

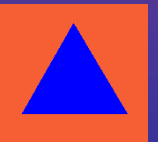


# Rescue and civil defence arrangements in Finland

Simo Weckstén

Rescue Commander

Helsinki City Rescue Department





# LEGISLATION AND STRATEGIES



- **PREPAREDNESS LAW (2011)**

- ▶ **Obligates:** government, the state administrative authorities, independent public bodies of the state, other state authorities and state enterprises and local municipal authorities, and other associations of municipalities
- ▶ **How:** contingency plans, plans to operate in exceptional circumstances, training, reservations of material and human resources
- ▶ **What:** to ensure the best possible management of tasks even in exceptional circumstances
- ▶ **Option:** possibility to exceed normal authoritative mandates by government acts

- **RESCUE LAW AND ACTS (2011)**

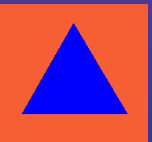
- ▶ rescue authorities are responsible of civil defense tasks (Geneva conventions etc.)
- ▶ building of civil defence shelters continues
- ▶ inspections made by rescue authorities are based on local risk evaluation

- **THE SECURITY STRATEGY FOR SOCIETY (2010)**

- ▶ the common basis for preparedness and crisis management for **all actors** in society

- **STRATEGY OF PROTECTING CIVIL POPULATION (2004)**

- ▶ no lives are lost due lack of sheltering
- ▶ people are primarily protected locally, evacuation comes secondary

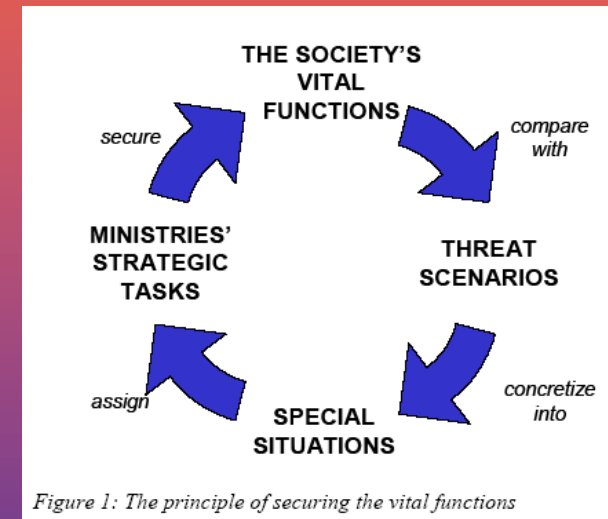
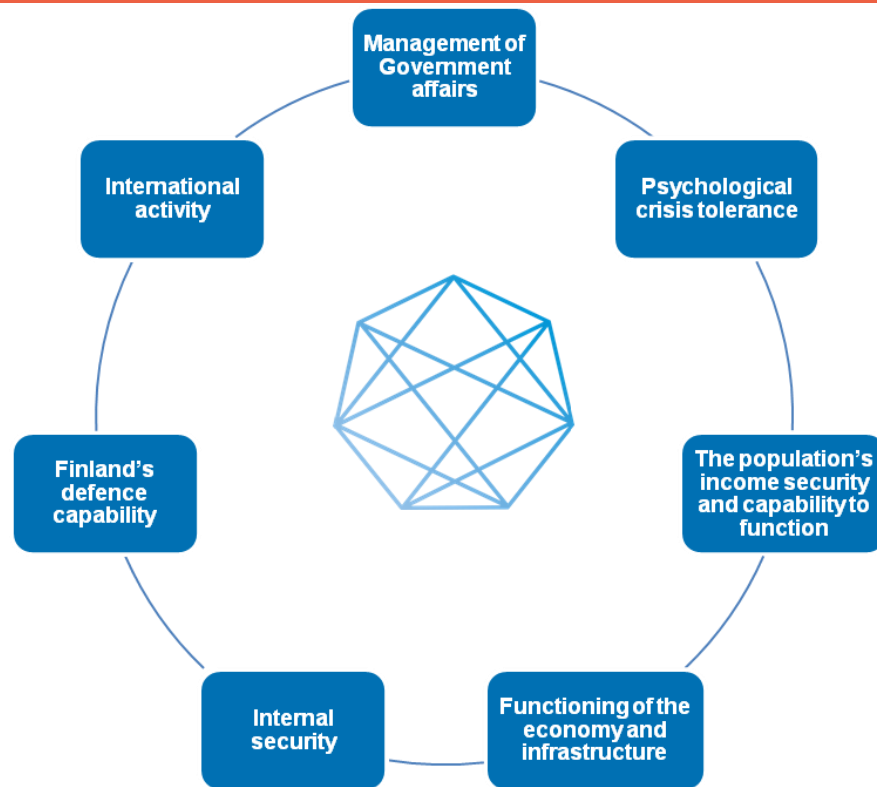




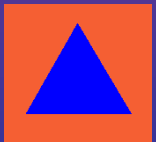
# The Security strategy for society 2010



The Secretariat of the Security and Defence Committee (TPAK)



Threat scenarios and disturbances > Desired end state >  
Strategic tasks > SECURING THE VITAL FUNCTIONS

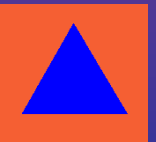




# STRATEGIC TASKS TO MINISTRY OF THE INTERIOR



- International civilian crisis management
- International disaster response
- Public order and security
- Emergency services and maritime search and rescue
- Emergency response functions
- Border management
- Immigration control
- The management of a major influx of asylum seekers





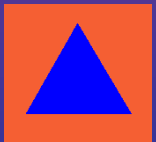
# ROLE OF THE MINISTRY OF THE INTERIOR'S DEPARTMENT FOR RESCUE SERVICES



- The Ministry of the Interior Department for Rescue Services is responsible for steering civil defence planning. The Department issues instructions to the authorities on civil defence preparedness and ensures the required collaboration. At regional level, Regional Administrative Agencies have the same responsibility.
- The Ministry of the Interior and Regional State Administrative Agencies may order civil defence managers and other specialist civil defence personnel to participate in civil defence training. State and municipal officeholders are responsible for carrying out the civil defence duties associated with their posts, preparing for the duties, and for taking part in relevant training.

In normal conditions, civil defence preparedness includes:

- planning and training regarding emergencies
- building shelters
- maintaining command, supervision and alarm systems, and communications links
- making provision for evacuations, rescue operations, first aid, providing the population with the supplies required, and for accident clearance and cleaning





# FORMATION OF RESCUE SERVICES



**The Ministry of the Interior's  
Department for Rescue  
Services**

**The Rescue Departments of  
State Provincial Offices**



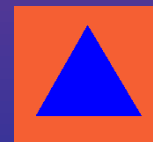
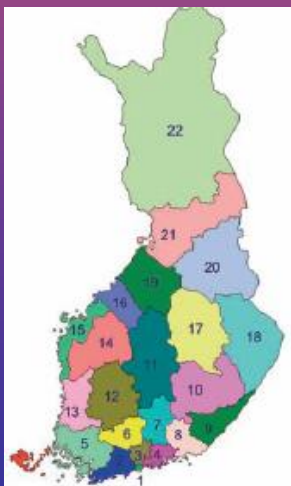
**EMERGENCY RESPONSE  
CENTRE ADMINISTRATION  
FINLAND**

**Regional rescue services**

**other authorities and bodies**

**Voluntary activities**

**Each person has  
responsibilities**



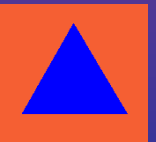


# STANDARD OF SERVICE IN REGIONAL RESCUE SERVICES



The services are planned on the basis of estimated accident potential by analysing the operating environment and the safety situation.

- How Rescue services prevent accidents and mitigate damage within a rescue service region?
- How are rescue operations organised within a rescue service region?
- What are **civil defence arrangements** in a rescue service region like?

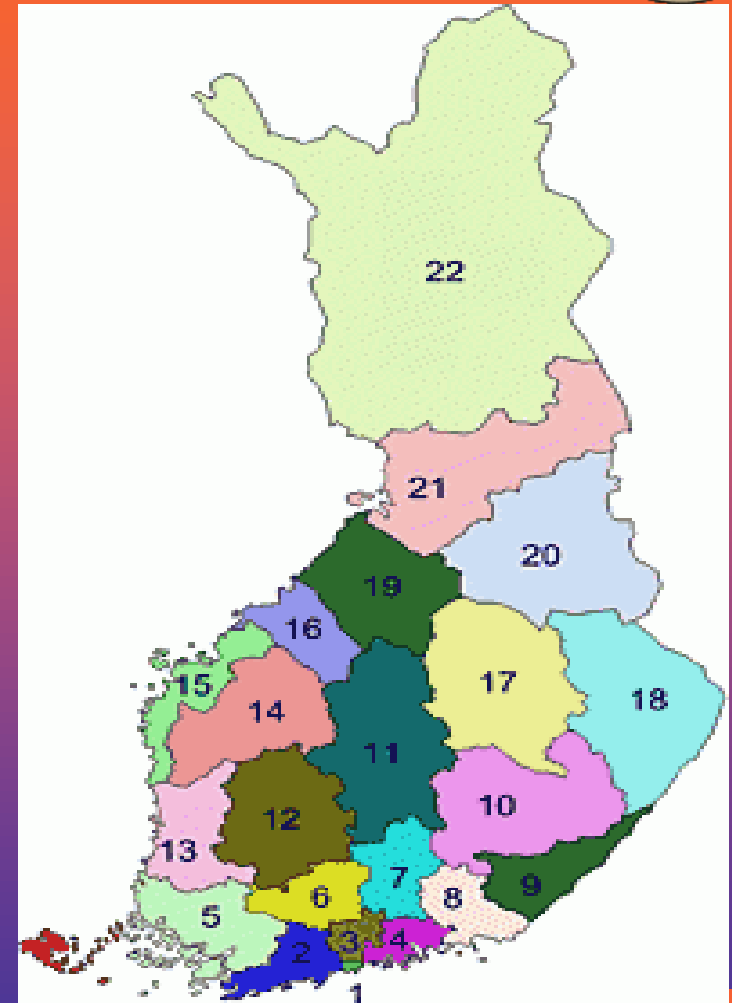




# Rescue authority



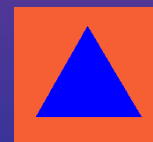
1. Helsinki
2. Western Uusimaa
3. Central Uusimaa
4. Eastern Uusimaa
5. Finland Proper
6. Tavastia Proper
7. Päijänne Tavastia
8. Kymenlaakso
9. Southern Carelia
10. Southern Savonia
11. Central Finland
12. Pirkanmaa
13. Satakunta
14. Southern Ostrobothnia
15. Ostrobothnia
16. Central Ostrobothnia
17. Northern Savonia
18. Northern Carelia
19. River Valleys
20. Kainuu
21. Oulu-Koillismaa
22. Lapland







# Helsinki City Rescue Department

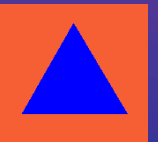




# HELSINKI CITY RESCUE DEPARTMENT



**Simo Weckstén**  
**Rescue Commander**

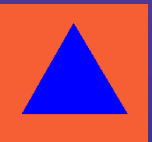
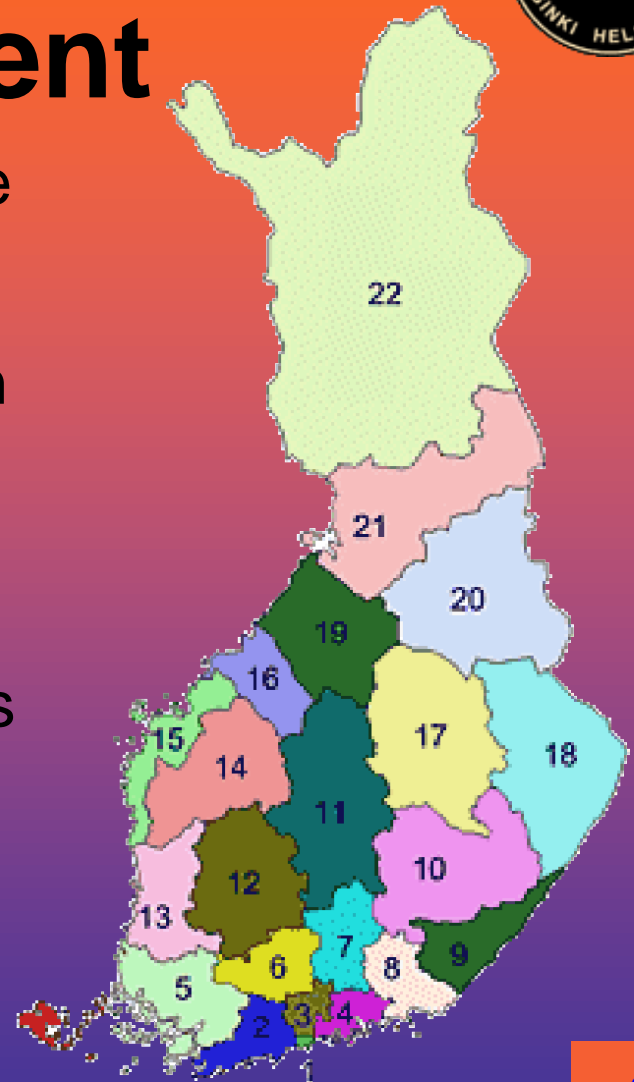




# Helsinki City Rescue Department



- one of the 22 regional rescue services departments in Finland
- responsible for fire protection control and inspections in Helsinki
- is in charge of emergency rescue, emergency medical care and ambulance services in Helsinki
- leads civil defence and emergency conditions planning and action in Helsinki

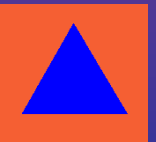




# History

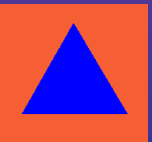
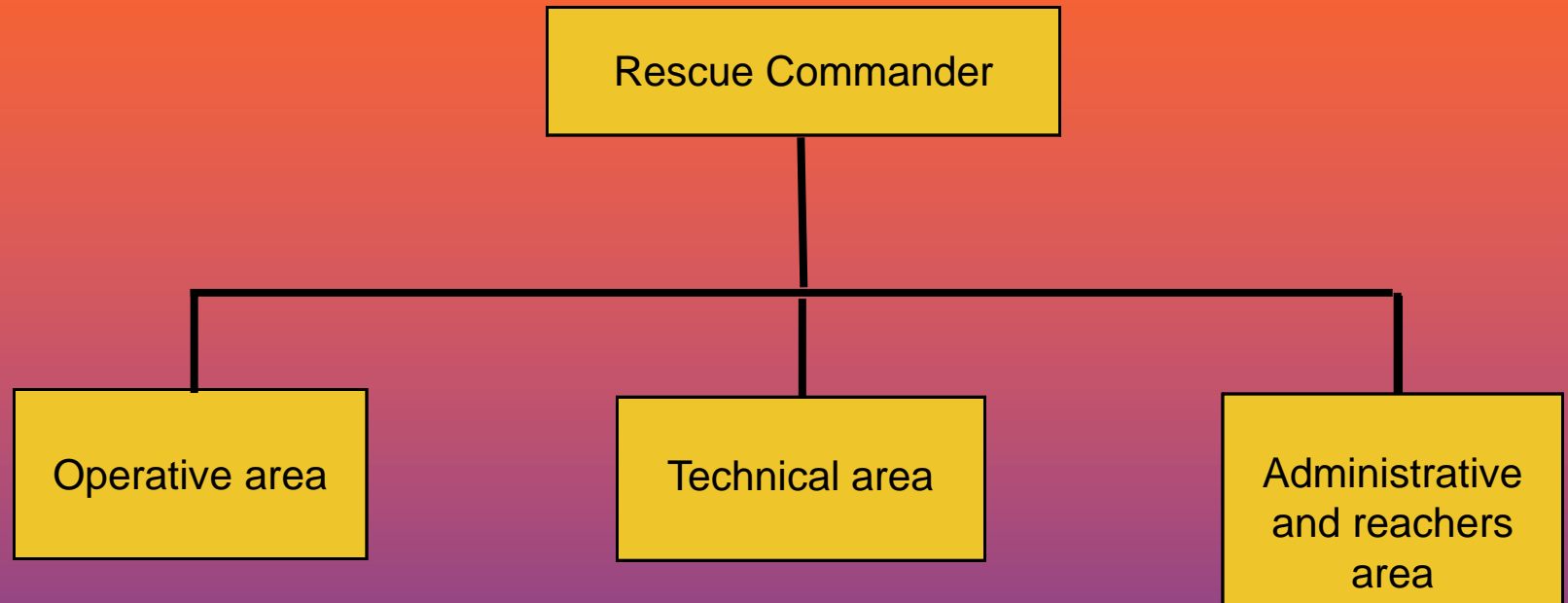


- Helsinki Fire Service Board was found in 1838 and Helsinki Fire Department in 1861
- Helsinki Civil Defence Department was found in 1940
- the departments were united in 1991 to become Helsinki City Rescue Department
- in 2005 Helsinki Emergency Response Centre (ERC) became a part of the nationwide ERC





# Organisation



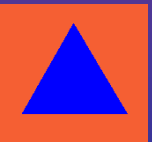


# Rescue services



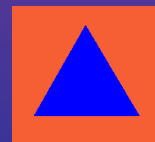
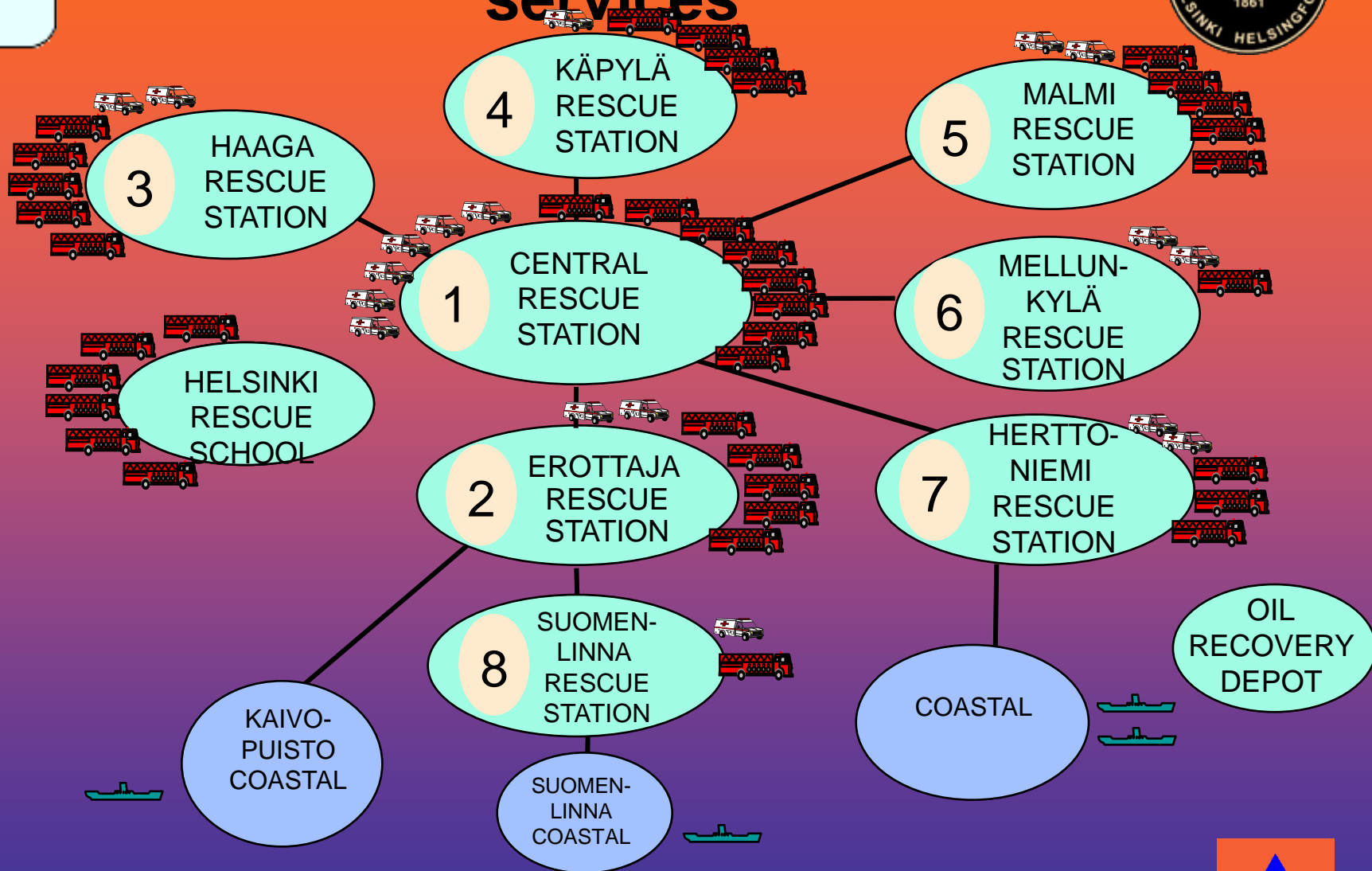
The rescue operations cover all accident categories, such as:

- Fires
- Accidents involving hazardous materials
- Traffic accidents
- Natural disasters
- Subsequent damage prevention
- Water rescue operations, rescue diving
- Human and animal rescue operations
- Oil damages
- Cave-ins
- Medical emergency rescue operations
- Executive assistance for authorities





# The operative units of the rescue services







# Finnish Rescue Finland (FRF )



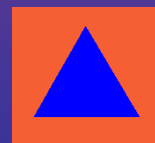
- a special unit prepared to depart for international rescue missions within 6 hours of receiving an assignment. The Ministry of the Interior is responsible for the coordination of FRF activities.
- The Helsinki City Rescue Department was involved in founding the FRF and has been the central authority responsible for its operations since its initiation.
- also, the regional rescue departments of Western Uusimaa, Central Uusimaa, Tampere and Southwest Finland and the Emergency Services College are involved in the operations.







# The Helsinki School of Fire and Rescue Services

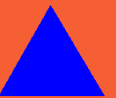




# The Helsinki Rescue School



- Qualification training (Fire fighter diploma)
- Civil defence training for Helsinki city personnel
- Continuing studies for Helsinki city rescue department personnel
- Short-term courses
- Expertise assignments
- Material production

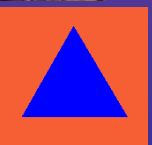




# Fire fighter diploma



- Emergency Services College approves the curriculum
- at least 90 study points (60 study weeks)
- additional "Helsinki-extra" 24 study points (16 study weeks)
- paid on-the-job training as a fireman 2 months + 2 months
- a fireman with multiskills is reached by a large amount of practical training





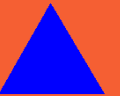
# Fire fighter diploma

FIRE FIGHTING SKILLS

EMERGENCY SERVICES SKILLS

EMERGENCY MEDICAL SERVICES SKILLS

CIVIL DEFENCE  
SKILLS FOR PEACE- AND WARTIME TASKS







# Accident prevention

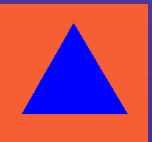




# Accident prevention



- to monitor trends indicative of accident potential, the number of accidents and their causes
- to take action to prevent accidents on the basis of conclusions made on the trends and, if necessary, submit proposals to other authorities
- to educate and advice people to identify various causes of danger, prevent accidents and take action in the event of an accident
- collaboration with other authorities and the organizations is crucial





# Accident prevention tools



- Risk analysis
- Planner counselling (structural fire safety)
- Fire safety inspections, rescue plans
- Accident investigations
- Safety training & guidance
- Chimney sweeping

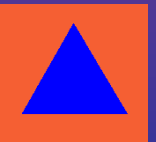




# Risk analysis



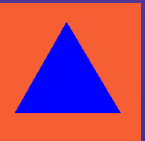
- *The standard of service provided by the rescue services must meet the accident potential, Rescue Act 12§.*
- risk identification of the population, construction and environment in the area
- evaluation of the effectiveness of the risk management methods
- basis of service standard decision and long-term activity planning







# Civil defence

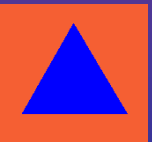




# Civil defence tools



- Public warning and information
- Civil defence shelters
- Emergency services
- Evacuation



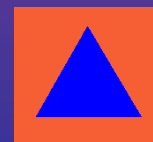


# Helsinki City

## Civil defense shelters 1.1.2008



	The number of shelters	Seats
Private shelters	6200	689 000
Public and jointly owned shelters	43	162 000
Underground stations	6	20 000
Civil defence organisation shelters	14	2 000
Total		873 000





# Rescue Service Commission



**LORD MAYOR (CHAIRMAN)**

**DEPUTY MAYOR FOR PUBLIC WORK  
(DEPUTY CHAIRMAN)**

**RESCUE COMMANDER  
DIRECTOR OF RISK MANAGEMENT**

**MANAGING DIRECTOR,  
SOCIAL SERVICES DEPARTMENT**

**MANAGING DIRECTOR,  
PUBLIC WORKS DEPARTMENT**

**DIRECTOR, PORT OF HELSINKI**

**MANAGING DIRECTOR, PUBLIC TRANSPORT**

**MANAGING DIRECTOR, HEALTH DEPARTMENT**

**MANAGING DIRECTOR, PALMIA CATERING**

**MANAGING DIRECTOR, HELSINKI ENERGY**

**MANAGING DIRECTOR, HELSINKI WATER**

**HEAD OF THE SURGERY**

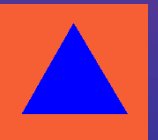
**DIRECTOR GENERAL OF THE  
ENVIRONMENT CENTRE**

**HOSPITAL DISTRICT OF HELSINKI**

**COMMANDER OF MILITARY DISTRICT  
COMMANDER OF COAST GUARD**

**POLICE COMMANDER**

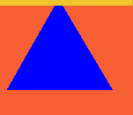
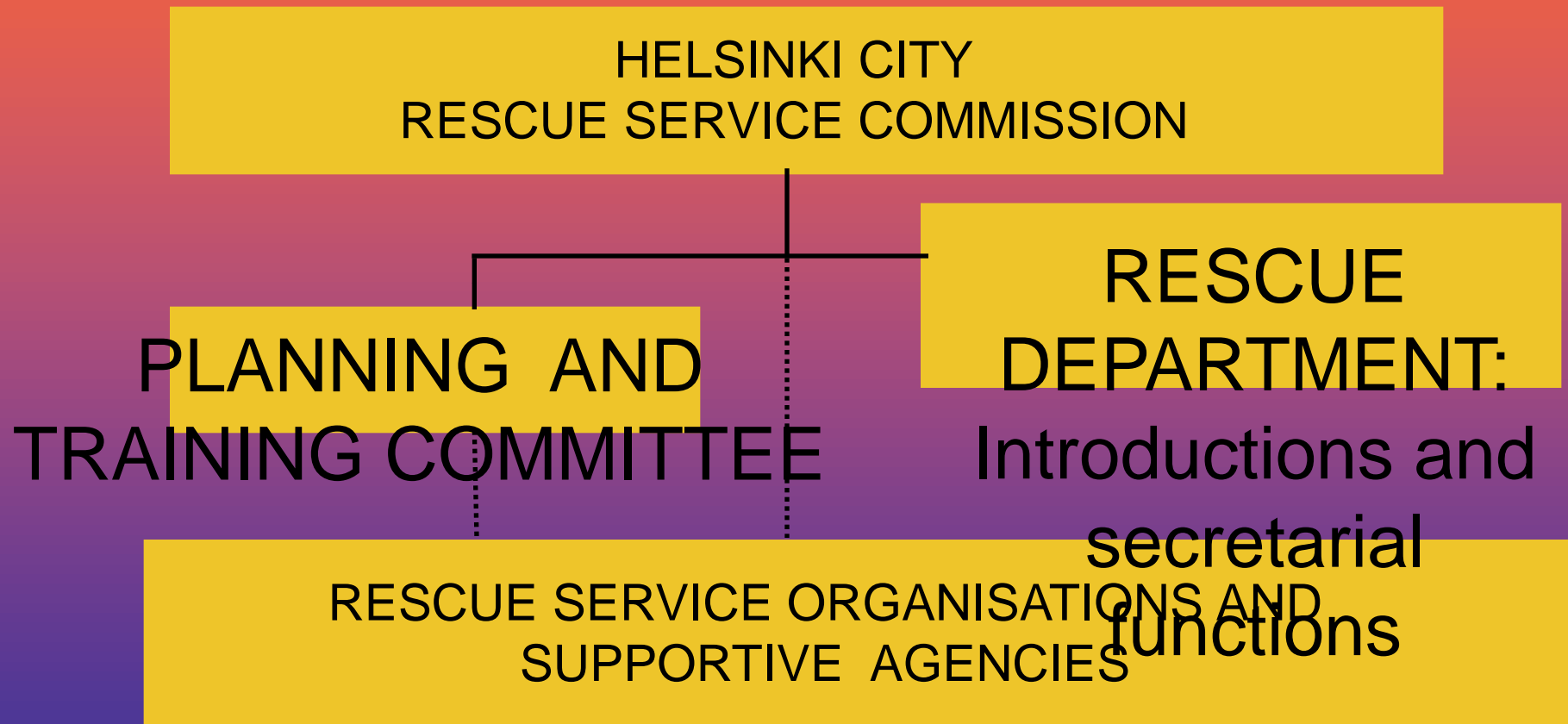
**DISTRICT OFFICER FINNISH RED CROSS**





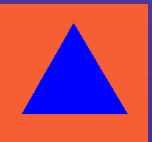
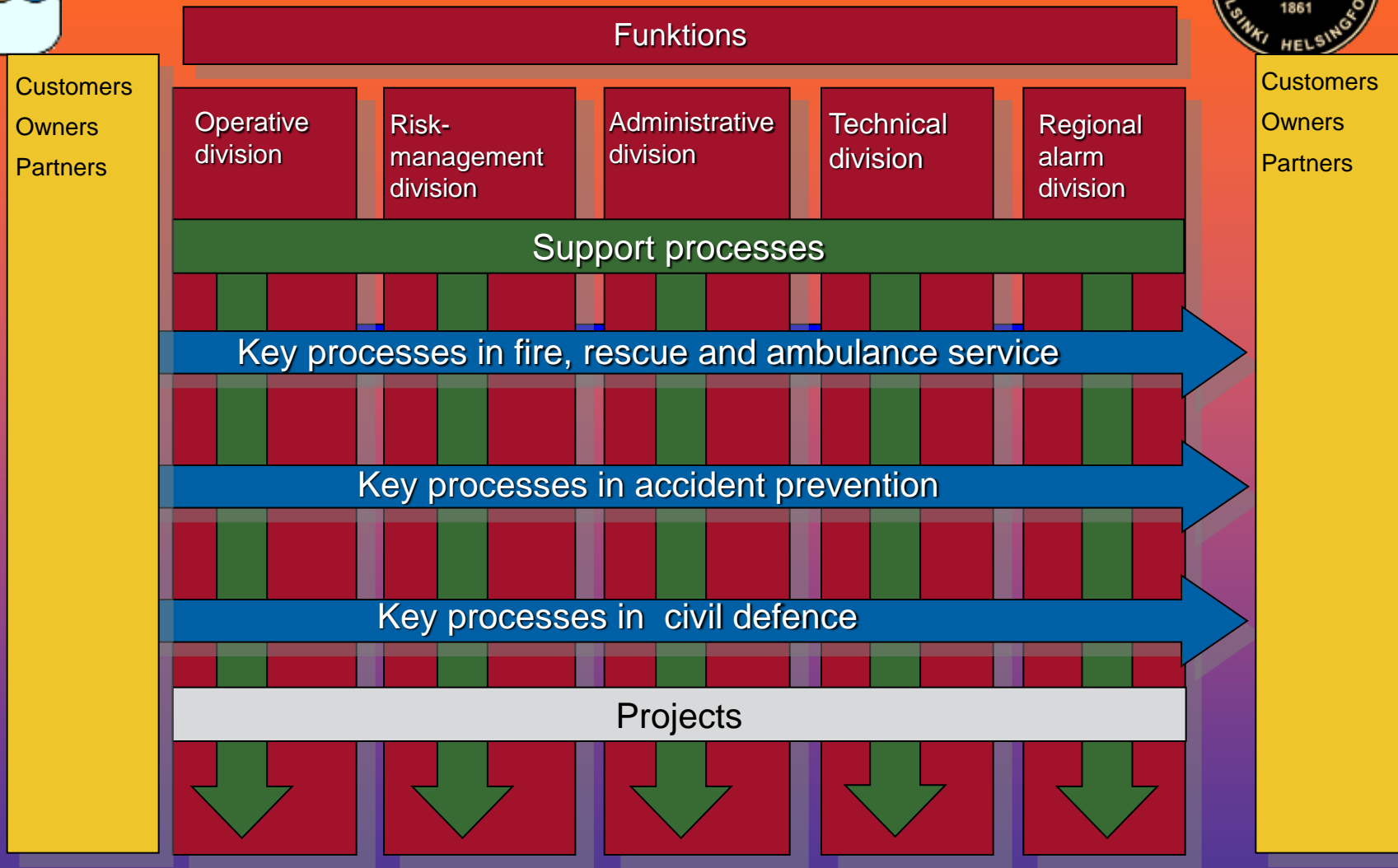


# Preparative organisation of the Commission





# HELSINKI RESCUE DEPARTMENT





## Staff

Operative division	508
Technical division	99
Risk management division	65
Administrative division	15
Total	687

## Alarms year 2011

Fire alarms	3 965
Rescue duties and other duties	4 383
Emergency ambulance services	48 331
Total	56 679



## Budget 2011

Income	10,3 milj. €
Expenses	49,5 milj. €
Investments	19,3 milj. €

## Motor vehicles

- on land	130
- at sea	4

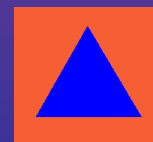
## Real estates under

Rescue

283 708 m<sup>2</sup>

1 165 744 m<sup>3</sup>

## Department control





# RISK MANAGEMENT UNIT



- Provides fire prevention functions
- enhancing the safe community planning, construction and use of buildings
- collaboration between public authorities
- enhancing the careful use of fire and dangerous chemicals
- supervision
- education and advice
- chimney sweeping

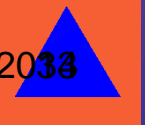




# Fire prevention functions



- Fire inspections
- Other monitoring tasks and necessary fire prevention actions
  - Official statements and decisions
  - Council and guidance regarding structural fire safety
  - Monitoring and inspection of demanded documents (such as rescue planning documents)
- Monitoring and inspections of dangerous chemicals and other hazardous materials
- Administrative coercion
- Safety communications

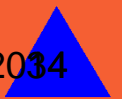




# Fire prevention functions



- Fire inspections are fix-termed
- Inspections are conducted as audits
- During inspections, general safety measures and environment are being evaluated:
  - Leading of safety and security measures
  - General risk management
  - Documents regarding safety and security
  - Buildings structural safety
  - Technical systems regarding fire safety
  - Safety communication inside organisation

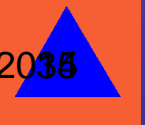




# Auditive fire inspections (Helsinki City Fire Department)



- Scale from 0-4
- Grade 2 meets the minimum requirements set by national law
- Grades 3 and 4 lack of minimum requirements set by national law
- Grades 0 -1 have exceptional low risk

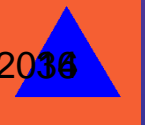




# Focus



- Focus is on targets which don't meet minimum standards set by law
  - 3- and 4-risk class targets: 1003





# Target based risk value



Risk value is based on auditive inspection models confirmed criteria:

- Leading of safety and security measures
- General risk management
- Documents regarding safety and security
- Buildings structural safety
- Technical systems regarding fire safety
- Safety communication inside organisation

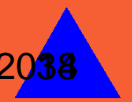


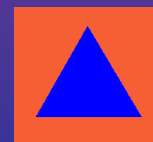
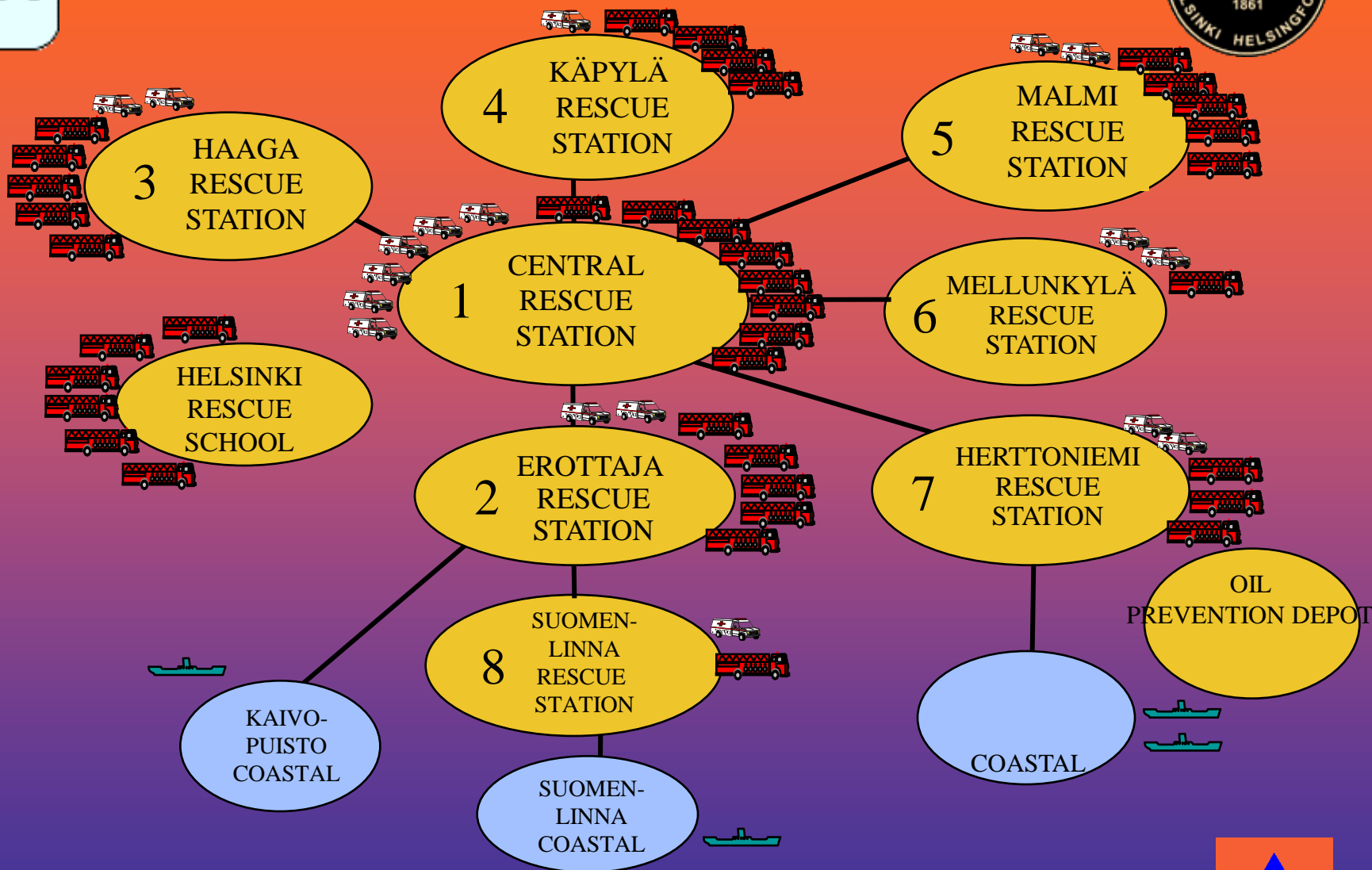


# Target based risk value



- Risk value grade purpose of use defines durations for targets inspections and monitoring
- Targets can improve their grade by actively improving pointed girevances
- > affects targets inspection and monitoring duration







# RESCUE SCHOOL THE CITY OF HELSINKI



## THE BASIC TRAINING FOR ALL TRAINEES

**FIRE & RESCUEMAN SKILLS**

**ACCIDENT PREVENTION SKILLS**

**MEDICAL RESCUE SERVICE SKILLS**

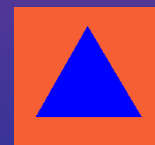
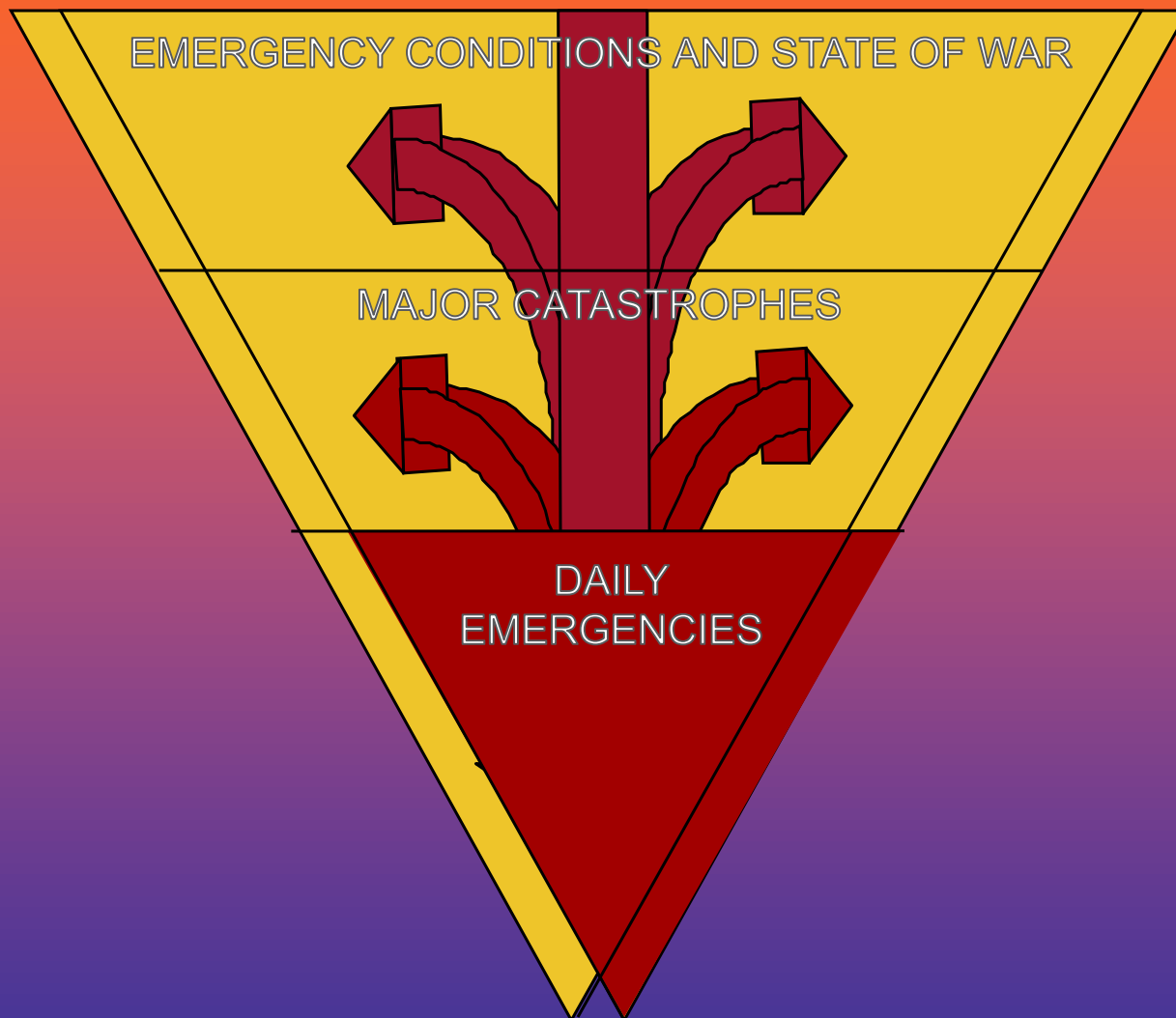
**CIVIL DEFENCE  
SKILLS FOR PEACE- AND WARTIME TASKS**





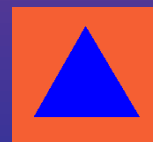
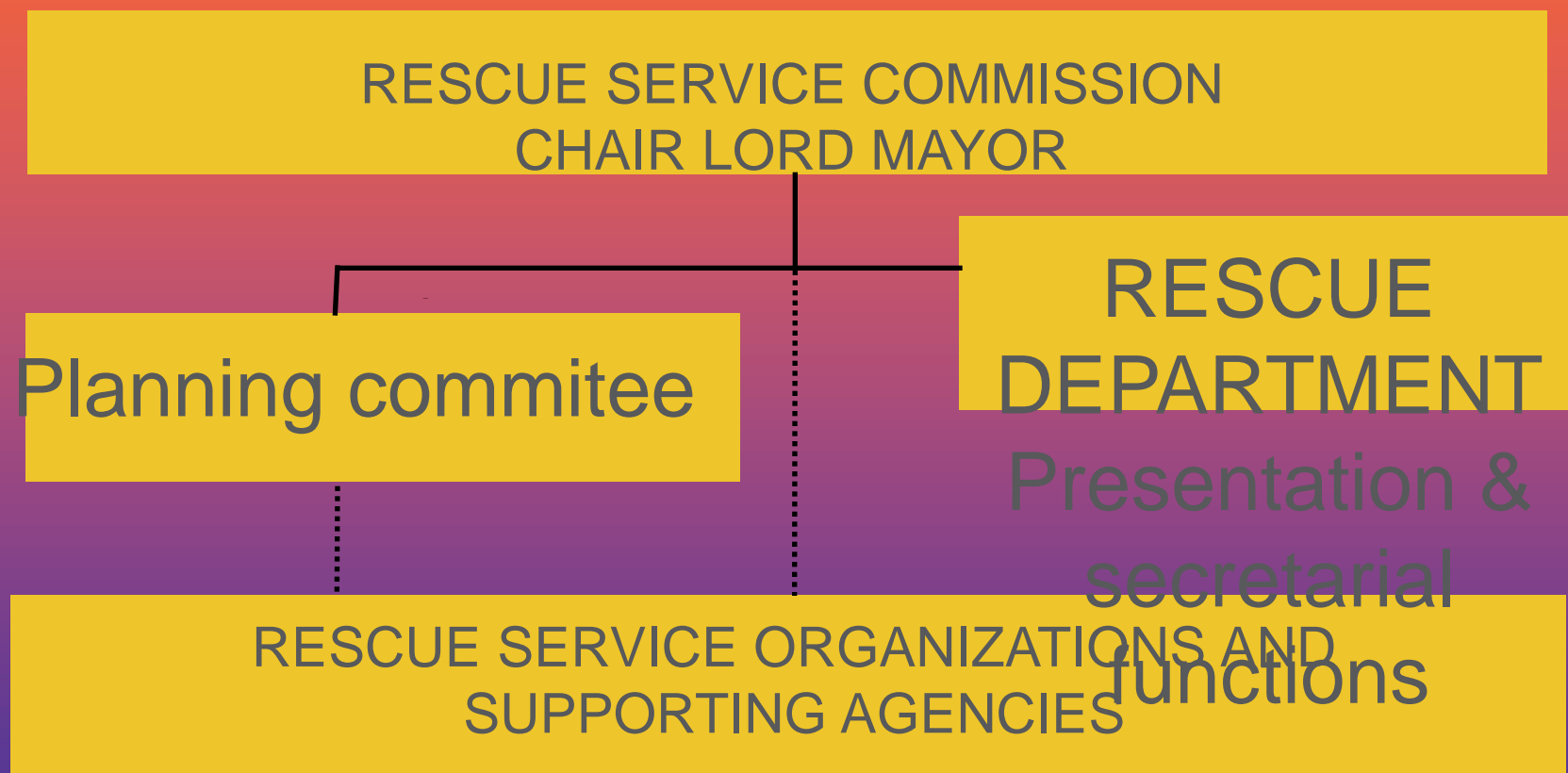


# THE MISSION OF THE UNITED RESCUE DEPARTMENT





# RESCUE SERVICE COMMISSION OF HELSINKI ADMINISTRATION





# RESCUE SERVICE COMMISSION



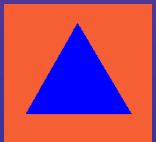
- LORD MAYOR (CHAIRMAN)
- RAKENNUS- JA YMPÄRISTÖTOINTA JOHTAVA APUL.KAUPUNGINJOHTAJA (VARAPUHEENJOHT.)
- RESCUE COMMANDER
- SOSIAALIJOHTAJA
- TERVEYSKESKUS, TOIMITUSJOHTAJA
- KAUPUNGININSINÖÖRI
- STARA, TOIMITUSJOHTAJA
- HKL, TOIMITUSJOHTAJA
- PALMIA, TOIMITUSJOHTAJA
- HELSINGIN ENERGIA, TOIMITUSJOHTAJA
- YMPÄRISTÖJOHTAJA
- HELSINGIN SATAMA, TOIMITUSJOHTAJA
- HELSINGIN SEUDUN YMPÄRISTÖPALVELUT, VESI, TOIMIALAJOHTAJA
- HELSINGIN SEUDUN LIIKENNE – KUNTAYHTYMÄ (HSL), TOIMITUSJOHTAJA

- POLICE COMMANDER
- HUS, OPERATIIVISEN TULOSRYKSKÖN JOHTAJA
- MILITARY COMMANDER OF SOUTH FINLAND REGION
- KAARTIN JÄÄKÄRIRYKMENTIN KOMENTAJA
- COMMANDER OF COAST GUARD
- SUOMENLAHDEN MERIPUOLUSTUSALUEEN KOMENTAJA
- SUOMEN PUNAISEN RISTIN HELSINGIN JA UUDENMAAN PIIRIN TOIMINNANJOHTAJA

## PYSYVÄT ASIAANTUNTIJAT:

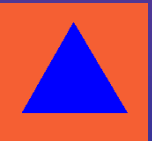
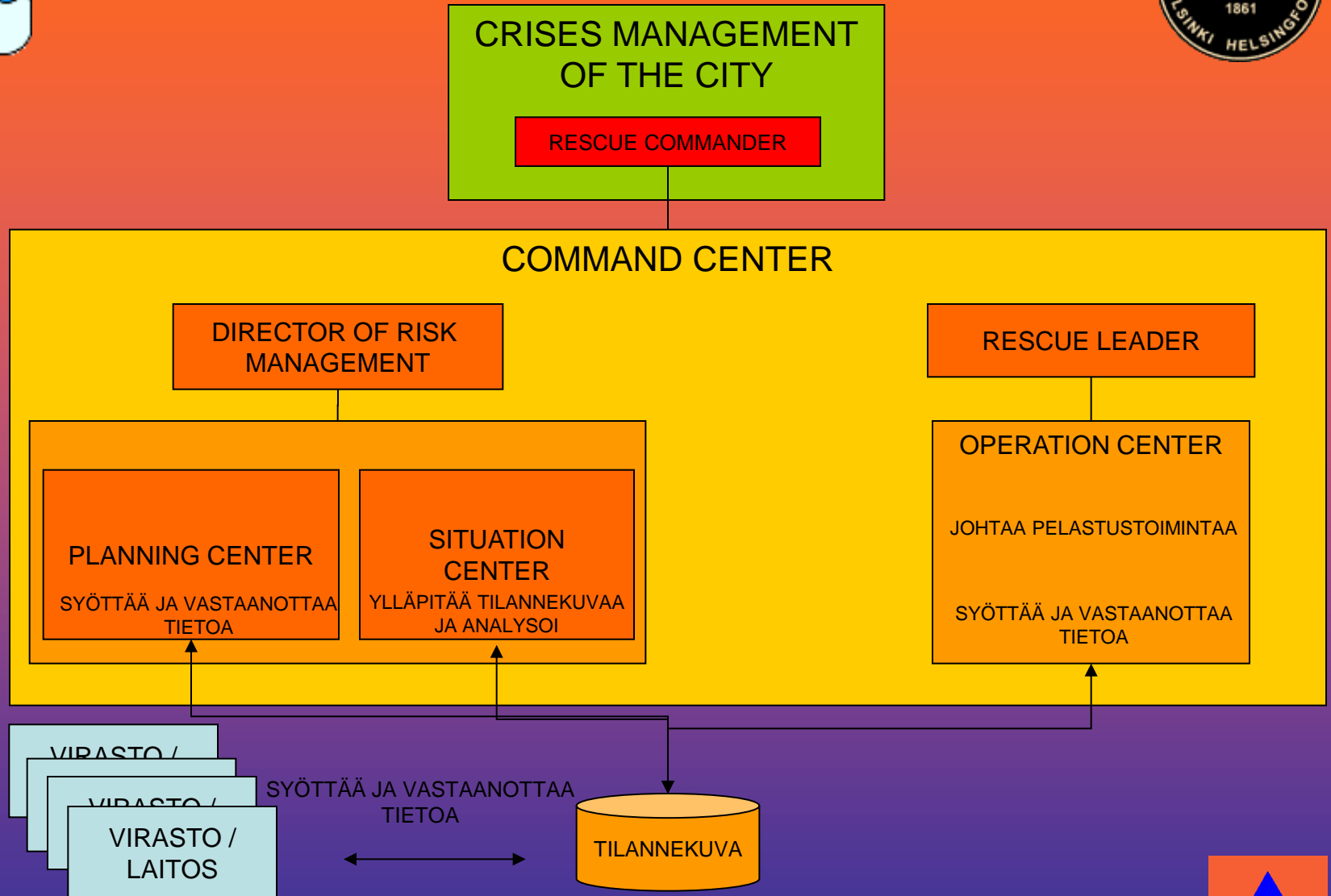
- HALLINTOKESKUS, VALMIUS- JA TURVALLISUUSOSASTON OSASTOPÄÄLLIKKÖ
- KAUPUNGIN VALMIUSPÄÄLLIKKÖ
- DIRECTOR OF RISK MANAGEMENT

NEUVOTTELUKUNNAN SIHTEERINÄ TOIMII PELASTUSLAITOKSEN PELASTUSJOHTAJA JA ESIKUNTANA PELASTUSLAITOS





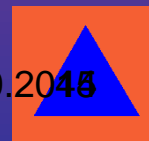
# COMMAND ORGANISATION





# ALARM CENTER

# RESCUE CIVIL DEFENCE (OPERATIONS)

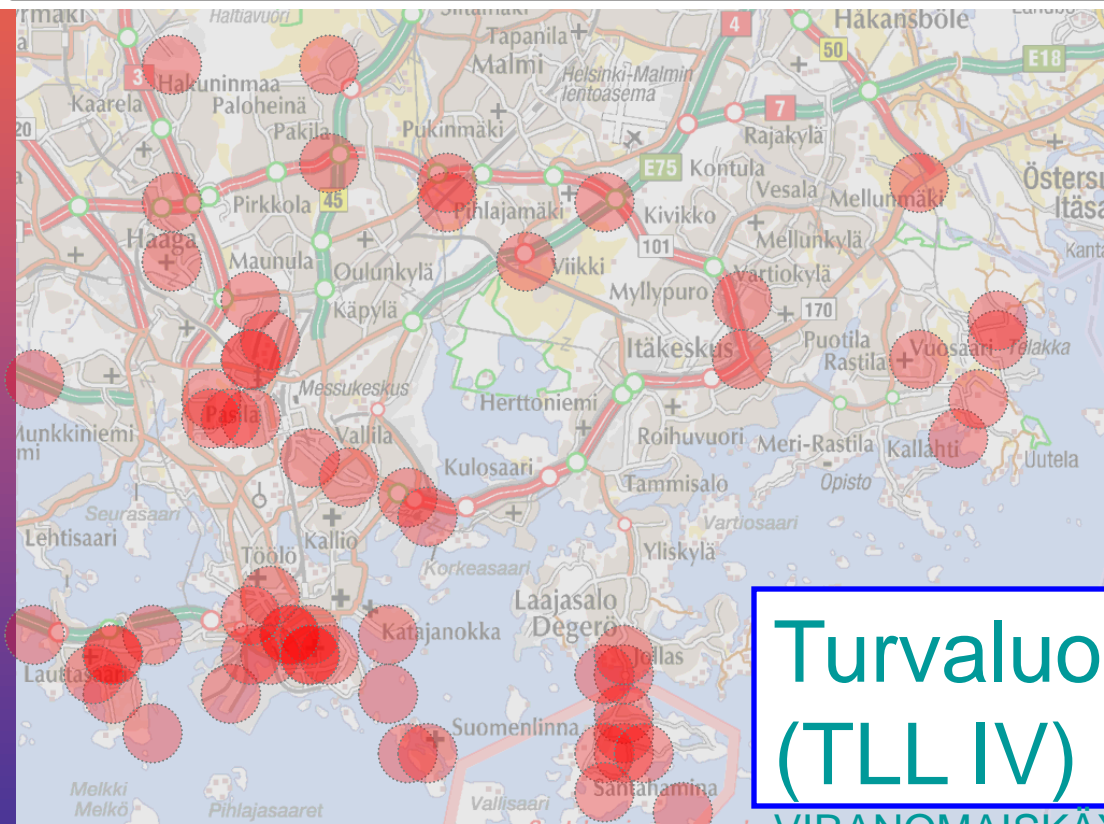




# RISK ANALYSE FOR EXEPTIONAL SITUATIONS (WAR)



Vaikutus rakennukseen	Rakennusten lukumäärä	Kuolleet	Vakavasti loukkaantuneet	Lievästi loukkaantuneet	Ei vahinkoa
Sortuma	45	393	793	793	0
Pieni sortuma	91	294	909	909	909
Rikkoutunut ikkuna	178	0	2093	4243	14959
Yhteensä	314	687	3795	5945	15868



Turvaluokiteltu  
(TLL IV)

VIRANOMAISKÄYTTÖ  
Julkl (621/1999)



# POSSIBLE TARKETS IN HELSINKI (function vital)



Turvaluokiteltu

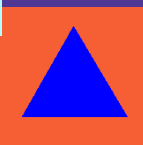
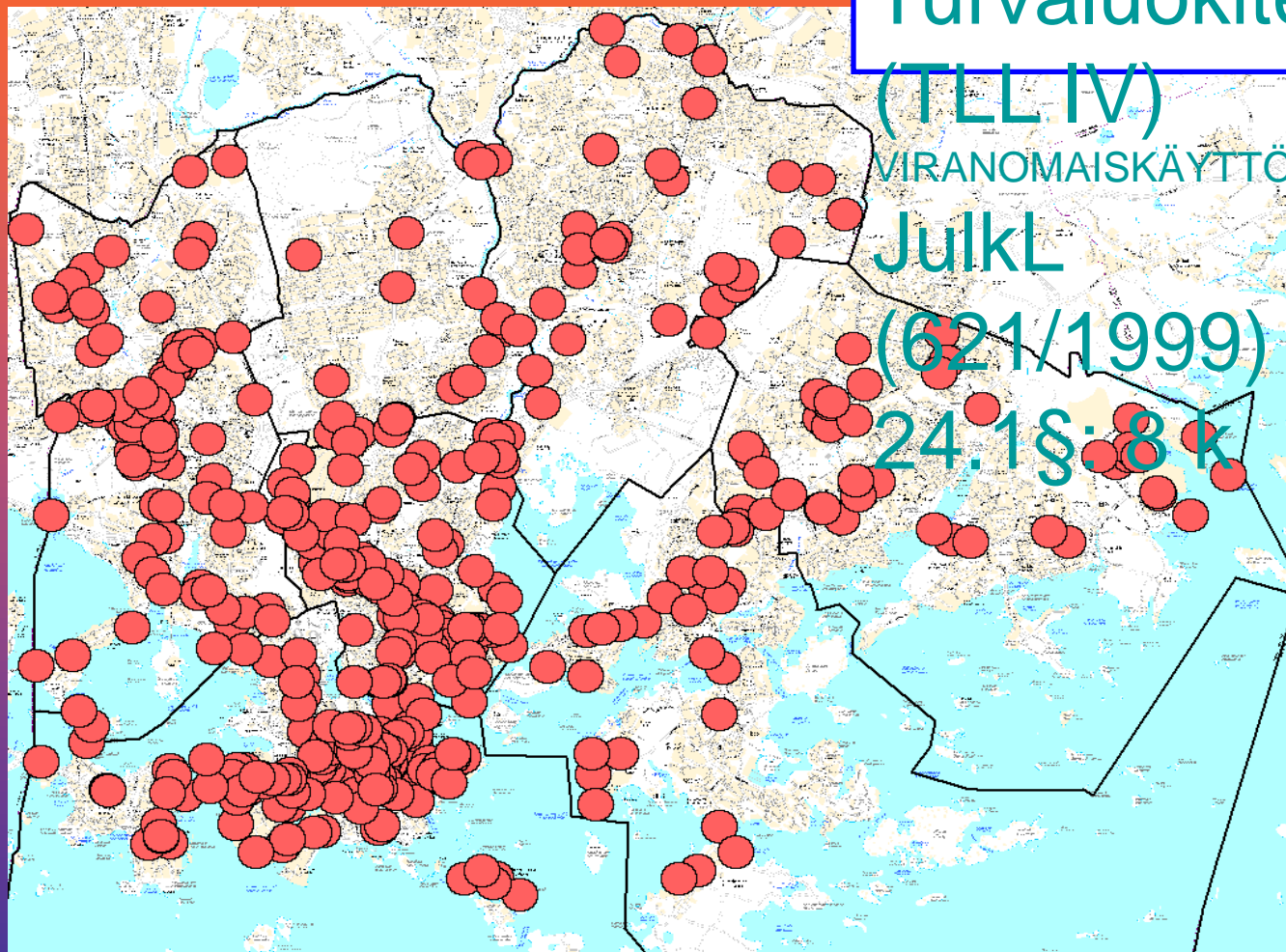
(TLL IV)

VIRANOMAISKÄYTTÖ

JulkL

(621/1999)

24.1§: 8 k





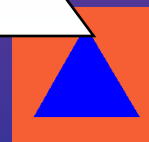


# HELSINKI CITY CIVIL DEFENCE SHELTER SITUATION



1.1.2012

	SHELTERS	PLACES
Private shelters	6 220	685 000
Public and jointly owned shelters	43	162 000
Underground Stations	6	20 000
Civil Defence Organization shelters	14	2 000
Total		869 000



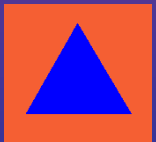


# STRUCTURAL CIVIL DEFENCE



In new development projects mainly used for living, property owners must include a civil defence shelter in buildings at least 1200 m<sup>2</sup>. For industrial-, production-, warehouse- and public buildings a shelter must be included if 1500m<sup>2</sup> is exceeded.

- Civil defence shelters must afford protection from structural collapse, radiation, gases and conventional weapons.
- Finland has civil defence shelters for nearly 3.4 million people. They are located in residential and public buildings.
- There is about 850 000 shelter places at Helsinki area. Annual increase in Helsinki is about 100 shelters; places for 10 000 people

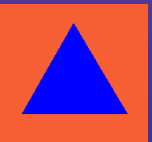




# BUILDING OF PUBLIC CD ROCK SHELTERS IN HELSINKI



- There is about 50 public rock shelters in Helsinki build between 1939-2002 offering places for 180 000 people
- Merihaka shelter at downtown Helsinki opened 2003
- Under construction: a part of new metro station in west-Helsinki
- Commitment: East-Centrum shelter

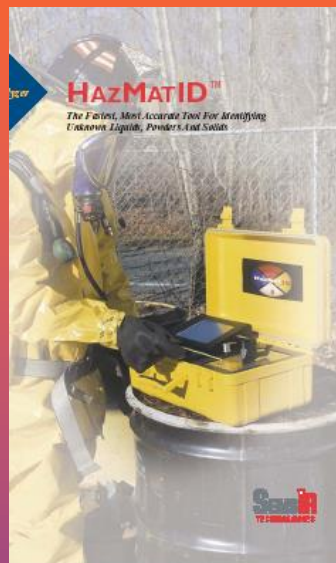




# LATEST TECHNICAL IMPROVEMENTS IN HELSINKI



**CemPro 100  
hand held  
gas detectors**



**HazMatID  
solid material  
analyser**



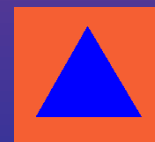
**personal radiation  
dose meters**



**air flow  
monitoring  
to subway  
tunnels**



**decontamination  
line for chemical  
accidents**







# QUESTIONS ?



## PUBLIC CIVIL DEFENCE ROCK SHELTERS IN DAILY USE IN HELSINKI

