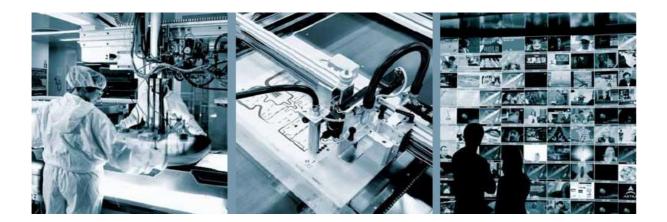




# for the THE NATIONAL PLAN FOR INNOVATION AND FULL EMPLOYMENT

(Unofficial English translation)

The official French version can be downloaded from www.odc.lu



Preliminary Remarks

This implementation report covers the measures taken up by the Government, following the major objectives set out in the National Plan for Innovation and Full Employment in 2005 and the first implementation report (2006). It uses the integrated guidelines numbering system of the Plan.

ACRONYMS			
ADEM	Jobs Administration		
CASES	Cyberworld awareness and security enhancement structure		
CASNA	<i>Cellule d'accueil scolaire pour élèves nouveaux arrivants</i> (Welcome center for newly arrived students)		
CCILL	Luso-Luxembourg Chamber of Commerce and Industry		
СDМ	Clean development mechanism		
CEPS /INSTEAD	Center for Population, Poverty and Socio-Economic Policy Studies/ International Networks for Studies in Technology, Environment, Alternatives, Development		
ESC	Economic and Social Committee		
CFL	CFL Luxembourg National Railways		
CIDD	Inter-Service Commission on Sustainable Development		
СІЈ	Youth Information Center		
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		
EBAFLS	European Bank of Anchor Items for Foreign Language Skills		
LFS	Labor Force Survey		
FDE	Law and Economics Faculty of the University of Luxembourg		
FEDER	European Regional Development Fund		
FNEL	National Federation of Boy and Girl Scouts of Luxembourg		
NFR	National Research Fund		
FSE	European Social Fund		
EIG	Economic Interest Grouping		
IFCC	Chamber of Commerce Training Institute		
IUIL	Institut universitaire international Luxembourg		
JCI	Junior chamber international		
JI	Joint implementation		
MRE	Maisons relais children reception centers		

M.Sc.E.I.	Master of science in Entrepreneurship & Innovation
NGO	Non-Governmental Organization
ОР	Vocational Guidance
EEAP	Energy Efficiency Action Plan
PAQS	Quality in Academics Action Protocol
GDP	Gross Domestic Product
PIRLS	Progress in International Reading Literacy Study
PISA	Program for International Student Achievement
SME	Small and Medium Enterprises
PNAQ	National CO <sub>2</sub> Emissions Quota Allocations Plan
NPPN	National Plan for the Protection of Nature
NRP	National Reform Program
РРР	Public-Private Partnership
R&D	Research and Development
GMI	Guaranteed Minimum Income
SCM	Standard cost model
SE	Internship in Companies measure
NSAS	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
STC	Faculty of Science and Communications Technology of the University of Luxembourg
EVS	European Voluntary Service
SVO	Voluntary Service for Personal Orientation
ITC	Information and Communications Technologies
TLS	Transport Layer Security
НТ	Health Technologies
VAT	Value Added Tax
UdL	University of Luxembourg

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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 by 2010 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.

Unfortunately, the mid-term review in 2005 carried out under the Luxembourg presidency gave very poor marks to progress in attaining the Lisbon objectives. 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, baptizing the new effort "Lisbon 2" and "working together for growth and jobs". The main thrusts of this new initiative were shifting the emphasis back to growth and employment, 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 has now been set at three years, beginning with 2005 and will be renewed in 2008 by means of a new strategic plan. Each member state therefore had to submit a three-year plan in the autumn of 2005. Over the course of 2006 and 2007, two implementation reports for this strategic plan must be drawn up by member states.

In the spring of 2006, the European Council requested that a certain number of specific priority actions be set in motion before the end of 2007 and these priorities must now be present in the implementation reports drawn up by the member states. The priorities consist 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.

In the autumn of 2005, the Luxembourg Government submitted its strategic plan to the European Commission as part of the new governance cycle. The plan was entitled "National Plan for Innovation and Full Employment"<sup>1</sup>. This plan is the responsibility of the Ministry of the Economy and Foreign Trade as the national coordinator of the Lisbon Strategy. It was discussed by the Tripartite Coordination Committee and adopted by Parliament. The plan was then evaluated by the European Commission, which confirmed that it identifies and addresses the major challenges facing Luxembourg in the future.

Concerning the first implementation report of the National Plan for Innovation and Full Employment (2006), the European Commission found in its « *Annual progress report 2007* » that the plan is in line with most of the priority actions set out by the European Council in the spring of 2006, although certain improvements could be implemented in some areas. The European Council meeting held in the spring of 2007 also observed that Luxembourg had achieved progress in implementing both its national reform program and actions approved at the Council in the spring of 2006, while improvement could still be implemented.

<sup>&</sup>lt;sup>1</sup> For more detail, see the following site: <u>http://www.odc.public.lu/publications/pnr/index.html</u>

Luxembourg is also one of the nations for which the Council imposed no formal recommendations in the spring of 2007.

Currently the first cycle of the new Lisbon strategy partnership has entered into its final year. This report constitutes the second and final implementation report of the first cycle extending from 2005 to 2008. It retraces the measures adopted by the Government to achieve the major objectives set out in 2005 in the National Plan for Innovation and Full Employment and the implementation report in the fall of 2006, using the integrated guidelines numbering system of the Plan. It also includes the new political measures undertaken since then, especially those arising following the Tripartite Coordination Committee in April 2006. This second report also attempts to respond to the various points to watch coming out of the European Commission's *Annual progress report 2007*, as well as the recommendations of the European Council in the spring of 2007.

Major progress has already been achieved in Luxembourg. The initial results of the implementation of the national reform plan in Luxembourg 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, in conjunction 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 mechanism currently permits member states to adopt an integrated approach to reforms they are undertaking. It is also necessary to take advantage of the favorable economic climate currently present in Luxembourg, which all of Europe is also enjoying, to move forward structural reforms with a view to pursuing the modernization of the economy and to deal with the consequences of globalization.

Emphasis must now be placed on implementing the reforms. It is important to ensure that the launching of a new three-year cycle from 2008-2010 does not relax efforts to achieve this priority. It is not necessary to revise the objectives of the Lisbon strategy and the management mechanisms now, at the kick-off time for the next three year cycle. The Lisbon strategy is an ongoing process for the long term that requires stability and clear objectives.

### 1.2 Implementation on the national level

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*"<sup>2</sup>. The Government and social partners pinpointed a certain number of imbalances essentially concerning questions of public finance, the labor markets situation 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

<sup>&</sup>lt;sup>2</sup> Ministry of State, <u>Tripartite Coordination Committee Opinion</u>, Luxembourg, 28 April 2006

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 in the fall of 2005. They center on the issues of innovation and full employment, education and training, integration of the Luxembourg economy into the European and international economies and creating an attractive economic environment and a stable macroeconomic framework. All of this is to be accomplished under the aegis of the principles of social corporate responsibility and the sustainable development concept. With the strategy in place, emphasis was placed on implementing the reforms. Last year was dedicated to working out agreements produced by the Tripartite Coordination Committee meeting held on 28 April 2006, especially preparing and finalizing legislative and regulatory texts that the reforms are based upon. The political discussions and decisions held over past months were thus characterized by continuity and consistency with regard to options selected in 2006 by the Government and the social partners for the future of Luxembourg's economy, using the six areas of concentration set out in April 2006 and cited above<sup>3</sup>.

In conclusion, it should be noted that competitiveness is not an end in itself. It is only an instrument to be used in obtaining the more long-term objective of the social well-being of citizens, to ensure that a nation will be able to improve the quality of life of its inhabitants in a protracted fashion, while securing high levels of employment and social cohesion and preserving the environment. By making Luxembourg a modern and energetic knowledge-based economy, the Lisbon strategy ensures that the concepts of sustainable growth and high quality jobs will persevere.

### 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 ways to achieve them. The spring 2007 European Council meeting confirmed that *"it is important that civil society, the social partners and local and regional authorities, which are all key elements to achieving the objectives of the Lisbon strategy, feel more actively involved."* The Government is therefore ensuring that reforms undertaken as part of the National Plan for Innovation and Full Employment are always drawn up in the wake of extensive consultations.

# 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

<sup>&</sup>lt;sup>3</sup> It should be stated that the Tripartite Coordination Committee agreement of April 2006 provides many more details concerning these six areas of concentration, along with their underlying flagship projects. In this section only the broad outlines are listed, illustrated by various examples.

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 therefore crucial and shared analysis is a key factor to successfully completing the reforms.

The social partners were also involved in drafting this implementation report. During the bilateral meeting of 5 July 2007 between the Lisbon Strategy coordinators from the concerned ministries and administrative departments and the European Commission entities, the extended office "IG 2007" of the Luxembourg Economic and Social Council (CES)<sup>4</sup> was also consulted.

The Parliamentary Commission for the Economy, Energy, the Post Office and Sports discussed the conclusions of this report on 23 October 2007. 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.

As requested by the European Commission president Mr. Barroso, in a letter<sup>5</sup> 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 will set up second hearing<sup>6</sup> for February or March 2008 in order to lay down the foundation for a political debate of this scale and to clarify common approaches for the new cycle.

In Luxembourg therefore, the major guidelines and concrete measures of this project were 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 good 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 informing the general public and the players in the economy "actively" 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 high visibility<sup>7</sup> 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

<sup>&</sup>lt;sup>4</sup> For more details see: <u>http://www.odc.public.lu/actualites/2007/07/5\_PNR/index.html</u>

<sup>&</sup>lt;sup>5</sup> Letter dated 30 May  $\overline{2007}$ .

<sup>&</sup>lt;sup>6</sup> An initial hearing took place in Parliament on 24 October 2006 following the submission of the 2006 Implementation Report.

For more details see: http://www.odc.public.lu/actualites/2006/10/24\_Hearing/index.html

<sup>&</sup>lt;sup>7</sup> For more details see: <u>http://www.odc.public.lu/actualites/index.html</u>

October 2004 and presented from a European perspective. Following the event's major success, a second edition of the event was held in November 2006. Three hundred participants including researchers, policy makers from the public and private domains and representatives of the social partners met to discuss the Lisbon strategy. The colloquium's aim was 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 intellectual property rights. To optimize the link between national implementation and discussions on the European level, the President of Economic Policy Committee's Country Review Working Group in Brussels was invited to attend. He stressed the importance of the Lisbon strategy and emphasized the importance of each member state's active commitment in "*Bringing Lisbon Home*"<sup>8</sup>.

- Evaluating the effectiveness of public policies is an essential feature of reform policies. In April 2007 the *Observatoire de la Compétitivité* gave a seminar in collaboration with the Henri Tudor Public Research Center dedicated to evaluating the effectiveness of public policies <sup>9</sup>. Numerous participants intervened before an attentive audience, presenting diverse methodologies and the primary results of international studies and analyses in this multidisciplinary research seminar. Presentations were made on various models on the subject of analysis and effectiveness of public policies in Luxembourg, focusing on work, education, health, R & D and innovation.
- 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 public<sup>10</sup>. 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 competition 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 2007, 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.

<sup>&</sup>lt;sup>8</sup> For more detail see: <u>http://www.odc.public.lu/actualites/2006/11/9et10\_coll\_lis/index.html</u> and <u>http://www.odc.public.lu/publications/lettre\_observatoire/Lettre\_Obs\_Comp\_N5.pdf</u>

<sup>&</sup>lt;sup>9</sup>: For more detail see <u>http://www.odc.public.lu/publications/lettre\_observatoire/Lettre\_Obs\_Comp\_N7.pdf</u>

<sup>&</sup>lt;sup>10</sup> For more detail see: <u>http://www.odc.public.lu/</u>

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 Luxembourg<sup>11</sup>. In view of this critique, it proved to be advantageous 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"<sup>12</sup> was suggested in 2004 to the Tripartite Coordination Committee. The social partners were closely involved in this effort. This scoreboard is updated periodically<sup>13</sup>, depending on the availability of data, and will serve as an instrument of economic policy<sup>14</sup>.

<sup>&</sup>lt;sup>11</sup> One example of this is the fact that cross-border workers are not counted in the employment rate. This is a purely national concept with residence as a criterion. However, domestic employment in Luxembourg includes a cross-border population of 37%, and 50% of new jobs created recently have gone to persons in this category.

<sup>&</sup>lt;sup>12</sup> 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. Additional meetings held periodically with the social partners will occur in order to optimize this state instrument for assistance in decision-making.

<sup>&</sup>lt;sup>13</sup> The scoreboard was updated recently for the third time, in September 2007 by the *Observatoire de la Competitivité*.

Ministry of the Economy and Foreign Trade, <u>Bilan Compétitivité 2007</u>, Luxembourg, 26 September 2007. <u>http://www.odc.public.lu/actualites/2007/09/26\_bilan\_compete/index.html</u>

<sup>&</sup>lt;sup>14</sup> Parallel to this Competitiveness Scoreboard, the Economic Interest Grouping (EIG) Luxinnovation is also closely following changes in the scoreboard concerning innovation and R & D activities in Luxembourg and the Ministry of the Environment is monitoring indicators for sustainable development. These two sets of indicators are fully compatible with the Competitiveness Scoreboard, which is composed of a core group of indicators to which different sets of specific indicators are associated. One must pay particular attention to achieving consistency with regard to the overall comparison approach being used, as well as to the definitions used within these different sets of indicators that must be compatible with each other. For example, it is necessary to be sure of the principle of uniqueness of the indicators, which implies that each base indicator use the same benchmarks and data, regardless of the set to which it belongs.

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-based Economy, Social cohesion and Environment.

The indicators are divided into three different zones, depending on the position of Luxembourg with relation to the European average (using countries for which data are available) that serves 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. Changes in the performance of the Grand Duchy are also analyzed over time.

The last update of the Competitiveness Scoreboard, containing the most recent data available, together with the systematic comparison with results from previous years shed more light on the level of competitiveness of the Luxembourg economy. Of the 78 indicators coming out of the Fontagné report on the competitiveness of the Luxembourg economy that are still available *and* comparable in 2007, several observations may be formed. At the scoreboard's inception, of the 78 indicators for Luxembourg, 31 were in the green zone, 28 in the orange zone orange and 19 indicators were in the red zone. In general, this situation remains unchanged since 2004, and it may be noted that between 2000 and 2006 there are more indicators in the green areas and fewer indicators in the red areas. Still, this situation has a tendency to differ from one category of indicators to another.

A summary of all the base indicators appearing in the ten categories done by the *Observatoire de la Compétitivité* included calculations of an overall competitiveness indicator that reflect a very favorable position for the Luxembourg economy, placing it fifth in the EU-27 group, unchanged with relation to 2005.

Source: Ministry of the Economy and Foreign Trade, Observatoire de la Compétitivité Competitiveness Scoreboard 2007 – The Road to Lisbon

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.

In May 2006, STATEC tried to evaluate the actions emanating from the Tripartite Coordination Committee on growth and employment. Since this attempt marked one of the first tries at this type of evaluation, it was clear that the methodology employed would necessarily evolve over time with the appearance of measurable impact of the actions on the ground and improved data quality. To this end a new DSGE<sup>15</sup> model even better adapted to economic policy simulations is currently being developed<sup>16</sup>. 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 appropriate 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.

<sup>&</sup>lt;sup>15</sup> "Dynamic Stochastic General Equilibrium"

<sup>&</sup>lt;sup>16</sup> For more details see, FONTAGNE L., MARCELLINO M., <u>Une présentation du nouveau Modèle Lisbonne de</u> <u>l'Economie du Luxembourg: ModEL</u>, in *Bilan Compétitivité* 2007, Luxembourg, September 2007

### 3. Broad economic policy guidelines

### 3.1 Macroeconomic polices to promote growth and employment

#### IG 1 - Guarantee the economic stability for sustainable growth

Since 2006, the <u>budget</u> of the public administration 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 the social partners met in the Tripartite Coordination Committee and agreed upon a series of measures 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 salary indexing system, to postpone and space out adjustments to 2007 annuities and pensions, to de-index family services and to optimize public expenditures, especially with regard to expenditures for current administrative expenditures, including staff and investments. In addition, a certain number of non-recurring measures involving revenue were approved, such as the increase in the dependency contribution for insured persons.

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 6.1% 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%. 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 achieving a balanced budget for the year 2006.

As a % of GDP	2004	2005	2006	2007 (estimate)	2008 (forecast)
	Financing balances by sub-sector				
Public Administration	-1.2	-0.1	0.7	1.0	0.8
Central Administration	-2.5	-1.3	-0.9	-0.9	-1.4
Local Administrations	-0.1	-0.3	-0.2	-0.1	-0.1
Social Security	1.5	1.5	1.8	2.1	2.4

#### Table 1: The Administration's budget situation

Source: Notification to the Commission on 1 October 2007 of deficit and public debt data 2008

The improvement in public finances amounted to 2.2% of GDP in 2006 and 1.9% of GDP in 2007 with relation to the December 2006 forecasts for the stability program. In terms of economic stability, this shows that there indeed exists a high enough degree of institutional capacity to react to negative impacts and absorb any repercussions they could produce. In contrast, public finances in Luxembourg are so highly sensitive to changes in the economy that it is essential to provide for sufficient safety margins in the budget should an

unanticipated negative impact arise. Therefore, it behooves the country to maintain a considerable budget surplus at times of favorable economic activity.

<u>Controlling inflation</u> is one of the six major avenues of approach for reform measures as stated by the Tripartite Coordination Committee on 28 April 2006. The social partners and the Government are convinced of the need to lower the high level of inflation in Luxembourg and have agreed upon a group of measures aimed at better controlling inflation, especially core inflation. Among these are the following items:

- Voluntary pricing agreements between different economic sectors
- A comparative price indicator for prices in the Greater Region
- De-indexation of contracts concluded by the State by limiting the impact of indexation on only the payroll aspects of these contracts
- Analysis of rules and practices of import lobbies that are weighing on business supply policies from a European competition law perspective
- A policy of revitalization in the area of competition
- A prudence policy in terms of adapting administrated prices
- Neutralization of some taxes and excise taxes from the perspective of the automatic wage indexation system
- A modulation in the application of index-linking over the period of 2006-2009
- Temporary (till 2008) de-indexation of the flat rate educational payments and sums paid by the National Family Allowance Fund

Following the recommendations of the Tripartite Coordination Committee, several measures were implement including neutralizing certain taxes and excise taxes from the perspective of the automatic wage indexation system and a modulation of adapting salaries for the period 2006-2009. Various employer/employee organizations and consumer protection groups have been exchanging views on this issue since 2006<sup>17</sup>. The objective of these meetings was to give a sense of responsibility to certain actors. On 27 April 2007, the Government Council heard a situation briefing on work and ideas being developed to draw up an "Action plan to control excessive inflation". A certain number of concrete instruments to use in better controlling inflation were discussed, including the following:

- Set up an analysis procedure of the inflation rate prior to the onset of increases in public rates. Public rates do indeed influence in inflation. They are part of a group of diverse home made factors, such as regulated prices that push inflation upward. Strong political measures can thus have an immediate impact on changes in the inflation rate. It is therefore useful to consider implementing a prudence policy with regard to setting regulated prices.
- An analysis was made of the rules and practices of general import representation together with some business sectors, from a viewpoint of invigorating competition.
- A specialized international company carried out an initial study with the intent of establishing a comparative price indicator in the Greater Region<sup>18</sup>. The objective of this preliminary study was to determine prices of products from the multitude of products in stores in Luxembourg as compared to their direct competitors in France,

<sup>&</sup>lt;sup>17</sup> Ministry of the Economy and Foreign Trade, <u>Press Release: *Les mesures contre une inflation excessive*</u>, Luxembourg, 02.04.2007

http://www.eco.public.lu/salle\_de\_presse/com\_presse\_et\_art\_actu/2007/04/02\_inflation/index.html

<sup>&</sup>lt;sup>18</sup> For more details see, Ministry of the Economy and Foreign Trade, <u>Vers un indice comparatif des prix dans la</u> <u>Grande Région</u>, in Bilan Compétitivité 2007 – The Road to Lisbon, Luxembourg, September 2007

Belgium and Germany, as well as changes in prices over time. This study is mainly intended to provide players on the Luxembourg economic scene with better knowledge of price variations in the border zones of the country. The study, for which results are still being reviewed, currently covers the realm of supermarkets and therefore will only provide partial responses. Therefore, at this stage, it is premature to draw general conclusions on the subject. Analyses from other sectors are, however, currently being carried out.

#### IG 2 - Safeguard economic and budgetary sustainability, a prerequisite for more jobs

The public administration's finance balance went positive in 2006 and a surplus of between 0.8 and 1.0% of GDP is expected for 2007 and 2008. In addition, Luxembourg has achieved its medium-term budget objectives and public debt is among the lowest in the European Union (6.9% of GDP in 2007).

Luxembourg now enjoys a budgetary safety margin that is adequate to face the impact of unanticipated negative events and its capacity for allowing automatic stabilizing mechanisms to enter into play remains fully intact.

In order to preserve the ability of budgetary policy to react while keeping the high degree of public revenue volatility to the forefront that is typical in a small economy that is extremely open to exterior interaction, it is imperative to closely monitor changes in public expenditures. The capacity to make adjustments to the budget with regard to expenditures allows maintaining and re-establishing budgetary equilibrium without resorting to increases in tax pressures. This is an essential factor in maintaining the attractiveness of Luxembourg as a center of business activity. From 2004-2006, Luxembourg demonstrated that this adjustment capability existed, which allowed it to preserve public finance strength in the short and medium term.

In the longer term, the challenge of ensuring budgetary durability is more daunting.

Low public debt and the existence of significant financing reserves for pension system, in excess of 25% of GDP, combine to ensure that Luxembourg has favorable defensive features in facing economic and budgetary challenges linked to an aging population.

However, beginning in 2020 the impact of an ageing population will make itself felt to the fullest degree. If no policy changes are made, expenditures in the pension system will exceed revenues and the financing reserve of the pension system will gradually begin to be whittled down.

In order to prepare Luxembourg for dealing with the consequences of an aging population, the Tripartite Coordination Committee concluded in April 2006 that "the Government and social partners will proceed with the creation of a study group whose task will be to draw up proposals for ensuring the long-term sustainability of pension schemes and to analyze the various measures that could be adopted to guarantee long-term viability and to adapt the pension scheme to changes occurring in the course of professional careers, to the ageing of the population and to its impact on the duration of time spent working in a person's life". An initial meeting of the study group has been called for November 2007.<sup>19</sup>.

<sup>&</sup>lt;sup>19</sup> See. IG 18.

### 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**

#### Public sector

The Government's <u>R & D and innovation policy</u>, as formulated in the government program, in addition to its will to fully subscribe to the Lisbon Strategy - emphasized by its intention to increase public allocations for R & D to 1% of GDP - confers a pre-eminent position to this policy in the general context.

#### Table 2: Changes in budget allocations to R&D in recent years

Year	2004	2005	2006	2007	2008 (forecast)	2009 (forecast)
Allocations to R&D (Units: Mn €)	72.0	94.5	113.6	142.0	175.0	200.0
% of GDP	0.27	0.32	0.36	0.42	0.50	0.54

Source: Ministry of Culture, of Higher Education and Research

There have been major changes in the research and innovation landscape in Luxembourg. A university has been established and the Government has committed itself to investing more in R&D in upcoming years. The recommendations of the analysis of the research and innovation system in Luxembourg (OECD) that were presented in May 2006 are currently being implemented<sup>20</sup>.

In September of 2006, the Government approved a <u>multi-year founding contract</u> between the State and the University of Luxembourg. 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 the area of budget, it is stated in the contract that the State agrees to finance the activities of the University through an annual budget allocation that will increase annually, reaching the sum of 72 million euros in 2009.

The OECD evaluation confirms the existence of governance deficiencies in public research. In view of the tasks to be accomplished in upcoming years in the area of the national innovation mechanism, the OECD recommended that a Consulting Committee for Science and Technology policy be set up. In January 2007, the Government decided to implement this recommendation and created the <u>Comité Supérieur de la Recherche et de l'Innovation</u> (<u>SeniorResearch and Innovation Committee</u>). The committee is made up of the Minister for Culture, Higher Education and Research and the Minister for the Economy and Foreign

<sup>&</sup>lt;sup>20</sup> OECD, <u>OECD review of Luxembourg's innovation policy</u>, Paris, 24 May 2006 For more detail, see: <u>http://www.gouvernement.lu/salle\_presse/actualite/2006/05/31ocde/index.html</u>

Trade, who jointly chair the committee. As needed and depending on the issues before the committee, one or several members of the Government make up members, as do three Luxembourg science professionals, three representatives of the Luxembourg business community, three personalities from Luxembourg, one of which, at least, represents civilian 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 consistent national research and innovation policies.

In an effort to improve governance of public research, <u>performance contracts</u> are being drawn up by the Government in which assignments and objectives will be clearly set out and specified by players in the public research realm. Performance contracts will include precise objectives to be achieved by a given research facility in addition to a description of the activities expected to be undertaken by that facility within a specified time frame. There are two types of objectives: financial objectives, in the form of a certain type of third party financing to be set up and operational objectives. Bilateral discussions with research institutions concerning content of the contracts began in June 2007, with a view to terminating these discussions at the end of October 2007.

Using a similar approach, the Government launched a strategic audit of the <u>National Research</u> <u>Fund</u> (NRF) at the end of May 2007, with the intent of setting up a performance contract. The Government will also initiate a like strategic audit of Luxinnovation to set up a performance contract with it as well.

One concern of the Government is to concentrate the national R & D effort on a limited number of priority areas. This volition is part of the Government program and is reiterated in the National Plan for Innovation and Full Employment. Available resources will be concentrated on areas where balance appears achievable between current and future demand for scientific and technological skill on the part of research users and the capability of establishing and maintaining research capabilities of the actors. It is a question of reconciling the triple objectives of quality, relevancy of current and future work and critical mass so as to achieve a driving force to act on research activities in the private sector.

In this context, the Government commissioned the FNR in 2006 to undertake a forward study to establish a priority list of research themes that have high socio-economic potential in the coming decade. In May 2007, the FNR submitted the results of this forward study to the Government, dubbing it "FNR Foresight".

The Government is expected to make a decision in October 2007 concerning the priorities for public research in the future. Prior to this decision, consultations are currently underway with the concerned ministries and professional groups that aim to focus better on research areas and discuss relevancy of the themes recommended in the Foresight study, as well as their consistency with the Government's general research policy and how well they take into account needs within the various sectors of the economy. It is clear that if the policy of concentrating national research activities is pursued, areas chosen as priorities will receive a major portion of the additional public expenditures for research in upcoming years.

In May 2007, the Government convened to adopt a draft law concerning <u>training-research aid</u> that modifies the training-research scholarship program introduced in the R & D law of 9

March 1987. 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.

The current training-research scholarship system provides for no security in terms of employment or social insurance benefits to recipients, who as a rule are doctorate candidates or post-doctorate students. The stipend provides a standard contribution to living costs and study-related costs to recipients. There is no formal contractual link between researchers and the facility in which they are carrying out the work that comprises their training matter, and there is no provision for contributing to the social security system to the benefit of researchers.

The new training-research aid system attempts to bridge this gap by linking grants of this type to a determined-length work contract between researchers and their assigned facilities. Another objective of the draft law concerning training-research aid is to promote cross-sector mobility, to whit, between the public and private sectors. In order to encourage this type of inter-sector mobility of doctorate candidates and post-doctorate students, supplementary financial stipends are included if a project has concrete collaboration with one or several private sector partners. It has also been proposed that in the future, management of trainingresearch aid programs fall under the responsibility of the FNR.

#### Private sector:

Since 2003, the Government has operated the Business and Innovation Center Ecostart 1 in Foetz from the perspective of <u>a start-up hosting and coaching infrastructure</u>, intended for both launches of new innovative businesses and for developing companies or foreign entities looking for a landing area in Luxembourg. Since its doors have opened, the Center has contributed to creating jobs. In 2006 the Government began construction of a new facility in Foetz dubbed Ecostart 2 and the new Center opened in 2007. The Government also opted to continue and even extend the scope of the convention existing with the EIG Luxinnovation, bestowing it with the double mission of coaching hosted companies and managing and promoting the Ecostart center. Parallel to the extension of its activities in Foetz, the Government 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.

#### **OBJECTIVE:** Increase the pool of human resources

In February 2006 a study group was set up and tasked with transposing into Luxembourg law the directive 2005/71/CE dated 12 October 2005 relating to an admissions procedure for scientific research specific to nationals from other countries. The study group<sup>21</sup> completed its work in March 2007 and its contribution was included in the draft law on the free circulation of persons and immigration. In June 2007, The Government agreed to the broad lines of the draft law, which will now enter a consultation phase.

With regard to immigration, Luxembourg continues to uphold its current legislation in the area, while considering the human resources requirements of businesses. Restrictions concerning access to the labor market by nationals of the eight new member countries in the

<sup>&</sup>lt;sup>21</sup> The study group is comprised of representatives of the Ministry of Culture, Higher Education and Research, the Ministry of Foreign Affairs and Immigration, the Ministry of Labor and Employment, the Ministry of the Economy and Foreign Trade and the Social Security Ministry.

East have been maintained, but entry requests from the agricultural, viniculture and Horeca (Hotels, restaurants and cafés) sectors are now being handled with full favorability. In the financial sector, persons with specific qualifications for which labor market requirements remain unfulfilled are receiving the same favorable treatment. These provisions apply also to nationals from Rumania and Bulgaria. The Government has announced that the Luxembourg labor market will now be accessible to all nationals of the eight member states concerned before the end of 2007. However, the restrictions in place regarding Rumania and Bulgaria remain intact<sup>22</sup>.

#### IG 8 - Facilitate all forms of innovation

#### **OBJECTIVE:** Promote the creation and development of new companies

In February 2007 the Government introduced its model for <u>future organization of creating</u> <u>businesses in the area of innovation</u> to executives from Luxinnovation and the Henri Tudor Research Center. 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 des 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.

The new model makes a distinction between the decision making and operational levels. On the decision making level, the model recommends setting up a decisions committee with the mission of setting out strategic guidelines for incubators, making decisions with respect to hosting new candidates and exiting more established ones and in general to ensure that the facility functions properly. On the operational level, the new organizational structure will piggyback on the existing one, handing over coaching and assistance responsibilities extended to technological and innovative start-ups to the Henri Tudor PRC and to Luxinnovation. These two entities have now accumulated precious experience in the area over many years.

In June 2007, UdL and the Chamber of Commerce set up a <u>Master of Science</u> <u>Entrepreneurship & Innovation</u><sup>23</sup>. This new advanced studies Master of Science degree is the first concrete expression of a close partnership between UdL and the Chamber of Commerce and responds to the proposals drawn up in 2004 by the Chamber of Commerce to create a chair specifically consecrated to entrepreneurialism in the new University.

The <u>project COURAGE</u> has been launched. This Interreg project will seek to motivate and train students in the area of starting up, developing and taking over businesses through 2008. The Gründercup Interregional was set up as part of this project. It is a combination of training in the area of creating and managing businesses and a simulation exercise in setting up a company. Working in the framework of a competitive game, students use the 'learning by doing' principle to get to know the foundations of the work of business. Participants use practical experiences to develop ways to think and act like an entrepreneur, as well as to get to know the necessary decision processes to employ when creating and managing a company.

<sup>&</sup>lt;sup>22</sup> For more details see:

http://www.Gouvernement.lu/salle\_presse/actualite/2007/09/20schmit\_travailleurs/index.html

<sup>&</sup>lt;sup>23</sup> For more details see the table on implementation of the European Charter by small companies.

#### **OBJECTIVE:** Promote the concept of intellectual property

The Government has been very active in the area of intellectual property since last year and can cite its participation in the following <u>events and presentations</u>:

- Several awareness actions centering on intellectual propriety (an exposition with the Technology Watch Center, information regarding the dangers of illicit downloading, etc.)
- An awareness campaign by the customs organization on the counterfeiting problem and the importance of brand protection, conceived in the form of an exposition at the World Intellectual Property Day event (*Journée mondiale de la Propriété Intellectuelle*).
- A conference devoted to the economic value of brands, aimed primarily at professionals interested in bolstering their company's brand image and their products and services, which was set up by *Office Benelux de la Propriété Intellectuelle, Institut de Formation de la Chambre de Commerce (IFCC)* and Luxinnovation.
- Ministerial approval for setting up three collective management companies in the area of related rights.

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

#### **OBJECTIVE:** Spread the use of ICT by all players in the economy

The first biometric passports were produced in August 2006 following the implementation of <u>the public key infrastructure</u> (PKI) by the company LuxTrust S.A.<sup>24</sup> and has since begun to sell SSL (Secure Socket Layer) certificates for certification of web sites. This company has entered its second deployment phase and in 2007 began to market SSL/TLS (Secure Socket Layer / Transport Layer Security) certificates and Object Certificates, which are used to identify and provide security for servers and online applications. These certificates guarantee electronic authentication of servers and web sites as well as for software and applications. They guarantee safe and reliable electronic communications and transactions.

One of the priorities of the CASES project is to the bolster confidence of the public in the Internet medium and online services. This Government project is attempting to reduce digital divide in the area of information <u>security</u> by organizing a transfer of expertise to a vast public audience by means of an Internet site<sup>25</sup>. The public targets of CASES are citizens, SME and administrations. Training sessions for children are also being offered as are demonstrations in public fairs and in state administrations.

<sup>&</sup>lt;sup>24</sup> LuxTrust S.A. was established in November 2005 as a partnership between the Government of Luxembourg and several major private sector companies in Luxembourg. It issues and manages extremely high level security electronic certificates to meet the heightened security requirements of electronic business for the Government, the financial sector and other players in the Luxembourg economy, while keeping an international orientation through the adoption of internationally recognized standards.

<sup>&</sup>lt;sup>25</sup> <u>http://www.cases.public.lu</u>. Also see the *e-learning* platform <u>https://elearning.cases.lu</u>, the online quiz <u>https://epass.cases.lu</u> and <u>https://pwws.cases.lu</u>.

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

Now that the move to land-based digital broadcasting has been completed, cable operators can begin offering digital television to customers no later than the beginning of 2008. The basic cable service offer includes some 80 television channels. Analog transmission of some programs will continue through the end of 2011 so that subscribers may switch to digital when they choose.

## **OBJECTIVE:** Adopt the regulatory requirements applicable to the media to promote circulation of content independent of the technology in use

The transposition of the new audiovisual media services directive provides the opportunity to adapt the legislation. Regulation of television content and on-demand services will be applied independent of the mode of transmission used.

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

The primary objective of the <u>Health Technologies Action Plan</u> is to promote Luxembourg as an advantageous location for companies pursuing leading edge activities in certain areas of the health technologies sector and to encourage sustainable economic development through this. The strategy used to achieve this involves better financial incentives for research efforts and to develop existing structures both in terms of research skill and industrial activities. We must also make full use of our competitive advantages. Over the last few months the requirements for regulatory and tax structures, infrastructures and promotion mechanisms were analyzed in concert with all involved parties - the Ministry of Culture, Higher Education and Research, the Ministry of Health, the National Loan and Investment Company (*Société Nationale de Crédit et d'Investissement*) and Luxinnovation - in order to implement the measures to be taken to draw up any recommendations necessary.

Using the potential of <u>developing the logistics sector</u> in Luxembourg, the Government chose logistics as a skill niche to develop in the country. To achieve its goal the Government outlined a four-pronged action plan. First, Luxembourg should be promoted as an intercontinental logistics site and as a location with organizational expertise in its logistical chain. Next, the country's administrative and regulatory structure will be adapted to meet requirements of the sector and existing expertise must be increased. It is particularly important to develop adequate industrial zones and access to them. It was decided to develop a zone that would be entirely dedicated to high value added logistical activities based on multi modal transportation. In addition, diverse initiatives were launched, such as setting up a rail highway extending from the Grand Duchy of Luxembourg to the south of France and implementing specialized training programs. The agreements between CFL Cargo and Euro rail, a company that places rail transportation at the center of its business, and Cobelfret, a company with a reputation in maritime shipping, fit ideally in the overall logistics concept of the Government that seeks to encourage alternative forms to road transportation<sup>26</sup>.

<sup>&</sup>lt;sup>26</sup> For more details on this subject, see. IG 16

#### IG 11 - Encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth

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. All checklists and basic analyses have been completed for each plan and design work began in the second half of 2007, with coordination between the choices under development carried out by the various sector plans. Draft plans are projected for presentation in the spring of 2008, with the consultation and final approval procedures as outlined by the law dated 21 May 1999 on territorial planning to follow.

#### **OBJECTIVE:** Promote a balanced environmental policy

The Government has pursued as a priority the implementation of measures set out in the National Plan for the Protection of Nature (NPPN) and the action plan for reducing  $CO_2$  emissions entitled "*Climate change: act on a major challenge*".

The <u>National Plan for the Protection of Nature</u> (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 1. Halt the loss of biodiversity before 2010, and 2. Protect countryside and ecosystem services, as well as seven specific goals to achieve:

- 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 effective implementation of nature protection policies
- 6. Promote scientific research in the area of biodiversity and conservation of nature
- 7. Improve awareness and teaching in the areas of protection of and sustainable development

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 labelled high priority, as well as thirty-six priority sites to be classified as protected areas. On the international level, the NPPN is the nation's commitment to halt losses in biological biodiversity before 2010.

The action plan to reduce  $CO_2$  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 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 concerned. A taskforce including comprising all the ministries involved reviews work on the plan on a regular basis. In May 2007, the action plan underwent its first formal evaluation in the framework of a forum<sup>27</sup>. In an effort to bolster the provisions of the existing action plant the Government introduced a 10-point short-term summary of the plan's essential elements in May 2007

- 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<sup>28</sup>

The Climate Change Action Plan<sup>29</sup> also contains measures intended to bolster the policy pursued by the Government to increase energy efficiency and develop renewable energies. Agreements concluded with the Federation Luxembourg Industrialists (FEDIL) were extended for 2008. The purpose of the draft Grand-Ducal regulation that transposes a large part of the European directive on energy efficiency is to increase energy performance of buildings and to amass construction types that are less hard on energy resources. In addition the regulations concerning the subsidy scheme for energy savings and the uses of renewable energy sources that ensure that renewable energy and rational use of energy are promoted underwent a reform based on a detailed analysis of the potential of renewable energy sources<sup>30</sup>. The two draft regulations introduced in July 2007 establish new measures for promoting renewable energy sources and rational use of energy in order to achieve the ambitious objective of full exploitation of the potential of renewable energy sources in the Grand Duchy of Luxembourg. These will take effect on 1 January 2008.

The drafting of the <u>National Sustainable Development Plan</u> (*Plan National pour un Développement Durable* PNDD)<sup>31</sup> is underway. The Interdepartmental Commission for Sustainable Development (CIDD), represents all ministries and chose the quality objectives required for sustainable development in Luxembourg. These include viability in the area of finance, competitiveness of the economy, a stable economy, equal opportunities, skills and qualifications, ensure reproducibility, education and sustainable development, consistent governance actions, sustainable spatial planning, sustainable production and consumption, protection of natural resources, climate protection, social integration, anticipate and prevent

<sup>&</sup>lt;sup>27</sup> The forum is called "*Klimaschutz schaaft Chancen*"

<sup>&</sup>lt;sup>28</sup> The measures appearing above are taken from the Evaluation Grid of the 2007 Implementation Report.

<sup>&</sup>lt;sup>29</sup> See. IG 11 - OBJECTIVE: Promote Eco-efficiency

<sup>&</sup>lt;sup>30</sup> Fh-ISI, EEG,BSR, <u>Bestimmung der Potenziale und Ausarbeitung von Strategien zur verstärkten Nutzung von</u> <u>erneuerbaren Energien in Luxemburg</u>, Karlsruhe, 26. March 2007

<sup>&</sup>lt;sup>31</sup> The PNDD and the National Plan for Innovation and Employment are complementary. The National Plan for Innovation and Full Employment is a part of the sustainable development concept.

precariousness, fight poverty, full employment, equal rights, safe services and reducing world poverty. These proposals are currently in consultation with representatives of civil society. In December 2006, the Government held a seminar on the theme of sustainable development and corporate responsibility in Luxembourg. Sustainable Development specialists were present at the seminar representing OECD, the World Business Council and the Wuppertal Institute, in addition to Luxembourg companies that have been closely involved in efforts to protect the environment and upholding social responsibility.

The Environmental Technologies Research Center  $(CRTE)^{32}$  undertakes activities and completes projects with objectives that promote sustainable consumption and eco-efficiency. The objectives of the activities the Center undertakes <sup>33</sup> are to minimize environmental impact on the air, water and land which originate from human intervention, through the implementation of Researcher Development Initiative (RDI) projects that aim at long-lasting management of natural and energy resources.

#### **OBJECTIVE:** Promote a competitive energy policy

Since the fall of 2006, some progress has been achieved in the area of energy policy. The Government introduced two draft laws in August 2006 in Parliament dealing with the structure of the electricity and natural gas markets. These draft laws transpose the electricity (2003/54/CE) and natural gas (2003/55/CE) directives for accelerated establishment of an internal energy market. The two laws were approved by Parliament in July 2007 and were published in the *Mémorial* on 21 August 2007. The laws also transpose two directives relating to 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. Through this, the laws offer full potential for increasing the competitiveness of Luxembourg's economy.

#### **OBJECTIVE:** Promote eco-efficiency

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

To this end it concluded a voluntary accord with the Luxembourg Federation of Industrialists (FEDIL) to improve energy efficiency in Luxembourg's industries. The accord was extended in 2002 and ends in 2008. The Government intends to roll over the voluntary accord and to widen the scope of this instrument of energy efficiency endorsement to other sectors of the Luxembourg economy.

A draft Grand-Ducal regulation concerning the <u>energy performance of residential buildings</u> was submitted for approval in 2006. After reviewing opinions submitted, the proposed Grand-Ducal regulation underwent amendments and was re-submitted with the intention of taking effect on 1 January 2008. This regulation largely transposes the European directive on the energy performance of buildings (2002/91/CE). The objective of the regulation is to ultimately make all buildings less wasteful of energy resources and to set out the basis for sustainable energy savings that spans the entire life cycles of these buildings. Furthermore, it will serve as a federating clause for the creation of sustainable local and regional jobs in the

<sup>&</sup>lt;sup>32</sup> This is a shared structure dependent on the Ministry of the Environment and the Henri Tudor PRC.

<sup>&</sup>lt;sup>33</sup> See the Evaluation Grid in the 2007 Implementation Report

construction sector. In the mean time, preliminary studies are underway for the drafting of a Grand-Ducal regulation on the energy performance of functional buildings thus covering the second part of the European directive transposition dealing with energy efficiency in buildings (2002/91/CE).

Since 1994 the Government has actively promoted the development of the cogeneration concept, both through providing guaranteed remuneration for electricity produced and by offering investment grants for installations of this type. In view of the transposition of the European directive concerning the promotion of cogeneration activities (2004/8/CE), 1994 legislation was fundamentally revamped. To this end, a study was initiated concentrating on the potential of high yield cogeneration systems. Based on the results of this study, a new regulation that continues to promote cogeneration will be produced.

The Government has set January 2008 as the date to complete a full review of its renewable <u>energies promotion and its energy efficiency processes</u>. A study on the potential of renewable energy sources in Luxembourg presented in March 2007 by *Fraunhofer Institut für System-und Innovationsforschung (Fh-ISI)*, Energy Economics Group, TU Wien (EEG) and BSR-Sustainability in partnership with the *Agence de l'Energie*, Luxembourg formed the basis for drafting new regulations. The new regulation is reflected by two new Grand-Ducal regulations expected to enter 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 in the Grand Duchy of Luxembourg. The new mechanism provides for setting 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 the area of 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 area 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.

In 2006, the Government attempted to give a boost to the <u>use of bio fuels</u> by introducing detaxation of this type of fuel effective 1 January 2006, which would have the effect of transposing directive 2003/30/CE intended to promote the use of bio fuels and other renewable fuels in transportation. Because this measure did not result in material increases in bio fuel use as expected, the Government introduced a measure effective 1 January 2007 requiring that fuels for motor vehicles comprise a minimum of 2% bio fuel, calculated on the basis of energy content of the fuel.

As a part of directive 2006/32/CE on <u>energy end use efficiency and energy services</u> the Government is finalizing its first action plan in energy efficiency, the PAEE, which sets a benchmark and intermediate objective for energy savings in the third year that the directive

has been in force. It also summarizes the strategy for achieving intermediate and global objectives. This action plan will be introduced at the end of 2007.

Lastly, the Government has begun preparations to eventually formulate an overall energy policy strategy that takes into account supply, competitiveness and eco-efficiency requirements that is based more on market instruments.

#### **OBJECTIVE:** Promote sustainable patterns of consumption

A series of consumer education actions were carried out through the intermediary of consumer protection organizations that were co-financed by the Government.

#### IG 12 - Extend and deepen the internal market

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

The Government has carried out a <u>more rigorous monitoring of European legislation to be</u> <u>transposed</u> into national law, carrying on regular discussions at various intervals about changes in the transposition deficit. It acquired a mechanism that aims to guarantee the transposition of directives within deadlines that impact both the internal market and all Community directives, via a circular from the Prime Minister to the members of the Government Council dated 10 July 2006. The role of the delegate Minister of Foreign Affairs with regard to follow-up and coordination concerning this mechanism on the national level was strengthened and confirmed by the circular. This mechanism, for which the full implementation is a continuing effort, aims at substantially reducing the transposition backlog and at avoiding the occurrence thereafter of new delays. It has already improved coordination and follow-up in the transposition process on the national level. Regular contact and information exchange with Parliament have also been improved by means of regularly published reports.

These efforts resulted in Luxembourg reducing its transposition deficit from 4.4% of the internal market directives when the National Plan for Innovation and Full Employment was introduced at the end of 2005 to 2.6% at the end of February 2006, with the number of internal market directives to be integrated into national law dropping from 72 to some 42. However, Luxembourg was part of the overturning of general trends observed in the scoreboard published in July 2007 indicating a 3.13% increase of the transposition deficit, with 51 internal market directives late in being transposed. Overall performance among the member states dropped slightly, the cause for which the Commission attributes to the elevated number of directives to be transposed between November 2006 and May 2007. Still, renewed efforts on the part of Luxembourg administrations helped in reducing the transposition deficit to 2.41% as of 10 October 2007, which amounts to 40 internal market directives yet to be transposed.

It should be noted that the European Council held in March 2007 appropriately indicated that proper functioning of the internal market depends not only on the prompt transposition of Community legislation throughout the EU, but also on correct and high quality transposition of this legislation. However, with the European Council's decision to reduce the intermediate objective to less than a 1% deficit of internal market directives instead of the previous figure of 1.5% of these directives between now and 2009, the Luxembourg authorities are aware that

each setback keeps Luxembourg further away from achieving the new objective within the time allotted.

Concerning the <u>transposition of directive 2006/123/CE</u> dealing with services within internal markets, the text of the directive partially upholds the constant law of the Court of Justice of the European Communities with regard to internal market rules. It also contributes to adding an element of administrative cooperation, 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. Since the provisions of the services directive dealing with administrative simplification are also mostly in line with the Government's aspirations as set out in its program of 4 August 2004, transposition activities may server useful in taking advantage of opportunities arising from the economic integration project benefiting Luxembourg service providers. Transposition coordinators for the services directive, aided by an inter-ministerial committee, have mapped out a path with an ambitious schedule in order to be able to complete transposition work as soon as possible.

In 2006, the Luxembourg <u>SOLVIT</u> center carried out a screening of the various dossiers that were processed. In this way, exchanges of viewpoints occurred with officials responsible for transposing directive 2004/38/CE converting their right of Union citizens and their family members to freely travel and stay on the territories of all member states. The national point of contact also pursued promotion efforts directed at the general public and increased collaboration with the appropriate departments in the Chamber of Commerce and the Chamber of Trades, the Permanent Representative of the European Commission in Luxembourg and most particularly with that organization's legal services arm for citizens, EUROJUST. In addition, in view of the success of the mechanism and the growing number of cases submitted, the SOLVIT center has been obliged to take on more staff to properly process the volume of dossiers.

#### **OBJECTIF:** Promote open, transparent and non discriminatory public markets

The electronic portal<sup>34</sup> for public markets has been in operation since the beginning of 2006. This portal aims at centralizing all notices concerning tender offers, vending opportunities and services originating from Luxembourg public sources in a single location. The portal also allows the various public sources to attach submission documents to notices to tender. Placing public markets online guarantees greater transparency and benefits include a larger field of contractors for public customers, better value for contracts and lower administrative costs for both interested contractors and public entities. The Government has just launched the second electronic public markets portal phase with the purpose of publishing offers in electronic form.

IG 13 - Ensure open and competitive markets inside and outside Europe, reap the rewards of globalization

With regard to agreements and abuse of dominant position, national competition authorities are pursuing their legal mission of scrutinizing the cases relating to violations of competition law, by virtue of articles 81 and 82 of the EC Treaty, independently of articles 3 to 5 of the national competition law. A draft law is underway that provides for setting up one single

<sup>&</sup>lt;sup>34</sup> For more details, see: <u>http://www.marches.public.lu/</u>

authority that integrates jurisdiction of the Competition Inspectorate with Competition Council. The idea is to simplify procedures, improve efficiency within the institutional framework, take into account the new rules of the European Competition Network amnesty program and to make it possible to carry out sector surveys and be able to increase personnel numbers. Currently, the Competition Inspectorate has closed its first cases and the Competition Council has delivered three decisions. The authorities are hastening toward developing and maintaining a genuine competition ethos in Luxembourg.

## IG 14 - Create a more competitive business environment and encourage private initiative by improving regulations

#### **OBJECTIVE:** Increase impact studies and analyze flows

In March 2007, the Government Council adopted the <u>*«Entfesselungsplang fir Betriber»*</u> report<sup>35</sup>. The report follows through on the 2004 coalition agreement. It is divided into five sections as follows: 1) Mandate, contexts, definitions, methodology, objectives 2) Administrative simplification to benefit Luxembourg companies 3) Action plan 4) Overall view of the Action Plan 5) Appendices.

This report is based on contributions from various ministerial departments and on recommendations formulated by company representatives participating in working groups and plenary meetings of the National Committee for Administrative Simplification to Benefit Companies (*Comité national pour la simplification administrative en faveur des entreprises*, CNSAE).

The action plan is a major part of the report. It contains four areas of administrative simplification to benefit companies, as follows: 1. Administrative Simplification Structure 2. Prerequisites for Administrative Simplification 3. Principles of Administrative Simplification 4. Other instruments and actions for Administrative Simplification. The report contains 76 concrete actions; of these 76 actions, 34 have been achieved, 13 are in the process of being achieved and 29 remain to be achieved, 19 of which have been approved by the Government Council.

Thirty four administrative simplification proposals have been presented by corporate representatives, three proposals by administrations and ten horizontal proposals for review by the CNSAE. The majority of these cases will be processed by working groups put into action by the Government.

In addition, the *Entfesselungsplang fir Betriber* report contains five governmental proposals for administrative simplification on the community level, as well as 67 administrative simplification actions stated to the CNSAE by the various ministries, presented as either actions that have been carried out, actions to be carried out or actions currently in the process of being carried out).

In March 2007, the Government gave its approval for setting up the working groups as suggested. These working groups will submit concrete proposals for resolving problems diagnosed by corporate and administrative/ministerial representatives. The Government

<sup>&</sup>lt;sup>35</sup> The *«Entfesselungsplang fir Betriber»* is available at the following Internet site <u>www.simplification.lu</u>.

Council has furthermore determined the need to impose restrictive deadlines on the working groups for completing their reviews.

The Government Council also decided in March 2007 to apply the SCM standard costs model to a set project on a trial basis. The purpose of this is to evaluate administrative costs inherent to this project.

In the fall of 2006, the Luxembourg Government set up a Simplification Coordination Committee (CCS) that will read the impact sheets and draft recommendations for the Government concerning all draft laws and Grand-Ducal regulations dealing with companies, as an ex-ante procedure. The CCS has issued a total of 25 recommendations up to now.

#### **OBJECTIVE:** Codify legislative texts

Drafting of the Consumer Code took more time than originally forecasted. It will not be possible to submit a draft law to the Government Council before the end of 2007.

## **OBJECTIVE:** Optimize information exchange between administration bodies and companies

As part of the <u>electronic assistant for creating companies</u>, a working group including representatives from the concerned departments and professional chambers was set up to analyze administrative procedures required of companies. This work will serve as a basis for putting the first electronic application of the Single Window on line.

The <u>single point of contact</u> concept will provide companies with an individual administrative space for recording information commonly requested during interaction with Government departments, a feature that precludes having to make redundant entries repeatedly. The individual space is protected by PKI infrastructure and enables companies to monitor progress of their files in the system. Companies are integrated into the administration's workflow by means of this mechanism and can react interactively concerning additional requests for information, which in turn will accelerate processing files.

The single point of contact contains department assistants that guide companies in choosing prospective processes that are appropriate to a particular context of a file. Assistants then intelligently aid companies in entering data not available in a company's personal space, use this data to generate a case file, then sign off on it and submit it electronically. By evaluating on a per case basis what benefits are derived from implementing this type of electronic system impacting both companies and the internal workings of a Government organization or the State as a whole, the following departments have been identified as likely to effectively integrate electronic assistants:

- Establishing new companies
- *Commodo/incommode* procedures and rules
- Government subsidies
- Activities derived from the services directive
- Recruitment
- Wages declarations
- VAT
- Tax returns
- Reporting to the balance sheets register (*Centrale des bilans*)

- Online public markets
- Miscellaneous sector-based subjects

In addition to the efforts to improve relations between companies and the administration, a full restructuring program of the Administration's back office operation has been initiated. It consists in optimizing processes in order that they can respond optimally to files that have been submitted by companies. To achieve this, it will be necessary to implement some new collaboration instruments such as the GED electronic document management and Business process management systems as well as a progressive integration of the Single Window into existing applications.

IG 15 - Promote a more entrepreneurial culture and create a supportive environment for SME <sup>36</sup>

#### **OBJECTIVE:** Promote an effective entrepreneurial policy

The Company Visitation Days held in June 2006 and May 2007 provided the opportunity to companies to help the general public know their operations better and to recruit new collaborators. The event was preceded by a media campaign. In 2007, the numbers of companies participating in this action increased by around 25%, with about double the number of visitors compared to 2006.

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.

The TGV East that links Luxembourg to Paris as of 10 June 2007 reduces travel time between the two capitals to two hours and five minutes, which represents a gain of 90 minutes with respect to the previous route. 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 <u>Luxembourg-Strasbourg section of the Eurocap-Rail</u> project, will, by the project's second phase completion date set for 2015, reduce travel time between Luxembourg and Strasbourg from its current two hours and five minutes to one hour and twenty-five minutes.

In addition, an <u>international rail link</u> with Germany<sup>37</sup> has been planned, 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 Saarbruck and the City of Luxembourg.

<sup>&</sup>lt;sup>36</sup> See also the frame concerning the implementation of the European Charter for small companies.

<sup>&</sup>lt;sup>37</sup> Luxembourg – Wasserbillig – Trèves – Koblenz

In addition, upon completion of the new <u>Luxembourg airport terminal</u> in 2008, traveller flows will be improved 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 has been continued. Thus, a new rail line that links the Luxembourg airport and the European Kirchberg sector, which is in full expansion, to the national rail network is being planned for the medium term.

The Government reiterates its resolve to put in a light tramway<sup>38</sup> that will pass through the center of Luxembourg to 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 2012), the benefits to users of increased service as sections are progressively completed and the reasonable cost of the construction project.

In the area of <u>freight transportation</u>, the Luxembourg Government set up a company called CFL CARGO in response to the need to adjust the balance between the various modes of transport. The company arose as a result of a joint venture between the Luxembourg national railroad CFL and the steel giant Arcelor. CFL CARGO was established on 17 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 initiated 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, known by the acronym "ROLY"; Antwerp - Basel; BELIFRET (the precursor in Europe takes its name from the first letters of the countries that are travelled through: Belgium, Spain, Luxembourg, Italy and France).

In 2007, The Government began operating a <u>railway-highway freight link</u> 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 rate systems 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, Luxembourg continues to operate motorways and lesser highways in the Grand Duchy under the "Eurovignette" rates system while it seeks to fully implement the new

<sup>&</sup>lt;sup>38</sup> Planning for the light tramway in the city of Luxembourg is being done by an Economic Interest Group (E.I.G.) under the name of "LuxTram" comprising the Grand Duchy of Luxembourg and the city of Luxembourg. Other analyses for future establishment of a light tramway system are underway in the South Region and in "*Nordstad*".

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.

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

In July 2006, the Government introduced a new bill pertaining to information highways. The goal of the project is to improve Luxembourg's international connectivity by introducing a very high speed network between the center of Luxembourg and the primary Internet access centers abroad. This is a general economic policy measure that benefits companies established in Luxembourg as well as consumers, who should see Internet access costs drop even further. The information highway construction law has been in force since 22 December 2006.

Concerning the appearance on the market of frequencies suitable for Wimax mobile applications, two Wimax licenses were granted on 1 August 2007.

#### I. Priority areas for 2006-2007

## • Less expensive and more rapid registration, especially through a single point of contact interface (Action line 2 of the Charter) (LDI 14 and 15)

» Two single points of contact cover all start-up procedures for companies in Luxembourg, one for handcraft businesses and one for trade businesses. The procedure for recruiting the first employee is subject to a mandatory announcement of a vacant position to be submitted to the Jobs 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 Chamber of Trades point of contact has been restructured and now handles procedures that extend beyond business start-ups and provides assistance throughout the life of the company. The Chamber of Commerce window has also been restructured and has now been awarded ISO 9001:2000 certification for service and consultation to companies.

»The virtual single point of contact *Portail Entreprises*, awarded the good practice status in the 2006 Charter follow-up conference, will be operational in 2008. Its initial phase will include procedures for obtaining authorization for establishing a company, procuring a VAT number, inward clearance for direct contributions and registration in the commercial register (see also IG 14). Promotion for the single point of contact for companies as described above is coordinated with that of startups, since rapid and easy access to pertinent information is and important element in creating a space conducive to entrepreneurial activities.

» The objective of granting authorization to form a new company within a week should be achieved in 2008 by means of the new computer application implemented in the authorizations department of the Ministry of Middle Classes, Tourism and Housing, the ministry responsible for SME.

» Currently, fees due to the public administration for starting a business amount to €45 for a trades person (a physical person).

#### • Improvement of online/taxation access (part of action line 7 of the Charter) (LDI 9 and 15)

» The second phase of the eVAT system, which was selected as a good practice in the "European Charter of Small Businesses – good practises selections for 2007" will from now on allow small businesses to perform no cost downloads of the declarations form, then to complete it, submit modifications, save it and submit it by means of the eVAT system. Encoding and submission to the tax administration can thus now be accomplished on a 24 hour basis by taxpayers who can follow the procedure's progress. In the event of an error, the tax administration can more easily guide taxpayers in correcting forms immediately and subsequently submitting them electronically.

#### II. Other areas

• Education and training for entrepreneurial spirit in companies (action line 1 of the Charter) (LDI 15)

#### A favorable brand image for entrepreneurs

» A new approach was chosen that includes testimonies from entrepreneurs in following through on the first media campaign promoting the "Trau Dech" entrepreneurship. These spots transmit a positive message: there is entrepreneurialism in Luxembourg!

» The Woman Business Manager of the Year award, 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.

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

#### **Bolster school – professional realm links**

» A Master of Science in Entrepreneurship & Innovation (M.Sc.E.I.), earned in the *Faculté de Droit, d'Economie et de Finance* (FDE) of the *Université du Luxembourg*, has the vocation of promoting entrepreneurial spirit in companies and creating innovative companies by means of setting up a university training program.

» The non profit association *Jonk Entrepreneuren* Luxembourg 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 2006-07 as a result of this financial support. For two years 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. The management team deemed to be the best may participate in a European competition set up by JA-YE Europe.

» Luxembourg is also contributing to the INTERREG IIIA/Delux «University training and Continuing Education for creating, developing and taking control of companies in the Greater Region» in which the International University Institute of Luxembourg - an institution specializing in continuing and professional education at the university level - participates along with the Universities of Trèves and Sarrebruck. Projects completed via this university and interregional cooperation include the following:

- Setting up the interregional entrepreneurship summer school
- Implementing a business development training cycle
- Organizing the *Gründercup* with participants from the student bodies of the universities of Trier, Saarbrücken and Luxembourg.

Together with the *Institut Universitaire International Luxembourg (IUIL)*, the Jonk Entrepreneuren Luxembourg association put on the *Gründercup* Luxembourg 2006-2007 for fourth year students in the Faculty of Sciences, Technologies and Communications (*Faculté des Sciences, de la Technologie et de la Communication:* STC) of the University of Luxembourg. The *Gründercup* is a combination of training for setting up a business and managing a business in a simulated business set up competition, in which students learn to distinguish the bases of the business environment through the 'learning by doing' process. Winners of the competition measured their skills against other students in the inter-regional *Gründercup* held in the spring of 2007.

Secondary education and university students, as well as participants in various continuing education programs can obtain authorization directly to establish a business by means of the entrepreneurship skills certificate project. These students can legally create their own company provided that during their scholastic training they have completed modules in the techniques of business management and/or entrepreneurship. This project is made possible through cooperation of the Chamber de Commerce, the Ministry of National Education, the Ministry of Higher Education and the Ministry of the Middle Classes.

#### Promote new start-ups, especially innovative ones

» The Business Plan Toolbox of the *Institut Universitaire International Luxembourg (IUIL)* is an online aid intended for future business creators. The aid provides assistance in going through procedures, drafting business plans and completing essential formalities. Using this tool, STC students in the University of Luxembourg can enter into contact with experts of different backgrounds. This functionality will be available in the future to all Toolbox users. The Business Plan Toolbox can be consulted in German, English and French. As of 2007, it is available in Portuguese with the Luso-Luxembourg Chamber of Commerce and Industry (CCILL), with financial support from the Ministry of the Economy and Foreign Trade.

» The University of Luxembourg and the Chamber of Commerce are offering a Master of Science in Entrepreneurship & Innovation (M.Sc.E.I.). The purpose of this Master degree, offered through the Faculty of Law, Economics and Finance (FDE), is to encourage entrepreneurial spirit in companies and the setting up of innovative companies by means of implementing a high level university study program intended for students who seek to perfect and acquire practical knowledge and for management staff who wish to increase professional skill levels in the area of innovation. This initial shared project of the Chamber of Commerce and the University of Luxembourg provides a good balance between theory and immersion into the business world through recruitment of students with varied nationalities and academic backgrounds and involving an international teaching staff and numerous professionals from the business sector. The one-year course provides a syllabus given entirely in English. This Master degree is very much practise-oriented concentrating on business 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 at the Berlin Conference Charter in June of that year. Beginning with 2007, the 1,2, 3 GO project is providing high-level support in developing innovative startups through start-up subsidies in the amount of €70,000, provided in the form of guarantee deposits. The primary objective is to facilitate access to loans and to establish an initial bank reference. Using a 100% guarantee deposit, start-ups can get lower rate business loans from participating banks. In addition to financial aid, start-ups receive support and counsel from a business start-up specialist for the duration of the loan life. » Four events promoting entrepreneurial spirit in companies were put on under the headline of the *Journées Créations et Reprise d'entreprise* (Start-up and Take-over of Companies Events) by the Chamber of Commerce, the Chamber of Trades and the Federation of Women Business Chiefs of Luxembourg between November and December 2006, sponsored by Ministry of the Economy and Foreign Trade, the Ministry for the Middle Classes, Tourism and Housing and the Ministry of Equal Opportunities. The three Ministers gave a joint press conference in November 2006, during which they proclaimed their support for this action. 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 came together at the kick-off meeting for the headline event.

#### • Better legislation and regulation (action line 3 of the Charter) (LDI 14)

» Consultations are underway concerning the pilot study for a law on controlled management, for which the objective is to avoid bankruptcy through restructuring plans. In addition, the possibility of starting up a company following a bankruptcy or court-ordered company wind ups 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.

»The National Committee for Administrative Simplification in favor of Enterprises (CNSAE), which was selected as a standard of good practice 2005 at the Conference Charter in Luxembourg, published an initial report on administrative simplification in favor of companies in February 2007. The report contains for areas dealing with administrative simplification benefiting companies, as follows:

- 1. Administrative Simplification Structure
- 2. Prerequisites to administrative simplification
- 3. Principals upholding administrative simplification
- 4. Other instruments and actions for administrative simplification

The different actions and their progress status are categorized by their progress status, be it 'achieved', 'in progress', etc. The action plan contains 76 specific actions. Details of the report and its action plan are presented in IG 14. (www.simplification.lu)

» In March 2007, the Government Council, acting on a recommendation of the CNSAE, decided to apply the standard cost model on a trial basis to a specific project in order to evaluate administrative charges to the project. Depending on the results of the trial run, the Government will determine whether it will use this evaluation procedure more widely.

#### • Tax and financial issues (action line 7 of the Charter) (LDI 15)

In September 2007, the Government Council approved a draft law aimed at the economic development of certain regions of the country following the new Commission guidelines concerning regional directed government aid. This law introduces a new aid instrument reserved exclusively for small companies located in regions specified by the law that have been established only within the last two years.

## 4. Guidelines for employment policies <sup>39</sup>

The past year has been marked by the implementation of the agreements reached at the Tripartite Coordination Committee meeting of 28 April 2006 and by preparing and finalizing legislative and regulatory texts fundamental to the reforms.

The political discussions and decisions of past months are characterized by continuity and consistency of the choices made in 2006 by the Government and the social partners for the future of the Luxembourg economy.

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 criteria<sup>40</sup>

According to the latest figures available in the 2006 Labor Force Survey, (LFS), the <u>overall</u> <u>employment rate</u> of persons aged between 15 and 64 is 63.6%, the same rate as in 2005. This stagnation is remarked not only in the national employment rate (60.9% in 2005 and 2006) but also in that of resident aliens for whom a rate of 67.2% was recorded over the last two years. While the rate of employed women continues to increase from 53.7% to 54.6%, that of men has fallen from 73.3% to 72.6%, both for Luxembourg residents and resident aliens.

<sup>&</sup>lt;sup>39</sup> This part of the implementation report was written chiefly by the Ministry of Labor and Employment (which served as the coordinator), the Ministry of National Education and Professional Training, the Ministry of Equal Opportunities, the Ministry for Family and Integration and the Minister of Social Security.

<sup>&</sup>lt;sup>40</sup> Although the Lisbon 2 Strategy 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 labour - meaning the total number of persons working on Luxembourg territory - increased between 2005and 2006 by 3.68%. 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 resident concept. Yet the rate of cross-border workers in internal employment is 37%, and 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.

Status	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total population	59,7	60,1	61,6	62,7	63,0	63,9	62,2	62,5	63,6	63,6
Luxembourg citizens	57,0	58,3	59,6	61,6	59,1	60,9	59,0	60,1	60,9	60,9
Foreign citizens	64,3	63,1	64,8	64,4	68,6	68,3	66,7	65,8	67,2	67,2
Men	74,0	74,5	74,4	75,0	74,9	75,7	73,3	72,8	73,3	72,6
Women	45,2	45,6	48,7	50,1	50,8	51,8	50,9	51,9	53,7	54,6
Male Luxembourg citizens	72,3	73,4	73,3	75,0	71,3	73,1	70,3	70,5	70,5	69,7
Male Foreign citizens	76,9	76,2	76,1	75,1	80,4	79,7	77,4	76,1	77,2	76,6
Female Luxembourg citizens	41,1	42,6	45,4	46,7	47,1	48,2	47,5	49,4	51,1	52,2
Female Foreign citizens	51,8	50,2	53,5	54,6	56,4	57,1	55,8	55,3	57,2	57,8

Table 2: Employment rates, persons 15-64 years old (in %)

Source: STATEC, LFS (break in the series in 2003)

The employment rate of older workers is on the rise with relation to 2005 (31.7%).

<u>Status</u>	<u>2006</u>
Total population	33.2
Luxembourg citizens	28.2
Foreign citizens	42.9
Men	38.7
Women	27.8
Male Luxembourg citizens	34.0
Male Foreign citizens	48.0
Female Luxembourg citizens	22.4
Female Foreign citizens	38.1

Table 3: Employment rates, persons 55-64 years old (in %)

Source: STATEC, LFS

Outlining a national overall strategy in the area of active ageing is the shared responsibility of several entities. The Ministry of Labor and Employment took one-time initiatives in the area, such as increasing subsidies for hiring older workers or accounting for older workers in the determining the four priority action areas in the framework of social responsibility of companies in the area of employment and labor law. Other recent legislative changes such as the one on keeping on the job and those concerning continuing education are likely to have a positive impact on the employment rate of older workers.

The <u>unemployment rate</u> was 4.1% in July 2007, unchanged from the previous month. The unemployment rate, corrected for seasonal changes, is 4.4%. Both the unemployment rate and the seasonally adjusted unemployment rate remained stable with relation to July 2006.

If those persons taking advantage of an employment measure – broad unemployment – the broad unemployment rate goes from 5.9% to 5.8%. The broad unemployment rate corrected for seasonal adjustment is 6.1%.

At the end of July 2007, the number of job seekers residing in Luxembourg that received full unemployment benefits decreased by 0.7% with relation to July of the previous year, and decreased 1.2% with relation to the previous month.

Nonetheless, Luxembourg is facing a genuine structural unemployment problem. In July 2007 51.8 % of all persons registered as job seekers on the unemployment rolls had qualification levels inferior to legal scholastic requirements of 9 years of studies. In addition, 26.51% of registered job seekers are handicapped workers, meaning that they have a reduced capacity for work.

Therefore, even though absolute figures remain constant, there remain major challenges for social, employment and training policies in Luxembourg.

IG 18 - Promote a lifecycle approach to work

## **OBJECTIVE: Re-evaluation of assuming responsibility for school children outside of classroom hours** $^{41}$

The implementation of the "*maisons relais*" concept for children (MRE) has quantitative (more structures), geographic (distribution of structures based on requirements throughout Luxembourg) and qualitative (development of services within structures) aspects.

On 1 January 2004, children aged between 0 and 17 years accounted for 22.25% of Luxembourg's total population (with children between 0 and 2 years representing 3.59%, children between 3 and 11 years 11.51% and children between 12 and 17 years 6.72% of total population figures).

According to a survey <sup>42</sup> conducted by the Center for Population, Poverty and Policy Studies (*Centre d'Etudes de populations, de pauvreté et de Politques Socio-Economiques*(CEPS)), in 2003, around 26% of children requiring care according to the child care method used by couples where both parents were working in 2003 availed themselves to the care system implemented by these centers.

In 2005, the Government<sup>43</sup> forecasted requirements for 2013 of 3.75 times the spaces available in 2005. Geographically, 30% of new requirements are in rural regions and 50% in urban areas, resulting in an average of 40%. These estimates were carried out considering the number of children living in the Grand Duchy of Luxembourg and experience acquired from functioning centers in the country.

<sup>&</sup>lt;sup>41</sup> This is also an implementation measure of the European Youth Pact.

<sup>&</sup>lt;sup>42</sup> See also the article written by Mrs. Blandine Lejealle "Sur le mode de garde des jeunes enfants: entre souhait et réalité" based on the PSELL-3/2003 study (the PSELL "Panel Socio-Economique Liewen zu Lëtzebuerg" is a survey completed in 2003 among a representative population living in Luxembourg. PSELL-3 fits in the EU-SILC statistical program of the European Union aimed at discerning income and living conditions of persons and households within the various member states) which is itself based on data collected 2003.

<sup>&</sup>lt;sup>43</sup> Statement made by the Government on the economic, social and financial situation of the country (2006).

Specifically, the implementation of the MRE concept means that each center must be able to offer minimum operations<sup>44</sup> of 200 days and 500 hours, with the following mandatory services:

- Food services to include a lunchtime meal, and snacks early in the morning and in the early evening
- Monitoring and activities for children
- Homework assistance
- Diverse educational activities

In August 2007, Luxembourg had 59% more spaces in centers than in 2005, spread out among the 193 units<sup>45</sup>; of which 82.25% were in MRE for school aged children, around 2% are in *maisons relais*/day care center and around 12% of the spaces are in day care centers and standard infant care facilities.

Since 2003, there has been in increase in the <u>rate of working women</u>. In 2003, the employment rate<sup>46</sup> of women between the ages of 15 and 64 years was around 51 %, in 2004 in rose to 51.9%, in 2005 to 53.7% and in  $2006^{47}$  to 54.6%.

MRE structures are currently distributed among the regions as shown below as of the month of June 2007, concerning centers accepting children between 0-12 years of age.

Center:	31.30 %
South. :	13.47 %
East	21.27 %
North	12.58 %
All regions together	18.92 %

#### Table 4: Regional coverage rate for children aged 0-12 years (June 2007)

Source: Ministry for the Family and Integration

In order that MRE structures meet regulatory requirements and are able to adapt to operation schedules as prescribed by regulations, progressive start-up programs have been implemented for a phase not to exceed five years.

Of the MRE structures currently in operation, 53.26% have been deemed to conform to regulatory standards, 13.04% conform partially (meaning with respect to the required number of days and hours) and 33.70% do not conform to regulatory standards.

<sup>&</sup>lt;sup>44</sup> Mandatory services for MRE structures were set by the Grand ducal regulation dated 20 July 2005 (published in the *Mémorial* A n°123 dated 10 August 2005 page 2145 and following pages) concerning the authorization level granted to MRE managing organizations.

<sup>&</sup>lt;sup>45</sup> The concept of "unit" is different from that of MRE. For example, an MRE on the commune level may include several units or hosting infrastructures for children that are spread out over a certain number of locales within the commune. This explains the difference between figures indicated for units that currently number 193 and for MRE that come in at 92.

<sup>&</sup>lt;sup>46</sup> STATEC, <u>Statnews n° 10/2007</u>, 7 March 2007.

<sup>&</sup>lt;sup>47</sup> Women employment rates for 2006 were taken from Eurostat.

It is also appropriate to note that MRE structures can offer supplemental services on an optional basis that go beyond mandatory minimum standards, such as accepting children with special needs or developing socio-educational projects.

During the course of 2006, administrators of five different MRE structures carried out 14 socio-educational projects, totalling 93 supervisory hours per week<sup>48</sup>.

Of these five administrators, two administrative organizations are centers specialized in community work that were set up in less favored areas of the City of Luxembourg, that also set up socio-educational, inter-generational and socio-trans-cultural events and initiatives<sup>49</sup>.

In June 2007, 4292 spaces were being planned. Of the 116 communes in the Grand Duchy of Luxembourg, 31 communes do not currently have MRE infrastructures. Of these 31 communes, 24 communes are currently planning the implementation of an MRE in upcoming years. For the moment, 7 communes have no specific plans to set up an MRE. In view of the current growth rate of MRE structures, which is from 2000 to 3000 spaces per year, it is also important to ensure that in the future high quality facilities will be in place.

#### **OBJECTIVE:** Meeting more of the cost for young people <sup>50</sup>

In the area of <u>youth counselling</u>, the vocational guidance service (*Orientation Professionnelle OP*) of the Jobs Administration (ADEM) acts within organizational plans of technical schools. Vocational staff attempts to give a sense of responsibility to students, to promote their personal development and to facilitate scholastic and professional guidance procedures during the first year of secondary technical education. Students thus explore the concepts of the labor environment and structure and accumulate knowledge concerning decision making and eventually achieving their goals. In view of conclusive results in different schools, making this type of guidance activity more widespread should be considered.

In addition, following the new legal activation measures that came into effect on 1 July 2007<sup>51</sup>, OP vocational guidance services automatically take charge of youths leaving school without a qualifying skill. These young people attend an individual guidance and information interview where they are informed about the possibility of entering a professional training program or continuing their studies.

Concerning the national information, guidance and counselling strategy, a national agency of information and guidance services, including the OP vocational guidance service, has been set up. The primary objective of this agency is to ensure that all involved players collaborate by basing their activities on a shared concept and on a high quality national strategy. The necessary consultations occur during monthly coordination meetings and common actions in the area of vocational guidance are drawn up and implemented<sup>52</sup>.

<sup>&</sup>lt;sup>48</sup> For the moment, the only available figures on this item date from 2006.

<sup>&</sup>lt;sup>49</sup> One item to note is the setting up of a parent training session with a specific support within an MRE. Also, during the course of 2006 the number of children with special needs accepted at MRE structures was 16.

<sup>&</sup>lt;sup>50</sup> This is also an implementation measure of the European Youth Pact.

<sup>&</sup>lt;sup>51</sup> See IG 19

<sup>&</sup>lt;sup>52</sup> See IG 23

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

Two studies on the <u>salary gender gap</u> have been carried out to determine why discrimination exists in the area of salaries, with a view to eradicating it by making players of both genders aware of the phenomenon and to analyzing the impact of joint collective agreements on equality in treatment and salaries between men and women in the hope of improvements in these areas:

- One STATEC study<sup>53</sup>, entitled "Are women discriminated against on the job market?" (*Les femmes sont-elles discriminées sur le marché du travail*?) appearing in April 2007 at the conference labeled "Equality Between Men and Women on the Job: Reality or Myth? (*L'égalité des femmes et des hommes dans l'emploi : réalité ou mythe* ?)
- A second study<sup>54</sup> entitled "Equality between men and women in collective agreements" (*L'égalité entre les femmes et les hommes dans les conventions collectives*), is a legal analysis carried out by an expert in the domain of equality between men and women at the European Commission. In view of the extremely weak impact of collective agreements on equality of treatment and compensation between the sexes, the analysis was submitted to the social partners and professional and employee chambers for an opinion and a position paper.

The Government has decided to adopt the principal of the "obligation de moyens" on a trial basis, that may later be replaced the "obligation de résultat" principal to eliminate any elements of discrimination that cannot be explained objectively.

#### **OBJECTIVE:** Continued adaptation to the social security system

At the Tripartite Coordination Committee meeting of 28 April 2006, the Government and the social partners agreed to proceed with the creation of a study group to draft proposals to ensure the <u>long-term viability of pension schemes</u> and to study the various measures that could be considered to adapt the pension system to changes in professional careers, the ageing of the population and its impact on the length of professional careers. This study group will begin its work in November 2007.

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

#### **OBJECTIVE: Employment policies based on activating employment measures**

The law dated 22 December 2006 <u>supporting employment</u> and outlining special measures in the area of social security and environmental policy changed some aspects of legislation on the advantages of unemployment benefits.

First of all, time spent in orientation and vocational preparation are no longer to be considered in calculating the internship period of 26 weeks to accomplish before being eligible for a full unemployment benefit package.

<sup>&</sup>lt;sup>53</sup> See <u>http://www.mega.public.lu/actualites/actu\_min/2007/04/egalite\_emploi240407/index.html</u>

<sup>&</sup>lt;sup>54</sup> See http://www.mega.public.lu/publications/1 brochures/2007/convention/index.html

Next, the principle of proportionality has been introduced. The period of full unemployment benefits has been limited to the effective length of time worked under a fix-term contract or a permanent contract taking into account the current internship period.

Lastly, persons seeking work are instilled with a sense of responsibility in as much as their rights and obligations are held within an individualized activation agreement that ADEM services must offer no later than three months after a person under the age of 30 registers for work and six months after those aged over 30 register. This activation agreement is a flexible and scalable instrument that can accommodate individual needs of job seekers.

The new legislation introduces the requirement to job seekers that they make an appropriate effort in searching for a job. The ADEM Placement Service is entitled to request job seekers to produce supporting documents at any time justifying their attempts to find a job.

A permanent follow-up and evaluation mechanism of the new instrument was implemented in collaboration with the *Centre d'Etudes de Populations, de Pauvreté et de Politiques Socio-Economiques* (CEPS/Instead).

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

In the National Plan for Innovation and Full Employment (2005), the Luxembourg Government announced new measures to promote youth employment that were intended to repeal those set out in the National Action Plan for Benefiting Employment (1999). A draft law was submitted to Parliament and presented to social partners for this purpose. The law was approved on 22 December 2006. The law, which took 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 <u>"Work Support" contracts</u> aim at the public sector, while the <u>"Initiation to Work" contracts</u> are intended for the private sector.

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.

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 a new hire into the company or onto the job market

#### **OBJECTIVE:** Make work pay

With regard to <u>the maximum length of time for active measures</u> of the Guaranteed Minimum Income (RMG), the administrative statistics established by the National Social Action Service

(SNAS) for 2006<sup>55</sup> indicate that up till the end of 2006, nearly twice the number of decisions were made by SNAS compared with the end of 2005.

The administrative statistics established by the SNAS in 2006<sup>56</sup> regarding <u>guidance of RMG</u> <u>beneficiaries toward active measures for accessing the job market</u><sup>57</sup>, namely the internship (*stage en enterprise: SE*) and subsidized contracts stemming from the application of article 13(3) of the RMG mechanism, show that:

- At the end of 2006, 14% of active measures involve internships (in 2005 the figure was 13%);
- In 47% of the cases in which SE measures expired in 2006, the reason for the end of the internship was that the intern found a job, while this was true for only 23% of those working through public employment measures (in 2005 the figures were 42% and 16%, respectively).

In addition, these administrative statistics for 2006<sup>58</sup> show that:

- At the end of 2006, article 13(3) contracts represented 26 % of active measures ;
- The number of new article 13(3) contracts concluded in 2006 nearly doubled with respect to 2005;
- Of the article 13(3) contracts initiated since the program began in August 2004, only 7% of contracts ended with dismissal of the employee.

Between 1 January 2007 and 1 September 2007 in 43% 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 higher that in 2005. On 1 September 2007, the number of capping decisions grew by 6.8% with relation to 2006 and SE internships as a percentage of total RMG active measures were 14%, while article 13(3) measures as a percentage of total RMG active measures was 32%.

In December 2006, the European Commission stressed that the "effectiveness of active measures undertaken with regard to households benefiting from the RMG is now fortified" <sup>59</sup>. The two measures mentioned above are contributing to this effectiveness and will continue to be implemented in 2008.

#### **OBJECTIVE:** Reinvigorate the solidarity economy concept

With regard to the participation of the Government to the solidarity economy initiatives, the 2006 Implementation Report for the national plan selected <u>six projects to be financed under</u> the solidarity economy heading. In 2006, the lack of new solidarity economy budget credits resulted in three of six projects receiving financing<sup>60</sup> in the amount EUR170,000. In 2007, these projects will continue to be financed under the same budget heading.

<sup>&</sup>lt;sup>55</sup> See Ministry for the Family and Integration, <u>Management Report 2006</u>, p. 159

<sup>&</sup>lt;sup>56</sup> See Ministry for the Family and Integration, Management Report 2006, pp. 160 et 163

<sup>&</sup>lt;sup>57</sup> Priority target of measure 2.are GMI recipients whose capability for employment is deemed appropriate to criteria of the labor market

<sup>&</sup>lt;sup>58</sup> See Ministry for the Family and Integration, <u>Management Report 2006</u>, pp. 160 et 147

<sup>&</sup>lt;sup>59</sup> COM(2006)816 final PART II dated 12/12/2006 «Assessment of National Reform Programmes», point 16., p. 98

<sup>&</sup>lt;sup>60</sup> For instance, article 33.019 "Jobs in households" from the budget of the Ministry for the Family and Integration /section 12.1.

The projects under review offer the following services:

- The "*Nuetswach*" project covers at-home service to persons in specific situations not covered by dependency insurance ;
- The "*Leit Hëllefe Leit*" project handles free distribution of clothing, furniture and appliances donated by private citizens and companies ;
- The "*Mobilix*" project transports linen to persons with reduced mobility.

While the primary objective of solidarity economy actions is meeting needs not covered by the market economy or the Government, professional insertion of persons who are far from the labor market is an important secondary objective.

As a result of this, the provisions of the amended draft law 5144 to which the 2006 Implementation Report refers<sup>61</sup>, modify the framework in which the considerations dealing with the solidarity economy are to be contained.

IG 20 – Improve matching of labor market needs

#### **OBJECTIVE:** Modernize public services employment

In June 2006, representatives of the OECD's Directorate of Employment, Labor and Social Affairs completed an <u>audit of the ADEM</u>. In November 2006, the OECD presented the broad lines of their preliminary report. Interviews were conducted with the Government, representatives of the social partners, a delegation from Parliament and management personnel from various departments of the ADEM job administration. The final version of the report is currently available and was discussed by the same group of persons in a seminar during September 2007, after which it was presented to the press and the general public<sup>62</sup>.

The implementation of the law dated 22 December 2006 that promotes maintaining employment and sets out specific measures in the areas of social security and environmental policy has already caused ADEM to carry out several internal restructurings. For instance, the single point of contact concept to process and receive job seekers on a daily basis and prepare their registration packets has been implemented. This tool constitutes a major discharge for placement personnel who can now assist job seekers in a more personal and individual manner.

An in-depth diagnostic is carried out on each job seeker and classified in five categories of employability. Activation agreements then set the phases for insertion or re-insertion of job seekers in the labor market.

In 2007, the Government and ADEM hired an expert to build up the level of relations between ADEM departments and companies in the interim worker sector and the recruiting sector.

<sup>62</sup> OCDE, <u>Audit du service public de l'emploi au Luxembourg</u>, OECD working documents: Social, employment and migration issues, Paris, 1.10.2007

<sup>&</sup>lt;sup>61</sup> See Ministry for the Family and Integration, <u>Management Report 2006</u>, p. 36

http://www.gouvernement.lu/salle\_presse/actualite/2007/09/27biltgen\_adem/index.html et http://www.oecd.org/dataoecd/20/1/39424034.pdf

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

Following several months of negotiations with the social partners, the Government submitted a draft law on 3 August 2007 to Parliament concerning the introduction of a <u>single status for</u> <u>salaried employees in the private sector</u>. The principal modifications appearing in the draft law include:

- 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
- Continuation of salary 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. It will contain an administrative simplification. The draft 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:** Retain jobs

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

The new legislative provisions allow identification of 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.

To this end the Economy Committee<sup>63</sup> will centralize information on non-discipline related layoffs and will request that social partners discuss establishing an employment retention plan should the results of a social and economic audit of the company concerned warrant such action.

With the intent of supporting social partners in this process, the Government assists with agreements made by means of a certain number of financial subsidies intended for concerned employees, to include assuming responsibility for fees assessed for training expenses, reconversion, consultancies, etc. It also assists companies including those that get people on their payrolls without going on the unemployment rolls. This is done through simplification of the procedure for obtaining temporary labor, possible reductions of pre-retirement contributions and hiring subsidies.

<sup>&</sup>lt;sup>63</sup> For more information, see: <u>http://www.cdc.public.lu/</u>

#### **OBJECTIVE:** Set out new forms of labor organization

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.

As part of the uniform staff regulations, it has been seen that <u>time savings accounts</u> could make up a major element that could further promote compensating overtime hours with free time. Following confirmation of this concept, it was decided to draw up a preliminary draft document that would be limited to the private sector. This document is currently being prepared.

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

The Government grants <u>subventions to companies in the private sector</u> that invest in the accomplishment of measures whose objectives are to increase the employment rate of women, to fight against professional segregation, to eliminate the wage gap, to promote the reconciliation between family life and work, to fight against sexual harassment and to promote equality between men and women. Any company that carries out a survey on the situation of women and men can receive financial aid from the State under the framework of a positive actions program for companies in the private sector.

An analysis of positive actions was carried out between October 2006 and July 2007. Persistent impacts were recorded in companies that chose to implement structural changes. These included changes in pay scales designed to reduce the wage gap, introducing roving work schedules or part-time work specially adapted to family requirements, promoting parental leave for women and men and recruiting women for atypical careers.

Male and female employees who took part in one-off measures such as training sessions, were able to take advantage of personnel benefits little likely to be shared within the company.

Following the analysis, the Government formalized a structure implementing positive action projects to better ensure a lasting effect in the company and portability to other companies. All positive actions have bearing on the three priority themes of the Government, which are equal treatment of men and women, equality of men and women in decision-taking and equality of men and women in reconciliation between family life and work.

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.

IG 22 - Ensure employment-friendly labor costs developments and wage-setting mechanisms

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<sup>64</sup>. To this end, the law dated 27 June 2006 that adapts certain application methods of the automatic wage indexation

<sup>&</sup>lt;sup>64</sup> And other indemnities as well as all the amounts included through reference to article 11, paragraph 1 of the amended law of 22 June 1963 that sets pays scales for State employees tied to the consumer price index with the basis of 100 as of 1 January 1948. See also IG 11.

system and stipend scale is intended to slow the rise in inflation and consequently the increase in labour costs to companies and the administration. These measures are limited in time - from 2006 to 2009 - they consist chiefly of adapting the application methods to the automatic wage indexation system by carrying over the next application figures.

In the event that the current hypotheses about changes in inflation should come true, the deadline for adjusting stipends, salaries, pensions, annuities and other income and sums generally adapted to the automatic wage indexation system differ in methods set by the legislation in force before the signing of the law for the years 2006, 2007, 2008 and 2009.

According to the latest available STATEC projections made on 30 August 2007, the next indexing of stipends, salaries, pensions and annuities will occur on 1 March 2008. In accordance with the text of the law dated 27 June 2006, indexation that is triggered by exceeding a threshold of the stipend scale in 2007 will be set on 1 January 2008. However, since the price of Brent crude oil, as confirmed by STATEC, exceeds between July 2006 and December 2007 on the average 63\$ per barrel, indexing for this period will be put off till 1 March 2008. The adjustment triggered by a new threshold in 2008 will be carried out on 1 January 2009. However, if the average the price of Brent crude exceeds 63\$ per barrel between January and December 2008, this adjustment will be deferred until 1 March 2009. Under the current legislation, no other adjustment to stipends, salaries, pensions and annuities will occur over the period 2006 to 2009 through the additional triggering of one or more of the thresholds of the automatic wage indexation system<sup>65</sup>.

#### IG 23 – Expand and improve investments in human capital

#### **OBJECTIVE:** Improve the fairness of educational and training systems

Over the past two years Luxembourg has been faced with very high immigration rates of families arriving from Portugal and the Balkans. Considering that children from these families have low education levels and do not know the teaching languages of Luxembourg, French and German, promoting the integration of these children in primary and secondary education systems has become a major challenge for the national education system.

An <u>academic reception cell for newly arrived students</u> (CASNA) has been set up by the Ministry of National Education in an effort to provide information to these children and their families. Classes designed to receive and integrate students have been set up in primary and secondary schools, employing persons speaking these children's' language. In other classes with high percentages of Portuguese students, integrated classes are given in Portuguese.

Different measures were adopted with an eye to fairness to <u>bridge between different systems</u> and orders of teaching and training.

Already in the nineties, the Government had decided that all academic fields would be offered in each new school for lower secondary education students (aged 12-15). Many other schools followed this movement and currently about half of Luxembourg *lycées* offer all fields in the lower forms of secondary school. In addition, academic bridges were put in place; a student who has obtained three quarter of the points in a field can pass on to a field with more

<sup>&</sup>lt;sup>65</sup> Modulating the wage indexation system to the cost of living index will be supplemented by neutralizing some taxes and other deductions in the consumer price index published the basis of 100 on 1 January 1948. This mechanism is directed toward taxes and deductions tied to environmental and public health objectives.

stringent requirements. Furthermore, in the <u>lower form pilot project</u>, in which 20% of *lycées* participate, the number of academic fields is restricted to two and in the <u>Neie Lycée pilot</u> project, students in different fields have many courses in common.

Luxembourg's education policy therefore adheres to the "Conclusions of the Council and representatives of the Governments of the Member States, in the Council meeting, on the effectiveness and fairness in education and training", dated November 2006. These conclusions did not recommend abolishing study areas, but rather state "there is also some research evidence to suggest that, in certain cases, differentiating pupils at too early an age into separate schools of different types on the basis of ability may have negative effects on the achievements of disadvantaged pupils."

In order to facilitate access to university studies for a large number of persons, the draft law on reform of professional training establishes bridges for pursuing higher level studies for persons who hold professional aptitude certificates or technician diplomas. Putting into practice a validation of knowledge system will also ensure that more people can obtain diplomas that enable them to pursue university studies.

Putting into practice a <u>validation of knowledge system</u>, as provided for in the same draft law, will also enable more people to access training to obtain qualifications or to pursue university education, reduce time in training programs or obtain formal certifications.

It is also interesting to quote the OECD within the context of fairness of the Luxembourg educational and training system<sup>66</sup>: "*The effects of both socio-economic background and immigrant status on achievement in Luxembourg are not significantly different from the average for the OECD countries included in the analysis. These results are a remarkable achievement in view of the added difficulty of learning in a trilingual education system. They attest to the success of the measures taken to compensate for this difficulty through extra inputs and flexibility in the system".* 

#### **OBJECTIVE:** Promote successful studies and reduce the number of early school leavers

The primary measures for preventing academic failure and lowering the number of students who leave school early are the following:

- Redefine promotion criteria and introduce remediation measures, in other words, mandatory extra help for students having academic difficulties;
- The lower form pilot project, with the following focus areas: emphasis on reforming programs and focusing on teaching by skill; 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.
- Pre-emptive support for students who risk being excluded from school during the academic year;
- Basic professional training that reforms the current training for initiation into professional life;

<sup>&</sup>lt;sup>66</sup> OECD, <u>Improving education achievement and attainment in Luxembourg</u>, Economics Department Working Papers N° 508, 4 September 2006, p.14

• A new law that redefines objectives and structure of professional guidance and initiation courses.

More specifically in the realm of guidance and assistance for young people leaving school or early school leavers, setting out concrete measures by the group *Action locale pour Jeunes* falls under legislation providing for organizing guidance and professional initiation courses.

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

With regard to accessing apprenticeships schemes all through one's life and the implementation of <u>a consistent lifelong apprenticeship strategy:</u>

- Preliminary work in relation to the draft law for reforming professional training is well underway. Pedagogical studies concerning the modulation of training and teaching by skill area were greatly accelerated through bolstering staff resources of the Ministry in charge;
- The law on individual access and training leave will go into effect in 2007;
- The link between professional training and adult education was reinforced through the reorganization of the adult training department. The reorganization allows for improved coordination of training offers as well as effective reception of adults who wish to participate in a training program and organizations offering them.

A Grand-Ducal regulation dated 30 March 2006 declared that an inter-professional agreement between the social partners relating to individual access to continuous professional training.

Since 2004, the Government has implemented or begun numerous actions to <u>make schools in</u> <u>Luxembourg more effective and fairer</u>. These actions will be extended in upcoming years. They will feature the continuing and consolidation of the reforms that have been started, to whit:

- Teaching based on skills for more lasting and in-depth learning experience<sup>67</sup>;
- More effective language learning programs to improve language skills of our young people<sup>68</sup>;
- Improved supervision of students so that fairness of chances becomes a reality
- A restructuring of the first nine years of academic studies for higher success rates amount students;
- An increasingly fertile scholastic offer to better meet the diverse requirements of our student bodies;
- A system of professional training that is consistent and flexible for better job market penetration;
- A high performance and consistent evaluation mechanism<sup>69</sup>.

In addition, actions will be furthered that help citizens access long lasting life long learning programs.

<sup>&</sup>lt;sup>67</sup> This also relates to IG 24.

<sup>&</sup>lt;sup>68</sup> This also relates to IG 24.

<sup>&</sup>lt;sup>69</sup> This also relates to IG 24.

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

#### **OBJECTIVE:** Promote teaching by skill and quality insurance

In 2004, the Government engaged on an in-depth reform to change from a teaching system based principally on reproducing acquired knowledge to a system based on <u>acquiring skills</u>. After a document was drawn up in 2005 describing the broad skills deemed essential to pursuing studies, getting a job and integrating into society as well as developing a personal identity, all levels of teaching to include pre-school, primary and post-primary education began in 2006 to lay out the base skills for the academic disciplines. Simultaneous to the drafting of the law on professional training, curricula teams made up of teachers and experts from the professional world in charge of implementing the base programs for initial professional training began work. Developing curricula for training relies on a skill-based approach, both for the design process of the training and on a modular teaching structure.

The published profile of the linguistic educational policy in Luxembourg that was prepared by experts of the Council of Europe is a precious aid in progressively implementing a teaching by skills process in teaching languages. A language action plan, approved in 2007, will guide the implementation of this reform<sup>70</sup>.

The law dated 25 June 2004 on the organization of *lycées* and technical schools grants greater autonomy to academic institution, but goes hand in hand with <u>a standardized evaluation of student performance and a quality evaluation of the establishments themselves</u>. This double evaluation acts as a guarantee of both participation in international studies like PISA, PIRLS and EBAFLS and of measures taken nationally including shared examinations, communes, PAQS, the creation of a Quality Insurance Agency for Education an the Survey on the motivation levels of students. The quality insurance concept was also integrated into the draft law on the reform of professional training. A Grand-Ducal regulation will set the manner for guaranteeing the quality of the professional training system. This law will also introduce a quality label for organizations that dispense continuing professional training and professional reconversion training. A quality label for training organizations exists in adult education since 2002.

#### **OBJECTIVE: Expand the offer of informal learning opportunities** <sup>71</sup>

In 2005, the National Youth Service (NYS) and the Youth Information Centre (YIC), together with two partners, re-launched the <u>student job project</u>. A group of young people developed an Internet based job center for student jobs under the headline "doit4you". In 2005, the NYS-YIC tandem took up the project and the doit4you.lu site is now the central clearinghouse for all student job-related information in Luxembourg. The site has two sections, the student job center and the information center. The site has been very successful. Already, 80% of the number of jobs available in 2006 have been filled for 2007 and the pool of young people available with relation to the previous year has increased by 80%. An analysis of the doit4you project showed that that there are still a lot fewer student jobs offered than students seeking jobs. It will be necessary to make employers more aware of the service, to offer more jobs and to advertise in a transparent fashion. Site visits show that many young people start their job search too late. The doit4you site is heavily visited in June and July, while the majority of

<sup>&</sup>lt;sup>70</sup> For more details, see: <u>http://www.men.public.lu/priorites/enseignement\_langues/index.html</u>

<sup>&</sup>lt;sup>71</sup> This is also an implementation measure of the European Youth Pact.

positions are filled in February and March. Making young people aware of this seems to be very necessary.

A <u>draft law on voluntary youth service</u> was submitted to adapt current legislation to changes in voluntary service, which is enjoying growing success in Luxembourg: The new text provides adaptation, openings and clarifications with regard to the 1999 law. The draft law will probably be approved at the end of 2007. In order to allow a maximum number of young people to participate in a voluntary service project and to profit from the benefits this type of action brings, two specific programs with diverse voluntary activities are being promoted more. These include the European Voluntary Service (EVS), which targets young people who wish to embark on an enriching experience abroad and the Voluntary Service for Personnel Orientation (VSPO) targeting youths with fewer opportunities in an attempt to increase their ability to integrate on a socio-professional level.

This being a new measure that could be considered a pilot project, considerable effort has been extended in conceptualizing and implementing the EVO, especially with regard to mobilizing associations that offer voluntary positions and that recruit young people, which often have no listing in any directory. The pedagogic concept consists of providing stability for young people, acquiring practical and social skills and evaluating and certifying these skills. Preliminary work began on this legislation in April 2007, yet some fifty voluntary young people will begin their service as from October. With regard to the VSPO, an initial evaluation of the program will be made in January 2008, which will serve to consolidate, adapt and broaden the scope of the project in upcoming years. In quantitative terms, it is necessary to increase the number of positions in host organizations, make organizations more aware of the need to diversify the type of voluntary service being offered and acquire additional resources so as to hit the mark on an elusive public target and to guarantee highly personalized follow-up. A wider offer base and heightened participation in voluntary activities go hand in hand with an evaluation and quality control system of the services and measures being offered.

The Government is simultaneously seeking to promote a <u>Voluntary Service for Other Young</u> <u>People</u> as an effective method for developing their active civic sentiments and skills necessary in acceding to adult life. The issue of skills certification as part of voluntary service is also an important subject to address and the pilot project "Certification of Skills Acquired in the Course of Informal Education" will serve as a frame of reference.

A new version of the <u>Youth Portal</u> was launched in 2006. This new version features an array of specific sub-projects as follows:

- youthnet.lu for volunteers and professionals in the youth sector;
- summer.lu for finding summer recreation activities;
- cabanes.lu and paradies.lu for documenting two projects carried out within the framework of Luxembourg and the Greater Region, European Capital of Culture 2007;
- campagne-jeunesse.lu;
- volontaires.lu for giving European Volunteers the opportunity to share experiences.

All these sites have been visited frequently and are getting more hits. The section dedicated to participation in associations operates with several projects such as chalets.lu and youth.lu. The volontaires.lu project was launched in January 2007 and is the first project in which young people have been able to participate directly.

The youth portal and its sub-sites are already magnets for participation compared to their status in 2005 or even 2006. It is important to build from this momentum in order to develop participation even further.

- Horizontal approach: content should be syndicated along with the other major thematic portals in Luxembourg, such as sports, culture and others.
- Institutional approach: more youth structures should identify with the youthnet.lu portal, which has the resources to become a work tool for these structures, such as an Internet directory, communications projects, etc.
- Youth approach: more young people should be able to identify with the projects carried out through the portal. More participatory projects must complement existing projects, such as volontaires.lu and spillkescht.lu. The youth portal offers open information architecture for this type of project.

A tally has been made of NYS measures and published in the form of a description of measures in place, tutoring, training and collaboration structures, including the Thematic file: Young Persons' Access to Professional Life and Pedagogic Practices for Youths in Accessing the Job Market. NYS drew up the Skills Evaluation mechanism for young people hired through job support contracts or who are doing voluntary service for personal orientation involving a phase test in 2008. Specific certification for young people working in job support contracts or those having completed voluntary service for personal guidance that will refer to tasks completed and skills acquired is expected to be in place as from 2008.

#### **OBJECTIVE:** Certify skills acquired in the area of informal education<sup>72</sup>

NYS, in collaboration with the National Federation of Boy and Girl Scouts of Luxembourg (FNEL), has set up a mechanism for certifying skills acquired during informal education activities involving young people. The project is supported by the Jobs Administration and the Union des enterprises luxembourgeoises (UEL, Union of Luxembourg Enterprises). The project carried out a pilot phase in 2006 and 2007 that was open to member-organizations of the consulting commission for the training of recreational activities leaders and managers. A certification commission that analyses the validity and the form of certification requests and a steering group were set up. The project is currently evaluated on the basis of an external evaluation that seeks to verify how set objectives have been achieved, or if it is appropriate to adapt the certification process in order to consolidate the initial project. The first results of this evaluation<sup>73</sup> highlight the very positive reception extended by organizations. These results make it clear that more promotion will be necessary concerning certification in order to anchor system in this practice.

In 2008, the mechanism will undergo modifications on the basis of the external evaluation and will be open to other youth organizations and measures. More promotion for certification is being planned. In order to guarantee the follow-up and implementation of adequate structures, the mechanism was included in a new draft law on youth adopted by the Government in February 2007<sup>74</sup>.

<sup>&</sup>lt;sup>72</sup> This is also an implementation measure of the European Youth Pact.<sup>73</sup> The final report is expected for the end of 2007.

<sup>&</sup>lt;sup>74</sup> See IG 23

# 5. Coordination between the National Reform Program and Structural Funds

This coordination is necessary 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 the following guidelines:

- 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
- IG 8 Facilitate all forms of innovation
- IG 9 Facilitate the spread and effective use of ICT and build a fully inclusive information society
- IG 10 Strengthen the competitive advantages of Europe's industrial base
- IG 11 Encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth
- IG 15 Promote a more entrepreneurial culture and create a supportive environment for SME

Many projects concern the areas of water, waste and wild lands that result from the spirit of IG 11, as well as economic development and innovation. The overall package for the Objective 2 program (2000-2006) amounts to €44 million.

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 8 October 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 following IG: IG 7, 8, 9, 10, 11 and 15.

The FEDER program is expected to kick off after the NSRF and the operational program are adopted at the end of 2007 or in early 2008, with a call for tenders.

5.1.3 Cross-border and trans-national cooperation programs (Interreg), ESPON and URBACT (2007-13)

The Interreg IV A-B-C cross-border trans-national and inter-regional cooperation programs are complementary in their strategic conception and the interventions of structural funds carried out on a domestic level complement each other and contribute to implementing in their manner the central objectives of the Community regional policy. In the framework of the inter-regional cooperation option, Fast Track provides an operational link between activities and experiences on the European level and those of national programs. The new programming period will see the beginning of a shared program in the Greater Region, while the INTERREG IVB NWE program and the INTERREG IVC program will be more centered on the Lisbon and Göteborg strategies. The first calls to projects of the INTERREG program were launched in the fall of 2007. According to all forecasts, projects under the INTERREG IV program will support IG 16.

The ESPON program (*European Spatial Planning Observation Network*), whose Coordination Unit is located at Esch-sur-Alzette, contributes to improved assimilation of territorial imbalances and improved spatial operations in the Community through its analyses and recommendations. In January 2007 the ORATE 2013 program was submitted to the European Commission for final approval. After several minor modifications, the procedure should be ready by the end of October and tenders for the first projects could begin coming in at the end of the year. The exchanges seen in the Luxembourg press with regard to ORATE clearly show the growing interest the public is taking in developing research activities in Luxembourg. The European Commission has already had recourse to ORATE, for example, in the Fourth Report on Economic and Social Cohesion in the European Union.

The URBACT program aims at developing experiential exchanges between European cities and players in urban programs headed by the European Union, and thus contribute to improving the actions being carried out in cities and regions to resolve shared problems. The program co-finances various experience exchange actions, including thematic networks, working groups, studies and other initiatives. Institutionally, URBACT is the exchange and funding part of the URBAN II Community initiative (2000-2006) that aimed more widely at implementing innovative strategies for urban economic, social and environmental regeneration, in a word, integrated action.

### 5.2 The European Social Fund (ESF)

NSRF priorities with relation to employment, which set the framework for ESF interventions in Luxembourg for the programming period 2007-2013, are as follows:

- 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
- Augment adaptability of workers in companies
- Improve anticipative management of economic shifts
- Adapt skills and knowledge of employees to labor market requirements
- Support innovative mechanisms of career transitions
- Build up human capital
- Bring university level institutions, research centers and companies together to work in the areas of innovation and research

- Modernize working conditions
- Support the actions of the social partners.

## 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 will be established on this basis, will combine 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 national strategies that contribute to implementing the National Plan for Innovation and Full Employment. Around 29% of the total contribution of FEADER will be reserved for Area 1, around 59% for Area 2 and 12% for Areas 3 and 4 for the Regional Development Plan for 2007-2013.

National Strategy for the Rural development programming period (2007-2013)	National Plan for Innovation and Full Employment
AREA 1 (Improve competitiveness in the agricultural and forestry areas)	
Encourage investments in 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 techniques	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
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)	
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 investment in human capital

 Table 5: Examples of national strategy that contribute to the implementation of the National Plan for Innovation and Full Employment

## **Appendix 1: Evaluation Grid**

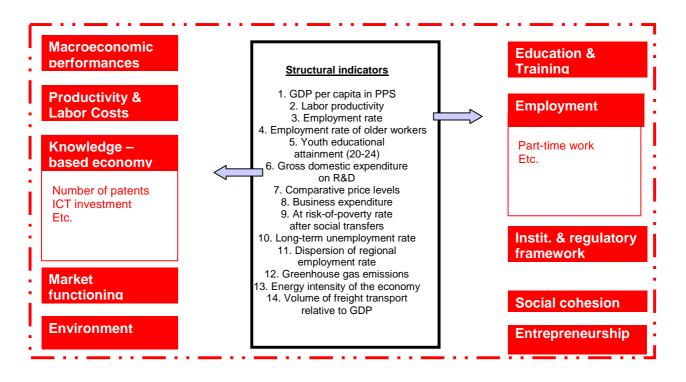
Apart from the implementation report that contains updated technical information on measures adopted after the National Plan for Innovation and Full Employment (2005), as of 2006, the European Commission has requested Member states to add an evaluation grid to this situation report to measure and monitor 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 2007 Implementation report may be consulted through the following link: <u>http://www.odc.public.lu/publications/pnr/index.html</u>

## **Appendix 2: Competitiveness Scoreboard**



		Luxembourg						UE-27									
1999	2000	2001	2002	2003	2004	2005	2006	National Target for 2010	1999	2000	2001	2002	2003	2004	2005	2006	Cible UE 2010
238,5 176,6	244,7 176,9	235,1 163,2	242,2 164,2	247,6 166	251,3 166,5	261,9 171	278,3 179,3		100 100	100 100	100 100	100 100	100 100	100 100	100 100	100 100	
61,7	62,7	63,1	63,4	62,2	62,5	63,6	63,6		618	62.2	62.5	62.3	62.5	63.9	(p)	(p)	70
48,6	50,1	50,9	51,6	50,9	51,9	53,7	54,6		53	537	54.3	54.4	54.8	55.4	(p)	(p)	
74,5	75	75	75,1	73,3	72,8	73,3	72,6		70.7	70.8	70.9	70.3	70.3	70.3	(p)	(p)	
26,4	26,7	25,6	28,1	30,3	30,4	31,7	33,2		36.5	36.9	37.7	38.5	40	40.7	(p)	(p)	
17,2	16,4	15,2	18,4	20,6	22,2	24,9	27,8		26.7	27.4	28.2	29.1	30.7	31.6	(p)	(p)	
35,8	37,2	35,9	37,7	39,7	38,3	38,3	38,7		46.9	47.1	47.7	48.4	49.9	50.3	(p)	52.6 (p)	
:	1,65	:	:	1,66	1,66	1,56 (p)	:	3	1,85 (s)	1,86 (s)	1,88 (s)	1,98 (s)	1,87 (s)	1,84 (s)	1.84 (s)	:	3
(b)	77,5	68	69,8	(b)	72,5	71,1	69,3		:	76.6	76 .6	76 .7	76 .9	77 .1	77.4	77 .8	
(b)	75,8	69	65,5	(b)	73,4	75,8	74,5		:	79 .3	79 .2	79 .3	79 .4	79 .9	80 .1	80 .7	
,-	79,2	67	74	,	71.6	66.6	64		:	73.8	74	74	74,5	74,3	74,7	74,8	
102,9	101,5	103,5	102,1	103,2	105,1	104,6	105,1		100	100	100	100	100	100	100	100	
19,2	17	18,3	17,6	17	16,6	15,4	14,4		18,1	18,4 16	17,9 16	17,3	17,1 15	17,3 16	17,8	18,2	
13	12	12	:	11 (b)	12	13	:		16 (s)	(s)	(s)	:	(s)	(s)	16 (s)	:	
13	12	13	:	12 (b)	12	13	:		17 (s)	(s)	(s)	:	(s)	(s)	17 (s)	:	
12	12	12	:	11 (b)	12	13 1 2	:		15 (s)	(s)	(s)	:	(s)	(s)	15(s)	: 36	
(p)	(p)	(p)	(p)	0,9 (p)	1 (p) 1 4	(p)	14 (p) 1 6		:	3,4	3,9	4	4,1	4,2	4	(p)	
(p)	(p)	(p)	(p)	0,9 (p)	(p)	(p)	(p)		:	4,7	4,6	4,7	4,7	4,7	4,5 (p)	(p)	
(p)	(p)	(p)	(p)	0,9 (p)	(p)	(p)	(p)		:	3,4	3,3	3,5	3,7	3,7	3,6 (p)	(p)	
721	76,4	78,5	86,4	90,1	100,3	:	:		90,8	90,7	91,7	90,4	92,4	92,7	:	:	
1929 92.3	186,6 100 8	190,7 110	196,7 109.5	181,8 113	193,5 109.5	189,9 95.4	:		219,5 100,5 (S)	213,1 100,1 (S)	214 98,9 (s)	206,5 99,7 (s)	210,9 98,9 (s)	213,5 104 (bs)	211 104,6 (s)	208 :	
	238,5 176,6 61,7 48,6 74,5 26,4 17,2 35,8 : 71,2 35,8 (b) 72,8 (b) 72,8 (b) 72,8 (b) 72,8 (b) 72,9 19,2 13 13 12 0,7 (p) 0,9 (p) 0,6 (p) 721	238,5       244,7         176,6       176,9         61,7       62,7         48,6       50,1         74,5       75         26,4       26,7         17,2       16,4         35,8       37,2         :       1,65         71,2       16,4         35,8       37,2         :       1,65         71,2       16,4         35,8       37,2         :       1,65         71,2       16,4         35,8       37,2         :       1,65         71,2       16,4         35,8       37,2         :       1,65         71,2       17,5         72,8       69,6         (b)       79,2         102,9       101,5         19,2       17         13       12         12       12         0,7       0,6         (p)       (p)         0,9       0,6         (p)       (p)         0,7       76,4         1929       186,6	238,5         244,7         235,1           176,6         176,9         163,2           61,7         62,7         63,1           48,6         50,1         50,9           74,5         75         75           26,4         26,7         25,6           17,2         16,4         15,2           35,8         37,2         35,9           :         1,65         :           71,2         77,5         68           72,8         75,8         69           69,6         79,2         67           102,9         101,5         103,5           19,2         17         18,3           13         12         12           13         12         12           0,7         0,6         0,6           (p)         (p)         (p)           0,9         0,6         0,6           (p)         (p)         (p)           13         12         12           0,7         0,6         0,6           (p)         (p)         (p)           0,9         0,6         0,5           12         12	238,5         244,7         235,1         242,2           176,6         176,9         163,2         164,2           61,7         62,7         63,1         63,4           48,6         50,1         50,9         51,6           74,5         75         75         75,1           26,4         26,7         25,6         28,1           17,2         16,4         15,2         18,4           35,8         37,2         35,9         37,7           :         1,65         :         :           71,2         0,77,5         68         69,8           72,8         (b)         75,8         69         65,5           69,6         (b)         79,2         67         74           102,9         101,5         103,5         102,1         19,2           13         12         12         :         :           13         12         13         :         :           13         12         13         :         :           13         12         12         :         :           0,7         0,6         0,6         0,9         (p)         (p	238,5       244,7       235,1       242,2       247,6         176,6       176,9       163,2       164,2       166         61,7       62,7       63,1       63,4       62,2         48,6       50,1       50,9       51,6       50,9         74,5       75       75       75,1       73,3         26,4       26,7       25,6       28,1       30,3         17,2       16,4       15,2       18,4       20,6         35,8       37,2       35,9       37,7       39,7         :       1,65       :       :       1,66         71,2       16,4       15,2       18,4       20,6         35,8       37,2       35,9       37,7       39,7         :       1,65       :       :       1,66         72,8	238,5244,7235,1242,2247,6251,3176,6176,9163,2164,2166166,561,762,763,163,462,262,548,650,150,951,650,951,974,5757575,173,372,826,426,725,628,130,330,417,216,415,218,420,622,235,837,235,937,739,738,3:1,65::1,661,6671,277,56869,8(b)72,5(b)75,86965,5(b)73,469,669,774(b)71,6102,9101,5103,5102,1103,2105,119,21718,317,61716,6131212:11(b)12121212:11<(b)	238.5244,7235,1242,2247,6251,3261,9176,6176,9163,2164,2166166,517161,762,763,163,462,262,563,648,650,150,951,650,951,953,774,5757575,173,372,873,326,426,725,628,130,330,431,717,216,415,218,420,622,224,935,837,235,937,739,738,338,3:1,65::1,661,66(p)71,2(b)77,56869,8(b)72,571,172,8103,2105,1104,6(b)75,86965,5(b)73,475,869,6103,5102,1103,2105,1104,619,21718,317,61716,615,4131212:11(b)1213121212:11<(b)	238,5244,7235,1242,2247,6251,3261,9278,3176,6176,9163,2164,2166166,5171179,361,762,763,163,462,262,563,663,648,650,150,951,650,951,953,754,674,5757575,173,372,873,372,626,426,725,628,130,330,431,733,217,216,415,218,420,622,224,927,835,837,235,937,739,738,338,338,7.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,66(p):.:1,65::1,661,64::.:<	19992000200120022003200420052006for 2010238,5244,7235,1242,2247,6251,3261,9278,3176,6176,9163,2164,2166166,5171179,361,762,763,163,462,262,563,663,648,650,150,951,650,951,953,754,674,5757575,173,372,873,372,626,426,725,628,130,330,431,733,217,216,415,218,420,622,224,927,835,837,235,937,739,738,338,338,771,21,65::1,661,66(p):371,216,5::1,661,66(p):371,277,56869,8(b)72,571,169,372,872,6.371,2101,5103,5102,1103,2105,1104,6105,119,21718,317,61716,65664102,9101,5103,5102,1103,2105,1104,6105,119,21718,317,61716,615,414,4131213:1213:1312 <td>19992000200120022003200420052006for 20101999238,5244,7235,1242,2247,6251,3261,9278,3100100176,6176,9163,2164,2166166,5171179,310010061,762,763,163,462,262,563,663,661848,650,150,951,650,951,953,754,65374,5757575,173,372,873,372,670.726,426,725,628,130,330,431,733,236.517,216,415,218,420,622,224,927,826.735,837,235,937,739,738,338,338,746.91,56::1,661,66(p):3:71,2'7,7,56869,8(b)72,571,169,3::72,8'1,65::1,661,5414,410010019,21718,317,61716,615,414,416,1111213:11&lt;(b)</td> 1213:17 (s)131212:11 (b)1213:17 (s)131212:11 (b)1213:15 (s)0,70,60,	19992000200120022003200420052006for 20101999238,5244,7235,1242,2247,6251,3261,9278,3100100176,6176,9163,2164,2166166,5171179,310010061,762,763,163,462,262,563,663,661848,650,150,951,650,951,953,754,65374,5757575,173,372,873,372,670.726,426,725,628,130,330,431,733,236.517,216,415,218,420,622,224,927,826.735,837,235,937,739,738,338,338,746.91,56::1,661,66(p):3:71,2'7,7,56869,8(b)72,571,169,3::72,8'1,65::1,661,5414,410010019,21718,317,61716,615,414,416,1111213:11<(b)	1999         2000         2001         2002         2003         2004         2005         2006         for 2010         1999         2000           238,5         244,7         235,1         242,2         247,6         251,3         261,9         278,3         100         100           176,6         176,9         163,2         164,2         166         166,5         171         179,3         100         100           61,7         62,7         63,1         63,4         62,2         62,5         63,6         63,6         100         100           64,6         50,1         50,9         51,6         50,9         51,7         53,7         54,6         100         70.7         70.8           26,4         26,7         25,6         28,1         30,3         30,4         31,7         33,2         26.7         27.4           35,8         37,2         35,9         37,7         39,7         38,3         38,3         38,7         46.9         47.1           1,85         1,86         (b)         72,5         71,1         69,3         69,6         69,7         72,6         7.5         7.1         69,3         69,7         69,6	1999         2000         2001         2002         2003         2004         2005         for 2016         for 2010         1999         2000         2001           238,5         244,7         235,1         242,2         247,6         251,3         261,9         278,3         100	1999         2000         2001         2002         2003         2004         2005         2006         for 2010         1999         2000         2001         2002           238,5         244,7         235,1         242,2         247,6         251,3         261,9         278,3         100         <	1999         2000         2001         2002         2003         2004         2005         for 2010         1999         2000         2001         2002         2003           238.5         244.7         235.1         242.2         247.6         251.3         261.9         278.3         100         <	1999         2000         2001         2002         2003         2004         2005         2006         for 2010         1999         2000         2001         2002         2003         2004           238,5         244,7         235,1         242,2         247,6         251,3         261,9         278,3         100	199         2000         2001         2002         2003         2004         2005         for 2010         199         2000         2001         2002         2003         2004         2005           238.5         244.7         235.1         242.2         247.6         251.3         261.9         278.3         100         <	199         2000         2001         2002         2003         2004         2005         2006         for 2010         1999         2000         2001         2003         2004         2005         2006           238.5         244.7         235.1         242.2         247.6         251.3         261.9         278.3         100

(s) Eurostat estimate; (p) temporary figure; (b) break in series

Note:

Source :

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

Macroed	conomic performance (13 indicators) 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	<ul> <li>Employment (9 indicators)</li> <li>Employment rate</li> <li>Employment rate (Men)</li> <li>Employment rate (Women)</li> <li>Long-term unemployment rate</li> <li>Persons holding a part-time job</li> <li>Unemployment rate of persons under 25</li> <li>Employment rate of persons aged 55 - 64 (total)</li> <li>Employment rate of persons aged 55 - 64 (Men)</li> <li>Employment rate of persons aged 55 - 64 (Women)</li> </ul>
Product	ivity & Cost of Labor (5 indicators) 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	<ul> <li>Market Operations (10 indicators)</li> <li>Percentage of full-time workers on minimum wage</li> <li>Price of electricity (ex-VAT) – industrial users</li> <li>Price of gas (ex-VAT) - industrial users</li> <li>Market share of the primary operator in the cellular telephone market</li> <li>Composite basket of fixed and cellular telecommunications (ex-VAT)</li> <li>Composite basket of cellular telephone royalties (ex-VAT)</li> <li>Broad band Internet access rates</li> <li>Basket of national royalties for 2Mbits leased lines (ex-VAT)</li> <li>Public markets – value of public markets using open procedure procurement</li> <li>Total of State aid as a % of GDP (excluding horizontal objectives)</li> </ul>
	onal and Regulatory Framework (11 indicators) Corporate taxes Standard VAT Tax wedge: Single, without children Tax wedge: Married, with 2 children, one wage- earner Administration efficiency index Respect for the law index Regulation quality index Degree of sophistication of online public services Public services fully available online	<ul> <li>Entrepreneurialism (4 indicators)</li> <li>Propensity for entrepreneurialism</li> <li>Independent jobs as a percentage of total employment</li> <li>Net change in number of companies (set-up rate less close-down rate)</li> <li>Volatility among companies (set-up rate plus close- down rate)</li> </ul>

<ul> <li>Education &amp; Training (8 indicators)</li> <li>Annual cost per student in public educational facilities</li> <li>Portion of the population between 25-64 with a secondary education</li> <li>Portion of the population between 25-64 with a university education</li> <li>Percentage of human resources in scientific and technological fields as a % of total employment</li> <li>Continuing training (participation of adults in training and teaching programs)</li> <li>Young school leavers</li> </ul>	<ul> <li>Knowledge economy (14 indicators)</li> <li>Internal R&amp;D expenditure</li> <li>Public R&amp;D budget credits</li> <li>Portion of public research financed by the private sector</li> <li>Percentage of sales attributable to the introduction of new products on the market (new or significantly improved products)</li> <li>Number of researchers per 1,000 employed persons</li> <li>Scientific publications per million inhabitants</li> <li>Number of patents (OEB/USPTO) per million inhabitants</li> <li>Use of Internet by companies (broad band)</li> <li>Investment in public communications as a percentage of gross fixed capital formation</li> <li>Percentage of households that have Internet access at home</li> <li>Number of secure web servers per 100,000 inhabitants</li> <li>Percentage of total employment in medium or high technology sectors</li> </ul>
<ul> <li>Social Cohesion (6 indicators)</li> <li>Gini Coefficient</li> <li>At-risk of poverty rate after social transfers</li> <li>Persistent at-risk of poverty rate</li> <li>Life expectancy at birth</li> <li>Wage gap between men and women</li> <li>Serious work accidents</li> </ul>	<ul> <li>Environment (6 indicators)</li> <li>Number of ISO 14001 and EMAS certifications par thousand companies</li> <li>Total greenhouse gas emissions</li> <li>Percentage of renewable energy sources</li> <li>Volume of municipal waste collected</li> <li>Energy intensity of the economy</li> <li>Modal split in transportation choice-percentage of car users as transportation method</li> </ul>

<u>Source</u>: Ministry of the Economy and Foreign Trade. *Observatoire de la Compétitivité* <u>http://www.odc.public.lu/publications/bilan\_compete/index.html</u>



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