



FLYING WARRIORS

FIREFIGHTER
D.FUSION

multifunctional drone-based fire extinguishing complex

MULTIFUNCTIONAL, REMOTE-CONTROLLED, ROBOTIC FIREFIGHTING COMPLEX.

PROBLEMATIC

Annually, more than 3.1 million fires occur in the world, and more than 20 thousand people die in them. About 50% of fires occur in buildings and transport, and they also account for 90% of all victims. The USA, Australia, European countries are leading in the number of fires. However, statistics of dead in fires show that the largest number of victims falls on Russia, Belarus and Ukraine.

The equipment available for firefighters to extinguish the fire is designed for the presence of a person close to the fire makes this profession one of the most dangerous ones.

THE AIM OF THE PROJECT

Creation of production complex for manufacturing of multifunctional firefighting complexes, with usage of foam generator “LIGHT FOAM”, mounted on vehicle chassis of different modifications, water transport, aero objects and etc.



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2020

PRODUCT

A group of specialists, in close contact with representatives of fire departments, has developed a foam generator, that has a foam ratio higher in many times than the existing samples do. The technology is based on the existing prototype of equipment for water and wastewater treatment, owned by the same group of developers.

As a result of the tests, it became obvious that the foam on the way out from the foam generator has a very low weight, which allows it to be delivered through the fire hose, at least up to the 100th floor, and also to use a controlled drone (or a group of multicopters) for extinguishing.

Considering the fact that a minimum amount of water is required to prepare foam of the desired consistency (calculated amount up to 10 liters), it became possible to create options for installing drones and foam generators on remotely controlled boats, cars such as VW Caddy, VW Transporter, Mercedes Benz Sprinter, Mercedes Benz ATEGO others.



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SUCCESS

Foam produced on the way out from the foam generator, considering oxygen saturation of the air and the presence of a small amount of water in the solution, has the feature of long resistance to fire, which can reach 30 minutes in different conditions.

Especially, according to firefighters opinion, this is important during extinguishing large areas of fire, oil storages, woodlands, high-rise buildings.



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COMPETITIVE DISTINCTIONS

- Providing effective fire extinguishing through the use of high ratio foam and up to 10 drones from one base station (a car with an installed foam generator);
- extinguishing at altitudes up to 300 m and at a distance from the base station up to 1000 m horizontally;
- the ability for multicopter drones to remain in the process of extinguishing a fire for an almost unlimited time;
- negligible amount of water for producing a foam solution (up to 10 liters of water per 1 cubic meter of foam);
- there is practically no damage to property after the elimination of the fire due to low foam encroachment factor;
- possibility of automated monitoring of fires and fire extinguishing;
- cost minimization of maintaining fire services from 30 to 60%;
- there is no need to be close to fire, it ensures the safety of life and health of firefighters.



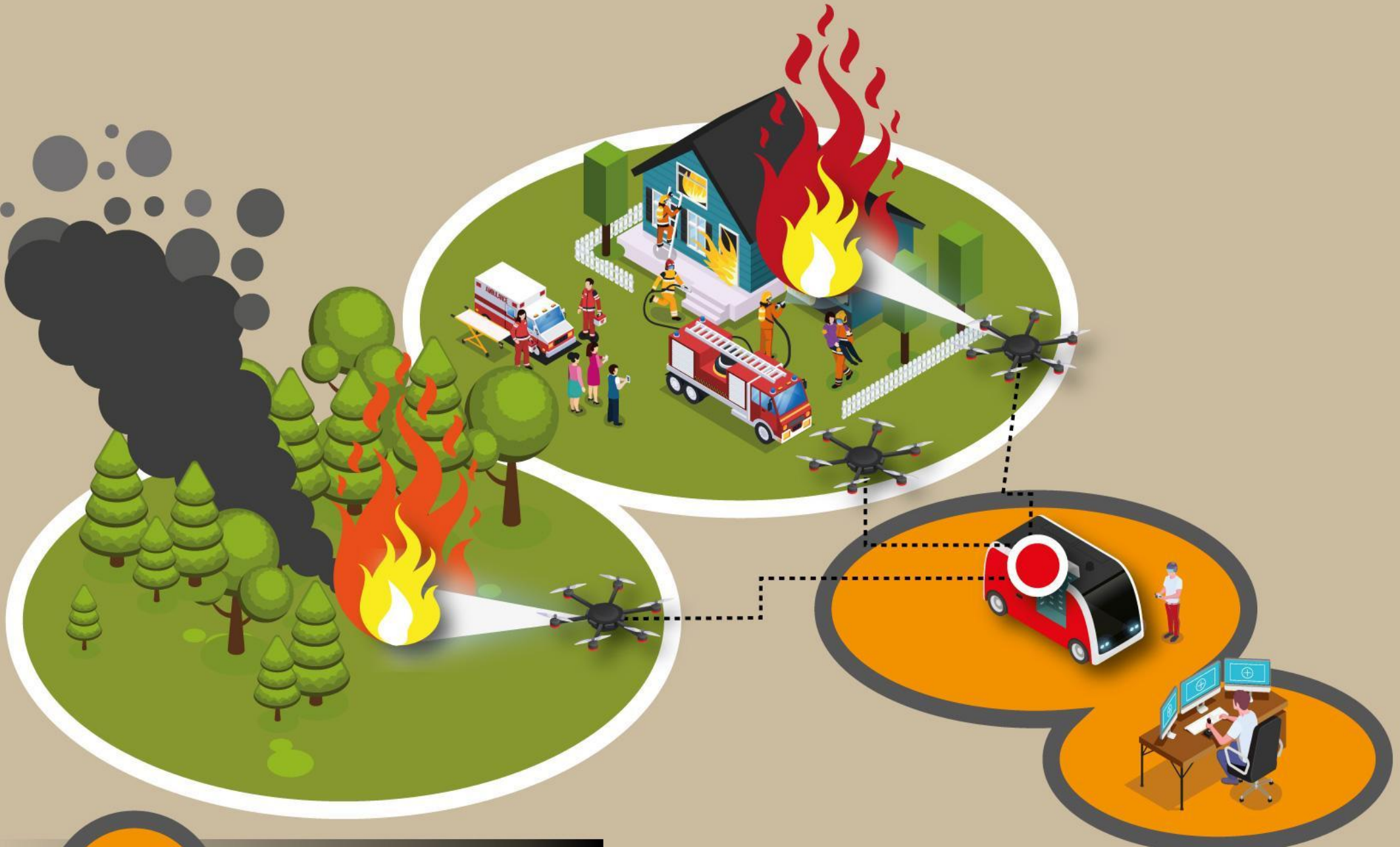
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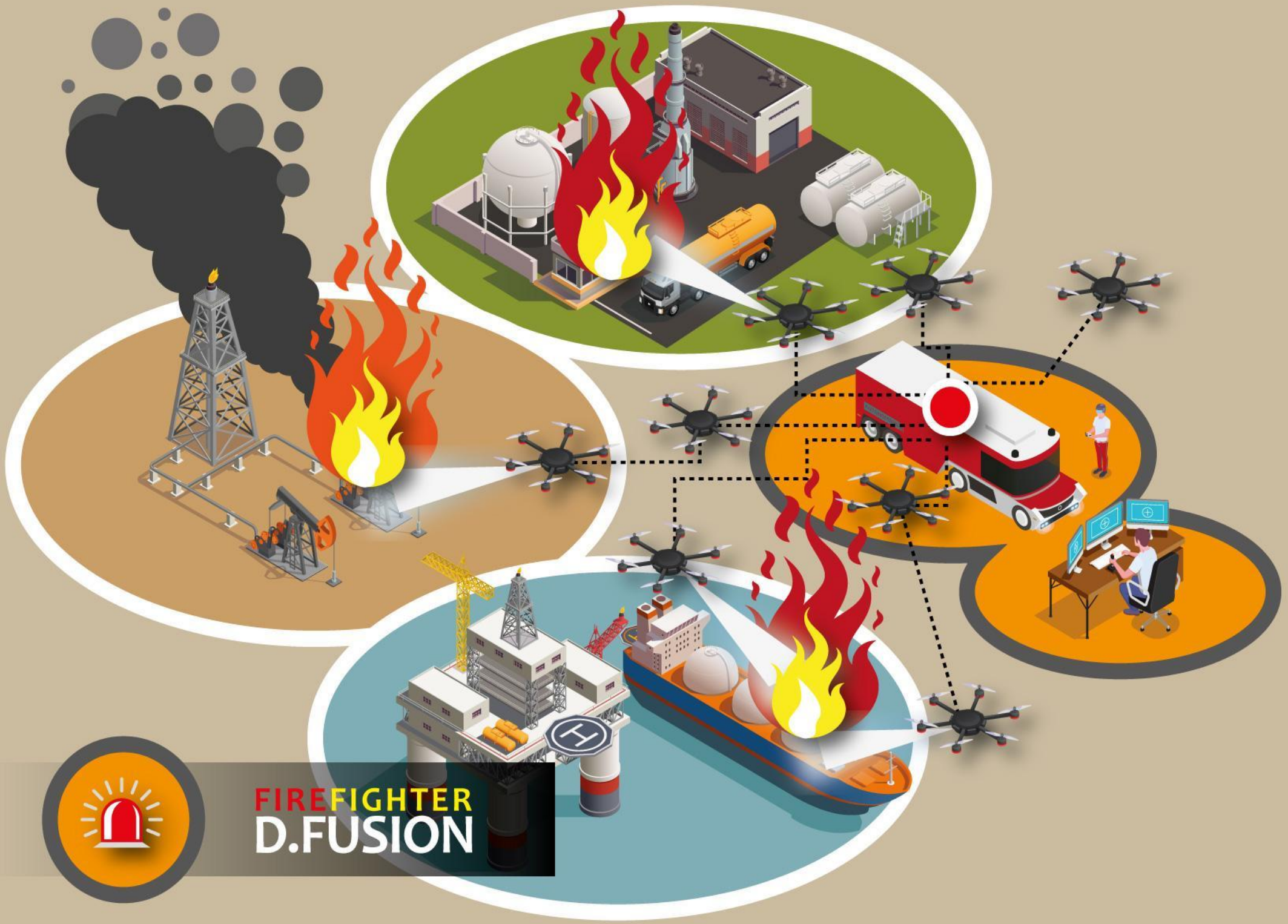
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1. **Drone cassette**
2. **Hose reel and feed unit**
3. **Electric generator**
4. **Tools and spare parts**
5. **Foam generator**
6. **Container with water**





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TEAM

Our team of like-minded people consists developers and manufacturers of foam-generating complexes, drones and boats.

MARKET SIZE

The market of firefighting systems has average annual growth for 9.7% and until 2020 year has an increasing trend up to 93,46 billion \$. Within 5 years our team has an opportunity to claim the 25% of the firefighting equipment market. It is difficult to impress someone with something new in the 21th century, of course everybody knows about drones existence, that can be controlled without human's presence, electric boats, and foam generators are not new, but in the basis of any described above option of execution, the main thing is foam generator, that will provide a uniqueness to any firefighting complex.



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How the INVESTOR'S money will be used

1. Opening a company in Europe
2. Certification and patenting of the equipment
3. Development of commercial samples of foam generators, drones, boats (size, carrying capacity, power)
4. Creation of production facilities and development of technological regulations.
5. Selection of producers and providers of components and materials.
6. Creation of mobile and stationary show-room.
7. Production of firefighting complexes on the cars of low and middle class and adaptation of equipment to the already existing firefighting cars.



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