



ERC GmbH

Notified Body Interoperability

ECM Certification Body

Independent Assessment Body (AsBo)

DeBo (Austria)



Impact of the new regulation on the activities conducted by the ECM certification bodies

How 779 has changed our world.

Has it?

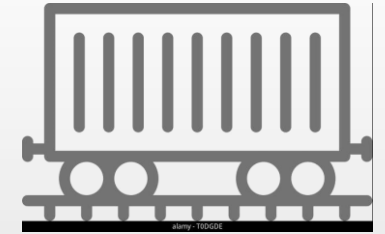
What do these have in common?



The good news is...

- Freight wagons have shown for 8+ years how it works

- Obviously, „other vehicles“ ECMs have been looking closely at the lessons learned



- Railway undertakings have an SMS



- → generally better prepared than freight wagon ECMs 8 years ago
- → ECMs started certification earlier
- → still, time will run out in June



Two fellows...

...with different habits und requirements

The unloved guy



Mother's darling



Freight vs „other vehicles“

- More components and functions
- Complex features, more information
- Damage to the cargo „humans“ is generally unacceptable

Key function
F2
Development

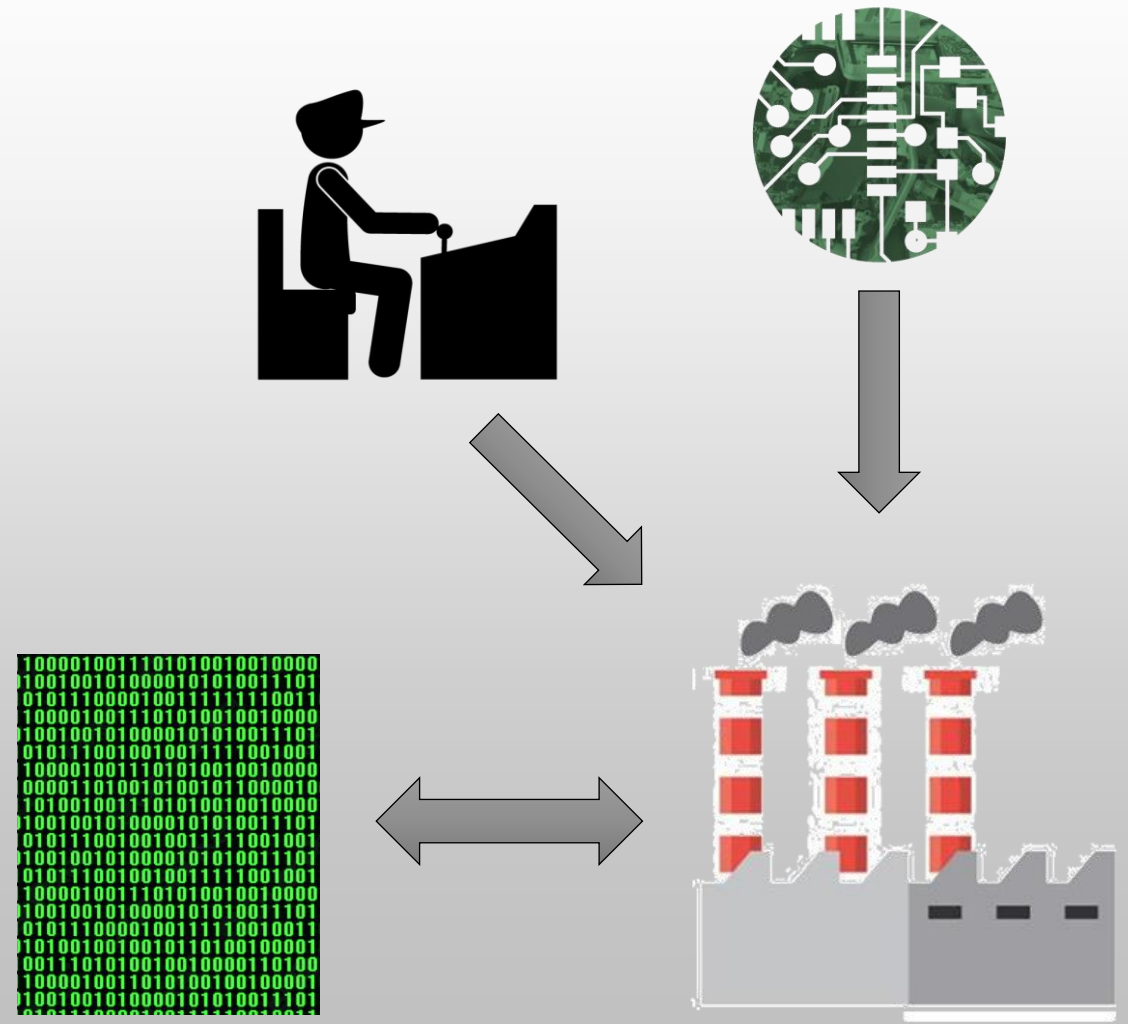
Maintenance plans must be

- developed more individually (no VPI,...)
- Justified (which is difficult without a sufficient number of vehicles)

Permanent surveillance of the vehicle

- Electronic systems on board
- Driver on board
- → a lot of maintenance tasks are already known before the vehicle enters the workshop
- „Big data“ exchange and analysis

Many younger generation persons and also women

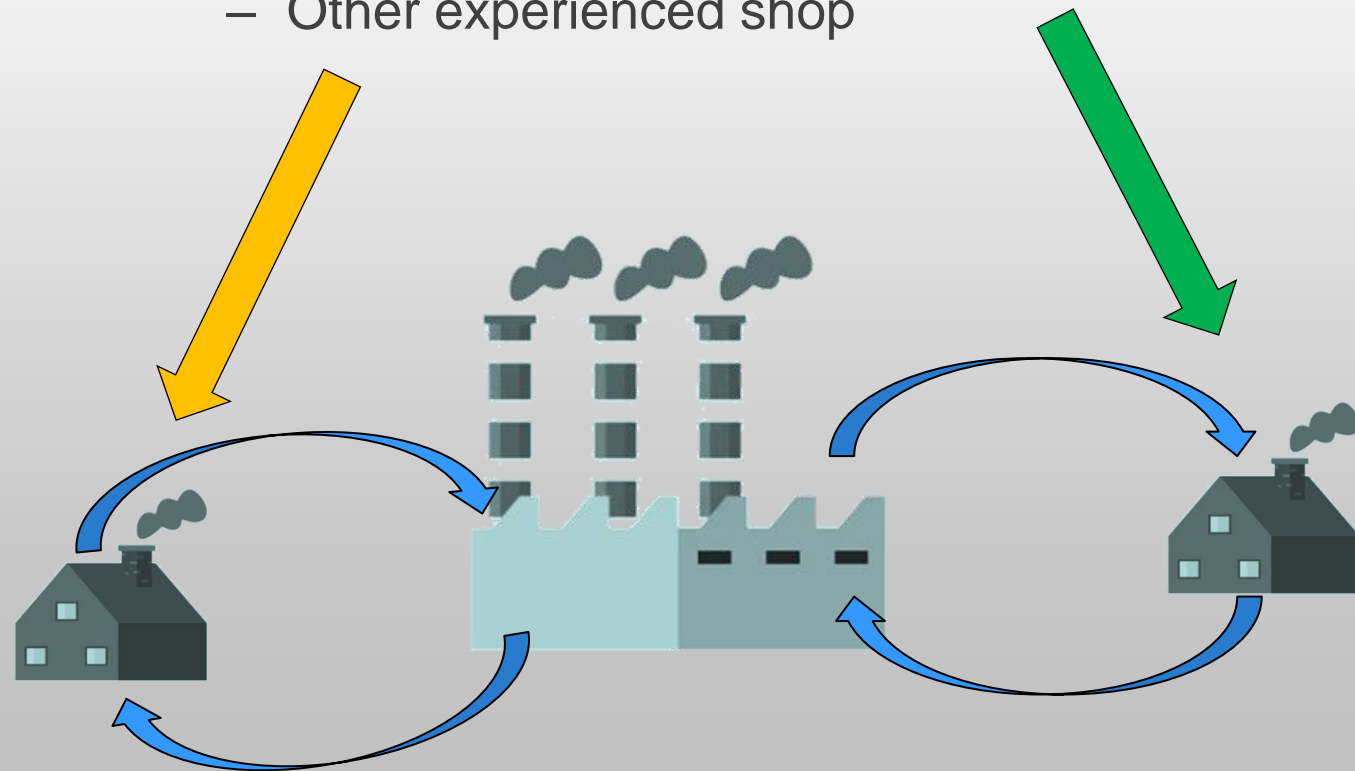


Function 4

Qualification of the suppliers

- Less depth of work in a workshop
- Revision:
 - Take apart
 - Send components out to different suppliers (F2?)
 - Receive components back
 - Put together
 - Check function and GO

- Suppliers are not certified
 - Original manufacturer
 - Other experienced shop



CSM Regulation 402/2013

The best legal act in 175 years railway!

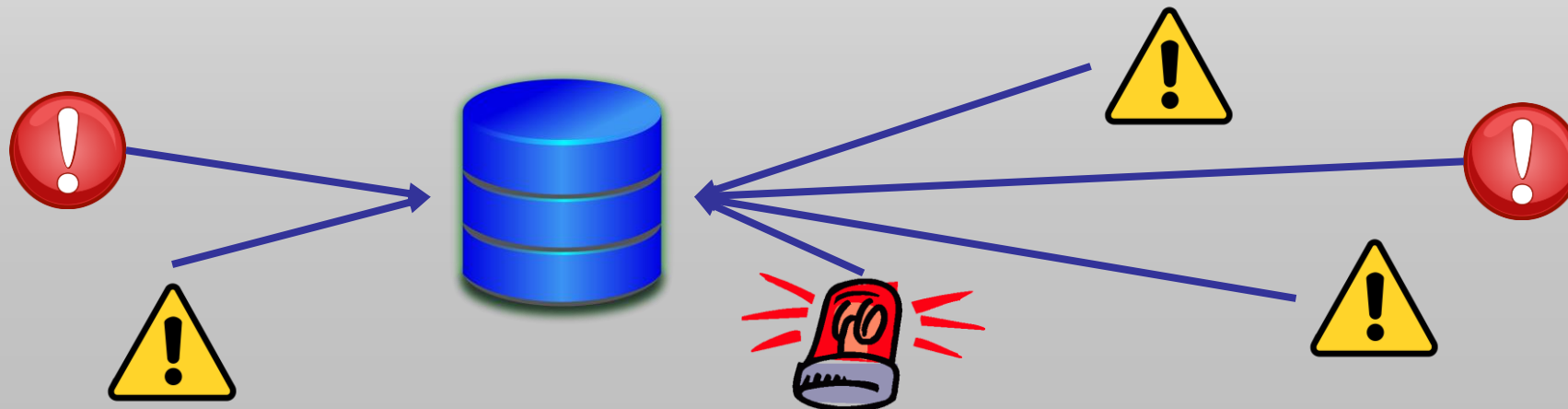
...because suddenly there are no more significant changes



- AsBo assessment is a huge effort for a small change
- ECMs define things as „not significant“ and analyse in-house

Exchange of information - SAIT

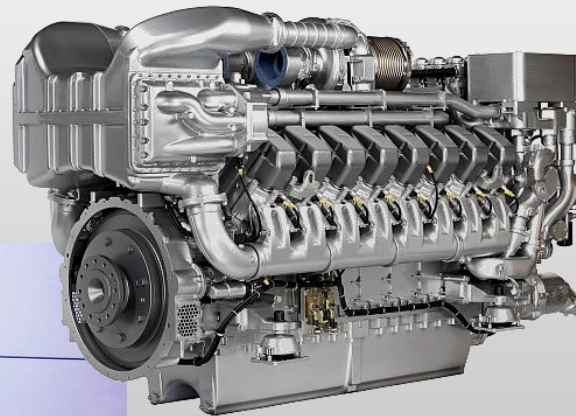
- „*Safety Alert IT Tool*“
 - Starting now
 - Uncertainty in the sector, what to put and what not
 - Positive evolvemement
- Service after official lifetime can be difficult, e.g. for software
- Can there also be a „Technical“ SAIT?



Safety-critical components

Everybody talks about them - what are they?

*“...components for which a **single failure** has a **credible potential** to lead directly to a **serious accident**”*



Software???

Safety Critical Components

- „The manufacturer must define them“
 - The ECM has to add if necessary
- Uncertainty in the sector
- Acting as certification body
 - Process must be available
 - Wheelset is a must-have
 - Further points on the list of SCC to be discussed
 - Let the sector learn
 - TR 17696

Will SCC make our world safer???



Messages to the sector

- ad ERA:
Continue the fruitful collaboration with the assessment bodies
- ad Certification bodies:
*Be pragmatic in your assessments.
The target is a safe vehicle.*
- ad new ECMs:
Have trust in yourself – there is nothing to panic about



Thank you for your attention

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