Research funding system in Poland

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Disclaimer

- The financing system of Polish science is now rapidly changing:
  - **before 2011** most of the the funds for science were coming directly (and annually) from the State Treasury to the institutes which then were distributing them among the internal research groups
  - **since 2011** the grant system has been introduced – funds go directly to the research groups at the institutes through project competitions
  - research projects (and therefore funding) are **always limited in time** (usually up to 3 years, sometimes 5)

- Most of the following slides are taken from the presentation of Prof. Andrzej Jajszczyk – Director of National Science Centre
- Only most general information will be shown

Structure of Polish Science Funding System

Strategic level

Ministry of Science and Higher Education

Expert level

Science Policy Committee

Committee of Evaluation of Scientific Units

Young Researchers' Council

Executive Agency level

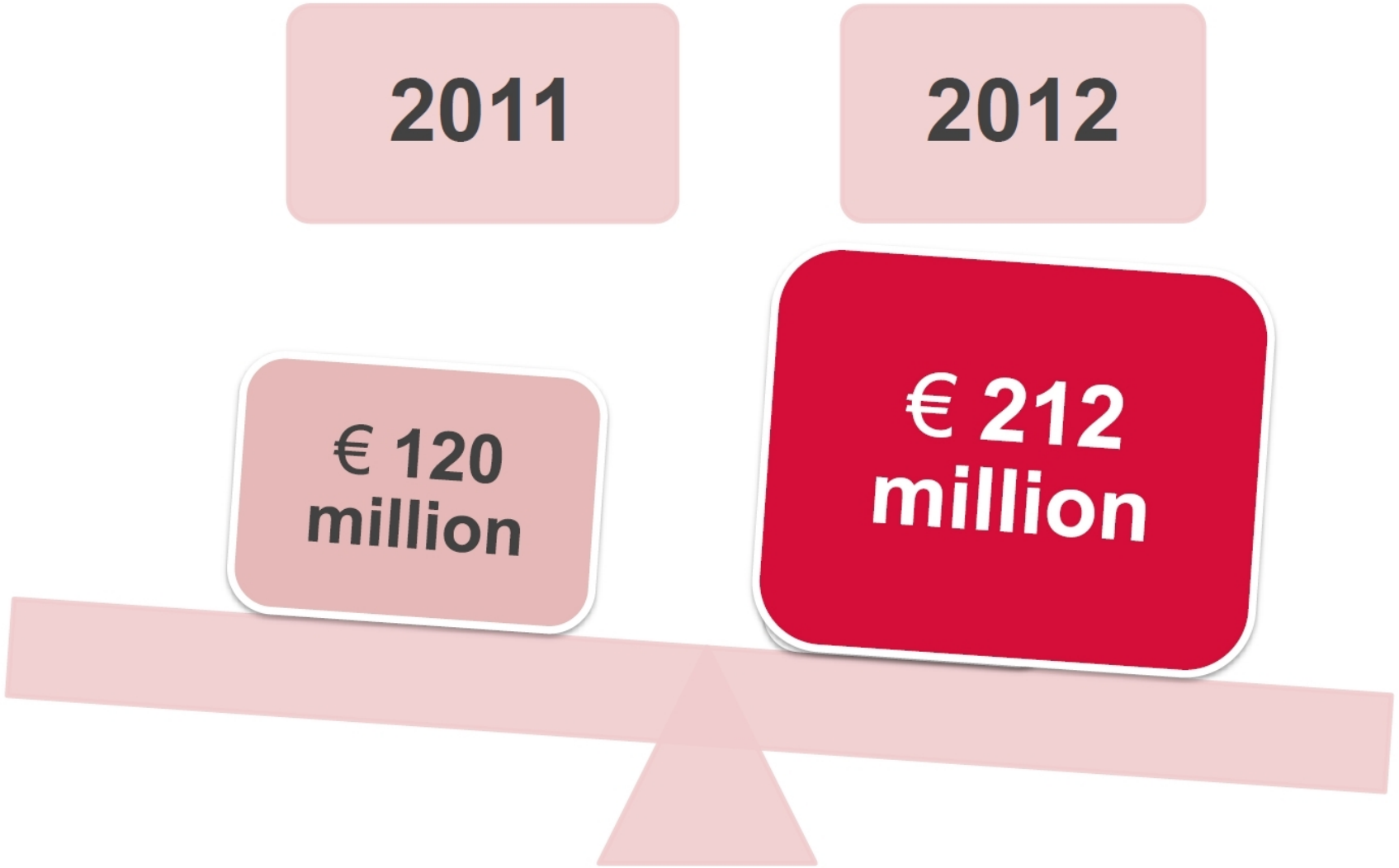
National Science Centre
http://www.ncn.gov.pl/?language=en

National Centre for Research and Development

National Science Centre

- The National Science Centre (NCN) is a government executive agency set up to fund basic research
- Basic research is original experimental or theoretical research work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any direct practical application or use

NCN Budget



ST Panel: Physical Sciences and Engineering

ST1 Mathematics
ST2 **Fundamental constituents of matter**
ST3 **Condensed matter physics**
ST4 **Physical and Analytical Chemical sciences**
ST5 **Materials and Synthesis**
ST6 Computer science and informatics
ST7 Systems and communication engineering
ST8 Products and processes engineering
ST9 **Astronomy and space research**
ST10 Earth system science

Statistics 2011

- Eligible proposals: **7826**
- Proposals qualified for the second-stage evaluation: **3395** (43%)
- Proposals qualified for funding: **1870** (24%)
- Grants: **€ 127.5 million** (2012: **€ 225 million**)
- Young researchers:
  - Received about 50% of grants
  - Received about 30% of the budget

National Centre for Research and Development

http://www.ncbr.gov.pl/en/

- The biggest funding agency in Poland
- Annual budget: **300 million EUR** (without EU funds)
- Platform for effective dialogue between science and business
- Financing of **national strategic research programmes** (i.e. technology for safe nuclear energy)
- Financing of **research which aims for transfer and commercialization of scientific results in economy** (i.e. shale gas extraction, graphene research)
- Management of the EU funds in Poland (Human Capital and Innovative Economy operational programmes)
- Potential source for funding of technical aspects of ALICE, but not physics

Other Sources

- Foundation for Polish Science (biggest scientific NGO)
  https://www.fnp.org.pl/en/
- European Union funds:
  - National Cohesion Strategy (EU budget 2007-2013)

HUMAN CAPITAL
NATIONAL COHESION STRATEGY

EUROPEAN UNION
EUROPEAN
SOCIAL FUND

INNOVATIVE ECONOMY
NATIONAL COHESION STRATEGY

EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

  - Horizon 2020 (EU budget 2014-2020)
    http://ec.europa.eu/programmes/horizon2020/

  - European Research Council
    http://erc.europa.eu/

European Research Council
Established by the European Commission

- Many others we may not know...
- Everything looks very nice, but...

Application process

- Application process and the proposal is very dependent on the funding institution and the grant programme
- Usual timescale for grant **evaluation is 6 months**
- Each grant programme has at most **two instances per year** (with a fixed submission deadline)
- Project funding is **always limited in time** (usually up to 3 years, sometimes 5)
- Both NCN and NCBR are relatively new institutions so changes in the grant process and evaluation are frequent
- Up to recently grants seldom included funds for hiring staff – this is slowly changing but rules are not finalized
- The application process is time consuming

Current funding of ALICE@WUT

- HARMONIA (project leader: Prof. Jan Pluta) – WUT financial contribution to ALICE and technical aspects: DCDB and Visualization
  - 1.2 million PLN = 286 kEUR, years 2013-2016
- OPUS (project leader: Prof. Jan Pluta) – pion femtoscopy
  - 407 kPLN = 97 kEUR, years 2012-2014
- PRELUDIUM (project leader: M.Sc. Łukasz Graczykowski) – angular correlations
  - 97 kPLN = 23 kEUR, years 2012-2014
- Research Scholarships of Center for Advanced Studies WUT for Ph.D. students and staff (EU funds) – programme finishing, last competition 03.2014
  - 176 kPLN = 42 kEUR, years 2012-2014 (A. Kisiel, M. Janik, Ł. Graczykowski, M. Szymański)
- Scholarships for 3-month long internships in foreign companies for undergraduate students (EU funds) – programme finishing, last competition 03.2014
  - 83 kPLN = 20k EUR, years 2009-2014 (more than 10 students received)
- **Total: <u>468 kEUR</u> in years 2012-2016 (20-30% of this amount are the so-called indirect costs of WUT administration which we cannot use)**
- Submitted to NCN in December 2013:
  - OPUS (project leader: Prof. Adam Kisiel), 730 kPLN = 174 kEUR
  - PRELUDIUM (project leader: M.Sc. Maciej Szymanski), 83 kPLN = 20 kEUR
- **No funding yet for extended collaboration in visualization and CWG9**

THANK YOU

Tasks of National Science Centre

- **Funding of**:
  - basic research in the form of research projects
  - doctoral fellowships and post-doctoral internships
- **Supervising** the implementation of research projects
- **International cooperation** in financing basic research
- **Fostering and monitoring** the funding of basic research funded from outside the state budget

Workload in Funding Agencies

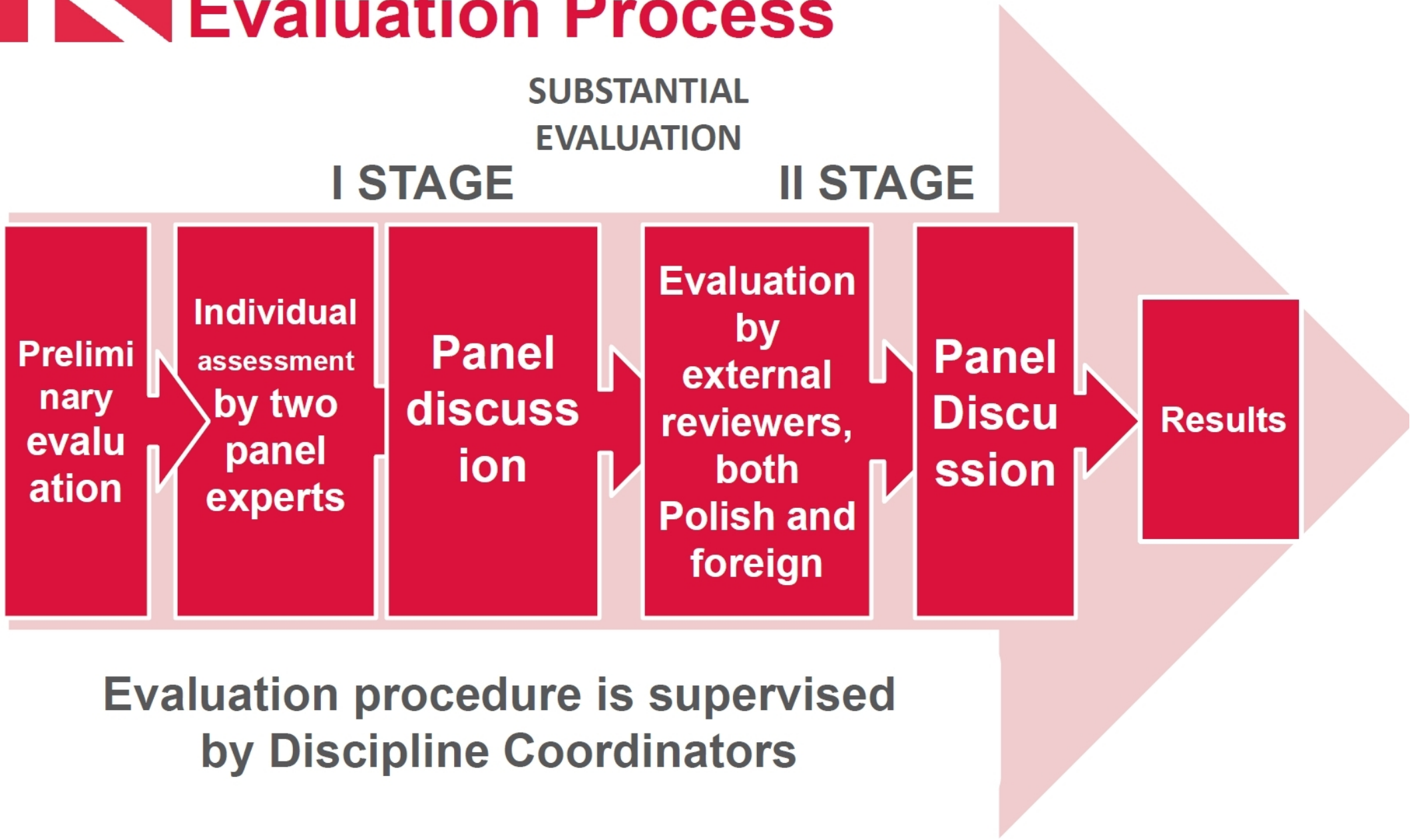
	Number of proposals	Number of employees	Proposals per employee
ERC	4882	316	15.4
NSF	40000	2100	19.0
NSERC	10000	400	25.0
NCN	14917	71	210.0

- ERC – *European Research Council*
- NSF – *National Science Foundation* (USA)
- NSERC – *Natural Sciences and Engineering Research Council* (Canada)
- ERC, NSF i NSERC: data for 2010, NCN: data for 2011

Evaluation Criteria

- Basic research
- Scientific level of research tasks
- Pioneering nature of the research problem
- Potential impact of the research project on the development of the scientific discipline
- Principal Investigator's scientific achievements
- Evaluation of previous research projects conducted by the applicant funded under previous calls for proposals (this criterion does not apply to pre-doctoral grants)
- Suitability of the planned costs
- Project feasibility

Evaluation Process



Evaluation procedure is supervised by Discipline Coordinators

Statistics 2011 for Physical Sciences

ST2 Fundamental constituents of matter

ST3 Condensed matter physics

ST4 Physical and analytical chemical sciences

ST5 Materials and synthesis

ST9 Astronomy and space research

GRANTING PROGRAMMES	# OF PROPOSALS	FUNDING	# OF GRANTS	FUNDING	SUCESS RATE
OPUS, PRELUDIUM, SONATA, HARMONIA	1397	€ 129 million	341	€ 29.4 million	24%
MAESTRO	117	€ 56.1 million	21	€ 10.9 million	18%