

HORIZON 2020 WORK PROGRAMME 2016 – 2017 SOCIETAL CHALLENGES 3 & 5 ENERGY & ENVIRONMENT

INFORMATION DAY

26/11/2015, Astana

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HUNGARY



Horizon 2020
The EU Framework
Programme for Research and Innovation

Societal Challenges in H2020; a challenge-based approach

Funding will focus on the following challenges:

- 1. Health, demographic change and wellbeing;**
2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy;
- 3. Secure, clean and efficient energy;**
4. Smart, green and integrated transport;
- 5. Climate action, environment, resource efficiency and raw materials;**
6. Europe in a changing world - inclusive, innovative and reflective societies;
7. Secure societies - protecting freedom and security of Europe and its citizens.

Work programme 2016 – 2017 (I)

- Future and Emerging Technologies (FETs)
- Marie Skłodowska-Curie actions (MSCA)
- Research infrastructures (including e-Infrastructures)
- Leadership in enabling and industrial technologies (LEITs)
 - Information and communication technologies (ICT)
 - Nanotechnologies, advanced materials, advanced manufacturing and processing,
 - Space

Work programme 2016 – 2017 (II)

- Access to risk finance
- Innovation in SMEs
- Health, demographic change and wellbeing
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy
- **Secure, clean and efficient energy (SC3)**

Work programme 2016 – 2017 (III)

- Smart, green and integrated transport
- **Climate action, environment, resource efficiency and raw materials (SC5)**
- Europe in a changing world - inclusive, innovative and reflective societies
- Secure societies - protecting freedom and security of Europe and its citizens
- Spreading excellence and widening participation

Work programme 2016 – 2017 (IV)

- Science with and for society
- Cross-cutting activities (Focus Areas)
- Fast Track to Innovation Pilot
- ERC
- EURATOM

Horizon 2020 – SC3

Introduction to WP 2016 - 2017

International cooperation with strategic partner countries and global technology leaders will support European energy and climate objectives and contribute to the global efforts to mitigate climate change and reduce CO₂ emissions. In line with the EU's strategy for international cooperation in research and innovation, all activities are open for third country participants; in addition, certain partner countries are also specifically targeted in a number of topics (Brazil, Mexico, South Korea, China, Australia, North America).

Structure of the Work Programme – SC3

Call – Energy Efficiency - H2020-SC3-EE-2016-2017

Major thematic areas:

1. Heating and cooling (5 topics)
2. Engaging consumers towards energy efficiency (4 topics)
3. Buildings (5 topics)
4. Industry, products and services (7 topics)
5. Innovative financing for energy efficiency investments (4 topics)

Structure of the Work Programme – SC3

Call – Competitive Low-Carbon Energy - H2020-SC3-LCE-2016-2017

Major thematic areas:

1. Towards an integrated EU energy system (5 topics)
2. Renewable energy technologies (18 topics)
 - Developing the next generation of renewable energy technologies
 - Demonstrating innovative renewable energy technologies
 - Supporting the market uptake of renewable energy technologies
 - Fostering international cooperation in the area of renewable energy
3. Decarbonisation of the use of fossil fuels (7 topics)
4. Social, economic and human aspects of the energy system (2 topics)
5. Supporting the development of a ERA in the field of energy (3 topics)
6. Cross-cutting issues (1 topic)

Topics where the international collaboration is encouraged

Developing the next generation of renewable energy technologies

LCE-6-2017: New knowledge and technologies

Wind energy

International cooperation with leading groups outside Europe is encouraged.

Type of Action: Research and Innovation action

Horizon 2020 – SC5

Introduction to WP 2016 - 2017

Given the transnational, global nature of climate change and the environment, and their scale and complexity, as well as of the raw materials supply chain, activities cover both EU level and beyond, thus contributing to the Commission's priority 'A Stronger Global Actor'.

International co-operation aims to boost the effectiveness of the actions promoted, within a scale-and-scope approach.

Structure of the Work Programme – SC5

Call – Greening the economy - H2020-SC5-2016-2017

Major thematic areas:

1. Climate services (5 topics)
2. Towards a low-carbon Europe (2 topics)
3. Nature-based solutions for territorial resilience (3 topics)
4. Water (2 topics)
5. Raw materials (5 topics)
6. Earth observations (3 topics)
7. Cultural heritage for sustainable growth (2 topics)
8. Support to policy and preparing for innovation procurement (7 topics)

Topics where the international collaboration is encouraged

Climate services

SC5-02-2017: Integrated European regional modelling and climate prediction system

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation is encouraged, in particular with countries having developed similar systems and with countries wishing to develop capacities.

Type of Action: Research and Innovation action

SC5-05-2016: A 1.5 million year look into the past for improving climate predictions

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation is encouraged.

Type of Action: Coordination and support action

Topics where the international collaboration is encouraged

Towards a low-carbon Europe

SC5-06-2016-2017: Pathways towards the decarbonisation and resilience of the European economy in the timeframe 2030-2050 and beyond

b) Assessment of the global mitigation efforts in the perspective of the long-term climate goal (2016)

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation is encouraged, in particular with countries that substantially contribute to global greenhouse gas emissions. Proposals should include partners from (non-European) high-, middle- and/or low-income countries.

Type of Action: Research and Innovation action

Topics where the international collaboration is encouraged

Nature-based solutions for territorial resilience

SC5-08-2017: Large-scale demonstrators on nature-based solutions for hydro-meteorological risk reduction

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), cooperation and synergies with similar international demonstration activities on nature-based solutions for hydro-meteorological risk reduction and climate change adaptation, funded under different financial arrangements or programmes, is encouraged to facilitate mutual learning, sharing of experience, networking and follow-up.

Type of Action: Innovation action

Topics where the international collaboration is encouraged

Water

SC5-11-2016: Supporting international cooperation activities on water

The challenge is to further enhance the opening of the Water JPI to international cooperation and thus contribute to creating a coherent European Research Area that is open to international cooperation in the area of water – a global research and innovation challenge *par excellence*.

Type of Action: Coordination and support action

Topics where the international collaboration is encouraged

Raw materials

SC5-13-2016-2017: New solutions for sustainable production of raw materials

In line with the EU's strategy for international co-operation in research and innovation (COM(2012)497) international co-operation is encouraged.

Proposals shall address **only one** of the following issues:

- a) Sustainable selective low impact mining (2016):**
- b) New technologies for the enhanced recovery of by-products (2016)**
- c) New sensitive exploration technologies (2017)**

Type of Action: Research and Innovation action

Topics where the international collaboration is encouraged

Raw materials

SC5-14-2016-2017: Raw materials Innovation actions

In line with the EU's strategy for international co-operation in research and innovation (COM(2012)497) international cooperation is encouraged.

Proposals shall address **only one** of the following issues:

- a) Intelligent mining on land (2016)**
- b) Processing of lower grade and/or complex primary and/or secondary raw materials in the most sustainable ways (2017)**
- c) Sustainable metallurgical processes (2017)**

Type of Action: Innovation action

Topics where the international collaboration is encouraged

Raw materials

SC5-16-2016-2017: Raw materials international co-operation

b) Advancing the idea of a World Forum on Raw Materials (2016)

In line with the strategy for EU international co-operation in research and innovation (COM(2012)497), international co-operation is required, in particular with G20 Member countries as well as the other third countries active in the mining and other raw materials sectors, and international organisations.

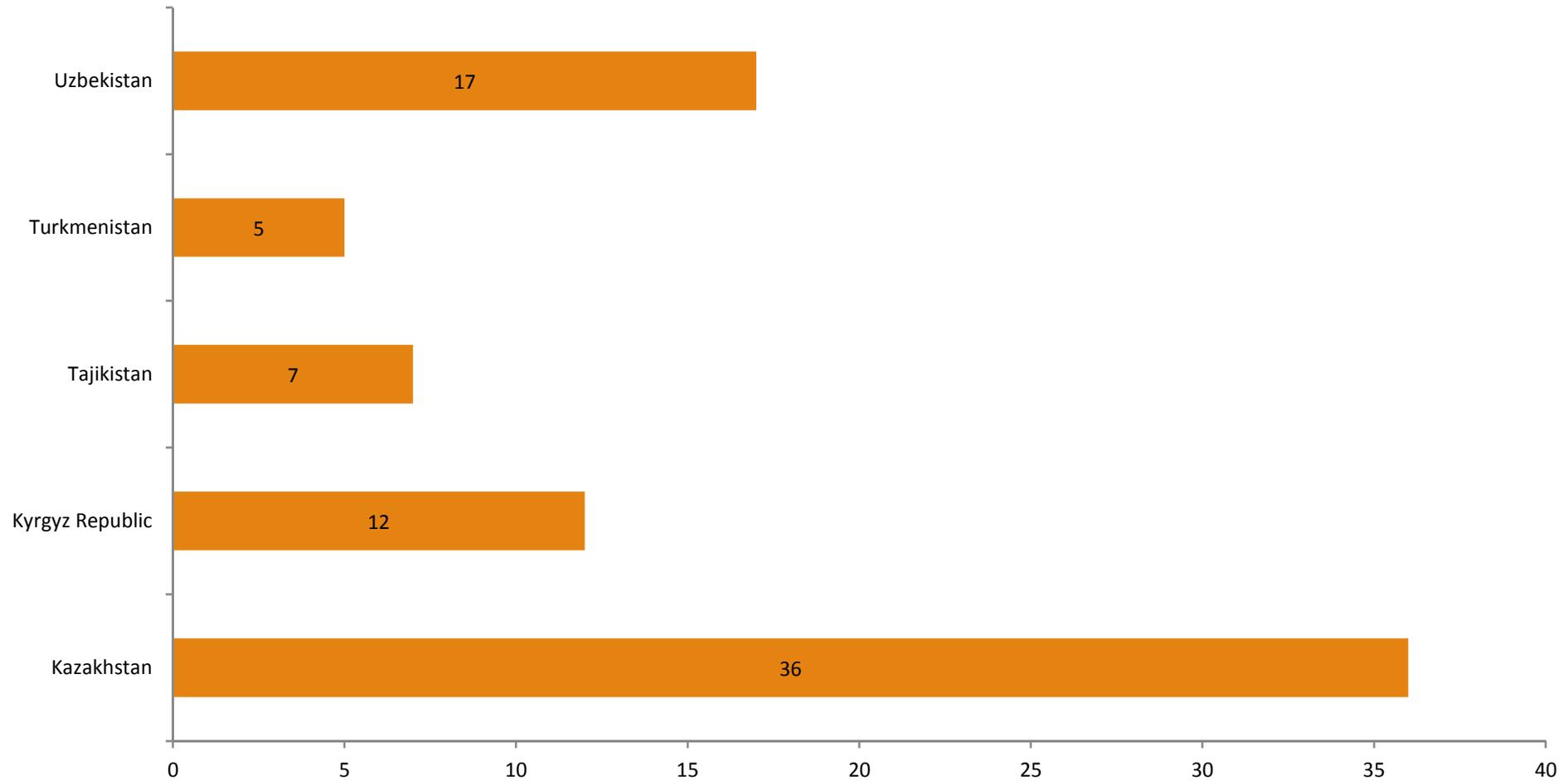
Type of Action: Coordination and support action

c) International network of raw materials training centres (2017)

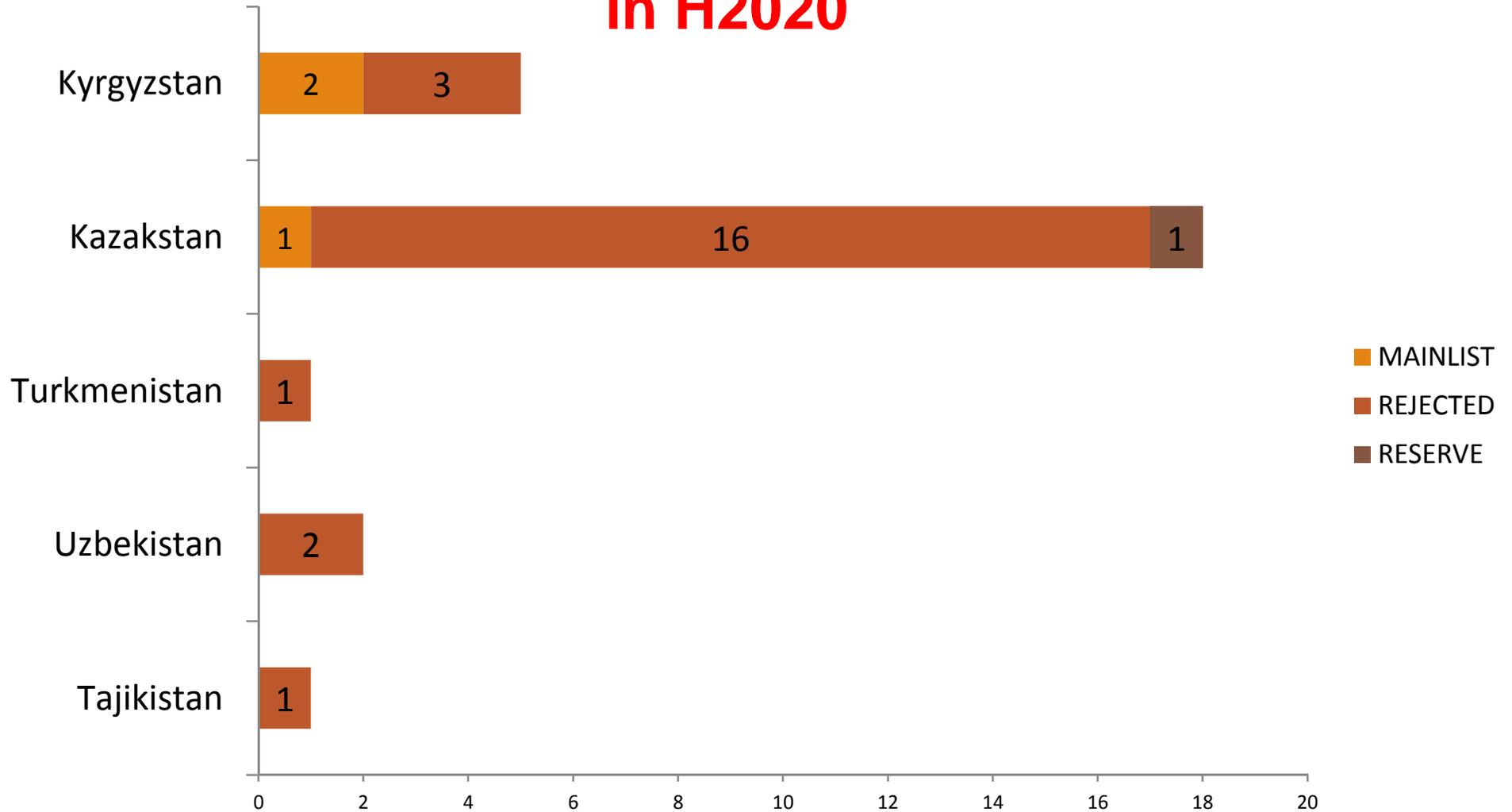
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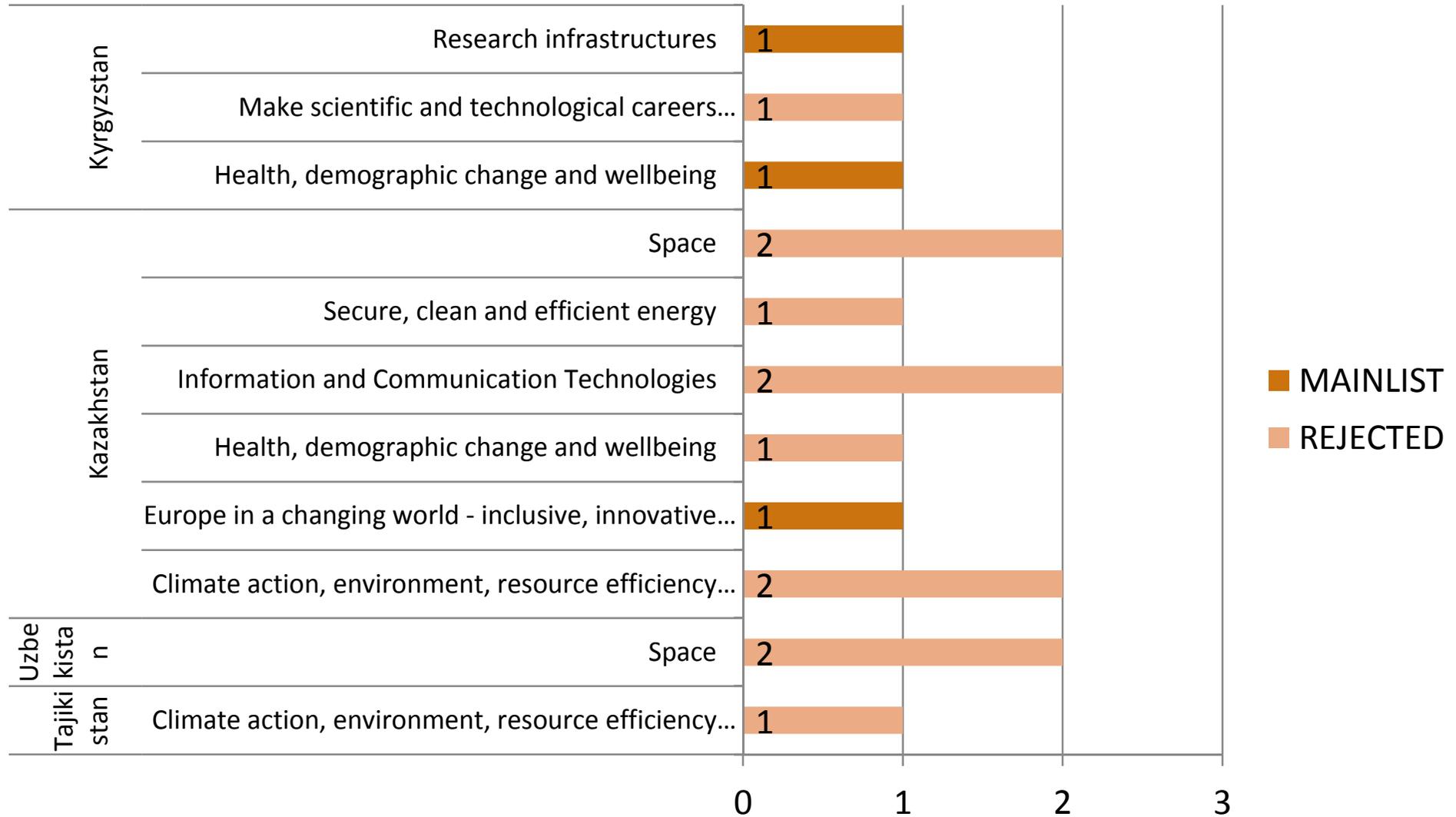
Number of participants in FP7



Number of central-asian participants in H2020

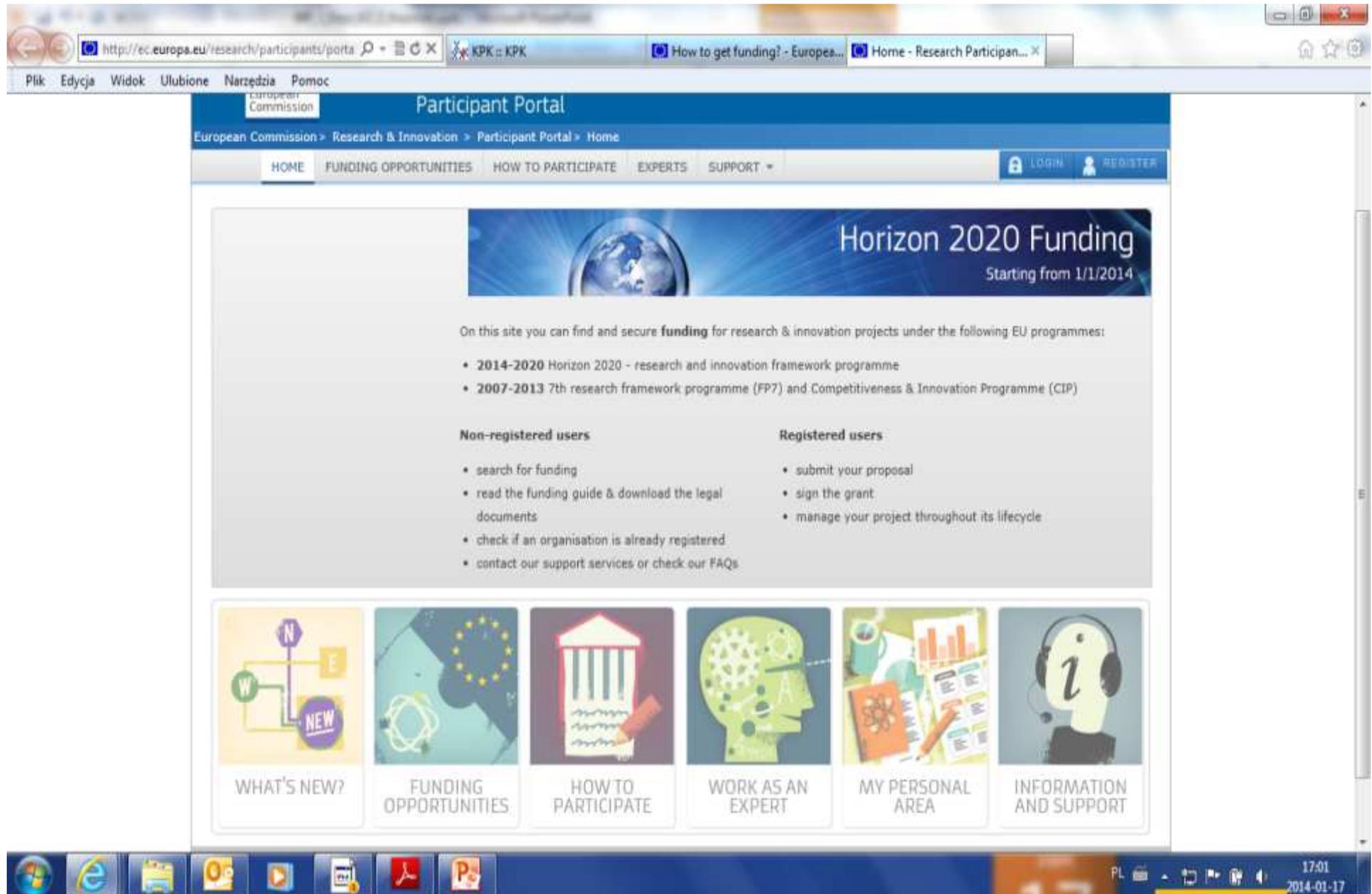


Number of central-asian participants in H2020 according to thematic objectives



Number of central-asian participants in H2020 in different action types





The screenshot shows a web browser window displaying the 'Participant Portal' website. The browser's address bar shows the URL 'http://ec.europa.eu/research/participants/porta'. The website header includes the European Commission logo and the text 'Participant Portal'. Below the header is a navigation menu with links for 'HOME', 'FUNDING OPPORTUNITIES', 'HOW TO PARTICIPATE', 'EXPERTS', and 'SUPPORT'. There are also 'LOGIN' and 'REGISTER' buttons. The main content area features a banner for 'Horizon 2020 Funding' starting from 1/1/2014. Below the banner, there is a section titled 'On this site you can find and secure funding for research & innovation projects under the following EU programmes:' followed by a list of programmes: '2014-2020 Horizon 2020 - research and innovation framework programme' and '2007-2013 7th research framework programme (FP7) and Competitiveness & Innovation Programme (CIP)'. There are two columns of user-related information: 'Non-registered users' and 'Registered users'. The 'Non-registered users' column lists: 'search for funding', 'read the funding guide & download the legal documents', 'check if an organisation is already registered', and 'contact our support services or check our FAQs'. The 'Registered users' column lists: 'submit your proposal', 'sign the grant', and 'manage your project throughout its lifecycle'. At the bottom of the page, there is a row of six icons representing different sections: 'WHAT'S NEW?', 'FUNDING OPPORTUNITIES', 'HOW TO PARTICIPATE', 'WORK AS AN EXPERT', 'MY PERSONAL AREA', and 'INFORMATION AND SUPPORT'. The Windows taskbar at the bottom shows the time as 17:01 on 2014-01-17.

Participant Portal

European Commission > Research & Innovation > Participant Portal > Home

HOME FUNDING OPPORTUNITIES HOW TO PARTICIPATE EXPERTS SUPPORT

LOGIN REGISTER

Horizon 2020 Funding

Starting from 1/1/2014

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WHAT'S NEW? FUNDING OPPORTUNITIES HOW TO PARTICIPATE WORK AS AN EXPERT MY PERSONAL AREA INFORMATION AND SUPPORT

THANK YOU FOR YOUR ATTENTION

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