

D 5.1.2. – DEPLOYMENT DEFINITION IN THE PILOT SITE ANCONA

Activity 5.1 – Pilot implementation

June, 2022 - Final

Partner: Lead Partner, Municipality of Ancona

Authors: Cocciarini, Campanari, Vukorep

Email: <stefano.campanari@comune.ancona.it> <sanja.vukorep@comune.ancona.it>

Project Acronym	E-CHAIN
Project ID Number	10048282
Project Title	Enhanced Connectivity and Harmonization of data for the Adriatic Intermodal Network
Priority Axis	4 - Maritime Transport
Specific objective	4.1 - Improve the quality, safety and environmental sustainability of marine and coastal transport services and nodes by promoting multimodality in the programme area
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Work Package Title	Services and Transport Vehicle Integration
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Activity Title	Pilot Implementation
Partner in Charge	LP – Municipality of Ancona
Partners involved	PP1 - Amatori Interestate SRL PP2 - Brusutti S.R.L. PP4 - University of Trieste PP5 - University Of Rijeka, Faculty Of Maritime Studies Rijeka PP7 - Jadrolinija PP8 - City of Split
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VERSION CONTROL

Data	Version	Prepared by	Revised by	Approved by	Revision	Comment
December, 2021	V1	Marco Cocciarini	Campanari Stefano, Vukorep Sanja		draft	
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ACRONYMS / ABBREVIATIONS

ACRONYM	DEFINITION
SoA	State of the Art
PP	Project partners
PT	Project Team
TC	Technical task coordinator
WP	Work package
IT	Information Technologies

REFERENCE DOCUMENTATION

No	TITLE	REPORT No.	PUBLISHED BY
1	<p>Application Form – E-CHAIN - Enhanced Connectivity and Harmonization of data for the Adriatic Intermodal Network</p> <p>2014 - 2020 Interreg V-A Italy - Croatia CBC Programme Call for proposal 2017 Standard - E-CHAIN Priority Axis: Maritime transport</p>	Application ID: 10048282	Lead Applicant: Municipality of Ancona

1. INTRODUCTION

1.1 PURPOSE OF THE DOCUMENT

This document is relevant to the activity 5.1 Pilot implementation of E-CHAIN project - Enhanced Connectivity and Harmonization of data for the Adriatic Intermodal Network.

Deployment encompasses all the processes involved in getting E-CHAIN hardware and software up and running properly in its environment, including installation, configuration, running, testing, and making necessary adjustments. The purpose of this document is to provide specification of installation (Installation manuals) for the Pilot Sites of Ancona/ Split/Venice. It contains the specific deployment information of related services in each Pilot Sites: infomobility system, multimodal travel solution, touristic co-marketing.

It is the operational document for the execution of the project being used:

- by the Task Manager (TM) and Project Team (PT) to provide detailed description and specification of installed Info-panels
- by the other Activity 4.3 Integration and testing - needed as a reference document for D 4.3.2 – E-CHAIN commissioning requirements and D 4.3.4 – Commissioning report
- by the Main stakeholders/beneficiaries – Municipality of Ancona/Split/Venice as a reference document of implemented services

1.2 WORKING PRINCIPLE

This document contains specification of implemented services for all pilot sites, and for Ancona and Split, of totem physical installation, their microlocations, network and communication implementation specification for deployed info-panels.

The main sources of data for defining test procedures derive from other deliverables, as follows:

D 4.1.1 – Hardware procurement for Municipality of Ancona. List of hardware needed for the project and the pilot site. Totem (windows based and managed by digital signage framework for developing ad hoc sw), physical architecture will be provided, potential restrictions due to permissions, security and safety in public property. Environment (server, etc.) dedicated for the deploy

D 4.1.2 – Hardware procurement for Municipality of Split. List of hardware needed for the project and the pilot site. Technical specification definition for Hardware, Software, Networking device, Totem, Panel PC. Totem physical architecture will be provided, potential restrictions due to permissions, security and safety in public property. Environment (server, etc.) dedicated for the deploy.

D 4.2.1 – E-CHAIN software environment. Identifies requirements software environment, specifies software environment and infrastructure.

D 4.2.2 – E-CHAIN platform (first release). Platform developed, first draft

D 4.2.3 – Interface development kit. Guidelines how to use APIs/Web Services realized according to different services offered to travelers using standards (XML, JSON, etc.). E.g. WS to gather data about timetable (GTFS format), to integrate E-CHAIN platform with local systems. Guidance for using web service will be provided

D 4.2.4 – E-CHAIN platform (final release). Platform and components developed. The release includes different communication channels and relative guidelines: WEB, WEB APP, totem and alert. Multilanguage will be available including language detected by the device. Moreover, geo-localization by m-device supports and navigates the users until the next destination (e.g. routing up to the boarding point) having the scope to limit the traffic congestion and fuel.

D 4.3.4 – Commissioning report. Documents the Verification and Commissioning environment and procedures applied in practice for services and components of the platform.

The coordinator of this activiti is LP, with the participation of PP1, PP2, PP4, PP5, PP7, PP8.

2. BACKGROUND INFORMATION

E-CHAIN (Enhanced Connectivity and Harmonization of data for the Adriatic Intermodal Network) main objective is to enhance connectivity and harmonization of data for the Adriatic Intermodal Network, through the realization of a modular integrated software (E-CHAIN platform) for the management of intermodal transport services in port areas for passenger transport. To enhance the current situation, E-CHAIN will focus on providing new services such as an improved Port multimodal info mobility system for the passengers, a ticketing system integrated with other transport modes, an advanced touristic co-marketing tool for the operators. These services will be designed and deployed in the selected pilot sites (Ancona, Split and Venice). A Business model suited to adapt the technology developed in the three applicative contexts will be created and specific needs will be taken into account.

The aim of WP4 is to develop, test and implement all components of E-CHAIN platform.

For this reason, development shall comprise a set of customer oriented services, related to mobility and tourism that have been selected in the WP3. Specific objectives:

- Develop selected services according to the specifics (technical and not) identified in WP3;
- Roll out service versions at pilot sites;
- Develop WSs to allow the integration between different services/systems for a multimodal and interoperable transportation
 - Timetables and travel solution optimizing resources (vehicles, staff), real-time events (e.g. delays) in a seamless solution: from Ancona centre to Split, train+bus+ferry complete information available by APP, WEB, totem.
 - Booking and ticketing modules to allow the payment of transport modes operated by different operators (Conerobus in Ancona + Trenitalia + Jadrolinija), thanks to the integration between different IT systems and stakeholder involvement.
- Develop help-desk system to assist travellers during the trip according to their needs.

3. PILOT SITE 1 - ANCONA

3.1. INTRODUCTION

The pilot site 1 foresees the installation of 2 totems on a fixed support, one internal and one external and of a third device integrated in a showcase.

Microlocations:

Item	Location	Outdoor/Indoor	DeviceName
1	Coneropoint Piazza Ugo Bassi	Indoor	E-CHAIN-A1
2	La Edicola Tourist Infopoint in Piazza Roma	Outdoor	E-CHAIN-A2
3	Parcheggio Archi in Via Marconi	Indoor	E-CHAIN-A3

One of the totems will be located in a demanding outdoor environment exposed to atmospheric influences (strong sunlight, high temperatures, wind, rain), can be the target of vandals and are intended for intensive interactive use. The quality and robustness of the device and the outer casing must correspond to the operating conditions in order to perform its E-CHAIN project function in the long run.

Both the totems need stable power supply and internet connection of sufficient bandwidth as well as a system backup.

After the installation and initial setup of the operating system, the totems will be software maintained and its contents updated online. The panels are intended for interaction with users and display of real time information, so non-stop availability is necessary.

A totem will be installed indoors on a ground support inside the maritime station.

A totem will be placed outside in front of the old maritime always on ground support.

A third device will be a screen inside the window of the tourist information office in Piazza Roma (a re-adapted newsstand), without ground support.

3.2. INFO-TOTEM(S) IMPLEMENTATION

The detailed Hardware specification, physical architecture and hardware installation requirements for the totems is described in the document D 4.1.1 – Hardware procurement for Municipality of Ancona.

This document contains the conditions that must be met for the implementation of the software solution available on Totems and a manual detailing all steps of its implementation.

3.2.1. WEB SERVER APPLICATION INSTALLATION AND CONFIGURATION

A prerequisite for the proper functioning of the Info-panel is the availability and connection to the E-CHAIN Web server.

Local Server name:	e-Chain	
Local Workgroup:	ECHAIN	
Internal IP (for VPN acces):	10.10.77.2	
External IP (only HTTP(S)):	194.1.255.111	
Access Username (VPN & Server):	globeinside	
Access Pwd (VPN & server):	*****	
Web access (HTTP(s))	www.echain.eu	(194.1.255.111)

3.2.2. PREPARING TOTEMS FOR KIOSK CONFIGURATION

E-CHAIN totems are intended for public use and will run in single-app kiosk mode that uses the Assigned Access feature to run a single app above the lock screen. When the kiosk account signs in, the app is launched automatically, so the person using the kiosk cannot do anything on the device outside of the kiosk app. There are some considerations and configuration recommendation to be followed for more secure operation and user experience.

Prerequisites: Touch screen Totems PC with preinstalled Operating system Windows 10 Professional or higher and Internet browser Chrome 19 or higher, Internet connection.

Kiosk mode preinstalment consideration

- User account control (UAC)¹ must be turned on to enable kiosk mode
- Sign in as kiosk users on the physical device that's set up as a kiosk. Kiosk mode isn't supported over a remote desktop connection.
- As Totems operates in public-facing environments with auto sign-in enabled, user account with the least privileges, such as a local standard user account is to be used.

Configuration recommendation

For a more secure kiosk experience, Microsoft recommend some configuration changes to the device before it is configured as a kiosk²:

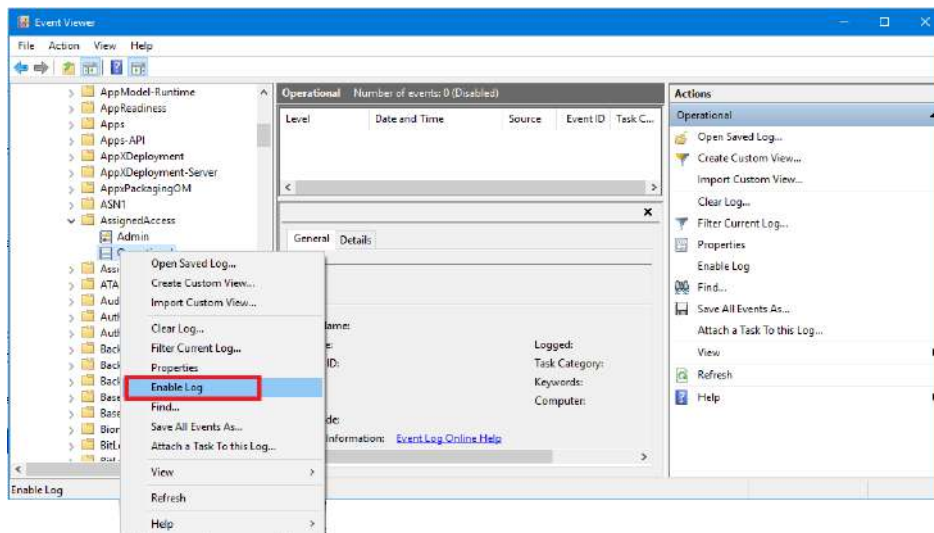
- Hide update notifications
- Enable and schedule automatic updates.
- Enable automatic restart at the scheduled time
- Replace "blue screen" with blank screen for OS errors
- Put device in "Tablet mode"
- Hide "Ease of access" feature on the sign-in screen

¹ Please consult Microsoft documentation on <https://docs.microsoft.com/en-us/windows/security/identity-protection/user-account-control/user-account-control-overview> for UAC configuration

² Detailed information on recomonded configuration changes can be found on <https://docs.microsoft.com/en-us/windows/configuration/kiosk-prepare>

- Disable the hardware power button
- Remove the power button from the sign-in screen
- Disable the camera
- Turn off app notifications on the lock screen
- Disable removable media

Enabling Loggings - In order to help troubleshoot kiosk issues Logs about configuration and runtime issues should be obtained by enabling the **Applications and Services Logs\Microsoft\Windows\AssignedAccess\Operational** channel, which is disabled by default.



Automatic logon for your kiosk device should be configured, so when kiosk device restarts, from an update or power outage, the device will sign in to the assigned access account automatically. Check that Group Policy settings applied to the device don't prevent automatic sign in.

There are some some windows features that have **interaction and interoperability issues**, so follow Microsoft recommends³ to take it in consideration when running assigned access.

Testing kiosk configuration

It is advisable to test configurations before deploying configurations to physical devices. It can be done by using a Virtual machine (VM) to test single-app kiosk configuration and upon successful testing on VM, the same configuration can be applied to all Totems in the all Pilot Sites.

3.2.3. SINGLE-APP KIOSK CONFIGURATION

Devices and network:

Item	DeviceName	IP Address	Gateway	DNS	Wrls SSID	WPA2-password
1	E-CHAIN-A1	172.16.90.11	172.16.90.1	208.67.222.222	-	-
2	E-CHAIN-A2	87.26.107.43	87.26.107.1	208.67.222.222	-	-
3	E-CHAIN-A3	172.16.90.12	172.16.90.1	208.67.222.222	-	-

AdministratorName:

AdministratorPassword:

AssignedUser: TotemUsr

AssignedUsrPsw:

ApplicationName: E-CHAIN Ancona

AppUrl: <https://e-chain.eu/totem/ancona>

³ Consult <https://docs.microsoft.com/en-us/windows/configuration/kiosk-prepare>

There are several ways to setup single-app kiosk mode that can be consulted in the relative guide on the Microsoft website at this page <https://docs.microsoft.com/en-us/windows/configuration/kiosk-single-app>

Chrome must be launched as a "single app". PC boots to a specific web page without any log in.

- The URL to be used in the kiosk to launch the web app: <https://e-chain.eu/totem/ancona>

After a few minutes of inactivity, the browser goes back to the start page.

- Create a scheduled task that runs that would close the browser and reopen it. Test out the trigger "idle", or on workstation lock.

If it is not supported or for some reason it is not possible to use the windows kiosk mode, it is still possible to use the same chrome mode. In particular, by adding a chrome user and adding the "-kiosk" parameter to the command line that launches the application, it is possible to use this mode. In this version it is then possible to regain control through the keyboard with the key combination "Alt + tab". The url to be used in the kiosk to launch the web app will be <https://e-chain.eu/totem/ancona>

4. INFO-PANEL APPERANCE

4.1. INFO-PANEL APPERANCE

Totem E-CHAIN 1

Location: Conero Point in Ugo Bassi Square



Totem E-CHAIN 2

Location: Parcheggio degli archi, parking in Via Marconi



Totem E-CHAIN-S3

Location: Tourist information center “Edicola”, Piazza Roma



4.2. TOTEM HOME SCREEN APPEARANCE

In the idle state of the totem always displays a floating E-CHAIN logo with a “touch to use” text.

When the totem is started, or after inactivity (screen saver mode), the E-CHAIN Totem web application restarts displaying the English version of the content. The info panel initial screen layout is shown in the picture below⁴



⁴ the image shows the Web version of the totem screen. On the totem itself or the mobile application, the groups of icons: Travel, Experience Split, Moving around the city and Useful info are displayed in a vertical sequence

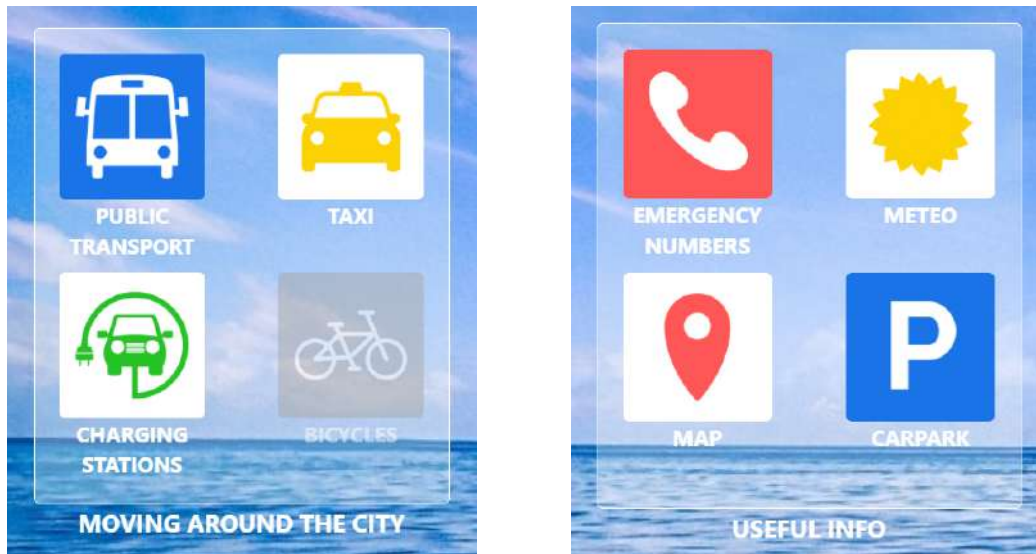
The functionality of the E-CHAIN Totem app is the same as the one in the mobile app. Therefore, by scanning the QR codes on Totem, it is possible to download a link to the E-chain web app (link to the website) and have its complete content available on your smartphone. By touching different icons (for example “train”) some information is also available in a form of a QR code that can be scanned to access the websites of different service providers contributors to the E-Chain project. The information available behind each icon is either a in a form of links to a single page of an external websites (frames) or QR codes containing external website URLs.

5. INFO-PANEL CONTENTS AND SERVICES

Meeting the scope of the E-Chain project, the Info Panel is an integrated platform that displays the Web content from other service providers in its Web application. For security reasons, these contents are displayed as frames, however, in many cases, this was not possible due to the way some of the external websites were built. In these cases, the app is displaying either a QR code with a link to the relevant Web site or, alternatively, the information is displayed directly on the info panel. The QR codes can of course be scanned using a smartphone and saved, so they continue to be available to the users after they leave the totem location.

5.1. INFO – MOBILITY

All information on city mobility options can be found in the icon group called "Moving around the city" and "Useful Info".



The uploaded and linked content on city mobility options is listed in the table below:

Table 1: Info-mobility content

Item	Ancona
Car Parks	http://www.anconaparcheggi.it/servizi/parcheggi-coperti-abbonamenti
EV Charging Stations	
Local Buses Stops	https://www.conerobus.it/servizi-tpl/servizio-urbano-ancona
Taxi Stations	https://adriaticgreentraveller.eu/ancona/transit-finder/mobile#taxi

5.2. MULTI MODAL TRAVEL SOLUTIONS

The information on the travel options to / from the city is situated below the corresponding icons in the "Travel" group.

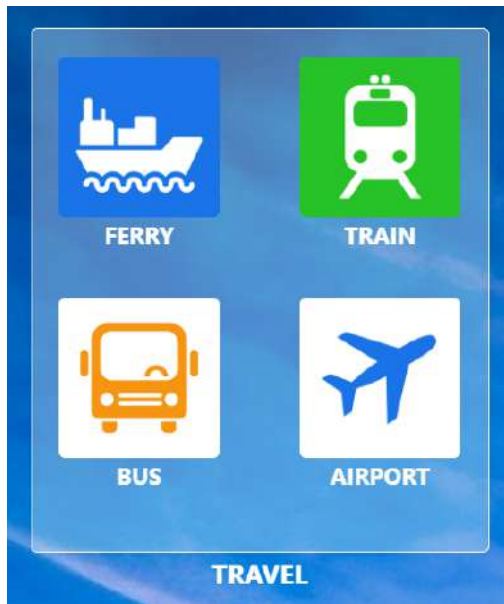


Table 2: Multi modal travel solutions content

	Item	Ancona
EN	Air flights from/to	https://www.ancona-airport.com/en/passengers/flights/departures/
IT		https://www.ancona-airport.com/passeggeri/voli/partenze/
EN	Trains from/to	https://iechub.rfi.it/ArriviPartenze/en/ArrivalsDepartures/Monitor?placeld=429&arrivals=True
IT		https://iechub.rfi.it/ArriviPartenze/ArrivalsDepartures/Monitor?placeld=429&arrivals=True
	Long haul buses	https://www.conerobus.it/servizi-tpl/servizio-extraurbano/
	International and local ferries connections	https://server1.entourance.com/api/proxy?url=http://totem.porto.ancona.it/totem.php

5.3. TOURISTIC CO MARKETING

By touching icons in the "Experience Ancona" group, the E-Chain app shows an interactive map of Ancona including popular sites and some useful information on things to do (activities and events) and places to visit. The picture below shows the content behind the icon "Activity".

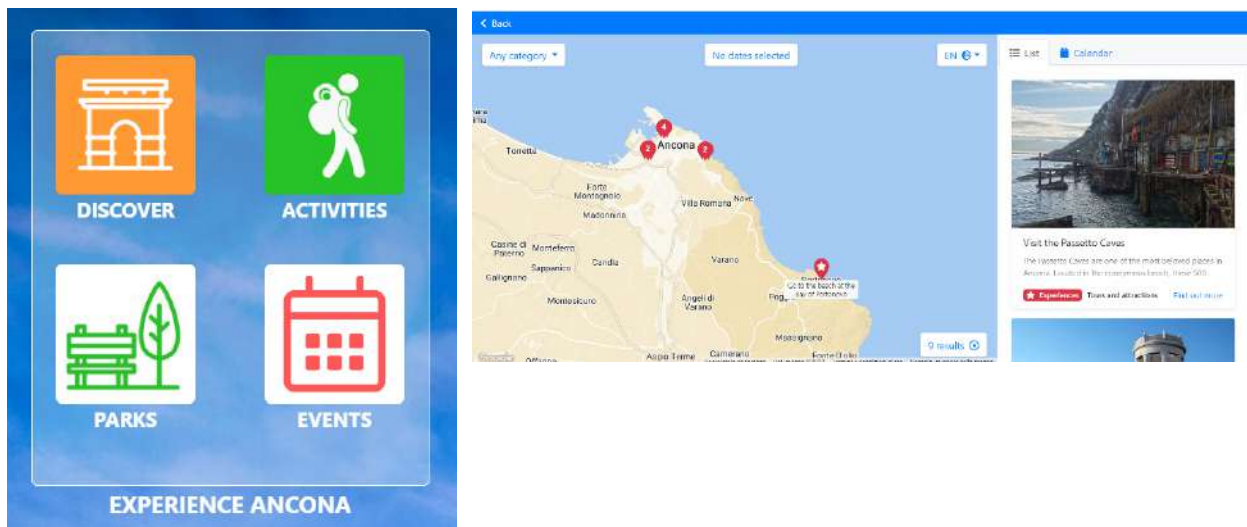


Table 3: Experience Ancona content

Item	Ancona
Events	https://www.comuneancona.it/ankonline/event/

D 5.1.2. – DEPLOYMENT DEFINITION IN THE PILOT SITE VENICE

Activity 5.1 – Pilot implementation

June, 2022 - Final

Partner: Lead Partner, Municipality of Ancona

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The aim of WP4 is to develop, test and implement all components of E-CHAIN platform.

For this reason, development shall comprise a set of customer oriented services, related to mobility and tourism that have been selected in the WP3. Specific objectives:

- Develop selected services according to the specifics (technical and not) identified in WP3;
- Roll out service versions at pilot sites;
- Develop WSs to allow the integration between different services/systems for a multimodal and interoperable transportation
 - Timetables and travel solution optimizing resources (vehicles, staff), real-time events (e.g. delays) in a seamless solution: from Ancona centre to Split, train+bus+ferry complete information available by APP, WEB, totem.
 - Booking and ticketing modules to allow the payment of transport modes operated by different operators (Conerobus in Ancona + Trenitalia + Jadrolinija), thanks to the integration between different IT systems and stakeholder involvement.
- Develop help-desk system to assist travellers during the trip according to their needs.

3. PILOT SITE 3 - VENICE

3.1. INTRODUCTION

Although the project does not provide for the physical installation of totems, the same level of services and information is available for Pilot site Venice via a web application to all users with desktop or mobile devices that are connected to the Internet at URL <https://e-chain.eu/totem/venice>

3.1.1. WEB SERVER APPLICATION INSTALLATION AND CONFIGURATION

A prerequisite for the proper functioning of the Info-panel is the availability and connection to the E-CHAIN Web server.

Local Server name:	e-Chain
Local Workgroup:	ECHAIN
Internal IP (for VPN acces):	10.10.77.2
External IP (only HTTP(S)):	194.1.255.111
Access Username (VPN & Server):	globeinside
Access Pwd (VPN & server):	*****
Web access (HTTP(s))	www.echain.eu (194.1.255.111)

4. WEB APPLICATION CONTENTS AND SERVICES

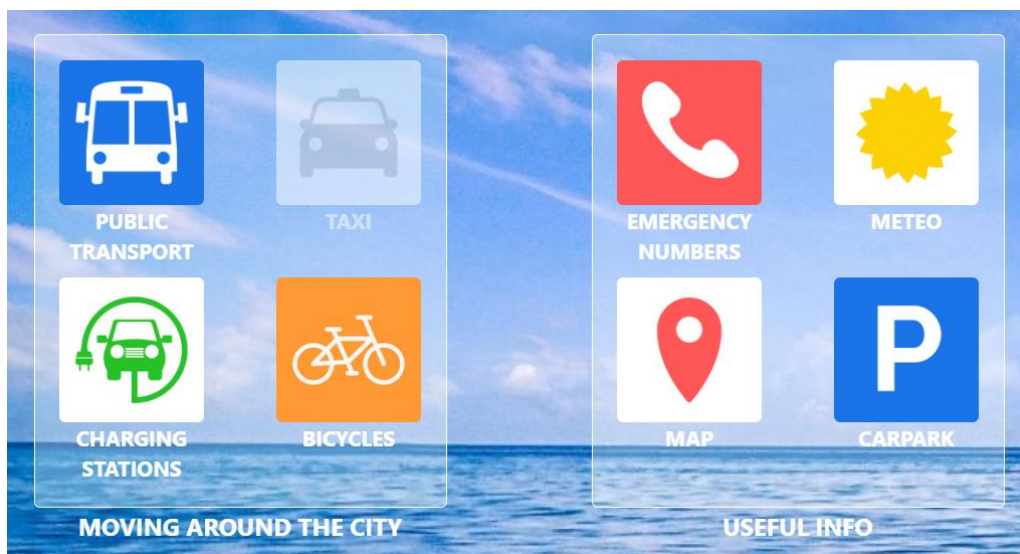
Meeting the scope of the E-Chain project, the Web application is an integrated platform that displays the Web content from other service providers. For security reasons, these contents are displayed as frames, however, in many cases, this was not possible due to the way some of the external websites were built. In these cases, the app is displaying either a QR code with a link to the relevant Web site or, alternatively, the information is displayed directly as static content. The QR codes can of course be scanned using a smartphone and saved.

The Home Screen of the Web Application for Venice is shown below:



4.1. INFO – MOBILITY

All information on city mobility options can be found in the icon group called "Moving around the city" and "Useful Info".



The uploaded and linked content on city mobility options is listed in the table below:

Table 1: Info-mobility content

	Item	Ancona
	Bike Sharing	https://play.google.com/store/apps/details?id=com.ridemovi.app
EN	Local Buses Stops	https://muoversi.venezia.it/en/content/moving-venice-1
IT		https://actv.avmspa.it/it/content/orari-actv

4.2. MULTI MODAL TRAVEL SOLUTIONS

The information on the travel options to / from the city is situated below the corresponding icons in the "Travel" group.

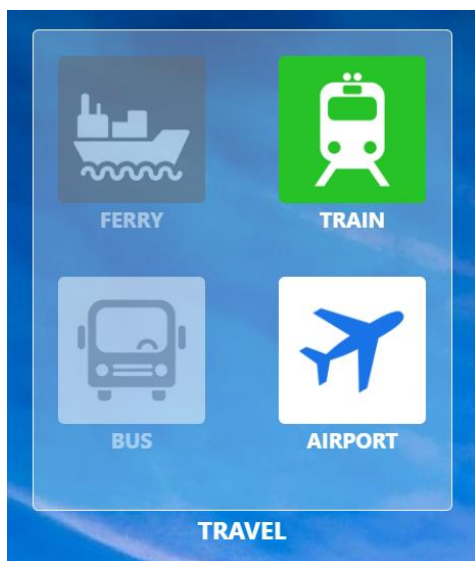
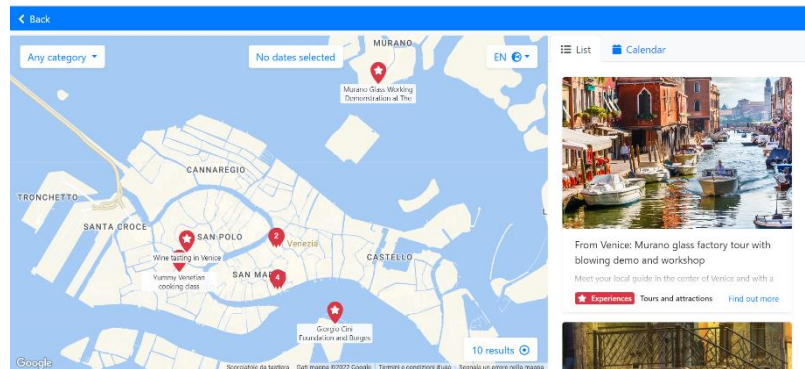
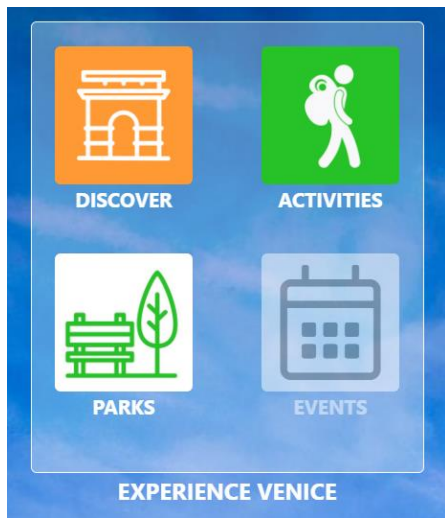


Table 2: Multi modal travel solutions content

	Item	Ancona
EN	Air flights from/to	https://www.veneziaairport.it/en/flights/todays-flights/ftype-D.html
IT		https://www.veneziaairport.it/voli/voli-di-oggi/ftype-D.html
EN	Trains from/to	https://iechub.rfi.it/ArriviPartenze/en/ArrivalsDepartures/Monitor?placelId=3009&arrivals=False
IT		https://iechub.rfi.it/ArriviPartenze/ArrivalsDepartures/Monitor?placelId=3009&arrivals=False

4.3. TOURISTIC CO MARKETING

By touching icons in the "Experience Venice" group, the E-Chain app shows an interactive map of Ancona including popular sites and some useful information on things to do and places to visit. The picture below shows the content behind the icon "Activity".



D 5.1.2. – DEPLOYMENT DEFINITION IN THE PILOT SITE SPLIT

Activity 5.1 – Pilot implementation

June, 2022 - final

Partner: PP8 – Municipality of Split

Authors: Tamara Moranjak

Email: tamara.moranjak@mm-memory.hr

Project Acronym	E-CHAIN
Project ID Number	10048282
Project Title	Enhanced Connectivity and Harmonization of data for the Adriatic Intermodal Network
Priority Axis	4 - Maritime Transport
Specific objective	4.1 - Improve the quality, safety and environmental sustainability of marine and coastal transport services and nodes by promoting multimodality in the programme area
Work Package Number	5
Work Package Title	Services and Transport Vehicle Integration
Activity Number	5.1
Activity Title	Pilot implementation
Partner in Charge	PP8 - City of Split
Partners involved	LP - Municipality of Ancona PP4 - University of Trieste PP6 – Prosoft d.o.o.
Status	Final
Distribution	Public

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VERSION CONTROL

Date	Version	Prepared by	Revised by	Approval	Revision	Comment
April, 2022	V1	Tamara Moranjak			draft	
June, 2022	Final	Tamara Moranjak		Andrea Barić	final	
June, 2022			Nelida Pogačić	Andrea Barić		Cover page changed

1. INTRODUCTION

The city of Split, is one of the three pilot sites in the E-CHAIN project and one the locations where 3 digital display totems on fix support will be installed.

The totems will be located in a critical outdoor environment exposed to different atmospheric conditions such as strong sunlight, high temperatures, wind and rain. Considering their outdoor location, the digital totems can be also target of vandalism and are intended for intensive interactive use. The quality and robustness of the device and the outer casing correspond to the operating conditions in order to perform its E-CHAIN project function in the long run.

Additionally, a stable power supply and a fibre internet connection with sufficient bandwidth needs to be available at all three the locations.

Following the installation and the initial setup of the operating system, the software running on the totems will be maintained and updated remotely (online). The digital totem's screens are meant to be used interactively by the public and much of the content displayed on them will be real-time information that needs to be available at all times (24/7).

Totems' Micro locations:

Item	Location	Outdoor/Indoor	DeviceName
1	Trg Franje Tuđmana (Riva)	outdoor	ECHAIN-S1
2	Poljana kneza Trpimira (bike rental point)	outdoor	ECHAIN-S2
3	Jadrolinija terminal (behind on bus station)	outdoor	ECHAIN-S3

2. INFO-TOTEM(S) IMPLEMENTATION

The detailed Hardware specification, physical architecture and hardware installation requirements for the totems is described in the document D 4.1.2 – Hardware procurement for Municipality of Split.

In addition to the mounting and connecting to the mains and the Internet, the digital display totems supplier is obliged to deliver totems with pre-installed operating system in “kiosk mode”, set the E-CHAIN software as the only application running on it, install TeamViewer support for the remote access and management of the totem, and provide the totem configuration and access data for a remote administrator access. All the three totems have the same technical characteristics and are configured in the same way.

This document is the summary of the requirements and conditions that must be met for the implementation of the E-Chain software solution on the digital totems in Split and a manual detail description of all steps of the implementation.

2.1. WEB SERVER APPLICATION INSTALLATION AND CONFIGURATION

A prerequisite for the proper functioning of the Info-panel is the availability and connection to the E-CHAIN Web server.

Local Server name:	e-Chain	
Local Workgroup:	ECHAIN	
Internal IP (for VPN access):	10.10.77.2	
External IP (only HTTP(S)):	194.1.255.111	
Access Username (VPN & Server):	globeinside	
Access Pwd (VPN & server):	*****	
Web access (HTTP(s))	www.echain.eu	(194.1.255.111)

2.2. SINGLE-APP KIOSK CONFIGURATION ¹

All the E-CHAIN digital totems are touch screens intended for public use and will run in single-app kiosk mode that uses the Assigned Access feature to run the single app on top of the lock screen. Once the totem is connected to power and switched-on, for better user experience and security reasons, the E-CHAIN Web App will be launched automatically, so the person using the kiosk won't be able to do navigate the internet or do any operations on the device outside of the set-up kiosk app.

Totems operating system, internet browser and management tools:

The touch screen Totems PC are setup in Windows 10 Professional operating system and operating in Kiosk mode in the Edge web browser based on Chromium and other open-source software projects. Remote access, control and maintenance of the digital display totems has been made possible via the TeamViewer software.

Devices and network:

Item	DeviceName	Location	IP address	Gateway	Subnet	DNS
1	ECHAIN-S1	F. Tuđmana	192.168.71.20	192.168.71.1	255.255.255.0	192.168.50.3
2	ECHAIN-S2	Riva	192.168.71.21	192.168.71.1	255.255.255.0	192.168.50.3
3	ECHAIN-S3	Ferry Port	192.168.71.22	192.168.71.1	255.255.255.0	192.168.50.3

Devices Remote Administration

Item	DeviceName	TeamViewer ID	TeamViewer Psw
1	ECHAIN-S1		

¹ All information contained in this section relates to pre-configuration of the device prior to handover.

2	ECHAIN-S2	542 941 967	pa7ax62
3	ECHAIN-S3	543 070 588	pa7ax62

ApplicationName: E-CHAIN Split

AppUrl: <https://e-chain.eu/totem/split> (<https://e-chain.eu/split/transit-finder/kiosk>)

There are several ways to setup single-app kiosk mode: these can be viewed in the relative guide on the Microsoft website on the following link: <https://docs.microsoft.com/en-us/windows/configuration/kiosk-single-app>.

Google Chrome or Windows Edge must be launched as a "single app" in Full screen mode. The PC boots to a specific web page without any log in.

- The URL to be used in the kiosk to launch the web app: <https://e-chain.eu/totem/split>

After a few of minutes of inactivity, the browser goes back to the E-CHAIN totem Split app start page.

- Create a scheduled task that runs that would close the browser and reopen it. Test out the trigger "idle", or on workstation lock.

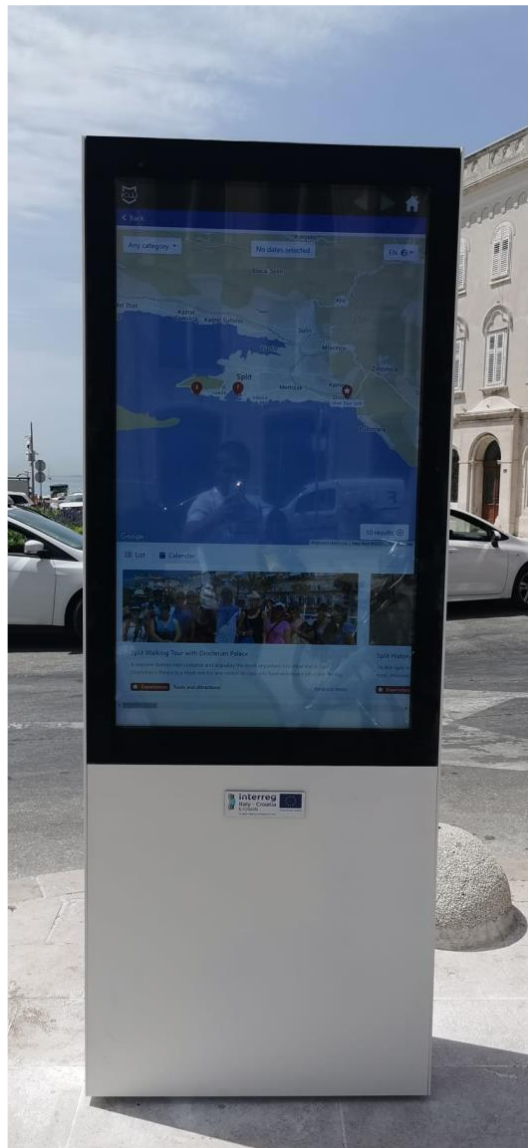
If it is not supported or for some reason it is not possible to use the windows kiosk mode, it is still possible to use the same Chrome mode. In particular, by adding a Chrome user and adding the "-kiosk" parameter to the command line that launches the application, it is possible to use the totem in this mode. In this version it is then possible to regain control through the keyboard with the key combination "Alt + tab". The URL to be used in the kiosk to launch the web app will be <https://e-chain.eu/totem/split>.

3. INFO-PANEL APPEARANCE

3.1. INFO-PANEL APPEARANCE

Totem E-CHAIN-S1

Location: Riva - Trg Franje Tuđmana



Totem E-CHAIN-S2

Location: Poljana kneza Trpimira



Totem E-CHAIN-S3

Location: Jadrolinija Terminal – at bus station



3.2. TOTEMS HOME SCREEN APPEREAANCE

In the idle state of the totem always displays a floating E-CHAIN logo with a “touch to use” text.

When the totem is started, or after inactivity (screen saver mode), the E-CHAIN Totem web application restarts displaying the English version of the content. The info panel initial screen layout is shown in the picture below².



The functionality of the E-CHAIN Totem app is the same as the one in the mobile app. Therefore, by scanning the QR codes on Totem, it is possible to download a link to the E-chain web app (link to the website) and have its complete content available on your smartphone. By touching different icons (for example “train”) some information is also available in a form of a

² the image shows the Web version of the totem screen. On the totem itself or the mobile application, the groups of icons: Travel, Experience Split, Moving around the city and Useful info are displayed in a vertical sequence

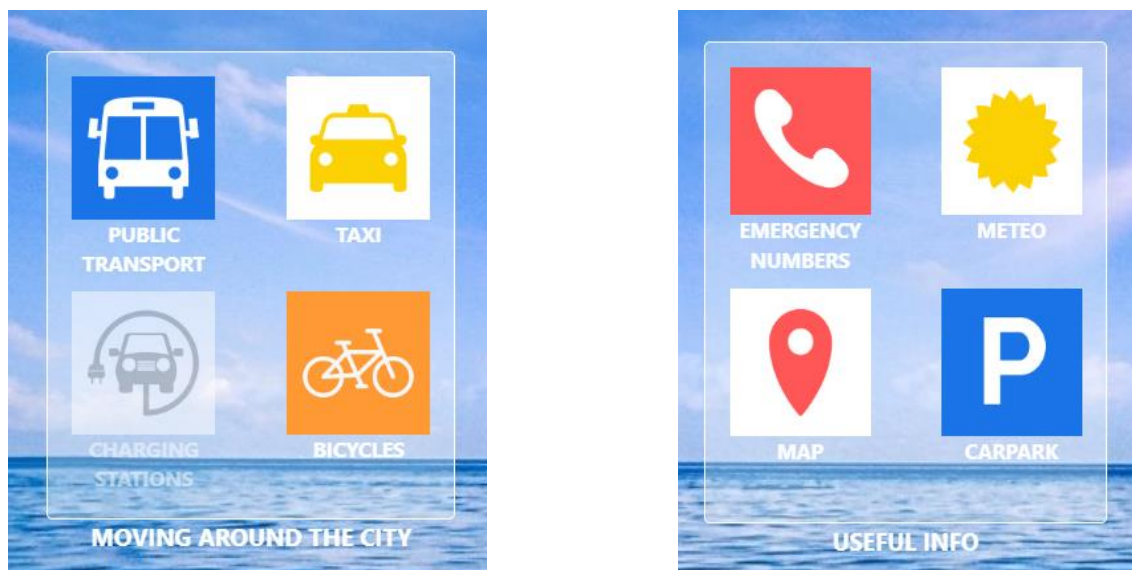
QR code that can be scanned to access the websites of different service providers contributors to the E-Chain project. The information available behind each icon is either a in a form of links to a single page of an external websites (frames) or QR codes containing external website URLs.

4. INFO-PANEL CONTENTS AND SERVICES

Meeting the scope of the E-Chain project, the Info Panel is an integrated platform that displays the Web content from other service providers in its Web application. For security reasons, these contents are displayed as frames, however, in many cases, this was not possible due to the way some of the external websites were built. In these cases, the app is displaying either a QR code with a link to the relevant Web site or, alternatively, the information is displayed directly on the info panel. The QR codes can of course be scanned using a smartphone and saved, so they continue to be available to the users after they leave the totem location.

4.1. INFO-MOBILITY






All information on city mobility options can be found in the icon group called "Moving around the city" and "Useful Info".



The uploaded and linked content on city mobility options is listed in the table below:

Table 1: Info-mobility content

	Item	Split
	Car parks	Real time map http://smart.splitparking.hr/ Smart Splitparking mobile app

		
	EV charging stations	<p>Map</p> <p>https://www.google.com/search?q=vehicle+chargers+croatia&rlz=1C1WPZA_enHR742HR742&sz=0&tbm=lcl&ei=uaOMYun7J5CPxc8PzoOxyAk&oq=vehicle+chargers+croatia&gs_l=psy-ab.12...0.0.0.100839.0.0.0.0.0.0.0.0.0...0...1c..64.psy-ab..0.0.0....0.Bi0tvvA3CIQ#rifi=hd;;si:,43.54369817421006,16.578890432812496;mv:[43.570071267353654,16.630045523144528],[43.47970794631013,16.37255345771484],null,[43.524906526808074,16.501299490429684],13]</p>
	Bike sharing stations	<p>https://www.splitparking.hr/javne-bicikle</p> <p>Mobile nextbike app download:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>
EN	Local buses stops	https://www.promet-split.hr/en/timetables
HR		https://www.promet-split.hr/vozni-red
IT		
	Taxi stations	<p>https://visitsplit.com/hr/1970/taxi</p> <p>or</p>

	static info according to the file: Static info from excel file "Split_Site_data.xlsx" Sheet "Transport"
--	---

4.2. MULTIMODAL TRAVEL SOLUTIONS

The information on the travel options to / from the city is situated below the corresponding icons in the "Travel" group.

Example: Timetable information displayed after selecting the Ferry icon is shown below right.

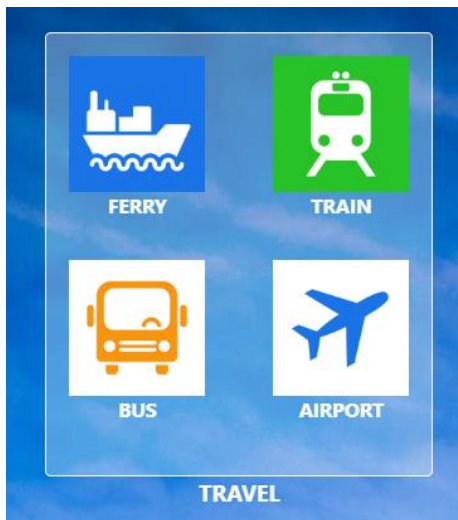


Table 2:

Isplivajena	Linija	Vozni	Brod	Voz
05:00h	Stari Grad	JAD	Fanos	17
05:15h	Supetar	JAD	Tin Ujević	25
05:15h	Supetar	JAD	Marjan	23
06:45h	Rogač	JAD	Šukovo	20
07:30h	Supetar	JAD	Hrvat	23
07:30h	Bali-Makarica-Končine - Sobra-Dubrovnik	KLU	Kilo Star	9
07:40h	Mirna-Hvar-Korčula-Pomena-Dubrovnik	KLU	KRILCO ECLIPSE	11
08:30h	Stari Grad	JAD	Zadar	12
08:30h	Hvar	JAD	Judita	6
08:40h	Sušivan	AFF	Bilovo	5
08:45h	Hvar	TPZ	Puntamika	10
09:00h	Supetar	JAD	Tin Ujević	20
09:00h	Hvar	KLU	Kilo Carbo	11
09:15h	Rogač	JAD	Šukovo	24

Travel solutions content

	Item	Split
EN	Air flights from/to	http://www.split-airport.hr/index.php?lang=en
HR		http://www.split-airport.hr/index.php?lang=hr
IT		

EN	Trains from/to	http://www.hzpp.hr/en
HR		http://www.hzpp.hr/
IT		
EN	Long haul buses	https://www.ak-split.hr/en/
HR		https://www.ak-split.hr/
IT		
EN	International and local ferries connections	Use HR, as for now it is the only available sailing schedule that exist
HR	International and local ferries connections	*only departures from Split are available for now https://plovibeniportsplithr/
IT	International and local ferries connections	Use HR, as for now it is the only available sailing schedule that exist

4.3. TOURISTIC CO-MARKETING

By touching icons in the "Experience Split" group, the E-Chain app shows an interactive map of Split including city districts and popular sites and some useful information on things to do and places to visit. The picture below shows the content behind the icon "Activity".

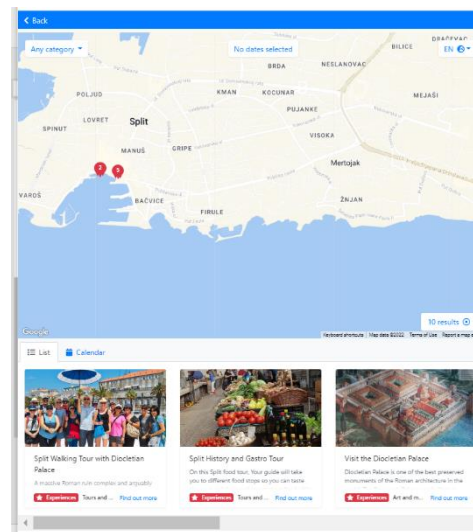



Table 3: Experience Split Content

	Item	Split
EN	Cultural Point of interest map	https://www.google.com/maps/search/Attractions/@43.5094403,16.4272391,15z ?? https://visitsplit.com/en/396/interactive-split-map (Google info: This page can't load Google Maps correctly.) https://visitsplit.com/en/446/attractions
	Meeting point for excursions map	Static info from excel file "Split_Site_data.xlsx" Sheet "Experiences" (highlighted data)
	Activity Mobile apps	https://visitsplit.com/en/2019/mobile-applications 

	Emergency phones	Static info from excel file "Split_Site_data.xlsx" Sheet "Split_Usefull_information" (highlighted data)



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ACT 4.3 INTEGRATION AND TESTING

ACT 5.1 PILOT IMPLEMENTATION

Pilot Site Split – Totems survey

June, 2022 – Minutes

Partner: PP6 – Prosoft d.o.o., PP8 – Municipality of Split

Authors: Aris Grozić, Andrea Barić

Email: aris.grozic@prosoft.hr, andrea.baric@split.hr

MINUTES OF TOTEMS SURVEY IN PILOT SITE SPLIT

This document is relevant to the activity 4.3 Integration and testing and 5.1 Pilot implementation of E-CHAIN project - Enhanced Connectivity and Harmonization of data for the Adriatic Intermodal Network.

The purpose of this document is to provide information of final pre-commissioning visit to installation sites of Information-panels in pilot site Split.

After the installation of the totem at the beginning of June and the passage of time in operation, representatives of the PP6 – Prosoft (Aris Grozić), as technology partner and PP8 project partner - City of Split (Andrea Barić) as totem beneficiary, carried out immediate inspection of the installed panels to make sure they are working according to specifications.

During the inspection, they noticed the some minor problems and non-conformities and requested their immediate elimination from the partners and/or supplier in charge.

The findings and actions requested or taken are presented for each location on the following pages

1. LOCATION TRG FRANJE TUĐMANA

Status:

- Remote access to totem is not available - reported to the totem supplier
- size of the E-CHAIN logo is too big and there is a problem with the screen resolution - reported to PP in charge of the app development



2. LOCATION POLJANA KNEZA TRPIMIRA

Status:

- the login screen appears after interruption of work or when remote access is disconnected (Poljana) - reported to the totem supplier
- problems with connection to the network (Poljana Knez Trpimir location) – fixed



3. LOCATION RIVA – JADROLINIJA

Status: OK



In Split, 29.6.2022.

for PP6 – Aris Grozić

for PP8 – Andrea Barić