

D 4.3.3 – TEST ENVIRONMENT REPORT

WP 4 - Activity 4.3 - Integration and testing

June, 2022 - Final

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ACRONYMS / ABBREVIATIONS

ACRONYM	DEFINITION
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
2	D 4.2.1 – E-CHAIN software environment		
3	D 4.2.2 – E-CHAIN platform (first release). Platform developed		
4	D 4.2.3 – Interface development kit		
5	D 4.2.4 – E-CHAIN platform (final release)		

6	D 4.3.1 – E-CHAIN System Localization translation to Croatian and English		
7	D 4.3.2 – E-CHAIN commissioning requirements		

1. INTRODUCTION

1.1 PURPOSE OF THE DOCUMENT

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

The purpose of this document is to identify and document the testing procedures for services and components of the platform and to provide guidelines for developers for the final release of E-CHAIN platform. The reporting of testing of E-CHAIN platform components is needed to assure the quality of the solution provided and will be done in cooperation with the all partners of the project.

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

- by the Task Manager (TM) and Project Team (PT) to provide testing procedures and initial testing results for E-CHAIN platform during the last stage of platform development
- by the other Activity 4.3 Integration and testing - needed as a reference document D 4.3.4 – Commissioning report.

1.2 WORKING PRINCIPLE

The reporting of testing of E-CHAIN platform components is needed to assure the quality of the solution provided and will be done in cooperation with the all partners of the project.

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

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 travellers 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 4.3.2 – E-CHAIN Commissioning requirements. Documents the development testing procedures for services and components of the platform and provides guidelines for developers.

The main tasks planned in this activity are the following:

- Definition of test procedures including functional test, communication tests, performance tests of software applications and communication lines for each component of the platform:
- To give input for Commissioning - final integrated test of the E-CHAIN platform

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. TESTING PROCEDURE

The purpose of this chapter is to describe the procedures for testing the features of the EWS solution provided in the data centre.

3.1 TEST ENVIRONMENT

To perform test some prerequisites must be meet:

- The E-CHAIN test environment - all servers available and running
- A tester must have a computer, in order to connect to the E-CHAIN software, and/or a smartphone to test some features.

During the course of software development and implementation tests were performed in three different testing environments.

1st Test environment – for design test

NAME	DESCRIPTION	WEB SITE ADDRESS	NOTE
E-CHAIN B2C	E-CHAIN FrontEnd Web Business to Customer	https://www.its4kids.it/echain/echain-b2c.htm	
E-CHAIN B2B	E-CHAIN FrontEnd Web Business to Business	https://www.its4kids.it/echain/echain-b2b.htm	
E-CHAIN PA	E-CHAIN FrontEnd Web Public Authorities	https://www.its4kids.it/echain/echain-pa.htm	
E-CHAIN TOTEMS	E-CHAIN Totems	https://www.its4kids.it/totem/index.html	

2st Test environment – for design and functionality test

NAME	DESCRIPTION	WEB SITE ADDRESS	NOTE
E-CHAIN B2C	E-CHAIN FrontEnd Web Business to Customer	https://dev.entourance.com/transit-finder/web/b2c	Test results in Annex 2
E-CHAIN B2B	E-CHAIN FrontEnd Web Business to Business	https://dev.entourance.com/transit-finder/web/b2b	
E-CHAIN PA	E-CHAIN FrontEnd Web Public Authorities	https://dev.entourance.com/transit-finder/web/pa	
E-CHAIN BO	E-CHAIN BackOffice		
E-CHAIN TOTEMS A	E-CHAIN Totems in Pilot Sites Ancona	https://dev.entourance.com/transit-finder/kioskAncona	
E-CHAIN TOTEMS S	E-CHAIN Totems in Pilot Sites Split	https://dev.entourance.com/transit-finder/kioskSplit	Test results in Annex 3
E-CHAIN TOTEMS V	E-CHAIN Totems in Pilot Sites Venice	https://dev.entourance.com/transit-finder/kioskVenezia	

3nd Production test environment – overall test

NAME	DESCRIPTION	WEB SITE ADDRESS	NOTE
E-CHAIN B2C	E-CHAIN FrontEnd Web Business to Customer	https://e-chain.eu/b2c	
E-CHAIN B2B	E-CHAIN FrontEnd Web Business to Business	https://e-chain.eu/b2b	
E-CHAIN PA	E-CHAIN FrontEnd Web Public Authorities	https://e-chain.eu/pa	

E-CHAIN BO	E-CHAIN BackOffice		
E-CHAIN TOTEMS A	E-CHAIN Totems in Pilot Sites Ancona	https://e-chain.eu/totem/ancona	
E-CHAIN TOTEMS S	E-CHAIN Totems in Pilot Sites Split	https://e-chain.eu/totem/split	
E-CHAIN TOTEMS V	E-CHAIN Totems in Pilot Sites Venice	https://e-chain.eu/totem/venezia	

3.2 PARTICIPANTS

For testing the features of the E-CHAIN platform, all partners, from Italy and Croatia are invited to join. Prosoft led the testing.

The early testing (1st and 2nd test) of the E-CHAIN system design and functionality were done while system was still in the development environment, and was conducted mainly during Partners online and physical meetings. ¹

Final test of E-CHAIN platform was performed according to the procedure defined in the Commissioning requirements document (D 4.3.2). The test procedure and results are described below.

3.3 TEST PROCEDURES

The section describes the test procedures aimed at verifying the correct behaviour of E-CHAIN platform. The test procedures shall verify in details the functionalities of all components of E-

¹ Annexes 1 contains Testing Schedule Template document

CHAIN platform in the test environment according to D.4.3.2 Commissioning Requirements and recorded as follows.

In order to ensure even testing of all components and to avoid the possibility of some of the functionalities being skipped in testing, a testing schedule has been made. In it, the partners enter basic information about which component has been tested, and who conducted/recorded the tests.

Table1. E-CHAIN Components to be tested

CODE	NAME	DESCRIPTION	TESTED BY	NOTE
B2C	E-CHAIN B2C	E-CHAIN Front-end Web Business to Customer	PP6	
B2B	E-CHAIN B2B	E-CHAIN front-end Web Business to Business	PP6	
PA	E-CHAIN PA	E-CHAIN front-end Web Public Authorities	PP6	
BO	E-CHAIN BO	E-CHAIN BackOffice	LP, PP9, PP6	
TO-A	E-CHAIN TOTEMS	E-CHAIN Totems in Pilot Sites Ancona	LP, PP6	
TO-S	E-CHAIN TOTEMS	E-CHAIN Totems in Pilot Sites Split	PP8, PP6	
TO-V	E-CHAIN TOTEMS	E-CHAIN Totems in Pilot Sites Venice	PP6	

In order to test the behaviour of the E-CHAIN system, a test cases with a well-defined test procedure are created. Each test case consists of:

- a Code to facilitate its identification;
- a Title summarizing the scope of the specific test;

- a Scope describing the scope of the test;
- a set of Pre-Conditions describing the initial conditions of the system and of the test environment and facilities before to execute the test procedure;
- a Procedure describing how the test will be carried out;
- the Successful Expected Results describing the set of results to consider the test successfully passed.

The next pages contain sheets detailing for each requirement to be tested the procedure and the expected successful results. For each sheet there is a section to take note of the real results/data collected during the execution of the test procedure.

Following template sheet is used detailing test procedure and expected successful results for each test case. For each form sheet there is a section to take note of the real results/data collected during the execution of the test procedure.

TEST FORM TEMPLATE

Test Code	Description	Result	Comment
Preconditions			
Test Objectives			
Test Procedure			
STEP 01			
STEP 02			
STEP 03			
STEP 04			

B2C-001 Test Report Section Date / /		
This section logs the result.		

3.4 THE LIST OF TEST CASES

Code	Description of the functionality to be tested
B2C-D1	B2C - Home page - Screen Appearance (design test)
B2C-F-1.1	B2C – Home page - Language selection functionality
B2C-F-1.2	B2C – Home page – Menu items selection functionality
B2C-F1.3	B2C – Plan section – Route planning/searching
B2C-F1.3.1	B2C – Route transport options selection/details
B2C-F1.4	B2C – Travel section – Sign up form content/functionality
B2C-F1.4.2	B2C – email communication functionality
B2C-F1.5	B2C – Share section display with hashtag #echainproject
B2B-D1	B2B - Home page - Screen Appearance (design test)
B2B-F-1.1	B2B – Home page - Language selection functionality
B2B-F-1.2	B2B – Home page – Menu items functionality
B2B-F-1.3	B2B – Home page – Restricted zone Log in functionality
B2B-F1.4	B2B – Home page –/ “Join now”/ “Sign up”/ “Join in” form content and functionality
B2B-F1.5	B2B – Restricted zone/Web services functionality
B2B-F1.5.1	B2B –Web services for transport providers – GTFS data upload
B2B-F1.5.2	B2B –Web services for Tourist services providers - data upload functionality

B2B-F1.5.3	B2B –Web services for Green experiences and activities providers - data upload functionality
PA-D-1	PA - Home page - Screen Appearance (design test)
PA-F-1.1	PA - Home page - Language functionality
PA-F-1.2	PA - Home page – Restricted zone Log in functionality
PA-F-1.2	PA – Home page – “Enter the network” form functionality
PA-F1.3	PA – email communication functionality
PA-F1.4	PA – Restricted zone/Web services functionality
BO-F1	BO - email communication functionality
BO-F2	BO – GTFS upload
TO-D-1	Totem – Home page Screen Appearance and content
TO- F1	Totem – Language functionality
TO- F2	Totem – Idle state/screensaver functionality
TO- F3	Totem – OQ code functionality
TO-A-F1	Totem Ancona – “Travel” Info Group functionality
TO-A-F2	Totem Ancona – “Experience Ancona” Info Group functionality
TO-A-F3	Totem Ancona – “Moving in the City” functionality
TO-A-F4	Totem Ancona – “Useful info” functionality
TO-S-F1	Totem Split – “Travel” Info Group functionality
TO-S-F2	Totem Split– “Experience Ancona” Info Group functionality
TO-S-F3	Totem Split – “Moving in the City” functionality
TO-S-F4	Totem Spit – “Useful info” functionality
TO-V-F1	Totem Venice – “Travel” Info Group functionality
TO-V-F2	Totem Venice – “Experience Ancona” Info Group functionality
TO-V-F3	Totem Venice – “Moving in the City” functionality
TO-V-F4	Totem Venice – “Useful info” functionality

4. TEST PROCEDURE AND RESULTS

4.1 E-CHAIN B2C MODULE

Test Code	Description	Result	Comment
B2C-D1	B2C - Home page - Screen Appearance (design test)		
Preconditions			
Web server https://e-chain.eu/B2C up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Checking how web content is displayed on different devices and OS and Internet browsers; check the display of design elements			
Test Procedure			
STEP 01	Home page on the Top screen - check that the elements are displayed in accordance with the design: E-CHAIN logo on the left, menu items and language icons on the right	ok	
STEP 02	Home page Bottom - check that the elements are displayed in accordance with the design: E-CHAIN LP and other PP logos with links to their respective web pages.	Not ok	Link to Prosoft Web Pages needs to be corrected to https://www.prosoftri.com/
STEP 03	Home page Central part of the scrollable screen – check consistency in design and clickable buttons (language depending).	ok	
/TEST CODE/ Test Report Section Date 6 .4.2022 NP			

A Link to PP6 web page needs to be corrected.		Test 1.6.2022 NP Link corrected
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Test Code	Description	Result	Comment
B2C-F-1.1	B2C – Home page - Language selection functionality		
Preconditions			
Web server https://e-chain.eu/B2C up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the language features, i.e., whether the language of the web platform is consistently changed in accordance with the choice of language.			
Test Procedure			
STEP 01	The default language is English. Make sure all elements are expressed in English.	ok	
STEP 02	Select and click on the flag icon in the upper right corner of the screen and check that the content and all elements of the page have changed according to the selection.	ok	
STEP 03	Click on the buttons and check the language compliance on the forms. Are the form elements displayed in the selected language?	ok	
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result.			

Test Code	Description	Result	Comment
B2C-F-1.2	B2C – Home page - Menu items selection functionality		
Preconditions			
Web server https://e-chain.eu/B2C up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the proper functioning of the menu items			
Test Procedure			
STEP 01	Click on the "Plan" menu item and check if it took you to the "Plan your journey" section with the form where you can enter the departure and arrival point and the date of travel. Clicking on "Plan your next journey" should have the same functionality.	ok	
STEP 02	Selecting the "Travel" menu item should take you to the "Always stay green" section with the "Sign up now" clickable button.	ok	
STEP 03	Go to the "Share" menu item that should lead you to the "Become a testimonial" section where users are invited to share experiences from their sustainable and green journeys on social media using the hashtag <i>#greenechain</i> .	ok	
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result.			

Test Code	Description	Result	Comment
B2C-F-1.3	B2C – Plan section – Route planning/searching		
Preconditions			
Web server https://e-chain.eu/B2C up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Test route planning form functionality			
Test Procedure			
STEP 01	Select 'Plan' menu item and enter departure and arrival locations in the appropriate fields, and select date. Click on "Search" button. The new window opens showing route travel options on the left side with mean(s) of the transport with estimated CO2 consumption and map showing travel options on the right site of the screen.	ok	
STEP 02	Above the map and travel option, user can change the departure and arrival point and select different date for the travel. Selecting "Search" button, new route options are shown	ok	
STEP 03	Clicking on the "Go to back" arrow previous page (from history) is available.	ok	
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result.			

Test Code	Description	Result	Comment
B2C-F-1.3.1	B2C – Route transport options selection/details		
Preconditions			
Web server https://e-chain.eu/B2C up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Test route transport options and link to transport provider booking page			
Test Procedure			
STEP 01	When page with travel options is open, click on one of the offered travel options. The window containing selected option should expand showing details about expected time of departure and arrival, distance, mean of the transport and travel duration.	ok	
STEP 02	If you click on “ferry”, “train” or “bus” travel option, if transport provider is one of E-CHAIN stakeholders or partners, a button with link to its booking page is available.		Only “car” option was available for the journey selected
STEP 03	Click on “ticket” button should lead you to the providers booking page		Did not test
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result. Test is not completed.			

Test Code	Description	Result	Comment
B2C-F-1.4	B2C – Travel section – Sign up form content/functionality		
Preconditions			
Web server https://e-chain.eu/B2C up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Test email communication functionality			
Test Procedure			
STEP 01	When 'Travel' menu item is selected, you'll be led to "Always stay green" page section	ok	
STEP 02	Click on "Sign up now" button and an email form will appear on the screen. Fill in all required fields and try to send it without accepting privacy disclosure statement. The message should not be sent.		Could not fill-in all required fields
STEP 03	Accept the privacy disclosure and try to send the message again. The message should be sent and confirmation visible on the screen.		Privacy disclosure option is not available
/TEST CODE/ Test Report Section Date 4.6.2022 NP			
This section logs the result. The functionality of is not available.			

Test Code	Description	Result	Comment
B2C-F-1.5	B2C – Share section display with hashtag #exhainproject		

Preconditions			
Web server https://e-chain.eu/m/transit-finder/web/b2c up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Test e-chain hashtag functionality			
Test Procedure			
STEP 01	Click on one of the “Share” menu item will lead you to the “Become a testimonial” section inviting you to Show everyone the new way of travelling SUSTAINABLE and GREEN and share eco-sustainable behavior during journey across social media accounts using the hashtag #echainproject	OK	
STEP 02			
STEP 03			
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result.			

4.2 E-CHAIN B2B MODULE

Test Code	Description	Result	Comment
B2B-D1	B2B - Home page - Screen Appearance (design test)		
Preconditions			

Web server https://e-chain.eu/m/transit-finder/web/b2b up and running;			
Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Checking how web content is displayed on different devices and OS and Internet browsers; check the display of design elements			
Test Procedure			
STEP 01	Home page on the Top screen - check that the elements are displayed in accordance with the design: E-CHAIN logo on the left, menu items and language icons on the right	ok	
STEP 02	Home page Bottom - check that the elements are displayed in accordance with the design: E-CHAIN LP and other PP logos with links to their respective web pages.	ok	
STEP 03	Home page Central part of the scrollable screen with information about E-CHAIN project, section dedicated to “Suppliers of the intermodal transport services”, “Benefits” for suppliers enrolling and explanation “How it works”– check its design arranged in sections with clickable buttons (language depending) for joining project.	ok	
/TEST CODE/ Test Report Section Date 6.4.2022. NP			
This section logs the result.			

Test Code	Description	Result	Comment
B2B-F-1.1	B2B – Home page - Language selection functionality		
Preconditions			
Web server https://e-chain.eu/B2C up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the language features, i.e., whether the language of the web platform is consistently changed in accordance with the choice of language.			
Test Procedure			
STEP 01	The default language is English. Make sure all elements are expressed in English.	ok	
STEP 02	Select and click on the flag icon in the upper right corner of the screen and check that the content and all elements of the page have changed according to the selection.		Upon Clicking on HR flag text displays in English language instead of Croatian
STEP 03	Click on the buttons and check the language compliance on the forms. Are the form elements displayed in the selected language?		Upon Clicking on HR flag English language is displayed in forms instead of Croatian
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result. Test did not pass for Croatian language pages.			

Test Code	Description	Result	Comment
B2B-F-1.2	B2B – Home page – Menu items functionality		
Preconditions			
Web server https://e-chain.eu/m/transit-finder/web/b2b up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the proper functioning of the menu items			
Test Procedure			
STEP 01	Click on the "The Project" menu item and check if it took you to the "The Project" section of the page with information about E-CHAIN project.	ok	
STEP 02	Selecting the "Enter the network" menu item should take you to the "Suppliers of the intermodal transport services" section with the "Join now" clickable button.	ok	
STEP 03	Go to the "Restricted access" menu item that should open Login Form.	ok	
/TEST CODE/ Test Report Section Date 4.6.2022 NP			
This section logs the result.			

Test Code	Description	Result	Comment
B2B-F-1.3	B2B – Home page – Restricted zone Log in functionality		

Preconditions			
Web server https://e-chain.eu/B2B up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Login Form functionality to access Restricted zone for transport and service providers			
Test Procedure			
STEP 01	Select the “Restricted zone” menu item and Login form will pop-up.	ok	
STEP 02	Enter given test login credentials and click on “Login” button to enter into the restricted zone. Was it successful?		Not tested
STEP 03			
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result. Test not finished due to missing Login credentials.			

Test Code	Description	Result	Comment
B2B-F-1.4	B2B – Home page –/ “Join now”/ “Sign up”/ “Join in” form content and functionality		
Preconditions			
Web server https://e-chain.eu/B2C up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			

This test checks the functionality of “Signup” request form to enter Restricted zone			
Test Procedure			
STEP 01	Select the “Enter the network” menu item and click on “Join now” button. The “TRANSPORT Provider Signup” form should pop-up.	ok	
STEP 02	Fill in all required data and try to send the form without accepting privacy discloser statement. The form should not be sent.	ok	
STEP 03	Accept privacy discloser statement by switching on radio button. Click on “Send request” button to send a message. The form should be sent and a confirmation on sent message should be displayed.	ok	
/TEST CODE/ Test Report Section Date 6.4.2022			
This section logs the result.			

Test Code	Description	Result	Comment
B2B-F-1.5	B2B – Restricted zone/Web services functionality		
Preconditions			
Web server https://e-chain.eu/B2B up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the general functionality of Web services main page			
Test Procedure			

STEP 01			
STEP 02			
STEP 03			
/TEST CODE/ Test Report Section Date / /			
This section logs the result.			

Test Code	Description	Result	Comment
B2B-F-1.5.1	B2B –Web services for transport providers – GTFS data upload		
Preconditions			
Web server https://e-chain.eu/B2B and Web services up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Web services functionality for GTFS data upload			
Test Procedure			
STEP 01	Login Restricted zone with login credentials		
STEP 02	Prepare and upload data following the procedure defined in D 4.2.3 – Interface development kit.		
STEP 03			
/TEST CODE/ Test Report Section Date / /			

This section logs the result.		
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Test Code	Description	Result	Comment
B2B-F-1.5.2	B2B –Web services for Tourist services providers - data upload functionality		
Preconditions			
Web server https://e-chain.eu/B2B up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Web services data upload functionality for Tourist services			
Test Procedure			
STEP 01			
STEP 02			
STEP 03			
/TEST CODE/ Test Report Section Date / /			
This section logs the result.			

Test Code	Description	Result	Comment
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B2B-F-1.5.3	B2B –Web services for green experiences and activities providers - data upload functionality		
Preconditions			
Web server https://e-chain.eu/B2B up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Web services data upload functionality for Green experiences and activities providers			
Test Procedure			
STEP 01			
STEP 02			
STEP 03			
/TEST CODE/ Test Report Section Date / /			
This section logs the result.			

4.3 E-CHAIN PA MODULE

Test Code	Description	Result	Comment
PA-D1	PA-D1 - Home page - Screen Appearance (design test)		
Preconditions			
Web server https://e-chain.eu/PA up and running;			

Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Checking how web content is displayed on different devices and OS and Internet browsers; check the display of design elements			
Test Procedure			
STEP 01	Home page on the Top screen - check that the elements are displayed in accordance with the design: E-CHAIN logo on the left, menu items and language icons on the right	OK	
STEP 02	Home page Bottom - check that the elements are displayed in accordance with the design: E-CHAIN LP and other PP logos with links to their respective web pages.	OK	
STEP 03	Home page Central part of the scrollable screen – check its design arranged in sections as follows: “INTERMODAL CONNECTIVITY BETWEEN ITALY AND CROATIA” with “Enter the Network” button, “The Project” with information about the E-CHAIN project and “What can I do” with instructions how to join project (language depending).	OK	
/TEST CODE/ Test Report Section Date 6.4.2022			
This section logs the result.			

Test Code	Description	Result	Comment
PA-F-1.1	PA – Home page - Language functionality		

Preconditions			
Web server https://e-chain.eu/PA up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the language features, i.e., whether the language of the web platform is consistently changed in accordance with the choice of language.			
Test Procedure			
STEP 01	The default language is English. Make sure all elements are expressed in English.	ok	
STEP 02	Select and click on the flag icon in the upper right corner of the screen and check that the content and all elements of the page have changed according to the selection.		Upon Clicking on HR flag text displays in English language instead of Croatian
STEP 03	Click on the buttons and check the language compliance on the forms. Are the form elements displayed in the selected language?		Upon Clicking on HR flag English language is displayed in forms instead of Croatian
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result. Test did not pass for Croatian language pages.			

Test Code	Description	Result	Comment
PA-F-1.3	PA – Home page – Restricted zone Log in functionality		
Preconditions			
Web server https://e-chain.eu/PA up and running;			

Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Login Form functionality to access Restricted zone for transport and service providers			
Test Procedure			
STEP 01	Select the “Restricted zone” menu item and Login form will pop-up.	ok	
STEP 02	Enter given test login credentials and click on “Login” button to enter into the restricted zone. Was it successful?		Not tested
STEP 03			
/TEST CODE/ Test Report Section Date 6.4.2022 NP			
This section logs the result. Test not finished due to missing Login credentials.			

Test Code	Description	Result	Comment
PA-F-1.3	PA – Home page – “Enter the Network” form functionality		
Preconditions			
Web server https://e-chain.eu/PA up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the functionality of “Enter the network” request form to enter Restricted zone			
Test Procedure			

STEP 01	Select the “Enter the network” button. A form should pop-up.	ok	
STEP 02	Fill in all required data and try to send the form without accepting privacy disclosure statement. The form should not be sent.	ok	
STEP 03	Accept privacy disclosure statement by switching on radio button. Click on “Send request” button to send a message. The form should be sent and a confirmation on sent message should be displayed.	ok	
/TEST CODE/ Test Report Section Date 6.4.2022			
This section logs the result.			

Test Code	Description	Result	Comment
PA-F-1.4	PA – Restricted zone/Web services functionality		
Preconditions			
Web server https://e-chain.eu/PA up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the general functionality of Web services main page			
Test Procedure			
STEP 01			
STEP 02			
STEP 03			
/TEST CODE/ Test Report Section Date / /			

This section logs the result.		
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4.4 E-CHAIN BACK OFFICE

Test Code	Description	Result	Comment
BO-F-1	BO - email communication functionality		
Preconditions			
E-chain Web server and Back office - mail service up and running; Forms from e-chain.eu/B2C, e-chain.eu/B2B or e-chain.eu/PA filled-out and email sent. Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Test route transport options and link to transport provider booking page			
Test Procedure			
STEP 01	Check weather emails are received from E-chain Web: e-chain.eu/B2B or e-chain.eu/PA		Emails sent from B2B and PA subscription requests are automatically forwarded to sender's email address. Emails sent from B2C are received to Entourance <noreply@entourance.com>
STEP 02	Send reply to emails received		Emails sent from B2B and PA subscription requests are automatically

			forwarded to sender's email address. To messages sent from B2C, a response from <noreply@entourance.com> is sent
STEP 03	Check if answers are sent to recipient email address and received		Messages received
/TEST CODE/ Test Report Section Date 25.4.2022 NP			
This section logs the result. Test performed while e-chain dedicated email address was still not established.			

4.5 E-CHAIN INFO-PANELS COMMON FEATURES

Test Code	Description	Result	Comment
TO-D1	Totem - Home page - Screen Appearance and content		The test case procedure is given for desktop
Preconditions			
Web server https://e-chain.eu/ancona/transit-finder/kiosk https://e-chain.eu/split/transit-finder/kiosk , https://e-chain.eu/venice/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
Checking how web content is displayed on different devices and OS and Internet browsers; check the display of design elements			
Test Procedure			

STEP 01	Home page on the Top screen - check that the elements are displayed in accordance with the design: E-CHAIN logo on the left, corresponding Coat of arms in the middle and language icons on the right side	ok	
STEP 02	Home page Bottom - check that the elements are displayed in accordance with the design: Left side with Instagram and Facebook icons and QR code leading to e-chain project social network and official program page. Real-time weather conditions are shown on the right side.	ok	
STEP 03	Home page Central part Four groups of icons are shown with its name on the bottom of each: "Travel", "Experience Ancona ", "Moving around the city ", "Useful Info" (language depending). Text "DISCOVER Ancona/Split/Venice EVERY INFORMATION ON MULTIMODAL TRANSPORT AND TOURISM ATTRACTIONS IN TOWN" is displayed below the group of icons.	ok	
/TEST CODE/ Test Report Section Date 25 .4.2022 NP			

Test Code	Description	Result	Comment
TO-F1	Totem – Language functionality		
Preconditions			
Web server https://e-chain.eu/ancona/transit-finder/kiosk ,			

https://e-chain.eu/split/transit-finder/kiosk , https://e-chain.eu/venice/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the language features, i.e., whether the language of the web platform is consistently changed in accordance with the choice of language.			
Test Procedure			
STEP 01	The default language is English. Make sure all elements are expressed in English.	ok	
STEP 02	Select and click on the flag icon in the upper right corner of the screen and check that the content and all elements of the page have changed according to the selection.	ok	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-F2	Totem – Idle state/screensaver functionality		
Preconditions			
Web server https://e-chain.eu/ancona/transit-finder/kiosk , https://e-chain.eu/split/transit-finder/kiosk , https://e-chain.eu/venice/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the totem functionality in idle state.			
Test Procedure			

STEP 01	In the idle state, screen should display video recordings or black screen with text “Touch to start”.	ok	
STEP 02	Test the appropriate video file is showing by letting totem app 5 minutes without activity.	ok	
STEP 03	Touch the screen during idle state and check whether a corresponding home page is shown.	ok	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-F3	Totem – QR code functionality		
Preconditions			
Web server https://e-chain.eu/ancona/transit-finder/kiosk , https://e-chain.eu/split/transit-finder/kiosk , https://e-chain.eu/venice/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access and mobile device with QR code scanner app			
Test Objectives			
This test checks the QR code functionality.			
Test Procedure			
STEP 01	Look for any QR code available in info-panel.	ok	
STEP 02	Scan QR code with your mobile QR code scanner.	ok	
STEP 03	Check whether the QR code has been read correctly.	ok	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

4.6 ANCONA INFO-PANELS

Test Code	Description	Result	Comment
TO-AD-F1	Totem Ancona – “Travel” Info Group functionality		
Preconditions			
Web server https://e-chain.eu/ancona/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Travel group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons arranged in 2 rows and 2 columns: "Ferry", "Train", "Bus", "Airport" (language depending)?	Yes	
STEP 02	Upon selecting each of the icons a new window should appear with the corresponding content, that is, with the appropriate timetable and/or QR code to access the timetable via a mobile device.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-AD-F2	Totem Ancona – “Experience” Info Group functionality		
Preconditions			

Web server https://e-chain.eu/ancona/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Experience group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons arranged in 2 rows and 2 columns: "Discover", "Activities", "Parks", "Events" (language depending)?	Yes	
STEP 02	Upon selecting "Events" a QR code leading to www.comuneancona.it is shown.	OK	
STEP 03	Upon selecting each of the remaining icons, a new window should appear showing map with the corresponding content.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-AD-F3	Totem Ancona – "Moving around the city" Info Group functionality		
Preconditions			
Web server https://e-chain.eu/ancona/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Moving around the city group features and functionality.			

Test Procedure			
STEP 01	Are there 3 icons: "Public transport", "taxi", "Charging stations" (language depending)?	Yes	
STEP 02	Upon selecting "Public transport" a QR code leading to www.conerobus.it is shown.	OK	
STEP 03	Upon selecting "Taxi", information about taxi service is displayed and QR code enabling to transfer it to mobile device.	OK	
STEP 03	Upon selecting "Charging station" icon, a new window should appear showing map with the corresponding content.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-AD-F4	Totem Ancona – "Useful Info" functionality		
Preconditions			
Web server https://e-chain.eu/ancona/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Moving around the city group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons in the group: "Emergency numbers", "Meteo", "Map" and "Car parks" (language depending)?	Yes	
STEP 02	Upon selecting "Emergency numbers", a list with information about emergency services	OK	

	numbers is displayed and QR code enabling to transfer it to mobile device.		
STEP 03	Upon selecting “Meteo”, a weather forecast for the next few days is shown.	OK	
STEP 04	Upon selecting “Map”, a map of Ancona and surrounding is shown.	OK	
STEP 05	Upon selecting “Car park” icon, a new window should appear showing map with the corresponding content.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

4.7 SPLIT INFO-PANELS

Test Code	Description	Result	Comment
TO-S-F1	Totem Split – “Travel” Info Group functionality		
Preconditions			
Web server https://e-chain.eu/split/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Travel group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons arranged in 2 rows and 2 columns: "Ferry", "Train", "Bus", "Airport" (language depending)?	Yes	
STEP 02	Upon selecting each of the icons a new window should appear with the corresponding content, that is, with the	OK	

	appropriate timetable and/or QR code to access the timetable via a mobile device.		
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-S-F2	Totem Split – “Experience” Info Group functionality		
Preconditions			
Web server https://e-chain.eu/split/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Experience group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons arranged in 2 rows and 2 columns: "Discover", "Activities", "Parks", "Events" (language depending)?	Yes	
STEP 02	Upon selecting “Events” a QR code leading to www.visitsplit.hr mobile app page.	OK	
STEP 03	Upon selecting each of the remaining icons, a new window should appear showing map with the corresponding content.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
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TO-S-F3	Totem Split – “Moving around the city” Info Group functionality		
Preconditions			
Web server https://e-chain.eu/split/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Moving around the city group features and functionality.			
Test Procedure			
STEP 01	Are there 3 icons: "Public transport", "taxi", "Bicycles" (language depending)?	Yes	
STEP 02	Upon selecting “Public transport”, a map with public transport lines is shown and QR code to scan and view the local bus timetable.	OK	
STEP 03	Upon selecting “Taxi”, information about taxi service is displayed and QR code enabling to transfer it to mobile device.	OK	
STEP 03	Upon selecting “Bicycles” icon, a new window should appear showing map with the corresponding content and QR code link to mobile app for bike rental.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-S-F4	Totem Split – “Useful Info” functionality		
Preconditions			

Web server https://e-chain.eu/split/transit-finder/kiosk up and running;			
Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Moving around the city group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons in the group: "Emergency numbers", "Meteo", "Map" and "Car parks" (language depending)?	Yes	
STEP 02	Upon selecting "Emergency numbers", a list with information about emergency services numbers is displayed and QR code enabling to transfer it to mobile device.	OK	
STEP 03	Upon selecting "Meteo", a weather forecast for the next few days is shown.	OK	
STEP 04	Upon selecting "Map", a map of Split and surrounding is shown.	OK	
STEP 05	Upon selecting "Car park" icon, a QR code is available to scan leading to web location for downloading Smart parking mobile app.	OK	
/TEST CODE/ Test Report Section			
Date 25.4.2022 NP			

4.8 VENICE INFO-PANELS

TO-V-F1	Totem Venice – "Travel" Info Group functionality		
Preconditions			
Web server https://e-chain.eu/venice/transit-finder/kiosk up and running;			

Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Travel group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons arranged in 2 rows and 2 columns: "Ferry", "Train", "Bus", "Airport" (language depending)?	Yes	
STEP 02	Upon selecting "Train" or "Airport" icon, a QR code to access the timetable via a mobile device.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-V-F2	Totem Venice – "Experience" Info Group functionality		
Preconditions			
Web server https://e-chain.eu/venice/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Experience group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons arranged in 2 rows and 2 columns: "Discover", "Activities", "Parks", "Events" (language depending)?	Yes	

STEP 03	Upon selecting any of active icons, a new window should appear showing map with the corresponding content.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-S-F3	Totem Split – “Moving around the city” Info Group functionality		
Preconditions			
Web server https://e-chain.eu/venice/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Moving around the city group features and functionality.			
Test Procedure			
STEP 01	Are there 3 icons: "Public transport", "taxi", "Bicycles" (language depending)?	Yes	
STEP 02	Upon selecting “Public transport”, QR code to muoversi.venezia.it with mobility options for travellers.	OK	
STEP 03	Upon selecting “Charging station”, a map is displayed.	OK	
STEP 03	Upon selecting “Bicycles” icon, QR code link to mobile app for bike rental is shown.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			

Test Code	Description	Result	Comment
TO-V-F4	Totem Venice – “Useful Info” functionality		
Preconditions			
Web server https://e-chain.eu/venice/transit-finder/kiosk up and running; Test device (desktop, tablet, mobile device) with internet access			
Test Objectives			
This test checks the Moving around the city group features and functionality.			
Test Procedure			
STEP 01	Are there 4 icons in the group: "Emergency numbers", "Meteo", "Map" and "Car parks" (language depending)?	Yes	
STEP 02	Upon selecting “Emergency numbers”, a list with information about emergency services numbers is displayed and QR code enabling to transfer it to mobile device.	OK	
STEP 03	Upon selecting “Meteo”, a weather forecast for the next few days is shown.	OK	
STEP 04	Upon selecting “Map”, a map of Venice and surrounding is shown.	OK	
STEP 05	Upon selecting “Car park” icon, a map is shown.	OK	
/TEST CODE/ Test Report Section Date 25.4.2022 NP			