Survey on Research and Development 2017

The aim of this survey is the collection of data concerning your Research and Development (R&D) activities performed. This survey is carried out under Regulation (EC) No 995/2012 of 28 October 2012 laying down detailed rules for the implementation of Decision No 1608/2003/EC of the European Parliament and of the Council concerning the production and development of Community statistics on science and technology and on the basis of article 2 of the Law of 10 July 2011 establishing the Institut national de la statistique et des études économiques (STATEC).

Under the terms of the Law of 10 July 2011 establishing STATEC, businesses are bound to respond to this questionnaire. According to article 15 of the aforementioned Law, the refusal to respond to the survey, the refusal to respond within the requested time frame or the intentional delivery of inaccurate or incomplete information is liable to a fine of 251 up to 2.500 euros.

STATEC guarantees the confidential treatment of the individual data of the enterprises, which are used exclusively for the compilation of statistics or in the carrying out of scientific studies.

Please keep a copy of this questionnaire for your own records and return the completed original questionnaire to STATEC before the date mentioned in the letter accompanying the survey.
Introduction

Objectives of this survey
The aim of the Research and Development (R&D) survey is to collect data on research and development expenditure, human resources and other research and development related topics, in Luxembourghish businesses, in order to produce harmonised and comparable statistics in the European Union.

The Research and Development data are also used for the preparation of national accounts.

Scope
The present survey is aimed at resident businesses carrying out market activities according to the statistical classification of economic activities in the European Community (NACE Rev.2) on or from the Luxembourghish economic territory during the observation period.

The definition of the enterprise unit used in this survey includes resident natural persons, legal persons incorporated under Luxembourghish Law and Luxembourghish branches of legal units incorporated under foreign law.

Please exclude any R&D activities related to any permanent establishments and subsidiaries located in foreign territories such as foreign branches of a legal unit incorporated under Luxembourghish law.

The reference period is the financial year 2017. Please report all items to the best of your ability, estimates are acceptable.

How to respond to this questionnaire
This questionnaire is intended primarily for the owner(s) or manager(s) responsible for R&D activities of the enterprise.

Due to the specialised nature of each question (e.g. R&D expenditure and personnel, key finance data, etc.), it may be necessary to collaborate with colleagues in different departments.

Please take into account all of the legal units listed in the “List of legal units targeted by this survey”, that was annexed to the letter inviting you to participate in the survey.

The structure of the questionnaire
This questionnaire is divided into three sections:
Section A - Intramural Research and Development
Section B - Extramural Research and Development
Section C - Comments and contact coordinates
Section A - Intramural Research and Development

What is Research and Development (R&D)?

R&D is planned, creative work aimed at discovering new knowledge, or developing new or significantly improved goods and services. It is distinguishable from other activities by the presence of a noticeable element of novelty and by the resolution of scientific or technological uncertainties.

R&D INCLUDES
- basic research, aimed at acquiring new knowledge, without any specific immediate commercial applications or uses;
- applied research, aimed at solving a specific problem or meeting a specific commercial objective;
- experimental development, consisting in the systematic use of research and practical experience to produce new or significantly improved goods, services, or processes.

Activities where there is no appreciable novelty or problem resolution are not considered to be R&D for the purpose of this survey.

R&D EXCLUDES
- routine product testing, design, quality control, and technical services unless they are an integral part of an R&D project;
- analytical projects (statistical analysis, efficiency surveys or market research) of a routine nature, with established methodologies, principles and models;
- literary, artistic, or historical projects, such as films, music, or books and other publications;
- prospecting or exploration for natural resources.

Does R&D include the development of software and Internet applications?

In this survey, report all software R&D as defined here regardless of its end use (internal or external).

R&D in software INCLUDES
- software development or improvement activities that expand scientific or technological knowledge;
- construction of new theories and algorithms in the field of computer science;
- creation of new and original encryption or security techniques.

R&D in software EXCLUDES
- software development that does not depend on a scientific or technological advance, such as:
  - supporting or adapting existing systems;
  - adding functionality to existing applications;
  - routine debugging of existing systems and software.
- creation of new software based on known methods and applications, even if these have not been used before by your enterprise;
- conversion or translation of existing software and software languages;
- adaptation of a product for a specific client, unless knowledge which significantly improved the base programme was added in that process.

A1. Based on the aforementioned definition, did your enterprise perform any intramural Research & Development (R&D) projects in 2017?

“Intramural” refers to R&D activities performed within your enterprise (in-house) during a specific period, whatever the source of funds, to create new knowledge or to solve scientific or technical problems.

Yes ........................................... □ No ........................................... □

If you answered No ➔ Please go to question B1.
A2. Please provide a short description of the intramural R&D projects performed in 2017.


A3. Does your enterprise have a dedicated R&D unit or department?

Yes .................................................................

No .................................................................

A4. In your enterprise, how many people were involved in intramural R&D activities in 2017?

Please answer about your enterprise only for Luxembourg. Exclude any subsidiaries, parent enterprises and foreign branches for the purposes of this survey.

Please write '0' if no one was involved in a category.

<table>
<thead>
<tr>
<th>Number of persons</th>
<th>Number of persons in full time equivalent (FTE)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Researchers</td>
<td></td>
</tr>
<tr>
<td>Professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, and in the management of the projects concerned.</td>
<td></td>
</tr>
<tr>
<td>of which females:</td>
<td></td>
</tr>
<tr>
<td>ii. Technicians and equivalent staff</td>
<td></td>
</tr>
<tr>
<td>Persons whose main tasks require technical knowledge and experience in one or more scientific or technical fields.</td>
<td></td>
</tr>
<tr>
<td>of which females:</td>
<td></td>
</tr>
<tr>
<td>iii. Other supporting staff</td>
<td></td>
</tr>
<tr>
<td>Skilled and unskilled craftsmen, secretarial and clerical staff participating in R&amp;D projects or directly associated with such projects.</td>
<td></td>
</tr>
<tr>
<td>of which females:</td>
<td></td>
</tr>
<tr>
<td>iv. On-site consultants devoted to R&amp;D</td>
<td></td>
</tr>
</tbody>
</table>

* One FTE may be thought of as one person-year. A person who spends 30% of his or her time in R&D should be considered as 0.3 FTE. A full-time R&D worker employed for 6 months is a 0.5 FTE.
A5. Do you measure intramural R&D, either as a function or as a cost centre, in your cost accounting or general accounting system?

Yes ........................................ No ........................................

A6. Please specify the amount of the following intramural R&D expenditure items for the financial year 2017:

Please consider the aggregate expenditure of all the legal units listed in the letter accompanying the survey.
Exclude any subsidiaries, parent enterprises and foreign branches for the purposes of this survey.
Also exclude VAT, amortization and depreciation, and extramural R&D expenditure.

Please write ‘0’ if you did not have any expenditure.

<table>
<thead>
<tr>
<th>i. Personnel costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Researchers</td>
<td>EUR</td>
</tr>
<tr>
<td>Technicians and equivalent staff</td>
<td>EUR</td>
</tr>
<tr>
<td>Other supporting staff</td>
<td>EUR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ii. Other current expenditure used to support R&amp;D performed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct costs of materials, supplies, consumables, equipment, as well as any pro rata administrative and overhead costs to support intramural R&amp;D</td>
<td>EUR</td>
</tr>
<tr>
<td>Services provided by on-site consultants devoted to R&amp;D</td>
<td>EUR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>iii. Gross investments in tangible or intangible fixed assets used in the R&amp;D</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land and buildings</td>
<td>EUR</td>
</tr>
<tr>
<td>Includes land acquired for R&amp;D use (e.g. testing grounds, sites for laboratories and pilot plants) and buildings constructed or purchased for R&amp;D use, including major improvements, modifications and repairs.</td>
<td></td>
</tr>
<tr>
<td>Instruments and equipment, capitalised computer software</td>
<td>EUR</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>iv. Total of intramural R&amp;D expenditure (i. + ii. + iii.)</th>
<th></th>
</tr>
</thead>
</table>
A7. Please allocate your intramural R&D expenditure in 2017 by sources of funds:

Please write ‘0’ if you did not receive any funds from a source.

Internal Funds (your enterprise) .................................................................................................................................................. EUR

Include loan amounts as part of internal funds since the external source in fact anticipates that the loaned funds will be paid back.

External Funds

i. Your affiliated enterprises
   a. established in Luxembourg ........................................................................................................................................ EUR
   b. established outside of Luxembourg ................................................................................................................................ EUR

ii. Partner enterprise of your R&D projects
   a. established in Luxembourg ........................................................................................................................................ EUR
   b. established outside of Luxembourg ................................................................................................................................ EUR

iii. Ministry of Economy (law of June 2009 relating to the promotion of research, development and innovation) ................................................................. EUR

iv. European Commission (including EU Framework Programmes for R&D) ................................................................................................................................ EUR

v. International organisations .................................................................................................................................................. EUR

vi. Other foreign sources including foreign governments, higher education institutions, etc. ......................................................................................................... EUR

vii. Other (please specify here below) ........................................................................................................................................ EUR

Total of intramural R&D expenditure

This total should be equal to the total amount of R&D expenditure provided in A6 item iv.
A8. Please allocate your intramural R&D expenditure in 2017 by type of R&D:

Please write '0' if you did not have any expenditure for a specific type.

i. Basic research ..................................................................................................................
   Empirical or theoretical research undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view. EUR

ii. Applied research..............................................................................................................
   Original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective. EUR

iii. Experimental development..............................................................................................
   Systematic work, drawing on knowledge gained from research and practical experience, that is directed at: producing new materials, products and devices; installing new processes, systems and services; or substantially improving those processes that are already produced or installed. EUR

Total (i. + ii. + iii.)

This total should be equal to the total amount of R&D expenditure provided in A6 item iv.

Section B - Extramural Research and Development

B1. In 2017, did your enterprise engage in any extramural Research & Development (R&D)?

Extramural R&D refers to the same activities as stated in Section A but performed by other enterprises (including affiliated enterprises) or by public or private research organisations.

Yes .................................. No ..................................

If you answered No ➔ Please go to question C1.

B2. How much did your enterprise spend on extramural R&D work in the financial year 2017:

Exclude VAT and intramural R&D expenditure.

EUR
Section C - Comments and contact coordinates

C1. In the box below, please write any additional comments that you would like to make:

C2. How long did it take to complete this questionnaire?

\[ \text{\_ \_ \_ Hours} \quad \text{\_ \_ \_ Minutes} \]

C3. Please indicate the department(s) in your business that provided the information:

- R&D........................................... \[ \square \]  Human resources ....................... \[ \square \]
- Finance / Accounting ............... \[ \square \]  Management............................... \[ \square \]
- IT ............................................. \[ \square \]  Other ....................................... \[ \square \]

Please provide details of the person we should contact if we have any queries regarding the information returned on this questionnaire.

Name ............................................................ Phone ..................................................

Position ............................................................ E-mail ...........................................

(location) (date) (signature)

Thank you for completing the questionnaire, your response is important.