



# Involvement of Prisma in HEP experiments

*Developing locally, competing globally*

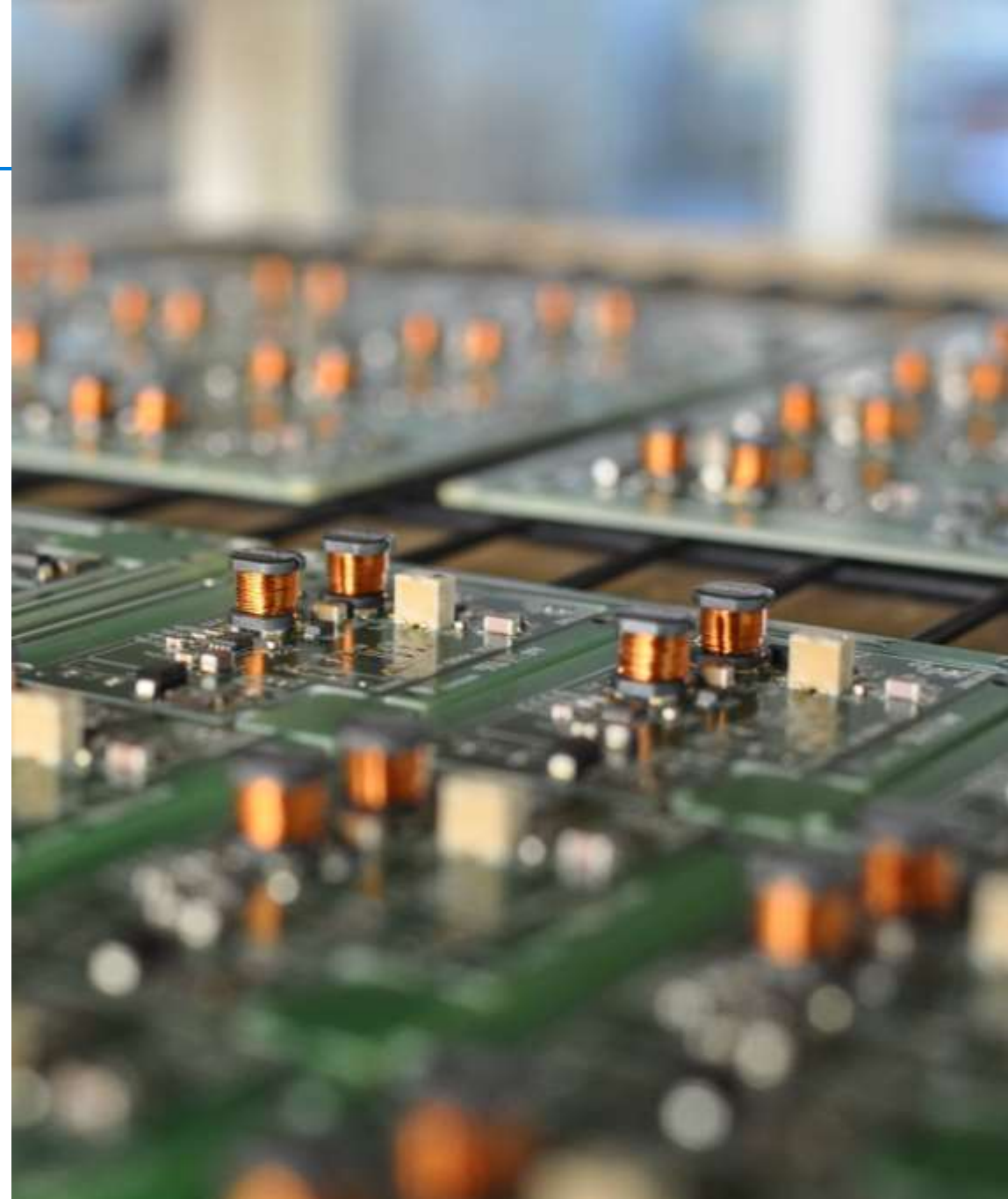
# Prisma In a nutshell

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Prisma Electronics SA is a **hi-tech** Company  
established in 1991 in Alexandroupolis, NE Greece

Main activities:

- Electronics Manufacturing Services
- R&D Projects
- ICT



# Vision

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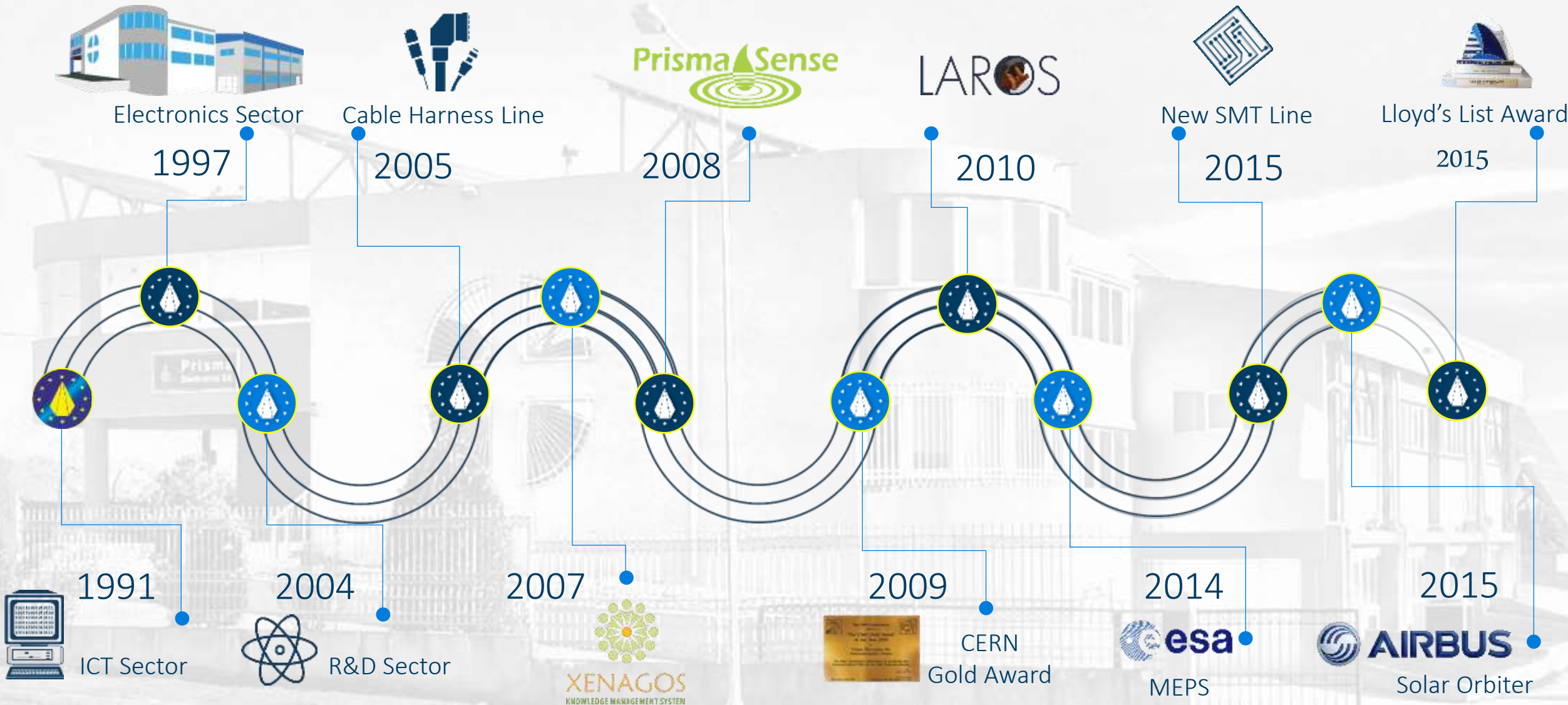
to become a **technology pole** in the wider geographical area,  
while developing **innovative corporate products** to compete globally.



*Developing locally, competing globally*

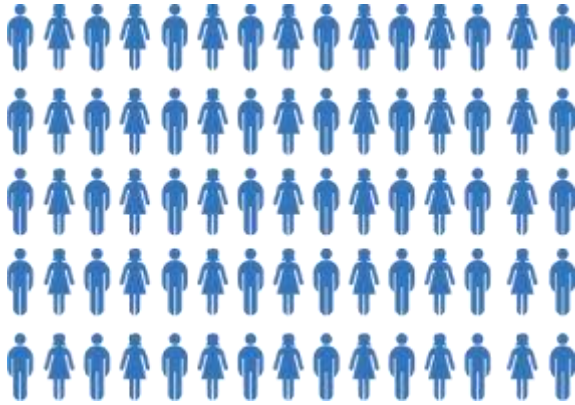


# History

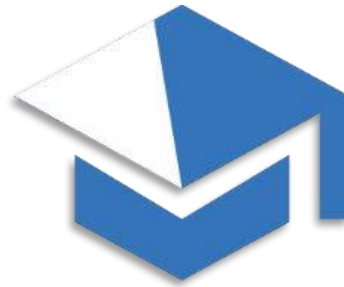


# In numbers

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> 60  
employees



> 65%  
Higher education



> 4,5  
million turnover



# Quality Systems

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**ISO 9001:2008**  
Cert No: 041050097



**ISO/IEC 20000-1:2011**  
Cert No: 01814003



**ISO 27001:2005**  
Cert No: 08014045



**EN ISO 14001:2004**  
QMSCERT No: 301215-2

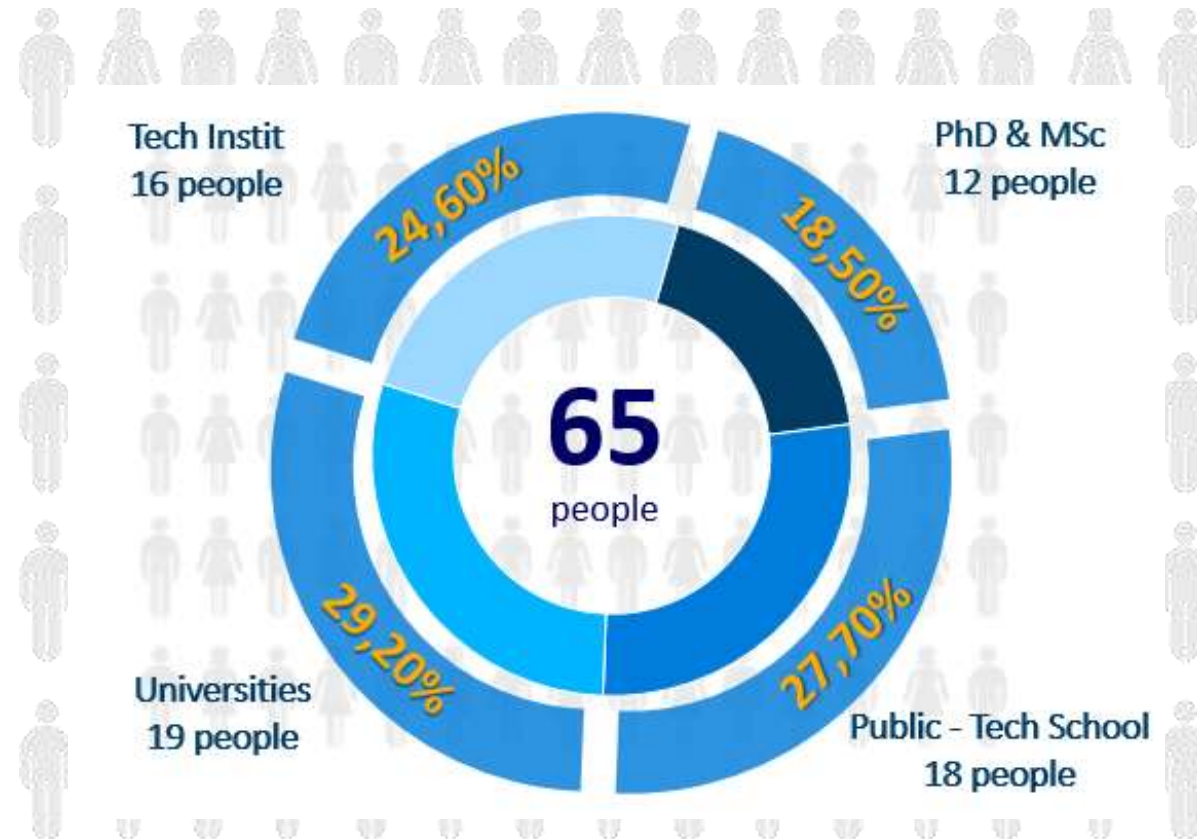


**Industrial Safety**  
Hellenic Ministry of National Defence



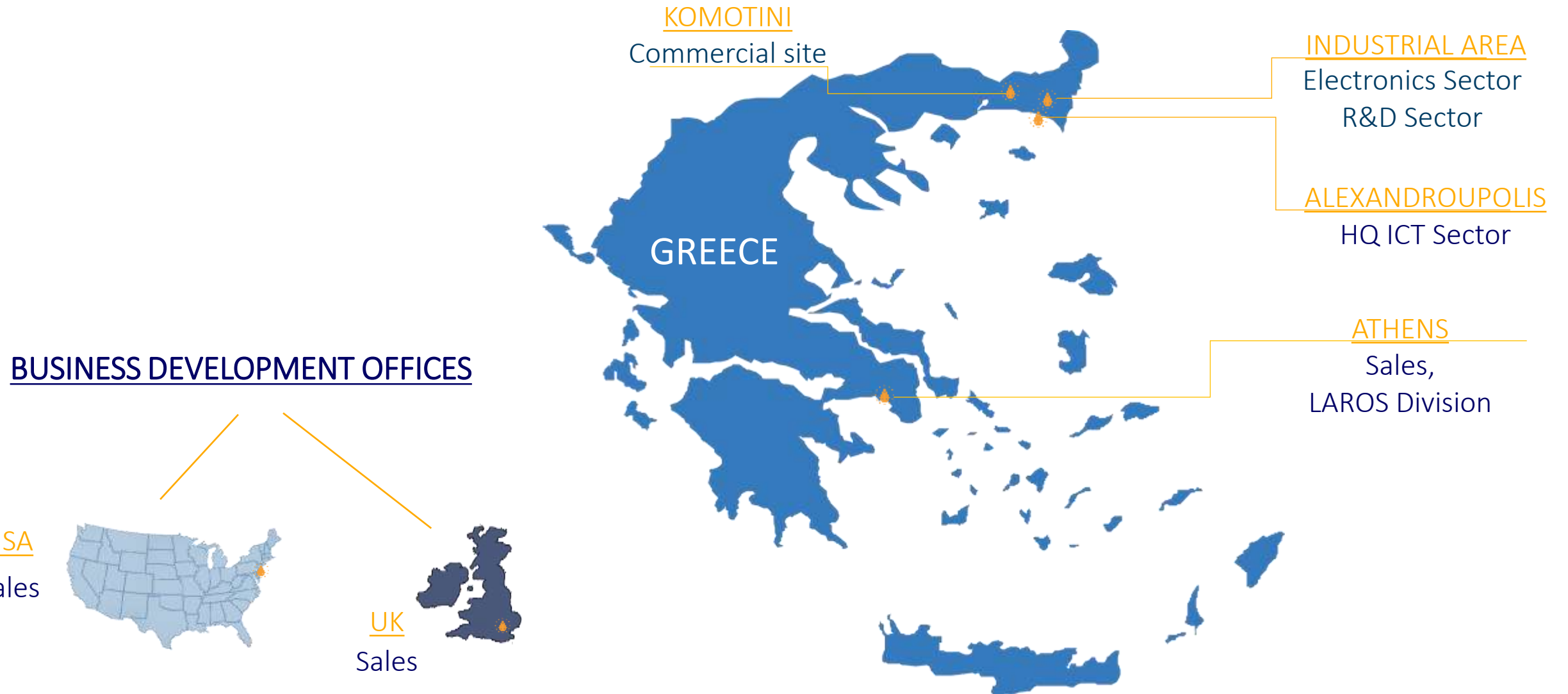
**ECSS Training**  
Electronics Soldering

# Personnel Education



engineers, technicians and administrative personnel  
with continuous training and education

# Locations

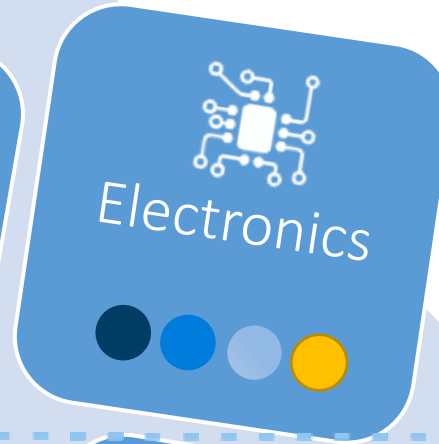
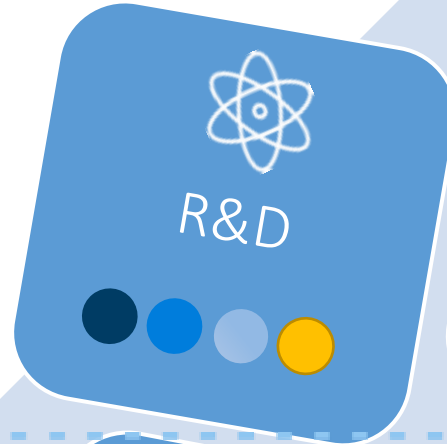




# Activities

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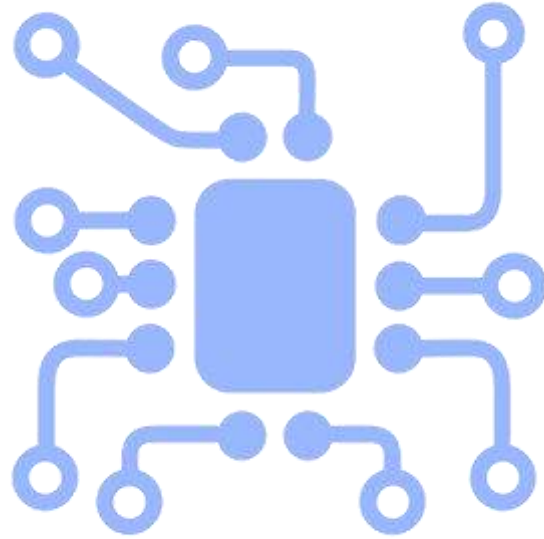
Industrial  
& Research



- Commercial
- Space – Defense
- Academia
- Company Products

Commercial





# Electronics Sector



# Electronics Services

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## PCB Assembly through SMT and THT techniques

- SMDs placement accuracy 0,035 mm,
- SMDs placement from 01005 to QFPs and BGAs
- Lead or lead free Soldering (RoHs)
- Nitrogen reflow soldering capability

## Assembly/Integration of electronic devices,

## Cable harnessing



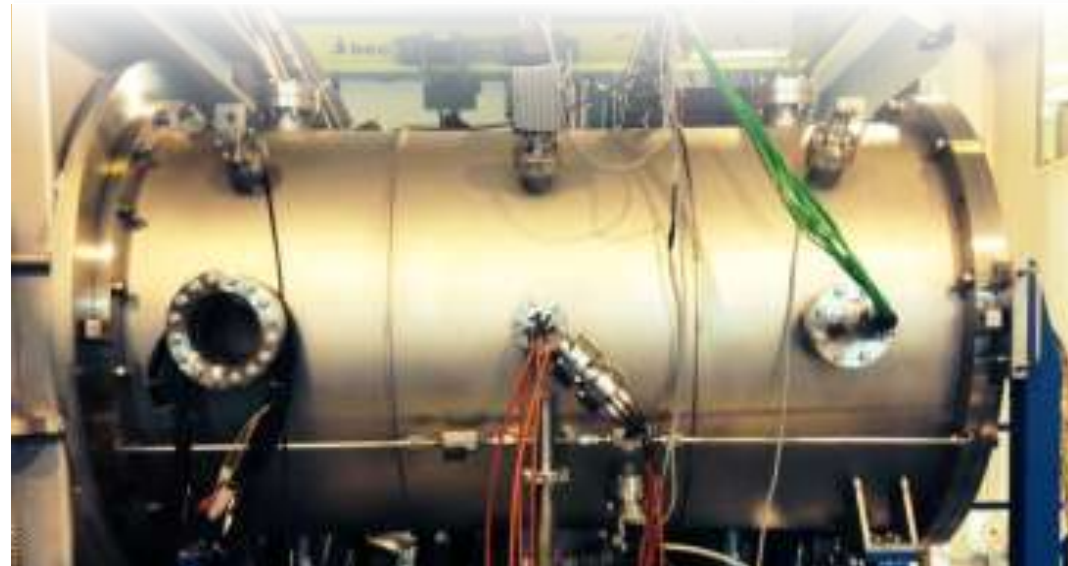
# Electronics Services (Space)

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CLEAN ROOM, CLASS 10.000, ISO 7  
(to be operational 1<sup>st</sup> quarter of 2016)



THERMAL VACUUM CHAMBER  
(to be installed by the end of 2017)



# Electronics Services

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## Specialized services:

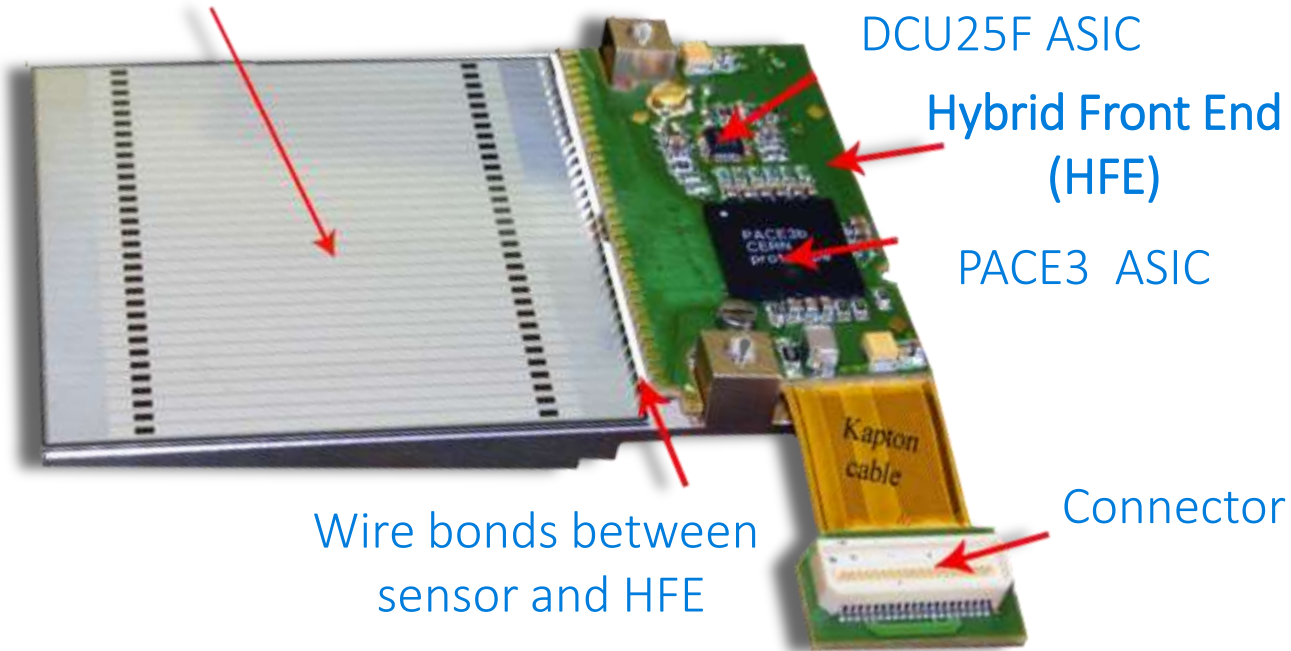
- Burn in test
- Coating
- Isolation & Continuity test
- Repair & rework support

## Functional testing



# Electronics (CERN/CMS)

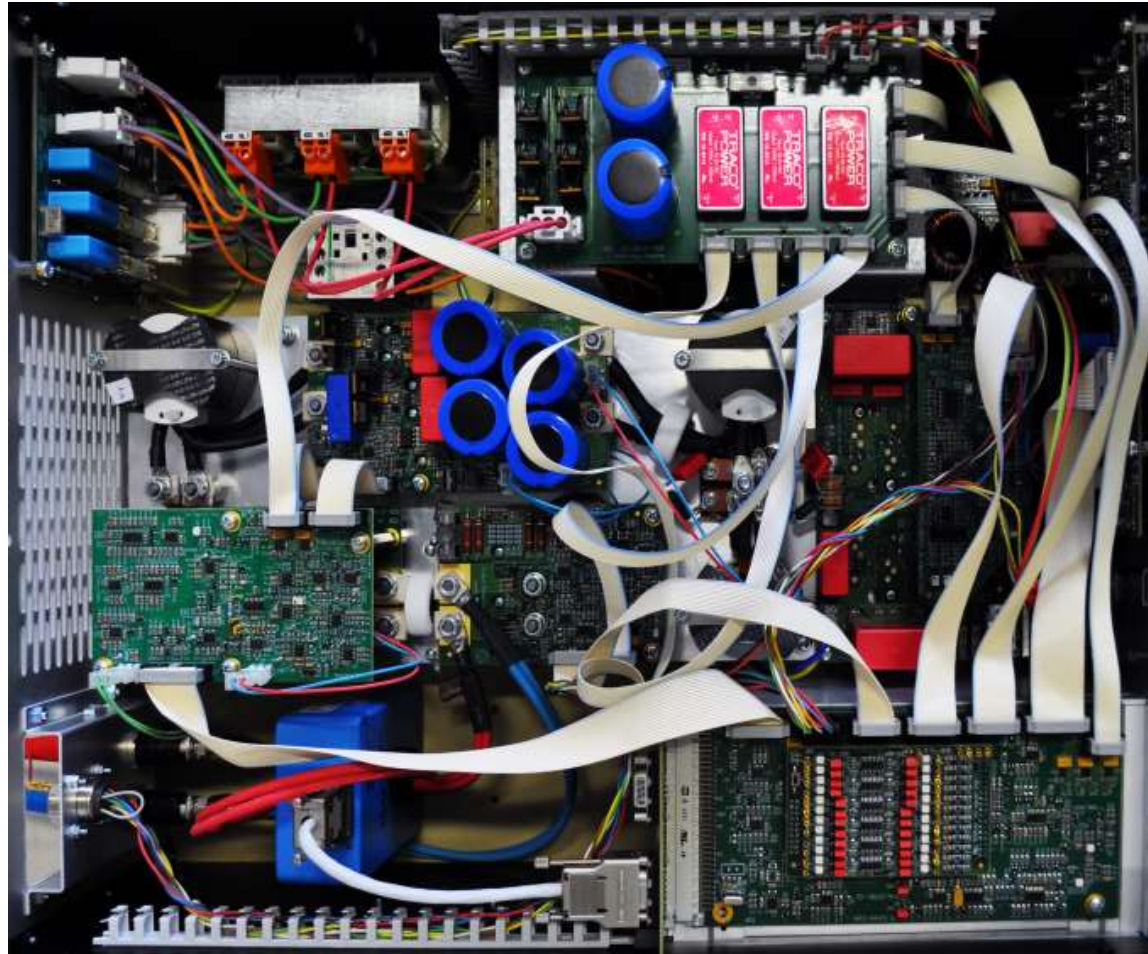
Silicon Sensor with 32 stripes



< 0,02% Defect Rate, in 5500 HFE boards produced

# Electronics (CERN/ACAPULCO)

## Power Converters



supplier



# Electronics (CERN/RD51)



supplier



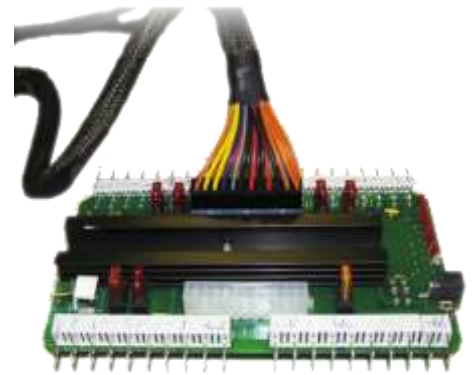
ADC



Hybrids



FEC



ATX Adapter

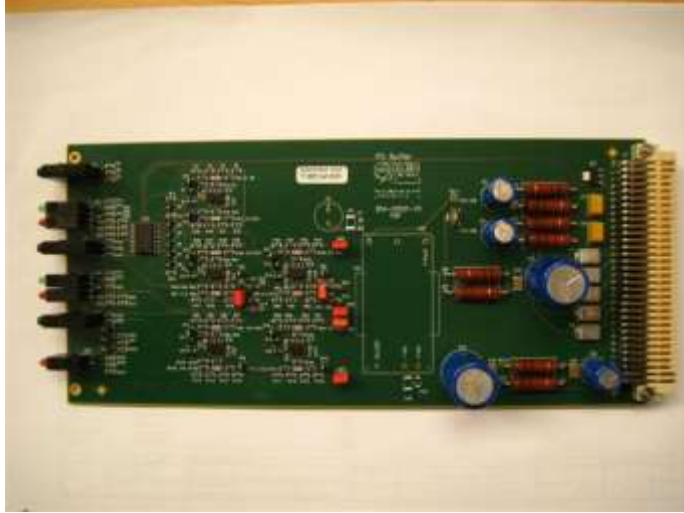




# Electronics (CERN/ATLAS)



# Electronics (CERN/D.E.M.)



Manufacturing various boards for the Development of Electronic Modules Department at CERN





# Research & Development Sector



# R&D Services

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Design of Electronic Circuits

Design and Development of Electronic Devices

Design and Development of Microwave Devices

Prototyping

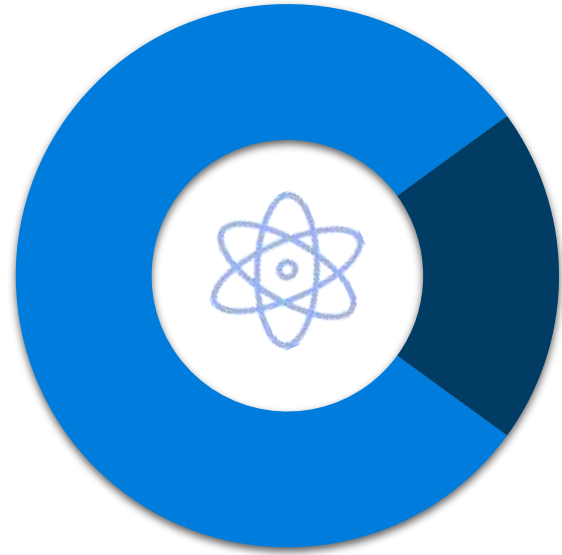
Software Development

- Operational System Software
- Embedded Software
- Application Software

Support Services to obtain CE



# R&D Projects



> 20%

of annual return  
invested in R&D

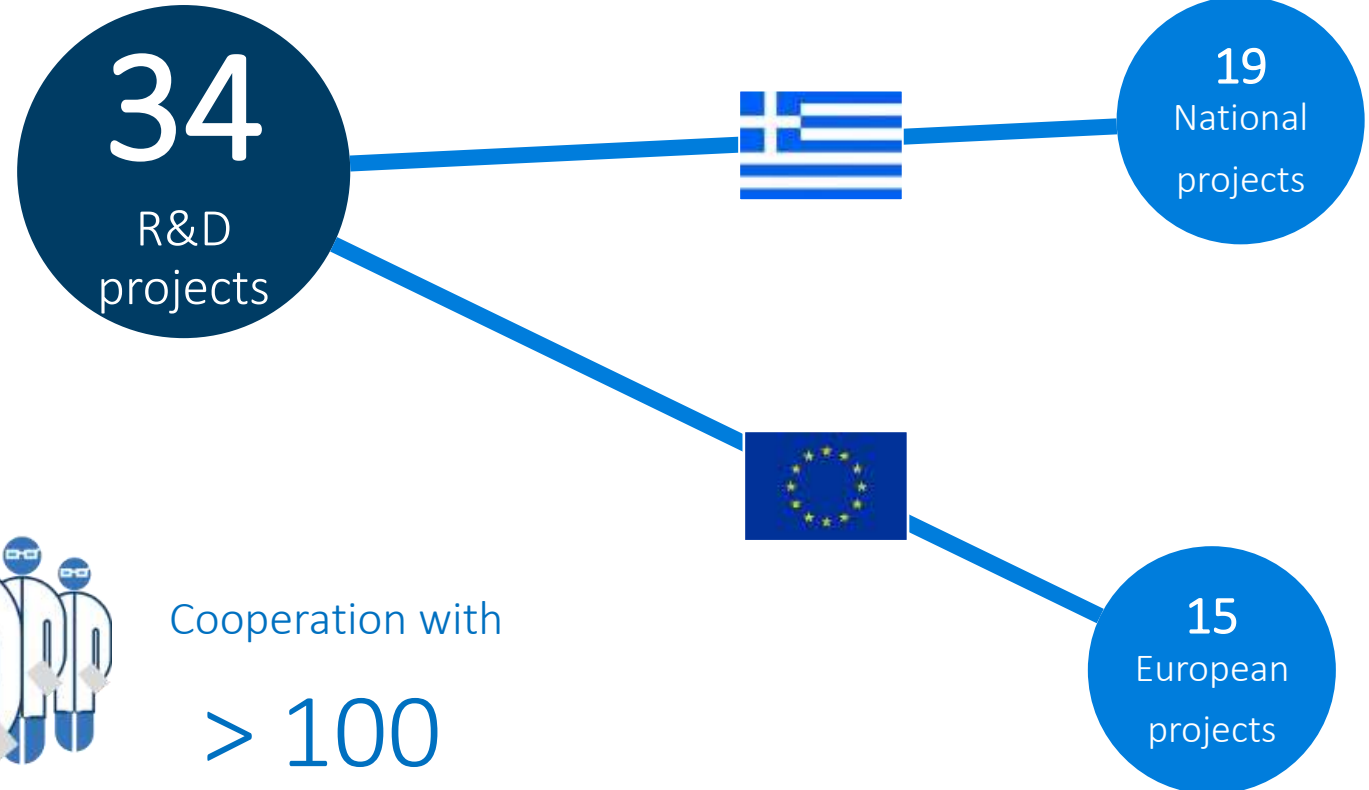


Cooperation with

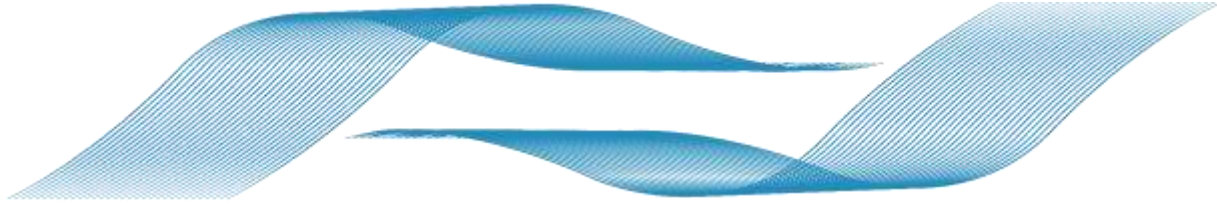
> 100

Researchers

1998 – 2015



# R&D Projects (CERN)



## EDUSAFE

Personnel Safety System Platform for remote monitoring in Harsh Environments utilizing PrismaSense®

## FTK

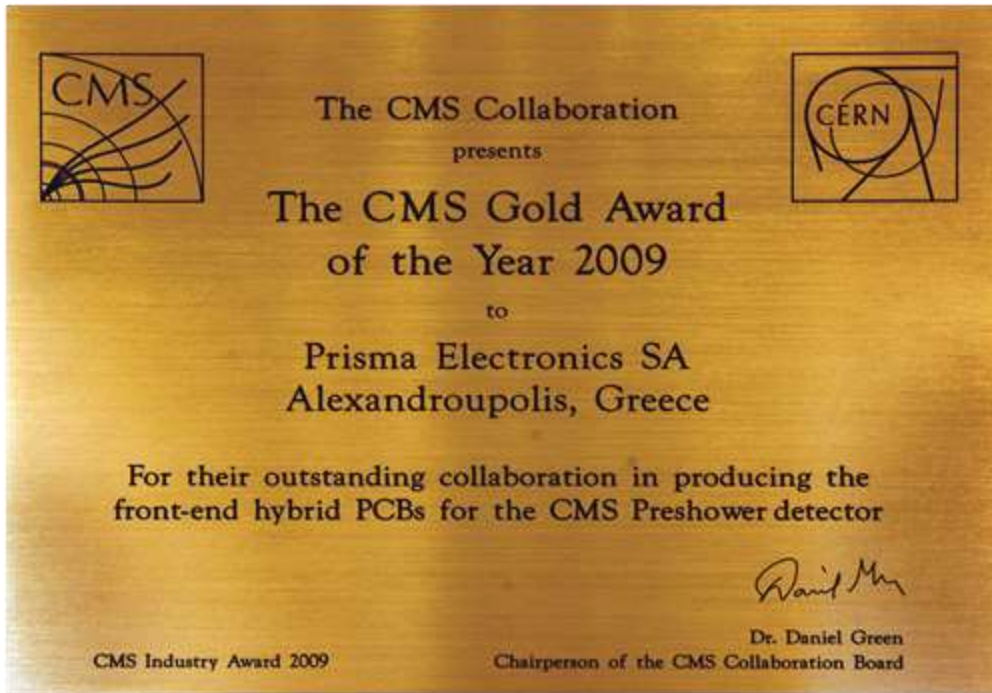
Fast Tracker for Hadron Collider Experiments



Wireless Personal Supervision System



# Awards



GOLD INDUSTRY AWARD 2009, CERN



TECHNICAL ACHIEVEMENT AWARD 2015, LLOYD'S LIST



DISTINCTION IN R&D COOPERATION, DEMOKRITOS





Thank you for you attention

Panagiotis Kalaitzidis  
Production Manager