University of Luxembourg

REPORT 2012

Key Performance Indicators

solicited under the “Contrat d’Etablissement Pluriannuel entre l’Etat et l’Université du Luxembourg 2010-2013”
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EU research funding

EU revenues as a percentage of Total external revenues

- Target 10%: 8.2%
- 2009: 2.86%
- 2010: 4.13%
- 2011: 4.45%
- 2012: 4.5%

External research revenues

- 2009: €2.86
- 2010: €4.13
- 2011: €4.45
- 2012: €4.5

- FNR: €8.66
- European projects: €9.17
- Chairs: €1.97
- Other partner: €0.72

EU revenues as a percentage of Total external revenues

- 2009: 31%
- 2010: 34%
- 2011: 38%
- 2012: 35%

European projects: 35%
Aides à la Formation Recherche: 47%
OTHER projects: 7%
Mesures d'accompagnement: 2%
ATTRACTION projects: 9%
CORE projects: 35%

FNR revenues

- 2009: €2.86
- 2010: €4.13
- 2011: €4.45
- 2012: €4.5

EU external revenues surpass the goal of representing greater than 10% of the total external revenues (3 mio €, +52.3% from 2011).

- This result is more significant than the total external research revenues that have increased substantially in 2012 (+44.2% from 2011). This progression is due to funds coming from:
  - EU: +52.3%
  - Fonds National de la Recherche (FNR): +42.1%
  - Other partners: +75.5%
  - Chairs: +4.3%

- FNR is the largest source of research revenues representing a total amount of 18.2 million € in 2012. The biggest share of funding arises from the "AFR-Aides à la Formation Recherche" (8.6 mio €, +27.4% since 2011) and CORE projects (6.28 mio €, +92.2% since 2011).

- ATTRACTION projects increased from 0.88 to 1.58 mio € from 2011 to 2012, showing an increase of 80.2%.
### Research indicators

<table>
<thead>
<tr>
<th>Total numbers of Chairs in 2012</th>
<th>6 on-going chair agreements supporting external research revenues for 1.70 mio € 2 acquired new chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of publications</td>
<td><img src="image" alt="Bar chart showing refereed conference proceedings, refereed journals, authored books, edited volumes, and book chapters" /></td>
</tr>
<tr>
<td>Published books</td>
<td><img src="image" alt="Bar chart showing published books" /></td>
</tr>
</tbody>
</table>

**COMMENTS**

- In 2012, UL held six on-going chair agreements conveying 1.7 mio € revenues to research activities, - 2 chairs with institutional partners (City of Luxembourg & FNR-PEARL research programme) - 4 chairs with private partners (Company ATOZ Tax Advisors, SES S.A., ArcelorMittal, Deutsche Bank Luxembourg S.A.).
- Two new agreements have been finalized in 2012 with UNESCO and FNR (PEARL).
- 1,161 scientific works have been published in 2012. Refereed publications increased by 18% from the previous year.
- Since 2010, UL researchers published and/or edited a total of 212 books.

**Art 4.**

*Le nombre de livres publiés et édités : 90*
**Research indicators**

**Art. 4**

L’intensité de publication dans des revues ou « proceedings » à comité de lecture : 2 publications par année et par enseignant-chercheur en équivalent « recherche ETP ».

**Publications per researcher**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total scientific publications</th>
<th>Research staff (exc Chercheur en formation doctorale, Doctorant sur projet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>726</td>
<td>326</td>
</tr>
<tr>
<td>2011</td>
<td>817</td>
<td>343</td>
</tr>
<tr>
<td>2012</td>
<td>856</td>
<td>386</td>
</tr>
</tbody>
</table>

**Publication Ratio**

- 2010: 2.23
- 2011: 2.38
- 2012: 2.24

**Number of citations - Web of Science**

<table>
<thead>
<tr>
<th>Year</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>289</td>
</tr>
<tr>
<td>2008</td>
<td>554</td>
</tr>
<tr>
<td>2009</td>
<td>927</td>
</tr>
<tr>
<td>2010</td>
<td>1305</td>
</tr>
<tr>
<td>2011</td>
<td>1943</td>
</tr>
<tr>
<td>2012</td>
<td>2477</td>
</tr>
</tbody>
</table>

**COMMENTS**

- The number of researchers increased by 12.5% in the last year. Nevertheless, the agreed upon goal of 2 publications per researcher per year has been surpassed. The goal of 2 publications per year can be considered conservative.
- The number of citations of UL publication continues to grow. Recent development of the ORBI database will allow us to robustly measure our publication statistics in the near future.
**Academic Affairs**

**Numbers of students versus time** (winter semesters; guest students excluded)

- Total University registrations: growth rate (Semester, Semester-1; guest students excluded)

- **Bologna Index**

  **Art. 6**  
  Bologna Index: le taux visé d'étudiants inscrits dans les formations de master et de doctorat est de 37% des étudiants inscrits dans les formations « Bologne ».

- **COMMENTS**
  - The number of students increased by 10.6% from 2011/12 to 2012/13. The annual increase appears to have stabilized around this growth rate.
  - 6288 students registered in WS 2012/13 (guest students excluded):
    - Bologna students:
      - 3435 (+6.6%) Bachelor students
      - 1139 (+3.7%) Master students
      - 459 (+17.7%) PhD candidates
    - Non-Bologna students:
      - 1255 (+28.8%) enrolled in other educational programmes
  - A new master in Accounting and Audit has been implemented, with 18 registered students. The first years for the "Master en Gérontologie (P)" and the "Master en Médiation (P)" have not been activated.
  - The Bologna Index continues to grow reaching 31.8% in 2012. The number of Master students increased by a smaller amount than the number of Bachelor students during the last winter semester (3.7% versus 6.6%).

1 Bologna Index = (total PhD and Master enrolled students)/(total Bologna enrolled students)
Academic Affairs - Bachelor

Teaching units

Art.6
Le taux « heures d'enseignement organisées par an/nombre d'étudiants » est fixé à un maximum de 22 heures organisées par étudiant

Limit: 22 TU

180 ECTS
Bachelor graduation rate
Graduation rate up to 2013, Bachelor full time students

Goal: 80%
awarded 46.6%
expected +19%
awarded 30.2%
cohort 08-09
cohort 09-10

240 ECTS
Bachelor graduation rate
Graduation rate up to 2013, Bachelor full time students

Goal: 80%
expected +16%
awarded 69.7%
expected 95%
cohort 08-09
cohort 09-10

COMMENTS

- The maximum of 22 teaching units (TU) per student has been respected.
- A redefinition of the goal of 80% of graduates for a single cohort may be necessary.
- The demanding requirement of 240 ECTS may have a positive effect in increasing the graduation rate.
- A cooperation with the CEDIES is on-going to adjust the data to alleviate the biasing effect of students leaving UL to continue their study in another Higher Education Institutions. These students should not be considered as "real" drop outs.
- An extensive non-cognitive questionnaire has been implemented during the WS 2012/13 to measure possible drop out risk factors for bachelor students. Results will be available shortly, focusing on the correlation between student's characteristics and academic results.
The number of Master students keeps increasing. The goal of 1100 master degrees by the end of the 4-year period will probably be achieved.

The recruitment rate for Master courses stays below the 40% ceiling. A stringent selection process has been implemented: in WS 12/13, 2353 people applied and only 680 were retained; in the previous semester, 790 have been accepted among 2339 applications.

The number of applications seems to have stabilized, despite the increase in Master courses. This tendency needs to be carefully monitored and understood.

The graduation rate for master courses is very satisfactory. Selecting students has a positive impact in reducing students attrition.
## Academic Affairs - PhD

### PhD degrees awarded cumulative over 3 years

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td>122</td>
<td>(+58)</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td>179</td>
<td>(+57)</td>
</tr>
<tr>
<td>Goal: 190 PhD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Goal:** 190 PhD

### Comments
- In the 4-year plan, a goal of 190 PhD awards was set. At the end of 2012, this goal has almost been achieved. A new conservative target may be set at awarding 60 PhD degrees each year.
- UL keeps on increasing the number of programs to accommodate the time limitations of mature and professionals allowing them to study part-time (+1.3% since 2011).
- 222 guest students registered in winter semester 2012/13, +63.2% since previous winter semester.

## Academic Affairs - Lifelong learning

### Bachelor and Master adult students (aged >30)

<table>
<thead>
<tr>
<th>Year</th>
<th>2012/13</th>
<th>Growth rate from previous year</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS</td>
<td>9.3%</td>
<td>1.1%</td>
<td>-1.1%</td>
</tr>
</tbody>
</table>

### Part-time students

<table>
<thead>
<tr>
<th>Year</th>
<th>2012/13</th>
<th>Growth rate from previous year</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS</td>
<td>17.5%</td>
<td>1.3%</td>
<td>+1.3%</td>
</tr>
</tbody>
</table>

### Bologna Lifelong Learning programmes

- **FSTC** Master en Management de la Sécurité des Systèmes d’Information (P)
- **FSTC** European Master in Small Animal Veterinary Medicine (P)
- **FDEF** Master in Entrepreneurship and Innovation (P)
- **FDEF** Master of Science in Banking and Finance (P)
- **FLSHASE** Master en Gérontologie (P)
- **FLSHASE** Master in Management und Coaching im Bildungs- und Sozialwesen (P)

### Other Lifelong Learning programmes

- **FSTC** Certificate - Principles of Biobanking
- **FSTC** Certificate in Small Animal Veterinary Medicine
- **FDEF** Formation complémentaire des Réviseurs d’Entreprises
- **FDEF** Formation complémentaire des Experts-Comptables
- **FLSHASE** Formation continue en Aménagement duTerritoire
- **FLSHASE** Formation continue «Letzebuerger Sprooch a Kultur»

### Guest students

<table>
<thead>
<tr>
<th>Year</th>
<th>2012/13</th>
<th>Growth rate from previous year</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS</td>
<td>222</td>
<td>+63.2%</td>
<td>+63.2%</td>
</tr>
</tbody>
</table>
Art. 4
La qualité et l’efficacité de la recherche se définissent par les indicateurs suivants : le nombre de brevets : 5

2 in 2011
+2 since 2011 and 1 patent sold

COMMENTS
• UL research output led to 5 ongoing patents; 21 applications are pending: 16 have been submitted in 2012 and 5 in 2011.
• The cooperation with the Institute for Systems Biology in Seattle led to 12 new patent applications.
• 4 i-depot applications for software and prototypes.
• One patent has been sold in 2012
• Two licenses have been obtained in cooperation with the Institute for Systems Biology in Seattle.
Art. 14 (3)
L’Université favorise l’accueil d’étudiants étrangers dans le cadre de partenariats. Le taux visé d’étudiants sortants/étudiants rentrants est de 2/1

COMMENTS

- The reciprocity between outgoing and incoming mobility increased in the last semesters. This result is remarkable considering that the number of mobility students has not ceased to increase (+6.6% in last WS), with a semester mobility being compulsory for all bachelor students.

- Master programs attract most of the incoming students (reciprocity rate outgoing: incoming 13:53 ; 334:50 for the bachelor)

- The goal of a 1:2 ratio between outgoing and incoming students may need to be revised.

- Non-commuting mobility percentage increased by 4.4% and falls slightly short of the target defined in Article 14 of the Contract.

- Mobility ECTS average is respected.

Art. 14 (2)
Un taux de 70% de mobilité des étudiants au-delà de la Grande-Région est visé

ECTS mobility
Art. 14 (1)
Pour les formations de bachelor, la mobilité des étudiants s’étend sur 30 ECTS au minimum avec en moyenne une reconnaissance de 25 ECTS par étudiant, le grade de bachelor étant délivré par l’Université

Non-commuting mobility

Mobility ratio

Report on contract fulfilment: Key Indicators 2012
Internationality

Staff composition and nationalities

- Personnel technique: 8%
- Personnel administratif: 20%
- Personnel scientifique: 21%
- Corps académique: 17%
- Corps intermédiaire: 34%
- Other foreigners: 12%
- Other EU27: 19%
- Luxembourg: 24%
- Belgium-France-Germany: 45%
- Other EU27: 19%
- Other foreigners: 12%
- Total agreements: 266

International versus Domestic

UL students W-12/13 Registration (guest students excluded)

- Luxembourg: 47.4%
- France: 14.7%
- Germany: 7.9%
- Belgium: 5.8%
- Portugal: 5.8%
- Total EU27 foreigners: 42.5%
- Others foreigners: 10.1%

International agreements

- 238 Europe
- 16 America
- 2 Africa
- 10 Asia

COMMENTS

- The University of Luxembourg continues to maintain a very international profile in terms of both its personnel and student body.
INTERNATIONAL VERSUS DOMESTIC

Master students W-12/13
Registration: Nationality versus UOE¹ definition of Mobile students

Bachelor students W-12/13
Registration: Nationality versus UOE definition of Mobile students

PhD students W-12/13
Registration: Nationality versus UOE definition of Mobile students

COMMENTS

- Bachelor programs attract particularly local students, that count for 78% of the total bachelor students population.
- Registered students in Master (70%) and PhD (83.2%) courses are highly represented by Luxembourg nationals.
- Non-Bologna programs attract a large number of international students from neighbouring countries and more in general from EU27 countries.

¹ Definition UOE: calculations were done using UNESCO-OECD-EUROSTAT data collection on education systems
The 8% target of Portuguese of total students population registered at UL may be revised. The number of Portuguese pupils graduating from the secondary school system is insufficient to allow UL recruiting more that the actual percentage of Portugal national students.

In the school year 2010/11, 6.8% of pupils studying in Luxembourg were Portuguese nationals.

Almost a quarter of UL students do not originate from from one of Luxembourg neighbouring countries. UL attracts students moving to Luxembourg from non-neighbouring countries to complete higher education.

In school year 2010/11, 5.4% of pupils studying in Luxembourg were from Germany, France or Belgium nationals.
COMMENTS

- Since 2009, UL’s external revenues showed an increase of 141.2%, surpassing largely the contract fixed target of €22.33 millions by the end of 2013.

- Total UL revenues increased by 9.7% in 2012 compared to the previous year. This increase have been supported by a significant increase in the amount of revenue from external funding (+18.9%).

- The contribution of the State of Luxembourg remained almost stable with a limited growth of 2.3% in 2012.
Organisation

Accommodation units (beds)

Number of accommodation units over time

- WS 2010-11: 427
- WS 2011-12: 431
- WS 2012-13: 550

Goal in 2013: 600

Equal opportunities

% of female academic staff

- 2010: 20.00%
- 2011: 21.90%
- 2012: 23.60%

Goal in 2013: 23%

Composition of academic staff by level & composition of female academic staff

- **Academic staff**
  - Chargé de cours: 16.5%
  - Assistant professor: 25.9%
  - Professor: 54.2%
  - Attract Fellow: 3.3%

- **Female Academic staff**
  - Chargé de cours: 24.0%
  - Assistant professor: 44.0%
  - Professor: 32.0%

COMMENTS

- UL increased by 28% the number of student accommodation units (beds) in 2012. New outstanding projects foreseen in 2013 will bring the total number of accommodation units over the goal of 600 units to be reached in 2013.
- The University maintained its effort to increase the number of women among Academic staff. UL reached the settled target of 23% of female academic staff in 2013.
- Female academic staff is currently underrepresented at the professor level.
**Organisation**

**Equal opportunities**

<table>
<thead>
<tr>
<th>Year</th>
<th>% of male administrative staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>26.90%</td>
</tr>
<tr>
<td>2011</td>
<td>25.90%</td>
</tr>
<tr>
<td>2012</td>
<td>24.10%</td>
</tr>
</tbody>
</table>

**Public understanding of Science and Technology**

- 3 "Grandes conferences"
- 14 "Jeudi des sciences"
- 5 courses "Amphi ouvert"
- 2 seminars "Uni@Lycées"
- 1 summer school "Leonardo" for pupils
- Guest students activity "open@uni.lu"
- Pilot project "Reseau culture scientifique UGR"
- "Journées Hubert Curien 2012"

**Cell for Sustainable Development**

- M-Pass for personnel
- Course "science and citizen meets Challenges of sustainable development"
- Open course "social enterprise and social innovation"
- Course on sustainability reporting

**Multilingualism**

- 31 language courses for personnel (229 participants)
- 16 language course for students (297 participants)

**COMMENTS**

- The number of male individuals within the administrative staff decreased by 2.8% since 2010.