



Federal Ministry  
for Economic Affairs  
and Climate Action



Online  
via Microsoft  
Teams

# Swedish-German Virtual Info-Session

19<sup>th</sup> October 2022 | [www.zim.de/schweden](http://www.zim.de/schweden)



Photo: adobestock.com/Andrey Popov

Organized by:



# Agenda

10:00 Introduction

10:05 Presentation of the German funding scheme ZIM

Christian Fichtner, AiF Projekt GmbH

10:15 Presentation of the Swedish funding scheme

Bianca Dochterowicz, Vinnova Sweden

10:25 Field report: Project ARHO

Esteban Arboix, Optea AB (Sweden)

10:50 Short Q&A session

11:00 End of Virtual Info-Session

# 5<sup>th</sup> Swedish-German call for proposals

## Requirements for applicants:

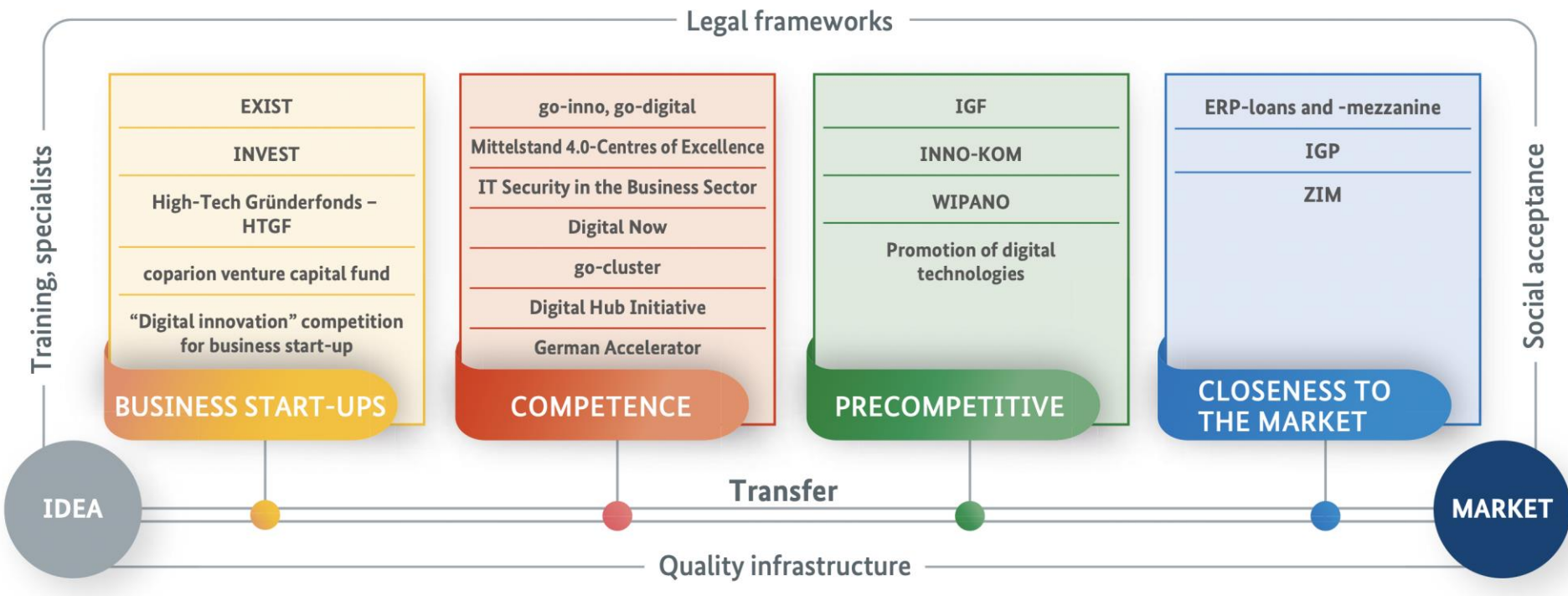
- Ready-to-market solutions for products, technology-based services or methods
- At least one German SME and one Swedish SME
- Balanced cooperation
- Partially funded by Vinnova and BMWK
- Common proposal application form
- Respective national application forms
- 5<sup>th</sup> Call deadline – January 19<sup>th</sup>, 2023



# Central Innovation Programme for SMEs (ZIM) – Boosting innovation

Speaker: Christian Fichtner AiF Projekt GmbH

# From the idea to market success



# What is new in ZIM 2020?

- Eligible costs raised for all project types
- Strengthening the national and international transfer of expertise
- Opening of ZIM to companies with less than 1,000 employees
- Improved services to support market launch
- Feasibility studies



# What is new in ZIM 2020?

Better conditions for:

- young companies (established less than 10 years ago)
- small companies from structurally weak regions
- first time innovators





# Arguments for ZIM

- Tailor-made project types
- Open to all technologies, topics and sectors
- Swift and non-bureaucratic procedures
- Applications possible at all times
- Simplified procedure during COVID-19 crisis





# Choose a suitable project type



Individual projects



Cooperation projects



Innovation networks

## Additional support



Feasibility studies



Services related to market launch

# Level of funding



Individual projects



Cooperation projects



Innovation networks

Max. fundable costs € 450,000

Max. amount of funding  
€ 270,000

Funding for total project up to  
€ 2,300,000

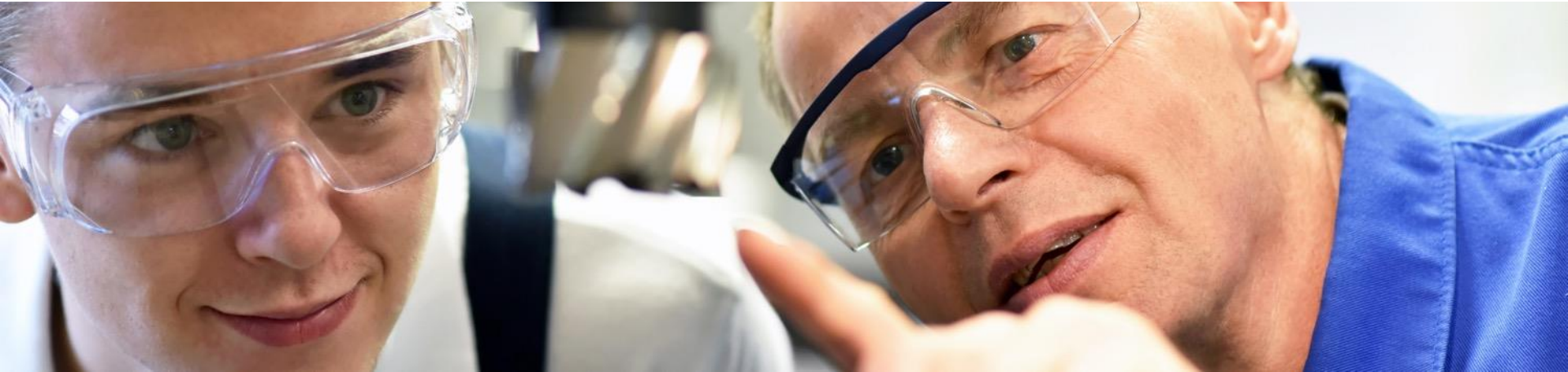
# Are you eligible to apply?

- Small or medium-sized company (possibly with partners)
- Start-up phase completed
- Financial contribution by the company
- Qualified staff



# Is your innovation eligible for funding?

- Innovative product, process or technical service
- Predestined for improvements through R&D that challenge the state of the art
- Significant technological risk
- Good market opportunities



# Cooperation project: what is funded?

## Companies:

- Labour costs of in-house employees
- Contracts with third parties
- R&D contracts
- Additional employees
- Other costs (fixed-rate)

## Research organizations:

- Labour costs of in-house employees
- Contracts with third parties
- Other costs



# Cooperation project: who can receive funding?

Small and medium-  
sized enterprises

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**Employees**

below 250

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**Annual turnover or**

Up to € 50 Mio.

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**annual balance sheet  
total**

Up to € 43 Mio.

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**Precondition**



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# R&D cooperation projects: rate of funding

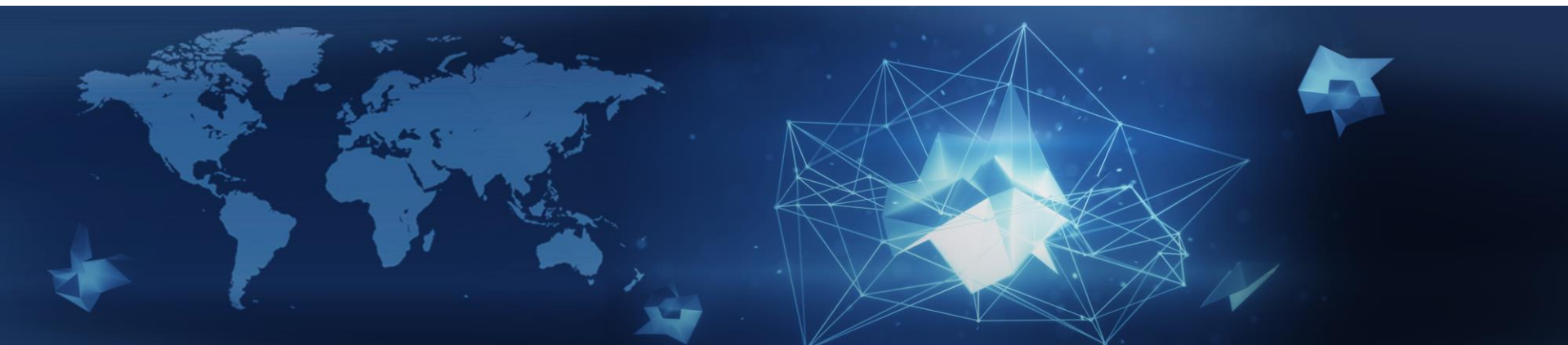
	National	International
<b>Small companies in structurally weak regions</b>	55 %	60 %
<b>Small enterprises</b>	45 %	55 %
<b>Small and young enterprises</b>	50 %	60 %
<b>Medium-sized enterprises</b>	40 %	50 %
<b>Other enterprises with &lt; 500 employees</b>	30 % / 25 %	40 % / 25 %
<b>Other enterprises with &lt; 1,000 employees</b>	30 %	40 %
<b>Research Technology Organizations (RTO)</b>	100 %	



# International cooperation

Better conditions for cooperation projects and innovation networks:

- funding rate raised by up to 10 %
- joint calls for proposals facilitate synchronised applications
- swift and non-bureaucratic application and evaluation procedures
- exploratory role of international innovation networks



# Enterprise Europe Network

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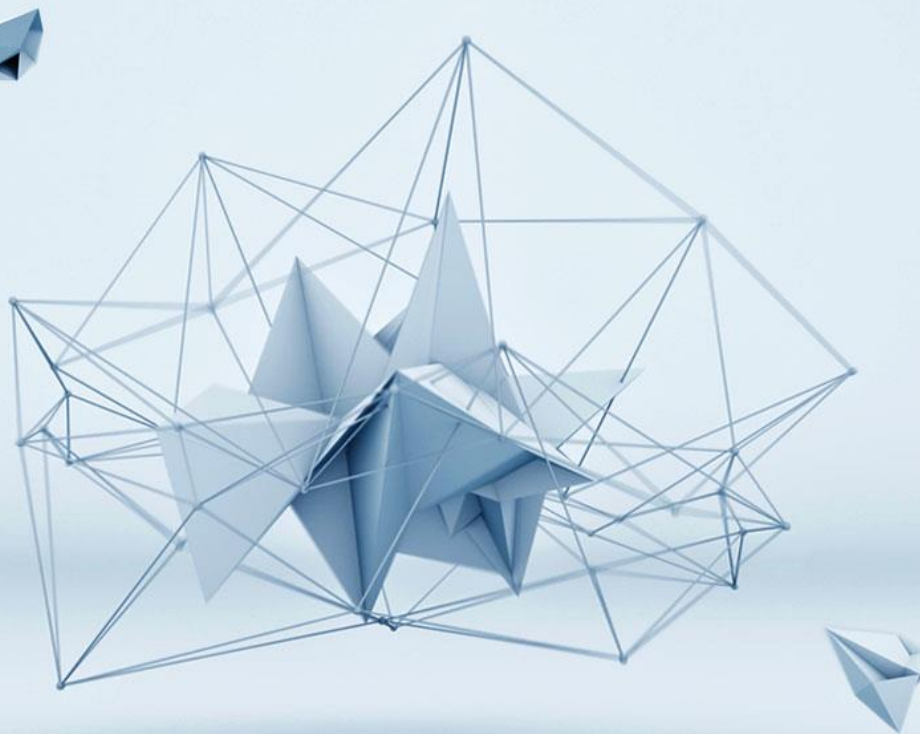




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We wish you every  
success with ZIM!



# **Vinnova – Sweden's Innovation Agency**

BIANCA DOCHTOROWICZ, INTERNATIONAL  
COLLABORATION, VINNOVA



”

**Vinnova's task is to promote sustainable growth through funding of needs driven research and development of effective innovation systems.**

[Start](#) / [Dokument & lagar](#) / [Förordning \(2009:1101\) med instruktion för Verket för innovationssystem](#)

## Förordning (2009:1101) med instruktion för Verket för innovationssystem

t.o.m. SFS 2019:149

**SFS nr:** 2009:1101

**Departement/myndighet:** Näringsdepartementet RSN

**Utfärdad:** 2009-11-12

**Ändrad:** t.o.m. SFS 2019:149

**Ändringsregister:** [SFSR \(Regeringskansliet\)](#)

**Källa:** [Fulltext \(Regeringskansliet\)](#)

### Uppgifter

**1 §** Verket för innovationssystem har till uppgift att främja hållbar tillväxt genom finansiering av behovsmotiverad forskning och utveckling av effektiva innovationssystem. Med innovationssystem avses nätverk av offentliga och



# The role of Vinnova



IDENTIFY



MOBILIZE



FUND

# Background to the Call-for-Proposals

*Innovation and cooperation for a sustainable future - A German & Swedish partnership for innovation (January 2017)*



“The German & Swedish partnership for innovation is an important step for bilateral cooperation between our countries. It brings together governments, businesses and institutions, and paves the way for deepened future cooperation”



# Aim of this initiative (Call for proposals)

- Support R&D cooperation between Small and Medium Sized companies (SME's) in Germany and Sweden
- Create opportunities for companies to strengthen their technological base and competitiveness as well as international network and opportunities
- Co-develop products, technology-based services or methods which will in subsequent steps generate sustainable solutions with market potential and potential to address societal challenges
- Open to all technological and application areas

# Structure of the call

- Cooperation between Vinnova and AiF Projekt GmbH (assigned by the Federal Ministry for Economic Affairs and Energy in Germany)
  - Sweden; Vinnova funding
  - Germany; Central Innovation Programme for SMEs (ZIM)
- Two parallel, and not identical, processes for submission and evaluation of project application in Germany and in Sweden
- Vinnova and AiF Projekt will make the final selection of successful proposals to be funded
- Important to read all three documents available on the home page!

# Structure of the call



AiF Projekt GmbH

<u>Sweden</u>	<u>Documents/ processes</u>	<u>Germany</u>
<i>One common document</i>	<b>"Announcement"</b>	<i>One common document</i>
Vinnova call text ("Svensk utlysningstext", for SE side applicants)	<b>National Guidelines</b> <i>Different for SE and DE</i>	ZIM Guidelines (applies only for DE side applicants)
Vinnova	<b>Information and support</b>	AiF Projekt GmbH
According to instruction from Vinnova ("Svensk Utlysningstext")	<b>Submission of application</b> <i>"Proposal Application Form" submitted on <u>both sides</u>, "Consortium agreement" only DE</i>	According to ZIM/AiF rules (DE side applicant must ensure they follow these)
Vinnova procedures	<b>Evaluation</b>	ZIM procedures

# IMPORTANT to understand the different process for Sweden (Vinnova) and Germany (AiF Projekt)

- The Swedish applicants should follow the Guidelines provided by Vinnova (“Utlysningstexten”)
- The German applicants should follow the ZIM guidelines
- The information requested by Vinnova and by AiF Projekt, respectively, differ to some extent
- The only common documentation requested on both sides is the “Proposal Application Form”
  - Draft Consortium Agreement has to be submitted in DE. **In SE Swedish applicants do not need to submit it**, a testimony in the project application that a draft exists is sufficient

# Projects – types and set-ups

- An ***obvious advantage*** and *added value* resulting from the cooperation between participants from the two countries
- Actual and active cooperation between project partners!
  - Companies, with opportunity to engage research performing organizations (universities, research institutes)
- At least one SME in Sweden and one in Germany
  - Companies in Sweden and in Germany from 1- 499 employees with  $\leq 50$  MEUR turnover/year or a balance sheet total of max. 43 MEUR)
- Industrial research
- Experimental development
- “**Novelty**” - We do not fund market-related or marketing, market or customer adaption of existing products, improvement and etcetera

# Industrial Research (state aid definition)

- ‘**Industrial research**’ means the planned research or critical investigation aimed at the acquisition of new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services.
- It comprises the creation of components parts of complex systems, and may include the construction of prototypes in a laboratory environment or in an environment with simulated interfaces to existing systems as well as of pilot lines, when necessary for the industrial research and notably for generic technology validation [COMMISSION REGULATION (EU) No 651/2014; “*GBER*”]

# Experimental development (state aid definition)

- **‘Experimental development’** means acquiring, combining, shaping and using existing scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services. This may also include, for example, activities aiming at the conceptual definition, planning and documentation of new products, processes or services; [examples can be found in COMMISSION REGULATION (EU) No 651/2014]
- Experimental development does not include routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements;



# Target group and consortium in Sweden

- Small and medium-sized enterprises who wish to cooperate with partners in Germany (SMEs up to 499 employees and  $\leq$  50 MEUR turnover/year or a balance sheet total of max. 43 MEUR)
- Project consortium set up:
  - One Sweden-based SME is the main applicant and project coordinator taking a distinct ownership and leadership responsibility
  - Universities, colleges, research institutes and large companies (500 employees or more) are eligible as project partners, but large companies are not eligible for grant funding
  - An equal contribution, added value and resources/financial capability must be shown on a project level
  - An equal influence of men and women in the project is encouraged
  - Project duration should in principle not exceed 2 years



# Grant levels in Sweden

- Vinnova can finance eligible costs\* based on *Förordning (2015:208) om statligt stöd till forskning och utveckling samt innovation art. 9*, as well as *Regulation (EU) No 651/2014.4 European Parliament and of the Council art 25:*

- Up to 3 000 000 SEK per project as grant
- Support of activities under “Industrial research” and “Experimental development”
- Up to 50 % of eligible costs for SMEs can be supported
- Companies with 250-499 employees are not officially labelled as SME according to current state aid regulations, they fall under category Large co’s
- Up to 100 % of eligible costs for research organizations can be covered by grant (universities, colleges and for research institutes participating as a part of their non-financial activities –”icke-ekonomisk verksamhet”)
- Companies with 500 or more employees or a higher annual turnover than 50 MEUR or a balance sheet total of more than EUR 43 MEUR are not eligible for funding (but can participate at their own expenses)
- State aid regulations: <https://www.vinnova.se/globalassets/huvudsajt/sok-finansiering/regler-och-villkor/dokument/stodnivaer-statligt-stod.pdf>



# The application process in Sweden

- Deadline for applications to be submitted to Vinnova through website "Intressentportalen" no later than 14:00 CET on January 19<sup>th</sup> 2023
- Documents to be submitted to Vinnova:
  - Joint Proposal application form for the full project (English)
  - Intressentportalen: Only for the Swedish side budget and participants (Swedish/English)
  - "Projektbeskrivning" only for the Swedish side (Swedish/English)
  - Existence of a draft of Consortium Agreement between all project partners to be confirmed but not submitted (English)
  - CV for key stakeholders only for the Swedish side (Swedish/ English)
  - Copy of latest registered annual report for the Project coordinator only for the Swedish side (Main applicant Sweden-based SME) stating the company's turnover, the number of employees and the overall financial capacity to carry out the project (Swedish/ English)



# Time line for project application in Sweden

Call opening at Vinnova's web 202209

⋮

SEP

Deadline for submission of application at Vinnova's web 20230119 14.00 CET

⋮

JAN

Grant funding decision communicated by Vinnova 202306

⋮

JUNE



In case of any questions please contact:

About the call:

- Bianca Dochtorowicz, Programme Manager, [bianca.dochtorowicz@vinnova.se](mailto:bianca.dochtorowicz@vinnova.se) and [08-4733094](tel:08-4733094)
- Emma Bäcke, Programme Manager, [emma.backe@vinnova.se](mailto:emma.backe@vinnova.se) and [08-4733014](tel:08-4733014)
- Kim Silvasti, Programme Manager, [kim.silvasti@vinnova.se](mailto:kim.silvasti@vinnova.se) and [08-4733240](tel:08-4733240)

About administrative issues about the call:

- Katarina Duca, Administrative Assistant, [katarina.duca@vinnova.se](mailto:katarina.duca@vinnova.se) and [08-4733208](tel:08-4733208)

## ARHO PROJECT

E. Arboix, Optea AB / P.M. ARHO Project



5th German-Swedish Call for Proposals for joint R&D projects by SMEs  
October 19<sup>th</sup> 2022



The poster features a large image of a tractor in a field. In the top left corner, there are two smaller inset images showing a first-person view from the tractor's operator perspective, displaying AR overlays. The ARHO PROJECT logo is prominently displayed in the top right. Below the tractor image, the 'MISSION' section describes the project's goal of innovating HUD optics for heavy machinery. The 'BECAUSE' section explains that the windshield is the best AR combiner. The 'BENEFITS' section lists several advantages of the technology. At the bottom, logos for the project partners are displayed.

**MISSION**

Innovating HUD optics for heavy machinery AR applications. Enabling compact packaging of HUD into operator cabins.

**BECAUSE**

Your windshield is the best AR combiner. True AR has focus @ infinity, adjacent to where normal machine operation takes place. You deserve the NEXT GEN state of the art AR Hud Optics.

**BENEFITS**

- Machinery productivity increased.
- Lowering operator stress and machinery downtime.
- Lowering threshold for new operator introduction.
- Improving HMI and safety.
- Enabling: Supervised Autonomy, Dynamic Decision Making, Digital Coaching, Drone and Sensor data visualization ...

**Partners:** INNOLITE, ZIM, VINNOVA, RL SE, Fraunhofer IPT, OPTEA

- *Project-start: Oct. 2018*
- *Project-duration: 2Y.*
- *Project Budget: 1M €*
- *Participants:*  
*Optea AB (coordinator)*  
*Fraunhofer IPT*  
*Innolite GmbH*  
*RISE AB*
- *Objectives:*  
*Dev. Next Gen AR HUD*  
*Optics.*



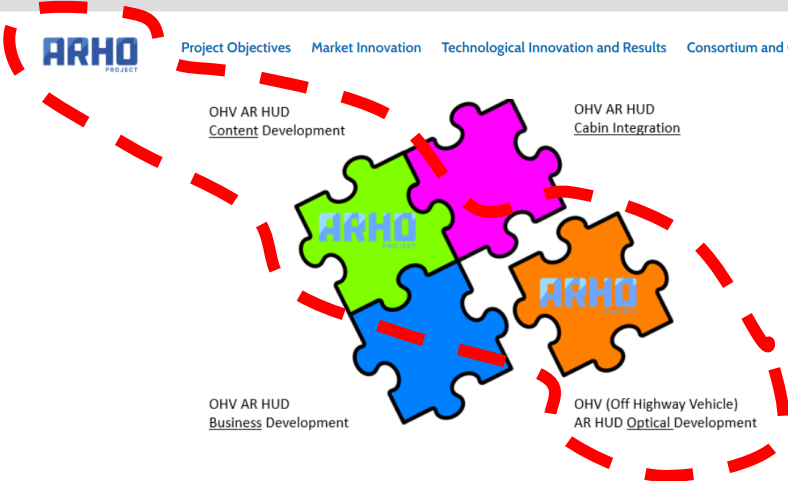
Some of the ARHO Participants (Left to Right):  
 Esteban Arboix (Optea), Cristina Rusu (RISE), Malte Rohrbeck (Fraunhofer IPT), Duncan Platt (RISE),  
 Jakob Blomgren (RISE), Ola Petterson (RISE), Ilkka Alasaarela (Optea)



optea.com/arho/market-innovation-2/#welcome

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**ARHO PROJECT** [Project Objectives](#) [Market Innovation](#) [Technological Innovation and Results](#) [Consortium and Contacts](#) [Disclaimer](#)

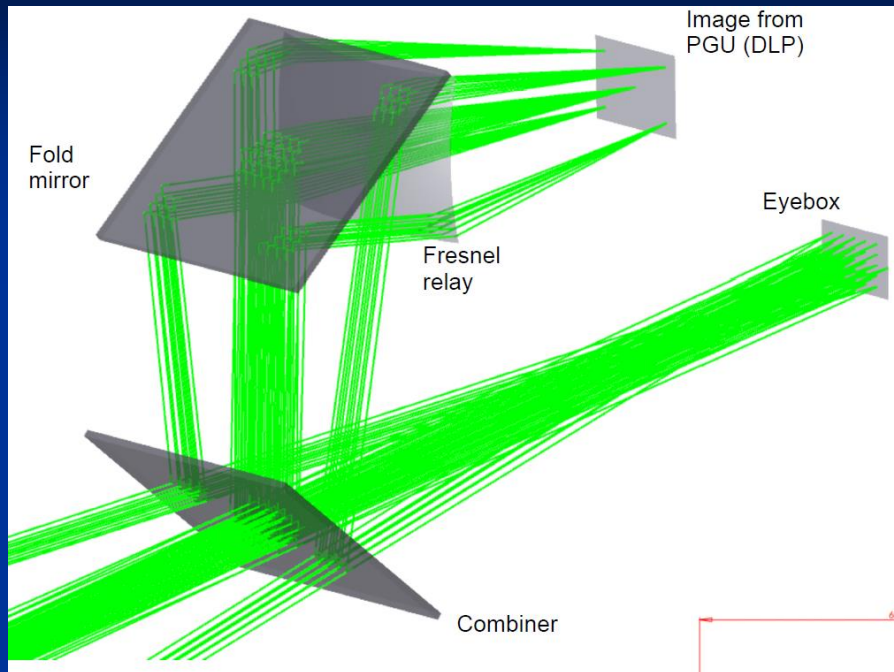


**Market Innovation Description:**

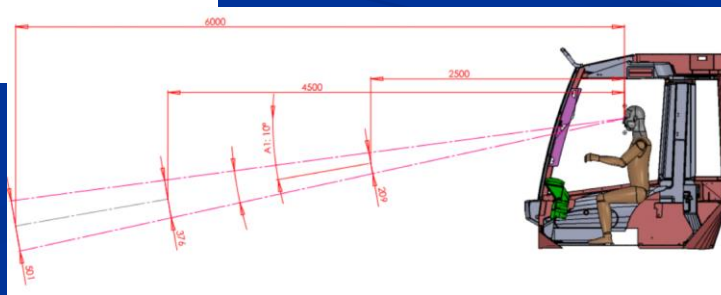
The ARHO Project, focuses in pushing the limits of the OHV AR HUD Technological development, especially in terms of large Field Of View (FOV) optics. Furthermore, it ties up this development with AG content and usability feasibility in its WP6 (AG Field Trials)

### *Focus in:*

- *Optical Dev.*
- *Agricultural AR HUD Content Dev.*



- Design for a flexible mount in the drivers cabin
- Virtual image 6 m outside the cabin



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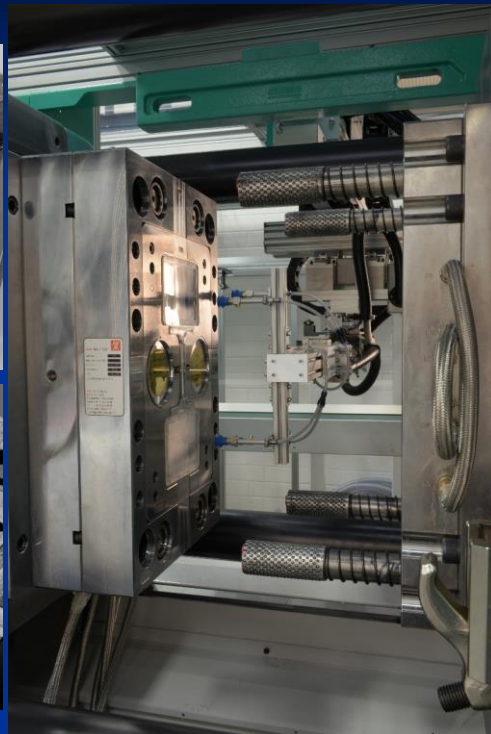
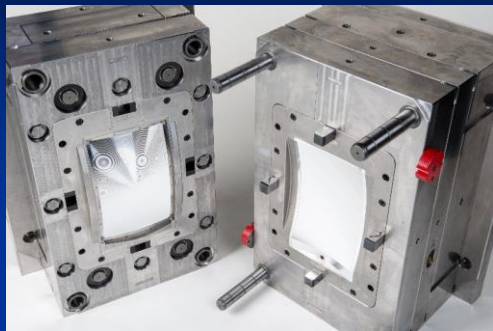
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Field trials 2022

ForestValue

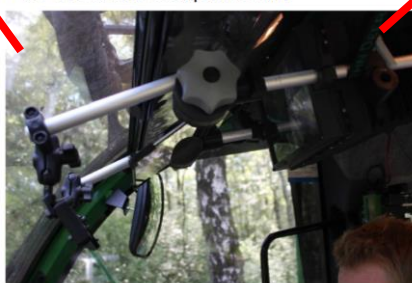
Landesbetrieb Wald und Holz  
Nordrhein-Westfalen



- Sensor platform (NIBIO) and harvester JD 1270G (WH-NRW)



▪ OPTEA HUD Setup in Cabin



Landesbetrieb Wald und Holz  
Nordrhein-Westfalen



GA GEORG AUGUST UNIVERSITÄT  
GÖTTINGEN



NIBIO  
NORWEGIAN INSTITUTE OF  
BIOSYSTEM RESEARCH



skogforsk





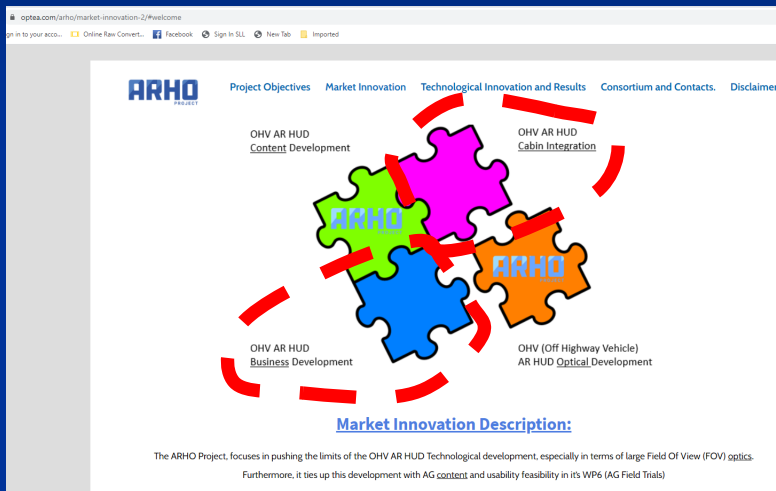
Field trials 202  
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ForestValue

Landesbetrieb Wald und Holz  
Nordrhein-Westfalen







**\* Dev. System Packaging  
= Cabin Integration  
(Optea)**

**\* Process Optimisation  
(FIPT/Innolite)**

**\* Dev. AG AR HUD Content  
(RISE)**

**\* Business Dev.  
= Dissemination/Exploitation  
(All)**