



ANNEX C.1.1 & C.1.2

Action C.1:

C.1.1 Performance test and validation report regarding the prototype IMS monitoring device in terms of the pilot implementation for 2018.

&

C.1.2 Performance Test and Validation Report regarding the trap NMS prototype in the Pilot implementations

November 2018

LIFE CONOPS (LIFE12 ENV / GR / 000466)

**Development & demonstration of management plans against
- the climate change enhanced - Invasive Mosquitoes in S. Europe**



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 <p>ΜΠΕΝΑΚΕΙΟ ΦΥΤΟΠΑΘΟΛΟΓΙΚΟ ΙΝΣΤΙΤΟΥΤΟ</p>	<p>Benaki Phytopathological Institute (Coordinating Beneficiary)</p>
	<p>Agricultural University of Athens</p>
 <p>SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA Azienda Unità Sanitaria Locale di Cesena</p>	<p>Azienda Sanitaria Locale Cesena</p>
 <p>SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA Azienda Unità Sanitaria Locale di Ravenna</p>	<p>Azienda Unità Sanitaria Locale Ravenna</p>
 <p>CENTRO agricoltura ambiente 'Gioglio Nicoli'</p>	<p>Centro Agricoltura Ambiente “G. NICOLI” S.R.L.</p>
 <p>DEMOKRITOS NATIONAL CENTER FOR SCIENTIFIC RESEARCH</p>	<p>NCSR Demokritos</p>
 <p>ONEX</p>	<p>ONEX S.A.</p>
 <p>Regione Emilia-Romagna</p>  <p>SERVIZIO SANITARIO REGIONALE EMILIA-ROMAGNA Azienda Unità Sanitaria Locale di Ravenna</p>	<p>Regione Emilia-Romagna Public Health Service</p>
 <p>terra nova</p>	<p>TERRA NOVA Environmental Engineering Consultancy Ltd.</p>
	<p>Urban Environment and Human Resources Institute of Panteion University</p>

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This deliverable was implemented in the terms Action C.1 and concerns a report for the for the Performance test and validation report regarding the prototype IMS monitoring device in terms of the pilot implementation and the Performance Test and Validation Report regarding the trap NMS prototype in the Pilot implementations. The abovementioned deliverables were unified as suggested by the monitoring team.

STRICTLY CONFIDENTIAL REPORT

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The scientific team, which is involved in Action C.1 and contributed to the development

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Name	Expertise	Participants
Tania Zachariadou	Environmental Affairs Administrator	Athens International Airport¹ Environmental Services Department Tel: +30 210 3536715 Fax: +30 210 3537800 ZachariadouS@aia.gr www.aia.gr
Kate Stamatiadi	Free Zone Department	Piraeus Container Terminal S.A.¹ N. Ikonio, 185 38, Perama, Greece Tel: +30-210 4099100 Fax: +30-210 4099101 Vassilios.Kopelas@pct.com.gr
Anestis Karakasidis	Free Zone Department	
Vassilios Kopelas	HR Department	
Antonios Michaelakis	Project Coordinator	Benaki Phytopathological Institute Stefanou Delta 8, 14561, Kifissia, Greece Tel: +30 210 8180248 Fax: +30-10-8077506 a.michaelakis@bpi.gr www.bpi.gr
Dimitrios Papachristos	Entomologist, PhD	
Angeliki Stefopoulou	Agronomist, PhD	
Panagiotis Mylonas	Entomologist, PhD	
Georgios Balatsos	Public Health Inspector, MSc	
Dimitra Markogiannaki	Agronomist, BSc	
Georgios Koliopoulos	Agronomist, PhD	
Debora Kapantaidaki	Agronomist, BSc	
Romeo Bellini	Senior entomologist	
Marco Carrieri	Senior entomologist	
Luciano Donati	Entomologist	
Roberta Colonna	Information specialist	
Claudio Venturelli	Entomologist	Azienda Sanitaria Locale Cesena via Moretti, 99 – 47023 Cesena Tel.: +39 0547 352068 Fax: +39 0547352058 cventurelli@ausl-cesena.emr.it www.ausl-cesena.emr.it
Carmela Matrangolo	Entomologist	
Diana Venturini	Public Health specialist	Azienda Unità Sanitaria Locale Ravenna Via Fiume Montone Abbandonato, 134, 48121, Ravenna, Italy Tel: +39 0544 286856 Fax: +39 0544 286875 diana.venturini@ausl.ra.it www.ausl.ra.it
Giuliano Silvi	Epidemiologist	
Cristina Raineri	Epidemiologist	
Adonis Rovolis	Senior Scientist	Urban Environment and Human Resources Institute of Panteion University
CvRichardson	Senior Scientist	
Angelos Mimis	Senior Scientist	

		14 Aristotelous str., PC-17671, Athens, Greece Tel: +30 210 9247450 Fax: +30 210 9248781 kbithas@eesd.gr www.uehr.gr
Serko Haroutounian	Team coordinator	Agricultural University of Athens IeraOdos 75, Athens 11855 Tel: +30 201 529 4247, +30 210 529 4246 sehar@aua.gr www.aua.gr
Ioannis Spanos	Chemical Engineer MSc.	TERRA NOVA Environmental Engineering Consultancy Ltd. 39 Kaisareias str., 11527, Athens, Greece Tel: +30 210 7775597 Fax: +30 210 7775572 sotiropoulos@terranova.gr spanos@terranova.gr www.terranova.gr
Andreas Sotiropoulos	Environmental Scientist Msc.	
Ioannis Tsikos	Environmental Scientist Msc.	
Karaiskos Theofanis	Project Manager	ONEX S.A. 87, Kon. Palaiologou St., Chalandri, 15232, Greece Tel.: +30-210-4310218, +30-210-6085648 Fax.:+30-210-4310875 fkaraiskos@onexcompany.com www.onexcompany.com
Karageorgiou Elina	Engineer	
Panopoulos Ioannis	Technician	
Moirotsos Ioannis	Technician	
Triarchis Antonis	Engineer	
Zarkada Georgia	Technician	
Xristakos Georgios	Technician	
Ksylos Theodosios	Developer	
Voulgaroudis Aristeidis	Project Manager	

SUMMARY

BACKGROUND: *Aedes (Stegomyia) albopictus* (Skuse 1894) (Diptera: Culicidae), the so called “Asian tiger mosquito”, has been reported to several parts of Greece and is widespread in Attica region. The aim of this report is to test and validate the performance of MDs after installation in terms of pilot implementation, therefore, the comparison between MD and other means of mosquito surveillance (BG, ovitraps and/or HLC) in three premises (BPI, AIA, PCT).

RESULTS: The results, which refer to the years 2017 and 2018, show that the only IMS detected was *Aedes albopictus*, commonly known as the “Asian tiger mosquito”. According to the presented results, the highest number of mosquito eggs was in areas, which attributed to the local high presence of people, which favored the creation of a more suitable microhabitat for the Asian tiger mosquito. However, BG and MD were placed as close as possible to these sites and showed a low number of collected mosquitoes.

CONCLUSION: According to the comparison of MDs with other adult traps, it ranged to the same level. In 2018 MDs were operated for longer periods and therefore we were able to collect more entomological data compared to previous years. Therefore, we were able to see the seasonal abundance of the IMS, concerning the comparison between MDs and the other commonly available adult traps such as BG-sentinel. The threshold for adults’ traps (including MDs) is difficult to estimate because of several biases. Findings will help us to examine the relationship between mosquito density and mosquito infection rate in near future and identify the minimum threshold of mosquito density needed for *Aedes* invasive mosquito management (eg mosquito control and virus transmission).