

Call for pre-proposals

Sentinels & ICT Innovation Platform Veilig Verbonden: Security in ICT, networks and information systems

Deadline September 16, 2008, 8.00 AM

The Sentinels research program on information security is open for new proposals. This third (and last) call is a combined call of the Sentinels program and the ICT Innovation Platform (IIP) 'Veilig Verbonden' [3] and has been made possible thanks to the support of ICTRegie. The budget is 2.4 M€, consisting of 845 k€ financial support from both Sentinels and ICTRegie, and at least 700 k€ (47%) contribution from industry. For this call, industrial research activities can be financed for at most 422 k€ (37,5%).

This document describes the details and benefits for participation. The Sentinels research program text [1] provides the context for this call. Exceptions are mentioned in this call. For more information about the Research Agenda "Veilig Verbonden" see [3].

Aim

The aim of this call is to improve ICT, networks and information security, including PCs, corporate and home networks, hand held devices, smart cards, and wireless networks. It targets the technical aspects of security through scientific research in close collaboration by academia and industry.

Scope

The scope includes ICT, network and information security, where security is defined as follows:

Security is a property enabling ICT, networks and information systems to function correctly in the face of malice, error or mischance.

Security encompasses confidentiality, integrity and availability relative to authorized users, as well as authentication and non-repudiation. Personal privacy

protection is seen as combining confidentiality and integrity.

Projects submitted for this call should fit in one or more of the seven applications areas of the Research Agenda 'Veilig Verbonden' [3], which are: (1) Healthcare, (2) Internet & Telecom, (3) Semi public spaces, (4) Finance, (5) Transport & Logistics, (6) Government and (7) the Creative Industry.

Ambition

Established methods and tools contributing to the design and implementation of security include risk analysis, user acceptance of cost effectiveness, cryptography, security policy models, security protocols, security certification and biometrics. However, these represent partial solutions.

The ambition of Sentinels and Veilig Verbonden is to contribute to the creation of a comprehensive framework for secure systems engineering. Given the fact that security impinges on every aspect of system design, the realization of this ambition is a long term process, extending over many years. All proposals are expected to contribute to realizing this ambition.

Relevance

Mainframes, desktop computers, laptops, palmtops, mobile phones, etc., are all connected and accessible via networks, either wired or wireless. Only security is able to unlock the potential of this ubiquitous connectivity.

Confidentiality and authenticity of information exchange between computing machinery is often a necessary

precondition for communication. Secure systems allow the participation of a large audience in e-commerce. Also, trustworthiness may improve the success and acceptance of e-government, for instance with e-voting.

Improved security resulting from research enables new business and new developments and is therefore important for the Dutch economy. Annually, millions of euro may be saved by preventing information security problems in government and industry.

Collaborative research

One of the most important aspects of Sentinels is the *collaborative* aspect of research projects. Universities and industry carry out projects together. Projects are pre-competitive and tackle long-term problems.

Participation in Sentinels projects allows companies to profit from knowledge found during the research, at the earliest possible moment. Each granted project has a forum for communication between industry and university and closely follows the progress of the research. Members have priority to claim the use of the knowledge developed. Other benefits are direct contact with researchers leading to creation and expansion of networks, knowledge dissemination and anchoring of knowledge.

Collaborative research means that industry participates in the research and contributes to the project costs. This can be done by providing material support or by providing research personnel. For this call, industry can also be financed but they have to match this (see below).

Industry often prefers research projects that last only two years, typically, whereas academic projects take the total duration of the program. Sentinels advises to apply for projects that take this into account. For example, the cooperation could be focused in the 2nd and 3^d year of the project.

Pre-proposals

To participate in the Sentinels program a brief summary of a research proposal is required (no more than two pages of A4). Permanent scientific staff from Dutch universities and research institutes mentioned on [2, page 11] are invited to submit such a pre-proposal. A pre-proposal should clearly describe:

- Title.
- Name(s) and address(es) of the applicant(s).
- Suitability given the aim, scope and ambition.
- Specification of the application area from the Research Agenda “Veilig Verbonden” [3].
- Expertise of the applicant(s).
- Names and addresses of industrial partners, including the name of the contact person within each company.
- Budget required and the contribution of industry.
- Concise description of the research planned, divided into a scientific and utilization part. This includes a description of expected results and their utilization in industry.

Pre-proposals will be treated confidentially.

Making your budget

In this last call of Sentinels and first call of Veilig Verbonden, two funds are combined. As a consequence, the budget of a proposal has to fulfil strict requirements. The division of projects in the categories “fundamental”, “methods and tools” and “prototype” as referred to in the Sentinels program [1], is not used.

The budget is divided into two parts: Academic Research and Industrial Research.

Part I: Academic Research

For Part I the usual budget rules for STW hold (that means, a.o., that the standard STW rates for project personnel will be used, extrapolated for July 2009). More details can be found in [2].

Part I should be 53% of the total project budget.

Part II: Industrial Research

Part of the budget is reserved for funding of industrial research. For this part, the basic funding rules for the “Kennisimpulsregeling Freeband” are used¹. This means that 17,7% of the total budget of the project (Part I+II) can be used for financing of industrial research. This can be up to 37,5% of the total industrial research participation (Part II). For junior, PhD degree and senior industry personnel the rates are maximized to resp. 72, 100 and 143 €/h (based on resp. 1.550, 1.390 and 1.160

¹ For more information on the Kennisimpulsregeling contact Frank Karelse, STW

hours per year). The used rates should be verifiable. The funded hours should be verifiable from a time registration system. Therefore, at the end of the project, an “accountantsverklaring” is required.

Part II should be 47% of the total project budget.

The industrial participation can be in kind (material contribution) for at most 25% of the total industrial participation.

For the calculation of the budget, the spreadsheet www.sentinel.nl/contribution.xls should be used. For example, the assignment of three years of a postdoc (Part I = 174.094 €, 53%) can be matched with 1.544 hours of a PhD degree researcher (Part II = 154.400 €, 47%) of which 57.900 € is refunded from Sentinels (37,5% of part II). Material matching instead of personnel could be as large as 38.600 euro in this case (25% of Part II).

Because of the nature of the Sentinels program, the industrial research financing is considered as a special assignment from the university based project. As a consequence, declaration of expenses must go through the university administration.

In your proposal, we expect to see a division of the project budget in the categories (a) personnel (specify which type and for how long); (b) materials budget; (c) foreign travel budget; (d) investment budget.

Sentinels may adapt the project grant according to the budget requirements if needed.

Evaluation

Pre-proposals will be evaluated by the Sentinels program committee using the following criteria:

- Does the program fit in the Sentinels program and the Veilig Verbonden Research Agenda?
- Is there sufficient matching from industrial partners?
- Does the proposal address both scientific and utilization issues?

In the pre-proposal phase, no judgment on the actual content of the proposal will be made, since such judgments can only be based on a full proposal and expert reviews. If the answer to any of the above evaluation items is “no”, the pre-proposal will be rejected.

Applicants are invited to submit a full proposal only when their pre-proposal has been accepted. The full proposal should be written according to the format described in [2] with a maximum length of 15 pages excluding the reference list and support letters. Applications longer than 15 pages and applications without confirmation(s) of the industrial contribution(s) will not be considered.

Management

The Sentinels program is managed by the Sentinels Steering Group, whose members represent the program's sponsors. The Steering Group is assisted by a Program Committee, a Daily Board and a Program Office. The Program Committee is responsible for the program's scientific content. The composition of the various committees can be found on the Sentinels website.

Time line

May 8, 2008	publication call for pre-proposals
Sep 16, 2008, 8.00 AM	deadline pre-proposals
Oct. 15, 2008	notification of acceptance pre-proposals
Dec 16, 2008, 8.00 AM	deadline proposals
July 1, 2009	notification of acceptance proposals
Dec. 31, 2012	end of the Sentinels program

Pre-proposals may be submitted electronically in pdf format to the Sentinels email address info@sentinel.nl, together with the project budget sheet.

Information

This call for pre-proposals can be found at www.sentinel.nl/call.pdf, the project budget sheet at www.sentinel.nl/contribution.xls, and further details including the program text, year plans and year reports at www.sentinel.nl/library. A short outline of projects funded in 2004 and 2006 is also available on the website.

For more information, please contact:

- Sentinels office (Technology Foundation STW), tel.: 030 6001268, info@sentinel.nl
- prof.dr. Willem Jonker (Philips Research Laboratories/ University of Twente, chairman), tel.: 040 2742831, willem.jonker@philips.com.

References

1. The research program text 'Sentinels, Security in ICT, networks and information systems' (www.sentinel.nl/sentinels.pdf) includes information about scope, vision and focus, aims and objectives, anchoring and knowledge transfer, program management and the procedure.
2. The Technology Foundation STW brochure 'Richtlijnen Open Technologieprogramma' (www.sentinel.nl/library/stwrichtlijnen) includes information on the format of research proposals and their drafting.
3. Research Agenda 'Veilig Verbonden' (version 2), ICT Innovation Platform Security and Privacy (www.sentinel.nl/library/iipvv-agenda-jan-2008.pdf).