



Moderator Lasse Nykänen

**Project Director Vediafi Ltd** 









#### DigiLog 3

#### **12: 00 Opening**

 Jarkko Rantala, CaaS Nordic & Marko Forsblom, ITS Finland

#### 12:15 Keynote speakers

- Sarah Schiffling, Hanken Building resilience in an uncertain world
- Markus Happonen, National Cyber Security Centre (Traficom) - Cybersecurity and information sharing in Logistics sector

#### **Authority view**

- Teemu Heikura, Fintraffic eFTI reference implementation
- OlliPekka Mäkitalo, Finnish Customs Customs 2.0
- Ilona Torniainen, Finnish Defence Forces Nato logistics

14:15-14:45 Break







#### 14:45 Industry outlook

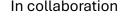
- Samuli Toivonen, Kaukokiito Versatile data transfer in supply chain
- Satu Orava and Suvi Widgren Telia and Rekka Group builds together a better future
- Jussi Poikonen, Awake.ai Harnessing JIT Scheduling to Enhance Port Performance
- Tomi Dahlberg, DBE CORE Peppol as the enabler of digital logistics and eFTI – current status
- Simonas Niedvaras, iToDEV eCMR with an integrated CO2 calculator for simpler CO2e reporting in the road logistics sector

#### 15:40-16:00 Panel - How to adapt to the changing operating environment

- Matti Lankinen, Vedia/CaaS Nordic (host)
- Sarah Schiffling, Hanken/ReMuNet
- Jan Bergstrand, Trafikverket
- Heiti Mering, Digilogistika Keskus / eFTI EXPERTS
- Rugile Andziukeviciute, TIA
- Janne Huhtamäki, Traficom
- Satu Orava, Telia

16:00 Summary and closing

**Cocktails & networking** 









**Marko Forsblom** 

**ITS Finland** 

**Jarkko Rantala** 

**CaaS Nordic** 











#### Wellcome to the DigiLog3

Jarkko Rantala, AFRY Finland Oy Chairman of CaaS Nordic

DigiLog3, Botta Ballroom, 20<sup>th</sup> November 2024

#### **CaaS Nordic**

- Corridor as a Service: A digital hub for supply chains and freight that innovates new technology and services to create more efficient logistics.
- A concept for logistics combining ITS systems to intelligent logistics.
- A focus on transport corridors and logistics systems covering the whole Baltic Sea area and Nordics.
- The CaaS concept has been developed in PPP-collaboration where private and public sectors have done collaboration with research.
- Logistics Laboratory LOBRA project (LIMOWA), 2025-27

https://www.caasnordic.eu/



#### Sarah Schiffling

Hanken School of **Economics** 

Building resilience in an uncertain world









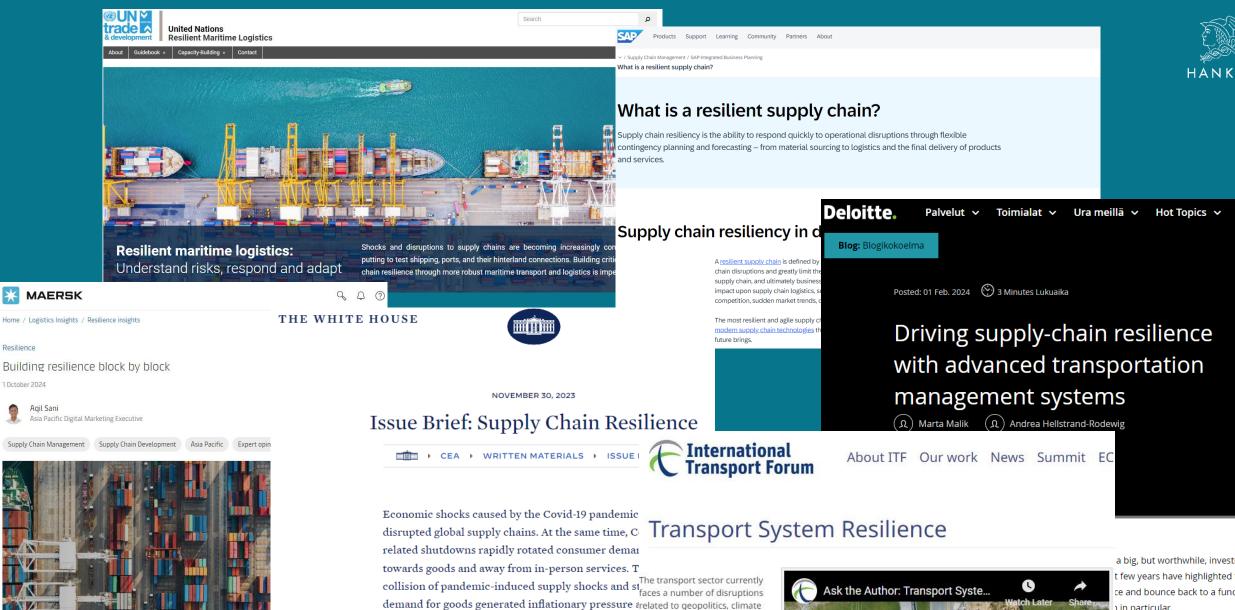


#### **BUILDING RESILIENCE IN AN UNCERTAIN WORLD**

Dr Sarah Schiffling

Assistant Professor in Supply Chain Management and Social Responsibility

Hanken School of Economics



the global economy. As suppliers were unable to  $m\varepsilon^{\text{change}}$  and energy security.

fragile global supply chains became clear.

elevated demand, the true cost of highly-efficient, brefers to the sector's capacity to

Transport system resilience

from such disruptions. This report sets out the main disruptions to transport systems worldwide. It explores ways to

deal with, adapt to and recover

a big, but worthwhile, investment. Th t few years have highlighted the impo ce and bounce back to a functioning s ı in particular.

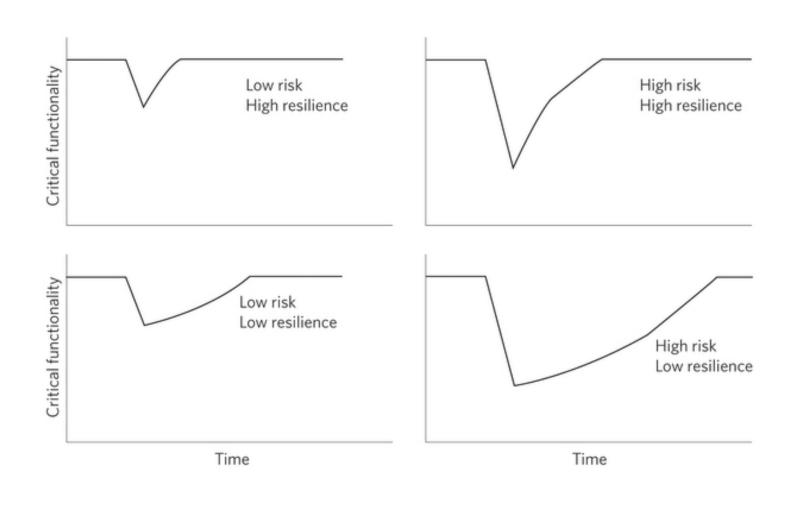


# "IT IS NOT QUITE CLEAR WHAT RESILIENCE MEANS, BEYOND THE SIMPLE ASSUMPTION THAT IT IS GOOD TO BE RESILIENT"

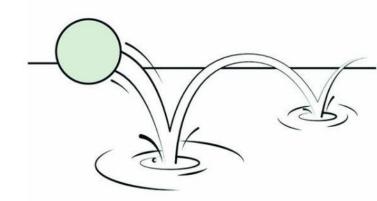
(Davoudi et al., 2012, p.299)



#### **BOUNCEBACKABILITY**



### Resilience = Bouncebackability



#### **ENGINEERING RESILIENCE**

- Fail safe design to protect an engineered system
- Assumes that there is one equilibrium
- The system bounces back to the equilibrium after disruption
- Assumes that the system is separate from its environment and can be controlled
- Might include strategies such as multisourcing, redundancy, buffer inventory...

(Wieland & Durach, 2021)

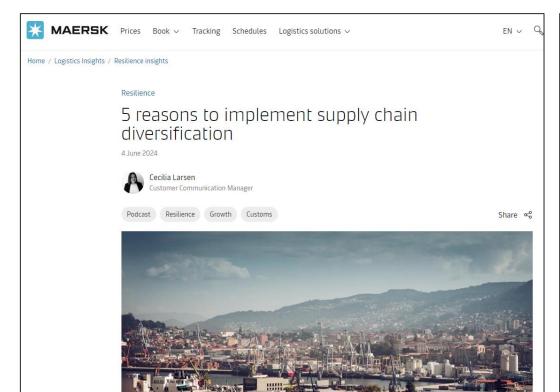


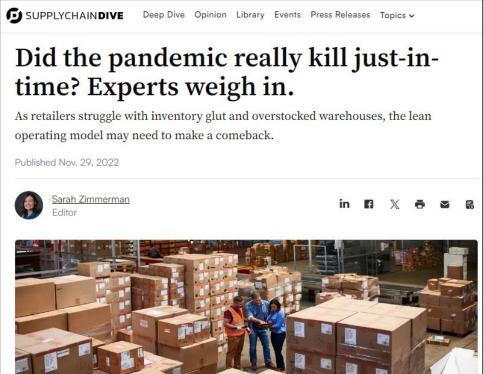
#### **ENGINEERING RESILIENCE**

To mitigate supply chain risks during COVID-19,

- 47 % of respondents are considering holding more inventory,
- 58 % intend to diversify their sourcing strategies

(van Hoek, 2020)







#### **ENGINEERING RESILIENCE**

#### **UNICEF Emergency Response**

- Pre-positioning of supplies around the world
- Preparation of kits of items to be distributed together









# IS THIS ENOUGH IN OUR COMPLEX, INTER-CONNECTED, AND UNCERTAIN WORLD?

#### SOCIAL-ECOLOGICAL RESILIENCE

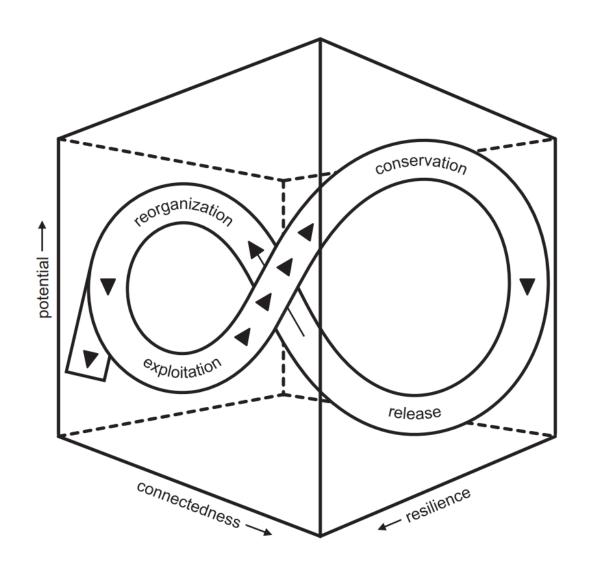
- Embraces a safe fail design
- Acknowledges that beyond a certain level of disruption, there will be a change to system control and structure
- There is no one steady equilibrium
- Assumes that the system is open and linked to other social-ecological systems
- The system cannot be managed
- Emphasises non-linearity, uncertainty, dynamic change and transformation

(Wieland & Durach, 2021)





#### **SOCIAL-ECOLOGICAL RESILIENCE**





#### SOCIAL-ECOLOGICAL RESILIENCE

#### IFRC: Early warning, early action

- Integration of social and ecological systems: Monitoring of environmental risk factors and forecasting potential hazards to protect communities through preemptive measures
- Adaptive capacity and learning: Anticipatory action framework for continuous learning and adaptation by fostering a culture of preparedness and responsiveness
- Community engagement and empowerment: Strengthening capacity of local communities to anticipate and respond to environmental changes through knowledge and resources



Early Warnings for All



Community early warning systems



**Anticipatory action** 



Forecast-based financing





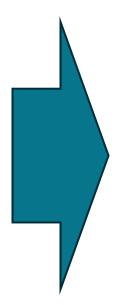
Risk-informed Early Action Partnership



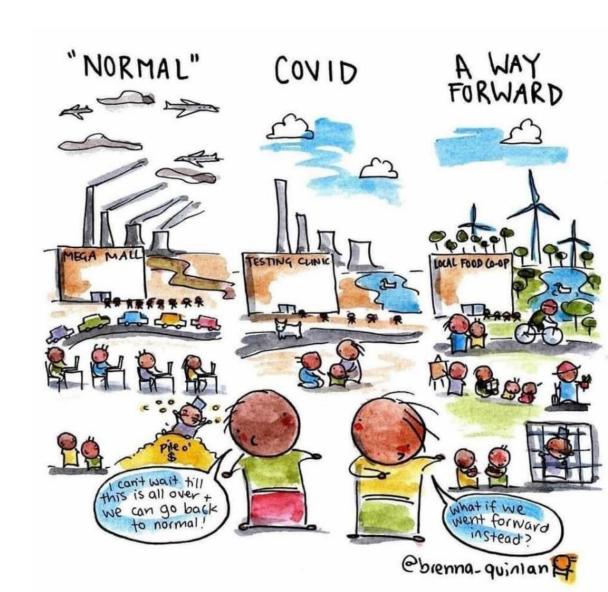
#### **BOUNCE FORWARD**

Can we embrace disruption?

- An opportunity for learning
- An opportunity for improvement
- An opportunity for finding a new (temporary) equilibrium



Resilience as a positive development towards the future, not clinging on to the past





#### **BOUNCE FORWARD**

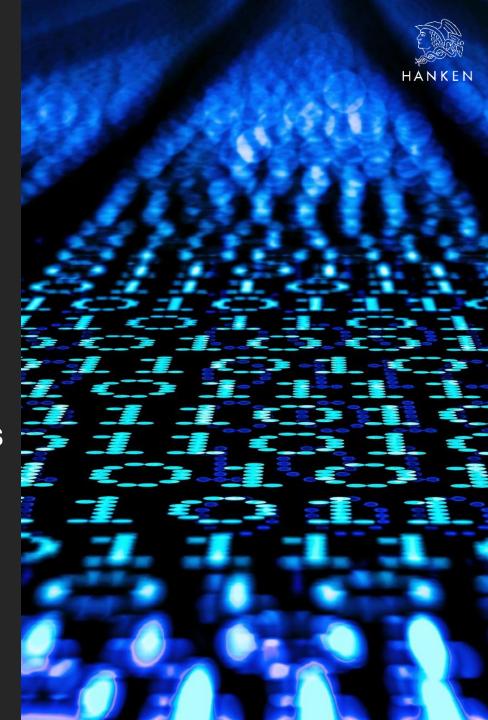
#### **UNICEF** drone delivery in Vanuatu

- Aimed to overcome logistical challenges to vaccine distribution posed by Vanuatu's rugged terrain and dispersed islands
- Drone use addressed immediate delivery obstacles but also established a scalable model for future healthcare logistics

Vanuatu: Revolutionary Technology for Vaccine Delivery | UNICEF Office of Innovation



- Predictive analytics
- Enhanced visibility
- Real-time monitoring
- Integration and interoperability for system-wide responses
- Automation for quicker response times





#### MSF (Doctors without Borders) Real-time cold chain monitoring

- enhance the monitoring of temperature-sensitive medical supplies
- provides real-time, accurate tracking of temperature conditions throughout the supply chain
- digital interface offers clear, immediate information to field staff, facilitating prompt decision-making

Cold Chain Indicators — The MSF Sweden Innovation Unit

First explanation:

10
22.0 °C

10



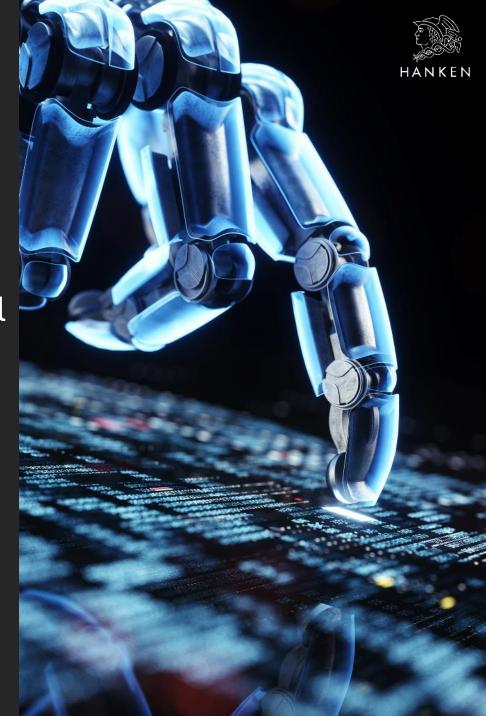
#### World Food Programme: Building Blocks in Zaatari refugee camp (Jordan)

- Using blockchain to manage cash-for-food transactions, combined with iris-scanning for identity verification
- eliminates reliance on intermediaries, reduces fraud, and ensures accountability in real time, providing a transparent, secure record of aid distribution
- improves operational efficiency and created a resilient system for managing aid

Inside the Jordan refugee camp that runs on blockchain | MIT Technology Review



- Digitalisation can help us embrace resilience as an opportunity
- Digitalisation aids the development of resilience but also introduces potential vulnerabilities
- Real-time visibility should not make us cling to the status quo
- Predictive analytics have the potential to take some of the pain out of transformation







Markus Happonen

**National Cyber Security Centre Finland** 

Cybersecurity and information sharing in Logistics sector













#### Cybersecurity and information sharing in **Logistics sector**

Markus Happonen, markus.happonen@traficom.fi

#### **Presentation consists**

- ► Introduction to Finnish National Cyber Security Centre
- ▶ Information sharing within critical infrastructure
- ► Things about digitalization
- ► Cyber security situation



## National Cyber Security Centre (NCSC-FI)

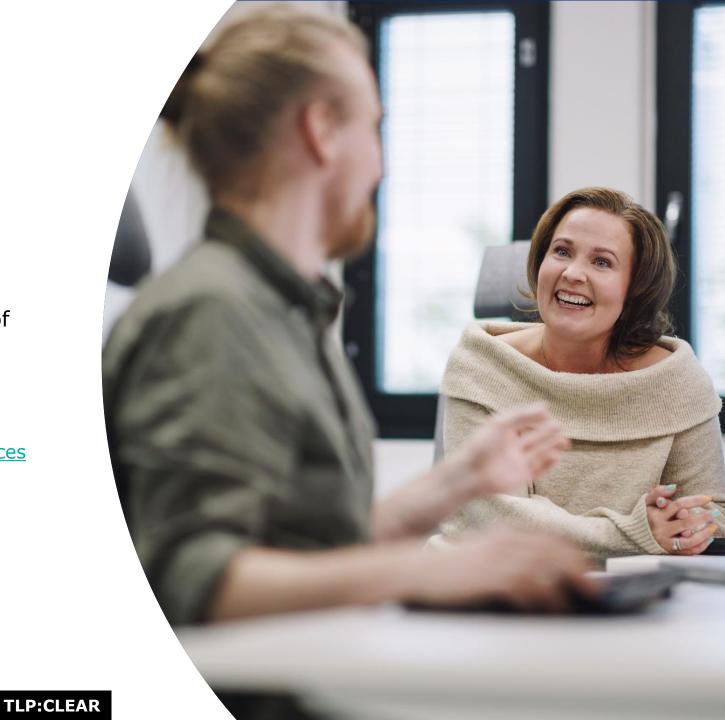
#### A national information security authority, whose duties consist of:

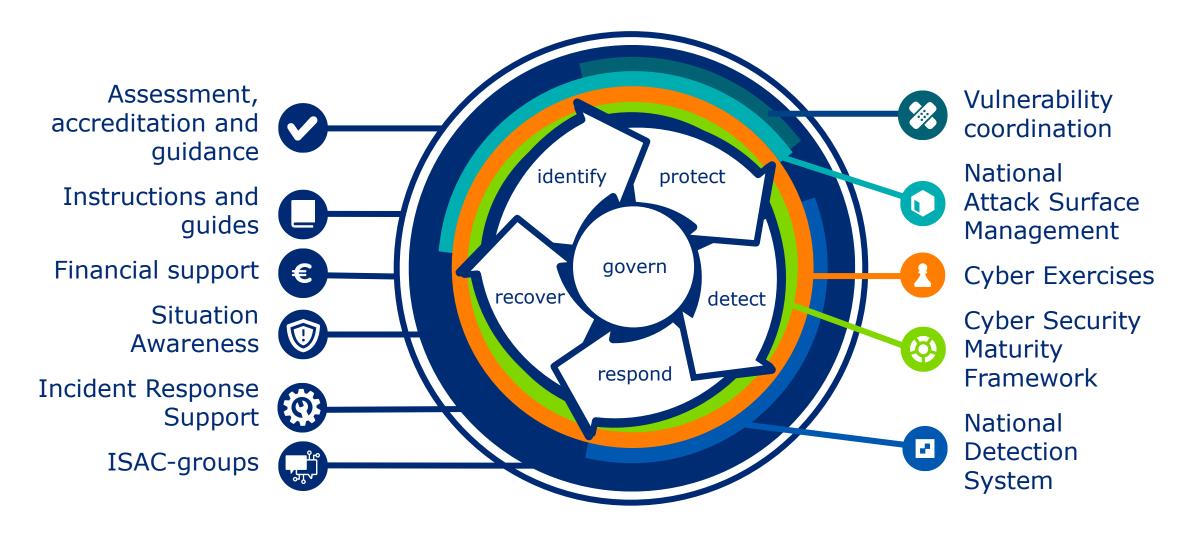
- Collecting information on information security violations and threats (Situational awareness)
- ▶ **Informing** of information security related matters and performance of communication networks and services
- Solving information security violations and threats against networks, communications and value-added services
- Steering and supervision of communications providers' information security, functionality and preparedness
- Information assurance matters related to the handling of classified information in electronic communications
- Authority functions for the public regulated service relating to the European Galileo satellite positioning system
- Supervising the responsibilities related to confidentiality of electronic communications



#### What we do

- Most of our information security services are free of charge and available to everyone.
- ▶ Some of our services are targeted specifically to support the cyber security of the central government and organisations vital for the security of supply.
- More information about our services:
  - www.kyberturvallisuuskeskus.fi/en/our-services (or www.ncsc.fi)
  - kyberturvallisuuskeskus@traficom.fi





## Comprehensive Cyber Security Services for the Entire Society



## Situational awareness and network management

Situational awareness ISAC information sharing groups

#### **Situational awareness products**

- Vulnerability reports
- Vulnerability digest
- Cyber weather
- Newsletter
- ► Information Security Now! articles
- Sector-specific situation awareness and notices
- Alerts
- Weekly report
- Annual information security review
- ▶ To access our products, please join our sector-specific mailing lists.
  - ▶ Send an email to kyberturvallisuuskeskus@traficom.fi.
- ▶ To subscribe to the newsletter and vulnerability digest, please visit our website:

**TLP:CLEAR** 

www.kyberturvallisuuskeskus.fi/en/ncsc-news/subscribe-our-newsletters





#### NCSC-FI's sector-specific mailing lists

- ► Central government
- Chemical and processing industry
- ► Defence industry
- Device and product manufacturers
- Energy sector
- ▶ Financial sector

- ▶ Food sector
- ▶ Healthcare
- ► ICT industry
- ▶ Industrial automation
- ► Industrial enterprises
- ► Information security consultants and consulting agencies

- Information security researchers
- Logistics sector
- Media
- Municipalities
- ► Public administration
- Service sector
- Water supply and sewerage

If you want to subscribe to these mailing lists or have any questions about their content, please contact us at kyberturvallisuuskeskus@traficom.fi

#### **Information sharing groups**

Develope sector and national Cybersecurity together in ISAC –networks (Information Sharing and Analysis Centre)

- Information sharing
- Situational awareness
- Good practices
- Risk analysis

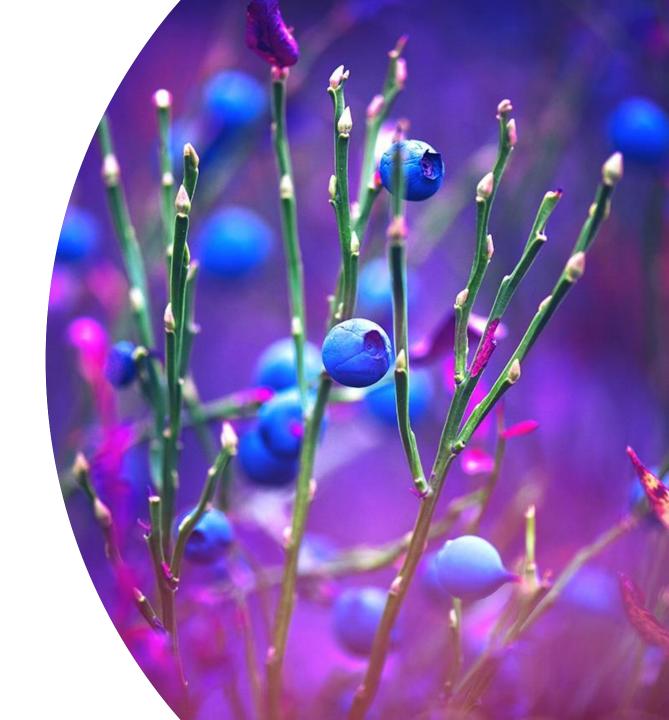


central





# Digitalization and cyber situation



# **About Digitalization in logistics sector**

- ▶ Long supply chains are very common in logistics sector. Logistics companies work as a supplier for the other critical infrastructure. Therefore it is very important to agree on responsibilities between actors beforehand.
- ▶ We have had some cases in logistics sector, where operative systems has been open to the internet.
- ▶ Internal and external communication plans are absolutely crucial in crisis situations.



### **Current Cybersecurity situation**

- ▶ (Distributed) Denial on Service attacks have been on public within last month.
  - ▶ Some DDoS attacks use varied technologies and also carpet bombing.
- ► SMS Sender ID protection should be considered.
  - ▶ SMS Sender ID protects from using organizations name for phishing.
- Finland's Cyber Security Strategy 2024-2035 has been published on October.
  - ▶ Reasons for new version include changed environment and NIS2-directive.



### **Cyber security in Logistics sector**

- ► Last quarter has been more calm than previous one.
- ► Still quite a lot of phishing and attempted CEO Frauds (especially during holiday season).
- ▶ During summer Crowdstrike distributed a faulty update, which caused indirect problems also in logistics sector in Finland.





# Thank you!

Please contact us at kyberturvallisuuskeskus@traficom.fi

TLP:CLEAR 25.11.2024 40



**Teemu Heikura** 

**Fintraffic** 

eFTI reference implementation





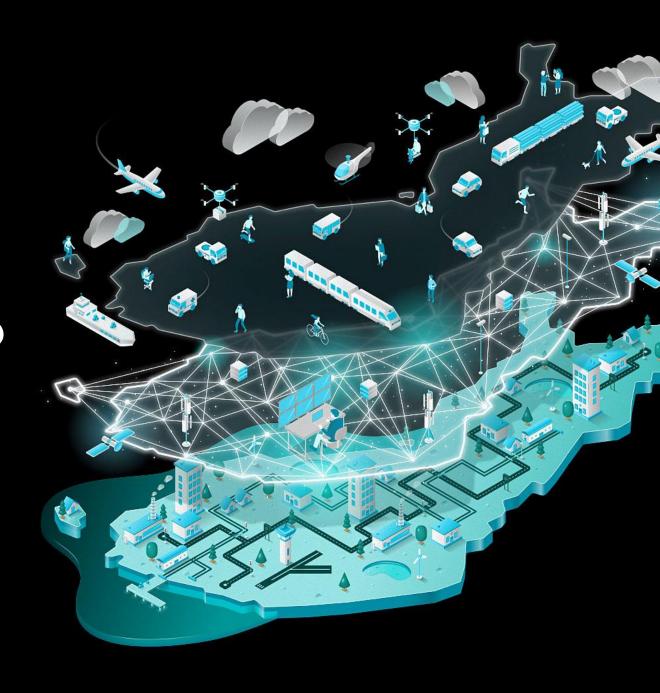


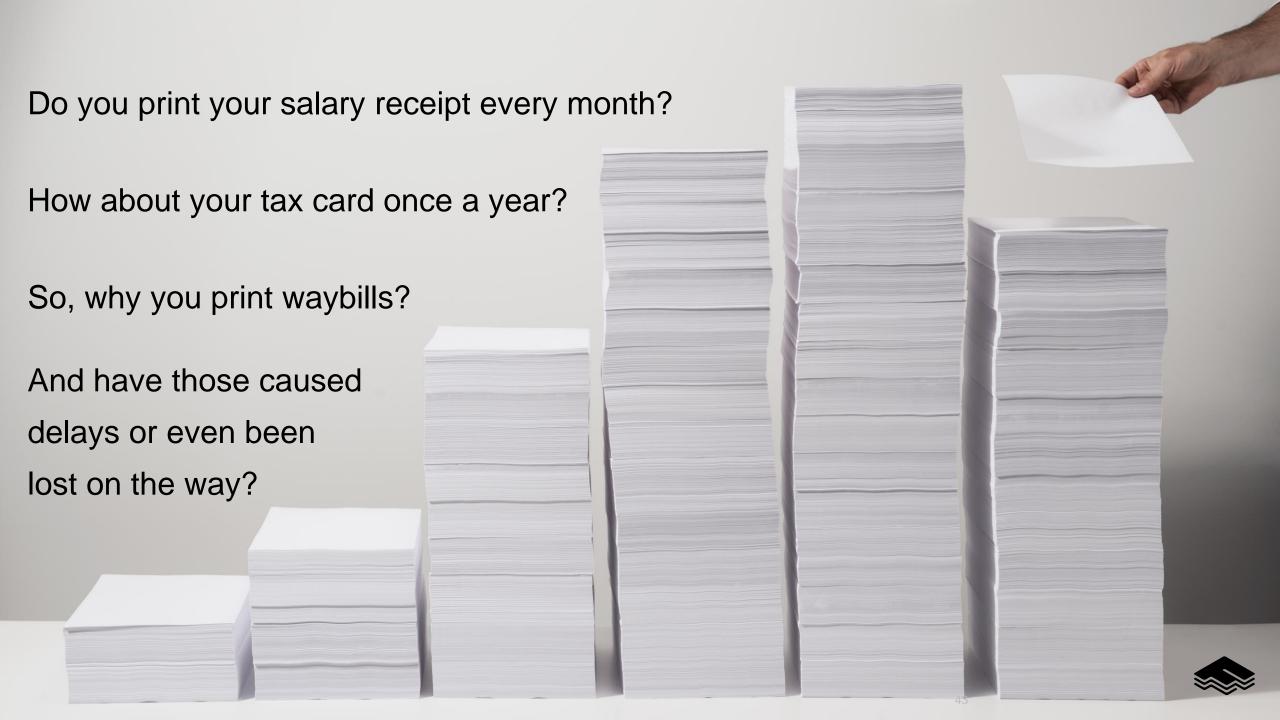


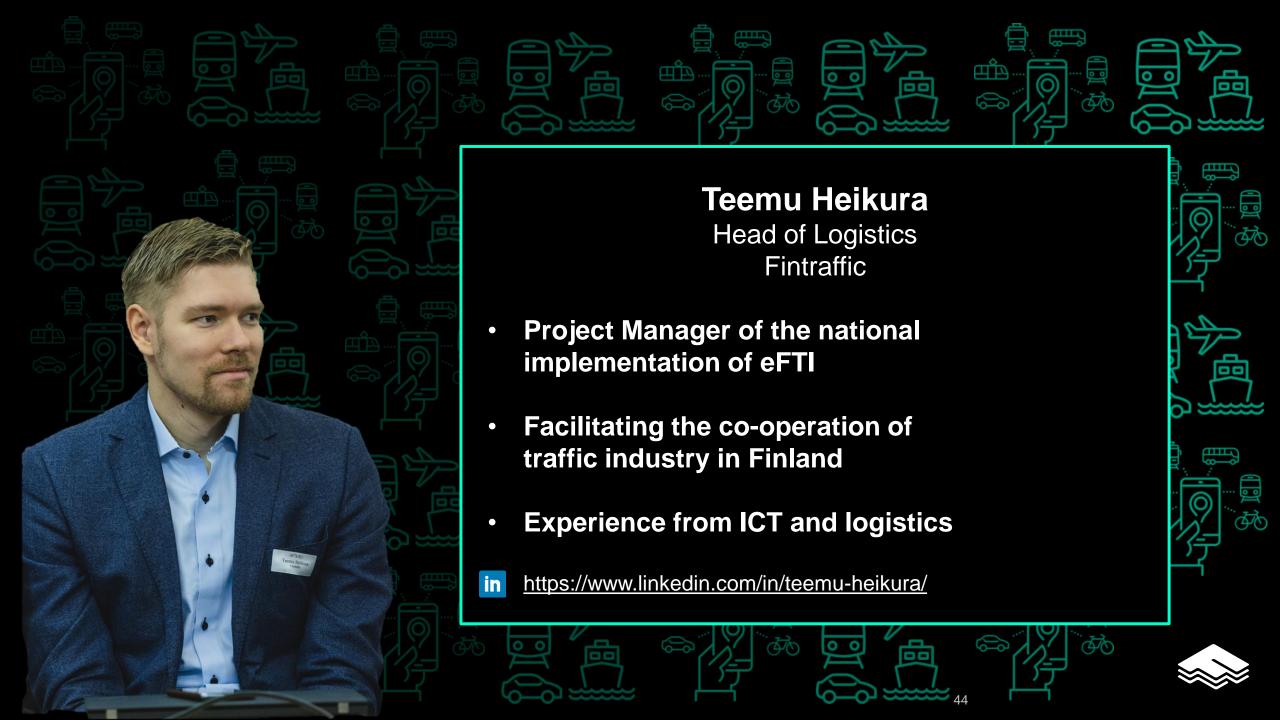


# eFTI – What I need to know?

Teemu Heikura, Fintraffic







# Fintraffic in brief



Traffic control and management: on the land, in the air and at sea



Facilitating the work of Traffic Data Ecosystem



Digital services and open data for organizations, developers and consumers



We employ 1100 professionals.



## **About Electronic Freight Transport Information (eFTI)**

EU-wide project (freight carried by rail, road and inland water) A legal and standardized framework for the digital exchange of freight transport information between companies and authorities.

Coming mandatory to authorities in Q2/2027

Boosts the efficiency of freight traffic and logistics

Reduces the administrative burden for operators.

Other future regulations (ex. The Combined Transport) will encourage the use of eFTI.

## eFTI benefits to companies

Get rid off paper waybills

Reduce administrative cost

Make border crossing smoother

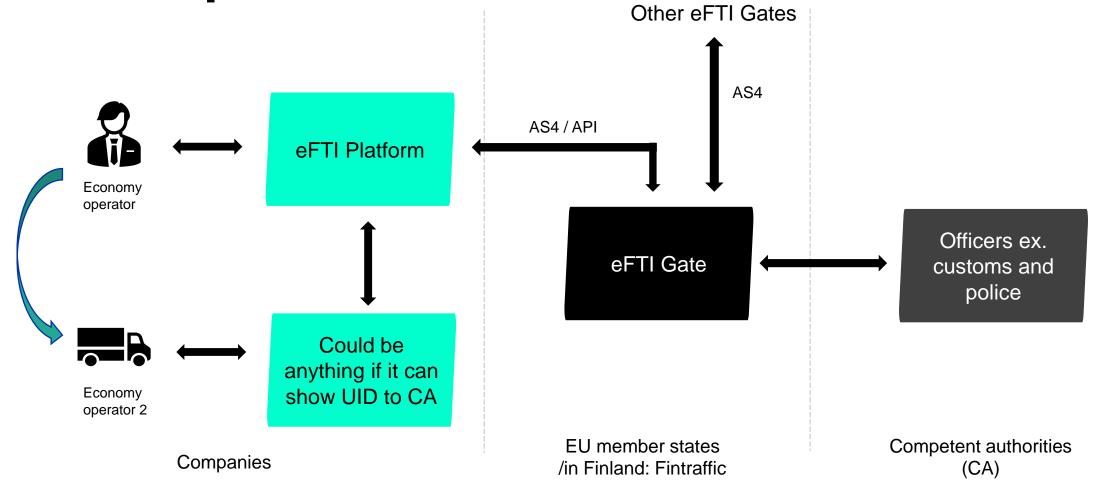
Authorities can access data easier which can reduce the need to stop transportation for inspection

Increase data reliability and reduce errors

New business for platform providers

EU wide standard

# eFTI in practice



eFTI is making data available for authorities. It is not defining B2B data sharing.



# You can implement eFTI platform in various ways

Option 1: Stand alone system eFTI Platform AS4 API eFTI Gate

Option 2: Third party service ex. SaaS service eFTI **Platform** AS4 API eFTI Gate





# There are requirements for the platform – but they are reasonable

Security standards

Certificate for eFTI platform

Authentication is mandatory

Response times

Datamodel and interfaces

Data storage times

Nothing special.

Just normal software development.

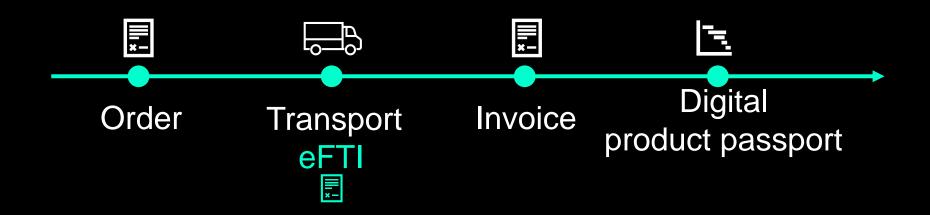
# You decide how you use eFTI



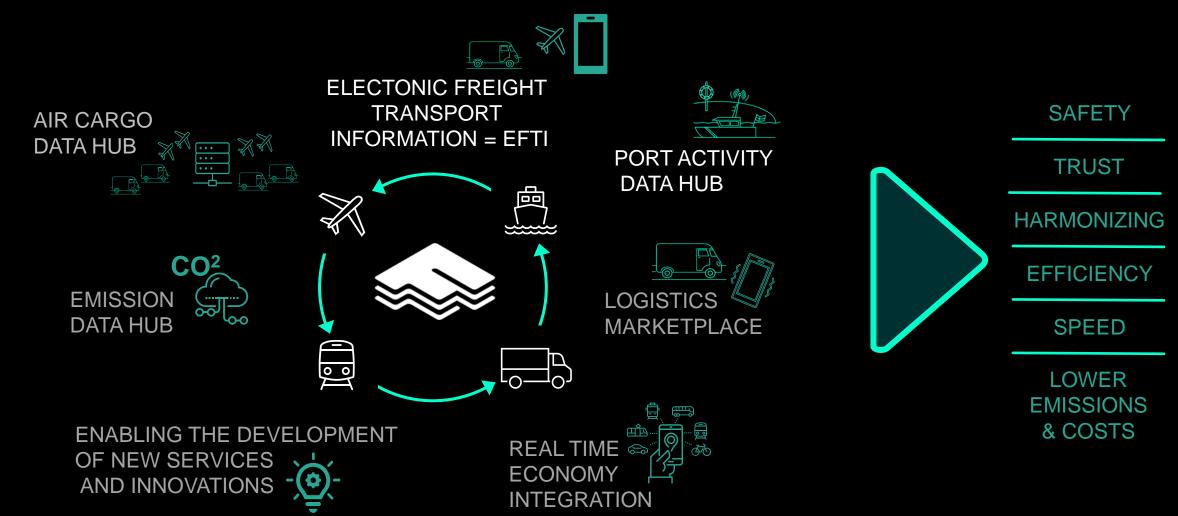
eFTI is limited data sharing from companies to authorities, it is nothing more.

However, you can use eFTI as a stepping stone for wider digitalization

# eFTI is only one part of the logistics process - combined with other data it can bring greater value



# Linked data generates more value than separate solutions, where eFTI is one piece of the digital logistic puzzle



# You are not in a hurry with eFTI, but you are in a hurry with digitalization

- Always room to improve efficiency
- Digitalization potential is not yet realized in logistics
- Start your digital journey now with your current process digitalization and then eFTI will be just one increment on that.
- Maybe taking traffic information in use is your next step?

## Start now!

# Utilize available information immediately. There is a lot of traffic information available right now.

Fintraffic Traffic information <a href="https://liikennetilanne.fintraffic.fi/">https://liikennetilanne.fintraffic.fi/</a>

Fintraffic Mobile <a href="https://fintraffic.fi/mobiili">https://fintraffic.fi/mobiili</a>

Digitraffic open data. <a href="https://www.digitraffic.fi">https://www.digitraffic.fi</a>



# Key take aways

- 1) Create capabilities to go digital
- 2) Utilize available open data from Fintraffic immediately
- **3) Familiarize yourself with regulation**, take advantage of the possibilities
- 4) Utilize, share data, optimize, measure, learn and imporove
- 5) Join Traffic Data Ecosystem let's learn together <a href="https://www.fintraffic.fi/en/trafficecosystem">https://www.fintraffic.fi/en/trafficecosystem</a>



# Thanks | Kiitos



**CONTACTS** teemu.heikura@fintraffic.fi

#### **DISCOVER MORE AT**

www.efti4eu.eu





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Ollipekka Mäkitalo

**Finnish Customs** 











# CUSTOMS

# Customs 2.0

# Facilitation Security

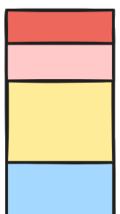
# **Need for updating Customs' strategy**

We have to react
to changes in
external operating
environment and to
demands/
expectations of the
society

Modern technology enables better result that we are currently able to reach.

We have to define role of Customs for the future: are we subject or object?

# **Focus**



Unknown Unknowns − 5 %?

Unknown Knowns − 5 %

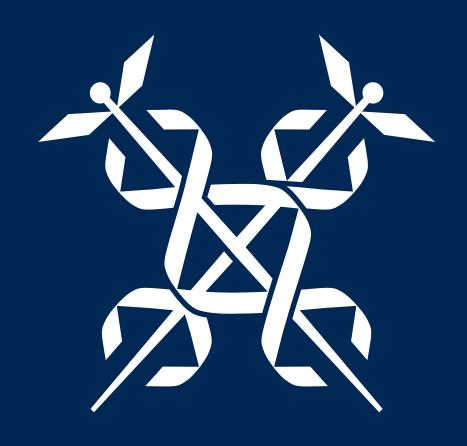
Known Unknowns 15 %

How do we get there?

• How to identify ...?

Who/ benefits ...?

Known Knowns 75 %



Ollipekka Mäkitalo ollipekka.makitalo@tulli.fi



Nato logistics













# **NATO Logistics**

Ilona Torniainen, D.Sc.(Tech)

Senior Planning Coordinator (LOG Digitalization)

**Logistics Division** 

**Defence Command Finland** 

The Finnish Defence Forces







# **Enablement, Sustainment & Logistics** in NATO / Military Context

#### THE ENABLEMENT ECOSYSTEM

Simplification of NATO doctrine and policy for briefing purposes only (v1.1)

#### **ENABLEMENT**

Integrated whole-of-government activities that support reinforcement by forces and movement of supplies across the area of operations. Government









Transport



Communications

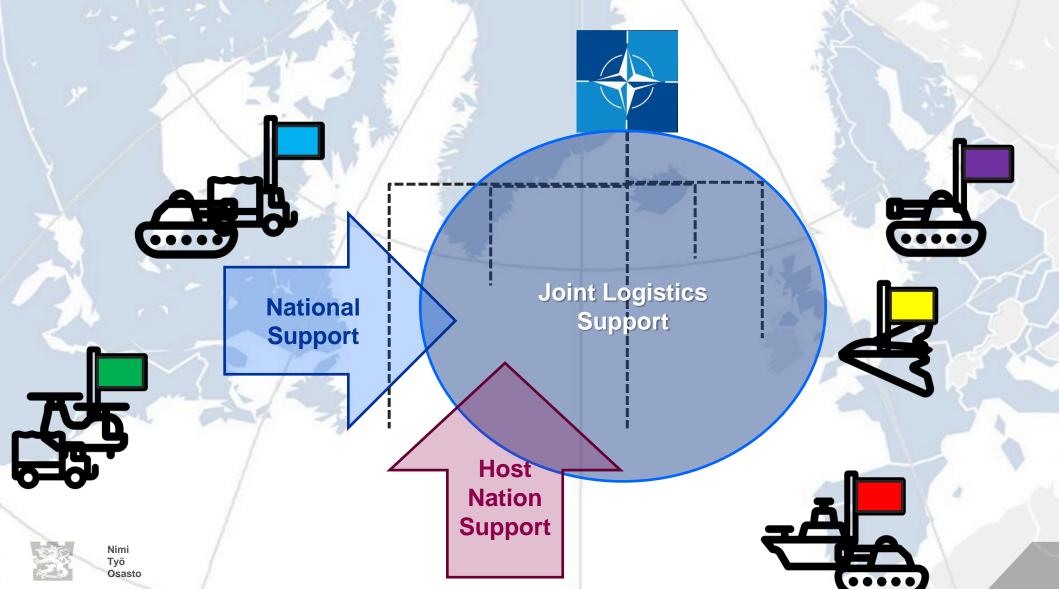
**Logistics** = Planning and carrying out the movement and maintenance of forces, incl.:

- 1. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposal of materiel;
- 2. transport of **personnel**;
- 3. acquisition or construction, maintenance, operation, and disposition of facilities;
- 4. acquisition or furnishing of **services**;
- **5. medical** and health service support.



## **NATO OPERATIONS**

Note! The graphics are for illustrative purposes only and do not carry any geographical or military significance







## Past (and some present) Constraints...

### Primary Focus before 2022









# Past (and some Present) Constraints...

### **National Solutions**









# Past (and some present) Constraints...

### Cybersecurity





#### ... And the Way Ahead

# **NATO** Digital Transformation



ain Operations





#### **Thank You!**

Ilona Torniainen ilona.torniainen @mil.fi







## DigiLog 3

#### **12: 00 Opening**

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#### 12:15 Keynote speakers

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14:15-14:45 **Break** 





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- Satu Orava, Telia

#### 16:00 Summary and closing

**Cocktails & networking** 



In collaboration



#### Samuli Toivonen

Kaukokiito

Versatile data transfer in supply chain













Versatile data transfer in supply chain

Samuli Toivonen, 20.11.2024



#### Samuli Toivonen

Director – Development, Technologies, Sustainability

- 6 years in Kaukokiito
- 2 years as startup founder (insurtech)
- 5 years at Microsoft (SW integration and release management)
- 12 years at Nokia
   (SW-, device-, test- ja operational development leadership)



# Your logistics partner

Transport | Contract logistics | Terminal services

**B2B B2C** 



Digital tools and integrations



Designated contact persons

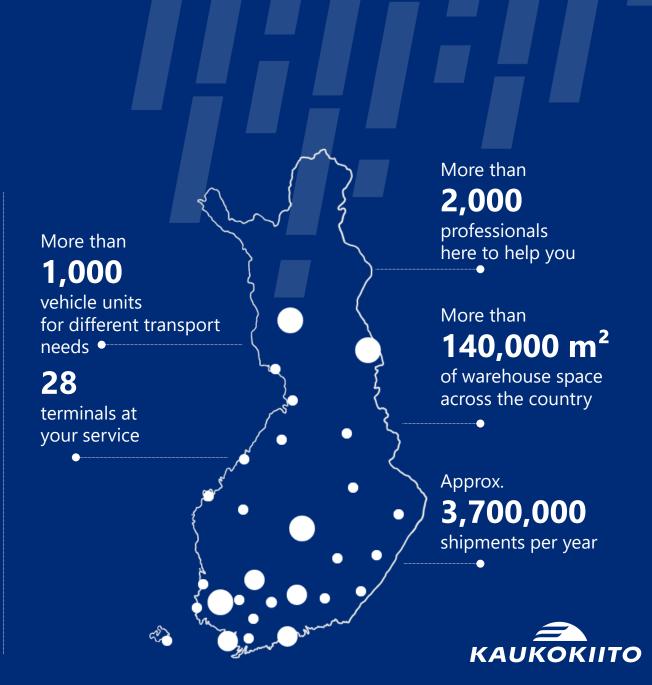


Customer service

Continuous development with customers









# Data in supply chain

Digital transport orders

Pickup

Pricing and timetable search

#### **Transparent tracking and management**

CUSTOMER: Digital information from order to delivery and billing

KAUKOKIITO: Continous transport management and optimization

Reporting

Billing

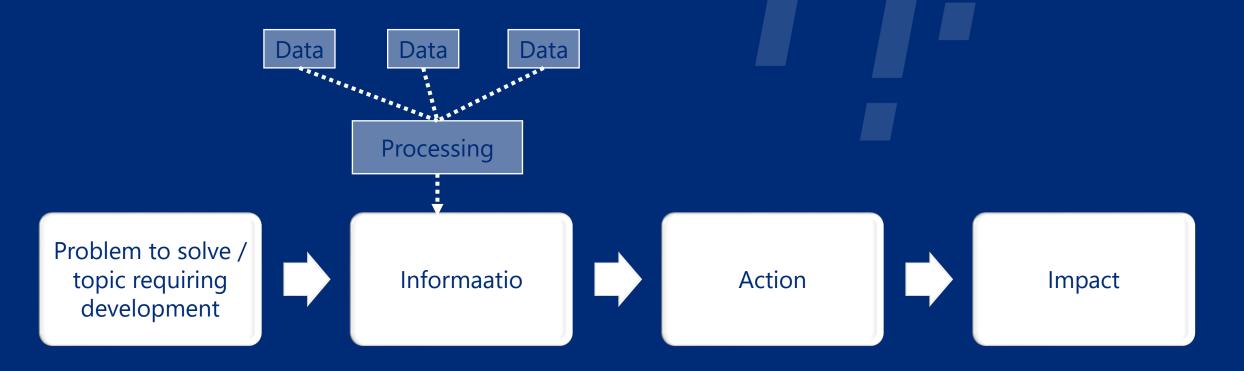






# Information driven leadership

("Business intelligence")





# Versatile data transfer builds on good quality data

Automated transport planning

Up to 80 %

Modern dataplatform for fast and versatile data processing (Azure)

Investing to transport order data quality 70→85 %

With customers | SW robotics | mobile | Al

Digitizing transport orders with customers ~100 %

Developing multiple data transfer solutions



# Versatile data transfer: multiple tools to operate

**Transport status Pricing and** Kaukoputki timetable search Direct integrations Transport and billing reports **Transport orders** 3rd party **Kaukokiito** channels (e.g. system nShift, Kaukokiito Transporeon) **Emission reports** APIs **Emission data,** ETA data (pending) KAUKOKIITO



# KAUKOKIITO

Thank you!



**Satu Orava** 

Telia

&

Suvi Widgren Rekka Group



Telia and Rekka Group builds together a better future











Together we build better future
Telia & Rekka
Group



#### Satu Orava Telia

#### Suvi Widgren Rekka Group







#### Telia connecting Nordic public transport

Share of public transport buses in the Nordics with Telia **Smart Public Transport services onboard:** 



Sweden 51%



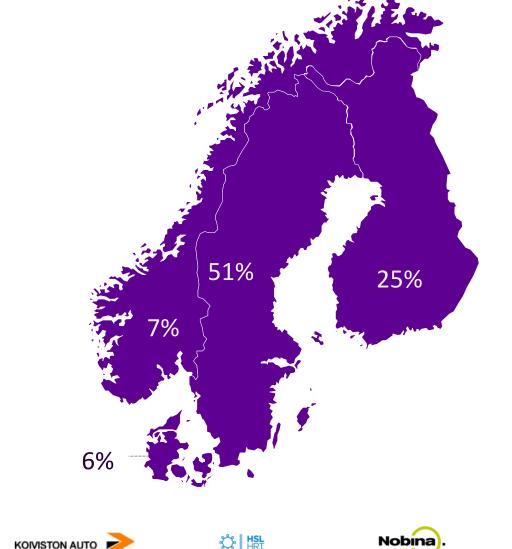
Finland 25%



7% Norway



Denmark 6%















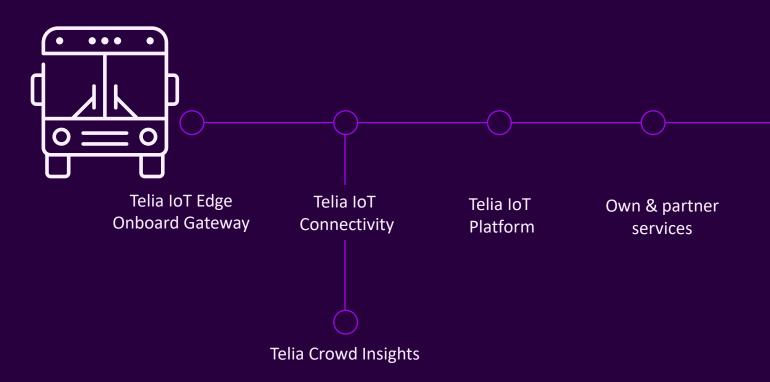






#### Telia Smart Public Transport

Portfolio



**Eco Driving** 

Vehicle Health

Vehicle Climate Management

Journey Information

Ticket Sales & Validation

Camera Surveillance

**Automatic Passenger Count** 

**Positioning** 

**Internet Onboard** 

Breathalyzer

Tachograph Data Manager

Driver's Alarm

Infotainment

**Driver ID** 

Message Push

VolP



#### FÄLTCOM -> Telia

1.2.2017 Telia bought Fältcom

Fältcom founded in 1998 40 000 router online

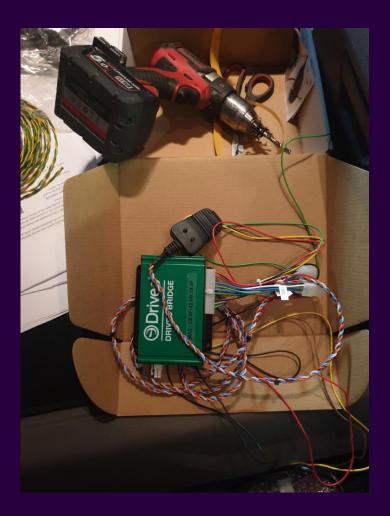
Fältcom Mobile gateway Cloud service





#### Where we started 2017





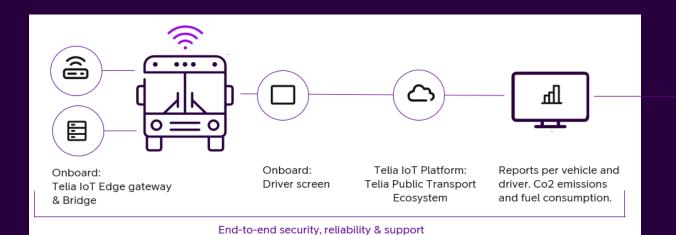


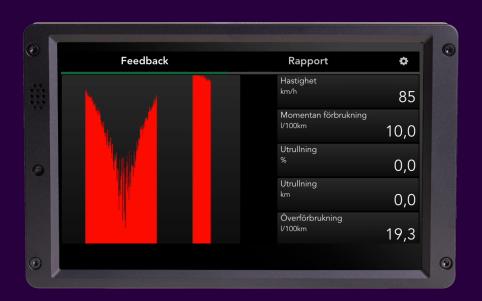


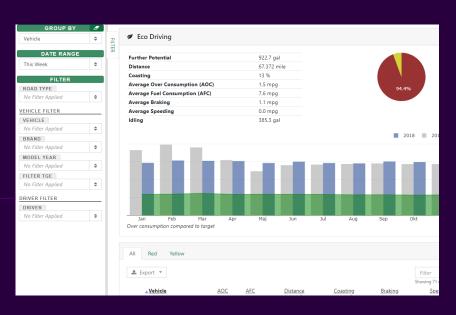
#### **Optimize each drive - energy-independent solution**

Minimize energy costs and environmental impact with EcoDriving. Save up to 12% of your fuel consumption.

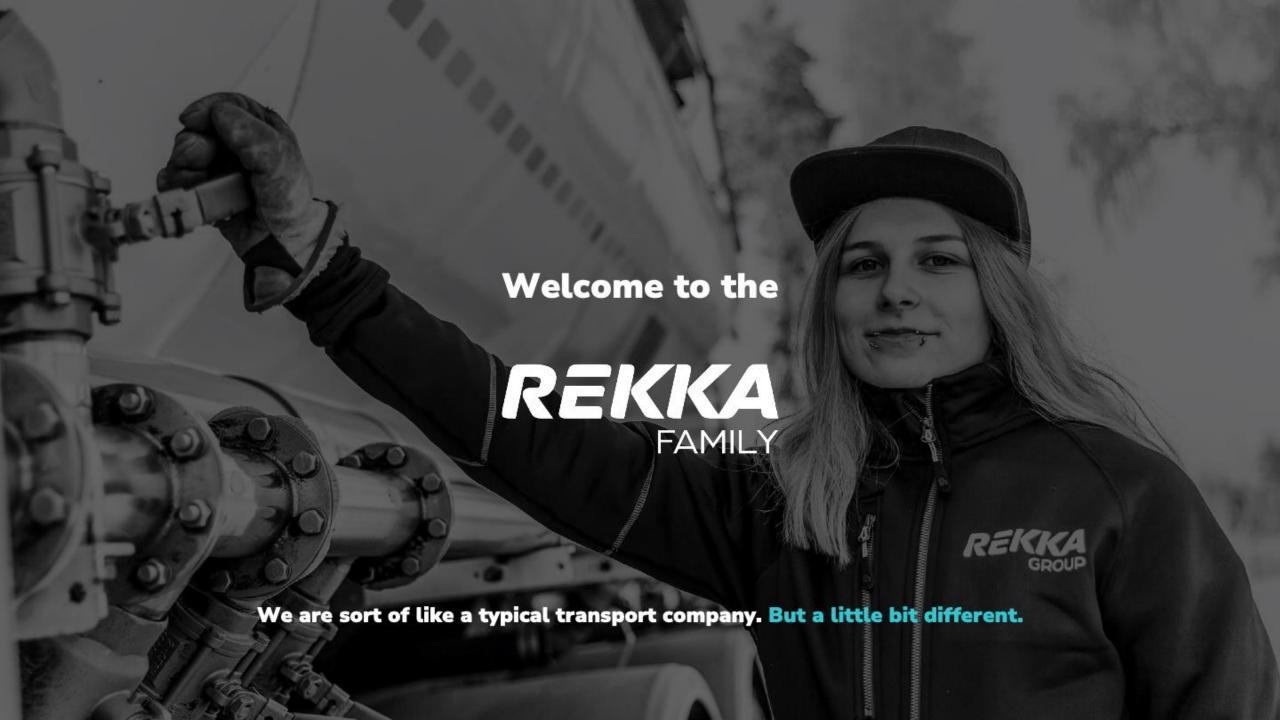
- Real-time performance feedback for driver
- Performance data stored online for further analysis
- Optimised fuel consumption
- Reduced CO2 emissions and costs
- Smoother drive for better passenger experience











# Tytär tuli yhtiöön ja lopetti isän telepatiajohtamisen

Heikki Virtanen halusi tyttärensä Suvi Widgrenin uudistamaan kuljetusliikettä, vaikka tämän näytöt ovat muilta aloilta.

#### Lankas

Jorma Rahkonen

Survi Widgress about vitime tablerus istinsa Johtamon Koljetowritys K. S. Bulkin kehitysjohtajana, vaikka olivannomit, ettel endå koskaan menetöllür perbeen yrirykseen. Entinen viiden Vila vaateliilideen yrittiju, ravietolsketju liggin vijotraju ia toimimerinaja sekä työsobdevrojen turiosijas Smartumin tokraltostobiała mookkou na cyritykom. brindii mkeakaan, oodstaa)

tambita ja tritmintatapoja. - bu of usesst alemminking tions cookin. Widgress, 38, ker

Titlii kertaa isin, Heikki V tasen, 59, elidotus oun byv santware, sillà Widgret off-offer nellä konkuntta pois työetimis-

62 Soperettuaan työt Smartumlilla. halfa ja tyttänyllä on ollut evojetti plentă văăntită și năketzyventa aviolden holtamisesta, motta viime talvena Virtaneis oli aimoa K-S Bulkin hallitakwer@sen, joka kanmatti

Widgrenin tuko vittioon. Kaskaum manu hallitutksessa et K-S Bulk

#### Iso työllistäjä

- Vuonna 2015 perustirttu isoletusyritys, jolla on toimipisteet Caulicium Valvolassa ja Jyváskylássá. Yritys toimii lioko
- K-S Bullion toimialaan kuuluvut. jas hiemsalsten ja rakeisten fuotbeiden pannesäriökusetukset. sold renterninet kerniqui-

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1970	19/4	43	

ja ulkopuolisen puheemohtajan.

bå esti yhden osakkaan pois, mind totsen. Widgen kertoo.

Kun Widgren balt K. S Halkim kehi-Pysiohtsüuksi, him ensimmäisten miden iroskousa om nymiskakenterim-

poly setralta la bette sen rosklin.

sitten, syydunusa 1984. Nuoten micheo (fillia oli rahaa 9000 mark.) kaa. Hiin kawamtuollotsesta yrityksesettön Lackaum Rahttautoista. ntin vativan tolentain, että Haanpith Annaems out yet yksen yuonna 2014. Josephanora vacenna htas perusti ammuttikonlukusertusa Ragino Bloven kamusa K. S.Berkim.

Vritylisen omistavat Helidi

(a Rauno Bionen kukin 20)

■ Yritys työllistää noin 60

prosentin osvadella.

Virtanen (40 prosenttia) sekä-

Suvi Widgrer, Oskari Laaksonen

V 5 Bullon bisevanto ob varne

nno 6.1 meliponas euros ia

ta. More roblica la fulcionissurceri etroppita katsova asemic slubititi.

K-S Bulkissa on jobtamisessa sama ongebna kain monessa munsakin perinteisen alan yrifyksessi: liika varshasta kiinni pitaminen ta asioiden tarkastelu vain. orum alan näkökulmasta.

Alassa optin asioita vanhem milia kurjettalilta, sitten tetn pitkään töitä samanikäisten kanssa. Kum oles mythemanin tehnyt 1583 fasteral (kateten kanssa, ofen käyre-t

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ii. S Butk tyofasula jo noin eo thenistä, mutta johtamisessa on offet primeira vitra ajaltu, kon yri-

to off palion prenempt. ban sahvuus et ofe arjen henkilostojohtaminen ja kommuni-

Osa asiolsta on kuotenkin jo-

hāni, Widgren kertoo.

Midgren ja Heikki Virtanen

Perheyritabydosii on byor la buonot puolensa. Minusta on Jopa kuortetunut joisukin pulaorreiosa kiukatteleva pikkutytiö. jos en saa tahtoa läpi, koska tuntelden nästläminen lähelville on helpompaa, Matta metilä osataan corneled psyttil muos antorkst.

offermittee and by menestit uusiksi, mutta ei kerrat Ia, vaux vähirellen.

- Loppovaodesta K-S Hafk saaunder nimers, Joka sopti Sporteen. ja kursuinvälisesti, Widgren kertoo.

Yritys tekeedtse välliöperävaunut. Ne sekä remontit ja hasillet tekee Heliki ja Tuija Virtasen omistama yritys LRA Kaskashnolio Oy.

countries to be a beginning the

Il a a with the autoille

Jonna Rahkenen

Heikki Virtanen lulusa, että yrityloen brändi pysyy kirkkaana myos tien päällä, mutta ison automäärän pesu vaatii hurjas-

Sallicauton peseminen vie







### This is how we do it

Aito

## Safety

Safety guides our everyday life. It is priority No. 1. We communicate openly, anticipate and collaborate.

# Responsibility

Responsible operation starts with the personnel. We have the willpower to set high goals and boldly look far into the future.

# Operation reliability

Our logistics coordination team is on call 24/7. Digital surface monitoring service with partners. An extensive and permanent cooperation network.

# \_\_\_\_Data

Daily operations are managed with data. It enables real-time monitoring, regular reporting and development.

# Strategic partnership with Rekka Group looks like this

We bring logistics trends and innovations to our partners.

We are paving the way into the future from the front seat, so you can focus on growing your business

**Dialogue** 

Curiosity and learning. We help our partners to succeed and develop, because cooperation is a competitive advantage for both of us and enables both of us to grow and be cost-effective in the future.

Measuring and reporting on mutually agreed matters..

**Shared vision** 

**Transparency** 

We'll tell you how we do it. Let's work together to deal with mistakes and let's learn from them.

No one is perfect, but we want to be your best partner.





Jussi Poikonen

**AWAKE.AI** 

Harnessing JIT Scheduling to Enhance Port Performance











Simonas Niedvaras

**iToDEV** 

eCMR with an integrated CO<sub>2</sub> calculator for simpler CO<sub>2</sub>e reporting in the road logistics sector



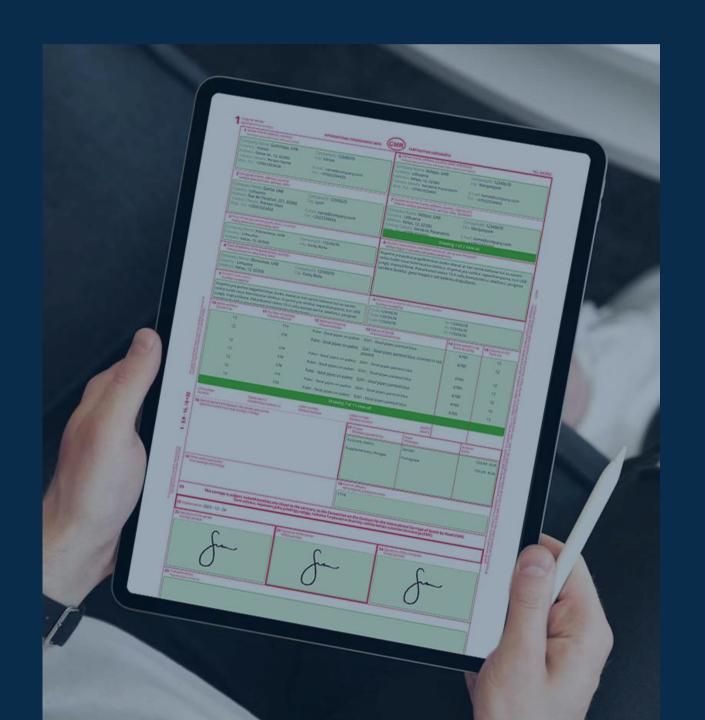








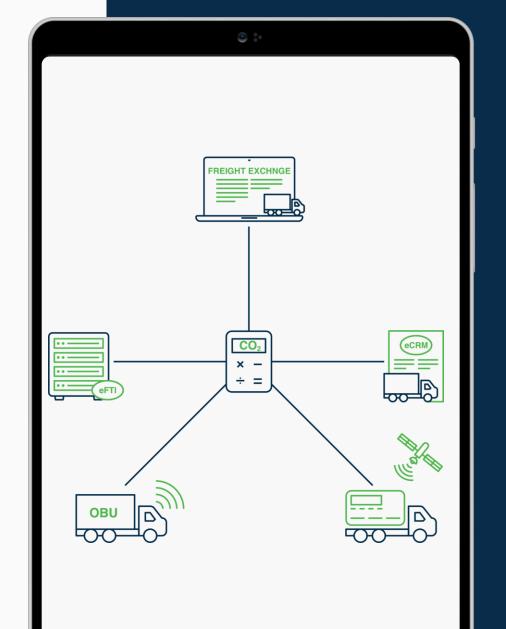
Logistics aims to go paperless and digital to reduce expenses, preserve the environment, and increase transparency.







Within the Horizon CINEA-funded ADMIRAL project, CargoSign conducted research on eCMR and CO2e calculation standards.







#### After research conducted

An idea emerged to merge the eCMR (UNECE) and CO2e (ISO 14083 and GLEC) standards to calculate CO2e from eCMR data—data that could potentially run via the eFTI ecosystem.

Cargo

To serve this purpose, CargoSign developed eCMR UI software for logistics companies with the following components.



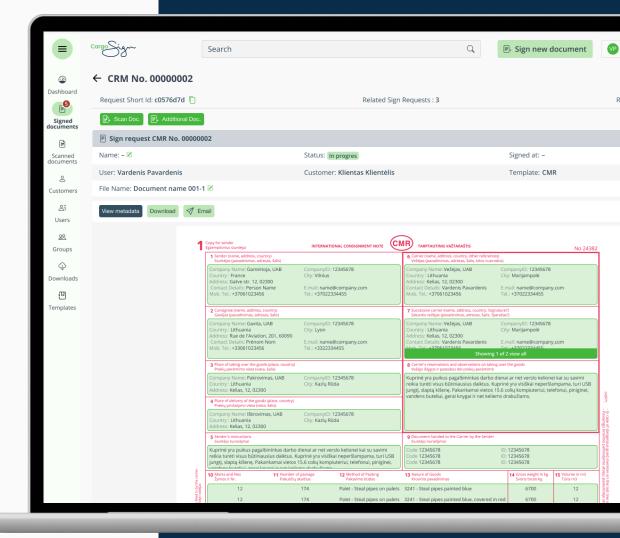


In CargoSign system every company receives it's subdomain

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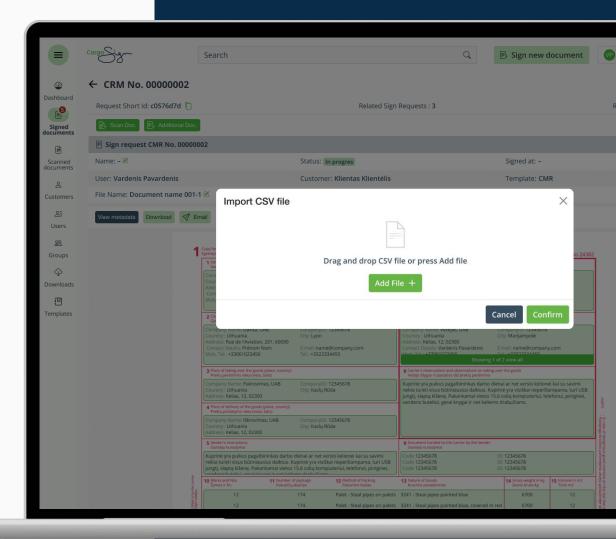
Cargo

We aimed to make paperless onboarding more comfortable for customers by using the familiar IRU paper CMR visualization, ensuring minimal deviation from the processes they are accustomed to.



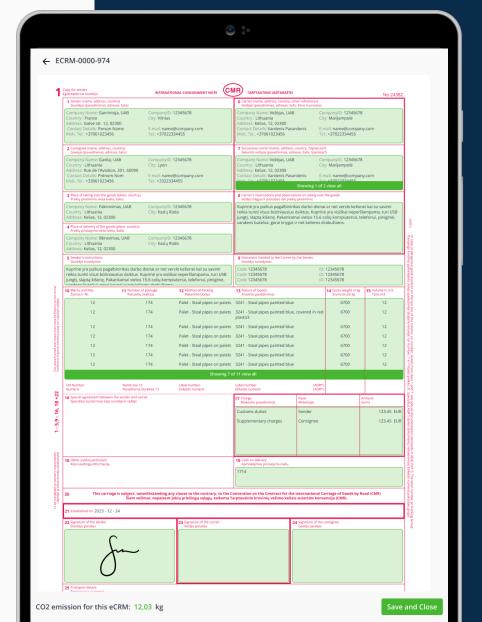


For users more advanced with digitization, we created the option to avoid typing by using data import or connecting via API.



The prefilled eCMR is simultaneously sent to the driver's tablet task list and the Vediafi eFTI platform concept.





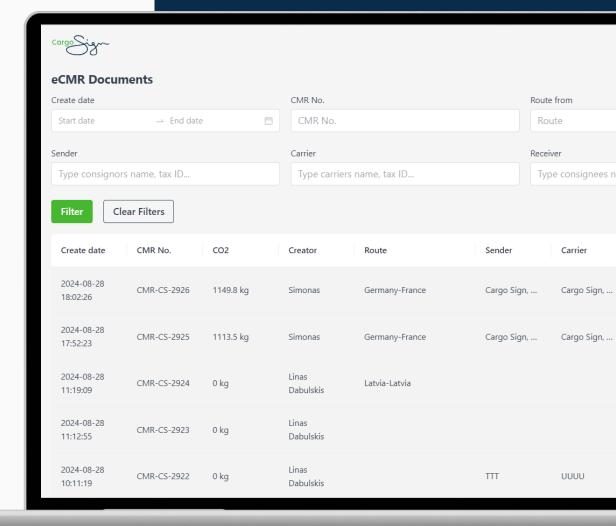


When the consignee signs the eCMR, the delivery status is updated to 'completed.' The eCMR is then sent back to the CargoSign platform, and the status is transmitted to the eFTI system.

•	:						
← ECRM-0000-974							
	TABETAUTINIS VAZTARAŠTIS  TO CERIE Turne užitora, Guardy, offer references)  Vedgai glavadoma, adresa, štalik, štas nucedos)  Company Namer Vedgas, LUBB Company Namer Vedgas, LUBB Company Namer Vedgas, LUBB Company Libraria Address Kellas, 12,02300 Condact Details: Vaudenis Pawridenis File 1370/12235455  To Successive carrier frome, address, country, hypothese?  To Successive carrier frome, address, country, hypothese?  Company Namer Vedgas, LUBB Co						
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CO2 emission for this eCRM: 12,03 kg	Save and Close						

Cargo

All created and completed eCMRs are stored in an archive along with the trips' CO2e data.



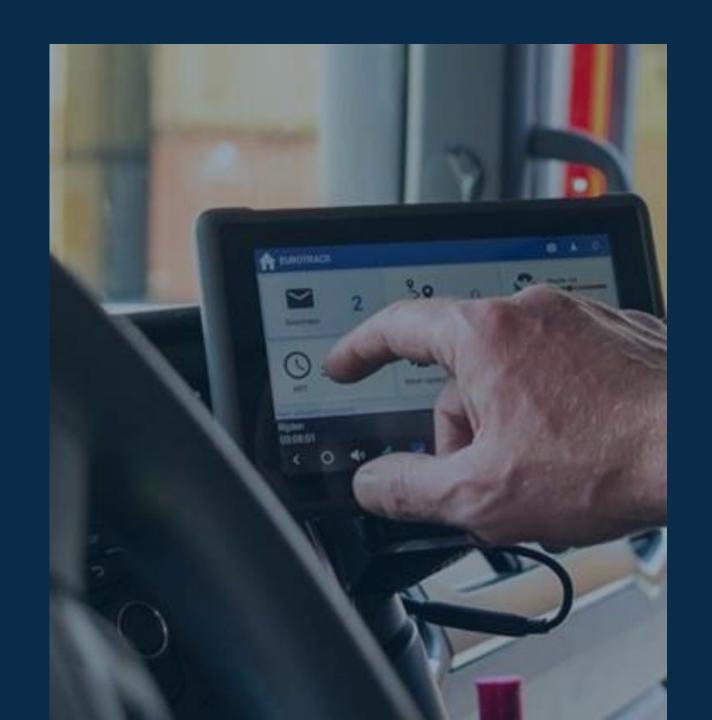
Cargo

Stage 2 for this product is to merge the eCMR and iLEAP CO2e exchange standards to make the product compatible with industry standards.





Stage 3 involves connecting the eCMR software with telematics to obtain real fuel consumption and odometer data for precise CO2e calculation. For this initiative, CargoSign is seeking partners and funding.



### Let's get in touch:

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+370 68539725





Tomi Dahlberg

**DBR Core** 

Peppol as the enabler of digital logistics and eFTI – current status





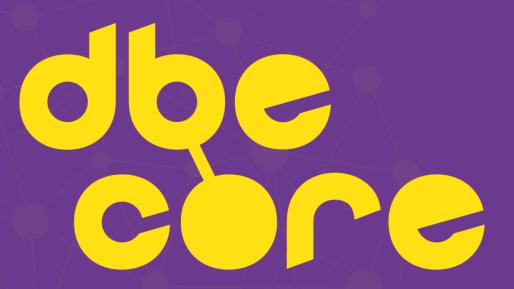




Peppol as the enabler of digital logistics and eFTI – current status

Digilog 3

**Tomi Dahlberg 20.11.2024** 







# Introduction and reminder: What is Peppol?



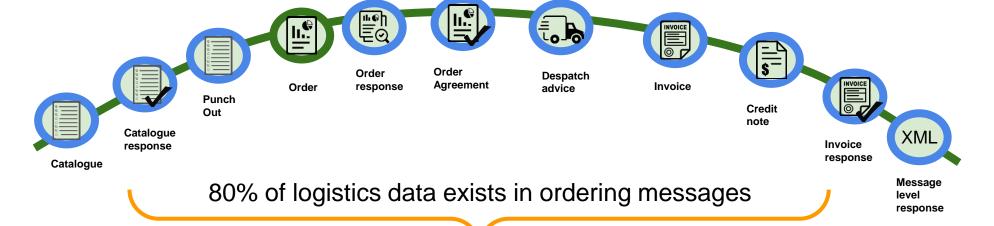
- Standardized UBL = ISO/IEC 19845 based structured, machine readable **Peppol Messages**
- OpenPeppol network eDelivery and AS/4
- OpenPeppol association and communities (8): technology, message clusters such as Peppol logistics, and user groups such as Peppol service providers



### Peppol Messages as eFTI **Reporting Enablers**



Peppol (ISO/IEC 19845) Ordering and Invoicing Messages



Peppol Transport and Logistics, UN/CEFACT and/or Edifact Messages















#### **Peppol supports**

Automatic matching of messages

Data re-use to remove data reentry

Advanced despatch advice

Wavbill (multimodal) Weight Statement / IoT

**Transport** Execution Plan Request **Transport** execution Plan

**Transport** status request and response

Transport receipt advice

eFTI reporting

Rates & Conditions

Cabotage

**Dangerous** Goods

Combined transport

Waste **Shipments**  Aviation Security

119 © DBE Core Ov 2024



47 100 000

**20XX** 

## Current Status – Peppol Messages Result in Financial Benefits

Peppol Ordering and Invoicing Messages (2023 & 2024 estimate)								
	Government		Municipalities, Social & Health		Private Companies		Summary	
year	Cost savings p.a.	Investments	Cost savings p.a.	Investments	Cost savings p.a.	Investments	Cost savings p.a.	Investments
2024	39 665	300 000	0	0	0	0	39 665	300 000
2025	793 309	45 000	3 569 891	2 000 000	38 179 251	15 000 000	42 542 451	17 045 000
2026	2 941 855	45 000	13 238 345	2 680 000	63 523 639	26 375 000	79 703 839	29 100 000
2027	6 363 000	45 000	57 267 000	4 370 000	378 686 138	35 350 000	442 316 138	39 765 000
2028	11 304 655	45 000	101 741 891	5 770 000	748 972 818	41 600 000	862 019 363	47 415 000
2029	15 667 855	45 000	141 010 691	6 170 000	1 284 442 830	45 100 000	1 441 121 375	51 315 000
2030	21 816 000	45 000	196 344 000	7 670 000	2 518 464 960	43 700 000	2 736 624 960	51 415 000
		570 000		28 660 000		207 125 000		236 355 000
20XX	36 360 000		327 240 000		5 246 802 000		5 610 402 000	

Peppol Transport and Logistics Messages (2023 estimate)								
	Government		Municipalities, Social & Health		Private Companies		Summary	
year	Cost savings p.a.	Investments	Cost savings p.a.	Investments	Cost savings p.a.	Investments	Cost savings p.a.	Investments
2024	0		0		0		0	
2025	234 327		1 171 636		29 210 699		30 616 663	
2026	868 964		4 344 818		48 806 305		54 020 087	
2027	1 879 500		18 795 000		288 921 319		309 595 819	
2028	3 339 164		33 391 636		576 458 426		613 189 226	
2029	4 627 964		46 279 636		1 003 186 204		1 054 093 804	
2030	6 444 000		64 440 000		1 950 568 560		2 021 452 560	
20XX	10 740 000		107 400 000		4 063 684 500		4 181 824 500	
Peppol Messages cumulatively								

434 640 000

Source:

Roadmap for Peppol Ordering Messages Implementation in Finland 2025-2030

Report to the Finnish Real Time Economy Programme, 2024

Crafted by Tomi Dahlberg

© DBE Core Oy 2024

9 792 226 500

9 310 486 500



#### Structured Machine-readable Messages Necessary enablers of Digitalization



Peppol (ISO/IEC 19845) Ordering and Invoicing Messages



Peppol Transport and Logistics, UN/CEFACT and/or Edifact Messages















Advanced despatch advice

Waybill (multimodal) Weight Statement / IoT

Transport Execution Plan Request Transport execution Plan

Transport status request and response Transport receipt advice

Regulatory Reporting and Data Space Needs

eFTI reporting

VAT, sales etc. Tax reporting P/L & statistical reporting

Customs (ICS2) reporting

CSRD (ESRS) reporting

Digital Product Passport Data

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### **Contact persons for more information**

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How to adapt to the changing operating environment

Matti Lankinen, CEO Vediafi, CaaS Nordic, eFTI EXPERTS (host)

• Sarah Schiffling, Assistant Professor at Hanken/ReMuNet

 Jan Bergstrand, Senior Strategist and Programme Manager at Trafikverket

Heiti Mering, Digilogistika Keskus / CEO at eFTI EXPERTS

 Rugile Andziukeviciute, General Manager at Transport Innovation Association

• Janne Huhtamäki, Head of Services at Traficom

Satu Orava, Senior Logistics Solution Advisor IoT at Telia











## Panel discussion – Transition arena for twin transition

1. Logistics Resilience and Preparedness:

"What concrete measures has your organization implemented to improve logistics resilience and preparedness for possible disruptions?"

2. The Role of Digitalization in Logistics:

"How do you see the role of digitization in improving the resilience of logistics, and what have been the most significant advances in this area in your company or industry?"

3. Weaknesses and Strengths in Digitalization:

"What do you think are the biggest weaknesses and strengths in the digitalization of logistics, and how could these weaknesses be best solved in the future?"









