

Emergency call management, dispatch services, Emergency call operators-experience and plans from Romania

Dr.Bogdan Oprita



**UE MEMBER STATE
2007**

**NATO MEMBER STATE
2004**

Romania

Surface = 238.391 km²

Population = 19.922.540

Public roads: 82.386 km

Highways: 695,4 km

Existing risks:

Natural (earthquakes, land slides, floods)

CBRN (chemical, biological, radiological, nuclear)

Tehnological

Fires

Social

1990

26 years ago, Romania had a different system. Each emergency system had its own dispatch and the communication was very difficult between the different services.



FIRE FIGHTERS = 981

fight against
fires



AMBULANCE = 961

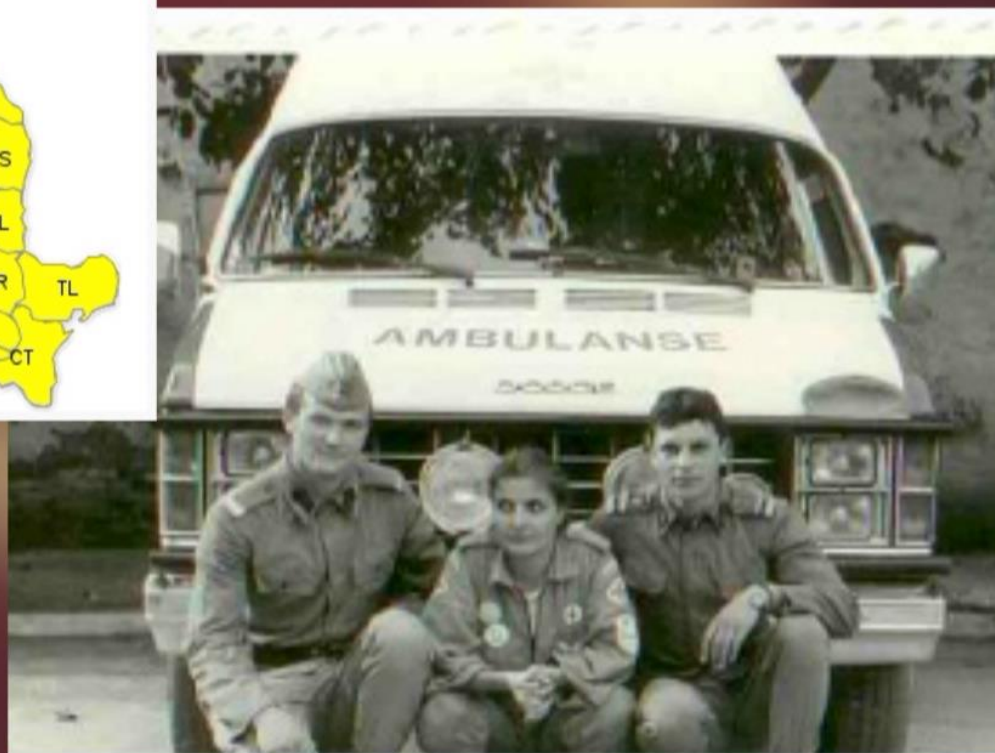
patients' transport



Also, the Civil Protection was under the coordination of the Ministry of Defence

The first resuscitation ambulance of the Mobile Emergency Service for Resuscitation (SMUR)

In 1990, the system relied on the transfer of a fully-equipped hospital medical team where the patient was in critical condition in order to provide qualified emergency medical care. The team was headed by a specialist doctor in anaesthesia, intensive care and emergency medicine.



2001

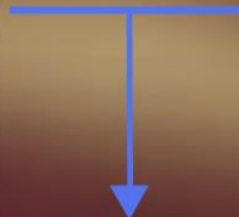
The first integrated dispatch in Mures county



FIRE FIGHTERS - 981



AMBULANCE - 961



Mureş - First integrated dispatch

2003

Regulations are laid down for the first time in Romania in order to implement the 112 Single European Emergency Call Number, the technical and organisational calls reception and reporting system for fire incidents, accidents, medical emergencies, disasters and other events that require the authorised agencies' immediate response.





961



955



981



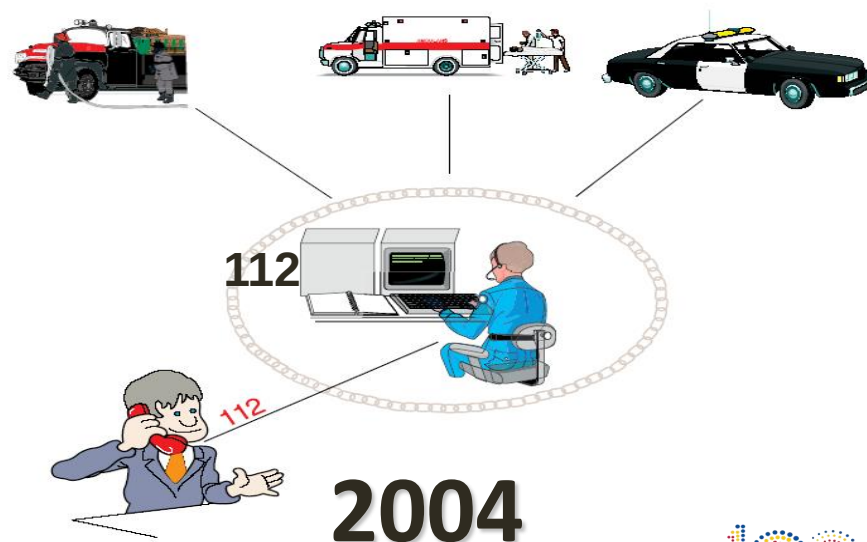
2003

Facts:

- Each agencies have its own emergency call number;
- Difficult cooperation among agencies;
- Inexistent ANI/ALI (automatic identification of phone number and adress)
- Impossibility to see resources on the map;
- Comune procedures for intervention - inexistent

New functions:

- Simultaneous alert of agencies;
- Cooperation start in the moment of alert;
- ANI/ALI;
- Position on map: event, resources, responsability zone;
- Plans, events index, contacts list, data archive, common procedures, resources administration;
- Data post process: analyzes, statistics, raports;
- Multiple languages;
- eCall – automatic alert.





SMURD HELICOPTER DISPATCH - 2004

In each district capital exist: voice and data conexion with emergency dispatch agencies: Fire-SMURD, ambulance, police, etc.

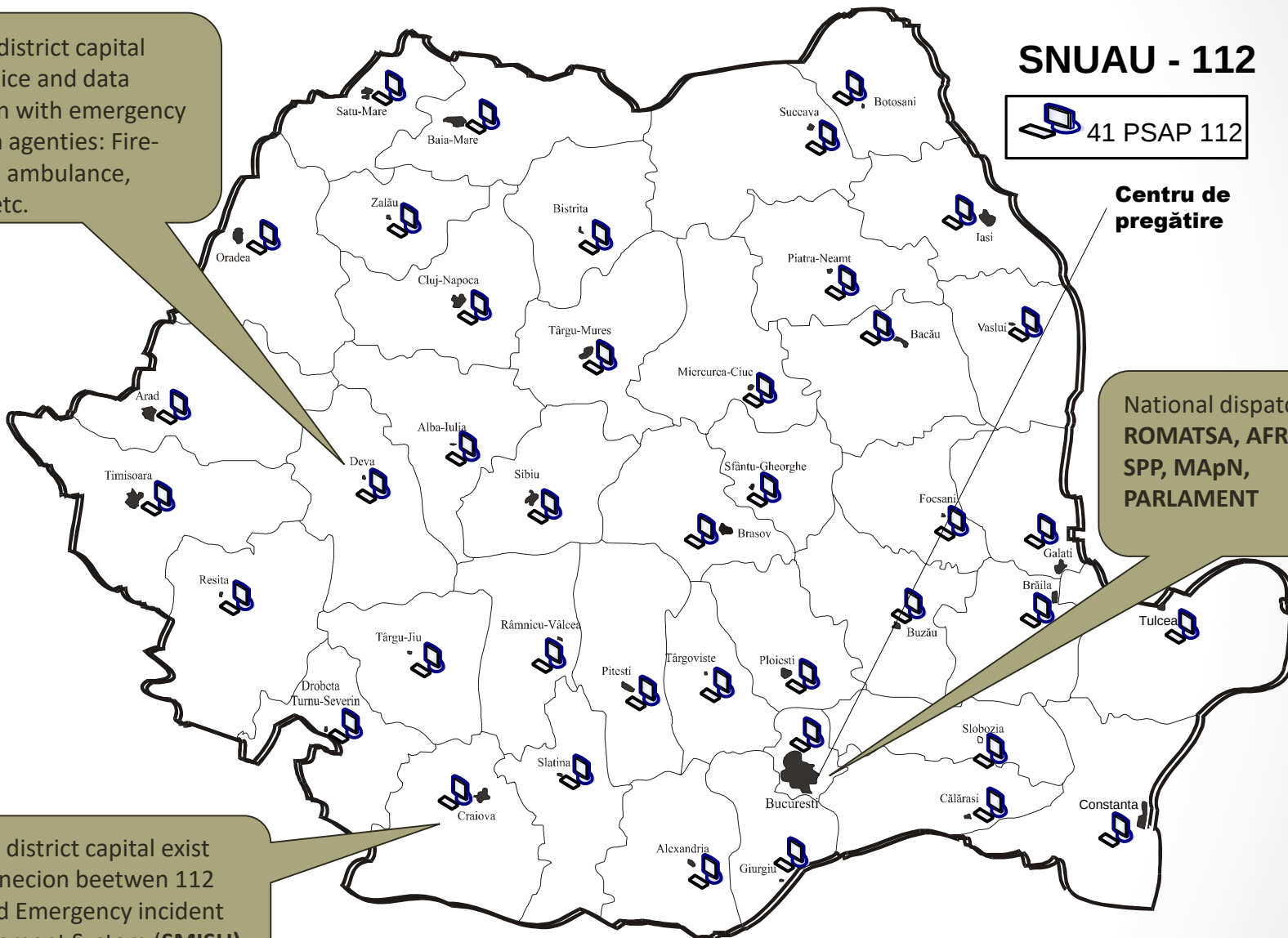
SNUAU - 112

 41 PSAP 112

Centru de pregătire

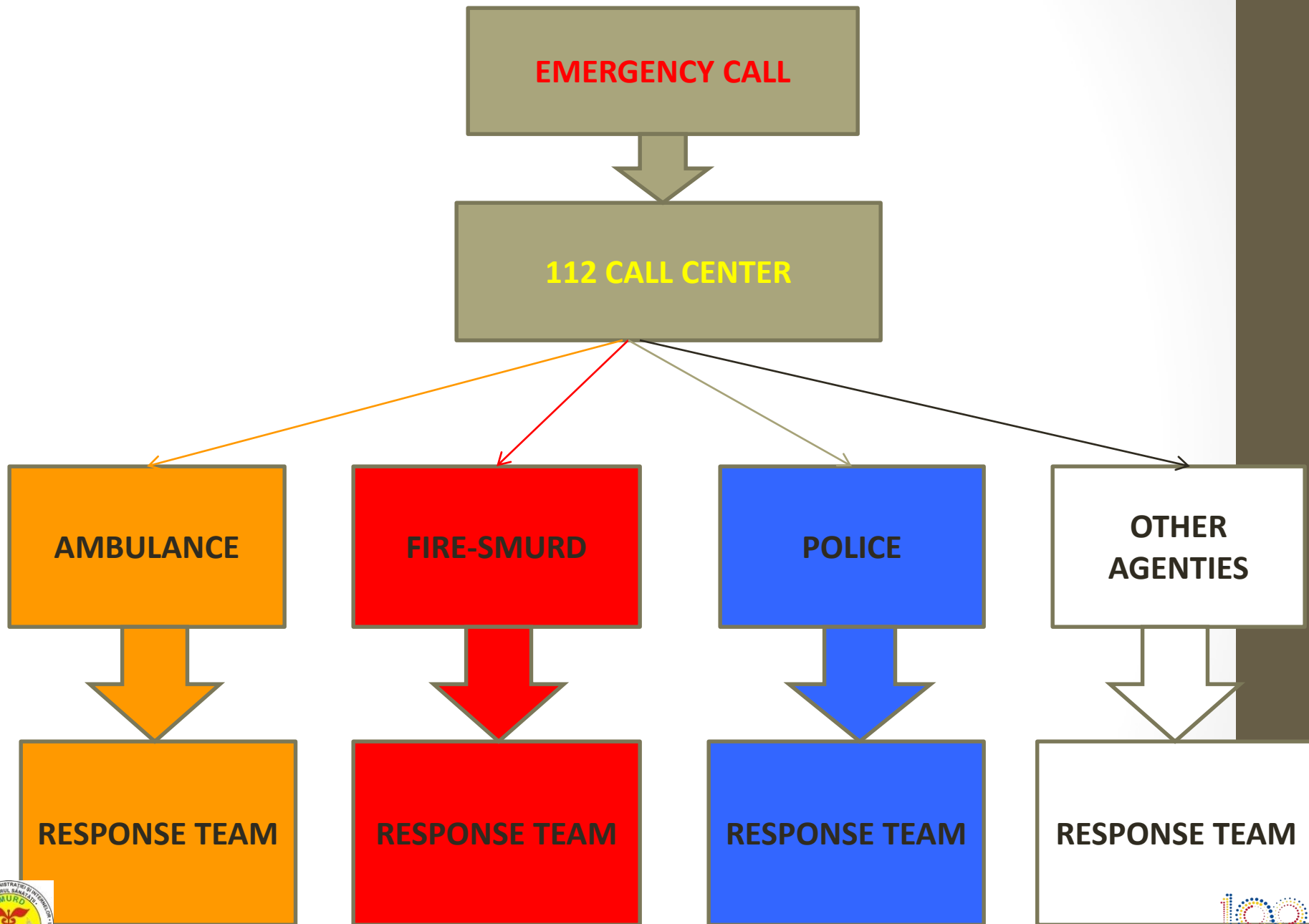
National dispatch: SRI, ROMATSA, AFR, IM, SPP, MAPN, PARLAMENT

In each district capital exist interconecion beetwen 112 Fire and Emergency incident Management System (SMISU)



27.09.2
018





SPECIFIC INDEX

Tipul și codul urgenței	Tipul echipajului								
	Prim ajutor calificat		Asistență medicală de urgență					Alte echipaje de intervenție	
II. BOALĂ NEDIAGNOSTICATĂ	EPA (Fără capacitate transport)	EPA B2	EMU B2	EMU B1/C2	TIM C1	ESA	ECU	Ordine publică	ISU Pompieri

III. Codul roșu

- inconștiență	E	P1	P3	P2	P1	P1-E	E	E	E
- nivel scăzut de conștiență	E	P1	P3	P2	P1	P1-E	E	E	E
- dificultate serioasă în respirație	E	P1	P3	P2	P1	P1-E	E	E	E
- tegumente palide și umede, aproape sincopă	E	P1	P3	P2	P1	P1-E	E	E	E
- pacient slăbit cu durere toracică	E	P1	P3	P2	P1	P1-E	E	E	E
- durere toracică și greață	E	P1	P3	P2	P1	P1-E	E	E	E



Nedefinit PERSOANA INCONSTIENTA Prio: 1 X Pompieri X Ambulanta X Politie Diverse Prio: 2 X SMURD PERSOANA INCONSTIENTA Prio: 1

Persoana Ctrl+Shift+H

Eveniment | Victima | Apelant

Introducere text

CAZUT IN SCARA BLOCULUI INCONSTIENT

GHIZELA IDA
DORDEA
0213079200

☐ Anonim

Victima

Prenume victima

Nume familie victima

Unitati Sex

Varsta

Prio ☒ Urgent

PERSOANA INCONSTIENTA

PERSOANA INCONSTIENTA

Loc: STR. JULES MICHELET 15 4 Ctrl+Shift+P

Obiectiv Informare Stingers

Adresa Pozitie

Bucuresti

S1

STR. JULES MICHELET 15

Bloc Scara Etaj Ap Interfon

4

BucSMURD

☐ Loc public

Directia ruta

07 16 joi 26 februarie

Paradire locatie Ctrl+Shift+P

Municipu

Localitate

Strada Nr

Bloc Scara Etaj Ap Interfon

Regiune

Time predare

Persoana Ctrl+Shift+H Comentarii Ctrl+Shift+A

Loc: STR. JULES MICHELET 15 4 Ctrl Obiectiv: gasita Ctrl+Shift+G

Persoana locatie Ctrl+Shift+P Informatii cas Ctrl+Shift+Q

Plan Ctrl+Shift+N

Resurse asociate Ctrl+Shift+U

Plan index: Plan general de actiune

- ☒ 07 24 24 Alertare PA
- ☒ 07 24 25 PA pleaca la caz
- ☒ 07 27 20 PA ajunge la caz
- ☐ Alertarea UTIM daca e cazul
- ☐ UTIM pleaca la caz
- ☐ UTIM ajunge la caz
- ☐ Alertare MMU daca e cazul
- ☐ MMU pleaca la caz
- ☐ MMU ajunge la caz
- ☐ MMU asociat la caz
- ☐ MMU coordoneaza caz
- ☐ Prealertare elicopter SMURD cu

Resursa Stare Time Categorie

A2PA-GUV 06 29 10 PA

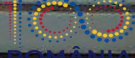
Terminare

Time indicat 26.02.2009 07 35 09

Plan Ctrl+Shift+N Actiuni Ctrl+Shift+L Resurse asociate Ctrl+Shift+U

Tratare medicale, obtinerea Ctrl+Shift+E

CoordCom Vehicle Tracking System Avicent



ADVISE FOR CALLER

Sfat Ctrl+Shift+R

- ☐ - nu se mobilizeaza pacientul decat daca este absolut necesar
- ☐ - se asteapta sosirea ambulantei
- ☐ - se apeleaza din nou 112 daca starea pacientului se modifica

QUESTIONS

Intrebari Ctrl+Shift+F

- 1.LOCALIZAREA SI UNDE SE DUCE DUREREA;**
- 2.DURATA EI (DE CAT TIMP?);**
- 3.SE AGRAVEAZA CU RESPIRATIA/TUSEA?**
- 4.CEDEAZA/SE AMELIOREAZA CU POZITIA?**
- 5.ATI LUAT UN MEDICAMENT PENTRU DURERE? CE MEDICAMENT?**
- 6.SUFERITI DE VREO BOALA?**

PLAN

Plan Ctrl+Shift+N

Plan index: Plan general de acțiune

☐		Alertare PA
☐		PA pleaca la caz
☐		PA ajunge la caz
☐		Alertarea UTIM daca e cazul
☐		UTIM pleaca la caz
☐		UTIM ajunge la caz
☐		Alertare MMU daca e cazul
☐		MMU pleaca la caz
☐		MMU ajunge la caz
☐		MMU asociat la caz
☐		MMU coordoneaza caz
☐		Prealertare elicopter SMURD

3 indicat

19.02.2009 13:47:51

Aplicare

Ctrl+Shift+N Actiuni Ctrl+Shift+L Fisiere atasate Ctrl+Shift+G

Where we are

THE NATIONAL SYSTEM FOR EMERGENCY INTERVENTIONS

First
Aid

Resuscitaion



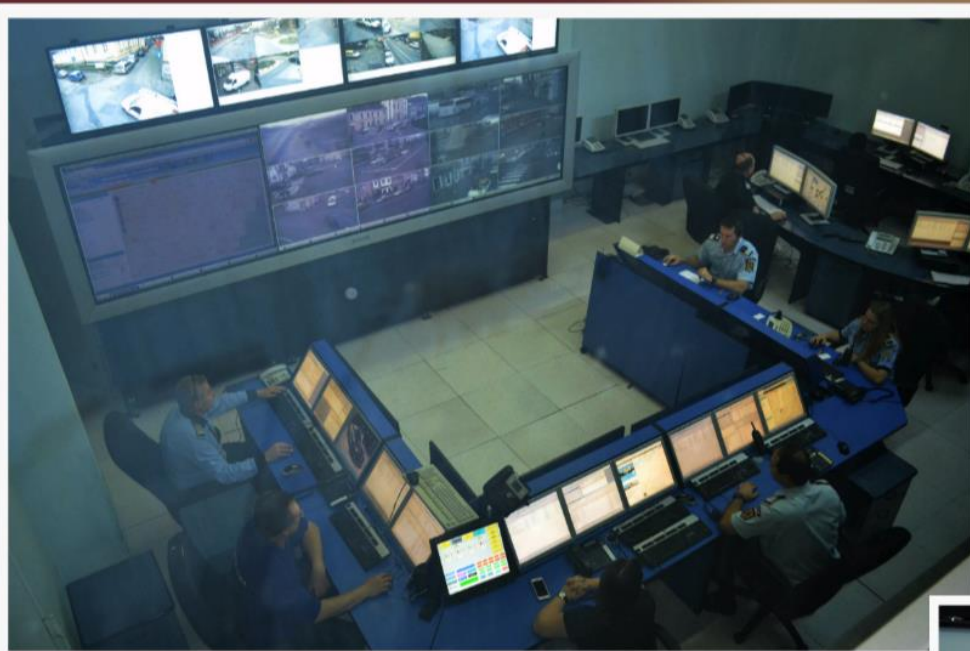
112

Hospital

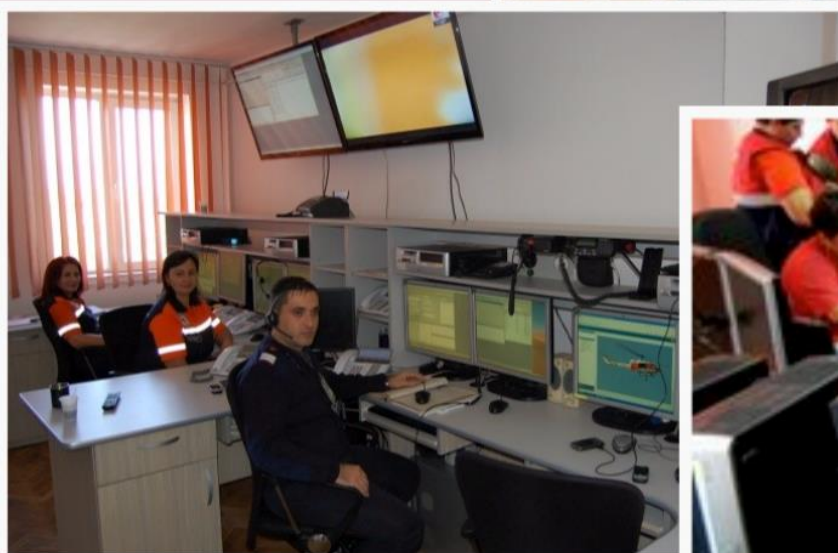
Advance
Life
Support

112

- 37 dispatches with the Fire Fighters/SMURD - AMBULANCE
- 2 integrated dispatches



Other dispatches



BUCHAREST

the new integrated dispatch started its activity in 2018



Air rescue



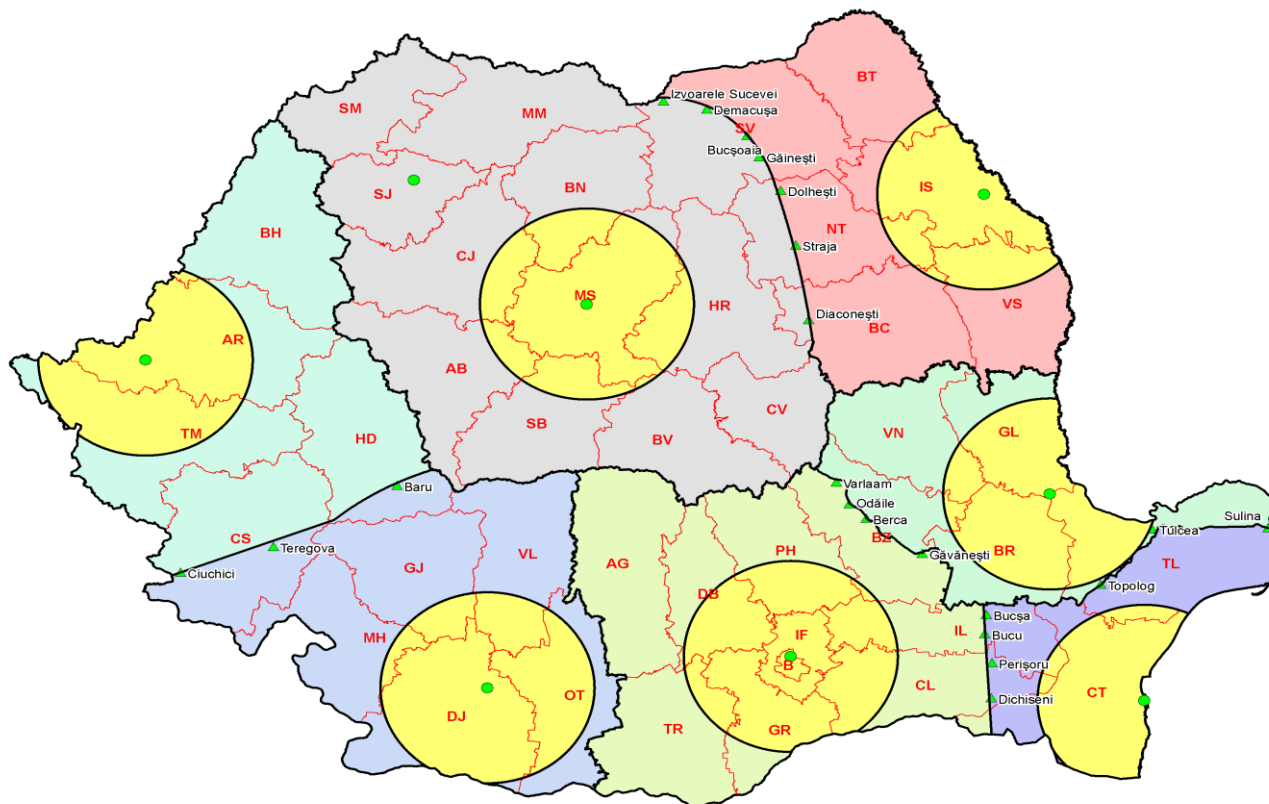
NEONATAL INTENSIVE CARE UNIT



INTERVENTION AREAS FOR SMURD HELICOPTERS

Legend:

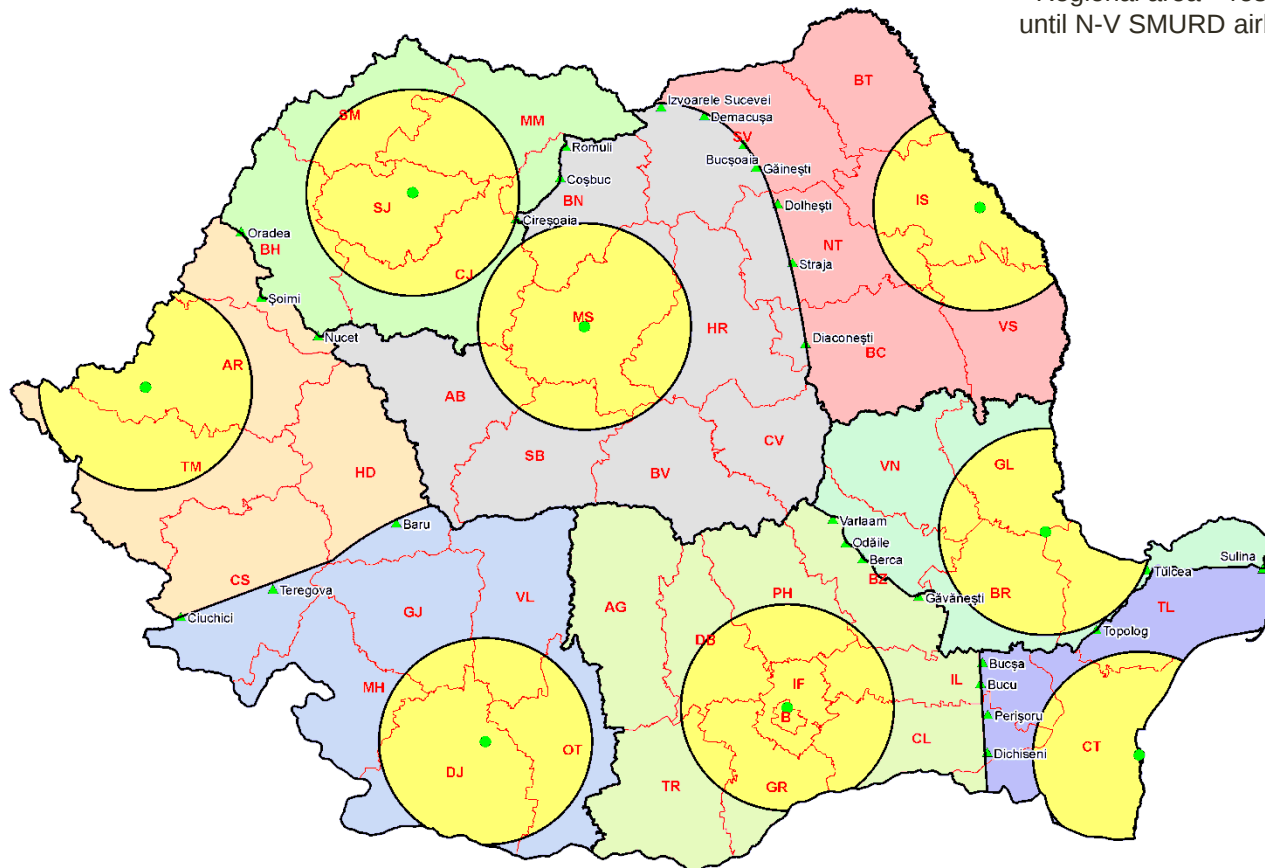
- Circular area – response until 20 min.
- Regional area – response until 40 min.
until N-V SMURD airbase become operational.



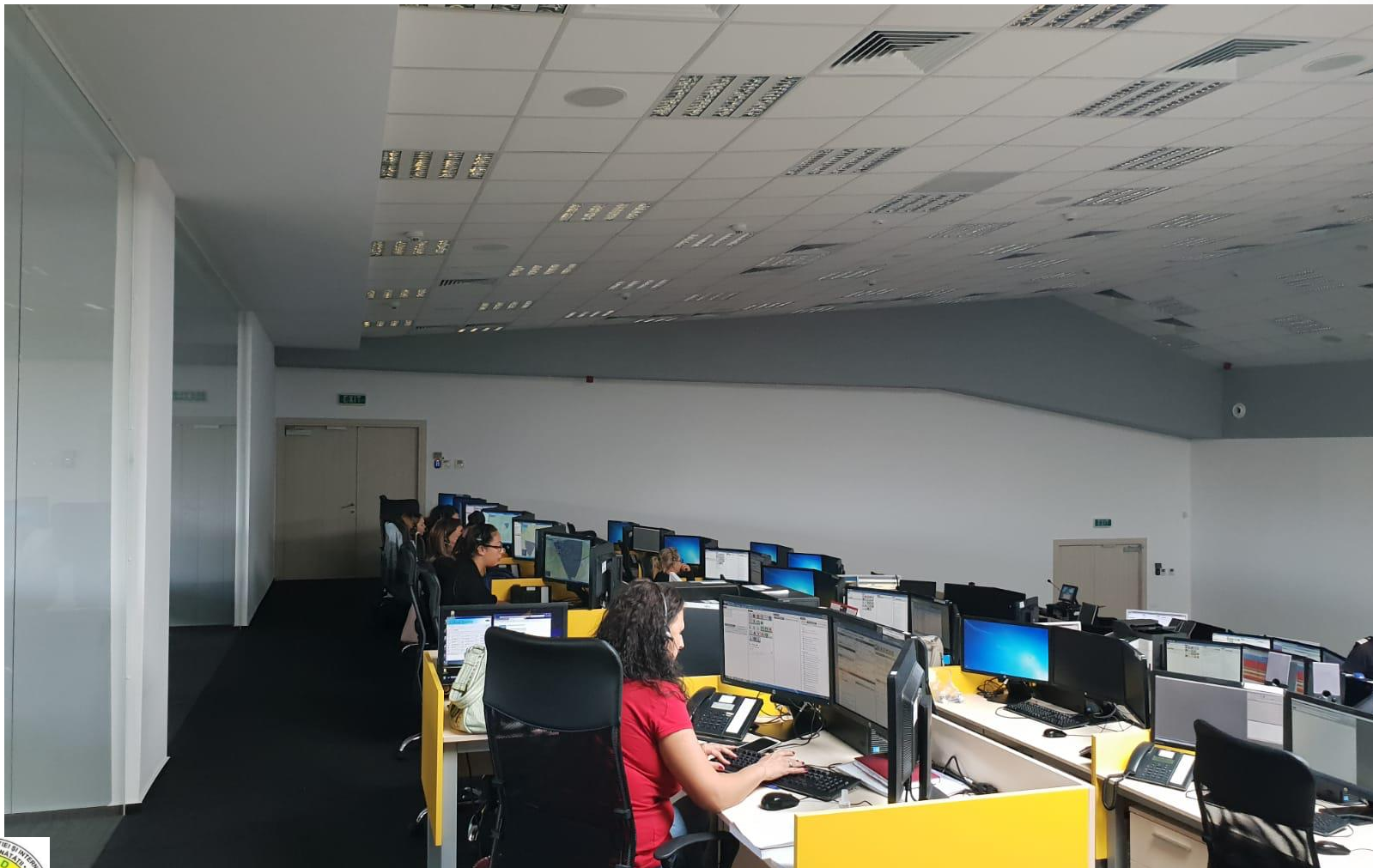
INTERVENTION AREAS FOR SMURD HELICOPTERS

Legend:

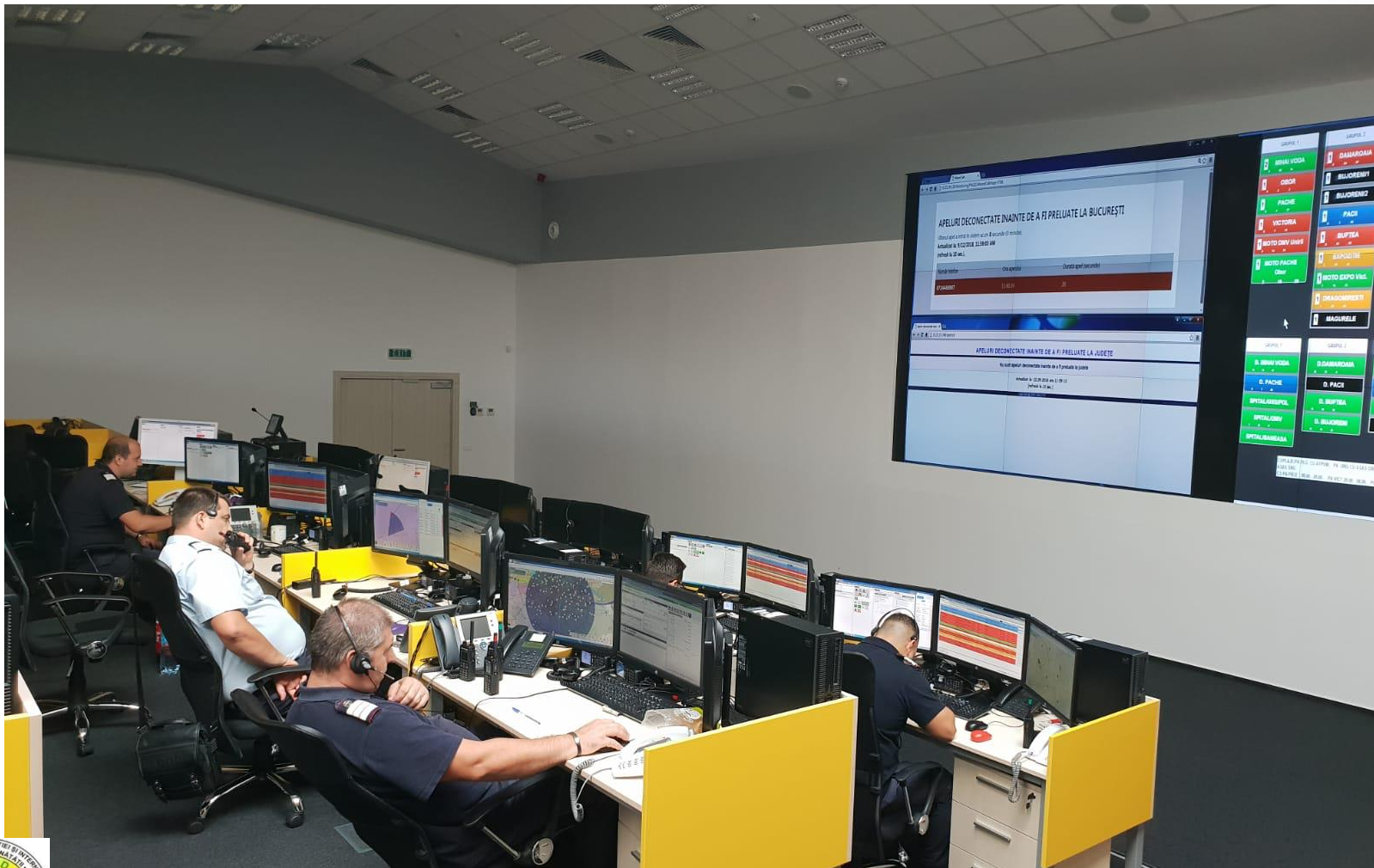
- Circular area – response until 20 min.
- Regional area – response until 40 min.
until N-V SMURD airbase become operational.



BUCHAREST DISPATCH- 112 CALLTAKER



BUCHAREST DISPATCH-FIRE



BUCHAREST DISPATCH-SMURD (MEDICAL)

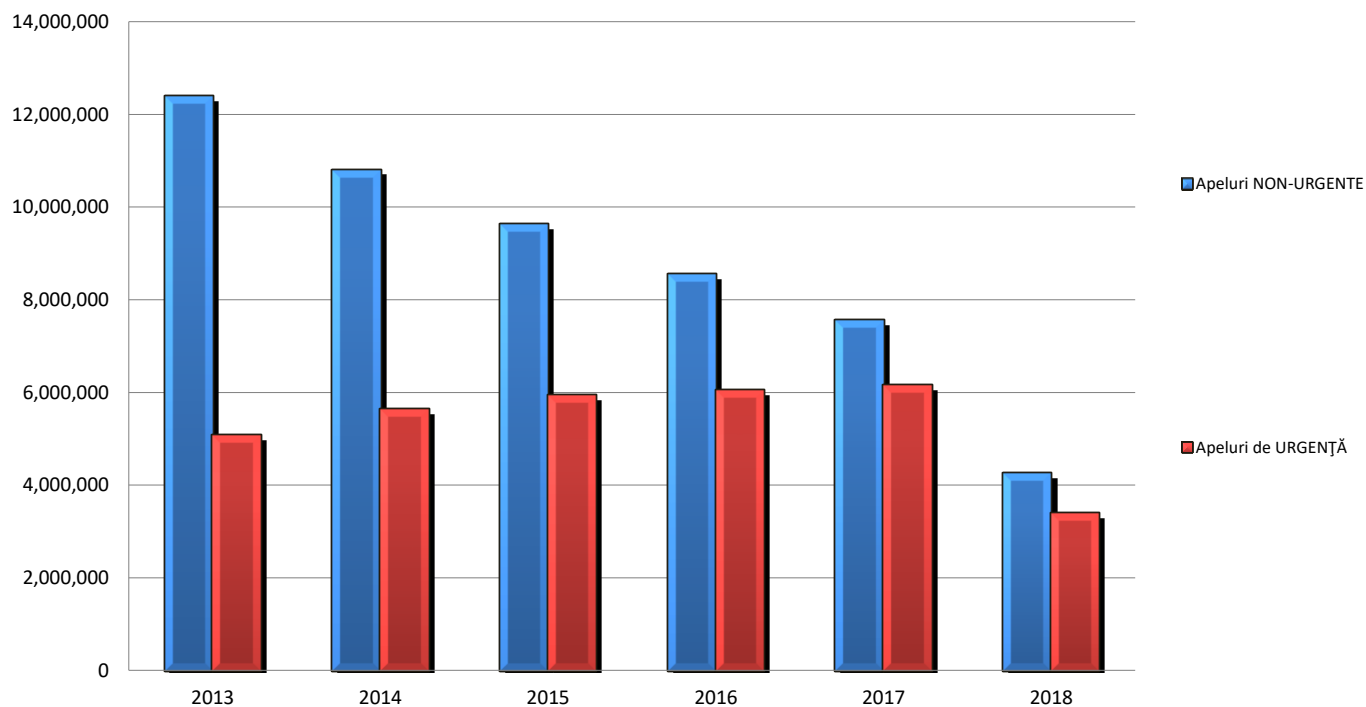


BUCHAREST DISPATCH- MUNICIPAL EMERGENCY COMMITTEE



STATISTICS (I)

Distribution of calls received in Unique Call Centers for the 2013-2018 period

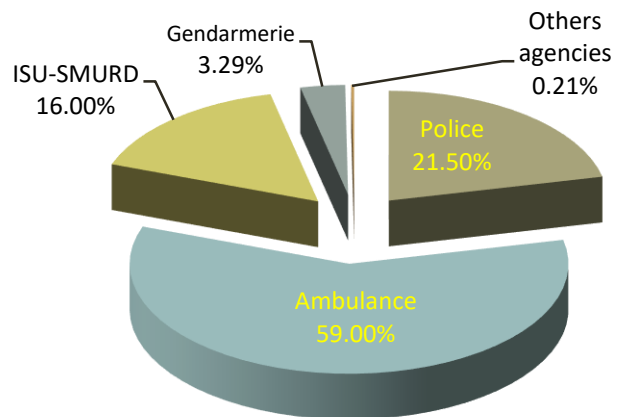


STATISTICS (II)

YEAR	Situation of 112 incoming calls					Situation of 112 incoming calls that were transferred to emergency agencies									
	Total calls	NON-EMERGENCY calls		EMERGENCY calls		POLICE		AMBULANCE		ISU+SMURD		GENDARMERIE		OTHER AGENCIES	
		Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
2013	17,463,468	12,383,150	70.91%	5,080,318	29.09%	1,434,870	24.80%	3,513,530	60.72%	729,118	12.60%	108,758	1.88%	6,227	0.11%
2014	16,434,007	10,800,956	65.72%	5,633,051	34.28%	1,369,813	23.50%	3,476,366	59.64%	810,844	13.91%	165,057	2.83%	7,124	0.12%
2015	15,561,664	9,634,679	61.91%	5,926,985	38.09%	1,373,394	22.30%	3,741,439	60.74%	869,059	14.11%	168,788	2.74%	7,296	0.12%
2016	14,600,440	8,552,087	58.57%	6,048,353	41.43%	1,364,808	21.76%	3,781,205	60.28%	933,622	14.88%	184,606	2.94%	8,507	0.14%
2017	13,711,362	7,564,684	55.17%	6,146,678	44.83%	1,370,048	21.44%	3,827,728	59.91%	986,913	15.45%	196,596	3.08%	8,033	0.13%
2018	7,645,426	4,252,336	55.62%	3,393,090	44.38%	849,476	21.50%	2,330,457	59.00%	632,115	16.00%	129,840	3.29%	8,358	0.21%

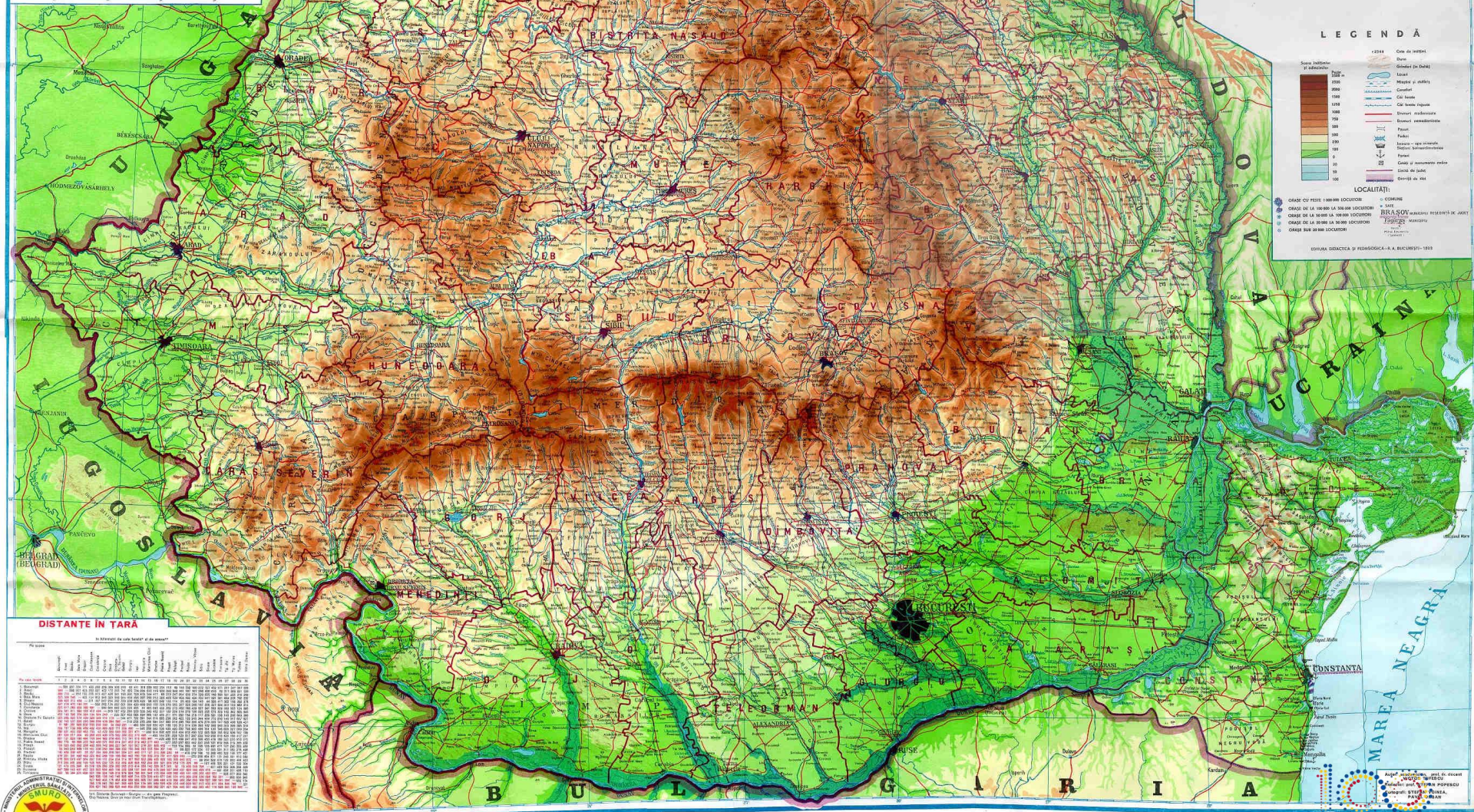
STATISTICS (III)

**Situation of 112 incoming calls
that were transferred to emergency agencies
from the beginning of the present year to the
end of July**



HARTA ADMINISTRATIVA A ROMÂNIEI



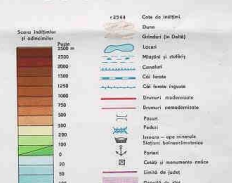


SCARA 1:800 000

MINISTERUL ÎNVĂȚĂMÎNTULUI

DIRECȚIA MIJLOACE DE ÎNVĂȚĂMÎNT ȘI DOCUMENTARE

L E G E N D Ă



LOCALITĂȚI:

- CRASE CU PESTE 1 000 000 LOCUTORI
 CRASE DE LA 100 000 LA 500 000 LOCUTORI
 CRASE DE LA 50 000 LA 100 000 LOCUTORI
 CRASE DE LA 20 000 LA 50 000 LOCUTORI
 CRASE SUB 20 000 LOCUTORI
- COMUN
 SATE
BRAȘOV MUNICIPIU REȘIDINȚĂ DE JUDEȚ
 FĂRĂȘ
 HÂRNIC
 HÂRNIC

REVISTA DIDACTICA SI PEDAGOGICA - R. A. BUCURESTI - 19

DISTANȚE ÎN TARĂ

As a result of the above, the following is proposed:

[illegible]

ROMÂNIA
1918-2018 | SĂRBĂTORIM ÎMPREUNĂ

Romania – development regions

GUVERNUL ROMÂNIEI



MINISTERUL DEZVOLTĂRII
ȘI PROGNOZEI

Regiunile de dezvoltare ale României:

- 1- NORD-EST
- 2- SUD-EST
- 3- SUD-Muntenia
- 4- SUD-VEST-Oltenia
- 5- VEST
- 6- NORD-VEST
- 7- CENTRU
- 8- BUCUREȘTI-ILFOV

Legendă:

DRUMURI EUROPENE
RESEDINTE DE JUDET
SEDII DE AGENȚII
REGIONALE

BRĂILA

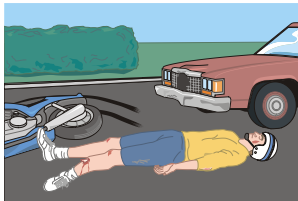


LEGAL FRAME

- Law no. 92/1996 on the organization and functioning of the Special Telecommunications Service, modified by the Government Emergency Ordinance no. 7 / 30.01.2002, approved by Law no. 332 of 31.05.2002;
- The Government Emergency Ordinance no. 34/2008 on the organization and functioning of the National System for Emergency Calls approved by Law no. 160/2008;
- Law no. 218/2002 on the organization and functioning of the Romanian Police with subsequent amendments and completions;
- Law no. 550/2004 on the organization and functioning of the Romanian Gendarmerie;
- Law 95/2006 on Health Reform, Title IV, with subsequent amendments and completions;
- Government Decision no. 1118/2005 regarding the designation of the specialized structures of the Romanian Gendarmerie and the specialized unit of the Romanian Intelligence Service as specialized intervention services;
- Government Ordinance no. 88/2001 on the establishment, organization and functioning of the community public services for emergency situations, with subsequent amendments and completions;
- Government Emergency Ordinance no. 1/2014 regarding some measures in the field of emergency management, as well as for the modification and completion of Government Emergency Ordinance no. 21/2004 on the National Emergency Situation Management System;
- Government Decision no. 94 of 12 February 2014 on the organization, operation and composition of the National Emergency Special Committee;
- Government Decision no. 121 of 19 February 2014 on the organization, functioning and composition of the National Committee for Weather and Disasters;
- Government Emergency Ordinance no. 21/2004 on the National Emergency Situation Management System, approved by Law 15/2005;
- Government Emergency Ordinance no. 126/2003, approved by Law no. 40/2004 on the emergency assistance with helicopters purchased by the Ministry of Health and the Joint Order of the Ministry of Administration and Interior and the Ministry of Health no. 277/777/2004 for the approval of the methodological norms for application;



STEPS IN MANAGEMENT OF MULTIPLE TRAUMA PATIENT



Accident scene



Prehospital



Emergency Department



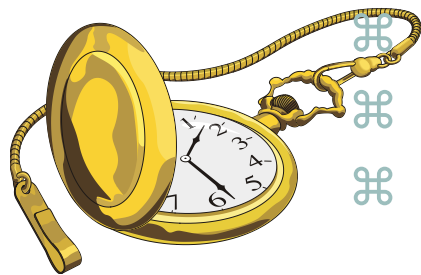
Operating Room



scoop & run



stay & play



- ⌘ Golden hour
- ⌘ Platinum half an hour
- ⌘ Superconductor quarter of hour

PE Pepe (Buxelles, 2001)

PRIMUM NON NOCERE!!!

EMERGENCY CALL SYSTEM

Criteria:

1. Administrative organization of country (regions, districts, counties, etc.);
2. Particularities of administrative organization (urban vs.rural)
3. Organisation of emergency system (agencies, resources, etc.)
4. Geography;
5. Climate;
6. Population;
7. Density of population;
8. Medical status of population;
9. Infrastructure (roads,highways, bridges, tunnels,airports,etc.)
10. Risks (both natural and human);

FUTURE GOALS and MEANS

GOALS:

- reduce the total time of emergency call;
- reduce the response time of emergency teams;
- improve the dispatch actions: the appropriate resource for the appropriate case.

MEANS:

- Integrated dispatch center (all agencies in the same place and also liaison officers from other agencies or utility companies);
- Regionalization of dispatch;
- The establishment of a dispatcher profession (who can manage all types of emergency call-fire, medical, etc.)

COST-ACCEPTANCE OF CHANGE

