

# CINI

# Consorzio Interuniversitario Nazionale per l'Informatica

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# CINI

# Italian National Inter-University Consortium for Informatics

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# Outline

- **The Consortium**
- **Assets**
- **Budget**



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- **A Consortium of 44 Italian Universities that**
  - do research in CS/CE
  - deliver MS/PhD degrees
  - are public funded



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  - do research in CS/CE
  - deliver MS/PhD degrees
  - are public funded
- **CINI involves 1,300+ professors of CS or CE**





# **CINI**

## **Mission**

- **Providing added value to:**
  - **the member Universities**
  - **the Italian production system**
  - **the Italian Public Administration**
  - **the overall country**

**being the representative of the almost whole  
Italian Academic Informatics Community**

# Outline

- The Consortium
- **Assets**
- Budget





- **Highest research quality at the country level**

# *CINI*

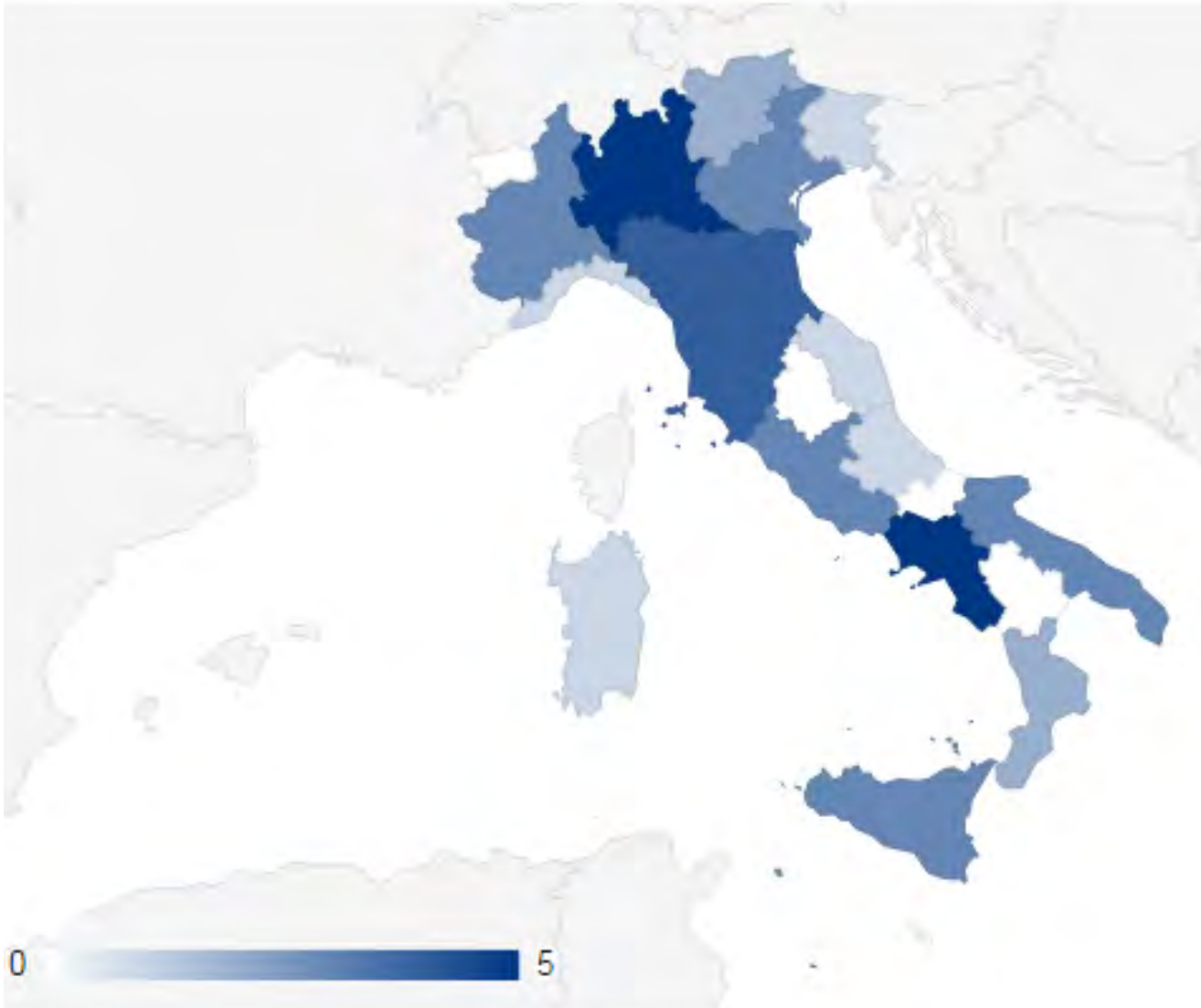
## *Assets*

- Highest research quality at the country level
- **Critical mass to get the target**

# CINI

## Assets

- Highest research quality at the country level
- Critical mass to get the target
- **Geographical distribution, spanning the overall country**



### Numerosità per Regione:

- 44 Università consorziate
- 44 Unità di Ricerca
- 5 Sedi CINI fisiche (registrate in CCIAA)

### Non coperte:

- Basilicata
- Molise
- Umbria

# *CINI* *Assets*

- Highest research quality at the country level
- Critical mass to get the target
- Geographical distribution, spanning the overall country
- **Thematic R&D Labs**

- The Consortium owns 8 **Thematic R&D Labs** on
  - **AsTech: Assistive Technologies**
  - **Big Data**
  - **Embedded Systems & Smart Manufacturing**
  - **Infolife: Formal Methods and Algorithmics for Life Sciences**
  - **Informatica e Società**
  - **CFC: ICT Skills, Training, and Certification**
  - **Cyber Security**
  - **Smart Cities and Communities**



# CINI Thematic R&D Labs

## Big Data National Lab

**Mission**  
The CINI Big Data Lab is an Italian expertise centre for the development of knowledge and technologies in the fields of Big Data and Data Science. The establishment of the Laboratory meets the following requirements of the national scientific community:

- to ensure a critical mass to complement the research efforts and to avoid the duplication of innovative strategies; possible synergies and complementarities on common needs; actions based on common research strategies;
- to leverage educational initiatives in Big Data in order to improve the quality of the national workforce.

**Organization**  
The Lab is institutionalized in 33 nodes distributed over the country. In a total of 200 permanent researchers/professors/visiting scientists, who belong to the CINI laboratories, who belong to the CINI laboratories.

**Nodes:**  
The list of the 33 nodes of the Big Data Lab is the following:

- Università degli Studi di Bologna
- Università degli Studi di Bari
- Università degli Studi di Bergamo
- Università degli Studi di Brescia
- Università degli Studi di Cagliari
- Università degli Studi di Catania
- Università degli Studi di Ferrara
- Università degli Studi di Firenze
- Università degli Studi di Genova
- Università degli Studi di Insubria
- Università degli Studi di Milano
- Università degli Studi di Napoli
- Università degli Studi di Padova
- Università degli Studi di Pisa
- Università degli Studi di Roma Tor Vergata
- Università degli Studi di Salerno
- Università degli Studi di Siena
- Università degli Studi di Torino
- Università degli Studi di Trieste
- Università degli Studi di Udine
- Università degli Studi di Urbino
- Università degli Studi di Venezia
- Università degli Studi di Verona
- Università degli Studi di Trieste
- Università degli Studi di Udine
- Università degli Studi di Urbino
- Università degli Studi di Venezia
- Università degli Studi di Verona

## CFC CINI NATIONAL LABORATORY

**Motivation**  
Digital competences are at the core of any activity in almost all careers and future sectors of the economy. Citizens, not only students, with a wide range of digital skills and competences are required. The Laboratory provides a coordinated and integrated set of activities to support the development of digital competences.

**Mission**  
Tracking international and national activities on the research for classifying digital competences. Defining a national system of formal and informal learning, secondary courses of learning EU standards on digital competences. Developing on-line, self-paced learning systems that support the acquisition of digital competences. Collaborating with other institutions (universities, research centers, etc.) to develop and disseminate digital competences.

**Organization**  
The core group of the lab consists of researchers in various disciplines:

- Università degli Studi del Lazio
- Università degli Studi di Aquila
- Università degli Studi di Bari
- Università degli Studi di Bologna
- Università degli Studi di Brescia
- Università degli Studi di Cagliari
- Università degli Studi di Catania
- Università degli Studi di Ferrara
- Università degli Studi di Firenze
- Università degli Studi di Genova
- Università degli Studi di Insubria
- Università degli Studi di Milano
- Università degli Studi di Napoli
- Università degli Studi di Padova
- Università degli Studi di Pisa
- Università degli Studi di Roma Tor Vergata
- Università degli Studi di Salerno
- Università degli Studi di Siena
- Università degli Studi di Torino
- Università degli Studi di Trieste
- Università degli Studi di Udine
- Università degli Studi di Urbino
- Università degli Studi di Venezia
- Università degli Studi di Verona

## CINI Cyber Security National Lab

**Motivation**  
Structuring and coordinating together Italian academic excellence in Cyber-Security (e.g. cryptography, dependability, information security, hardware security, malware analysis, risk management, intelligence, etc.) and of spreading the knowledge and fine mapping of research and education in Italy.

**Mission**  
The Cyber Security National Lab will address the Italian research in the field of Cyber-Security (e.g. cryptography, dependability, information security, hardware security, malware analysis, risk management, intelligence, etc.) and of spreading the knowledge and fine mapping of research and education in Italy.

**Research Areas**  
The research activities carried out within the Cyber Security National Lab will focus on the following areas:

- Information Security
- Malware Analysis
- Network Security
- System Security
- Hardware Security
- Software Security
- Mobile Security
- Cloud Security
- IoT Security
- Big Data Security
- AI Security
- Blockchain Security
- Cyber Law
- Cyber Policy
- Cyber Diplomacy
- Cyber Intelligence
- Cyber Forensics
- Cyber Incident Response
- Cyber Risk Management
- Cyber Resilience
- Cyber Hygiene
- Cyber Awareness
- Cyber Training
- Cyber Education
- Cyber Research
- Cyber Innovation
- Cyber Entrepreneurship
- Cyber Startups
- Cyber Scale-ups
- Cyber Unicorns
- Cyber Giants
- Cyber Titans
- Cyber Behemoths
- Cyber Leviathans
- Cyber Goliaths
- Cyber Juggernauts
- Cyber Colossuses
- Cyber Titans
- Cyber Behemoths
- Cyber Leviathans
- Cyber Goliaths
- Cyber Juggernauts
- Cyber Colossuses

## ASTECH CINI Assistive Technologies National Lab

**Mission**  
The CINI Assistive Technologies National Lab is an Italian expertise center for the development of knowledge and technologies in the fields of Assistive Technologies and Digital Inclusion. The establishment of the Laboratory meets the following requirements of the national scientific community:

- to ensure a critical mass to complement the research efforts and to avoid the duplication of innovative strategies; possible synergies and complementarities on common needs; actions based on common research strategies;
- to leverage educational initiatives in Assistive Technologies in order to improve the quality of the national workforce.

**Motivation**  
The CINI Assistive Technologies National Lab is an Italian expertise center for the development of knowledge and technologies in the fields of Assistive Technologies and Digital Inclusion. The establishment of the Laboratory meets the following requirements of the national scientific community:

- to ensure a critical mass to complement the research efforts and to avoid the duplication of innovative strategies; possible synergies and complementarities on common needs; actions based on common research strategies;
- to leverage educational initiatives in Assistive Technologies in order to improve the quality of the national workforce.

## InfoLife CINI national lab

**Formal Methods and Algorithms for Life Sciences**  
TRAINING RESEARCH DEVELOPMENT

**Networking 35 Research Units**  
CONNECTING YOUR BUSINESS TO THE RESEARCH RESOURCES YOU NEED  
The InfoLife laboratory includes 35 groups from Italian Universities for a total of more than 2000 professionals and researchers plus an equal amount of PhD students and post-docs. The number of research topics covered by the lab nodes is high and allows to practically any area of the Systems Biology and Bioinformatics domain.

**YOUR IDEAL PROJECT PARTNER**  
The InfoLife laboratory can participate in National and International funded projects. The CINI consortium is able to take care of all the administrative parts of the project, while being able to provide an unlimited amount of man-hours and co-funding opportunities.

## CINI Smart Cities & Communities National Lab

**Mission**  
The Smart Cities & Communities National Lab aims to be an Italian competence center in the field of Information and Communication Technologies (ICT) for Smart Cities. Its main objective is the development of innovative solutions for improving the citizens' quality of life. As this requires a multi-disciplinary approach, the Lab is open to researchers working in areas different from ICT.

**Motivation**  
The Lab intends to cooperate actively with city administrators and industrial partners to implement joint research programs and technology transfer.

**Research Areas**  
The research activities carried out within the Smart Cities & Communities National Lab will focus on the following areas:

- Smart Mobility
- Smart Energy & Smart Buildings
- Smart Governance & Smart Services
- Smart Health & Smart Living
- Smart Security & Smart Safety
- Smart Urban Planning & Smart Urban Design
- Smart Urban Infrastructure & Smart Urban Services
- Smart Urban Mobility & Smart Urban Transport
- Smart Urban Quality of Life & Smart Urban Well-being
- Smart Urban Resilience & Smart Urban Sustainability
- Smart Urban Innovation & Smart Urban Entrepreneurship
- Smart Urban Research & Smart Urban Development
- Smart Urban Education & Smart Urban Training
- Smart Urban Culture & Smart Urban Heritage
- Smart Urban Environment & Smart Urban Ecology
- Smart Urban Climate & Smart Urban Energy
- Smart Urban Water & Smart Urban Waste
- Smart Urban Air & Smart Urban Noise
- Smart Urban Light & Smart Urban Sound
- Smart Urban Heat & Smart Urban Cold
- Smart Urban Wind & Smart Urban Rain
- Smart Urban Snow & Smart Urban Ice
- Smart Urban Earth & Smart Urban Sky
- Smart Urban Earthquake & Smart Urban Disaster
- Smart Urban Crisis & Smart Urban Emergency
- Smart Urban Recovery & Smart Urban Reconstruction
- Smart Urban Regeneration & Smart Urban Revitalization
- Smart Urban Transformation & Smart Urban Transition
- Smart Urban Evolution & Smart Urban Revolution
- Smart Urban Innovation & Smart Urban Entrepreneurship
- Smart Urban Research & Smart Urban Development
- Smart Urban Education & Smart Urban Training
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- Smart Urban Heat & Smart Urban Cold
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- Smart Urban Snow & Smart Urban Ice
- Smart Urban Earth & Smart Urban Sky
- Smart Urban Earthquake & Smart Urban Disaster
- Smart Urban Crisis & Smart Urban Emergency
- Smart Urban Recovery & Smart Urban Reconstruction
- Smart Urban Regeneration & Smart Urban Revitalization
- Smart Urban Transformation & Smart Urban Transition
- Smart Urban Evolution & Smart Urban Revolution

- **Each Lab:**
  - Network of distributed research nodes
  - National coverage
  - Multidisciplinary
  - Unique experience in Italy
  - *Ad includendum* approach

# CINI

## Assets

- Highest research quality at the country level
- Critical mass to get the target
- Geographical distribution, spanning the overall country
- Thematic R&D Labs
- **Strategic Agreements**

- **Strategic Agreement with:**
  - **DIS ( Dip. delle informazioni per la Sicurezza della Presidenza del Consiglio dei Ministri - Dept of Homeland Security of the Prime Minister Cabinet)**



# The future of Cyber-Security in Italy

## A white book



# The future of Cyber-Security in Italy

## A white book





# A National Cyber-Security Framework

## In cooperation with NIST



- **Strategic Agreement with:**
  - DIS ( *Dip. delle informazioni per la Sicurezza della Presidenza del Consiglio dei Ministri - Dept of homeland Security of the Prime Minister Cabinet*)
  - **Ministry of Education, University & Research: project *Programma il Futuro* (code.org in Italy)**

- ***BDVA (Big Data Value Association) – cPPP***
- ***ECISO – Cyber Security – cPPP***
- ***NIST (USA)***
- **ARTEMIS IA**
- **ECSEL JU**
- **NESSI**
- **Forum Europeo EF-ICST**
- **Informatics Europe (IE)**
- **Science Foundation Ireland**
- **ESA (European Space Agency)**
- **Horizon 2020**

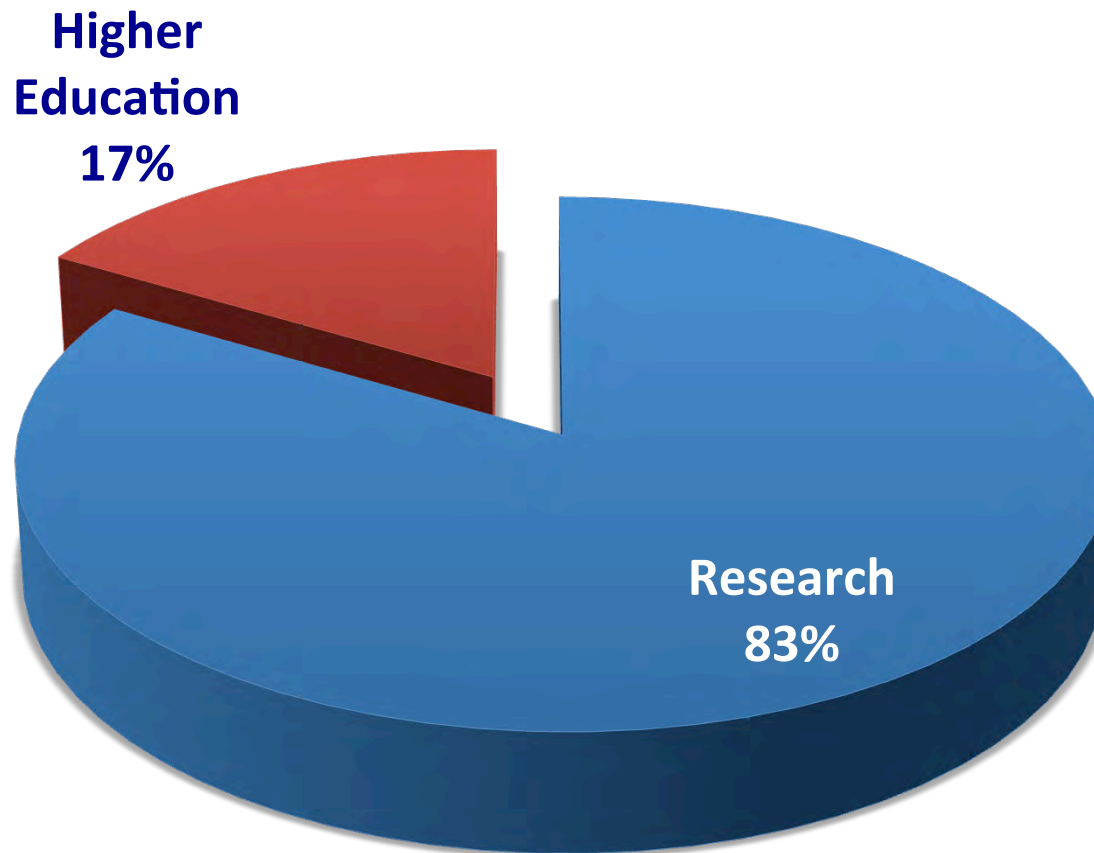
# Outline

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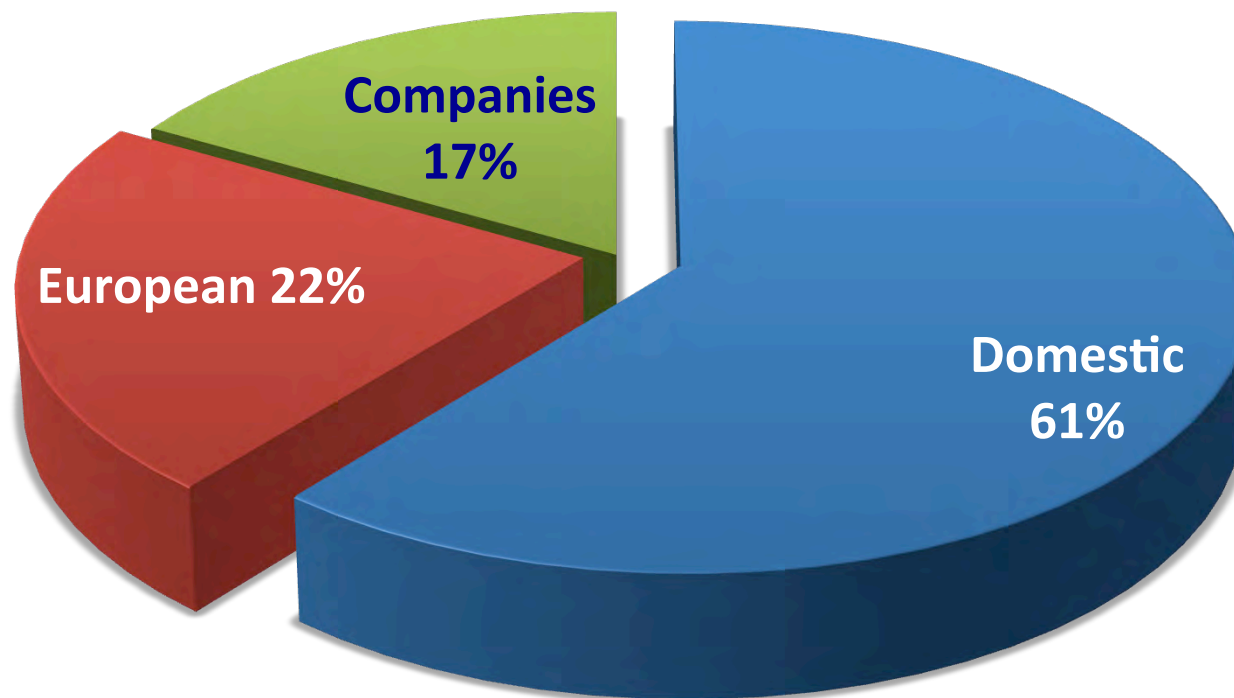
# Budget 2013-2015

## Research vs. Higher Education



# Budget 2013-2015

## Projects Sources





# Save the dates



CINI - Presenta il nuovo Laboratorio Nazionale "Informatica e Società"

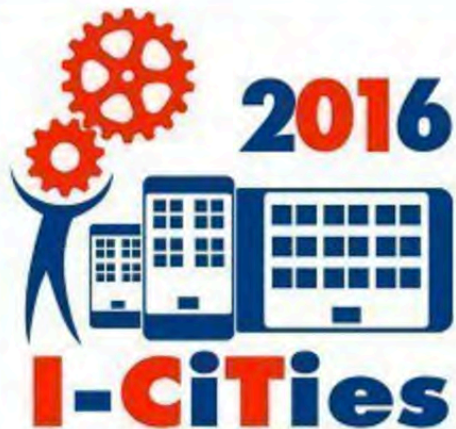
**“Informatica e diritti: la rivoluzione digitale per la società”**

Roma, 27 settembre 2016

**Camera dei Deputati**

Sala della Regina

# Save the dates



2<sup>nd</sup> CINI Annual Conference on  
ICT for Smart Cities & Communities

September 29-30, 2016 - Benevento, Italy

# Save the dates



## FIRST ITALIAN CONFERENCE ON CYBERSECURITY

ITA-SEC 2017

Venice, 18-20 January 2017



Università  
Ca' Foscari  
Venezia



**cini**  
**Cyber Security National Lab**



Малые Автюхи, Калинковичский район, Республики Беларусь

