

URVIS NUMBER & DIGITAL SOLUTIONS

MARIANNA LEVTOV
SEPTEMBER 3RD 2024

SETTING THE SCENE- WHY DIGITAL?

- cross border operations (passengers & freight)
demand transparency and tracking
- Underinvestment both in infrastructure & rolling stock forces predictive maintenance
- Transportation modes are subject of environmental, social and political activities and goals. The shift to (greener) rail require proofs of compliance



WHAT IS IN THE
OFFER?





- **Predictive Maintenance:** IoT sensors on railway rolling stock assets and tracks monitor conditions in real-time, predicting failures before they happen, reducing downtime, and improving safety.
- **Asset Tracking:** IoT devices track the location and status of assets and, optionally, cargo in real-time, enhancing logistics and operational efficiency.
- **Fleet Utilisation Efficiency:** IoT can optimize energy usage and fleet operations by monitoring and adjusting based on pattern recognitions, demand and environmental conditions.



URVIS INTEGRATION INTO DIGITAL RAIL SOLUTIONS

Digital URVIS serves the financing of the railway rolling stock:

- ✓ Public Finance
- ✓ Public Export Finance
- ✓ Private Investment

PROBLEM

- **Cost of Credit:** In the current economic environment, interest rates might be high due to various factors such as inflation, economic uncertainty, or market conditions. This increases the overall cost of financing for rail operators, making it more expensive to purchase or lease new rolling stock.
- **Funder security/collateral:** In the context of rolling stock, the trains themselves often serve as collateral. Especially in the market for used rolling stock, funders may face challenges in recovering their investment in the event of a default, particularly if there is no national title or security registry in place.
- **Creditor exposure on cross border financing or operations:** legal, regulatory, currency, operational and other risks challenges the rolling stock financing. Sanctions, insecure countries, taxes can trigger an asset's repossession. However, creditors rely on operators to inform on assets' current location.



DIGITALISATION BENEFITS

URVIS integration

DIGITAL RAIL

- **IoT = hardware enabled software**
- **Mounted on the Rolling Stock hardware is secured from penetration and hacking**
- **IoT related software should be cyber secured same as any other software (e.g. ERP, Online Banking)**

Real-time
TRANSPERANCY
on geo-location,
maintenance,
operations

EVIDENCE proof:
historical data on
activities

MnR: pattern
recognition of usage,
damage and
maintenance cycles

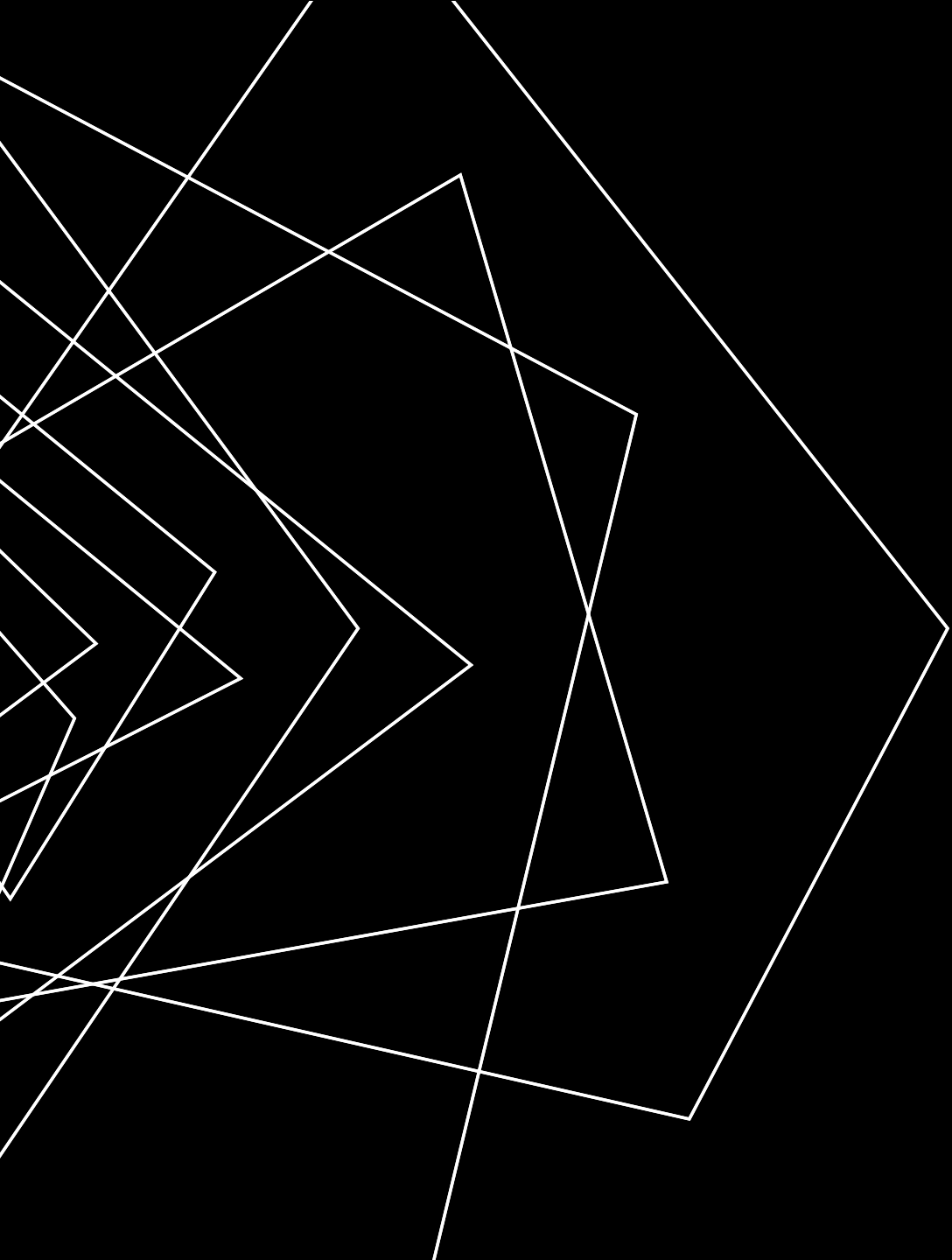
SOLUTION

Adopt URVIS Number

Integrate into IoT Platform as
Asset Running Number

Agree on Levels of Transparency
for the 3rd parties

Enable Visibility to the Financier
on the Platform



LET'S DISCUSS!

THANK YOU

Marianna Levtov
+41-76-608-0731
marianna@levtov.ch
www.levtov.ch