CORENA

- wanted by the best

CORENA Company Presentation

Making Mechanics more Efficient with 3D Animated Graphics and Interactive Job Cards

Presentation for S1000D User Forum
Vienna September 2013

Bjarne Larsen, Sales Director Europe

Agenda

- CORENA introduction
- CORENA S1000D Work Order Solution
- CORENAs engagement with Norwegian Rail (NSB)

CORENA Vision

- Wanted by the best customers
- Wanted by the best partners
- Wanted by the best employees

CORENA Mission

- We shall add value to our customers' technical information processes
- We shall develop user friendly and adaptable COTS based solutions
- We shall provide outstanding services and customer support
- We shall offer the world's most experienced team of domain experts
- We shall be a global, innovative, an inspiring workplace

About CORENA

BUSINESS

- Software products development
- Markets:
  - ✓ Aerospace (Commercial and Defence)
  - ✓ Defence (Land and Sea)
  - ✓ Commercial Marine
  - ✓ Rail
  - ✓ Energy and Oil & Gas (emerging)
- Members of standardization committees

ORGANIZATION

- Established in 1991
- Employees: ~90 + 25 consultants
- ISO 9001:2010 Certified
- NATO Security Clearance

CLIENTS

- Never lost a client in 20 years
- Typical clients include:
  - ✓ Bombardier Aerospace
  - ✓ Rolls-Royce
  - ✓ Goodrich Aerostructures
  - ✓ Pratt & Whitney
  - ✓ COMAC
  - ✓ British Airways
  - ✓ Thales
  - ✓ Swedish Defence
  - ✓ Danish Defence
  - ✓ Norwegian Defence
  - ✓ Patria
  - ✓ BAE Systems

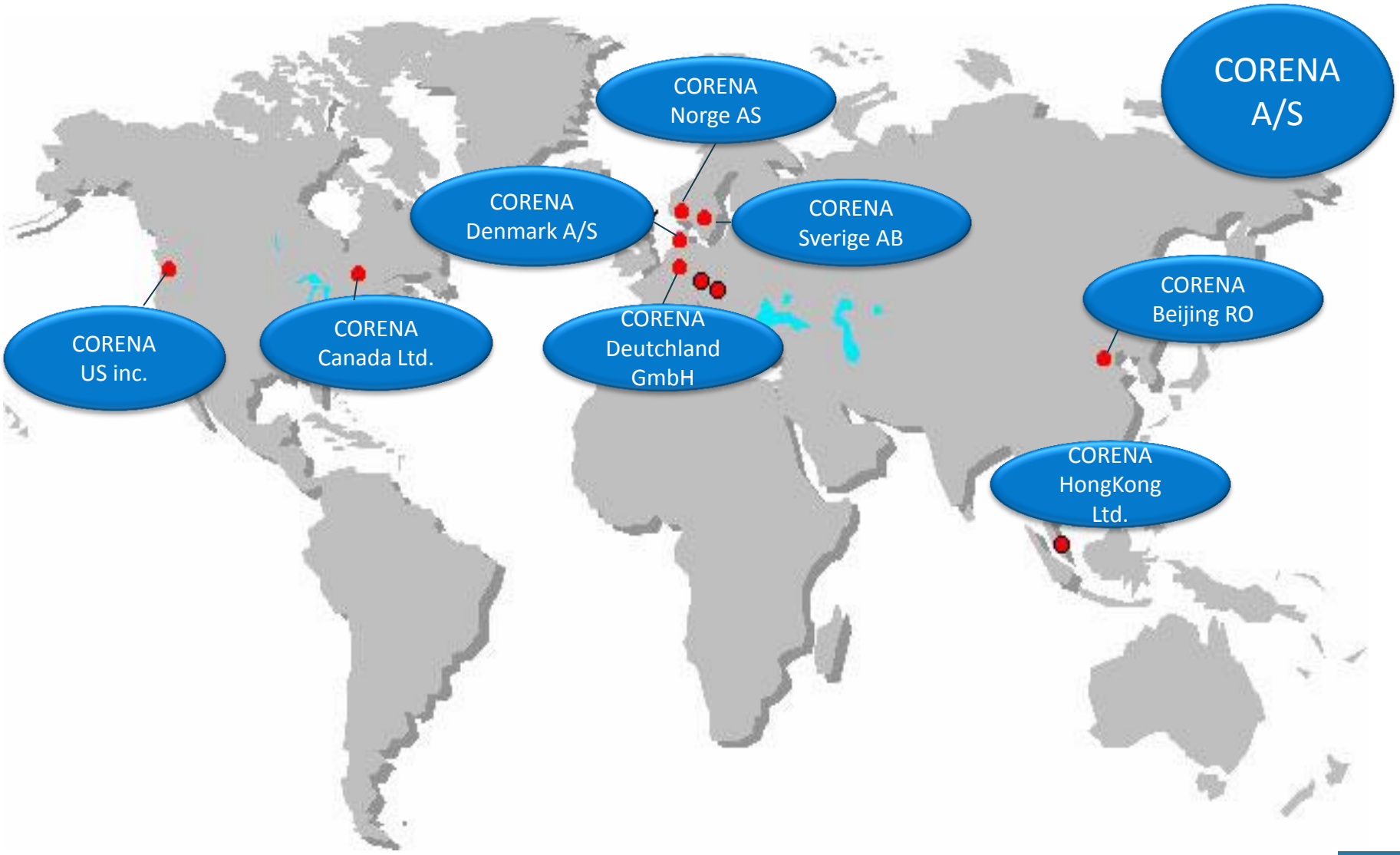
PRODUCTS & SERVICES

- Commercial-Off-The-Shelf Products and Services for production and usage of Technical Life Cycle information, focusing on standards
  - ✓ ASD/AIA/ATA S1000D
  - ✓ ATA iSpec 2200
  - ✓ SHIPDEX

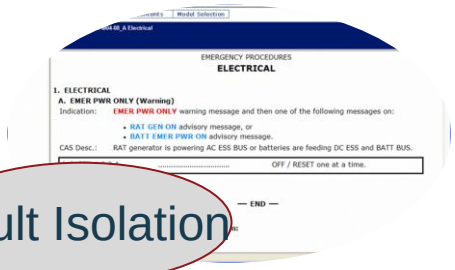
LOCATION

- Headquartered in Denmark
- Offices in 8 countries
- Partners in 10 countries

CORENA Locations



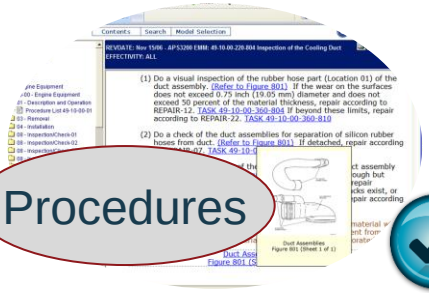
Solution Vision «The Intelligent Information Console»



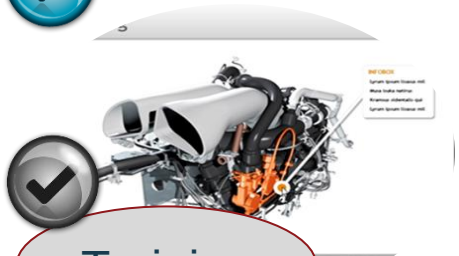
Fault Isolation

Simulation

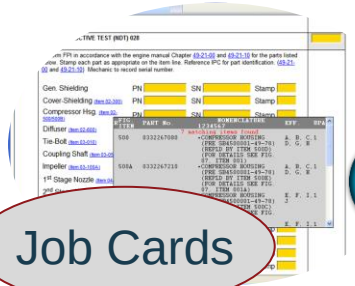
Parts Catalog



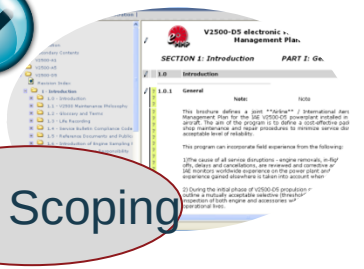
Procedures



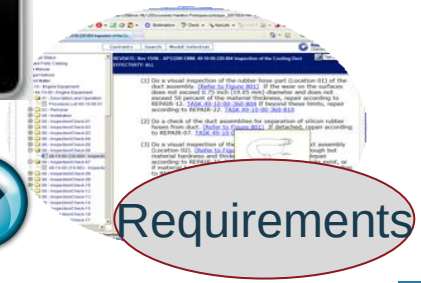
Training



Job Cards



Work Scoping



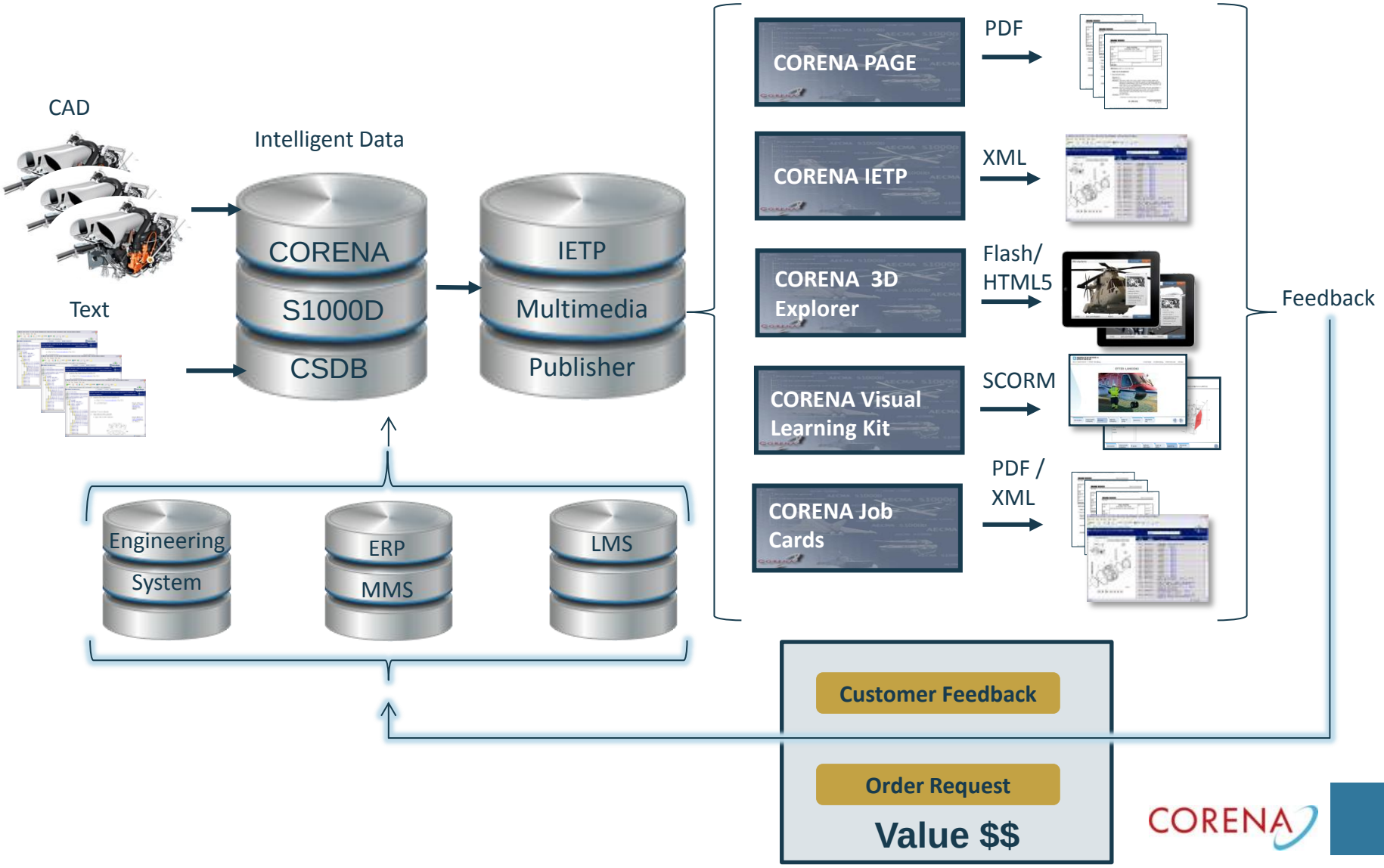
Requirements

Solution available

Solution being productized

CORENA

Publishing intelligent information – and feedback

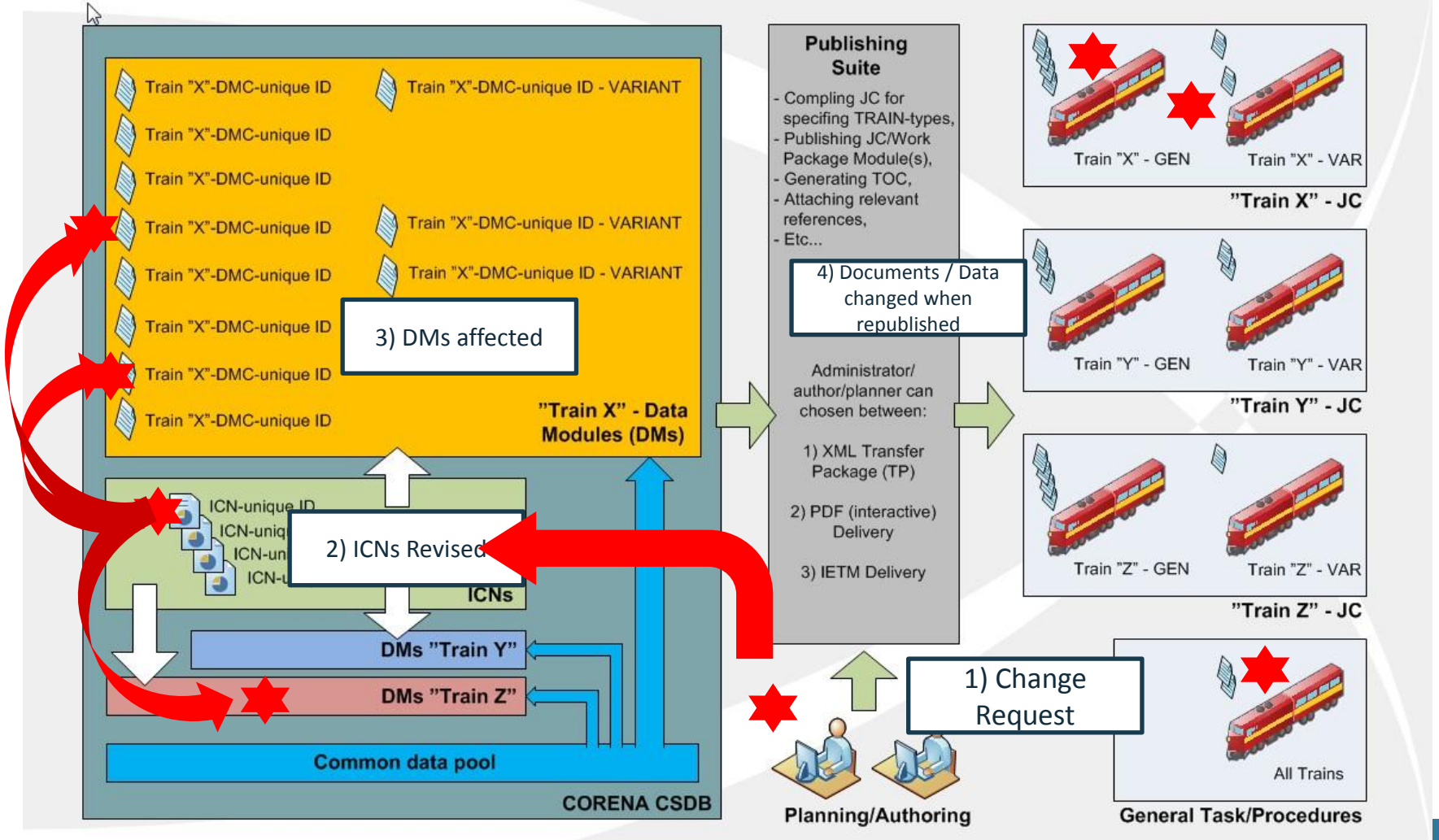


1 CORENA Engagement with NSB(Norwegian Rail)

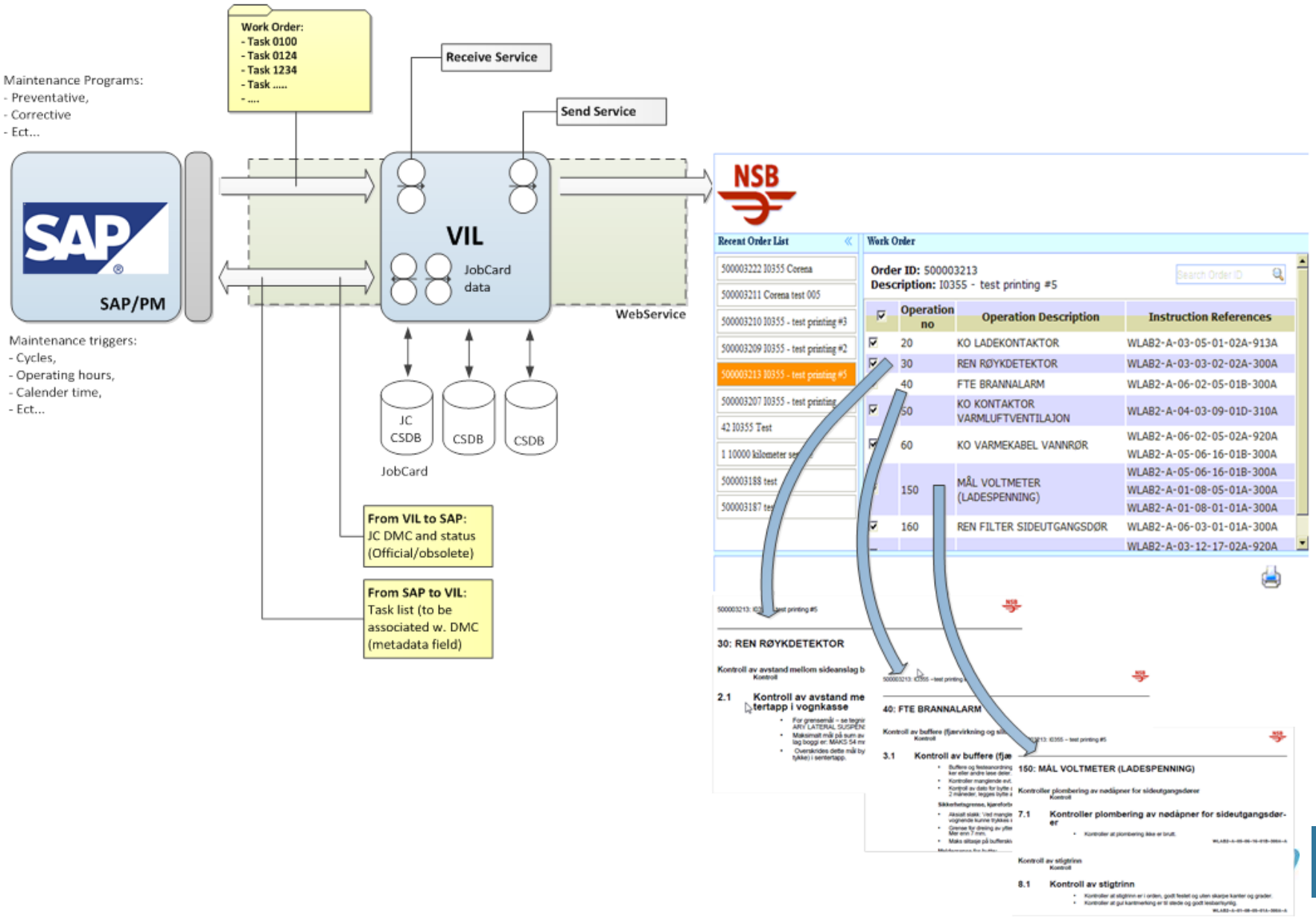
CORENA vision for NSB

- Solution scenario
- CORENA solution for job cards
- Conversion of 15 000 work instructions to S1000D
- Integration to SAP
- Electronic Parts Catalogue (3D and 2D)

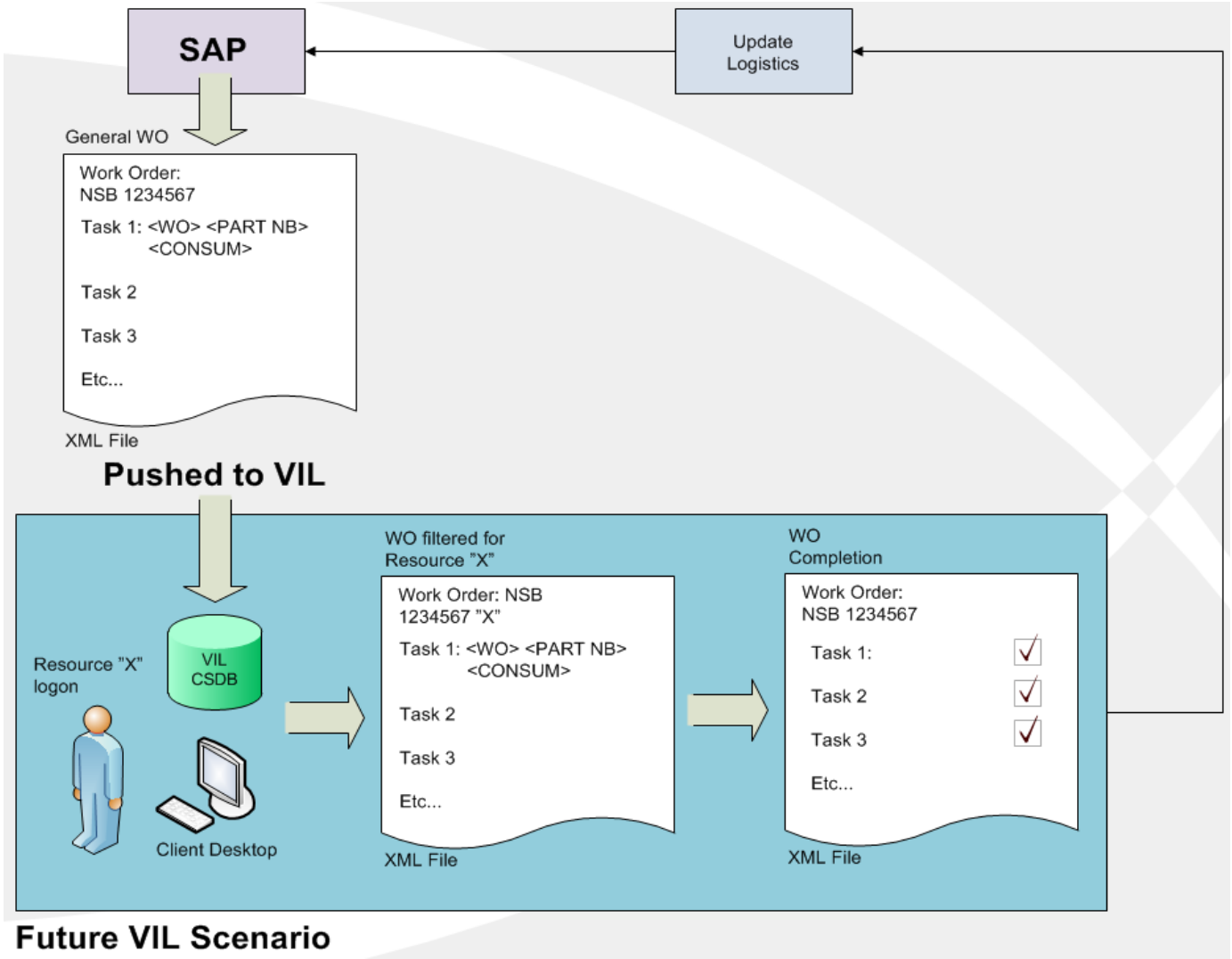
Maintaining Data in CORENA CSDB



Managing Job cards with SAP



Workflow Scenario



1 Solution overview – EPC (Electronic Parts Catalogue)

Solution overview – using VIL

SAP

BOM / Parts / vendor

1. Edit
2. Save
3. Make Official
4. View EPC in Visual Information Library

2D Illustrations

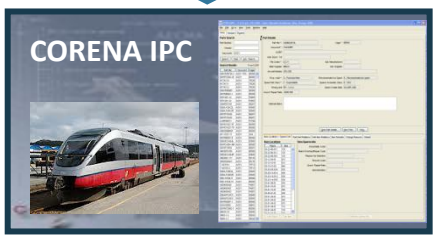


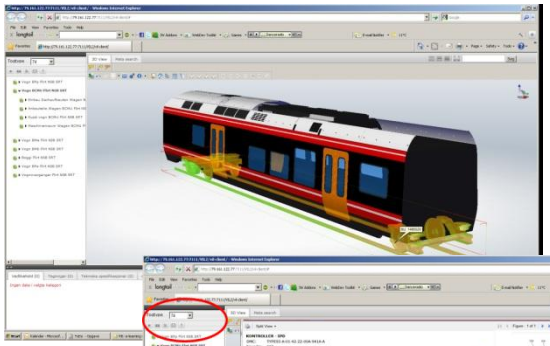
Figure / Parts / vendor

Migrate EPC

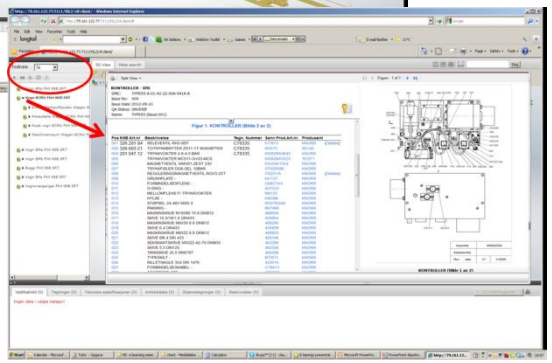
3D CAD Models

View Official

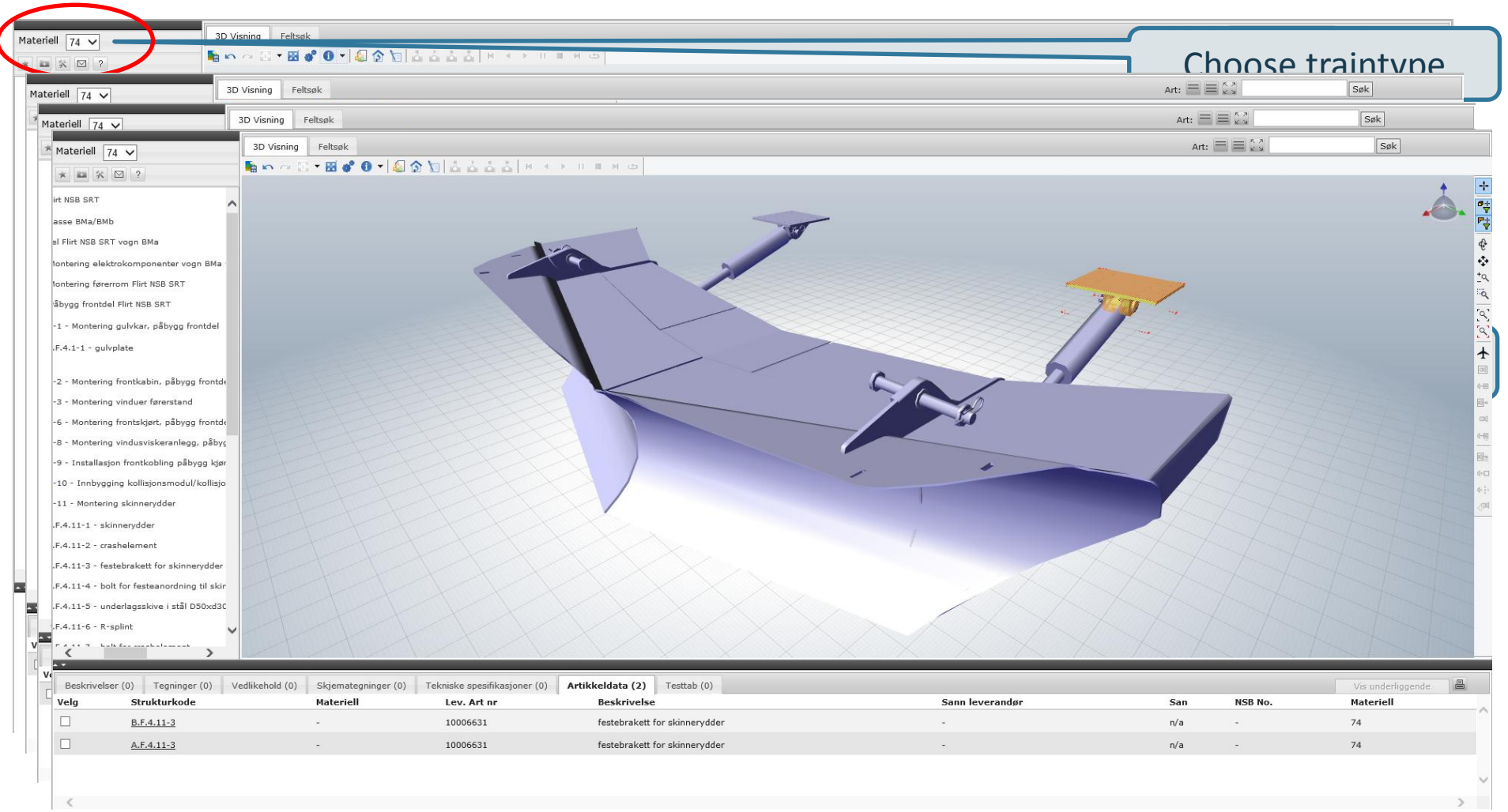
3D View



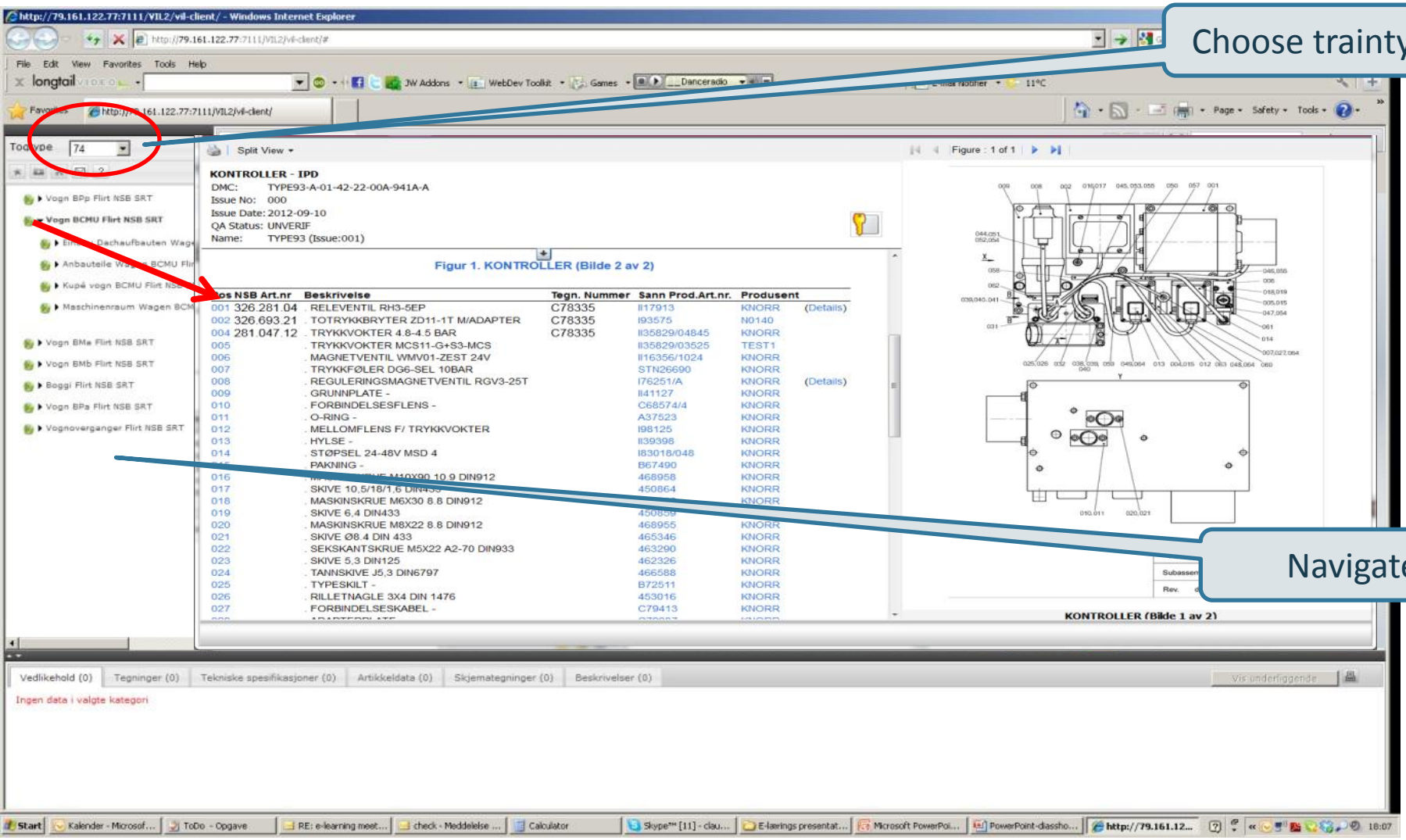
2D View



Solution: EPC end user via Visual Information Library (**3D**)



Solution: EPC end user via Visual Information Library (**2D**)



Solution overview – using VIL– Work Order / Job Cards

SAP

WO

BOM / Parts / vendor

2D Illustrations

CORENA IPC

Figure / Parts / vendor

Migrate EPC

IPD

3D CAD Models

CORENA

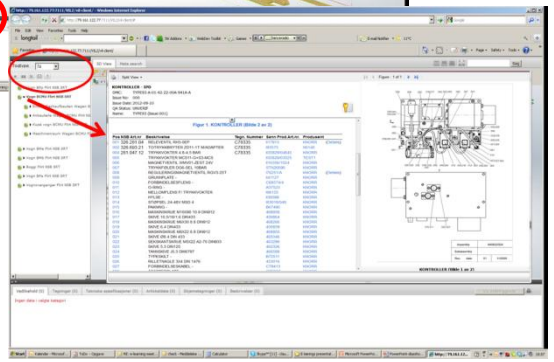
S1000D

CSDB

View Official

3D View

2D View



Solution: Work Orders / Job Cards

NSB

Order Result List

Search options

Revision SU56001 Show list

Start revision

Train type WLAB2

Reset Search

- 99891 NSB Jobcard Training 11
- 99890 NSB Jobcard Training 10
- 99889 NSB Jobcard Training 9
- 99888 NSB Jobcard Training 8
- 99887 NSB Jobcard Training 7
- 99886 NSB Jobcard Training 6
- 99885 NSB Jobcard Training 5
- 99883 NSB Jobcard Training 3
- 99881 NSB Jobcard Training 1
- 99884 NSB Jobcard Training 4

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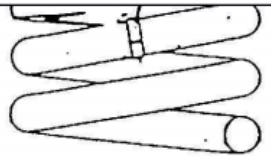

Fig 1

For klassifisering, se dokument DT-70-GEN-0010 KLASSIFISERING AV SKRUEBÆREFJÆRER PÅ NSBS MATERIELL.

Merk
Fjærene utstyres med bånd av aluminium der gruppe og art. nr. innstemples.

Ved revisjoner eller fjærbytte skal det for sekundærfjærer på samme boggi bare monteres fjærer som ligger innenfor samme gruppe. Akselkassefjærene pr. hjulsats må tilhøre samme gruppe.

WLAB2-A-03-12-17-02A-920A-A

PDF generert 2013-09-10 13:27

Bytte av bremseslanger på boggi

Bytte

Dette dokumentet er konvertert automatisk fra ProArc, hvis du finner innholdet ufulstendig/feil sjekk følgende document Ved feil kontakt NSB dokumentavdelingen tekdok@nsb.no

3.1 Bytte av bremseslanger på boggi

- Bremseslanger (pos.37) i boggien byttes.
- Slanger (pos.30) mellom vognkasse og boggier byttes.

WLAB2-A-04-04-10-02A-920A-A

Summary

- We have used 3D models and S1000D data for multiple purposes, including manuals, work processes and dynamic job cards
- Data are prepared for the next step of E-Learning
- Planners and Authors are now in control of maintaining the data in an easy way
- Mechanics are expected to become much more efficient with intuitive access to product variant specific 2D/3D and animated illustrations and data
- All relevant information available in one tool

WWW.CORENA.COM

Complex reality made easy!