



National Headquarters
of the State Fire Service

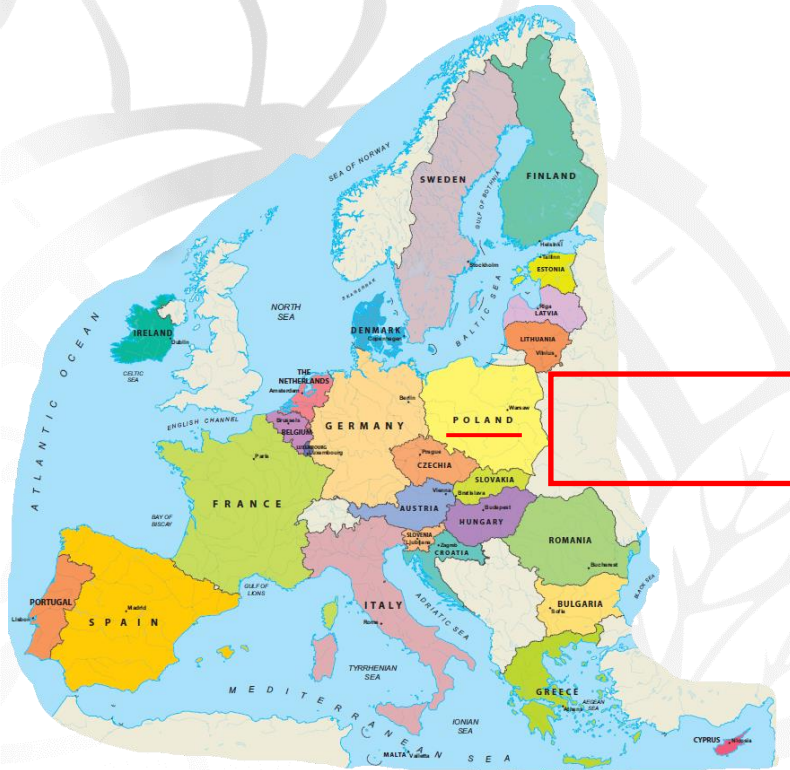
Accident Prevention System in Lower Tier Sites in Poland

Lt. Col. MEng. Konrad Leszczuk
– Deputy Head Hazard Analysis Unit
National HQ of the State Fire Service

Mutual Joint Visit Workshop for Seveso Inspections on
Risk management and enforcement on lower tier sites
18 October 2023, Lisbon, Portugal



Poland in Europe; Regions in Poland



Poland is divided into:

I level – 16 Voivodeships (similar to provinces),

II level – 314 Powiaty (similar to counties or districts) 66 cities with powiat status,

III level – 2477 Gminy (similar to communes or municipalities)



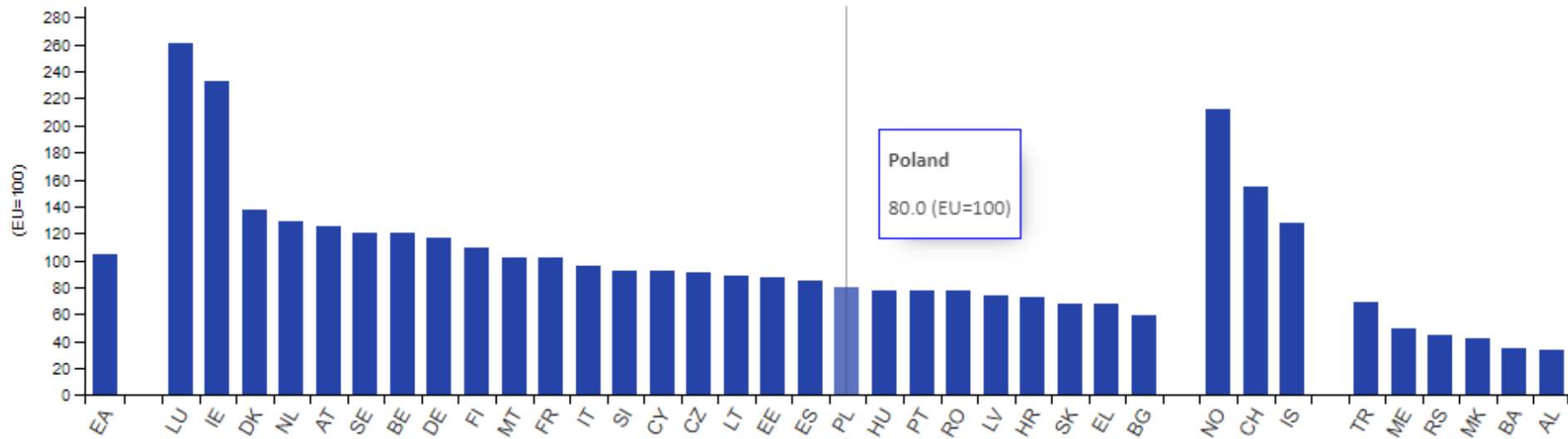
Poland – basic information

36,7 mln citizens

307 km² area

Polish economy:

Volume of indices of GDP per capita, 2022



Note: countries are sorted according to their 2022 volume index per capita for GDP.

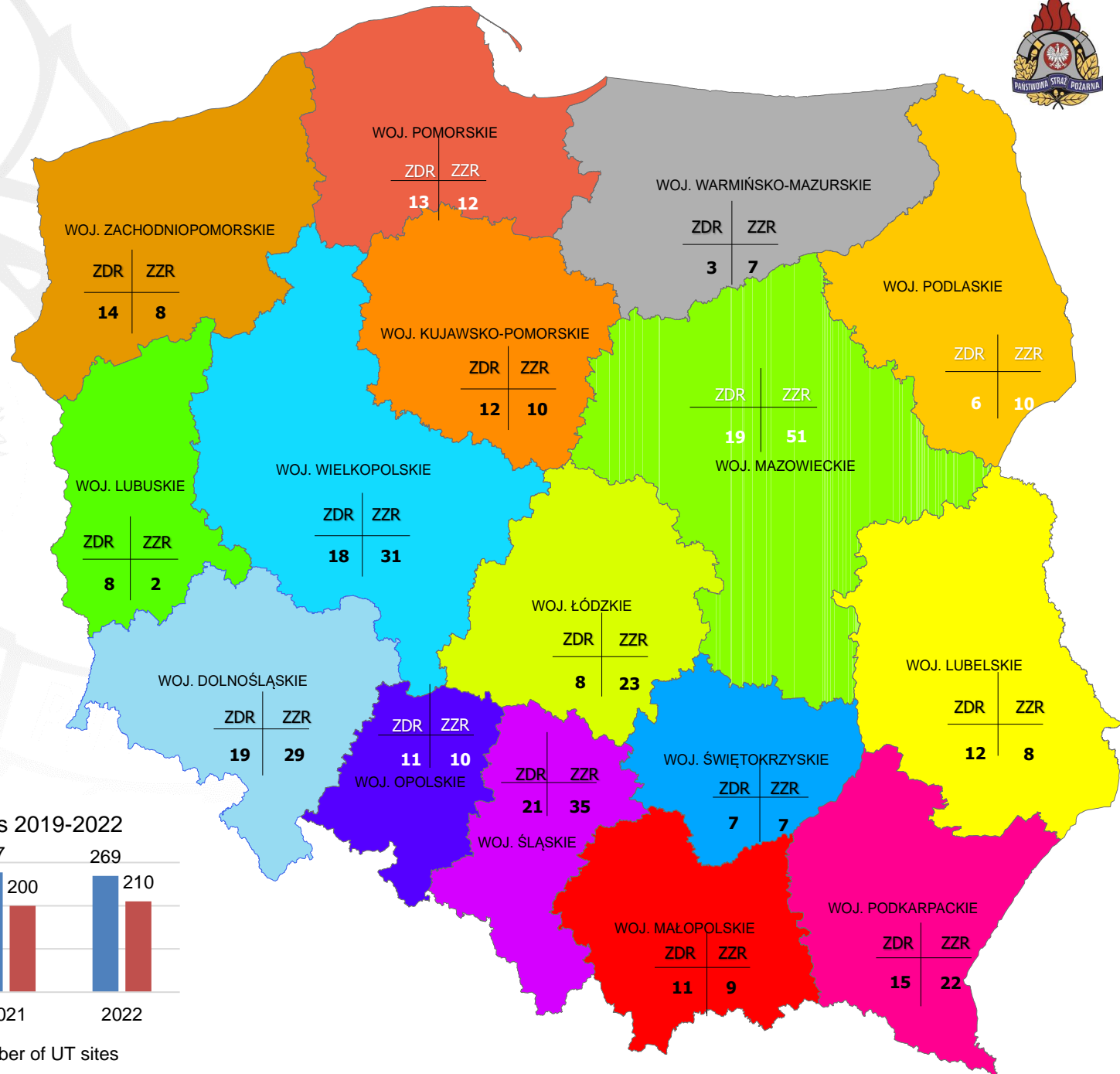
Source: Eurostat (online data code: prc_ppp_ind)



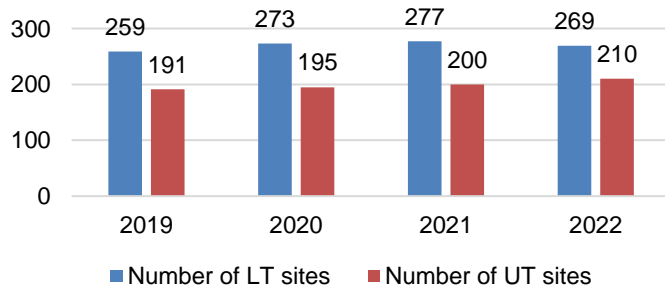
SEVESO sites: **479**

UT sites (ZDR): **210**

LT sites (ZZR): **269**

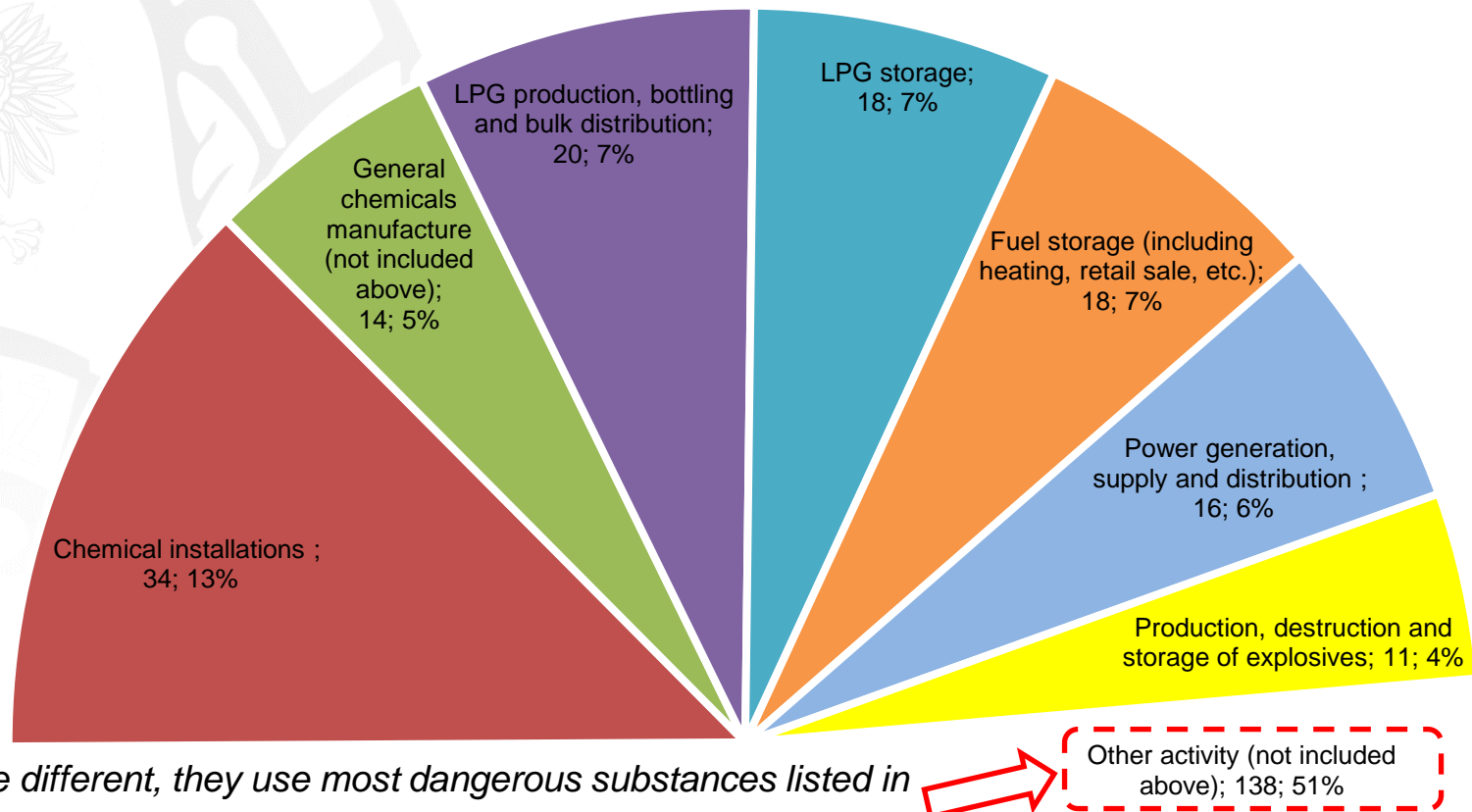


Number of LT and UT sites 2019-2022





Industry Types in LT sites



LT sites in Poland are different, they use most dangerous substances listed in Annex I Seveso Directive and represent approx. 25 industry types in accordance with the classification used in eSPIRSS database.



The competent authorities of the Seveso Directive

Seveso Directive
(Directive)



Implemented by Act of 1 October 2001 amending
Environmental Protection Law Act and some other acts



European
Commission



Ministry of Climate and Environment
Republic of Poland



**Chief Commandant of the State Fire Service
The State Fire Service (SFS)**

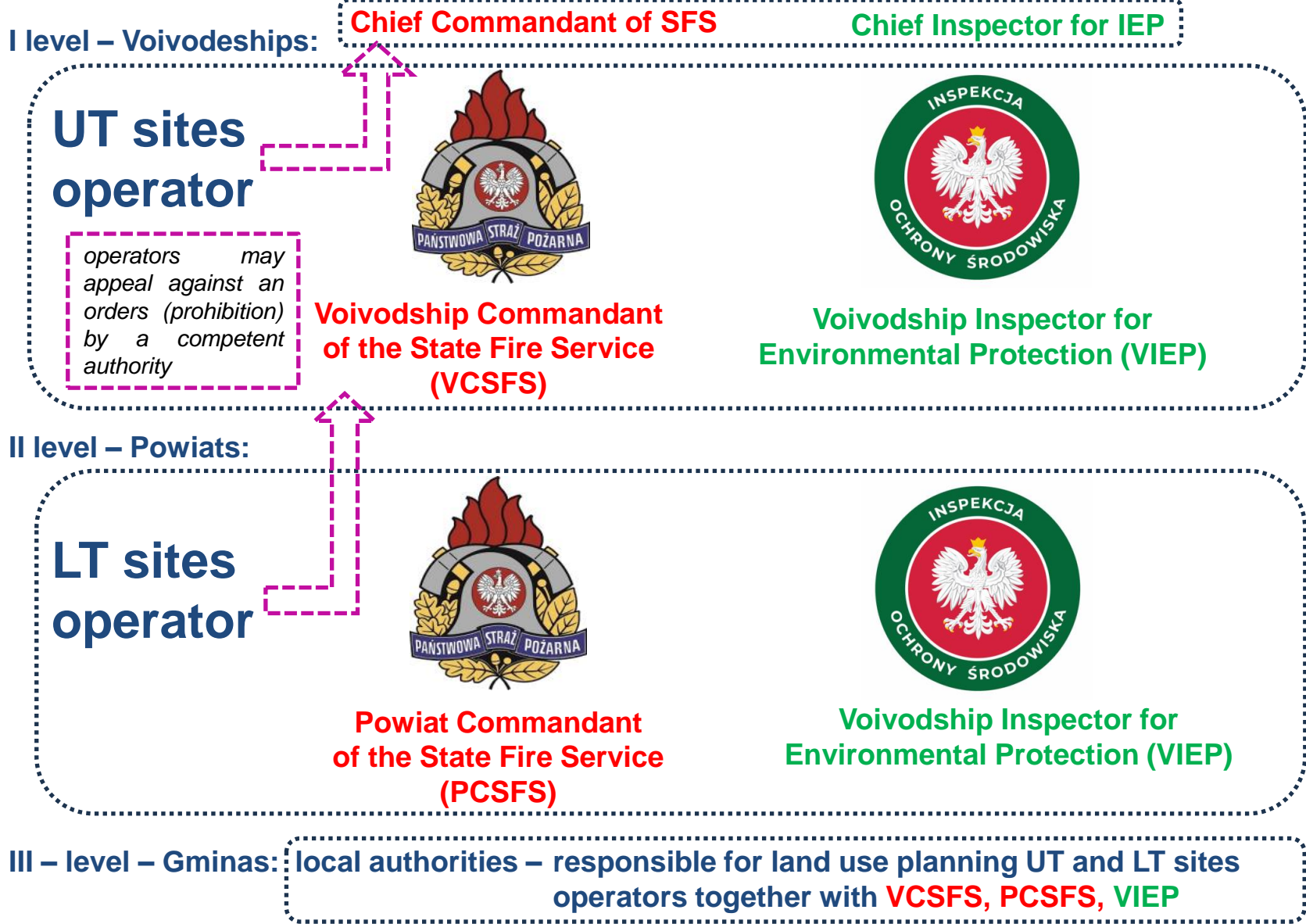


**Chief Inspector for Environmental Protection
Inspection for Environmental Protection (IEP)**

They are charged with:

- 1) identifying sites (establishments) capable of creating major accidents,
- 2) reviewing Seveso documentations (e.g. for LT sites: notifications, major accident prevention policys (MAPP), safety management systems),
- 3) the responsibility of inspections,
- 4) investigating major accidents,
- 5) data collecting, analysis of the information from local level and coordination of the activities at the central level,
- 6) participating in land use planning process.

Local competent authorities for UT and LT sites



PCSFS tasks in relations to LT sites



- 1) **receiving notifications by LT site operator** (*paragraph 1, 2, of Article 7 Directive*):
 - a) for new establishments, within 30 days before opening LT sites,
 - b) for all other cases, one year from the date from which this Directive applies to the sites concerned,**and modification of a site or an installation** (*referred to in points (a), (b) or (c) of paragraph 4 Article 7 Directive*),
 - ✓ **LT sites operators also provide copy of notifications to the VIEP;**
- 2) **analyzing notifications provided by LT sites operators;**
- 3) **analyzing Major Accidents Prevention Policies (MAPP) provided by LT side operator**
 - ✓ **LT sites operator also provide copy of MAPP to the VIEP;**
- 4) **accepting and analyzing updates in MAPP made by LT site operator;**
- 5) **inspecting the sites (establishment) that may be a source of a major accident;**

PCSFS tasks in relations to LT sites



- 5) analysis of the causes and consequences of major accidents to the environment;
- 6) identifies all site or groups of sites (establishments) with domino effects, but **VCSFS** decides to create a group of sites and impose additional obligations on operators;
- 7) participating in land use planning process in relation to LT site;
- 8) keeping the register of LT site;
- 9) information to the public about:
 - a) received notifications by LT site operator (*paragraph 1, 2, of Article 7 Directive*),
 - b) accepting MAPP,
 - c) annual inspection plan;
- 10) receiving notifications from LT site operator about a major accident.

Strategy **SFS** inspection in LT sites



Standarization and unification of country's approach to the cases related to prevention of major industrial accidents

(clarification of implementation referred to paragraph 3 article 20 Directive)

Content of the methodology (1):

- ✓ **planning inspection and reconnaissance activities**
- ✓ **establishing inspection programs and schedules**
- ✓ **carrying out inspection and reconnaissance activities in the scope of determining compliance with safety requirements in LT sites**
- ✓ **carrying out control and reconnaissance activities together with other authorities**
- ✓ **rules of conduct in the event of detection of significant violations**

Zatwierdzam:
KOMENDA GŁÓWNA
PAŃSTWOWEJ STRAŻY POŻARNEJ
Suski
gen. brygadier Leszek SUSKI



KOMENDA GŁÓWNA PAŃSTWOWEJ STRAŻY POŻARNEJ
BIURO ROZPOZNAWANIA ZAGROZEŃ

**METODYKA POSTĘPOWANIA W SPRAWACH
DOTYCZĄCYCH PRZECIWDZIAŁANIA
POWAŻNYM AWARIOM PRZEMYSŁOWYM**

Material wraz z załącznikami wyłącznie do użytku służbowego.

Warszawa, maj 2018 r.

ZASTĘPCA KOMENDANTA GŁÓWNEGO
PAŃSTWOWEJ STRAŻY POŻARNEJ

Marek JASIŃSKI
nadbrzoj. Marek JASIŃSKI

25.05.2018r.

Strategy SFS inspection in LT sites



Content of the methodology (2):

- ✓ **templates of protocols from inspection and reconnaissance activities**
- ✓ **the principles of giving opinions on draft studies of the conditions and directions of spatial development and draft local spatial development plans (land use planning proces)**
- ✓ **rules for agreeing decisions on development conditions for facilities in the vicinity LT site in the event that these investments increase the risk or the effects of major accidents**
- ✓ **the rules for determining the so-called "Safe distances"**

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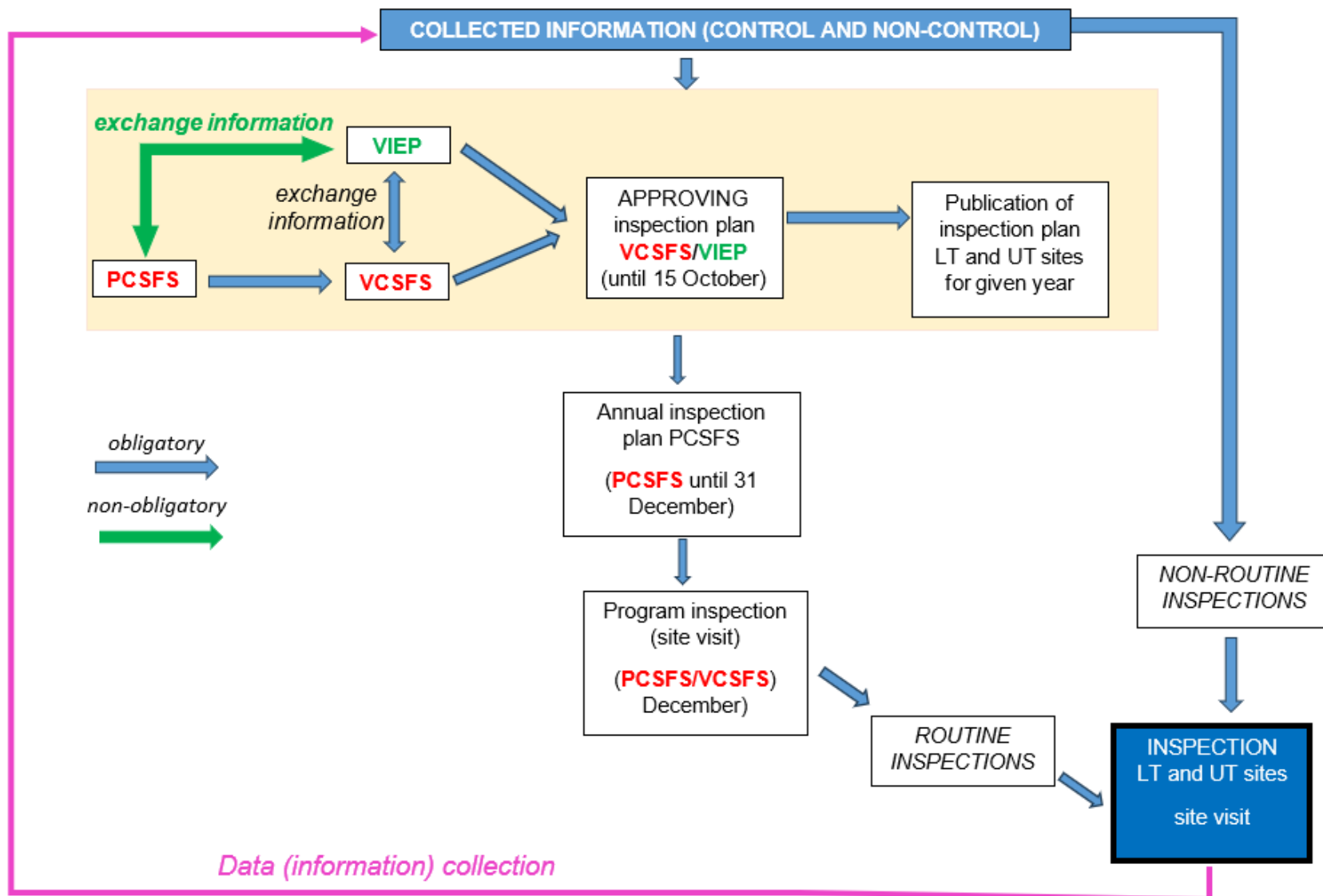
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Strategy SFS inspection in LT sites



Strategy SFS inspection in LT sites



Network of cooperation SFS units		VCSFS	PCSFS
LT site	schedule routine inspection	gray	red
	list of the establishments (LT and UT sites) covered by the plan	red	blue
	annual inspection plan	gray	red
	program inspection (site visit)	gray	red
	authorization to control/ notice of routine and additional inspection	gray	red
	routine inspection (site visit)	gray	red
	routine inspection (site visit) report	gray	red
	authorization to control/ notice of non-routine and additional inspection	gray	red
	non-routine inspection (site visit) and additional inspection report	gray	red
	inspection (site visit)	gray	red

-  organizational unit SFS leading in this area
-  organizational unit SFS cooperating in this area
-  not applicable

Inspections



The frequency of inspections is determined taking into account the systematic assessment of environmental risks caused by installation and provisions regarding the frequency of inspections.

GENERAL RULE:

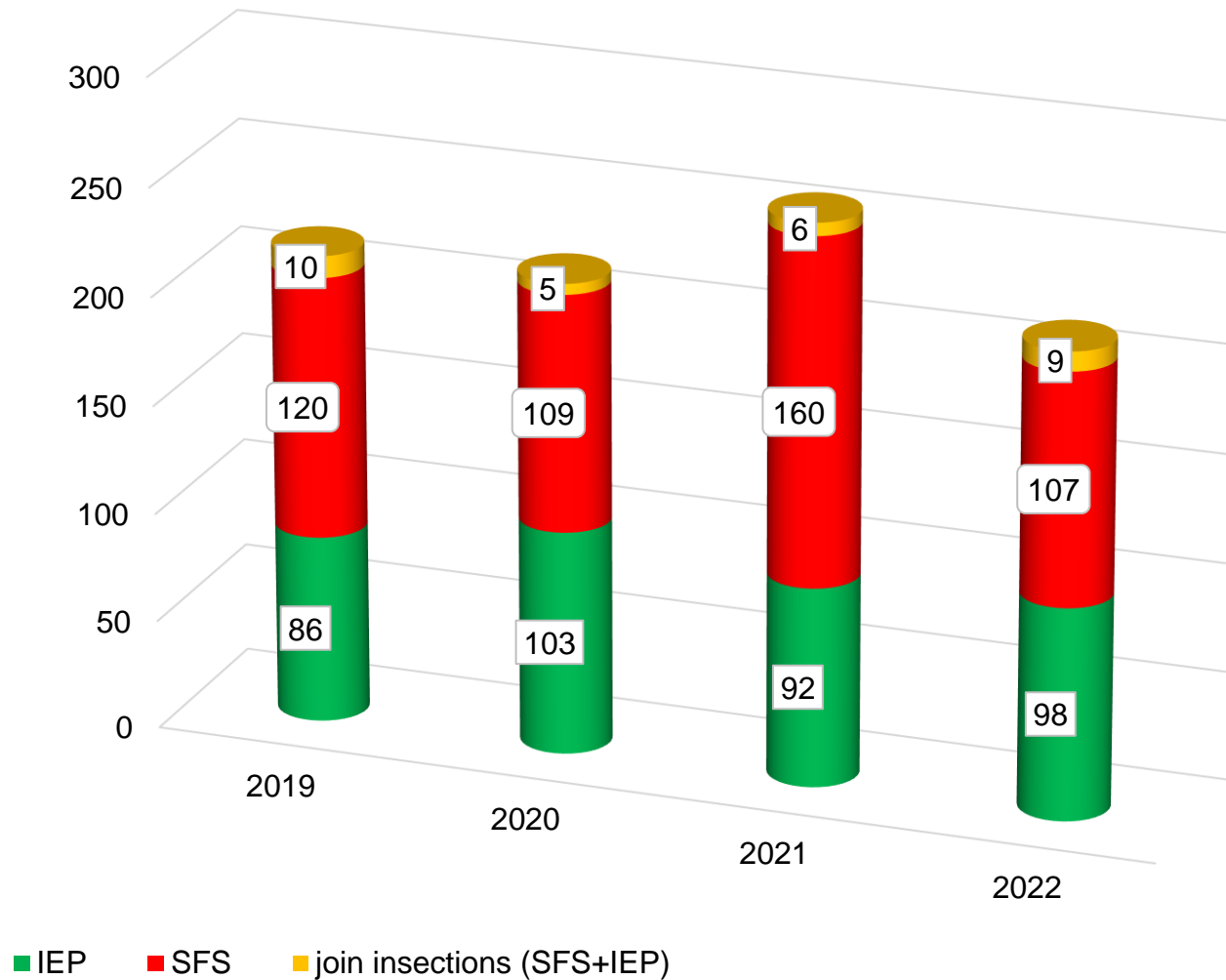
LT sites – law requires that period between inspections shall not exceed for 3 years for LT site

Note:

Firefighters SFS from fire prevention departments (only 700 people) carried out fire inspection in 53 000 sites (buildings or areas) and 350-400 Seveso sites **annually**.



Inspection structure in LT sites

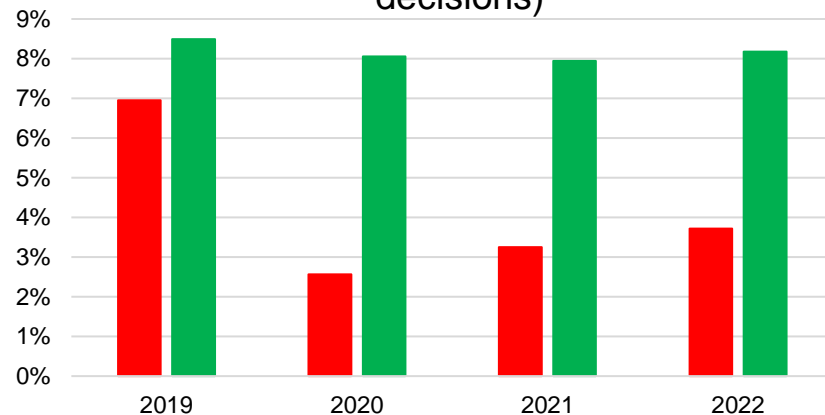


Inspection arrangements 2019-2022 in LT sites

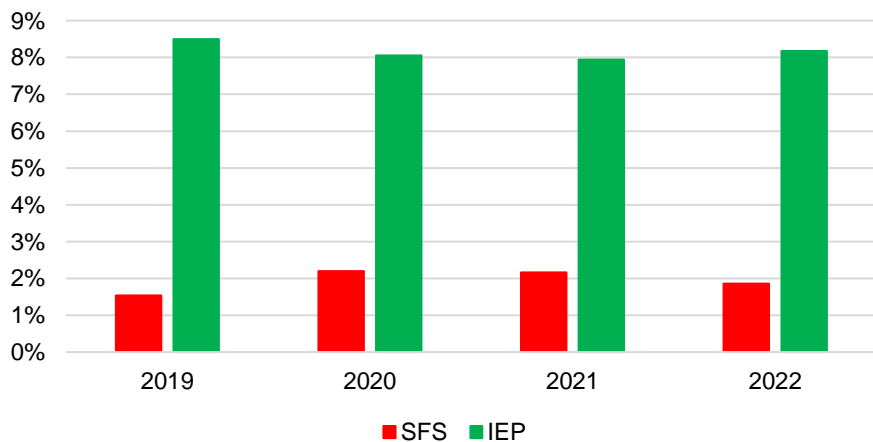


SFS and **IEP** didn't prohibit of use or starting of any new-site, installation or storage facility.

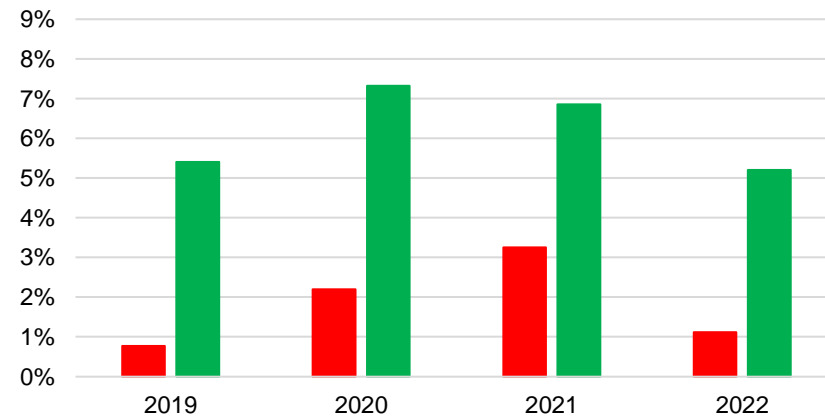
Administrative decisions (e.g. post-inspection orders or administrative decisions)



Penalties (e.g. fines, tickets)



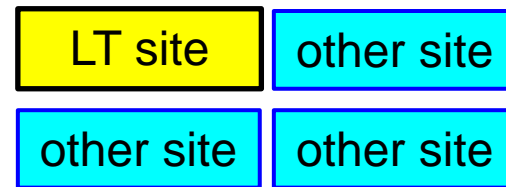
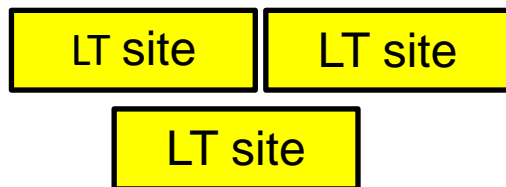
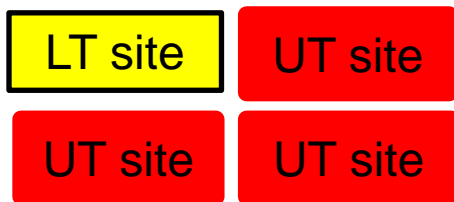
Other measures (e.g. cautions, complaints to other bodies)



Domino effects in LT sites

13 - number of LT sites, where there is a possibility of a domino effect:

➤ most common and characteristic locations types:



➤ **VCSFS** based on inspections carried out by **PCSFS** identifies all groups of establishments with possible domino effects and decides to impose additional obligations, which they most often are:

- exchange suitable information (operators),
- cooperate in informing the public and neighbouring sites that fall outside the scope of Directive,
- external emergency plans (prepare by **VCSFS**).

- exchange suitable information (operators),
- cooperate in informing the public and neighbouring sites that fall outside the scope of Directive.

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- cooperate in informing the public and neighbouring sites that fall outside the scope of Directive.



Register of major accidents and near misses in LT sites 2019-2022

Total major accidents and near misses in 2019-2022 in LT sites:

8

(2019 – 3 (1 of them was major accidents), 2020 – 2, 2021 – 3, 2022 - 0)

1 accident set out criteria for the notification of major accident to the commission Article 18(1):

In the metal surface treatment plant building, as a result of the collapse of the structure due to a fire, the galvanizing baths were overwhelmed and hydrochloric acid in the amount of approximately 500 m³, with a concentration of 5 to 15%, was released into the environment.



Thank you for attention

Questions?

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