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NATIONAL PLAN FOR INNOVATION AND FULL EMPLOYMENT

National Reform Program
of the Grand-Duchy of Luxembourg
as part of the Lisbon strategy

2008



Preliminary Remarks

The spring European Council (March 2008) launched the new cycle of the Lisbon strategy for growth and jobs. The Council stated that the Integrated Guidelines (IG) set in the first three-year cycle were to remain in force for the period of 2008-2010 and stressed that the upcoming triennial phase should concentrate essentially on their implementation.

This report summarizes the measures taken by the Government over the course of the past year, based on the broad objectives set in 2005 in the “National Plan for Innovation and Full Employment” and the two succeeding implementation reports of 2006 and 2007, drafted on the basis of the IGs.

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ACRONYMS

ADEM	Labor Administration
BnL	<i>Bibliothèque nationale de Luxembourg</i> / Luxembourg National Library
CASES	Cyberworld Awareness and Security Enhancement Structure
CASNA	Welcome center for newly arrived students (<i>Cellule d'Accueil Scolaire pour Elèves Nouveaux Arrivants</i>)
CDM	Clean Development Mechanism
CEPS / INSTEAD	Center for Population, Poverty, and Socio-Economic Policy Studies/International Networks for Studies in Technology, Environment, Alternatives, Development
CFL	CFL Luxembourg National Railways
CIDD	Inter-Service Commission on Sustainable Development
CNSAE	National Committee for Administrative Simplification in Favor of Enterprises
CRP	Public Research Center
CRSN	National Strategic Reference Framework
CRTE	Environmental Technologies Research Center
DIRD	Gross Domestic Expenditure on R & D
DSGE	Dynamic Stochastic General Equilibrium
EBAFLS	European Bank of Anchor Items for Foreign Language Skills
ECS	Economic and Social Committee
EEAP	Energy Efficiency Action Plan
EIG	Economic Interest Grouping
ESF	European Social Fund
FEDER	European Regional Development Fund
GDP	Gross Domestic Product
IFCC	Chamber of Commerce Training Institute
IGSS	Inspectorate General for Social Security administration
ILO	International Labor Organization
IUIL	<i>Institut Universitaire International Luxembourg</i>
IVL	Integrated Transport and Spatial Development Concept
JCI	Junior Chamber International
JI	Joint Implementation
LFS	Labor Survey Force
M.Sc.E.I.	Master of science in Entrepreneurship & Innovation
MRE	Children reception centers (<i>Maisons relais</i>)
NRF	National Research Fund
NRP	National Reform Program
NGO	Non Governmental Organization
OP	Vocational Guidance
PAQS	Quality in Academics Action Protocol
PIRLS	Progress in International Reading Literacy Study
PISA	Program for International Student Achievement
PNAQ	National CO2 Emissions Quota Allocation Plan
NPPN	National Plan for the Protection of Nature
PPP	Public-Private Partnership
R&D	Research and Development
RMG	Guaranteed Minimum Income
SCM	Standard cost model
SE	Internships in Companies
SME	Small and Medium Enterprises
SNAS	National Social Action Service
SNCI	National Loan and Investment Company
SNJ	National Youth Service
SSL	Secure Socket Layer
STATEC	Luxembourg Central Statistics and Economic Analysis Office
STH	Handicapped Workers Unit (ADEM)
TIC	Information and Communications Technologies
UdL	University of Luxembourg
ULC	Luxembourg Consumer Protection (<i>Union luxembourgeoise des consommateurs</i>)
VAT	Value Added Tax

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1. Introduction

1.1 Aligning with the Lisbon Strategy

The Lisbon process, launched under Portuguese presidency in 2000, was to “*make the EU the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*”. It was to have enabled European economies to change into knowledge-based economies capable of affirming themselves in a new globalized world. Between 2000 and 2005, results were very disappointing and the EU was even further away from reaching goals set for 2010. In an attempt to correct the situation, the European Council redirected the Lisbon strategy in the spring of 2005, with the new effort to be known as “*new partnership for growth and jobs*”. The main thrusts of this new initiative were shifting the emphasis back to growth and jobs, an overall simplification of the plan’s strategy and making the strategy more a part of each member state’s responsibility by causing them to draw up national reform programs. The new governance cycle was set at three years, beginning with 2005 and each member state had to submit a three-year plan in the autumn of 2005. In the spring of 2006, the European Council requested that a certain number of specific priority actions be achieved and these priorities were to be reflected in the implementation reports drawn up by the member states. The priorities consisted mainly of investing in knowledge and innovation, freeing up the potential of companies, especially SME, increasing employment possibilities and moving towards an integrated European energy policy that targets rational use of resources.

The member states intensified efforts to achieve structural reforms during the first three-year cycle. As a result, the Lisbon strategy has contributed to accelerating the speed of reforms and the new governance system, stressing partnerships on both the European level and that of individual member states. At present, the Lisbon tool box resembles the various political processes of nations and gives a more complete view of the manner in which the EU and the member states can combine their efforts to face and resolve the complex problems facing Europe today. Major progress has been made in Luxembourg since 2005. The results of the implementation of the first national reform program that was introduced in the fall of 2005 are encouraging. Now what is needed is to continue to send a strong political signal indicating that Luxembourg, together with the other EU member states, intends to accomplish these reforms. Since all the instruments and strategic mechanisms are now in place, the stratagem has achieved a high degree of maturity. The Lisbon strategy is an ongoing process that requires stability and clear objectives.

Much remains to be achieved to place the EU and its member states in a posture to face the challenge of globalization and to bolster the basis of economic success in the medium and long term. The objective of making a competitive and vital knowledge-based society of the EU retains its paramount importance. With this perspective in mind, the spring session of the European Council produced the new cycle of the Lisbon strategy for growth and jobs in March 2008. In the wake of the Commission’s strategic report, **the European Council confirmed that the Integrated Guidelines (IG) of the first phase of the three-year cycle covering 2008-2010 will remain in force, and stressed that the new triennial cycle should focus on implementation** and on the recommendations and on the monitoring points directed to the Member States¹.

¹ Presidency Conclusions of the European Council in Brussels on 13 and 14 March 2008

This report is the first report of the second cycle covering 2008-2010. It details the measures taken by the Government based on the broad objectives set in 2005 in the “National Plan for Innovation and Full Employment” and the 2006 and 2007 Implementation Reports, using the Integrated Guidelines numbering system. It also addresses the various “points to watch” directed specifically to Luxembourg by the spring 2008 Council.

1.2 Implementation on the national level

1.2.1 The need to focus on implementing reforms on the national level

In the autumn of 2005, the Luxembourg Government submitted its strategic plan for re-launching the Lisbon strategy to the European Commission entitled “National Plan for Innovation and Full Employment”². The plan, drafted under the responsibility of the Ministry of the Economy and Foreign Trade as the national coordinator of the Lisbon strategy, was discussed by the Tripartite Coordination Committee and adopted by Parliament. In the initial three-year cycle of the National Plan for Innovation and Full Employment (2005), innovation and full employment were presented as partner concepts of equal value, indivisible from each other, in preparation for an information society. Innovation in all its forms - social, technological, environmental, organizational - promotes higher productivity and rapid progress. The objectives and priorities of the upcoming three-year cycle for 2008-2010 remain the same: innovation, full employment, high quality education and training structures, the integration of Luxembourg’s economy into the European and world economies, maintaining an attractive economic milieu and providing a stable macroeconomic framework. Lastly, the principles of sustainable development underpin these new Government political initiatives during the triennial cycle.

On 28 April 2006, the Tripartite Coordination Committee produced a balanced package of measures working from the principle “*restore the balance and provide for the future*”³. The Government and social partners pinpointed a certain number of imbalances essentially concerning questions of public finance, the labor market and inflation. The Government and social partners determined the major thrust for new policies to be implemented as part of the country’s modernization effort aimed at sustaining long-term economic growth and competitiveness. The main targeting areas include higher education and national education, research and innovation, the energy policy and transportation and telecommunications infrastructure. The situation was not deemed to be in a state of crisis, but rather one that requires determined action promoting the re-establishment of fundamental balances in the economy. The Government and social partners agreed on a set of measures, breaking down into six major work areas, as follows: 1. Controlling inflation, 2. Balancing the budget, 3. Implementation of a set of complementary measures to promote competitiveness of companies, 4. Redress the labor market situation, 5. Introduction of a single status for employees and 6. Social Security measures. These reforms all arose from an analysis of long-term fundamentals for development of the economy and were drawn up with a view to achieving consensus on the national level. As such, they should be useful in adapting and providing longevity to the social model and fit perfectly into the framework of the guidelines set on the European level.

The first years were spent in implementing the Tripartite Coordination Committee’s agreements of 28 April 2006, including the preparation and finalizing of regulatory and legislative texts guiding the reforms. The political discussions and decisions of the past twelve

² For more details see: <http://www.odc.public.lu/publications/pnr/index.html>

³ Ministry of State, *Tripartite Coordination Committee Opinion*, Luxembourg, 28 April 2006

months again illustrate continuity and consistency with regard to options selected. The Chairman of the Parliamentary Commission for the Economy, Energy, Post Office and Sports, responsible for coordinating the Lisbon strategy in the Luxembourg Parliament remarked in an exchange of views on 20 June 2008 during the annual bilateral meeting of national Lisbon strategy coordination staff and the European Commission, that it was, *“useful to note that during the second public hearing⁴ where suggestions for new concrete measures to be included in the new national reform plan were to be offered, very few new proposals were made. Therefore no doubts are being expressed with regard to the reform process tied to the Lisbon strategy. Remember that many proposed laws conceived as part of the initial National Reform Plan must still be finalized or have only just begun to be implemented⁵”*. The Economic and Social Committee also found that *“Since IGs will remain strictly identical to those adopted by the European Council in March of 2005, emphasis must now be on implementation of the reforms undertaken”⁶*. In conclusion, it should be noted that the next legislative elections are scheduled for June, 2009. This makes the implementation of prospective and approved reforms very important.

1.2.2 Evaluation of Luxembourg by the European Council in March 2008

The European Council requested Member States to include detailed and concrete actions in their national reform programs concerning the implementation of specific measures they intend to undertake to respond to country specific recommendations and points to watch concerning their nations.

The Council’s most recent evaluation in March 2008 notes that *“Luxembourg has achieved significant progress in implementing its national reform program between 2005 and 2007. It has progressed in implementing commitments undertaken at the spring European Council session in 2006 in four priority areas.”⁷* Luxembourg is one of the rare Member States for which no formal recommendation was adopted by the Council in its spring meeting of 2008, as it was already the case in 2007.

The European Council nonetheless felt that with regard to the points to watch *“It will be important for Luxembourg over the period of the National Reform Programme to focus on the following challenges: accelerate the implementation of measures aimed at increasing the employment rate of older workers, in particular through reform to discourage early retirement; take further measures to reduce the number of early school leavers, and to remove the artificial barriers between different types of education; closely monitoring the impact of recently adopted measures to reduce unemployment amongst the young; and in order to deliver a more attractive economic environment, greater support is needed to deliver competitive markets, improve the transposition of EU legislation, and support SMEs. It is also important that Luxembourg take steps to reform its pension system, with a view to ensuring its long-term sustainability.”*

⁴ For more details concerning this public hearing held on 10 April 2008, see Chapter 2.1 of this report, “Active involvement on the part of the social partners and civil society”.

⁵ See minutes of the exchange of views on 20 June 2008 of the Parliament Commission for the Economy, Energy, Post Offices and Sports with a delegation of the European Commission regarding conclusions to be drawn from public hearings on the drafting of the National Plan for Innovation and Full Employment during the annual meeting.

⁶ CES, Integrated Guidelines for Growth and Jobs (2008-2010) merging broad economic policy guidelines and integrated guidelines for jobs, Luxembourg, 2008, p.6
<http://www.ces.etat.lu/>

⁷ Recommendation by the Council concerning 2008 updates of the BEPG of Member States and the Community as well as the implementation of employment policies in Member States, March 2008.

With regard to points to watch directed to Luxembourg as part of the “Partnership for growth and jobs”, the term “partnership” is especially important. While the Government generally welcomes the approach, the analysis and the points to watch as it pertains to Luxembourg, it wishes to stress that the renewed Lisbon strategy must allow Member States to specify their own objectives - outside of those set by the Community in the areas of R&D and employment - and to leave them the independence to achieve these objectives, at the rhythm and according to the preference of each State (“*kreative Freiheit*”).

Table 1 : Responses by the Government to the points to watch directed at Luxembourg as part of the Lisbon strategy (March 2008)

Points to watch	Steps taken and current assessment
<u><i>Accelerate the implementation of measures aimed at increasing the employment rate of older workers, in particular through reform to discourage early retirement</i></u>	With regard to policies for improving the prospects of older workers in the labor market, the Government requested a progress assessment from the Inspectorate General for Social Security (IGSS) on the repercussions of legal provisions governing the effectiveness of guidance actions for insured persons with a view to assessing early retirement measures by means of the disability mechanism. In 2008, the Government presented the conclusions of the report to the joint parliamentary committee of Health and Social Security, and of Labor and Employment. The Government is very aware that ageing of the working population over the course of upcoming years will contribute to increasing financial pressure on the system. Costs for unemployment and tide-over benefits paid to persons that have not been placed in the labor market and are reclassified externally, who represent two thirds of all reclassified persons, will likely increase in upcoming years. The external reclassification procedure implies a perspective of lengthy inactivity and fewer chances of finding gainful employment. The majority of persons that are reclassified externally risk become long-term unemployed persons and eventually receive the tide-over allowance. The Government has set up an inter-ministerial working group that includes representatives of Social security and Labor and Employment departments that must find solutions for this issue, mainly concerning benefits paid to persons with reduced work capacity on the labor market. (See IG 18 for more details)
<u><i>Take further measures to reduce the number of early school leavers, and to remove the artificial barriers between different types of education</i></u>	Schools in Luxembourg have opened up their structures over recent years by introducing many channels of instruction as well as the means to access them. They are also adapting content and methods to these multiple channels. Introducing a skills-based approach makes it possible to qualify apprenticeships and assessments of them, to differentiate between what standards each student should achieve, to put a value to what each student can do. While acquiring skills is a condition for success in academics and professional life, the future of those who don't meet the standard continues to be a major issue for the Luxembourg school system. The struggle against academic failure is all the more important in the current economic and social context where the situations of people with few or no qualifications are increasingly precarious. The efforts made by the Luxembourg school system have borne fruit. The third report on early departures from school ⁸ in Luxembourg was published in July 2008. It noted a decrease in the drop out rate of students of around 45% compared to 2003-2004. This decrease is confirmation of the success of numerous measures taken by the Government in recent years. This is strong incentive to redouble efforts to intensify the work of prevention and

⁸ For more details see: http://www.men.public.lu/actualites/2008/06/080626_decrochage/index.html

	remediation. Educational policy will thus show the effects of a consolidation and widening of projects and action plans implemented since 2004 intended to adapt education and training programs in Luxembourg to the requirements of the epoch and to the diversity of students. All programs, be they early through secondary education, or yet professional or adult training programs, must converge to better qualify participants and help youth and adults succeed in an educational and training environment that continues on a lifelong basis. (See IG 23 for more details)
<u><i>Closely monitoring the impact of recently adopted measures to reduce unemployment amongst the young</i></u>	In 2005, the Government announced new measures to promote youth employment that would replace those set out in the 1999 National Action Plan for Employment. The law resulting from this effort entered into force in July, 2007. It reduces the number of measures to two and changes the practical details of the original plan to increase effectiveness in terms of integration and definitive re-integration of young people in the labor market. The first measure is the “Work Support Contract”, which targets the public sector and the solidarity economy, while the “Initiation to Work Contract” concentrates primarily on the private sector. Follow up on young people engaged in both of these contract types is accomplished through the Luxembourg Labor administration, ADEM. (See IG 19 for more details)
<u><i>In order to deliver a more attractive economic environment, greater support is needed to deliver competitive markets, improve the transposition of EU legislation, and support SMEs</i></u>	<p>In December 2007, the Government introduced a proposed law to revitalize <u>free competition</u>, in an attempt to use synergies between the Council and the Competition Inspectorate to the fullest advantage. The object is to rationalize procedures, concentrate resources within a single institution and to widen this institution’s field of action by conferring it with powers of consultation and carrying out sector analysis. (See IG 13 for more details)</p> <p>In order to improve the <u>process of transposing Community legislation</u>, the Government began to implement new measures. These measures will provide for better follow-up on each Community legislative proposal throughout the enactment process. In this way, the Government seeks to reduce the period between publication of a piece of Community legislation and its transposition into national law. It hopes that these new measures will contribute to lowering the transposition deficit over time in accordance with the spring 2007 objectives of the European Council, which voted to reduce the medium term objective of transposition deficits of internal market directives to less than 1% by 2009. (See IG 12 for more details)</p> <p>The Government is supporting <u>SME activities</u> by means of action plans in favor of SME. The third plan of this sort went into effect in April 2008. It is based on ten themes and contains some 100 measures incorporating the Integrated Guidelines, the objectives of the European Charter for small businesses and those included in the <i>Small Business Act</i>⁹. Multiple measures, appearing in several IGs are now being carried out. Some examples include:</p> <ul style="list-style-type: none"> - Public aid schemes that support R&D in companies will be widely adjusted in 2009. The new legislation will provide for placing research personnel in SME. (See IG 7 for more details) - Effective backing to help SME incorporate intellectual property into the strategy and daily actions of their companies is being pursued. (See IG 8 for more details)

⁹ For more details see: http://www.gouvernement.lu/salle_presse/actualite/2008/05-mai/08-boden-pme/index.html

	<ul style="list-style-type: none"> - Efforts to bolster SME confidence in the Internet and online services are in progress. (See IG 9) - A multitude of awareness raising actions are being carried out to help people to discover and value entrepreneurialism. The links between schools and the business world are continuously reinforced, and starting up companies - especially innovative ones - is being encouraged. (See IG 15) - In order to promote private initiatives through better regulatory practices, a report on administrative simplification has been published that contains an action plan. Ad-hoc working groups can submit specific proposals to the Government aimed at resolving problems experienced by representatives of companies and public entities. The “<i>think small first</i>” principle is applied systematically. (See IG 14 and IG 15) - Assistance and consulting actions to companies seeking access to foreign markets are extended in keeping with a view to assisting internationalization of economic activity. (See IG 15) - For persons starting companies, faster and lower cost startup fees are being promoted. The electronic application for starting a business is now in its final stage of completion and in 2009 the virtual single contact concept will be progressively endowed with new technologies such as putting online procedures relating to the services directive. The objective of obtaining authorization to start a business within one week should be achieved during the final quarter of 2008. (See IG 15).
<u>Take steps to reform the pension system, with a view to ensuring its long-term sustainability</u>	<p>The Government emphasized its firm volition to free up sufficient financial resources to ensure the longevity of the social security system and guarantee inter-generational fairness in consultations with the Tripartite Coordination Committee held in 2006. The Government likewise stated its desire to participate in developing measures to support older persons. Thus the Government, rather than reduce its current support of the pension system, is maintaining the principle of allocating supplementary revenue from the general pension scheme to pension reserves. It should be stressed that in 2007 more or less 2.8% of GDP went into the scheme’s reserve fund,. This contribution is expected to increase considerably over upcoming years. The reserve fund amounted to over 25% of GDP for 2007. The Tripartite Coordination Committee, which includes employers, employees and the public authorities, decided in April 2006 that the social partners and the Government would introduce a study group that would draw up proposals for ensuring long-term viability of the pension schemes. It would also study different measures for guaranteeing this long-term viability and to adapt the pension systems to changes in professional careers, the ageing of the population and its impact on the length of peoples’ active working lives. An initial meeting of this study group occurred in November, 2007 and the group continued to meet through the first half of 2008. No specific proposals have yet been made. (See IG 18 for more details)</p>

1.3 The Lisbon strategy and the Plan for Sustainable Development

The National Plan for Innovation and Full Employment that has been prepared as part of the new three-year cycle of the Lisbon strategy for 2008-2010 should be considered fully compatible with the new National Plan for Sustainable Development (PNDD), which is

currently being drafted¹⁰. An ongoing coordination and consistency effort involving all policies is in place. The sustainable development strategy should be seen as a long-term extension of the Lisbon strategy. Emphasis and priority is concentrated on education and training, entrepreneurship and support of SME, the new Kyoto emissions allocations plan, maintaining competitiveness in general and promoting jobs by adopting a new approach based on life cycle working time.

2. Governance and assuming responsibility

In order for the Lisbon strategy to succeed it is vital to continue to stimulate the debate on the national reform program. The political debate must continuously focus on the lessons learned from the first three years of the renewed strategy, the objectives to achieve during the next cycle and the ways to achieve them.

2.1 Active involvement on the part of the social partners and civil society

It is useful to consider difficulties generally encountered on all levels by governments while implementing structural reforms. Various studies by the OECD have shown that resistance to structural reforms is linked to the fact that uncertainty about the future benefits expected from such reforms is often greater than uncertainty regarding the costs incurred. Therefore one of the most important challenges in re-launching the Lisbon strategy consists in giving better explanations to citizens about the benefits of such a policy to Luxembourg in upcoming years. Accepting and assimilating the reforms is crucial and shared analysis is a key factor to successfully completing the reforms. The Government is therefore taking care that reforms engendered as a part of the National Plan for Innovation and Full Employment will only be drawn up following extended consultations, as follows:

- As requested by the European Commission president, in a letter addressed to the national coordinators of the Lisbon strategy, it is important to set up a political debate within each country focusing on lessons learned during the first three years of the renewed Lisbon strategy. Included are what objectives to set during the new cycle, how to achieve them and more generally what progress must be achieved between now and the end of the decade. Parliament set up two public hearings¹¹ in March and April 2008 in order to lay down the foundation for a political debate and to clarify common approaches for the new cycle. The first hearing featured international experts who gave technical presentations on the Lisbon strategy. A wide range of organizations that are representative of civil society attended this public hearing. Attendees were able to react to the presentations, airing their views and ideas on the broad guidelines of the upcoming triennial cycle. The second hearing dealt with three major issues that arose during the first public hearing: How to increase the country's economic competitiveness while simultaneously bolstering social cohesion? How to reconcile a pro-growth and employment policy to the concerns of a sustainable development plan that protects the environment? What new initiatives or priorities should be incorporated into the next national reform plan?

¹⁰ For more details see: http://www.environnement.public.lu/developpement_durable/index.html

¹¹ For more details see: http://www.odc.public.lu/actualites/2008/03/audience_publicque/index.html and http://www.odc.public.lu/actualites/2008/04/audience_publicque2/index.html

- At the bilateral meeting held on 20 June 2008 those responsible for coordinating the Lisbon strategy implementation within the various ministries and administrative offices and the departments of the European Commission, the Parliamentary Commission for the Economy, Energy, the Post Office and Sports, and the social partners were consulted by means of the IG 2008 “enlarged bureau” of the Luxembourg Economic and Social Committee (ESC)¹². After two public hearings set up by Parliament and the bilateral meeting, the ESC drafted a Notice on the main avenues of approach to be adopted for the future NRP¹³.
- Parliament entered into a consultative debate on the NRP during a plenary session on 16 October 2008¹⁴. Parliament also participated in drawing up the broad guidelines for the National Plan for Innovation and Full Employment as well as in its transposition into national law and in the follow-up of the implementation of the reforms.
- A territorial reorganization program is being drafted at present. It is expected that new structures arising from this reorganization will be better capable to transpose measures emanating from the Lisbon strategy on the local level, which is a key element of active involvement by the nation.

In Luxembourg therefore, the major guidelines and concrete measures of this NRP were therefore determined in wide concert between the executive and legislative powers, as well as the national and local public entities and social partners.

2.2 Ensuring public awareness is a key objective

A major challenge in rebooting the Lisbon strategy consists in providing better explanations to citizens of the advantages of policies carried out in order to secure a prosperous future for Luxembourg. The Government maintains a particularly strong interest in this challenge since re-launching the Lisbon strategy in 2005 and the publication of the National Plan for Innovation and Full Employment. It is striving to achieve an objective of “actively” informing the general public and the players in the economy about the Lisbon strategy. To accomplish this, several communications tools enter into play, as described below:

- Public events, such as colloquiums, conferences, and other activities that are accorded a high degree of visibility¹⁵ in the media are held periodically. One example of this is the colloquium entitled “The Road to Lisbon”, which was organized for the first time in October 2004, then in November 2006, both times presented from a European perspective. Following the extraordinary success of the first two conferences, a third one has been scheduled for December 2008¹⁶. The colloquium’s aim is to bring together research professionals, decision makers and professionals to discuss issues such as the link between research, development and innovation, competitiveness, technology transfers, initial and continuing education, the spread and impact of ICT, immaterial capital, knowledge management and property rights.

¹² For more details see: http://www.odc.public.lu/actualites/2008/06/visite_commission_europeenne/index.html

¹³ CES (2008)

¹⁴ For more details see: <http://www.europaforum.public.lu/fr/actualites/2008/10/chd-lisbonne/index.html>

¹⁵ For more details see: <http://www.odc.public.lu/actualites/index.html>

¹⁶ For more details see: <http://www.tudor.lu/Lisbonne2008>

- The Luxembourg competitiveness watchdog *Observatoire de la Compétitivité* put an Internet site on line in 2005 in order to centralize the plethora of information concerning the Lisbon strategy, as well as to give it heightened visibility before the general public¹⁷. This site gives observers a rapid overall view of the Lisbon strategy on both the national and European levels. It also acts as a communications platform for the entire range of players concerned by the implementation of the Lisbon strategy on the national level. The *Observatoire de la Compétitivité* ensures that this site is updated actively with a wide range of competitiveness related information.

2.3 Providing a thorough follow-up on reforms

Progress achieved in implementing the National Plan for Innovation and Full Employment should be the subject of an efficient follow-up, reporting and evaluation processes. The follow-up should be based on both qualitative and quantitative actions, as well as on evaluations of resources expended and results achieved. Member states certainly need quality information in order to guide and evaluate their reform efforts. To this end, the Government has acquired several follow-up tools.

In the first place, in order to optimize coordination of the various measures being introduced, to ensure that consultation procedures were followed and to guarantee the assimilation of the Implementation Report in 2008, the ad hoc Lisbon structure, which was established at the inter-ministerial level in 2005 for drawing up the National Plan for Innovation and Full Employment, was closely involved in the implementation follow-up, as was the case in 2006 and 2007. The *Observatoire de la Compétitivité* is in charge of coordinating and drafting the implementation report.

Secondly, it has turned out that some structural indicators from Eurostat have a tendency of not taking into full account the specificities of Luxembourg¹⁸. In view of this critique, it was appropriate to widen the scope of statistical follow-up in order to better grasp the level of competitiveness of Luxembourg. Another goal of this is to render the debate on the issue more objective by relying on a rigorous follow-up and evaluation process. Thus, in order to make a rigorous “quantitative” monitoring of the proposed reform measures possible, a “Competitiveness Scoreboard”¹⁹ was suggested in 2004 to the Tripartite Coordination Committee. The social partners were closely involved in this effort. This scoreboard is updated periodically²⁰, depending on the availability of data, and will serve as an instrument of economic policy.

¹⁷ For more details see: <http://www.odc.public.lu/>

¹⁸ One example of this is the fact that cross-border workers are not counted in the employment rate. The employment rate is a purely national concept, with residence as a criterion. However, domestic employment in Luxembourg includes a cross-border population of 40%, and 50% of new jobs created recently have gone to persons in this category.

¹⁹ See the Appendices for more details on this subject. In order to properly follow progress achieved by each member state through statistical indicators, one must account for situations specific to each country. This is equally true in the case of Luxembourg and indicates the requirement for a scoreboard with a broader scope to better account for national specificities, one that will be able to highlight certain gaps related to the structural indicators of the Lisbon Agenda. This Competitiveness Scoreboard must be seen as a dynamic tool and as such is subject to periodic adaptations.

²⁰ MINISTRY OF THE ECONOMY AND FOREIGN TRADE, *Bilan Compétitivité 2008*, Luxembourg, October 2008. http://www.odc.public.lu/actualites/2007/09/26_bilan_compete/index.html

Box 1: Competitiveness Scoreboard – Update 2008

The Competitiveness Scoreboard is based on several dozen indicators, split out into ten categories as follows: Macroeconomic performance, Employment, Productivity and labor costs, Market Operations, Institutional and Regulatory framework, Entrepreneurship, Education and Training, Knowledge-Based Economy, Social cohesion and Environment. These indicators are then analyzed using three different complementary approaches.

First Luxembourg's position is set using a European average obtained for the countries for which data is available. This average is used as a benchmark. If a score for Luxembourg is at least 20% better or equal to the EU-x average, the indicator is classified as green, or favorable. If a score for Luxembourg is 20% worse or equal to the EU-x average, the indicator is classified as red, or unfavorable. When a score for Luxembourg is between +20% and -20% of the EU-x average, the indicator is classified orange, or neutral. Next, changes in the performance of the Grand Duchy are also analyzed over years in time. Lastly, all of the basic indicators appearing in the ten competitiveness categories are synthesized by the *Observatoire de la Compétitivité* which calculates an overall competitiveness indicator (TBCO) based on the calculation method used by the European Innovation Scoreboard (EIS)²¹.

The Competitiveness Scoreboard in the 2008 *Bilan Compétitivité*, was updated using the most recent data available, coupled with a systematic comparison of the results of earlier years. This provides a good picture of the level of competitiveness of the Luxembourg economy as well as changes occurring within it. Overall, it is clear that between 2001 and 2004 the number of red indicators declined progressively and the number of green ones increased. Between 2005 and 2007 this trend reversed, with the number of green indicators receding. However, the image projected varies greatly at times from one category to another. The overall competitiveness indicator TBCO puts Luxembourg in 9th place within the EU-27. Luxembourg dropped three places compared with the 2007 *Bilan Compétitivité*.

Source: Ministry of the Economy and Foreign Trade, Bilan Compétitivité 2008

Thirdly, the analysis of the impact of reforms on growth and employment is a very important task. It is accordingly necessary to develop and apply micro and macro economic evaluation methods for policies, although actually accomplishing this task has proved to be relatively difficult. To this end a new DSGE (Dynamic Stochastic General Equilibrium) model even better adapted to economic policy simulations is currently in its final stages of completion²². Some features of the model are such that it is especially well adapted to analyzing economic policies implemented in Luxembourg. In addition, the model should be particularly suitable for judging overall effects of economic policy measures related to implementing the Lisbon strategy. However, one must keep in mind that there is no ideal structure for an institutional macro econometric model.

²¹ For more information see: <http://www.eis.eu/>

²² Details concerning methodology: FONTAGNE L., MARCELLINO M., *Une présentation du nouveau Modèle Lisbonne de l'Economie du Luxembourg: ModEL*, in Bilan Compétitivité 2007, Luxembourg, September 2007
Initial Results : http://www.odc.public.lu/actualites/2008/03/audience_publicue/Contribution_Fontagn_/index.html
Work done on the European level : http://www.odc.public.lu/actualites/2008/06/s_m_m_th_mod_1_struct/index.html

Box 2: The Luxembourg DSGE model - Model

The initial economic policy simulations have been published in *Bilan Compétitivité* 2008 using the new Luxembourg Economic Model LSM (Luxembourg Structural Model)²³. This model will be introduced in December 2008 at the third “*Road to Lisbon*”²⁴ colloquium.

This model, which was first implemented in 2008, was conceived with two guiding objectives in mind. The first deals with the microeconomic foundations of the behavior of economic agents with a view to better analyzing the reforms. The second objective takes into account the specificities of the Luxembourg economy, its size, the duality of the labor market, social inter-relations and its social security schemes. To deal with the question, it was decided to develop a DSGE model that would introduce nominal rigidities such as prices and salaries and that would explicitly model expectations. This model complements the plethora of models in existence in Luxembourg with STATEC and BCL and is not a substitute for them, as each model type addresses a specific issue and carries its own set of benefits and drawbacks.

This type of DSGE is more exacting in terms of theoretical foundations than LUXMOD or BCL. This is an advantage when constructing economic policy simulations whose aim is to modify the behavior of economic agents. In contrast, this type of model is less useful for economic forecasting. Since the aim of this work is a methodology and while a complete open economy version is lacking, one cannot be too careful in recommending caution in the interpretation of results, which could change as the model is being finalized. In fact, the model is subject to change over the first quarter of 2009.

The Lisbon agenda has multiple dimensions and it would be illusory to attempt a detailed analysis of impacts. The final result depends as much on the structural measures adopted as on the schedule for each measure’s implementation, on any accompanying measures or on whether or not the social partners buy into them. This should not dissuade the use of a model to provide a basis for reflection since only a general equilibrium model can be used to update the outcome of putting mechanisms in motion, by accounting for the reaction of economic agents and their expectations. Impacts analyzed in this framework have been suggested by the European Commission. These simulations should be carried out again when the next LSM version appears, even in view of the initial encouraging results that provide full justification for the assumptions of the models used. The exercise conducted at that time should therefore be included as a validation of the LSM and as motivation to rapidly develop a more complete version of this model.

Source: Ministry of the Economy and Foreign Trade, *Bilan Compétitivité* 2008

²³ FONTAGNE L., MARCELLINO M., *Premières simulations de politique économique avec le nouveau Modèle de l'Economie du Luxembourg: LSM (Luxembourg Structural Model)*, in *Bilan Compétitivité* 2008, Ministry of the Economy and Foreign Trade, Luxembourg, October 2008

²⁴ For more details see: <http://www.tudor.lu/Lisbonne2008>

3. Broad economic policy guidelines

3.1 Macroeconomic policies to promote growth and employment

IG 1 – Guarantee the economic stability for sustainable growth
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Since 2006, the budget of the public administration has returned to a surplus position and Luxembourg has achieved its medium-term budgetary objective.

Following the economic slowdown of 2001-2003, the public administration experienced a worsening of the budget position and in 2004 and 2005 budget deficits were recorded. In April 2006, the Government and social partners met in the Tripartite Coordination Committee and agreed upon a series of measures to improve the competitiveness of Luxembourg's economy and to re-establish budgetary equilibrium. The primary objective of these measures was to stymie the upward movement in public expenditures. The parties agreed to modulate the automatic wage indexation system, to de-index family services and to optimize public expenditures, especially with regard to expenditures for current administrative expenditures and investments. In addition, a certain number of non-recurring measures involving revenue were approved.

The adoption of budgetary consolidation measures in April 2006 coincided with an upswing in Luxembourg's economy that developed to an extent which was not fully anticipated. Economic growth surged to 6.4% in the country in 2006. In addition, the administration's budget received a boost following an unusual event, the Arcelor-Mittal merger, which had a positive impact on the budget balance of 0.4-0.5% of GDP. Thus the effect of the measures approved by the Tripartite Coordination Committee was amplified by a combination of favorable economic circumstances, resulting in the administration reestablishing budgetary equilibrium for the year 2006. Implementing these budgetary consolidation measures and exercising rigorous discipline in controlling public expenditures resulted in equilibrium of public finances. Another outcome of this was to provide sufficient margins of maneuver in the budget to allow financing of the nation's major financial commitments and to put long-term economic growth policies in place without raising taxes or placing excessive burdens on future generations. A list of the political engagements undertaken include commitments to an equitable social system, employment policy with a priority of reducing unemployment, education and research, developing a more efficient public transportation service and protection of the environment.

It now appears that the onset of economic slowdown and the current financial crisis will limit maneuverability in the budget.

The limited expanse of the Luxembourg economy and its highly open nature imply that the country's public finances are particularly sensitive to changes in the economy. The impact of automatic stabilizers on the budget balance is consequently especially significant. In addition, the Government has acted to counter increased inflation by introducing measures aimed at preserving the purchasing power of low income households.

Despite these factors, the budget position remains comfortably in the positive area and Luxembourg will continue to meet its budgetary objectives in medium term forecast levels.

Table 2: The Administration's budget situation

	2007	2008	2009	2010	2011
Public Administration	3.2	2.3	1.1	0.8	1.1
Central Administration	0.8	-0.4	-1.8	-1.7	-1.5
Local Administrations	0.0	0.2	0.2	0.0	0.0
Social Security	2.4	2.5	2.7	2.5	2.5

Note: As a % of GDP

Getting excessive inflation under control is one of the six major avenues of approach for reform measures as stated by the Tripartite Coordination Committee in April 2006. After consulting the Tripartite Coordination Committee and participating in an exchange of views with diverse employer and worker organizations, as well as consumer protection groups, various measures were implemented, including the following²⁵ :

- The Government is pursuing a prudent policy in adapting administered prices, by setting up a procedure for a mandatory review of the impact of increases in public service charges on the inflation rate before implementing an increase. A complementary heading has been added to the impact statement for legislative and regulatory measures²⁶. In addition, in April 2008 the Government decided to « *defer for the moment all increases in public prices and requested the municipalities to follow suit*²⁷ ».
- All Ministry departments received a circular exhorting them to restrict the indexing of public contracts to increases in costs of goods and services.
- Rules and practices for imports are currently being analyzed. The overall framework used to import goods influences both the level and changes of prices in a country, such as when exclusivity contracts are concluded, and a small economy such as Luxembourg's would appear particularly vulnerable because of its size.
- A proposed law has been introduced that would optimize synergies between the Competition Committee and the Competition Inspectorate²⁸. This measure intended to revitalize competition aims at providing the Competition Council the means of legal action required to carry out active and vigorous policies to promote increasing the free play of competition.
- The social partners and the Government have agreed upon changes in applying the automatic wage indexation system, and set the application rates for 2006- 2009²⁹.
- The Government periodically carries out sector price studies. This was recently done in the food sector, canvassing a sampling of Luxembourg producers and distributors in order to better comprehend pricing processes in the sector for Luxembourg.
- Voluntary pricing agreements were signed with the Luxembourg Trade Confederacy (clc), the Federation of Craft workers (FA) and with the HORESCA in February

²⁵ For more details about these various measures see: MINISTRY OF THE ECONOMY AND FOREIGN TRADE, Maîtriser l'inflation: plus de compétitivité pour plus de pouvoir d'achat, in Bilan Compétitivité 2008, Luxembourg, October 2008

²⁶ http://www.mcm.public.lu/fr/admin/espace_administrations/procedure_analyse_flux/index.html

²⁷ Also see the Government statement on the economic, social and financial situation of the country in 2008, made by the Prime Minister in Parliament.

<http://www.gouvernement.lu/gouvernement/etat-nation/etat-nation-FR-2008/index.html>

²⁸ Draft law to amend the law dated 17 May 2004 relating to competition (n°5816).

<http://www.chd.lu/fr/portail/role/default.jsp>. Also see IG 13.

²⁹ Law dated 27 June 2006 that changes certain application methods of the sliding scale for employees and of salaries.

2008³⁰. Neither general pressure on prices nor increases resulting from the automatic wage indexation system can serve as a pretext to impose excessive or covert price increases on consumers.

- The implementation of a comparative price indicator for the Greater Region is currently under review. This would enable better price comparisons between Luxembourg and the surrounding region³¹.

The Government also wishes to increase transparency of markets and prices. To this end the Luxembourg Consumer Union (ULC) was asked to facilitate comparisons of consumer prices. In addition, STATEC was requested to intensify its information policy *vis à vis* the general public with the intent of facilitating access to improved information and to make the pricing system more transparent³². As a result, STATEC put a report on line dealing with the consumer price and inflation index and stepped up promotion in the press of its evaluation mechanisms for monitoring changes in prices. Lastly, STATEC is working on new mechanisms for obtaining better analyses, understanding and communication of official statistics such as using an online personal inflation simulator, calculating an index of frequent purchases, etc. With regard to scientific research on prices and inflation, several projects are currently ongoing, including an analysis of inflation persistence in Luxembourg, a project to define domestic inflation, an analysis of micro and macroeconomic impacts of the indexing of salaries and products and the concept of productivity in Luxembourg³³.

The Government has also instructed the Economic and Social Committee (ESC) to study both the determinants of inflation in Luxembourg and the instruments available to control inflation.

IG 2 - Safeguard economic and budgetary sustainability, a prerequisite for more jobs
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The public administration's finance balance has been positive since 2006. In 2008 a budget surplus representing 2.3% of GDP is expected. Despite the slowdown in the economy, public finances will remain solid from the short to medium term. The draft budget for 2009 and the stability and growth pact for the 2008-2011 are forecasting that average budget surpluses of 1% of GDP will be achieved from 2009-2011.

The Government took advantage of the favorable economic conditions between 2005 and 2007 to consolidate its public finances. The favorable economic climate aside, the measures agreed upon in April 2006 by the Government and the social partners under the auspices of the Tripartite Coordination Committee to re-establish budgetary equilibrium were crucial to the structural shoring of public finances.

³⁰ http://www.eco.public.lu/salle_de_presse/com_presse_et_actu/2008/02/29_inflation/acc_volont_prix.pdf

³¹ The principal results of these Government-commissioned studies were presented at a methodological seminar that was held in June 2008. For more details see:
MINISTRY OF THE ECONOMY AND FOREIGN TRADE, Vers un indice comparatif des prix dans la Grande Région, in *Bilan Compétitivité 2007 – The Road to Lisbon*, Luxembourg, September 2007.
MINISTRY OF THE ECONOMY AND FOREIGN TRADE, Maîtriser l'inflation : plus de compétitivité pour plus de pouvoir d'achat, in *Bilan Compétitivité 2008*, Luxembourg, October 2008.
http://www.odc.public.lu/publications/bilan_compete/index.html

³² For more details see: http://www.statistiques.public.lu/fr/communiqués/economie/prix_salaires/2008/09/20080915/index.html

³³ A methodological seminar concerning these issues was held in June 2008 where national and international experts gathered to discuss the theme "Inflation in Luxembourg: Measures and Determinants". The social partners had the opportunity to participate and to submit their contributions. The seminar illustrated that an interactive approach and a more refined economic analysis were necessary. For more details see:
http://www.odc.public.lu/actualites/2008/06/S_ministre_m_thodologique/index.html

From the perspective of public finances, the margins of budgetary maneuver available to Luxembourg are adequate to face the worldwide economic slowdown resulting from the international financial crisis and higher energy and agricultural raw material prices. The existence of these margins of maneuver enable the Government to fully utilize its automatic stabilizer mechanisms, to reduce fiscal pressures on households and corporations, to use the budgetary policy instrument to attenuate cyclical fluctuations of internal demand and to adopt a series of targeted measures whose objective is to increase purchasing power of low income households in an environment of high inflation.

In addition, the low level of public debt, coupled with significant reserves for financing the pension system - reserves amounted to 23% of GDP in 2008 - combine to put Luxembourg in a favorable posture to overcome the economic and budget associated with the ageing of the population. Nonetheless, the challenge of ensuring long-term budget durability is real.

In effect, long-term projections drawn up in 2005 by the Inspectorate General of the Social Security administration (IGSS) as part of the Economic Policy Committee of the European Union and the European Commission show that if policies remain unchanged, public expenditure related to demographic ageing increases significantly beginning around 2015 to 2020. This will exert considerable pressure on the long-term viability of public finances. These projections show that adaptations must be provided for in time to ensure the longevity of public finances in general and to maintain the financial viability of the social security system.

3.2 Microeconomic reform aimed at increasing growth potential

IG 7 - Increase and improve investments in research and development, in particular in the private sector, with a view to establishing a European area of knowledge

OBJECTIVE: Increase R&D activities

To achieve the Government's R&D and innovation objectives as set out in the 2004-2009 government program, the aim is to increase public appropriations to 1% of GDP.

Table 3: Changes in budget allocations to R&D from 2004-2010

Year	2004	2005	2006	2007	2008	2009 (Forecasted)	2010 (Forecasted)
Allocations to R&D (Units: Mn €)	72.0	94.52	113.6	142.0	175.0	215.0	250,0
% of GDP	0.27	0.32	0.36	0.42	0.48	0.54	0.58

Source: Ministry of Culture, of Higher Education and Research

The recommendations of the analysis of the research and innovation system in Luxembourg made by the OECD in May 2006 are largely in place.

The inaugural meeting of the *Comité Supérieur de la Recherche et de l'Innovation* (Senior Research and Innovation Committee)³⁴, co-chaired by the Ministries of Culture, Higher Education and Research, and Economy and Foreign Trade, was held in July 2008. The committee comprises both personalities of the economic and academic worlds and members of civil society. It should be able to tackle the full extent of complexity in the innovation chain and also cover the aspects of research itself, its value in the nation's economy and issues at the level of society. The committee is charged with contributing to the formation and development of a consistent and effective national policy in the area of research and innovation and to counsel the Government with regard to implementing policies in the short, medium and long term. The committee draws up proposals dealing with strategic objectives, national research priorities and in particular, themes, as well as instruments and measures that are appropriate to implementing a consistent national research and innovation policy mix. The committee will furthermore advise the Government on changes in public expenditures on research and innovation.

One major concern of the Government is concentrating the national R&D effort to a limited number of priority areas. The National Research Fund (NRF) submitted the results of its "*NRF Foresight*" study to the Government in May 2007 in order to establish a list of theme-based research priorities with high socio-economic potential for the next decade. On the basis of the proposals in this study, the Government specified several research domains as future priorities³⁵ to be allocated a significant share of additional public expenditure for research in

³⁴ For more details see: http://www.gouvernement.lu/salle_presse/communiqués/2008/07-juillet/30-comite-innovation/index.html

³⁵ Priority research areas include Development and Performance of Financial Systems, Better Quality and More Productive Business Services, Information Security and Fiduciary Management, High Performance Telecommunications Systems - an essential innovation motor in the services sector, Sustainable Water Resources Management, Functional and Intelligent Materials and Surfaces, Control of Chronic, Degenerative

upcoming years. The 2008-2010 program “CORE” was launched in the first half of 2008. In this program the NRF largely incorporates the priority research areas of the Government.

The law dated 19 August 2008 concerning training-research aid, that modifies the training-research scholarship program introduced by the R&D law dated 9 March 1987, links grants of this type to a determined-length work contract between researchers and their assigned facilities. The new system was developed integrating the recommendations of the Charter for Researchers and the Code of Conduct for the Recruitment of Researchers established in 2005 by the European Commission. In order to encourage inter-sector mobility of doctorate candidates and post-doctorate students between public and private sectors, supplementary financial stipends are included if a project has specific collaboration with one or several private sector partners. As of October 1st 2008, management of training research aid programs fall under the responsibility of the NRF.

In July 2008, Parliament approved the law transposing the European Council Directive 2005/71/CE dated 12 October 2005 concerning a Specific procedure for admitting third-country nationals for the purposes of scientific research.

In an effort to improve governance of public research, in the first half of 2008 the Government finalized performance contracts with public research players to cover 2008-2010, in which assignments and objectives will be clearly set out and specified by players in the public research realm. Research centers commit to achieving objectives stipulated by indicators and output results in exchange for financial aid from the State. This links R&D expenditure with anticipated results on the scientific, economic and social levels. These results can be categorized as financial objectives, in the form of a certain level of third-party financing to be attained, and operational objectives, such as numbers in terms of scientific articles published, researchers seeking doctorates or patents awarded. The overall allocation by the State for the period 2008-2010 to public research entities amounts to 168 mn euros. Simultaneously, research centers commit to obtaining third party financing in the amount of 103 mn euros over the same period. Using a similar approach, the Government signed a multi-year contract with the NRF on 28 July 2008. The Fund committed to achieving objectives stipulated by indicators and output results in exchange for financial aid from the State. The Fund will particularly stress its role as financial backer in order to achieve its objectives, by means of priority actions such as the multi-year programs, ancillary measures and promoting scientific traditions. The overall allocation by the State for the period 2008-2010 to NRF amounts to 91 mn euros. The Government will also sign a performance contract with Luxinnovation, the agency responsible for promoting innovation and research, in October 2008.

In June 2008, the Government announced a strategic partnership with three world class American research institutions, the Translational Genomics Research Institute (TGen) in Phoenix, the Institute for Systems Biology (ISB) in Seattle and the Partnership for Personalized Medicine (PPM) also in Phoenix. This initiative, in which the Government will invest around 140 mn euros over the next five years, is aimed at developing a skill pool in molecular medicine. In successfully achieving this initiative, the Government is turning to the public research centers (CRP) *Santé*, Henri Tudor and Gabriel Lippmann as well as to the University of Luxembourg for cooperation, which will be closely involved in the preparatory phase. The specific objective of the three projects is to intensify research in the area of

molecular diagnostics, which is the cornerstone of personalized medicine. The project pivots around the establishment of a Luxembourg “BioBank” in partnership with the Translational Genomics Research Institute, to be called the Integrated Biobank of Luxembourg (IBBL). The second phase of the research agreement involves a partnership between the Institute for Systems Biology and the University of Luxembourg, whose objective is to establish a skill pool in systems biology in Luxembourg in collaboration with the public research project centers. The third and final venture is a demonstration project to be achieved in conjunction with the Partnership for Personalized Medicine (PPM)³⁶. The Luxembourg project will target lung cancer, a nearly incurable disease that manifests itself only in the advanced stages. The research partnership will involve PPM and the CRP-Santé.

In 2008 the University of Luxembourg began preparing the next multi-year contract between the State and the University that will cover the period 2010-2013. In application of the law of 12 August 2003 creating the University of Luxembourg, the development of the University is the subject of a founding contract extending over several years negotiated between the State and the University. The contract, concluded for a period of four years, applies to the general policy of the university, its strategic choices, its objectives and its activities in the areas of teaching, research, student mobility and administration.

In 2007, the number of R&D projects financed through Government-provided vehicles increased 28% compared to 2006, although the volume of allocated financing regressed by 8%. This change underscores the growing importance of R&D projects within Luxembourg companies, especially SME.

With a view to increasing participation of Luxembourg companies in the “7th R&D Framework Program”, a new aid measure was made available to companies 2007. The program, entitled *Fit4Europe*, aims at covering part of the application costs of participation in a community research program.

The Government has also decided to participate on the European level in the *Eurostars* and *Assisted Ambient Living* programs, which should entitle public research organizations and companies in Luxembourg to a privileged access to research work and related programs.

The programs for making host infrastructure available will be continued in 2009 with the completion of construction and the fitting out of the new incubator in the steel wastelands of Belval-Ouest. The public aid schemes promoting R&D in companies will be widely adapted in 2009 to take advantage of new opportunities for grants and support available through European Commission R&D aid. The new legislation will incorporate aid schemes to stimulate outsourcing expertise, secondment of researchers to SME and to promote the implementation of skill pools.

OBJECTIVE: Increase the pool of human resources

Because of the specific labor market situation in Luxembourg, which has been quite dynamic in recent years, many companies have recruited qualified personnel outside of the Greater Region. The opening of the labor market through the early elimination in 2007 of the requirement of nationals of the new EU Member Nations, except Rumania and Bulgaria, to obtain a work permit has greatly facilitated recruitment.

³⁶ An initiative launched by Dr. Hartwell, Nobel Prize winner in Physiology and Medicine (2001).

In addition, Luxembourg has taken on new legislation in the area of the free circulation of persons and immigration, which will massively change the terms and procedures for accessing the labor market and provide for combining residence permits and work permits under a single authorization scheme. A more specific scheme for highly qualified employees, as for seconded or transferred employees has been introduced. The legislation takes effect on 1 October, 2008.

In 2009, the Government will cooperate with the players concerned to establish an action plan based on the European Commission's communiqué "*Better careers and more mobility: a European Partnership for Researchers*". The plan includes a consistent group of specific actions, particularly with regard to improving terms of employment and work in an effort to make scientific careers more attractive.

IG 8 – Facilitate all forms of innovation

OBJECTIVE: Promote the creation and development of new companies

In February 2007 the Government introduced to executives from Luxinnovation and the Henri Tudor Research Center (CRP-HT)³⁷ its model for the future organization related to the creation of innovative companies. The Government drew up a business plan for this in 2008 with the cooperation of CRP-HT and Luxinnovation.

OBJECTIVE: Promote intellectual property

The Government has been very active in pursuing its multiple awareness actions concerning the importance of intellectual property:

- A series of four specific training sessions was organized during the first half of 2008, which were successful enough to warrant presaging a second series shortly.
- The European project *IP Awareness and Enforcement Modular Based Actions for SME* is developing effective support structures to assist SME in incorporating intellectual property into their strategies and daily activities. The Government is actively participating in this network for exchanging skill sets and experiences via a network that includes 27 national intellectual property offices and is coordinated by the European Commission. This project took off in November 2007 and meets the criteria of the "*Competitiveness and Innovation Program*" (CIP) program. The Government is also participating in the *Ip4inno* project, for which the primary objective is to promote perfect command and the utilization of intellectual property by SME.
- An e-learning workshop was set up in cooperation with the European Patent Office that addressed the *DIPS* project, developed as part of the European *Leonardo Da Vinci* program, which consists of internet-based distance learning for people with different professional profiles to familiarize themselves with intellectual property issues.

³⁷ The objective of this new model is to assemble all the different existing infrastructures under a single governance structure and thus rationalize the services available for coaching and assistance. The implementation project of a new incubator in the *Cité de Sciences, de la Recherche et de l'Innovation* offers a perfect opportunity to structure and federate the various initiative currently underway. This type of integration of shared infrastructures will also be the occasion to put into practice the recommendations of the OECD report in this domain.

- On the occasion of the World Intellectual Property Day, the Government initiated and coordinated the first edition of the “*IP Day in Luxembourg*” conference. Specialists gave presentations on the theme of intellectual property. A simultaneous conference dealt with the economic value of intellectual property rights, tackling such issues as patents for inventions, brands and copyrights.³⁸ These presentations brought back the issue of valuing property rights titles in Luxembourg, and particularly the proposed law 5801 that was approved in Parliament last December, which allows for the possibility of exonerating up to 80% of specific income deriving from intellectually property from taxation. Taxation of income derived from an intellectual property right will be reduced³⁹. This first edition also served to assemble a panel of European experts to discuss the London Agreement, which entered into effect in May 2008 and which signals significant progress in limiting the cost of translating patents that are granted. Luxembourg was one of the first member states of the European Patent Organization to ratify this agreement.

OBJECTIVE: Use and develop new communications technologies to diffuse information, knowledge and documentation in all their forms⁴⁰

The digital revolution is bringing about dramatic change in our societies. Rapid and far-reaching change is currently transforming ways information, knowledge and documentation are produced in all of their forms. Production and dissemination in digital form, such as e-books, e-journals, online dailies and digitized administrative archives are growing at exponential speed. At the same time, methods used by the public to obtain information and knowledge are being revolutionized. Cultural institutions have a primary stake in this transformation. The technologies that they must implement to complete their assignments in a rapidly changing environment are not mature technologies, ready for use. To keep up, these institutions must innovate on a daily basis and international collaboration is proving essential so that technology transfer can occur. In the same way, having research and consultation vehicles available to the general public, coupled with the pedagogic actions required for everyone to learn how to master these technologies, are very significant contributions to improving the public’s ICT skills and promoting the lifelong learning concept. It is equally important to illustrate that these digital technologies imply a much closer level of cooperation than in the past with the private sector through Public-Private Partnerships (PPP). The most distinguishing example of this is the upcoming application of a copyright requirement for digitized publications, including those with no material base (i.e. immaterial publications) for the National Library of Luxembourg (BnL), as well as the audio-visual documents for the *Centre national de l’audiovisuel* (CNA). In the area of digitization, interoperability standards must be implemented between cultural institutions and the other public administrations⁴¹.

³⁸ To increase consciousness of copyright issues, an awareness action on respecting authors’ rights was included for the first time in the activities organized by the Government on the occasion of the World Book and Copyright Day.

³⁹ Revenue arising from copyrights on computer software, patents, manufacturing or trade brands, designs and registered models are exempt from 80% of taxes. The law dated 19 December 2007 introduced a new article, number 50 bis, in the income tax law that is intended to promote innovation in Luxembourg incorporated companies by allowing them to ease tax rates on revenue arising from innovations protected by intellectual property rights. This article refers to revenue from patents, computer software copyrights, brands, designs and models.

⁴⁰ It should be noted that the measures described above can also be considered under IG 9 – “Facilitate the spread and effective use of ICT and build a fully inclusive information society” and under IG 24 – “Adapt education and training systems in response to new skill requirements.”

⁴¹ One example of this is the issue of the BnL storing public internet sites and the National Archives conserving digitized administrative archives.

Developing a network for cooperation will enable the rationalization of expenditures while simultaneously increasing quality levels of the offer nationally⁴².

IG 9 – Facilitate the spread and effective use of ICT and build a fully inclusive information society
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OBJECTIVE: Spread the use of ICT by all players in the economy

The certification entity LuxTrust S.A.⁴³ has set up a national public key infrastructure (PKI) and has begun to disseminate its authentication and signature certificates on the national level. These certificates, which are available in different formats⁴⁴, have been in use since the end of 2007 in banking, private and public sector applications. Sales of products will begin shortly in the next phase and will lead to rapid development of *B2C* applications in both the public and private sectors soon.

One of the priorities of the CASES⁴⁵ project is to build the confidence of citizens and SME in the Internet and in online services. This Government project is aiming to reduce the digital divide in the area of Internet security by setting up a transfer of know-how to a huge portion of the population. Citizens, SME and administrations will find numerous practical guides and solutions on the site that touch on information security. In addition to its site, CASES makes available guides for implementing security policies, develops methods for implementing security management systems within small structures and sets up specialized labels. Training programs for children and demonstrations at fairs or within public administrations round out the project's offering.

OBJECTIVE: Develop high performance and fully integrated infrastructures in international electronic communications networks

The country now has very broad coverage in 3G networks. In addition, with a view to rapidly expanding broad band and wireless coverage in Luxembourg, the WiFi technology has been massively deployed in urban areas. In order to improve international and domestic connectivity, the necessary equipment, cabling and infrastructure have been installed in the wake of setting up the new LUXCONNECT⁴⁶ organization in 2007. Service will be available in February 2009.

Efforts were carried on in 2007 to implement a proactive approach in managing radio spectrums via the innovative use of radio frequencies in the domain of WiFi connectivity. This resulted in identifying new frequencies for use by innovative operators.

⁴² Examples of this include the Luxembourg library network <http://www.bibnet.lu/> and the Luxembourg Consortium that acquires and manages electronic publications and for which the computer management systems are administered by the Luxembourg National Library.

It must be acknowledged that Luxembourg has a major effort ahead of it to keep up with the changes occurring on the international level as rapidly as is required in these strategic areas. The same can be said in the area of public municipal libraries. Libraries are used abroad to help disseminate knowledge all throughout the social body and at all levels of society. In Luxembourg they should be more an instrument for integrating non Luxembourg nationals and for promoting Luxembourg's languages and culture. The Government has drawn up a proposed law that should allow progress along this path.

⁴³ For more information see: <https://www.luxtrust.lu/>

⁴⁴ *Smartcard, Signing Stick and Signing Server* via a *Token* or by text message.

⁴⁵ For more information see: <http://www.cases.public.lu/fr/index.html>

⁴⁶ For more information see: <http://www.luxconnect.lu>

Lastly, regarding the optimal use of freed up capacity resulting from the transition to digital⁴⁷, the arrangement for concessions put out by the CLT-Ufa and renewed in 2008, provides for broadcasting television in digital, thus allowing more efficient use of the spectrum. Land-based frequencies are held in reserve for the spectrum dividend, including mobile television and broad band communications services. In addition, a license has been granted to an operator to conduct test broadcasts as part of an R & D project on the DVB-H technology for land-based mobile television.

IG 10 - Strengthen the competitive advantages of Europe's industrial base

The Health Technologies action plan became a reality through the implementation of a major strategic partnership initiative involving the Government, the University of Luxembourg and three U.S. research institutions. The initiative, in which the Government will invest around 140 mn euros over the next five years, is aimed at developing a skill pool in molecular medicine⁴⁸.

An "Eco-Technologies" action plan is currently being drawn up that is intended to promote the development of this business sector in Luxembourg. The Government, keeping in mind the opportunities and vitality inherent to the sector, intends to promote it by implementing specific actions to face the challenges of dealing with the environment, particularly climate change.

IG 11 - Encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth
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In accordance with the options set out by the Integrated Transport and Spatial Development concept (IVL), four master sector plans are currently being drawn up in the following areas: transportation, industrial zones, housing and countryside. A preliminary draft has been adopted by the working group responsible for the Sector Master Plan regarding the "Large Areas of Countryside and Forests" sector plan. The preliminary draft must be evaluated according to the provisions of the law governing impact assessment of plans and programs on the environment.

OBJECTIVE: Promote a balanced environmental policy

The Government put maximum priority to the implementation of the action plan measures⁴⁹ to reduce CO₂ emissions and of the National Plan for the Protection of Nature (NPPN).

The action plan to reduce CO₂ emissions was adopted by the Government in April 2006 and was drawn up following an analysis of emissions reduction potential. It includes measures in the areas of transportation, buildings, renewable energy sources, industry and provides information and consulting. It was worked out mainly with a view to adhering to Luxembourg's commitments with regard to the Kyoto protocol (2008-2012) and the measures should be considered the backbone of a long-term climate protection strategy. The action plan was implemented in consultation with the ministries and professional sectors, and all other players concerned. A taskforce comprising all the concerned ministries reviews work on the plan on a regular basis. In May 2007, the action plan underwent its first formal evaluation

⁴⁷ The transfer to land-based digital television was set for 2007 and cable network operators were encouraged to abandon analog broadcasts by 2010.

⁴⁸ See. IG 7 - Increase and improve investments in research and development, in particular in the private sector.

⁴⁹ "Climate change: act on a major challenge"

following a public forum and was reinforced by ten functional elements representing essential points for short-term action⁵⁰. The majority of the measures stipulated have been implemented. In the transportation sector, tax rates on fuel have been progressively increased. The tax on road vehicles has been restructured depending on environmental criteria and financial aid is now available for the purchase of highly fuel economical vehicles between June 1st 2007 and December 31st 2009.

The National Plan for the Protection of Nature (NPPN) was drawn up within the framework of a consultation process involving eighty experts representing twenty-four non-governmental organizations (NGO), unions, and public authorities. It was adopted by the Government in May 2007. As a political action program in the area of the protection of nature for the period 2007 – 2011, the NPPN sets two strategic objectives, including 1. Halt the loss of biodiversity before 2010⁵¹ and 2. Protect countryside and ecosystem services, as well as seven specific goals to achieve⁵². The NPPN emphasizes above all the implementation of specific measures for the protection and conservation of nature and has selected forty-one priority measures, fifteen of which are labeled high priority, as well as thirty-six priority sites to be classified as protected areas. Implementation of all the measures registered has begun and a majority of them are near completion.

The drafting of the National Sustainable Development Plan continues (*Plan National pour un Développement Durable* PNDD). After choosing the quality objectives required for sustainable development in Luxembourg⁵³, the Interdepartmental Commission for Sustainable Development (CIDDD) determined action objectives based on quality objectives. These will be submitted to the Government Council following consultation with representatives of civil society during the second half of 2008. The PNDD and the National Plan for Innovation and Full Employment (PNR) drafted as part of the Lisbon strategy are complementary programs. The PNR's contribution is significant in achieving the goal of sustainable development.

OBJECTIVE: Promote a competitive energy policy

The laws dated 1 August 2007 concerning the organization of the electricity and natural gas markets transpose European electrical (2003/54/CE) and natural gas (2003/55/CE) directives

⁵⁰ 1. Achieve savings in energy and ecological products 2. Develop and improve awareness, information and consulting efforts 3. Make public transportation an absolute priority 4. Promote fuel efficient passenger cars and the Government's front runner role in updating vehicles in Luxembourg 5. Greater use of "Green" electricity 6. Better energy efficiency in buildings 7. Introduce a new subsidy program for rational use of energy and renewable energy sources 8. Lower VAT assessments for use of energy saving products 9. Further emissions quotas plan, PNAQ II 10. Adopt JI and CDM flexible mechanisms.

⁵¹ On the international level, the NPPN is the nation's commitment to halt losses in biological biodiversity before 2010.

⁵² 1. Reinforce the implementation of specific measures promoting the protection of nature 2. Integrate the concept of protecting nature into other sectors of activities and multiply the numbers of actors involved 3. Designate and manage in an appropriate manner protected national and community areas of interest 4. Update legal and regulatory planning instruments 5. Introduce a science-based monitoring system for the status of biodiversity and to check how effective implementation of nature protection policies is 6. Promote scientific research in the area of biodiversity and conservation of nature 7. Improve awareness and teaching in the areas of protection of nature and sustainable development.

⁵³ Protect natural resources, sustainable consumption and production, sustainable land development, climate protection, disassociate economic development from volume of traffic, full employment, employ older workers, avoid insecurity of work and provide access to and fairness of social protection, integrate non-Luxembourg citizens and cross-border workers into Luxembourg, ensure health for all, provide an economy that is sheltered from crises, ensure viability of finances, contribute to eliminating world poverty, promote global sustainable development, improve levels of education and qualification, educate people about sustainable development, equality between men and women, consistency among policies.

that aim to accelerate the establishment of the internal energy market. They also transpose the two directives concerning the security of supply in the areas of electricity and natural gas (2005/89/CE and 2004/67/CE). This legislation entering into force means that as of now, economic players have non-preferential access to the markets as well as greater transparency and it increases competition levels in the markets and provides positive influence on the reliability of supply.

OBJECTIVE: Promote eco-efficiency⁵⁴

The Government continues to place priority on increasing energy efficiency and on developing new and renewable energy sources.

The Government intends to roll over the voluntary agreement concluded with the Luxembourg Business Federation (FEDIL) to improve energy efficiency in Luxembourg's industries in 1996 that was extended in 2002 and ended in 2008. The Government also intends to widen the scope of this instrument for promoting energy efficiency in other sectors of the Luxembourg economy.

The Grand-ducal regulation dated 30 November 2007 concerning energy performance of residential buildings entered into effect on 1 January 2008. In large part it transposes the European directive on the energy performance of buildings (2002/91/EC). The directive's objective is to obtain over time buildings that provide better conservation of energy resources and to lay the foundations for savings of sustainable energy to cover the full useful life of these buildings. It will also serve to federate the concept of creating sustainable local and regional employment for tradesmen in the construction sector. A vast awareness campaign has been launched in this framework that includes information brochures, participation stands in trade fairs, skills upgrade seminars for professionals in the sector and seminars for local and municipal authorities. In this context the Government signed a partnership agreement for achieving better energy efficiency in residential buildings in early May 2008 with several banks operating in the Luxembourg financial sphere. The motivation behind the agreement is to further sustainable development and to provide a multiplier effect to encourage the construction of passive houses with low energy consumption in Luxembourg. The Government has granted participating banks the use of "Energy Efficient Partner" as a logo. This partnership remains open to all interested financial establishments.

In the meantime, preparatory work for drafting a Grand-ducal regulation concerning the energy performance of public buildings that covers the second part of the European directive transposition on energy performance of buildings (2002/91/CE) has reached an advanced stage, with the draft regulation to enter parliamentary proceedings in 2009.

Following a workshop that was set up in May 2007 to explore strategies for establishing a national structure for energy consulting in the area of rational use of energy and renewable energies, the Energy Agency was restructured by creating a supplementary EIG entitled "MyEnergy", which is charged with disseminating information, awareness programs and advice to the general public.

⁵⁴ As a common structure of the Ministry of the Environment and the Henri Tudor Public Research Center, the Environmental Technologies Research Center (*Centre de Ressources des Technologies pour l'Environnement* – CRTE) undertakes actions and executes projects whose objectives are to promote sustainable development and eco-efficiency as reflected by IG 11. The objective of these actions is to reduce the impact on the environment - that is air, water and soil - that originate from human activities through the implementation of RDI projects that target sustainable management of natural resources and energy.

In view of the transposition of the European directive concerning the promotion of cogeneration activities (2004/8/CE), the 1994 legislation is now being fundamentally revamped. To this end, a study was initiated concentrating on the potential of high yield cogeneration systems. The goal of this study is to identify not only potential gains but allowable costs, technical and administrative barriers that exist, and any support measures for cogeneration.

Directive 2003/54/CE stipulates the common rules for the internal market for electricity and repeals directive 96/92/CE. It contains provisions concerning the dissemination of information about electricity and labeling of electricity that aim at furnishing end users with information denoting the source of their electricity and of its impact on the environment at the time it was produced. In February 2008 the Government Council approved a draft Grand-ducal regulation concerning the dissemination of information about electricity and the labeling system that will include details about checks, supervision and structure of the labeling organization. This should allow each consumer to easily compare the mix of a specific electrical product with that of a given supplier and the national mix that corresponds with the composition of electricity at the national level, or even the sum of all electricity supplied in Luxembourg. In addition, the labels will outline information on environmental impacts of electricity that must be provided to end users. This includes both CO₂ emission quantities and radioactive waste resulting from the process of producing electricity.

The Government had set January 1st 2008 as the date to complete a full review of its renewable energies promotion and its energy efficiency processes. The drafting of a new regulation was based on a study on the potential of renewable energies in Luxembourg that was introduced in March 2007. The new regulation is reflected by two new Grand-ducal regulations that went into effect on 1 January 2008. The first Grand-ducal regulation relating to electricity production based on renewable energy sources sets out new injection fees for electricity produced from renewable energy sources. This is a major instrument for meeting the ambitious goal of exploiting the full potential of renewable energy sources. The new mechanism sets injection fees for each sector of technology, be it hydraulic, wind-power, photovoltaic, biogas, biomass or scrap wood. The second Grand-ducal regulation establishes a subsidy system for physical persons in promoting rational use of energy and highlighting the value of renewable energy sources. It states what subsidies are available to private persons who invest in energy savings projects in the construction sector or in using renewable energy sources for heating. It will help improve the Kyoto balance for Luxembourg. The new subsidies support the construction of housing with high energy savings, the so-called passive houses, as well as for energy use reduction, even on a partial basis, in existing buildings. Subsidies also encourage the use of solar thermal energy systems, heat pumps, pellet or wood chip fired furnaces and replacing low yield furnaces.

A draft Grand-ducal regulation concerning the production and injection of biogas into a natural gas network is currently being prepared following a study presented in 2007. The regulation's objective is to outline the framework for a support mechanism for installations injecting biogas into natural gas networks in Luxembourg.

The Government attempted to give a boost to the use of biofuels through the de-taxation of this type of fuel effective January 1st 2006, by transposing directive 2003/30/CE intended to promote the use of biofuels and other renewable fuels in transportation. Because this measure did not result in material increases in biofuel use as expected, the Government introduced a measure effective 1 January 2007 requiring that fuels for motor vehicles comprise a minimum of 2% biofuel, calculated on the basis of energy content of the fuel. This requirement was extended for 2008.

In March 2007, the Government adopted a draft bill transposing the directive 2005/32/CE, which was to have been ready for adoption by Parliament between now and the end of the year. This directive 2005/32/CE outlines the principles, terms and criteria for setting eco design requirements on energy consuming products⁵⁵.

As a part of directive 2006/32/CE on energy end use efficiency and energy services the Government finalized its first action plan in energy efficiency (PAEE) which sets a benchmark and intermediate objective for energy savings and is a summary of the strategy for achieving intermediate and overall goals. The action plan was approved by the Government Council at the end of February, 2008 and was then ratified by the European Commission.

OBJECTIVE: Promote sustainable patterns of consumption

The Government put out an extensive awareness campaign about energy savings measures and protection of the climate between October 2007 and July 2008, with the aim of promoting sustainable consumption methods. The campaign “*Think climate, act clever*”⁵⁶ aims at supporting the growing mechanism used by citizens to act against climate change by informing them and furnishing them with practical advice on energy savings steps.

IG 12 - Extend and expand the internal market

OBJECTIVE: Promote accurate and timely transposition of directives and proper functioning of the internal market

Well aware that the system for transposing Community law remains inadequate, the Government has committed to finding rapid and lasting improvements. The latest measures are based on coordinated work method set out in the Prime Minister’s circular dated 10 July 2006 that ensures a consistent and rigorous follow-up on European legislation queued for transposing. These new measures are intended to allow a systematic and rigorous follow-up, including within the Government Council, of each legislative proposal of the European Commission throughout the European legislative process⁵⁷. As of 1 June 2008, a record is created for each Community legislative act. The record is drafted by departments within the Ministry in charge of negotiating the legislation with the Council of the European Union and contains information on the objectives and content of this draft Community and its legal basis, as well as its probable implications on Luxembourg. The descriptive records go before the interministerial Coordination Committee for European Policy (CICPE). When a piece of Community legislation is adopted by the EU, the Minister responsible for transposing it produces an updated record of it accompanied by a forecast of the date by which it will be transposed⁵⁸. Only Community legislation that runs into difficulty in being transposed by the deadline set are submitted to the Government Council for review. According to the circular, the Minister responsible for the act is to immediately inform the Prime Minister about delays

⁵⁵ This campaign did not directly provide for the constrictive requirements of particular products. This will be attended to later with regard to specific products by means of execution measures that will apply following consultation with concerned parties and an impact assessment. The Framework-Directive applies to all products using energy for their operation that are available on the market. All energy sources are covered, including electricity and solid, liquid and gas combustibles. It applies to all products available on the EU market and to imported products.

⁵⁶ http://www.environnement.public.lu/energies_renouvelables/dossiers/think_climate/Presentation_20071013.pdf

⁵⁷ The Ministry of Foreign Affairs and Immigration has the lead in managing these new measures pursuant to the role that has been attributed to it in coordinating European policy.

⁵⁸ As provided for in Appendix I of the Prime Minister’s circular dated 10 July 2006.

in drafting of draft legislation that will transpose a legislative act of the Community. The Minister's letter of explanation in this case will indicate the specific difficulties encountered on a legislative or other level that could be a barrier to transposing the directive within the deadline. It also states what has been done to inform the European Commission of the situation and the steps the Minister suggests be taken in order to transpose the directive in the shortest time possible. In addition to managing this upstream set of issues, the Government Council will also continue to pursue violation procedures when acts are not transposed within the set deadlines.

The transposition of directive 2006/123/CE continues. The screening of the legislation has been completed and now the framework law must be finalized by transposing the horizontal provisions of the directive. This law will most likely also include elements of administrative cooperation, administrative simplification, aid for companies that are attempting to get established or seek to provide services in the European Community (through one single point of contact) and guarantees for end users and consumers of services by means of improved service quality and pre-contract information to consumers, as provided for by this directive. The directive must be reviewed by the interministerial committee and will then be sent to the Government Council for adoption with the goal of starting the legislative procedure at the end of 2008.

In 2007, the Luxembourg SOLVIT center⁵⁹ continued its promotional activities aimed at increasing knowledge about the network among the general public. It also participated in several conferences and seminars and was present at the "Contact" event. The number of files dealt with continues to increase, which allows obtaining a better view of the body of issues that subsist in the internal market and makes them known to the competent authorities, as needed. The second bi-annual summary report will be published at the end of 2008.

<p>IG 13 – Ensure open and competitive markets inside and outside Europe, reap the rewards of globalization</p>

A draft legislation⁶⁰ was submitted in December 2007 that aims to rationalize procedures, concentrate resources within a single institution and widen the scope of action for this institution by conferring it with consultative powers and the ability to carry out sector surveys. This is a policy to revitalize competition in favor of developing free and genuine competition.

<p>IG 14 - Create a more competitive business environment and encourage private initiative by improving regulations.</p>
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OBJECTIVE: Increase impact studies and analyze flows

The national Committee for administrative simplification in favor of enterprises (*Comité national pour la simplification administrative en faveur des entreprises*, CNSAE) published an initial report (*Entfesselungsplang fir Betriber*) in 2007, which the Government Council adopted in March 2007. A significant part of this report is the action plan that presents 76 actions, of which 50 have been achieved, 17 are in the process of completion and 9 remain to be achieved, two of which have yet to be approved by the Government Council.

⁵⁹ <http://www.eco.public.lu/attributions/dg2/solvit/index.html>

⁶⁰ Draft legislation to amend the law dated 17 May 2004 relating to competition (5816).
<http://www.chd.lu/fr/portail/role/default.jsp>

The Simplification Coordination Committee (CCS) that was set up in the fall of 2006 by the Government has the responsibility of analyzing impact statements and issuing an opinion to the Government on all proposed laws and Grand-ducal regulations dealing with companies. To date, 38 opinions have been issued to the Government Council.

In May 2008, an initial series of proposals emanating from ad hoc working groups⁶¹ that cover the areas of food security, the environment, taxes, social security, on the job health and safety and transportation, were approved by the Government Council. The conclusions already drawn by these groups were validated by the Government Council in May 2008 and will now be implemented.

In March 2007, the Government adopted the Standard Cost Model as its benchmark model, in accordance with the CNSAE proposal. It was decided that the model be applied occasionally to specific projects, following requests by the Ministry responsible for a given project.

OBJECTIVE: Codify legislative texts

The Consumer Code came before the State Council and Parliament in May 2008⁶². As the Code included most of the existing legal texts that have been only partially modified to ensure consistency, a proposed law could be adopted within a year.

OBJECTIVE: Optimize information exchange between administration bodies and companies

The electronic assistant for creating companies that was announced in 2007 is nearing completion. In 2009, the virtual one-stop-shop for companies will be progressively improved with new technologies like online processing in relation with the Services Directive⁶³. Creating a company through virtual tools was initially limited to submitting requests for basic registration items. This will now be extended to include the environmental and security permit act on classified establishments. The one-stop-shop will also enable business people to electronically declare inflows and outflows of employees beginning in 2009, according to the rules of single status (*statut unique*)⁶⁴ approved in 2008. Lastly, electronic VAT declarations will be incorporated in the same one-stop-shop.

⁶¹ These ad hoc working groups were set up in March 2007 with the approval of the Government Council to deal with “ex-post” records. They proposed limited measures for administrative simplification and better regulation introduced by employer representations or administrations and selected beforehand by the Government Council. The groups are made up of representatives of companies and administrations and are involved in drafting specific proposals to resolve issues submitted by these representatives of companies and administrations.

⁶² Parliamentary Document 5881.

⁶³ See IG 12 - Extend and expand the internal market.

⁶⁴ See IG 21 - Promote flexibility combined with employment security and reduce labor market segmentation, having due regard to the role of social partners. It refers to the standardization of the status of manual workers and employees in the private sector.

Box 3: Implementation of the European Charter for Small Enterprises and of the Small Business Act

I. The Three Priority areas for 2008-2009

1. Education and training for entrepreneurship (Action line 1 of the Charter / IG 15)

Make entrepreneurship talked about and valued

» The 2008 “Luxembourg Company Days” (*Journées portes ouvertes*) allowed a wide public group to get an idea of the diversity and vitality of companies and to fuel the concept of entrepreneur as a vocation among youthful visitors. Between 2007 and 2008, the number of companies participating grew 12% while the number of visitors jumped 22% following a media campaign.

» To follow through with the first media campaign *Trau Dech* for promoting entrepreneurship, another approach, consisting of testimonials by entrepreneurs was very well received by the public.

» The Woman Business Manager of the Year 2008 award, was set up by Dexia-BIL bank, with the aid of the Federation of Women Business Chiefs, the Chamber of Trades, the Ministry of Middle Classes, Tourism and Housing, the Ministry of Equal Opportunities and the Ministry of the Economy and Foreign Trade. This is used to promote entrepreneurship among women. Promoting this concept is all the more important because the rate of women creating businesses in Luxembourg is quite low.

» Members of the Junior Chamber International (JCI) Luxembourg established the 2008 Young Entrepreneur Luxembourg prize. The Government provided financial support for this initiative that is intended to reward the most creative young entrepreneur. The winner competes in a worldwide competition.

» The electronic platform <http://www.businessplan.lu> allows future start-up entrepreneurs to write their personalized business plans online. One of the specificities of this virtual platform is that it is adapted to the economic, financial and legal environment in Luxembourg. This site also stands out through its interactive character and its use paths. The platform was introduced in Brdo, Slovenia during the European Commission-organized European “Charter for Small Enterprises” conference. In conformity with the goals of this conference, which was to exchange good practices at the European level in the area of mechanisms promoting the creation and development of SME, the *Institut Universitaire International Luxembourg* (IUIL) launched a “dissemination” procedure for the platform⁶⁵.

Bolster school – professional realm links

» A Master of Science in Entrepreneurship & Innovation (M.Sc.E.I.), a degree program offered by University of Luxembourg, has the vocation of promoting entrepreneurial spirit in companies and creating innovative companies by means of setting up a university training program.

» The COURAGE project is an inter-regional initiative supported by IUIL, the University of Luxembourg, University of Saarbrücken, the *Fachhochschule* of Trèves, the University of Trèves and the Inmit (*Institut für Mittelstandsökonomie*). The objective of the project is to make people aware of processes for starting up and developing companies throughout the Greater Region by means of initial and continuing training programs. The project was supported by the European Interreg III A –Delux program and ended on 30 June 2008. The following projects were carried out through this university and inter-regional cooperation:

- The *Gründercup Interrégionale*, a business management competition in which teams of students from Greater Region universities compete with other national *Gründercup* winners. The *Gründercup* is a combination of training for setting up a business and managing a business in a

⁶⁵ Primarily to the *Université de Metz*, the *Ecoles Nationales de Commerce et de Gestion du Maroc* (National Business and Management Schools of Morocco) and the University of Bratislava (See point II of the Business Plan Toolbox).

simulated business set up competition, in which students learn to distinguish the bases of the business environment through the 'learning by doing' process.

- The *Summer School Entrepreneurship Interregional*, summer courses for allowing newly degreed students and students still working toward degrees to broaden their knowledge in company management.
- The *Nachdiplom in Unternehmensführung* is an intensive continuing education program intended for managers and CEOs of companies who wish to improve their knowledge of company management, especially regarding organizational analysis and the perspective of developing their company and personnel.

COURAGE II: The *Fachhochschule* of Trèves, the University of Saarbrücken and KWT as well as the IUIL have all expressed their desire to extend the project. The COURAGE II project was therefore unveiled with a long-term, wide diffusion view in mind, which would also involve French-speaking universities in Belgium and the Lorraine region.

» The non profit association *Jonk Entrepreneuren* Luxembourg, a branch of the Junior Achievement network, brings together representatives from the business world and education sector, especially SME owners. The association is based on a public-private partnership of which 48.5% of the current budget originates from the public sector and 51.5% from the private sector. Numerous projects were carried out in 2007- 08 as a result of this financial support. The non-profit organization *Jonk Entrepreneuren* has also taken over the mini-companies competition. Students are responsible for operations of a mini-company for an entire year where they make decisions and assume responsibility. In order to guarantee that each mini-company project develops in a professional manner, a pool of entrepreneurs and coaches intervene occasionally to give advice to students, who also receive training courses in entrepreneurialism. The management team deemed to be the best participates in a European competition set up by Junior Achievement-Young Enterprise Europe.

Promote new start-ups, especially innovative ones

» The University of Luxembourg and the Chamber of Commerce are offering a Master of Science in Entrepreneurship & Innovation (M.Sc.E.I.). This is an advanced university degree program for students who want to perfect and acquire practical knowledge, or for managers who want to improve their professional skills in the area of innovation. This program was launched for the first time during the 2007-2008 academic year. The program was a balance of theory and immersion in the world of business. Students from some 17 different countries and of varied academic backgrounds have enrolled for the 2008-2009 academic year. They will have the benefit of teaching from professors of different nationalities each of whom has their own vision and experience with entrepreneurialism. In addition, some twenty companies will provide support behind teaching dispensed by professors. The one-year course provides a syllabus given entirely in English. This Master degree is very much concentrated on the business world and is based on a strong triangular relationship between students, the teaching staff and companies.

» The principal objective of the 1,2,3 GO, interregional business plan competition is to assist innovative company creators in the Greater Region to draft their business plans. This project was selected as a standard of good practice in 2007 and was ranked among the ten best initiatives at the Small Enterprises Charter conference organized by the European Commission at Berlin in June 2007. It was again awarded a prize in December 2007 in the "Enterprise Support" category at the European Entrepreneurship Award 2007 in Porto. It was also in 2007 that 1,2,3GO introduced its "Startup Subsidy" project providing high-level support in developing innovative start-ups through 100% guarantee deposits and a sponsoring contract. Beneficiaries get access to a low interest loan from partner banks and receive support and counsel from a business start-up specialist for the duration of the loan life. Now the 1,2,3GO program is concentrating on its "core business" of linking project entrepreneurs with network coaches to promote exchanges of experience and mutual aid between experts and innovative company start-ups.

» The “Start-up or Acquiring Businesses” exhibition, sponsored by the Ministry of the Economy and Foreign Trade, the Ministry of Middle Classes, Tourism and Housing and the Ministry of Equal Opportunities was organized in 2007 by the Chamber of Commerce as part of the “Contact” event. The 2008 exhibition will be put on by the Chamber of Trades at the end of November, 2008. Over two weeks, many events that promote entrepreneurship will be put on by the Chamber of Trades, the Chamber of Commerce and the Federation of Women Business Chiefs of Luxembourg. All the players involved in starting up or taking over companies, including the professional chambers, the Artisans Loan Mutual Society (*Mutualité d’aide aux artisans*), the Business Guarantee and Loan Society (*Mutualité de cautionnement et d’aide aux commerçants*), support structures, banks, insurance companies and business counselors will be in one place. Information stands will be available for future start-up or take over entrepreneurs and an initial informal contact can be easily made.

Make available hosting and management infrastructure to start-ups

» Since 2003, the Government has operated the Business and Innovation Center Ecostart 1 in Foetz from the perspective of a start-up hosting and coaching infrastructure, intended for both launches of new innovative businesses and for developing companies or foreign entities looking for a landing area in Luxembourg. In 2006 the Government approved new infrastructure and the Ministry of the Economy and Foreign Trade began construction of a new facility in Foetz dubbed Ecostart 2 that boasts some 8,000 square meters of space broken down into 6,300 square meters for workshops and 1,700 meters for storage and offices. The new Center opened in 2007. The Ministry of the Economy and Foreign Trade also opted to extend and even increase the scope of the convention existing with the EIG Luxinnovation, assigning it the dual mission of coaching hosted companies and managing and promoting the Ecostart center. Parallel to the extension of its activities in Foetz, the Ministry of the Economy and Foreign Trade has also pursued efforts to create a high tech incubator within the structure at the *Cité des Sciences, de la Recherche et de l’Innovation* at Belval-Ouest, to be called Ecostart 3.

» In February 2007 the Government introduced its model for future organization of creating innovative businesses to executives from Luxinnovation and the CRP-HT. In 2008, the Government drew up a business plan for the model in collaboration with CRP-HT and Luxinnovation.

2. - Improved legislation and better regulation as a principle of the “think small first” concept (Action line 3 of the Charter / IG 14)

» Consultations concerning the preliminary proposed law on controlled management, for which the objective is to avoid bankruptcy through restructuring plans, have been completed and a text is being finalized for rapid submission to the Minister of Justice. In addition, the possibility of reviving a company following a bankruptcy or court-ordered company wind up could remain open, provided the entrepreneur’s professional reputation remains intact and that the person completes an accelerated training program in company management given by the appropriate employer chamber.

» Following the 2004 coalition agreement in which the Government accorded a priority rating to administrative simplification, the national Committee for administrative simplification in favor of enterprises (*Comité national pour la simplification administrative en faveur des entreprises*) was identified as a “Best Practices” entity in 2005 during the Charter Conference in Luxembourg, and published its *Entfesselungsplang fir Betriber* report in 2007, which the Government Council adopted in March 2007. The plan is based both on the contributions of the various ministerial departments and those of companies participating in the working groups and plenary CNSE sessions. One of the most significant parts of the report is the action plan, which is divided into four headings: 1. Administrative simplification structure ; 2. Prerequisites for administrative simplification ; 3. Principles of administrative simplification ; 4. Other instruments and actions for administrative simplification. It introduces 76 concrete actions, of which 50 have been achieved, 17 are in the process of completion and 9 remain to be achieved, two of which have yet to be approved by the Government Council.

The Government set up working groups that are reviewing 46 administrative simplification proposals outlined in the action plan, of which thirty four have been presented by corporate representatives, three by administrations and ten via horizontal sources.

Ad hoc working groups were set up in March 2007 with the approval of the Government Council made up of representatives of companies and administrations to and are involved in drafting specific proposals to resolve issues submitted by these representatives of companies and administrations. An initial series of proposals were approved by the Government Council in May, 2008.

In the fall of 2006, the Government set up a Simplification Coordination Committee (CCS) to analyze the impact statements and draft recommendations for the Government concerning all proposed laws and Grand-ducal regulations dealing with companies, as an ex-ante procedure. The CCS has issued a total of 38 recommendations to the Government Council up to now.

» The second phase of the eVAT system that was chosen as a best practice in the “European Charter for Small Enterprises: 2007 best practice selection”, was expanded to include electronic deposits of declarations for quarterly and annual summary statements, the amortization statement and the statement of purchased assets subject to amortization. The former authentication system by means of user name and password has been replaced by a system requiring a more secure LuxTrust professional certificate. The other public online applications also use this authentication method necessitating a single professional LuxTrust smart card for access.

3.- Support the quality effort in small companies, with special concentration on internationalizing aid (Action line 9b of the Charter)

»As part of the assistance and consulting activities in helping companies access foreign markets - especially in Germany, France and Belgium - the *Contact Entreprise* service of the Chamber of Trades is collaborating with the Enterprise Europe Network to complete a certain number of administrative procedures for these companies to facilitate accessing services abroad. Using companies’ proxies, the support entity carries out such as applying for a VAT number, statements concerning direct taxation and notifications to be submitted to respective authorities before beginning work. In addition, the Chamber of Trades informs companies about legislative changes occurring in bordering countries that may be of interest to those seeking to do business abroad.

II Other areas

Less costly and more rapid registration (Action line 2 of the Charter / IG 15)

» The Business Plan Toolbox (BPTB) of the IUIL is free online aid (available in English, French, German and Portuguese) intended for future business creators. The tool comprises different modules including business plan containing market analyses, marketing aids and financing, a virtual guide with responses and solid examples for drawing up a business plan, online information and advice provided by a counselor who has analyzed business plans - this is only available for students at present but could be extended to all users in future - and the single form, with date entered only once as the tool then automatically fills in all required forms. BTPB was ranked in the top ten of best practices during the Brdo Charter Conference in June 2008.

» Two single points of contact cover all start-up procedures for companies, one for handcraft businesses and one for trade businesses. The procedure for recruiting the first employee is still subject to a mandatory announcement of a vacant position to be submitted to the Labor Administration (ADEM), however registration documents for social security and pensions are also available through both single points of contact and these procedures may be handled through assistance by its personnel.

» The electronic assistant for creating companies that was announced in 2007 is nearing completion. In 2009, the virtual single window for companies will be progressively improved with new technologies like online processing in relation with the services directive. The virtual creation of a company, initially limited to requests for basic registration items, will be progressively extended to include other authorization procedures. The window concept also enables companies to electronically declare inflows and outflows of employees beginning in 2009, according to the rules of single status approved in 2008. Lastly, electronic VAT declarations will be incorporated in the same virtual window.

» The objective of granting authorization to create a new company within a week should be achieved in the final quarter of 2008. Significant progress has been achieved following the implementation of a new computer application implemented in the authorizations department of the Ministry of Middle Classes, Tourism and Housing.

IG 16 - Expand, improve and connect European infrastructures
and complete priority cross-border projects

OBJECTIVE: Improve connectivity between Luxembourg and the European and international environments

The Government has stressed the importance of maintaining high quality links to European railroad networks because major interdependencies exist between Luxembourg and the Greater Region, but also with the remainder of the countries in Europe. Thus the TGV East that has linked Luxembourg to Paris since June 2007 reduces travel time between the two capitals by 42%. There are five round trip trains per day. The completion of the second phase of the Europe East high speed rail line that will achieve the Luxembourg-Strasbourg section of the Eurocap-Rail project, will, by the project's completion date set for 2015, reduce travel time between Luxembourg and Strasbourg by 32%. In addition, an international rail link with Germany has been planned⁶⁶, which will guarantee appealing train service on this section. Furthermore, the Government of the Saar and the Government of Luxembourg are considering establishing a direct rail connection between Saarbrück and the City of Luxembourg.

Operations of the new Luxembourg airport terminal began in May 2008, improving traveler flows through modernized airport infrastructure that is adapted to the current and future economic context. Parallel with projects in the European and international arena, the achievement of infrastructure projects announced on the cross-border and national levels was continued. Thus, a new rail line that links the Luxembourg airport and the European district Kirchberg to the national rail lines was approved by the finance act dated December 18th, 2003. The portion of this project located directly in front of the airport has been completed and the rail line is slated to come on-stream in 2016.

The Government and the City of Luxembourg have decided to proceed with the light tramway project and has instructed the EIG LuxTram to complete planning for the project. The Tram will be routed through the center of Luxembourg and link up with the peripheral stations and highly urbanized neighborhoods, or where major development is projected in the medium and long term. The project has the two-pronged objective of increasing the attraction and capacity of urban public transportation within the City of Luxembourg and significantly reducing motor vehicle emissions. The major attractions of this project include the ease of integrating it within the urban context, the continued use of existing tramway infrastructure capabilities, the fact the project can be completed in the short term (in 2015), the benefits to users of increased service as sections are progressively completed and the reasonable cost of the construction project⁶⁷.

In the area of freight transportation, the Government set up a company called CFL CARGO to address the need to adjust the balance between the various modes of transport. The company

⁶⁶ The Luxembourg-Wasserbillig-Trèves-Coblence route

⁶⁷ Other analyses for future establishment of a light tramway system are underway in the South Region and in Nordstad.

arose as a result of a joint venture between the national railroad company CFL and the steel company Arcelor. CFL CARGO was established in October 2006, with CFL retaining the majority of shareholder's equity. The company will engage in all operations concerning logistics and transportation by rail both domestically and internationally.

Several initiatives were begun in the area of freight corridors in order to improve rail transportation of merchandise through increased use of this form of transport. Luxembourg supports these initiatives and participates in the development of the following freight corridors: Rotterdam - Lyon, Antwerp – Basel and BELIFRET⁶⁸.

Several railway corridors have been developed within the trans-Europe railroad network that aim to improve merchandise traffic potential in Europe, chiefly by means of rapidly implementing the European Rail Traffic Management System (ERTMS), but also via other infrastructure and rolling stock investments. There are six corridors dissecting Europe, including the Antwerp – Basel/Lyon Corridor C that measures around 1,840 kilometers and crosses Belgium, Luxembourg, France and Switzerland. The path of this corridor is strategic for freight transportation because it links one of the oldest ports in Europe to first class industrial centers⁶⁹. Integrating ERTMS throughout Corridor C will occur from 2008 to 2018, by successive stages and sections. In order to facilitate studies, work on improving interoperability along corridor C and to build a high-performance system, a European EIG was established and dubbed EEIG C corridor. The memorandum of association for GEIE C Corridor was signed in Luxembourg in March 2007. The aim of the EEIG is to develop, in concert with its members, specific measures by improving interoperability and the attractiveness of the offer on this line. In addition, the EEIG intends to draw up a detailed plan of action for the introduction of the ERTMS on the Antwerp-Basel C Corridor. Luxembourg will chair this structure. The official setting up of the EEIG is an important step in the realization and development of Corridor C. This organization is also an excellent base for railway companies who intend to use this railway axis for freight traffic.

Luxembourg is a member of the non-profit and multi-sector association FERRMED, whose headquarters is located in Brussels. FERRMED was established to improve competitiveness by means of harmonizing railroad standards for a single, interoperable, European railroad system and for a major railroad corridor extending from Scandinavia through the Rhine-Rhone region to the western Mediterranean area.

In 2007, the Government began operating a railway-highway freight link between two platforms located respectively in Boulou (France) and Bettembourg (Luxembourg) using the low floor wagons developed by MODALOHR. The project's objective is to pursue the expansion of the service by strengthening results obtained in order to arrive progressively at a proper rhythm.

Regarding the levy system for road infrastructures, Luxembourg continues to consider the possibility of better adapted rate structures that correspond to meeting the objective of better infrastructure use and more effective recognizance of environmental costs. At the moment,

⁶⁸ The precursor in Europe takes its name from the first letters of the countries that are traveled through: Belgium, Spain, Luxembourg, Italy and France.

⁶⁹ The European Union supports the development of these corridors in collaboration with the member states involved and the infrastructure managers of the countries concerned. The EU is also supporting this venture financially with up to half possibly being paid by the EU. There are five different signaling systems currently operating on corridor C. The introduction of the ERTMS standardized safety system will stimulate the growth of freight traffic and will contribute to the speed and reliability of train traffic.

Luxembourg continues to operate motorways and lesser highways in the Grand Duchy under the “Eurovignette” road charging system while it seeks to fully implement the new elements of directive 2006/38/CE that reinforce the possibility of applying diverse rates depending on environmental performance of heavy trucks that better reflects costs borne by the community and the environment.

Lastly, with regard to airport operations, the Government has set up a new rate structure for airport use fees at the Luxembourg Airport that took effect in June 2008. The structure incorporates changes in fees depending on the hourly timeframe of use, which requires users to factor in environmental considerations in planning operations.

OBJECTIVE: Carry out a proactive policy in connectivity of electronic communications networks

The Government has continued its efforts to improve international and domestic connectivity. The LUXCONNECT organization has existed since 2007 and the equipment, cable and infrastructure necessary is in place for service to begin in February, 2009⁷⁰. Major investments have been made by fixed networks that are essential for bringing fiber optic wire in homes to the local loop and thus making possible new broadband and very broad band services such as television, on-demand video and other services. The incumbent operator in telecommunications launched television by Internet (*iptv*) in 2008.

The Government also expects to pursue specific actions to ensure heightened competition by means of multiplying fixed infrastructure and radio. At the end of 2007 the incumbent operator in telecommunications launched a European broadband connectivity offer⁷¹ and frequencies were placed on the market allowing WiMAX mobile applications.

⁷⁰ See IG 9 - Facilitate the spread and effective use of ICT and build a fully inclusive information society.

⁷¹ For more details see: <http://www.teralink.lu/>

4. Guidelines for employment policies

IG 17 - Implement employment policies aiming at achieving full employment, improving quality and productivity at work and strengthening social and territorial cohesion

OBJECTIVE: Measuring full employment: a wider employment rate criteria⁷²

The Government set up the first National Employment Days in July 2008 with an eye to putting the objective of full employment in the center of interest and to illustrate how complex and multi-dimensional the subject is. The event is an encounter forum for the gamut of economic and social actors and was used to inform and increase awareness in all persons concerned with the many aspects of employment policies in Luxembourg. The forum embraced all the different social strata, allowing an exchange of ideas and concepts against the background of structural unemployment in Luxembourg, seeking innovative ideas to fight structural unemployment, introducing good practices and discussing an overall strategy for optimizing the labor market situation in Luxembourg. Ideas stemming from the forum will be presented in upcoming months to the various organizations with jurisdiction over the issue, including Parliament and the Permanent Work and Employment Committee. Four subjects formed the basis of the discussions, to wit the relationship between employment policies and education and training policies, the relationship between employment policies and immigration and integration, the relationships between employment policies and social and activation policies and the relationship between employment policies and economic policies.

A job fair featured 73 entities who occupied 56 information stands that work in the areas of employment, the fight against unemployment and continuing education.

The new series of social measures announced by the Prime Minister on 22 May 2008⁷³, as part of the Government statement on the economic, social and financial situation of the country to join the “Fight Against Poverty and Precariousness” found their way into the National Strategy Report on Social Protection and Social Inclusion (RNS 2008) which makes a national strategy of the common social objectives of the Member States⁷⁴.

At the beginning of 2008, the unemployment rate was at 4.2% compared to 4.5% one year ago. First the number of unemployed persons receiving full benefits fell, then the number of

⁷² Although in the Lisbon 2 Strategy the Commission recommended to Luxembourg that the employment rate be increased in order to augment the supply of labor on the national level, to revitalize growth and to ease social and public expenditure, these findings must be put into perspective. Internal labor—meaning the total number of persons working on Luxembourg territory—increased between 2006 and 2007 by 4.2%. In its second opinion released in 2003 on the Broad Economic Policy Guidelines of the Member States and the Community (BEPG), the ESC critiques this apparent contradiction. The labor supply features three components: indigenous, cross-border and immigrant persons. Cross-border workers are completely excluded from employment rate statistics. This rate is a purely national residency-based concept. Yet the rate of cross-border workers in internal employment is 37%, and about 50% of new jobs created in the recent past have been taken by cross-border workers. Thus the ESC critiqued the validity of this indicator in the case of Luxembourg. The indicator “*is not representative of macroeconomic realities in Luxembourg and lends itself even less as a macroeconomic employment objective, which should be serving as a basis for setting employment policy.*” In contrast, employment rates for the young, women and older persons are useful tools for understanding how to use human resources in the economy.

⁷³ <http://www.gouvernement.lu/gouvernement/etat-nation/etat-nation-FR-2008/index.html>

⁷⁴ With regard to this new group of social measures, refer to the RNS 2008, particularly chapters 1.2.1.2 “The Fight Against Poverty” and chapter 2. “National Action Plan for Social Inclusion”

persons occupied in an employment measure. Finally, it was the number of job seekers registered ADEM that dropped. The only category of unemployment that continues to increase at a significant rate is handicapped workers with reduced work capacity, up 30% per year over the past to years. This change also partially explains changes in the structure of unemployment registered at ADEM: the age of unemployed workers and the duration on the rolls has increased.

For almost all areas of activity the number of job seekers per offer fell in 2007, manifesting an increase of tension in the market, particularly in the financial sector. The situation is particularly tight in the finance and education sectors, where there is a genuine shortage of personnel.

In 2007, the employment rate for persons aged 15-64 continued to increase, mainly because of the change in the employment rate of women, which rose from 54.6% in 2006 to 56.1% in 2007.

Table 4: Employment rates, persons 15-64 years old (in %)

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Population totale	59.7	60.1	61.6	62.7	63.0	63.8	62.2	62.5	63.6	63.6																																																																																																														
Nationaux	57.0	58.3	59.6	61.6	59.1	60.9	59.0	60.1	60.9	60.9																																																																																																														
Etrangers	64.3	63.1	64.8	64.4	68.6	68.3	66.7	65.8	67.2	67.2																																																																																																														
Hommes	74.0	74.5	74.4	75.0	74.9	75.7	73.3	72.8	73.3	72.6																																																																																																														
Femmes	45.2	45.6	48.7	50.1	50.8	51.8	50.9	51.9	53.7	54.6																																																																																																														
Nationaux- hommes	72.3	73.4	73.3	75.0	71.3	73.1	70.3	70.5	70.5	69.7																																																																																																														
Etrangers- hommes	76.9	76.2	76.1	75.1	80.4	79.7	77.4	76.1	77.2	76.6																																																																																																														
Nationaux- femmes	41.1	42.6	45.4	46.7	47.1	48.2	47.5	49.4	51.1	52.2																																																																																																														
Etrangers- femmes	51.8	50.2	53.5	54.6	56.4	57.1	55.8	55.3	57.2	57.8																																																																																																														

Source: STATEC, EFT (rupture de série en 2003)

The employment rate of older workers shows a balanced evolution. The exceptional upsurge in 2006 was probably due to sampling error.

Table 5: Employment rate of older workers aged 55-64 (2004-2007)

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Total population	30.4	31.7	33.2	31.7
Luxembourg citizens	26.5	27.6	28.2	27.3
Foreign citizens	38.9	40.0	42.9	39.9
Men	38.3	38.3	38.7	35.6
Women	22.2	24.9	27.8	28.0
Male Luxembourg citizens	34.1	33.7	34.0	30.6
Male Foreign citizens	47.0	47.1	48.0	45.4
Female Luxembourg citizens	18.9	21.5	22.4	24.0
Female Foreign citizens	29.7	32.1	38.1	35.0

IG 18 - Promote a lifecycle approach to work
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OBJECTIVE: Introduce aid for services

In order to expand access to hosting structures for children to borderline poverty households the Government has introduced a system of issuing checks valid for care services intended for families with children. The program will enable families to pay for a certain number of hours at nurseries, after-school child care centers and child reception centers (*maisons relais*). The program should help ease expenses for caring for children⁷⁵.

OBJECTIVE: Re-evaluation of assuming responsibility for school children outside of classroom hours⁷⁶

On 1 January 2008, Luxembourg had a population of 105,197 children, equivalent to 21.74% of the total population. Of these, 3.44% were children aged⁷⁷ 0 to 3, 11% aged 3 to 12 years and 14.41% were aged 0 to 12 years. The Government calculated that there would be a need for 35,000 spaces by 2015. It should be noted that the policy implemented within the framework of this figure is likely to contribute to increased female employment.

Table 6: Progress achieved in implementing child care centers⁷⁸

	Spaces available on 31 Dec 2005	Spaces available on 31 Dec 2006	Spaces available on 31 Dec 2007	Spaces available in September 2008	Projected spaces available ⁷⁹
<i>Maisons relais</i> children reception centers (MRE)	8,000	10,053	11,425	13,338	8,064
Nurseries, MRE nurseries and Day Nurseries	5,015	5,402	5,520	6,414	1,190
Boarding facilities	796	847	886	880	
Adult child care provider	247	347	437	1,188 ⁸⁰	312 ⁸¹

⁷⁵ To see the introduction of this measure go to Political Priority 1 of the Action Plan for Social Inclusion 2008-2010 of the RNS 2008-2010.

⁷⁶ This is also an implementation measure of the European Youth Pact.

⁷⁷ By children aged 0 to 3, we mean all children under the age of 3, or children aged 0 through 2 years. This applies for the other age levels cited as well.

⁷⁸ The statistics in the chart reflect existing spaces in the following types of structures: Nurseries, child reception centers, boarding facilities and adult child care providers.

⁷⁹ Data available in September, 2008.

⁸⁰ Statistics available for the month of June, 2008.

Total :	14,058	16,649	18,268	21,820	+9,566
Change in number of spaces compared to previous year		+18.43%	+9.72%	+19.44%	

OBJECTIVE: A life-long guidance

The basic activities of the Professional Guidance department of ADEM are information, guidance and counseling approached from a lifelong perspective and these services may be dispensed individually or in groups. This information and guidance work is becoming more and more requested over recent years by a growing number of adults. The department provides guidance to young people by working within a framework of school work plans of the various technical schools; trying to give students a sense of responsibility from the moment they begin secondary technical education, to promote their personal development and to facilitate access to their academic and professional paths. Students are thus led to explore data concerning the world of careers, to structure and accumulate related knowledge with the goal of making a decision and eventually carrying out their projects.

The counseling groups Local Action for Youth (*Action Locale pour Jeunes*), The Center for Psychology and Academic Guidance (*Centre de Psychologie et d'Orientation Scolaires (CPOS)*), the Documentation and Information Center for Higher Education (*Centre de Documentation et d'Information sur l'Enseignement Supérieur (CEDIES)*) and the Professional Guidance department of ADEM all carried out individual and group actions as part of the "Guidance" project at regular intervals at four secondary education and secondary technical education schools. The objective of these actions was to step up and maintain a regular presence of vocational guidance counselors within the schools so as to provide information and detailed explanations to students and parents of students regarding training in general available for professions on our labor market. This model will continue to expand over upcoming years. In addition, several Inter-Ministry working groups, some of which are tripartite, continue to discuss a strategy to optimize professional and academic guidance programs in Luxembourg.

OBJECTIVE: Continue the struggle against differences in the salary gender gap

A number of seminars have been organized in collaboration with the Chamber of Commerce and the Chamber of Private Employees for late 2008 and early 2009 intended for employers and union representatives who negotiate collective bargaining agreements. There are also to be courses on the Katz and Baitsch analytical evaluation system of job functions ABAKABA, a scientific method with the objective of establishing a fair salary scale that relates to requirements of men and women's work activities.

OBJECTIVE: Continued adaptation to the social security system

The reforms enacted over the past thirty years have established an extremely unified and robust pension system in Luxembourg that has successfully accompanied the transformation of Luxembourg from an industry-based country to a services-dominated economy. The merging of pension schemes by profession into a single scheme as well as increased coordination between the general and special pension schemes have resulted in better dispersal of the risk of structural changes in the labor market than was achieved in the past where each pension fund was funded autonomously. Some reforms that are currently underway in other countries have long been

⁸¹ According to the Ministry of the Family and Integration for June 2008, adult child care providers will have 1,500 spaces available on 31 December 2008.

implemented in Luxembourg, such as calculating pensions on the basis of professional revenue over an entire career or coordination between the two Luxembourg pension schemes.

The financial viability of the country's pension schemes is assured in the medium term, with a relatively young working population and a continuous flow of labor feeding average employment growth of around 3% over the last ten years. The pension scheme for the private sector is receiving an inflow of revenue sufficient to guarantee continued accumulation for the legal reserve in the medium term even after covering costs. The amount of labor available depends essentially on changes in the economic growth of the country and sustained growth over the long term is far from certain. Thus multiple projections carried out by national and international institutions indicate that pension schemes will come under pressure in the long term.

The International Labor Organization's (ILO) actuarial and financial evaluation of the general pension scheme in Luxembourg forcefully concluded that the country perform a structural consolidation of the scheme for the long term. The European Commission's 2006 Synthesis Report on Adequate and Sustainable Pensions concludes that the financial viability of retirement systems hinges not only on relatively high rates of economic growth in the future, but also on the major contribution of non-resident workers to the Luxembourg economy and the pension scheme and that although the reserve fund of the general pension scheme is projected to increase, long-term financial sustainability of the pension system is not ensured in the long run. In its 2008 bi-annual report on Luxembourg, the OECD stresses that costs associated with ageing populations will increase moderately over the next decade, but that in the long term increases will be so onerous that problems that arise in maintaining budget viability will be more serious in Luxembourg than in most other European countries.

The Government emphasized its firm will to free up sufficient financial resources to ensure the longevity of the social security system and guarantee inter-generational fairness in consultations with the Tripartite Coordination Committee held in 2006. The Government likewise stated its desire to participate in developing measures to support older persons. Thus the Government, rather than reduce its current support of the pension system, is maintaining the principle of allocating supplementary revenue from the general pension scheme to pension reserves. It should be stressed that in 2007 nearly one billion euros went into the scheme's reserve fund, more or less 2.8% of GDP. This contribution is expected to increase considerably over upcoming years. The reserve fund amounted to over 25% of GDP for 2007.

In order to ensure the security of investments while simultaneously minimizing risk inherent in the financial markets, the Government announced as far back as 1999 in its coalition program that it would do a study on the structure of reserves and on placement policy for the general pension insurance scheme. Subsequently the law dated May 6th, 2004 on the administration of assets of the general pension scheme was approved and implemented. The law stipulates that management of the reserve fund of the general pension scheme falls to a public entity named Reserve Fund and the law authorizes the Fund to invest reserve monies with the goal of guaranteeing longevity of the general pension scheme.

While it is true the reserves total three times annual expenses the financing system in Luxembourg is one of allocations by coverage period and cannot be qualified as a highly capitalized system. The reserve fund backing the general pension fund will serve, at the appropriate time, to guarantee current expenses of the pension system during a transition period. Because the pension insurance scheme maintains significant funds, dialogue with the social partners regarding required reforms in upcoming years can be carried out without undue haste.

The Tripartite Coordination Committee, which includes employers, employees and the public authorities, decided in April 2006 that the social partners and the Government would introduce a think tank that would draw up proposals for ensuring long-term viability of the pension schemes. It would also study different measures for guaranteeing this long-term viability and to adapt the pension systems to changes in professional careers, the ageing of the population and its impact on the length of peoples' active working lives. An initial meeting of this think tank took place in November, 2007 and the group continued to meet through the first half of 2008. No specific proposals have yet been made.

This initiative concurs with the decisions made at the round table discussions on pensions held in 2001 among representatives of parliamentary groups, unions and employer organizations. It was stipulated that some measures would come under review, without impacting low level pensions, if an actuarial analysis - done on the standard seven year cycle - were to show that the reserve level might fall under the legal minimum of 1.5 times annual pension costs, putting sustainable financing of pensions in jeopardy unless supplemental costs were imposed on future generations. In addition, debates held in 2001 under the roundtable on pensions ("*Rentendesch*") auspices led to a series of measures that led to a structural increase in budget expenditures of around 0.6% to 0.8% of GDP beginning from 2002.

As part of the thematic review of policies to promote the prospects of older workers on the labor market in 2003, the OECD found that for over two decades, Luxembourg has favored a policy of rejecting older workers. There is also a continuing collective consensus issuing from extensive cooperation between the Government and social partners as part of the Luxembourg three party model that early eclipsing from the labor market acts as an economic and social shock absorber. According to the OECD, some actions taken recently are moving in the right direction. In 1996, access to disability pensions became more difficult and since the end of 2002, persons reclassified as having reduced work capacity must nonetheless seek work. However, a country by country analysis of illness benefits, work disability and invalidity policies done by the OECD in 2006 revealed that until now, the new procedure has essentially created a new category of "disabled unemployed persons" and has prevented an adequate number of these persons from returning to jobs.

In the hope of evaluating these early retirement-via-disabilities measures, the Government requested the Inspectorate General for Social Security to produce a summative evaluation of the impact of the legal provisions on the effectiveness of measures for counseling and guiding insured parties. In 2008 the Government presented the conclusions of the report to the parliamentary committee on Health and Social Security, and Labor and Employment. The Government is very aware that ageing of the working population over the course of upcoming years will contribute to increasing financial pressure on the system. Costs for unemployment and tide-over benefits paid to persons that have not been placed in the labor market and are reclassified externally, who represent two thirds of all reclassified persons, will likely increase in upcoming years. The external reclassification procedure implies a perspective of lengthy inactivity and fewer chances of finding gainful employment. The majority of persons that are reclassified externally risk become long-term unemployed persons and eventually receive the tide-over allowance. The Government has set up an interministerial working group, comprising representatives of the Department of Social security and Labor and Employment that must find solutions for this issue, mainly concerning benefits paid to persons with reduced work capacity on the labor market.

OBJECTIVE: Facilitate the insertion of young people in the labor market

In the National Plan for Innovation and Full Employment of 2005, the Government announced new measures to promote youth employment that were intended to replace those in the National Action Plan for Employment of 1999. The law that subsequently went into effect on 1 July 2007 reduced the number of measures to two and changed methods with the purpose of increasing its effectiveness in terms of ultimate integration or re-integration of young people into the employment market. The first measure, the “Work Support” contract⁸² targets the public sector, while “Initiation to Work”⁸³ contracts are intended for the private sector. At the beginning of September 2008, ADEM had 153 young people on a Work Support Contract and 507 on an Initiation to Work Contract. For the moment, no other new measures specifically promoting youth employment are being considered.

OBJECTIVE: Make work pay

With regard to the maximum length of time for active measures of the Guaranteed Minimum Income (RMG), the administrative statistics established by the National Social Action Service (SNAS) for 2007 indicate that up till the end of 2007, the number of maximum length decisions made by SNAS increased 7% compared with the end of 2006.⁸⁴ On 1 September 2008, the number of decisions again grew, this time 10% compared to 2007.

The administrative statistics established by the SNAS in 2007 regarding priority guidance of RMG beneficiaries toward active measures for accessing the job market, namely the internship (*stage en entreprise: SE*) and subsidized contracts stemming from the application of article 13(3) of the RMG mechanism, show that:⁸⁵

- Between the end of 2006 and the end of 2007, active internships were up by 15%
- At the end of 2007, 15% of active measures involved internships (in 2006 the figure was 14%)
- In 37% of the cases in which SE measures expired in 2007, the reason for the end of the internship was that the intern found a job, while this was true for only 21% of those working through public employment measures (in 2006 the figures were 47% and 23%, respectively).

⁸² The Work Support contract, which replaces the temporary auxiliary job contract, leans toward early activation and a sense of responsibility for both young job seekers and activators. The new measure makes available a young person to an activator from the public sector for the purpose of obtaining a practical and theoretical initiation to work that should ease the youth’s entry into the job market. The contract is concluded between the young person and ADEM. The staff member whose responsibility it is to supervise young people at the workplace has an essential role in this employment promotion measure. A training plan is developed jointly with the young person and submitted to ADEM within one month, and an evaluation of the person’s performance at the end of the period is due as well. In the framework of a work support contract, the youth works only thirty-two hours per week so as to have enough free time to engage in an active search for a job and/or enroll in a training course.

⁸³ The Initiation to Work contract, which replaces the former private sector temporary auxiliary job contract, is concluded between the host company, the young job seeker and ADEM. It ensures job seekers that they will undergo practical training on the job to ease the person’s access to the job market. This type of contract can only be offered by ADEM to an employer with genuine hiring perspectives for the worker at the end of the reinsertion period. The employer must also provide training and supervision to the young job seeker.

⁸⁴ See Ministry of the Family and Integration, Activity Report 2007, Luxembourg, p. 146

⁸⁵ See Ministry of the Family and Integration, Activity Report 2007, Luxembourg, pp. 146, 148 and 149

In addition, these administrative statistics for 2007 show that⁸⁶:

- Between the end of 2006 and the end of 2007, article 13 (3) contracts were up by 28%
- At the end of 2007, article 13(3) contracts represented 31 % of active measures (in 2006 the figure was 26%)
- While the number of new article 13(3) contracts decreased by 9% en 2007 with respect to 2006, the proportion of unlimited term contracts among these new contracts went from de 61% in 2006 to 67 % in 2007
- Of the article 13(3) contracts initiated since the program began in August 2004, only 11% of contracts ended with dismissal of the employee.

Since the implementation of the article 13(3) program in August 2004, 17% of these contracts were extended after subsidy funding expired and 35% of article 13(3) beneficiaries entered or re-entered the initial job market following the end of their 13(3) contract.

Between 1 January 2008 and 1 September 2008, in 44% of the cases in which SE measures expired, the reason was that the person involved got a job and the number of new type 13(3) contracts concluded was slightly lower than during the same period in 2007. On 1 September 2008, the number of SE internships as a percentage of total RMG active measures was 13%, while article 13(3) measures as a percentage of total RMG active measures was 31 %.

While the principle of maximum length of time for active RMG measures is attractive as a job market insertion measure, SNAS statistics show that implementing this seemingly neutral principle indirectly creates gender discrimination. The table below illustrates the breakdown of RMG beneficiaries who can no longer benefit from job activation measures because they have exceeded the maximum time principle⁸⁷.

Table 7 : Breakdown of RMG beneficiaries excluded from job activation measures

Excluded from job activation measures	Women	Men
2005	79%	21%
2006	84%	16%
2007	84%	16%

As emphasized by the Social Action Superior Council (*Conseil supérieur à l'action sociale*, CSAS), in its 2008 “Report on the Status of Requirements in the Social Sphere”, the return to the traditional theme of men’s role being to enter the working world while women tend to the home as indicated by the table above is disquieting⁸⁸. The concern raised by CSAS could cause a review of the practice of the maximum length principle in the benefits domain.

Since paid work is the best protection against poverty and social exclusion, such measures as the SE and 13(3) contracts, which target insertion in the labor market, are basic components of the strategy of active inclusion that Luxembourg is pursuing in the area of its RMG mechanism. As emphasized in the 2007 Implementation Report, these measures primarily

⁸⁶ Ministry of the Family and Integration, *Activity Report 2007*, Luxembourg, pp. 146 and 135

⁸⁷ See Ministry of the Family and Integration, *Activity Report 2005-2006-2007*, pp. 127, 159 and 146

⁸⁸ See CSAS, *Report 2008*, p.38

target RMG beneficiaries whose work capability profiles meet the criteria of the labor market⁸⁹.

While the pool of measures for this social category is quite significant, it only makes up a small percentage of total RMG beneficiaries. Thus in 2007, only 8% of these persons had to make themselves available for insertion in the labor market and prepared to accept any job furnished by ADEM.

In the report cited above, the CSAS addresses the numerous RMG recipients who are not capable of working due to multiple deficiencies. It calls for “developing better adapted measures to address this group of the population of RMG beneficiaries” and stresses the importance of “instituting an adequate socio-pedagogic follow-up” that takes into consideration the “overall situation of those concerned”⁹⁰.

OBJECTIVE: Reinvalidate the solidarity economy concept

Although the implementation of the objective of revitalizing the solidarity economy remains on hold while a vote is called on the amendment of law 5144 (“Draft law to Contribute to Re-establishing Full Employment”), article 33.019 of the *emplois de proximité* (jobs in the households) from the MIFA/section 12.1 budget maintains a level of 170,000 euros. The 2007 Implementation Report cited three projects under article 33.019. Two of these projects, including the one distributing free clothing, furniture and appliances collected from donations by citizens and businesses to underprivileged households⁹¹ and the one providing linen deliveries to persons with reduced mobility⁹², continue to receive financing. Coverage of persons in specific situations receiving at-home services that the third project targeted⁹³, is now covered by dependency insurance as part of a pilot project.

OBJECTIVE: Improve benefits for disabled workers

ADEM’s Handicapped Workers department (STH) is responsible for guidance, training, placement, re-education, integration and professional re-integration of persons returning from work accidents, war invalids, and persons with a physical, mental, sensory, psychic and/or psychological handicap with disability levels of at least 30%. A set of new initiatives have been drawn up, to include:

- Insertion and re-insertion measures are increasingly available to handicapped workers registered as job seekers in view of improving their chances on the job market. Collaboration for this effort is provided by ADEM’s placement and employment for young people and personalized assistance for job seekers sections as well as the *Service national d’action sociale*.
- STH continues to carry out awareness actions intended to increase the employment rate of handicapped workers in the municipal or quasi-State sectors.
- Although the State is not currently meeting its 5% employment rate obligation, it has maintained its efforts to support employment initiatives for handicapped workers for 2007, per its commitment as part of the National Employment Action Plan (Pan 1998).

⁸⁹ See PNR, *Implementation Report 2007*, p. 40

⁹⁰ See CSAS, *Rapport 2008*, p. 39

⁹¹ Since the association “*Leit Hëllef Leit*” which initiated this project has been dissolved, redistribution of used household goods under this project has been taken up by the Luxembourg Red Cross

⁹² The *Mobilix* project

⁹³ The *Nuetswach* project

It created the equivalent of 2.000 man-hours per week in jobs within the ministries and administrations.

- Apart from job placement through actions as described above, jobs left vacant by handicapped workers were reoccupied by other handicapped workers, with the support of STH. This is in accordance with the directive of the Savings and Rationalization Commission.
- Another high yield employment area for handicapped workers could be the socio-economic initiatives opening up in the solidarity economy such as the “*Proactif*”, “*Objectif Plein Emploi*” and “*Forum pour l’Emploi*” associations that attempt to employ a maximum number of people in productive activities adapted to their needs who have been excluded from the job market and/or are long-term unemployed persons. STH is working with the ADEM job placement department to set up recruiting workshops for handicapped workers.
- Since the beginning of 2006 STH staff has been bolstered by a person in the department helping people with reduced capacity to find jobs. This job description includes making companies aware of the pool of reduced-capacity workers so that they can contact STH for recruitment needs, and to make them aware of the various measures and subsidies available from the State should they hire handicapped workers registered with STH. The person also organizes information and recruitment workshops for handicapped workers.
- In order to optimize candidate selection, handicapped job seekers are pre-selected by STH and are offered an intensive coaching program.
- As part of professional training for handicapped workers, STH continues to cooperate with the institutions of the Greater Region, especially Euro-Bbw in Bitbourg where the first young handicapped workers successfully completed their qualifications training in the summer of 2008.
- As part of the job retention policy, STH has increased its visits to employers in order to detect any problems concerning relations between handicapped workers and their employers as early as possible. The strategy behind this is to act as a sort of mediator between the two parties with the ultimate object of maintaining lasting work relations between them, or if this proves impossible, to reassign the handicapped person to a new company while simultaneously seeking to place another handicapped person in the original job.
- STH applies a scientific method for evaluating both the skill set of a person and the requirements of a job using an approach centered on the capacity for work of a person. This helps guarantee that the job placement lasts and quantifies a handicapped person’s loss in productivity.
- STH personnel responsible for the measures stipulated in the law dated 12 September 2003 relating to handicapped persons try to incorporate a leitmotiv of disability management in their approach. This is a form of case management that has the goal of introducing prevention and rehabilitation measures in order to keep employees in a job that otherwise might leave working life due to their reduced capacity for work.

IG 20 – Improve matching of labor market needs
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OBJECTIVE: Modernize public services of employment

As part of an internal restructuring of ADEM, a single point of contact department whose task is to process and receive job seekers on a daily basis and prepare their registration packets has been implemented. ADEM is now presenting an activation agreement to job seekers that outlines the rights and obligations of the two parties, to be concluded between ADEM and job

seekers under 30 within three months of registration, and within six months of registration for job seekers over 30.

At an early stage in the registration process, ADEM offers a more personalized supervision of job seekers. The goal of employment policies cannot consist of having to pay full unemployment benefits, which are precarious in terms of their amount and duration, but rather to insert or reinsert a job seeker as quickly as possible into the job market. Aid offered by public services, including personalized Placement and Support services (SAPDE) to ADEM job seekers apply to different categories of people, as follows:

- Young people who leave school without diplomas and who should be primarily re-directed toward their academic programs or apprenticeships
- Job seekers whose profiles correspond in principle to needs on the labor market and who are seeking an appropriate job offer
- Those who, through minimal assistance such as improving their job search techniques, increase their possibilities of employment in the short or medium term
- Those who ADEM has found to be deficient and who require supervision and personalized monitoring - chiefly employment measures - in order to increase their chances of being hired in the medium or long term
- Those who are encountering difficulty in finding work independent of the economic situation and who could be guided toward socio-economic activities in the sense of the proposed law contributing to re-establishing full employment (proposed law number 5144)

In addition to motivation and information workshops, and CV workshops offered for several years now, ADEM has offered a “Marketing Plan for Job Seekers” since January 2008. This initiative is intended principally for job seekers with university training. The marketing plan allows concerned parties to rapidly visualize professional projects, skill sets and current contacts as well as selected positions. A special “university graduates” brochure has been produced and made available to the target group. Notwithstanding the restructuring in effect, other wide-ranging projects are planned for upcoming months, such as:

- Producing new functionalities to guarantee appropriate follow-up of the activation convention of September 2008
- Partial rewriting of ADEM system software to better offset job offers with job requests. The ROME system will be added, as will a higher performance ELISE type search engine and better accessibility for job seekers and ADEM staff in 2009.
- Introduction of a more subtle follow-up procedure tailored to the status of the job seeker in 2009
- Improve the placement rate; a better ratio “meetings offered to hires” in 2009
- The new “*Schnuppertage*”-internship in 2009 makes personnel available to companies to work for several days.

Following OECD recommendations in 2006-2007, the SAPDE department has embarked on a more sustained program of exchange with the placement department. The two services were able to set up a mutual cooperation procedure, such as in the event of disagreement between the departments over designating a level of capacity a job seeker may have to obtain employment. In cooperation with the University of Luxembourg, SAPDE launched on a program in 2008 to improve the quality of job seeker evaluations made by the department, since the diagnosis of how apt a candidate is to obtain work depends directly on this. As more

and more job seekers have professional project shortfall (31% in 2007) SAPDE now has an internal team that is developing a more pertinent method of dealing with the issue, which could turn into a lingering difficulty over time. Faced with a significant shortage of good quality documents like CVs and cover letters that meet employers requirements of readability and good presentation, SAPDE has developed a new type of “custom CV” to more effectively make job seekers aware of how important quality is in their contact documents.

The *e-learning* project with the Henri Tudor PRC did not kick off as planned in early 2008 but will do so at the end of the year.

IG 21 - Promote flexibility combined with employment security and reduce labor market segmentation, having due regard to the role of social partners

OBJECTIVE: Introduce a single status for salaried employees in the private sector

The proposed law concerning the introduction of a single status for salaried employees in the private sector months was approved in Parliament on 29 April 2008. The principal modifications concerning the labor code appearing in the proposed law that will take effect on January 1st, 2009 concern:

- Harmonization of severance compensation for employees ;
- Harmonization of additional premiums for overtime ;
- The extra quarter pension for all salaried employees with repayment of the pension fund share ;
- Continued payment of wages (and salaries) - *Lohnfortzahlung* - for all salaried employees for an average of 13 weeks.

Single status will put an end to the distinctions between skilled manual workers and private employees and will give way to a Labor Code that is uniformly applicable to all employees under the private law schemes. The proposed law will allow health fund insurance and pension funds in the private sector to merge, and will lead to the creation of a single professional chamber for salaried employees in the private sector as well as a single labor court.

OBJECTIVE: Reduce segmentation of the labor market

In May 2008 the Government submitted a proposed law introducing linguistic leave. This project is in line with the government policy to reinforce professional training. In this context, following an ECS opinion dated 8 December 1993, a framework law on continuing professional training was introduced and recently a law was approved that established individual training leave, of which this project is a supplementary section. It was proposed that a special supplementary leave be introduced for the purpose of allowing employees of all nationalities to learn Luxembourg’s language or to perfect their knowledge of the language in order to facilitate their integration into society by way of the labor market. From this perspective the opportunity is available to all employees having worked at least one month for an employer based on Luxembourg territory. The right to leave for linguistic purposes is not tied to any condition of residency. Naturally, this leave may also be useful to employees seeking to obtain Luxembourg nationality so that they may acquire the linguistic certifications required by the new legislation in the area of citizenship. The total length of the linguistic leave is limited to two hundred hours that must be split into two sections of 80 and 120 hours each for each beneficiary over the course of their professional career. A candidate must complete a degree or certificate program for the first section in order to pursue the second part

of the course. Employees who benefit from the linguistic leave may receive indemnities equal to their hourly salary for each hour passed in coursework, limited to four times the minimum wage for non-qualified employees. The indemnity is paid by the employer, who is later reimbursed by the State for the indemnity amount, plus employers' social contributions.

OBJECTIVE: Retain jobs

The law dated December 22nd, 2006 designed to keep people in jobs sets out specific measures in the area of social security and environmental policy. The law transposes decisions made by the Tripartite Coordination Committee in its conclusions of 28 April 2006 which were subsequently detailed in the Permanent Employment Committee. The law widens the legal scope for promoting a policy for retaining jobs.

The new legislative provisions identify economic difficulties at as early a stage possible, be they based on the economy or structural causes in a company, and puts the entities concerned in a posture of anticipating consequences. Between 30 January 2007 and 8 August 2008, 603 non-discipline related layoffs were notified to the secretariat of the Economy Committee. It is quite difficult to draw conclusions on the basis of these notifications because the first step is to determine whether the other economic sectors are aware of what legal obligations exist regarding the notifications. As it has been ascertained that numerous layoff notifications come from the financial and industrial sectors, it is appropriate to note that most of these notifications were made by lawyers' offices that are fully aware of the underlying legal obligations. The two most highly reputed offices in the area of company reorganizations have been informed by the secretariat of the Economy Committee of the new opportunities that can turn up in the area of maintaining jobs. For the industrial, construction and services sectors, an information session was set up about measures for job retention with the Luxembourg Business Federation (FEDIL) human resources managers⁹⁴. An information meeting was held for the benefit of the LCGB trade union secretaries and an offer of additional information was extended to other unions that may be concerned.

There are currently two formal job retention plans underway and a third has been drawn up following a bankruptcy, though its effects cannot yet be gauged. In two other cases elements of the job retention plan were applied, with the help of the secretariat of the Economy Committee that did not end up formally as a job retention plan but did result in avoiding layoffs.

OBJECTIVE: Set out new forms of labor organization

Discussions centered on introducing new forms of work organization have borne their initial fruit. Firstly, a Grand-ducal regulation dated 13 October 2006 stated that an inter-professional agreement must be concluded between the social partners and the jurisdiction responsible for telecommuting. Secondly, a proposed law on "time savings accounts" that could further promote compensating overtime hours with free time is now being finalized.

OBJECTIVE: Continue to carry out positive actions in the area of equality of the sexes

In order to bear on reducing professional segregation and the salary gap between men and women and to influence the rise of women in the work force using examples of good practice,

⁹⁴ Unfortunately, information sessions of this type have not yet been organized for the tradesman or commerce sectors.

the Government is pursuing its positive actions program in private sector companies. Three priority areas have been identified:

- Equal treatment of women and men in recruiting, training and qualifications, salaries and corporate culture
- Equality between women and men in decision making in the areas of professional advancement, continuing professional training and equal participation of women and men in decision making
- Equality of women and men in reconciling professional and private life issues such as work schedules, professional re-integration measures, reconciling the demands of upper management positions with private life and offers for child care and concierge services.

Any company that carries out a survey on the situation of women and men can receive a ministerial certification and financial aid from the State. Follow-up is done on the basis of qualitative and quantitative indicators, and the positive action project approved by the State is subject to evaluation every two years. Since the new process was launched on 13 November 2007, eight projects are underway.

In an effort to eliminate stereotypes on the job, the social partners (UEL/LCGB/OGBL) have drawn up a joint action plan on equality between women and men on the following themes:

- The role of women and men in the job market
- Reconciling professional life with private life
- Balance of weighting between women and men in decision making
- Equal salaries for equal work

IG 22 - Ensure employment-friendly labor costs developments and wage-setting mechanisms
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One of the measures of the Tripartite Coordination Committee of 28 April aims at changing the way in which stipends, salaries, pensions and annuities are indexed. To this end, the law dated 27 June 2006 that adapts certain application methods of the automatic wage indexation system and stipend scale is intended to slow the rise in inflation and consequently the increase in labor costs to companies and the public administration. These measures are limited in time (from 2006 to 2009) and consist chiefly of adapting the application methods to the automatic wage indexation system by carrying over the next application figures. In accordance with the law of June 27th, 2006 the adaptation was triggered when the application figures were exceeded in June 2008 and will go into effect in March 2009. Based on the law now in force, no other adaptation can be made of stipends, salaries, pensions and annuities between 2006 and 2009.

IG 23 – Expand and improve investments in human capital

OBJECTIVE: Promote access to education and training on a lifelong basis

From 2005 to 2008, national education policy as part of the NRP has been chiefly based on the implementation of an education and training strategy that lasts a lifetime, on successful academic experiences⁹⁵ and on pedagogic reforms instituting a teaching system based on

⁹⁵ IG 23 – Expand and improve investments in human capital

acquiring skills⁹⁶. Through in-depth legislative reforms, a system that consistently and flexibly structures the various types of training from a lifelong apprenticeship perspective has been implemented. If the various laws on the subject are finalized and approved by the end of 2008, the challenge for upcoming years will be to put these reforms in practice.

Three draft projects concerning fundamental teaching and the reform of vocational training are under review in the area of initial training.

The reform of the vocational training system also includes the education and training of adults. The scope of this effort includes not only initial vocational training but also occupational re-training and continuing vocational training. This same law will introduce accreditation of prior and experiential learning.

With the concept of access for all to lifelong learning firmly in mind, mechanisms involving aid to companies as part of the collective access concept were bolstered by introducing the leave for individual training concept. Learning languages is a priority measure in the adult training area to promote social integration and a successful professional experience among the foreign population of migrants and cross-border workers. A proposed law to create a national languages institute is currently being reviewed. The linguistic leave program⁹⁷ will be of special interest within this context.

OBJECTIVE: Promote successful studies and reduce the number of students who leave school early

Different measures were taken with the concept of fairness as a backdrop to bridge between different teaching systems and order in order to promote academic success and to reduce the number of students leaving school early. These measures, which were detailed in the 2005 NRP and the annual reports, are cited below; they have been successful in reducing the number of early school leavers. A nation-wide study on secondary school dropouts for 2006-2007 shows a decrease in the dropout rate of 45% with relation to the 2003-2004 academic year. This study has been in place since 2003 and serves not only as an evaluation tool but also a personalized follow-up method for tracking dropouts by a socio-educational unit of the national education administration *Action Locale pour Jeunes* (ALJ). The ALJ contacts the youth concerned individually to ask them the reasons that led to them leaving school and their personal situation since leaving their studies. ALJ helps young people seek out an apprenticeship or get back into an appropriate studies program.

Box 4: Measures for bridging between different systems and grades to promote academic success and lower the number of students who leave school early

- Redefine promotion criteria and introduce remediation measures, in other words, mandatory extra help for students having academic difficulties
- The pilot project on lower secondary education, with focus on teaching by skills; improved monitoring of students; more sensitive evaluations, especially in languages; differentiating between reading, writing and oral skills; more effective guidance in the third year of secondary technical education
- Measures to give young people the opportunity to return to school via bridging classes, professional re-insertion classes, etc

⁹⁶ IG 24 – Adapt education and training systems in response to new skill requirements

⁹⁷ See IG 19 – Ensure inclusive labor markets, enhance work attractiveness and make work pay for job-seekers, including disadvantaged people and the inactive

- Pre-emptive support for students who risk being excluded from school during the academic year.
- Basic vocational training that reforms the current training for initiation into professional life.
- The law that redefines objectives and structure of professional guidance and initiation courses.
- Hosting and processing foreign born students, especially newly arrived children. The *Cellule d'accueil pour élèves nouveaux arrivants-CASNA* (Welcome Center for Newly Arrived Students) has the job of evaluating and guiding students, drawing up guidelines for placing newly-arrived students in primary schools and setting up new insertion classes in secondary education.
- Pilot projects that explore new paths in the area of apprenticeships, supervision and evaluation of students and that diversify the academic offer such as the *Neie Lycée*, the *Ganzdagschoul*, the *Eis Schoul* project, the *Schengen-Lyzeum Perl* cross border school and the introduction of the international baccalaureate in two schools.

IG 24 – Adapt education and training systems in response to new skill requirements

OBJECTIVE: Promote teaching by skill and quality assurance

The introduction of the skill-based approach to basic education and to post primary teaching is a large scale undertaking on which working groups made up of teachers, Ministry staff members and external experts are engaged. The paragraphs below give a picture on progress achieved in the area since 2005, as well as initiatives for the future:

- *Bildungsstandards Sprachen*: An orientation document for teaching and learning languages in all grades in Luxembourg schools has been drafted and will serve as a reference to teachers for implementing the skills-based approach.
- Early education (pre-school and elementary education): Cycle 1, pre-school education, uses a new monitoring tool to document the development and progress of children that is available to teachers, called the *Lëtzebuurger Beobachtungskonzept fir den 1. Cycle* (LBK1). A large number of teachers have completed training using the LBK1 concept. The work to outline basic skills to be mastered by all children in German, French and Mathematics at the end of each of the four learning cycles extending from pre-school to the end of primary education was finalized in June 2008. The basics for German and French are determined using the *Bildungsstandards Sprachen* exit qualifications standard. During the 2008-2009 academic year, five “schools in movement” that are piloting the program will begin work on the basis of these foundations. Skill bases for attaining citizenship and for the human right to primary education are now being drafted. Work to detail skill requirements for the sciences, musical education, art education and physical and sports education got underway in 2008-2009.
- Secondary education: Skill bases for lower secondary and secondary vocational education have been drawn up. A databank with documents and teaching unit is operational and available on the education portal of *mySchool*⁹⁸ as from the beginning of the 2008-2009 school year:
 - *German and French*: Skill-based approach introduces the distinction between the four skill areas of language learning: 1. Written expression 2. Reading comprehension 3. Listening comprehension, 4. Oral expression
 - *Mathematics*: Skill-based approach introduces the distinction between the four skill areas: 1. Problem solving and modeling 2. Formulate arguments and communicate 3. Surface areas and volume 4. Numbers and operations.

⁹⁸ <http://www.myschool.lu>

- *Natural Sciences; Art Education; Physical education; Social and Ethics training.*
- Vocational training: Continuity and consistency with the other levels in the educational system are key components of the proposed law for the reform of professional training, which also outlines the framework for teaching based on the acquisition of skills. Working groups are currently drawing up details for skill bases that students must achieve at the various levels of their professional training. The reform of the framework programs of 112 professional training programs is being reviewed by some sixty teams of teaching experts and two to six experts from the professional world. These teams are being assisted by experts from the *Bundesinstitut für Berufsbildung* in Bonn, an institute of vocational training.

Introducing a skills-based approach will cause the Luxembourg school system to employ a more nuanced perspective when it comes to evaluations. In primary school teaching several schools are working on the basis of skills bases using three evaluation tools, a portfolio, a skills grid and the end of cycle evaluation. These training evaluation tools take into account the path of students' apprenticeships and replace the traditional report card. Other primary schools are also participating in projects that use innovative evaluation methods for grading students. In secondary and secondary vocational schools, an appendix is attached to the report card in all the 7th year classes in German, French and Mathematics. The appendix provides a more subtle appreciation of the students' skill level in these subject areas.

Quality in the Luxembourg education system is ensured via the introduction of various guidance instruments:

- As part of the evaluation of the efficiency of the Luxembourg educational system in the international context, Luxembourg is participating in two international studies of primary and secondary education founded on skills-based approaches. These studies are the Progress in International Reading Literacy Study (PIRLS) and the Program for International Student Assessment (PISA). Other international comparative analyses and studies in which Luxembourg is a participant include the Health Behavior in School-aged Children (HSBC), *Étude internationale sur l'éducation civique et citoyenne* (ICCS) and the European Bank of Anchor Items for Foreign Language Skills (EBAFLS).
- Evaluating academic achievement that meets skills-based standards is a tool for improving and ensuring high quality academics. Beginning with the 2008-2009 school year, the Government will set up standardized tests in all third year primary school classes in German and mathematics and for fifth year secondary and ninth year secondary vocational classes in German, French and Mathematics.
- A proposed law establishing an Agency for developing quality in education is currently being considered.

5. Coordination between the National Reform Program and Structural Funds

Coordination is necessary here because the Lisbon strategy also contains a Community action program. Consequently, the Community budget is set from a Lisbon perspective. This is all the more true for Community structural funds that should draw heavily from the IG (*earmarking Lisbon*).

5.1 The European Regional Development Fund (FEDER)

5.1.1 Economic and social reconversion in the regions (2000-2006)

The Objective 2 program (2000-2006) for economic and social re-conversion of some of the country's regions contributes in particular to IG 7, IG 8, IG 9, IG 10, IG 11 and IG 15. Many projects concern the areas of water, waste and wild lands that come under IG 11, as well as economic development and innovation. The overall package for the Objective 2 program (2000-2006) amounts to €44 million. With regard to the Objective 2 program (2000-2006), it is important to note that costs of the various project initiators can only be incurred until December 31st, 2008.

5.1.2 Regional competitiveness and employment program (2007-2013)

The regional and employment competitiveness objective for the new period 2007-2013 aims at increasing the attraction and competitiveness of the regions of Luxembourg. This is a Community intercession to enhance economic and social cohesion by reinforcing growth, competitiveness, employment and social inclusion. The National Strategic Reference Framework (NSRF) was adopted on October 8th, 2007. With regard to the FEDER section, two avenues of approach were laid out, with financial distribution in the total amount of €25 mn for the period to be divided on a 50% basis for each of them. The first avenue focuses on measures of attraction to the Luxembourg site, with a priority on employment and investments, while the second bolsters knowledge and innovation as growth factors. The program should contribute to the IG 7, 8, 9, 10, 11 and 15. The Luxembourg "Regional Competitiveness and Employment" operational program was approved by Decision number C (2007)6821 dated December 20th, 2007 of the European Commission. This allowed the program to go forward. The first call for projects occurred at the end of the first quarter of 2008 and the selection committee was to sit at the end of September 2008.

5.1.3 Cross-border, trans-national and inter-regional cooperation programs

The first calls for projects and approvals committees have taken place for all INTERREG IV programs. Operational programs, and consequently eligible measures, are very tightly focused on the Lisbon strategy. Under the cross-border INTERREG IV A program, Luxembourg operators are involved in 21 projects and will receive FEDER awards amounting to €4.66 mn. One example, the "*Université de la Grande Région*", will result in laying the foundations for a coordinated association of the universities in the Greater Region, aiming for an integrated higher educational space. Under the trans-national INTERREG IV B program, 6 projects involving Luxembourg partners have been approved for FEDER contributions of around €2.2 mn. An example of this is the "Fostering interregional exchange in ICT Technology Transfer" project that exploits the innovation potential of ICT technologies.

5.2 The European Social Fund (ESF)

The strategy chosen by national authorities for ESF intervention in Luxembourg during the 2007-2013 programming period falls completely in line with the context of the guidelines of the Lisbon-2 strategy. As illustrated by the table below, the priority areas and specific objectives of the Operational Program (OP) support each of the integrated guidelines except for IG 22.

Table 8: Intervention of the European Social Fund (ESF) in Luxembourg during the 2007-2013 programming period

OP Priorities 2007-2013	National Plan for Innovation and Full Employment (IG)
Priority Area 1: Improve access to employment and lasting inclusion in the labor market Increase the employment rate Facilitate the insertion of young people in the labor market Activate persons who are far removed from the labor market	IG 17: Implement employment policies aiming at achieving full employment, improving quality and productivity at work and strengthening social and territorial cohesion IG 18: Promote a lifecycle approach to work IG 19: Ensure inclusive labor markets, enhance work attractiveness and make work pay for job-seekers, including disadvantaged people and the inactive
Priority Area 2: Increase adaptability of workers and companies Improve anticipative management of changes in the economy Adapt skills and knowledge of employees to labor market requirements Support innovative mechanisms of career transitions	IG 20: Improve matching of labor market needs IG 21: Promote flexibility combined with employment security and reduce labor market segmentation, having due regard to the role of social partners IG 24: Adapt education and training systems in response to new skill requirements
Priority Area 3: Build up human capital Bring university level institutions, research centers and companies closer together, in particular in the areas of innovation and research Modernize labor organization and working conditions Support the actions of the social partners	IG 21: Promote flexibility combined with employment security and reduce labor market segmentation, having due regard to the role of social partners IG 23: Expand and improve investments in human capital IG 24: Adapt education and training systems in response to new skill requirements

5.3 The European Agricultural Fund for Rural Development (FEADER)

The Government is very attached to a vision of agriculture based on multi-functional agriculture that is both competitive and sustainable, concerned about applying ecologically defensible production and cattle raising methods that take into account rules for protection and well-being of animals. This type of agriculture produces healthy and high-quality food, is spread throughout the territory and can maintain the countryside and natural areas. The rural development program (PDR) for 2007-2013, which is established on this basis, combines this vision of European agriculture with the sustainable development objectives set out by the European Council in Gutenberg in 2001, as well as with the objectives targeted by the Lisbon-2 strategy in the areas of growth and employment. The table below illustrates examples of the national strategy for the 2007-2013 programming period for rural development that contributes to implementing the National Plan for Innovation and Full Employment. Around 29% of the total contribution of FEADER will be reserved for Area 1 (Improve competitiveness of the agricultural and forestry areas), around 59% for Area 2 (Improve the environment and countryside) and 12 % for Areas 3 (Improve quality of life in rural areas and promote diversification of the rural economy) and 4 (Leader) for the Regional Development Plan for 2007-2013.

**Table 9: Examples of national strategy the contribute to the implementation of the
National Plan for Innovation and Full Employment**

National Strategy for the Rural Development programming period of 2007-2013	National Plan for Innovation and Full Employment (IG)
Area 1 (Improve competitiveness in the agricultural and forestry areas)	
Encourage investments in the bio-energy, rational use of energy and protection of the environment	IG 11: Encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth
Encourage young people to take up, set up and develop farms, vineyards and plant production businesses. Aid farms in order to assist in the restructuring and modernization of the sector, as well as to establish new operations	IG 15: Promote a more entrepreneurial culture and create a supportive environment for SME
Encourage investment in innovation and the rational use of innovative technologies	IG 8: Facilitate all forms of innovation
Training and information measures assisting in the implementation of the PDR measures	IG 17: Implement employment policies aiming at achieving full employment, improving quality and productivity at work and strengthening social and territorial cohesion
Area 2 (Improve the environment and countryside)	
Promote a multitude of environment-friendly services and agricultural practices that protect threatened native animal and plant species in forest and agricultural locations	IG 11: Encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth
Area 3 (Improve quality of life in rural areas and promote diversification of the rural economy)	
Promote the adoption and spread of ICT	IG 9: Facilitate the spread and effective use of ICT and build a fully inclusive information society
Develop valuation of resources and the supply and use of renewable energy sources	IG 11: Encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth
Assist in setting up and developing micro-companies ; promote the entry and re-insertion of women in the labor market	IG 15: Promote a more entrepreneurial culture and create a supportive environment for SME
Improve the conditions for entry and re-insertion of women in the labor market	IG 18: Promote a lifecycle approach to work
Train and inform persons living in rural areas. Train persons working in forest industries.	IG 23: Expand and improve investments in human capital

Appendix 1: Evaluation Grid

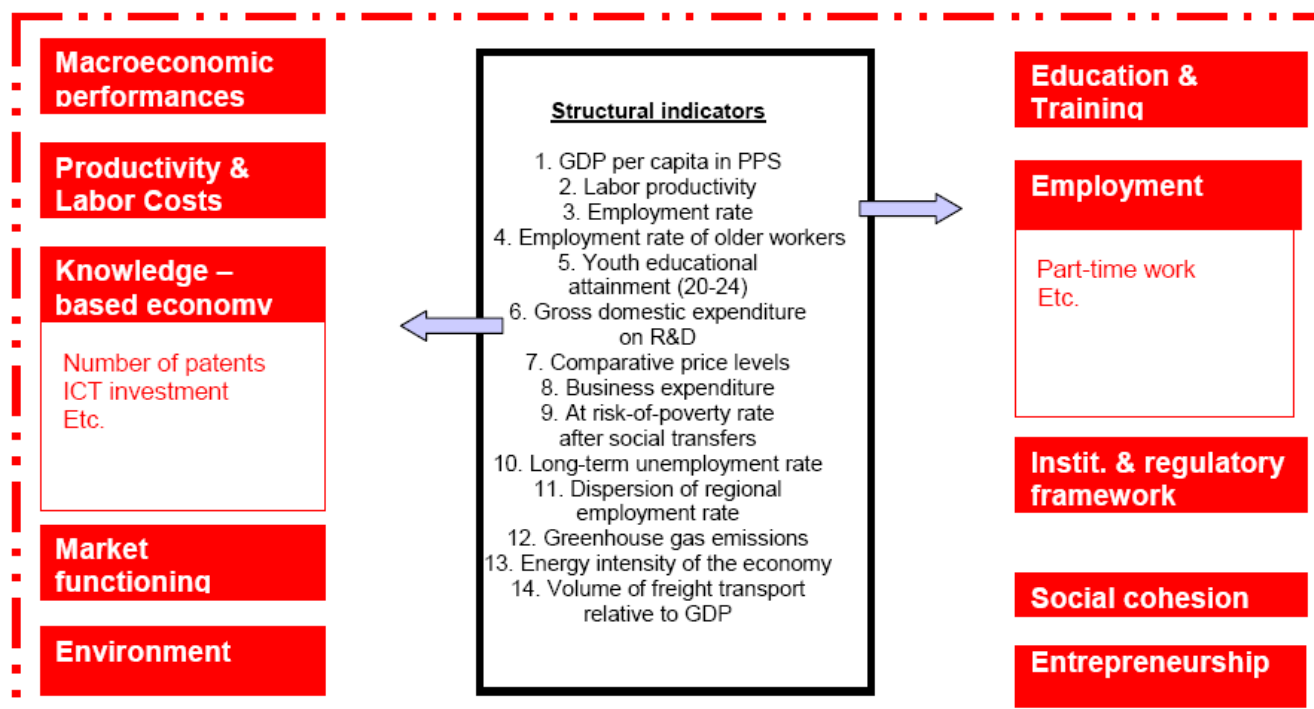
Apart from the implementation report that contains updated technical information on measures adopted after the National Plan for Innovation and Full Employment (2005), as of 2006, the European Commission has requested Member states to add an evaluation grid to this situation report to measure and monitor major progress achieved in implementation. The evaluation grid is structured as follows:

1. Part I includes the content, justification and calendar of reforms.
2. Part II classifies individual reforms according to different criteria.
3. Part III summarizes the manner in which Member states evaluate progress achieved, through indicators, as well as information on the subject of budget allotments.

It is noteworthy that this evaluation grid includes only a limited number of the measures described in the National Plan for Innovation and Full Employment and the implementation reports. It should therefore be considered as information complementary to reports drawn up as part of the Lisbon strategy, intended to provide a summary view of the national reform program.

The evaluation grid of the 2008 report may be consulted through the following link:
<http://www.odc.public.lu/publications/pnr/index.html>

Appendix 2: Competitiveness Scoreboard



Lisbon Structural Indicators (1999-2008) and the list of indicators from the Competitiveness Scoreboard (2008)

	Luxembourg											EU-27											
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	National Target 2010	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UE-27 Target 2010	
GDP per capita in purchasing power parities (PPS) (EU-25 = 100)	237.9	244.3	234.7	240.9	247.3	253.2	263.9	278.8	276.3	274.6(f)		100	100	100	100	100	100	100	100	100	100		
Productivity per wage earner	176.1	176.1	162.5	163.5	166.8	169.8	175.6	183.9	180.3	174.9(f)		100	100	100	100	100	100	100	100	100	100		
Overall employment rate	61.7	62.7	63.1	63.4	62.2	62.5	63.6	63.6	64.2			61.8	62.2	62.5	62.3	62.6	62.9	63.5	64.5	65.4		70	
Employment rate of women	48.6	50.1	50.9	51.6	50.9	51.9	53.7	54.6	56.1			53	53.7	54.3	54.4	54.9	55.5	56.3	57.3	58.3			
Employment rate of men	74.5	75	75	75.1	73.3	72.8	73.3	72.6	72.3			70.7	70.8	70.9	70.3	70.3	70.4	70.8	71.6	72.5			
Employment rate of older workers	26.4	26.7	25.6	28.1	30.3	30.4	31.7	33.2	32			36.5	36.9	37.7	38.5	40	40.7	42.4	43.5	44.7			
Employment rate of older workers – women	17.2	16.4	15.2	18.4	20.6	22.2	24.9	27.8	28.6			26.7	27.4	28.2	29.1	30.7	31.6	33.6	34.9	36			
Employment rate of older workers – men	35.8	37.2	35.9	37.7	39.7	38.3	38.3	38.7	35.6			46.9	47.1	47.7	48.4	49.9	50.4	51.6	52.7	53.9			
Internal expenditure for R & D as a % of GDP	:	1.65	:	:	1.66	1.63	1.57	1.47 (ep)			3	1.84(s)	1.86(s)	1.87 (s)	1.88(s)	1.87(s)	1.83 (s)	1.84 (s)	1.84 (s)			3	
Youth educational attainment (20-24) - total	71.2 (b)	77.5	68	69.8	72.7 (b)	72.5	71.1	69.3	70.9			:	76.6	76.6	76.7	76.9	77.2	77.5	77.9	78.1			
Youth educational level - females	72.8 (b)	75.8	69	65.5	75.6(b)	73.4	75.8	74.5	76.4			:	79.3	79.2	79.3	79.4	79.9	80.2	80.8	80.8			
Youth educational level - males	69.6 (b)	79.2	67	74	69.7(b)	71.6	66.6	64	65.6			:	73.8	74	74	74.4	74.4	74.9	75	75.4			
Comparative price levels	102.9	101.5	103.5	102.1	103.2	103	102.7	103.2	105.1			100	100	100	100	100	100	100	100	100			
Business investment	19.2	17	18.3	17.7	17	16.5	15.5	14.8	16.3			18.1	18.4	17.9	17.3	17.1	17.3	17.8	18.2	:			
At-risk of poverty rate after social transfers – total	13	12	12	:	11 (b)	12	13	14				16 (s)	16 (s)	16 (s)	:	15 (s)	16 (s)	16 (s)	16 (s)				
Poverty risk rate after social transfers - women	13	12	13	:	12 (b)	13	13	14				17 (s)	17 (s)	17 (s)	:	16 (s)	17 (s)	17 (s)	17 (s)				
Poverty risk rate after social transfers - men	12	12	12	:	11(b)	12	13	14				15 (s)	15 (s)	15 (s)	:	14 (s)	15 (s)	15 (s)	15 (s)				
Long-term unemployment rate	0.7	0.5	0.5	0.7	0.9	1	1.2	1.4	1.2			:	4	3.9	4	4.1	4.2	4.1	3.7	3.1			
Long-term unemployment rate – women	0.9	0.6	0.6	0.8	0.9	1.4	1.2	1.6	1.1			:	4.6	4.4	4.5	4.5	4.6	4.4	4	3.3			
Long-term unemployment rate – men	0.6	0.5	0.5	0.6	1	0.8	1.2	1.2	1.2			:	3.5	3.5	3.6	3.8	3.8	3.8	3.5	2.8			
Total greenhouse gas emissions	70.9	75.2	77.5	84.9	88.6	100.8	100.4					90.7	90.7	91.7	90.9	92.8	92.8	92.1					
Energy intensity of the economy	192.88	170.8	173	175.6	181.4	189.9	184.5	173.8				219.48	213.9	214.71	211.76	214.69	212.06	208.56	202.45				
Volume of freight transport by rail as a % of GDP	92.3	100.8	110	109.2	111.8	107.2	92.4	87.9(s)				:	99.1(s)	98.2 (s)	99.3(s)	98.7(s)	104(bs)	105.4(s)	106.7(s)				

Note: (b) break in series (f) forecast; (s) Eurostat estimate (p) temporary figure (e) estimated value

Source: Eurostat

http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1133,47800773,1133_47802588&_dad=portal&_schema=PORTAL

<p>Macroeconomic performance (13 indicators)</p> <ul style="list-style-type: none"> ➤ Gross National Product per capita (PPS) ➤ Real growth rate of GDP ➤ Growth in national employment ➤ Unemployment rate ➤ Inflation ➤ Public balance as a % of GDP ➤ Public debt as a % of GDP ➤ Gross fixed capital formation of the public administration ➤ Terms of trade ➤ Real effective exchange rate (1995=100) ➤ Diversification – entropy coefficient ➤ FDI inflows ➤ FDI outflows 	<p>Employment (9 indicators)</p> <ul style="list-style-type: none"> ➤ Employment rate ➤ Employment rate (Men) ➤ Employment rate (Women) ➤ Long-term unemployment rate ➤ Persons holding a part-time job ➤ Unemployment rate of persons under 25 ➤ Employment rate of persons aged 55 -64 (total) ➤ Employment rate of persons aged 55- 64 (Men) ➤ Employment rate of persons aged 55 - 64 (Women)
<p>Productivity & Cost of Labor (5 indicators)</p> <ul style="list-style-type: none"> ➤ Trends in total factor productivity ➤ Trends in apparent work productivity ➤ Productivity per hour worked as a percentage of the USA ➤ Changes in unit labor costs ➤ Costs / Revenue ratio in the banking sector 	<p>Market Operations (10 indicators)</p> <ul style="list-style-type: none"> ➤ Percentage of full-time workers on minimum wage ➤ Price of electricity (ex-VAT) – industrial users ➤ Price of gas (ex-VAT) - industrial users ➤ Market share of the primary operator in the cellular telephone market ➤ Composite basket of fixed and cellular telecommunications (ex-VAT) ➤ Composite basket of cellular telephone royalties (ex-VAT) ➤ Broad band Internet access rates ➤ Basket of national royalties for 2Mbits leased lines (ex-VAT) ➤ Public markets – value of public markets using open procedure procurement ➤ Total of State aid as a % of GDP (excluding horizontal objectives)
<p>Institutional and Regulatory Framework (11 indicators)</p> <ul style="list-style-type: none"> ➤ Corporate taxes ➤ Standard VAT ➤ Tax wedge: Single, without children ➤ Tax wedge: Married, with 2 children, one wage-earner ➤ Public sector payroll costs ➤ Administration efficiency index ➤ Respect for the law index ➤ Regulation quality index ➤ Degree of sophistication of online public services ➤ Public services fully available online 	<p>Entrepreneurialism (4 indicators)</p> <ul style="list-style-type: none"> ➤ Propensity for entrepreneurialism ➤ Independent jobs as a percentage of total employment ➤ Net change in number of companies (set-up rate less close-down rate) ➤ Volatility among companies (set-up rate plus close- down rate)

<p>Education & Training (8 indicators)</p> <ul style="list-style-type: none"> ➤ Annual cost per student in public educational facilities ➤ Portion of the population between 25-64 with a secondary education ➤ Portion of the population between 25-64 with a university education ➤ Percentage of human resources in scientific and technological fields as a % of total employment ➤ Percentage of foreigners in S&T human resources ➤ Percentage of highly qualified workers (ICT) in total employment figures ➤ Continuing training (participation of adults in training and teaching programs) ➤ Young school leavers 	<p>Knowledge economy (14 indicators)</p> <ul style="list-style-type: none"> ➤ Internal R&D expenditure ➤ Public R&D budget credits ➤ Portion of public research financed by the private sector ➤ Percentage of sales attributable to the introduction of new products on the market (new or significantly improved products) ➤ Number of researchers per 1,000 employed persons ➤ Scientific publications per million inhabitants ➤ Number of patents (OEB/USPTO) per million inhabitants ➤ Use of Internet by companies (broad band) ➤ Investment in public communications as a percentage of gross fixed capital formation ➤ Percentage of households that have Internet access at home ➤ Number of cell phones per 100 inhabitants ➤ Percentage of households that have broad band Internet access ➤ Number of secure web servers per 100,000 inhabitants ➤ Percentage of total employment in medium or high technology sectors
<p>Social Cohesion (6 indicators)</p> <ul style="list-style-type: none"> ➤ Gini Coefficient ➤ At-risk of poverty rate after social transfers ➤ Persistent at-risk of poverty rate ➤ Life expectancy at birth ➤ Wage gap between men and women ➤ Serious work accidents 	<p>Environment (6 indicators)</p> <ul style="list-style-type: none"> ➤ Number of ISO 14001 and EMAS certifications par thousand companies ➤ Total greenhouse gas emissions ➤ Percentage of renewable energy sources ➤ Volume of municipal waste collected ➤ Energy intensity of the economy ➤ Modal split in transportation choice-percentage of car users as transportation method

Source: Ministry of the Economy and Foreign Trade, Observatoire de la Compétitivité
http://www.odc.public.lu/publications/bilan_compete/index.html



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