

**Тематическое направление 7РП ЕС
Нанонауки, нанотехнологии, материалы и новые
промышленные технологии
6-ой конкурс**

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7RP ЕС. Подпрограмма «Cooperation»

10 Themes

	(million €)
1. Health	6 100
2. Food, agriculture and fisheries, and biotechnology	1 935
3. Information and communication technologies	9 050
4. Nanotechnologies, Materials and Production (FP7- NMP)	3 475
5. Energy	2 350
6. Environment	1 890
7. Transport	4 160
8. Socioeconomic research	623
9. Space	1 430
10. Security	1 400
Total	32 413

* Not including non-nuclear activities of the Joint Research Centre: €1 751 million

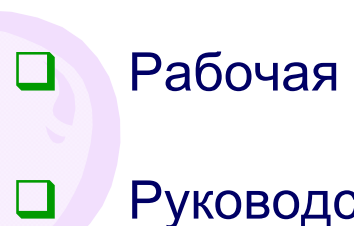


FP7-NMP. 6-ой конкурс

- ❑ Тематический приоритет «**N**anosciences, **N**anotechnologies, **M**aterials and new **P**roduction Technologies»; Акроним: **FP7-NMP**
- ❑ Бюджет на 2007 -2013 гг. - **3 475 млн. €**
- ❑ 6-ой конкурс объявлен 20.07.2011; бюджет ~ **510 млн. €**
(2013 г. ~ **620 млн. €**)

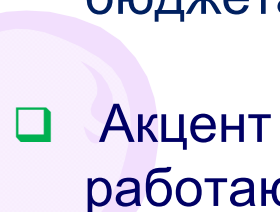


Основные документы конкурса

- ❑ Объявление о конкурсе (Call fiche)
 - ❑ Рабочая программа (Work programme 2012)
 - ❑ Руководство для заявителей (Guide for Applicants)
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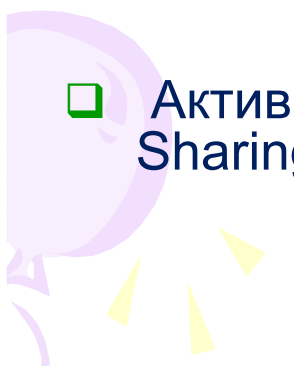


Особенности приоритета FP7-NMP

- ❑ Связь с предыдущими конкурсами FP7-NMP
 - ❑ Ориентированность FP7-NMP на все сектора *промышленности* (6РП – 35% SMEs, 7РП – 40%),
 - ❑ Междисциплинарный подход (совместные конкурсы с другими тематическими направлениями), координация национальных и региональных инициатив
 - ❑ Поддержка участия малых и средних предприятий (SME) посредством специальных конкурсов (на данный момент 23% участников проектов - SMEs)
Бюджет SME-ориентированных проектов составляет 15 % от бюджета FP7-NMP
 - ❑ Акцент на международном сотрудничестве с регионами, активно работающими в области нанотехнологий
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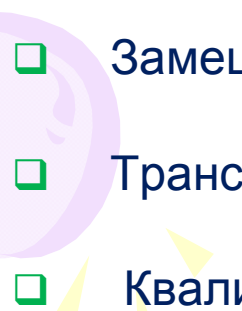


FP7-NMP-6. Рабочая программа (РП 2012)

- ❑ Рабочая программа 6-ого конкурса (РП 2012) нацелена на содействие реализации европейской инновационной стратегии 2020 “Innovation Union” (принята в октябре 2010 г.)
 - ❑ Инновационная компонента отражается в дизайне РП-2012, описании тем и целей заявок, ожидаемых результатов (Impact)
 - ❑ Формирование тематики конкурса с учетом предложений Европейских технологических платформ (SRA), Экспертной консультативной группы по NMP, результатов семинаров и опросов последних лет
 - ❑ **47** тем в РП 2012, из которых в **29** включены инновационные элементы
 - ❑ Активное использование инновационного инструмента 7РП Risk Sharing Finance Facility (RSFF)
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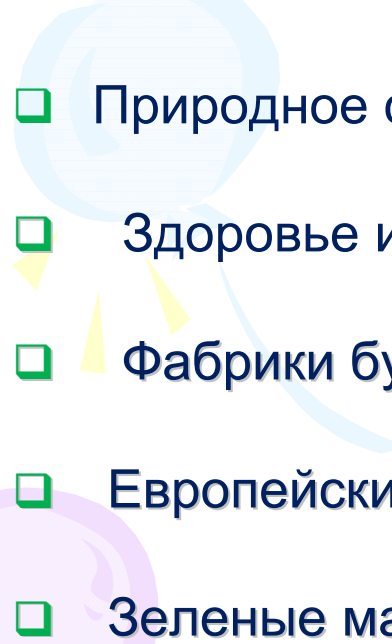


РП 2012. Инновационные элементы

- ❑ Участие в европейском антикризисном пакете (PPP-инициатива) “Factories of the Future”, “Energy efficient Buildings,” “Green cars”
 - ❑ Компьютерное моделирование и модели; высококачественный и творческий дизайн продукции
 - ❑ Поддержка исследований в ключевых технологиях (Key Enabling Technologies: biotechnology, nanotechnology, micro- and nanoelectronics including semiconductors, advanced materials and photonics)
 - ❑ Демонстрационные и валидационные мероприятия
 - ❑ Безопасность и нормативы, IPR; стандартизация
 - ❑ Замещение критических полезных ископаемых
 - ❑ Трансфер технологий
 - ❑ Квалифицированная рабочая сила
- 



РП 2012. Главные темы

- Энергетика и энергосбережение (Strategic Energy Technology Plan, SET)
 - Вопросы экологии и устойчивого развития (complement activities of the Environment and FAFB Themes)
 - Природное сырье (EC's Raw materials Initiative)
 - Здоровье и безопасность (complementing to Health Theme)
 - Фабрики будущего (PPP- инициатива)
 - Европейские энергетически эффективные здания (PPP-инициатива)
 - Зеленые машины (PPP-инициатива)
- 



РП 2012. Финансовые схемы

- ❑ РП 2012 дает подробное описание тем, по которым приглашается подготовить проектные заявки. Описание включает техническое содержание, требования к заявителям, ожидаемые результаты и их последствия (Impact)

- ❑ **Финансовые схемы:**

- Совместные проекты (Collaborative projects):**

1. Small or medium scale focused research projects
2. Large scale integrating projects
3. SME-targeted collaborative projects
4. DEMO-targeted collaborative projects



Coordination and Support Actions

FP7-NMP-2012-6. Структура

Activity 4.1 Nanosciences and Nanotechnologies

12 topics

Activity 4.2 Materials

10 topics

Activity 4.3 New Production Technologies

2 topics

Activity 4.4 Integration including Raw materials

8 topics

Recovery Package : Public Private Partnerships

15 topics

Restructuring the RTD sub-areas (as in WP 2011)

NANOTECHNOLOGY

- 1.1 Maximising the contribution of Nanotechnology on sustainable development
- 1.2 Nanotechnology for benefiting environment, energy and health
- 1.3 Ensuring the safety of Nanotechnology
- 1.4 Cross-cutting and enabling R&D

ADVANCED MATERIALS

- 2.1 Enabling research and development
- 2.2 Innovative materials for advanced applications
- 2.3 Structuring actions

NEW PRODUCTION

Several objectives covered by PPP “Factories of the Future”
Remaining objectives reflected by NMP part
Emphasis on Raw Materials

INTEGRATION

RECOVERY PACKAGE: PUBLIC PRIVATE PARTNERSHIPS FoF, EeB, GC



Content of Calls

Activity 4.1 Nanosciences and Nanotechnologies

1.1 Maximising the contribution of Nanotechnology to sustainable development

1.1-1 Rational design of nano-catalysts for sustainable energy production based on fundamental understanding

SMALL

1.2 Nanotechnology for benefiting environment, energy and health

1.2-1 Nanotechnology solutions for in-situ soil and groundwater remediation

LARGE

1.2-2 Development and phase-I clinical trials of novel therapeutic nanotechnology-enabled systems for the diagnosis and treatment of atherosclerosis

LARGE

1.2-3 ERA-NET on Nanomedicine

CSA

Content of Calls

Activity 4.1 Nanosciences and Nanotechnologies

1.3 Ensuring the safety of Nanotechnology

1.3-1 Systematic investigations of the mechanisms and effects of engineered nanomaterial interactions with living systems and/or the Environment

LARGE

1.3-2 Modelling toxicity behaviour of engineered nanoparticles

SMALL

1.3-3 Regulatory testing of nanomaterials

LARGE

1.4 Cross-cutting and enabling R&D

1.4-1 Pilot lines for precision synthesis of nanomaterials

LARGE

1.4-2 Hierarchical assembly of nanoscale building blocks

SMALL

1.4-3 Nanoscale mechanical metrology for industrial processes and products

SME

1.4-4 Evaluation of EC communication and dialogue on research and innovation in nanotechnologies and design of future needs for the EU (industry and society)

CSA

1.4-5 Improving education in nanotechnologies to match the skill needs of EU industry and society

CSA



Content of Call

Activity 4.2 Materials

2.1 Enabling Research and Development

- 2.1-1 Joining dissimilar materials (excluding applications specific only to healthcare)
- 2.1-2 Fine chemicals from CO₂
- 2.1-3 Self-healing materials for prolonged lifetime

SMALL

SMALL

SMALL

2.2 Innovative materials for advanced applications

- 2.2-1 Biomaterials for improved performance of medical implants
- 2.2-2 Materials for data storage
- 2.2-3 Advanced materials for high-temperature power generation – SICA (Eastern partnership)
- 2.2-4 Cost-effective materials for larger blades for off-shore wind energy applications
- 2.2-5 Halogen-free flame retardant materials
- 2.2-6 Photocatalytic materials for depollution – SICA (ASEAN)

LARGE

SMALL

SMALL

SMALL

SME

SMALL

Content of Calls

Activity 4.2 Materials

2.3 Structuring actions

2.3-1 Networking of ETPs and main materials collective stakeholders in materials science and engineering

CSA



Content of Calls

Activity 4.3 New Production

3.0 -1 Highly efficient chemical syntheses using alternative energy forms

SMALL

3.0 -2 Total Safety Management for industrial organisations

SMALL



Other objectives of New Production are Implemented through the PPP- initiative “Factories of the Future”

Content of Calls

Activity 4.4 Integration

4.0-1 Novel materials and design-based solutions for the creative industry

4.0-2 Support for standardisation needs

4.0-3 Innovation in the forest-based sector for increasing resource efficiency and tackling climate change with competitive customer solutions - ERA-NET Plus

topic jointly implemented by Theme2, FAFB, and Theme 4, NMP

4.0-4 Organisation of events related to the Presidencies of the European Union (Ireland and Lithuania, 2013)

SME

CSA

CSA

CSA

Content of Calls

Activity II.4.1 Raw materials

4.1-1 New environmentally friendly approach in minerals processing

LARGE

4.1-2 Innovative recycling technologies of key metals in high-tech applications

SME

4.1-3 Development of advanced magnetic materials without (or with) reduced use of critical raw materials

CSA

Content of Calls

Recovery Package : Public Private Partnerships

5.1 "Factories of the Future" PPP (FoF) – Cross thematic Coordinated Call NMP & ICT

Topics covered by NMP

FoF.NMP.2012-1 Adaptive production systems and measurement and control equipment for optimal energy consumption and near-to-zero emissions in manufacturing processes

LARGE

FoF.NMP.2012-2 Methodologies and tools for the sustainable, predictive maintenance of production equipment

SME

FoF.NMP.2012-3 Intelligent production machines and 'plug-and-produce' devices for the adaptive system integration of automation equipment, robots and other intelligent machines, peripheral devices, smart sensors and industrial IT systems

SME

FoF.NMP.2012-4 High-performance manufacturing technologies in terms of efficiency (volumes, speed, process capability etc), robustness and accuracy

DEMO

FoF.NMP.2012-5 High precision production technologies for high quality 3D micro-parts

SMALL

FoF.NMP.2012-6 Knowledge based tools and approaches for process planning and integrated process simulation at factory level

SMALL

FoF.NMP.2012-7 New technologies for casting, material removing and forming processes

DEMO

Content of Calls

Recovery Package : Public Private Partnerships

5.2 "Energy-efficient Buildings (EeB)" PPP – Cross thematic coordinated call NMP, ICT, Energy, Environment

Topics covered by NMP

EeB.NMP.2012-1 Interaction and integration between buildings, grids, heating and cooling networks, and energy storage and energy generation systems

LARGE

EeB.NMP.2012-2 Systemic Approach for retrofitting existing buildings, including envelope upgrading, high performance lighting systems, energy efficient HVAC systems and renewable energy generation systems

LARGE

EeB.NMP.2012-3 Development and validation of new 'processes and business models' for the next generation of performance based energy-efficient buildings integrating new services

SME

EeB.NMP.2012-4 Nanotechnology based approaches to increase the performance of HVAC systems

SMALL

EeB.NMP.2012-5 Novel materials for Smart Windows, conceived as affordable multifunctional systems offering enhanced energy control

SMALL

EeB.NMP.2012-6 Methodologies for Knowledge transfer within the value chain and particularly to SMEs

CSA

Content of Calls

Recovery Package : Public Private Partnerships

5.3 "Green Cars (GC)" – PPP – Cross-thematic coordinated call NMP, Transport, ICT, Energy, Environment

Topic implemented via a Joint Call of NMP, Transport & Environment

GC.NMP.2012-1 Innovative automotive electrochemical storage applications based on nanotechnology

GC.NMP.2012-2 Innovative advanced light-weight materials and for the next generation of environmentally-friendly electric vehicles

SMALL

LARGE

Implementation of the Calls – Tentative data

LARGE, SMALL and SME 2012

- ❑ Date of Publication : 20 July 2011
- ❑ Deadlines : 1st stage 8 November 2011 – 2nd stage 26 April 2012
- ❑ Indicative budgets : 110 million € for LARGE
124 million € for SMALL
48 million € for SME

Implementation of the Calls – Tentative data

CSA 2012

- ❑ Date of Publication : 20 July 2011
- ❑ Deadline : 7 February 2012
- ❑ Indicative budget : 10.5 million €

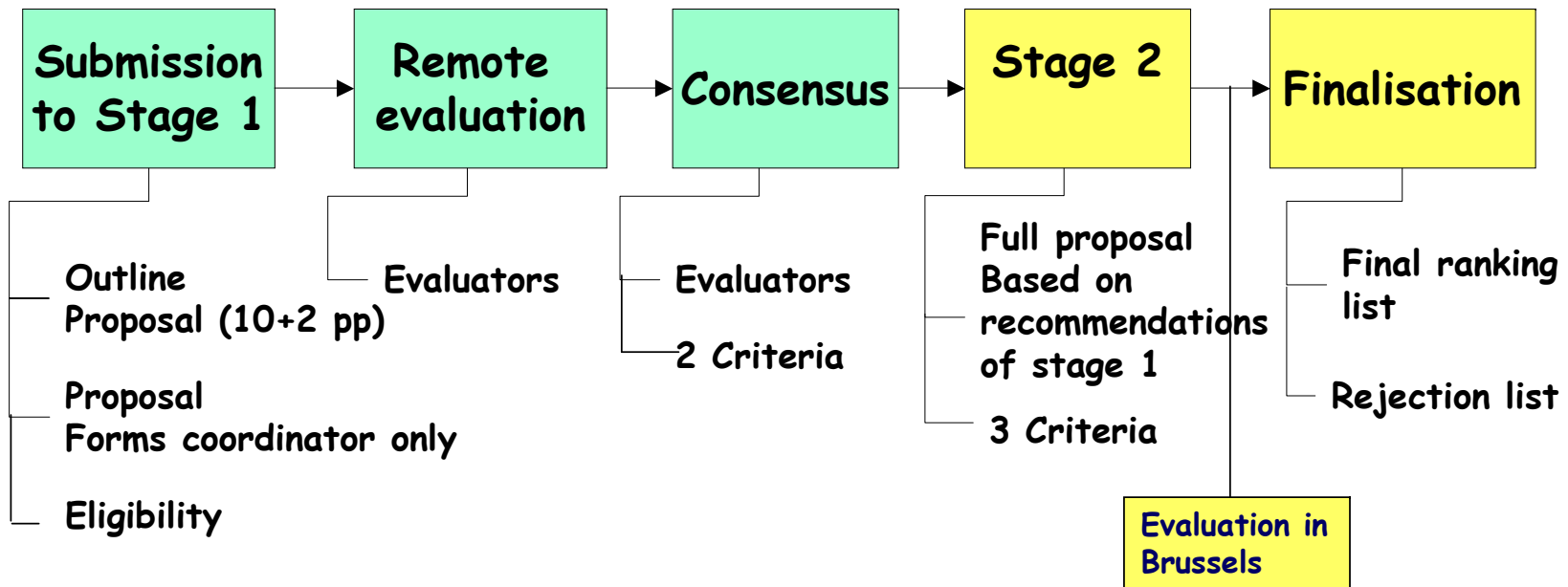
ERA-NET

- ❑ Date of Publication : 20 July 2011
- ❑ Deadline : February 2012
- ❑ Indicative budget : 6 million € from NMP

FoF, EeB, GC

- ❑ Date of Publication : 20 July 2011
- ❑ Deadline : 1 December 2011
- ❑ Indicative budgets :
 - FoF: 100 million € for NMP topics
 - EeB: 70 million € for NMP topics
 - GC: 35 million €, of which 20 million € from NMP

Reminder of the Evaluation Process



Критерии оценки проектных заявок

- S/T Quality** (Scientific and/or technological excellence (relevant to the topics addressed by the call))
- Implementation** (“Quality and efficiency of the implementation and the management”)
- Impact** (“Potential impact through the development, dissemination and use of project results”)

Для FP7-NMP проектных заявок:

На этапе 1

S/T quality: 4/5

Impact : 3/5

Overall Threshold: **8/10**

На этапе 2

S/T quality: 4/5

Implementation: 3/5

Impact : 3/5

Overall threshold required: **12/15**

Что делать?

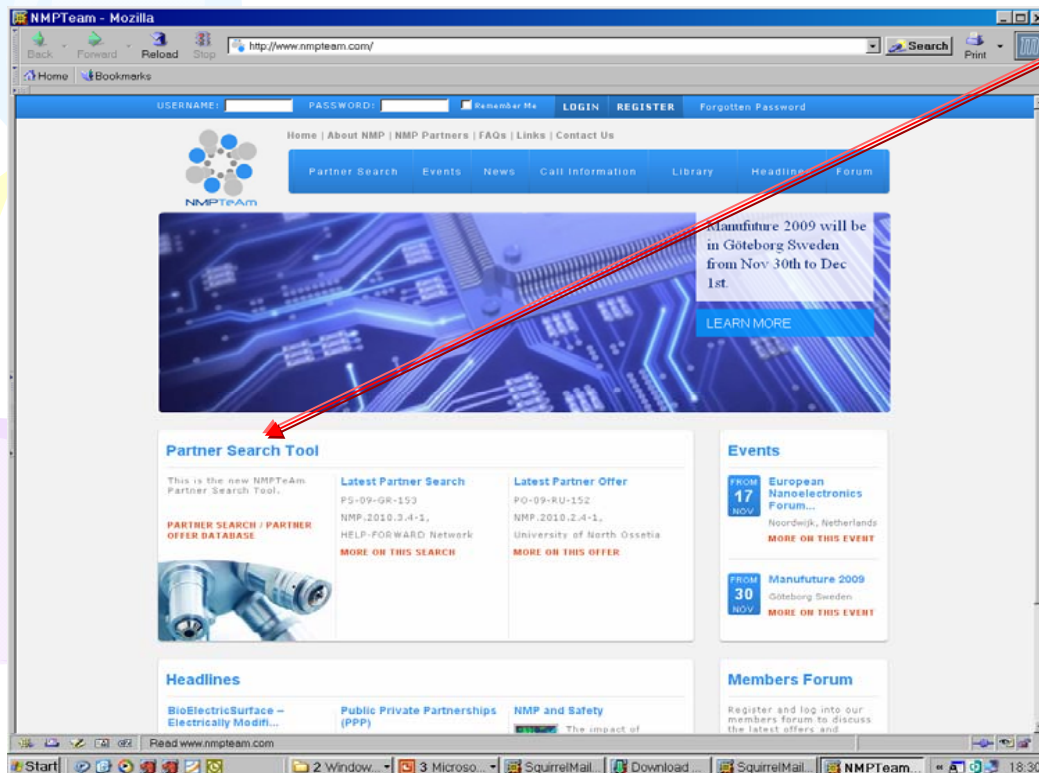
The logo for NCP NANOTECH features the text 'NCP NANOTECH' in a bold, yellow, sans-serif font with a black outline. This text is positioned on the left side of a horizontal rectangular area. The background of this area is a green grid pattern. To the right of the text, there is a faint, stylized graphic of a network or molecular structure in a light green color. The entire logo is set against a background that includes a large, light green balloon with yellow streamers and rays of light in the upper left corner.

NCP NANOTECH

- Использовать активнее возможности Национальной контактной точки по тематическому направлению и российской сети НКТ
- Активно и своевременно реагировать на запросы по поиску партнеров от европейских НКТ , поступающие в Российскую НКТ по различным каналам
- Обеспечивать быструю обратную связь
- Создать свой профиль для распространения его по каналам российской НКТ в Европе

Проект NMP TeAm (Improving the services of the NMP NCP Network through trans-National Activities)

- Старт 1 апреля 2009
- 15 основных партнеров в консорциуме – все НКТ (Греция, Италия, Мальта, Ирландия, Румыния, Великобритания, Германия, Болгария, Турция, Чехия, Венгрия, Эстония, Польша, Португалия, Россия)
- Цель – совершенствование служб сети НКТ по направлению FP7-NMP , чтобы добиться более активного участия организаций в рамочных программах



Partner search tool



<http://www.nmpteam.com>



Registration to the Conference is free of charge.

Deadlines:

Starting date:
25.06.2011

Closing date:
20.08.2011

<http://www.fumat2011.eu>



Friday, 23 September 2011

09:00-13:00

**Matchmaking event for FP7 NMP 2012
topics related to materials with project idea
presentations and bilateral meetings**



Полезная информация

FP7 calls

ec.europa.eu/research/participants/portal/page/fp7_calls

NMP find a partner www.nmp-partnersearch.eu/



Industrial technologies

ec.europa.eu/research/industrial_technologies

Innovation Union

ec.europa.eu/research/innovation-union



Green paper on Research and Innovation

ec.europa.eu/research/csfri/



Вопросы ??

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