GRAND-DUCHY OF LUXEMBOURG
MINISTRY OF FINANCE

4th UPDATE OF THE LUXEMBOURG STABILITY AND GROWTH PROGRAMME 2001-2005

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INTRODUCTION

In accordance with Council Regulation EC 1466/97, the Grand-Duchy of Luxembourg presented in early 1999 its first Stability and Growth Programme to the Council and to the Commission. The present document is the fourth update of this Programme and it covers the time period 2001-2005.

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, which was adopted by Parliament on 17 December 2002.

However, the Luxembourg Government insisted that the present update of the Stability and Growth Programme should only be finalized after the final approval of the 2003 budget law in order to allow for the inclusion in this update of the political conclusions that emerge for the Luxembourg public finances from the sharp slowdown in economic activity in the European Union in general and in Luxembourg in particular.

The updated Luxembourg Stability and Growth Programme has been approved by the Cabinet and has also been communicated to Parliament.

The Stability and Growth Programme is available on the website of the Ministry of Finance http://www.etat.lu/FI/.

1. ECONOMIC OUTLOOK

In Spring 2002, the national statistical office STATEC published a first version of the National Accounts for 2001, along with macro-economic forecasts for 2002 and 2003. GDP growth for 2001 was estimated at 3.5% while for 2002 and 2003 GDP growth rates of 2.7 and 6.6% respectively were forecast.

When elaborating the draft budget for 2003, the Government based itself on these STATEC forecasts but it nevertheless adopted a prudent approach by allowing for a “budgetary buffer”. In fact, the draft budget was prepared under the assumption that GDP growth in 2003 would amount to 5%.

With the benefit of hindsight, one must conclude that in Spring 2002, STATEC – though relying on the concordant forecasts of the European Commission and the OECD – grossly underestimated the magnitude of the slowdown of the world economy and its repercussions for the financial services sector. Furthermore, the recovery that had been forecast by the major international organisations to occur during the second semester of 2002 did not in fact materialize.

1.1. DOWNWARD REVISION OF GROWTH IN 2001

In early October 2002, STATEC published a set of revised National Accounts for the years 1998 to 2001, as well as – for the first time – a complete series of ‘ESA95’ accounts for the years 1985 to 1994.

According to the revised data, GDP growth in 2001 was only 1%. In this context, it is worthwhile pointing out that in 2000, real GDP had increased by 8.9% and that the average rate of growth during the period 1985-2000 had approximately been 6% per annum. Hence, the economic slowdown was sharp and came rather unexpectedly.

The downward revision of GDP growth may essentially be attributed to two causes: a more sluggish growth of private consumption than what had initially been forecast, but first and foremost a sharp slowdown in the growth of exports of goods and services.

The slowdown in export growth was most noticeable for services: in 2000 – albeit exceptionally high – these exports had increased by 21.3%, while in 2001 they only increased by 0.7%. The quasi-stagnation of services exports was due to the large losses incurred by stocks which directly affected the commissions received by banks, as well as to a reduction in the volumes traded.

At the sectoral level, the evolution of the financial services sector, which accounts for roughly 25% of the GDP of Luxembourg, provides the principal explanation for the slowdown in economic growth. In fact, in 2002 total value added in the economy grew by 1.8%. However, the value added generated by financial services and insurance shrunk by 2.7%. Value added in industry increased by 2.6%. In construction and non-market services (with the exception of financial services), value added expanded by 3.8%.

In the wake of the revisions to the 2001 National Accounts and realising that the expected economic recovery during the second semester of 2002 had not actually occurred, STATEC also proceeded to the downward revision of the macro-economic forecasts for the period 2002 to 2005.

1.2. THE LUXEMBOURG ECONOMY IN 2002

In 2002, economic growth clearly fell short of the exceptionally high rates attained in the past. In fact, STATEC estimates that in 2002, economic growth slowed down even further to 0.5%.

At the sectoral level, value added generated by the financial services sector shrank for the second year running. This had negative spillover effects on those sectors that directly or indirectly depend on the performance of the financial services sector (e.g., services provided to enterprises and services provided to private individuals).

Despite the reform of personal income taxation in two stages in 2001 and 2002 that resulted in a reduction of the tax burden on households of 430 million €, STATEC believes that the contribution of private consumption to GDP growth remained minor in 2002: after an increase of 3.6% in 2001, final household consumption expenditures only increased by less than 2% in 2002. According to STATEC, the weak demand was due to the uncertain economic outlook, which led households to reduce their propensity to consume and to increase their savings rate.

Despite slower economic growth, final public administration consumption expenditure remained high. The growth rate of 6% in 2002 also reflected the aspiration of the Government to stabilise economic activity *via* the implementation of an ambitious programme of public sector investments.

The slowdown in the growth of domestic and international demand led private sector enterprises to curb investment. Consequently, gross fixed capital formation decreased by 5% in 2002. External demand slipped in 2002: in fact, after feeble growth in 2001, the volume of exports of goods and services decreased by 2% in 2002.

Note that in 2001 and 2002, exports of goods and services followed an unusual trajectory. Also note that such large swings are characteristic of a very small open economy. In general, Luxembourg exports of goods are tracking international demand rather closely. However, in 2001, export levels were pushed up by exceptionally high sales of telecommunications material and in 2002, export levels returned to normal.

With no respite for stock markets in 2002, exports of financial services decreased by 3%.

Imports of goods and services, which are in fact the counterpart of intermediate and final demand of resident consumers and producers, are also strongly influenced by the international economic environment. Therefore, it is estimated that they shrank by 2% in 2002.

TABLE 1 : Growth and associated factors

	ESA Code	2001	2002	2003	2004	2005
GDP growth at constant market prices	B1g	**1.0**	**0.5**	**1.2**	**2.4**	**3.1**
GDP level at current market prices (billion €)	B1g	**21.5**	**21.8**	**22.5**	**23.6**	**24.8**
GDP deflator		**2.3**	**0.9**	**2.0**	**2.2**	**1.8**
HICP change		**…**	**…**	**…**	**…**	**…**
National index of consumer prices (percentage change)		**2.8**	**2.1**	**1.8**	**1.7**	**1.9**
Employment growth						
Domestic employment		3.3	3.0	1.4	1.3	2.5
National employment		2.6	1.8	1.1	1.2	1.3
Sources of growth : percentage changes at constant prices						
Private consumption expenditure	P3	**3.6**	**1.6**	**2.7**	**2.8**	**3.3**
Government consumption expenditure	P3	**7.5**	**6.0**	**7.5**	**4.5**	**4.0**
Gross fixed capital formation	P52+P53	**5.9**	**-5.3**	**2.3**	**3.8**	**4.9**
Exports of goods and services	P6	**1.2**	**-2.0**	**1.0**	**2.8**	**3.0**
Imports of goods and services	P7	**4.5**	**-2.3**	**2.7**	**3.5**	**3.5**
Contribution to GDP growth						
Final domestic demand		**2.7**	**1.7**	**2.6**	**2.2**	**2.3**
External balance of goods and services	B11	**-4.1**	**0.0**	**-1.9**	**-0.5**	**-0.3**

The labour market reacts to the general economic conditions with a certain lag. For this reason, domestic employment growth remained fairly dynamic, with 8,000 new jobs (+3%) created in 2002. Note that national employment (i.e., resident workers only) increased less rapidly than domestic employment. The difference between the two rates of employment represents a net influx of cross-border workers. Altogether, there are over 100,000 cross-border workers, totalling 36% of total domestic employment. The unemployment rate increased slightly to 2.9% in 2002.

In January 2002, the consumer price index (national version – NCPI) increased (+2.3%) due – among other things – to a seasonal increase in the price of fresh fruit and vegetables, but also due to the introduction of euro coins and notes. From February onwards, inflation started coming down. Furthermore, the slower economy appeased inflationary pressures in the Luxembourg economy. Consequently, consumer price inflation, which reached 2.8% in 2001, dropped to 2.1% in 2002.

1.3. THE MEDIUM TERM ECONOMIC OUTLOOK (2003-2005)

In November 2002, STATEC presented medium term macro-economic forecasts for the years 2002 to 2005. These forecasts were published by STATEC in late November 2002. For the purposes of the Stability and Growth Programme and in order to take into account the substantial uncertainty regarding the international economic environment, STATEC also prepared a "low" and a "high" variant of the base-case scenario. In the 4th update of the Stability and Growth Programme, the Government's prudent approach to fiscal policy is put into practice by considering the "low growth" scenario as the most likely to occur.

In accordance with the European Commission Autumn forecasts, the "low" variant rests on the assumption that the international economy will start its recovery during the second semester of 2003. However, in the "low growth" scenario this recovery is not as robust as is forecast by the Commission: in fact, GDP growth in the European Union would amount to 1% in 2003, 1.7% in 2004 and 1.9% in 2005. Consequently, international demand for goods and services will also be weaker than what is forecast by the European Commission.

Moreover, the main difference between the STATEC base-case scenario and the "low growth" scenario used for the purposes of the Stability and Growth Programme is that the latter assumes an additional decline in financial services sector activities. In fact, in the base-case scenario it is assumed that the financial services sector will experience a muted recovery in 2003. However, the "low" variant assumes that in 2003, the financial services sector will generate negative value added for the third consecutive year (-3%) and that in 2004 and 2005 the financial services sector will stagnate.

Under these conditions, Luxembourg GDP would increase by 1.2% in 2003, 2.4% in 2004 and 3.1% in 2005.

Final household consumption expenditure – still feeble in 2002 – would increase gradually to reach a rate of growth in excess of 3% per annum in 2005.

Final public administration consumption expenditure – which is exogenous in the STATEC model – would increase by 7.5% in 2003 and grow by 4% per annum in 2004 and 2005.

After a decrease in 2003, gross fixed capital formation would re-enter positive territory in 2003 (+2.3%) and gradually improve thereafter. Note that the STATEC forecasts make no allowance for the effects of the 2002 corporate tax reform that is likely in the medium term to stimulate private sector investment and consequently to have a positive impact on GDP growth.

Mainly as a result of the recovery of the world economy, export and import growth rates will turn positive again from 2003 onwards. Note, however, that import growth will be much stronger than export growth. As a result, the contribution to GDP growth of the external balance of trade in goods and services will remain negative.

SALIENT FEATURES OF THE 2001-2002 TAX REFORM

In 2002, the Government completed the tax reform started in 2001. In the first stage in 2001, only personal income tax was reformed. The second stage in 2002 also comprised a reform of corporate income taxation.

At the level of the personal income tax, the reform was characterised by a reduction of the marginal tax rates throughout the entire range of taxable income. The Government also proceeded to a detailed analysis of the efficiency and rationale of the various tax deductions and tax exemptions in the light of the general guidelines of Government policy. Furthermore, the Government introduced tax incentives that substantially enhance the attractiveness of voluntary personal retirement savings plans (see below in chapter 6).

In total, the reform of personal income taxation in 2002 resulted in an alleviation of the tax burden on households of 185,9 million € relative to the tax year 2001. The bulk of these alleviations was due to the reduction of marginal income tax rates (173,5 million € relative to a year earlier). The remaining measures only had a negligible impact on tax revenue, or their effects cancelled each other out.

Note that the first stage of the tax reform implemented in 2001 resulted in a reduction of the tax burden on households of 247,9 million € relative to the tax year 2000. Thus, in total, the tax liability of households decreased by 495,8 million € in 2001 and 2002.

In the area of corporate taxation, the tax rate on corporate profits (*impôt sur le revenu des collectivités*) was reduced from 30 to 22%. At the same time, the tax base was broadened *via* the abolition of the deductibility from the tax base of the municipal business tax (*impôt commercial communal*) liability.

The revenue services (*Administration des contributions directes*) estimate that in 2002, the total cost of the reform of corporate taxation amounts to 324,7 million € relative to a year earlier.

From the budgetary perspective, the revenue loss caused by the 2002 tax reform complies with the Government's forecasts and it does not threaten the overall balance of the public finances in the long run. In 2002, the total cost of the tax reductions benefiting households, individual enterprises and corporations amounts to 510,7 million € relative to a year earlier.

Employment responds to the economic slowdown with a lag: in fact, as a result of the slower economic growth, the growth rate of domestic employment decelerated from 6% to 3% in 2002. However, it will only be from 2003 onwards that the less buoyant economic growth will impact negatively on employment. In 2003 and 2004 – under the assumptions of the "low growth" scenario – domestic employment is forecast to increase by 1.4% and 1.3% respectively. It will attain a more sustained rate of growth in 2005 (+2.5%) but it will fail to reach the high growth rates of 5% per annum experienced in the past. Unemployment is forecast to increase to a level in excess of 3.5%. The unemployment rate would be significantly higher than the historical average, but would remain very low in international comparison.

There is likely to be little upward pressure on prices and inflation is forecast to durably drop below 2% per annum. However, towards the end of the forecasting horizon, the more robust economic growth is expected to somewhat rekindle upward pressure on prices.

2. GENERAL GUIDELINES OF FISCAL POLICY

2.1. THE 2003 BUDGET

The budget for the fiscal year 2003, which was prepared in the summer of 2002 and subsequently amended by the Government in November 2002, presents itself as follows:

	Approved budget 2002	Approved budget 2003	Change	
			in €	in %
Current budget				
Receipts	5,935.2	6,305.3	+370.1	6.24
Expenditures	5,146.0	5,521.3	+375.3	7.29
Surplus	+789.2	+784.0	…	…
Capital budget				
Receipts	42.0	44.4	+2.4	5.71
Expenditures	853.0	827.9	-25.1	-2.94
Surplus	-811.0	-783.5	…	…
Total budget				
Receipts	5,977.2	6,349.7	+372.5	6.23
Expenditures	5,999.0	6,349.2	+350.2	5.84
Surplus	-21.8	+0.5	…	…

Note : Figures are in million €. Percentage changes are for the approved budget 2002 against the approved budget 2003.

As can be seen from the summary table presented above, the 2003 budget exhibits a surplus of 0.5 million €. Note, however, that the expenditure side of the budget – as it is presented in this table – only records the endowments to the special funds, but not their actual expenditures in 2003. In fact, the special funds have been created in order to more flexibly finance investment projects that are stretched out over a longer period of time and covering several budgets. The endowments to the special funds are not an actual government expenditure. In fact, actual expenditures only occur when the projects for which the funds have been set aside are completed. Therefore, the endowments to the special funds are akin to savings in view of the financing of future investment projects, and they are not an actual and immediate government expenditure.

During fiscal year 2003, forecast expenditures of the special funds will exceed the budgetary endowments on behalf on these funds. If one adds to total government spending the forecast actual expenditures of the special funds in 2003 and one subtracts the budgetary endowments, the expenditure side of the budget for the fiscal year 2003 presents as follows:

	Provisional general account 2002	Approved budget 2003	% change
Current expenditure	5,785.0	6,076.2	+5.03
Capital expenditure	1,160.4	1,260.0	+8.58
Total expenditure	6,945.4	7,336.2	+5.63

Note : Budget 2003 = budgetary expenditures + expenditures of the special funds – endowments to the special funds.

Note that in 2003, the special funds will generate revenues of 400 million €. Consequently, after taking into account the actual expenditures of the special funds, the budget for 2003 will exhibit a deficit of some 550 million €. This deficit reflects the consumption of savings accumulated over the course of previous fiscal years.

Note that in this presentation of the expenditure side of the budget, current government expenditures are increasing less rapidly than total expenditures.

For the analysis of these data, it is important to point out that the 2003 budget does not foresee the contingency of contracting a new loan to either finance current government spending or the expenditures of the special funds.

2.2. THE FRAMEWORK OF FISCAL POLICY IN THE MEDIUM TERM

In its declaration to Parliament on 12 August 1999, the Government insisted on the fact that in the medium- to long-run the prosperity of the country can only be preserved if the Government succeeds in maintaining the conditions underlying the current balanced public finances, which are a solid basis on which to found governmental action.

In this context, the Government recalls that its fiscal policy is embedded in the new European framework of monitoring and coordination of economic policies, and it defines the following principles:

- Public sector net lending should remain positive;
- The central government budget should remain in balance;
- The growth of current expenditure should not exceed the growth of total expenditure.

The Government is convinced by the need to pursue a strict fiscal discipline and it will take care that government spending growth will not exceed in the medium term a level compatible with the rate of economic growth. For this reason the Government is also committed to keeping the public debt at its very low level and to keeping at a high level the fiscal reserves and the reserves of the special funds.

The willingness to implement a fiscal policy that seeks to match the increase in government spending to GDP growth in the medium term, requires that in principle – i.e., adjusted for the economic cycle – the increase in government spending should remain compatible with economic growth.

2.3. THE BASIC FISCAL POLICY STANCE IN THE MEDIUM TERM

When preparing the 2003 draft budget, the Government has based its approach on two basic tenets:

- The medium term fiscal policy guidelines as set out in the Government programme;
- The economic and fiscal policy guidelines of the Council of the European Union.

<u>The medium term fiscal policy guidelines as set out in the Government programme</u>

In its declaration to Parliament on 12 August 1999, the Government has committed itself to pursuing a strict fiscal discipline and to ensure that the growth of government spending will not exceed economic growth in the medium term.

Apart from the rate of economic growth, a second economic indicator is crucially important for the implementation of fiscal policy. This indicator is the consumer price index which affects public spending *via* the wage indexation scale.

The ministerial communication regarding the draft budget for 2003 was sent out the all government departments in February 2002. The communication assumed that on an annual basis, the average wage indexation scale would reach 595.76 points (+1.5%) in the fiscal year 2002 and 609.4 points (+2.3%) in the fiscal year 2003.

Later in the year, STATEC revised its estimations regarding inflation as follows:

	2002	2003
Consumer price index : Annual percentage change (average)	+2,0%	+1,9%
Wage indexation scale : Annual percentage change (average)	+2,1%	+1,9%

As the revised estimates of the annual averages for the wage indexation scale only marginally diverged from the initial estimates sent out to all government departments earlier in the year, the Government decided to maintain the initial assumptions regarding the wage indexation scale.

The economic and fiscal policy guidelines of the Council of the European Union

According to the Commission, the European Union will face a number of challenges over the next few years, and overcoming these challenges necessitates the implementation of appropriate economic policies. Broadly speaking, there are four types of challenges:

- Maintain and strengthen the economic framework;
- Foster quantitative and qualitative employment growth, increase participation rates and deal with persistent unemployment;
- Strengthen the framework for sustained productivity growth;
- Promote sustainable development in the interest of current and future generations.

The Commission summarises the main elements of the strategy to be implemented both at the macro- and at micro-economic levels as follows:

- Guarantee the implementation of macro-economic policies centring on growth and stability;
- Improve the quality and sustainability of public finances;
- Stimulate labour markets;
- Re-launch structural reforms in product markets;
- Promote the efficiency and integration of financial services markets in the EU;
- Foster entrepreneurship;
- Promote the knowledge economy;
- Promote sustainable development.

Regarding the objective to improve the quality and sustainability of public finances, the Commission estimates that Member States should:

- Continue their efforts to render tax and benefit systems more conducive to employment, reducing the global tax pressure, especially on the low paid, whilst continuing to strive towards budgetary stabilisation, and improving the efficiency of the taxation systems;
- Strengthen the quality of public expenditure by re-assigning them to the accumulation of physical and human capital and to research and development in order to substantially increase annual investment per capita;
- Improve the efficiency of public spending *via* institutional and structural reforms; in particular the introduction or improvement of expenditure control mechanisms;
- Improve the long-term sustainability of the public finances by acting on three fronts, as advocated by the Stockholm European Council meeting. This implies an appropriate policy mix of measures to rapidly reduce public debt levels, to increase participation rates (especially those of women and elderly workers) and to reform public pension and health systems in order to put them on a solid financial basis;
- Reform retirement policies according to the common objectives agreed upon at the Göteborg and Laeken European Council meetings which imply the reconciliation of adequate benefit levels with the financial sustainability of the regimes; design an overall strategy that establishes a balance between these

broad objectives and the particular challenges that each country faces individually.

The Commission insists that the “The increase of the low participation and employment rates, in particular among elderly workers, remains an overriding policy objective. The evolution of wages and labour costs must be closely monitored and remain compatible over the next years with that elsewhere in the euro zone”.

2.4. THE MAIN TENETS OF FISCAL POLICY

In accordance with the general objectives of Government policy, the 2003 budget focuses on four broad priority areas:

- Social solidarity;
- Education and research;
- Safety;
- Public transport.

In addition to the four priority areas outlined above, it is important to point out that the 2003 budget will also implement a large number of new initiatives, or further develop activities in other areas of governmental action.

This is for instance the case for the budgetary credits allocated to the diversification and modernisation of the economic tissue. Given that such a policy can only be successful if it takes into account the particular situation in the different sectors of economic activity, the Government attaches the utmost priority to the improvement of infrastructures via large budgetary endowments for the main special funds.

Social policy and family

In 2003, the Government will continue to invest in the development of socio-family and therapeutic infrastructures to benefit families, disabled persons and other disadvantaged socio-demographic groups, such as elderly and dependent persons. The investments in socio-family infrastructure projects should also foster the conciliation of professional and family life.

Development aid and humanitarian action

In 2001, Luxembourg spent 152 million € on development aid. This amounts to 0.82% of gross national income. Luxembourg belongs to the top five nations with the highest rate of development aid relative to national income.

In 2003, the Government will spend 172 million € on development aid, thus maintaining its high rate of assistance to developing nations.

Promoting education and research

In 2003, the Government will pursue its policy of sustainable development in the area of education *via* supplementary human and financial resources. Government spending on primary and secondary education will reach 660 million €, or 2.9% of estimated 2003 GDP.

In the eyes of the Government, an economy based on knowledge and on the production and transfer of know-how also needs to invest in new and innovating infrastructures in tertiary education and research. The Government expects the tertiary education sector to closely collaborate with the public research institutes and the National Research Fund (*Fonds National de la Recherche*).

Hence, for 2003, the Government proposes a substantial increase of the budgetary credits in support of higher education and scientific and applied research. The budgetary means will be raised by 12 million € relative to their 2002 level. Total budgetary resources available to research and development activities will reach 35 million €.

Promoting safety and fighting crime

In its declaration to Parliament on 12 August 1999, the Government committed itself to according priority status to the fight against crime.

In practice, the Government tries to achieve its objective *via* additional staffing and the purchase of new anti-crime material in order to establish a visible police presence and to enhance the efficiency of the legal apparatus.

Developing public transport

The Government is committed to the development of public transport by road and by rail. The development of public transport is an integral part of the Government's strategy on sustained development and for this reason, the 2003 budget provides substantial additional funding in order to realise these objectives.

The development of public investments

In 2003, the development of public infrastructures will remain the top priority of the Government. In fact, public investment will increase by 31%. The total amount of public sector investment spending will reach 790 million €, or 11.8% of total government spending in 2003. In comparison to the fiscal year 2002, this is an increase of over 2%.

Also note that in 2002, public investment expenditures totalled 2.75% of GDP. In 2003, this ratio will reach 3.5%.

According to the estimates published in Spring 2002 by the European Commission, investment levels in Luxembourg – measured by gross fixed capital formation in the public sector – were the highest in the European Union during the fiscal year 2002. The ratio of gross fixed capital formation to GDP was equal to 4.8%, while it averaged 2.3% in the remaining Member States.

This table provides additional information on the development of public sector investments:

	General account 2000	General account 2001	Provisional general account 2002	Approved budget 2003
1) Budgetary credits				
Purchases of land and buildings	20,616.3	33,059.4	6,325.0	8,325.0
Construction of buildings	56,487.0	41,484.5	58,222.9	59,757.0
Construction of roads	64,487.9	65,188.2	79,891.1	83,253.0
Purchases of moveable durable goods	41,694.4	44,661.2	67,287.6	74,614.0
2) Public investment funds	245,403.5	300,895.4	388,855.9	561,396.5
3) Total investment	428,689.1	485,288.7	600,582.5	787,345.5
Percentage change	-	13.2	23.8	31.1
4) Total government expenditure	5,581,637.0	5,606,703.6	6,339,203.7	6,694,596.5
Investment in % of total government spending	7.7	8.7	9.5	11.8

Note: Figures are in thousands of €. Total government expenditure = budgetary expenditure + expenditures of the special funds – endowments to the special funds.

2.5. SPECIFICITIES OF THE LUXEMBOURG PUBLIC FINANCES

In order to fully comprehend the evolution of the Luxembourg public finances, it is important not only to insist on the very low level of public indebtedness, but also to highlight the availability of substantial budgetary reserves.

These reserves are the result of high growth levels achieved in past years by the Luxembourg economy, which led to budget surpluses that have not been re-injected into the budgetary circuit and that henceforth have not been used to finance increases in current expenditure.

These reserves are of two types:

- The budget reserve and
- The reserves of the special funds.

The budget reserve

The budget reserve is the sum of all budget surpluses since 1946. The level of this reserve fluctuates as a result of the budget deficits or surpluses in any particular year and its purpose is to ensure that public finances remain in balance, e.g. when there is a shortfall of government revenues due to an economic downturn.

The existence of the budget reserve allows the Government to flexibly respond to a possible deterioration of the balanced budget conditions without having to issue new debt or increase taxation levels. At the end of the fiscal year 2002, available funds in the budget reserve amounted to 505.6 million €.

The reserves of the special funds

The special funds are used for the purpose of financing larger projects that by their very nature are usually difficult to complete within a single fiscal year. More specifically, large investments in infrastructure are typically financed *via* these funds as their completion stretches over several fiscal years.

The special funds provide greater flexibility as the budgetary credits must not necessarily be used entirely during the fiscal year in which the endowment occurs and it is possible to carry un-used credits forward. This technique also allows for the accumulation of reserves in the funds in view of future investment projects.

Owing to these very sizeable reserves, the budget is less sensitive to the economic cycle and the Government can sustain high levels of public investment even if the economy is slowing down. Thus, the budget deficits that are forecast in 2003-2005 can be easily offset by the accumulated reserves (also see below in chapter 4.4).

Among the special funds there is also a fund dedicated to the repayment of the public debt. This fund deserves a special mention.

In fact, this fund was created in order to allow the Government to accumulate reserves with a view to the re-payment of the interest and principal of the loans and Treasury certificates issued by the State. Over the last few years, this fund has received substantial endowments in the wake of the allocation of successive budget surpluses.

As can be seen in chapter 4 dealing with the public debt, the reserves of the public debt fund roughly cover 75% of outstanding long term public debt.

3. GENERAL GOVERNMENT BUDGETARY DEVELOPMENTS

3.1. FISCAL YEAR 2001

The final budget for the fiscal year 2001 was approved by Parliament on 22 December 2000. Total receipts were estimated to amount to 5,446.7 million € and the expenses provided for in the budget amounted to 5,445.4 million €, yielding an estimated budget surplus of 1.3 million €. Despite the sharp economic slowdown that occurred during the second semester of 2001, tax revenues remained high. The corporate income tax (*impôt sur le revenu des collectivités*), the withholding tax on wages and salaries (*impôt retenu sur les salaries et traitements*) and the annual tax on securities (*taxe d'abonnement sur les titres de société*) alone generated surpluses in excess of 300 million € relative to the budgetary revenue forecasts. As a result, the central government budget generated a large surplus. In fact, the surplus amounted to 560,4 million €, or 2.6% of GDP. Social security continued to benefit from the continued strong growth of domestic employment, generating a surplus of 660 million € (3.2% of GDP). Finally, local government also generated a small surplus. Overall, the general government budget yielded a surplus of 1,307.5 million €, or 6.1% of GDP.

3.2. FISCAL YEAR 2002

The budget law for the fiscal year 2002, which was approved by Parliament on 21 December 2001, forecast receipts of 5,977.2 million € and expenditures of 5,976.1 million €. Subsequently, the budget was modified by the law approved on 22 July 2002 implementing the wage agreement for civil servants and public sector employees and by the law approved on 2nd August 2002 regarding the protection of the confidentiality of personal data. These two laws led to additional expenditures of 22.9 million €, and consequently the final budget for 2002 exhibited a small deficit of 22 million €.

As it became obvious that the economic slowdown was both more severe and more protracted than forecast initially, the Government proceeded to revise downwards by 270 million € expected tax revenues for the fiscal year 2002.

It is henceforth estimated that the central government budget for the fiscal year 2002 will produce a deficit of 480 million €, or –2.2% of GDP. However, the central government deficit is offset by the large social security surplus. In fact, it is forecast that social security will yield a surplus of 485 million € in 2002. Finally, local government is expected to produce a deficit of 80 million € in 2002.

Overall, the general government budget for 2002 will yield a deficit of 75 million €, or –0.3% of GDP. This deficit breaks with a long tradition of general government surpluses, the previous two fiscal years having generated surpluses of 5.6% and 6.1% respectively. However, it is important to point out that the large surpluses in 2000 and 2001 were the result of exceptionally buoyant economic growth during the latter part of the 1990s. In the same way, the deficit of 2002 is the result of extremely feeble economic growth during the second half of 2001 and in 2002.

TABLE 2 : General government budgetary developments

in % of GDP	ESA Code	2001	2002	2003	2004	2005
Net lending (B9) by sub-sectors						
General government	S13	**+6.1**	**-0.3**	**-0.3**	**-0.7**	**-0.1**
Central government	S1311	+2.6	-2.2	-2.1	-2.8	-2.8
Local government	S1313	+0.4	-0.4	-0.6	-0.6	-0.1
Social security	S1314	+3.1	2.2	2.4	2.7	2.9
General government (S13)						
Total receipts	ESA	**47.0**	**46.6**	**47.0**	**46.0**	**45.6**
Total expenditures	ESA	**40.9**	**47.0**	**47.3**	**46.7**	**45.6**
Budget balance	B9	**+6.1**	**-0.3**	**-0.3**	**-0.7**	**-0.1**
Net interest payments		**0.3**	**0.5**	**0.3**	**0.2**	**0.2**
Primary balance		**+6.4**	**+0.2**	**0.0**	**-0.5**	**+0.1**

3.3. THE MEDIUM TERM FORECASTS (2003-2005)

The medium term forecast is prudently based on the assumptions underlying the macro-economic "low growth" scenario. In this scenario, the sharp economic downturn in 2001 and 2002 is followed by a period of sluggish growth in 2003, 2004 and 2005.

At the level of the central government, the economic slowdown in 2001 and 2002 will trigger successive deficits in 2003, 2004 and 2005 as tax revenues – e.g., corporate income tax (*impôt sur le revenu des collectivités*) – respond to general economic conditions with a lag. In fact, the revenue services (*Administration des contributions directes*) expect that corporate tax revenues will remain fairly high in 2003, but decrease in 2004 before starting to increase again in 2005. As a result, central government is likely to exhibit a deficit of 480 million €, or –2.1% of GDP in 2003. In 2004 and 2005, the central government deficit is expected to amount to 670 million € and 695 million € respectively.

The budgetary situation of local government closely tracks that of the central government. On the one hand, local government receives transfers from central government. On the other hand, their main source of autonomous funding – the municipal business tax rate (*impôt commercial communal*) – is a tax levied on corporate profits whose fluctuations are similar to those of the corporate income tax. As a result, the local government budget, which typically produced small surpluses over the past several years, is forecast to go marginally into deficit in 2003, 2004 and 2005. In 2003, the local government deficit is expected to amount to 135 million €. In 2004, this deficit will increase slightly to 145 million € and in 2005 the budgetary situation of local government is expected to return to a position close to balance (-35 million €).

Throughout the forecast horizon, social security is expected to continue to generate large surpluses. The receipts of social security are closely linked to developments on the labour market. Despite the economic slowdown, the number of employees, the average wage and hence the payroll will continue to increase in 2003, 2004 and 2005. On the other hand, social security expenditures are linked to demographic factors rather than to the economy. Consequently, the social security surplus is forecast to amount to 550 million € in 2003, 645 million € in 2004 and 710 million € in 2005.

Overall, the general government budget will produce a deficit in 2003 (-0.3% of GDP). In 2004, this deficit will pass to –0.7% of GDP but the general government budget will return to a position close to balance in 2005 (-0.1% of GDP).

4. PUBLIC DEBT AND CENTRAL GOVERNMENT FINANCIAL SITUATION

Article 104 of the EC Treaty stipulates that the ratio of public debt to GDP must not exceed 60%. Furthermore, the level of public debt conditions net borrowing. Consequently, it is particularly important to monitor debt levels and the ensuing financial burden.

4.1. LOCAL AUTHORITIES' DEBT

The conditions under which local authorities are allowed to 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. In addition, local authorities must provide guarantees regarding their ability to repay the debt. The budgets of the local authorities must be approved by the Home Secretary (*Ministre de l'Intérieur*) who, if necessary, amends the budget in order to ensure that it complies with the relevant rules and regulations. Furthermore, the legislation stringently regulates the conditions under which local authority syndicates may contract new loans.

The level of outstanding debt of the Luxembourg local authorities remains small and static in relation to GDP (roughly 2% of GDP). The aggregate debt of the local authorities totalled 419.4 million € at the end of 2000 and 453.9 million € by mid-2001.

4.2. SOCIAL SECURITY DEBT

The Luxembourg social security has recently generated a string of structural surpluses and consequently its debt tends towards zero.

4.3. CENTRAL GOVERNMENT DEBT

<u>Monetary signs</u>

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 30 November 2002, euro coins worth 55.35 million € were in circulation. Furthermore, *francs* coins worth 6.20 million € have, to this date, not yet been returned. The Treasury is committed to convert these coins until 31 December 2004. In addition, the Treasury will reimburse in 2005 the residual amount of 0.61 million € relating to a Treasury bond emitted per contra *francs* notes issued by BIL.

<u>Treasury bonds</u>

The Treasury bonds issued by the Government are not actually reimbursable funds collected by the Government. Instead, these bonds enact long-term commitments *vis-*

à-vis the international financial institutions (EBRD, UNCTAD, IFAD, GEF, IDA, MIGA). These bonds do not carry interest and they are paid if and when they are due. On 30 November 2002, outstanding bonds totalled 13.35 million €. The payment of the Treasury bonds is carried out *via* the special fund dedicated to the repayment of the public debt. On 30 November 2002, available reserves in this fund amounted to 5.77 million €, implying that the net debt is equal to 7.58 million €.

<u>Government loans</u>

The Government has not issued new loans during the fiscal years 1998 to 2002. Furthermore, the budget law for 2003 does not provide for an authorisation to issue new public debt. It is the intention of the Government to repay the public debt as and when it is falling due.

On 30 November 2002, gross public debt in the form of government loans amounted to 697.22 million € (3.13% of GDP). Of these, 404.81 million € 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 loans totals 292.41 million € (1.31% of GDP).

A breakdown of total outstanding public debt by financial instruments produces the following situation:

- Linear loans (OLUX): 78.64%
- Savings certificates with capitalised interest: 8.14% (maturity 9 December 2002)
- Bonds (7.11%)
- Bank loans (6.11%).

The public debt contracted by the Government is almost entirely denominated in euros. Only a small number of loans come under the category foreign debt, either because they are denominated in CHF, or based on the characteristics of the creditor. Foreign debt amounts to 6.11% of the total.

Other features of the public debt as of 30 November 2002 are as follows:

- Weighted average interest rate: 6.44%
- Debt per capita: 1,586.40 € (total population 439,500 on 31 July 2002)
- Average duration: 2 years and 58 days

On this basis, central government debt and the ensuing financial burden will develop as follows:

Year	**Public debt outstanding on 31 December (in million €)**	**Financial burden: capital plus interest (in million €)**
2001	697.26	
2002	640.11	150.72
2003	433.31	248.16

2004	392.12	68.97
2005	248.59	170.07
2006	94.45	169.46
2007	0	99.64

Over the six fiscal years 2002 to 2007, the repayment of the principal and the interest of the public debt will impose a total cost of 907.02 million €, or on average 151.17 million € 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 86.35 million € for the fiscal years 2002 to 2007.

TABLE 3 : General government debt developments

in % of GDP	ESA Code	2001	2002	2003	2004	2005
Gross debt level		**5.3**	**5.1**	**4.1**	**3.8**	**2.9**
Central government		3.2	2.9	1.9	1.7	1.0
Local government		2.1	2.2	2.1	2.1	1.9
Change in gross debt		**-0.1**	**-0.2**	**-1.0**	**-0.3**	**-0.9**
Contributions to change in gross debt						
Primary balance		**6.4**	**0.2**	**0.0**	**-0.5**	**0.1**
Interest payments	**D41**	**0.3**	**0.5**	**0.3**	**0.2**	**0.2**
Nominal GDP growth	**B1g**	**3.3**	**1.4**	**3.3**	**4.7**	**5.0**

4.4. CENTRAL GOVERNMENT FINANCIAL SITUATION

Gross public debt only allows for an incomplete appraisal of the Government's financial situation. The general account (*compte général*), which is drawn up at the end of the fiscal year, supplies important information regarding the financial resources of the Government. The Government's general accounting plan matches resources to their uses, hence providing the possibility to establish the patrimonial situation of the Government in the form of a financial statement.

On 30 November 2002, this statement looked as follows:

Resources (liabilities):

- Government own resources (reserves and counterpart of financial assets): 5,625 million €
- Third party assets deposited with the Government: 256 million €
- Third party assets borrowed by the Government (see also public debt): 359 million €

Uses (assets):

- Bank financial assets: 3,539 million €
- Non-bank financial assets: 2,672 million €
- Balance (net borrowing): 448 million €

The analysis of the general account for the fiscal year 2001 – which has been submitted to Parliament for approval after the Government's decision regarding the appropriation of the budget surplus – reveals that at the end of the fiscal year 2001, the Government had at its disposal, in addition to borrowed funds, reserves totalling 3,119.25 million € (14% of GDP). These reserves correspond to the cumulative sum of the net budget surpluses realised during the fiscal years 1944 to 2001.

Of these, 2,613.63 million € 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 November 2002, resources available in the special funds amounted to 2,890.18 million €.

The balance of these reserves, amounting to 505.62 million € at the end of the fiscal year 2001, has not been allocated to any special purpose. It is used to carry out payments relating to previous fiscal years in cases where the settlement was not previously possible for technical reasons (145 million €), or to overcome short-term cash-flow problems caused by the non-synchronicity of government receipts and expenditures.

Furthermore, the Government has occasionally acquired financial assets *via* participations or loans given. At the end of November 2002, the value of these assets amounted to 2,229.47 million €. 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 448 million € at the end of November 2002, represents net government borrowing. It is composed of uncovered public debt (Treasury bonds and loans), Treasury advance funds relating to past fiscal years and the budget balance relating to the current fiscal year.

5. COMPARISON WITH THE STABILITY PROGRAMME 2000-2004

In Autumn 2002, STATEC published a set of revised National Accounts computed according to a methodology that provides for “a much better coverage regarding the basic data used”. The salient feature of this revision of the National Accounts was the downsizing of GDP growth in 2001 from 3.5% to 1%. Even if the revision of the 2001 data is the one that most commentators focused on, it is important to point out that the 1995-2000 data were also substantially revised:

		1995	1996	1997	1998	1999	2000
GDP at current market prices	**before revision**	**13220.2**	**13944.7**	**15628.6**	**16974.9**	**18449.0**	**20563.6**
	after revision	**13214.8**	**13929.9**	**15495.7**	**17009.9**	**18585.9**	**20815.0**
GDP at constant prices*	**before revision**	**13220.2**	**13694.1**	**14929.1**	**15798.3**	**16744.3**	**18001.1**
	after revision	**13214.8**	**13708.2**	**14762.9**	**15876.9**	**16823.4**	**18328.6**
GDP, % change	**before revision**	**…**	**3.6**	**9.0**	**5.8**	**6.0**	**7.5**
	after revision	**…**	**3.7**	**7.7**	**7.5**	**6.0**	**8.9**

* base year = 1995

In fact, in its Bulletin 2002-4, the Luxembourg Central Bank points out that “the revision of the 2001 GDP is only partly to be blamed for the downsizing of the 2001 growth rate. In fact, the GDP for 2001 has only been revised downwards by 0.5%, accounting for only 1/5th of the revision of the growth rate. […] Rather, the main impact on growth in 2001 stems from the upward revision of the 2000 data”.

Even if these explanations put the scope of the downward revision of the 2001 GDP growth into perspective, divergences from the previous update of the Stability and Growth Programme are nonetheless substantial. In fact, in the previous update a growth rate of GDP of 3.9% in 2001 had been forecast, while actual growth only reached 1%. This divergence is sizeable indeed, but one should not forget that the economic slowdown occurred in the second half of 2001 and was magnified at the international level by the terrorist attacks on 11 September. Although prior to the finalisation of the previous update, certain early warning signs of an economic slowdown were already perceptible, it was extremely difficult – or even impossible – to quantify this information and to include it into the forecasts. For this reason, a caveat was inserted into the previous update of the Stability Programme.

After the publication of the revised National Accounts, STATEC also changed its medium term macro-economic forecasts. In Autumn 2001, STATEC assumed that the economic slowdown would be rather short-lived and limited to 2001. It was expected that from 2002 onwards, GDP growth would recover to exceed 5%. The Commission

Autumn 2001 forecasts were much more pessimistic regarding the outlook for 2002 (only 3% of growth), but confirmed the recovery from 2003 onwards. In Spring 2002, the Commission marginally revised downwards GDP growth but it confirmed the general trends of the Autumn 2001 forecast.

As there were no early signs of the recovery of the world economy that had been forecast to occur during the second half of 2002, the Commission and STATEC proceeded to substantially revise downwards their medium term growth forecasts. Even if the magnitude of these revisions may seem surprising, it is important that they are looked at in the context of a very small and very open economy. In fact, the sensitivity analysis presented in the previous Stability Programme shows clearly that the Luxembourg economy is extremely sensitive to an exogenous shock to international demand or to a slowdown of economic activity in the financial sector.

TABLE 4 : Divergence from previous update

in % of GDP	ESA Code	2001	2002	2003	2004
GDP growth					
Previous update	B1g	3.9	5.3	5.7	5.6
Latest update		1.0	0.5	1.2	2.4
Difference		**-2.9**	**-4.8**	**-4.5**	**-3.2**
Actual budget balance					
Previous update	B9	4.1	2.8	3.1	3.4
Latest update		6.1	-0.3	-0.3	-0.7
Difference		**+2.0**	**-3.1**	**-3.4**	**-4.1**
Gross debt levels					
Previous update		5.0	4.6	4.2	3.9
Latest update		5.3	5.1	4.1	3.8
Difference		**+0.3**	**+0.5**	**-0.1**	**-0.1**

Given that general government budgetary developments follow economic activity with a certain lag, the general government surplus was larger in 2001 than what had initially been forecast. From 2002 onwards, the divergences from the previous update of the Stability Programme are a corollary of the revised medium term macro-economic outlook.

6. LONG TERM SUSTAINABILITY OF PUBLIC FINANCES

The assessment completed in 2001 by the International Labour Office (ILO) showed that the current financial situation of the private sector pension insurance scheme is excellent. Even under the assumption of moderate economic growth of 2% per annum until 2050, the pension scheme will yield surpluses over the next 10 years, and as a result the absolute and relative levels of the pension fund reserve will continue to increase.

If more optimistic assumptions are made concerning economic growth i.e., that the growth rate of GDP will average 4% per annum until 2050, nominal pension fund reserves will continue to increase until 2028.

With sustained economic growth, nominal reserves will reach their maximum around 2015, and subsequently they will gradually decrease to reach 1.5 times the total of annual benefits in 2034, hence calling for an increase of the contribution rates from 2034 onwards. On 1st January 2002, the average general premium (that may be interpreted as the average long term redistribution premium) amounted to 24.6% until 2050, which is 0.6 points higher that the current contribution rate of 24% (8% by the employer, 8% by the employee and 8% by the State). Hence, under the assumptions of the more prudent first scenario, it would be possible to leave benefit levels unchanged and keep positive reserves until 2050 if the contribution rate was increased immediately from 24% to 24.6%.

Under the assumptions of the more pessimistic alternative scenario, the relative level of the reserve would continue to increase to reach 3.3 times the total of annual benefits in 2006. Subsequently, it will decrease and drop below 1.5 times the total of annual benefits in 2019. Current legislation commands that under these conditions contribution rates must be increased or benefit levels decreased at the start of the coverage period 2013 to 2019. On 1st January 2000, the average general premium in this scenario amounted to 34.8% until 2050, which represents roughly a 50% increase of contribution rates from their current level.

The participants of the "*Rentendësch*" – the round table discussions on pensions that were held in 2001 – agreed that a certain number of the new measures introduced at the last reform of the private pension scheme could be repealed, if it transpired from the actuarial analysis carried out every 7 years that the reserve of the pension fund was likely to drop below 1.5 time the total of annual benefits, hence undermining the financial sustainability of the pension system at the expense of the future generations. However, this does not apply to the new measures introduced on behalf of poorer pensioners.

Within the framework of the 2002 tax reform, the Government also introduced tax incentives to enhance the attractiveness of voluntary personal retirement savings plans. In fact, with the new measures, the Government is trying to provide the framework for the development of an attractive third-pillar pensions savings instrument in Luxembourg.

The objective of the new regime of voluntary personal retirement savings plans is the creation of an attractive and highly flexible savings instrument for service providers and beneficiaries, without restricting access to the private sector pension insurance scheme or curbing the benefits thereof. However, the new instrument is not meant to break with the tradition of inter-generational solidarity epitomised by the first pillar of the pension system, but to ensure the harmonious coexistence of the generalised private sector pension insurance scheme and an attractive voluntary personal retirement savings plan.

THE NEW REGIME OF VOLUNTARY PERSONAL RETIREMENT SAVINGS

The new regime of voluntary personal retirement savings is contracted on an individual basis and by private initiative. Policy holders are entitled to deduct contributions from taxable income as special expenses. Furthermore, the attractiveness of the instrument has been enhanced in comparison to the previous regime of voluntary personal retirement savings. The most salient advantages are the following:

- Entitled beneficiaries may recover accumulated savings in the case of death of the policy holder prior to the date of payment (previously, accumulated savings were lost in case of the premature death of the policy holder);
- The new mechanism provides for greater flexibility regarding payments, as beneficiaries are entitled to receive back part of their capital (up to a ceiling of 50% of accumulated savings) and to receive the balance as an annuity (previously, benefits were only paid as annuities);
- The income tax liability on received capital is only half of the top marginal income tax rate (i.e., 19% in 2002) and 50% of received annuities are exempt from income tax (previously, annuities were fully taxable);
- Contributions are tax deductible, with deductions varying between 1,500 € and 3,200 € depending on age (previously, the maximum deduction was 1,190 €).

When the contract falls due, the beneficiary has accumulated a certain amount of capital. He or she may then opt for one of the following benefit formulas:

- Payment of an annuity;
- Reimbursement of the capital up to a ceiling of 50% of accumulated savings and the remainder paid as an annuity.

TABLE 0 : Basic assumptions

	2001	2002	2003	2004	2005
Short-term interest rate (annual average)	**4.3**	**3.4**	**3.2**	**3.8**	**3.8**
Long-term interest rate (annual average)	**4.8**	**4.8**	**4.5**	**4.8**	**4.8**
€/USD exchange rate (percentage change, annual average)*	**3.1**	**-5.0**	**-5.5**	**0.0**	**0.0**
EU-15 GDP growth	**1.7**	**1.0**	**2.0**	**2.0**	**2.0**
Growth of relevant foreign markets**	**0.1**	**1.5**	**4.5**	**4.5**	**4.5**
World import prices (goods, in €)	**1.2**	**0.2**	**0.8**	**1.6**	**1.9**
Oil prices (percentage change, in USD)	**-12.4**	**2.8**	**4.0**	**-4.2**	**0.0**

* increase = depreciation
** mean goods + services (excl. financial services)