

Needs & experience in Civil Robotics

euRobotics Forum 2015, March 13th

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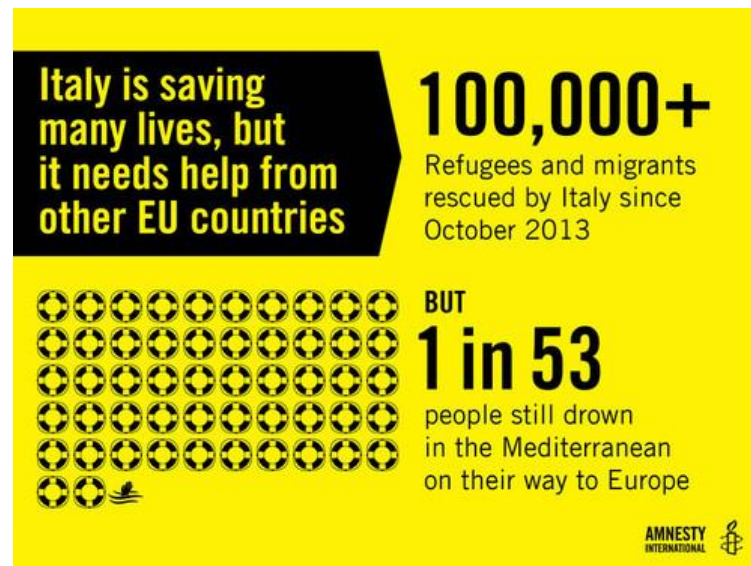
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THE HUMANITARIAN CRISIS IN THE MEDITERRANEAN

- Between 1988 and September 2014, **21,344 people** are estimated to have drowned in the Mediterranean Sea while trying to reach Europe.
- **Nearly 2%** of the people who had attempted the journey in 2014 drowned.
- Between October 2013 and September 2014, the Italian Navy has rescued **138,866 people**.
- Italy reported to be spending over 9 million euros per month on operation Triton -- saving each life cost around **712 €**.



Rescue operation – Massimo Sestini, World Press Photo 2015, 2nd award general news



THREATS FOR SECURITY AND FREEDOM FOR EU CITIZENS

- In 2012 **Hashish Resin** seizures reached **325,5 Tons** in Spain.
- 51% of this amount was seized during **Marine operations and Caches on beaches**.*



EL PAÍS
EL PERIÓDICO GLOBAL

www.elpais.com

SÁBADO 7 DE FEBRERO DE 2015 | Año XL | Número 13.732 | EDICIÓN NACIONAL | Precio: 1,80 euros

SOCIEDAD
La justicia avala el uso del 'burka'
Un tribunal rechaza el veto al velo integral en Reus PÁGINA 36

REVISTA SÁBADO
Ricky Martin, por fin sin secretos
Entrevista con el cantante puertorriqueño PÁGINAS 43 Y 44

S San Valentín, al rojo vivo
Regalos de moda y belleza para vivir un día redondo y planes para los solteros

Los yihadistas usan las rutas del tráfico de inmigrantes para entrar en España
La policía identifica las tres vías de tránsito que aprovechan los terroristas para regresar a Europa a través de suelo español desde Irak y Siria

PATRICIA ORTEGA DOLZ
Madrid

Los excombatientes yihadistas se

Putín se resiste al plan de paz de los líderes europeos para Ucrania
El mando militar de la OTAN pide el envío de armamento a Kiev

- Between 30.000 to 100.000 European militants joint IS.
- In 2014 Jihadist has used immigration routes to enter Spain.**

*Centre of intelligence against Organized Crime, Ministry of Interior

**Spanish National Police report, February 2015

WHICH ARE THE NECESSITIES?

- Reduce the death toll by saving more lives at sea.
- Increase EU's citizens security preventing cross-border crime.
- Reduce the number of people entering the EU undetected.

RESEARCH MUST BE DRIVEN BY GOALS

Goals

- Extended surveillance
- Autonomous surveillance
- Continuous surveillance

Necessities

- Reduce the death toll.
- Reduce cross-border crime.
- Reduce undetected entering.

MARITIME SURVEILLANCE CAPABILITIES

Goals

- Extended surveillance
- Autonomous surveillance
- Continuous surveillance

Mobility and
projection

Acquisition

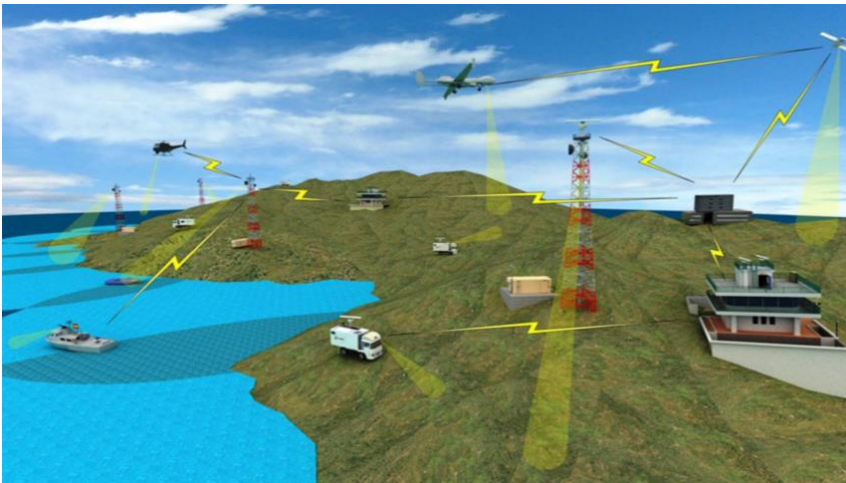
Communications

Integrated C2 &
Coordination

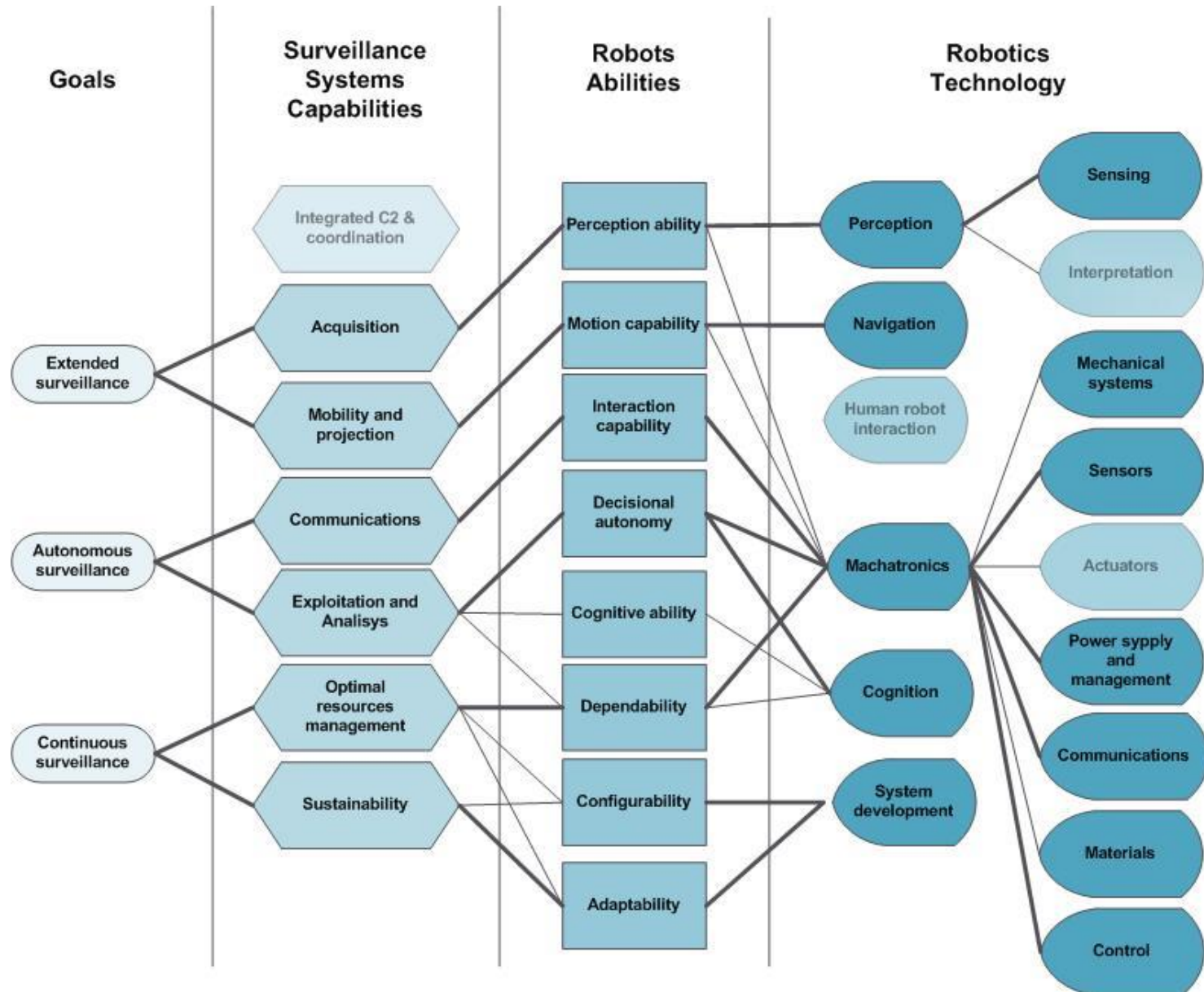
Exploitation and
analysis

Optimal
resources
management

Sustainability



ROBOTICS CAN IMPROVE SURVEILLANCE CAPABILITIES



PERSEUS PROJECT



- 7FP Flagship project coordinated by Indra.
- Capabilities are enhanced through system integration.
- West Campaign (2013).
 - ANTEX-II (FAP)
 - Atlante (Cassidian)
- East Campaign (2014).
 - Remorina (DCNS)
 - TANAN (Cassidian)
 - Pegasus (HMoD)

PERSEUS PROJECT



- September 2014, Ikaria island, Greece:

- NATO - CMRE
- Slocum glider.
- Acoustic payload.
- About 50 hours missions.



- May 2015, Canary Islands, Spain:

- PLOCAN
- WaveGlider
- Acoustic and AIS payload.



OUR CONTRIBUTION TO THE ROBOTICS COMMUNITY



جائزة الإمارات للطائرات بدون طيار لخدمة الإنسان
The UAE Drones For Good Award

- SESAR research program pursue the future integration of drones into European airspace.
- Nine different projects financed across Europe.
- Indra coordinates project ARIADNA (Activities on RPAS Integration Assistance and Demonstration for operations in Non-segregated Airspace).

- Awards solutions for improving people's lives today.
- Increase society awareness of the benefits of robotics technology.



INDRA TECHNOLOGY

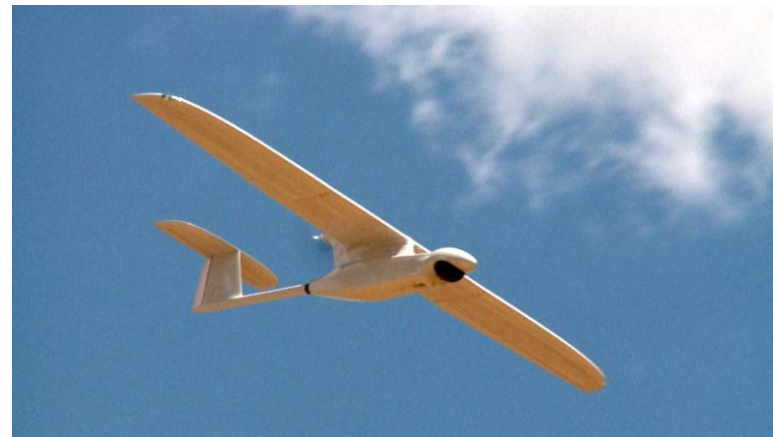
■ Platforms:

- MANTIS
- ALBATHROS
- PELICANO

■ Simulators

- UAV missions.
- Space missions.

■ Maritime surveillance systems integrator.



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OUR COMMITMENT

- Provide value to law enforcement bodies to contribute to a safer and securer Europe.

Innovation

=

Technology

+

Talent

R&D&i

6-8% of revenue

(+200 agreements with universities and research centers)

€ 3 Billion
revenues

43,000
professionals

138
countries



HOW CAN WE CONTRIBUTE TO ENHANCE SAFETY, SECURITY AND FREEDOM OF EU CITIZENS?

Security / R&I and European projects
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