

# Emergency response management in Poland

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1. EMS System organisation, structure and rules of operation
  - hospital emergency departments
  - medical emergency teams
  - trauma centers
  - organizational units of hospitals specialised in providing health services for the emergency medical service
  - non-hospital units cooperating with the EMS System
2. Planning of EMS system needs
3. CPR (Centre of Rescue Reporting) and SWD EMS (State Emergency Management Assistance System)





## EMS System organisation

Act of 8 September 2006 on State Emergency Medical Services System provides rules governing arrangement and functioning of the State EMS System

- changed many times since 2006
- many additional regulations to the Act



# EMS System organisation



EMS system is composed of following units:

- hospital emergency departments – at present 225
- ground medical emergency teams (ambulance services) - at present 1543
- air emergency services teams (HEMS) - at present 24 permanent locations and one seasonal

EMS system is based on cooperation with:

- trauma centers
- organizational units of hospitals specialised in providing health services for the EMS
- non-hospital units cooperating with the system EMS



# EMS System organisation



- The tasks of ground medical emergency teams are financed from the state budget through voivodships
- The tasks of air medical emergency teams are financed from the state budget through the Minister of Health



# Hospital emergency department

Hospital emergency department (SOR)



- basic unit of the EMS system
- organizational unit of hospital providing health services to patients in sudden life-threatening condition
- provides stabilization of vital signs and restoration of organ perfusion of emergency patients, initial diagnosis (including diagnostic imaging) and immediate medical treatment, including invasive treatment



# Hospital emergency department

The determination of number and location of SORs is influenced by many factors, including:

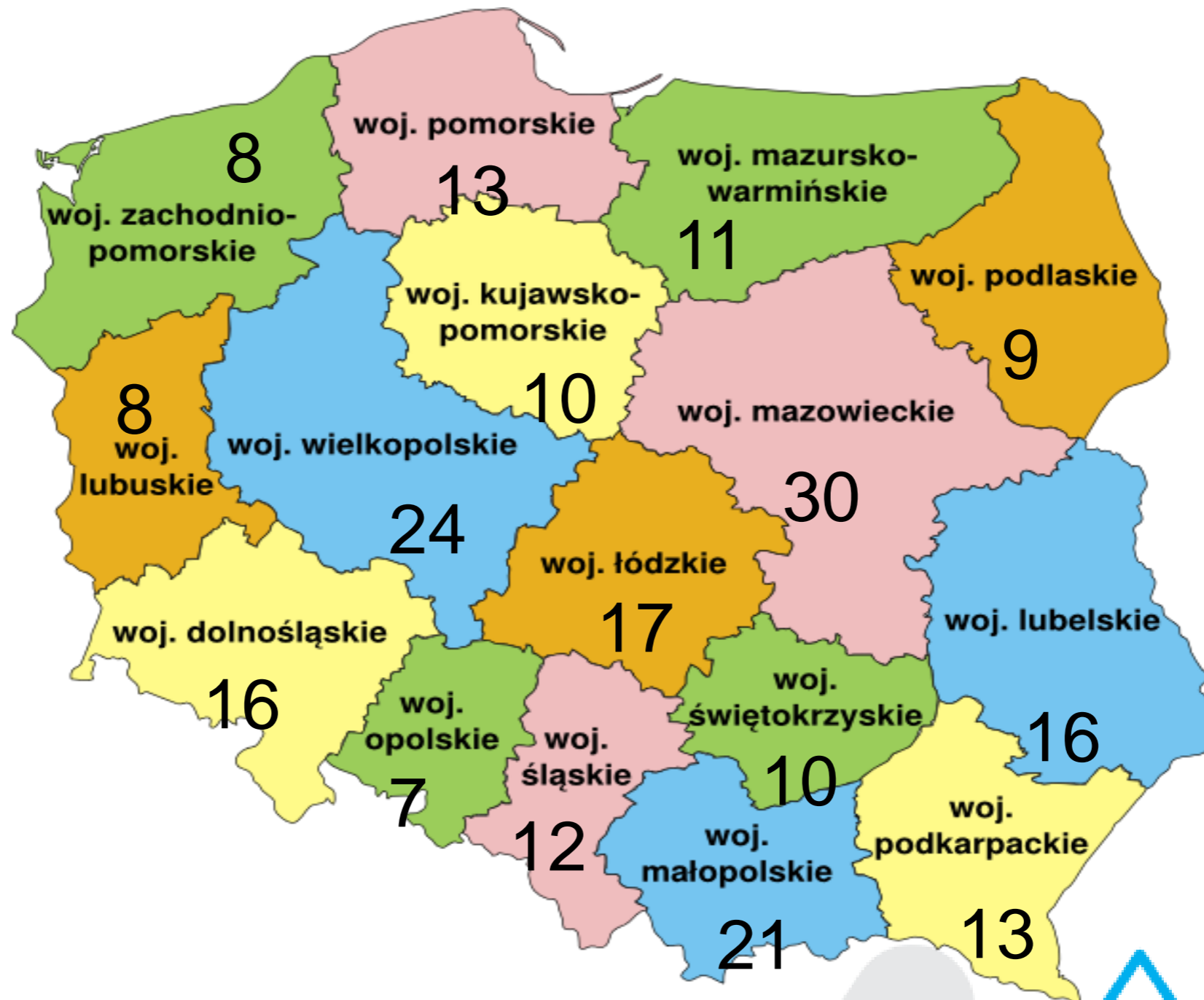
- keeping appropriate time period to reach the nearest SOR from the accident scene (so called “golden hour” standard, which means that person in sudden life-threatening condition should reach the appropriate hospital within one hour since emergency notification)
- organizational capacity and infrastructure of the existing hospitals and
- number of population (on average 150 thousands of population should be served by one SOR)





# Hospital emergency department

Disposition of hospital emergency departments in 2017 - a total of 225 SORs



# Medical emergency teams

Ground medical emergency teams are divided into:

- specialized teams „S” - consisting of three persons authorized to perform medical rescue operations, including a doctor and a nurse or paramedic
- basic teams „P” - consisting of two persons authorized to perform medical rescue operations, including a nurse or paramedic
- In addition, team includes a driver if none of the members of the team has the right to drive. The Drivers in order to obtain permission to drive an ambulance undergo additional tests. Every team is equipped with a vehicle (ambulance) complying with norm EN 1789.
- In practice, there is no clear distinction between disposing of „S” or „P” teams - dispatcher decides.
- The Polish system does not provide a rendez-vous model.
- According to the Act on State Emergency Medical Services System, each paramedic is required to deepen the knowledge and practical skills through additional courses.



## Medical emergency teams

Ground medical emergency teams in 2017, including temporary, seasonal and water teams - 1543



## Medical emergency teams

In line with the initial layout of the Programme for Integrated Emergency Medical Services one emergency medical services team should served no less than 33 thousand inhabitants (at present on average in Poland one team serves 26 thousands inhabitants)

When planning the number and location of teams in the area, the voivodeship plans to place medical emergency teams so that parameters referring to the response time since emergency notification, are taken into account.



## Medical emergency teams



Parameters referring to the response time since emergency notification:

- **Median response time – each month – no longer than 8 minutes in a city with population over 10 000 and 15 minutes outside the city with population over 10 000**
- **Third quartile of response time – each month – no longer than 12 minutes in a city with population of 10 000 and 20 minutes outside the city with population over 10 000**
- **Maximum response time – no longer than 15 minutes in a city with population over 10 000 and 20 minutes outside the city with population over 10 000**



## Medical emergency teams

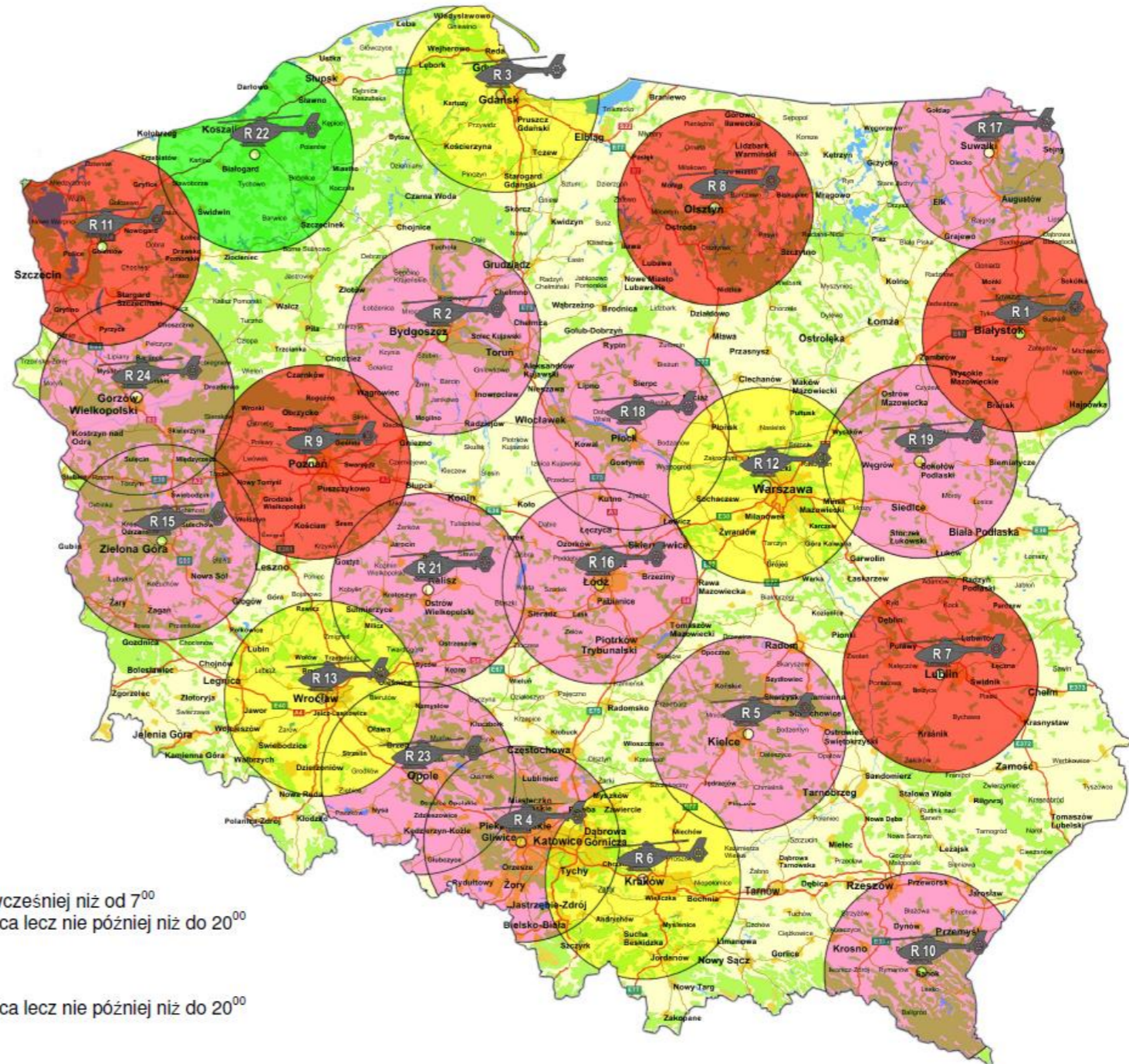






Transportation in the context of providing emergency medical services should be distinguished from sanitary transport, where there is no life-threatening problem. In both cases, different funding rules and procedures are applied.



# Air medical emergency teams

There are 24 permanent locations of Helicopter Emergency Medical Services and one seasonal



-  - dyżur 24 h
-  - dyżur od 7<sup>00</sup> do 20<sup>00</sup>
-  - dyżur od wschodu lecz nie wcześniej niż od 7<sup>00</sup> do 45' przed zachodem słońca lecz nie później niż do 20<sup>00</sup>
-  - baza sezonowa dyżur od 7<sup>00</sup> do 45' przed zachodem słońca lecz nie później niż do 20<sup>00</sup>



## Air medical emergency teams

In view of provisions of the Act about State Emergency Medical Service The Polish Medical Air Rescue perform two types of tasks:

- Medical rescue activities - emergency medical services (funded entirely from the state budget),
- Air medical transport - the provision of health care (in terms of readiness - financed from the state budget, in terms of actual costs - by the subject that commissioned transportation (Medicinal Subject)).





## Air medical emergency teams

### When Rescue Helicopter should be called?

- when the ground emergency medical service is not available,
- when the time of arrival and transport to a specialist hospital is longer than a helicopter rescue,
- when there is an information about the mass incident,
- to help the ground emergency medical services,
- when the nearest to the scene hospital is not able to provide medical assistance to a person in a state of sudden health threat,



# Air medical emergency teams

## Helicopter EC 135



# Air medical emergency teams

## Cockpit EC 135



# Air medical emergency teams

## EC 135 – medical cabin



# Trauma center



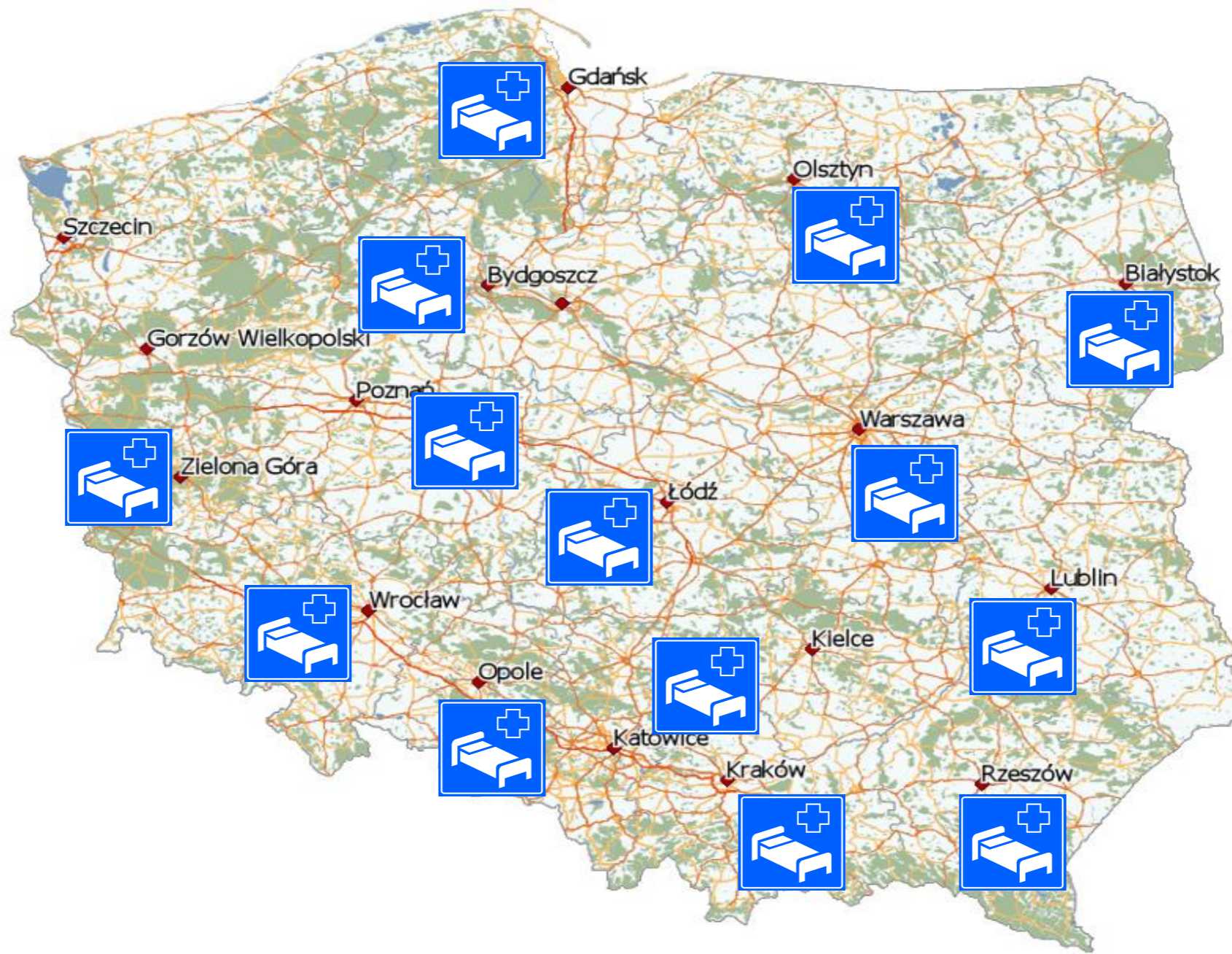
- functionally separated part of hospital, in which emergency department and other specialised units are operating and cooperating in a manner that allows for quick diagnosis and treatment of patients suffering from traumatic injuries ie. a persons in a sudden and life-threatening condition caused by external factor, resulted in severe, multiple or multi-organ injury
- serves population of at least 1 million living in the area that permit reaching the trauma center from the accident scene within 1.5 hours

Creation of each new trauma center is preceded by needs analysis on keeping the appropriate time of arrival of trauma patients in CU



# Trauma center

There are currently 14 trauma centers in Poland



## Organizational units of hospitals specialised in providing health services for the emergency medical service



- replantation, toxicological centers
- intensive cardiac care units
- hypothermia treatment units
- departments of anesthesiology and intensive care
- burn treatment units
- children's hospitals dealing with specialised diagnosis and treatment of persons in sudden life-threatening condition



## Non-hospital units cooperating with the EMS System

- State Fire Service, Police
- Social organizations and associations, like: Mountain Volunteer Rescue Service, Polish Red Cross, Polish Scouting Association...

Support the system, if needed.





# EMS System planning

Estimates for actual health needs relating to services provided by the EMS are made at voivodeship level by the government-appointed governor - a voivode.

**The voivode** is responsible for planning, organizing, coordination and supervision of EMS system in the voivodeship area.



## EMS System planning

The functioning of the EMS system is based on *Voivodeship Action Plans of the State Emergency Medical Services System*



# EMS System planning

The functioning of the EMS system is based on *Voivodeship Action Plans of the State Emergency Medical Services System*.

Voivodeship Action Plan is subject of consultation with the **branch of the voivodeship National Health Fund** in terms of the number and distribution of SOR-s, Trauma centers and organizational units of hospitals specialised in providing of health services for the emergency medical services.

Voivodeship Action Plan is also subject of consultation with Commander of Voivodeship's State Fire Service Voivodeship's Police Commander and Commander of the Division of the Border Guard.

Draft of the Voivodeship Action Plan is submitted by the voivode to the Minister of Health **for approval.**



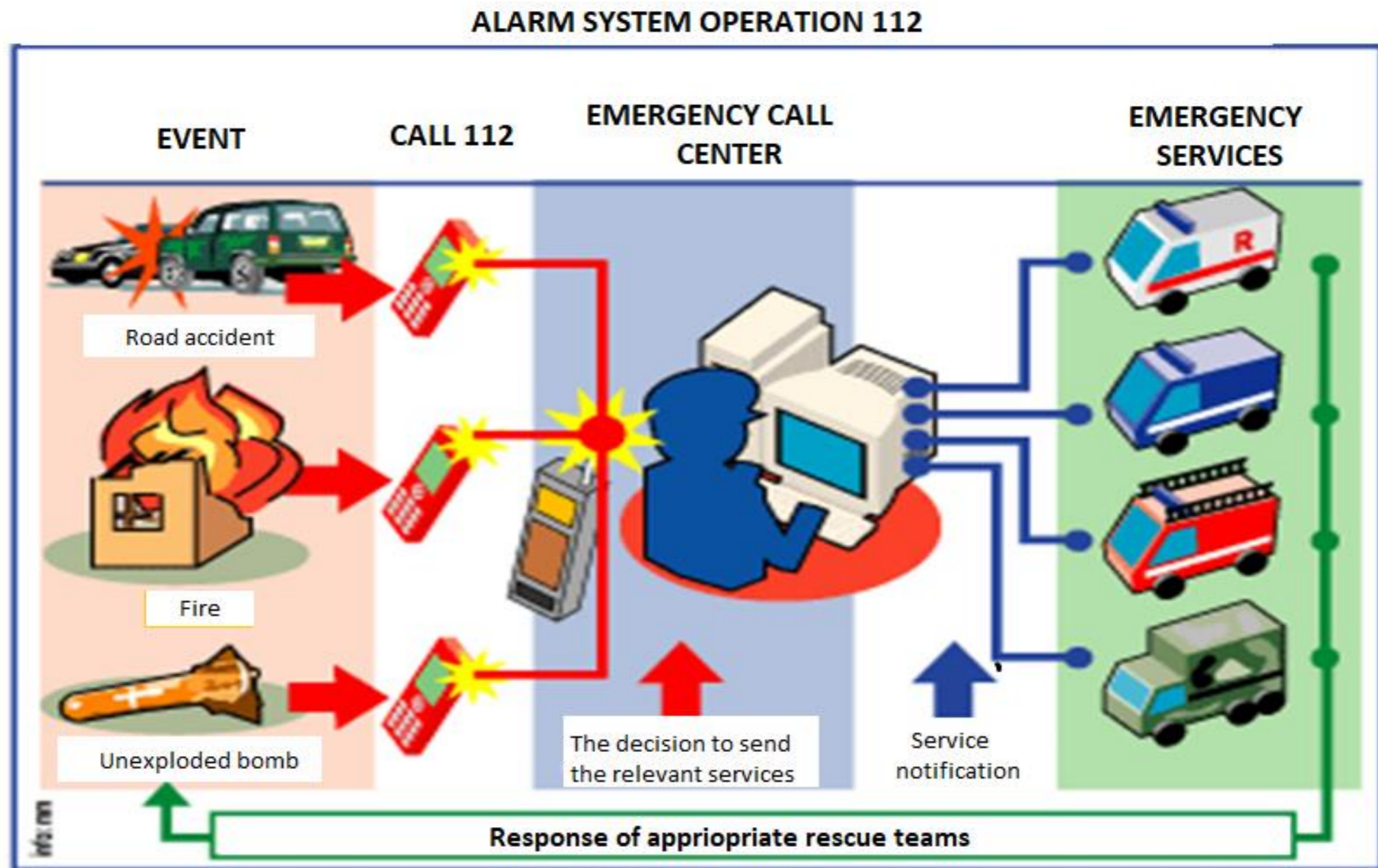
## CPR (Centre of Rescue Reporting) and SWD EMS (State Emergency Management Assistance System)



- Information about a person in sudden life-threatening condition is provided on the emergency number 999 or 112. In the case of long waiting for a call, you can also make a call to 998 (State Fire Service) or 997 (Police).
- The medical dispatcher accepts the request, determines the priority and directs the nearest air or ground medical rescue team.
- The medical rescue team provides medical emergency services and transports a person in sudden life-threatening condition to the nearest hospital emergency department or hospital designated by a medical dispatcher or medical emergency coordinator.



# CPR (Centre of Rescue Reporting) and SWD EMS (State Emergency Management Assistance System)



# CPR (Centre of Rescue Reporting) and SWD EMS (State Emergency Management Assistance System)

What is SWD for EMS?

- brand new unified national supporting system
- key element in the emergency reporting system
- a tool, IT system supporting activities related to the handling of notifications and CPR emergency calls





**Thank you for your attention**

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