

**Integrated information campaign
for the reduction of smoking related litter
on beaches**

LIFE12 INF/GR/000985

LAYMAN'S REPORT



The present publication is a deliverable of the **LIFE AMMOS Project**, which is carried out by the **MEDITERRANEAN SOS Network**, **TERRA NOVA Ltd.**, the **University of Patras** and **MARC S.A.**, with the contribution of the **LIFE financial instrument** of the **European Union**, as well as with the financial contribution of the **Green Fund** and **Blue Star Ferries**.

Project duration: 1.7.2013 - 31.3.2015

Total budget: 599.918 €

EU contribution: 299.709 €

Photographs: LIFE AMMOS Project Archive

Design-Layout: MEDITERRANEAN SOS Network

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Why LIFE AMMOS?

Cigarette butts (CBs) are the **most commonly littered item in the world**.

Approximately 5.6 trillion filtered cigarettes are smoked every year worldwide and an estimated amount of 4.5 trillion end up as litter. Apart from causing aesthetic degradation, cigarette litter causes serious environmental and socio-economic impacts. Cigarette filters:

- are **non-biodegradable**, as most people think. Composed of cellulose acetate, a type of plastic, CBs only break down into smaller and smaller plastic fragments (“microplastics”) that are accumulating in the natural environment in alarming quantities.
- **contain numerous hazardous chemicals**, such as nicotine, cadmium, lead and arsenic, which are partially filtered out during smoking. When the butts are discarded, these chemicals leach into the environment adding to the existing **water and soil pollution** and posing a **threat to wildlife**. Birds, fish, turtles and marine mammals often ingest CBs. This may lead to reduction in the food intake due to a false sense of satiation, blockage of the digestive tract and toxic chemical poisoning. Such an exposure can have various adverse effects, ranging from general debilitation, to starvation and death. Sometimes even young children accidentally ingest CBs.

Furthermore, CBs are **frequent cause of fires** when carelessly discarded.

Taking into account the intensity and extent of the occurrence of the specific litter items on Greek beaches, it becomes increasingly imperative to change public behaviour (smokers and non-smokers), as well as to develop the necessary infrastructure and tools to abate this problem.

The LIFE AMMOS Project focuses on preventing and reducing the smoking-related litter input into the coastal environment.

Furthermore, the Project seeks to increase citizens' awareness and understanding of the problem of coastal and marine pollution in general.



Implementing an integrated information campaign

To meet its objectives, the consortium has implemented an integrated information campaign based on the **combined use of digital communication technologies and traditional media**.

During its nearly two-year life cycle, the LIFE AMMOS Project developed a **series of innovative tools**, which:

- contributed to the implementation of a campaign at both the **national** and the **local level** (15 beaches).
- made possible the **systematic recording and monitoring of smoking-related litter** in the studied beaches, which was of major importance for the evaluation of the project impact on the environmental problem targeted.

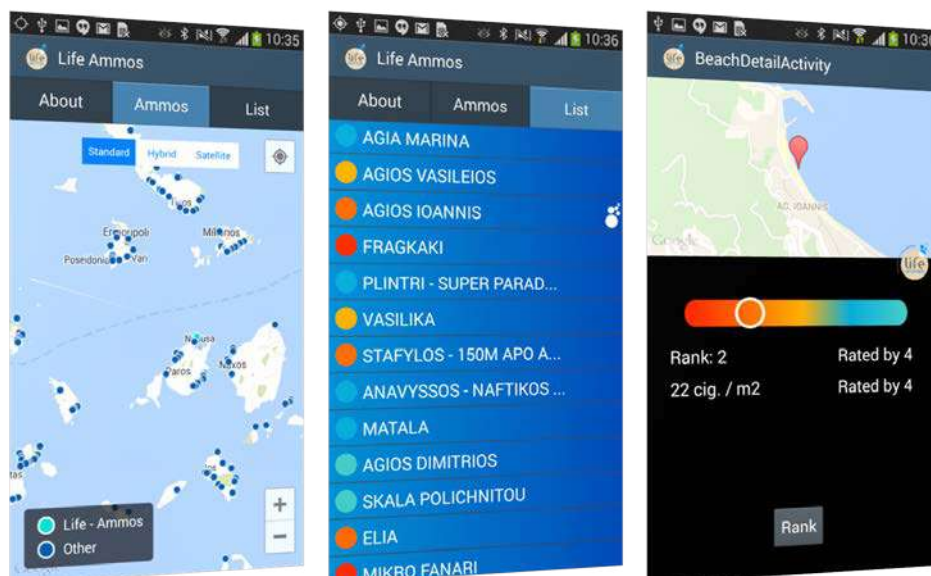
Nationwide communication campaign

Campaign in print - electronic and social media

- Design of the logo and crafting of the campaign message (slogan), that are both included in all deliverables.
- Development of the official website of the LIFE AMMOS Project, which is updated on a regular basis.
- Creation of a TV and a Radio spot, which have been approved by the Greek National Council for Radio and Television (NCRTV) as social messages and were widely broadcasted by public and private radio and televisions stations.
- Intensive use of Internet and social media (Facebook, Twitter, YouTube, Google+, Flickr)
- Dissemination to local and national media through 20 Press Releases, 188 articles in printed and electronic media, as well as through 20 TV and radio interviews.

Mobile application campaign

Under the context of the LIFE AMMOS Project, the mobile application “Ammos” has been developed by TERRA NOVA Ltd., which is available for download in the electronic stores App Store and Google Play. The App Backend (Database of beaches) has been extended to around 2.500 beaches.

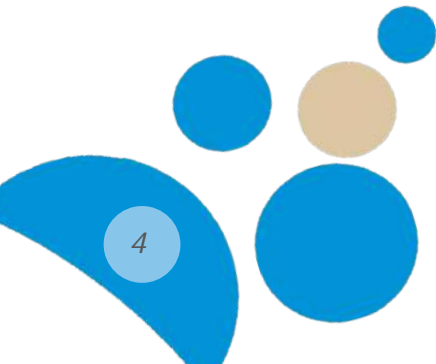


957 Downloads of the “Ammos” App
513 Evaluations of beaches



Do It Yourself campaign

The aim of the Do It Yourself campaign was to encourage citizens to replicate the on-site activities of the LIFE AMMOS Project and organize their own voluntary campaign, using the tools and methods that have been developed during the Project's implementation. Using these tools, 4 parallel voluntary actions have been implemented, with the participation of a total of 72 students.



Intensive (on-site) awareness-raising & information campaign

In order to obtain a sample that is representative of the current situation, as well as to ensure that the project results will be widely taken up and embedded, **15 beaches** have been selected that **cover almost all of the geographic regions of Greece**.

The most important prerequisite for the selection of beaches was the **sediment composition**. Cigarette butts, because of their low weight and small size, tend to be easily transferred in the environment by wind and rain. Therefore, a primary and essential condition for the study of the number of CBs was that the involved beaches would be sandy, as fine sand is able to hold larger number of CBs than gravel and pebbles. Thus, all selected beaches were sandy, except from one pebble beach (Agios Isidoros, Lesvos Municipality), which was selected in order to compare the results from the *in situ* investigation with those of sandy beaches. Other factors that were considered were **easy and free access, high number of visitors, high ecological and/or cultural value**.



- (1) **Fanari & Arogi** (Municipality of Komotini) | (2) **Epanomi** (Municipality of Thermaikos) | (3) **Agios Ioannis/ Ai Giannis** (Municipality of Zagora-Mouressio) | (4) **Loutsa/ Vrachos** (Municipality of Parga) | (5) **Kalogria** (Municipality of Dymaion/ Western Achaia) | (6) **Voidokilia** (Municipality of Pylos-Nestor) | (7) **Plytra/ Pachia Ammos** (Municipality of Monemvasia) | (8) **Vai** (Municipality of Sitia) | (9) **Georgioupoli** (Municipality of Apokoronas) | (10) **Tsambika & Enydreio** (Municipality of Rhodes) | (11) **Karfas** (Municipality of Chios) | (12) **Agios Isidoros** (Municipality of Lesvos) | (13) **Agios Ioannis/ Monastery** (Municipality of Paros) | (14) **Perissa** (Municipality of Thira) | (15) **Schinias** (Municipality of Marathon).

During the summer period May-September 2014, an intensive (on-site) awareness-raising and information campaign was implemented in those coastal areas.

The campaign included the **operation of info-kiosks**, with specially **trained staff** (Beach Supervisors). The Beach Supervisors were in charge of **informing tourists** and **distributing disposable ashtrays** and **informative material** (brochures, factsheets, posters).



*The Project's brochure
100.000 copies*



Example of the info-kiosk



*The beach ashtray in action
350.000 copies,
>175.000 of which were distributed on-site*



*The Poster
200 copies*

Monitoring the Project impact on the environmental problem targeted

September – October 2013

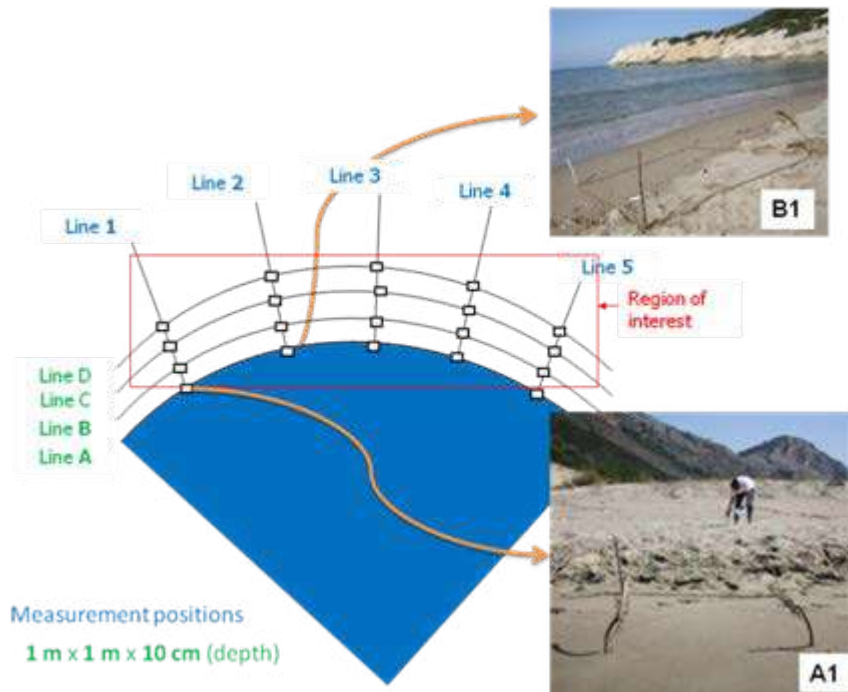
Step 1 - Drawing up an integrated cigarette butt monitoring system, consisting of the:

- Protocol for cigarette butts measurement on beaches.
- Form for cigarette butts measurements at the beach.
- Record file of cigarette butts on beaches.

Step 2 - First set of site visits.

Twofold objective:

- Conduct the field monitoring for assessing the status of smoking-related pollution.
- Engage with the local stakeholders.



Example of a representative grid showing the measurement positions defined for the cigarette butt measurements.

One grid was designed on every beach, covering its geographical characteristics and the different uses.

June – September 2014

In the last sampling period (September – October 2014), there was a **total reduction of 66.9% of the amount of CBs** that were recorded in the first sampling period (September – October 2013), while the range of the reduction rate/ beach was **18.5% to 90.1%!**

Step 3 - The next measurement cycle, was performed during the summer of 2014 - on a monthly basis.

The repeated measurements of the abundance of CBs took place approximately in the same positions and with the same methodology, so that the results from each sampling period could be quite comparable.

Environmental Education

Environmental Education is essential for helping children to grow into responsible and sensitized adults and as such has been a core element of the Project. The main objective of the Educational Programme developed during LIFE AMMOS is to:

- **foster students' knowledge and understanding** of the environmental problem targeted and, also, to further develop their attitudes and skills, as well as to inspire them to take action to reduce marine pollution/ marine litter in their local area.
- **equip the teachers with essential concepts** of Environmental Education and with the **skills** for the successful implementation of such programmes in their school.



The **Integrated Environmental Education Package** entitled "**Marine litter - The human footprint on coasts and seas**" consists of 5 Activity Sheets, 4 Fact Sheets and a Teacher Guide, and is freely available online.

Educational presentations were delivered to **5.095 students / 45 schools** in **Attiki, Thessaloniki** and **Patras**. The 45-minute slideshow is officially approved by the Ministry of Education and Religious Affairs.

One set of 5 outdoor interactive games have been designed.

The Educational Programme was presented in **8 training seminars for teachers**, whereas MedSOS implemented **5 dedicated workshops**, in collaboration with the School Activities' Managers and the Heads of Environmental Education at the Directorates of Primary and Secondary Education.





Further information

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