



MOSCOW  
AGENCY OF  
INNOVATIONS



DEPARTMENT OF SCIENCE,  
INDUSTRIAL POLICY  
AND ENTREPRENEURSHIP  
OF MOSCOW



MOSCOW  
OPEN  
CHALLENGE

# International Open Challenges

# Target audiences

**Goal** To find and pilot-test best available solutions to address Moscow's needs; to provide tech companies with access to government customers

**Target audiences:**

Customers:

Developers:



Moscow Government



Moscow-based state corporations and companies with state participation



Tech companies

**Drivers:** The need to upgrade the city's infrastructure; compliance (innovative products must account for at least 5% of Moscow's public procurement contracts)

Greater revenues due to the optimization of processes and the adoption of innovations

The acquisition of new customers; the establishment of long-term relationships with Moscow government departments and large companies

# Open Challenges

OPEN CHALLENGE

## Stage 1. Initiation



Research on relevant urban issues;  
challenge definition



## Stage 2. Search



Scouting for solutions, collecting  
submissions, communicating with  
entrants, and building databases



## Stage 3. Expert assessment



1st round: online assessment of all  
entries and identification of finalists



2nd round: in-depth evaluation of  
finalists and selection of winners



Winner  
announcement



## Stage 4. Finalization



Challenge Initiator receives:  
-a complete database of submissions  
-an accompanying research report on  
relevant solutions and international  
practices pertaining to the challenge

PILOTING

## Stage 1. Pre-project activities



Testing site and timeline



## Stage 2. Testing



Evaluation methodology and criteria



Agreement



Testing



## Stage 3. Evaluation



Project evaluation and  
findings report



Gradual scaling up in Moscow

# Results

2014-2017

**37** challenges completed :

**859** companies

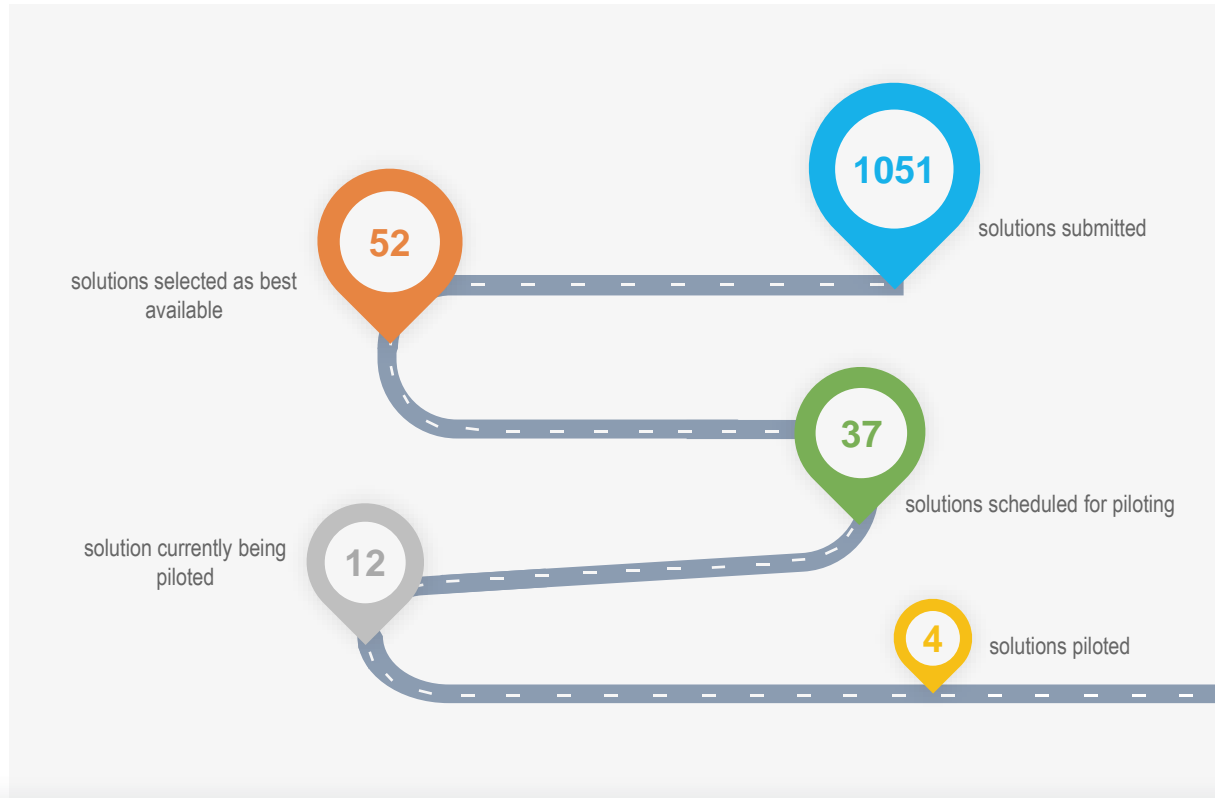


## Plans 2017-2018

**1** Running the International Open Challenges competition

**2** Expanding the pool of partners:  
-strategic partners  
-information partners  
-finance partners

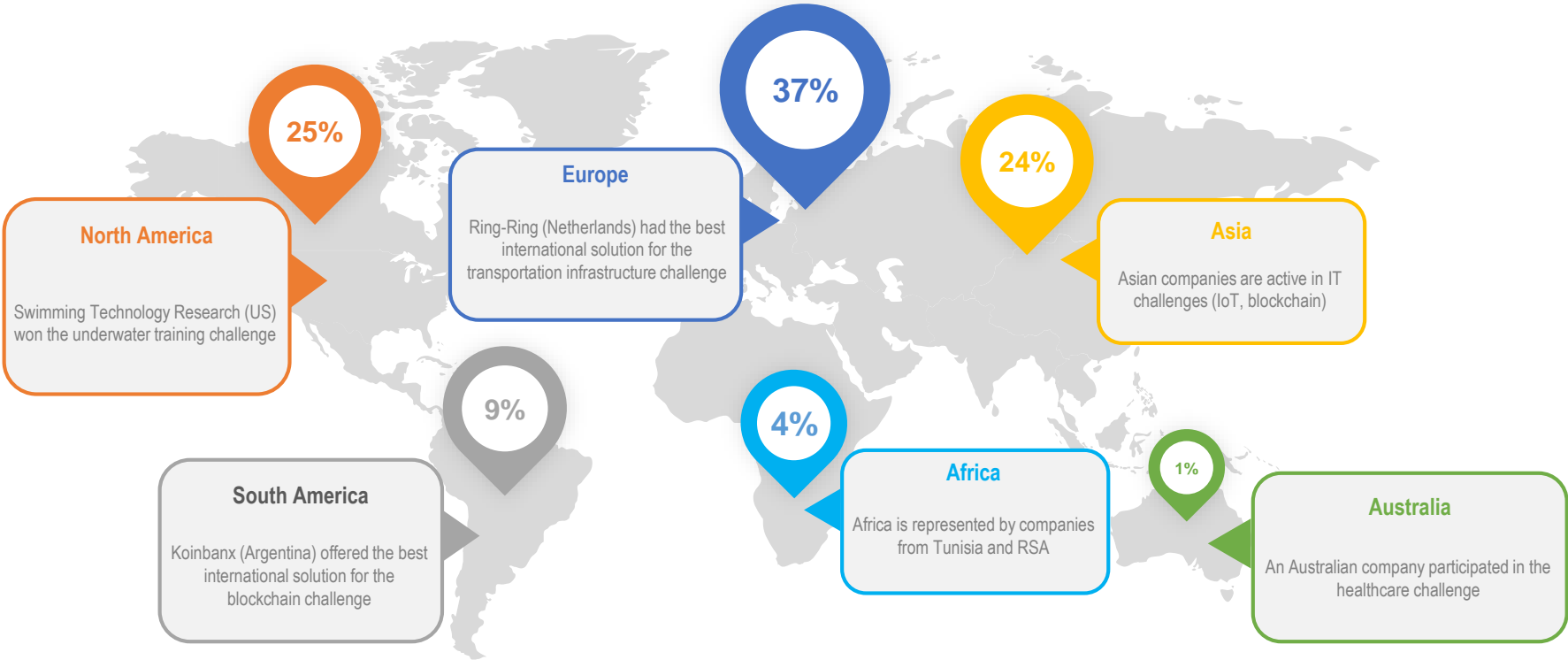
**3** Strengthening the program:  
-information support



# International entrants

324  
international entrants

535  
Russian entrants



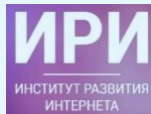
# Partners

## Strategic

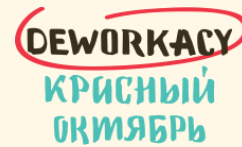


Rijksdienst voor Ondernemend  
Nederland

## Finance



## Infrastructure



## Information



# Open Challenges in progress



## Pharmacy education

16.12.16 – 12.09.2017

Initiated by the Moscow Sechenov University

Stage - entry submission



## Overhead power lines

22.12.16 – 25.09.2017

Initiated by FGC UES  
Stage - entry submission



## Green construction

23.06.17 – 15.09.2017

Initiated by the State Conservation Center

Stage - entry submission



## Pedestrian areas and bikeways

23.03.17 – 29.09.2017

Initiated by the Traffic Management Center

Stage - entry submission



## Augmented reality

21.06.17 – 30.11.2017

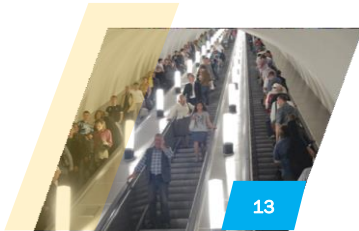
Initiated by Gorky Park

Stage - entry submission

1

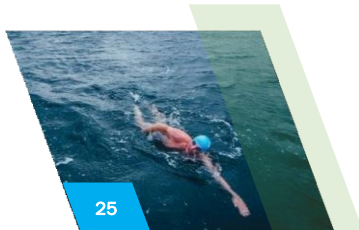
# Completed challenges

(2014 – 2017)



## Metro air quality

04.12.14 – 24.02.2015  
Initiated by the Moscow Metro  
Stage - piloting



## Swimmer monitoring

13.04.15 – 08.02.2016  
Initiated by the Sports Tech Center  
Stage - piloting



## Firefighter safety

29.09.15 – 20.03.2017  
Initiated by the Fire and Rescue Center  
Stage - piloting



## Water safety

29.09.15 – 14.03.2017  
Initiated by the Moscow Search and Rescue Service  
Stage - entry evaluation



## Wheelchair lifts

28.12.15 – 31.03.17  
Initiated by Rehabilitation and Education Center #7  
Stage - entry evaluation



## Road surface coatings

25.12.15 – 31.03.17  
Initiated by Rehabilitation and Education Center #7  
Stage - entry evaluation



## Children with special needs

25.12.15 – 10.04.17  
Initiated by Rehabilitation and Education Center #7  
Stage - entry evaluation



# Completed challenges

(2014 – 2017)



52

## Health monitoring

01.06.16 – 20.09.2016

Initiated by PTO

Stage - piloting



58

## Internet of things

01.06.16 – 20.09.2016

Initiated by Rostelecom

Stage - piloting



71

## Energy

01.06.16 – 20.09.2016

Initiated by FGC UES

Stage - piloting



64

## Environmental services

01.06.16 – 20.09.2016

Initiated by the Dept. of Environment Management

Stage - piloting



45

## Disease prevention

01.06.16 – 20.09.2016

Initiated by the Healthcare Dept.

Stage - piloting



48

## Additive technologies

01.06.16 – 20.09.2016

Initiated by Rostech

Stage - piloting



33

## Blockchain

01.06.16 – 20.09.2016

Initiated by Sberbank Technologies

Stage - piloting

# Completed challenges

(2014 – 2017)



57

## Construction technologies

30.06.16 – 20.09.2016

Initiated by the Dept. of Urban Planning

Stage - piloting



23

## Elevators

30.06.16 – 20.09.2016

Initiated by the Dept. of Public Utilities

Stage - piloting



44

## Transportation

30.06.16 – 20.09.2016

Initiated by the Dept. of Transport

Stage - piloting



10

## Infusion drips

31.03.16 – 28.02.2017

Initiated by the Moscow Sechenov University

Stage - piloting



32

## Doctor-patient interaction

31.03.16 – 28.02.2017

Initiated by the Moscow Sechenov University

Stage - piloting



24

## Green certificates

16.12.16 – 31.05.2017

Initiated by Mosecomonitoring

Stage - piloting



13

## Navigation





31.03.17 – 05.06.2017

Initiated by Gorky Park













Stage - piloting

# Pilot testing progress









## Completed tests- 4






























-  Air crosswalk
-  IPRO2 glucose monitoring system, MMT-7745
-  Inter-bank information sharing system on scam artists
-  SUREFUSER+ hospital infusion system

## Tests in progress - 12

-  Heterophasic powder laser metallurgy
-  Zinoferr, an anticorrosive zinc silicate coating
-  Samocat Sharing System
-  Stay Clean, an anti-vandal hydrophobic protective coating Stay Clean
-  ECOGLO-RUS, photoluminescent anti-slip pads
-  Gradi-Standard, a stair-climbing wheelchair
-  EIBraille, a computer for the visually impaired
-  A mini projector for children with mobility impairments
-  An insulin pump with continuous glucose monitoring function
-  AquaChranitel, a water safety monitoring system
-  A comprehensive life safety solution
-  NaviGuide ,a personalized navigation system (demo test)

## Scheduled for testing - 37

-  Mobile physical monitoring kit
-  DOMOFLEX lifting platforms
-  FlexStep
-  Color coating
-  Advanced technologies and strategies for achieving the perfect swimming technique
-  Improving the quality of physical fitness tests for professional athletes
-  Smart detection of parking violations
-  LiteTech

-  Strelets-PRO, a rapid deployment solution
-  Zen, a location tracking and health monitoring system for rescuers
-  Passenger safety enforcement solutions
-  Shock absorbers
-  Aerolife, an air cleaning system
-  Potok, a disinfection system
-  Medsenger
-  Unimonex
-  Gamma-Multivox
-  InTouch Health
-  Automated blood pressure measurement
-  Remote telemetry of patients with pacemakers
-  Automated intensive care records management
-  Doctor/patient remote communications
-  ONDOC, a telemedicine solution
-  SN-1500H infusion pump
-  CavaMentor, an optical intravenous infusion control system
-  Virtual street promoter
-  In-park navigation systems
-  Interactive skating rink
-  Express blood tests to determine brain damage
-  Devices for public utility service providers
-  Industrial equipment monitoring system
-  Heat leakage 3D-mapping solution
-  Medtaophone
-  Medtera Patronage
-  Health monitor
-  E-nurse
-  Healbe GoBe

# International pilot-testing practices

**COUNTRY, CITY:** Spain, Barcelona

**TECHNOLOGY:** smart waste management

**ADDRESSED PROBLEM:** online monitoring of the fill level of the waste container. It is expected that the solution will save the government of Barcelona \$4 billion in the next 10 years.

**PILOTING TIMELINE:** in 2016, the solution was successfully implemented in the infrastructure of Barcelona.

**INITIATED BY:** the government of Barcelona together with the Barcelona Urban Lab. The Barcelona Urban Lab is a tool that facilitates the use of public spaces to test products and ideas that can help address the city's problems.

**FUNDRAISING MODEL:** the pilot project is completely financed by the company behind the product.

**COUNTRY, CITY:** Canada, Ottawa

**TECHNOLOGY:** Key2Access

**ADDRESSED PROBLEM:** Most conventional traffic systems have push buttons for pedestrians to cue a change in the traffic lights, however locating these buttons can be a serious challenge for pedestrians with sight and mobility impairments. Key2Access has developed a special handheld device, which the user must only point in the desired direction to activate the crossing signal.

**PILOTING TIMELINE:** June 2016

**INITIATED BY:** the government of Ottawa

**FUNDRAISING MODEL:** financed by Key2Access. Additional testing scheduled in Montreal.

