

### **Worldwide Spread**

A total number of 550,000 firearms were officially seized during each of 2016 and 2017, across 81 major countries.





### **Criminal Profits**

The illegal firearms trade generates between 125 to 236 million EUR per year globally, which represents between 10% to 20% of the total trade in legal firearms.

### **Deadly Impact**

In 2019 alone, more than 250 thousand people died as a result of firearms worldwide.

### Growing Threat



### **Different Regulations**

The criminalization of firearms trafficking and its related crimes varies a lot across EU countries.



#### **Incompatible Databases**

Incomplete implementation of the EU Firearms Directive (revised in 2021) is an additional source of differences in national laws and disharmonized data collection procedures.

### **3D-printed Firearms**

The growing number of seizures of 3D-printed firearms suggests that the on-line availability of blueprints for additive manufacturing of weapons is increasing. Many such user communities have emerged in social media and Web forums/blogs.

# Technology and Legal Loopholes

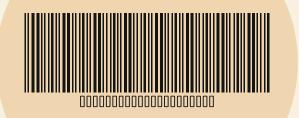
### **Anonymous Trafficking**

In 2017 alone, on-line sales of illicit firearms generated up to 80,000\$ per month in revenues. Cryptomarkets allow for multiple vendors to sell goods in an illegal e-shop (e.g., in the Dark Web), while buyers compare alternatives and purchase firarms anonymously via cryptocurrency payments.

### **Courier Services**

Traffickers use licit courier/post services, by exploiting the lack of harmonization in the legal frameworks of EU Member States and concealing firearms, ammunition or firearm components within legally mailed parcels.

# Aid Criminals



### **Erasing Traces**

Criminals tend to remove or alter serial numbers in weapons they use. Along with the lack of expertise on firearms by many crime scene police investigators, accurate identification of a seized weapon may prove difficult. This can hinder the unraveling of the illicit trafficking network where the firearm originated from.

### **International Operations**

Modern communications/transportation technologies and legal loopholes allow trafficking networks to disperse across many countries and cross over from the physical to the virtual world, or vice versa. This situation has made it more difficult for law enforcement agencies to identify and prosecute the criminal rings involved.



### Near-real-time incidence tracking

CEASEFIRE will develop a near-real-time European-scale firearms incident tracking software tool, which will also support the efficient intelligence information exchange among the various (types of) law enforcement agencies.



### Enter CEASEFIRE

Horizon Europe Innovation Action (2022-2025)-21 international



# Al-powered firearm recognizer

CEASEFIRE will develop a mobile application to automatically and on-the-spot identify the main characteristics (e.g., brand, model, caliber, location of the serial number, etc.) of a seized firearm at the crime scene, in order to subsequently facilitate automatic search/update of information in relevant (inter-)national databases.

### Al-powered Dark Web firerms exchanges tracker

CEASEFIRE will develop software tools for automatic analysis of online activities, in order to detect and reveal the real identities of individuals engaged in illegal firearms trafficking on darknet marketplaces.

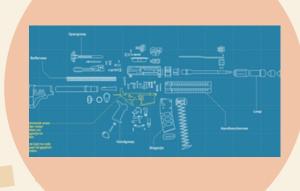
### partners https://ceasefireproject.eu/

Innovative, cuttingedge tools for law enforcement agencies



### Al-powered firearms detection in X-rays of mailed parcels

CEASEFIRE will develop a tool for automatically detecting illicit firearms, ammunition or firearms components on X-ray scan images of parcels, which have been mailed with legit post and courier services.



#### Al-powered identification of on-line 3Dprinted firearm blueprints distribution

CEASEFIRE will develop software for automatically detecting and analyzing the on-line distribution of blueprints of 3D-printed firearms.