



EUROPEAN COMMISSION  
DIRECTORATE GENERAL  
ECONOMIC AND FINANCIAL AFFAIRS

Brussels, 15.02.2005  
ECFIN/B1/2005/REP/50083/EN

**DECEMBER 2004 UPDATE**  
**OF THE CONVERGENCE PROGRAMME OF ESTONIA**  
**(2004-2008)**  
**AN ASSESSMENT**

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## SUMMARY AND CONCLUSIONS<sup>1</sup>

The first update of the Estonian convergence programme was submitted to the European Commission on 1 December 2004. It covers the period 2004-2008. The programme complies with the “code of conduct on the content and format of stability and convergence programmes”.

The macroeconomic scenario as presented in the programme envisages real GDP growth of 5.6% in 2004. In 2005, real GDP is forecast to accelerate to 5.9% and to maintain a pace of 6% p.a. over the period 2006-2008. This is somewhat lower than the Commission services autumn 2004 forecast for the years 2004-2006, which projects growth rates of 5.9% in 2004, 6% in 2005 and 6.2% in 2006. Both projections remain below the Commission estimates of potential output growth for the years 2004-2007. On the basis of currently available information, and in particular given that the actual growth rate during the first 3 quarters of 2004 was 6.3% year-on-year, along with the Estonian authorities’ track record of prudent government forecasting, the programme scenario can be considered as plausible. A high external account deficit will continue to be the major macro-economic imbalance in Estonia over the foreseeable future, largely reflecting the strong investment needs of the economy in catching up towards EU-average income levels. Although the programme projects a sustainable narrowing of the external deficit through structural improvements on the trade balance, present trends and less than reliable trade data plead in favour of caution.

On 28 June 2004, Estonia joined ERM II with a standard fluctuation band, while maintaining a unilateral commitment to the present currency board system. The hard peg to the euro, supported by strong policy discipline, helped to disinflate the Estonian economy quite rapidly during the past years. Reflecting primarily EU accession effects, annual CPI inflation increased to around 3% in 2004, but is expected to ease back over the medium term. Estonian money market and bank lending rates are at historical lows, reflecting developments in the euro area as well as sustained interest rate convergence.

The programme update aims at achieving a budgetary position of close-to-balance or small surplus throughout the programme period. For 2004, a budget surplus of 1% of GDP is expected. From 2005 onwards, balanced budgets are targeted. Owing to buoyant growth of activity, government investment and consumption are expected to decline as ratios of GDP, while nominal expenditure on both items will increase. In parallel, revenues will decrease as per cent of GDP, primarily due to the net effects of an ongoing tax reform. While the overall strategy remained unaltered as compared with the May 2004 programme, the expected budget surplus for 2004 has been revised upwards to 1% of GDP, from 0.7%. The GDP growth projections have been raised over the entire programme period, although they still appear to be on the cautious side.

The risks to the budgetary projections in the programme appear broadly balanced. On the one hand, the cautious macroeconomic scenario suggests that revenues could be higher and that expenditure somewhat lower than budgeted. Indeed, Estonia has established a

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<sup>1</sup> This technical analysis, which is based on information available up to 26 January 2005, accompanies the recommendation by the Commission for a Council opinion on the update of the convergence programme, which the College adopted on 2 February 2005. It has been carried out by the staff of and under the responsibility of the Directorate-General for Economic and Financial Affairs of the European Commission. Comments should be sent to Helga Vogelmann (helga.vogelmann@cec.eu.int).

track record of prudent forecasting and repeated overshooting of fiscal targets over the past few years. On the other hand, unexpected revenue shortfalls from the planned tax cuts, or an adverse impact on growth from exogenous shocks cannot be excluded altogether. In view of this risk assessment the budgetary stance in the programme seems adequate to maintain the Stability and Growth Pact's medium-term objective of a position of close-to-balance over the entire programme period. It also seems to provide a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations.

The debt ratio is estimated at 4.8% of GDP in 2004, well below the 60% of GDP Treaty reference value and, indeed, the lowest in the EU. The programme projects the debt ratio to further decline by 1.9 percentage points up to the programme horizon.

The programme briefly reviews the government's structural reform programme which focuses on measures to improve the country's infrastructure (using also EU funds for that purpose), the education and health care systems, and on active labour market policies as well as the promotion of innovation and research. The programme also outlines measures to further strengthen the budget process through a multi-annual budgeting framework, and to increase transparency and reliability of the nominal expenditure ceilings through systematic evaluation mechanisms. The local government deficits are planned to be brought under control through improved co-ordination of borrowing with the central government level, as well as mandatory preparation of a mid-term budget framework, the introduction of limits for annual deficits, and the mandatory accumulation of reserves. The reforms, most of which are already underway or whose legislation is being prepared, can reasonably be expected to improve growth conditions of the Estonian economy, while strengthening incentives to work, creating new jobs and discouraging tax evasion, as well as improving fiscal discipline both with line ministries and at local government level. Encouraging early results, especially in the labour market, have become visible already in 2004.

Estonia appears to be in a favourable position with regard to the long-term sustainability of the public finances, of which the projected budgetary cost of an ageing population is an important element. A low government debt level, considerable government financial reserves and a medium-term budgetary strategy that is fully consistent with the objective of a close-to-balance or in-surplus budgetary position, together with credible and thorough reforms of the pension and health care systems which are meant to stem budgetary pressures in the longer term, should ensure that public finances remain on a sustainable footing.

The economic policies outlined in the update are broadly consistent with the country-specific broad economic policy guidelines in the area of public finances. The higher-than-projected budget surplus in 2004 is in line with the recommendation to avoid pro-cyclical fiscal policies. Nevertheless, given that the external account deficit has most likely not narrowed significantly (if at all) in 2004, a rapid run-down of the budget surplus may provide insufficient support from the fiscal policy stance to the correction of the external imbalance.

<b>Table: Comparison of key macroeconomic and budgetary projections</b>		<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Real GDP (% change)	<b>CP Dec 2004</b>	<b>5.6</b>	<b>5.9</b>	<b>6.0</b>	<b>6.0</b>	<b>6.0</b>
	COM Oct 2004	5.9	6.0	6.2	n.a.	n.a.
	<i>CP May 2004</i>	5.3	5.8	5.6	5.9	5.8
HICP inflation* (%)	<b>CP Dec 2004</b>	<b>3.3</b>	<b>3.2</b>	<b>2.5</b>	<b>2.8</b>	<b>2.8</b>
	COM Oct 2004	3.4	3.5	2.8	n.a.	n.a.
	<i>CP May 2004</i>	3.1	3.0	2.8	2.8	2.8
General government balance (% of GDP)	<b>CP Dec 2004</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
	COM Oct 2004	0.5	0.2	0.1	n.a.	n.a.
	<i>CP May 2004</i>	0.7	0.0	0.0	0.0	0.0
Primary balance (% of GDP)	<b>CP Dec 2004</b>	<b>1.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>
	COM Oct 2004	0.8	0.4	0.3	n.a.	n.a.
	<i>CP May 2004</i>	1.0	0.3	0.3	0.3	0.3
Government gross debt (% of GDP)	<b>CP Dec 2004</b>	<b>4.8</b>	<b>4.6</b>	<b>4.3</b>	<b>3.1</b>	<b>2.9</b>
	COM Oct 2004	4.8	4.4	4.2	n.a.	n.a.
	<i>CP May 2004</i>	5.4	5.1	4.7	3.4	3.2
<i>Note: *the programme refers to the national CPI definition, not the HICP</i>						
<i>Sources: convergence programme (CP); Commission services autumn 2004 forecasts (COM);</i>						

## 1. INTRODUCTION

The first update of the Estonian convergence programme was submitted to the European Commission on 1 December 2004. It covers the period 2004-2008. The programme was approved by the Council of Ministers, and thus carries a firm political commitment by the Estonian government. It is based on the 2005 draft state budget and on expenditure ceilings for the central government for the period 2005-2008.

The programme complies with the “code of conduct on the content and format of stability and convergence programmes”<sup>2</sup>. The data are generally in line with the ESA95 standards, and the programme broadly follows the model structure of Annex 2 of the “code of conduct”<sup>3</sup>.

## 2. MACROECONOMIC DEVELOPMENTS

The macroeconomic scenario as presented in the programme expects real GDP growth of 5.6% for 2004. In 2005, real GDP is forecast to accelerate to 5.9% and to maintain an annual pace of 6% over the period 2006-2008. This is slightly lower than the Commission services autumn 2004 forecast for the years 2004-2006, which projects growth rates of 5.9% in 2004, 6% in 2005 and 6.2% in 2006. Both projections remain below the Commission services estimates of potential output growth for the years 2004-2006, with the programme’s estimate of the output gap being slightly smaller than that of the Commission services. Given that the actual growth rate during the first three quarters of 2004 was as high as 6.3% year-on-year, and taking into account the Estonian authorities’ track record of prudent government forecasting, the short-term growth assumption underlying the programme can be considered as plausible and leaning towards the cautious side.

Inflation in 2004 and 2005 is projected to increase to 3.3% and 3.2%, respectively, mainly on account of EU accession effects and fuel price developments. In 2006, inflation is projected to decline to 2.5%, before stabilising at a level of 2.8% in 2007 and 2008. These projections are broadly in line with those in the Commission services autumn 2004 forecast for the years 2004-2006. The actual HICP for 2004 which became available only after submission of the programme update was 3%.

The programme’s external assumptions on exchange rates and interest rates are similar to those of the Commission services autumn 2004 forecast. They differ, however, with

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<sup>2</sup> Inflation is reported on the basis of the national definition of the consumer price index (CPI) although table 1 of the annex contains an optional requirement for projections for the harmonised index of consumer prices (HIPC). Participation rates which are an optional item for table 6 of the annex are calculated for the age group 15-64, instead of the suggested age group 20-64. As for table 0 of the Annex 1 on basic assumptions, the compulsory projections for ‘growth of relevant foreign markets’ and ‘world import volumes, excluding EU’ are not included. None of these minor deviations would impede the programme’s assessment.

<sup>3</sup> Chapter 7 of the model structure on ‘Horizontal issues affecting public finances’ is not included as a separate chapter in the update, although its main contents are covered in other chapters of the programme.

regard to the appreciation of the euro against the dollar and with regard to oil prices, both lower than in the Commission projections.

**Table 1: Comparison of macroeconomic developments and forecasts**

	2004		2005		2006		2007	2008
	COM	CP	COM	CP	COM	CP	CP	CP
Real GDP (% change)	5.9	5.6	6.0	5.9	6.2	6.0	6.0	6.0
<i>Contributions:</i>								
- Final domestic demand	6.7	3.7	6.0	6.2	6.0	5.6	5.5	5.3
- Change in inventories	0.6	0.1	-0.4	-0.3	-0.5	-0.1	-0.2	-0.1
- External balance on g&s	1.8	1.9	0.3	0.1	0.7	0.5	0.7	0.8
Employment (% change)	0.3	1.4	0.3	0.8	0.4	0.7	0.7	0.7
Unemployment rate (%)	9.7	9.7	9.4	8.7	9.1	8.4	8.4	8.4
CPI inflation (%)*	3.4	3.3	3.5	3.2	2.8	2.5	2.8	2.8
GDP deflator (% change)	3.8	4.0	3.9	3.5	3.0	3.3	3.0	2.9
Current account (% of GDP)	-13.0	-10.8	-11.6	-9.1	-10.2	-7.7	-6.8	-5.6
<i>*Note: CP discusses national CPI definition, not HICP</i>								
<i>Sources:</i>								
<i>Commission services autumn 2004 forecasts (COM); convergence programme update (CP)</i>								

The estimate of potential output growth for 2004-2006 based on Commission services calculations according to the commonly agreed methodology and consistent with the programme's macro-economic scenario in 2004 is somewhat below the trend projected in the Commission services autumn 2004 forecast. Importantly, both projections show negative output gaps for the years 2004-2006. Also for 2007 and 2008, the programme foresees persistent, albeit narrowing negative output gaps. This supports the view that the programme's macro-economic scenario is relatively cautious.

**Table 2: Sources of potential output growth**

	2004		2005		2006		2007	2008
	COM	CP <sup>3</sup>	COM	CP <sup>3</sup>	COM	CP <sup>3</sup>	CP <sup>3</sup>	CP <sup>3</sup>
Potential GDP growth <sup>1</sup>	6.5	6.3	6.6	6.3	6.7	6.1	5.8	5.8
<i>Contributions:</i>								
- Labour	0.9	0.7	1.1	0.7	1.3	0.7	0.5	0.5
- Capital accumulation	2.8	2.7	2.7	2.7	2.6	2.6	2.5	2.5
- TFP	2.7	2.8	2.6	2.8	2.6	2.7	2.7	2.8
Output gap <sup>1,2</sup>	-0.7	-0.9	-1.3	-1.3	-1.7	-1.4	-1.2	-1.0
<i>Notes:</i>								
<sup>1</sup> based on the production function method for calculating potential output growth								
<sup>2</sup> in percent of potential GDP								
<sup>3</sup> Commission services calculations on the basis of the information in the CP								
<i>Sources:</i>								
<i>Commission services autumn 2004 forecasts (COM); Commission services calculations</i>								

A high external account deficit will continue to be the major macro-economic imbalance in Estonia over the foreseeable future, largely reflecting strong investment needs in the catching-up process. Since 2002, the current account deficit<sup>4</sup> has been widening,

<sup>4</sup> For reasons of consistency with the figures as presented in the programme and standard tables, the assessment will use the 'current account deficit' as the main reference of the analysis. Nonetheless, it should be noted that the Estonian 'external account deficit' is lower, by some 0.5-0.7% of GDP, according to the Commission services autumn 2004 forecast, subtracting the positive capital balance

exceeding 13% of GDP in 2003<sup>5</sup>. This is mainly the result of a large and increasing deficit on the incomes balance, corresponding to 7.8% of estimated GDP during the first three quarters of 2004. A considerable share of the deficit is financed by FDI, which in turn includes a large amount of reinvested earnings<sup>6</sup>. Thus, the external imbalance does not necessarily indicate deficiencies in the country's price competitiveness.

Although the programme projects a sustained narrowing of the current account deficit through structural improvements on the trade balance, this is not confirmed by recent trends based, though, on less reliable trade data following methodological changes upon EU accession<sup>7</sup>. While the programme remains vague on the issue, it hints at a possible increase of the current account deficit to over 15% of GDP in 2004.<sup>8</sup> Thus, the expected start of the correction has probably been delayed beyond 2004. While the programme projects a gradual reduction of the current account deficit to 5.6% of GDP by 2008, the Commission services autumn 2004 forecast foresees a much more gradual reduction until 2006. Both corporate and household saving can be expected to head up somewhat, but only more gradually than would be implied by the current account trajectory according to the programme. Also the persistent negative income balance according to the programme does not support the assumption of a swift decline of the current account deficit. The projected path of reduction of the external imbalance, as indicated in Table 1 of the programme update, might thus prove over-optimistic. The budgetary strategy as outlined in the programme may provide insufficient support from the fiscal policy stance to the planned correction of the external imbalance.

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from the current account deficit. The external account is defined as: 'net lending/borrowing vis-à-vis the rest of the world = current account + capital account'. In the current system of national accounts, this is what corresponds to the concept of the 'balances of payments on current account' mentioned in Art 121(1) of the Treaty.

<sup>5</sup> The current account deficit in 2003 was 13.1% of GDP, while the external account deficit was 12.7%. For definitions, see footnotes 3 above and 7 below.

<sup>6</sup> In this way, around two-thirds of the incomes balance deficit, i.e. roughly 6% of GDP, return as FDI on the financial account.

<sup>7</sup> Temporary warehouse effects, and likely overrated import figures, are at the base of this problem. This could lead to a downward revision at a later point of time, but will certainly have a considerable (positive) base effect on the 2005 deficit figures. Similar difficulties have been experienced by other Member States upon EU accession. They usually abate after the first year of membership.

<sup>8</sup> Table 1 of the programme shows the estimated 2004 current account deficit at 10.8% of GDP, identical with the projection in the May 2004 programme, which appears outdated. However, the text, on the basis of information covering the first three quarters of 2004, suggests a considerably higher deficit in 2004.



### Box 1: Fiscal Policy and the external account in Estonia

The goals for fiscal policy need to take due account of the imbalances in the economy and the strength of other sectoral balance sheets. With private sector savings just starting to recover from a consumption, investment and construction boom preceding EU accession, a firm commitment to continued fiscal discipline is key to maintaining an adequate level of national savings and to underpinning a sustainable correction of the external imbalance.

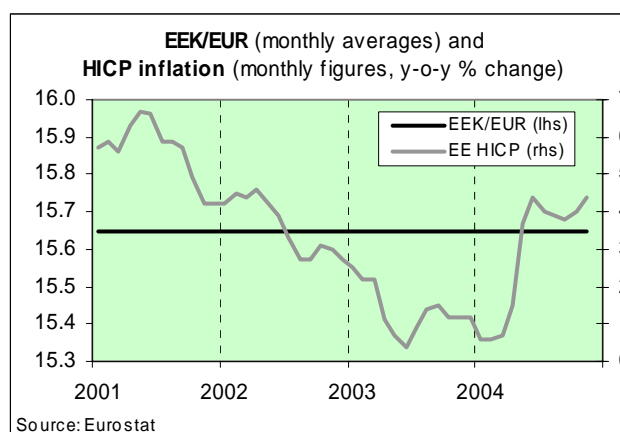
The primary scope for fiscal policy in a situation of a high external imbalance is to act as a 'regulator' of the economy by preserving stability. In addressing private sector imbalances, fiscal policy can play manifold roles. First, there is a direct impact on domestic savings. The widening of the Estonian external account deficit does not originate from fiscal imbalances. On the contrary, public savings have increased considerably over the past few years, leading to a level of liquid public reserves of close to 10% of expected GDP at the end of 2004. Second, confidence-enhancing fiscal behaviour, including a credible track record of fiscal discipline and a low level of government debt, can effectively support external sustainability by maintaining a positive financial market sentiment of Estonia being a safe destination for investment, both financial and in the form of FDI. Third, pre-emptive fiscal tightening can be an effective response to deteriorating market conditions for external borrowing (which at present, however, is not a problem in Estonia). Fourth, there is the cyclical effect of fiscal tightening or expansion on economic activity (in the case of Estonia the ongoing tax cuts are likely to have a stimulating effect). Fifth, Estonia's prudent fiscal policy has contributed to avoiding an unwarranted degree of real appreciation. And sixth, fiscal policy measures, including a pension reform, can influence consumption and saving behaviour of private households, with repercussions on the external account.

### 3. MEDIUM-TERM MONETARY POLICY OBJECTIVES AND THEIR RELATIONSHIP TO PRICE AND EXCHANGE RATE STABILITY

Following very low inflation in 2003, consumer prices increased by just 0.4% year-on-year during the first quarter of 2004. However, CPI inflation picked up strongly following EU accession, mainly reflecting hikes in excise taxes and some administrative prices. Towards the end of the year, monthly rates stabilised around 4%, with fuel price hikes adding to the upward pressure on prices. The actual CPI for 2004 which became available only after submission of the update was 3%. The programme expects it to fall back to below 3% after 2005; the assumed inflation path is broadly consistent with the Commission forecast.

Estonia's monetary regime continues to be firmly anchored on exchange rate stability. The currency board, which has been operating since 1992 and enjoys high credibility with

markets and citizens, has been maintained as a unilateral commitment following the entry of the Estonian kroon into ERM II on 28 June 2004. In line with this commitment, the kroon has not deviated from its central rate through the period of ERM II participation. The convergence programme emphasises sound fiscal policy and flexible labour markets



as important elements to underpin the continued smooth functioning of the currency board.

Under the currency board, the Estonian central bank does not set independent policy interest rates. Money market rates have remained closely aligned to euro area rates, with spreads vis-à-vis euro area rates hovering at around 50 basis points since the beginning of 2004, and decreasing to some 25-30 basis points in the second half of the year. Given the low level of government debt, Estonia does not have a developed market for long-term fixed interest rate debt securities denominated in Estonian kroon, and therefore no sovereign benchmark bond yields. Following a sharp fall between 2001 and 2003, bank lending rates have remained at low levels throughout 2004.

The effective exchange rate of the kroon has remained broadly stable in 2004, reflecting the strong role of the euro and euro-linked currencies in its trade-weighted reference basket. In nominal effective terms, the kroon appreciated by around 1 percent, while it recorded a slightly higher real appreciation of some 3 percent, reflecting the pick-up in inflation during the year.

On euro adoption, the convergence programme reiterates Estonia's aim "*to become a full member of the European Economic and Monetary Union as soon as possible*" and expresses confidence that Estonia would be "*among the first new Member States adopting the euro*".

#### **4. BUDGETARY IMPLEMENTATION IN 2004**

For 2004, the programme of last May had targeted a general government surplus of 0.7% of GDP, based on an output growth assumption of 5.3%. In the current update, the estimated outturn for 2004 is a surplus of 1% of GDP with a growth rate of 5.6%. The Commission services autumn 2004 forecast projected a 0.5% surplus based on a growth assumption of 5.9%. Latest information that has become available after submission of the update indicates that the actual budget surplus is likely to be around 1.3-1.5% of GDP, with growth above 6%. On the whole, the target set in the previous programme is expected to be overachieved.

The most important factor underlying the higher-than-projected budget surplus lies with the generally cautious approach towards budget forecasting in Estonia. As in recent years, revenues were higher than expected, due not least to stronger-than-projected growth, but also to continued improvements in tax collection, while nominally-anchored expenditure turned out lower than budgeted. The main reason why the surplus has not exceeded even more the May 2004 programme's target is a supplementary budget to the tune of 0.7% of expected GDP, adopted in November 2004, when it had become clear that the fiscal target would be outperformed. Apart from numerous small expenditure items concerning urgently needed infrastructure investment, it covered a 0.3% of GDP reserve for the EU membership fee in 2005 (thus taking pressure from the nominal budget this year, whereas in ESA95 terms this will not have an impact), and 0.1% of GDP of additional transfers to local governments in order to compensate them for losses in tax revenues related to the income tax reform.

The fiscal situation in 2004 was strongly marked by various EU accession effects. Apart from changes to some taxes and administrative prices as of May 2004, there was some uncertainty about the country's ability to absorb EU transfer payments in its first year of membership, and related levels of co-financing. Last but not least, following a revision of

the National Accounts<sup>9</sup> that was published only one week after submission of the May 2004 programme, GDP figures were revised substantially upwards which outdates a comparison of revenue and expenditure ratios, as well as the level of tax burden, between the two programmes. On the whole, the assumption expressed in both programmes that EU membership would have a broadly neutral effect on the budget appears to be confirmed by preliminary results for 2004.

## 5. BUDGETARY TARGETS AND THE MEDIUM-TERM PATH OF THE PUBLIC FINANCES

### 5.1. Evolution of budgetary targets in successive programmes

Maintaining sound public finances is a key objective for Estonian economic policy. Budget surpluses have been recorded each year since 2001, against annual targets of balanced budgets. The budgetary strategy as outlined in the updated programme is for the general government accounts to remain in surplus of 1% in 2004, and to arrive at balanced annual budgets from 2005 onwards. Apart of a higher-than-projected surplus in 2004, this strategy is coherent with that outlined in the May 2004 programme (projected surplus of 0.7% of GDP). It is slightly more optimistic than the 2003 PEP scenario which indicated no more surpluses already from 2004.

The assumption of strong GDP growth throughout the programme period is crucial for the fiscal plans to materialize in terms of balancing revenues and expenditures, whereby the revenue side represents the larger uncertainty.

**Table 3: Evolution of budgetary targets in successive programmes**

		2003	2004	2005	2006	2007	2008
General government balance (% of GDP)	<b>CP December 2004</b>	<b>3.1</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
	CP May 2004	2.6	0.7	0.0	0.0	0.0	0.0
	PEP August 2003	0.4	0.0	0.0	0.0	0.0	n.a
General government expenditure (% of GDP)	<b>CP December 2004</b>	<b>35.8</b>	<b>40.0</b>	<b>40.7</b>	<b>39.0</b>	<b>37.6</b>	<b>37.5</b>
	CP May 2004	39.3	43.3	42.7	41.9	40.3	39.7
	PEP August 2003	40.6	42.1	41.0	40.7	40.3	n.a
General government revenues (% of GDP)	<b>CP December 2004</b>	<b>38.9</b>	<b>41.0</b>	<b>40.7</b>	<b>39.0</b>	<b>37.6</b>	<b>37.5</b>
	CP May 2004	41.9	44.0	42.7	41.9	40.3	39.7
	PEP August 2003	41.0	42.1	41.0	40.7	40.3	--
Real GDP (% change)	<b>CP December 2004</b>	<b>5.1</b>	<b>5.6</b>	<b>5.9</b>	<b>6.0</b>	<b>6.0</b>	<b>6.0</b>
	CP May 2004	4.7	5.3	5.8	5.6	5.9	5.8
	PEP August 2003	4.5	5.6	6.0	6.0	6.0	n.a.
<i>Sources:</i>							
<i>Convergence programmes (CP); pre-accession economic programme (PEP)</i>							

### 5.2. Budgetary targets in the updated programme

From an expected budget surplus revised upwards to 1% of GDP for 2004, the update aims at achieving a budgetary position of close-to-balance or surplus throughout the programme period. The time profile of the primary surplus follows a similar path, with a decline from 1.3% of GDP in 2004 to 0.2% from 2005 to the end of the period (given the low debt burden, interest payments do not play an important role in Estonian budgetary projections).

<sup>9</sup> The major reason for the revision was methodological changes in the calculation of real estate services (including imputed rent) and the consumption of fixed capital.

Reflecting the inflow of EU transfers since May 2004, both expenditure and revenues are projected to peak in 2004, at 40% and 41% of GDP respectively, and thereafter to gradually decline to 37.5% of GDP by 2008. Estonia plans to continue with the implementation of a far-reaching tax reform that will lead to a further shift from direct to indirect taxation. At the same time, a pension reform implemented in 2002 foresees transfer payments from the social security budget to the private 'second pillar' (rising from 0.6% of GDP in 2004 to around 1% of GDP in 2008), thus raising the general government expenditure over the medium term. The programme contains a comprehensive discussion of the financing of these changes to the tax and transfer system and its effects on the general government balance. A gradual reduction of the flat tax rates for both the corporate and personal income tax by 6 percentage points over three years, which has started in 2005, will be combined with increased transfer payments to young families and on social benefits and with higher tax allowances. Strong growth, savings on public expenditure at local government level and thorough changes to the spending structure including administrative reform, improved tax collection, increases to tax rates (VAT, gambling tax) and excise duties (alcohol, tobacco, fuel) are all expected to provide for the financing of these reforms. While the central government and the social security budgets are projected to remain in surplus over the entire programme period, local governments are expected to run minor and declining deficits.

**Table 4: Composition of the budgetary adjustment**

(% of GDP)	2003	2004	2005	2006	2007	2008	Change: 2008-2004
<b>Revenues</b>	38.9	41.0	40.7	39.0	37.6	37.5	<b>-3.5</b>
<i>of which:</i>							
- Taxes	21.9	21.3	21.4	20.4	19.5	19.6	<b>-1.7</b>
- Social Security contributions	11.5	11.1	10.9	10.7	10.5	10.5	<b>-0.6</b>
- Other (residual)	5.5	8.6	8.4	7.9	7.6	7.4	<b>-1.2</b>
<b>Expenditure</b>	35.8	40.0	40.7	39.0	37.6	37.5	<b>-2.5</b>
<i>of which:</i>							
- Primary expenditure	35.5	39.7	40.5	38.8	37.4	37.3	<b>-2.4</b>
<i>of which:</i>							
Gross fixed capital formation	3.4	4.4	4.4	4.0	3.9	3.9	<b>-0.5</b>
Collective Consumption	8.8	9.3	9.1	8.7	7.7	7.6	<b>-1.7</b>
Transfers	19.5	20.2	20.4	20.3	20.1	20.1	<b>-0.1</b>
Subsidies	0.9	1.4	1.4	1.3	1.3	1.3	<b>-0.1</b>
Other (residual)	2.9	4.5	5.1	4.5	4.4	4.4	<b>-0.1</b>
- Interest payments	0.3	0.3	0.2	0.2	0.2	0.2	<b>-0.1</b>
<b>Budget balance</b>	<b>3.1</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-1.0</b>
<b>Primary balance</b>	<b>3.4</b>	<b>1.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>-1.1</b>
<i>Sources:</i>							
<i>Convergence programme update; Commission services calculations</i>							

## **Box 2: The budget for 2005**

The 2005 budget is the first one officially based on a 'long-term financial perspective' (which is in line with the fiscal framework of the May convergence programme). It contains nominal expenditure ceilings for the central government, for the entire period 2005-2008. In 2005, while revenues are expected to slightly fall as a percentage of GDP, expenditure is projected to increase, resulting in a balanced budget overall.

The main measures in the budget for 2005 consist of a cut in the flat tax rate for all income taxes by 2 percentage points, from 26% to 24%, with effect from 1 January 2005, combined with an increase in tax thresholds.

On the expenditure side, additional funds are allocated to education, including infrastructure investment and a 12% increase in teachers' wages, along with an increase in spending on R&D and higher education in technical areas like IT and biotechnology. In the health care sector, wage increases up to 33% of and an increase to the minimum wage have an important impact. Social transfers, including parental benefits, are expected to increase by 9% as compared with 2004. Other spending priorities are on co-financing EU funds for rural development and environmental protection.

On the revenue side, higher yields from a number of VAT and excise tax rate increases that entered into force upon EU accession are projected. New measures to enter into force in 2005 are a 5% increase in the excise duty for alcoholic beverages, an increase in certain fuel taxes, as well as in the gambling tax. With regard to non-tax revenues, EU transfers will constitute an important and increasing part in the 2005 budget, as compared to 2004.

The fiscal targets as outlined in the programme are broadly sound, if implemented cautiously and in a flexible manner. The programme's fiscal scenario assumes strong growth with little cyclical variation over the entire programme period, which is broadly in line with the Commission services autumn 2004 forecast. The update openly admits the difficulty to determining the country's position in the business cycle, given that Estonia does not appear to have yet completed a full economic cycle since transition. It is argued that the strategy of the Estonian government to plan annual budget balances based on cautious assumptions has so far 'in practice' led to counter-cyclical fiscal policies, as indicated by macro-economic developments in the aftermath of the 1998 Russia crisis, and that automatic stabilizers are allowed to play freely in Estonia. To achieve a balanced budget as early as 2005 from a considerable budget surplus carry-over from 2004 implies further fiscal easing that is likely to create a fiscal stimulus to the economy, stemming notably from the tax cuts. However, based on Commission services calculations according to the commonly agreed methodology, fiscal policy, though expansionary until 2005, would remain on a counter-cyclical path throughout the programme period. Thus, the fiscal recommendation in the BEPGs to avoid counter-fiscal policies appears to be broadly addressed in the programme.

Nonetheless, the important stabilisation function of fiscal policy in Estonia could have called for higher and prolonged surpluses in the short term, less for cyclical reasons, but taking into account the large current account deficit. The programme takes the view, so far borne out by the facts, that the financing of a current account deficit caused by the high investment needs of a rapidly growing economy should not pose problems. Nonetheless, strict budgetary discipline, including the setting aside of 'windfall surpluses' will continue to be a crucial element for the credibility of the fiscal framework, including

its contribution to avoiding destabilising developments on the external balance (see also Box 1 above).

**Table 5: Budgetary targets and output gaps**

	2003		2004		2005		2006		2007	2008	Change: 2008-2004
	COM	CP <sup>1</sup>	COM	CP <sup>1</sup>	COM	CP <sup>1</sup>	COM	CP <sup>1</sup>	CP <sup>1</sup>	CP <sup>1</sup>	CP <sup>1</sup>
Budget balance <sup>2</sup>	3.1	3.1	0.5	1.0	0.2	0.0	0.1	0.0	0.0	0.0	-1.0
Output gap <sup>3</sup>	-0.2	-0.3	-0.7	-0.9	-1.3	-1.3	-1.7	-1.4	-1.2	-1.0	-0.1

Notes:  
<sup>1</sup>CP (convergence programme): Commission services calculations on the basis of the information in the programme  
<sup>2</sup>in percent of GDP  
<sup>3</sup>in percent of potential GDP  
Sources:  
*Commission services autumn 2004 forecasts (COM); Commission services calculations*

Overall, the risks to the budgetary projections in the programme appear broadly balanced. On the one hand, the cautious macroeconomic scenario suggests that revenues could be better than expected and that expenditures could be somewhat lower than budgeted. Indeed, Estonia has established a track record of prudent forecasting and repeated overshooting of fiscal targets over the past few years. On the other hand, unexpected revenue shortfall from the planned tax cuts, or adverse impacts on growth from exogenous shocks cannot be excluded altogether.

In view of this risk assessment the budgetary stance in the programme seems adequate to maintain the Stability and Growth Pact's medium-term objective of a position of close-to-balance over the entire programme period. It also seems to provide a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations.

### 5.3. Sensitivity analysis

The programme does not contain a sensitivity analysis.

## 6. EVOLUTION OF THE DEBT RATIO

Estonia's public debt at 4.8% of GDP is the lowest in the EU-25. With balanced annual budgets or surpluses projected, debt is plausibly expected to come down to levels around 3% of GDP by 2008, which is broadly in line with the Commission services forecast up to 2006. The decline in debt does not fully reflect the current budgetary surpluses since it is the central government's strategy not to repay debt early, but to put surpluses into (mostly liquid) government reserves. Privatisation receipts do no longer play a significant role for debt dynamics in Estonia. Because of its limited size, public debt - which is entirely covered by liquid public sector reserves - is a negligible risk to the Estonian economy. I

**Table 6: Debt dynamics**

	average 2000-2003	2004		2005		2006		2007	2008
	COM	COM	CP	COM	CP	COM	CP	CP	CP
<b>Government gross debt ratio</b>	4.9	4.8	4.8	4.4	4.6	4.2	4.3	3.1	2.9
Change in debt ratio (1 = 2+3+4)	-0.2	-0.5	-0.5	-0.4	-0.2	-0.2	-0.3	-1.2	-0.2
<i>Contributions:</i>									
- <b>Primary balance</b> (2)	-1.3	-0.8	-1.3	-0.4	-0.2	-0.2	-0.2	-0.2	-0.2
- <b>“Snow-ball” effect</b> (3)	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1
- Interest expenditure	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
- Real GDP growth	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2
- Inflation (GDP deflator)	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1
- <b>Stock-flow adjustment</b> (4)	1.4	0.5	1.0	0.2	0.2	0.3	0.1	-0.8	0.1
- Cash/accruals	0.1								
- Accumulation of financial assets	1.3								
<i>of which: Privatisation proceeds</i>	-0.5	-0.1	-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0
- Valuation effects & residual adj.	-0.1								
<u>Note:</u>									
The change in the gross debt ratio can be decomposed as follows:									
$\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} = \frac{PD_t}{Y_t} + \left( \frac{D_{t-1}}{Y_{t-1}} * \frac{i_t - y_t}{1 + y_t} \right) + \frac{SF_t}{Y_t}$									
where $t$ is a time subscript; $D$ , $PD$ , $Y$ and $SF$ are the stock of government debt, the primary deficit, nominal GDP and the stock-flow adjustment respectively, and $i$ and $y$ represent the average cost of debt and nominal GDP growth. The term in parentheses represents the “snow-ball” effect.									
<u>Sources:</u>									
Convergence programme update (CP); Commission services autumn 2004 forecasts (COM); Commission services calculations									

## 7. STRUCTURAL REFORM AND THE QUALITY OF PUBLIC FINANCES

The update provides an overview of the quality of public finances and recent structural reforms being initiated to improve the functioning of the supply side of the economy. In a further chapter, the update elaborates on the contingent liabilities, both explicit and implicit, for the Estonian public sector.

The implementation since 2002 of a comprehensive pension reform is weighing on the budget in the short term, through transfer payments from the general government to the new fully-funded ‘second pillar’. With the maturing of the funded scheme, this fiscal impact is projected to be reversed in the longer-term. As for the pay-as-you-go system, an increase of the retirement age to 63 years for both genders is gradually implemented until 2016. A relatively low indexation of retirement benefits<sup>10</sup> also puts a brake on pension expenditure growth for the time being.

On the revenue side, the comprehensive tax reform that has started in 2004 and is continued in 2005 lead to a further shift from direct to indirect taxation. The main features are: the step-wise introduction of a flat tax rate of 20% for both corporate and

<sup>10</sup> The Estonian index for retirement benefits is composed of the annual change in the consumer price index and the arithmetic mean of growth in the pension’s portion of social tax revenues.

individual income taxation by 2007, which has started with a first reduction from 26% to 24% that entered into force on 1 January 2005; and a gradual increase in the level of the tax-exempt basic income which is taking pressure from gross wages. As a consequence, the tax burden is projected to decline from 33% in 2004 to 30.9% in 2008.

Apart from the spending limits already implemented, budgetary discipline of local governments is to be further strengthened through new legal requirements that have been initiated by the government and are expected to enter into force from 2006. The measures in the pipeline include mandatory preparation of a medium-term budget framework, establishment of ceilings for annual deficits, and the establishment of mandatory reserves. As a result, local government deficits, which have already started to decline considerably in 2004, are projected to be further curtailed over the programme period.

A high level of budgetary reserves is another feature of Estonia's prudent fiscal policy. Liquid government reserves reached an overall level of close to 10% of GDP at the end of 2004.

Having already achieved considerable progress over recent years, the government is continuing its efforts to improve the management of public finances in all phases of the budget cycle. The 2005 budget is the first to be legally embedded into a multi-annual budget framework covering the period 2005-2008, in line with the May 2004 convergence programme. Further measures to simplify and improve tax administration are being implemented. The introduction of tax collection over the internet since 2002 continues to prove highly popular: roughly 70% of tax declarations were already submitted and processed over the internet in 2004. Both budgetary planning and internal audit are being further strengthened through the introduction of performance-based budgeting in all ministries as of 2004. A systematic improvement of co-ordination and modernisation of all public audit and evaluation functions, including the planned introduction of annual fulfilment reports by line ministries, is being gradually implemented and developed.

These reform measures have the potential to substantially improve the quality of public finances. Their implementation will bring Estonia further in compliance with the general guidelines of the BEPGs 2003-2005.

## **8. THE SUSTAINABILITY OF THE PUBLIC FINANCES**

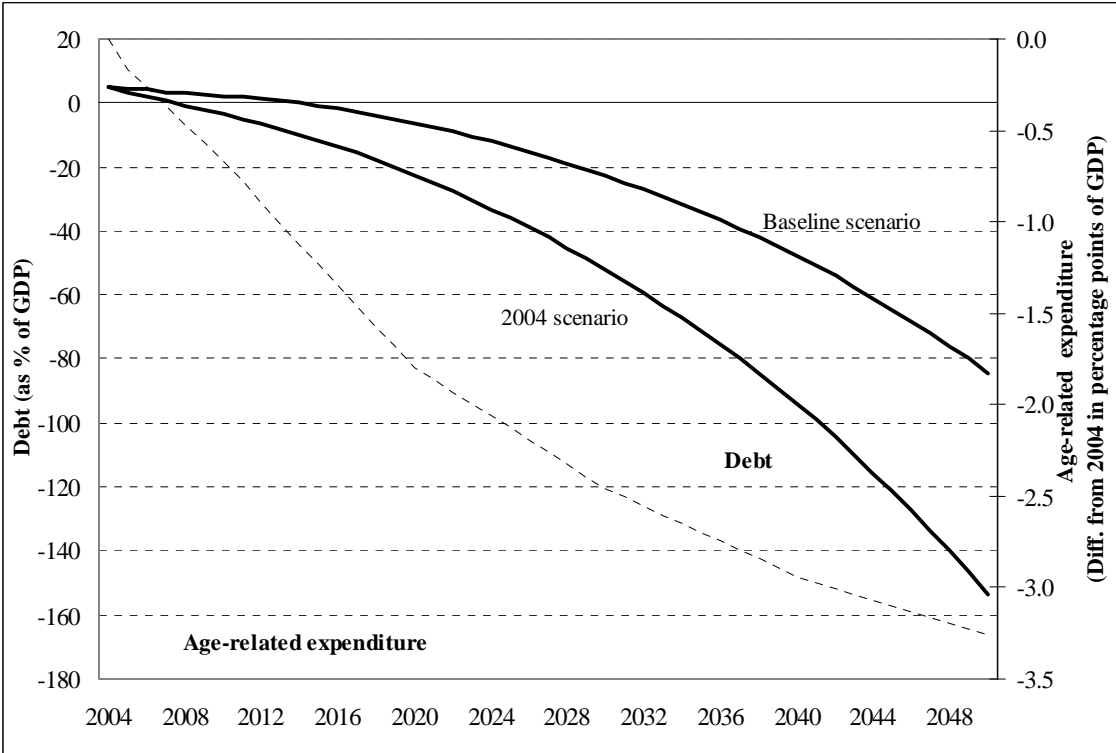
The assessment of the sustainability of Estonian public finances is based on an overall judgement of the results of quantitative indicators and qualitative features. The quantitative indicators project debt development according to two different scenarios, to take into account different budgetary developments over the medium term. The "programme" scenario (baseline) assumes that the medium-term objective set up in the programme is actually achieved, while the "2004" scenario assumes that the underlying primary balance remains throughout the programme period at the 2004 level.

The graph below presents gross debt development according to the two different scenarios. On the basis of the programme, age-related expenditure is foreseen to decrease by 2.7% of GDP between 2009 and 2050 (see Annex 2 for a breakdown of different age-related expenditures). Gross debt is projected to decrease over the entire projection period as a consequence of declining age-related expenditures, in particular on retirement



benefits<sup>11</sup>. Such debt dynamics would be further improved if the current budgetary surplus is kept over the programme period.

**Long-term sustainability: summary results**



**Sustainability indicators**

	<b>S1*</b>	<b>S2**</b>	<b>RPB***</b>
<b>Baseline scenario</b>	-2.5	-1.8	-1.3
<b>2004 scenario</b>	-3.7	-2.9	-1.4

*Notes:*

\* It indicates the required change in tax revenues as a share of GDP over the projection period that guarantees to reach debt to GDP ratio of 60% of GDP in 2050.  
 \*\* It indicates the change in tax revenues as a share of GDP that guarantees the respect of the intertemporal budget constraint of the government, i.e., that equates the actualized flow of revenues and expenses over an infinite horizon to the debt as existing at the outset of the projection period; p.m. debt to GDP ratio in 2050: 18%  
 \*\*\* Based on S2, the Required Primary Balance (RPB) indicates the average minimum required cyclically adjusted primary balance as a share of GDP over the first five years of the projection period that guarantees the respect of the intertemporal budget constraint of the government for this period.

On the basis of the debt projections, it is possible to calculate a set of sustainability indicators to measure the gap between the current policies and a sustainable one. The S1 indicator shows the permanent change in the primary balance that is required to achieve a debt-to-GDP ratio in line with the Maastricht Treaty reference value in the very long run

<sup>11</sup> It should be recalled that, being a mechanical, partial equilibrium analysis, projections are in some cases bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels is not a forecast of likely outcomes and should not be taken at face value.

(year 2050)<sup>12</sup>. S2 shows the gap between the current tax policies and those that would ensure respect of the inter-temporal budget constraint given the future impact of ageing on public expenditure, namely the change in the tax ratio that would equate the present discounted value of future primary balances to the current stock of gross debt. According to the latter, Estonia's tax ratio is in line with this requirement. This would lead to a sustainable debt ratio of around 18% of GDP by mid-century<sup>13</sup>. The budgetary effort over the first 5 years of the projections (i.e. after the end of the programme period) to respect the inter-temporal budget constraint is in line with the required one, being around one and a half percentage point lower than the primary surplus that is projected for the last year of the programme period.

Projections of the long-term age-related expenditures appear cautious for the following reasons:

First, they already include the considerable cost of implementing a fully funded private 'second pillar' in the pension system. In addition, the update of the programme indicates for the first time that a revision of the currently 'imperfect' pension indexation would be necessary, for reasons of social cohesion, at some point in the future, possibly beyond the programme horizon of 2008, which would certainly influence the pay-as-you-go pension expenditure beyond 2010. Although such a policy measure has not yet assumed concrete form, its likely budgetary effect is already covered by the pension expenditure projection in the update.

Second, the projections include higher costs of the health-care system resulting from the increase in previously low health-care wages which are expected to rise further above the national average and increasing costs for medicines. A number of measures to contain the budgetary pressures is in the pipeline, according to the national health-care programme 'Estonian Health Care Project 2015' adopted in 2000. These include privatisation and restructuring of both practitioners and hospital services, and improvement in financial management and technological equipment in the health care system, the budgetary effects of which are however not yet known.

Despite some weakening in the long-term projections as compared with the May 2004 programme, high GDP growth over the rest of the decade should facilitate Estonia to keep up the stance of fiscal prudence. Thus, the medium-term budgetary strategy outlined in the programme together with low government debt level and considerable government financial reserves puts Estonia in a favourable position with regard to long-term sustainability of the public finances. A low and declining tax burden leaves some room for corrective action on the revenue side, if necessary.

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<sup>12</sup> The respect of the underlying debt path does not ensure sustainability over an infinite horizon, but only that debt remains below 60% up to 2050. In most cases, this would imply an increasing trend and possible imbalances after the end of the projection period.

<sup>13</sup> The debt ratio of around 18% in 2050 in the baseline scenario according to the S2 indicator illustrates that there is no sustainability gap in order to ensure a sustainable evolution of gross debt beyond 2050. This is also the case for the S1 indicator which is negative.

**Annex 1: Summary tables from the December 2004 Convergence programme**

**Table 1: Growth and associated factors**

		2003	2004	2005	2006	2007	2008
<b>GDP growth at constant market prices (7+8+9)</b>		5.1	5.6	5.9	6.0	6.0	6.0
<b>GDP level at current market prices</b>		125.8	138.3	151.6	165.9	181.2	197.7
<b>GDP deflator</b>		2.4	4.0	3.5	3.3	3.0	2.9
<b>HICP change*</b>		1.3	3.3	3.2	2.5	2.8	2.8
<b>Employment growth</b>		1.5	1.4	0.8	0.7	0.7	0.7
<b>Labour productivity growth</b>		3.6	4.2	5.2	5.3	5.3	5.3
<b>Sources of growth: percentage changes at constant prices</b>							
<b>1. Private consumption expenditure</b>		5.4	5.9	5.4	5.3	5.2	5.2
<b>2. Government consumption expenditure</b>		5.8	5.7	4.3	3.9	3.6	3.3
<b>3. Gross fixed capital formation</b>		5.4	4.6	7.3	5.6	5.5	5.5
<b>4. Changes in inventories and net acquisition of valuables as a % of GDP</b>		2.7	2.6	2.0	1.8	1.5	1.3
<b>5. Exports of goods and services</b>		5.7	13.0	10.4	10.0	9.7	9.6
<b>6. Imports of goods and services</b>		11.0	9.2	9.2	8.6	8.2	8.2
<b>Contribution to GDP growth</b>							
<b>7. Final domestic demand (1+2+3)</b>		10.2	3.7	6.2	5.6	5.5	5.3
<b>8. Change in inventories and net acquisition of valuables (=4)</b>		-0.2	0.1	-0.3	-0.1	-0.2	-0.1
<b>9. External balance of goods and services (5-6)</b>		-4.9	1.9	0.1	0.5	0.7	0.8

\*Note: programme discusses national CPI definition, not HICP

**Table 2. General government budgetary developments**

% of GDP		2003	2004	2005	2006	2007	2008
<b>Net lending by sub-sectors</b>							
<b>1. General government</b>		3.1	1.0	0.0	0.0	0.0	0.0
<b>2. Central government</b>		2.9	0.9	0.0	0.0	0.0	.0
<b>3. State government</b>		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>4. Local government</b>		-0.5	-0.3	-0.2	-0.2	-0.2	-0.2
<b>5. Social security funds</b>		0.7	0.4	0.2	0.2	0.2	0.2
<b>General government</b>							
<b>6. Total receipts</b>		38.9	41.0	40.7	39.0	37.6	37.5
<b>7. Total expenditures</b>		35.8	40.0	40.7	39.0	37.6	37.5
<b>8. Budget balance</b>		3.1	1.0	0.0	0.0	0.0	0.0
<b>9. Net interest payments</b>		0.3	0.3	0.2	0.2	0.2	0.2
<b>10. Primary balance</b>		3.4	1.3	0.2	0.2	0.2	0.2
<b>Components of revenues</b>							
11. Taxes		21.9	21.3	21.4	20.4	19.5	19.6
12. Social contributions		11.5	11.1	10.9	10.7	10.5	10.5
13. Interest income		5.5	8.6	8.3	8.0	7.5	7.4
14. Other		38.9	41.0	40.7	39.0	37.6	37.5
15. Total receipts		21.9	21.3	21.4	20.4	19.5	19.6
<b>Components of expenditures</b>							
16. Collective consumption		8.8	9.3	9.1	8.7	7.7	7.6
17. Social transfers in kind		9.9	10.1	10.2	10.1	10.0	10.0
18. Social transfers other than in		9.6	10.1	10.2	10.2	10.1	10.1
19. Interest payments		0.3	0.3	0.2	0.2	0.2	0.2
20. Subsidies		0.9	1.4	1.4	1.3	1.3	1.3
21. Gross fixed capital formation		3.4	4.4	4.4	4.0	3.9	3.9
22. Other		2.9	4.5	5.1	4.5	4.4	4.4
23. Total expenditures		35.8	40.0	40.7	39.0	37.6	37.5

**Table 3. General government debt developments**

% of GDP		2003	2004	2005	2006	2007	2008
<b>Gross debt level</b>		5.3	4.8	4.6	4.3	3.1	2.9
<b>Change in gross debt</b>		0.0	-0.5	-0.2	-0.3	-1.2	-0.2
<b>Contributions to change in gross debt</b>							
<b>Primary balance</b>		-3.4	-1.3	-0.2	-0.2	-0.2	-0.2
<b>Interest payments</b>		0.3	0.3	0.2	0.2	0.2	0.2
<b>Nominal GDP growth</b>		-0.4	-0.4	-0.4	-0.3	-0.3	-0.3
<i>Other factors influencing debt ratio</i>		3.5	0.9	0.2	0.0	-0.9	0.1
<i>Of which: Privatisation receipts</i>		0.3	0.2	0.1	0.0	0.0	0.0
p.m. implicit interest rate on debt		4.8	4.95	5.1	5.2	5.2	5.2

**Table 4. Cyclical developments**

% of GDP	2003	2004	2005	2006	2007	2008
<b>1. GDP growth at constant prices</b>	5.1	5.6	5.9	6.0	6.0	6.0
<b>2. Actual balance</b>	3.1	1.0	0.0	0.0	0.0	0.0
<b>3. Net Interest payments</b>	0.3	0.3	0.2	0.2	0.2	0.2
4. Potential GDP growth	6.0	6.2	6.2	6.1	6.0	6.0
5. Output gap	0.1	-0.4	-0.6	-0.7	-0.6	-0.6
6. Cyclical budgetary component	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>-of which cyclical contributions</i>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>-contributions from special items</i>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7. Cyclically-adjusted balance (2-6)	3.1	1.1	0.1	0.1	0.1	0.1
8. Cyclically-adjusted primary balance (7-3)	3.3	1.3	0.3	0.3	0.3	0.3

**Table 5. Divergence from previous update**

% of GDP	2003	2004	2005	2006	2007	2008
<b>GDP growth</b>						
<b>Convergence Programme May 2004</b>	4.7	5.3	5.8	5.6	5.9	5.8
<b>Convergence Programme Dec 2004</b>	5.1	5.6	5.9	6.0	6.0	6.0
<b>Difference</b>	0.4	0.3	0.1	0.4	0.1	0.2
<b>Price Inflation (CPI)</b>						
<b>Convergence Programme May 2004</b>	1.3	3.1	3.0	2.8	2.8	2.8
<b>Convergence Programme Dec 2004</b>	1.3	3.3	3.2	2.5	2.8	2.8
<b>Difference</b>	0.0	0.2	0.2	-0.3	0.0	0.0
<b>Actual budget balance</b>						
<b>Convergence Programme May 2004</b>	2.6	0.7	0.0	0.0	0.0	0.0
<b>Convergence Programme Dec 2004</b>	3.1	1.0	0.0	0.0	0.0	0.0
<b>Difference</b>	0.5	0.3	0.0	0.0	0.0	0.0
<b>Gross debt levels</b>						
<b>Convergence Programme May 2004</b>	5.8	5.4	5.1	4.7	3.4	3.2
<b>Convergence Programme Dec 2004</b>	5.3	4.8	4.6	4.3	3.1	2.9
<b>Difference</b>	-0.5	-0.6	-0.5	-0.4	-0.3	-0.3
<b>Tax burden</b>						
<b>Convergence Programme May 2004</b>	36.0	36.5	35.7	34.5	33.5	33.4
<b>Convergence Programme Dec 2004</b>	33.3	33.0	33.0	31.8	30.8	30.9
<b>Difference</b>	-2.7	-3.5	-2.7	-2.7	-2.7	-2.5

**Table 6. Long-term sustainability of public finances**

% of GDP	2000	2005	2010	2020	2030	2040	2050
Total expenditure	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Old age pensions	7.41	6.76	6.26	5.13	4.52	4.04	3.72
Health care (including care for the elderly)	4.81	4.62	4.62	4.62	4.57	4.57	4.57
Transfers payments <sup>2</sup>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total revenues	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Of which:</i> Tax on net pension payments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
National pension fund assets <sup>3</sup>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Assumptions</b>							
Labour productivity growth	8.6	4.36	3.82	2.94	2.30	2.23	2.17
Real GDP	7.3	5.13	4.1	2.24	1.63	1.26	1.11
Participation rate males (aged 20-64)*	70.2	68.2	71.0	73.3	72.3	72.1	71.0
Participation rates females (aged 20-64)*	57.3	60.7	63.2	66.2	65.8	64.9	63.3
Total participation rates (aged 20-64)*	63.3	64.3	67.0	69.7	69.0	68.5	67.2
Unemployment rate**	13.6	9.9	8.9	7.4	7.1	6.9	6.8

\* The programme discusses participation rates of the age group 15-64 years \*\*ILO

**Table 7. Basic assumptions**

	2003	2004	2005	2006	2007	2008
<b>Short-term interest rate</b> (annual average)	2.1	2.5	3.1	3.5	3.5	2.3
<b>Long-term interest rate</b> (annual average)	4.0	4.1	4.4	4.6	4.6	4.1
United States: short-term (three-month money market)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States: long term (10-year government bonds)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>USD/€exchange rate</b> (annual average)	1.21	1.19	1.19	1.19	1.19	1.13
Nominal effective exchange rate (euro area)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Nominal effective exchange rate (EU)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>EEK/€exchange rate</b> (annual average)	15.6466	15.6466	15.6466	15.6466	15.6466	15.6466
<b>World GDP growth, excluding EU</b>	4.2	4.1	4.1	4.1	4.1	3.5
United States, GDP growth	4.3	3.1	3.0	3.0	3.0	3.1
Japan, GDP growth	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>EU-15 GDP growth</b>	1.9	2.4	2.5	2.5	2.5	0.8
<b>Growth of relevant foreign markets</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>World import volumes, excluding EU</b>	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
World import prices (goods, in USD)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Oil prices</b> (Brent, USD/barrel)	32.0	30.0	30.0	30.0	30.0	28.9
Non-oil commodity prices (in USD)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

## Annex 2: Indicators of long-term sustainability

<b>Main assumptions - baseline scenario (as % GDP)</b>	<b>2009</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>changes</b>
Total age-related spending	11.0	10.9	9.8	9.1	8.6	8.3	-2.7
Pensions	6.4	6.3	5.1	4.5	4.0	3.7	-2.6
Health care	4.6	4.6	4.6	4.6	4.6	4.6	0.0
Total primary non age-related spending*	26.2						
Total revenues	37.5	37.4	37.2	37.1	37.0	36.9	-0.5

\*constant

<b>Results (as % GDP)</b>	<b>2009</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>changes</b>
<b>Baseline scenario</b>							
Gross debt	2.6	2.2	-6.3	-22.8	-47.9	-84.2	-86.8
<b>i + 0.5*</b>	2.6	2.2	-6.3	-23.5	-50.4	-91.0	-93.6
<b>2004 scenario</b>							
Gross debt	-2.1	-3.5	-22.6	-52.1	-94.1	-153.5	-151.4
<b>i + 0.5*</b>	-2.1	-3.5	-23.2	-54.5	-100.8	-168.5	-166.4

\* i + 0.5 represents the evolution of debt under the assumption of the nominal interest rate being 50 basis points higher throughout the projection period.

