Handbook for Baekeland Mandates

version December 2018

Mandates for carrying out a doctoral project in cooperation with the business/industrial sector
1. Introduction

This handbook describes what is meant by a Baekeland mandate and how firms and researchers can benefit from the available funding.

This handbook contains general information about the funding programme. It should be read together with the additional information available on the website (www.vlaio.be), including the application form, the description of the selection criteria, the description of the mutual cooperation agreement, etc. Regular consultation of the website is highly recommended.

Additional questions can also be sent to: Baekeland-IM@vlaio.be.

This text is a translation from an original in Dutch. In case of dispute, the Dutch-language version shall have sole legal validity.
2. Positioning

The purpose of Baekeland mandates is to offer researchers the opportunity to make a PhD in close collaboration with the business/industrial sector.

Baekeland mandates provide support for individual mandates, including cofinancing of operating costs associated with the implementation of the project.

A basic principle of the Baekeland mandate is that on the one hand, a Flemish company is involved in the strategic orientation of the project and cofinances it, and on the other hand, a Flemish university is responsible for the supervision of the doctorate and the conferral/assignment of the doctoral degree according to the accepted quality norms/standards. Other strategic institutes (strategic research centres, research institutes, colleges, etc.) can also act as host institutes for a doctoral candidate in so far that they cooperate with a scientific supervisor affiliated with a university.

The mandate holder can be an employee of a knowledge centre or a company. Work activities can take place in the knowledge centre or in a company.

The support provided by Flanders Innovation and Entrepreneurship (Agentschap Innoveren en Ondernemen) is granted as a project-based support to a company that concludes a cooperation agreement with the knowledge centre. The company acts as the main applicant vis-à-vis the Agency.
3. Funding programme features

3.1. **Scope of project**

The purpose of Baekeland mandates is to support research that—in case of success—has clear economical objectives and offers added value to the company involved in the project. However, the research is oriented to acquiring a PhD and meets the accepted criteria for doctoral research. In order to be eligible for support, a project proposal for a Baekeland mandate must offer at the very least a scientific challenge and a definition of a problem that will give a researcher the opportunity to become intellectually competent and to develop into a fully-fledged researcher.

3.2. **Applicants and partners**

Baekeland mandates are projects that are assigned to a ‘consortium’ of a Flemish company and a Flemish university. Other types of knowledge centres (or research institutes, strategic research centres, colleges, etc.) could also act as host institutes in so far that they cooperate with a scientific supervisor affiliated with a university.

There are at least five parties involved: (1) Flanders Innovation and Entrepreneurship, which grants the mandate, (2) the company that acts as the main applicant, is co-responsible for the financing and appoints an industrial mentor, (3) the mandate holder, (4) the knowledge centre with which the mandate holder is associated (a university, research centre, strategic research centre, college, etc.) and (5) the supervisor responsible for the doctoral supervision and who is affiliated with a university. All five parties have to be listed when submitting a project application.

The company acts as the main applicant vis-à-vis the Agency and as a party to the funding agreement. Since one or more research partners are involved, a mutual cooperation agreement is required, signed by the scientific supervisor as well.

The support provided is project-based, paid in yearly instalments to the main applicant (the company). The mandate holder can be an employee of the company or an employee of a knowledge centre (university or research centre).

The Agency therefore does not act as an employer and is not responsible for the direct payment of a salary to the mandate holder. The employer, which can be either a knowledge centre or a company, is responsible for the contractual aspects related to the employment, salary and reimbursements of the mandate holder.

The candidate (for the mandate) who wishes to apply for a Baekeland mandate must first outline the cooperation framework that will be set up between the company and the university doctoral supervisor. The application must be submitted by the company.
3.3. **Companies eligible for funding**

All firms, from SMEs to multinational corporations with a Flemish seat, may submit a funding application under this programme. A selection criterion in the evaluation process is that there is adequate added value for Flanders. Entities that do not have their seat in Flanders yet, but develop adequate knowledge that will be used in Flanders in the future, can submit an application, conditional to an exceptional permission from the Agency.

The department of the company with which the doctoral student is affiliated, must have the qualifications for supporting the doctoral research until its completion. The company must have at least one employee who has the competence to act as an industrial mentor for the doctoral student. In addition, the environment must be a professional one that will properly support the doctoral project. It is also possible for a number of small and middle-sized enterprises (SMEs) to cooperate together in order to support a demand-driven doctoral project if they are able to jointly provide the necessary funds and professional environment. They have to sign a cooperation agreement with the commitment to provide the necessary resources for the doctoral project. The project needs to be located in one of the participating SMEs, which has at least one employee who has the competence to act as an industrial mentor.

The mandate holder can be an employee of the company or of the university. The regulation is open to all candidates who are admitted into a doctoral programme by a Flemish university. The Agency does not impose any additional limits. Therefore, the regulation is open to all nationalities and to all people holding diplomas that the education institute accepts for subscribing to a doctoral programme. There are no requirements in terms of marks. Nevertheless, candidates who already have a PhD-diploma cannot be accepted. The mandate holder carries out the research project in cooperation with the company and the lab of a knowledge centre. The mandate holder is registered for doctoral studies in the host university. He/she divides his/her time between the knowledge centre and the company, as stipulated also in the cooperation agreement.

3.4. **Duration and Supportable Activities**

In principle, a mandate is for four years. At the latest after two years, an interim evaluation will be conducted to monitor the progress of the project and to check whether the mandate is being allocated properly according to the objectives.

A Baekeland mandate includes the financing of salary costs, operating expenses, equipment expenses and fixed costs related to one specific employee. It is possible to obtain a Baekeland mandate for part-time staffing (minimum is 50% staffing) as long as the prospects for achieving a doctorate remain, which is part of the detailed evaluation of the application.

In the case of part-time staffing, the duration of the project will be extended so that the total support corresponds to 4 full-time man-years. If the project lasts more than four years, the date of the interim evaluation is adjusted accordingly.
Drawing up the budget follows the logic of the industrial R&D funding programme. Budgeting consists of salary costs, operating expenses, equipment expenses and fixed costs. The sum of the non-staff costs (=operating expenses + equipment expenses + fixed costs) is maximum € 40,000 per year in full-time staffing (or maximum € 160,000 for the whole project period). Verification of the costs will be conducted after the project is completed (all the costs must be demonstrable).

For more details, see the guidance document on the website (only available in Dutch).

**3.5. Scope of financial support**

The accepted budget constitutes a basis for calculating the subsidy. The granted support depends on the size of the company and consists of 50% for a large company and 60 or 70 % for an S(M)E. The Agency pays the subsidy to the company responsible for the full reimbursement of its partners.
4. Processing of the application

4.1. Submitting an application

Applications may -principally- be submitted any day of the year. However, decisions take place two times per year. Before each decision date, the Agency defined the last date for submitting an application (see call document “oproepdocument” on the website).

4.2. Eligibility

Within 14 working days after the deadline for submission, a decision on eligibility of the application is taken.

Eligibility is based on formal criteria.

- The company must have a registered office in Flanders. Entities that do not have their seat in Flanders, but do envision sufficient valorisation in Flanders in the future, can submit an application, conditional to an exceptional permission from the Agency.
- At the moment of the decision, the company is no “undertaking in difficulty” (see http://www.vlaio.be/onderneming-in-moeilijkheden)
- The various partners, especially the company, the knowledge centre (university, research centre, college, etc.), the mandate holder and the scientific supervisor are known at the time of the application. The company and the knowledge centre agree on implementing the activities.
- An industrial mentor is appointed by the company for supervising the mandate holder. If the research is carried out in a research institute, which does not (confer) assign doctorates itself, but for this purpose cooperates with a scientific supervisor affiliated with a university, then a supervisor is also required in the knowledge centre.
- The university with which the supervisor is affiliated has to accept the candidate to do doctoral research. The university is required to submit a declaration that the candidate meets all the conditions for admission into a doctoral research programme. Ideally, this declaration should be submitted together with the application. If this declaration is not available on the date of submission, a provisional admittance can be given (stating the condition on which the candidate is accepted to the PhD-program) and the evaluation can get started.
- The intentions with regard to intellectual property and use of the results are known. A signed declaration of intent (term sheet/“afsprakennota”) or a cooperation agreement is required. In the absence of such a signed term sheet or cooperation agreement at the time of the project submission, the Agency can declare provisional admittance and the evaluation can proceed. However, if the Agency does not possess a term sheet or cooperation agreement at the deadline for submission of the term sheet as stipulated in the call document.
(“oproepdocument”), the project proposal is declared ineligible and the provisional handling is stopped.

- There is no limit on the number of mandates that a company can apply for. An individual researcher can only be presented twice as a candidate mandate holder within an application for a Baekeland mandate.

- During the eligibility analysis, the Agency has the right to request additional information about official aspects, such as the status of the company with regard to social security (RSZ) contributions, the financial means of the company to finance the mandate, etc.

In case of a positive evaluation, the company enters an agreement for financing its own contribution for the entire mandate. Hence, the Agency also conducts a business and financial analysis. It checks whether the company has sufficient financial resources at their disposal, are up to date with all government and permit requirements, and properly implemented any earlier funded projects. Especially for companies which are not known to the Agency, or if the situation of the company is not clear, the Agency shall request additional information before deciding the eligibility. The Agency can declare an application ineligible if a company cannot substantiate elements of financial means and/or the company is not in compliance with the regulations. The handling of a Baekeland application only starts after the required declarations are issued.

### 4.3. Evaluation period

The Agency will decide within 75 working days, from the date the application is declared eligible, whether to support the project. In order to handle the applications in groups, each year there are two deadlines for submission. However, it is the eligibility that determines the timing of the decision. A timely submitted application, but which cannot be declared eligible within the foreseen period is automatically shifted to the next evaluation session. The dates are as follows (indicative):

<table>
<thead>
<tr>
<th>Call</th>
<th>Deadline for submission</th>
<th>Eligibility</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Call</td>
<td>End of March</td>
<td>April</td>
<td>Mid July</td>
</tr>
<tr>
<td>2nd Call</td>
<td>Beginning of September</td>
<td>September</td>
<td>End of December</td>
</tr>
</tbody>
</table>

For each call, the exact dates for submitting the proposals will be published at the website (www.vlaio.be).
4.4. **Starting date**

Implementation of a mandate always begins on the first day of the month. Implementation must start within six months following the decision of the Hermes decision committee.

As is common in the industrial R&D funding programme, it is possible to start the implementation of a mandate even before the decision. The starting date is at the earliest on the first day of the month following the submission deadline, as long as the application can be declared eligible (or provisionally eligible in case the term sheet and/or the document for admission into the doctoral research programme is submitted later) within a normal period of 14 working days. Important to note is that for the final payment, the period prior to the decision can only be financially supported if the implementation was effectively started and the costs for this period can be demonstrated. If the parties chose for a starting date before the decision, then this occurs at the risk of the company. Important to note is that the mandate can only be started if all the eligibility requirements and all the conditions for carrying out doctoral research are met. In any case a Baekeland mandate cannot be started as long as the candidate has not been admitted by a university for doing the doctoral research.

4.5. **Evaluation procedure**

The final decision is based on a well-founded advice by external experts. This is based on the oral defence by the candidate mandate holder in which he/she explains the project and answers questions posed by the experts. The scientific supervisor and/or the company representatives do not have to provide any explanations.

By making decisions on groups of applications, the jury has the possibility to handle several project applications at the same time. A specialist is assigned to each file and he/she has a leading role in the interactive discussion. The evaluation and granting of an assessment is based on a consensus among the jury members. Experts who are affiliated with the same department as the candidate mandate holder or are affiliated with the company applying for the mandate are regarded as incompatible and cannot participate in the evaluation of an individual file. The experts must sign a confidentiality agreement, which is identical to the confidentiality agreement used for evaluation of industrial R&D projects.

The Agency designates external experts for each call. There are no permanent committees. The names of the external experts are not announced in advance. At the oral defence of his/her project, the mandate candidate is informed about the names of the experts.

In order to maintain a proper balance during the evaluation between the project’s application possibilities and its doctorate-level qualities, the targeted composition of the evaluation team is 50% experts from the business sector or from other potential users of the research results and 50% from the academic world and public research organisations.
To reduce any possible conflict of interest among industrial competitors, it is possible to submit a short list of industrial experts to be avoided. This must be based on the name or at least on the affiliation. Objection cannot be submitted based on content elements. Therefore, it is not possible to object to all experts that are for instance active in diagnosis. However, it is possible to object to academic experts if they are affiliated with a competitive company. Submitting an objection to an academic expert is only possible at the department level, not at the level of the institute or university.

When designating the experts, the Agency will take into account—as much as possible—any requests for objections. If an unreasonable number of objections are made about names/entities (more than five), the Agency will not consider the request. When objecting to academic experts, the important element is the connection to the competing company. If the request is based purely on personal preference or rejection, the Agency will not necessarily take this into account.

**4.6. Application Document**

The evaluation is based on a project application according to a form provided for that purpose.

The basic elements are:
- Innovation goal: a concise summary with emphasis on the objectives and the intended results; fit of the research within the innovation strategy of the company;
- Project description: positioning, reason(s) + setting up objectives, approach + work programme;
- Intended applications and valorisation;
- Guidance: description of how a project will fit with the expertise provided by the academic supervisor and the industrial mentor;
- Budget;
- CV of the candidate mandate holder;
- Declaration of intent by the knowledge centre and company regarding the availability of support and infrastructure, and agreements about the future use of the results, including agreements on intellectual property (term sheet or cooperation agreement);
- Official information (*will be specified in the application form*).

The innovation goal constitutes a formal starting point for the funding agreement that comes later. This has to be described as specific as possible. Changes within the boundaries of the innovation goal do not require any adjustment of the agreement.

Applications can be submitted in Dutch or English. The defence is in the language of the application.
5. Decision

5.1. Assessment Criteria

Each application is assessed on two evaluation aspects: the scientific quality and the valorisation dimension. For each aspect the jury assesses the quality of the candidate and the quality of the project proposal. Therefore, the evaluation is based on four sets of criteria.

The evaluation criteria and the evaluation method are explained further in the document ‘Explanation Document Baekeland: Evaluation Criteria’ (Toelichtingsdocument Baekeland-mandaten: selectiecriteria) on the website.

Each criterion receives an assessment that varies from critical (=unacceptable) to weak, reasonable, good and excellent. Based on the assessments for all the criteria, a global assessment is made for each project proposal with regard to the scientific aspect and the valorisation dimension.

Based on these assessments, the granted (financial) support is decided.

The Hermes decision committee makes a decision about providing or not providing support based on the detailed assessments. If the available budget is insufficient for providing support to all the projects, then the committee makes selective decisions and grants the support to the highest ranked proposals within the available budget.

5.2. Request for reconsideration

If an application has been rejected, the applicant (company) may request the Agency to reconsider it. This request for reconsideration has to be submitted within 60 working days following the decision and must be based on clear and verifiable elements.

Note that a particular project cannot be defended by the candidate more than two times for a committee of external experts.

5.3. Complaints

A written, oral or digital complaint can be submitted at any time in case of dissatisfaction about the way the Agency handled the application. Complaints will be dealt with within 45 days following receipt.
6. Rights and Obligations

6.1. Intellectual Property Rights

A general standard regulation is used for agreements about Intellectual Property Rights (IP). Each individual application could also have other stipulations if agreed upon in mutual consultation.

The basic models for the IP regulation are included in the standard Baekeland cooperation agreement, which was formulated by the universities and the companies. The standard cooperation agreement is included in an explanation document on the website. This is not a stringent template, but rather an informative document whose purpose is to explain the possible models of the IP regulation.

The key elements of the IP agreements must be included in a mutually signed term sheet/“afsprakennota” (or cooperation agreement). These elements could play a role in the evaluation (if applicable) and therefore they have to be known before the interview with the jury. The term sheet is part of the eligibility procedure. In the absence of a signed term sheet (or cooperation agreement) at the time of the project submission, the Agency can declare provisional admittance. However, if the Agency does not possess a term sheet (or cooperation agreement) at the deadline for submission of the term sheet, as stipulated in the call document (“oproepdocument”), the project proposal is declared ineligible and the provisional handling is stopped.

The official confirmation of the agreements is the cooperation agreement (see below). This must be signed before the support agreement is concluded following a positive decision.

It is obviously essential that the elements specified in the final cooperation agreement remain within the main outlines of the agreements specified in the term sheet.

6.2. Support Agreement

In the case of a positive decision, a support agreement is concluded between the Hermes fund and the primary applicant (company). The mandate holder should also sign the support agreement.

The support agreement is a commitment of effort, which binds the partners to make every effort to achieve the described innovation goal.

The support agreement also includes a commitment for sufficient valorisation in Flanders in the case of successful results.

The support agreement contains commitment by the applicant (the company) to provide its own adequate financial means in order to guarantee the continuity of the project. The modalities for mutual contributions are regulated in the cooperation agreement (see below).
If relevant, the Agency will include specific conditions in the support agreement, such as approval of ethics committees, possession of required permits, etc. In case of doubt about the financial means of the applicant (the company) during the project period, financial conditions could also be set down in order to guarantee the contribution of the particular company during the implementation.

### 6.3. Cooperation Agreement

A cooperation agreement is concluded between the partners and it regulates at the very least:
- Agreements about mutual payments
- Designation of contact persons
- Procedure in case of disputes
- Mutual agreements regarding IP and use of results

The cooperation agreement is signed at the very least by the authorised representatives of:
- The company
- The knowledge centre

The support agreement is sent by the Agency only after receiving the cooperation agreement. A signed cooperation agreement must be received no later than four months following the decision. If after four months a cooperation agreement has not been received, the positive decision is cancelled.

The cooperation agreement contains the commitment of the knowledge centre and a supervisor—who meets the legal requirements for supervising the doctorate in a continuous manner—to perform the doctoral supervision. The cooperation agreement also contains a commitment by the company to finance the costs on which the subsidy is calculated.

If in the course of the project, a supervisor can no longer fulfil his/her task—for whatever reason—it is possible to re-assign the supervision task to another supervisor. The knowledge centre and the company concerned are required to adjust the cooperation agreement and to submit this for approval to the Agency. The support agreement concluded between the Hermes Fund and the primary applicant does not change as a result of this. If the candidate ceases his/her activities, then the agreement, which is granted personally, is automatically cancelled.

### 6.4. Release of funding

The support payment is a project-based subsidy and is paid in yearly instalments to the primary applicant.

The first instalment is paid following the receipt of the signed support agreement and the signed cooperation agreement.

The primary applicant is responsible for the timely payment of any partners in instalments of at least six monthly payments. The university is a contractual research partner. The primary
applicant is responsible for paying all research partner costs that are part of the eligible costs for which the applicant receive the subsidy.

Payment by the Agency is conditional on the proper implementation of the project and on compliance with the reporting and notification requirements.

At the end of the project, a final verification of the real costs is made. Based on the accepted costs and the applied support percentages, the total support is determined and final instalment is paid, whereas the instalment already paid are taken into account.

6.5. **Reporting**

The innovation goal is the starting point of a support agreement. Adjustments/changes within the scope of the innovation goal are possible without the need to adjust the agreement.

Standard project reporting consists of short follow-up report cards for each payment, a midterm report and a final report when the project is completed. The final report has to include:

- A summary of the scientific results (Academic progress)
- Implementation of the innovation goal, including the strategic application
- Valorisation report
- Financial report

The reporting templates can be found on the website (http://www.iwt.be/subsidies/baekeland-mandaten/documenten).

6.6. **Interim Evaluation**

At the latest after two years, an interim evaluation is made to evaluate the progress of the project and to monitor whether the mandate is being allocated properly according to the agreed upon objectives.

The interim evaluation is based on a report about the results and the prospects for future applications. The mandate holder is always given the opportunity to have an interview with the external experts, a setting in which various elements can be explained. If deemed relevant, the scientific supervisor and the industrial mentor can also be invited for a discussion.

If during the course of the mandate, the partners wish to significantly change the innovation goal, this will also have to be submitted to the jury of external experts during the interim evaluation. In the case of a positive advice, the mandate can progress further with the adjusted innovation goal. With this decision, the jury shall take into account the quality of the proposed change, but also the feasibility of the adjusted innovation goal within the remaining period, including the possibility of completing the doctorate.
6.7. **Publication Right**

The purpose of a Baekeland mandate is achieving a doctorate. Publishing is very important for a doctoral candidate. Therefore, as part of the Baekeland mandate, the mandate holder also has the right to publish. Within the agreements about intellectual property, publication might be postponed due to reasons of patent applications. The possibility of the mandate holder to publish cannot be denied without valid/sound reasons.

6.8. **Reconsideration of the Support**

A Baekeland mandate is granted as support for R&D projects in the business sector under the regime of 'industrial research'. As common in industrial R&D projects, the status of the state of affairs is established at the end of the project, and sometimes three years after the end (in some cases after five years).

This reporting has a double purpose:

- Monitoring the prospects of applications in the future
- Evaluation of the achieved (or not achieved) doctorate

If from the reports it emerges that the implementation of the project is not in compliance with the modalities of awarding support and the innovation goal, the Agency might reconsider the support. If it indeed emerges that the implementation cannot be considered as research on a doctorate-level and the project implementation complies more with a classical development project, the support will at least be reviewed as support for development projects within the commonly accepted support framework (support is 25% instead of 50%). This is actually an obvious review: the European Commission would consider awarding the support of 50% under the regime of industrial research for a project in experimental development an infringement in the market. The special thing about the Baekeland mandates is that this is probed explicitly during a fixed monitoring period in order to preclude improper use as much as possible.

In practice, the *post factum* control of the research type remains limited to situations in which no doctorate is obtained at the moment of monitoring. When obtaining the doctorate, aside for monitoring of possible applications, there is no further analysis after the closure of the project period.

In the case of non-compliance with the contractual agreements, during the project or with monitoring after the project, support van be reconsidered with the possibility of re-claiming the financial support that was already paid in the case of proven shortcomings.