

Comparison of the WB- and STAMP-Analyses of the Brühl accident

2. Bieleeschweig Workshop

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Braunschweig, 01.07.03

Identifying those aspects covered by both analyses

Aspects only covered by STAMP analysis

Aspects only covered by WBA

Conclusions

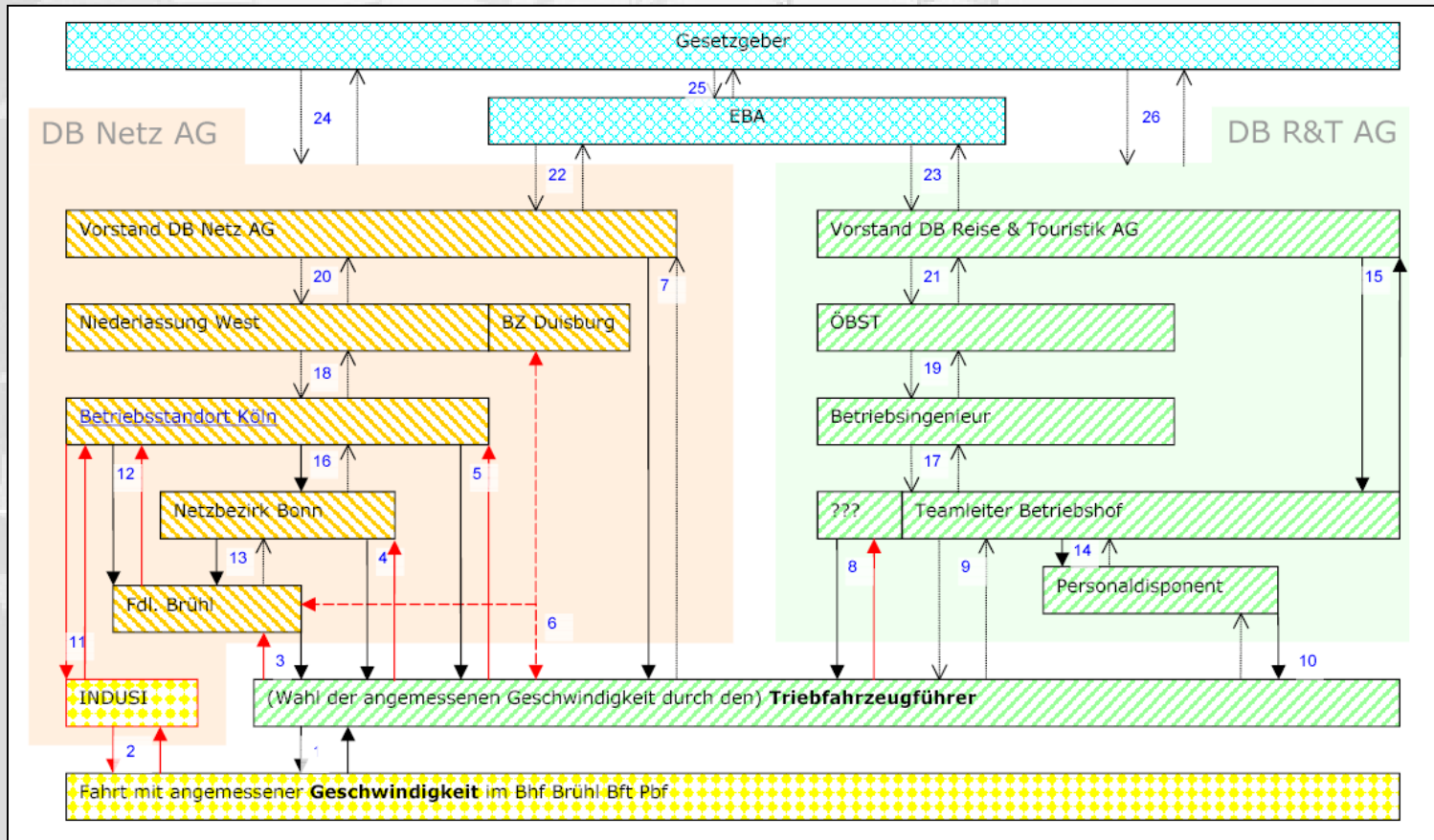
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Aspects only covered by STAMP analysis

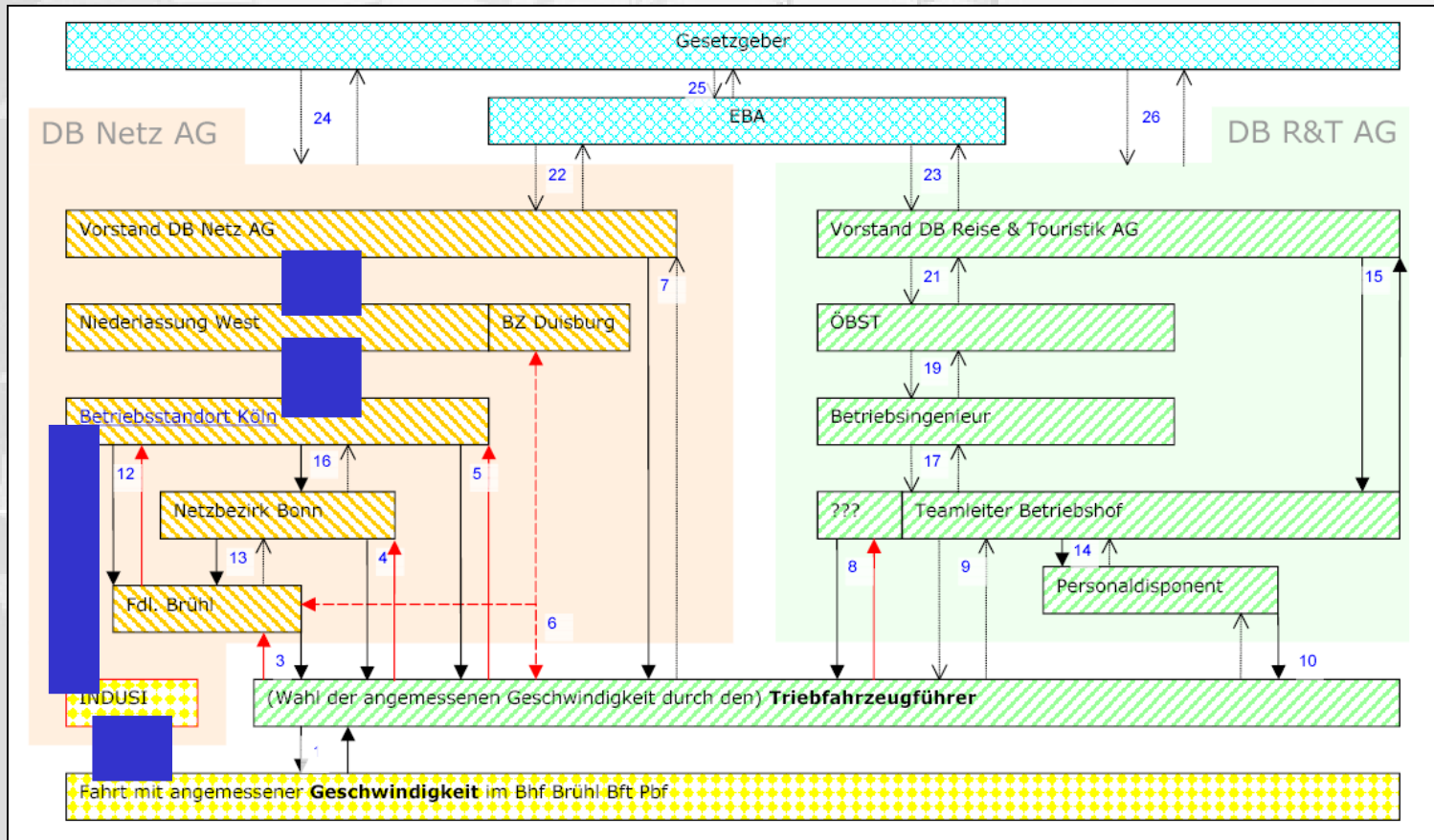
Aspects only covered by WBA

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STAMP control structure I

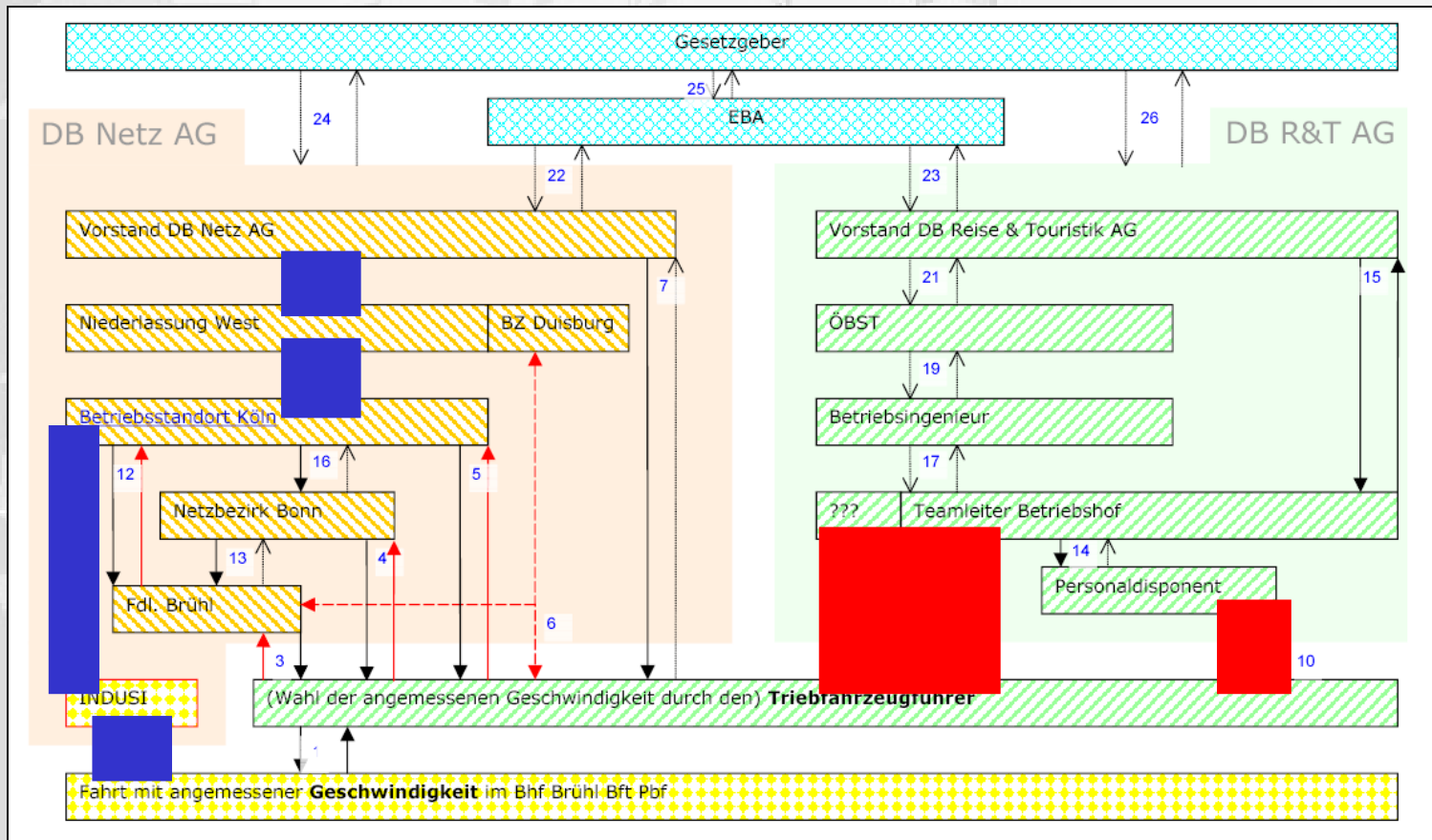


STAMP control structure I



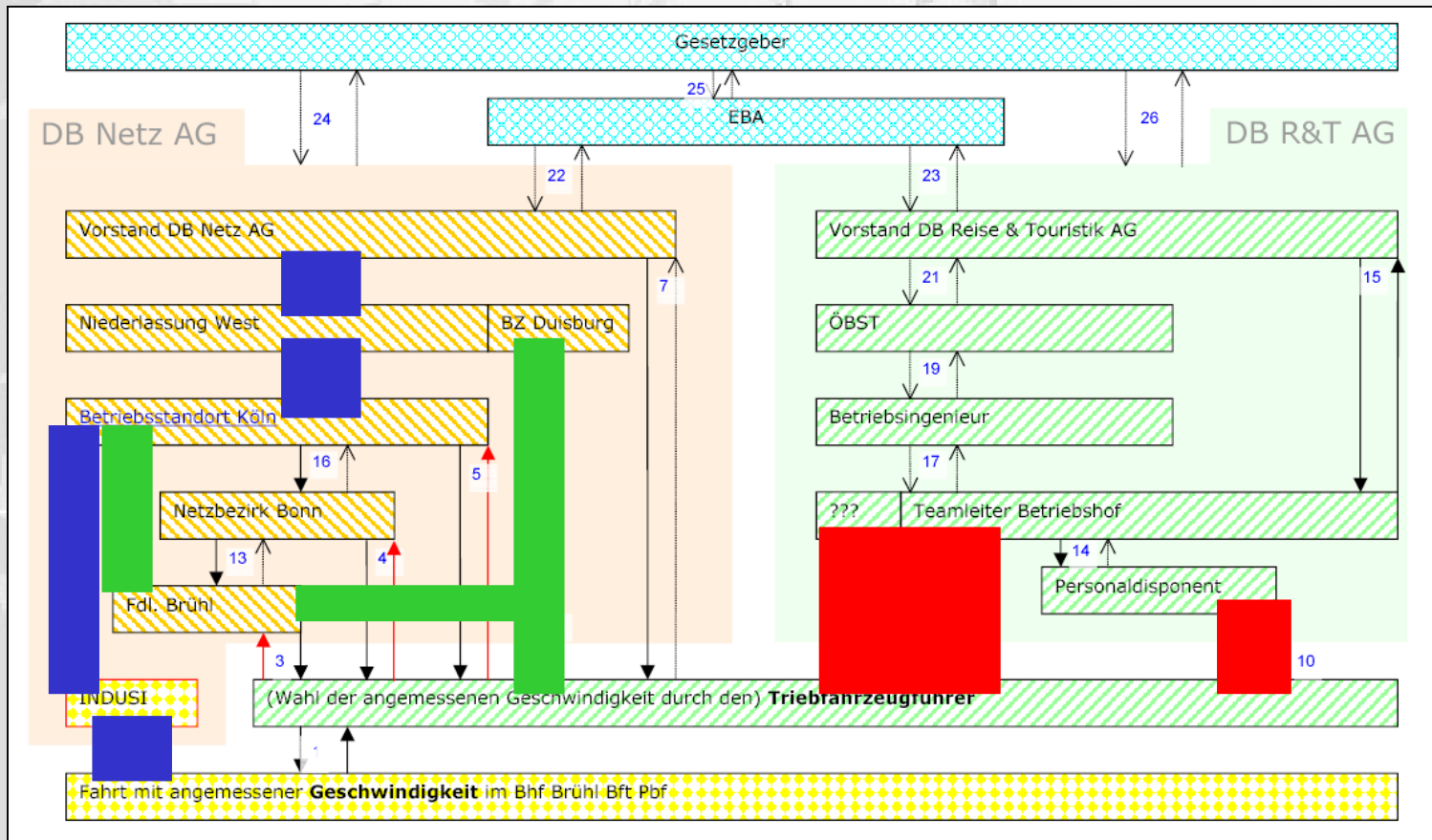
No ATC installation present

STAMP control structure I



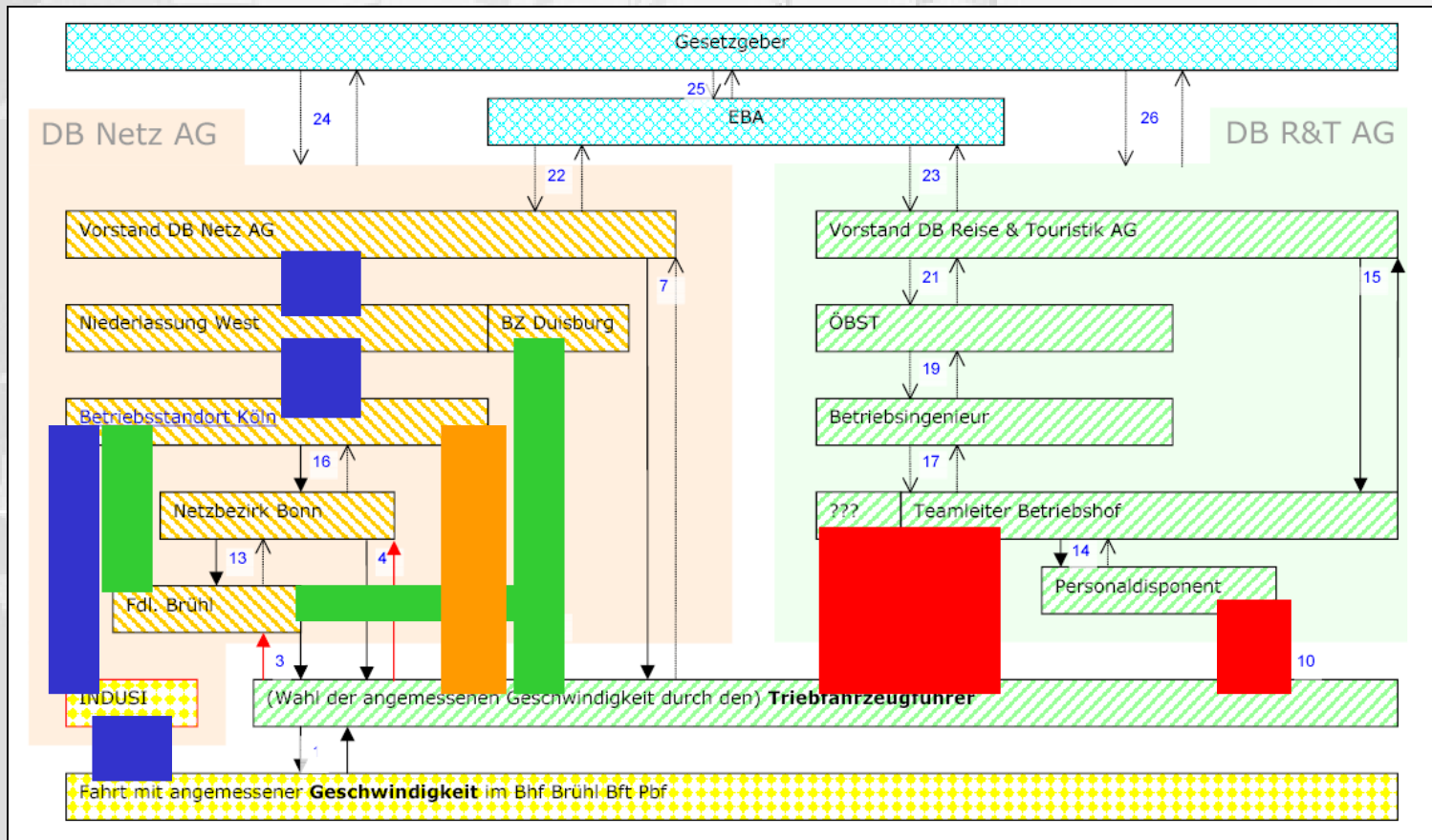
- No ATC installation present
- Driver lacks training

STAMP control structure I



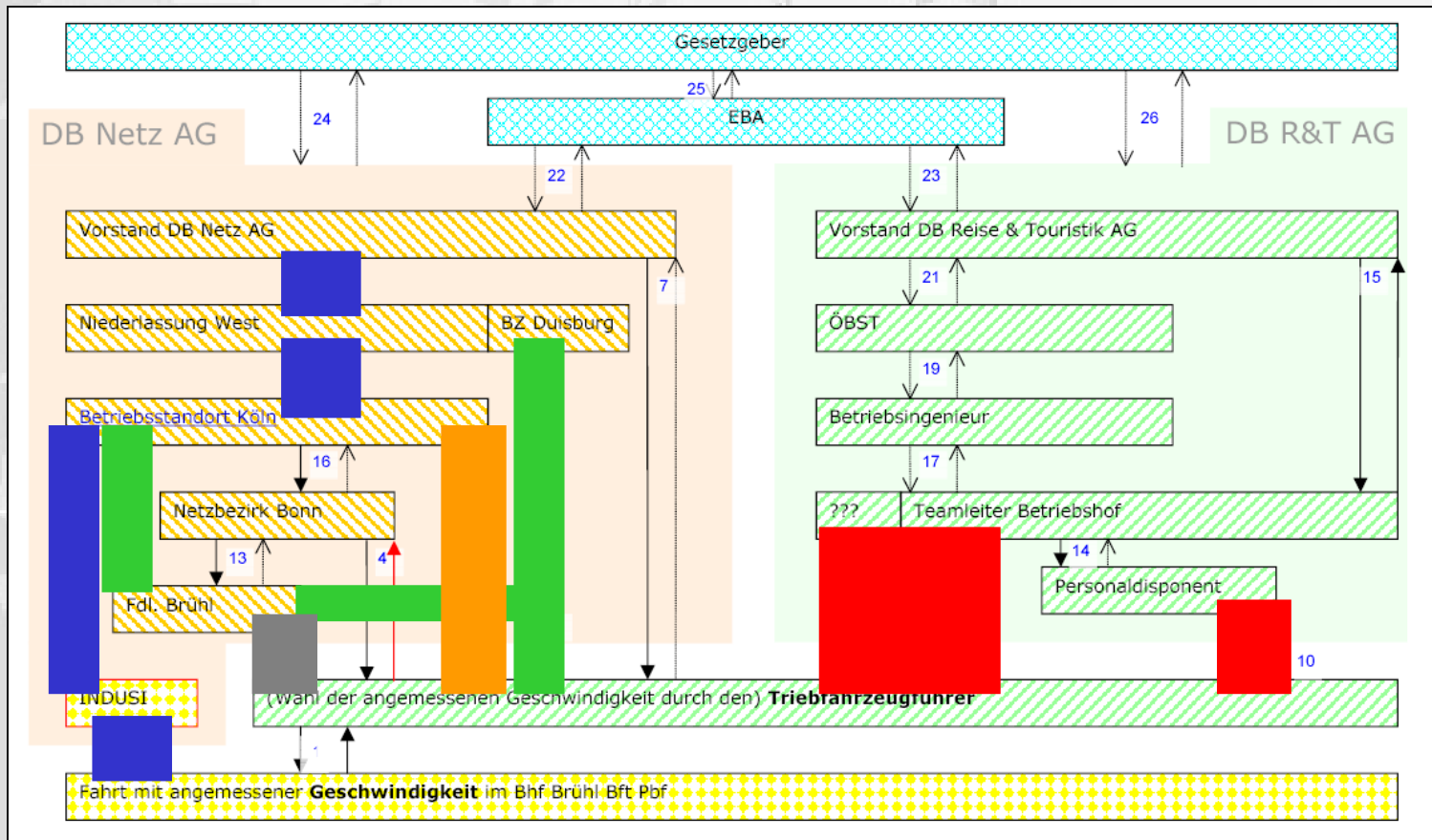
- No ATC installation present
- Non mandatory instructions to inform driver by cab-radio
- Driver lacks training

STAMP control structure I

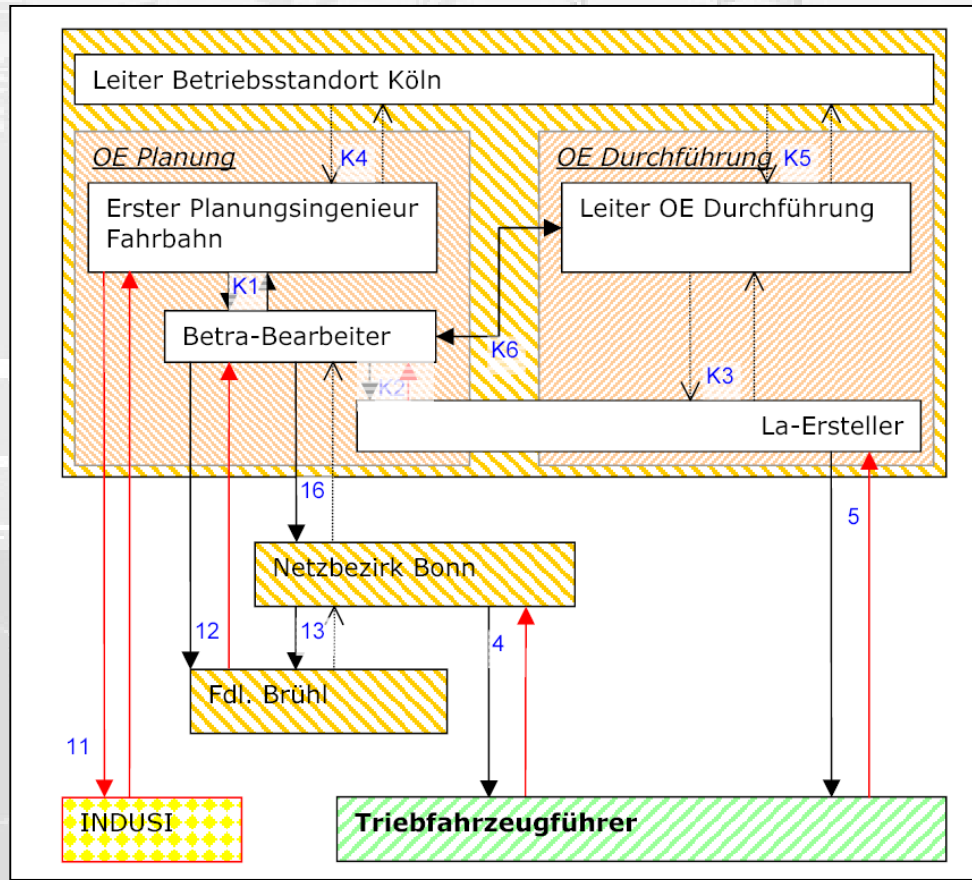


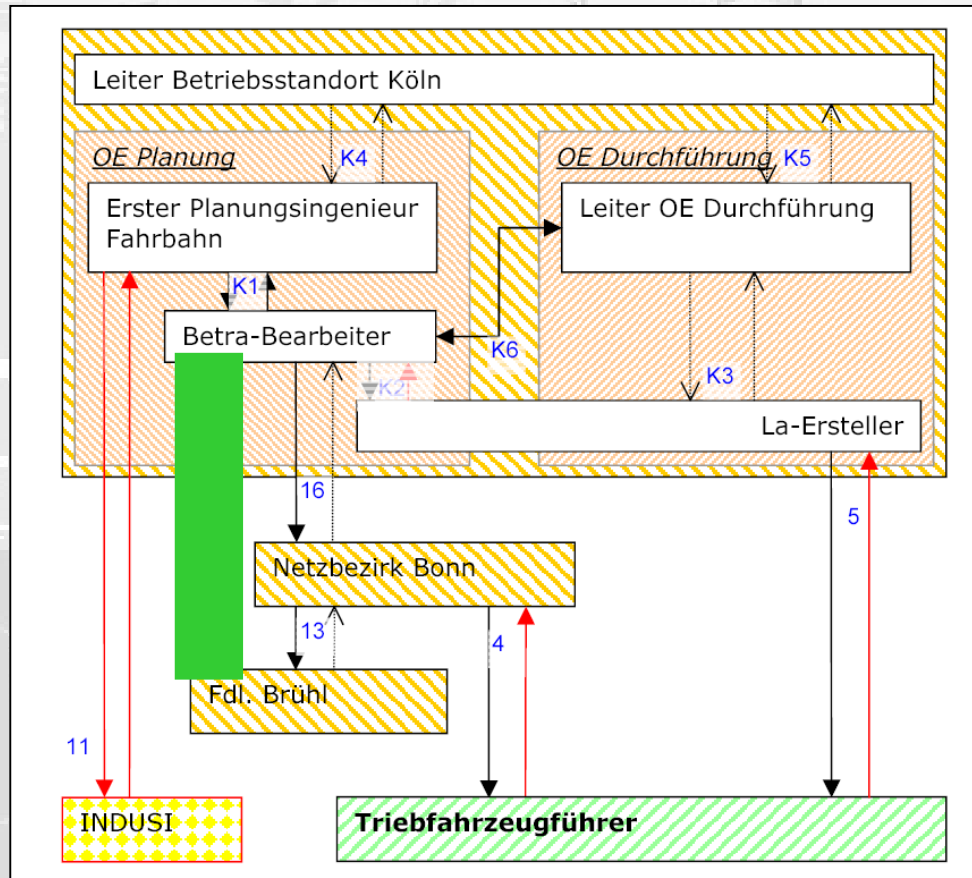
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- Non mandatory instructions to inform driver by cab-radio
- Driver lacks training
- Confusing La entries


STAMP control structure I

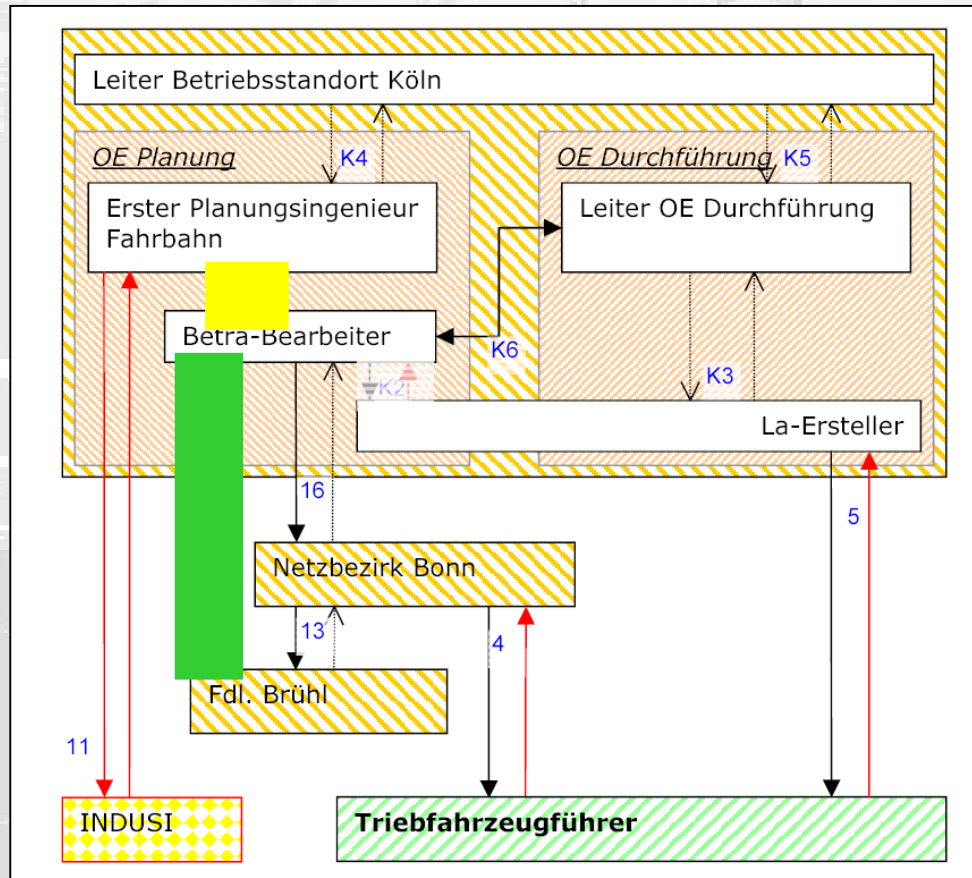



- No ATC installation present
- Non mandatory instructions to inform driver by cab-radio
- Unusual use of Zs1
- Driver lacks training
- Confusing La entries




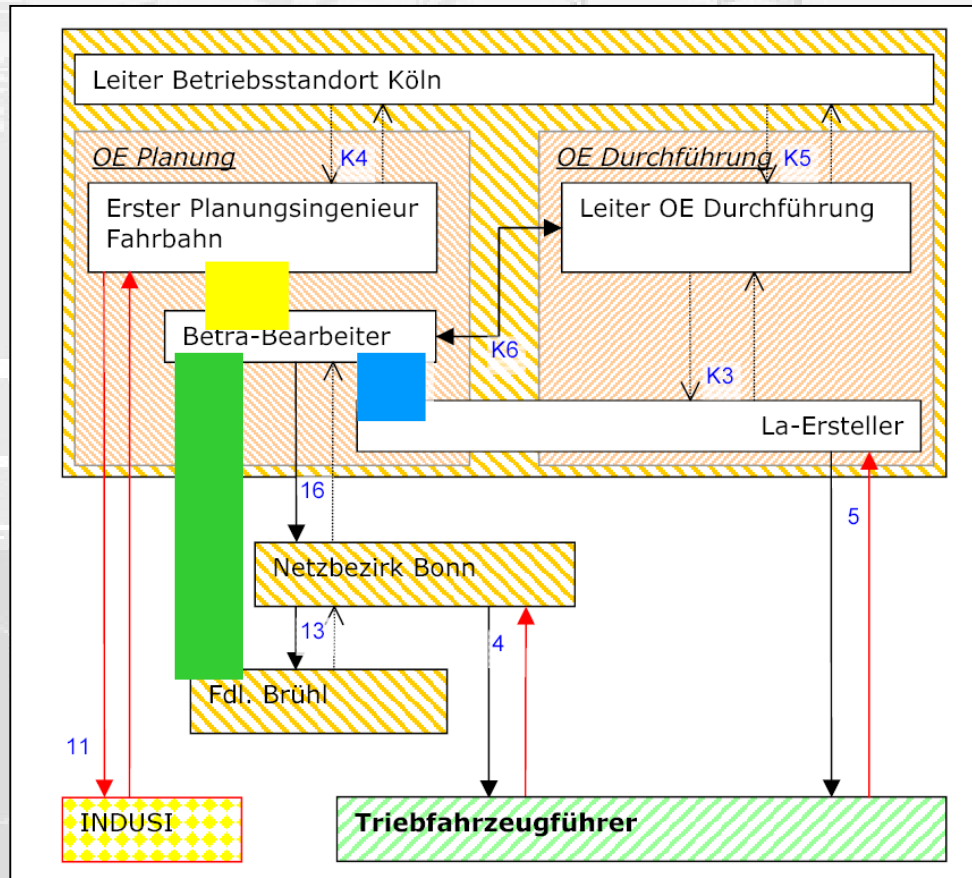



 Non mandatory instructions to inform driver by cab-radio





 Non mandatory instructions to inform driver by cab-radio

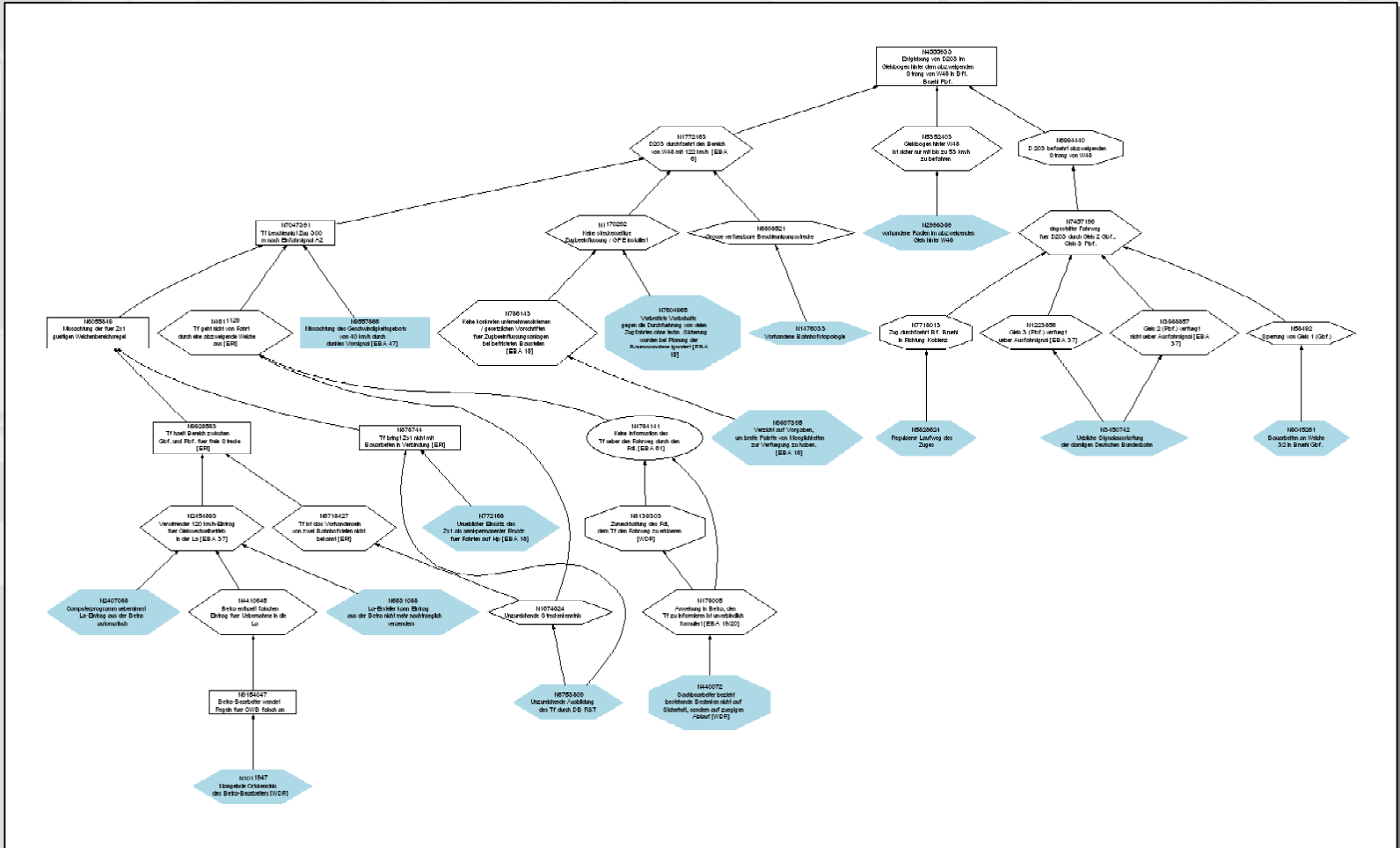
 Concerns about mode of operation were ignored

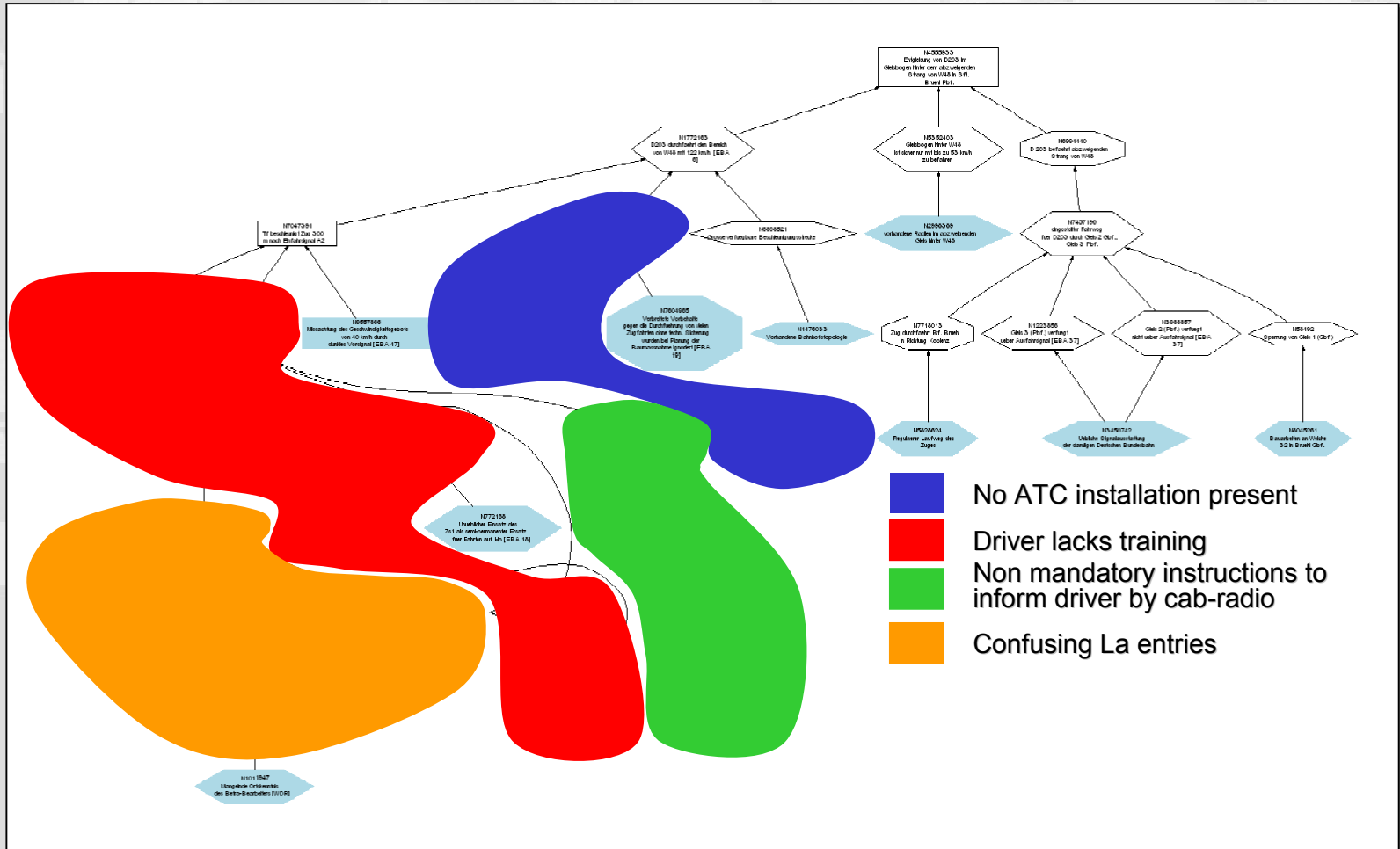


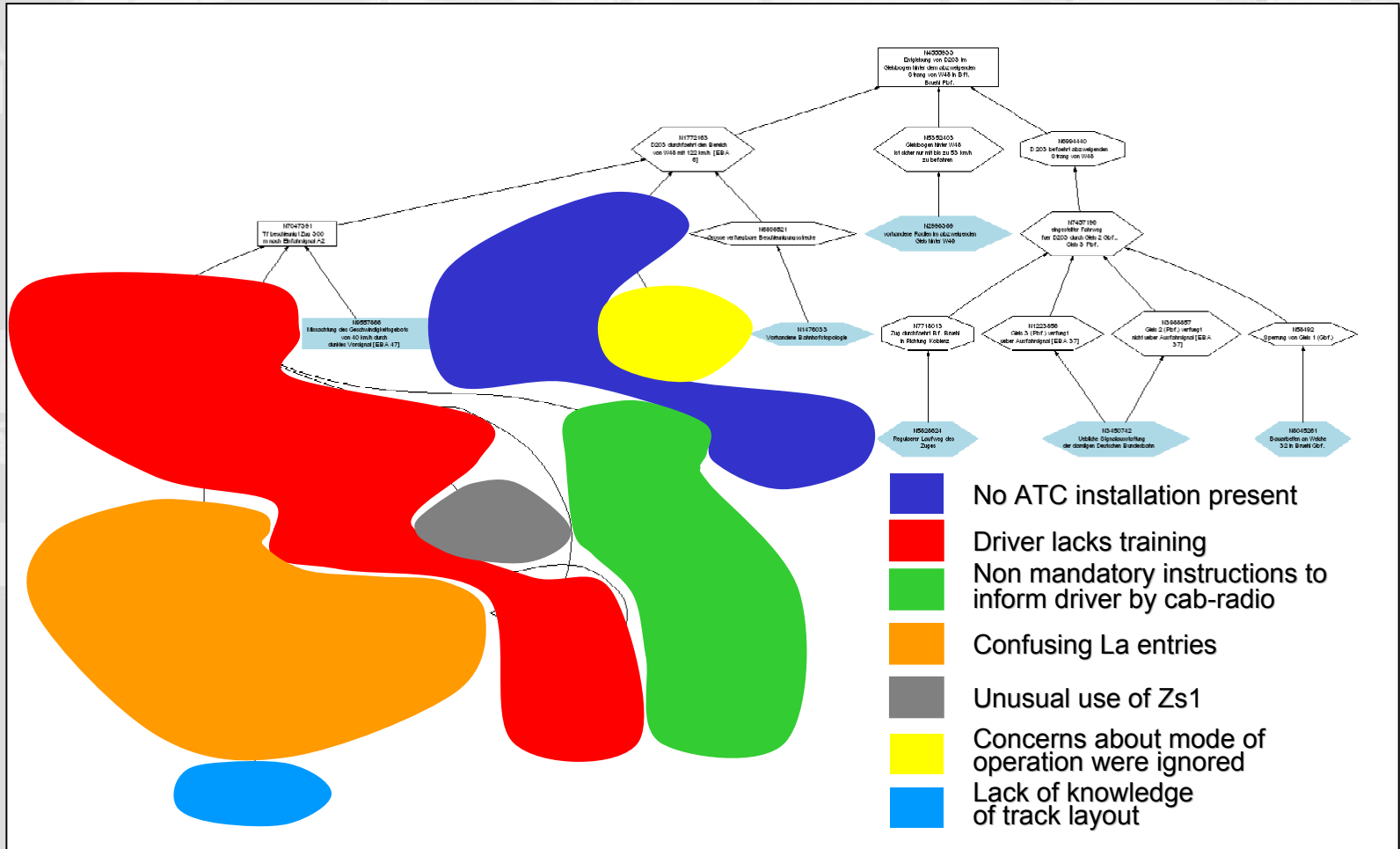
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 Lack of knowledge of track layout







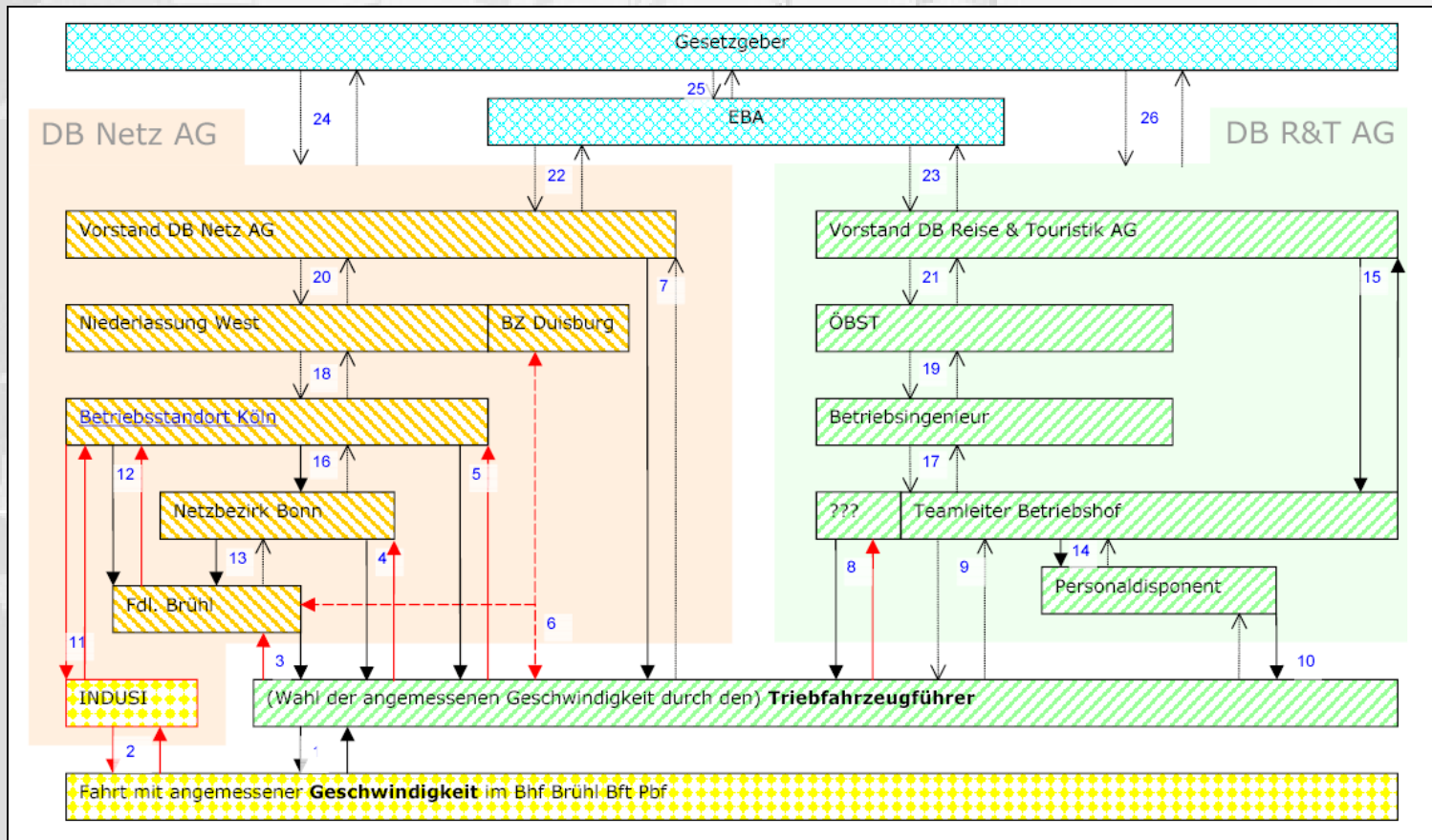
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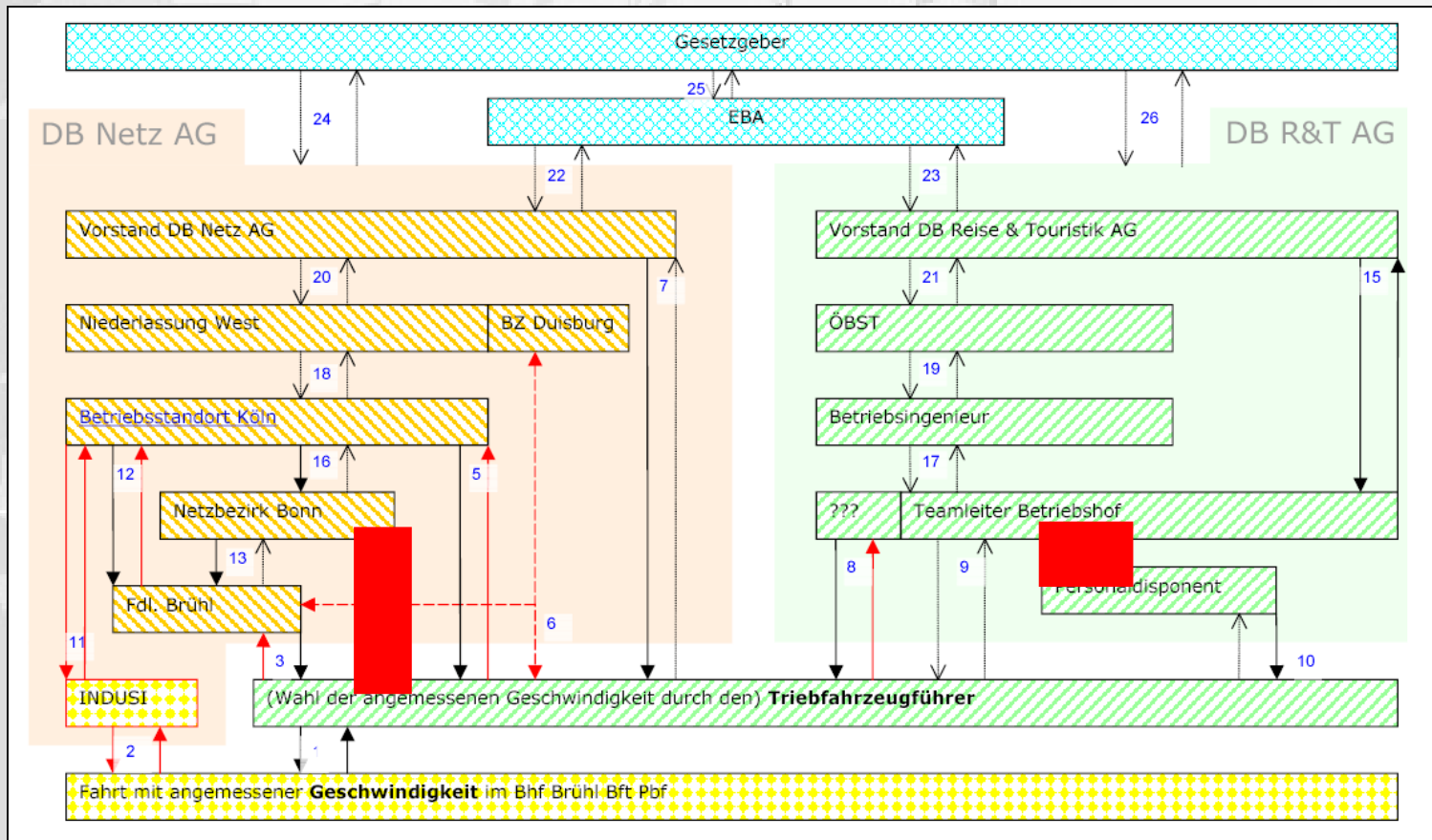
Aspects only covered by WBA


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Aspects covered only by STAMP analysis

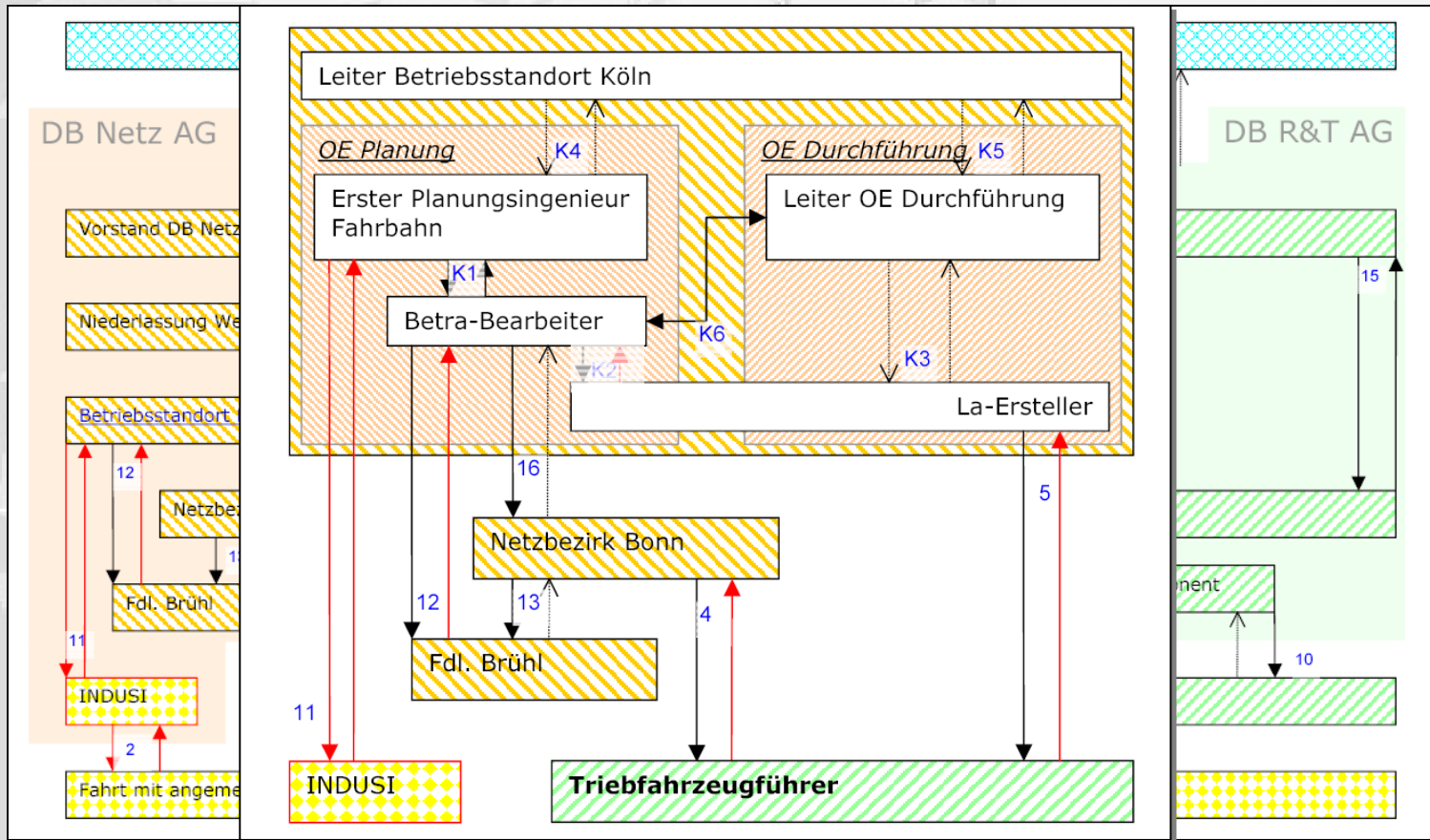


Aspects covered only by STAMP analysis



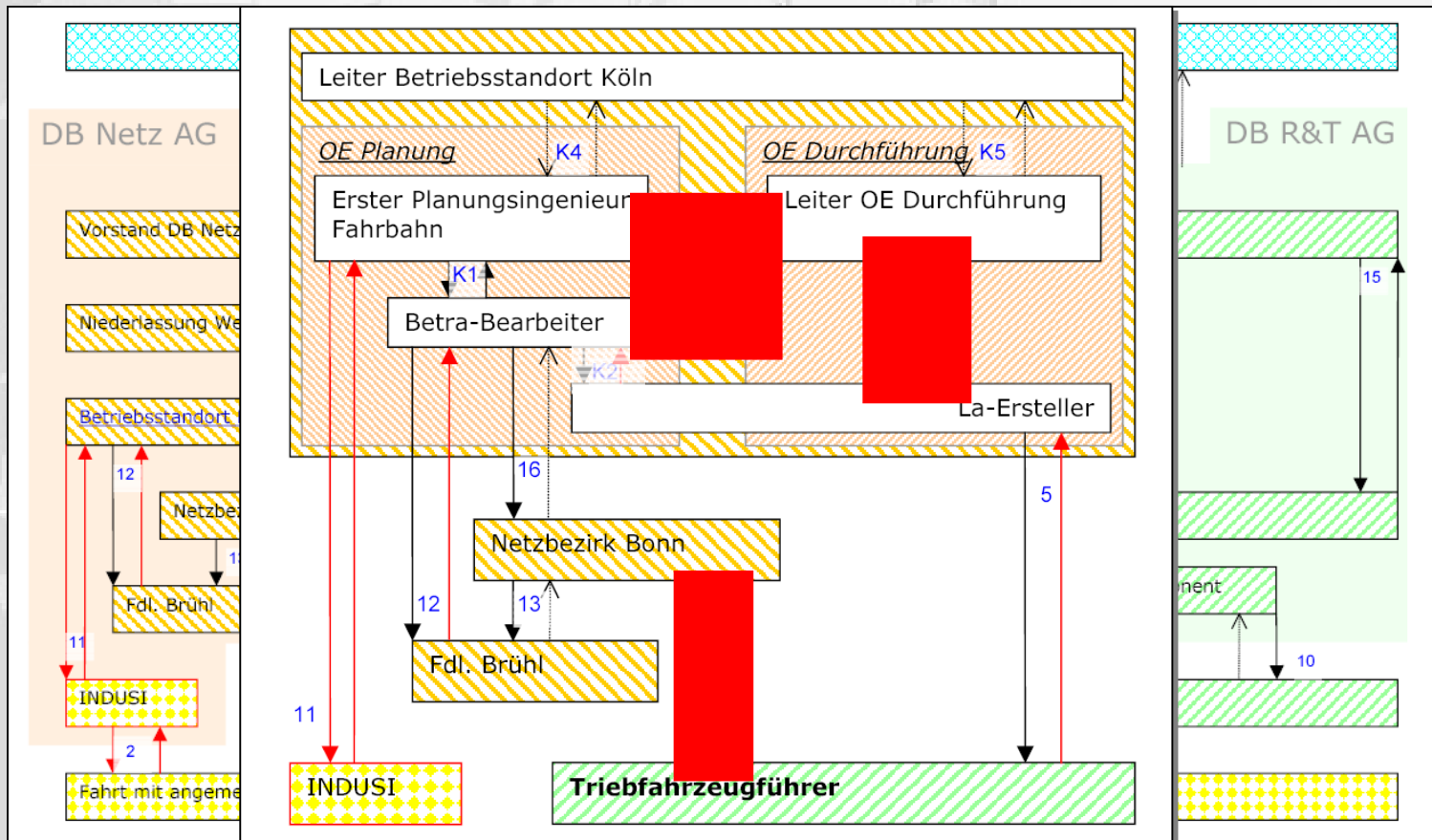
 Aspects only found by STAMP analysis

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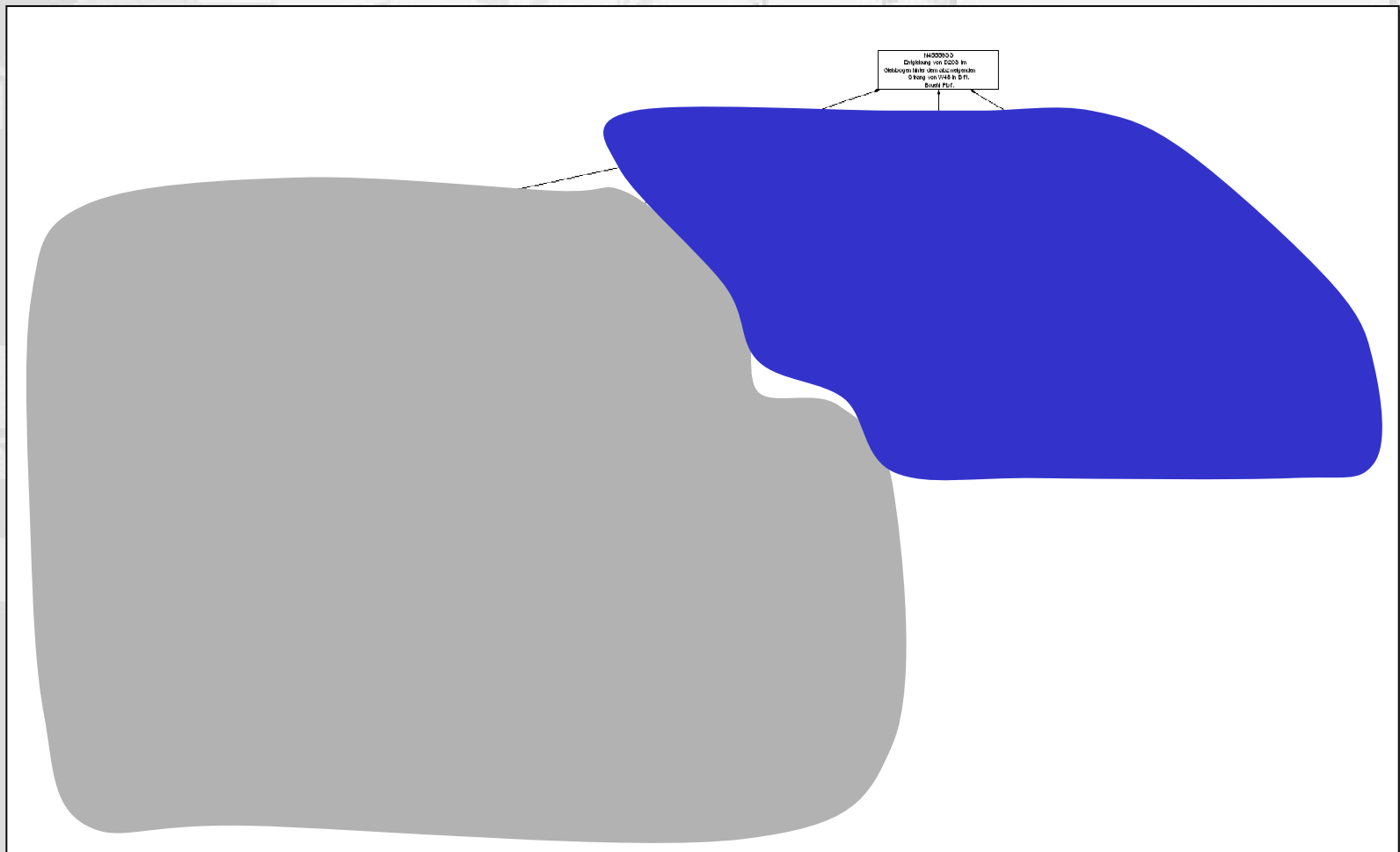
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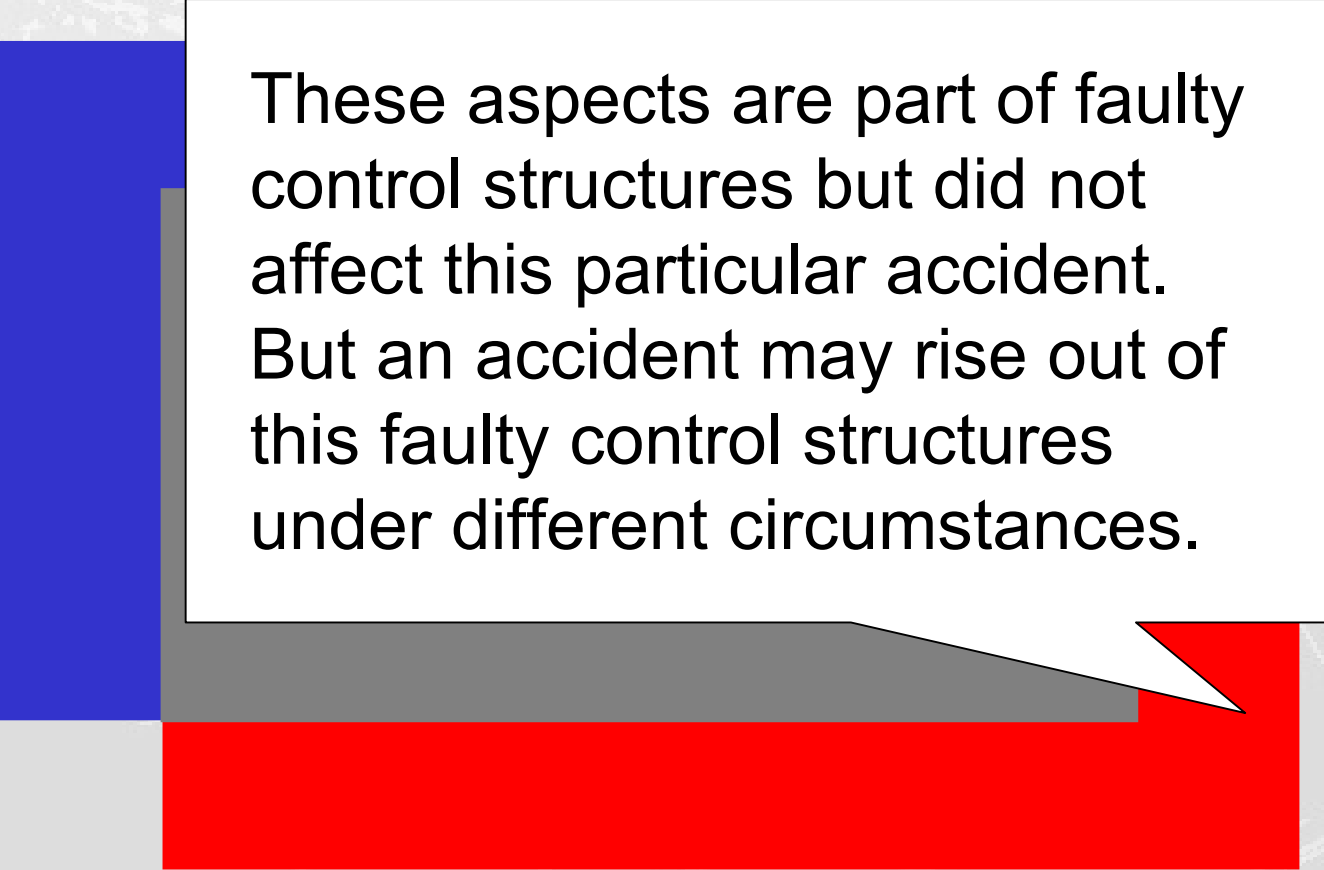
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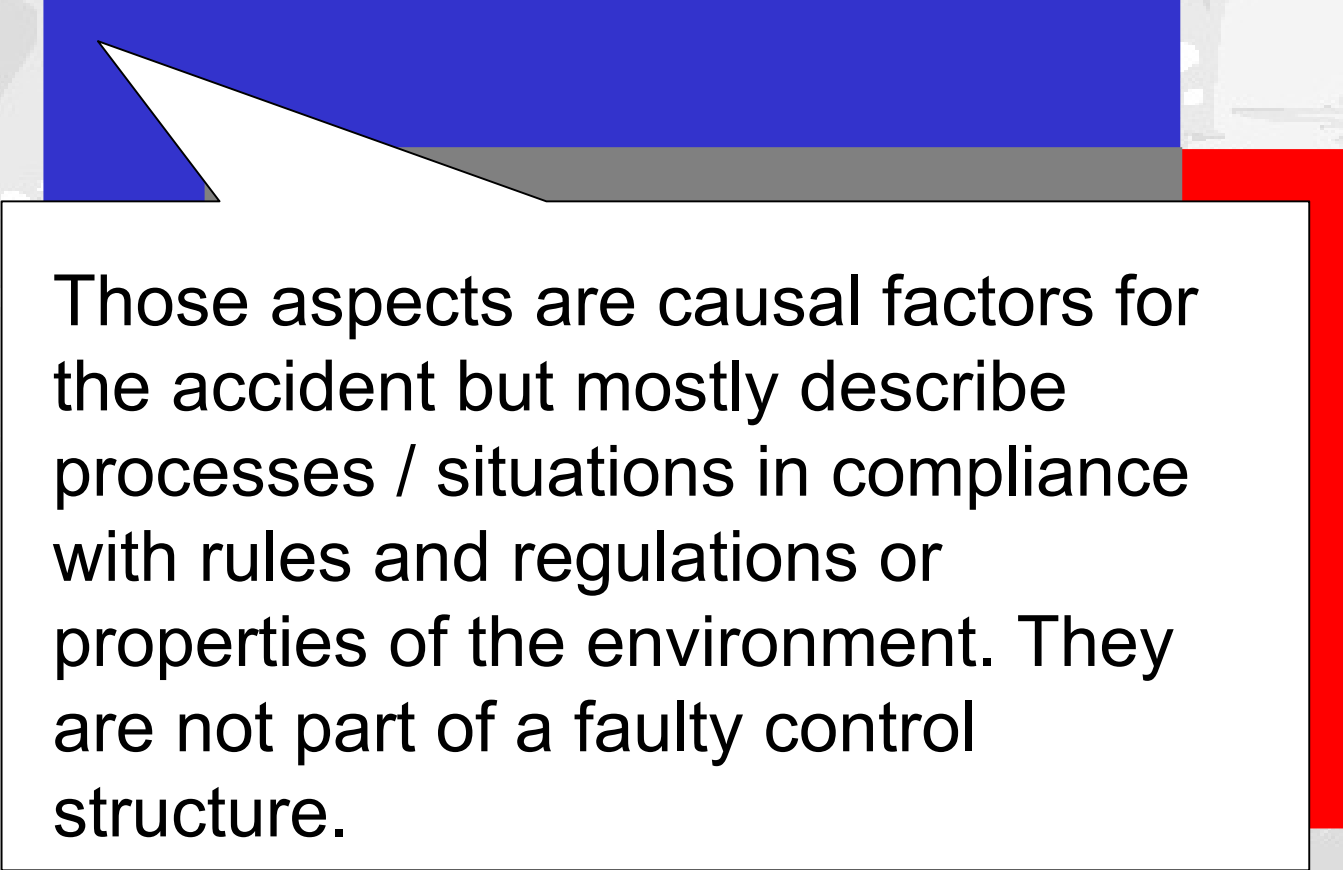
**Aspects covered
by both analyses**

Aspects covered
with analyses

Those aspects are part of a faulty control structure AND are causal factors for the accident: The inadequate control structure directly contributed to the accident.



These aspects are part of faulty control structures but did not affect this particular accident. But an accident may rise out of this faulty control structures under different circumstances.



Those aspects are causal factors for the accident but mostly describe processes / situations in compliance with rules and regulations or properties of the environment. They are not part of a faulty control structure.



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- **Only the combination of both methods leads to a comprehensive analysis!**



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Thank you for your attention!