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Intelligent PPE system for personnel in high risk and complex environments

Fact Sheet

Project Information

I-PROTECT

Grant agreement ID: 229275

[Project website](#) 

Project closed

Start date

1 October 2009

End date

30 September 2013

Funded under

Specific Programme "Cooperation": Nanosciences, Nanotechnologies, Materials and new Production Technologies

Total cost

€ 3 602 563,00

EU contribution

€ 2 726 399,00

Coordinated by

CENTRALNY INSTYTUT
OCHRONY PRACY -
PANSTWOWY INSTYTUT
BADAWCZY

 Poland

This project is featured in...



Objective

The main objective of the 4-year project is to develop intelligent personal protective equipment (PPE) system that will ensure active protection and information support for personnel in high risk and complex environments, in particular chemical rescue teams, firefighters and mine rescuers, who are exposed to fire, explosions, high temperature, dangerous substances, limited visibility, high humidity and limitation of breathable air. These high-level risks are reflected in a significant number of injuries and fatalities reported in the target sectors. The S&T objectives of the project are: - to integrate, within the new PPE system, state-of-the-art materials, active textiles, optical fibre sensors, gas and temperature detectors, ICT - to develop new materials (based on nanotechnology) and integrate them into PPE elements in order to enhance multi-functionality and adaptability; - to assure ergonomic design of new PPE and validate its functionality, safety, comfort and performance level by usability tests in real working conditions. The project is divided into 4 phases: 1) Conceptualization; 2) Technical development and integration, 3) Verification and validation; and 4) Dissemination and exploitation. The consortium consists of 16 partners from 6 countries: 5 RTDs, 8 SMEs, 2 industrial companies and 1 non-profit organisation. Three partners representing target groups participate in the whole project to guarantee full adaptation of the PPE system to users' needs. The project will have an impact on: the reduction of occupational injuries and disease in the EU (the population of end-users estimated at 3-5 mln.); European regulations (PPE Directive) and harmonised EN standards; European leadership in PPE-related research and innovation; the growth of European PPE market and the development of ERA in the area of industrial safety.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [nanotechnology](#)

[engineering and technology](#) > [materials engineering](#) > [textiles](#)

[engineering and technology](#) > [electrical engineering, electronic engineering, information engineering](#) > [electronic engineering](#) > **sensors**

[natural sciences](#) > [physical sciences](#) > [optics](#) > **fibre optics**



Programme(s)

[FP7-NMP - Specific Programme "Cooperation": Nanosciences, Nanotechnologies, Materials and new Production Technologies](#)

Topic(s)

[NMP-2008-4.0-9 - Reducing the risk of injury in complex systems through advanced personal protective equipment](#)

Call for proposal

FP7-NMP-2008-SME-2

[See other projects for this call](#)

Funding Scheme

[CP-TP - Collaborative Project targeted to a special group \(such as SMEs\)](#)

Coordinator



**CENTRALNY INSTYTUT OCHRONY PRACY - PANSTWOWY INSTYTUT
BADAWCZY**

EU contribution

€ 666 038,00

Total cost

No data

Address

CZERNIAKOWSKA 16

00 701 Warszawa

 **Poland** 

Region

Makroregion województwo mazowieckie > Warszawski stołeczny > Miasto Warszawa

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Participants (15)



BUNDESANSTALT FUER MATERIALFORSCHUNG UND -PRUEFUNG

 Germany

EU contribution

€ 276 484,00

Address

Unter den Eichen 87

12205 Berlin 

Region

Berlin > Berlin > Berlin

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



COLOROBIA ITALIA SPA

 Italy

EU contribution

€ 68 400,00

Address

VIA PIETRAMARINA 53
50059 SOVIGLIANA VINCI 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



TYOTERVEYSLAITOS

 Finland

EU contribution

€ 136 647,00

Address

TOPELIUKSENKATU 41 B
00250 Helsinki 

Region

Manner-Suomi > Helsinki-Uusimaa > Helsinki-Uusimaa

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



INSTITUTO DE BIOMECANICA DE VALENCIA

 Spain

EU contribution

€ 121 622,00

Address

Region

Este > Comunitat Valenciana > Valencia/València

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



INSTYTUT TECHNIKI GORNICZEJ KOMAG

 Poland

EU contribution

€ 19 646,00

Address

ULICA PSZCZYNSKA 37

44 101 GLIWICE 

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



FUNDACION TECNALIA RESEARCH & INNOVATION

 Spain

EU contribution

€ 165 116,00

Address

PARQUE CIENTIFICO Y TECNOLOGICO DE BIZKAIA, ASTONDO BIDEA, EDIFICIO 700
48160 DERIO BIZKAIA 

Region

Noreste > País Vasco > Gipuzkoa

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



SPERIAN RESPIRATORY PROTECTION FRANCE

 France

EU contribution

€ 87 600,00

Address

Rue des Vanesses 33
93420 Villepinte 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



VEREINIGUNG ZUR FORDERUNG DES DEUTSCHEN BRANDSCHUTZES EV

 Germany

EU contribution

€ 63 250,00

Address

WOLBECKER STR. 237
48341 MUNSTER 

Region

Rheinland-Pfalz > Koblenz > Birkenfeld

Activity type

Other

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



ARESCOSMO S.P.A.

 Italy

EU contribution

€ 395 313,00

Address

VIA DELLE VALLI 46

04011 Aprilia Lt 

Region

Centro (IT) > Lazio > Latina

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



Coalesenses GmbH

 Germany

EU contribution

€ 276 190,00

Address

Maria-Goeppert-Str. 1
23562 Lübeck 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



neoVision Slawomir Zwolenik

 Poland

EU contribution

€ 196 400,00

Address

Ulica Jasminowa 11
91488 LODZ 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



ORLEN SPOLKA AKCYJNA

 Poland

EU contribution

€ 14 550,00

Address

UL.CHEMIKOW 7
09-411 Plock 

Region

Makroregion województwo mazowieckie > Mazowiecki regionalny > Płocki

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



CENTRALNA STACJA RATOWNICTWA GORNICZEGO

 Poland

EU contribution

€ 21 277,00

Address

Chorzowska 25

41 902 Bytom 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



Orneule Oy

 Finland

EU contribution

€ 79 466,00

Address

Neuletie 3

35300 Orivesi 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



SAFIBRA SRO

 Czechia

EU contribution

€ 138 400,00

Address

CERNOKOSTELECKA 1621

25101 RICANY 

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 2 August 2019

Permalink: <https://cordis.europa.eu/project/id/229275>

European Union, 2025