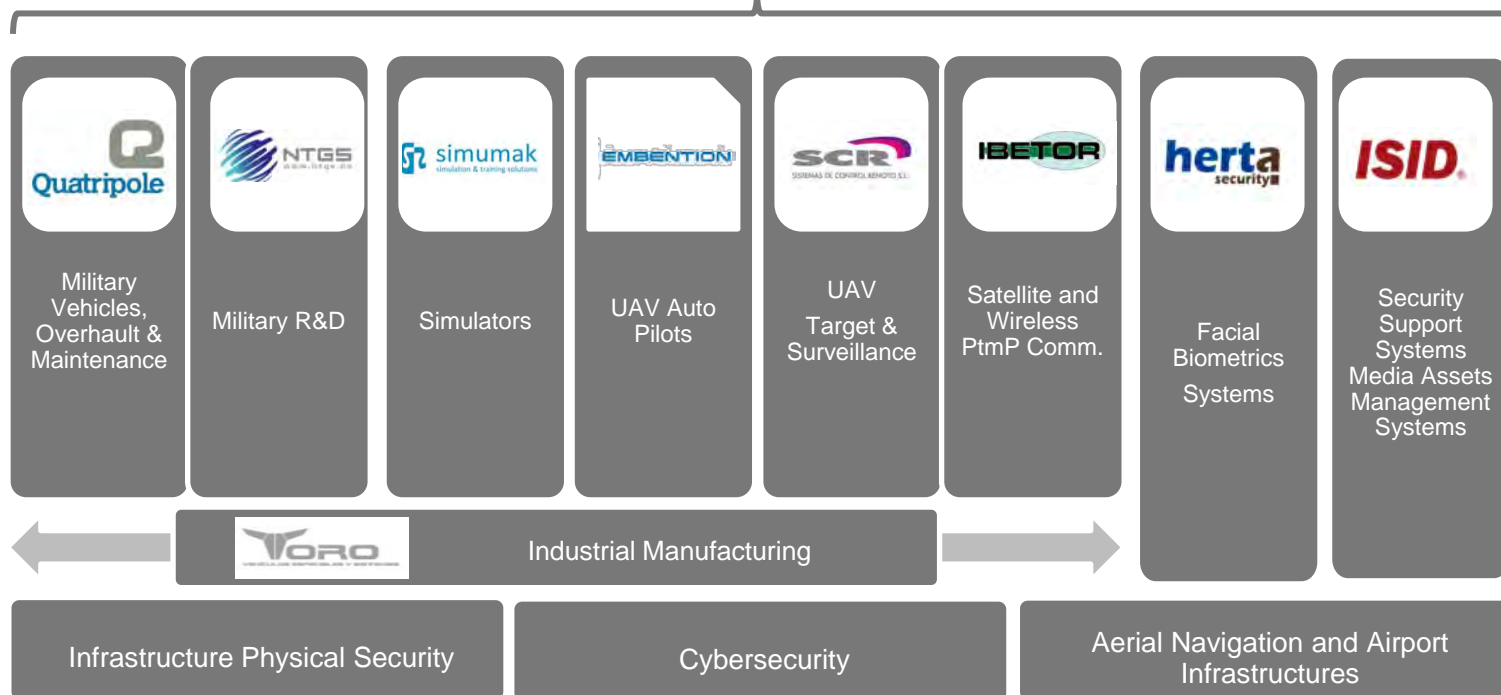# About everis Aerospace and Defense

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everis Aerospace & Defense

Innovative and reliable technologies offering the best capabilities to our clients

Aerospace
and Defense
everis

Quatripole	NTGS	simumak	EMBENTION	SCR	IBETOR	herta security	ISID
Military Vehicles, Overhault & Maintenance	Military R&D	Simulators	UAV Auto Pilots	UAV Target & Surveillance	Satellite and Wireless PtmP Comm.	Facial Biometrics Systems	Security Support Systems Media Assets Management Systems

← TORO | Industrial Manufacturing →

| Infrastructure Physical Security | Cybersecurity | Aerial Navigation and Airport Infrastructures |

Mortar Carrier Challenge

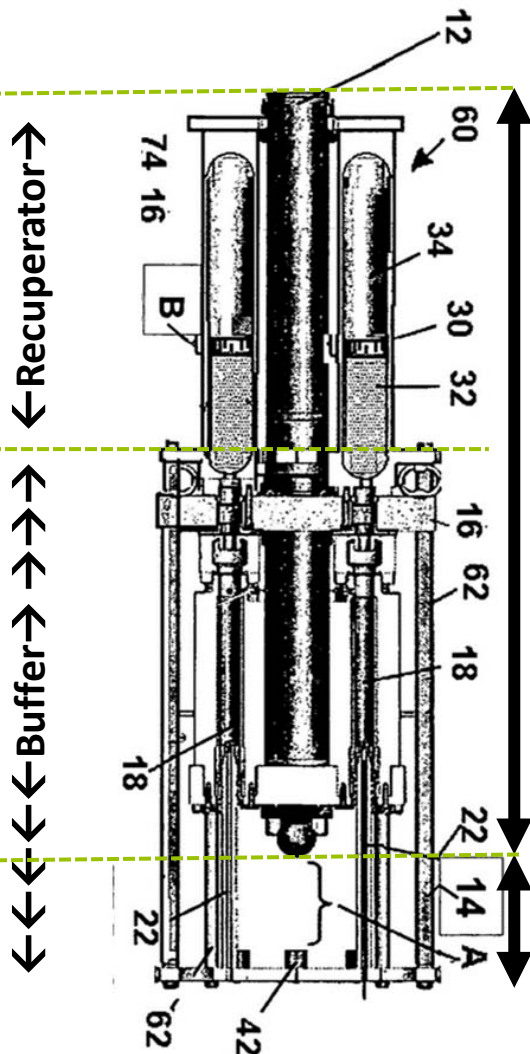120 mm Mortar- Force on the ground (N) - time (s)

Peak Recoil Force 120 Tons during 0,001 sec.*

Peak Recoil Force 30 Tons during 0.01 sec.**

* Measurement based 120 mm mortar from ECIA with 7 supplements (full charge)
** Based on information about SRAMS (first to achieve only 30Tons recoil force)

Mortar Carrier Challenge

Shooting energy … approx. 500,000 Jules
- **Transmitted to the vehicle** ≈ 100,000 Jules
- **Absorbed** ≈ 400,000 Jules

But… **"Energy can neither be created nor destroyed"**

- **Absorbed** ≈ 400,000 Jules ≈ 100,000 Cal

Non dissipated energy, together with the absorber structure limit the system capability for iterative shooting (cook-off)

* Recoil absorber. http://www.google.com.tr/patents/EP2400255A2?cl=en

Mortar Carrier Challenge
Effect on the vehicle

Peak Recoil Force 30 Tons during 0.01 sec
This is equivalent to 10 Humvees with their crew.

Mortar Recoil Absorber Limitations
- Increase height (Difficult loading)
- Over heating and limited repetitive shooting (Cooking-off)
- Limited aiming capabilities (+30º/-30º)
- Limited operation space
- Requires structural reinforcement
- Requires hydraulic jacks
- Heavy solution (limited available payload for ammunition)
- Only feasible in very large and expensive vehicles.
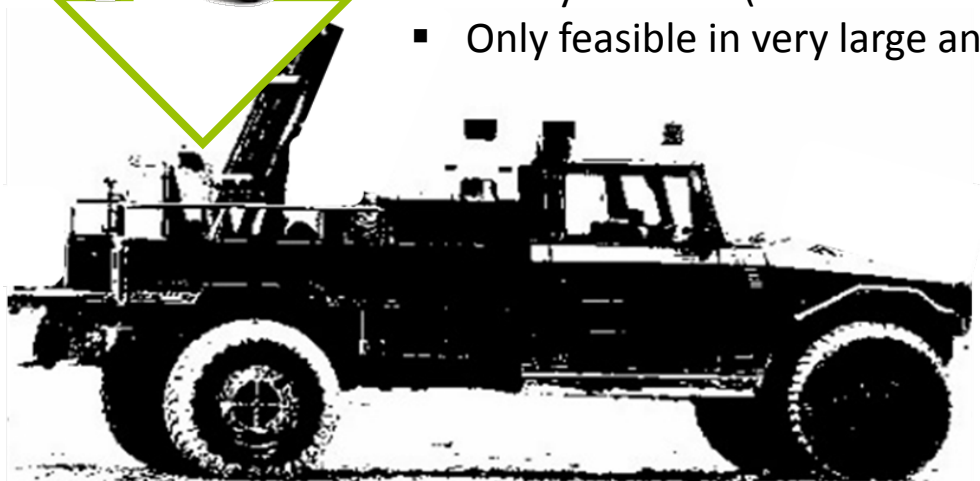
ALAKRAN MORTAR CARRIER

ALAKRAN Mortar Carrier System brings a different perspective to the standard recoil absorber approach.

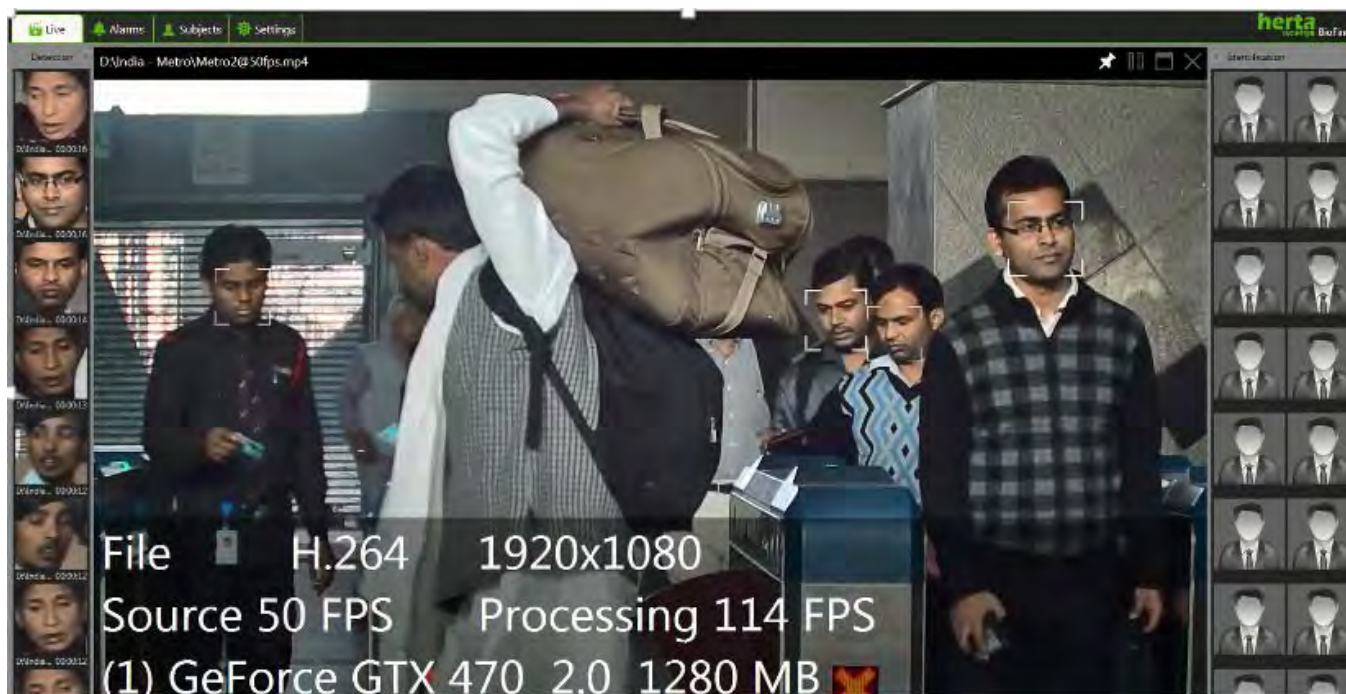- Simpler, Smarter and more common sense solution.

Shooting from the ground with an automatic control and aiming from the vehicle.

←←←←←12 seconds to deliver fire power →→→→→→/←←← 5 seconds out of action →→→
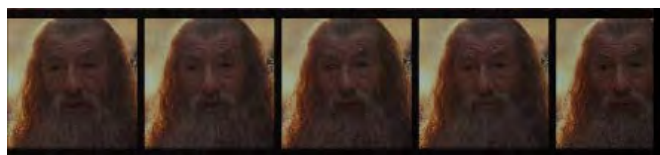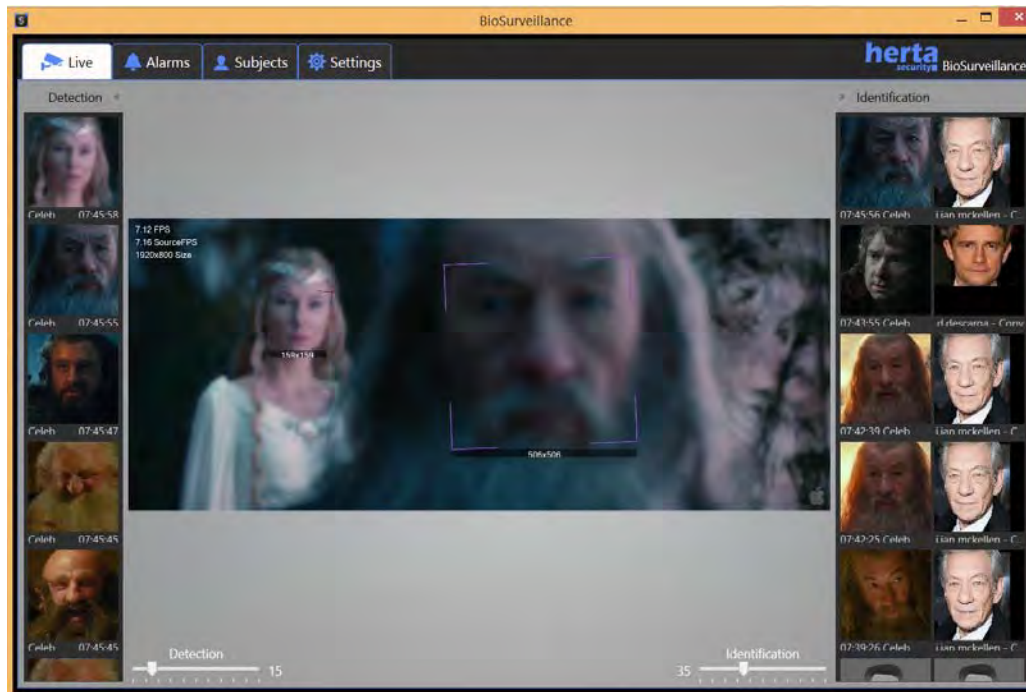
Some achievements

We have developed the world fastest and most rewarded facial recognition system.
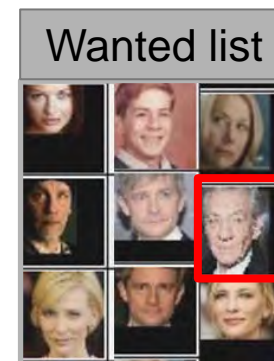

ECS Award Winner 2015
GPU Technology Conference

Herta Technology
Algorithms

Faces detection algorithm

Faces

Every face detected is sent to the identification algorithm

Wanted list

Identification algorithm

Video Management vs Photo Management
Accuracy

Video (approx. 24 frames per second)

Working with video will provide many identification chances. 3 second video will provide about 72 images to be compared.
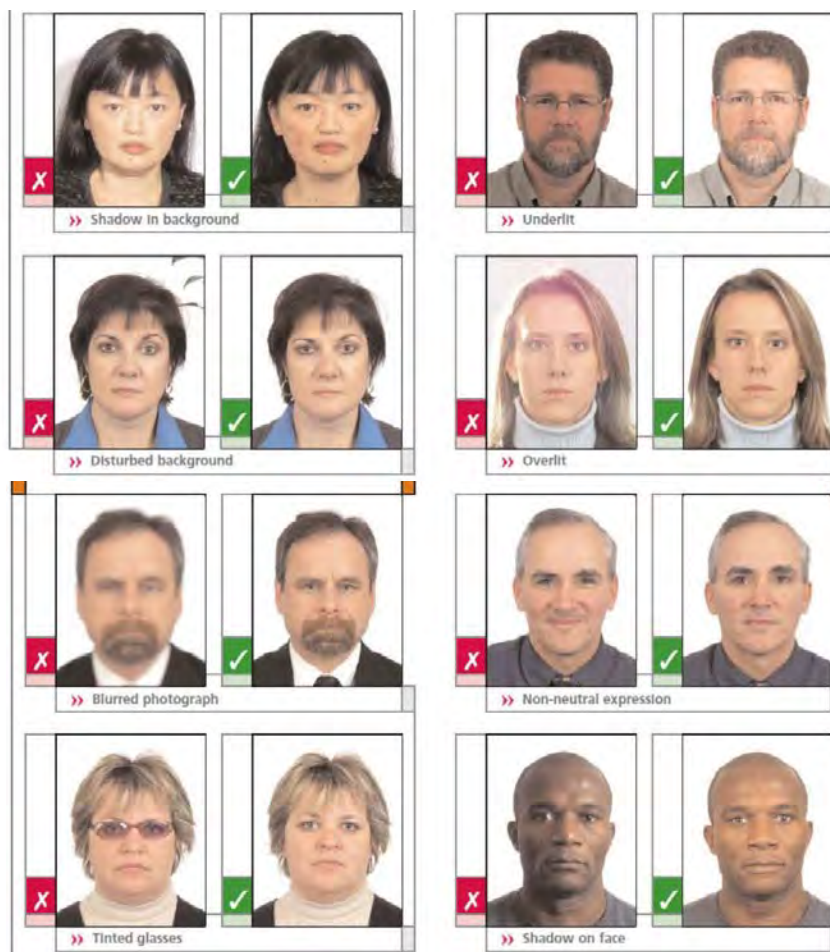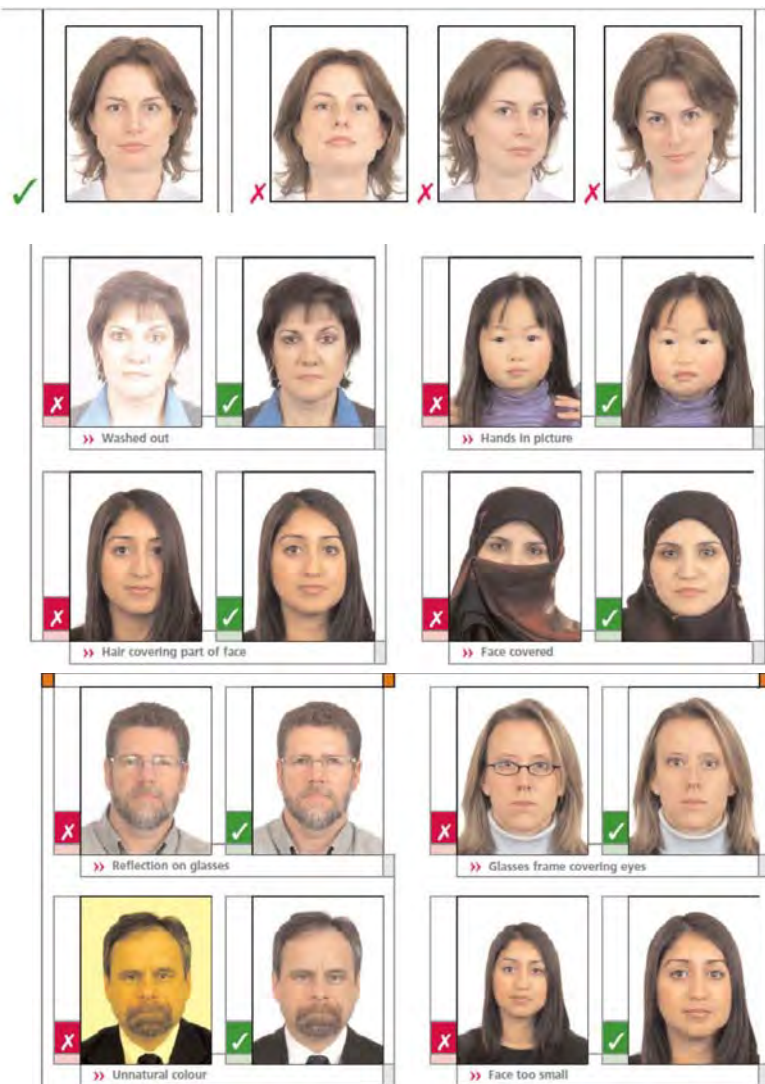

Meanwhile working with photos will give us only 1 identification chance.
To be successful in photos identification we need to work with really high quality photos in the "wanted list photo set" and the "analysis photo set".

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Video Management vs Photo Management
Good quality photo –passport photo

Good quality photos will provide good identification results.
Bad quality photos will provide false positives or non-identification

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