

**Smartare
Elektroniksystem**

ELECTRONIC COMPONENTS & SYSTEMS

Smarter Electronic Systems

-a strategic innovation programme to strengthen competitiveness of Swedish electronics sector

**Info webinar February 3rd 2023
IMPROVE YOUR APPLICATION**

Thorbjörn "TOBY" Ebefors, deputy program manager
Thorbjorn.Ebefors@smartareelektroniksystem.se

Med stöd från



Strategiska
innovations-
program



Agenda

08.30 Welcome

08.35 Important things to know when writing a proposal

08.55 Q & A

09.15 End

Smarter Electronic Systems

– a Swedish partnership program

- Cooperation Industry - Public sector - Academia

Vision

"by 2025 Swedish electronic systems enable a world-class Swedish industry".

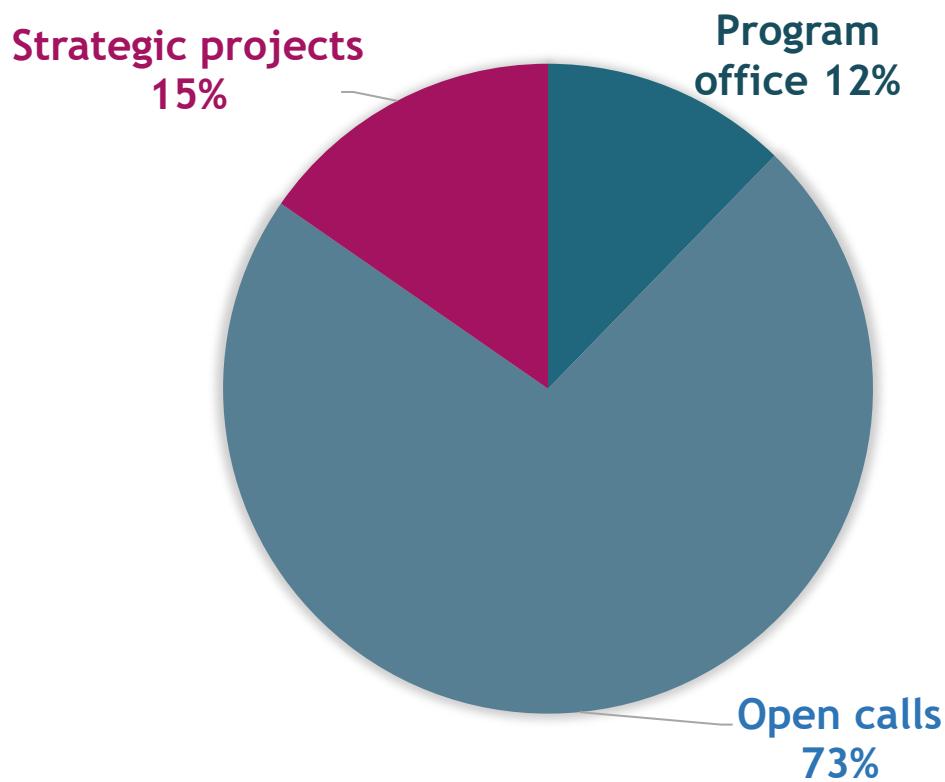
3 challenges

- Further developed Swedish excellence
- Increased cooperation and efficiency in the value chains
- Secure the provision of skills



Our tools

- Yearly budget ~45 Mkr



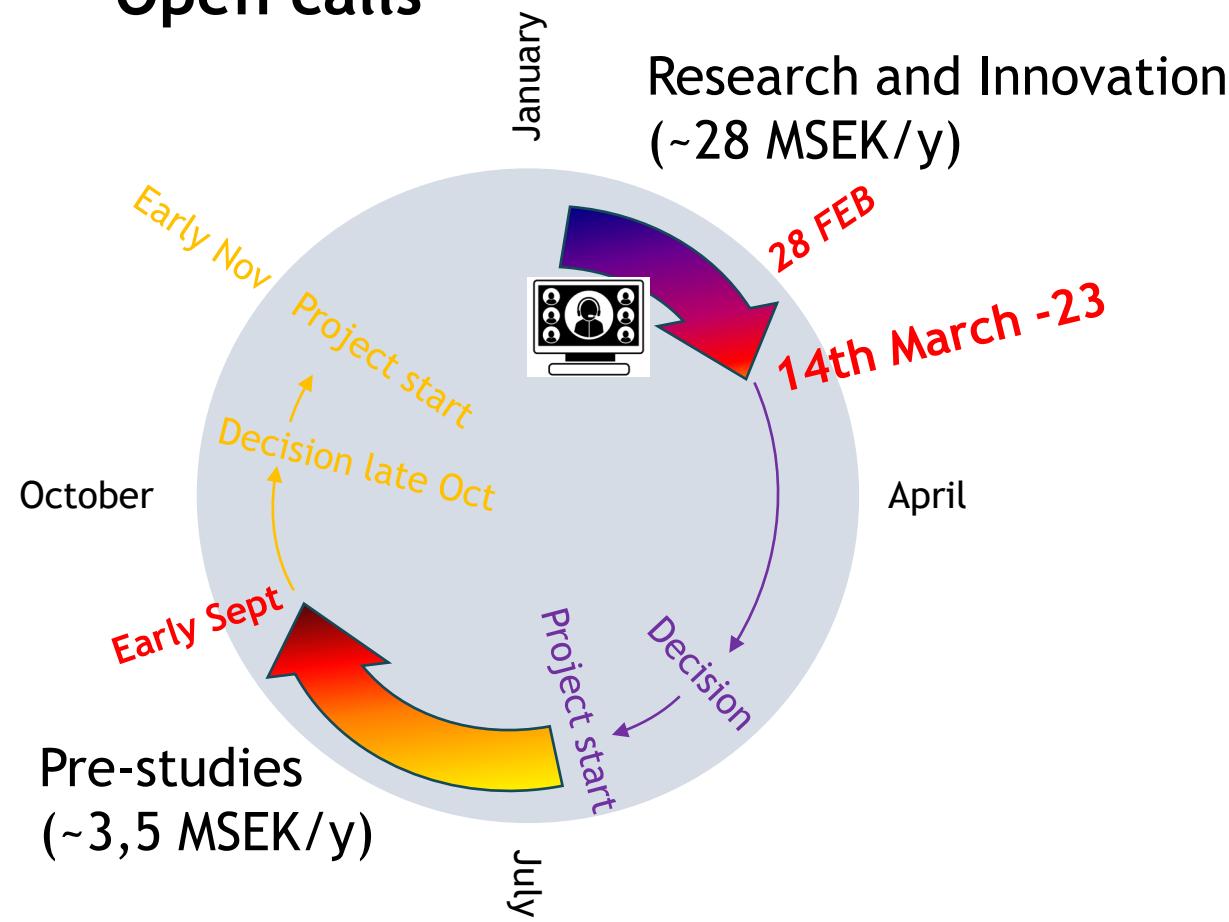
- Program office
 - 4 persons
 - OutReach project: Conferences, seminars, fairs
 - Reports and lobbying
 - Managing strategic projects
 - Internationalization - industry delegation EFECS etc
- Strategic projects
 - Activities of interest for many
 - E.g. Testbed for printed electronics and *Smartare Elektronikhandboken*
- Biannual open calls through Vinnova
 - Research & Innovation projects (~28 MSEK/year) Q1
 - Pre-studies (~3,5 MSEK/year) Q3



Forming ~600 SWE ECS project proposals 2014-22

Public funding for projects 2023

Open calls



Next opportunities

Research and Innovation projects SES2023:01

- Opened 16th January
- Deadline for proposal
14th March 14:00

Prel Feasibility studies SES2023:02

- Open June 2023
- Deadline September 2023



Scope for R&I call 2023

- **Area**
 - Embedded intelligent systems
 - Industrial needs
 - Manufacturability
 - Reliability
 - Energy efficiency
- **Requirements**
 - Industrial needs
 - Consortium representing a continuous value chain
 - Minimum one company
 - Minimum 2 partners

Intelligence in embedded systems refers to systems that actively react to events and deliver conclusions in the form of decision support or that the system itself acts. In the most advanced form of intelligence, the system is self-learning and changes its conclusions over time based on past experience (AI).

Projects in open calls should contribute to achieve:

- Sustainable and profitable growth in Sweden and Swedish industry
 - Strengthen industrial international competitiveness
 - Swedish electronics systems contribute to transition towards a sustainable society – Contribution to SDG
-
- Increase at least one step in TRL scale
 - Start at max TRL 6
 - End at min TRL 5
 - Market introduction within 3 years after project



Gender aspects

- Equality is a prerequisite for sustainable growth and is found in Agenda 2030, as a goal in itself but also as a perspective that should permeate the work with all targets. The projects within this call should therefore contribute to an egalitarian social development connected to two main perspectives.
- One aspect that Vinnova follows up and assesses applications: if both women and men equally take part in the contribution, participate in and has influence over the project (see section 7 under the actor criterion).
- Another important aspect involves analysing and deciding whether it exists gender and/or gender aspects that are relevant within the problem area of the solution and beneficial. This question is mandatory for all applicants and can be found under the heading "Project details".

Full details read the CALL TEXT CAREFULLY !! At:

<https://www.vinnova.se/en/calls-for-proposals/the-strategic-innovation-programme-smarter-electronic-systems/electronic-components--systems-2022-03126/>

Scope for research and innovation projects

This call aims for larger research and innovation projects with a focus on the development of smart electronic systems in the areas where Sweden has excellence, e.g.:

- antenna, microwave and terahertz systems (AMT)
- photonics
- sensors
- embedded systems
- micro- and nanoelectronics (MNE)
- printed electronics
- power electronics
- construction method, reliability or advanced production technology

It can be activities such as aims to acquire new knowledge and new skills to develop new or significantly improved products, processes or services.

Evaluation criteria's – R&I projects

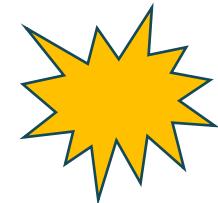
▪ Potential

- Sustainable growth, competitiveness, sustainable solutions
- Innovation and renewal
- Results on the market 3 years after project end
- TRL status and progress
- Competition



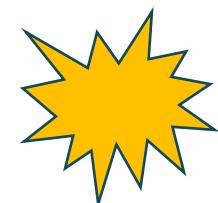
▪ Partners

- Ability and credibility of the team of applicants
- Ability of designated constellation of partners to reach market introduction
- Balance - Budget, activities, partners
- Gender distribution - resources, power and influence



▪ Viability

- Realistic plan
- Collaboration during project and exploitation after
- Risk management
- Preparation for next step



Who can apply?

- R&I-projects =



- *Feasibility studies – open to single applicants*

- Minimum 1



What can you apply for?

Research and innovation projects that, through collaboration, develop new knowledge or improve existing technology or products in the area of smarter electronics systems.



Who can apply?

At least two project participants, of which at least one is a company, in a coherent value chain. Universities, university colleges and research institutes can also participate.



How much can you apply for?

A maximum of SEK 4 million and a maximum of 50 percent of the project's costs. A maximum of SEK 2.5 million per individual participant. The offer's budget is provisionally SEK 28 million.



Important dates

16 JAN 2023

14 MAR 2023

AT 14:00

25 MAY 2023

1 JUL 2023

1 SEP 2023

31 AUG 2025

Opens for application

Last application date

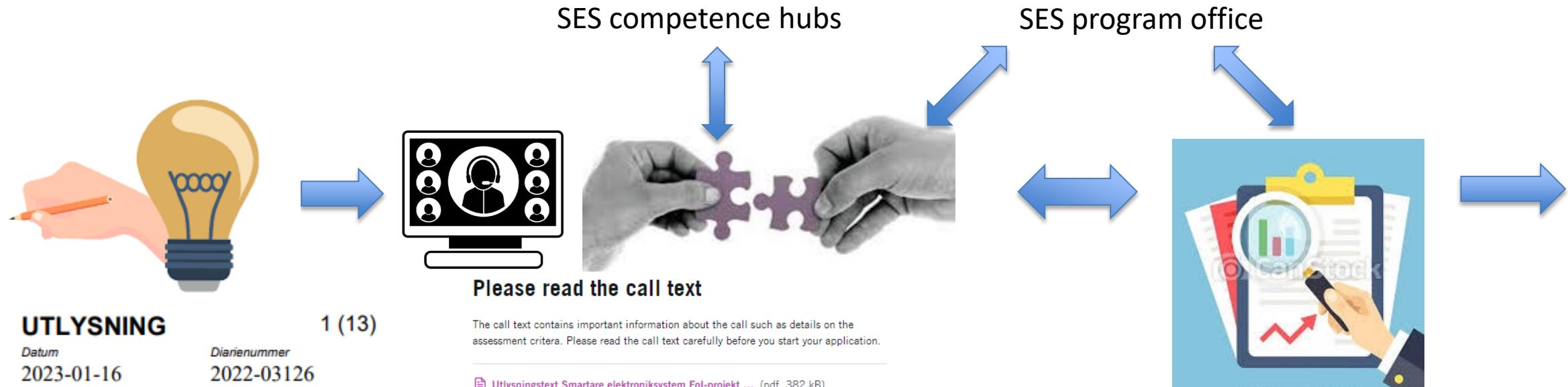
Decision given

Project allowed to start

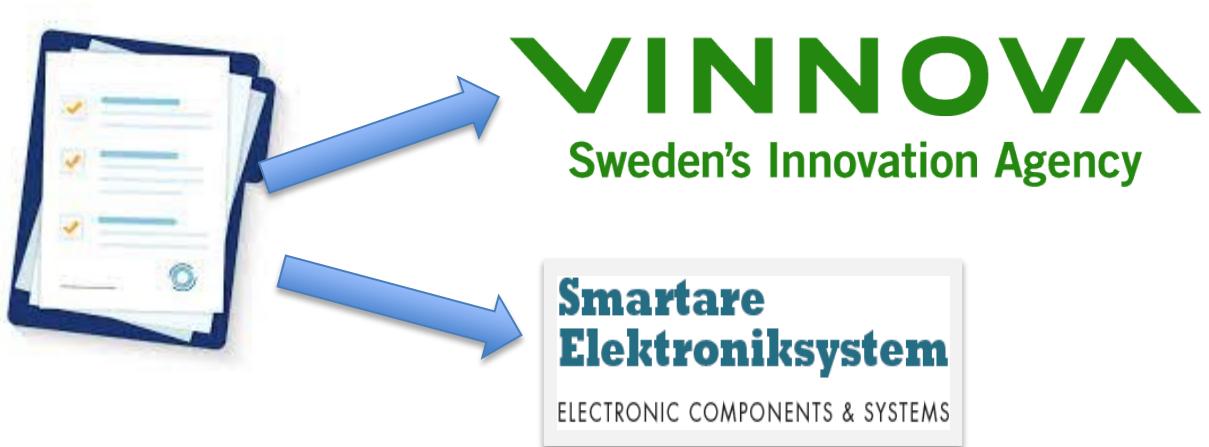
Project latest start date

Project latest end date

Application and Evaluation process



Application process



Project abstract (högst en sida) samt kontaktuppgifter till samtliga projektpartners kontaktpersoner (en ytterligare sida), enligt **mall** på utlysningens webbsida.

Project abstract ska kunna spridas och publiceras fritt och ska därför inte innehålla konfidentiella eller andra känsliga uppgifter.

Project abstract ska skrivas på engelska

I direkt anslutning till att ansökan lämnas till Vinnova ska bilagan med project abstract och kontaktuppgifter till samtliga projektpartners kontaktpersoner även skickas till programkontoret för Smartare elektroniksystem via e-post till adressen anna.wibom@smartareelektroniksystem.se

Please allow enough time

Please keep in mind that it takes time to complete an application. Filling in the templates can take several days, since they're based on analyses you need to do. Therefore, start the application well in advance. You can start filling in your details, then save and continue at a later time.

För att söka bidrag fyller ni i ett webbaserat formulär i Vinnovas e-tjänst, som nås via www.vinnova.se.

Där laddar ni även upp följande bilagor:

- Projektbeskrivning enligt mall för projektansökan som hämtas från utlysningens webbsida
- CV-bilaga
- SMF-bilaga

[Mall Projektbeskrivning Smartare elektroniksystem Fol... \(docx, 46 kB\)](#)

[Mall Project Abstract Smartare elektroniksystem Fol-p... \(docx, 82 kB\)](#)

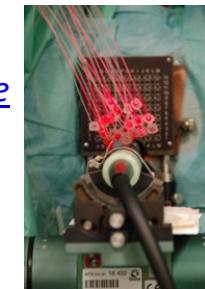
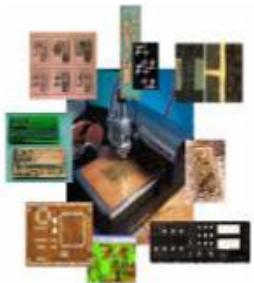
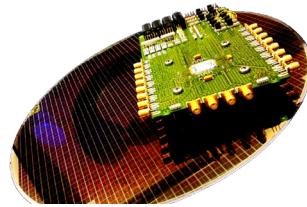
[Mall SMF-bilaga Smartare elektroniksystem Fol-projek... \(docx, 74 kB\)](#)

[TRL-definition till Smartare elektroniksystem Fol-proje... \(docx, 56 kB\)](#)

SES ECS Competence HUBs with contact info

www.smartareelektroniksystem.se/en/efforts/competence/

- **MicroNano Electronics**, Mitt University, christer.frojdh@miun.se
 - *Sub-HUB Integrated Circuits and systems*, Linköpings University Atila.Alvandpour@liu.se
- **Photonics**, Photonic Sweden, lennart@photonicsweden.org
- **Power Electronics**, SiC Power Centre at RISE, Mietek.Bakowski@ri.se
- **Antennas- mm wave- and terahertz systems**, Chalmers
jan.grahn@chalmers.se
- **Printed Electronics**, Printed Electronics Arena, RISE,
bjorn.norberg@ri.se
- **Embedded systems**, Luleå University, ulf.bodin@ltu.se
 - *Sub-HUB Embedded sensor systems for health*, Mälardalens Högskola, maria.linden@mdh.se
- **Advanced electronics production**, KTH, johnnyob@kth.se
- **Reliable electronics hardware**, RISE / Swerea IVF, per-erik.tegehall@ri.se





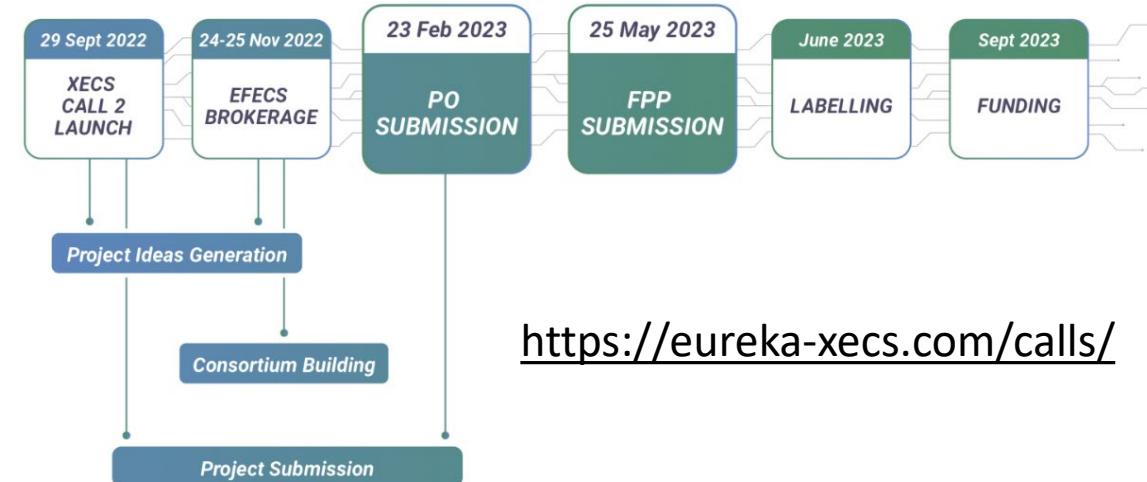
Possible Int' continuation

Eureka Clusters primarily Xecs (or Eurostars)

- Launch Sept 2022
 - Phase 1 - Project Idea Development
 - Phase 2 - Consortium Building at EFECS
 - Phase 3 - Project Submission and Evaluation
 - Phase 4 - Project Management



is a Eureka Cluster



<https://eureka-xecs.com/calls/>

- Launch February 7th 2023
 - Phase 1 – PO Consortium Building at ECS brokerage
 - Phase 2 - FPP
 - Phase 3 - Project Submission and Evaluation
 - Phase 4 - Project Management

<https://www.vinnova.se/e/key-digital-technologies-ju/>
<https://www.kdt-ju.europa.eu/current-call>



**Key Digital
Technologies Joint
Undertaking**

ECS Brokerage 7-8 Feb

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Start > ECS Brokerage 2023

ECS Brokerage 2023

Save the date for the ECS Brokerage Event: your networking meeting point to build consortia and share ideas! This matchmaking get-together is a perfect way to collaborate in regards to the KDT JU and Horizon Europe. The ECS Brokerage Event takes place at Hotel Le Plaza Brussels on 7-8 February 2023.

www.smartareelektroniksystem.se/event

Smartare Elektroniksystem

ELECTRONIC COMPONENTS & SYSTEMS

Smartare
Ett strate
i svenska



Anna Wibom, program manager

Anna.Wibom@smartareelektroniksystem.se

Thorbjörn "TOBY" Ebefors, deputy program manager
Responsibility: ECS's Internationalization efforts

Activities within SES SIP to strengthen Swedish participation in Int'l (EU funded) consortium projects

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QUESTIONS ?

**ASK TOBY & ANNA
IN THE CHAT**

OR RISE YOUR HAND