

## **Raport UEFISCDI privind infrastructurile de cercetare la nivel national**

**- generat din platforma ERRIS -**

### **Informatii generale**

ERRIS a fost lansata pe 26 iunie 2015.

Platforma ERRIS reuneste majoritatea infrastructurilor de cercetare publice si private si reprezinta unicul punct de acces pentru serviciile oferite de acestea. Prin intermediul platformei se ating urmatoarele obiective:

- promoveaza si asigura vizibilitatea infrastructurilor, cu focus pe serviciile de cercetare pe care acestea le furnizeaza;
- ofera informatii strcuturate si acces facil la serviciile de cercetare pentru orice utilizator, in functie de interesele si nevoile specifice;
- contribuie la imbunatatirea serviciilor de cercetare prin intermediul sistemului de feedback pe care il au la dispozitie utilizatorii ce au beneficiat de servicii de cercetare prin intermediul platformei;
- ofera o imagine de ansamblu asupra capacitatii de CDI din Romania, astfel putandu-se identifica punctele tari, potentialul de dezvoltare, lipsurile, intr-un cuvant nevoile reale ale sistemului.

La 1 an jumata de la lansare, exista 1281 conturi publice de infrastructuri de cercetare, carora le sunt asociate 7072 de servicii de cercetare si 18833 de echipamente.

Alte 482 de infrastructuri nu au, deocamdata, contul public pe ERRIS. Acest lucru se intampla, fie pentru ca administratorul contului respectiv nu a facut public contul, fie pentru ca respectivul cont nu indeplineste un set de conditii obligatorii stabilit de echipa ERRIS.

In 2016, PNIII a conditionat participarea la competitiiile pentru finantarea cercetarii, prin inregistrarea in ERRIS a infrastructurilor de cercetare ale aplicantilor.

Din acest motiv, s-a observat ca rata de inregistrare in platforma, a fost ridicata si constanta in perioadele de competitii pentru finantari. Totodata, a existat o activitate mai scazuta in perioada verii.

### **Structura ERRIS**

ERRIS contine trei tipuri de conturi:

- cont institutional – contul umbrela sub care se regasesc conturile de infrastructuri asociate institutiei sau organizatiei respective;

- cont de infrastructura – accentul platformei este pe acest cont care contine cele mai multe informatii legate de servicii de cercetare, echipamente si persoanele de contact;
- cont de serviciu de cercetare – la acest nivel, utilizatorul poate sa contacteze responsabilul si, eventual, sa rezerve serviciul respectiv.

Fiecare tip de cont este administrat de o persoana care este responsabila de acuratetea datelor despre institutia/infrastructura pe care o coordoneaza.

Fiecarei infrastructura i se asociaza domenii de cercetare dintr-o lista predefinita (mai precis domeniile MERIL):

*Obs: Mai jos sunt enumerate categoriile principale, si domeniile asociate acestora:*

#### **Biological and Medical Sciences**

- ❖ Agronomy, Forestry, Plant Breeding Centres
- ❖ Animal Facilities
- ❖ Collections of Biological Resources (e.g. Microorganisms, Biobanks and Seed Banks)
- ❖ Bio-Informatics Facilities
- ❖ Biomedical Imaging Facilities
- ❖ Cell Culture Facilities
- ❖ Clinical Research Centres
- ❖ Environmental Health Research Facilities
- ❖ Genomic, Transcriptomic, Proteomics and Metabolomics Facilities
- ❖ Structural Biology Facilities
- ❖ Systems Biology/Computational Biology Facilities
- ❖ Telemedicine Laboratories and E-Health Technologies
- ❖ Translational Research Centres

#### **Chemistry and Material Sciences**

- ❖ Chemical Libraries and Screening Facilities
- ❖ Intense Light Sources
- ❖ Intense Neutron Sources
- ❖ Materials Synthesis or Testing Facilities
- ❖ Pilot Plants for Process Testing
- ❖ Reference Material Repositories

#### **Earth and Environmental Sciences**

- ❖ Acoustic Monitoring Stations
- ❖ Atmospheric Measurement Facilities
- ❖ Earth Observation Satellites
- ❖ Earth, Ocean, Marine, Freshwater, and Atmosphere Data Centres
- ❖ Earthquake Simulation Laboratories
- ❖ Environmental Management Infrastructures
- ❖ Geothermal Research Facilities
- ❖ In Situ Earth Observatories

- ❖ In Situ Marine/Freshwater Observatories
- ❖ Natural History Collections
- ❖ Polar and Cryospheric Research Infrastructures
- ❖ Research Aircraft. Solid Earth Observatories, including Seismological Monitoring Stations

### **Engineering and Energy**

- ❖ Aerospace and Aerodynamics Research Facilities
- ❖ Civil Engineering Research Infrastructures
- ❖ Electrical and Optical Engineering Facilities
- ❖ Energy Engineering Facilities (non-nuclear)
- ❖ Marine & Maritime Engineering Facilities
- ❖ Mechanical Engineering Facilities

### **Humanities and Arts**

- ❖ Museums
- ❖ Galleries
- ❖ Analogue audio/visual/multimedia collections
- ❖ Archaeology, Anthropology and Ethnology Collections
- ❖ Arts & Art History Collections
- ❖ Music and Instrument Collections
- ❖ Datasets (e.g. analogue audio/visual/multimedia datasets)
- ❖ Analogue audio/visual/multimedia repositories
- ❖ Archaeology, Anthropology and Ethnology Repositories
- ❖ Arts & Art History Repositories
- ❖ Data repositories
- ❖ Digitised Manuscript Repositories
- ❖ Archaeology, Anthropology and Ethnology Databases
- ❖ Arts & Art History Databases
- ❖ History Databases
- ❖ Digitised Manuscript Databases
- ❖ Research facilities for cultural heritage
- ❖ Visualisation facilities
- ❖ Cognitive Sciences facilities
- ❖ Laboratories for the study of sound
- ❖ Web mapping and Geographical Information Systems data facilities
- ❖ Facilities and tools for linguistics
- ❖ Research data service facilities
- ❖ Cognitive Sciences facilities
- ❖ Timelines applied to historical data
- ❖ Research Archives
- ❖ Research Libraries
- ❖ Research Bibliographies

### **Information Science and Technology**

- ❖ Centralised Computing Facilities

- ❖ Communication Networks
- ❖ Complex Data Facilities
- ❖ Distributed Computing Facilities
- ❖ Software Service Facilities

#### **Physics, Astronomy, Astrophysics and Mathematics**

- ❖ Astro-Particle and Neutrino Detectors and Observatories
- ❖ Centres for Advanced Research in Mathematics
- ❖ Centres for Development of Industrial Mathematics
- ❖ Cross-Disciplinary Centres in Mathematics
- ❖ Extreme Conditions Facilities
- ❖ Gravitational Wave Detectors and Observatories
- ❖ High Energy Physics Facilities
- ❖ Mathematics Centres of Competence
- ❖ Micro and Nanotechnology Facilities
- ❖ Nuclear Research Facilities
- ❖ Safety Handling Facilities
- ❖ Space Environment Test Facilities
- ❖ Telescopes
- ❖ Underground Laboratories

#### **Social Sciences**

- ❖ Data Archives, Data Repositories and Collections
- ❖ Data mining and Analysis (Methodological) Centres, including statistical analysis
- ❖ National Statistical Facilities (offices)
- ❖ Registers and Survey-led Studies/Databases
- ❖ Research Data Service Facilities

Uncont de infrastructura devine public doar daca are cel putin un serviciu de cercetare, un echipament si ii este asociat cel putin un domeniu de cercetare. O alta conditie obligatorie este incarcarea tuturor informatiilor in limba engleza, deoarece obiectivul pe termen lung este extinderea platformei la nivel international.

*Obs: Nu s-a stabilit, la acest moment, o procedura pentru obligarea responsabililor conturilor de a utiliza limba engleza sau de a respecta cerintele stabilite de echipa ERRIS in ceea ce priveste completitudinea si acuratetea informatiilor incarcate, unica modalitate fiind furnizarea de sugestii cu privire la imbunatatirea sau actualizarea conturilor.*

O functionalitate ambitioasa a platformei este posibilitatea celui care a utilizat un serviciu de cercetare, pe care l-a accesat prin intermediul ERRIS, de a evalua calitatea serviciului folosit, prin completarea unui formular de review.

ERRIS este o platforma in continua dezvoltare, in functie de nevoile grupului tinta. Astfel, ultimul upgrade l-a reprezentat imbunatatirea si eficientizarea functiei de cautare, prin introducerea unei harti dinamice care permite identificarea rapida a obiectelor de interes (Map Search).

## Utilizarea ERRIS de catre persoanele implicate in sistemul de CDI

In ceea ce priveste utilizarea efectiva a platformei ca facilitator al identificarii si, ulterior, accesarii unor servicii de cercetare, exista aproximativ 20 de infrastructuri care inregistreaza peste 1000 de vizualizari, majoritatea avand un numar de vizualizari de ordinal sute.

ERRIS se doreste a fi mai mult decat un simplu centralizator al capacitatii de CDI din Romania, astfel incat utilizatorul interesat de un serviciu sau un echipament de cercetare poate contacta persoana responsabila de serviciul respectiv, direct din platforma. Asadar, au existat peste 300 de astfel de contacte, insa au fost completate foarte putine formulare de review, ca urmare a utilizarii efective a serviciului de cercetare.

Acest numar scazut de accesari sau de evaluari nu este indicator real al succesului platformei, deoarece, un utilizator, in urma identificarii infrastructurii potrivite (prin ERRIS), poate contacta direct institutia/organizatia respectiva, fara sa apeleze la instrumentele oferite de ERRIS. Astfel, ERRIS se dovedeste util in ceea ce priveste centralizarea si structurarea informatiei cu privire la sistemul de CDI romanesc, precum si facilitarea identificarii serviciului dorit (prin functia de Map Search), chiar daca utilizarea efectiva a infrastructurii s-a facut, ulterior, pe alte cai, fie ele formale sau informale.

## Analiza rapoarte ERRIS (aceste rapoarte au fost generate in data de 16.10.2016)

Pe baza informatiilor incarcate de utilizatori s-au facut o serie de analize care reflecta capacitatea de CDI (dupa cum reiese din ERRIS) raportata la domeniile de cercetare (MERIL), forma de proprietate (public sau privat) sau actualitatea echipamentelor detinute.

### 1. Distributia organizatiilor, infrastructurilor de cercetare si a echipamentelor dupa forma de proprietate

	Public	Privat	N/A
<b>Organisations</b>	226	80	22
<b>Infrastructures</b>	1093	119	179
<b>Equipments</b>	12207	695	1635

*Obs: Alta informatie cunoscuta este anul de fabricatie al echipamentului pentru 9581 de echipamente (in timp ce pentru 4686 de echipamente nu exista aceasta informatie)*

### 2. Top 20 organizatii dupa numarul de infrastructuri de cercetare

No.	Organisation Name	No. Infrastructures	No. Equipments
1	UNIVERSITATEA POLITEHNICA DIN BUCURESTI	123	1154
2	UNIVERSITATEA TEHNICA DIN CLUJ - NAPOCA	71	532
3	UNIVERSITATEA DE VEST TIMISOARA	57	30
4	UNIVERSITATEA DE STIINTE AGRICOLE SI MEDICINA VETERINARA CLUJ-NAPOCA	47	605
5	UNIVERSITATEA BUCURESTI	35	508
6	UNIVERSITATEA DE MEDICINA SI FARMACIE (U.M.F) Cluj-Napoca	32	433
7	UNIVERSITATEA DE STIINTE AGRONOMICE SI MEDICINA VETERINARA	32	403
8	UNIVERSITATEA TEHNICĂ, "GHEORGHE ASACHI" IAŞI	27	861
9	UNIVERSITATEA POLITEHNICA TIMIŞOARA	27	349
10	UNIVERSITATEA DE MEDICINA SI FARMACIE TARGU MURES	24	112
11	UNIVERSITATEA "ALEXANDRU IOAN CUZA" IASI	22	275
12	UNIVERSITATEA BABES BOLYAI	19	453
13	UNIVERSITATEA DIN ORADEA	19	273
14	UNIVERSITATEA DIN CRAIOVA	19	246
15	UNIVERSITATEA DE VEST "VASILE GOLDIŞ" ARAD	19	26
16	INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE PENTRU TEXTILE SI PIELARIE - INCOTP BUCURESTI	17	121
17	UNIVERSITATEA DE MEDICINA SI FARMACIE "GR. TH. POPA"	17	47
18	UNIVERSITATEA "DUNAREA DE JOS"	16	483
19	UNIVERSITATEA "VASILE ALECSANDRI" DIN BACĂU	16	218
20	UNIVERSITATEA TEHNICA DE CONSTRUCTII BUCURESTI	16	189

### 3. Top 20 organizatii dupa numarul de echipamente

No.	Organisation Name	No. Equipments	No. Infrastructures
1	UNIVERSITATEA POLITEHNICA DIN BUCURESTI	1154	123
2	UNIVERSITATEA TEHNICĂ, "GHEORGHE ASACHI" IAŞI	861	27
3	UNIVERSITATEA DE STIINTE AGRICOLE SI MEDICINA VETERINARA CLUJ-NAPOCA	605	47
4	UNIVERSITATEA TEHNICA DIN CLUJ - NAPOCA	532	71
5	UNIVERSITATEA BUCURESTI	508	35
6	UNIVERSITATEA "DUNAREA DE JOS"	483	16
7	UNIVERSITATEA BABES BOLYAI	453	19
8	UNIVERSITATEA DE MEDICINA SI FARMACIE (U.M.F) Cluj-Napoca	433	32
9	UNIVERSITATEA DE STIINTE AGRONOMICE SI MEDICINA VETERINARA	403	32

10	UNIVERSITATEA POLITEHNICA TIMIȘOARA	349	27
11	UNIVERSITATEA "ALEXANDRU IOAN CUZA" IASI	275	22
12	UNIVERSITATEA DIN ORADEA	273	19
13	UNIVERSITATEA DIN CRAIOVA	246	19
14	UNIVERSITATEA "ȘTEFAN CEL MARE" DIN SUCEAVA	236	8
15	INSTITUTUL NATIONAL DE CERCETARE -DEZVOLTARE PENTRU ECOLOGIE INDUSTRIALA - ECOIND	234	8
16	UNIVERSITATEA "VASILE ALECSANDRI" DIN BACĂU	218	16
17	UNIV.DE MEDICINA SI FARMACIE - CAROL DAVILA	213	10
18	UNIVERSITATEA TEHNICA DE CONSTRUCTII BUCURESTI	189	16
19	SANIMED INTERNATIONAL IMPEX S.R.L.	183	3
20	Institutul National de Cercetare-Dezvoltare pentru Chimie si Petrochimie - ICECHIM Bucuresti	154	9

#### **4. Numarul de echipamente pe an**

Year	Public	Private	N/A
<b>2016</b>	148	3	15
<b>2015</b>	1301	136	83
<b>2014</b>	688	62	133
<b>2013</b>	534	122	51
<b>2012</b>	697	11	84
<b>2011</b>	452	6	61
<b>2010</b>	590	17	52
<b>2009</b>	517	16	71
<b>2008</b>	1112	15	165
<b>2007</b>	749	14	179
<b>2006</b>	468	14	113
<b>2005</b>	257	4	55
<b>2004</b>	109	4	39
<b>2003</b>	56	3	7
<b>2002</b>	67	3	16
<b>2001</b>	54	1	13
<b>2000</b>	98	2	13
<b>1999</b>	24	1	24
<b>1998</b>	35	2	7
<b>1997</b>	27	2	6
<b>1996</b>	19	1	4
<b>1995</b>	13	0	1
<b>1994</b>	14	0	0
<b>1993</b>	5	0	2

<b>1992</b>	11	0	0
<b>1991</b>	3	1	0
<b>1990</b>	11	1	0
<b>1989</b>	4	5	1
<b>1988</b>	8	0	0
<b>1987</b>	14	1	1
<b>1986</b>	8	0	1
<b>1985</b>	13	2	0
<b>1984</b>	4	0	1
<b>1983</b>	4	0	0
<b>1982</b>	7	0	0
<b>1981</b>	5	0	1
<b>1980</b>	18	0	3
<b>1979</b>	3	0	0
<b>1977</b>	6	0	0
<b>1976</b>	4	0	0
<b>1975</b>	8	1	1
<b>1974</b>	2	0	1
<b>1973</b>	0	0	1
<b>1972</b>	2	0	1
<b>1971</b>	6	0	0
<b>1970</b>	4	0	1
<b>1967</b>	2	0	0
<b>1966</b>	1	0	1
<b>1965</b>	2	0	0
<b>1963</b>	1	0	0
<b>1961</b>	2	0	0
<b>1960</b>	1	0	1
<b>1958</b>	1	0	0
<b>1957</b>	1	0	0
<b>1955</b>	1	0	0
<b>1938</b>	1	0	0

##### **5. Matricea numarului de infrastructuri la intersectia intre domenii**

La inscrierea unei infrastructuri de cercetare, aceasta este inclusa de catre organizatia care o detine, in maxim 3 domenii si, optional, intr-un domeniu adaugat la liber (exista 590 de astfel de domenii la liber). Matricea are pe linii si coloane domeniile in care avem cel putin o infrastructura de cercetare, plus coloana Other, care include toate domeniile la liber.

La intersectia unui domeniu cu el insusi se gaseste numarul de infrastructuri care sunt inscrise numai in acel domeniu. La intersectia a doua domenii diferite se gaseste numarul de infrastructuri care sunt inscrise in ambele domenii.

Raportul cu rezultatele de mai sus poate fi consultat in Anexa 1 a acestui document – *Anexa 1\_Distributia infrastructurilor pe domenii*

## **6. Top 5 organizatii pe fiecare domeniu in functie de numarul de infrastructuri de cercetare**

Raportul cu rezultate poate fi consultat in Anexa 2 a acestui document – *Anexa 2\_Top 5 organizatii pe domeniu*

## **7. Numarul de echipamente diferențiat pe mai multe criterii**

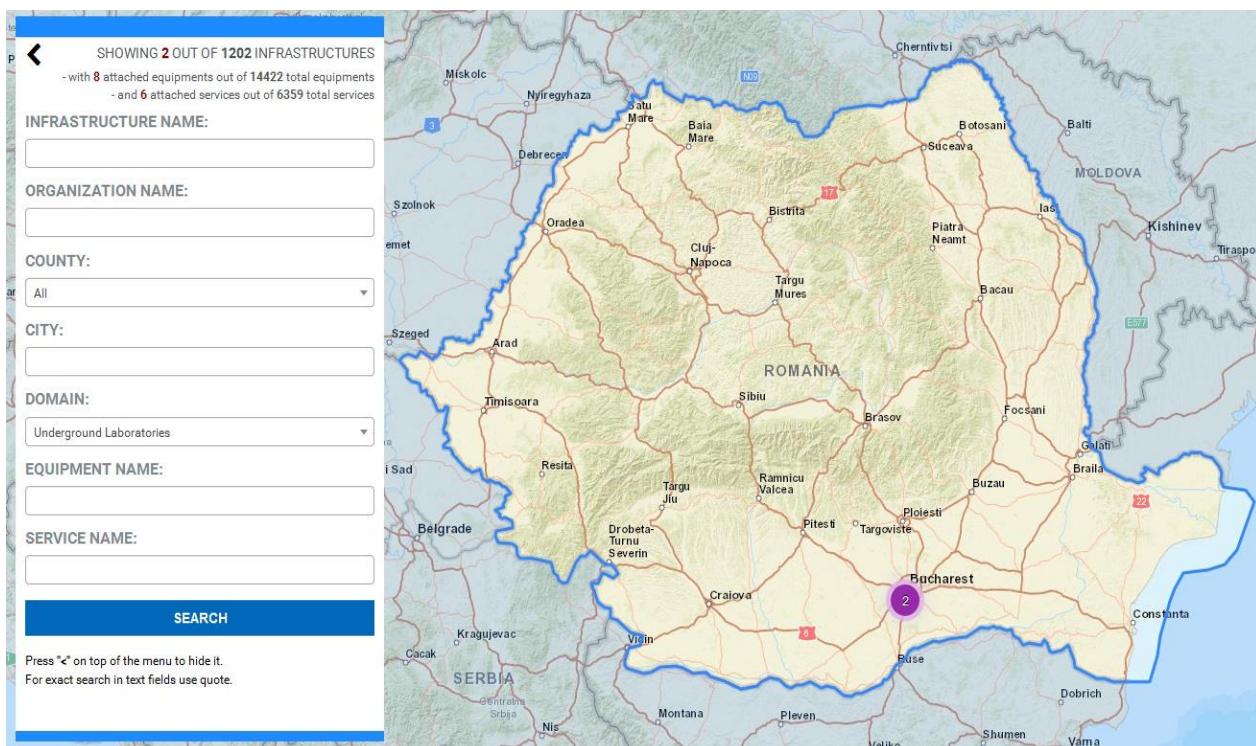
Acum raport prezinta numarul de echipamente, in functie de anul de fabricatie si tipul de proprietate al organizatiei (public sau privat), raportat pe fiecare domeniu.

Raportul cu rezultate poate fi consultat in Anexa 3 a acestui document – *Anexa 3\_Numar echipamente-an-organizatie-domeniu*.

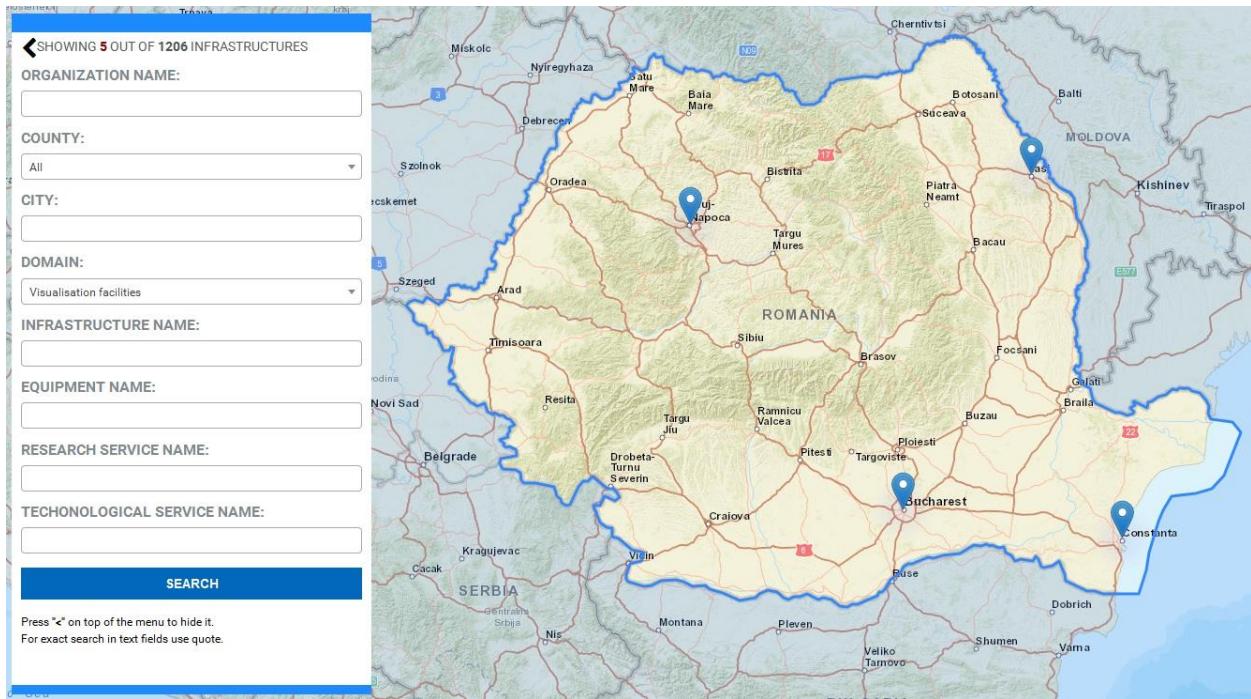
## **8.Distributia nationala pe domenii a infrastructurilor de cercetare**

Acum raport contine print screen-uri din platforma ERRIS ce reprezinta distributia nationala a infrastructurilor de cercetare asociate fiecarui domeniu

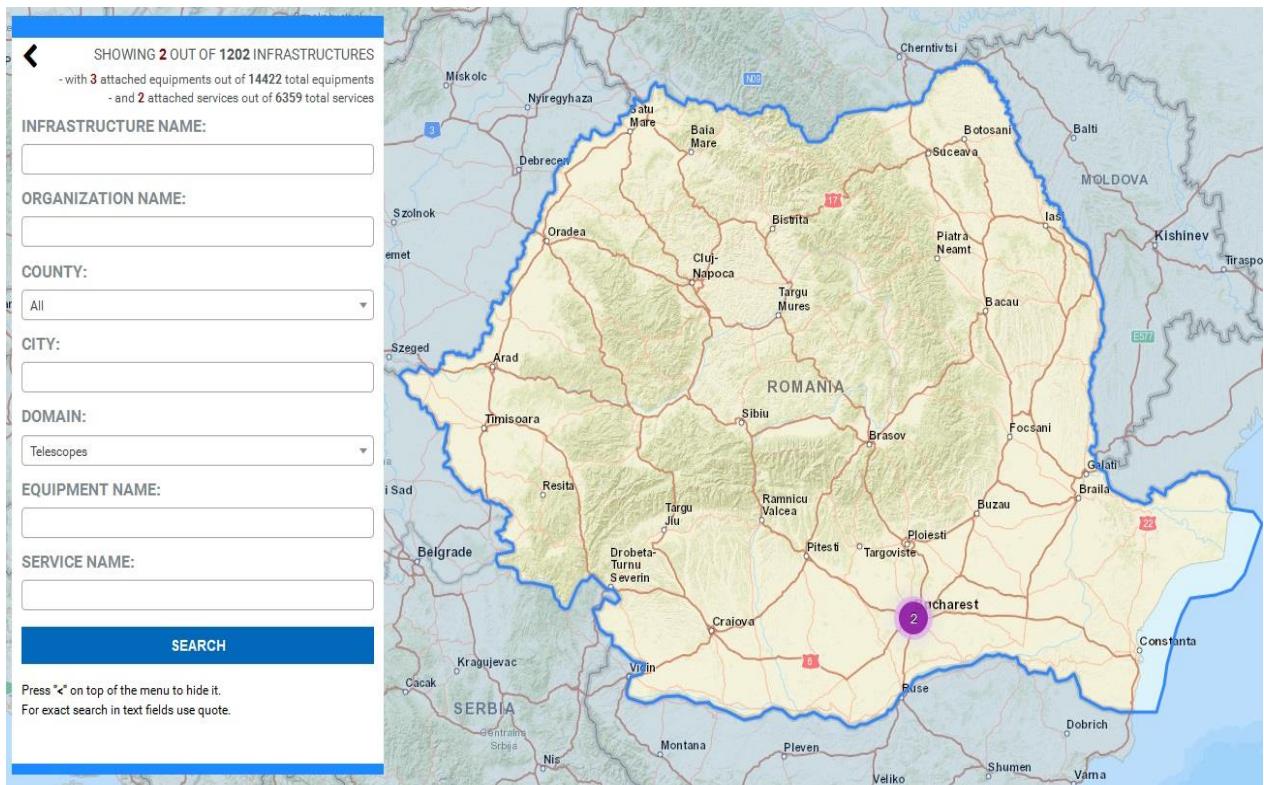
Distributia nationala pe domeniul “Underground laboratories” a infrastructurilor de cercetare:



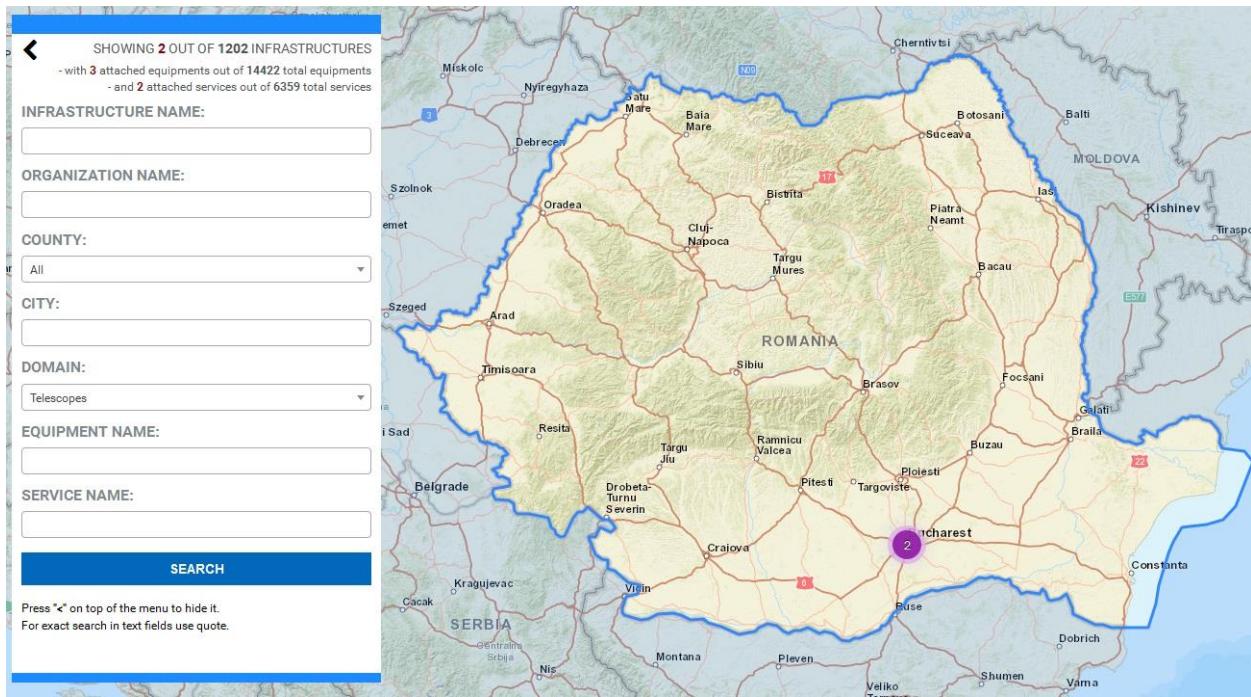
## Distributia nationala pe domeniu "Visualization facilities" a infrastructurilor de cercetare:



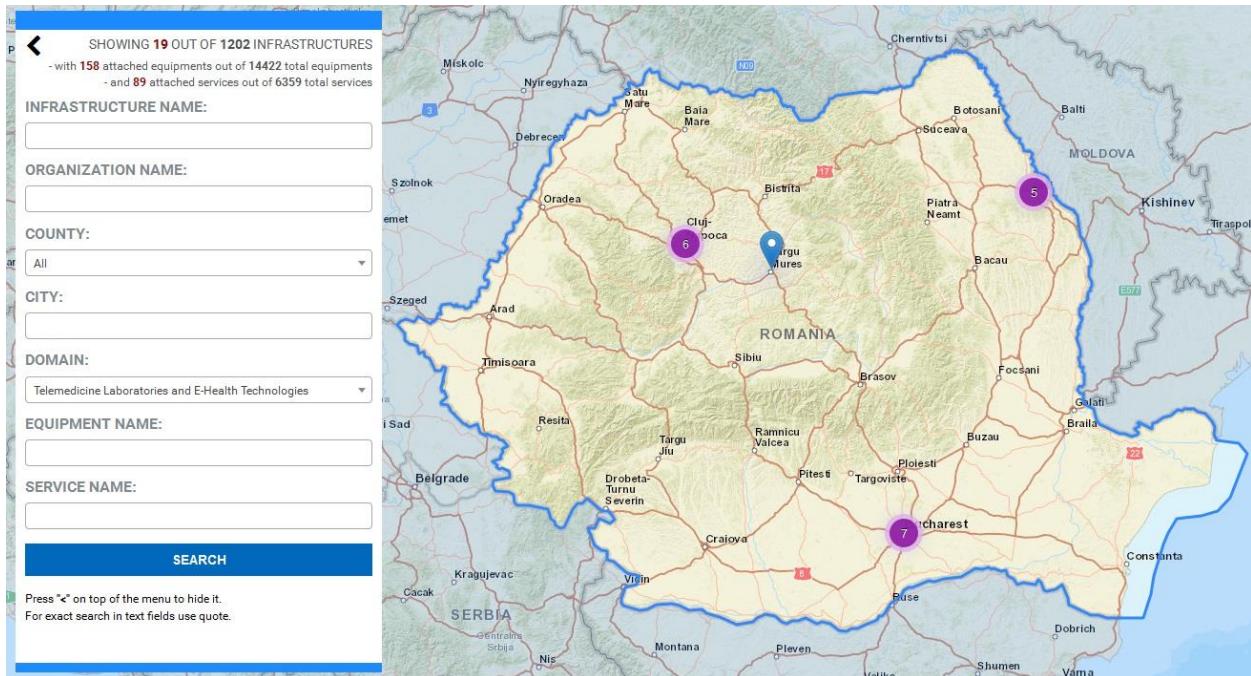
## Distributia nationala pe domeniu "Telescopes" a infrastructurilor de cercetare:



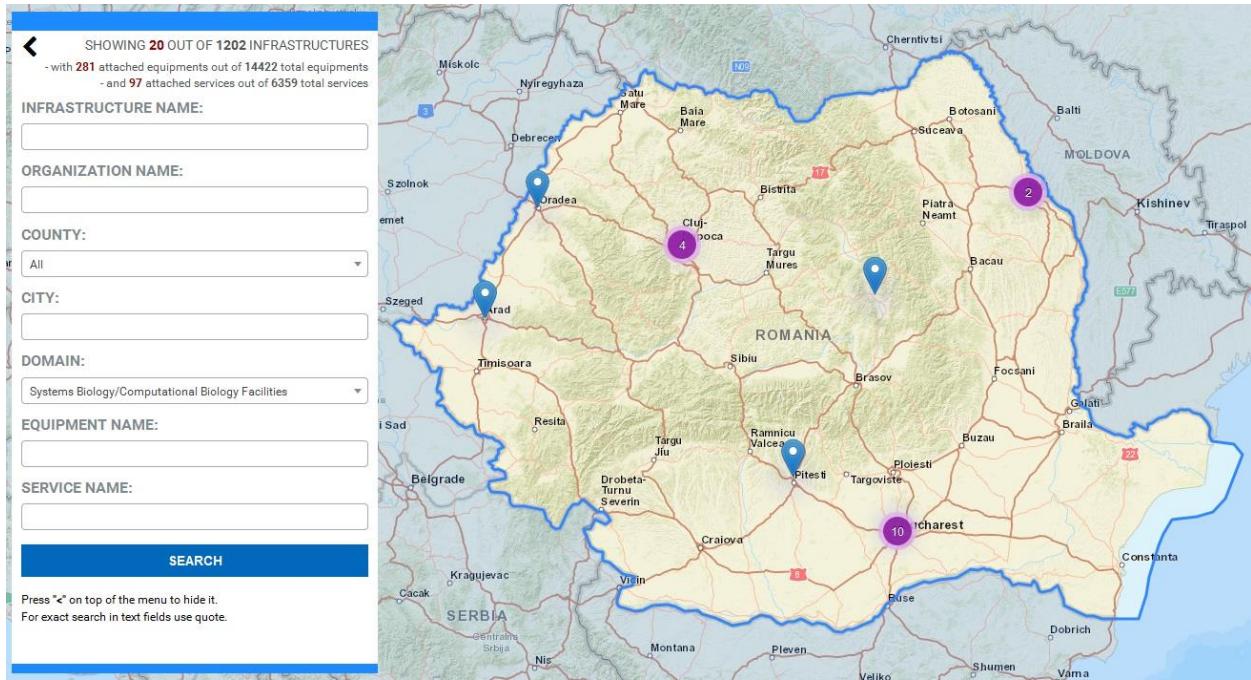
## Distributia nationala pe domeniu "Telescopes" a infrastructurilor de cercetare:



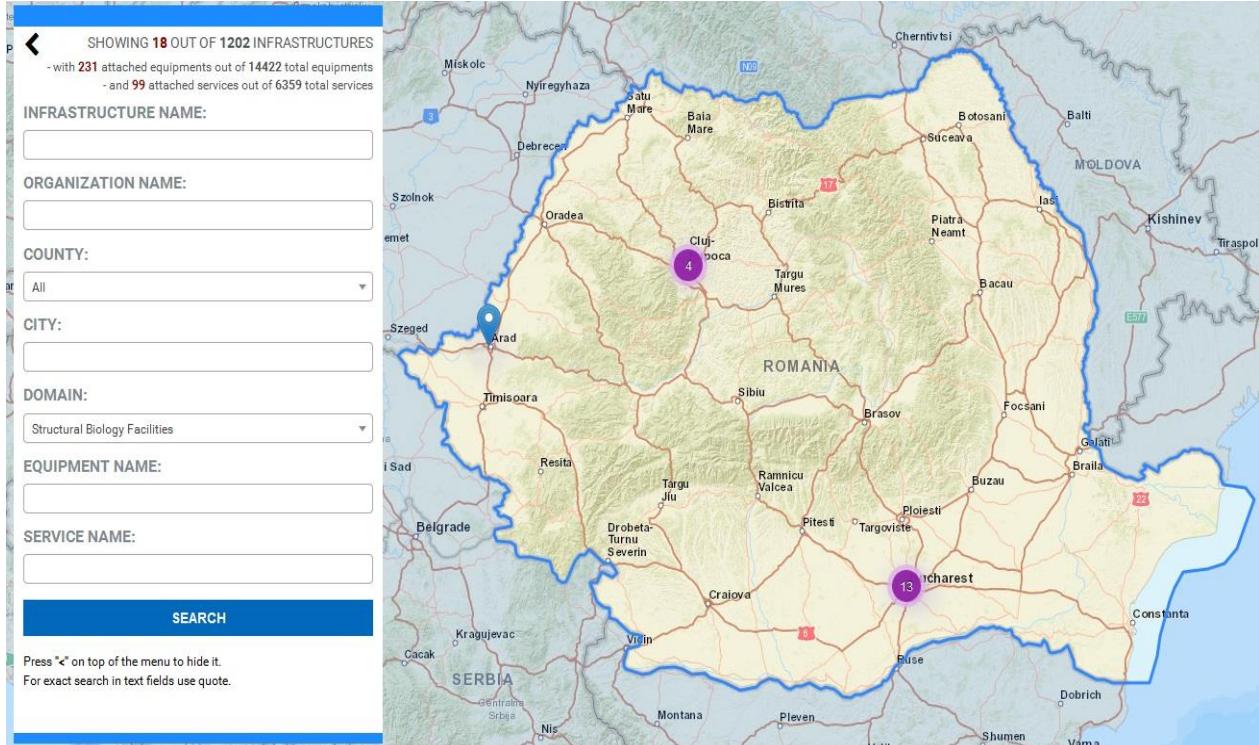
## Distributia nationala pe domeniu "Telemedicine Laboratories and E-Health Technologies" a infrastructurilor de cercetare:



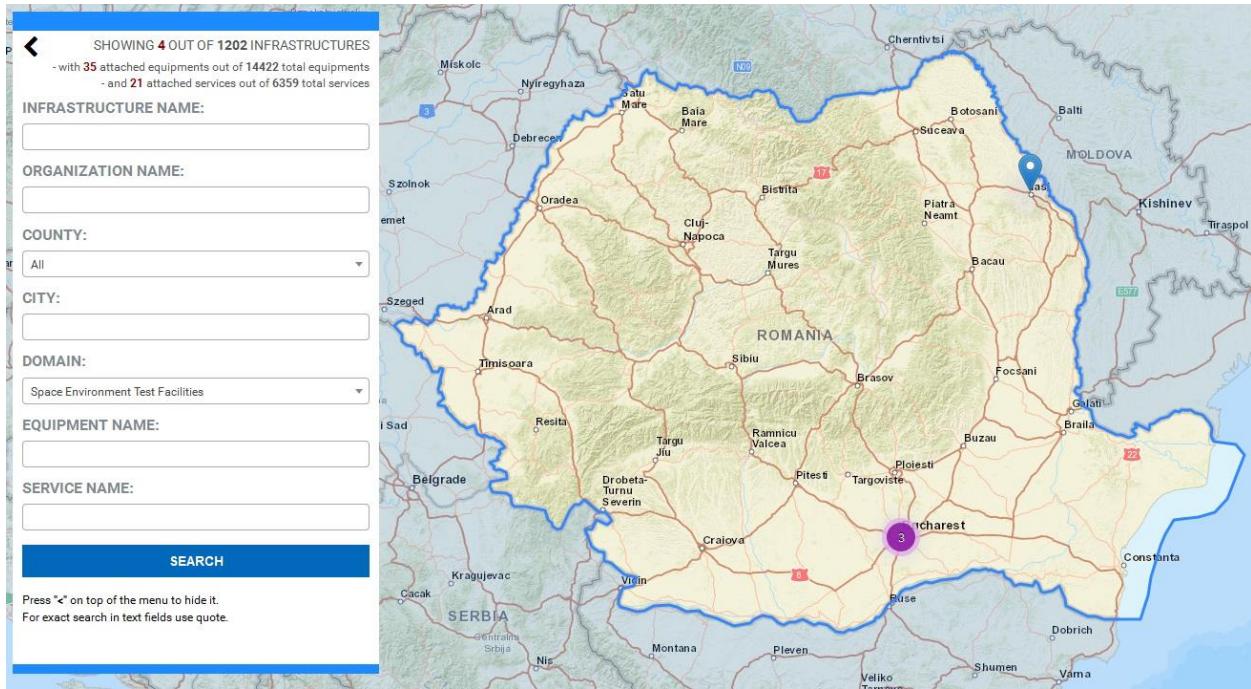
Distributia nationala pe domeniul “Systems Biology/Computational Biology Facilities” a infrastructurilor de cercetare:



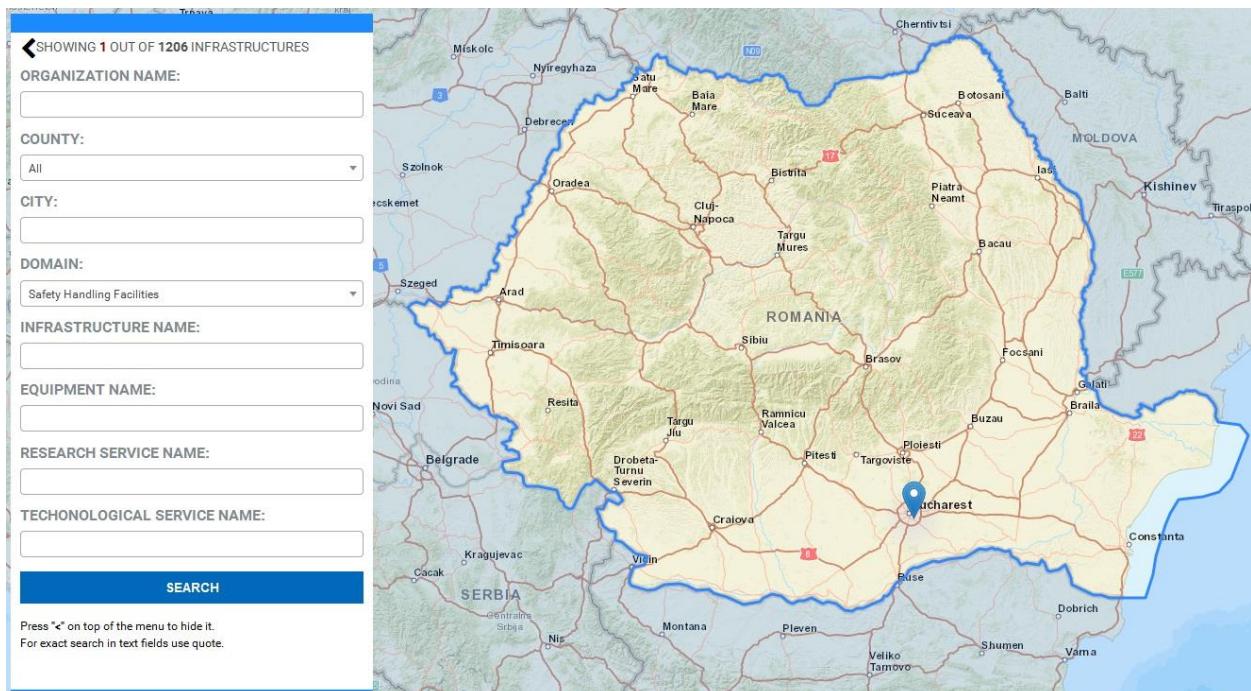
Distributia nationala pe domeniul “Structural Biology Facilities” a infrastructurilor de cercetare:



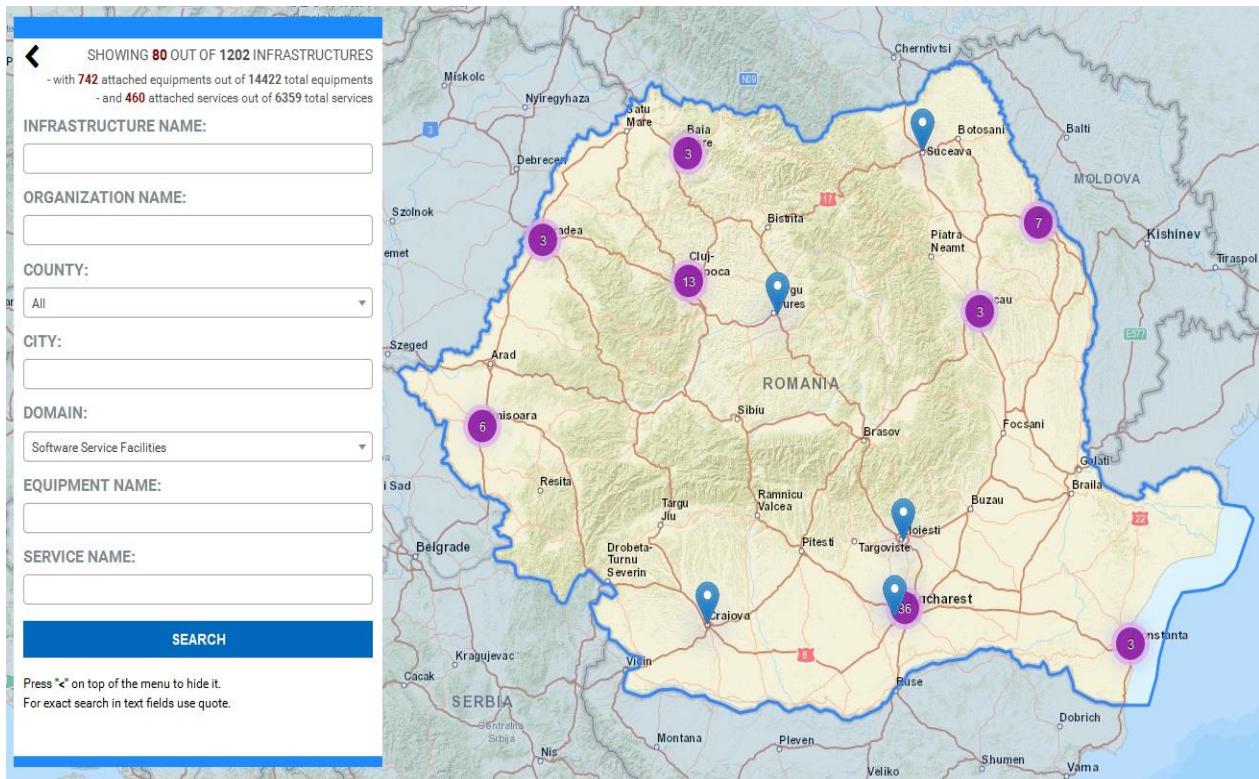
## Distributia nationala pe domeniu "Space Environment Test Facilities" a infrastructurilor de cercetare:



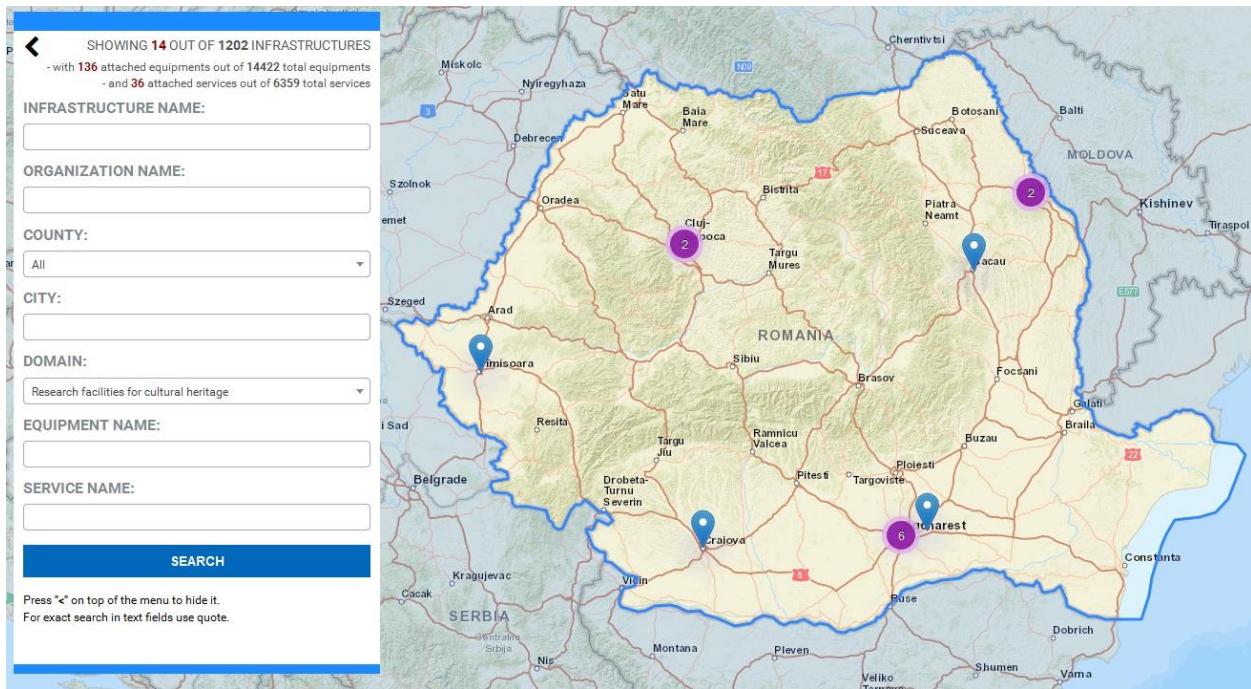
## Distributia nationala pe domeniu "Safety Handling Facilities" a infrastructurilor de cercetare:



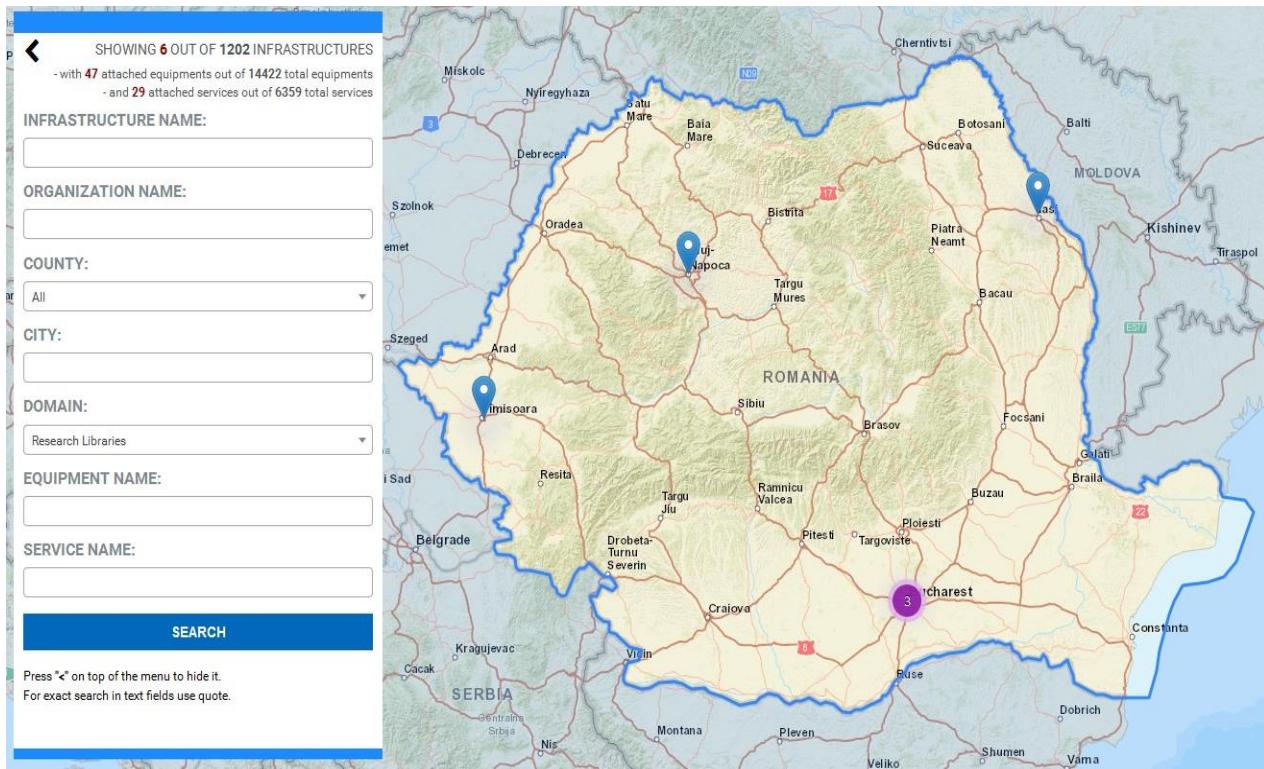
## Distributia nationala pe domeniu “Software Service Facilities” a infrastructurilor de cercetare:



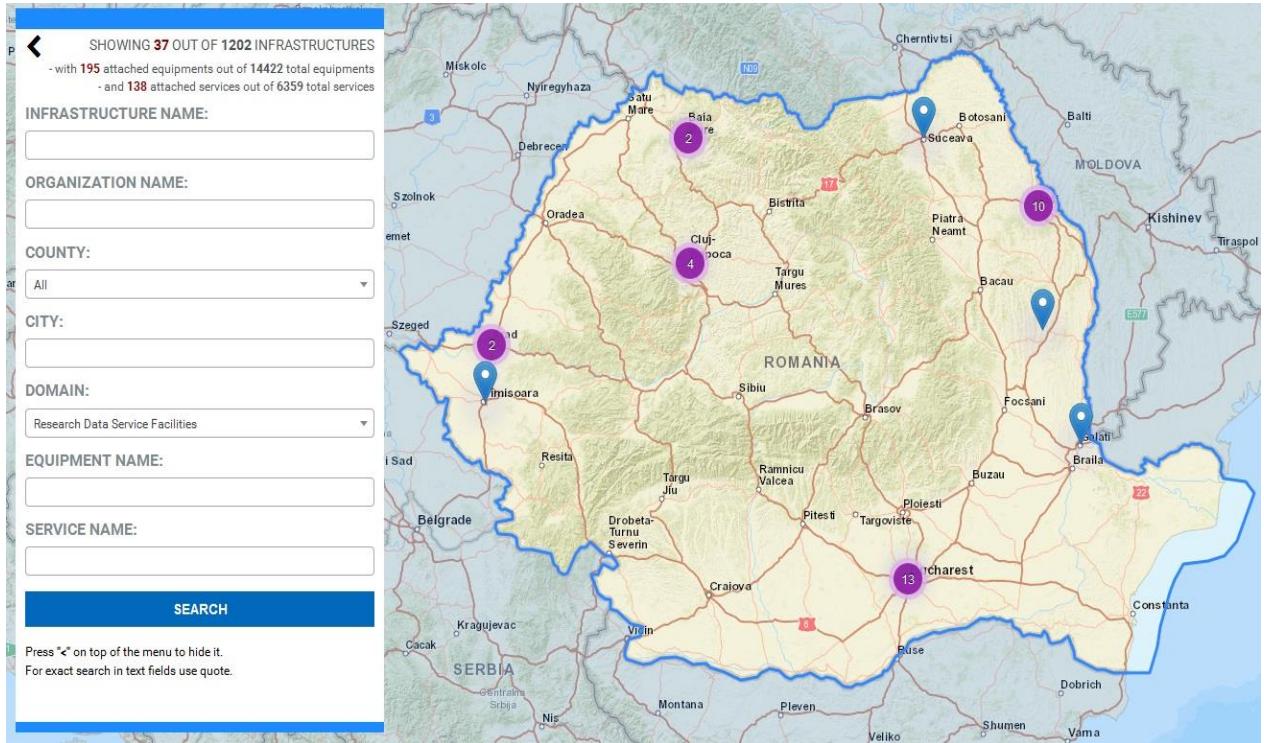
## Distributia nationala pe domeniu “Research Facilities for cultural heritage” a infrastructurilor de cercetare:



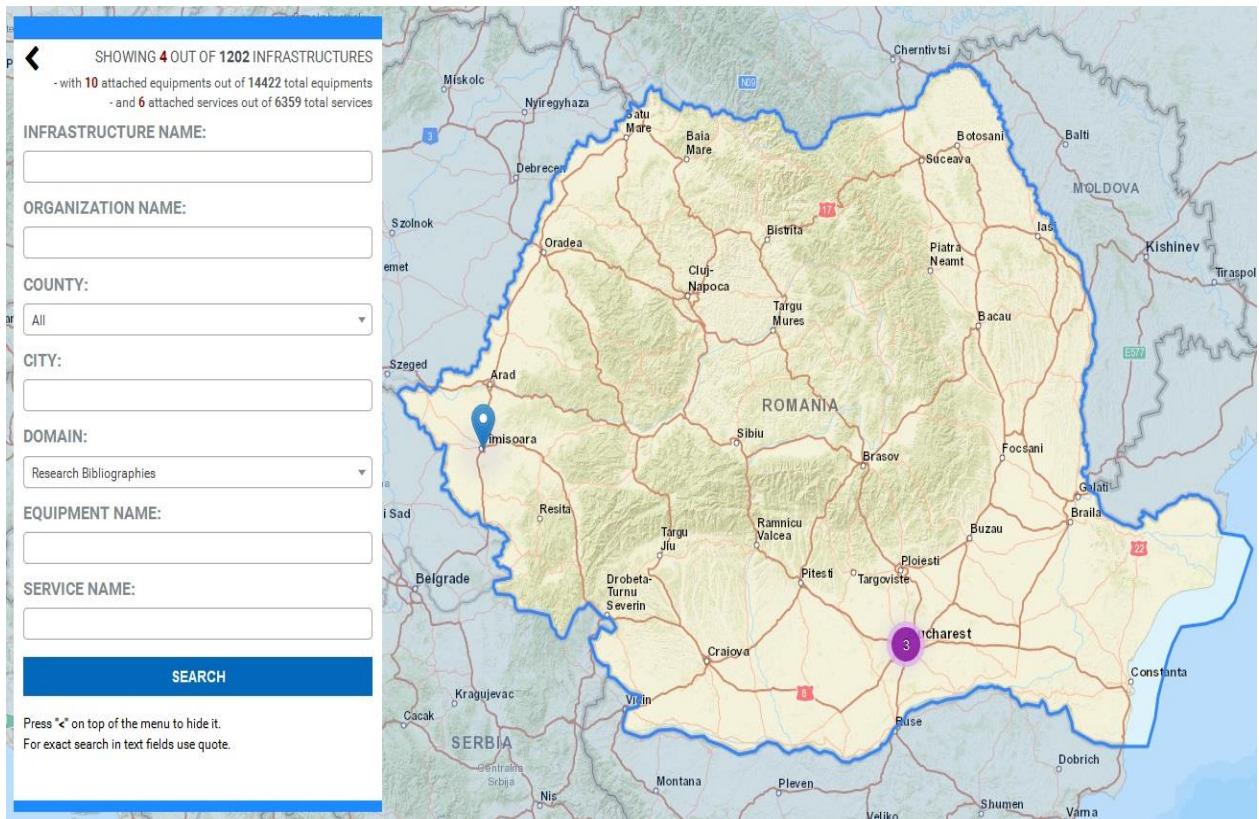
## Distributia nationala pe domeniu "Research laboratories" a infrastructurilor de cercetare:



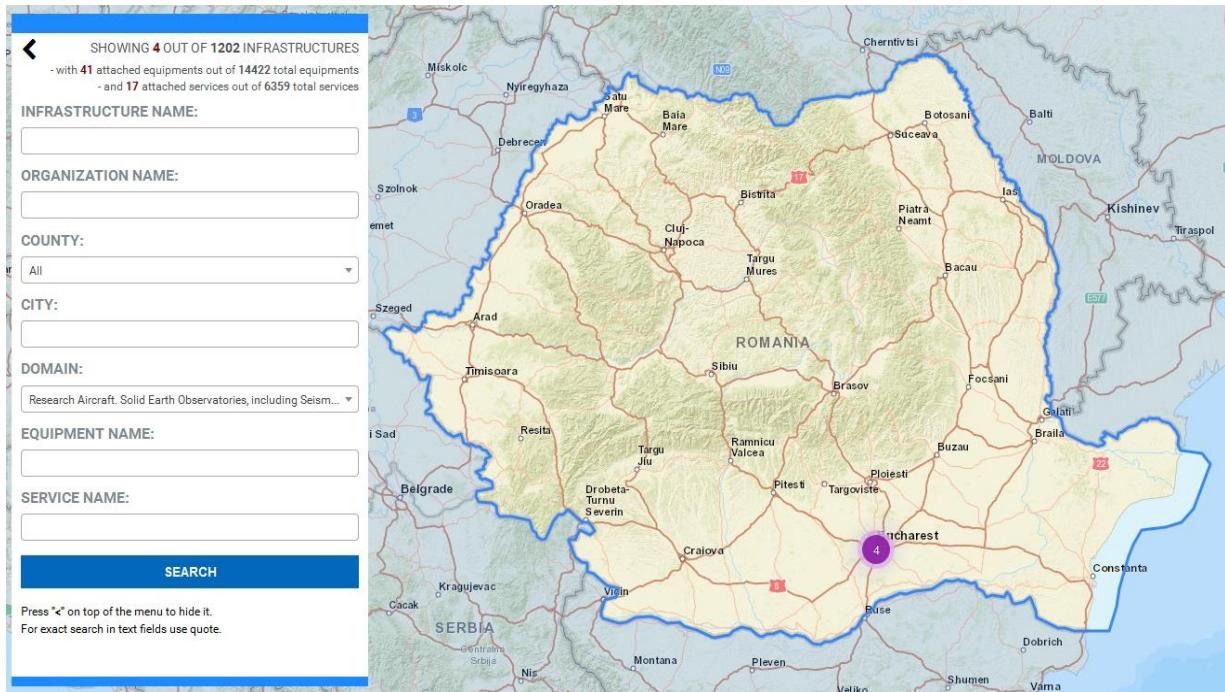
## Distributia nationala pe domeniu "Research Data service facilities" a infrastructurilor de cercetare:



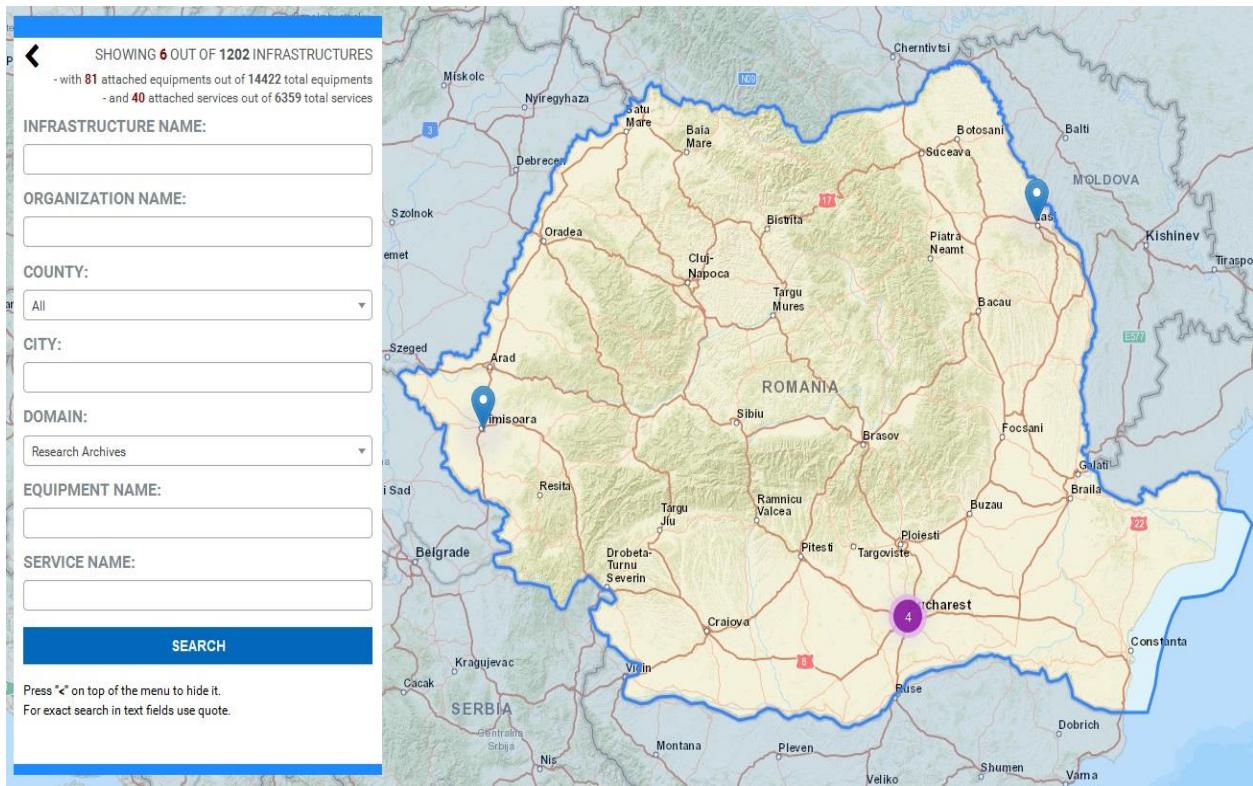
Distributia nationala pe domeniu "Research Bibliographies" a infrastructurilor de cercetare:



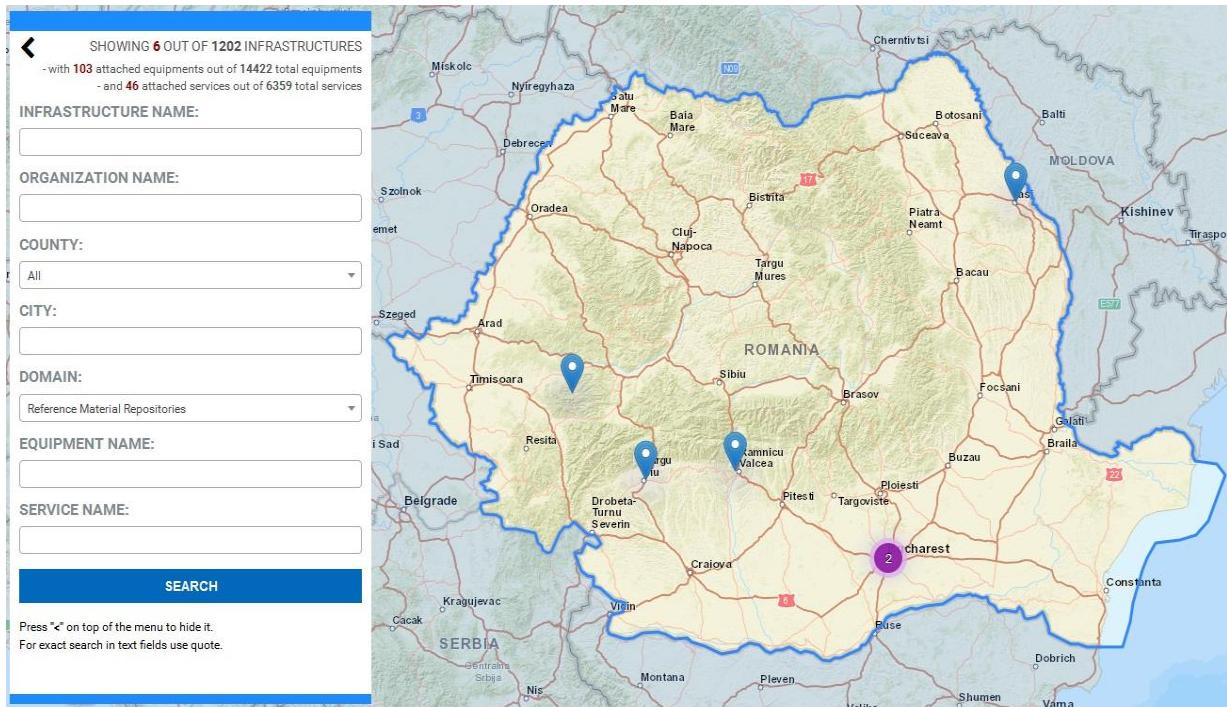
Distributia nationala pe domeniu "Research Aircraft. Solid Earth Observatories, including Seismological Monitoring Stations" a infrastructurilor de cercetare:



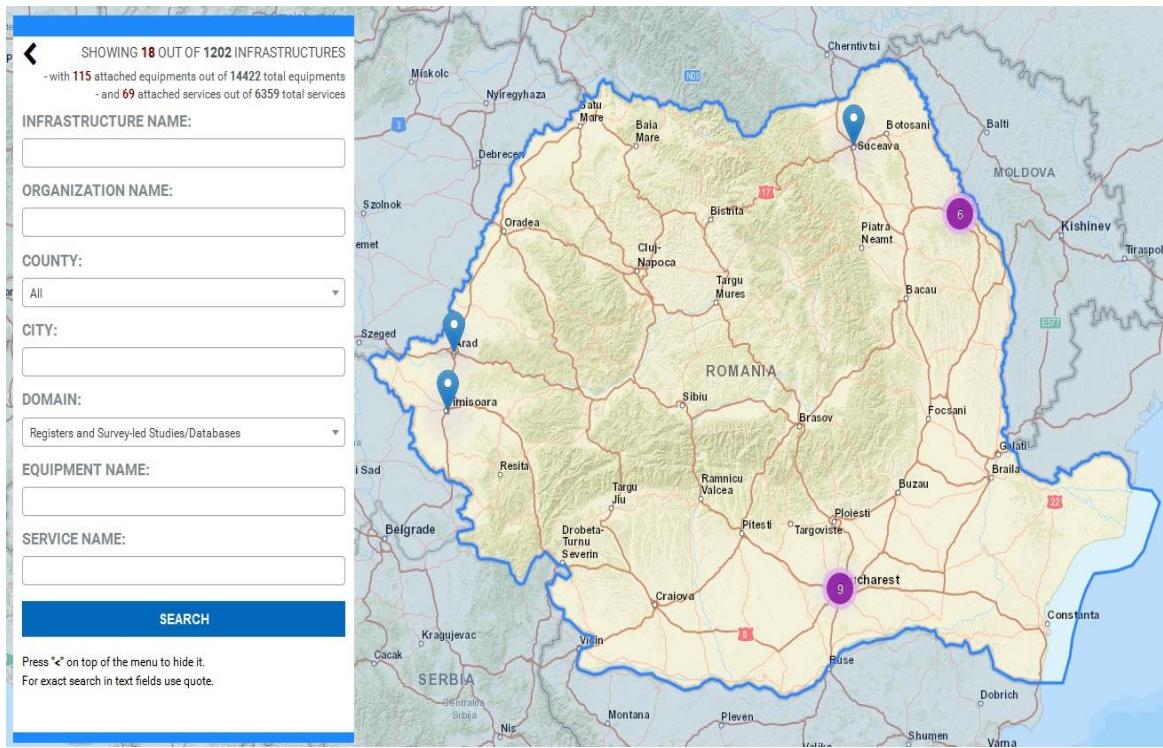
## Distributia nationala pe domeniu “Research Archives” a infrastructurilor de cercetare:



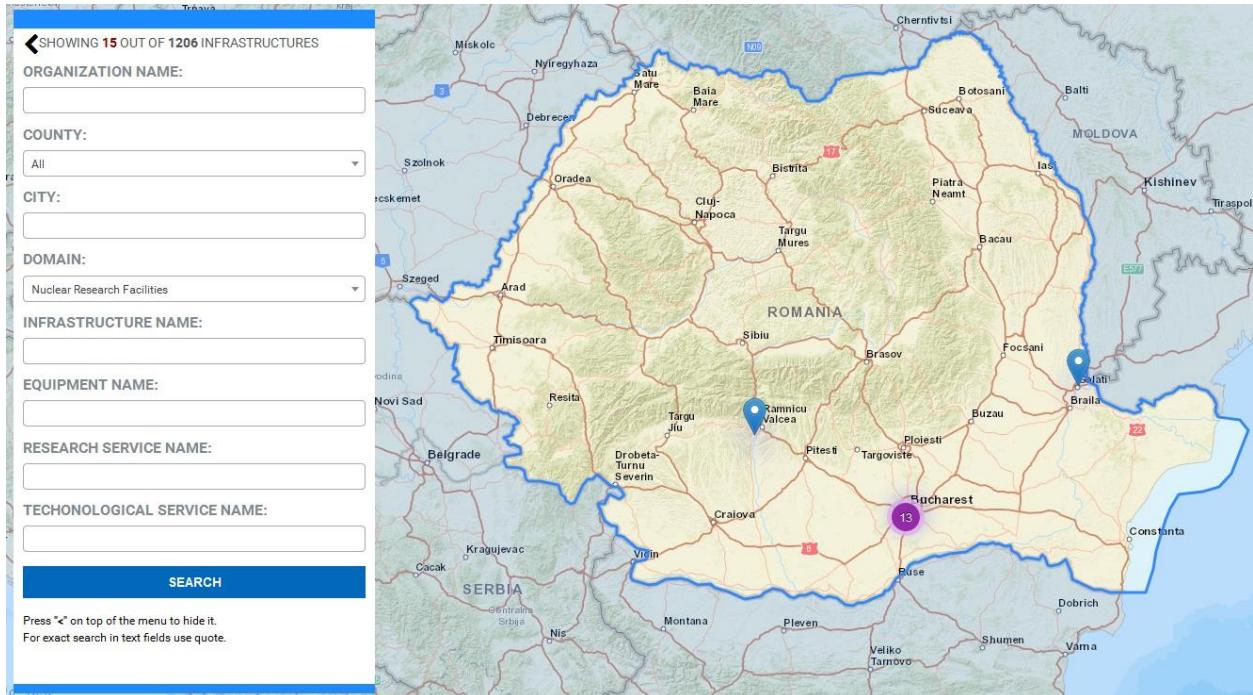
## Distributia nationala pe domeniu “Reference Material Repositories” a infrastructurilor de cercetare:



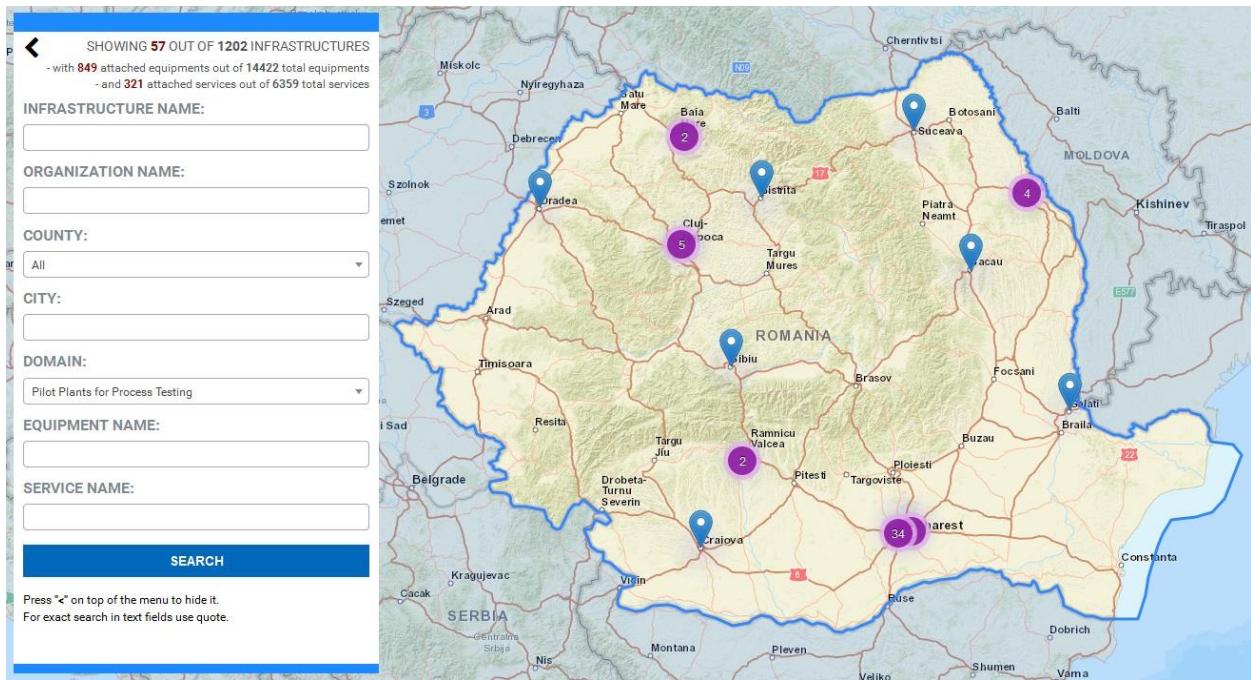
Distributia nationala pe domeniu "Registers and Survey-led Studies/Databases" a infrastructurilor de cercetare:



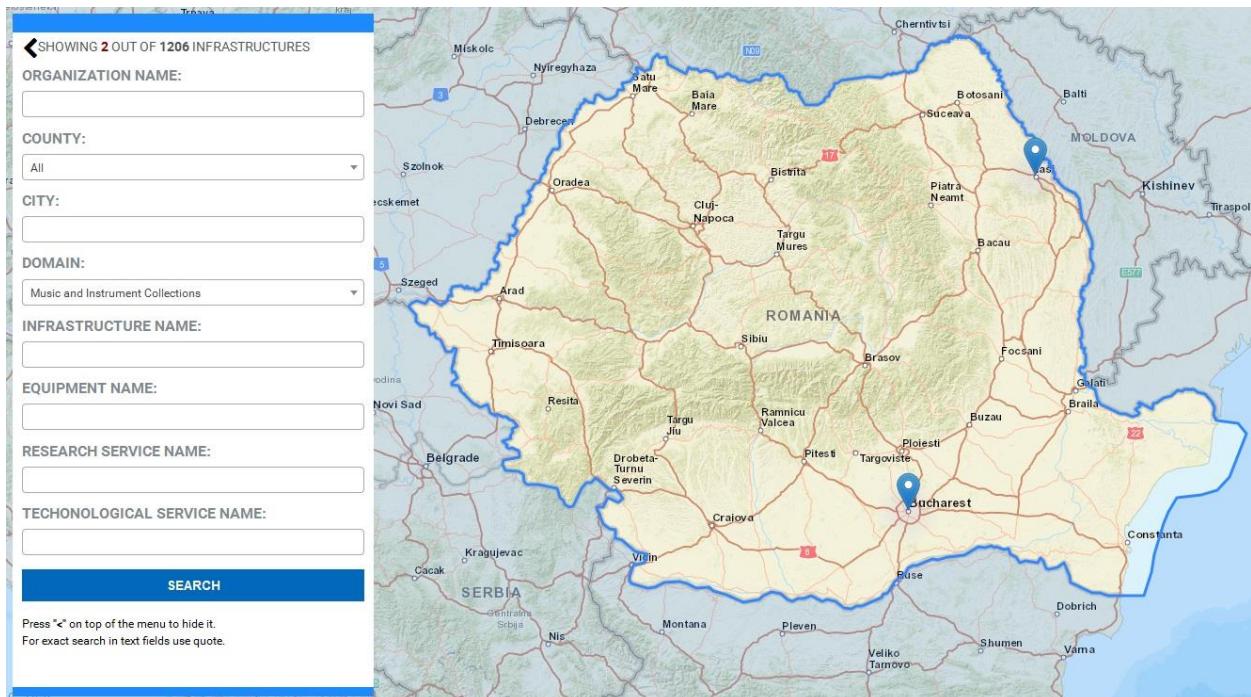
Distributia nationala pe domeniu "Nuclear Research Facilities" a infrastructurilor de cercetare:



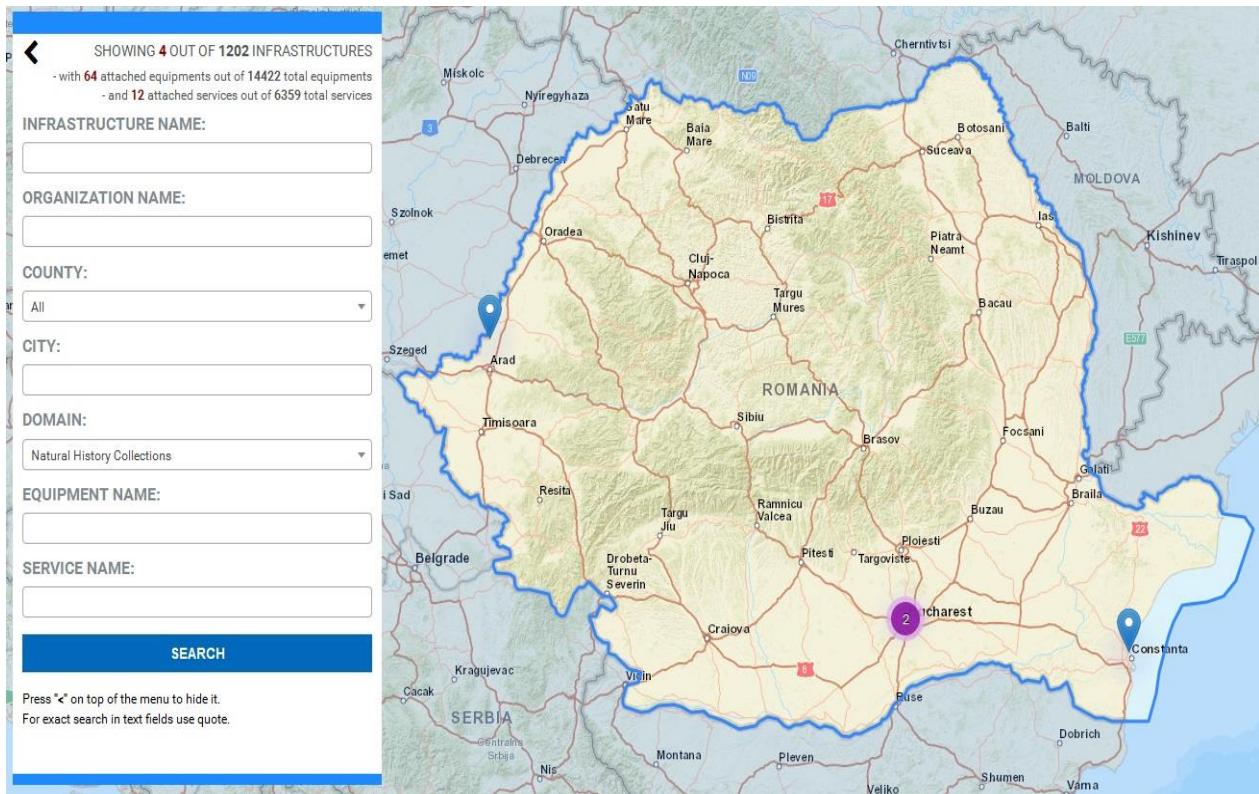
## Distributia nationala pe domeniu "Pilot Plants for Process Testing" a infrastructurilor de cercetare:



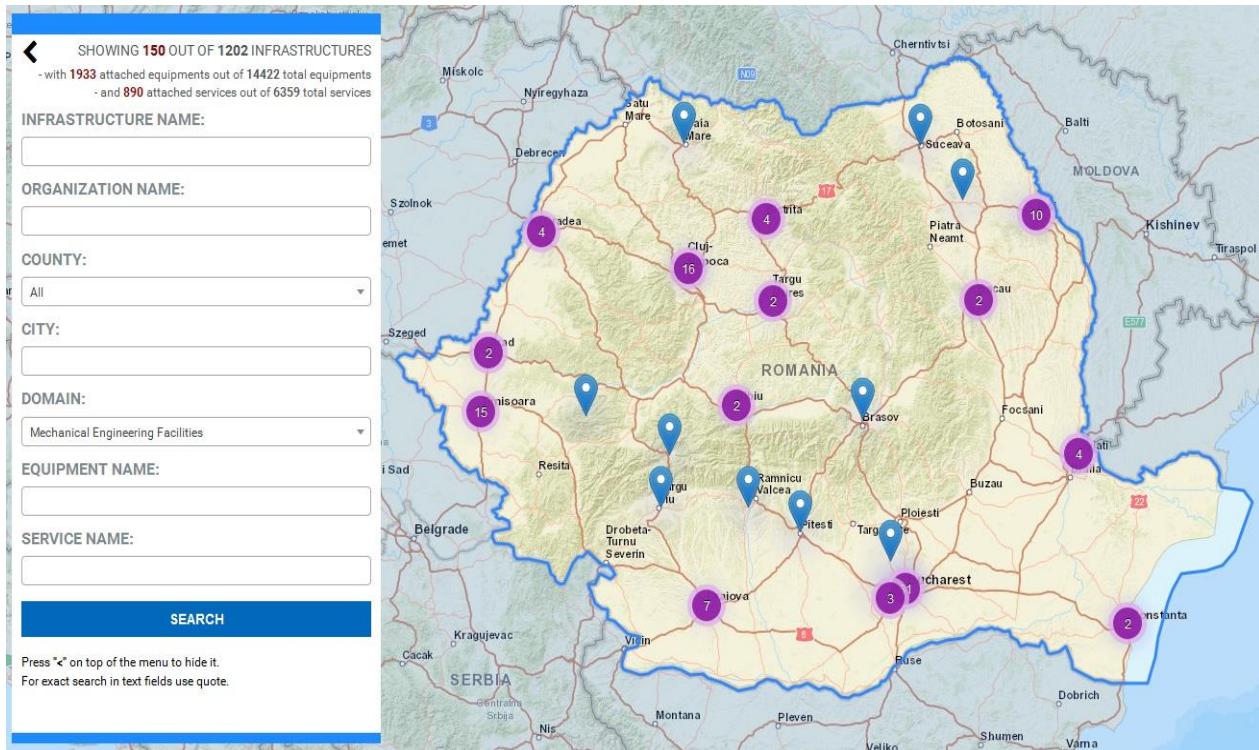
## Distributia nationala pe domeniu "Music and Instrument Collections" a infrastructurilor de cercetare:



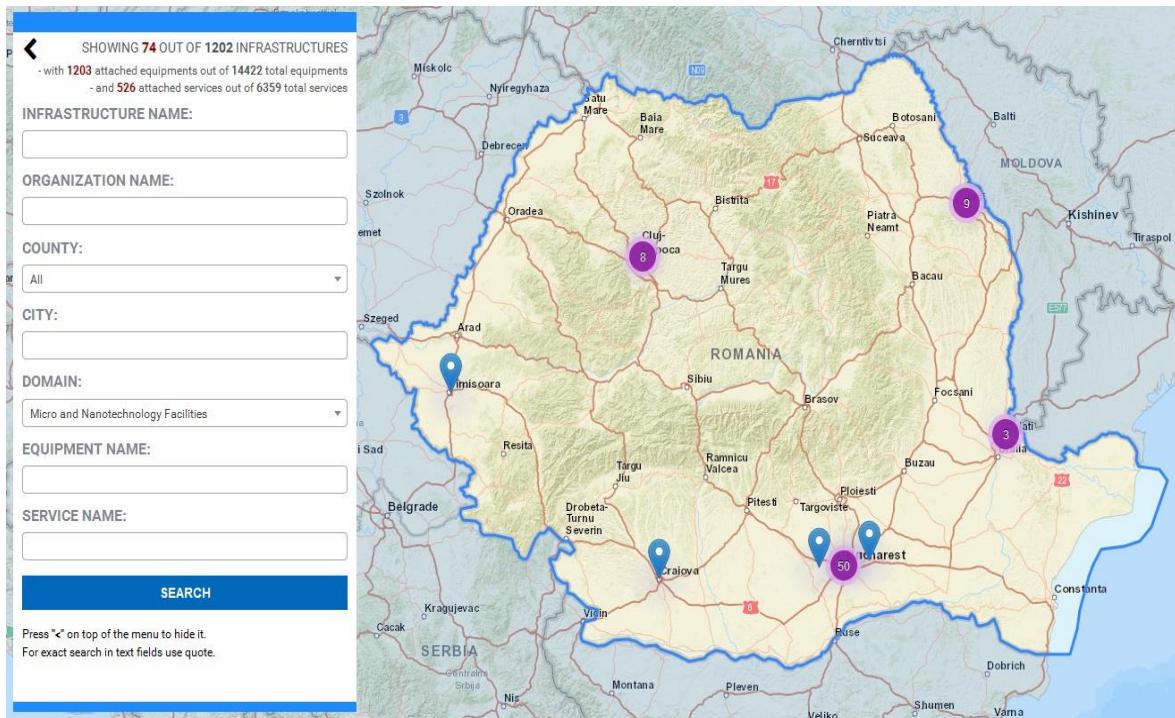
## Distributia nationala pe domeniu "Natural History Collections" a infrastructurilor de cercetare:



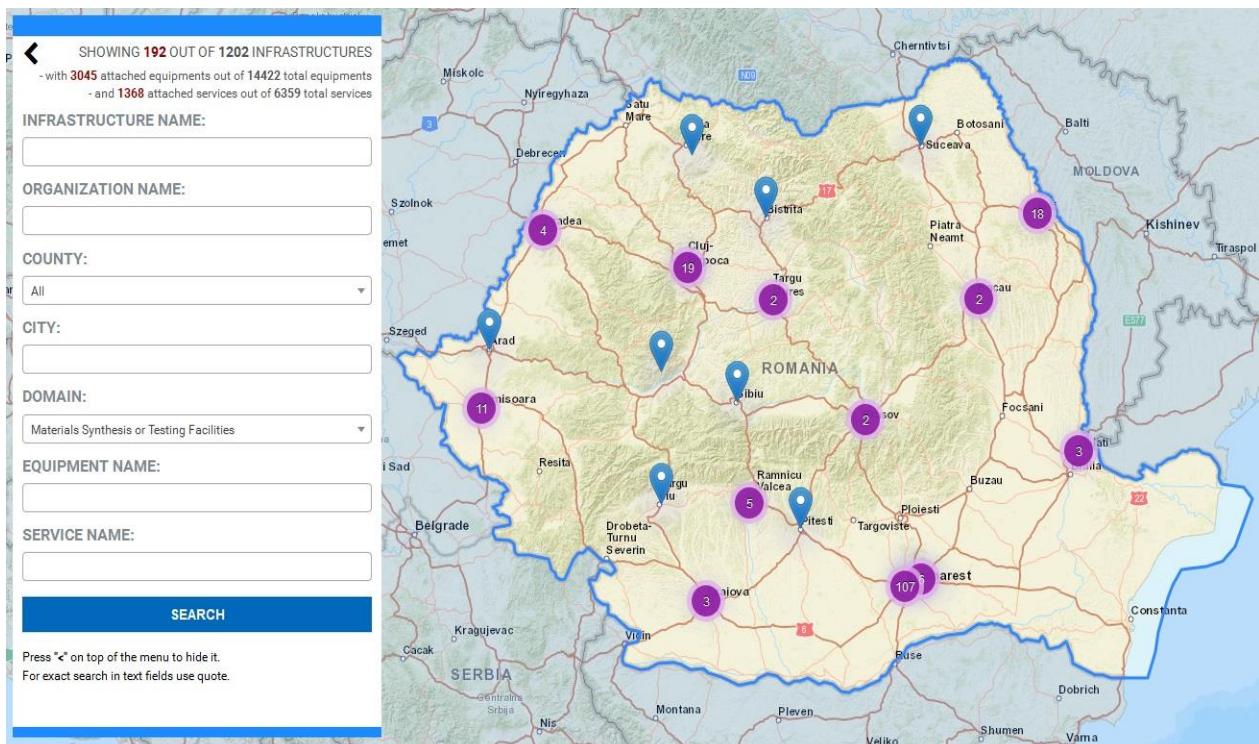
## Distributia nationala pe domeniu "Mechanical Engineering Facilities" a infrastructurilor de cercetare:



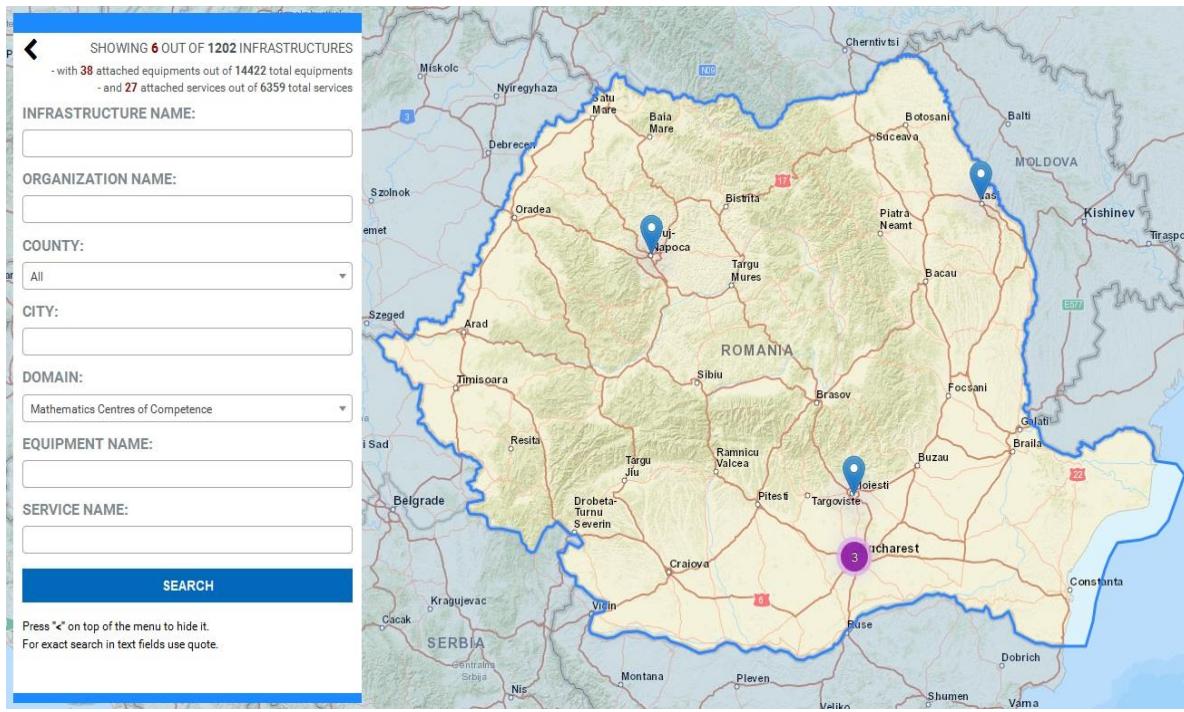
## Distributia nationala pe domeniu "Micro and Nanotechnology Facilities" a infrastructurilor de cercetare:



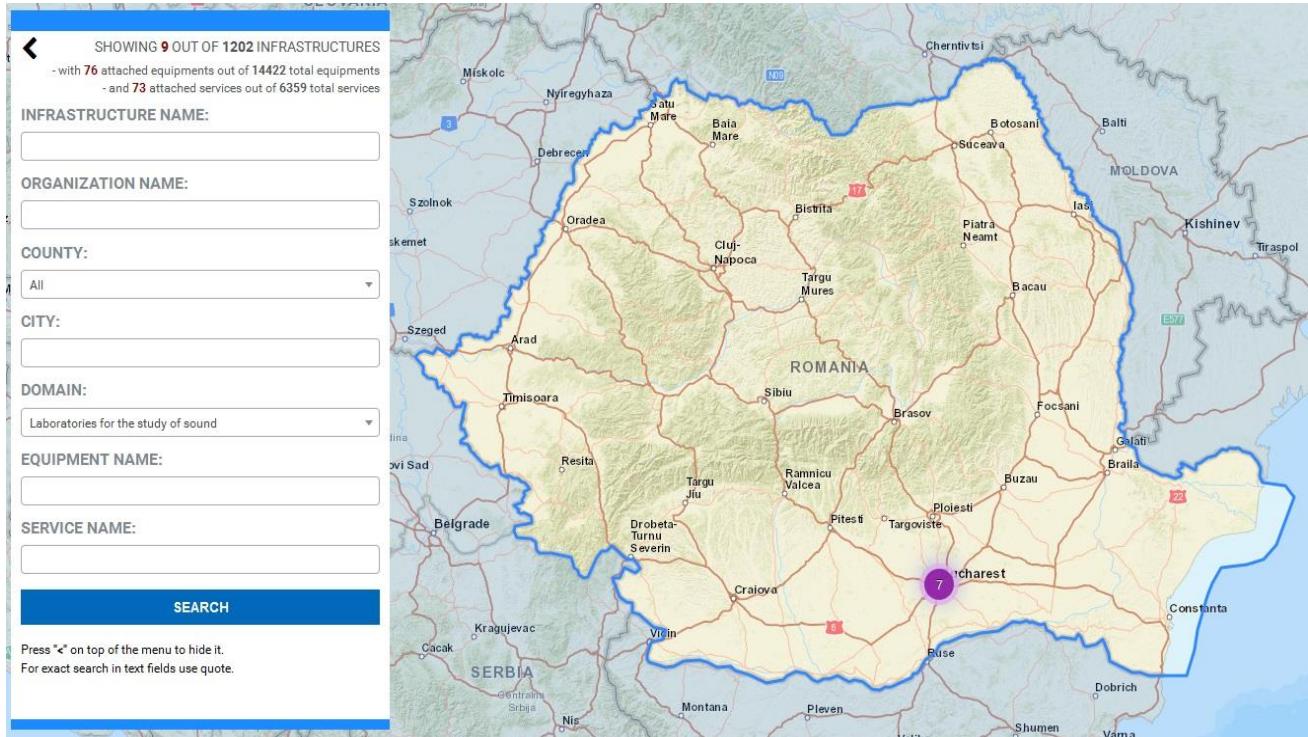
## Distributia nationala pe domeniu "Materials Synthesis or Testing Facilities" a infrastructurilor de cercetare:



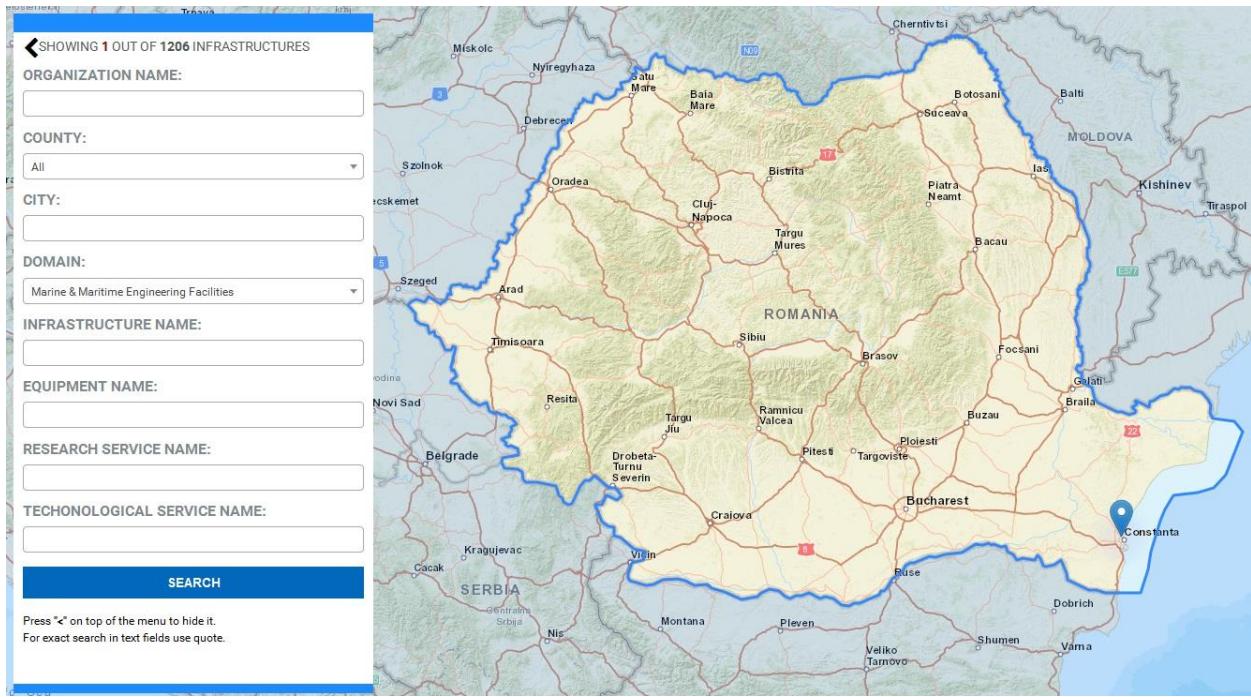
Distributia nationala pe domeniu "Mathematics Centre of Competence" a infrastructurilor de cercetare:



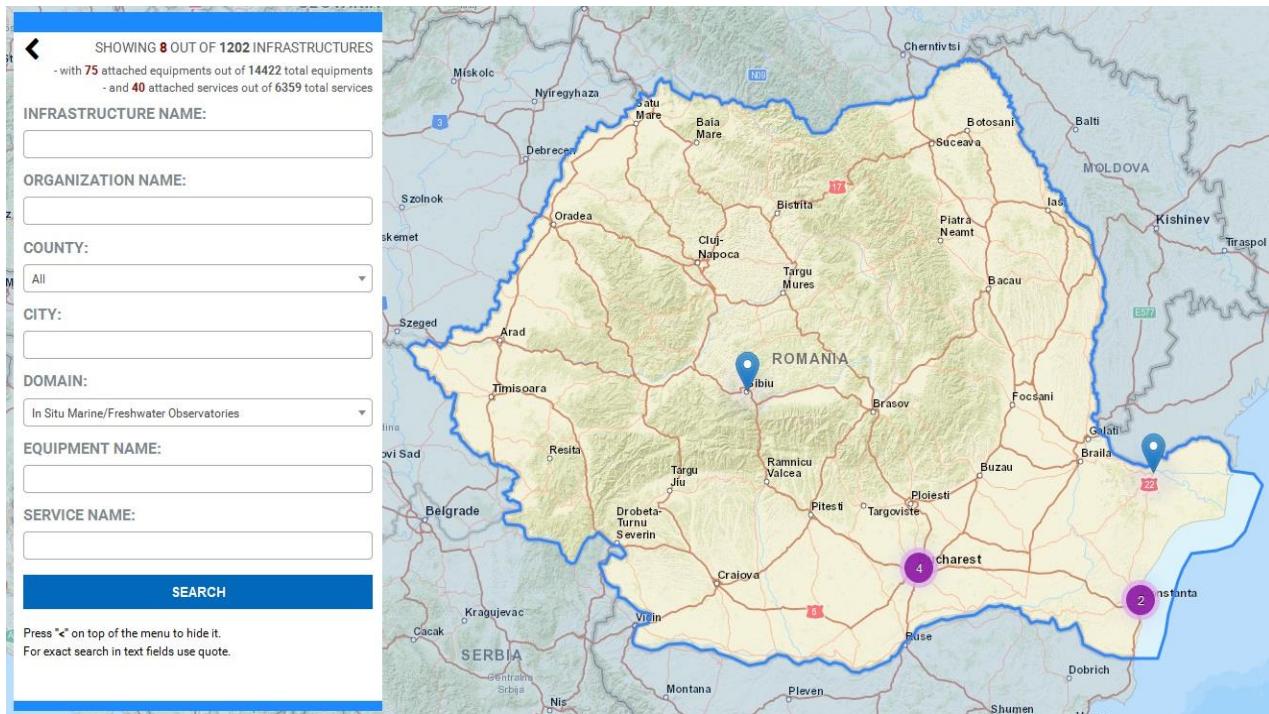
Distributia nationala pe domeniu "Laboratories for the study of sound" a infrastructurilor de cercetare:



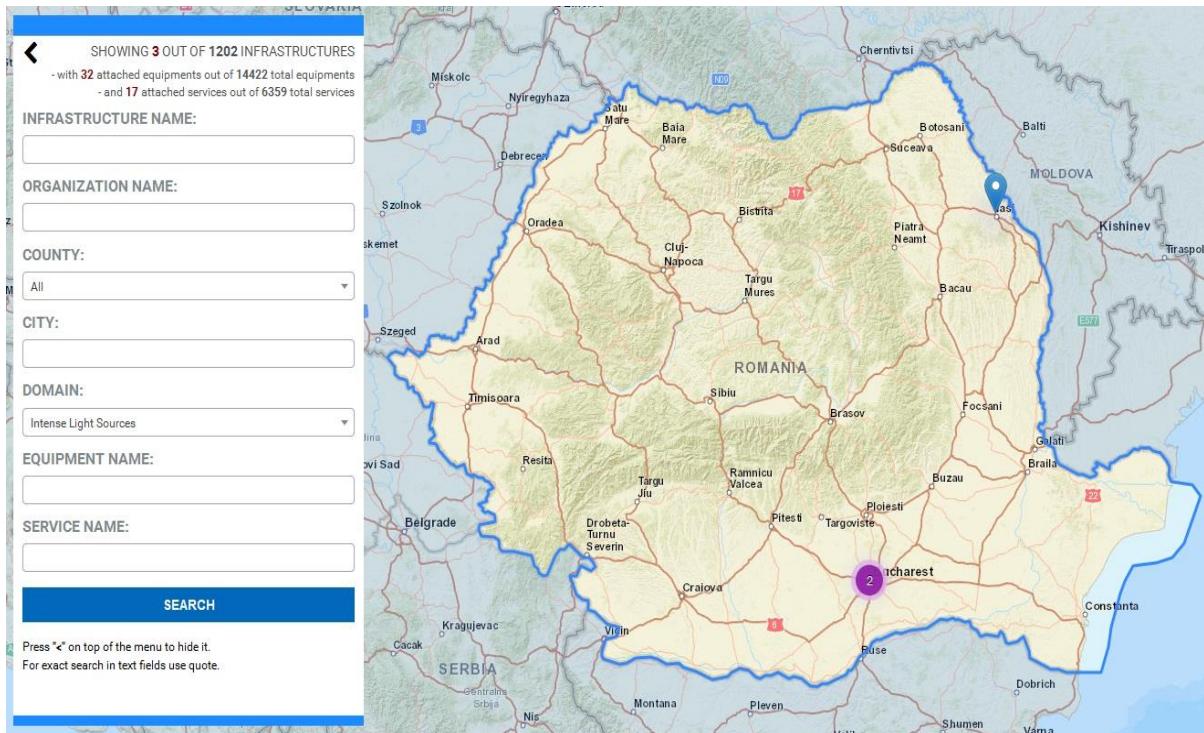
Distributia nationala pe domeniu "Marine & Maritime Engineering Facilities" a infrastructurilor de cercetare:



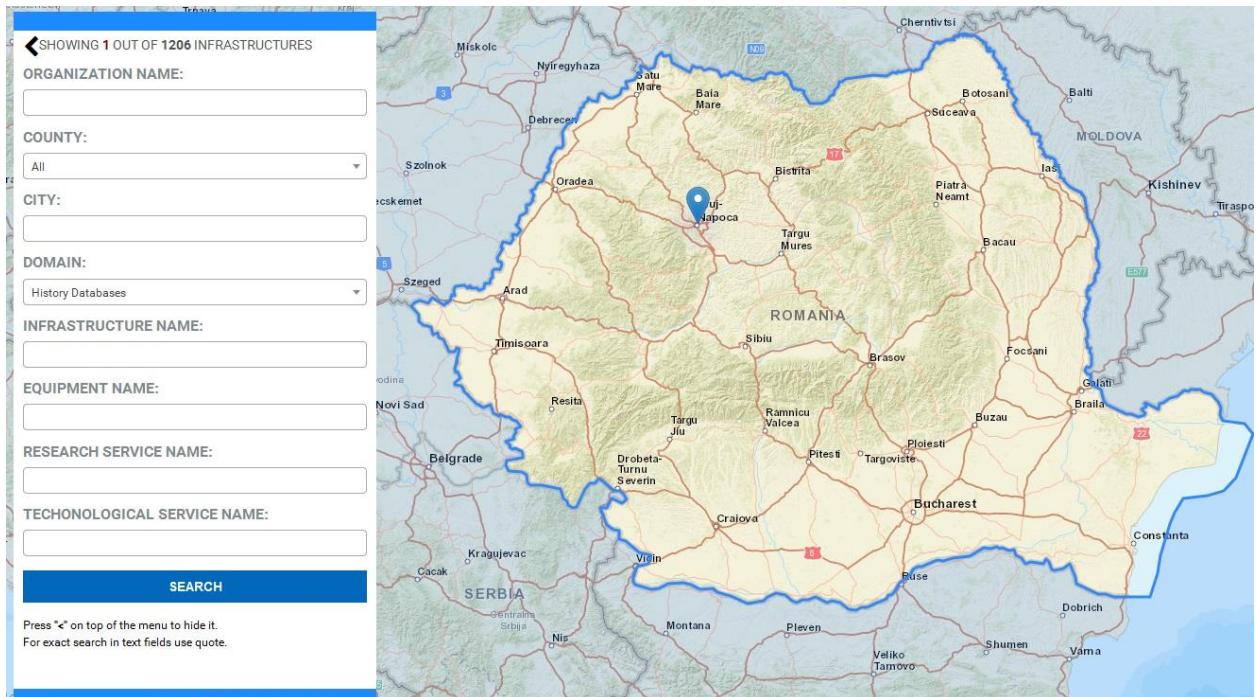
Distributia nationala pe domeniu "In Situ Marine/ Freshwater Observatories" a infrastructurilor de cercetare:



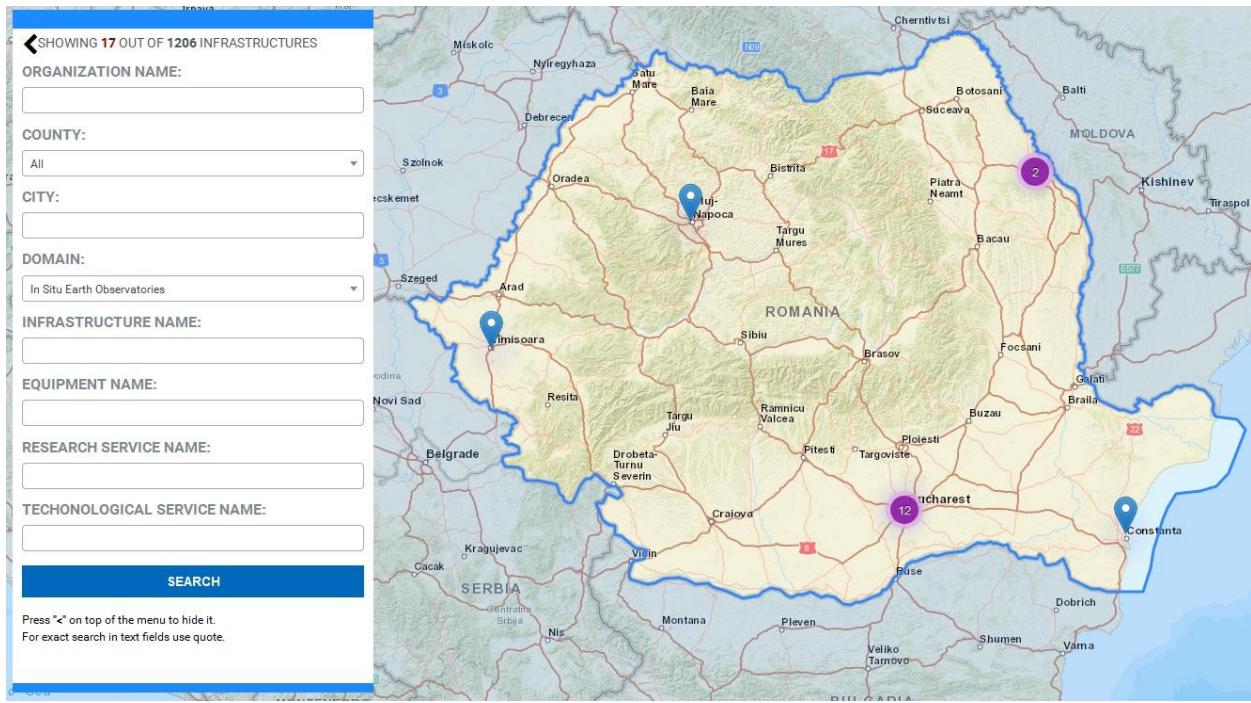
## Distributia nationala pe domeniu “Intense Light Sources” a infrastructurilor de cercetare:



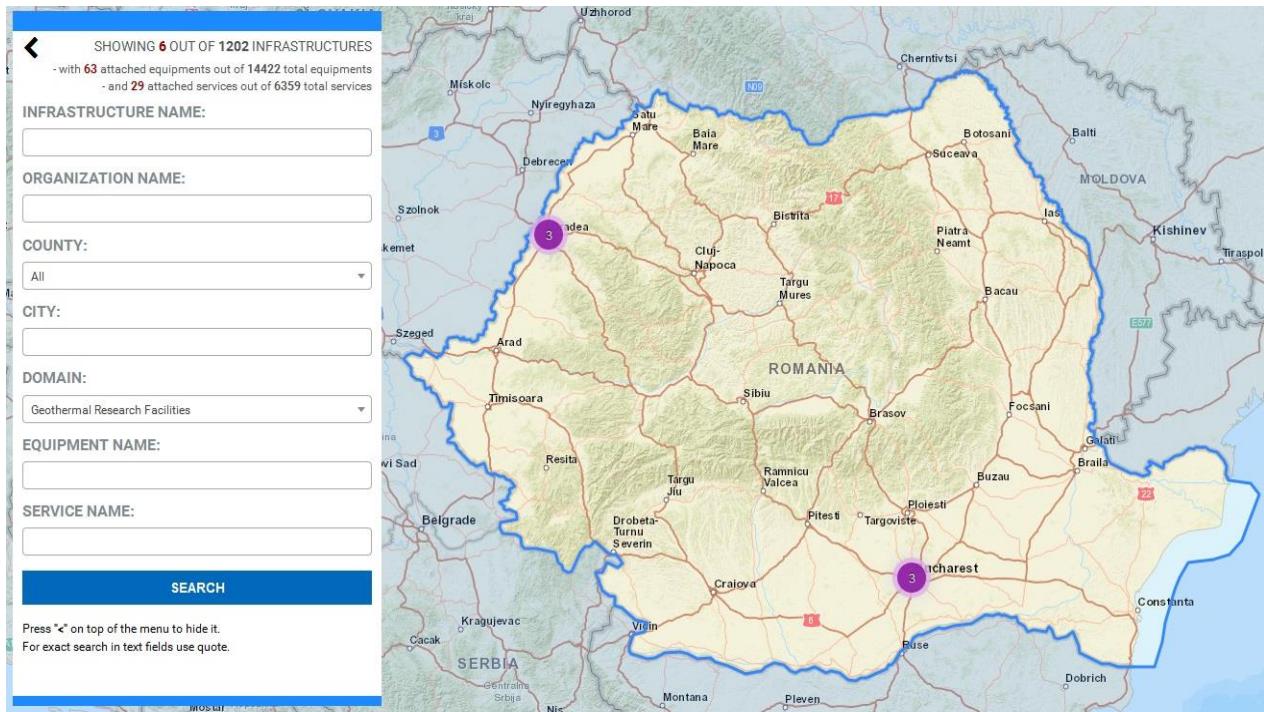
## Distributia nationala pe domeniu “History Databases” a infrastructurilor de cercetare:



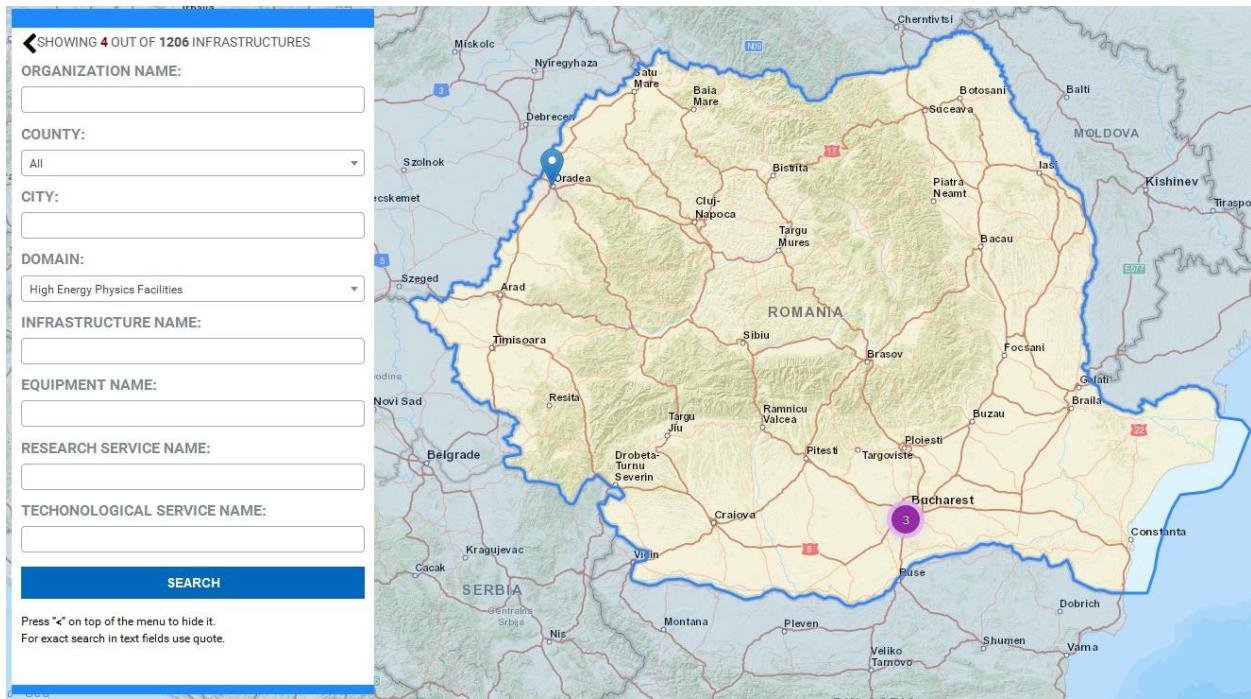
Distributia nationala pe domeniu "In Situ Earth Observatories" a infrastructurilor de cercetare:



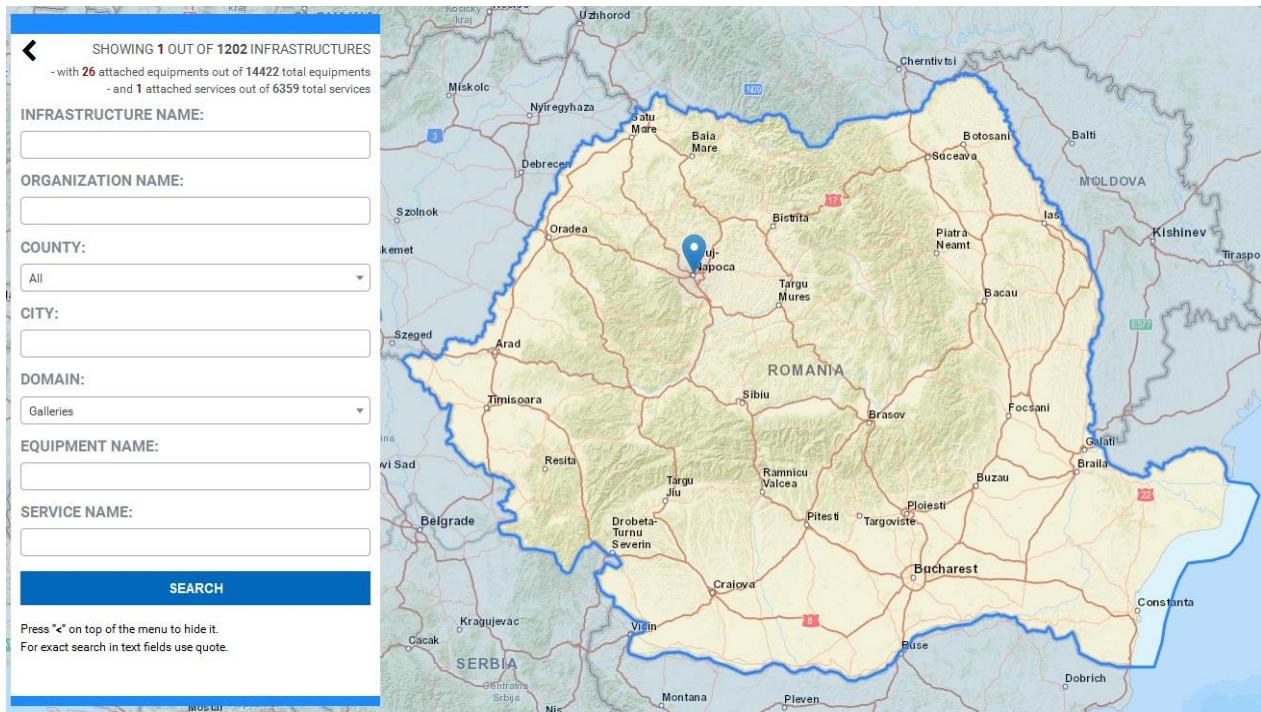
Distributia nationala pe domeniu "Geothermal Research Facilities" a infrastructurilor de cercetare:



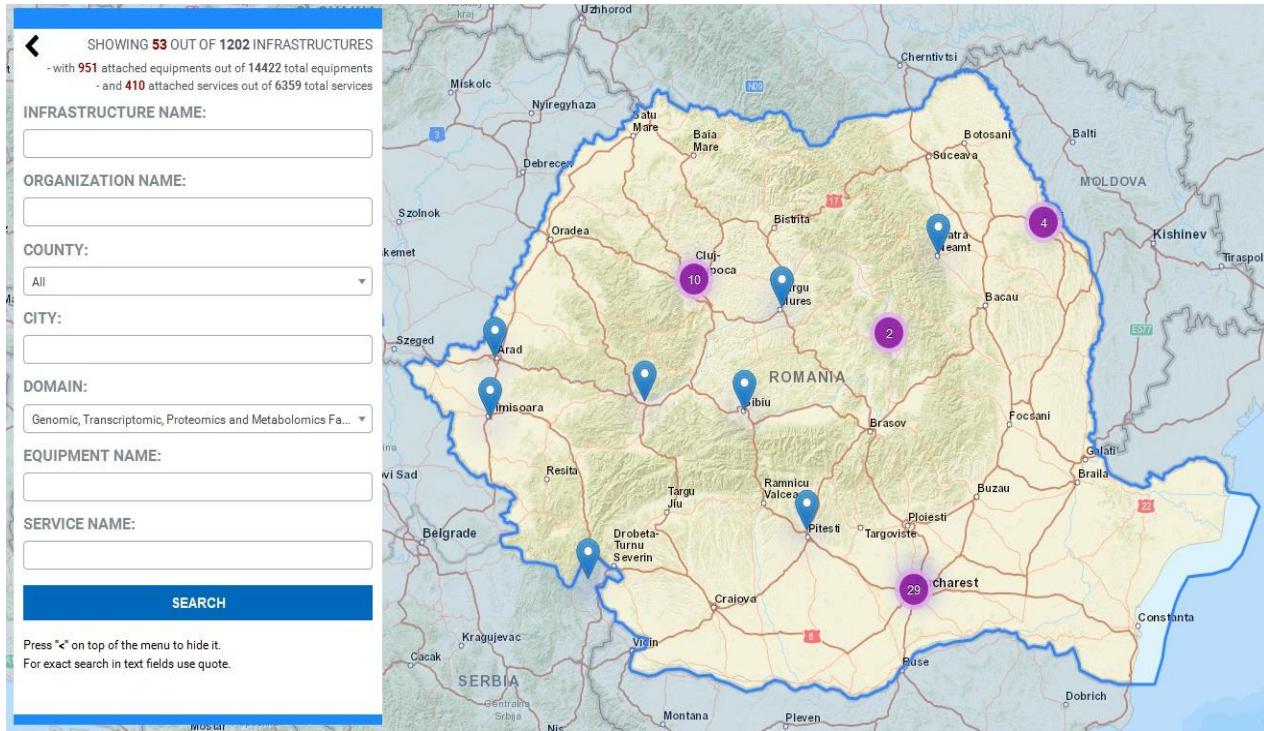
## Distributia nationala pe domeniu "High Energy Physics Facilities" a infrastructurilor de cercetare:



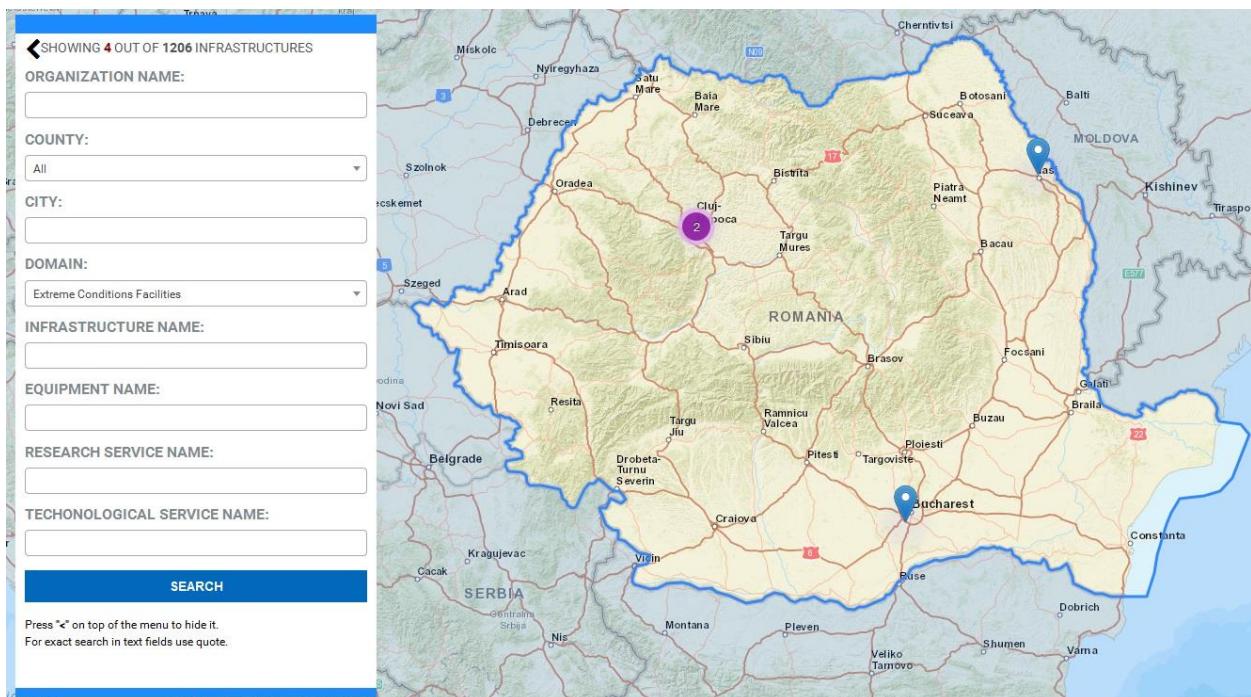
## Distributia nationala pe domeniu "Galleries" a infrastructurilor de cercetare:



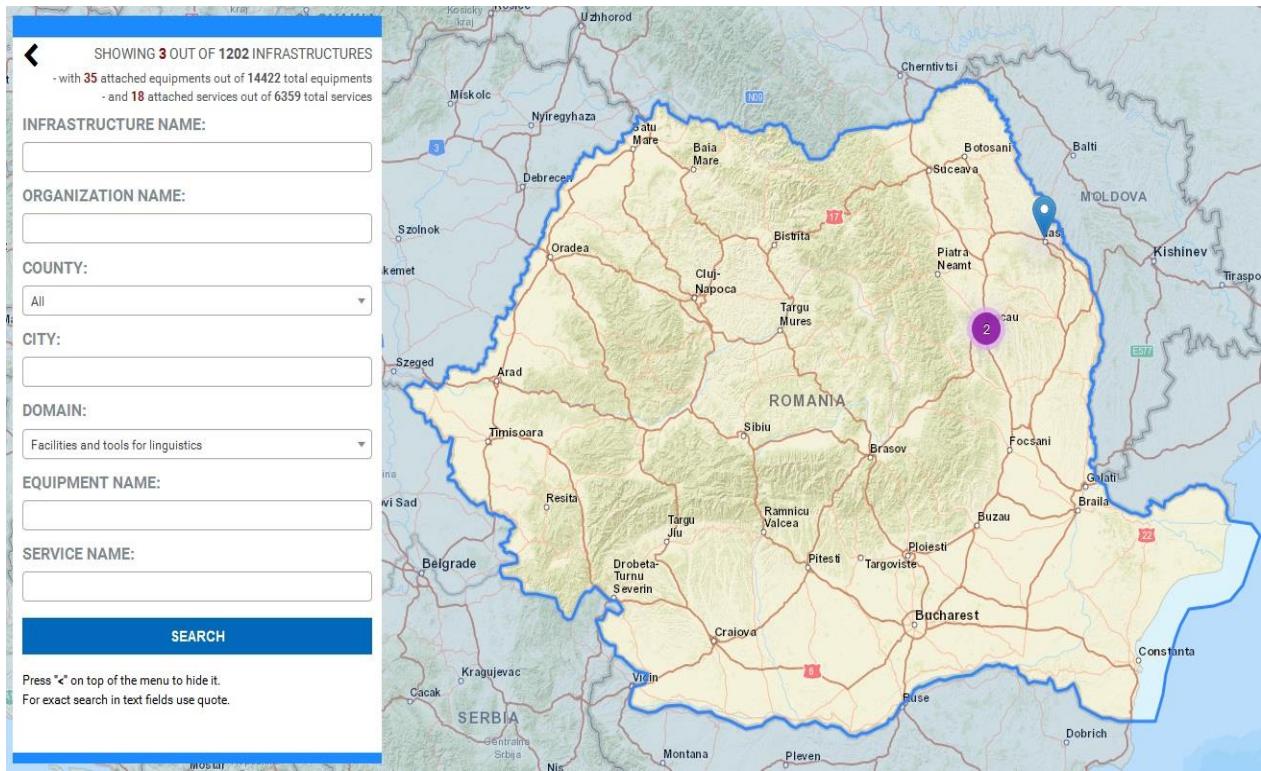
Distributia nationala pe domeniu "Genomic, Transcriptomic, Proteomics, and Metabolomics Facilities" a infrastructurilor de cercetare:



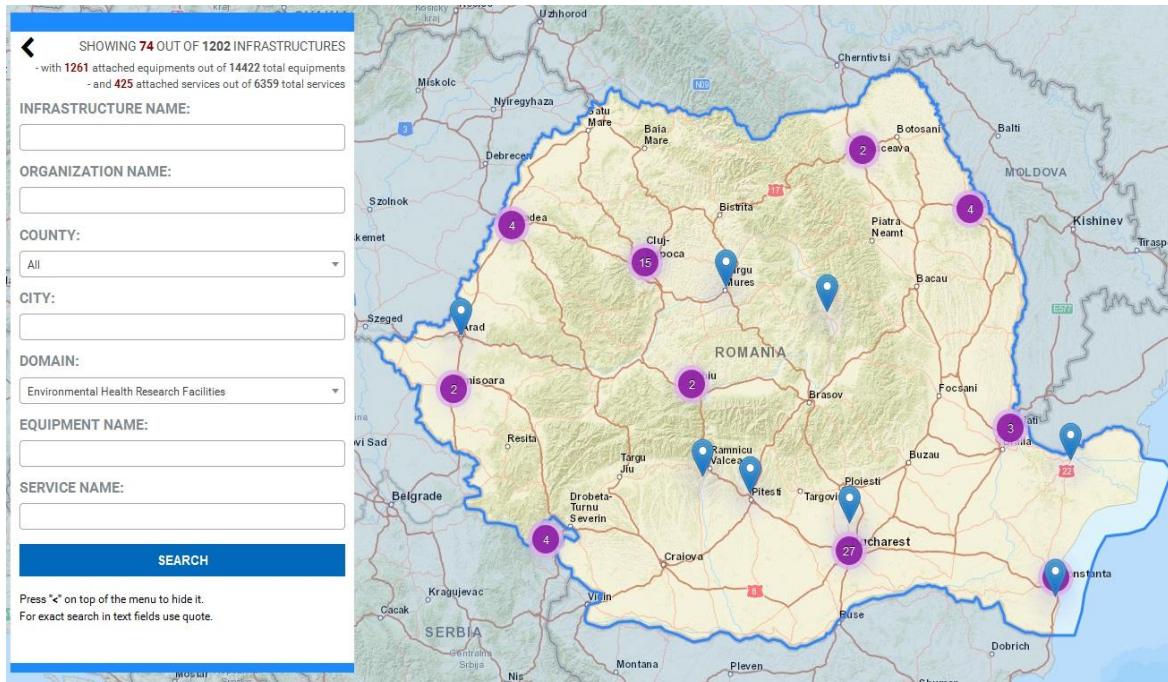
Distributia nationala pe domeniu "Extreme Conditions Facilities" a infrastructurilor de cercetare:



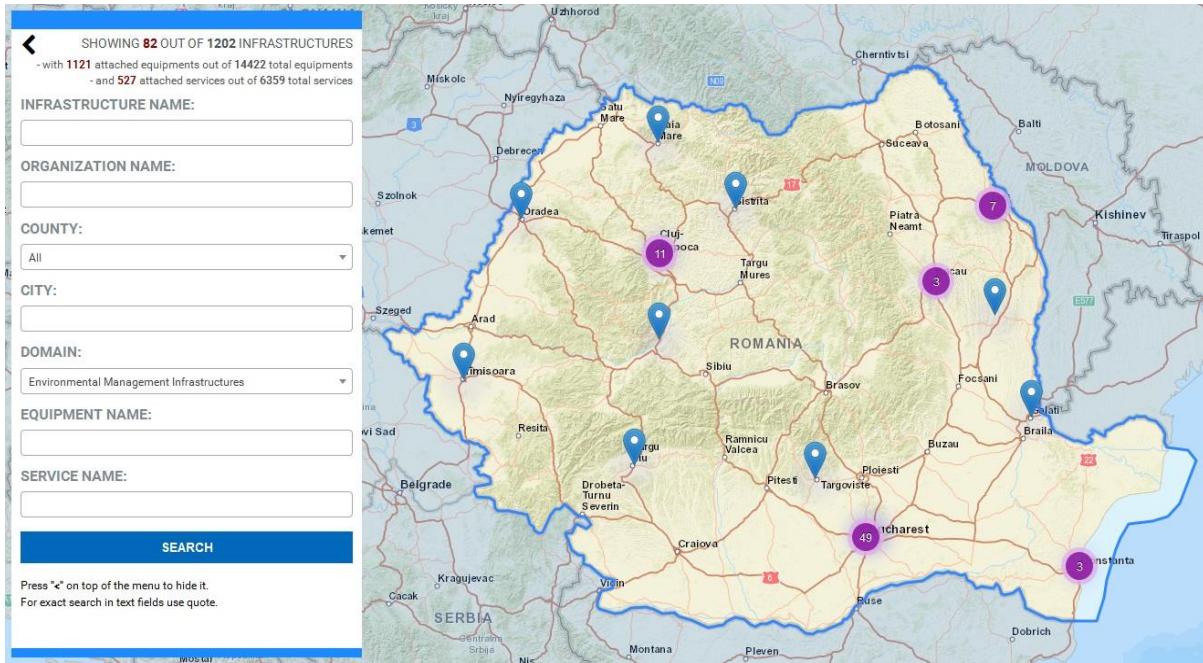
## Distributia nationala pe domeniu "Facilities and tools for linguistics" a infrastructurilor de cercetare:



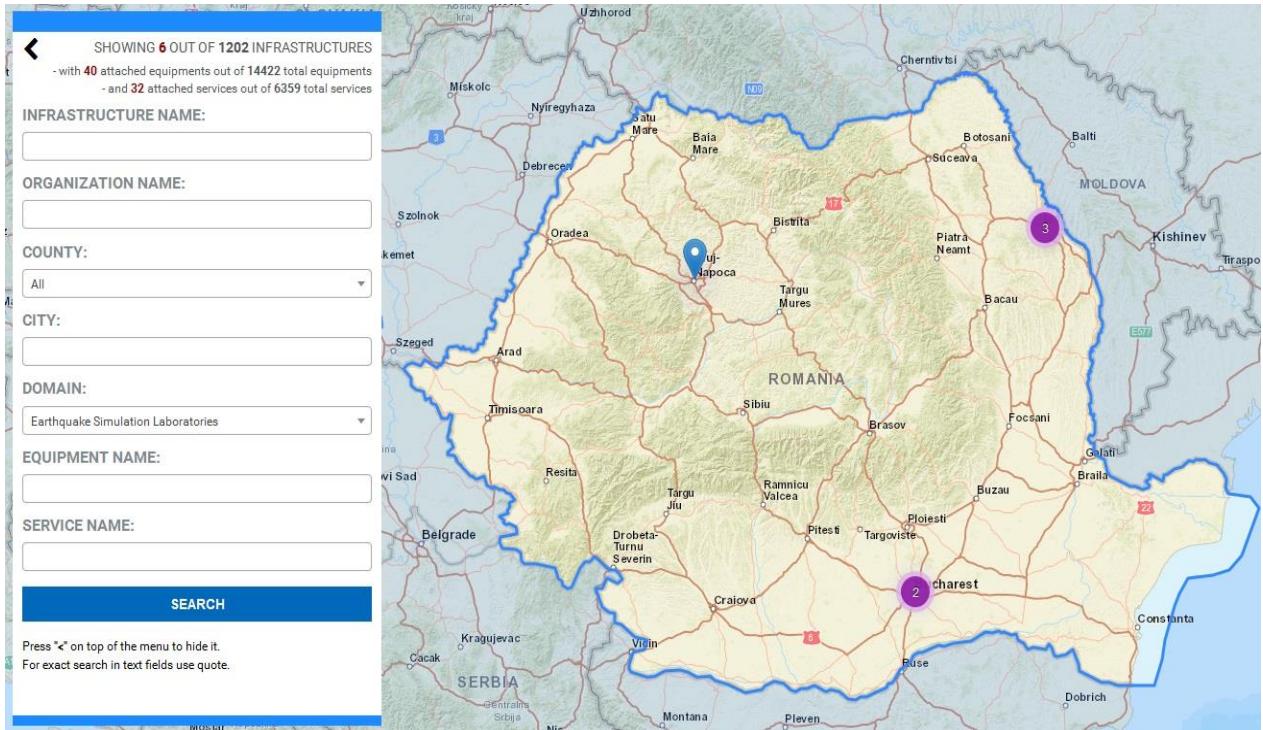
## Distributia nationala pe domeniu "Environmental Health Research Facilities" a infrastructurilor de cercetare:



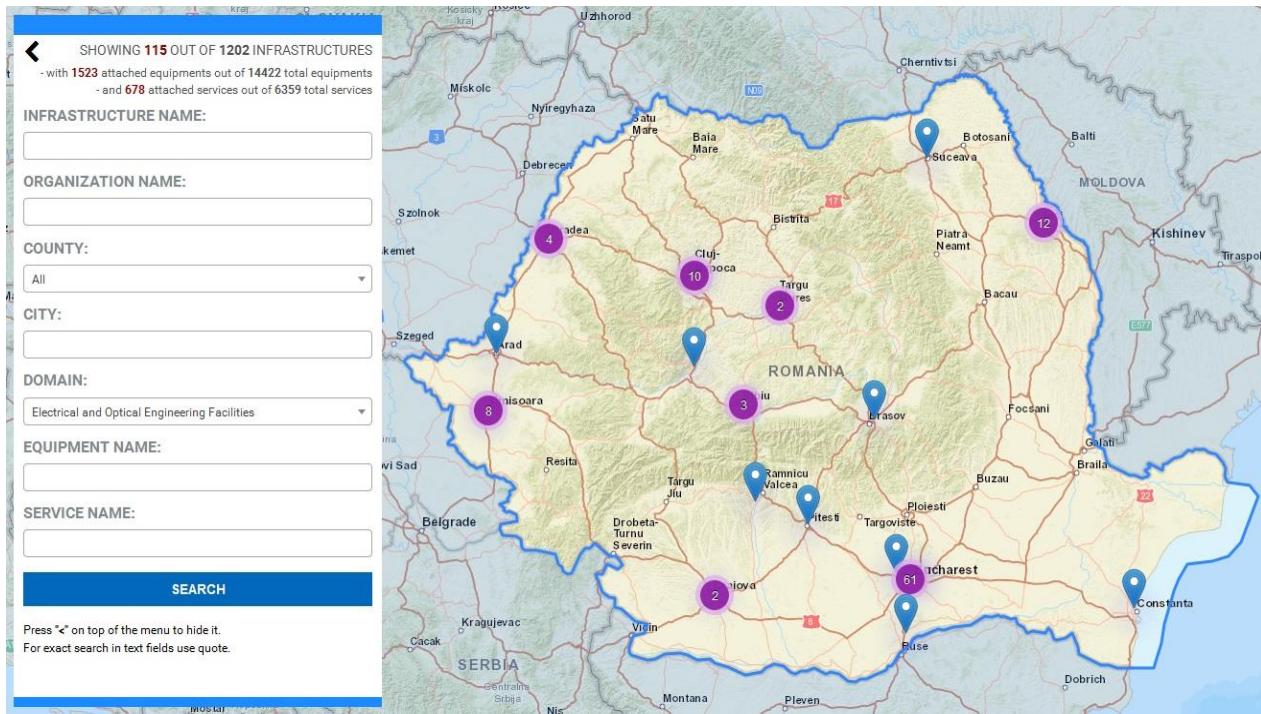
Distributia nationala pe domeniu "Environmental Management Infrastructures" a infrastructurilor de cercetare:



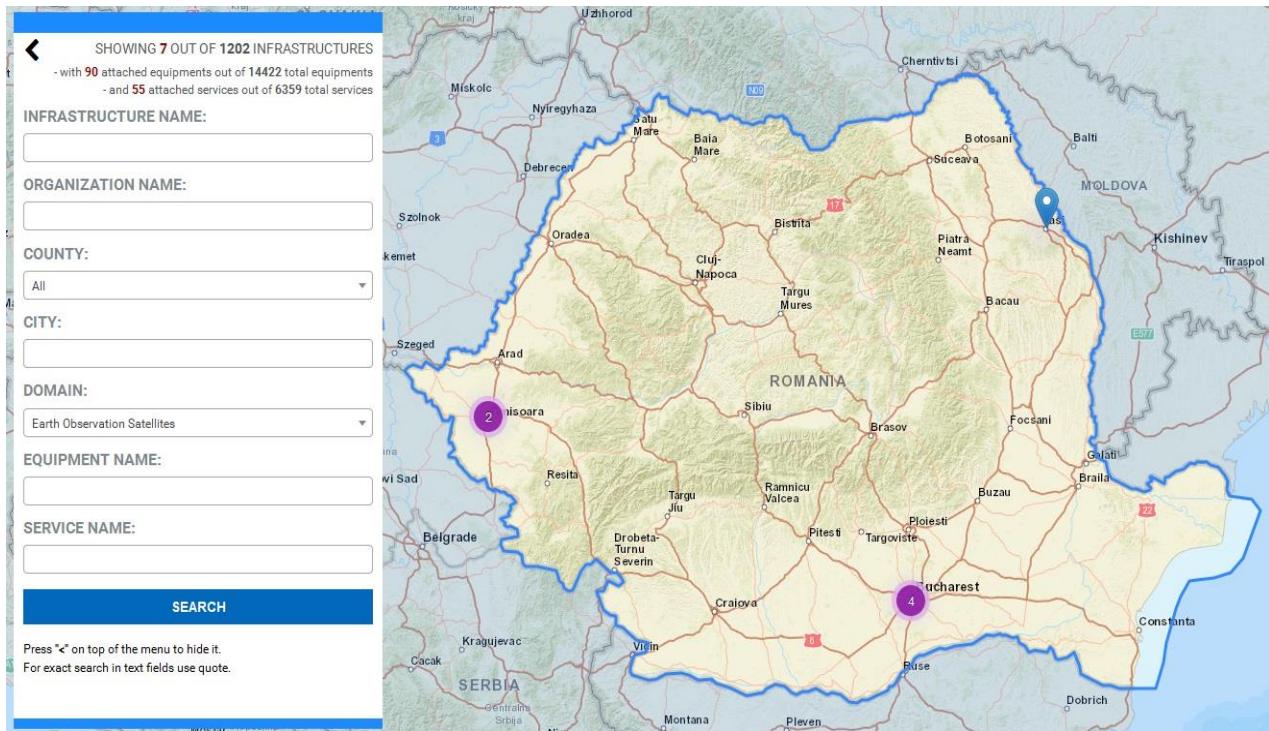
Distributia nationala pe domeniu "Earthquake Simulation Laboratories" a infrastructurilor de cercetare:



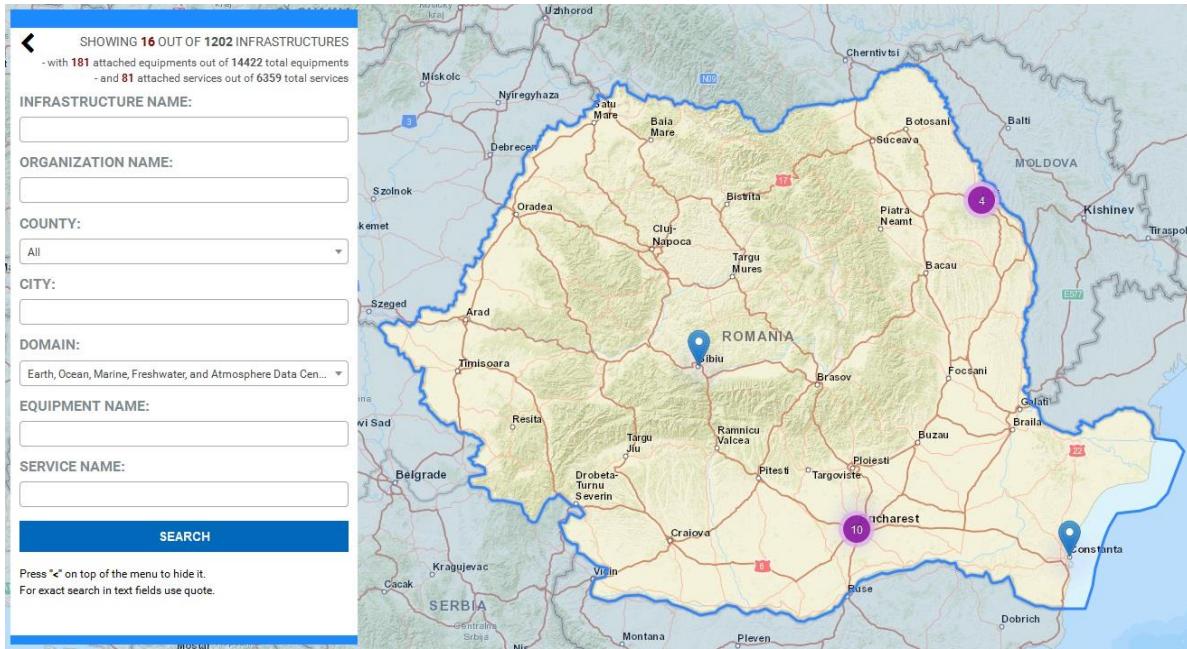
Distributia nationala pe domeniu "Electrical and Optical Engineering Facilities" a infrastructurilor de cercetare:



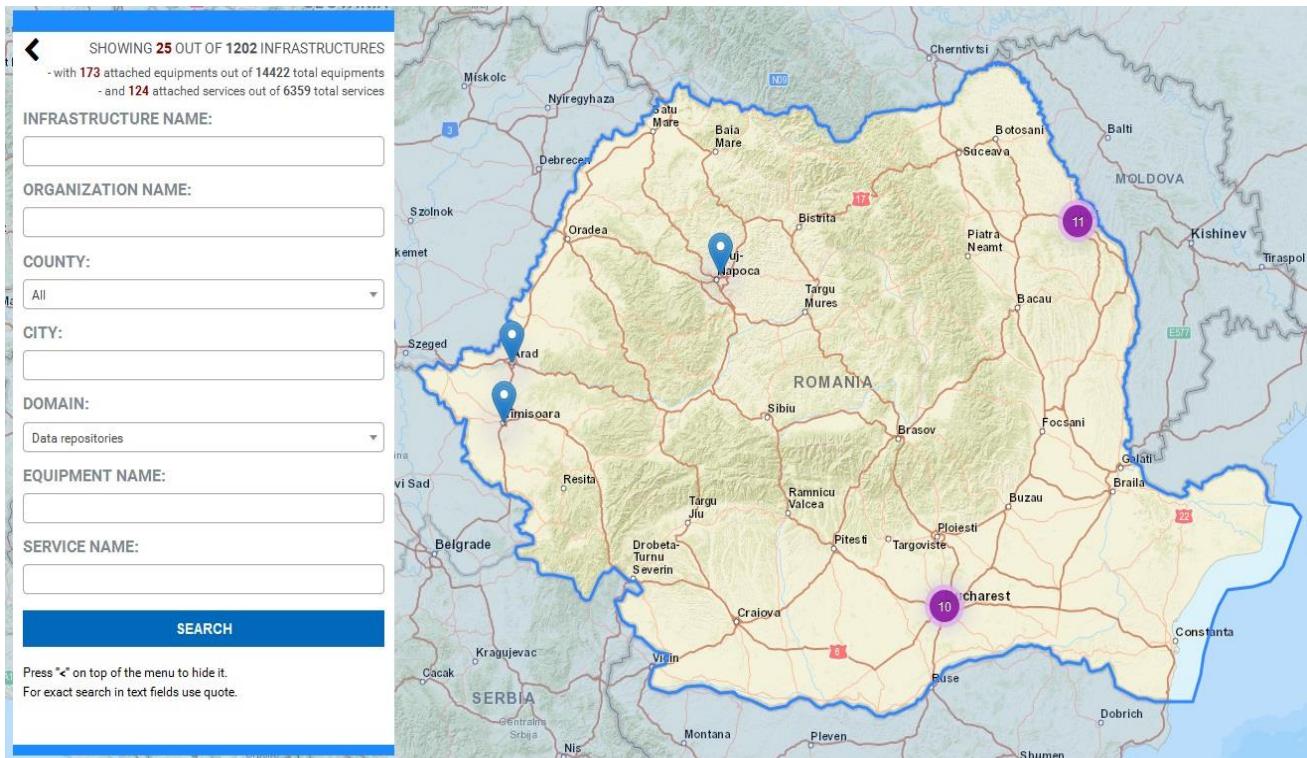
Distributia nationala pe domeniu "Earth Observation Satellites" a infrastructurilor de cercetare:



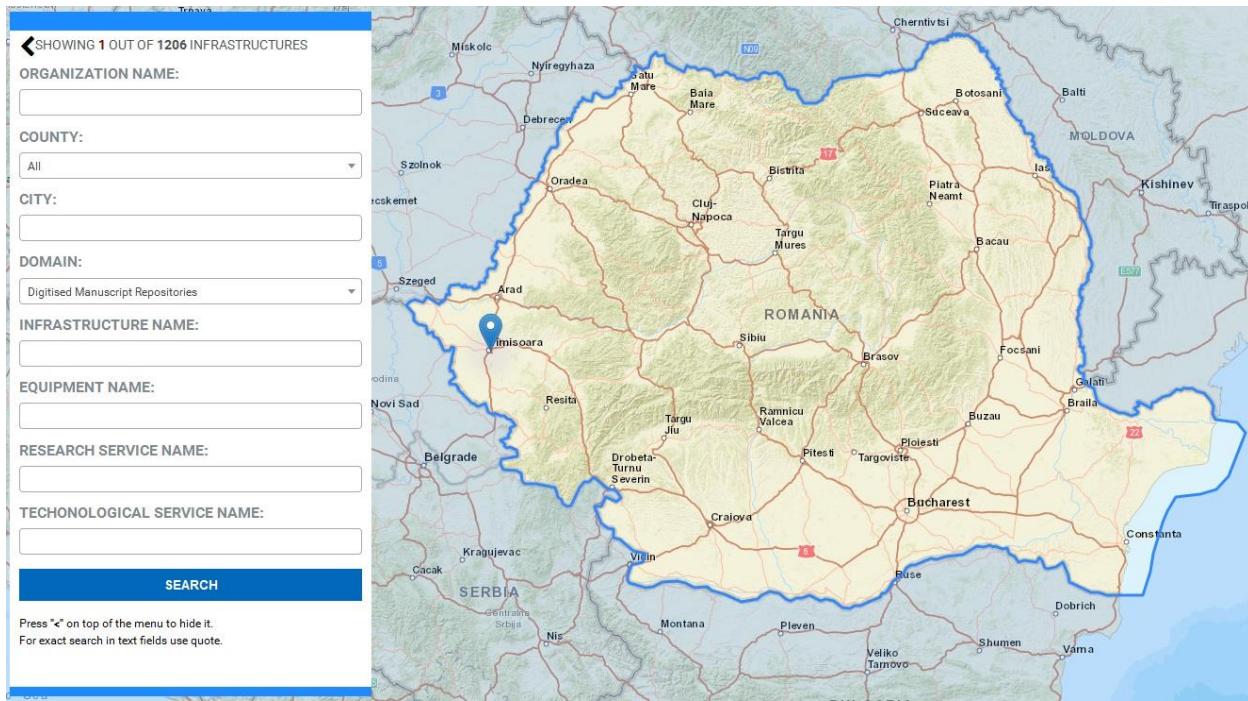
Distributia nationala pe domeniu "Earth, Ocean, Marine, FreshWater and Atmosphere Data Centres" a infrastructurilor de cercetare:



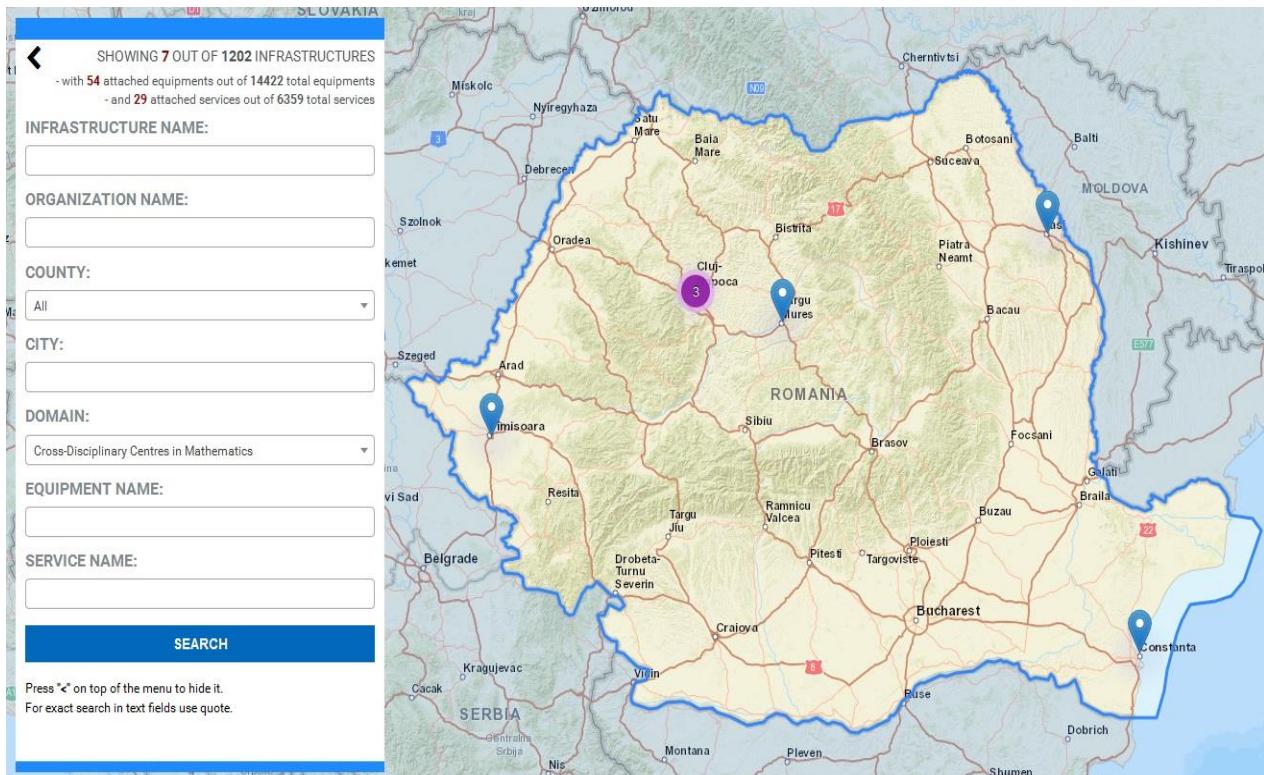
Distributia nationala pe domeniu "Data Repositories" a infrastructurilor de cercetare:



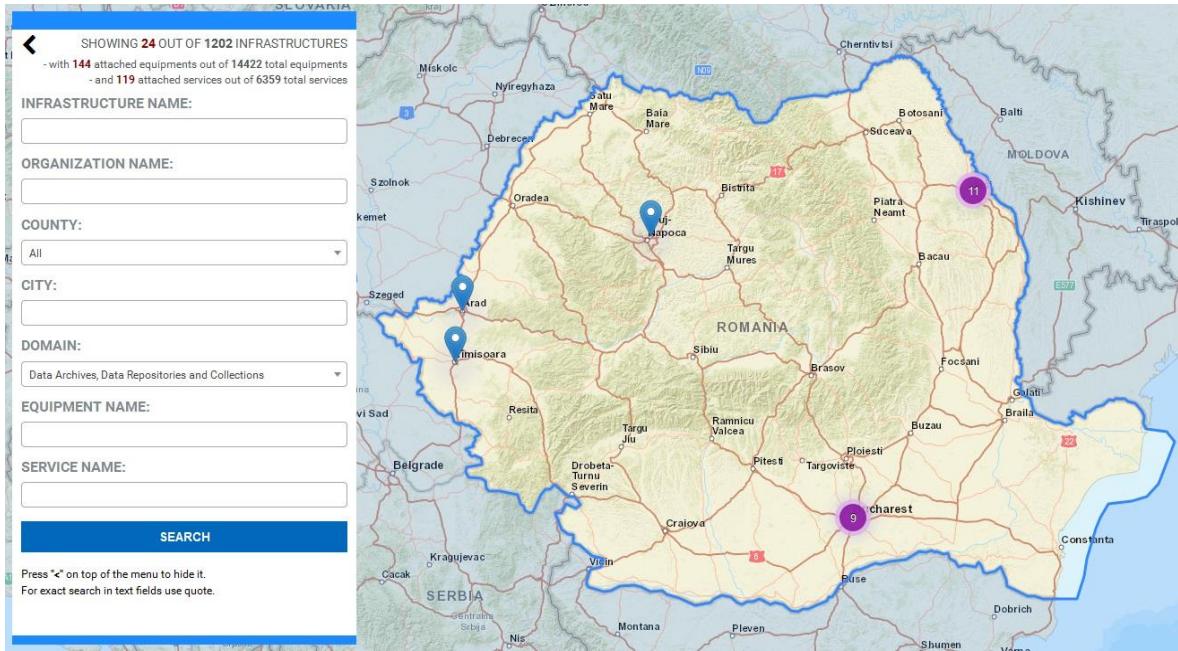
Distributia nationala pe domeniu "Digitised Manuscript Repositories" a infrastructurilor de cercetare:



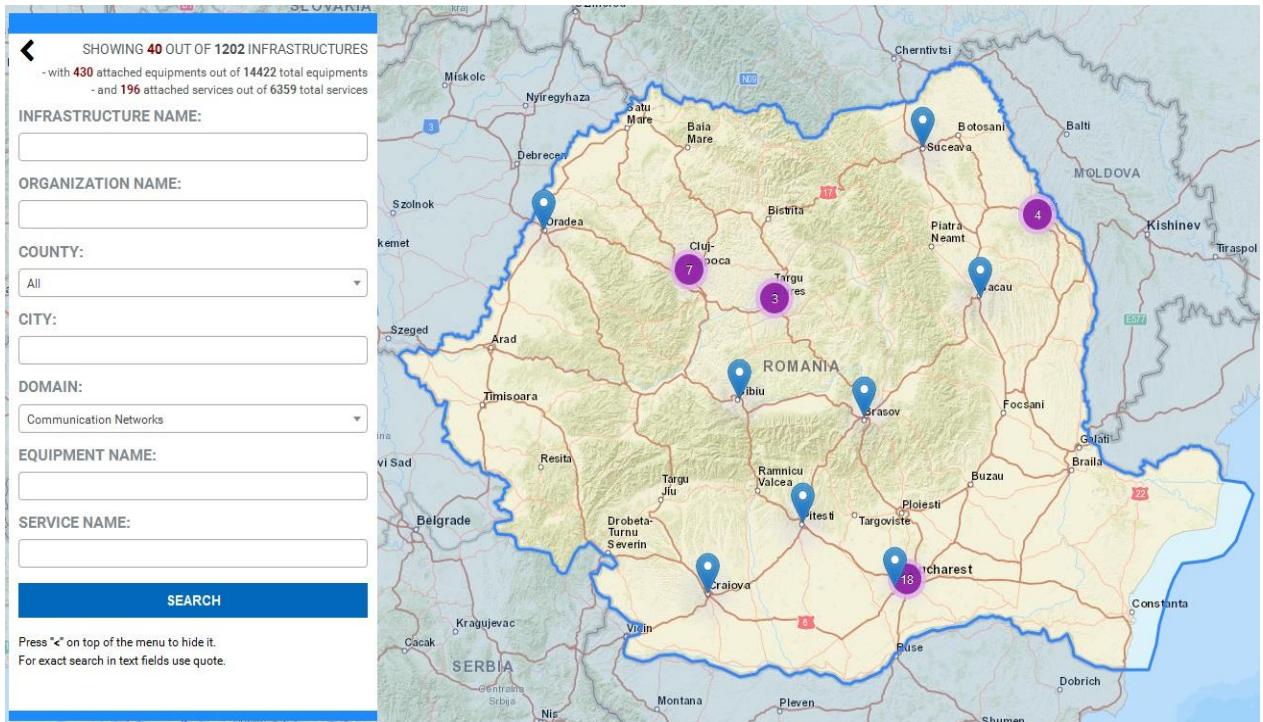
Distributia nationala pe domeniu "Cross Disciplinary Centres in Mathematics" a infrastructurilor de cercetare:



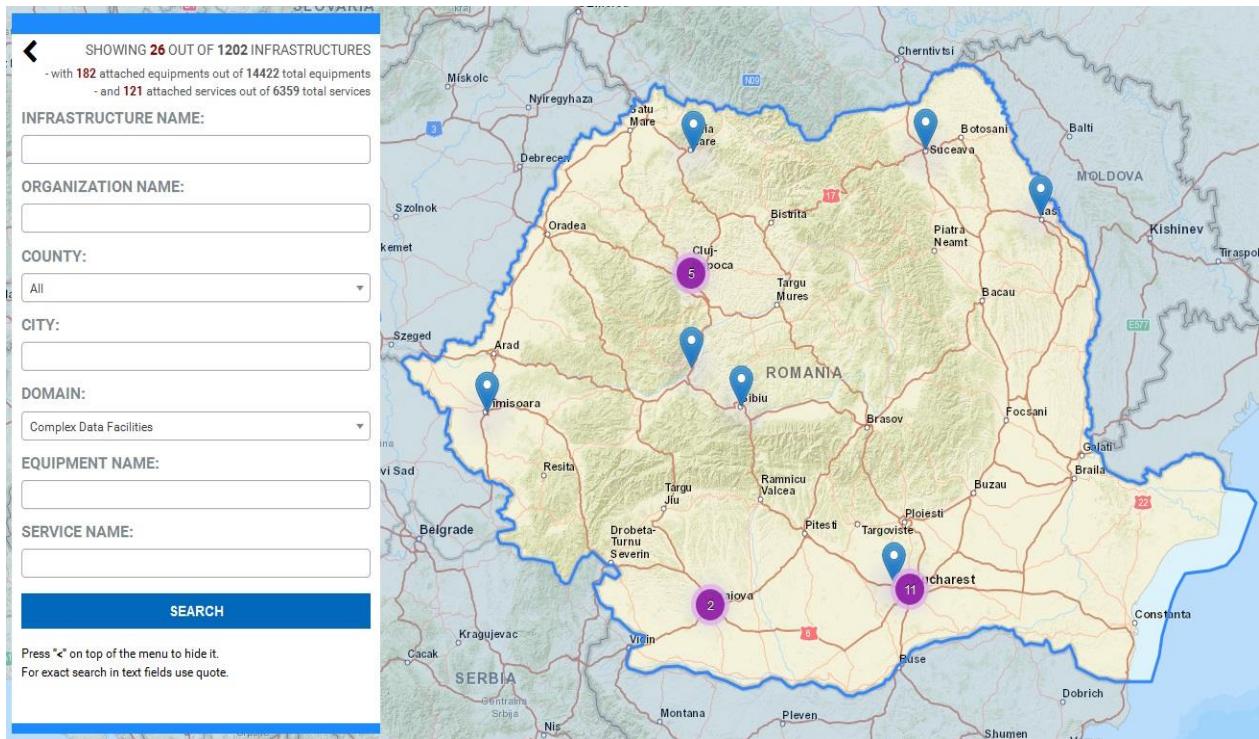
Distributia nationala pe domeniu "Data Archives, Data Repositories and Collections" a infrastructurilor de cercetare:



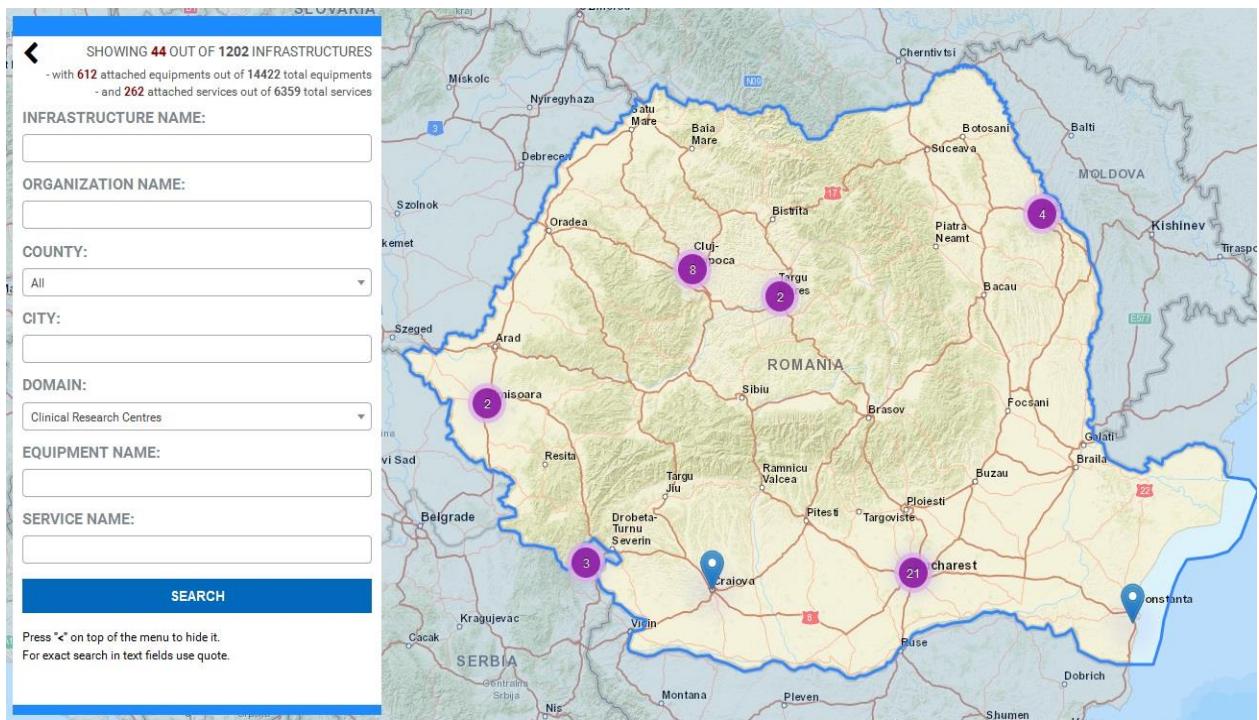
Distributia nationala pe domeniu "Communication Networks" a infrastructurilor de cercetare:



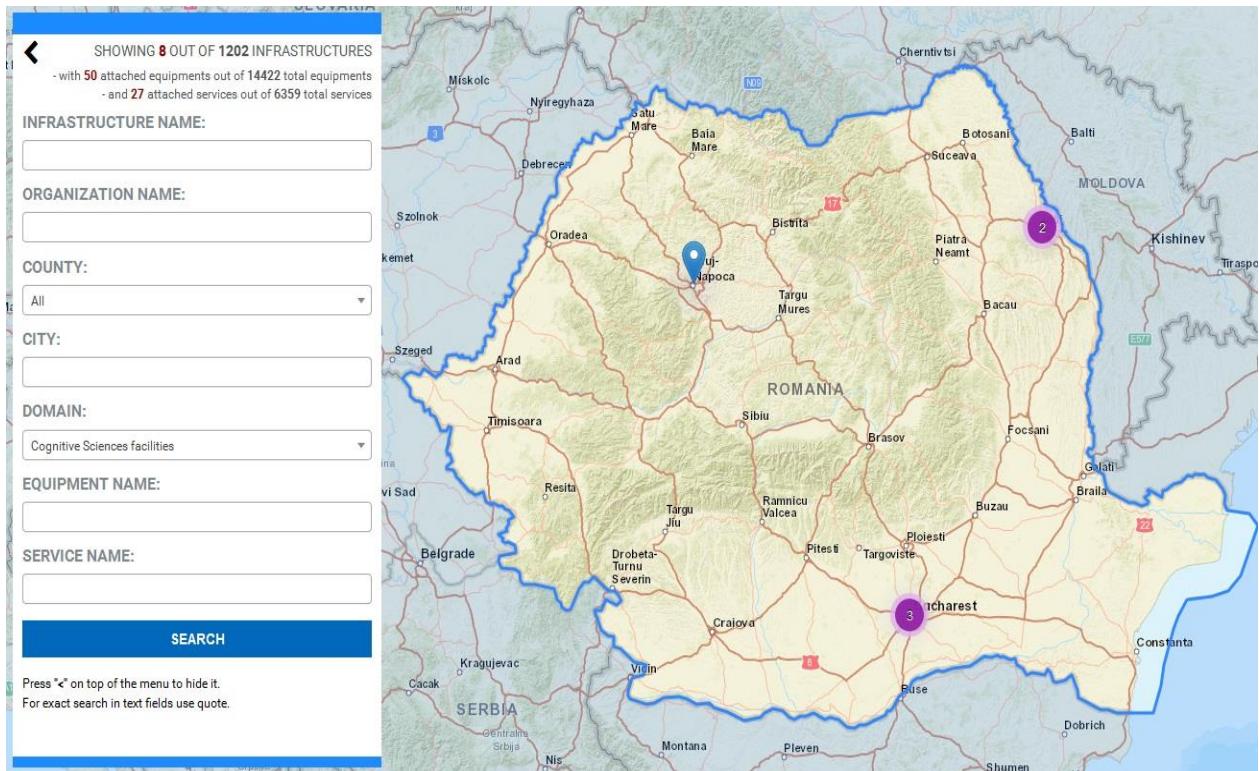
## Distributia nationala pe domeniu “Complex Data Facilities” a infrastructurilor de cercetare:



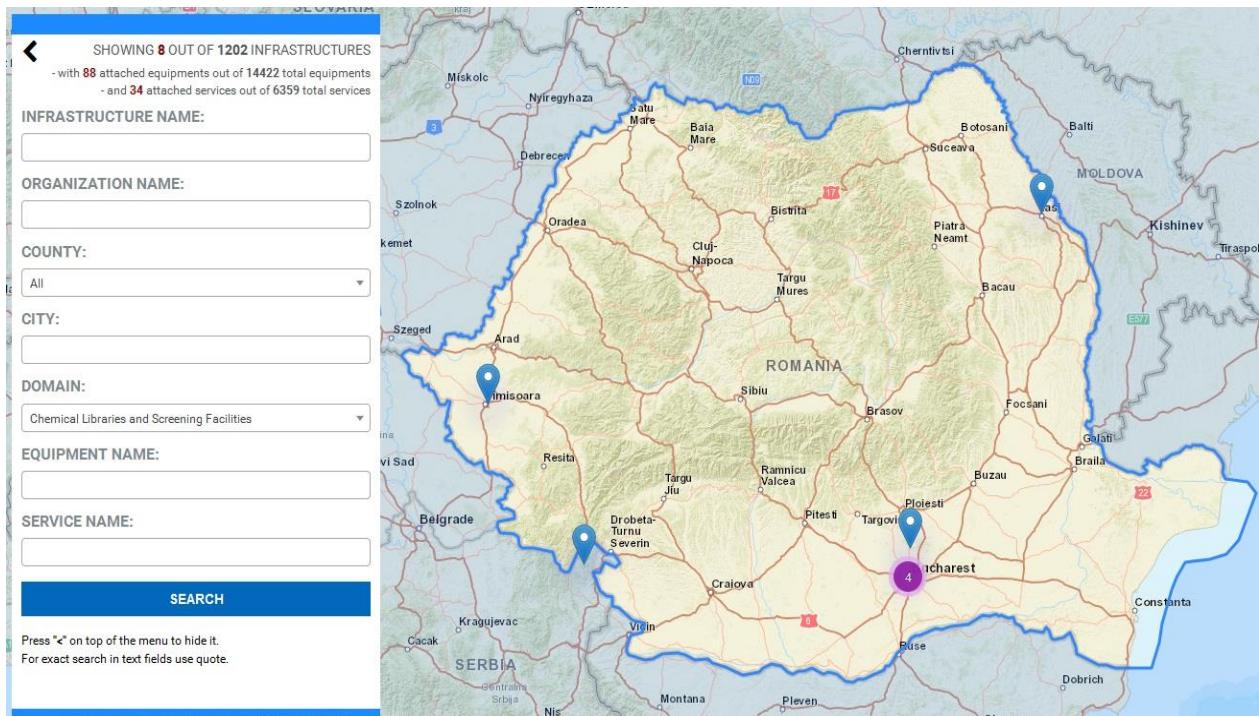
## Distributia nationala pe domeniu “Clinical Research Centers” a infrastructurilor de cercetare:



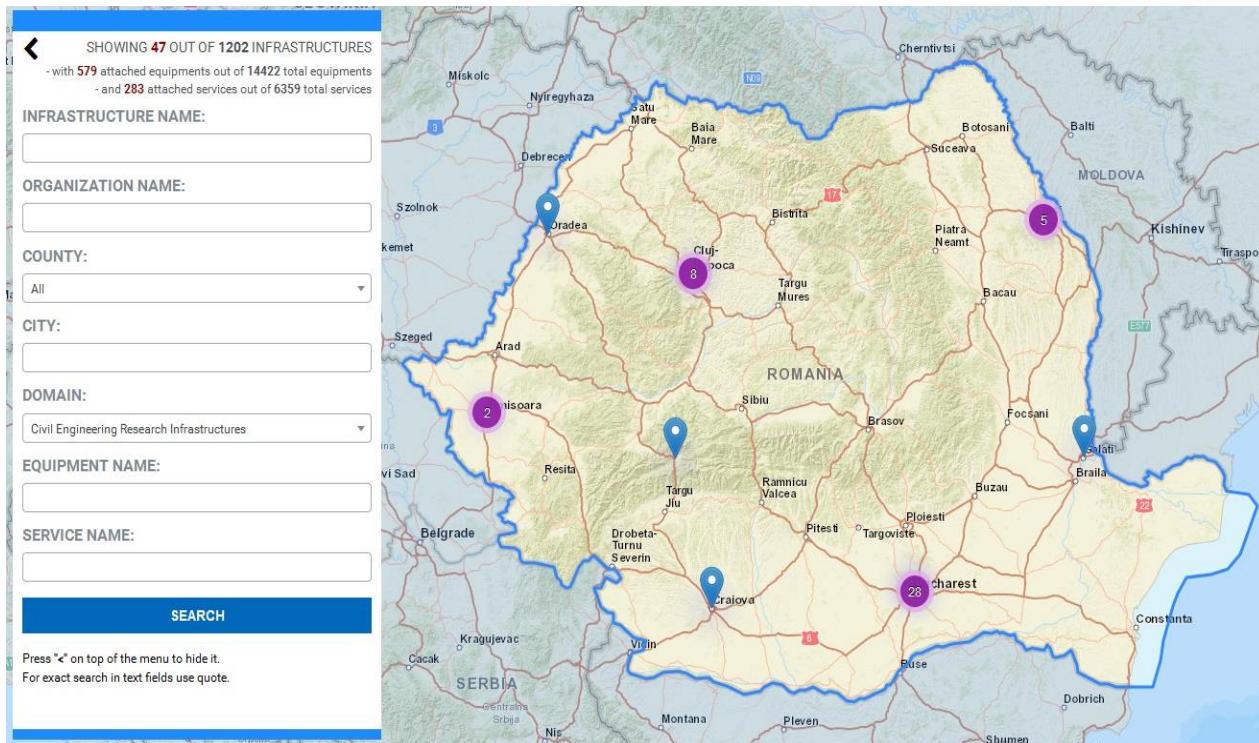
## Distributia nationala pe domeniu “Cognitive Sciences facilities” a infrastructurilor de cercetare:



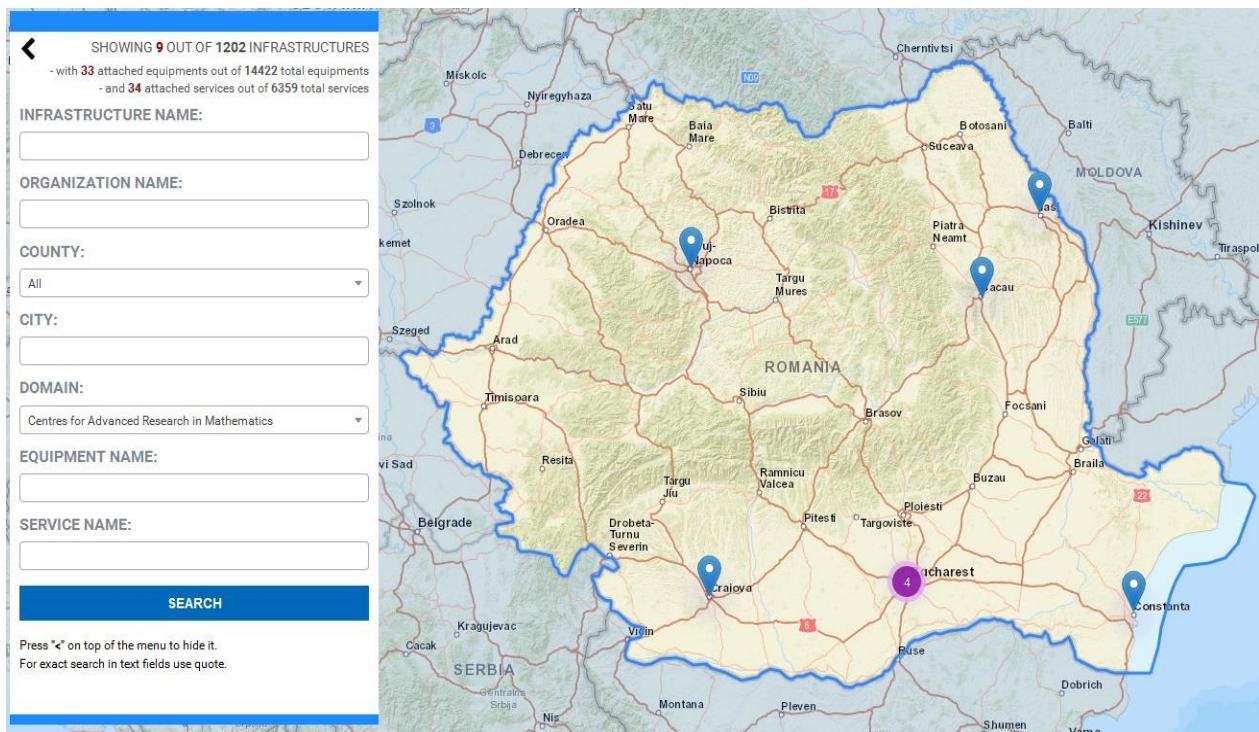
## Distributia nationala pe domeniu “Chemical Libraries and Screening facilities” a infrastructurilor de cercetare:



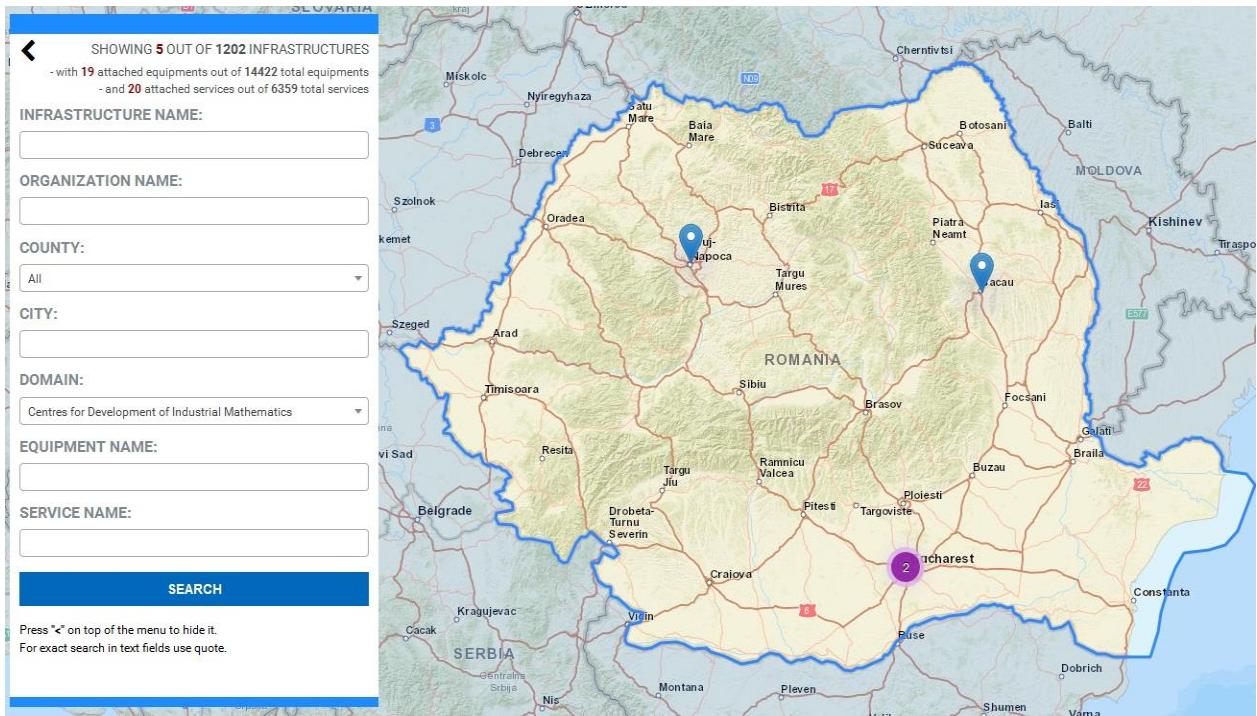
## Distributia nationala pe domeniu “Civil Engineering Research Facilities” a infrastructurilor de cercetare:



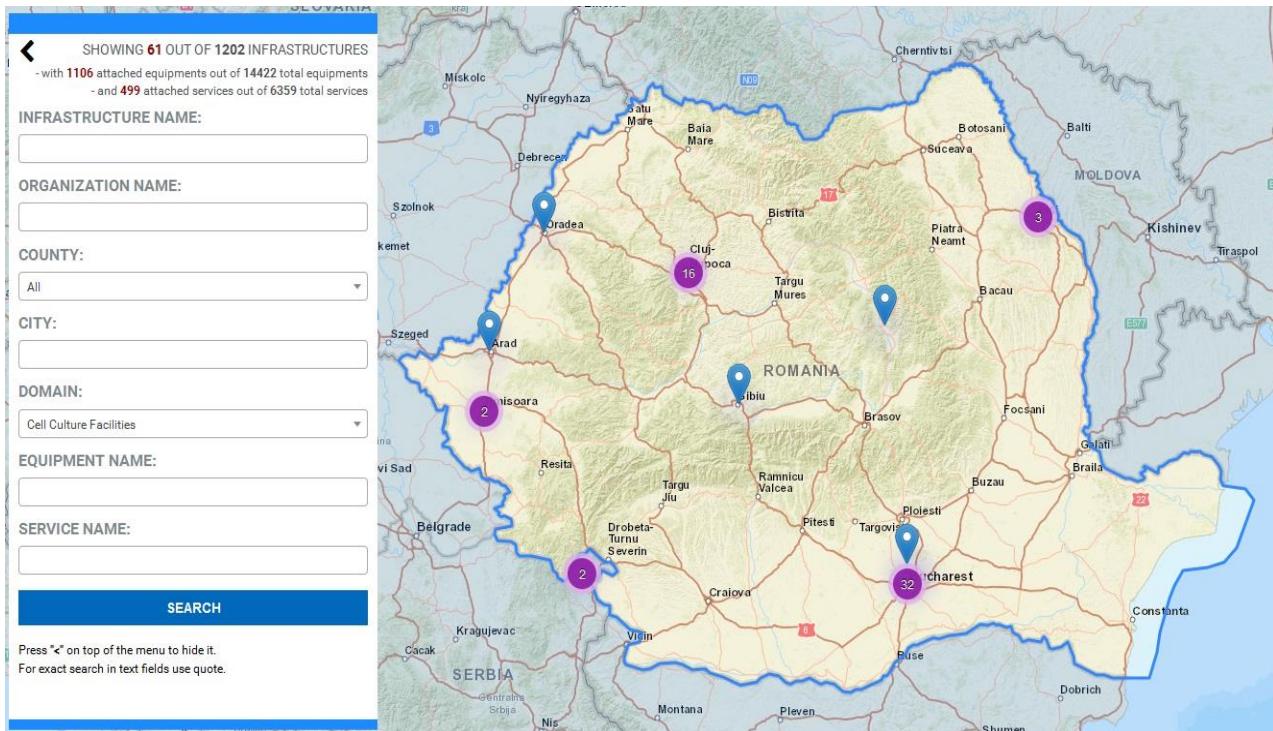
## Distributia nationala pe domeniu “Centres for Advanced Research in Mathematics” a infrastructurilor de cercetare:



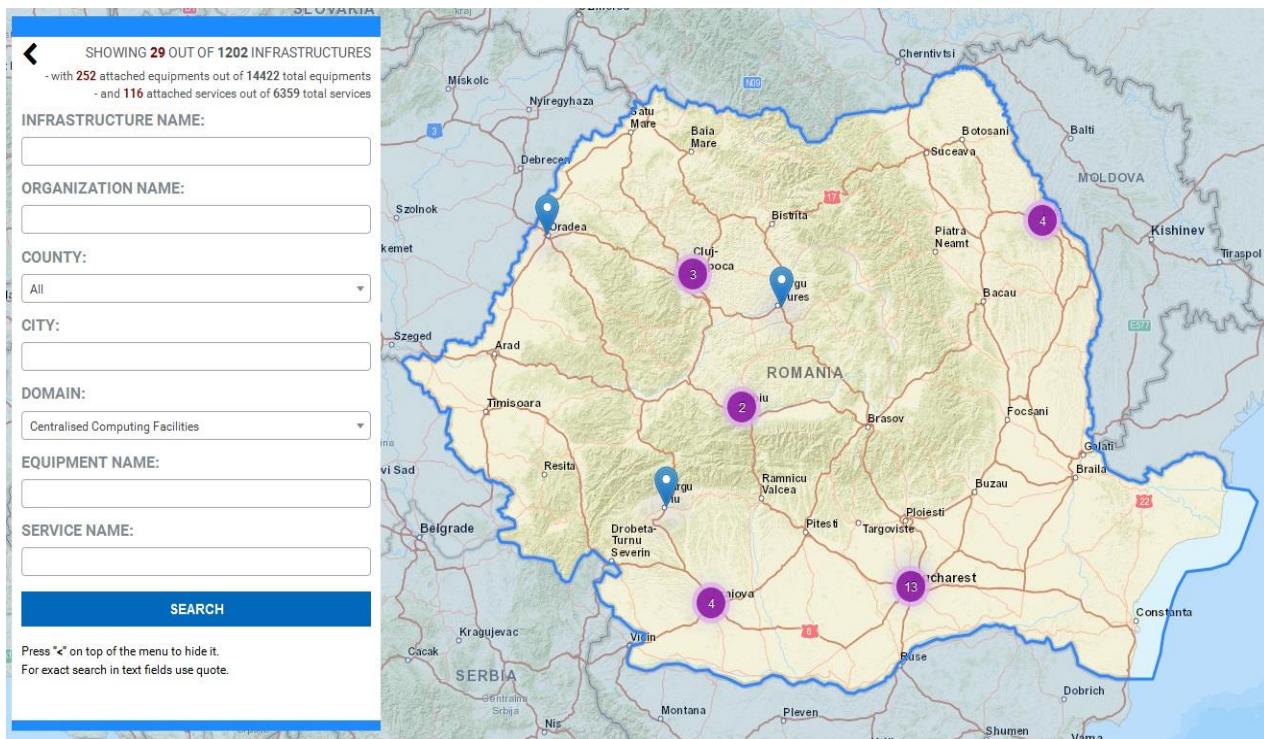
Distributia nationala pe domeniu “Centres for Development of Industrial Mathematics” a infrastructurilor de cercetare:



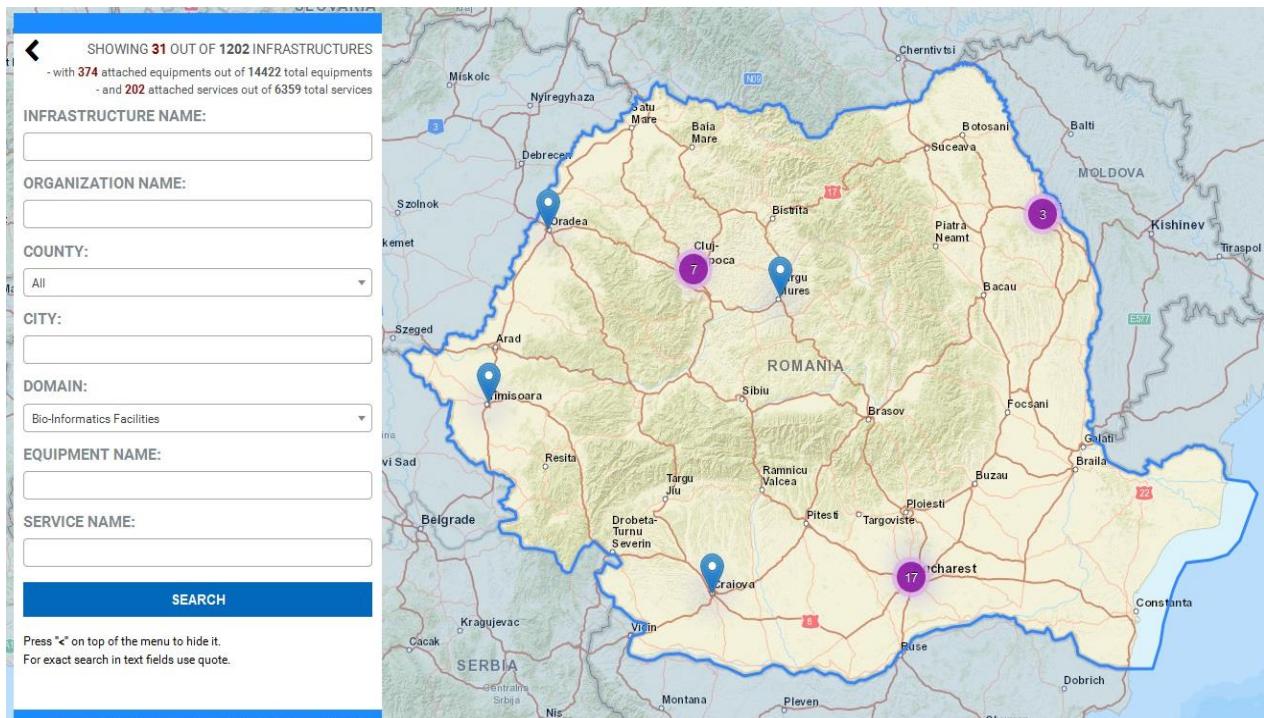
Distributia nationala pe domeniu “Cell Culture Facilities” a infrastructurilor de cercetare:



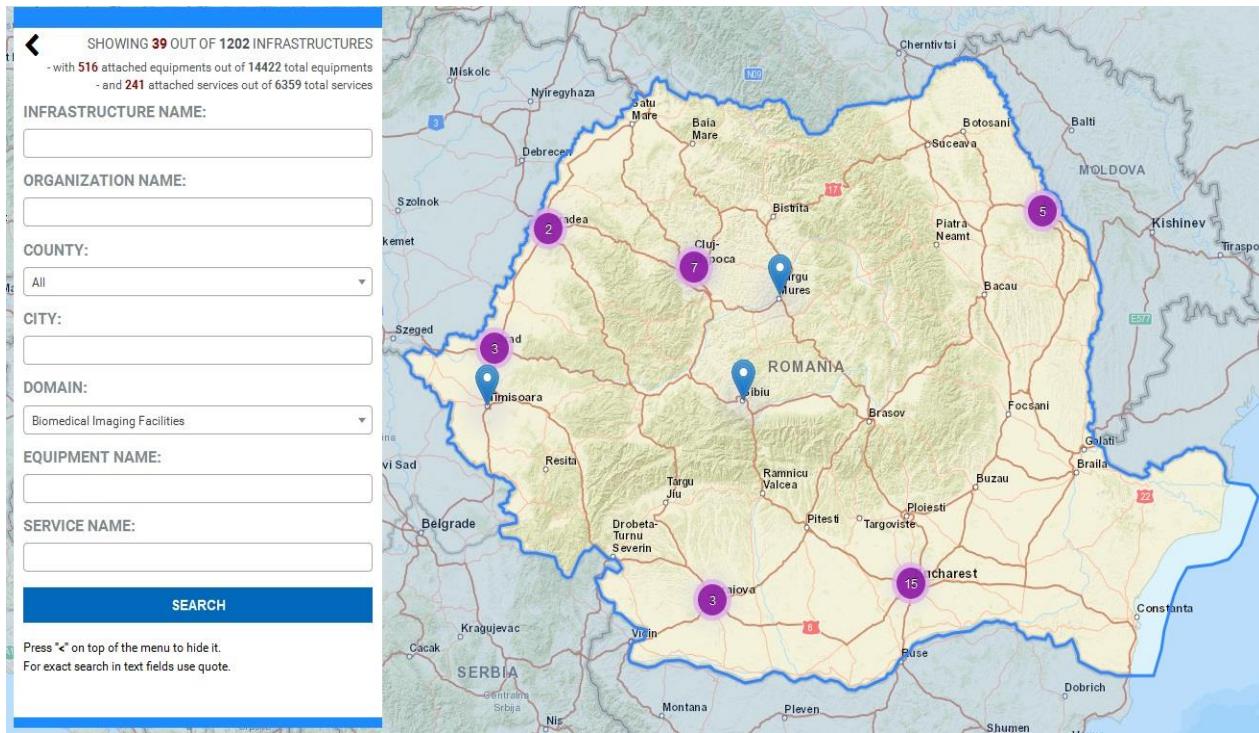
## Distributia nationala pe domeniu “Centralised Computing Facilities” a infrastructurilor de cercetare:



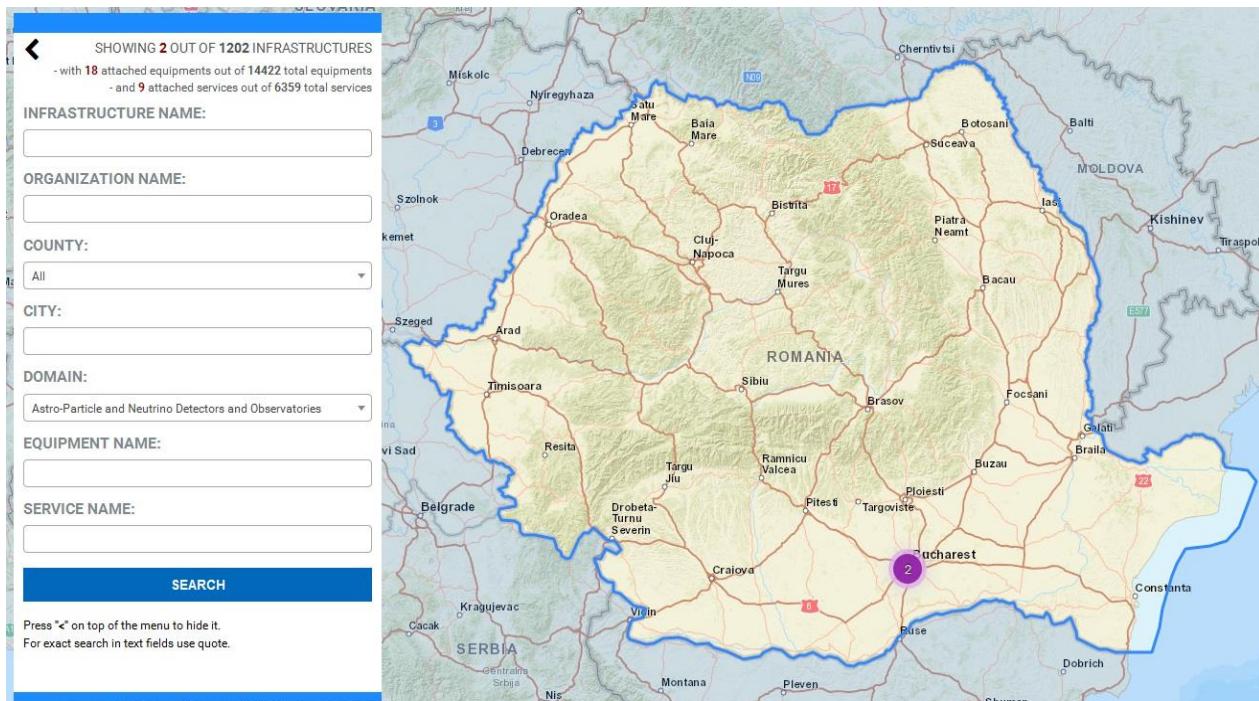
## Distributia nationala pe domeniu “Bio Informatics Facilities” a infrastructurilor de cercetare:



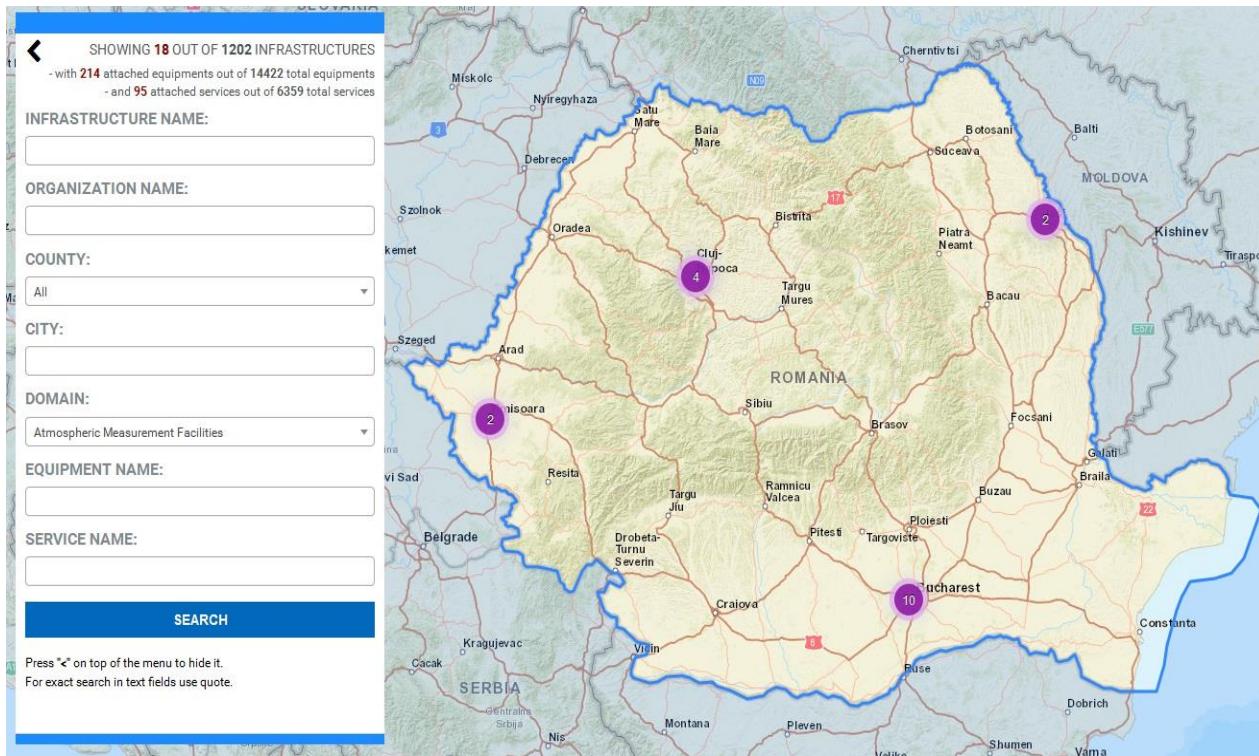
## Distributia nationala pe domeniu "Biomedical Imaging Facilities" a infrastructurilor de cercetare:



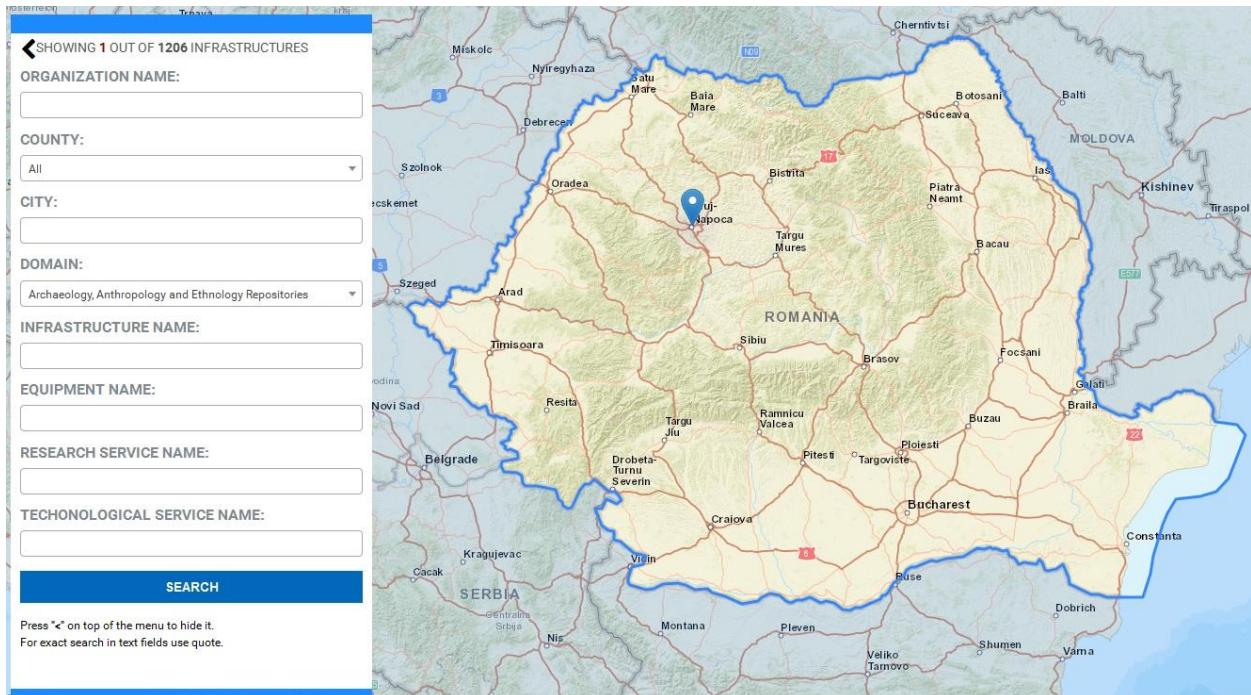
## Distributia nationala pe domeniu "Astro-particle and Neutrino Detectors and Observatories" a infrastructurilor de cercetare:



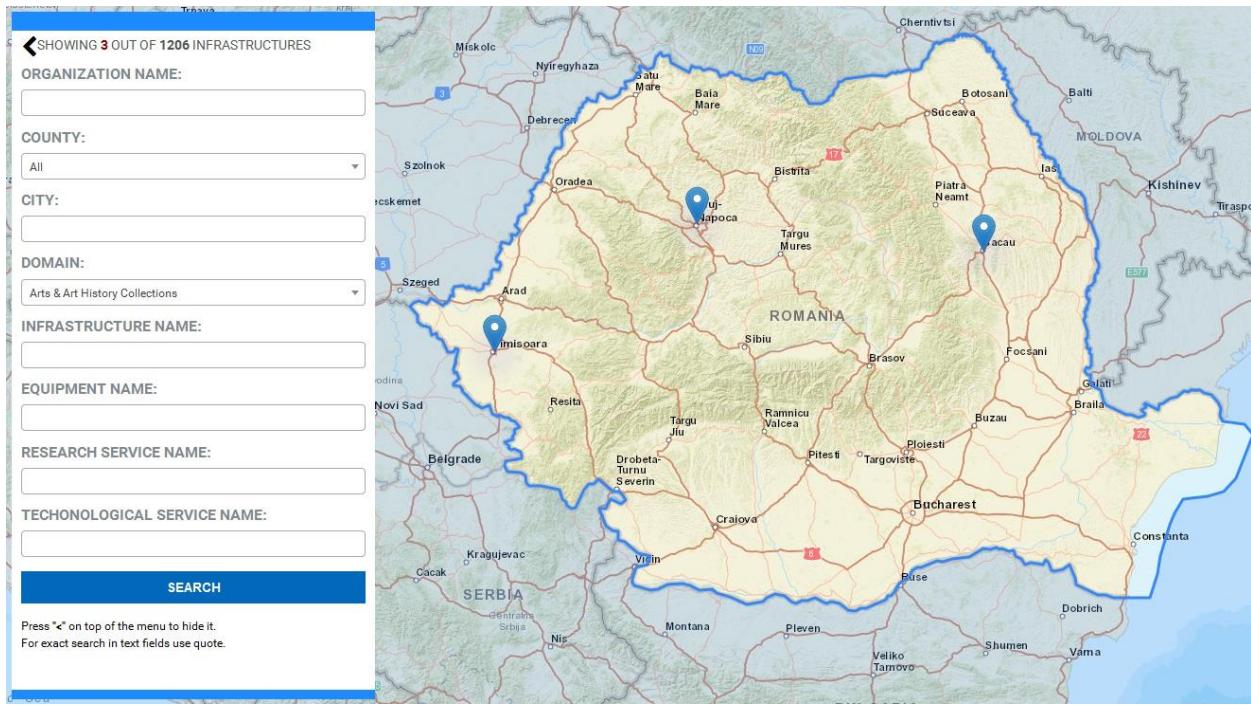
## Distributia nationala pe domeniu "Atmospheric Measurement Facilities" a infrastructurilor de cercetare:



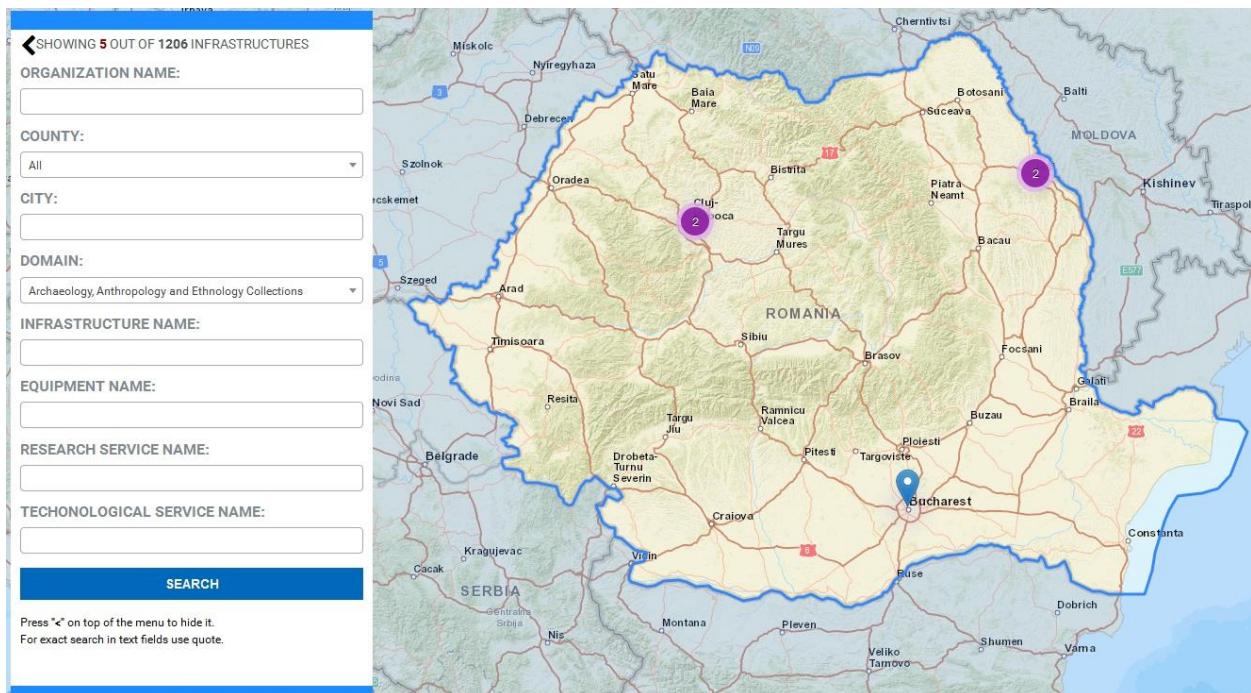
## Distributia nationala pe domeniu "Archeology, Anthropology and Ethnology Repositories" a infrastructurilor de cercetare:



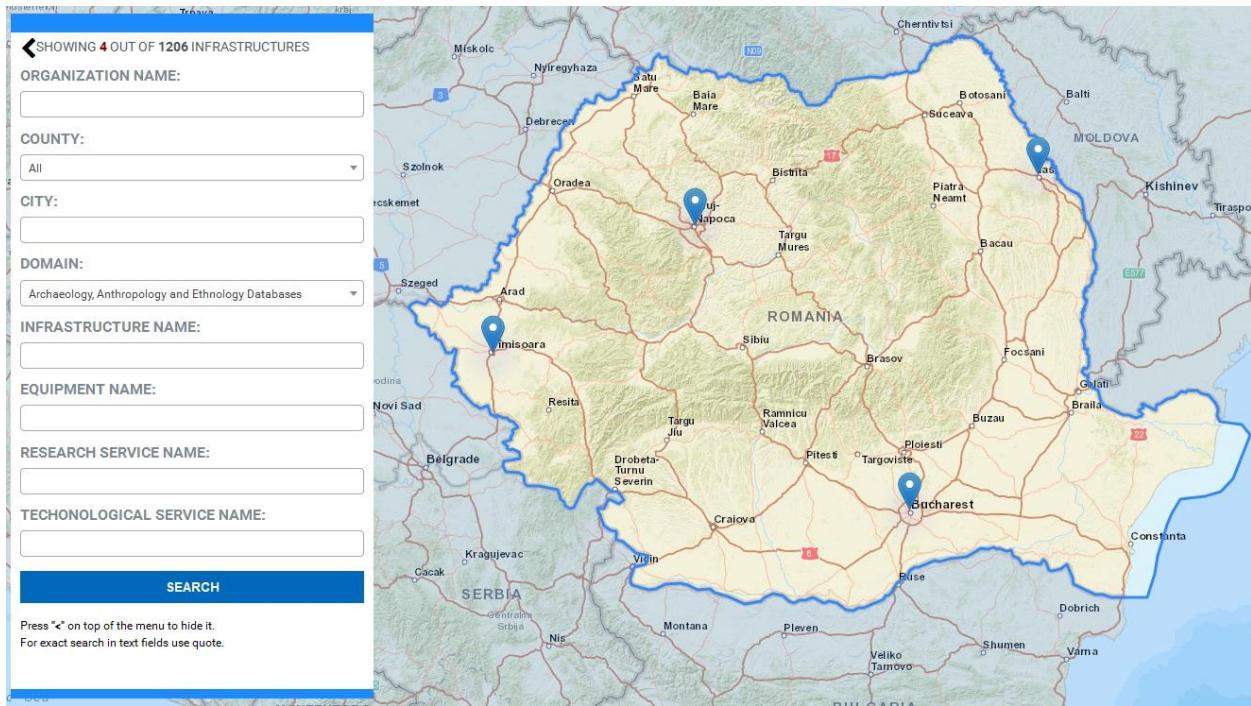
Distributia nationala pe domeniu "Arts and Art History Collections" a infrastructurilor de cercetare:



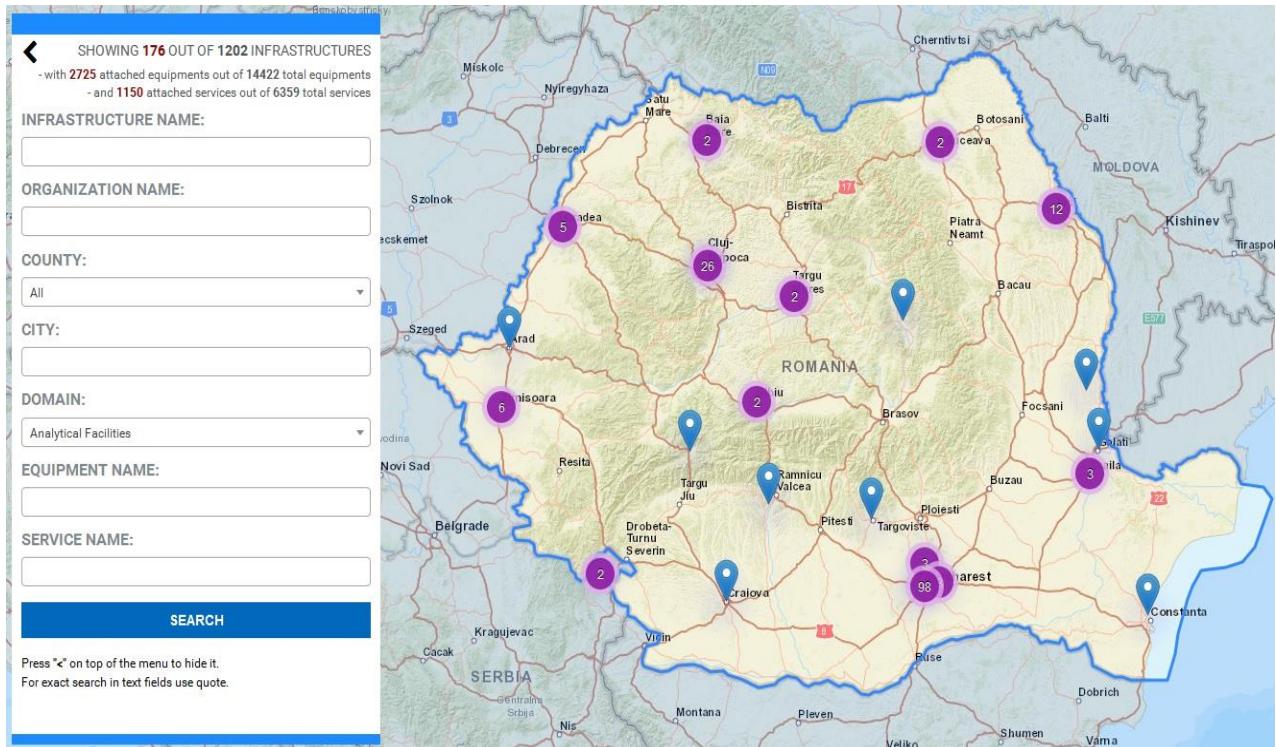
Distributia nationala pe domeniu "Archeology, Anthropology and Ethnology Collections" a infrastructurilor de cercetare:



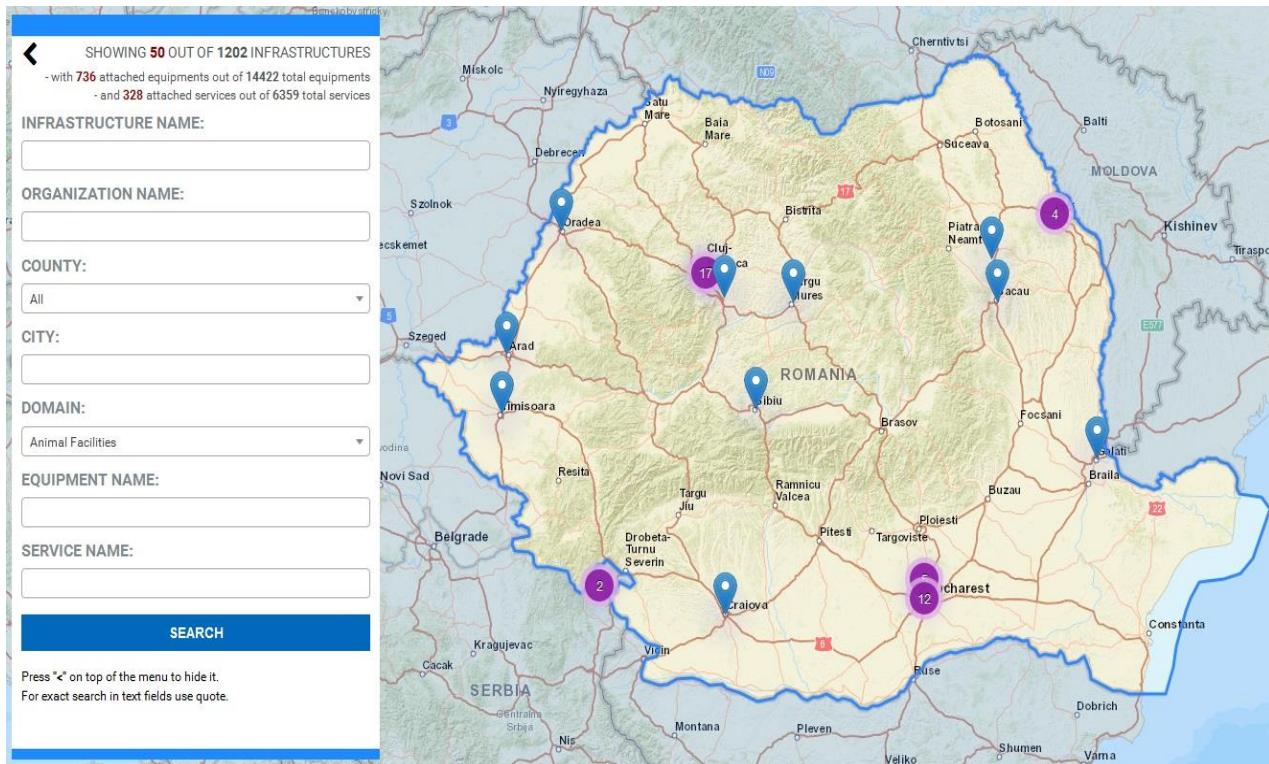
Distributia nationala pe domeniu "Archeology, Anthropology and Ethnology Databases" a infrastructurilor de cercetare



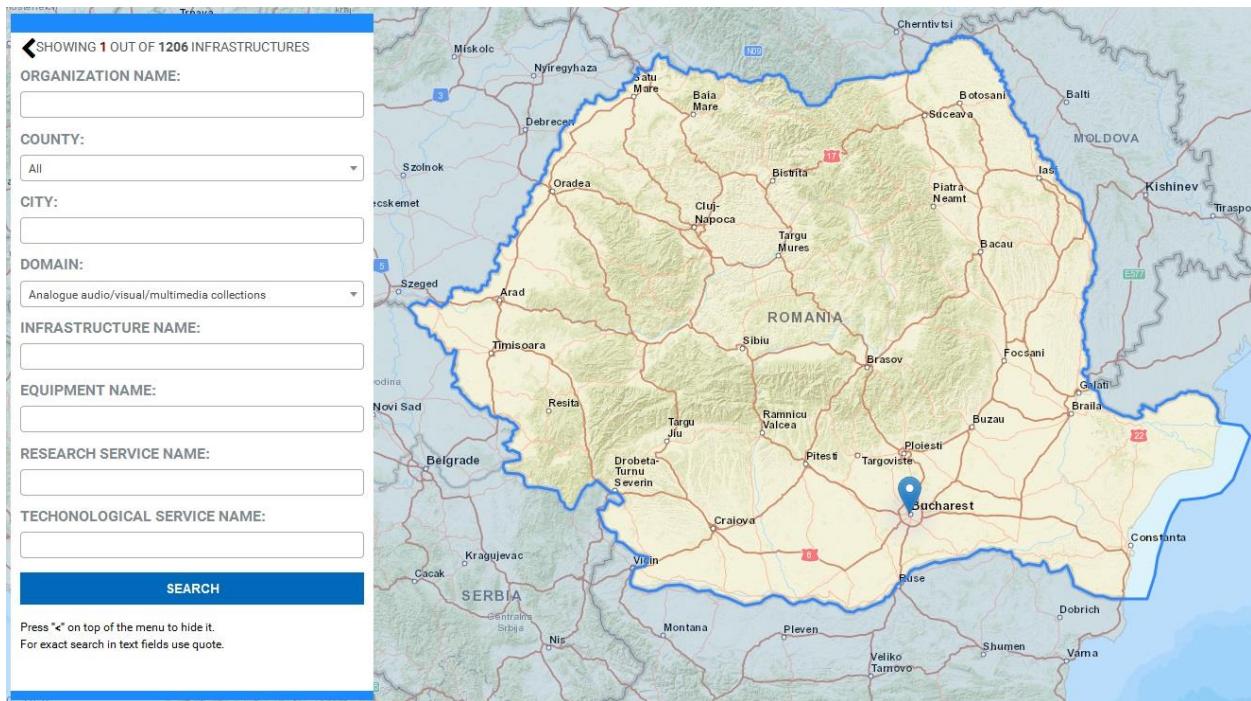
Distributia nationala pe domeniu "Analytical Facilities" a infrastructurilor de cercetare:



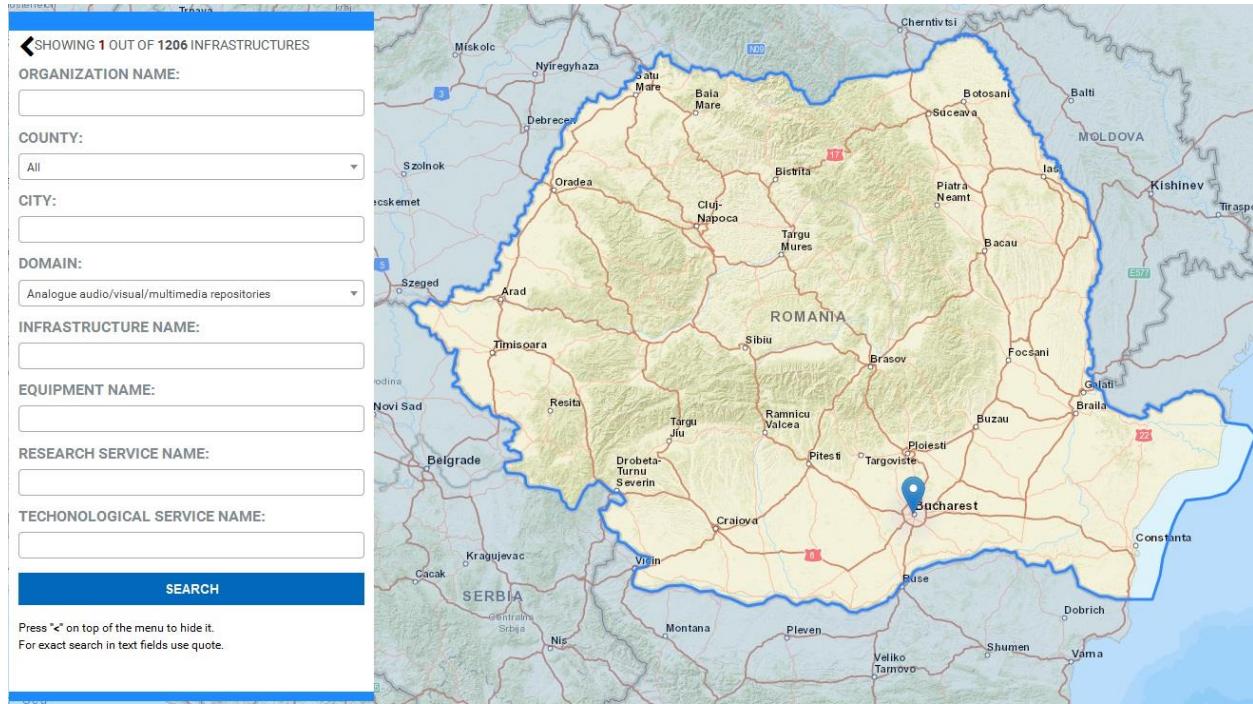
## Distributia nationala pe domeniu "Animal Facilities" a infrastructurilor de cercetare:



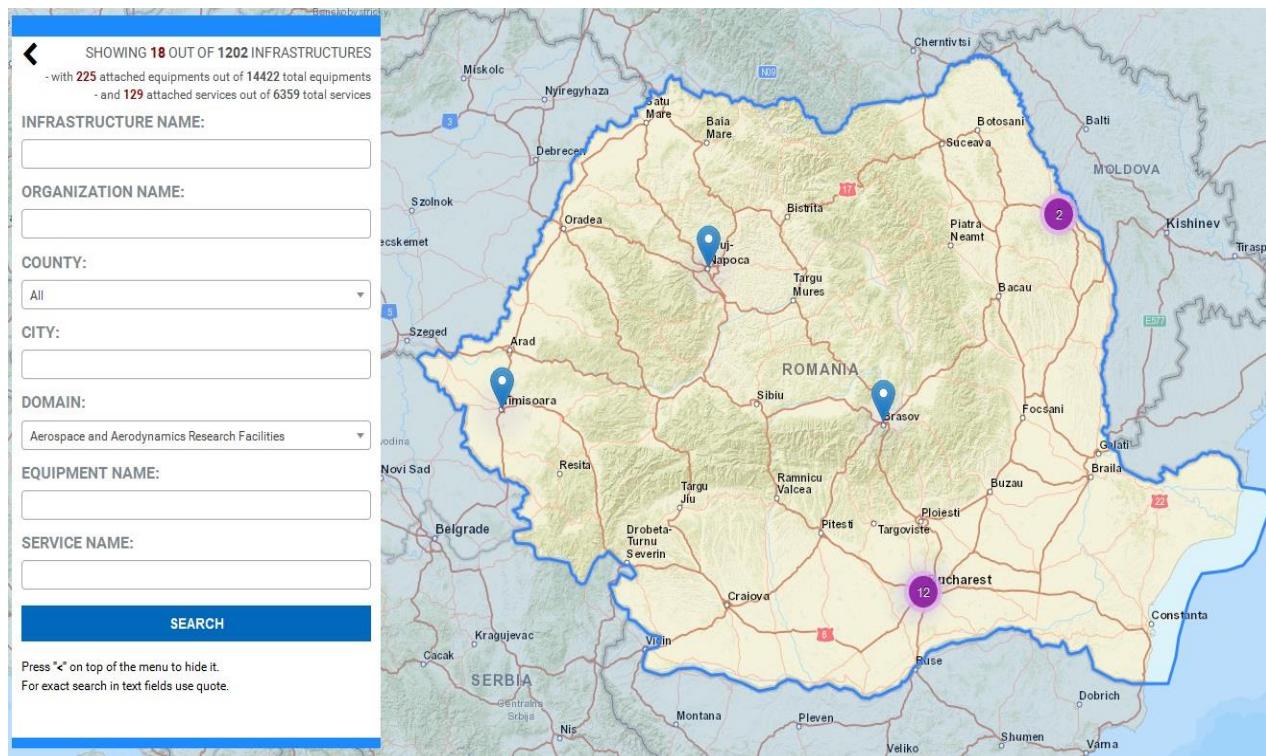
## Distributia nationala pe domeniu "Analogue audio/visual/multimedia collections" a infrastructurilor de cercetare:



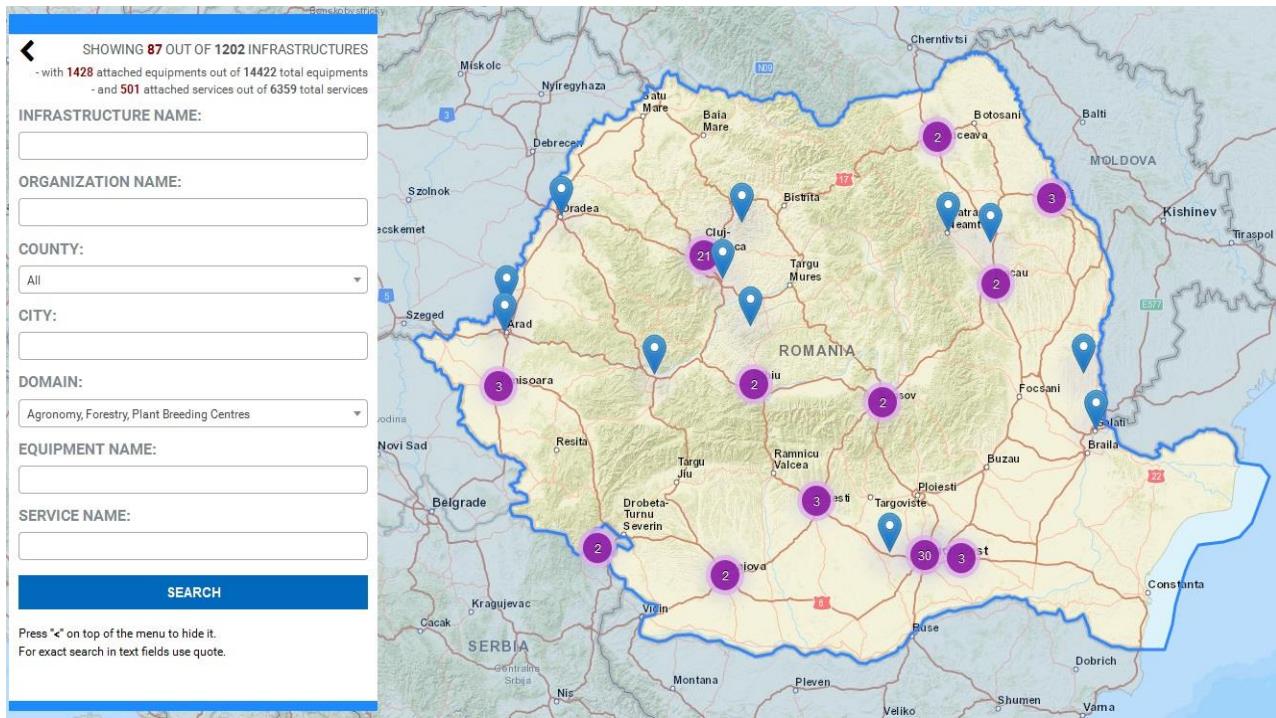
Distributia nationala pe domeniu "Analogue audio/visual/multimedia repositories" a infrastructurilor de cercetare:



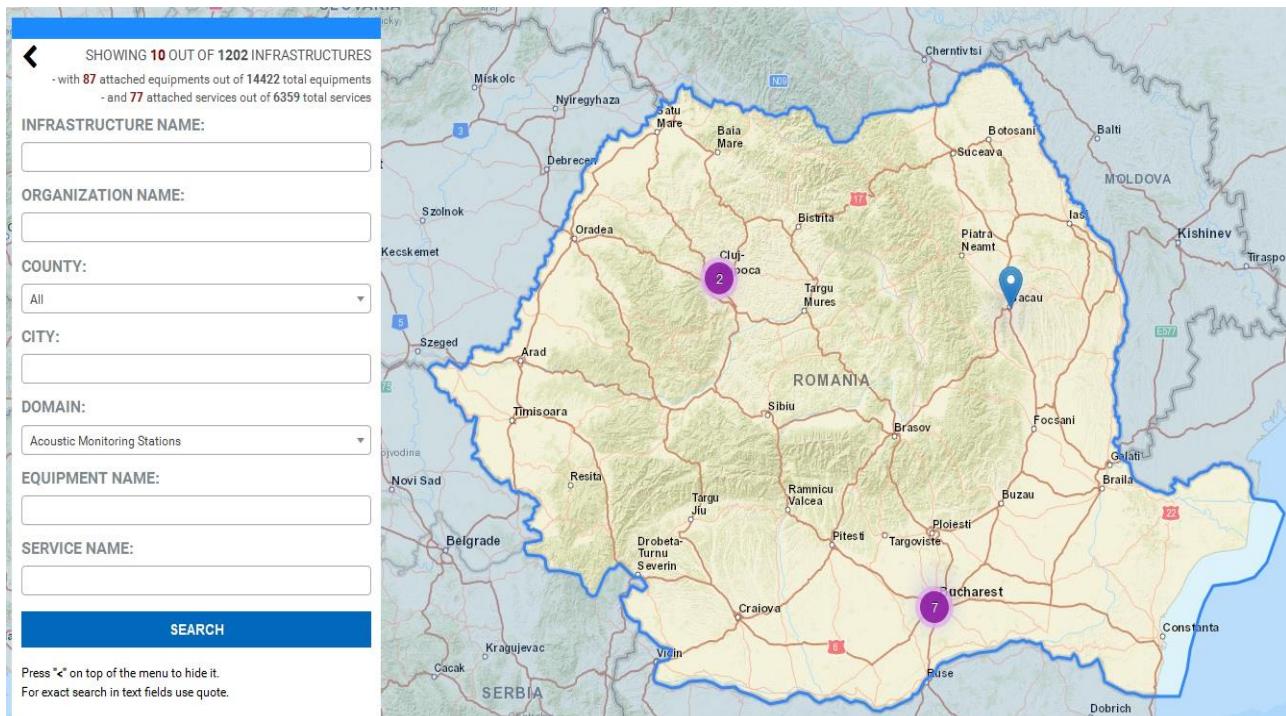
Distributia nationala pe domeniu "Aerospace and Aerodynamics Research Facilities" a infrastructurilor de cercetare:



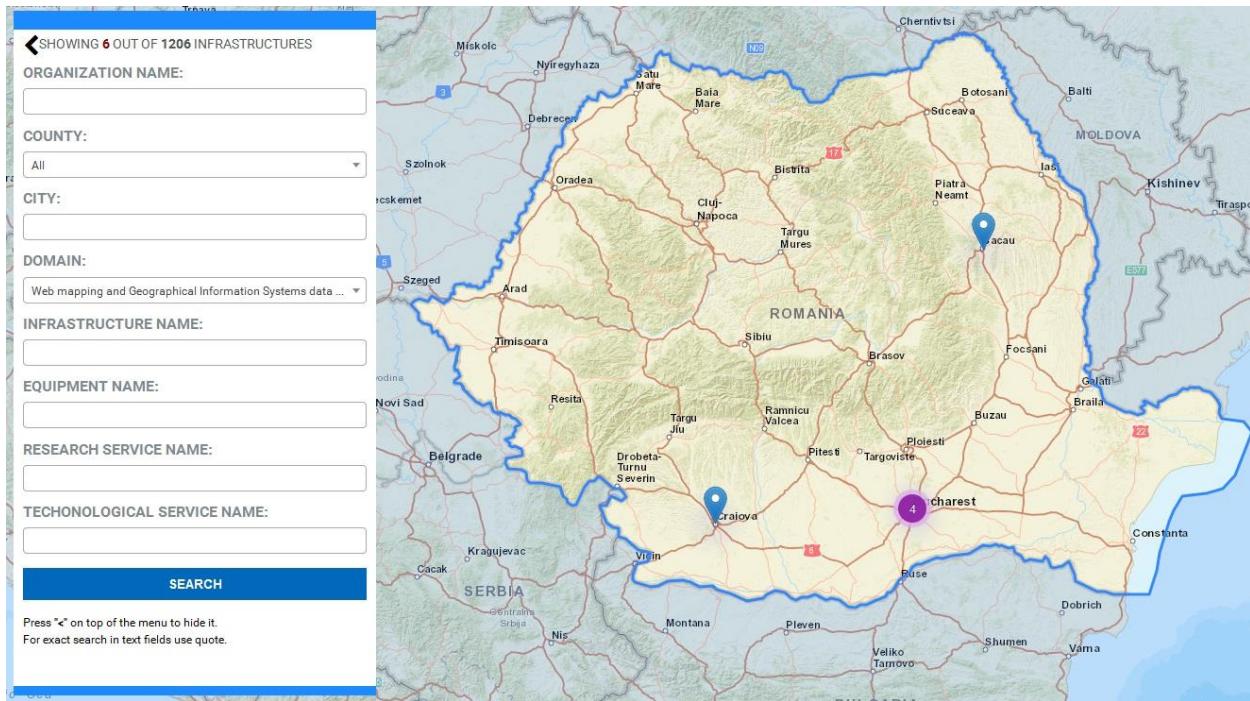
Distributia nationala pe domeniu "Agronomy, Forestry, Plant Breeding Centres" a infrastructurilor de cercetare:



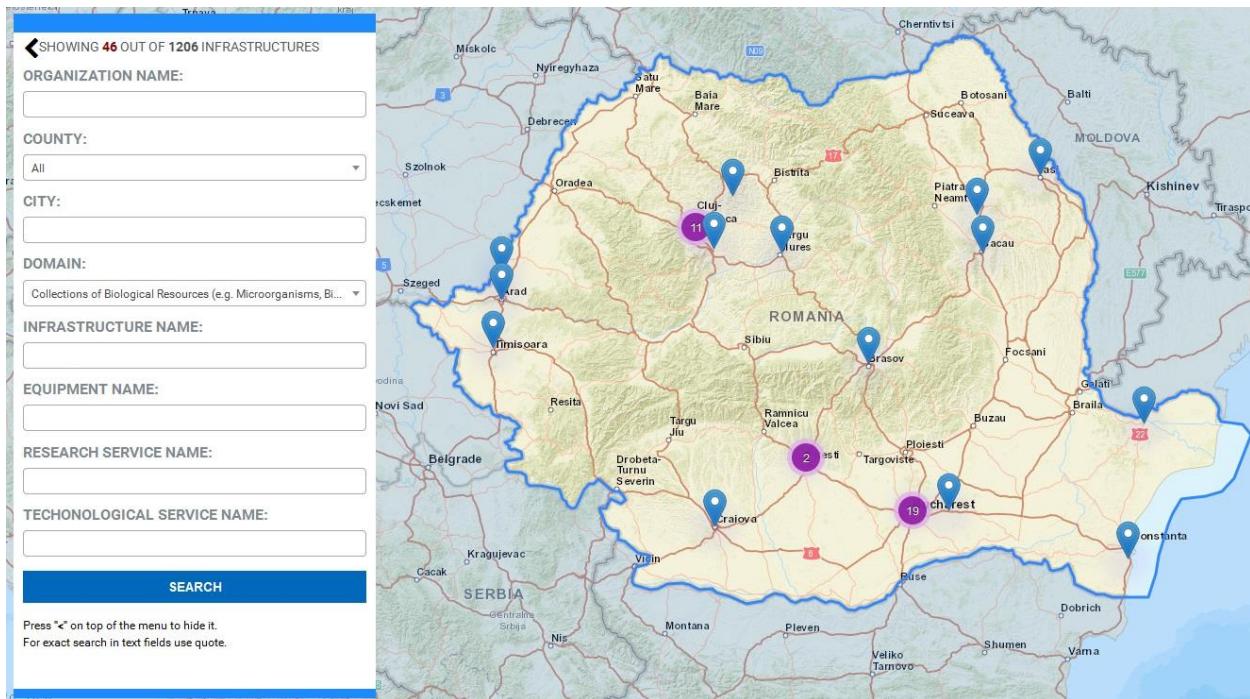
Distributia nationala pe domeniu "Acoustic Monitoring Stations" a infrastructurilor de cercetare:



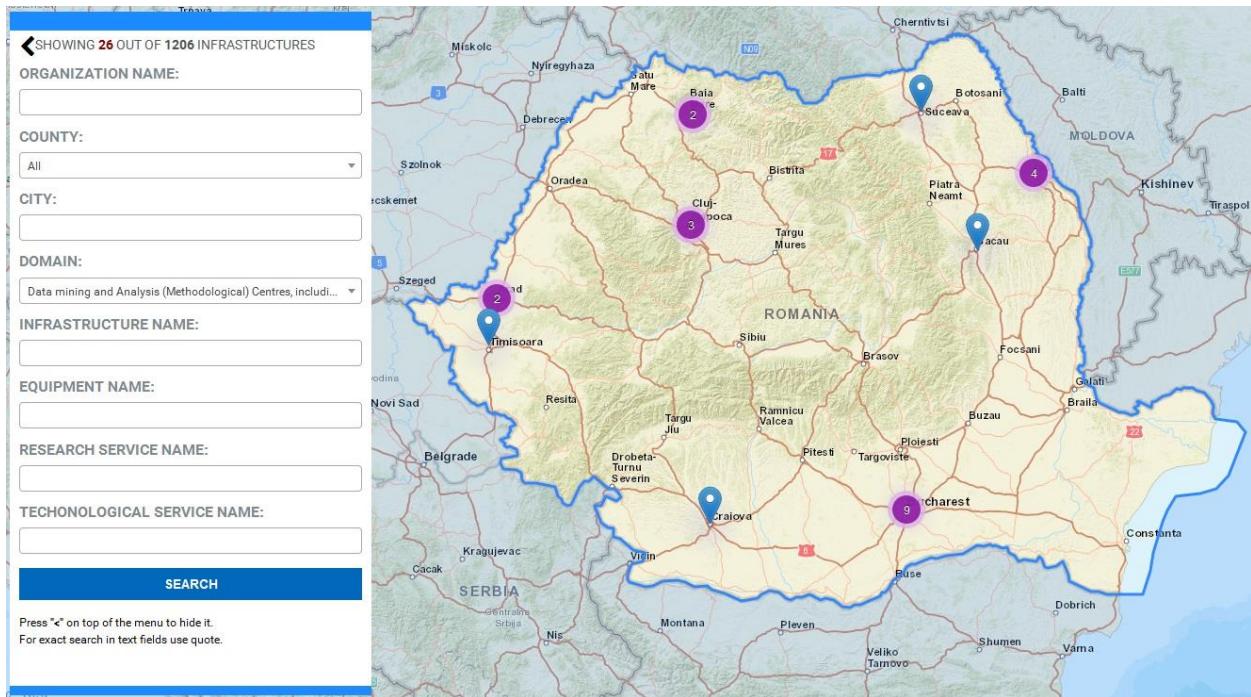
Distributia nationala pe domeniu "Web mapping and Geographical Information Systems Data Facilities" a infrastructurilor de cercetare:



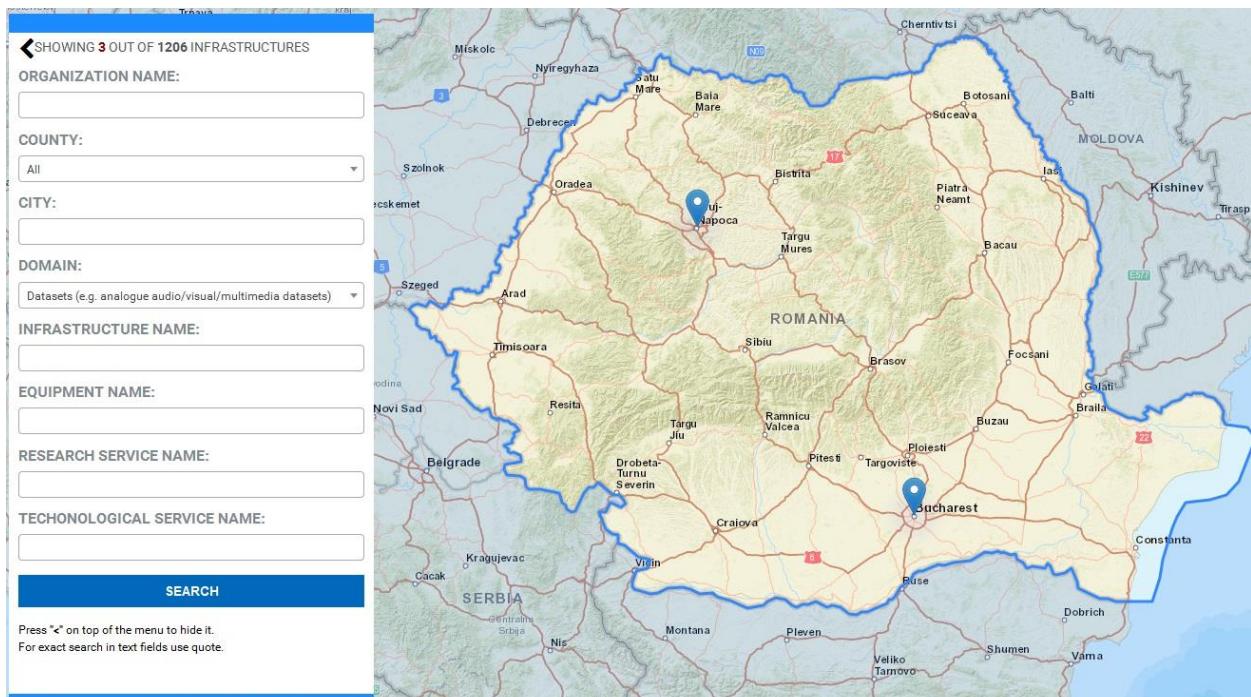
Distributia nationala pe domeniu "Collections of Biological Resources (e.g. Microorganisms, Biobanks and Seed Banks)" a infrastructurilor de cercetare:



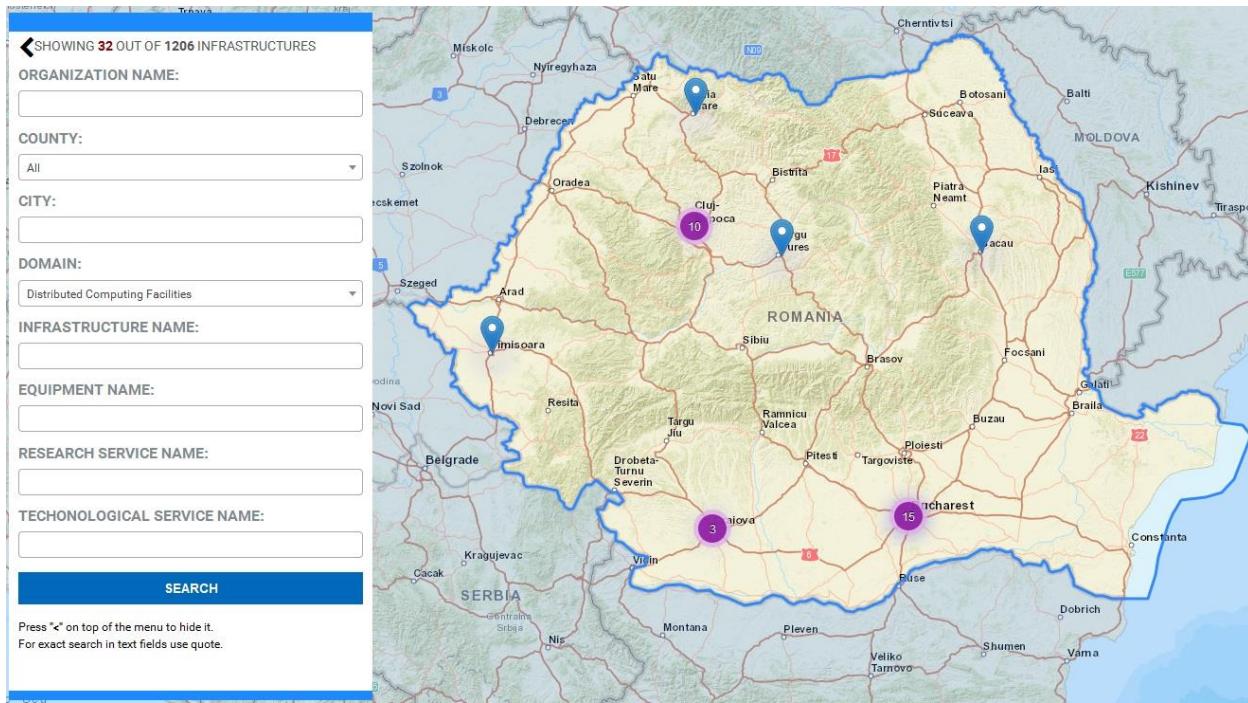
Distributia nationala pe domeniu "Data Mining and Analysis (Methodological) Centres, including statistical analysis" a infrastructurilor de cercetare:



Distributia nationala pe domeniu "Datasets (e.g. analogue audio/video/multimedia datasets)" a infrastructurilor de cercetare:



## Distributia nationala pe domeniu “Distributed Computing Facilities” a infrastructurilor de cercetare:



## Distributia nationala pe domeniu “National Statistical Facilities (offices)” a infrastructurilor de cercetare

