

# D.5.1.1 SET OF DEVICES AND INFORMATION SYSTEM TO PROMOTE SMART AND EFFICIENT TRAFFIC FLOWS FOR ALL TYPOLOGY OF PASSENGERS IN THE PORT OF ANCONA

<b>Working Package n:</b>	WP5 Developing tools and harmonizing services for a sustainable intermodal mobility
<b>Activity (n. and description):</b>	5.1 Analysing existing, re-use and development of new smart technological tools and advanced solutions
<b>Deliverable (n. and description):</b>	D.5.1.1 n. 1 set of devices and information system to promote smart and efficient traffic flows for all typology of passengers
<b>Responsible Partner:</b>	PP4 – Central Adriatic Ports Authority
<b>Status:</b>	Final
<b>Deadline (as from the original AF):</b>	02/2023
<b>Finalized on:</b>	06/2023

## 1. Background, scope and description of the pilot action

### Background

The port of Ancona has a strategic role in terms of passengers' flow crossing the Adriatic, with a total of nearly 1 million passengers transiting in the port of Ancona towards international destinations: Greece, Croatia and Albania.

To decongest and optimize the passengers flows especially in the peak season, ADSPMAC needed to upgrade the communication flow in the port of Ancona through the adoption of new smart technological and advanced solutions for the provision of real-time information to passengers embarking and disembarking. The intervention aims to smooth passengers' flows in the port area.

### Scope

The pilot actions "D.5.1.1 n. 1 set of devices and information system to promote smart and efficient traffic flows for all typology of passengers" is aimed at improving the real-time information flow to international passengers embarking and disembarking at the port of Ancona. The aim of this activity is to ease access to real-time information concerning ferry timetables, regarding indications on the quays, destinations, delays, urgent information, in order to increase passengers' comfort in the port area; moreover, the information will allow communication in different languages (EN, ITA, CRO, GR) and also for the disabled passengers (hearing impaired).

### Description of the pilot/investment

The "D.5.1.1 n. 1 set of devices and information system to promote smart and efficient traffic flows for all typology of passengers" consists of the acquisition of 2 innovative LED technology displays that are installed at the ferry ticketing terminal and at one of the main gate of the port of Ancona, Varco da Chio, to provide real-time information to passengers while embarking and disembarking, in several languages (Italian, English, Croatian, Greek). The information concern time, date, quay, and destination of the ferries as well as delays, urgent communication, or service information.

The devices are integrated with the "D.5.1.9 n. 1 upgrading on-time information system in the port of Ancona" into a single coordinated system through the development of software able to ensure the autonomous management and remote control of the system and of the devices, and to connect it to the available networks (eg. Wifi, optic fibre, etc.), to obtain a fully integrated and autonomous communication system for passengers and for emergency situations.

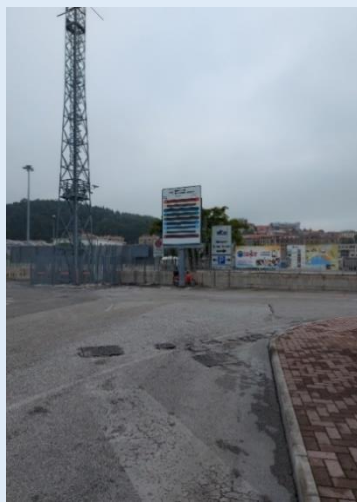
## 2. Implementation of the pilot action (including a description of the externalized services/supplies/works)

The “D.5.1.1 n. 1 set of devices and information system to promote smart and efficient traffic flows for all typology of passengers” was externalized with “D.5.1.9 n. 1 upgrading on-time information system in the port of Ancona” to Eritel company, according to the technical feasibility project implemented by Trillini Engineering.

All the legal and administrative documents for the procurement to Eritel were finalized within December 2022. The works for the substitution of the current displays have been finalized in June 2023.

Below, a series of photos of the different phases of the works:

Ex-ante situation at Da Chio gate (on the left) and at the ticket office (on the right): during the first phase, the old panels were removed



Work in progress: for security reason, also the concrete pillar had to be removed and substituted with a new one in both sites. Excavation works and filling up with the new basement were realized



New panels set up: the new concrete pillar and the LED displays are set up





Ticketing terminal new MIMOSA LED panels



Gate "Varco Da Chio" new MIMOSA LED panels

### 3. Information about stakeholders role/involvement

The need for the upgrading of the real-time information system of the port of Ancona was detected in particular by the same Port Authority System. The existing displays presented several criticalities in terms of visibility, efficiency in delivering the communication, lack of application of digital and innovative technologies, lack of a remote managing and connection with the operative room. The same criticalities were highlighted by the maritime agencies and the passengers' assistance provider that, based on their daily experience with the passengers in transit, could collect and report feedbacks to the ADSPMAC.

ADSPMAC is very active in the involvement of the stakeholders, namely the maritime agencies and the passengers' assistance providers, for the identification of solutions to jointly improve the experience of the passengers at the port of Ancona. The stakeholders are informed on a regular basis on the initiatives of ADSPMAC to upgrade the passengers' services and were informed also about the ongoing works for the realization of the pilot action.

### 4. Lessons learnt and conclusions

The pilot action contributed to:

- improve the efficiency, smoothness, and on-time diffusion of communication to passengers during the embarking and disembarking phases;
- increase the inclusiveness of the communication flow that can now address an international audience speaking English, Italian, Greek and Croatian, and a target of disabled passengers such as equally impaired people;
- substitute aged equipment with new technologies more efficient, reliable, and environmentally sustainable;
- increase the efficiency and improve the management of security tasks thanks to the integration, through the ad hoc software that connects the devices with the operative room in the port authority, between the security operations and the passengers flow;
- improve the smoothness of passengers' flow, due to a more efficient real-time information system in the port of Ancona;

## 5. Problems found and adopted solutions

The main problems concerning the “D.5.1.1 n. 1 set of devices and information system to promote smart and efficient traffic flows for all typology of passengers” were related to the public procurement procedures and to obstacles during the works phases.

The Central Adriatic Ports Authority faced difficulties in the awarding of both the project design and the physical realization of the pilot action. Both public procurement procedures had to be repeated twice due to the lack offers received. The project design and direction of the works were assigned to Trillini Engineering; then, a public procurement procedure to implement the physical works was launched in March 2022, but no application was registered. Thus, on July 2022, the Central Adriatic Ports Authority launched a direct award procedure to Eritel society to realize the D.5.1.1 n. 1 set of devices and information system to promote smart and efficient traffic flows for all typology of passengers”; the contract could be signed in December 2022.

During the construction works, a very old water pipeline was found on the place for the installation of one of the panels, that need to be substituted. Thus, it was necessary to modify the initial project design for the installation of the new concrete pillar, causing some delays in the timing of the works. However, the pilot action was concluded within the timeline.

## 6. Expected follow up (after project closure)

### Expected follow up

The “D.5.1.1 n. 1 set of devices and information system to promote smart and efficient traffic flows for all typology of passengers” and the “D.5.1.9 n. 1 upgrading on-time information system in the port of Ancona” provided a solid benchmark to realize similar technologies also in the other ports managed by the Central Adriatic Ports Authority. They are one of the steps of a wider strategy to improve the quality of the communication flow with the passengers and the access to the embarking facilities, not only in the port of Ancona but also in the other ports of the Central Adriatic Ports Authority. One of the main follow up was the realization, within MIMOSA project, of a study on the accessibility for disabled passengers in the port of Ancona and Pesaro and the creation of a dedicated section in the institutional webpage, and the setting up of a kiosk to provide information to passengers to the port of Ancona, as emerged during the local consultations with the stakeholders. Further activities to increase the quality of the services to the passengers will be identified with the local stakeholders.