



Directorate C: National and European Accounts  
Unit C-5: Validation of public accounts



EUROPEAN CENTRAL BANK  
DIRECTORATE GENERAL STATISTICS  
S/SDC/2006/190

**Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government**

## **INTERIM REPORT TO THE CMFB PREPARED BY THE TASK FORCE**

### ***Executive Summary***

*The Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government (the Task Force) was established by the CMFB at its June 2006 meeting. There have been two meetings of the Task Force in 2006, during September and November 2006. The Task Force has concentrated initially on the discussion of a possible compromise for the comprehensive recording of pension schemes in the context of the updated SNA, and on the design of a possible supplementary table which forms a key part for implementation of the compromise. The Task Force chairmen circulated a proposed compromise to the ISWGNA in October 2006, which was subsequently forwarded to members of the Advisory Expert Group (AEG) for worldwide consultation, and the compromise has received almost universal support.*

*The Task Force continues to work on the design of the supplementary table and other aspects of the proposed compromise, and in addition has started discussion on the modelling and estimation aspects of pension schemes for national accounts purposes. The Task Force chairmen feel that, given the complexity of the subject, it will be necessary to extend the timetable of the Task Force to the end of 2007, and seek the CMFB's agreement to this extension.*

### **1. The work to date**

As CMFB members will be aware, the treatment of unfunded pension schemes in the updated SNA has been one of the most controversial issues discussed, and had revealed major differences of opinion worldwide. Following the AEG meeting in February 2006, Eurostat and the ECB proposed to

create a jointly-chaired Task Force to examine the practical issues involved in compiling actuarially-based estimates for pension schemes. The mandate of the new Task Force was agreed by the CMFB in its June 2006 meeting and the following countries and international organisations have participated: Czech Republic, Germany, Spain, France, Italy, Hungary, Poland, Sweden, the United Kingdom, the OECD, the IMF, DG ECFIN and the SNA Editor. The mandate of this Task Force is provided in Annex 1 to this document.

The **first meeting of the Task Force in September 2006** was focussed on the possibility of finding a compromise which would reconcile the different worldwide perspectives, recognise the difficulties encountered by particular countries (notably in Europe) and nevertheless introduce transparency for the users of national accounts. The discussion was based on a preliminary draft text prepared by certain international statistical institutions during the summer of 2006, and the Task Force developed a possible compromise for the recording of pension schemes. Eurostat and the ECB sent the following document to the ISWGNA that summarises the outcome (it was sent to the CMFB for information shortly before wider distribution). Both letters, as well as the compromise, are provided in Annex 2 to this document.

The proposed compromise was not intended by the Task Force to provide an exact drafting text for the updated SNA, but rather to reflect the spirit of a compromise which will need to be operationalised by further work within the Task Force and elsewhere, both on the complex technical aspects of modelling and estimating activities and positions of unfunded pension schemes and on a suitable presentation to assist users in establishing a basis for comparing national accounts internationally.

The ISWGNA used this document as a basis for consultation to the AEG and the IMF/BEA Task Force on Pensions during 2006, and it was subsequently circulated worldwide for further comments. To date these comments have been almost entirely favourable. The ISWGNA is currently writing a short report on the responses that will be put on the UN website, and which will form part of the basis for the recommendations that will go to the forthcoming Statistical Commission meeting at the end of February 2007.

The **second meeting of the Task Force in October 2006** concentrated on the design of the supplementary table which is envisaged in the proposed compromise to ensure that data on pension schemes are fully transparent for the future users of national accounts.

The first and second meetings of the Task Force also listened to presentations of national pension systems by five Task Force members, and raised preliminary discussions on the key assumptions to be made for modelling pension schemes (notably the actuarial approach, treatment of future real pay increases of existing staff and the discount rate to be applied). A letter has been sent to the chairmen

of the IMF/BEA Task Force on pensions to seek their input on the appropriate treatment of future promotions in this context. The letter is provided in Annex 3 to this document.


All of the relevant documents for the Task Force meetings are available on the Commission's CIRCA website (in a dedicated directory of the Financial Accounts Working Group).

## **2. Future work of the Task Force**

Owing to the obvious complexity of the ongoing work, the Task Force chairmen recommend that the Task Force be extended until the end of 2007, with a final report delivered to the CMFB in its first meeting in 2008. *The CMFB is asked to endorse this extension.* For information the latest timetable of the group is attached in Annex 4.

During the first half of 2007 it is envisaged that the Task Force will finalise the design for the supplementary table on pensions and then circulate a questionnaire to all EU27 countries seeking feedback on the table and the latest national developments in pension schemes and related modelling. The Task Force will also seek to reach agreement on a common basis for making assumptions in modelling pension schemes, particularly for the main aspects such as discount rate, demographic data and the specific issues associated with social security pensions. Following discussion with the World Bank, it is envisaged that the ECB will arrange a special training course in "PROST" software, which is a standard software package used by many countries to examine reform options for their pension schemes on an actuarial basis. Following the training, the Task Force will examine the extent to which PROST will be applied to its work.

It is planned that members of the Task Force will undertake modelling of their national pension schemes during mid-2007, and the Task Force will use this experience to develop a common methodological document for distribution to all countries at the end of 2007 in the framework of the final report for the CMFB, encouraging all countries to start modelling work themselves afterwards.

 EUROPEAN COMMISSION  <b>eurostat</b>	 EUROPEAN CENTRAL BANK
Directorate C: National and European Accounts <b>Unit C-5: Validation of public accounts</b>	EUROPEAN CENTRAL BANK DIRECTORATE GENERAL STATISTICS

**Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government**

**MANDATE OF THE TASK FORCE**

**Background**

In the context of discussion of the recording of public pension and social security schemes in the ongoing review of SNA93 and the promotion of full government balance sheet information in the national accounts, there is a need to develop clear, complete and consistent rules and guidelines for the reporting of statistics on pension schemes in general government. There is also an opportunity to provide statistical input to the ongoing work on sustainability of public finances being led by DG ECFIN in cooperation with the Economic Policy Committee (and the AWG attached to it).

This Task Force is intended to deal with two related requirements:

- The need for a further analysis of the measurement of the liabilities<sup>1</sup> (and related assets) of pension schemes in general government, in the context of discussions on the revision of SNA93, and notably to analyse borderline issues between public employee pension schemes and the pension elements of social security schemes.
- Preliminary discussions on the sources and methods for measuring the liabilities (and related assets) of the pension elements of social security schemes.

There is a considerable amount of background material on both of these matters, both from work in European Union and also worldwide, which will need to be collated and summarised by Eurostat and the ECB in advance of the first Task Force meeting.

**Mandate of the Task Force**

The Task Force should undertake the following tasks:

- i) Review existing material on the measurement of pension schemes and social security classified in the general government sector<sup>2</sup>;
- ii) On the basis of this review, identify the statistical methodological issues which would need to be resolved to produce best possible estimates of these assets and liabilities. These issues will include investigation of the borderlines between social security and public employee schemes, and between schemes with actual liabilities accrued to date and schemes with contingent liabilities;

<sup>1</sup> Liabilities in this sense refer to those accrued to date, rather than the broader concept of all future liabilities whether or not accrued to date.

<sup>2</sup> It is unlikely that these funds have significant holdings of non-financial assets, however this should not be excluded in every case.

iii) Discuss and reach an agreement on the appropriate methodological approaches to be taken on the identified issues;

iv) Produce statistical estimates for as many past years as possible of the appropriate stocks and flows relating to these financial assets and liabilities, based on national accounting principles, for the participating Task Force countries.

v) Elaborate a methodological guidance note which could be used in non-Task Force countries for the purposes of preparing the best possible estimates of these assets and liabilities.

#### Members of the Task Force

The Task Force will be co-chaired by Eurostat and the ECB, and will be supported by a joint secretariat from these institutions. The following participants will be invited:

- A limited number of Member States' experts.
- DG ECFIN
- Observers from the OECD and IMF
- Experts in government accounting, demographics and pension and social security schemes as decided initially by the Chairpersons and/or by the Task Force during the course of its deliberations.

#### Timetable of the Task Force

The Task Force should meet twice during the course of 2006, with the first meeting to be held in September 2006.

Eurostat will prepare in consultation with the ECB for the end-January 2007 CMFB meeting an interim report of the work of the Task Force in which it summarises work-in-progress and provides those conclusions which will be of relevance for discussions of the treatment of public employee pension liabilities in the revised SNA93<sup>3</sup>.

The Task Force should in principle conclude its work by 1<sup>st</sup> May 2007, and the outputs of its work will be presented to the June 2007 CMFB meeting (notably a report on issues discussed, a methodological guidance note, and preliminary quantitative tables). These outputs may also be presented to, and discussed at, the FAWG and NAWG, so that all Member States have an opportunity to provide expert input. The outputs will also be subsequently presented to EPC / EFC sub-groups for information.

The Task Force should provide the agreed minutes of each Task Force meeting to the relevant statistical authorities of all Member States. It shall seek the input of other statistical experts, including the National and Financial Accounts Working Groups.

The Task Force should also consider a timetable for possible follow-up work.

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<sup>3</sup> It is recalled that the UN Statistical Committee will meet in March 2007 to finalise the SNA93 review issues. The input from the Task Force should provide a sound basis for discussions on treatment of employee pension schemes leading up to that meeting.

**Mr Adriaan Bloem**  
**Chairman of the ISWGNA**  
**International Monetary Fund**  
**Washington, DC, 20431**  
[abloem@imf.org](mailto:abloem@imf.org)

**Subject: Task Force on the statistical measurement of the assets and liabilities of  
pension schemes in general government**

Dear Mr Bloem,

As you will probably be aware, the last AEG and the OECD Statistics Committee meetings exposed a significant divergence of opinion on the appropriate recording of pension schemes in the 1993 SNA, Rev.1. Over the summer a number of international institutions, including Eurostat and the ECB, have collaborated in an attempt to seek a compromise. It reflects the heterogeneity of the pension scheme arrangements established worldwide. The proposed compromise was set out in a letter from the ECB to the IMF of 28<sup>th</sup> July 2006, which recently received an encouraging response from the IMF on behalf of the ISWGNA on 17<sup>th</sup> September 2006.

The Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government, established by the CMFB and co-chaired by Eurostat and the ECB, met on 20<sup>th</sup>-21<sup>st</sup> September 2006 and examined closely the suggested compromise. The text of the compromise, which is attached, has been discussed and slightly amended. It is considered by the Task Force to be a good way forward.

The Task Force also discussed the detailed design of a possible supplementary table on pensions, the delineation between general government employer pension schemes and social security schemes, three country presentations, and some strategic questions relating to modelling and software. We plan to send you a draft version of the supplementary table including the results of the discussion of the first meeting of the Task Force as soon as it is cleared with the members of the Task Force, but you should consider that this work is still in progress. Moreover, the Task Force is developing a questionnaire to be sent to all EU Member States and acceding countries, which is intended to collect further relevant information for the Task Force's work.

The next meeting of the Task Force will take place on 16-17 November 2006 at the ECB's premises in Frankfurt.

Yours faithfully,

*(signed)*  
Eduardo Barredo Capelot

*(signed)*  
Reimund Mink

Attachment

Proposed compromise

Luxembourg 29 September 2006  
ESTAT/EBC/lc/ D(2006) 50089

WF –Task Force Pension

**Mr Bill Keating**  
**Chairman of the CMFB**  
**Central Statistics Office**  
**Ardee Road**  
**Rathmines**  
**DUBLIN 6**  
**IRELAND**  
e-mail: [cmfb@chaircso.ie](mailto:cmfb@chaircso.ie)

**Subject: Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government**

Dear Mr Keating,

We would like to inform you about the establishment of the above Task Force, following agreement at the last CMFB meeting, and the discussions that took place in the first Task Force meeting in Luxembourg on 20<sup>th</sup>-21<sup>st</sup> September 2006.

The Task Force is composed of all countries and institutions which expressed an interest. Representatives from Germany, Spain, France, Italy, Hungary, Poland, Sweden, the United Kingdom and DG ECFIN, as well as observers from the OECD, IMF and the SNA Editor, participated in this Task Force meeting. A list of persons attending the meeting is attached.

As you will probably be aware, the last AEG and the OECD Statistics Committee meetings exposed a significant divergence of opinion on the appropriate recording of pension schemes in the updated SNA93. Over the summer a number of international institutions, including Eurostat and the ECB, have collaborated in an attempt to seek a compromise. It reflects the heterogeneity of the pension scheme arrangements established worldwide.

The proposed compromise was set out in a letter from the ECB to the IMF of 28<sup>th</sup> July 2006, which recently received an encouraging response from the IMF on behalf of the ISWGNA on 17<sup>th</sup> September 2006. Both letters are attached for information.

The Task Force examined closely the suggested compromise. The text of the compromise, which is attached, has been discussed and slightly amended by the Task Force. It is considered by the Task

Force to be a good way forward. At the request of Mr Bloem, on behalf of the ISWGNA, the Task Force would suggest that it is circulated to the international statistical community.

The Task Force also discussed the detailed design of a possible supplementary table on pensions, the delineation between general government employer pension schemes and social security schemes, three country presentations, and some strategic questions relating to

modelling and software. The Task Force is developing a questionnaire to be sent to all EU Member States and acceding countries, which is intended to collect further relevant information for the Task Force's work.

The minutes of the Task Force, together with other Task Force documents, will be uploaded onto CIRCA within a dedicated directory in the Financial Accounts Working Party section, so that they may be consulted by CMFB members and their colleagues.

The next meeting of the Task Force will take place on 16-17 November 2006 at the ECB's premises in Frankfurt. We attach a draft timetable of the work of the Task Force. As you will see there is a suggestion that the work of the Task Force might continue until the end of 2007, given the potentially complex technical issues to be resolved on modelling and deriving actuarially-based estimates for the various countries.

We would be grateful if you could please forward this letter and attachments to the members of the CMFB.

Yours faithfully,

*(signed)*  
Eduardo Barredo Capelot

*(signed)*  
Reimund Mink

Attachments:

- 1) List of participants to the first meeting of the Task Force
- 2) Proposed compromise
- 3) Timetable of the Task Force
- 4) Letter from the ECB to the IMF of 28<sup>th</sup> July 2006
- 5) Letter from the IMF to the ECB of 17<sup>th</sup> September 2006

### **Possible compromise on the treatment of pension schemes in the updated SNA93**

The following six "basic principles" have been elaborated during collaboration between international bodies and have found widespread support amongst senior statistical staff. The Eurostat/ECB Task Force discussed these principles on 21<sup>st</sup>–22<sup>nd</sup> September 2006 and agreed that they represent a good way forward.

Terminology is important and the Task Force defined the following terms:

*Funded schemes:* Those schemes that finance pension payments by drawing down on segregated and earmarked assets. These schemes can be exactly funded, under-funded or over-funded, depending on the size of the accumulated assets in relation to the pension entitlements.

*Unfunded schemes:* Those schemes that finance current pension payments with the ongoing contributions paid by future pensioners and/or other ongoing revenue such as taxes or transfers; unfunded schemes may hold sizeable assets (for example for liquidity reasons or as buffer funds).

- (i) All employer pension-related flows and stocks, including pension entitlements, provided by schemes where the government has no direct responsibility for paying future pensions are recorded in the core accounts, even if they are unfunded.
- (ii) The updated SNA will include a new standard (supplementary) table on pensions which will become a requirement. In this table, all flows and stocks of all pension schemes will be shown. This table will thus include details of pension flows and stocks that are recorded in the core accounts plus any that are not included in the core accounts, giving a complete view of households' pension entitlements;
- (iii) For the benefit of users of the accounts, all countries will be expected to produce the new standard (supplementary) table. It is suggested that this table would be compulsory for European Union member states through ESA regulation.

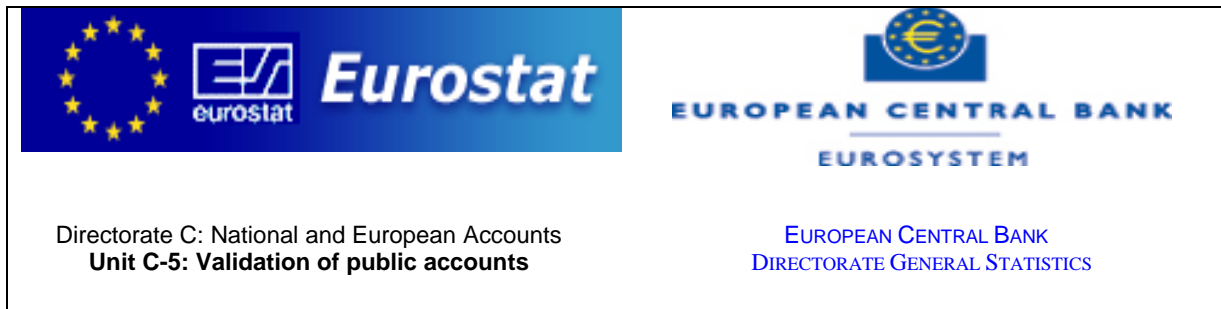
*Concerning government sponsored schemes:*

- (iv) Pension entitlements of unfunded, pay-as-you-go government sponsored schemes which provide the basic social safety net type of provision, will be recorded only in the new standard (supplementary) table (but not in the core accounts);
- (v) The recommendation of the updated SNA regarding the recording of unfunded pension schemes sponsored by government for all employees (whether private sector employees or government's own employees) will be flexible. Given the different institutional arrangements in countries, the updated SNA will permit recording only some of these pension entitlements in the core accounts. However, it will be a requirement that the rationale and criteria be provided to explain the distinction between those schemes whose entitlements are carried forward to the core accounts and those for which they are recorded only in the new standard (supplementary) table.

Providing a set of internationally recognized criteria for this distinction should be on the SNA research agenda, and will also be considered during the update of the ESA;

- (vi) Pension entitlements of funded systems sponsored by the government will be recorded in the core accounts.

Annex 3



**Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government**

Luxembourg, Frankfurt, 24 November 2006

Mr A. Bloem and Mr J. Ruser,  
Chairmen  
IMF/BEA Task Force on Pensions

**Subject: Use of the actual benefit obligation (ABO) approach and the projected benefit obligation (PBO) approach for actuarial estimates of pension entitlements in the national accounts**

Dear Mr Bloem, Dear Mr Ruser,

The Eurostat/ECB Task Force on Pensions met on 16-17 November in Frankfurt and, amongst other issues, discussed the most suitable valuation method to use for the actuarial estimation of *accrued-to-date pension entitlements* in the national accounts. Accrued-to-date pension entitlements cover both those due to pension contributions already paid by current workers and also the remaining pension entitlements of existing pensioners.

For the derivation of actuarial estimates under the accrued-to-date approach, there are two main valuation methods that have been applied to corporate pension schemes, the actual benefit obligation (ABO) and the projected benefit obligation (PBO) approach. The ABO is calculated for years of service to date based on the current wage and salary rates, i.e. future salary increases are disregarded. By contrast, the PBO is calculated including assumptions on what the employee will earn during his entire career. The PBO estimate of entitlements is larger than the ABO, with a substantial difference in early years of service decreasing towards retirement date (when the measures are equivalent).

We are aware that the choice between the ABO and PBO approaches was discussed in your Task Force at its meeting of 21-23 September 2005, and that the ABO approach was felt to be the most appropriate valuation approach for national accounts. It was argued that the accumulated value of benefits should be based only on service to date (ABO) figures. Accordingly, projected future wages and salaries should not be taken into account, but PBO estimates could be provided as a memorandum item.

However most members of the Eurostat/ECB Task Force felt that a PBO approach showed significant merits and it would not be inconsistent with the "accrued to date" valuation method. In particular the Eurostat/ECB Task Force noted that for defined benefit pension schemes:

- The ABO approach could lead to significant "other changes in volume" each year as the total changes in the pension entitlements have to be reconciled with the relevant transactions – this is equivalent to a situation where any promotions or real wage increases for employees are treated as a "surprise" each year in the model. The PBO approach could also lead to "other changes in volume", but only when the assumptions of promotions and real wage increases are shown to be inconsistent with actual movements (thereby leading to a change of the actuarial assumptions) and therefore less regular and potentially smaller.
- The PBO approach would, other things being equal, lead to a smoother path of actuarially-based social contributions over time. This has implications for the measurement of government non-market output when a government employer defined benefit pension scheme is classified in the general government sector.
- The PBO approach appears to be that chosen by business accountants for international accounting standards for private businesses, and this approach has been retained for the exposure draft of the International Public Sector Accounting Standard (IPSAS) on employee benefits, recently released for consultation by the IPSAS Board. This is important for us because the data sources for non-government pension schemes, and possibly some government pension schemes, will be often be based, at least for quoted corporations, on these international accounting standards. We have noted the view expressed in your Task Force that the actuarial profession is moving towards adopting an ABO approach as the standard, but we have not found references to this either in the actuarial profession journals or in the ongoing convergence review of employee benefits between IFRS and US GAAP.
- Finally, some Eurostat/ECB task force members pointed out cases where actuarial estimations of pension entitlements of individuals, even of government employees or civil servants, in cases of moving from one pension scheme to another, are based on the PBO approach.

We would be most grateful if you could provide us with some further information on the possible reasons for favouring an ABO approach, and perhaps update us if any further discussions have taken place on this issue at an international level.

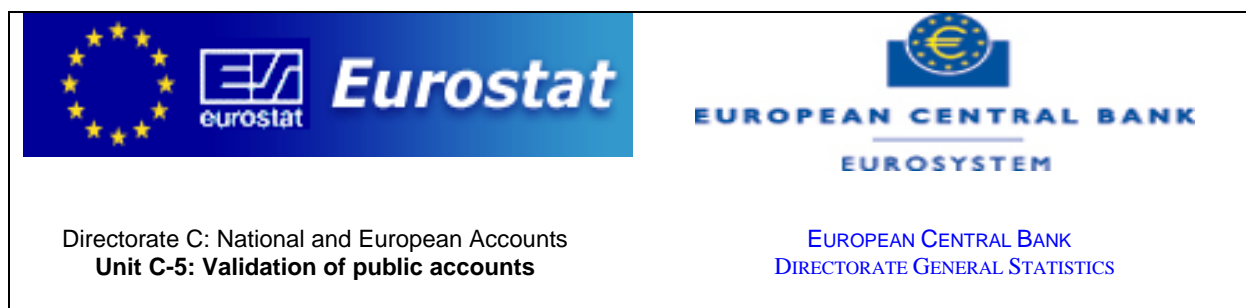
Yours sincerely,

*Signed*

Eduardo Barredo and Reimund Mink

Chairmen of the Eurostat/ECB Task Force on pensions

Annex 4



**Task Force on the statistical measurement of the assets and liabilities of pension schemes in general government**

**TIMETABLE FOR THE TASK FORCE (LAST UPDATE: 14 DECEMBER 2006)**

Date	Activity / Deadline	Issue
20 and 21 Sep-06	First meeting of the Task Force in Luxembourg	Statistical methodology: standard and supplementary accounts; borderline between unfunded employer pension schemes and social security schemes; stocktaking
22 Sep-06 to 15 Nov-06	Follow-up and preparation of the second TF meeting	<ul style="list-style-type: none"> <li>a) Finalise a summary methodological note on how to treat general government unfunded employer pension schemes and pension-related social security schemes in the new SNA for circulation within Europe and outside – prepare interim report for CMFB</li> <li>b) Supplementary table on pension schemes (accounting entries, classification of pension schemes by type and sector)</li> <li>c) Delineation between government employer schemes and social security schemes</li> <li>d) Questionnaire on pension schemes</li> <li>e) Investigation of actuarial modelling and related software: Explore feasibility to have an introduction in PROST</li> <li>f) Update the timetable</li> <li>g) Minutes of the first meeting</li> </ul> Deadlines: a) Send to TF by 22 Sep-06; TF comments by 26 Sep-06; send to CMFB for comments by 27 Sep-06 for comments; CMFB comments by 4 Oct-06; send to ISWGNA by 6 Oct 2006 b) d) f) g) Send to TF by 29 Sep 06; TF comments by 11 Oct 06 d) Send to EU-25 by 17 Oct 06; deadline 31 Oct 06
9-10 Oct-06	OECD NAWG, Paris	Presentation of the 'compromise' solution on pensions by the SNA Editor
14 and 15 Nov-06	NAWG, Luxembourg	Presentation of the outcome of the first TF meeting
16 and 17 Nov-06	Second meeting of the Task Force in Frankfurt am Main (Eurotower CVI)	<ul style="list-style-type: none"> <li>a) Follow-up of report/methodological note to be prepared for the CMFB meeting in January 2006-09-2006</li> <li>b) Further work on the supplementary table on pensions</li> <li>c) Delineation between government employer schemes and social security schemes</li> <li>d) Developing criteria</li> <li>e) Questionnaire: Outcome</li> </ul>

		f) Handbook on pension schemes in Europe g) Country presentations (DE, PL) f) PROST, modelling and actuarial estimates
20 Nov-06 to mid Jan-06	Preparation of the interim report to the CMFB	
18-19 Jan-07	FAWG, Luxembourg	Presentation of the TF work to date
1 and 2 Feb-07	CMFB meeting in Luxembourg	Presentation of the interim report and estimate of follow-up work by the Task Force
end Feb-07	UN Statistical Commission meeting	
20 Nov-06 to early Mar-07	Follow-up and preparation of the third TF meeting	a) Supplementary table on pensions b) Questionnaire to countries EU-27 c) Developing criteria delineation between government employer schemes and social security schemes d) PROST, modelling and actuarial estimates
8-9 Mar-07	Third meeting of the Task Force in Luxembourg	Specification of pension model; actuarial estimates for some countries; results questionnaire and supplementary table; developing criteria.
19-23 Mar-07	5th AEG meeting	
Mid Mar-07 – mid May-07	Follow-up and preparation of the fourth TF meeting	
mid May-07	Fourth meeting of the Task Force in Frankfurt am Main	Draft report (including methodological note, some actuarial estimates) for CMFB meeting in June/July 2007; timetable for follow-up
May-07	Finalising the CMFB report with timetable for follow-up	Amended mandate of the Task Force
May-07 and Jun-07	Ongoing work on EU country stocktaking, model specification and estimates	Involvement of all EU countries
14-16 May-07	NAWG, Luxembourg	
14-15 Jun-07	FAWG, Luxembourg	
28-29 Jun-07	CMFB meeting in Luxembourg	Presentation of report prepared by the Task Force; approval of the amended mandate and extended timetable
Sep-07 / Nov-07	Fifth and sixth meeting of the Task Force	Completion of the empirical work
22-23 Nov-07	NAWG, Luxembourg	
10-11 Dec-07	FAWG, Luxembourg	
End Jan-08	CMFB meeting in Luxembourg	Presentation of the outcome of the Task Force to the CMFB (methodology for SNA/ESA, standard and supplementary tables, estimation method, empirical results)
Afterwards	Regular annual update of the tables	