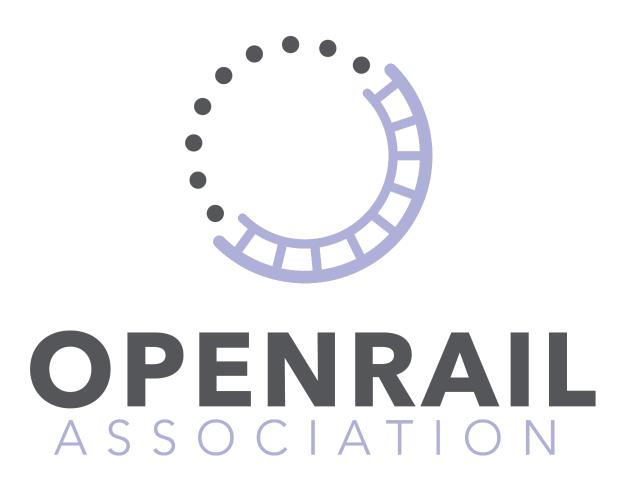
# Annual Report 2024 of the OpenRail Association

Text in italics (such like this) is meant as instructions how to fill the sections. It should be removed before finalising the report.



OpenRail Logo

#### Table of contents

- Executive Summary
- · Message of the Chair of the Board
- The OpenRail Association Board
  - Jochen Decker
  - Frédéric Novello
  - Jean-Michel Evanghelou
  - Nicole Göbel
  - Brede Dammen
  - Erik Nygren
  - Fatima Zohra El Ouerkhaoui
  - Peter Franken
- Open Source for the Railway Sector
- OpenRail Projects
  - Open Source Railway Designer (OSRD)
  - Rail Condition Monitoring (RCM OSS)
  - Digital Automated Coupling Migration Decision Support System (DAC Migration DSS)
  - Netzgrafik-Editor (NGE)
  - Library for Linear Reference Systems (libLRS)
  - Open Source Railway Designer {.project}
  - Rail Condition Monitoring { project}
  - Digital Automated Coupling Migration Decision Support System {.project}
  - Netzgrafik-Editor {.project}
  - Library for Linear Reference Systems {.project}
- Message of the Chairs of the Technical Committee
- Members
- · Building the organization
- Participating in Events
- Join us
- Endnotes
  - Website
  - Contact
  - License

## **Executive Summary**

## **Message of the Chair of the Board**

#### The OpenRail Association Board

Pictures of all board members with name, role in the board, organization and title in their organization

For each board members we would like to have a brief quote about the OpenRail Association. Ideally this alltogether tells a story.

For each board member there is an own file where we collect the respective info and text (05xx.md)

We leave the chairs of the TC out here as they have their own page <u>later</u>.

**Jochen Decker** 

Frédéric Novello

Jean-Michel Evanghelou

**Nicole Göbel** 

**Brede Dammen** 

**Erik Nygren** 

Fatima Zohra El Ouerkhaoui

**Peter Franken** 

## **Open Source for the Railway Sector**

Tell the story of what the organization is built for. What does it want to achieve and how do the steps we did in 2024 are the beginning of this effort.

#### **OpenRail Projects**

One-page overview of the projects with brief summary and ideally some icon to visually represent each project.

For each project we will add the incubation stage as a small visital indicator using the <u>badge</u>.

In the following subsections we have a deep dive for each project (07xx.md).

Each project should address the following topics:

- Which domain, which business requirement does it address
- Which functionality
- Technology
- Adoption, community
- Potential, future perspective
- Reached milestones

In 2024 the OpenRail Association accepted the first five open source projects in its <u>incubation</u> <u>process</u>. Dive deeper on each of the projects on the following pages.

#### **Open Source Railway Designer (OSRD)**



OSRD is an open source web application for railway infrastructure design, capacity analysis, timetabling and simulation and short term path request.

#### **Rail Condition Monitoring (RCM OSS)**

OpenRail Sandbox

RCM by SBB comprises a suite of products for rail condition monitoring. Based on the open-source data format RCM-DX (RCM Data eXchange), RCM enables easy accessibility and visualization of railway diagnostic data.

## Digital Automated Coupling Migration Decision Support System (DAC Migration DSS)

OpenRail Sandbox

Within the next years around 500 K freight wagons all over Europe owned and operated by various corporations will be converted from screw couplers to digital automatic couplers (DAC). To facilitate the migration process, a decision support system (DSS) is planned under the project.

#### **Netzgrafik-Editor (NGE)**

OpenRail Sandbox

Netzgrafik-Editor is now a mature tool for creating and analyzing regular-interval timetables. It's versatile for logistics planning in various domains. Features include interactive editing, graphic timetables, trainrun editing, and logistics analysis.

#### **Library for Linear Reference Systems (libLRS)**

OpenRail Sandbox

The goal of the library is to have a flexible, high performance and easy to integrate linear referencing systems (LRS) library that can be used in any system to manipulate LRSs.

**Open Source Railway Designer** 

#### **Rail Condition Monitoring**

Digital Automated Coupling Migration Decision Support System

## **Netzgrafik-Editor**

**Library for Linear Reference Systems** 

## Message of the Chairs of the Technical Committee

Message from the Technical Committee, highlighting beginning collaboration (example OSRD/ NGE).

## **Members**

One-page overview of members. Grouped by membership category.

## **Building the organization**

2024 has been the year of building up the organization. Tell the story, significant milestones, use it to mention the important organizational parts, link to where to find more information, such as governance documents.

## **Participating in Events**

Events OpenRail participated in, along with photos where we have them. Tell the story of building a community.

- FOSDEM
- InnoTrans
- Flatland Symposium

#### Join us

Text from our one-pager. To be adapted.

OpenRail Association - Open Source for the Railway Sector

We create an open, autonomous and collaborative space to work together on rail-specific software initiatives.

Our goal is to: - Unlock the benefits of open source for the sector - Accelerate innovation - Increase efficiency - Improve interoperability

**Contribute** to our projects to collaboratively create solutions for the challenges of digital transformation within the railway sector: https://github.com/OpenRailAssociation

**Topics** - Active Open Source Projects:

- Maintenance e.g. RCM-DX
- Timetable Planning e.g. OSRD
- Netdesign e.g. Netzgrafik Editor

Established in 2024 by: - DB - SBB - SNCF - UIC

**Join us** as a member to support an open-source ecosystem for the railway sector: https://openrailassociation.org/about

## **Endnotes**

#### Website

https://openrailassociation.org

#### Contact

Send us an email at contact@openrailassociation.org.

#### License

CC-BY-SA