



# South-East Europe Strategic Alliance for Rail Innovation (SEESARI)

11th TC on Railways, Skopje 10.02.2022

# SEESARI - South-East Europe Strategic Alliance for Rail Innovation

**SEESARI** is the initiative for **supporting rail and transport development in South East Europe with focusing on railway research, development and innovation**

## **Partnership:**

=> currently **more than 70 members from 18 countries** (railway transport operators and infrastructure managers, manufacturers and suppliers of technical equipment, financial institutions, research institutions, associations and interest groups connected with (rail) transport, national and regional authorities,..)



## SEESARI – MAIN PRIORITIES

HIGH SPEED RAIL  
NETWORK

INTERGATION OF  
PASSENGER  
TRANSPORT

REGIONAL RAILWAY  
NETWORK

RAILWAY ROLLING  
STOCK

INTEROPETABILITY  
AND TECHNICAL  
STANDARDS

SOCIAL COMPONENT/  
HUMAN RESOURCES

COOPERATION IN  
FREIGHT TRANSPORT

DIGITALIZATION

ENERGY EFFICIENCY

SUSTAINABILITY

# SEESARI – concrete project proposals

## SEESARI - Innovation and development projects

- Ticketing and reservation system (SEPA)
- Electronic timetable and optimization
- Real-time tracking of trains
- Regional education centre for the development of knowledge of managers and experts
- Maintenance and standardization based on rail diagnostics
- Integrated railway traffic management

## SUPPORT/COOPERATION WITH INTERNATIONAL ORGANIZATIONS

### => Full support of International Union of Railways

- Special group
- Technical support, promotion, leadership EU projects



### => Support of Community of European Railways



*The Voice  
of European  
Railways*



### => Support and cooperation with SHIFT2RAIL



“SEESARI – FACILITATION ROLE”



## WORKING MATERIALS

### INTERNATIONAL TRAINS IN BALKAN PENINSOLA

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**IMMEDIATELY** .....CAN BE ADD TO TIMETABLE

„EXTEND“ EXISTING TRAIN

**210/211 : BEOGRAD - VINKOVCI – LJ - VILLACH**

SUGGESTED COMPOSITION: **2 B (HŽ) + 2 B (SŽ) + 1 AB (SŽ)**

**CAN BE EXTEND TO BEOGRAD**

<b>BEOGRAD :</b>	<b>07:00</b>
ZAGREB:	12:39
LJUBLJANA:	15:06
VILLACH:	17:08

VILLACH:	12:53
LJUBLJANA:	14:31
ZAGREB:	17:07
<b>BEOGRAD:</b>	<b>23:00</b>

**FROM JULY 2022** .....**CAN BE ADD TO TIMETABLE** NEW TRAN, ADD TO „EXTEND“ EXISTING TRAIN

## 410/411 : **BEOGRAD – ZAGREB - LJ - VILLACH**

SUGGESTED COMPOSITION: **1 AB (HŽ) + 2 B (SŽ) + 2 B (HŽ)**

na relaciji Dobova – Beljak / **3 B(SŽ) + 1BC(Optima\*\*)** na relaciji Beograd – Dobova\*

**CAN BE EXTEND TO BEOGRAD THROUGH ZAGREB**

<b>BEOGRAD :</b>	<b>22:00</b>
<b>ZAGREB:</b>	<b>04:45</b>
<b>LJUBLJANA:</b>	<b>07:17</b>
<b>VILLACH:</b>	<b>09:03</b>

<b>VILLACH:</b>	<b>18:48</b>
<b>LJUBLJANA:</b>	<b>20:33</b>
<b>ZAGREB:</b>	<b>23:30</b>
<b>BEOGRAD:</b>	<b>06:00</b>

\*vlak vozi v obdobju 10.12 – 15.01 ter 24.06 – 15.09., \*\*BC vozi le v obdobju 24.06. – 15.09.; vlak vozi v obdobju 10.12 – 15.01 v kolikor ga ponudijo druge železniške uprave



**2022/2023** .....CAN BE ADD TO TIMETABLE

„EXTEND“ EXISTING TRAIN

**414/415 RELATION : BEOGRAD - ZAGREB – LJ - ZURICH**

SUGGESTED COMPOSITION: 1 B (SŽ/HŽ) + 3 B (SŽ) + 2 B (HŽ)

CAN BE EXTEND TO BEOGRAD

<b>BEOGRAD :</b>	<b>10:34</b>
ZAGREB:	18:11
LJUBLJANA:	20:54
VILLACH:	22:49

VILLACH:	06:28
LJUBLJANA:	08:09
ZAGREB:	10:40
<b>BEOGRAD:</b>	<b>17:38</b>

**2022/2023** .....CAN BE ADD TO TIMETABLE

NEW TRAIN

## BUSINESS RELATION : **LJUBLJANA - BEOGRAD**

SUGGESTED COMPOSITION: **1 A (SŽ) + 2 B (SŽ) + WB (SŽ)**

**ALL AIR CONDITIONED**

LJUBLJANA :	05:15
ZAGREB:	07:25
BEOGRAD:	12:00

BEOGRAD:	18:00
ZAGREB :	22:35
LJUBLJANA:	00:45

### NUMBER OF STOPS LIMITED :

**SLO** ZIDANI MOST, SEVNICA, DOBOVA

**CRO** ZAGREB, NOVSKA, SLAVONSKI BROD, VINKOVCI

**SRB** ŠID, RUMA, STARA PAZOVA



## SEPA – OPPORTUNITIES AND CHALLENGES IN PUBLIC TRANSPORT

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## EUROPEAN RESERVATION SYSTEMS

European railways' reservation systems are all interconnected and create a network which, for the end user, looks like a single reservation system.

Besides being reservation systems (for selling inventory), they are able to handle IRT tickets (tickets with integrated reservation). Thus, they also act as ticketing systems.

## SEPA INITIATIVE AS SEESARI PROJECT

**SEESARI officially launched SEPA initiative on April 18th, 2019 in Ljubljana**

Digital platform for  
railway reservations  
model

Fully functional  
replacement for EPA

Reliable support for  
all SEPA partners

1

Railway reservation  
system

2

SEPA as a **full IRIS**  
**member**

3

**SEESARI** as top  
governance body

Open architecture ready for future  
extension to OSDM and other areas

Full support for existing (and future)  
industry standards

Former EPA partners can use connection  
interface compatible to EPA

## SEPA NOW IS NOT ONLY YET ANOTHER RESERVATION SYSTEM

SEPA is a platform which can act not only as a reservation system, but also as a connectivity tool or standalone ticketing system.

### **FOR EXAMPLE.. SEPA CAN :**

1. Providing connectivity to other ticketing systems (e.g. DB Webservices)
2. Providing services of UIC backed projects (ETCD electronic tickets)
3. Providing services of other companies (EURAIL, other transport modes)
4. Providing centralized NRT ticketing solution using OSDM

## SEPA FEATURES

Takes care of all accounting and reporting

Supports graphic reservation mode

Enables Internet and mobile sales, electronic tickets

Enables personal data exchange

Integrated and multicity ticketing, OSDM, yielded prices

Supports also other modes of transport

Direct connectivity to other ticketing systems

## SEPA HELP ..

### OUR SOLUTION IS OPEN FOR PARTNERSHIP ....

#### **OUR PARTNERS/MEMBERS CAN USING SEPA:**

- host their inventory in SEPA reservation system
- connect their ticketing systems to SEPA
- enables its partners to use the new connection interface taking full advantage of new standards, requirements and guidelines
- offers EPA compatible connection interface



## SEPA SIMPLY ...

SEPA is designed to support multiple ticketing systems and inventory from different railway undertakings

### **SOLUTION ALLOW OUR PARTNERS/MEMBERS TO :**

- cuts the expenses of running the system
- offers inherent scalability
- offers other services besides reservation system
- online reporting and tools for inventory management
- Share „important” information and news exchange among SEPA „world”

## SEESARI – SEPA OBJECTIVES ARE NOW ARCHIEVED

**1<sup>st</sup> objective** SEESARI will allow „location“ to host, maintain and manage the entire future SEPA solution. SEPA infrastructure will be physically located in Cloud solution and SEESARI take full business control over it – significantly reduced operating costs

**2<sup>nd</sup> objective** is **enabling „our“ partners** to use full advantages of new standards, requirements and UIC guidelines without programming it in their systems

**3<sup>rd</sup> objective** is to make the new reservation system flexible enough to be able to host trains from other national railway companies (like Greece,..)

**4<sup>th</sup> objective** is to have a flexible accounting and reporting system as part of platform

## WHY BE/BECOME A MEMBER OF SEESARI/SEPA FAMILY

- ✓ FUNCTIONALLY REPLACES EPA AND ADDS NEW FUNCTIONALITIES (GRAPHICS, IMPROVED TARIFFS)
- ✓ **ENABLES** INTERNATIONAL INTERNET AND MOBILE SALES, ELECTRONIC TICKETS
- ✓ SOLVES ISSUES (GDPR ISSUE, PERSONAL DATA PROTECTION REQUIREMENTS)
- ✓ INTEGRATED AND MULTICITY TICKETING, OSDM ARCHIVED
- ✓ **NATIONAL TARIFFS** (LOCAL TICKETING BACKUP OR REPLACEMENT)
- ✓ **INCREASES PARTNERS' PROFIT, SIGNIFICANTLY CUT EXPENSES**

# Thank you for your attention.

Dr. Peter Verlič, chairman

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## Any questions?

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