



Advanced Noise Control strategies in HarbOuR



Autorità di Sistema Portuale
del Mar Tirreno Settentrionale

Activities carried on by AdSP MTS

Figures of Merit and awareness raising

Alessio Cerulli

ANCHOR LIFE webinar March 30th Tuesday 2021



In the first three quarters of 2020, the Port System has lost 17.8% traffic in comparison with 2019 levels. Severe drops have been recorded as for containerized cargo (minus 10%), Ro-Ro traffic (minus 16%) and new cars (minus 39%).

Only forestal products have gained ground, with a growth of 4%.

It has been therefore extremely difficult to incentivize port operators to more sustainable port operations in a dire economic downturn.

Figure of Merit	How to determine it	Type	How to measure it	Traffic category
Low Impact Handling	Handling speed (Crane moves per hour/spreader cycle)	Quantitative- impact on port operations	Direct observation of declared values	Container
Low impact structures and facilities	Verification on purchased equipment/works, Business plan to be evaluated	Quantitative- impact on operator's costs	Desk verification (Business plan); direct observation of declared values	All categories
Electricity instead of diesel or diesel-electric moving equipment	Verification on purchased equipment/ Business plan to be evaluated	Quantitative- impact on operator's costs	Desk verification (Business plan); direct observation of declared values	All categories, more relevant for Container traffic
Use of supply energy ship-shore	Number of ships using electrified berth	Qualitative	Data from Harbour master	Passenger terminal
Interventions to mitigate noise impact	Verification of works	Quantitative- impact on operator's costs	Desk verification (Business plan); direct observation of declared values	All categories

ADSP MTS has equipped the port of Portoferraio with acoustic sensors and it is set to provide the port of Livorno with acoustic sensors too, by the end of April 2021. It will be capable of assessing noise levels and noise sources.

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Figures of Merit

Figure of Merit	Impact	Incentive	Means of verification
Low Impact Handling	Lower revenues	Lower fees	Business plan, Balance sheet
Low impact structures and facilities	Higher costs investment costs	Lower fees, extend concession length	Business plan, Balance sheet
Electricity instead of diesel or diesel-electric moving equipment	Higher investment costs	Lower fees, extend concession length	Business plan, Balance sheet
Use of supply energy ship-shore	No economic impact on the concessionaire; marketing actions to reach new customers-for shipping companies installing transformers and other equipment on vessels can cost up to half million euros	Better evaluation of the business plan	Business plan
Interventions to mitigate noise impact	Higher costs investment costs	Better evaluation of the business plan, extend concession length	extend concession length

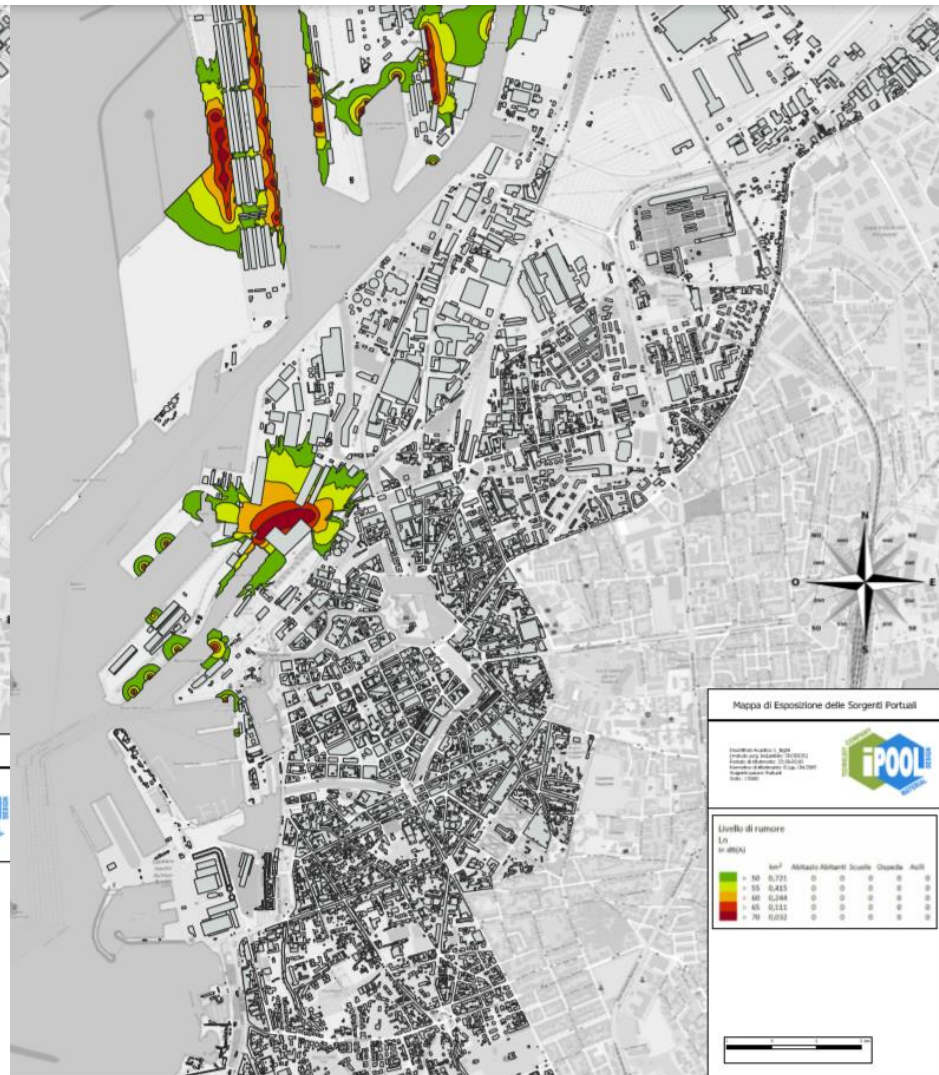
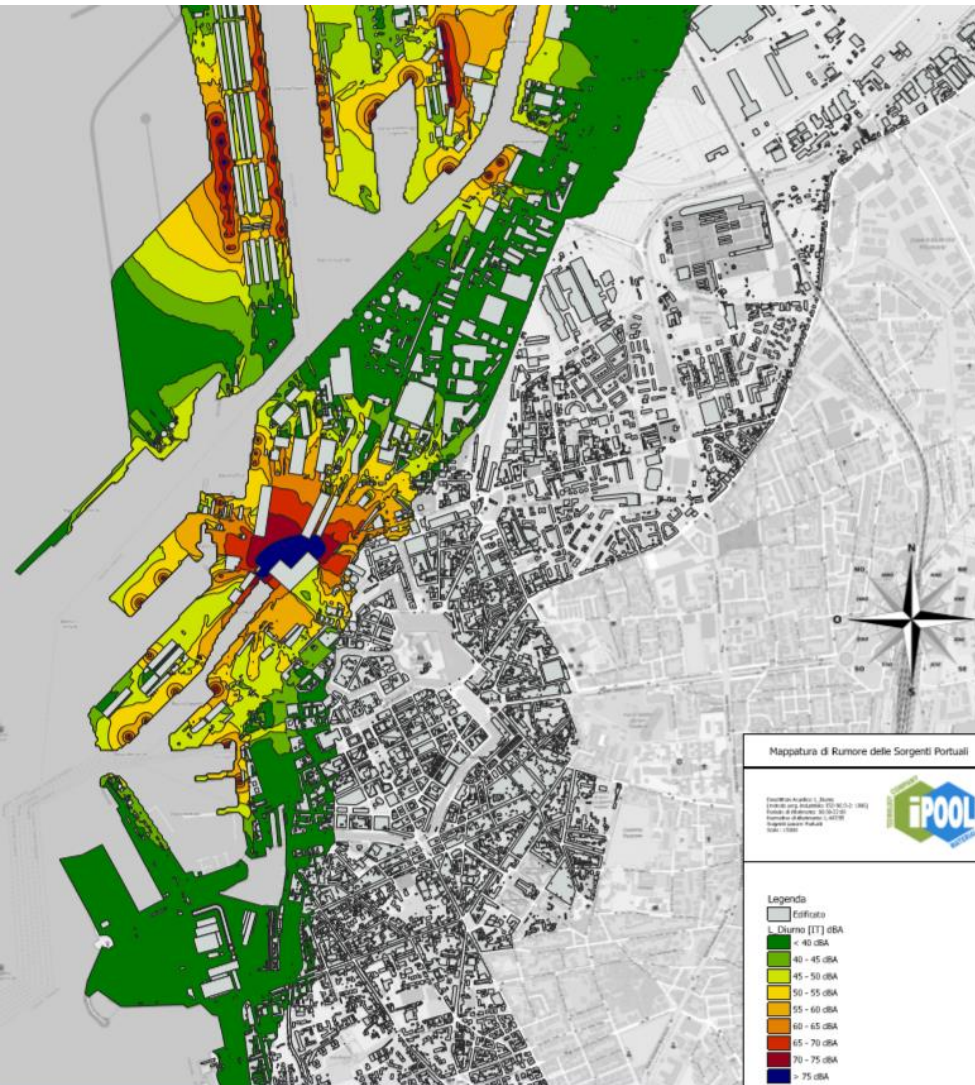
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Figures of Merit

Acoustic mapping already available



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We are going to provide a simulation of the noise of the following polluting sources:

- Means of port handling from diesel propulsion to electric propulsion (at least three port terminals);
- Berthing of ships at the quay in the port, with electrification of the quays, for replacement for all ships of fuel propulsion with the supply of electricity;
- Reduction in the handling of goods, with slowing down of speed of the execution of the unloading and loading of goods (at least for three port terminals);
- Identification of at least 5 acoustic mitigation interventions in the port and estimate of impact on noise (e.g. dunes, sound-absorbing asphalt, noise barriers). Basically, it will be sound –absorbing asphalt.

On February, ADSP MTS intensified the awareness raising campaign to shed light on the benefits brought by LIFE ANCHOR project.

On Thursday the 18th of February we dedicated an event on EU noise projects that gave the chance to present also the outcomes of LIFE ANCHOR to a wide public of experts and stakeholders. After the delivery of the Figures of Merit simulation, roughly in May 2021, a webinar on the Figures of Merit will be presented to a selection of local stakeholders.

In so doing, at least 15 additional stakeholders will be contacted and involved in the raising of awareness on the LIFE ANCHOR project.

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Thank you for your attention

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