



Hellenic Rescue Team of Attica – HRTA

Harris Georgiou, Athanasios Ntais



Hellenic Rescue Team of Attica – H.R.T.A.



- HRTA is a volunteer-based citizen association – NGO.
- HRTA was founded in 2000.
- Since 2000, more than 600 citizens-members have been trained for participating in **S**earch **A**nd **R**escue (SAR) operations.
- Average participation in SAR operations per year: 10-15 (mountains, rivers, sea, urban environments).
- Close cooperation with state services and official rescue Teams and competent state units (incl. Hellenic Coast Guard, “EMAK” Team - Special Unit for Disaster Response).
- Collaborative training, synergies and participation in SAR field operations.



Hellenic Rescue Team of Attica – H.R.T.A.



- **Operational Sectors (SAR):**

1) Mountain Rescue



2) Water Rescue



3) Mass Disaster Rescue & Relief



Hellenic Rescue Team of Attica – H.R.T.A.

- Independent NGO, 100% volunteers, field-specific & first-aid training, certified experts in various topics & environments (wilderness, urban, river, scuba, ...)
- officially active since 2000, part of Civil Protection general plan (when needed)
- emergency response, first-responders, safety, SAR, humanitarian aid, training

Motivation for getting involved in SCENT:

- field experts, well-equipped for river operations, first-aid providers (safety)
- strong support for community work, flood response & civil protection planning



LAND SAR: Wilderness, non-urban
(mountain, canyon/river, forest)



WATER SAR: Surface, underwater, shore
(sea, large river, lake)



URBAN SAR: emergency response, disaster relief
(earthquake, flood, fire, large-scale accidents)

Hellenic Rescue Team of Attica – H.R.T.A.



HRTA Training & Prevention Activities:

- i) Regular field activities: simulation of SAR operations in real environment (mountain, water, urban environment).
- ii) Training courses for multiple citizens group on health and safety issues for climbing, hiking, other open-field activities.
- iii) First Aid training programmes for kids in schools , teachers and parents.
- iv) A tailor-made curriculum addressed to members, developed by HRTA experts, graded in three main educational levels (introductory, medium and operational level) and further specializations.

The programme is always kept up to date with the highest training and professional standards to achieve the best results:

→ Properly trained and skilled individuals, ready to participate in SAR operations with **safety** and **professionalism**.



Recent H.R.T.A. deployments in USAR

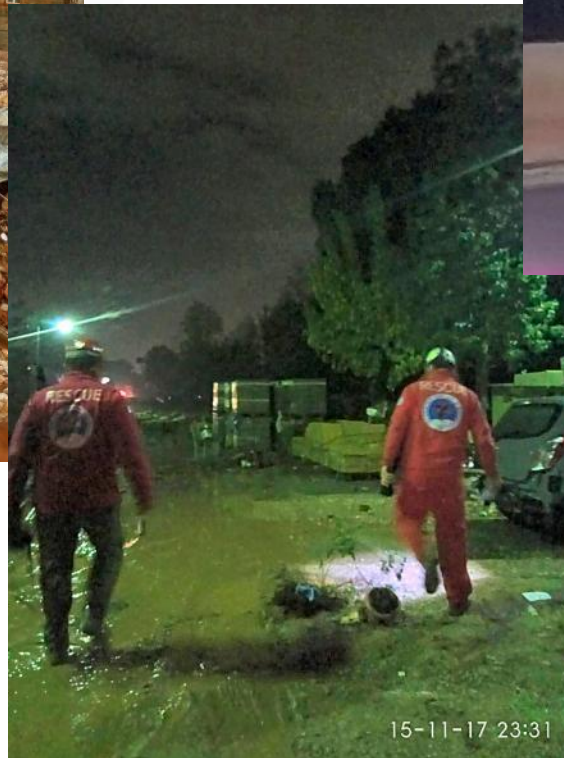


- Mandra, Attica (Nov/2017)
 - Flash flood event in eastern Attica
 - Associated to local wildfires a few months before
 - 23 dead, major urban damages

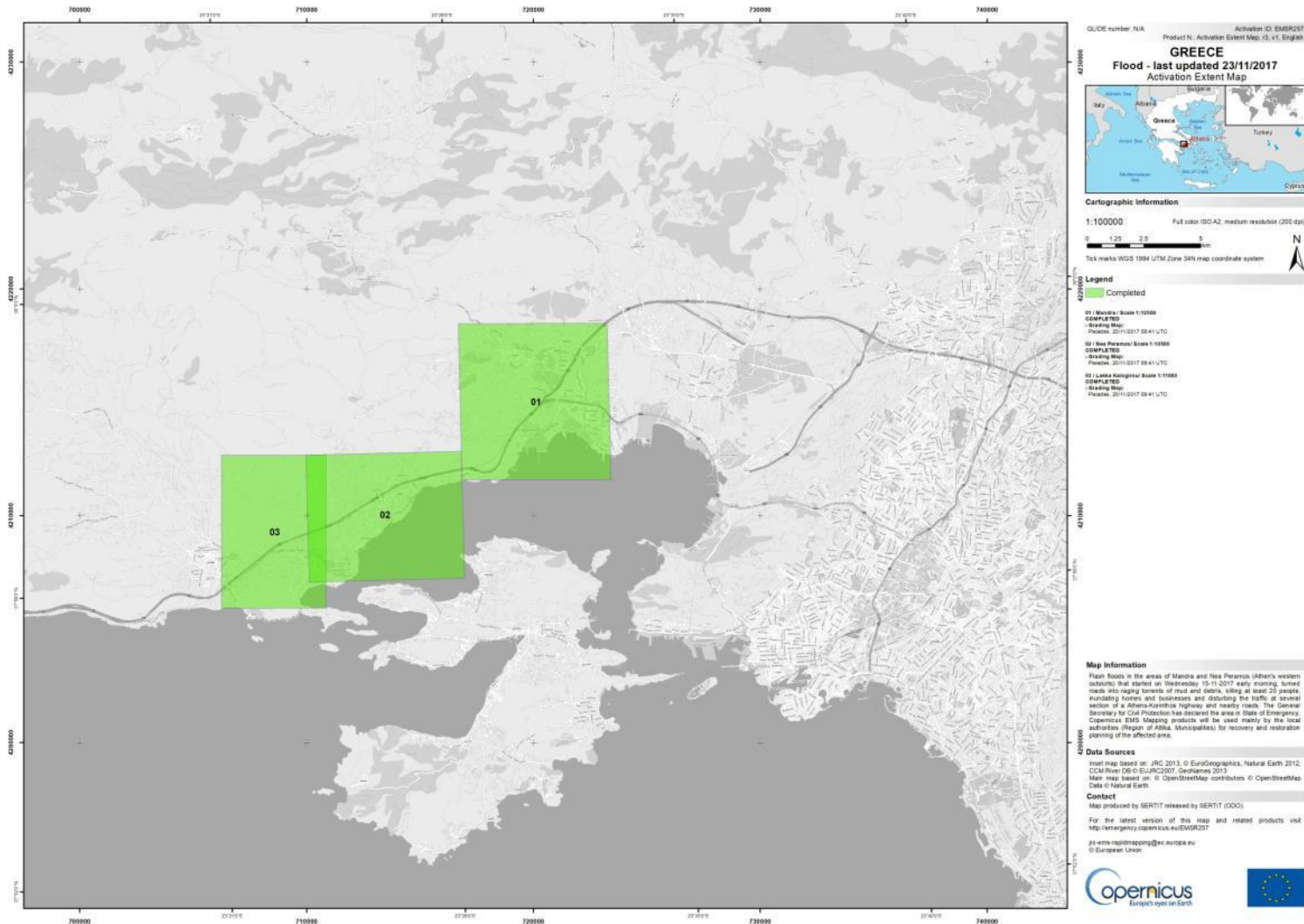
- Mati, Attica (Jul/2018)
 - Wildfire crossing into urban/mixed area
 - Unique local weather conditions (downhill winds)
 - 99 dead, still several people in ICUs (burn treatment)



H.R.T.A. at Mandra, Attica (Nov/2017)



H.R.T.A. at Mandra, Attica (Nov/2017)



H.R.T.A. at Mandra, Attica (Nov/2017)



H.R.T.A. at Mandra, Attica (Nov/2017)



H.R.T.A. at Mandra, Attica (Nov/2017)



H.R.T.A. at Mandra, Attica (Nov/2017)



- Conditions **during** the event

- (...)
- (...)
- (...)
- (...)

- Conditions **after** the event

- (...)
- (...)
- (...)
- (...)



H.R.T.A. at Mandra, Attica (Nov/2017)



- Main problems encountered
 - Lack of on-field coordination with central authorities
 - Need for long-term assistance to locals (food, shelter, med.)
 - (...)
 - (...)
- Lessons learned
 - Self-organization, local contact points are necessary
 - (...)
 - (...)



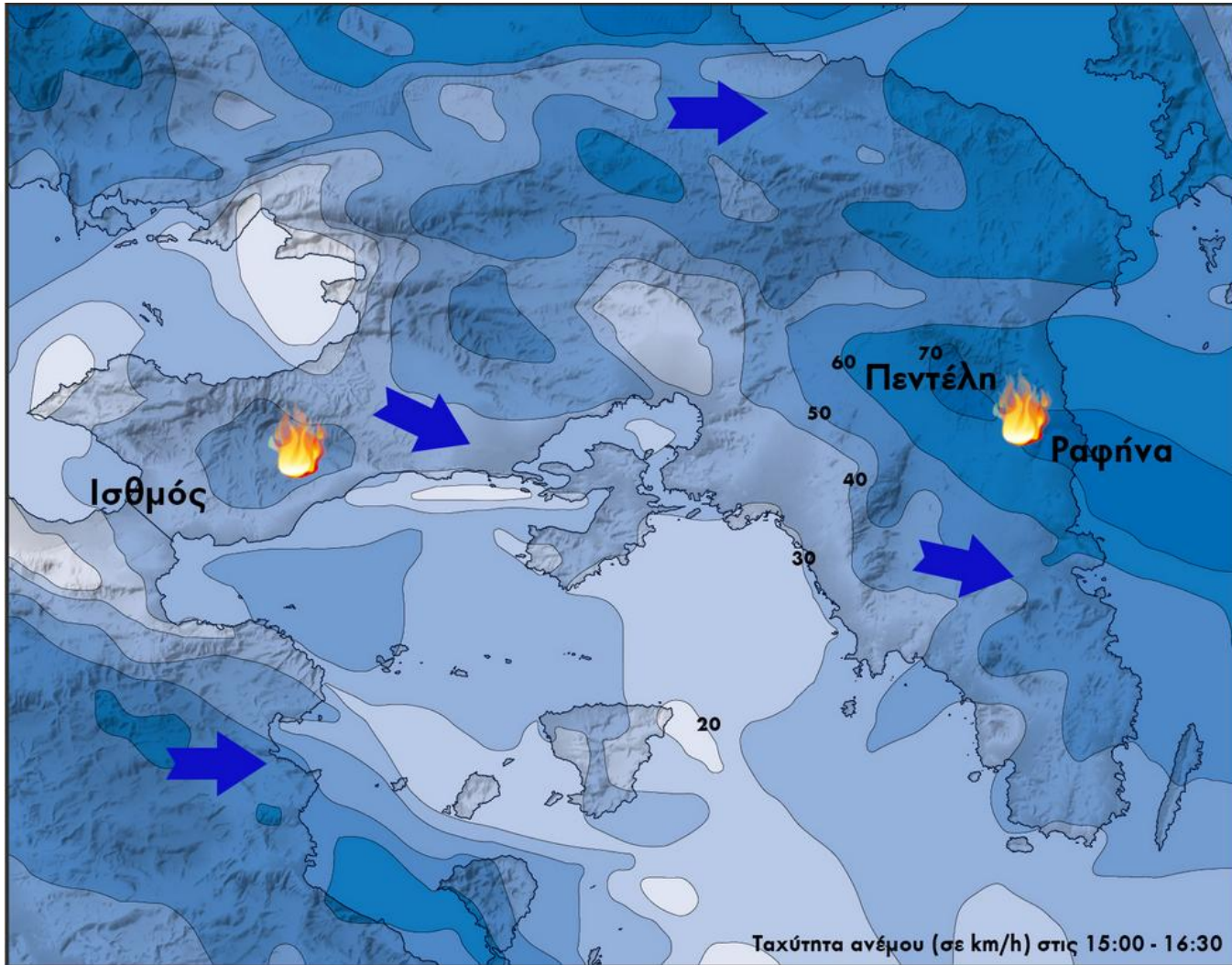
H.R.T.A. at Mati, Attica (Jul/2018)



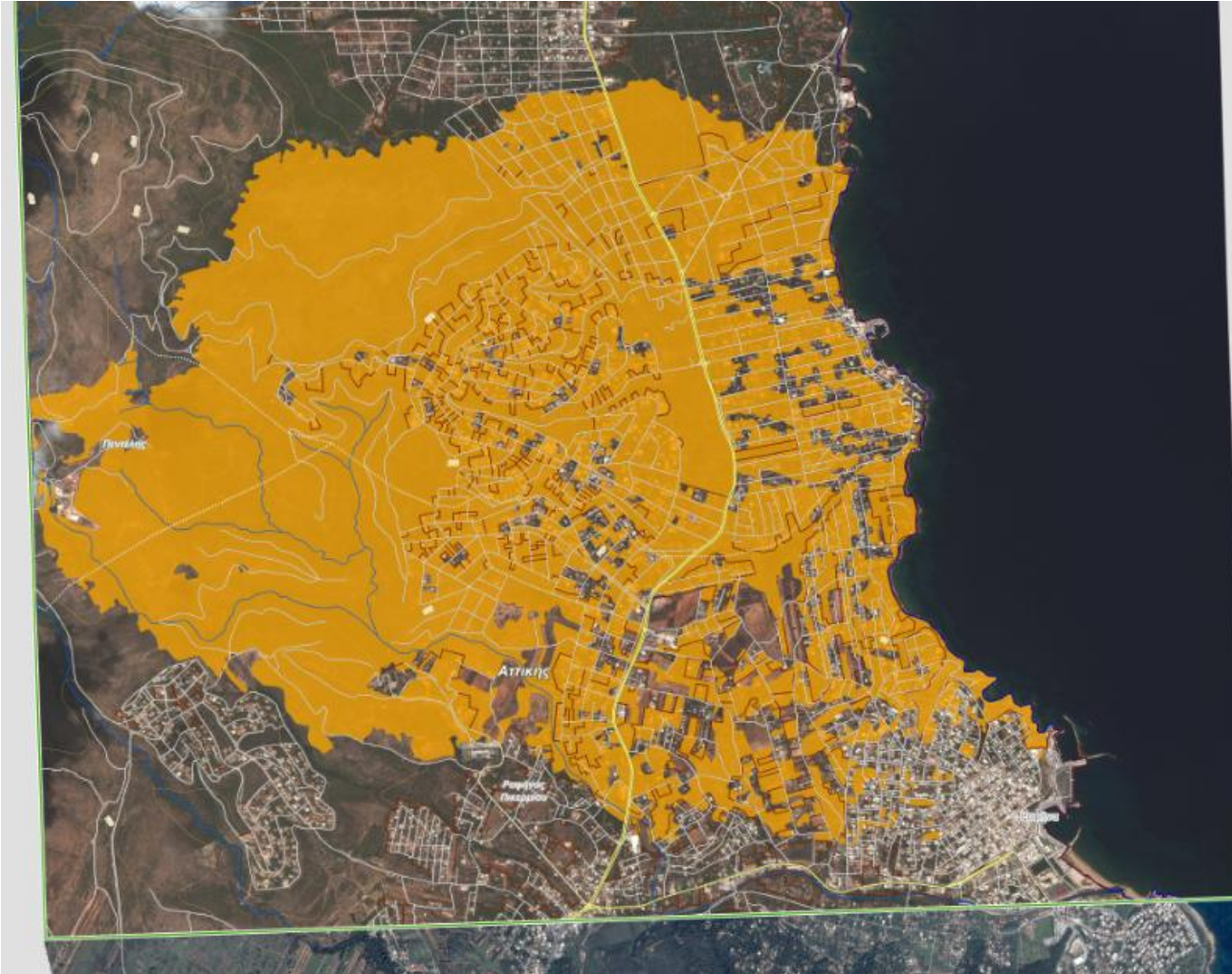
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H.R.T.A. at Mati, Attica (Jul/2018)



H.R.T.A. at Mati, Attica (Jul/2018)



Cartographic Information
 1:11000 Full color (300 x 1, high-resolution (300 dpi)
 Date: 08/01/2018 UTM Zone 38N map coordinate system
 T.M. scale: WGS 84 geographical coordinate system

- Legend**
- Administrative boundaries**
 - Municipality
 - Crisis Information**
 - CRISIS AREA (H.R.T.A.)
 - General Information**
 - Line of Impact
 - Unaffected
 - Not Affected - No Data
 - Place names**
 - Place name
 - Sub-Up Area**
 - Sub-Up Area
 - Hydrography**
 - Stream
 - Physiography**
 - Topographic Contour (m)
 - Transportation**
 - Primary Road
 - Secondary Road
 - Local Road
 - Cart Track

Category	Sub-Category	Value	Unit
Population	Total	10,000	Persons
	CRISIS AREA	5,000	Persons
	Unaffected	5,000	Persons
	Not Affected - No Data	0	Persons
Buildings	Total	10,000	Buildings
	CRISIS AREA	5,000	Buildings
	Unaffected	5,000	Buildings
	Not Affected - No Data	0	Buildings

Map Information
 This map was created by the author using the information provided in the report on 02 July 2018. The author is not responsible for any errors or omissions in the data or for any damage or loss of information or for any other consequences arising from the use of the information. The author is not responsible for any damage or loss of information or for any other consequences arising from the use of the information. The author is not responsible for any damage or loss of information or for any other consequences arising from the use of the information.

Relevant data records

Event	Date	Location
CRISIS AREA	02/07/2018	Mati, Attica
Unaffected	02/07/2018	Mati, Attica
Not Affected - No Data	02/07/2018	Mati, Attica

Data Sources
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Map prepared by: [Name]
 Date: [Date]
 Location: [Location]



H.R.T.A. at Mati, Attica (Jul/2018)



- Conditions **during** the event
 - Fire speed calculated at 3,5-4 km/h (walking speed)
 - Main road (Marathonos) did not act as a barrier like in the past
 - Extreme temperatures (aluminium, glass melted even outside)
 - Fire moved horizontally in some areas (e.g. only 1st floor burnt)
 - Evacuation via sea (beach), narrow access, no plan, only way out
- Conditions **after** the event
 - Mixed SAR operations: urban, shoreline, sea
 - Search for bodies/remains in building & open field
 - Some constructions were dangerous to enter (half-collapsed)
 - (...)



H.R.T.A. at Mati, Attica (Jul/2018)



H.R.T.A. at Mati, Attica (Jul/2018)



H.R.T.A. at Mati, Attica (Jul/2018)



H.R.T.A. at Mati, Attica (Jul/2018)



- Main problems encountered
 - Lack of on-field coordination with central authorities
 - Need for long-term assistance to locals (food, shelter, med.)
 - Some problems with R/F communications due to scenery
 - Logistical stretching, 9-day deployment (all day)
- Lessons learned
 - Self-organization, local contact points are necessary
 - (...)
 - (...)



Recent HRTA deployments in USAR



Recent HRTA deployments in USAR

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Recent HRTA deployments in USAR





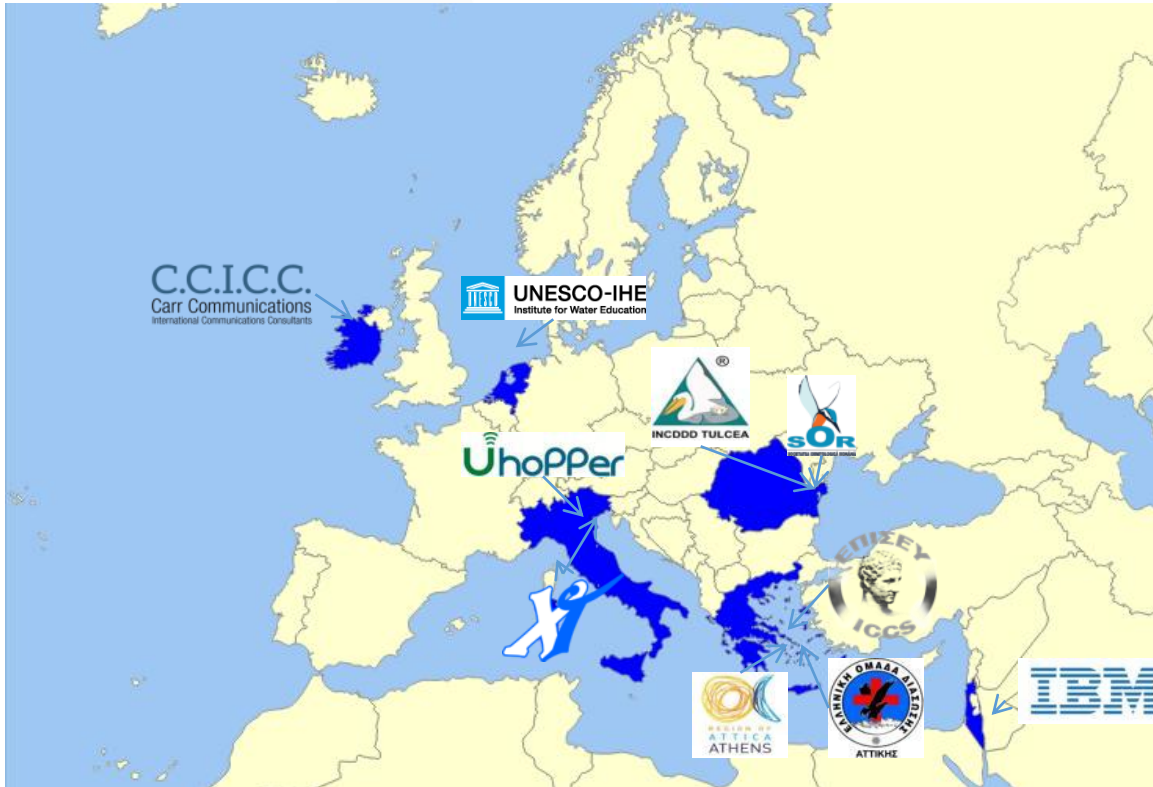
SCENT: A Smart Toolbox for Engaging Citizens into a People-Centric Observation Web



Summary

- SCENT Facts & figures
- Motivation
- SCENT @ a glance
- SCENT objectives
- SCENT architecture
- HRTA @ SCENT
- Large scale demonstrations
- SCENT current status

SCENT facts & figures



H2020 Call:

SC5-17.2015 Demonstrating the concept of 'Citizen Observatories'

EC requested funding 3,264,675 €

Duration 09/2016 – 08/2019

10 partners from 6 countries

2 Large scale demos

3 Research institutes

1 Large industry

3 SMEs

3 NGOs / public bodies



Motivation

- Flooding is a major environmental issue related to land-cover/use
 - ➔ urban development, critical infrastructure, soil fertility
- Assets close to flood plains
 - ➔ driver for economic development
 - ➔ societal risk in case of flood loss potential



*Pluvial flooding in Coibra
[Source: Imperial College]*



*Flooding in Chennai
[Source: Oxford Analytica]*



*Flooding in Vietnam
[Source: Floodlist]*

Land-cover/use influences flooding

- Large scale diversions, earthworks
- Flood embankments
- Urbanisation, changing natural surfaces to artificial areas



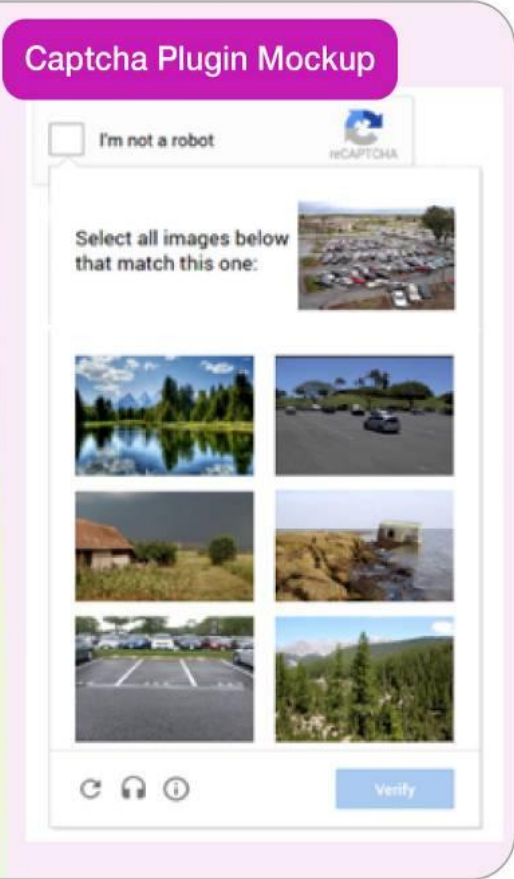
[Source: Noah systems]



[Source: Telegraph]

- Agricultural practices related to choice of crop, cropping pattern & soil drainage system
- Forestation: density of forest, canopy, soil cover
- Land-use malpractices, e.g. excessive logging, conversion of forested areas into other land-use types, conversion of land through forest fires.

SCENT @ a glance



SCENT objectives



- **People-centric Observation Web**
 - ➔ Develop OGC-compliant web services and resources for GEOSS portal
- **SCENT crowd-sourcing platform**
 - ➔ Collect image & text from citizens, thus extend the in-situ infrastructure with citizen-sourced observations
- **SCENT intelligence engine**
 - ➔ Implement innovative machine learning to classify & annotate images/text sourced from citizens & existing open platforms.
- **Serious gaming applications**
 - ➔ Annotate unutilised images from popular platforms, e.g. Flickr, Panoramio



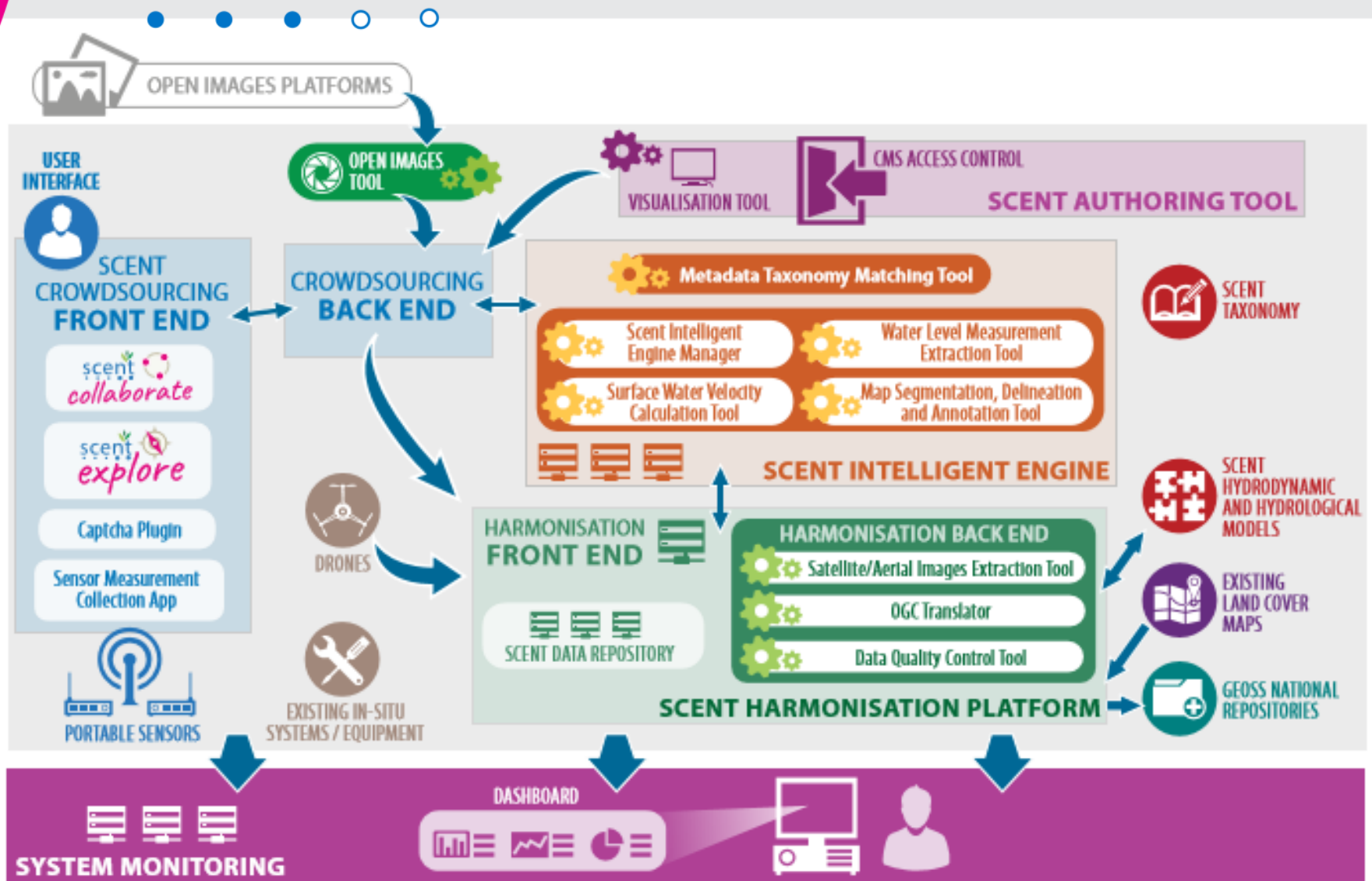
SCENT objectives (2)



- Quantification of impact of land-cover/use changes
 - ➔ Improve flood risk maps and spatio-temporal flooding patterns.
- Simple authoring tool for policy makers
 - ➔ Customise SCENT toolbox according to target group, regional or social characteristics.
- Testing & validation of the SCENT smart toolbox
 - ➔ Run 2 large scale pilots of great environmental impact; the urban case of Kifisos river in Attica and the rural case of Danube Delta.
- Increase active engagement of citizens, associations, local authorities
 - ➔ Create a sustainable citizen movement



SCENT architecture



Hellenic Rescue Team of Attica – H.R.T.A.



HRTA's participation in SCENT:

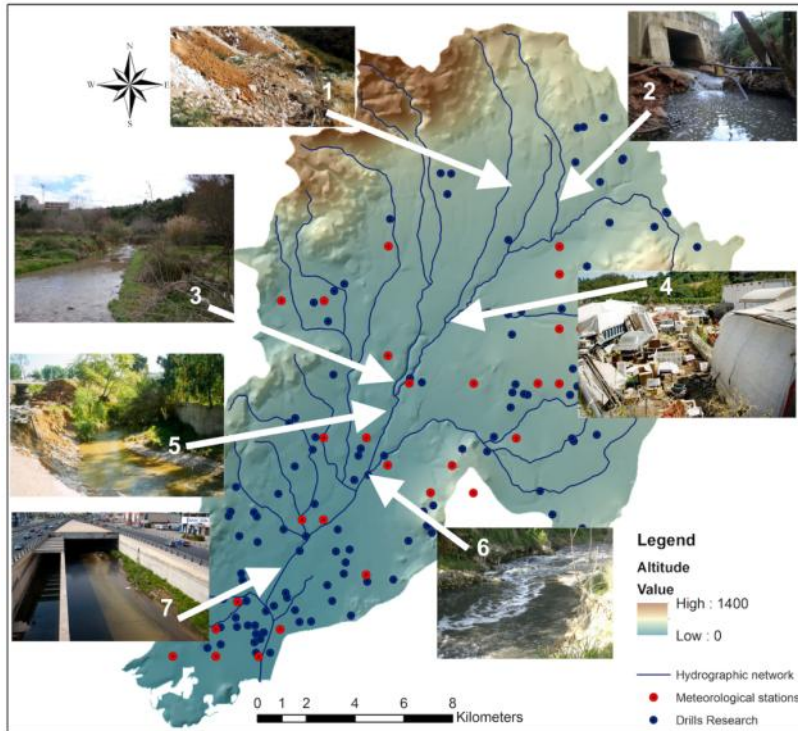
- Involved since the inception & proposal preparation.
- First time to participate in highly-demanding (H2020) R&D project as field experts, with specific skills & teams.
- Providing insights at top-level design goals, as both experts (specs) and end-users (crowd-sourcing).
- Additionally, provide medical assistance (first responders) and safety in all SCENT field operations in Greece.

Citizen Observatories, as in SCENT, has always been one of the main principles w.r.t. involving every citizen in preparedness and disaster response, not just personally but also collaboratively in his/her work, school, neighborhood.

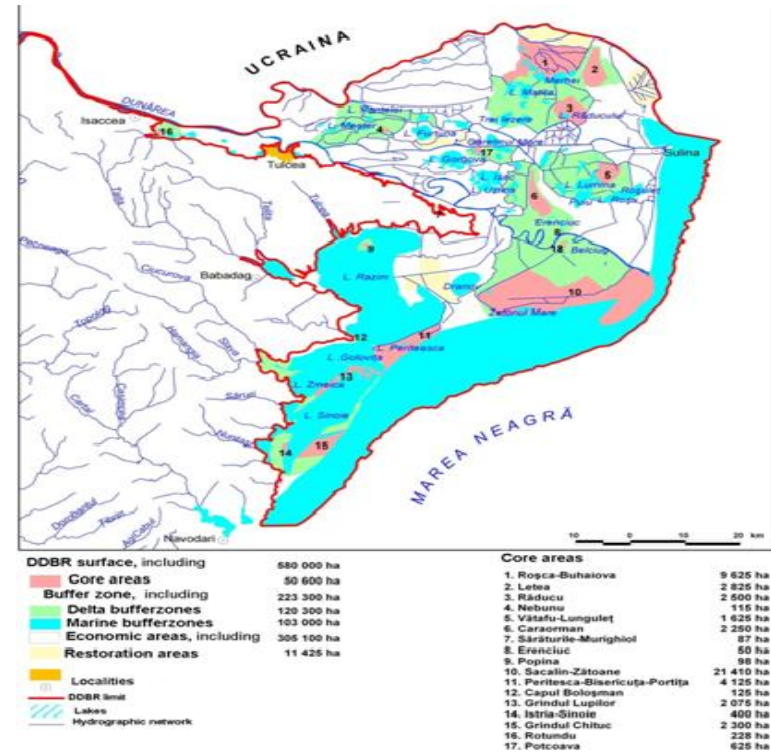


SCENT large-scale pilots

Urban demo: Kifisos river catchment in Attica, Greece



Rural demo: Danube Delta in Tulcea, Romania

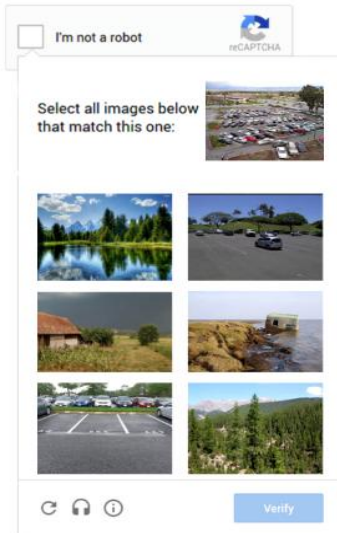


SCENT large-scale pilots (2)

- At least 200 participants in each demo, aiming to reach ~ 1000
 - SCENT NGOs (HRTA, SOR)
 - 5 municipalities around Kifisos mobilised by Attica regional authority
 - External volunteer groups & environmental associations
 - Individual citizens mobilised through SCENT dissemination campaigns



Birdwatchers @ Danube Delta



- Online SCENT toolbox validation
 - Download gaming app in personal devices for image annotation from Flickr, Panoramio
 - Use CAPTCHA plugin and implicitly annotate pool of images from open repositories

SCENT Current status (Sept/2018)



- **Focus groups**
 - ➔ Already conducted events with focus groups (experts) and plain citizens (end-users)
- **SCENT crowd-sourcing**
 - ➔ Available via web platform & mobile app, prototypes currently under development (“Explore”, “Measure”, “Collaborate”)
- **SCENT internals**
 - ➔ Architecture, design, SIE, taxonomy, mockups (GUIs), data fusion, image semantics, validation of submitted images (automatic & manual)
- **Pilots in Attica & Danube Delta**
 - ➔ Already finished first (1+1), preparing next campaigns, scheduling both closed- and open-call events for dissemination (2018+)





Find SCENT online:

Website: scent-project.eu

Twitter: [@SCENT_EU](https://twitter.com/SCENT_EU)

YouTube: [scent EU](https://www.youtube.com/scentEU)

Facebook: facebook.com/ScentEU

Email: info@eodathens.gr

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