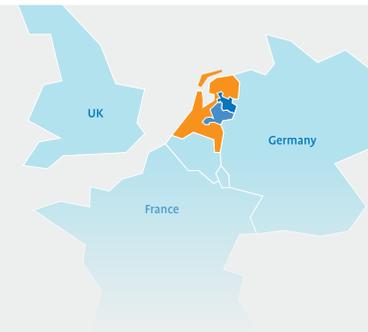




Semiconductors

# A complete semicon ecosystem

East Netherlands, where a complete semiconductor ecosystem has led global standard-bearers such as ASML and NXP to success. One of only three countries in the world with a complete semiconductor eco-system, where you can find pioneering cross-overs from semiconductor technology to ground-breaking end-user applications. Join our strong network of global businesses, research institutes and universities.



## M Business climate



East Netherlands has a thriving ecosystem where companies, from start-ups to mature enterprises, can grow their semiconductor business with focus on chip design as well as advanced and smart manufacturing technology.



### Expertise

In the entire semiconductor value chain from wafer processing, testing and measuring equipment, high precision positioning systems, advanced (multi-layer) packaging, fabless IC design services, MEMS development and production, microfluidics, photonic devices.



### Markets

Automotive electronics, RF antenna technology, IoT applications, front/back-end manufacturing and testing, life science & health devices, 3D motion tracking.



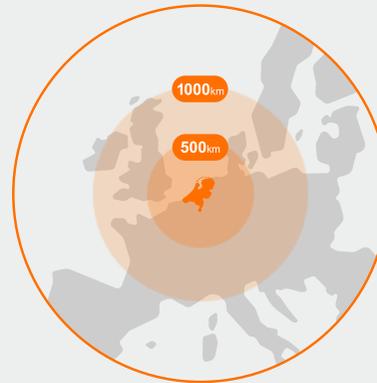
### Companies

NXP, Thales, Sensata, BESI, Nexperia, Towa, ASM ALSI, NTS Group, Xsens Technologies, BE Precision Technology, Ampleon, Demcon, Boschman Technologies, Bruco, Teledyne, Lionix International, Micronit, 3T, Tempres, Salland Engineering, Malvern Panalytical, OdysseyRF, Mini-Circuits, among many others.

## -+ Market access

The Netherlands is a gateway to European markets, with an open market approach, business-friendly fiscal climate, and a multilingual workforce.

**95%** of Europe's most lucrative consumer markets are just around the corner



- 244 million consumers within 2-3 days by road
- 170 million consumers within 1-2 days by road

East Netherlands is a region of living technology, making real-life testing of new semiconductor technology possible. From lab testing to open test space, to public use and acceptance, for example: IoT, sensor, drone and smart industry technology.

## 💡 New technologies

Joint research programs with top-class research institutes like MESA+, Digital Society Institute, IMEC and Fraunhofer Institute offer new semiconductor applications.

### Key research areas:

- Micro and nanoelectronics
- Photonics
- Nanotechnology
- Industrial biotechnology
- Advanced materials
- Advanced manufacturing technologies

### Technology invented in East Netherlands:

- iPhone Long Life Battery management system by NXP and Bruco
- Rehabilitation/Hollywood Motion Capture Suits by Xsens Technologies
- Fast DNA 4-hour time test by Micronit
- And many more.



**5th** Most innovative country in the world

GII 2022

## East Netherlands: a mature and highly innovative semiconductor ecosystem

Key success factor is stimulating cross-overs, where semiconductor technology enables groundbreaking new applications in, for example, automotive, health, life science and Internet of Things (IoT).

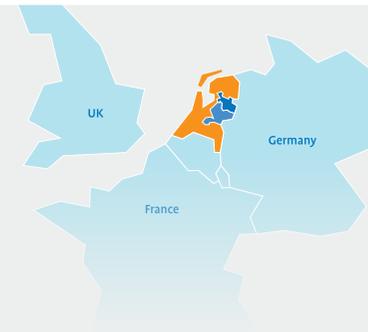
If your company is active in the semiconductor value chain, East Netherlands is the place to be.

*"Odyssey U.S. has been doing repairs for European customers for many years, but logistically a location made sense in Europe as the business grew. We are essentially aligning our service locations with our global customers by establishing the new Nijmegen service centre. Additionally we have the added benefit that Nijmegen and the Novio Tech Campus is a fantastic RF hub where we have access to knowledgeable engineering talent"*

**Jim Plourde,**  
President Odyssey Technical Solutions



# Oost NL has successfully supported over 1,000 companies from all over the world



## Top talent



Three Universities and five Universities of Applied Sciences educate multi-skilled talent for future challenges in Semiconductor Technology and Key Enabling Technologies such as Mechatronics, Micro- and Nano Technology, Photonics, Computer and Information Technology Science.

### Number of students, East Netherlands



48,000

Universities



93,000

Higher Professional Education



106,000

Vocational Education

source: CBS, 2020/2021

Due to its position in Europe, the East Netherlands attracts many international PhD students and researchers. Hosting three international schools, the region offers a quality setting for international talent workers and their families.

## Funding



Semiconductor, among other Key Enabling Technologies, and innovation are funding priorities within the European Union (EU). These funds are an important vehicle to connect our semiconductor ecosystem to other important EU hotspots.

**95.5 billion** budget for cooperation in R&D through EU Horizon 2021-2027 program



As an official partner of the Dutch and EU governments, Oost NL is a qualified intermediary in helping you to access EU, national and regional funding.

**255 million** regional participation fund

**100 million** innovation grants & incentives



## Business support



The Business Cluster Semiconductors, originally founded by Oost NL, is a national/regional business support network which helps companies and projects in the semiconductor field.

Facility sharing is one low-cost method for companies to boost innovation and enter new markets. Semiconductor facility sharing is possible through MESA+, which offers the largest micro/nano cleanroom facility in Europe (1,250 m<sup>2</sup>), shared EDA, Advanced Packaging Center and Chip Integration Technology Centre (CITC), among others.

**Business Incubators** are available at the science park adjacent to the University of Twente (Kennispark), the High Tech Systems Park at the Thales premises, and the Life Science and Semiconductor incubator at the NXP premises (Novio Tech Campus).

Oost NL is partner in connecting international companies to business communities in the semiconductors such as Holland High Tech, Business Cluster Semiconductors, Novel-T, Food Valley, Health Valley, etc.

## Oost NL - Your support for success in business

Oost NL is the economic development agency for East Netherlands. We have access to resources - funding, business partners and infrastructure, technological architecture and research partners - to help you succeed in establishing and growing your European business. If your strategic vision is global growth through European business development, Oost NL is your partner for success.

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