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I. Introduction

In accordance with Council Regulation EC 1466/97, the Grand-Duchy of Luxembourg presented at the beginning of 1999 its first stability and growth programme to the Council and to the Commission. The present document is the seventh update of this programme, covering the time period 2004-2008.

As was the case with previous updates, the present update of the stability and growth programme has been prepared in parallel with the draft budget law. The draft budget for 2006 was presented to Parliament on 19 October 2005 and will be the subject of a final vote towards mid-December 2005. The draft budget is available on the website of the *Inspection générale des finances* http://www.igf.etat.lu/pb2006.pdf. This update also takes into account the key data of the multi-annual investment spending plan.

The updated Luxembourg stability and growth programme has been approved by the Cabinet and has also been transmitted to Parliament.

The stability and growth programme is available on the website of the Ministry of Finance http://www.etat.lu/FI/.

II. Overall policy framework and objectives

With respect to fiscal policy, the governmental programme of 4 August 2004 provides the following general guidelines:

"During the previous legislature, the public finance situation of the Member States of the European Union was markedly affected by the adverse international economic conditions which translated in a sharp slowdown of economic growth. Despite this unfavourable general context and in order to stimulate the Luxembourg economy, the Government significantly reduced the tax burden on households and enterprises and invested in public infrastructure projects, implying a discernible increase in Government investment expenditure, both directly and indirectly.

In the course of the coming legislature, the Government undertakes to preserve the solidity of the public finances. It will continue to implement a prudent fiscal policy and public expenditure growth will be maintained at a rate compatible with the medium term economic growth prospects. The Government is committed to respect the objectives of the European Stability and Growth Pact.

In order to reach those objectives, and in face of an uncertain development of certain tax revenues which could even decrease, the Government will not decide upon any new measures entailing a significant impact on public expenditure levels. The Government will maintain public debt at a low level in order to avoid an increase in public spending on debt service and reimbursement. In principle, the Government only envisages to issue new public debt in order to finance rail infrastructure projects.

Given that the annual budgetary process represents the centrepiece of the Government's strategy to control the development of the public finances, the Government will – starting in 2005 – proceed to a revision of the budgetary process. In practical terms, the new procedure entails that the draft budget will be approved by the Government in October, instead of August (as was the case under the previous budgetary process).

Adoption of the draft budget later in the year will allow the Government to improve the quality of the budgetary forecasts, notably because the most recent economic forecasts of the national and international forecasting agencies can be better taken into account in the draft budget.

Furthermore, the Government has repealed the procedure of bringing in budgetary amendments during the later stages of the budgetary process, which should also allow freeing up additional resources to exhaustively examine budgetary credit demands and to plan the Government's medium term investment strategy.

All future investment projects which are either directly or indirectly financed by the Government will be subject to a more detailed analysis in order to reduce the cost of public investment. Special attention will also be devoted to an early evaluation of the operating costs of new infrastructures, in order to achieve a better control of the government current spending".

III. Economic outlook

In line with the other statistical institutes of the Member States of the European Union, Statec proceeded in 2005 to the first revision of national accounts since the introduction of ESA95 in 1999. This revision had not been completed at the time the 7th update of the stability and growth programme was prepared. This programme presents the methodological aspects pertaining to the revision and it provides a tentative estimation of the magnitude of the revision. It should be noted that in qualitative terms – economic growth, general government balance, debt to GDP ratio – the effect of the revision of national accounts is marginal and the main conclusions presented in this update remain valid.

III.1. World economy : technical assumptions

The stability and growth programme assumes that in 2005, economic growth in the European Union (EU-15) will reach 1.5%. The main economic indicators evolve favourably during the last quarter of 2005, thus suggesting a more robust economic growth pattern in the European Union in 2006. Economic growth is forecast to accelerate to 2.2% in 2006 and 2.4% in 2007 and 2008. This growth pattern is based on the assumption of balanced economic growth of the other OECD economies, notably the United States. It also assumes robust growth in the main emerging economies (Brazil, China, India, Russia). It is foreseen that economic growth in relevant foreign markets will reach 4.3% in 2005. It will reach 5.7% in 2006 and then stabilize at 5.4% in 2007 and 2008.

Table 0: Basic assumptions

	2004	2005	2006	2007	2008
Short term interest rate (annual average)	2.1	2.1	2.2	2.4	3.0
Long term interest rate (annual average)	4.1	3.4	3.5	3.7	4.0
Exchange rate €/USD (annual average)	1.24	1.25	1.20	1.20	1.20
Nominal effective exchange rate (in %, increase = appreciation)	0.63	0.24	-0.02	-0.29	0.00
World GDP growth (excluding EU-15)	…	…	…	…	…
EU-15 GDP growth	2.2	1.5	2.2	2.4	2.4
Growth of relevant foreign markets	5.1	4.3	5.7	5.4	5.4
World import volumes (excluding EU-25)	…	…	…	…	…
Oil prices (Brent, USD/barrel)	38.3	55.0	58.8	58.8	58.8

The economic outlook for 2005 was negatively affected by the rise of oil prices during the second quarter, as it skimmed the threshold of 70 USD/barrel at the end of August. For 2005, the average price/barrel is estimated to settle at 55 USD. It is expected that in 2006-2008, oil prices will stabilize, albeit at a high level (58.8 USD/barrel).

After peaking at 1.35 €/USD at the beginning of 2005, the € has gradually depreciated relative to the USD. The estimated annual average exchange rate for 2005 is 1.2475 €/USD and it is expected that for 2006-2008 the € exchange rate will stabilize close to this level (+/- 1.2 €/USD).

In general, the stability and growth programme is based on the assumption of a generally accommodating international economic environment that will not be subject to any sudden sharp movements in exchange rates, interest rates or the prices of basic commodities.

III.2. The Luxembourg economy in 2005

In 2005, economic growth in Luxembourg is estimated to reach 4%. Although by international standards this growth rate is high, it should nevertheless be pointed out that it is slightly lower than the estimated potential growth rate of 4.25% and that the output gap will remain negative (-0.6% of GDP), albeit only marginally.

The contribution of consumption to real GDP growth is estimated at 1.7% and that of net exports at 2.3%. However, private consumption will continue to grow rather sluggishly. In fact, after having reached 1.5% in 2004, private consumption growth slowed to 1.2% in 2005. The underlying causes of slow consumption growth in a generally favourable economic environment are not clearly identified, but the rise of oil and real estate prices, the slowdown in population growth, the rise in unemployment, fiercer competition in the *Grande Région* and, more generally, a feeling of uncertainty regarding the medium term economic outlook (partly imported from abroad) all contribute at different degrees. Note that this analysis is confirmed by the evolution of the consumers' confidence index established by the Luxembourg Central Bank.

Government consumption and investment also increase at a slower pace than in 2004, reflecting in particular the budget consolidation efforts undertaken by the government. However, it should be noted that domestic investment continues to develop positively and that an acceleration of investment in equipment goods has been recorded.

External demand continues to be the main driving force for economic growth in Luxembourg. However, the adverse development of oil prices led to an increase in the total cost of oil supplies, which led to a reduction in the contribution of net exports to GDP growth. Furthermore, the subdued economic growth in the € zone adversely affects intra-EU exports, while extra-EU exports, in particular to Asia, progress rapidly. It should also be noted that the favourable development of financial services activities in Luxembourg – especially in the UCITS sector – contributes significantly to the growth of exports of financial services. On the other hand, a slowdown of exports of the steel sector is reported as a consequence of a slowing global demand for steel products.

Under the impulse of the rise in oil prices (+18.9% during the first 9 months), consumer price inflation accelerated in 2005. Indeed, the national consumer price index has risen from 2.1% in 2004 to 2.5% in 2005, while the harmonized consumer price index has increased from 3.2% in 2004 to 3.5% in 2005. In addition to the significant increase in oil prices (which accounts for about one third of the rise in inflation), inflationary pressures also stem from the services sector, as well as from alcohol and tobacco. Inflation in Luxembourg is above the average inflation rate in the € zone. However, underlying inflation remains rather low (1.7%).

The acceleration of inflation also spills over onto average wage costs. Average wage costs have increased by 2.6% in 2004 and they will rise by 3.5% in 2005. The development of average wage costs has been influenced by the 2% increase on 1st January 2005 of the economy-wide minimum wage and by a wage increase in the public sector (1%). In addition, average wage costs have also increased because of the favourable developments in the financial sector which exhibits an increase in total employment.

Table 1a. Macroeconomic prospects

	ESA Code	2004	2004	2005	2006	2007	2008
		mio. €	%	%	%	%	%
Real GDP	**B1*g**	20 803	4.4	4.0	4.4	4.9	4.9
Nominal GDP	**B1*g**	25 664	7.1	6.8	6.9	7.5	7.9
		Components of real GDP					
Private consumption expenditure	**P.3**	8 766	1.5	1.2	2.4	3.2	3.0
Government consumption expenditure	**P.3**	3 693	6.0	4.0	2.7	3.2	4.1
Gross fixed capital formation	**P.51**	4 406	3.5	2.1	5.4	7.8	7.3
Changes in inventories	**P.52 + P.53**	0.8	-0.7	0.0	0.0	0.0	0.0
Exports of goods and services	**P.6**	29 994	7.5	7.7	7.2	7.7	8.0
Imports of goods and services	**P.7**	26 231	6.3	6.9	6.8	7.8	8.1
		Contributions to real GDP growth					
Final domestic demand		…	1.7	1.7	2.6	3.5	3.5
Changes in inventories	**P.52 + P.53**	…	-0.7	0.0	0.0	0.0	0.0
External balance of goods and services	**B.11**	…	2.7	2.3	1.9	1.4	1.5

Developments in the labour market continue to be contradictory. On the one hand, domestic employment evolves positively and increases in 2005 by 2.9%, or a net creation of some 9,000 jobs. On the other hand, the unemployment rate continues to increase from 4.2% in 2004 to 4.7% in 2005. The rise in unemployment in Luxembourg is partly due to the economic slowdown in 2001-2003, but there is definitely also a structural component to it. The recent increase in unemployment has mostly affected persons in the age category from 40 to 60 years and persons with a low level of education. In this context, the lengthening of the duration of unemployment is also a worrying trend: the percentage of people unemployed for more then 12 months increased from 27% in August 2004 to 31% in August 2005.

Table 1b: Price developments

	2004	2005	2006	2007	2008
	%	%	%	%	%
GDP deflator	2.6	2.7	2.4	2.4	2.8
Private consumption deflator (NIPC)	2.1	2.5	2.4	2.0	2.0
HIPC	3.2	3.7	2.6	2.0	1.8
Public consumption deflator	1.9	4.6	3.1	3.0	2.8
Investment deflator	1.2	1.7	1.4	0.9	1.1
Export price deflator (goods and services)	6.0	4.0	2.4	2.7	2.8
Import price deflator (goods and services)	5.7	4.4	2.6	2.4	2.6

Table 1c: Labour market developments

	ESA Code	2004	2004	2005	2006	2007	2008
		x 1000	%	%	%	%	%
Employment, persons		301	2.6	2.9	2.9	3.1	3.2
Employment, hours worked		…	1.2	2.1	2.4	2.6	2.8
Unemployment rate		…	4.2	4.7	5.0	5.2	5.3
Labour productivity, persons		…	0.8	0.6	1.2	1.5	1.3
Labour productivity, hours worked		…	2.2	1.5	1.7	1.9	1.8
Compensation of employees	D.1	…	2.6	3.5	3.1	3.0	3.4

III.3. Medium term scenario, 2006-2008

In 2006-2008, the more robust economic growth in the € zone and the European Union will generate positive spillover effects for the Luxembourg economy.

The stability and growth programme predicts that in 2006 economic growth will accelerate to 4.4% and that it will reach 4.9% in 2007 and 2008. During these two years, actual economic growth will be above potential, although the output gap will stay negative on average during 2001-2005.

The impetus to economic growth comes mainly from domestic demand and in particular from private consumption. The acceleration of growth in the € zone will trigger an improvement in consumer confidence, while a more restrictive fiscal policy will lead to a slowdown in government consumption (although not investment). The more favourable medium term growth prospects will also have a positive impact on private investment, while public investment (central and local government), especially in the field of transport infrastructure, will be maintained at a high level (> 5% of GDP).

Inflation – in particular because of the sharp increase in oil prices during the second half of 2005 – will remain relatively high (> 2%) in 2006, but will converge towards 2% in 2007 and 2008.

Employment will continue to grow in 2006-2008 at a rate of approximately 3% per year, which implies an annual net creation of about 10,000 jobs. Despite a generally favourable economic environment, unemployment will continue to rise and the unemployment rate will exceed the threshold of 5% in 2006, reaching 5.3% in 2008.

III.4. The 2005 revision of the National Accounts

In parallel with other statistical institutes of the European Union, Statec proceeded in 2005 to a revision of National Accounts. This revision is the first of its kind since the introduction in 1999 of ESA95 and it pertains to two main aspects:

1) A revision of the methodology to measure financial services and more precisely to computation and allocation of financial intermediation services indirectly measured (FISIM).

The United Nations system of national accounts of 1993 (SNA93) provided for the possibility to split up FISIM between end use (public and private consumption, exports) and intermediate use as an option alongside the traditional method that treats services as intermediate consumption of the national economy. In the first version of the European system of national accounts of 1995 (the European version of SNA93), this allocation was not introduced, in the absence of an appropriate methodology agreed to by all Member States.

A revision of the treatment of financial services (on the basis of an allocation of FISIM) was decided in early 1998. The final decision was however deferred until 2002, after a test period intended to improve the statistical sources used and to allow an assessment of the different allocation methodologies that had been put forward. A Commission Regulation (Regulation No. 1889/2002 – 23 October 2002) determines the methodology for allocating the FISIM, the computation method at constant prices, the year in which the new methodology must first be applied (2005) and the period to which it must be applied retroactively (as from the reference year 1995).

In the case of Luxembourg, the impact of this revision on the level of GDP is quite significant, reaching from 14% in 1995 to 2.8% in 2001 (6.4% on average for the period 1995-2004).

2) A revision of statistical methods in order to include new surveys or statistical sources and new estimation methods in order to prepare National Accounts. This revision also reflects recommendations issued by the European Commission within the framework of the computation of Member States' contributions to the fourth own resource after verification of the inventory of sources and methodologies to compute GDP and GNI according to ESA95.

This revision pertains to a number of aspects within the framework of preparing National Accounts. The main points are the following:

- Improvements in the extrapolation methodologies used for surveys.

- New methods to analyse structural statistics, taking into account more complete data on foreign branches of resident enterprises, the phenomenon of VAT “carousel fraud” and “letter box” firms.

- A revision of the statistical treatment of maritime and fluvial shipping companies resident in Luxembourg in order to allow their personnel to be affiliated to the Luxembourg social security system, derogating from the principle “*Lex loci laboris”* but for which effective management and the production of service activities does not take place on the national territory.

- A revision of the statistical treatment of the insurance sector, taking into account more detailed data supplied by the *Commissariat aux Assurances*.

- A revision of the methodology to compute the capital stock and the consumption of fixed capital (including changes regarding the lifetime of investment goods, and notably buildings and engineering projects, following a Eurostat proposal).

- A revision of data regarding the sector of financial auxiliaries, through integration of statistical information from a special structural survey of professionals in the financial services sector conducted by the *Commission de Surveillance du Secteur Financier*.

The impact of these revisions on the level of GDP amount to approximately -1.5% on average for the period 1995-2004 (ranging from -0.3% to -2.4%).

The aggregate impact of these revisions of the GDP level is about +5% on average during the period 1995-2004 (close to 14% in 1995 and less than 1% in 1998).

IV. General government balance and debt

IV.1. Policy strategy and medium term objectives

On 12 October 2005, the Prime Minister delivered to Parliament a Declaration on the general political orientations for the short to medium term political priorities of the Government.

The Prime Minister asserted that the public accounts for the fiscal years 2004, 2005 and 2006 are and would be characterised by deficits. He confirmed that – in line with the governmental programme of 4 August 2005 – the Government is committed to strictly comply with the objectives defined by the Stability and Growth Pact, following its reform in March 2005 under the Luxembourg presidency of the Council of the European Union. The Lisbon National Action Plan entitled "National action plan for full-employment and innovation" also places fiscal policy at the heart of the medium term macro- and micro-economic policy strategy.

The preventive arm of the Stability Pact stipulates that those Member States that have not yet achieved their medium term objective must undertake the necessary steps in order to reach their objective over the cycle.

Member States of the € zone set country-specific medium term objectives that may diverge from a position close to balance or in surplus on the basis of the debt-to-GDP ratio and their potential growth, while preserving an appropriate budgetary safety margin with respect to the -3% of GDP reference value. On the basis of the above-mentioned characteristics, Member States may set a medium term objective between -1% of GDP and balance or surplus. The medium term objective is defined in cyclically-adjusted terms, net of one-offs and temporary measures.

Given that the Luxembourg economy is characterised by high potential growth (> 4%) and a low level of public debt (debt-to-GDP ratio < 10%), Luxembourg may set for itself a relatively less stringent medium term objective (-1% of GDP). However, the smallness of its territory and the high degree of openness of its economy entail that Luxembourg is relatively more vulnerable to adverse external shocks, which translates into a high volatility of GDP growth. As a result, and following a methodology developed by the European Commission and agreed by the Economic and Financial Committee (EFC), the medium term objective is increased by a budgetary safety margin of 0.2% of GDP in structural terms. Hence, the medium term objective is set at -0.8% of GDP.

In 2005, the general government budget deficit is forecast to reach 2.3% of GDP in nominal terms, i.e. 2% of GDP in cyclically-adjusted terms. Consequently, Luxembourg will not reach its medium term objective in 2005 and it must step up budgetary consolidation efforts in order to reach the medium term objective over the cycle.

The preventive arm of the Stability Pact foresees that Member States must intensify their budgetary consolidation effort during good times and that consolidation efforts may be lower during periods of slower economic growth. A deficit reduction of 0.5% of GDP in structural terms serves as a benchmark in order to assess whether Member States' efforts to consolidate their public finances are sufficient. However, this assessment must also take into account the cyclical position of the economy as well as tax elasticities.

"Good times" are defined as periods during which GDP is above potential, i.e. the output gap is positive. According to the forecast underlying the current update of the stability programme, this will be the case for Luxembourg in 2007 and 2008, but not in 2006.

In addition to the budgetary objectives defined by the Stability and Growth Pact, the governmental programme of August 2004 defines supplementary guidelines regarding the conduct of fiscal policy. In particular, the Government is committed to maintain the solidity of the public finances, notably through keeping the debt-to-GDP ratio at a low level and by only increasing public borrowing in order to finance public infrastructure projects. These guidelines underline that the Government intends to implement a fiscal policy that will allow reaching a balanced budgetary position over the course of the current legislature which will end in 2009. In order to reach this objective in a generally accommodating macroeconomic framework, the Government will sustain the consolidation effort throughout 2008.

IV.2. Fiscal situation in 2004 and 2005

Since the 1st September 2005 deficit notification, the 2004 and 2005 public accounts have been updated in order to take into account new elements concerning the development of general government revenue and expenditure.

After the 1st March 2005 downwards revision, the 2004 general government deficit was again revised upwards, from 0.6% of GDP (-158 mio. €) to 1.2% of GDP (-297 mio. €). For the fiscal year 2005, the general government deficit is estimated to reach 619 mio. €, i.e. 2.3% of GDP.

The 2004 upward revision of the deficit can essentially be explained by two factors.

First, a re-evaluation of social transfers, based on final accounting figures provided by social security, and a correction of transfers between sub-branches of social security led to a 93 mio. € adjustment in benefits. Expenditures have been corrected accordingly and the public deficit has been revised upwards.

Second, taxes on production and imports have been revised downwards by 47 mio. €. These taxes are registered on a time-adjusted cash basis. Following this concept, tax revenues are imputed on the fiscal year during which the economic activity generating the tax liability has taken place. This also holds true for refunds to taxpayers, e.g. VAT reimbursements. In 2005, the tax administration proceeded to a number of VAT reimbursements in relation to transactions taking place during the fiscal years 2001-2005. The total amount of these reimbursements is very significant, amounting to around 2% of GDP. In budgetary (cash) accounting terms, the impact of these reimbursements bears essentially – or even entirely – consequences for the fiscal year 2005. However, in public accounting terms, compiled on an ESA 95 basis, the impact of these reimbursements extends over the entire period 2001-2005. The tax reimbursements are deducted from gross revenues in the year during which the transaction took place. The downward revision of tax revenues in 2004 is therefore related to the registration of revenues on a time-adjusted cash basis.

In this context, it should be noted that the public accounts are compiled on the basis of ESA 95. According to ESA95, transactions are classified on the basis of economic rationale and the corresponding revenues or expenditures are recorded in relation to the time period during which the economic activity took place. However, the period during which the economic activity took place and the moment at which the relating payment occurred do not necessarily coincide. Thus, ESA95 accounting differs fundamentally from budgetary (cash) accounting, the latter registering cash amounts paid and received during any particular fiscal year. In order to compile public accounts according to ESA 95, it is necessary to have access to detailed information regarding the timing of both the economic activity and the relating payment, whereas in budgetary (cash) accounting, it is only necessary to gain information regarding the timing of the actual payment. Public accounts are continuously updated, whenever new information becomes available.

Based on current estimates, the general government fiscal deficit increased from 1.2% of GDP in 2004 to 2.3% of GDP in 2005 or 2% of GDP in structural terms. Consequently, Luxembourg does not reach the medium term objective of 0.8% of GDP. It should however be pointed out that the final budgetary outcome for 2005 remains uncertain at this stage and will only be established in spring 2006, taking into account exceptional and seasonal payments during the final months of the fiscal year 2005.

In 2005, expenditures continued to grow above the growth rate of nominal GDP (+8.4% compared to 2004), while revenue growth was more subdued. Consequently, the ration between total expenditure and GDP increased from 45.6% in 2004 to 47% in 2005 and the ratio of total revenue to GDP ratio increased moderately from 44.5% to 44.7%, thus bringing the 2005 deficit to 2.3% of GDP.

The 2005 deficit is higher than the deficit anticipated in the previous update of the stability programme. Indeed, as was already mentioned above, fiscal developments in 2005 are adversely affected by a series of exceptional VAT reimbursements amounting in total to around 2% of GDP. However, as these reimbursements are registered in time-adjusted cash terms, the budgetary impact is not limited to the fiscal year 2005, but the reimbursements also negatively affect the ESA95 general government balance for the fiscal years 2001-2004. However, fiscal year 2005 bears the brunt of the reimbursements with a negative impact on the budget deficit in excess of 1% of GDP.

These reimbursements were not anticipated in the revenue projections underlying the previous update of the stability programme. Consequently, the robust increase in indirect tax revenues foreseen in the previous update did not materialise and accordingly, the deficit increased. It should be noted, however, that in 2004, taxes on production and imports increased by 16.7% compared to 2003 (despite the imputation on fiscal year 2004 of part of the 2005 VAT reimbursements), while in 2005 this increase will be a more limited +7.5% compared to 2004.

Furthermore, the economic slowdown in 2001-2003 continued to carry over its negative effects to fiscal year 2005. As a result, the ratio between direct taxes and GDP stagnated (13.9% of GDP in 2004 and 2005). Indeed tax revenues from the two main levies on corporate profits – the corporate income tax and the municipal business tax – are not directly related to corporate profits generated during the current year, but they are in fact a 4-5 year weighted average. Thus, during the fiscal years 2001-2003, the taxation of high corporate profits in years 1997-2000 contributed to stabilise tax revenues, whereas the more recent fiscal years starting with 2004 are adversely affected by the slowdown in corporate tax revenues, as taxes are assessed on the basis of lower corporate profits (or even losses) in 2001-2003. However, this effect is partly offset by the robust growth in direct taxes on individuals and households.

IV.3. The budget for fiscal year 2006

On 19 October 2005, the Government presented to Parliament the draft budget law concerning the fiscal year 2006.

The 2006 draft budget presents a general government deficit of 537 mio. €, i.e. 1.8% of GDP. In structural terms the deficit is estimated at 1.6% of GDP.

Looking at the sub-sectors, the central government deficit will reach 3.8% of GDP, i.e. a 0.4% reduction compared to 2005. Local government finances will be at equilibrium. It should be noted that the initial 2006 draft budget – which showed a central government deficit of 4.1% of GDP and a surplus of local government of 0.3% of GDP – did not include a 0.3% current transfer from local government to central government. This transfer has now been taken into account. The fiscal situation of social security will continue to be positive, also owing to the current transfers of revenue from central government (> 9% of GDP in 2005). The social security balance is projected to slightly improve from +1.9% of GDP in 2005 to +2% of GDP in 2006.

The 2006 budget consolidation path has been prepared in conformity with the Stability and Growth Pact. The nominal deficit is reduced from 2.3% of GDP to 1.8% of GDP, i.e. a deficit reduction of 0.5%. The structural deficit decreases by 0.4%, from 2% of GDP in 2005 to 1.6% of GDP in 2006. This adjustment path only marginally deviates from the 0.5% benchmark value. However, this slight deviation from the 0.5% of GDP benchmark for the adjustment path can be fully justified by the fact that the 2006 output gap will remain negative and by the high level of public investment (5.5% of GDP in 2005 and 2006). These investments, most notably in the rail and road networks as well as in the construction of a new airport terminal, are enhancing the long term growth potential of the Luxembourg economy.

Regarding public revenues, the ratio between total revenue and GDP records a slight 0.2% of GDP decrease from 44.7% of GDP in 2005 to 44.5% of GDP in 2006. In nominal terms, revenues are expected to grow by 6.5% compared to 2005.

The 2006 budget forecasts a slowdown in taxes on production and imports. Relative to GDP, these revenues are expected do decrease from 14.7% in 2005 to 13.7% in 2006. This prudent estimate also reflects a better anticipation of exceptional VAT reimbursements.

The negative development in taxes on production and imports is however offset by positive developments in taxes on income and wealth. In 2006, these revenues will rise in nominal terms by 10.5%, and relative to GDP they will increase from 13.9% in 2005 to 14.3% in 2006. This trend can be explained by several factors. First, concerning corporate tax income, the protracted effect of the 2001-2003 economic slowdown is progressively winding down, while profits – notably in the banking sector – are developing favourably. Second, since the 2001/2002 tax reform, personal income tax receipts are quite buoyant and the present upswing in economic activity will generate higher tax revenues. Third, in 2006 the development of taxes on income and wealth is characterized by a new element, i.e. the introduction of a withholding tax on savings for residents and non residents. The revenues from this tax are estimated to amount to around 0.3% of GDP.

Table 2 : General government budgetary prospects

	ESA Code	2004	2004	2005	2006	2007	2008
		mio €	% GDP	% GDP	% GDP	% GDP	% GDP
		Net lending by sub-sector					
General government	S.13	**-297**	**-1.2**	**-2.3**	**-1.8**	**-1.0**	**-0.2**
Central government	S.1311	-703	-2.7	-4.2	-3.8	-3.0	-2.1
Local government	S.1313	-32	-0.1	0.0	0.0	0.0	0.0
Social security	S.1314	438	1.7	1.9	2.0	2.0	2.0
Total revenue	TR	11 412	44.5	44.7	44.5	44.1	44.3
Total expenditure	TE	11 709	45.6	47.0	46.3	45.1	44.5
Net lending/borrowing	EDP B.9	-297	-1.2	-2.3	-1.9	-1.0	-0.2
Interest expenditure	EDP D.41	58	0.2	0.2	0.2	0.3	0.3
Primary balance		-239	-0.9	-2.1	-1.7	-0.7	0.1
		Components of revenue					
Total taxes		7 249	28.2	28.5	28.0	28.3	28.7
Taxes on production and imports	D.2	3 683	14.4	14.7	13.7	13.8	13.9
Current taxes on income and wealth and capital taxes	D.5 + D.91	3 566	13.9	13.9	14.3	14.5	14.8
Social contributions	D.61	3 170	12.4	12.5	12.4	12.2	12.1
Property income	D.4	307	1.2	1.2	1.3	1.2	1.2
Other		685	2.7	2.5	2.8	2.4	2.3
Total revenue	TR	**11 412**	**44.5**	**44.7**	**44.5**	**44.1**	**44.3**
Tax burden		…	40.6	41.0	40.4	40.5	40.9
		Components of expenditure					
Compensation of employees	D.1	2 242	8.7	8.7	8.6	8.4	8.2
Intermediate consumption	P.2	900	3.5	3.7	3.7	3.6	3.6
Total social transfers		5 438	21.2	21.4	21.0	20.7	20.4
Social transfers in cash	D.62	4 030	15.7	15.8	15.6	15.4	15.2
Social transfers in kind	D.63	1 408	5.5	5.6	5.4	5.2	5.2
Interest expenditure	EDP D.41	58	0.2	0.2	0.2	0.3	0.3
Subsidies	D.3	437	1.7	1.8	2.2	1.7	1.6
Gross fixed capital formation	P.51	1 197	4.7	5.5	5.5	5.3	5.2
Other		1 437	5.6	5.7	5.3	5.3	5.2
Total expenditure	TE	**11 709**	**45.6**	**47.0**	**46.3**	**45.1**	**44.5**

The growth of social contributions should be more or less in line with nominal GDP. The ratio between social contributions and GDP should be roughly stable at 12.5% in 2005 and 12.4% in 2006.

The projected trajectory for public expenditures clearly demonstrates the Government's commitment to actively consolidate public finances, although the Government will continue to support investments in the future growth potential of the economy.

Indeed, the ratio between public expenditure and GDP is being reduced from 47% in 2005 to 46.3% in 2006, i.e. a reduction of 0.7% of GDP, while the ratio between public investment and GDP is maintained at the high level of 5.5% of GDP in 2006. These investments, which are essentially concentrated on transport infrastructures, education, research and health, exhibit a clear forward-looking orientation.

The consolidation of other public expenditures is implemented through strictly limiting their growth and keeping it below the rate of growth of nominal GDP.

A more ambitious consolidation effort is being implemented at the level of social transfers, the latter coming down from 21.4% of GDP in 2005 to 21% in 2006. Indeed, the 2006 budget starts showing the effects of a range of measures introduced in 2002-2005 in order to limit the growth of social expenditures. The main measures that were implemented pertain to the reclassification of disabled workers, a sizeable reduction in the number of unwarranted sick leaves, a campaign to raise the public's awareness regarding the effects of excessive medication consumption, incentives to increase the use of generic drugs and tougher controls of hospital expenditures.

IV.4. Medium term forecast, 2007-2008

The Government is clearly committed to implement in 2007 and 2008 the fiscal consolidation measures necessary in order to reach the medium term objective.

In fact, based on the requirements of the stability and growth pact and in accordance with the Government programme of 4 August 2004, the Government is committed to reduce the structural deficit by 0.5% of GDP in both 2007 and 2008. The structural deficit will thus be reduced from 1.6% of GDP in 2006 to 0.6% in 2008. In 2008, this consolidation effort should bring the general government budgetary position close to balance in nominal terms (-0.2% of GDP).

In its Declaration on the general political orientations of 12 October 2005, the Government announced the development of a medium term framework to consolidate the public finances. In association with the social partners, the Government will proceed to an analysis of recent budgetary developments with a view to identifying the underlying causes of the observed deterioration of the budget balance. This review will take place during the first semester of 2006 and concrete measures will be enacted in time for the draft budget 2007. The Government will notably implement a series of structural measures aimed at enhancing the framework for public expenditure growth control.

It is important to note that this consolidation policy will be carried out in favorable economic conditions. This stability programme update is projecting a 4.9% economic growth rate in both 2007 and 2008 which, in turn, will lead to a fairly robust growth in tax revenues. This update forecasts that the tax-to-GDP ratio will increase from 28% in 2006 to 28.3% in 2007 and 28.7% in 2008. This positive evolution will be partially offset by a slowdown in the rate of growth of social contributions. However, the ratio between revenue and GDP will remain stable at 44.1% in 2007 and increase to 44.3% in 2008.

In this context, the consolidation of public finances can be achieved through a strict control of the rate of growth of public expenditures (relative to public revenue), but it does not imply *a priori* that the Government must implement large-scale expenditure cuts. This stability programme update projects that the ratio between public expenditure and GDP will decrease from 46.3% in 2006 to 45.1% in 2007 and 44.5% in 2008. This trend implies that in nominal terms, public expenditures will continue to increase by 5% in 2007 and 5.8% in 2008.

Table 3: Cyclical developments

in % of GDP	**ESA Code**	**2004**	**2005**	**2006**	**2007**	**2008**
Real GDP growth		4.4	4.0	4.4	4.9	4.9
Net lending of general government	EDP B.9	**-1.2**	**-2.3**	**-1.8**	**-1.0**	**-0.2**
Interest expenditure	EDP D.41	0.2	0.2	0.2	0.3	0.3
Potential GDP growth		3.9	4.3	4.3	4.3	4.3
Output gap		-0.3	-0.6	-0.4	0.2	0.9
Cyclical budgetary components		-0.2	-0.3	-0.2	0.1	0.4
Cyclically-adjusted balance		**-1.0**	**-2.0**	**-1.6**	**-1.1**	**-0.6**
Change in the cyclically-adjusted balance		-1.5	-1.0	+0.4	+0.5	+0.5
Cyclically-adjusted primary balance		-0.8	-1.9	-1.4	-0.9	-0.3

***Note** : The cyclically-adjusted budget balance is computed under the assumption that the budgetary sensitivity parameter (ε) is equal to 0.49. The output gap is estimated by Statec using a Cobb-Douglas production function. Production factors (with the exception of the capital stock) are adjusted by using an H-P filter and the labour input takes into account hours worked.*

The main measures announced by the Government will pertain to the following sectors:

- A large share of public expenditures is either directly or indirectly related to the automatic wage indexation mechanism. Although the Government remains committed to the wage indexation mechanism, it will examine proposals to uncouple public expenditure growth from the wage indexation mechanism.

- In this context, the Government also intends to discuss with social partners the cost-of-living adjustment of social security benefits, as well as the indexation of social security benefits to wages (in order to allow benefit recipients to share in the proceeds of economic growth).

- The Government remains firmly committed to maintain a high level of public investment. However, the Government has announced that it will reappraise financing instruments and that ways and means to use innovative financing mechanisms like public-private partnerships should be analysed.

- The Government will also remain vigilant with respect to wage developments in the public sector. The current public sector wage agreement will expire at the end of 2006 and wage moderation will continue thereafter. In addition, the Government also intends to initiate a more general discussion on public sector wage policy, in particular with respect to the nexus of pay, promotion and performance.

Despite embarking on fiscal consolidation, the Government, in its Declaration on the general political orientations, has also confirmed a number of priorities in other areas such as labour market policy – in order to reduce unemployment – education and research, development of public transport infrastructure and environment protection. In this context, additional expenditures will be targeted at reaching the Government's medium term strategic objectives in the following areas:

- On research, the Government intends to increase total resources (private and public) allocated to research to 3% of GDP. According to the Lisbon National Reform Plan, total R&D expenditures should reach 2.4% of GDP in 2008. The focal point of research activities will be the recently created *Université du Luxembourg*.

- In line with international commitments, the Government also intends to gradually increase development aid and defence spending to 1% of GDP.

- The Governments confirms that it remains fully committed to the Kyoto protocol and the emissions reductions agreed as part of the EU burden-sharing. The Government will actively support initiatives to reduce greenhouse gas emissions at the national level, notably through appropriate incentive schemes. Luxembourg will also fulfil its international obligations by means of the so-called "flexible mechanisms". In this regard, the 2006 draft budget provides the budgetary allocations to implement the Government's national and international action plan.

IV.5. Debt levels and developments

General government debt remains well below the 60% of GDP reference value mentioned in Article 104 of the EC Treaty.

In 2005, the debt-to-GDP ratio reaches 6.4%. At the same time, central government reserves amount to 8% of GDP. These reserves were accumulated during the period 1997-2001, which was characterised by a series of large budget surpluses. The availability of these reserve funds allowed central government to implement a counter-cyclical fiscal policy during the years 2002-2004 and they also allowed the Government to maintain investment spending at a high level. Although the central government budget balance is negative since 2002, deficits were entirely covered by existing reserves and not via increasing public debt.

Furthermore, the social security sector regularly generates surpluses and these surpluses are saved in order to pay for future social transfers (mainly pensions). In fact, at the end of 2005, social security has accumulated a pensions reserve amounting to 6.6 bn. €, i.e 24.5% of GDP. Consequently, the general government net debt is negative. In 2005, it amounts to -30% of GDP. The existence of these reserves will allow cushioning the adverse shock to public expenditure stemming from an ageing population.

For the fiscal years 2005 and 2006, the government has been or will be authorized to issue new debt up to a total of 200 mio. € in 2005 and 500 mio. € in 2006 in order to finance investment projects via special funds dedicated to roads and motorway construction as well as to railroads construction. Given that the overall financial situation of central government yields a positive net balance, the use of debt financing is not unavoidable. However, in the short term, debt financing is justified in order to benefit from low interest rates, while in the medium term it guarantees a higher degree of liquidity to the Treasury given the ambitious spending plans as set out in the multi-annual capital spending programme. Furthermore, this update of the stability programme assumes – in line with the multi-annual capital spending programme – that the central government will issue new debt of up to 400 mio. € per annum in 2007 and 2008. This information is included in Table 4, which furthermore assumes that central government will continue to reimburse the existing debt as planned.

Table 4: General government debt developments

in % of GDP	**2004**	**2005**	**2006**	**2007**	**2008**
Gross debt	6.6	6.4	9.6	9.9	10.2
Central government	4.2	4.0	7.3	7.7	8.2
Local government	2.3	2.4	2.3	2.2	2.0
Social security	0.0	0.0	0.0	0.0	0.0
Change in gross debt ratio	-0.1	-0.2	+3.2	+0.3	+0.3
	Contribution to changes in gross debt				
Primary surplus	-0.9	-2.2	-1.6	-0.7	0.1
Interest expenditure	0.2	0.2	0.2	0.3	0.3
Stock-flow adjustment	1.5	2.5	5.4	2.0	1.1
Implicit interest rate on debt	3.6	3.0	3.7	3.2	3.1
	Other relevant variables				
Liquid financial assets	39.5	35.9	…	…	…
Net financial debt	-32.9	-29.5	…	…	…

Furthermore, the Government has granted a certain number of guarantees to property developers, in relation to the construction of public infrastructures (*Loi de garantie*). In accordance with the Eurostat decision of 11 February 2004 regarding the statistical treatment of public-private partnerships, these transactions are recorded as imputed loans in the general government accounts. In 2006, a number of large infrastructure projects will be financed via the *Loi de garantie*, e.g. the new airport terminal at Luxembourg-Findel, the *Cité judiciaire* in Luxembourg-Centre, the extension to the European Court of Justice building at Luxembourg-Kirchberg. These projects will have a significant impact on the level of the public debt.

Consequently, central government debt will increase from 4% of GDP in 2005 to 7.3% of GDP in 2007 and it will reach 8.2% of GDP in 2008.

Central government debt encompasses monetary signs issued by the Treasury, Treasury bills and central government loans.

The quantity of monetary signs issued by the Treasury as coins has increased rapidly since the replacement of Belgian and Luxembourg francs coins with euro coins. On 31 October 2005, euro coins worth 120.9 mio. € were in circulation. Furthermore, francs coins worth 5.41 mio. € have, to this date, not yet been returned. The Treasury was committed to convert these coins until 31 December 2004. In addition, the Treasury will reimburse in 2005 the residual amount of 0.59 mio. € relating to a Treasury bond emitted against francs notes issued by BIL.

The Treasury bills issued by the government are not actually reimbursable funds collected by the government. Instead, these bills enact long-term commitments *vis-à-vis* international financial institutions (AsDB, AsDF, EBRD, IFAD, GEF, IDA, MIGA, “Kyoto” carbon funds). These bills do not carry interest and they are paid if and when they are due. On 31 October 2005, outstanding bills totalled 34.1 mio. €. The payment of the Treasury bills is carried out via the special fund dedicated to the repayment of the public debt. On 31 October 2005, available reserves in this fund amounted to 0.4 mio. €, implying that the net debt in the form of Treasury bills is equal to 33.7 mio. €.

The government has not issued new bonds during the fiscal years 1998 to 2005. The government intends to repay the public debt as and when it is falling due. On 31 October 2005, gross public debt in the form of government bonds amounted to 248.59 mio. € (0.9% of GDP). Of these, 68.47 mio. € are currently covered by the reserves of the special fund dedicated to the reimbursement of the public debt, implying that the net debt in the form of government bonds totals 180.12 mio. €. The total outstanding public debt comprises a single financial instrument, namely linear bonds (OLUX). The public debt contracted by the government is entirely denominated in euros. Over the three fiscal years 2005 to 2007, the repayment of the principal and the interest of the public debt will impose a total cost of 474.32 mio. €, or on average 158.11 mio. € per fiscal year. As part of this burden is already covered by the reserves accumulated in the special fund dedicated to the repayment of the public debt, the actual financial burden only amounts to an average of 56.6 mio. € for the fiscal years 2005 to 2007.

Local government debt remains at a low level (2.4% of GDP in 2005). The aggregate debt of local authorities totalled 650 mio. € at the end of 2005.

The conditions under which local authorities may contract new loans are very stringent. In fact, they may only contract new loans to finance extraordinary expenditures, and only if no other source of finance is either available or economically efficient. Furthermore, the legislation stringently regulates the conditions under which local authority syndicates may contract new loans.

The Luxembourg social security records structural surpluses and consequently its debt tends towards zero.

V. Sensitivity analysis and comparison with previous update

V.1. Sensitivity analysis

The 7th update of the stability programme was prepared under the assumption that – in accordance with the Government’s Declaration on the general political orientations of 12 October 2005 – the Government will present in spring 2006 a package of structural consolidation measures aimed at slowing down the rate of growth of public expenditures.

The sensitivity analysis presented below is based on a “no policy change” scenario, i.e. it is assumed that the Government will not implement any structural measures and that public expenditure will continue to grow on the basis of historical trends.

Under this hypothesis, the general government deficit will increase from 1.8% of GDP in 2006 to 2% of GDP in 2007 and 2.1% of GDP in 2008. In 2008, the structural deficit would reach 2.5% of GDP.

The general government deficit would remain well below the 3% of GDP reference value mentioned in Article 104 of the EC Treaty. However, Luxembourg would not reach its medium term objective, nor would it respect the adjustment path to the medium term objective.

Steady growth of tax revenues and favorable macroeconomic conditions would allow central government to bring down its deficit from 3.8% of GDP in 2006 to 3.3% of GDP in 2008. However, this result implies that in nominal terms, the central government deficit would exceed the threshold of 1 bn. € throughout the period 2005-2008. As a result, gross public debt would converge towards 15% of GDP in 2008.

In the absence of budgetary measures to slow down the rate of growth of current and investment expenditures, the budget balance of local government would turn negative in 2007 and 2008 (-0.2% of GDP in 2008).

The improvement in the central government budget balance would be offset by a worsening of the budgetary situation of the social security sector. In fact, the rate of growth of social contributions and current transfers from the central government budget would be insufficient to compensate for the rapid increase in social transfer expenditures. As a result, the social security surplus would shrink from 2% of GDP in 2006 to 1.5% of GDP in 2008.

V.2. Comparison with previous update

The 6th update of the stability programme was based on a prudent macroeconomic scenario. For 2004, the difference between the GDP growth rate forecast in the previous and the current stability programme update is zero. However, from 2005 onwards, the difference is positive, i.e. in the current update medium term growth rates have been revised upwards.

For 2005, the GDP growth forecast has been increased by 0.4%. While private consumption and investment are less buoyant than forecast, this lack of drive is more than compensated by government consumption and by exports. Furthermore, the resumption of growth in the financial services sector was more robust than foreseen initially, thus generating both direct and indirect positive spillover effects for other economic branches. This more rapid growth of the financial services sector also contributes to explaining the positive growth differential observed in 2006 and 2007.

For 2006, because of less favourable international economic conditions, the previous stability programme update forecast a slowdown in economic growth compared to 2005. However, the current update assumes that the international economic outlook improves and that economic growth in Europe is gathering speed. As a result, the 7th update of the stability programme forecasts an acceleration in domestic growth, rather than a slowdown. The positive effects of more robust international growth also spill over into the 2007 growth forecast which, on the basis of a strengthening of investment and external demand, is also revised upwards.

Table 5: Divergence from previous update

	2004	2005	2006	2007
Real GDP growth (%)				
6th update	4.4	3.8	3.3	4.3
7th update	4.4	4.0	4.4	4.9
Difference	**0.0**	**0.2**	**1.1**	**0.6**
General government net lending (% of GDP)				
6th update	-1.4	-1.0	-0.9	-1.0
7th update	-1.2	-2.3	-1.8	-1.0
Difference	**0.2**	**-1.3**	**-0.9**	**0.0**
General government gross debt (% of GDP)				
6th update	5.0	5.0	4.6	4.5
7th update	6.6	6.4	9.6	9.9
Difference	**1.6**	**1.4**	**5.0**	**5.4**

Regarding the general government deficit and debt, it is important to point out that the figures provided in the current update are not strictly comparable to the figures provided in the 6th update of the stability programme.

In fact, in the current update, deficit and debt figures are adjusted for the impact of transactions financed via the *Loi de garantie*, in accordance with the Eurostat decision on public sector guarantees.

At the level of the public deficit, the effect stemming from the *Loi de garantie* is marginal for 2004. However, given the concentration of a certain number of large infrastructure projects over the period 2005-2007, the effect ceases to be marginal from 2005 onwards. In fact, in 2005, the effect stemming from the *Loi de garantie* amounts to 0.6% of GDP, i.e. roughly 50% of the difference observed between the two stability programme updates. The remaining 0.7% of GDP of difference are due to lower revenues than forecast, notably regarding indirect taxes.

In 2006 and 2007, the effect stemming from the *Loi de garantie* amounts respectively to 1% and 0.5% of GDP. This accounts for the difference observed in 2006. In 2007, despite a negative impact on the public finances stemming from the *Loi de garantie*, there is no difference between the forecasts of the current and the previous update. This observation confirms that the adjustment path presented in the 7th update of the stability programme is more ambitious than the adjustment presented in the previous update.

Regarding public debt, the 2004 difference between the current and the previous updates of the stability programme are entirely explained by the inclusion of the *Loi de garantie*.
Consideration

In 2005, the effect stemming from the *Loi de garantie* amounts to more than 2% of GDP. However, the difference between the two stability programme updates is only 1.4% of GDP.

In this context, one should point out that the Government has been authorized to issue new debt in 2005 and this information had been included in the 6th update of the stability programme. However, the Government did not take advantage of the possibility, i.e. did not issue any new debt.

Regarding the fiscal years 2006 and 2007, the effect on the debt level stemming from the *Loi de garantie* amounts to 4% of GDP. The residual of 1% of GDP in 2006 and 1.4% of GDP in 2007 is explained by diverging assumptions between the two stability programme updates regarding the issuing of new public debt. In fact, according to the previous update, the Government would borrow 150 mio. € in both 2006 and 2007 while according to the present update, the Government will borrow 700 mio. € in 2006 and 400 mio. € in 2007.

VI. Quality of public finances

The appraisal of the financial situation of central government is incomplete if one only looks at public debt – which remains at a very low level – without taking into account the existence of the considerable reserves (also for social security). These reserves were built up during the period of rapid economic growth that yielded a string of large budget surpluses. In fact, these surpluses were largely put in reserve, instead of re-injecting them into the budgetary circuit in order to finance current expenditure.

The general account (*compte général*), which closes at the end of the fiscal year, provides detailed information regarding the financial resources of central government. The government's general accounting plan matches resources to their uses, hence providing the possibility to establish the patrimonial situation of central government in the shape of a financial statement.

On 31 October 2005, this statement looked as follows:

<u>Resources (liabilities) :</u>

- Government own resources (reserves and counterpart of financial assets) — 3,854 mio. €
- Third party assets deposited with the government — 408 mio. €
- Third party assets borrowed by the government (net public debt) — 417 mio. €

<u>Uses (assets) :</u>

- Bank financial assets — 2,069 mio. €
- Non-bank financial assets — 2,261 mio. €
- Balance (net borrowing) — 349 mio. €

The analysis of the general account for the fiscal year 2004 – which has been submitted to Parliament for approval by the government – shows that at the end of the fiscal year 2004, central government had at its disposal, in addition to borrowed funds, reserves totalling 2,098 mio. € (> 8% of GDP). These reserves correspond to the cumulative sum of the net budget surpluses realised during the fiscal years 1944 to 2004.

Of these, 1,885 mio. € have been transferred to the special funds i.e., they have been used to realise the specific objective for which each special fund was set up via a special law. Over the course of a fiscal year, the resources available in the special funds fluctuate due, on the one hand, to the inflow of the budgetary endowments, and, on the other hand, the outflows relating to the payment of completed works. At the end of October 2005, resources available in the special funds amounted to 1,979 mio. €.

The special funds are typically used to finance projects that by their very nature are not appropriate to be dealt with via the ordinary budget. In fact, these are typically large investment projects that take several years to complete and where the relevant expenditures are spread out over several fiscal years.

The expenditures of the special funds are not tied to a specific fiscal year and funds available at the end of a fiscal year can be carried over to the next. This allows the government to build up reserves in the special funds that can be used in order to finance future investment projects.

Due to the existence of these sizeable reserves, the ordinary central government budget is less sensitive to fluctuations in economic activity. Furthermore, the existence of the reserves allows the government to maintain a high level of investment spending, even when the economy is slowing down. Consequently, the future deficits forecast in this update are offset by the existing reserves.

The balance of these reserves, amounting to 213 mio. € at the end of the fiscal year 2004, has not been allocated to any special purpose. This is the budgetary reserve that is the cumulative sum of budget surpluses realised since 1944. This reserve, whose fluctuations are a function of the central government balance, is used to ensure that the financial situation of central government is balanced, for instance in circumstances where revenues decrease due to an economic slump.

The existence of the budgetary reserve provides additional degrees of freedom to the government in order to react to a deterioration of the financial situation of central government without having to use alternative channels, e.g. issuing new debt or increasing the tax burden.

Furthermore, the government has occasionally acquired financial assets via participations or loans given. At the end of October 2005, the value of these assets amounted to 2,261 mio. €. The accounting counterpart of these assets increases the government's own resources.

The sum of the government's own resources, borrowed funds and third party assets deposited with the government are invested in a variety of bank and non-bank financial assets, and the returns that they are yielding represent an additional source of income for the government.

The balance between the assets and liabilities, amounting to some 349 mio. € at the end of October 2005, represents net government borrowing and is equivalent to the amount of uncovered public debt (Treasury bills and loans).

VII. Sustainability of public finances

The revenue and expenditure projections for the private sector pension schemes and the specific regimes for public sector employees are based on a methodology defined by the "Ageing Working Group" of the Economic Policy Committee (EPC) of the European Union. The medium term scenario is based on a methodology developed by the "Output Gap Working Group" of the Directorate general for Economic and Financial Affaires of the European Commission. However, the methodology has been adjusted in order to take into account country-specific aspects of the Luxembourg labour market, and consequently the underlying macroeconomic assumptions differ from those used by the "Ageing Working Group". It should be pointed out that the common methodology is appropriate in cases where there is a close link between the labour market and the resident population. However, in the case of Luxembourg, the common methodology is not appropriate because of the sizeable share of cross-border workers in total employment (close to 40%). Hence, the development of national total employment is modelled on the basis of a series of exogenous hypotheses.

Between 2010 and 2017, employment growth will gradually pass from 2.6% to 2% and it will converge linearly to 1.3% in 2025. Labour productivity growth will converge to 1.7% in 2030. Potential growth will pass from 4.4% in 2010 to 3% in 2030 and it is maintained constant at that level until 2050.

Pension contributions and pension expenditures encompass both the private and public sector pension schemes. The pensions reserve corresponds to the reserve of the private sector pension scheme. The pension contributions rate is assumed to remain constant at its current level and it includes the co-financing of social security provided by central government. Every two years, pensions are adjusted on the basis of real wage growth in the economy. The projection horizon is 2050.

Table 6: Long term sustainability of public finances

in % of GDP	**2005**	**2010**	**2020**	**2030**	**2050**
Total pension expenditure	**10.0**	**9.6**	**10.3**	**12.7**	**16.3**
Old-age and early pensions	6.1	6.0	6.8	9.1	12.5
Other pensions (disability, survivors)	3.9	3.6	3.6	3.6	3.8
Occupational pensions	0.0	0.0	0.0	0.0	0.0
Pension contributions	**9.6**	**9.6**	**9.7**	**9.7**	**10.0**
Pension reserves	**24.5**	**30.0**	**39.4**	**33.3**	**-49.6**
Assumptions:					
Labour productivity growth	+1.3%	+1.9%	+1.8%	+1.7%	+1.7%
Real GDP growth	+4.1%	+4.3%	+3.6%	+3.0%	+3.0%

Expenditures related to pension benefits are increasing significantly over the projected period. The ratio of pension expenditures to GDP will rise above 16% in 2050. With an ageing population and the related increase of the underlying contributions base, the pension contributions will grow moderately between 2005 and 2050. The reserves of the general (private sector) scheme increase until 2020. Approximately in 2030, the financing balance of the general scheme will become negative and the reserve will be exhausted at the end of the projection period.

These results concur with the projections prepared by international institutions showing that the general scheme will be put under significant pressure in the coming years. Since the Luxembourg workforce is rather young compared to that in other EU Member States, and financing is assured over the medium term, the financial viability of the general scheme will outlast that of the majority of EU Member States. Nevertheless, in the medium run, it will be necessary to undertake adaptations to ensure the sustainability of the general scheme. The pension system is sufficiently flexible so that a broad range of measures may be envisaged in order to maintain its financial viability.