consider the residual risk as a primary criterion, but the Eurostat proposal considers it only as a supplementary criterion. The Pitzer proposal is deliberatively non-prescriptive and, therefore, subject to the widest range of interpretations.

**Question 2:** If the private enterprise is the legal and economic owner of the assets during the contract and the government makes periodic payments during the contract, how are the periodic payments and the transfer of ownership of the assets at the end of the contract accounted for?

16. Eurostat. The periodic payments are treated as the value of services produced (output by the private enterprise and intermediate consumption by the government). It is assumed that, at the end of the contract, the government purchases the assets at a price reflecting the remaining useful economic life of the asset.11

17. United Kingdom Accounting Standards Board. If the amount the government agrees to pay the private enterprise at the end of the contract differs from the expected residual value of the assets, then the difference should be built up over the term of the contract by dividing the actual periodic payments into a payment for the services produced by the private enterprise and the

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11 In its accounting example, Eurostat does not specifically consider the case where the government receives ownership without making an explicit payment. When the periodic payments are made by the public, Eurostat assumes that the government receives ownership of the assets at the end of the contract without payment, by means of a capital transfer. A similar treatment would apply in this case.
build up of a claim against the private enterprise. The value of the claim could be negative if the government has agreed to pay more than the expected residual value.

18. **International Accounting Standards Board.** This question is outside the scope of the proposed interpretations.

19. **Donaghue.** The private enterprise is never deemed to be the economic owner in the case of BOOT schemes.

20. **Pitzer.** The periodic payments are partitioned into a payment for the services produced by the private enterprise and an increase in a financial claim of the government against the private enterprise. The amount attributed to the financial claim is the amount that, including interest earned throughout the contract period, equals the expected market value of the assets at the end of the contract. The claim is the means of payment for the assets.

21. **Summary.** The UK ASB and Pitzer proposals are essentially the same. Both assume the government purchases the assets at the expected market price at the end of the contract implicitly through the periodic payments. As a result, the value of the services produced by the private enterprise is less than the amount of the periodic payments. Eurostat assumes the government’s purchase of the assets is a separate, explicit transaction and that the value of the services produced by the private enterprise equals the amount of the periodic payments. Eurostat does not provide guidance for the case in which the government’s purchase of the assets is not an explicit transaction. The operating surplus of the private enterprise each period is less with the UK ASB and Pitzer proposals than with the Eurostat proposal.

22. With the Eurostat proposal, the deficit is increased during the contract by the full amount of the periodic payments, but with the UK ASB and Pitzer proposals the deficit is increased during the contract period by the amount of the purchases of services, which is only part of the periodic payments, less any interest receivable. At the end of the contract, the deficit is increased by the purchase of the fixed assets with the UK ASB and Pitzer proposals, but there is no impact with the Eurostat proposal. Because the private enterprise is the economic owner of the assets, there is no effect on the stock of government debt with any of the proposals.

**Question 3: If the private enterprise is the legal and economic owner of the assets during the contract and the public purchases the services during the contract, how are the payments by the public and the transfer of ownership of the assets at the end of the contract accounted for? (This question is the same as question 2 except that the periodic payments are made by the public rather than the government.)**

23. **Eurostat.** The receipts from the public are treated as the value of services produced (output by the private enterprise). Depending on the contract provisions, the government can receive ownership of the assets at the end of the contract without making a final payment by means of a capital transfer.

24. **United Kingdom Accounting Standards Board.** This possibility is not addressed.

25. **International Accounting Standards Board.** This question is outside the scope of the proposed interpretations.

26. **Donaghue.** The private enterprise is never deemed to be the economic owner in the case of BOOT schemes.

27. **Pitzer.** The private enterprise has been granted a partial or full monopoly for producing and selling its services to the public. In exchange for the monopoly, the government claims a portion...
of what otherwise would be the profits of the private enterprise as an implicit tax on production. Because the private enterprise does not actually pay the tax each period, the government accumulates a financial claim against the private enterprise throughout the period of the contract. The amount attributed to the tax is the amount that will accumulate at the end of the contract to the expected market value of the assets. The claim is the means of payment for the assets.

28. **Summary.** Pitzer assumes the government purchases the assets for their expected market price and Eurostat assumes the government obtains them through a capital transfer. The value of the private enterprise’s output is equal to the amount of the public’s payments in both proposals, but there is a tax on production in the Pitzer proposal and no tax in the Eurostat proposal. The operating surplus of the private enterprise each period is less with the Pitzer proposal than with the Eurostat proposal. With the Eurostat proposal, there is no effect on the deficit or debt. With the Pitzer proposal, the deficit is reduced during the contract period by the amount of the imputed tax and interest receivable, but is increased at the end of the contract by the purchase of the assets.

**Question 4:** If the government is the economic but not the legal owner of the assets during the contract and the government makes periodic payments during the contract, how are the government’s purchase of the assets at the beginning of the contract and its periodic payments accounted for?

29. **Eurostat.** The government purchases the assets by means of a financial lease. The periodic payments during the contract include the amount necessary to pay the interest as it accumulates and to repay the principal, based on the assumption that the debt will be extinguished at the end of the contract. If the private enterprise also engages in production during the contract, then a portion of the periodic payments is treated as the value of services produced (output by the private enterprise and intermediate consumption by the government). The private enterprise does not use the assets in its production process and no operating lease is imputed. Thus, the value of the services excludes the rental value of the assets.

30. **United Kingdom Accounting Standards Board.** The government purchases the assets by means of a financial lease. The debt service payments are imputed based on the appropriate current interest rate and the assumption that the debt will be extinguished at the end of the contract. The difference between the periodic government payments and the imputed debt service payments is the purchase of services produced by the private enterprise. The private enterprise does not use the assets in its production process and no operating lease is imputed. Thus, the value of the services excludes the rental value of the assets.

31. **International Accounting Standards Board.** The government purchases the assets using a non-cash asset as the means of payment. If the private enterprise has the right of use of the assets, then it has an operating lease and the private enterprise’s asset is a lease prepayment. In this case, the periodic payments received from the government are sales of services and the lease prepayment is distributed proportionally over the life of the contract. If, as is usual, the government controls the use to which the assets are put, the private enterprise does not have the right of use and, therefore, does not have an operating lease. Instead it has the right to access the assets to provide the services, and its asset is a financial receivable, usually a loan or an other accounts receivable. The subsequent periodic payments are then partitioned between a payment for services and a repayment of the receivable. In this case, the private enterprise does not use the assets in its production process and no operating lease is imputed. Thus, the value of the services excludes the rental value of the assets.

32. **Donaghue.** The government purchases the assets by means of a financial lease. It is assumed that the private enterprise uses the assets to produce services that are sold to the government and
pays for the use of the assets by means of an operating lease. The actual periodic payments by government are treated as the value of services produced by the private enterprise. Each financial lease payment is imputed equal to the amount necessary to extinguish the loan at the end of the contract period. Each operating lease payment is imputed equal to the financial lease payment. The private enterprise uses the assets in its production process. Thus, the value of the services includes the rental value of the assets (the value of the operating lease payment).

33. **Pitzer.** The government purchases the assets by means of a financial lease. It is assumed that the private enterprise uses the assets to produce services that are sold to the government and pays for the use of the assets by means of an operating lease. The periodic payments by government are a combination of a purchase of services produced by the private enterprise and the build up of a financial claim against the private enterprise. The amount attributed to the financial claim is the amount that, including interest earned throughout the contract period, equals the expected market value of the assets at the end of the contract. Each financial lease payment is imputed equal to the amount that will reduce the loan at the end of the contract to the value of the financial claim of the government against the private enterprise, which is also the expected value of the fixed assets and land. The private enterprise uses the assets in its production process. Thus, the value of the services includes the rental value of the assets (the value of the operating lease payment).

34. **Summary.** The Eurostat, UK ASB, and IASB proposals (with no operating lease) are essentially the same. The value of the services produced by the private enterprise is the residual of the actual payment less the amount of the debt service payment. Because there is no operating lease, the value of the services of the assets (the amount that would be the operating lease payment) is not included in the cost of production. Donaghue and Pitzer both consider the use of the assets to be part of the production process and include the cost of the imputed operating lease payment in the cost of production of the private enterprise. Thus, the value of the services produced by the private enterprise is greater than with the Eurostat, UK ASB, and IASB proposals. The amount of the operating lease payment with the Pitzer proposal is less than with the Donaghue proposal because the balance of the loan associated with the financial lease is reduced only to the expected market value of the assets by the end of the contract, while with the Donaghue proposal the loan is completely extinguished. The operating lease payments should reflect the flow of capital services from the assets over the period of the agreement and by setting their net present value at the beginning of the agreement equal to the value of the assets, Donaghue overstates the value of the operating lease payments if the assets still have value at the end of the agreement. The upshot is that the Eurostat, UK ASB, IASB and Pitzer proposals have the same operating surplus for the private enterprise, but Donaghue’s is understated.

35. With all of the proposals, the deficit and debt are increased at the beginning of the contract by the purchase of the assets and incurrence of a loan or similar liability. With the Eurostat, UK ASB, and IASB proposals, the deficit is increased during the contract by the interest payments and the debt is decreased by the principal repayments. The deficit is also increased during the contract by the amount paid by the government for the services, which excludes the value of the services of the assets. The Donaghue proposal is similar, but the amount paid by the government for the services includes the value of the services of the assets. This higher payment is offset by the receipt of operating leasing payments. With the Pitzer proposal, the debt service payments are less and the reduction of the debt is correspondingly less. The amount paid by the government for the services is also less. The lower deficit and higher debt during the contract is offset at the end of the contract when the government purchases the assets and liquidates the debt.

**Question 5:** If the government is the economic but not the legal owner of the assets during the contract and the public purchases the services during the contract, how are the government’s purchase of the assets at the beginning of the contract and the
payments by the public accounted for? (This question is the same as question 4 except that the periodic payments are made by the public rather than the government.)

36. Eurostat. There is no need to answer this question because the private enterprise is considered to be the economic owner whenever the payments are received from the public.

37. United Kingdom Accounting Standards Board. This possibility is not addressed.

38. International Accounting Standards Board. The government purchases the assets using a non-cash asset as the means of payment. If the private enterprise has the right of use of the assets, then it has an operating lease and the private enterprise’s asset is a lease prepayment. In this case, the periodic payments received from the public are sales of services and the lease prepayment is distributed proportionally over the life of the contract. If, as is usual, the government controls the use to which the assets are put, the private enterprise does not have the right of use and, therefore, does not have an operating lease. Instead it has the right to access the assets to provide the services, which is classified as an intangible, non-financial asset—the right to collect the payments from the public. In this case, the periodic payments received from the public are sales of services and the value of the intangible asset is amortized over the life of the contract. The cost of production includes the amortization expense rather than the operating lease payment, but amortization of intangible assets is not a transaction. As a result, the net operating surplus is larger than if an operating lease were assumed.

39. Donaghue. The government purchases the assets by means of a financial lease. It is assumed that the private enterprise uses the assets to produce the services that are sold to the public and pays for the use of the assets by means of an operating lease. The receipts from the public are treated as the value of the services produced by the private enterprise. Each financial lease payment is imputed equal to the amount necessary to extinguish the loan at the end of the contract period. Each operating lease payment is imputed equal to the financial lease payment. Because the private enterprise uses the assets in its production process, the value of the services includes the rental value of the assets (the value of the operating lease payment).

40. Pitzer. The government purchases the assets by means of a financial lease. It is assumed that the private enterprise uses the assets to produce the services that are sold to the public and pays for the use of the assets by means of an operating lease. The private enterprise has been granted a partial or full monopoly for producing and selling its services to the public. In exchange for the monopoly, the government claims a portion of what otherwise would be the profits of the private enterprise as an implicit tax on production. Because the private enterprise does not actually pay the tax each period, the government accumulates a financial claim against the private enterprise throughout the period of the contract. The amount attributed to the tax is the amount that will accumulate at the end of the contract to the expected market value of the assets. Each financial lease payment is imputed equal to the amount that will reduce the loan at the end of the contract to the value of the financial claim of the government against the private enterprise, which is also the expected value of the fixed assets and land. The private enterprise uses the assets in its production process. Thus, the value of the services includes the rental value of the assets (the value of the operating lease payment).

41. Summary. With the IASB, Donaghue, and Pitzer proposals, the value of the services produced by the private enterprise is equal to the actual receipts from the public. With the IASB proposal, the amortization of the intangible asset is an expense. With the Donaghue and Pitzer proposals, the operating lease payment is an expense. Thus, the operating surplus is greater with the IASB proposal than with either the Donaghue or the Pitzer proposal. The amount of the operating lease payment with the Pitzer proposal is less than with the Donaghue proposal because
the balance of the loan associated with the financial lease is reduced only to the expected market value of the assets by the end of the contract, while with the Donaghue proposal the loan is completely extinguished. The operating lease payments should reflect the flow of capital services from the assets over the period of the agreement and by setting their net present value at the beginning of the agreement equal to the value of the assets, Donaghue overstates the value of the operating lease payments if the assets still have value at the end of the agreement. The upshot is that Donaghue’s proposal understates the operating surplus for the private enterprise.

42. With the Donaghue and Pitzer proposals, the deficit increases at the beginning of the contract with the purchase of the assets. During the contract, the deficit is increased by the interest payments but decreased by the receipt of the operating lease payments. As with question 4, the difference between the Donaghue and Pitzer proposals is that the operating lease payments are higher and the debt reduction is greater with the Donaghue proposal than with the Pitzer proposal during the contract. At the end of the contract, there is no change in the debt with the Donaghue proposal but there is a debt liquidation payment with the Pitzer proposal. With the IASB proposal, the initial purchase of the assets is offset by the sale of the intangible asset so that there is no effect on the deficit. During the contract, there are no interest payments and no operating lease payments.

**Question 6:** If the government transfers the ownership of existing assets to the private enterprise at the beginning of the contract for use during the contract with the provision that ownership be transferred back to government at the end of the contract, what treatment should be accorded those transfers of ownership?

43. **Eurostat.** If the government transfers existing fixed assets and/or land to the private enterprise at the beginning of the contract period for use in producing the services, this transfer is treated as the acquisition of equity in the private enterprise by the government. The exchange of the non-financial assets for the financial asset is accomplished with a reclassification of assets, which is a non-transaction other change in the volume of assets. When the assets are transferred back to the government at the end of the contract, there is another reclassification of assets. If the assets are fixed assets, then their value will decrease during the contract. This decrease in value is treated as a revaluation of the equity asset.

44. **International Accounting Standards Board.** If an asset is sold by the government to the private unit for use in the contract with either an option or an obligation to repurchase the asset at the end of the contract such that the government retains significant risks or rewards, then the transaction is not a sale, but is an operating lease.
Question 7: How should payments by the private enterprise to the government during the contract be accounted for?

45. Eurostat. In concession contracts, the private enterprise is obligated to make regular payments to the government. If the government has transferred ownership of some assets to the private enterprise, the payments are treated as dividends on the financial asset received in exchange for the non-financial assets (see question 6). Otherwise, the payments are treated as rent if the private enterprise is using government land or taxes on production if it is not using government land.

John Pitzer
Charles Aspden
Canberra II Group
Questionnaire

Please mark your preference with an X, and provide comments as you see fit.

Name of member:

Canberra II meeting(s) attended:

1. Which unit is the economic owner of the assets at the beginning of the contract?

   1. Eurostat [ ]
   2. United Kingdom Accounting Standards Board [ ]
   3. International Accounting Standards Board [ ]
   4. Donaghue [ ]
   5. General statement [ ]
   6. Other, please specify what you have in mind [ ]

Comments:

2. If the private enterprise is the legal and economic owner of the assets during the contract and the government makes periodic payments during the contract, how are the periodic payments and the transfer of ownership of the assets at the end of the contract accounted for?

   1. Eurostat [ ]
   2. United Kingdom Accounting Standards Board [ ]
   3. Pitzer [ ]
   4. Other, please specify what you have in mind [ ]

Comments:

3. If the private enterprise is the legal and economic owner of the assets during the contract and the public purchases the services during the contract, how are the payments by the public and the transfer of ownership of the assets at the end of the contract accounted for?
4. If the government is the economic but not the legal owner of the assets during the contract and the government makes periodic payments during the contract, how are the government’s purchase of the assets at the beginning of the contract and its periodic payments accounted for?

1. Eurostat
2. United Kingdom Accounting Standards Board
3. International Accounting Standards Board
4. Donaghue
5. Pitzer
6. Other, please specify what you have in mind

Comments:

5. If the government is the economic but not the legal owner of the assets during the contract and the public purchases the services during the contract, how are the purchase of the assets at the beginning of the contract and the payments by the public accounted for?

1. International Accounting Standards Board
2. Donaghue
3. Pitzer
4. Other, please specify what you have in mind

Comments:

6. If the government transfers ownership of existing assets to the private enterprise at the beginning of the contract for use during the contract with the provision that they be
transferred back to government at the end of the contract, what treatment should be accorded those transfers of ownership?

1. Eurostat
2. International Accounting Standards Board
3. Other, please specify what you have in mind

Comments:

7. How should payments by the private enterprise to the government during the contract be accounted for?

1. Eurostat
2. Other, please specify what you have in mind

Comments: