



Dutch-Flemish Research Programme for Dutch Language and Speech Technology STEVIN (*Spraak- en Taaltechnologische Essentiële Voorzieningen In het Nederlands*)

3rd Open Call for Proposals:

- Submission deadline full proposals: Tuesday May 22, 2007, 12:00 h.

General introduction

In order to stimulate the technology sector so as to increase its innovative power, and in order to improve or at least secure the position of the Dutch language in the modern information and communication society, the *Nederlandse Taalunie* has launched the 5 year Dutch-Flemish Language and Speech Technology Programme *STEVIN*.

The STEVIN programme aims can be briefly summarized as follows:

- realise an appropriate digital language infrastructure for Dutch, based on the BaTaVo-priorities (see <http://taalunieversum.org/taal/technologie/docs/daelemans-strik.pdf>);
- carry out strategic research in the domains of language and speech technology, in particular in areas for which there is a large demand from specific applications and technologies;
- stimulate the creation of networks and the consolidation of language and speech technology activities, educate new experts, promote demand stimulation and knowledge transfer.

More information about the objectives of the programme can be found on the STEVIN website <http://www.stevin-tst.org/>. Here you will also find the electronic versions of STEVIN's programme framework, the guidelines for submitting proposals and the official *STEVIN-subsidieregeling* of the *Nederlandse Taalunie* (the legal Dutch-Flemish basis for this Call).

Three calls have been planned within this programme:

1. a 1st open call (September 2004) - maximum budget 2 M€ - for focussed short term projects with a self-contained result (maximum duration is 2 years);
2. a 2nd open call (in the spring of 2005) for more complex projects with a longer time frame (maximum duration four years) combined with a call for tender for projects targeting some specific priorities (maximum duration 2 years) - maximum budget 4.2 M€ ; and
3. a 3rd call (in 2007) - maximum budget 2.3 M€ - the specific content of which is described below.

The total budget of the 3rd Open Call is limited to a maximum of € 2.3 million. This is an open call for proposals which should target at one of the priorities described in this call.

The STEVIN programme aims to have a balanced programme covering all layers (resources, research and development, technology integration in applications, end users). In the preceding calls, only a few projects focused on technology integration in applications. For this reason we especially invite proposals for *application-oriented research projects* in this call.

An *application* is a technical system implemented in software and/or hardware which aims to provide a solution to a problem of its intended end users.

An *application-oriented research project*, in the STEVIN programme, is a project which contains at least the following three activities:

- development of language and/or speech technology
- integration of the technology developed in a (prototype) application
- evaluation of the application with the intended (naïve) end users

The application developed in the project can be a completely new application, but it can also be an existing application that is extended with new functionality in order to better serve its intended end users.

All other things being equal, the best proposals for application-oriented research projects will get higher priority for funding than other types of projects. Proposals that aim to define an application-oriented research proposal must explicitly specify their character as an application-oriented research proposal, and will then be evaluated as such.

Though the focus of this call is on application-oriented research projects, projects aiming at other layers are also eligible for funding in this call. However, projects that focus purely on the creation of resources will not be awarded funding. Projects can of course still create resources, but the resource creation should be just one component of the project, and the created resource should be used in the project to develop or test technology or applications.

Practical details as to a) who can apply, b) what type and length of projects can be submitted, and c) details about the assessment procedure, etc. can be found in the section on Practical Details below. Obviously, proposals targeting at language and speech technology or applications that are already being addressed with other funding are not eligible for funding in this call. Prospective submitters of proposals are particularly recommended to familiarize themselves with the projects that received funding in the first and second call in order to avoid overlap. Information about these projects is available on the STEVIN website.

STEVIN Timetable

Activity	Date
3 rd Open Call for Proposals opening	March 2007
Deadline Full proposals open call for proposals	May 22, 2007
Assessment and ranking by International Advisory Panel Open Call	June 2007
Reply applicants on Assessments IAP	last week of June 2007
Assessment and ranking by Programme Committee Open Call	July 2007
Decision on Funding by Programme Board Open Call	July 2007

STEVIN Priorities open call

Proposals can relate to research and/or applications in the areas of language and speech technology, and they have to contribute to an appropriate digital language infrastructure for Dutch. The STEVIN priorities for this Call for Proposals are:

In the area of speech technology

- robustness of speech recognition;
- output treatment (inverse text normalization);
- confidence measures;
- adaptation;
- lattices.

In the area of language technology

- semantic analysis, inc. semantic tagging and integrating morphological, syntactic and semantic modules;
- text pre-processing;
- morphological analysis;
- syntactic analysis (robust parsing).

In the area of speech & language technology applications

- information extraction from audio-transcripts created by speech recognizers;
- speaker accent and identity detection;
- monolingual or multilingual information extraction;
- semantic web;
- dialogue systems and Q&A solutions, especially in multimodal domains;
- automatic summarization and text generation applications;
- machine translation;
- educational systems;
- other applications.

In addition, resources mentioned in the official STEVIN programme and not yet envisaged in previously approved STEVIN projects will be considered as contributions to the STEVIN priorities, as far as they are produced in the context of a technology or application-oriented research project. More details as to the exact nature of the STEVIN priorities can be found in the official programme description in chapter 5.3.

Assessment criteria Open Call

In the evaluation, ranking and selection of technology-oriented proposals, the same criteria as have been used in previous STEVIN calls will be taken into consideration and they will be considered equal in weight.

Also for application-oriented proposals the normal evaluation criteria apply, but we emphasize a number of specific instantiations of them here:

- A project that claims to be application-oriented must of course contain the three components of such a project as mentioned above.
 - There must be a significant effort in developing or further developing language and speech technology.
 - The technology developed must be integrated in an application, either an existing application that is extended with new functionality, or a completely new application. The application envisaged and its intended end users must be clearly defined. Furthermore, the added value of integrating language and/or speech technology in the application should be clearly indicated.
 - Since an application (by definition) is aimed at end-users, a serious evaluation of the application with its end-users is essential. It is advised to set up a pilot experiment (with a small number of end-users) before defining and implementing a full-scale evaluation of the application. Especially for new aspects of the application, multiple small-scale experiments may be required to be able to make justified design decisions. The proposal should specify clearly how it intends to perform this evaluation and how it will get access to the right (naïve) end users
- An application-oriented project, as any project, must of course be innovative, but the innovative aspects will relate more to the application, or to the way the developed technology is used in the application than to the technology itself.
- Since the applications developed and evaluated are intended for end users, it is expected that the opportunities for applying the results in industry and/or society can be rather specific and concrete, and they will be evaluated as such.

Standard STEVIN assessment criteria

- **Quality and innovative character of the proposal**
 - Clarity in problem definition and innovative power of the project.
 - Suitability and effectiveness of the research design and methodology. In particular, an explicit component of evaluation, or in the case of linguistic resources, an explicit validation plan must be included in the proposal.
 - Impact of the project on a wide range of applications and relevancy of the project for applications that are relevant for industry.
 - Competence of the participating groups (including past performance).
 - Feasibility of the goals.
 - Balanced cooperation and task division within the project.
 - Availability of the required infrastructure.
- **Economic aspects of the project proposal**
 - Is there cooperation with or support by companies?
 - What are the prospects for spin-offs and/or other new developments?
 - Opportunities for applying the results in industry and/or society.

- **Contribution to the STEVIN programme**
 - Conformity to the focus of the programme and fit in with the priorities set. The project must focus on the Dutch language and must contribute to improving or at least securing the position of the Dutch language in the modern information and communication society.
 - The goal is to have a balanced programme covering all layers (basic resources, research and development, technology integration, end users) in the chain approach and properly integrating them. The contribution of individual projects to this overall programme goal will therefore be a criterion in their evaluation.
 - Perspectives on knowledge transfer and network creation. In particular it is to the advantage of a project proposal if the expertise of Dutch and Flemish groups or companies are combined, if research institutes and companies jointly make a proposal, or if the proposal relates both to language and to speech technology.
- **IPR, avoiding duplication and standards**
 - The proposal must contain a clear plan for the proper treatment of intellectual property rights (IPR), both for the resources provided by third parties and for the results of the project. The working principle must be that the data, tools and other results of the STEVIN projects are made available in a non-discriminative way in the *TST-centrale*.
 - The proposal must prove that the applicants have a precise and up-to-date picture of what is already available. Preferably the resources to be developed in the project do not exist yet. If it is known or can be presupposed that the resources exist but are not generally accessible, the proposal should contain a plan to avoid disturbance of the market, i.e. unfair competition must be avoided.
 - The R&D Community must be able to access, use and exploit the STEVIN projects on non-discriminate terms. The applicants have to declare themselves willing to negotiate on this with the *TST-centrale* and to sketch the conditions that apply. Conclusion of a contract on the IPR-arrangements is a necessary condition for awarding of funding.
 - The proposal must fit in with existing standards and apply these where possible, or cooperate on the development of new standards so that a maximum reuse of the basic resources developed is guaranteed.

Practical details on the submission and evaluation procedure regarding the 3rd Open Call for Proposals of the STEVIN programme

Call for Proposals

The 3rd Call for Proposals for the STEVIN Programme is open as of DATE, 2007. The total budget of the 3rd Call is limited to a maximum of 2,3 million Euro. Full proposals for this open call must be submitted electronically in the prescribed format via <http://www.stevin-tst.org/> where a link can be found to the electronic proposal submission system of NWO.

The deadline for submitting proposals in the 3rd open STEVIN call is May 22, 2007, 12.00 h.

The NWO electronic proposal submission system IRIS can be accessed as of April 1st, 2007.

Who can apply?

Applications can be submitted only by senior researchers of Dutch or Flemish knowledge institutes. If a research proposal is submitted by a consortium of knowledge institutes and/or companies, the main applicant and coordinator of the project must be employed by a Dutch or Flemish knowledge institute. Eligible knowledge institutes are defined in the official *STEVIN-subsidieregeling*. In principle it concerns those institutes recognized as such a) in "de Nederlandse Wet op het hoger onderwijs en wetenschappelijk onderzoek" or b) in "het Decreet van 4 april 2003 betreffende de herstructurering van het hoger onderwijs in Vlaanderen" or c) by the Board of the STEVIN programme.

What can be applied for in the open call?

Proposals should specify how the proposed research or project fits in with the priorities of the STEVIN programme specified above and described more extensively in the official STEVIN programme description. Proposals can consist of self-contained focused projects of 3 years maximum. For project proposals whose budget exceeds 500 k€, matching funds from industrial partners are required.

The size of the matching funds depends on the size of the total project budget: i.e. the requested STEVIN funding plus funding provided by others either in actual funds or in kind. To determine the value in kind the following guidelines apply:

- * personal support: salary cost plus social security
- * cost price of material support
- * cost price minus depreciation of equipment

Matching must be confirmed in writing. For each Euro exceeding 500 k€, 50% must be made available from matching funds provided by industrial partners.

Format open call full proposals

Full proposals must be written in English and may not exceed 15 pages A4 (max. 8000 words in sections 6-8). Before submitting a proposal, first read the "Richtlijnen indienen projectvoorstellen derde STEVIN Oproep" which can be downloaded from <http://www.stevin-tst.org/> and contains specific directions as to the format in which full proposals must be submitted and also includes an excel file for the budget.

Eligible costs

- Personnel costs (100%) directly related to the project to which a maximum of 25% can be added for overhead costs.
- A bench fee of 11.000 € per FTE for computers, material costs and conference visits. This amount will be raised by 50% if the project consortium contains at least one Dutch and one Flemish partner.
- Costs related to realising databases.

Evaluation procedure full proposals submitted in the open call

All eligible full proposals submitted in the open call will be presented to a panel of international experts in language and speech technology. For this call the same experts will be asked to serve in the International Assessment Panel as the ones that acted as such in the second STEVIN Call. The composition of the International Assessment Panel can be found on the STEVIN website. This international panel will evaluate and rank the eligible applications based on the assessment criteria mentioned earlier and will formulate a set of recommendations for the STEVIN's Programme Committee.

The panel's assessment will be presented to the applicants for comments. Based on the applications, the panel's recommendations and the applicant's response to the Panel assessment, the Programme Committee will assess the applications and determine the order of priority of the eligible proposals. On the basis of the Programme Committee's advice, the Board of the STEVIN programme will finally determine which projects will be funded.

STEVIN subsidieregeling

More information as to which legal rules apply for this specific Dutch-Flemish granting scheme are laid down in the *Subsidieregeling van de Nederlandse Taalunie tot subsidieverstrekking in het kader van Nederlandse taal- en spraaktechnologie "STEVIN" (STEVIN-subsidieregeling)*, which can be found on the STEVIN website.

STEVIN Organisation

The STEVIN programme for Dutch language and speech technology is a coordinated effort of:

- o de Nederlandse Taalunie;
- o het departement Economie, Wetenschap en Innovatie van de Vlaamse Overheid (EWI);
- o het Instituut voor de aanmoediging van Innovatie door Wetenschap en Technologie in Vlaanderen (IWT-Vlaanderen);
- o het Fonds voor Wetenschappelijk Onderzoek - Vlaanderen (FWO-Vlaanderen);
- o het Nederlandse Ministerie van Onderwijs, Cultuur en Wetenschap (OCW);
- o het Nederlandse Ministerie van Economische Zaken (EZ);
- o het Nederlandse EZ-agentschap SenterNovem;
- o de Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO);
- o het NWO-gebied Exacte Wetenschappen (EW);
- o het NWO-gebied Geesteswetenschappen (GW).

Programme Board

The Board of the STEVIN programme will be responsible for the final funding decision. The Board is also responsible for supervising two activities that are related to the STEVIN programme, i.e. the *TST-centrale* and the *Makel en Schakel* activities carried out by the *Nederlandse Taalunie*.

In the Board representatives of all funding parties will be represented which may be complemented with some senior experts from the field.

Programme Committee

- o prof. dr. J. Odijk (Nuance/Universiteit Utrecht) - chair;
- o prof. dr. J.P. Martens (Universiteit Gent);
- o prof. dr. F. Van Eynde (Katholieke Universiteit Leuven);
- o prof. dr. W. Daelemans (Universiteit Antwerpen);
- o mrs. D. Kenyon-Jackson (Cumlingua);
- o dr. A. van Hessen (Telecats BV/Universiteit Twente);
- o prof. dr. L. Boves (Katholieke Universiteit Nijmegen);
- o J. van Sas (The LingWareHouse /Karel de Grote-hogeschool te Antwerpen);
- o mrs. dr. J. Beeken (INL/TST-centrale);
- o dr. K. Van Bruwaene (VRT);
- o dr. ir. R.J.A.M. Smeulders (Rabobank Groep ICT, IBA).

Programme Bureau

Together the Dutch organisations NWO and SenterNovem have been selected by the *Nederlandse Taalunie* to form STEVIN's Programme Bureau that coordinates the STEVIN activities, including the handling of applications from both Dutch and Flemish applicants.

For further information, please contact the Programme Bureau or the *Nederlandse Taalunie*:

<i>NWO-Geesteswetenschappen</i>	<i>SenterNovem</i>	<i>Nederlandse Taalunie</i>
Alice Dijkstra / Brigit van der Pas	Hans Kruithof	Peter Spyns
dijkstra@nwo.nl / pas@nwo.nl	jak@senternovem.nl	pspyns@taalunie.org
+31 (0)70 34 40 736 / 567	+31 (0)70 37 35 363	+ 31 (0)70 34 69 548
<i>Visiting address</i>	<i>Visiting address</i>	<i>Visiting address</i>
Laan van Nieuw Oost Indië 300, Den Haag	Juliana van Stolberglaan 3, Den Haag	Lange Voorhout 19, Den Haag
<i>Postal address</i>	<i>Postal address</i>	<i>Postal address</i>
Postbus 93425	Postbus 93144	Postbus 10595
NL 2509 AK Den Haag	NL 2509 AC Den Haag	NL 2501 HN Den Haag

STEVIN website: <http://www.stevin-tst.org>