Advanced Noise Control strategies in HarbOuR

Report of Follow-up activities

Action B.3

Definition of a common Port Noise Impact Assessment (PNIA) method and application to Melilla port

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## Document Review

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1. Executive Summary

In report on Follow-up activities we make an updated summary of the different actions that the project is carrying out in reference to Activity B3 and the perspectives that we have until the end of the project.
2. Follow-up activities

2.1 Physical model and Noise map of the Port of Melilla & Noise impact assessment of the expansion of Melilla Port

In this action we have completed the following elements: B3 “Report on sharing Objectives”, which was scheduled to be completed for December 31, 2018 and which was finally completed on January 8, 2019. This report has been prepared mainly by the staff of the Melilla Port Authority and defines the methodology and goals of a common Port Noise Impact Assessment (PNIA) to Melilla port as well as its application. This report is based on the Port Authority experience on ongoing noise mapping and noise management, the current concerns that arise from noise issues affecting local citizenship and our port expansion plans. In this report is defined how the PNIA will be defined an applied to current Melilla Port operations and activities and to Melilla Port expansion plans. In particular, the main tasks to follow in the methodology are described:

- geographical definition and limits of the noise simulation model
- characterization of noise sources
- realization of noise maps
- impact assessment
- noise management

MPA produced a detailed plan for the actions. Responsibilities, data, validations, resources, and deadlines were proposed to CIRIAF and to the other project partners. MPA defined – under coordination and supported by ISPRA – prepared and developed the First Intermediate Meeting of the Project.

Continuing with the work carried out, we have deliverable B3 “Comparison of noise maps obtained using algorithms from ISO 9613-2 and new END annex II (Directive 2015/996 / EC)”, whose completion was scheduled for February 29, 2020 and which was finally concluded on April 22, 2020. Carried out by the professors of the CIRIAF Giorgio Baldinelli, Francesco Bianchi and Samuele Schiavoni, identifies three major differences in the estimation of the pressure produced in port and peri-port environments, between both algorithms.
The work has continued to advance thanks to frequent connections by computer means, as well as teleconferences, file and information shipments. Panoramic videos and photographic reports have allowed the creation of the physical model by CIRIAF to be fine-tuned. The Port Authority has obtained from the Melilla environmental authorities the best information available regarding acoustic zoning to facilitate the work of CIRIAF. As a consequence, deliverable B3 “Guideline for a common Port Noise Impact Assessment method” was produced, which was completed on April 27, 2020, with the scheduled date being April 30, 2020. It was carried out by Giorgio Baldinelli, Francesco Bianchi and Samuele Schiavoni (CIRIAF), identifies the critical points of port activity when producing impacts in the areas near the Port of Melilla.

During the interaction between the technical staff of the Melilla Port Authority and the CIRIAF experts, we are discovering that the expectation is growing among the former that the help that this methodology can provide among those responsible for the design of port extensions and the planning of activities, it can be very well received by the profession. These expectations come from the fact that they usually work “blind” regarding the impact of noise and vibrations, being aware that it is a potential source of problems for port authorities with their environment.

2.2 Intermediate Meeting in Melilla.

In this framework:

- A Public Conference was offered to Melilla stakeholders with more than 40 participants. The Public Conference has been recorded, dubbed to English, and will be uploaded to the Project’s Platform.
- A technical visit was carried out in the area of Melilla port, allowing the partners to get more detailed knowledge about the Melilla conditions regarding to Action B3.
- An internal meeting was organized, under ISPRA coordination.
- A set of building-team activities took place.
9:00 Medios gráficos y coffee break
9:30 – 10:00
Workshop opening
10:00 – 10:30
Public presentation of project to the stakeholders (5 minutes for each partner).
10:30 – 10:40
Coffee break
10:40 – 11:00
Mini technical session about noise and vibration
11:00 – 11:30
Port Noise Impact Assessment (PNIA) concept
11:30 – 12:00
Press conference
12:00 – 14:00
Technical port visit for the preparation of noise measurement discussions
14:00 – 16:00
Lunch
16:00 – 20:00
Internal meeting
2.3 Difficulties, problems and solutions adopted

In the financial part, the main difficulty that the Melilla Portuaria Authority has had in the project has been the low estimate that we made in the cost / hour of the workers. We have investigated what may be the origin of having estimated the hourly cost of our staff in a rudely low way. It has not been a localized problem, in one person, if not systematic in all categories. We have seen that it has dragged on from the first opportunities when we prepared proposals for the purpose of studying port noise. In 2014 and 2015, we already made estimates for this purpose and they were misdirected as data were taken from personnel recently incorporated into the workforce. Reviewing the documentation with which those proposals were prepared, it has been found that the cost to the employer (social security and others) was not included in the total cost. In this way, except in very specific cases, we have underestimated the chargeable hourly cost. Unfortunately, those data tables have been reused and not revised.

In this regard, the Melilla Port Authority is fully aware that the European aid it will finally receive is limited to the maximum amount foreseen, which it accepts and shows its agreement. We understand that it corresponds to continue the declaration of hours of work actually
applied for the effective cost for the Port Authority. We are using actual productive time derived from the approved timesheets for the calculation of the annual working time of the personnel.

During the 1st Intermediate meeting, as reported in the FS, Melilla Port Authority managed to cover all the objectives spending only 4.441,28 € instead the foreseen budget of 8.000,00 € for “Organization of event at Melilla”.

This reduction in the costs are consequence of:

- the duration of the event was shorter than expected.
- the professional equipment was needed less time.
- We managed to use a free space for the open conference.
- Some support for event management was assumed by Melilla Port Authority.

We propose to allocate the surcharge budget to the performance of complementary sound measurements to better calibrate the model as explained below.

In the technical part of the project we have had the difficulty generated by the stoppage of port activities that COVID-19 has represented. Additionally, the decision of the Kingdom of Morocco to, on the one hand, close the passage of goods through the Melilla border, and on the other hand, suspend this year 2020 the passage of Moroccan emigrants working in Spain, France, Germany, Belgium and others countries.

This lack of activity has produced difficulties in making noise measurements at a normal operating level. Consequently, with the supervision of the technical partners of the project, we will carry out a measurement campaign to refine the application of the noise map model. For this, we are going to increase the budget foreseen for measurements, with the budget not consumed in the activity "Organization of an event in Melilla"

The Melilla Port Authority's accounting system has been adapted to allow a clear accounting separation of the expenses charged to the project. The separation mechanism has been to generate specific accounting accounts for each type of expense. You only have the limitation of
the allocation of personnel costs, which must be done manually.

### 2.4 Replication & Communication plan

We think that it is possible to present an application project of the "Noise Monitoring System" in Melilla, through Fondo 4.0 (https://ports40.es/)

We have established contact with different European and Spanish organizations and entities to plan the best way to present the project results, bearing in mind that the current pandemic situation may not completely disappear in the short term.