



The National Centre
for Research and Development

POLISH ROAD TO INNOVATION



Plan for Responsible Development and the competitiveness of the Polish economy

Reindustrialisation

Polish technologies as industry flywheels

Implementing innovations

Encouraging industry to commercialise research:

- tax incentives (legislative system)
- co-funding R&D projects (NCRD)



NCRD – a modern institution

- Encourages industry to commercialise research by co-funding R&D projects
- Effectively supports building a lasting technological advantage of the Polish economy



How do we act?

- Connecting science with business
- Providing entrepreneurs with „risk insurance policy“
- „From idea to industry“

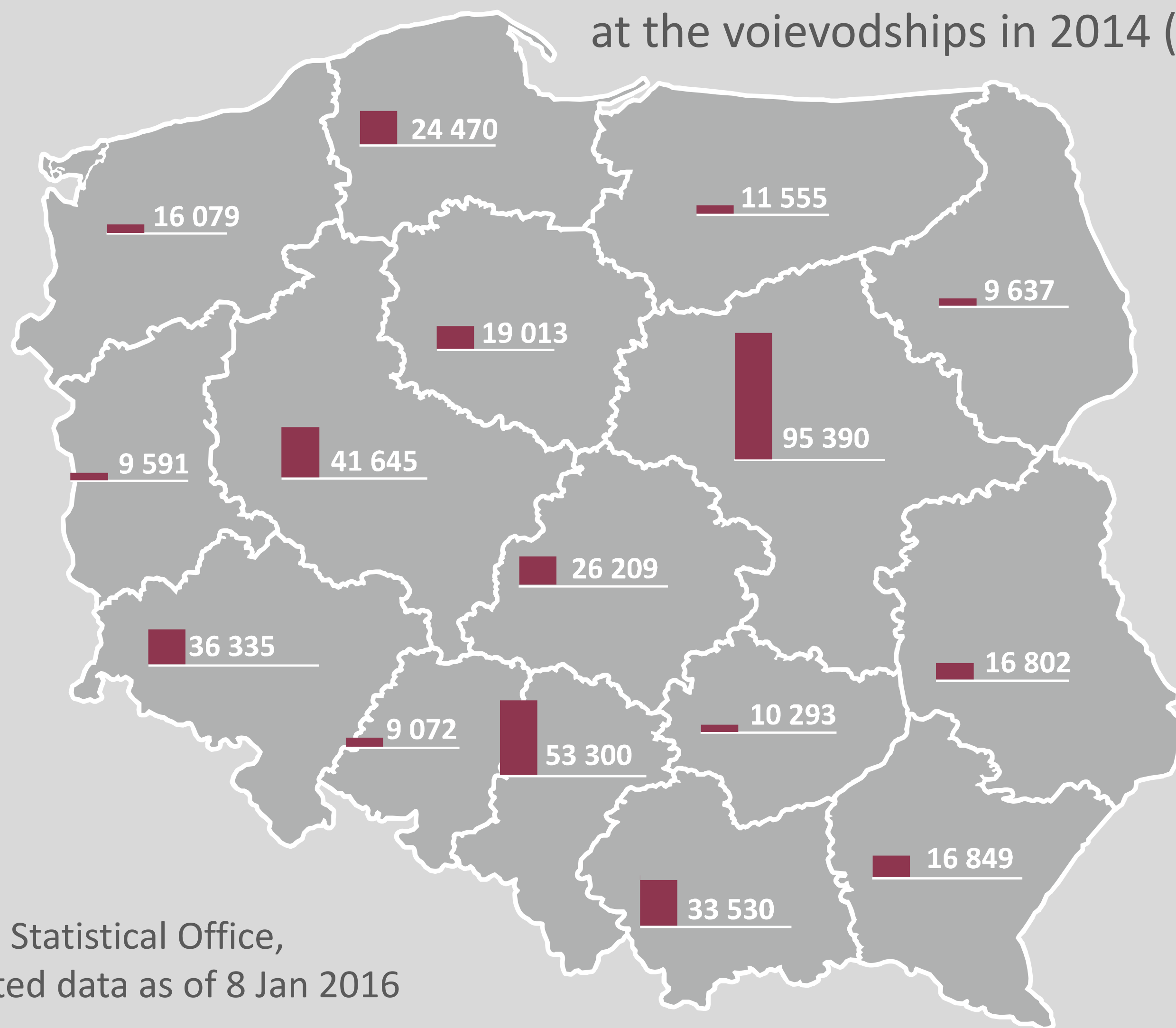


NCRD IN NUMBERS

Gross domestic product



at the voievodships in 2014 (in mln €)



Central Statistical Office,
Estimated data as of 8 Jan 2016



Average contract value €1,1 million
Data in millions € for 2007 - 2015

For whom?



42 %

Consortia

Military University of Technology,
PIT-RADWAR S.A., AGH University
of Science and Technology

26 %

Enterprises

EIT+, Polonia Aero, Selvita, Skotan, Adamed

20 %

Universities

Warsaw University of Technology, University of Warsaw,
AGH University of Science and Technology

8 %

Research institutes

Central Mining Institute, Institute of Non Ferrous Metals,
National Centre for Nuclear Research

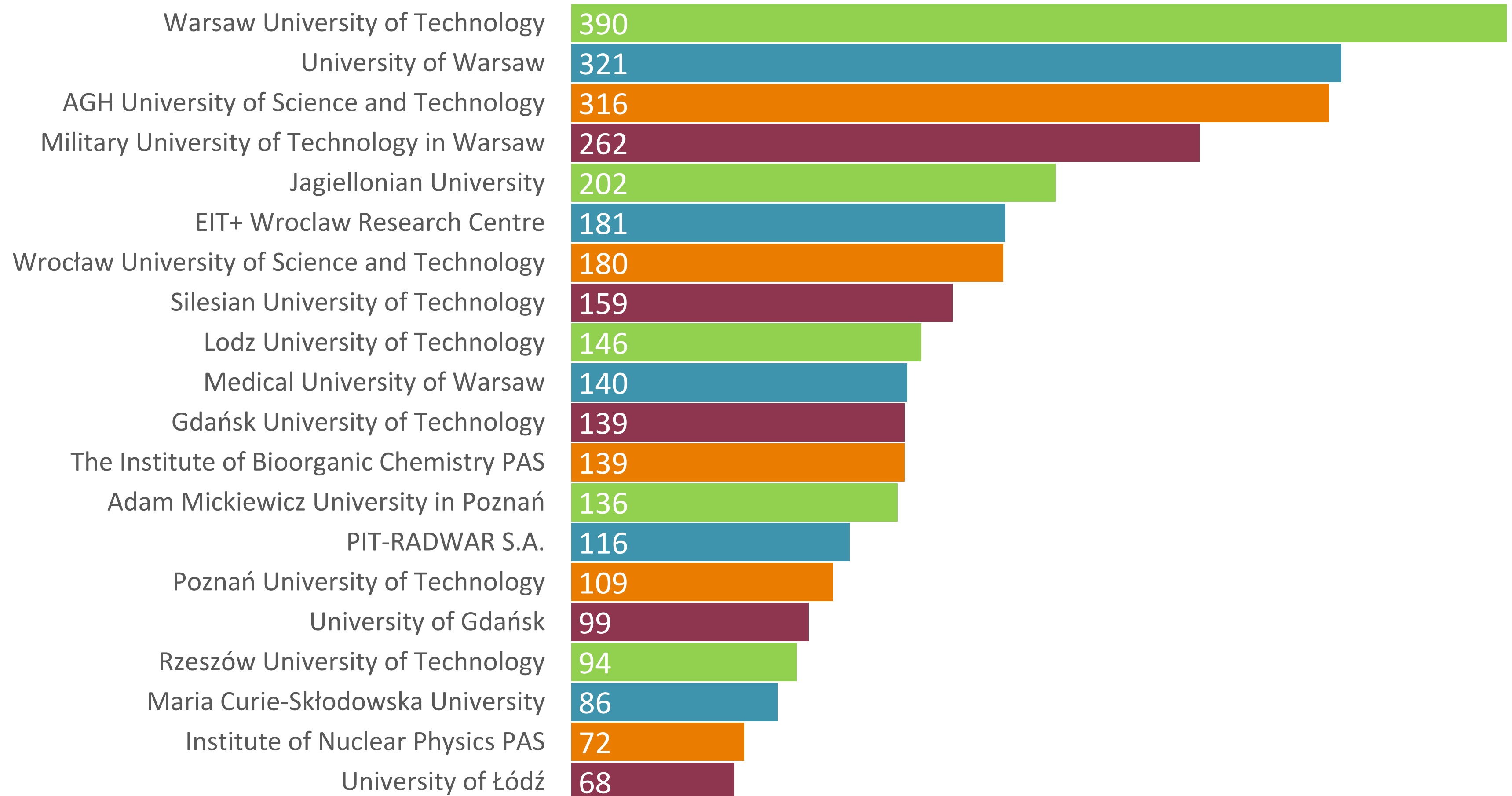
3 %

Polish Academy of Sciences

Institutes of: Bioorganic chemistry,
Nuclear physics, Pharmacology

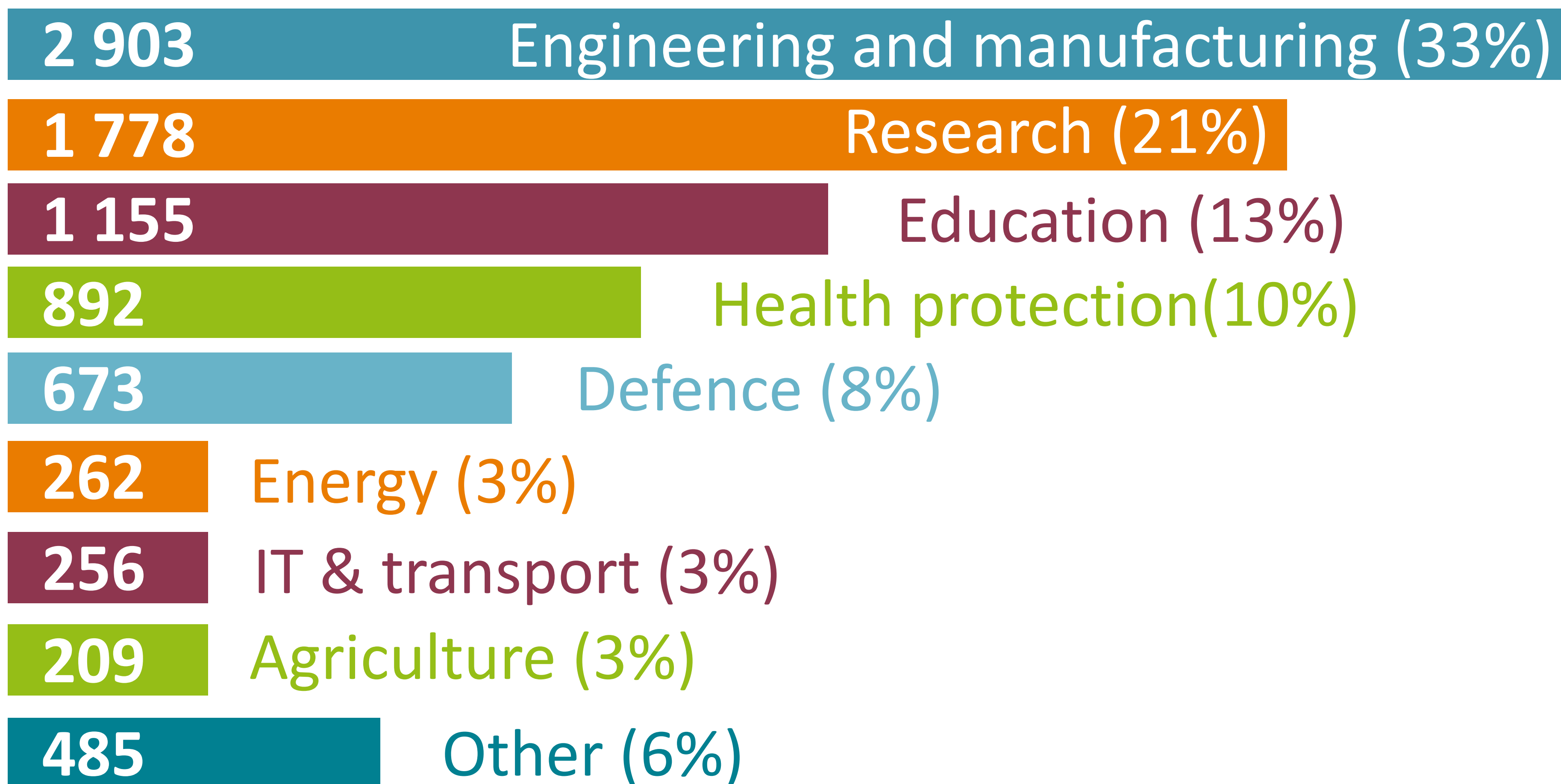
AVERAGE GRANT VALUE (PER ENTITY) € 4 million

20 largest beneficiaries



Total funding value of all contracts in million € – as of 1 August 2016

For what?



Total funding value of all contracts in million € – as of 1 August 2016



NCRD PROGRAMMES „FROM IDEA TO INDUSTRY“

from highest risk phase up to foreign expansion



„Idea” stage

BRidge Alfa

Budget: €113 milion

- bridging innovators with seasoned entrepreneurs
- funding early stage ideas with commercialisation potential
- spin-off incubation by investment vehicles, the so-called „Alfas”

TANGO: joint activity of NCRD and National Science Centre

Budget: €10 million

- practical application of fundamental research
- facilitating science units introducing modern products or technologies to the market, e.g. by covering market analyses costs



„Idea development” stage on Fast Track – NCRD flagship programme

Fast Track for small and medium enterprises

Budget: €188 million

- reduced formalities, intuitive procedure, decision made in 60 days
- entrepreneurs „learn” how to invest in innovations and how to collaborate with scientists

Fast Track for large enterprises

Budget: €250 million

- reduced formalities, intuitive procedure, decision made in 90 days
- incentive to collaborate with scientists and develop own R&D teams



SECTORAL PROGRAMMES

development of key Polish economy sectors



Sectoral programmes - examples

INNOLOT

Budget: €145 million

aviation sector

e.g. module-based plane

INNOMOTO

Budget: €64 million

(I competition)

automotive sector

e.g. electric car

GAMEINN

Budget: €20 million

(I competition)

videogames sector

e.g. 3D modeling



Domestic strategic programmes - examples

STRATEGMED

Budget: €200 million

- preventing civilizational diseases
- development of regenerative medicine

BIOSTRATEG

Budget: €125 million

- food security
- biodiversity protection
- water resources management

TECHMATSTRATEG

Budget: €125 million

- modern technologies
- nanoelectronic materials
- energy storage



Defence and security

„Satellite”
programme

Budget: €250 million

- optoelectronic satellite system
- Earth observation



TECHNOLOGY DEMONSTRATORS

prototypes prior to market launch



PILOT LINES

formerly DEMONSTRATOR

Budget: €125 million

- R&D projects of large enterprises
- pilot installations
- prototypes of products
- post-production system for movies
- multi-system electric locomotive
- plastics joining technology



JOINT ACTIVITIES

supporting key sectors along with large enterprises

SYNCHEM



Budget: €50 million

NCRD and Synthos SA
to invest in 50/50
ratio

- projects of consortia including science units
- new generation products in chemical industry
- boosting one of key economy sectors

- ecological anti-degradants
- high efficiency elastomers
- bio-pesticides
- composite materials for medical applications



INTERNATIONAL EXPANSION

Polish innovations into foreign markets

GO_GLOBAL.PL



Budget: €2 million

up to €37 500 per project

global market entry
strategy

e.g.: remote foetal
health monitoring device
using teleKTG –
introduced to the
German market



NEW APPROACH TO R&D SUPPORT

Project X



CONTRACTOR

- DEFINES THE PRODUCT
- GOVERNMENT, LOCAL AUTHORITIES, CORPORATIONS



CONTRACTOR GUARANTEES FINANCING:

- PRE-PRODUCTION SAMPLES
- FINE TUNING OF PRODUCT
- DEVELOPMENT OF SALES MARKET
- PROMOTION IN FOREIGN MARKETS



NCRD

- ANNOUNCES THE CHALLENGE
- SELECTS PROJECTS



LEVEL I

BUDGET FOR EACH SELECTED PROJECT



LEVEL II

PROTOTYPES



LEVEL III

PRE-PRODUCTION SAMPLES



STRONG ECONOMIC ENTITY

LEVEL IV

THE WINNER



SKILLS DEVELOPMENT AT UNIVERSITY LEVEL

universities respond to economic changes
and job market needs



Development of student skills

(Bachelor and Master degrees)

COMPETENCIES DEVELOPMENT PROGRAMME

Budget: €63 million

- trainings and workshops
- courses prepared by employers
- practical tasks - projects
- study visits
- internships

NEW HIGHER EDUCATION PROGRAMMES

Budget: €50 million

- new study areas
- adapting curricula to economy and society needs

INTERNATIONAL EDUCATION PROGRAMMES

Budget: €36 million

- classes held in foreign languages
- foreign tutors
- international curricula
- summer schools



PhD STUDIES

Announcement in
December 2016

Budget: €39 million

- international courses
- interdisciplinary programmes
- commercial implementation of studies' results

LIDER



Competitions for
young scientists

Grants up to
€300 000

- independent research planning
- managing own research team
- focus on market-driven research



Training of tutors and knowledge sharing

IMPROVING ACADEMIC STAFF COMPETENCIES

Budget: €33 million

Tutors training:

- foreign language
- innovative skills
- IT competencies

PHILOSOPHICAL EDUCATION

Budget: €1,25 million

- co-operation with secondary and lower secondary schools
- philosophy classes
- argumentation, critical thinking, heuristics, logic

COPERNICUS PATHWAYS 2.0

Budget: €1,25 million

- strategic partnerships
- unique classes
- enhancing creativity as well as eagerness to learn and explore





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