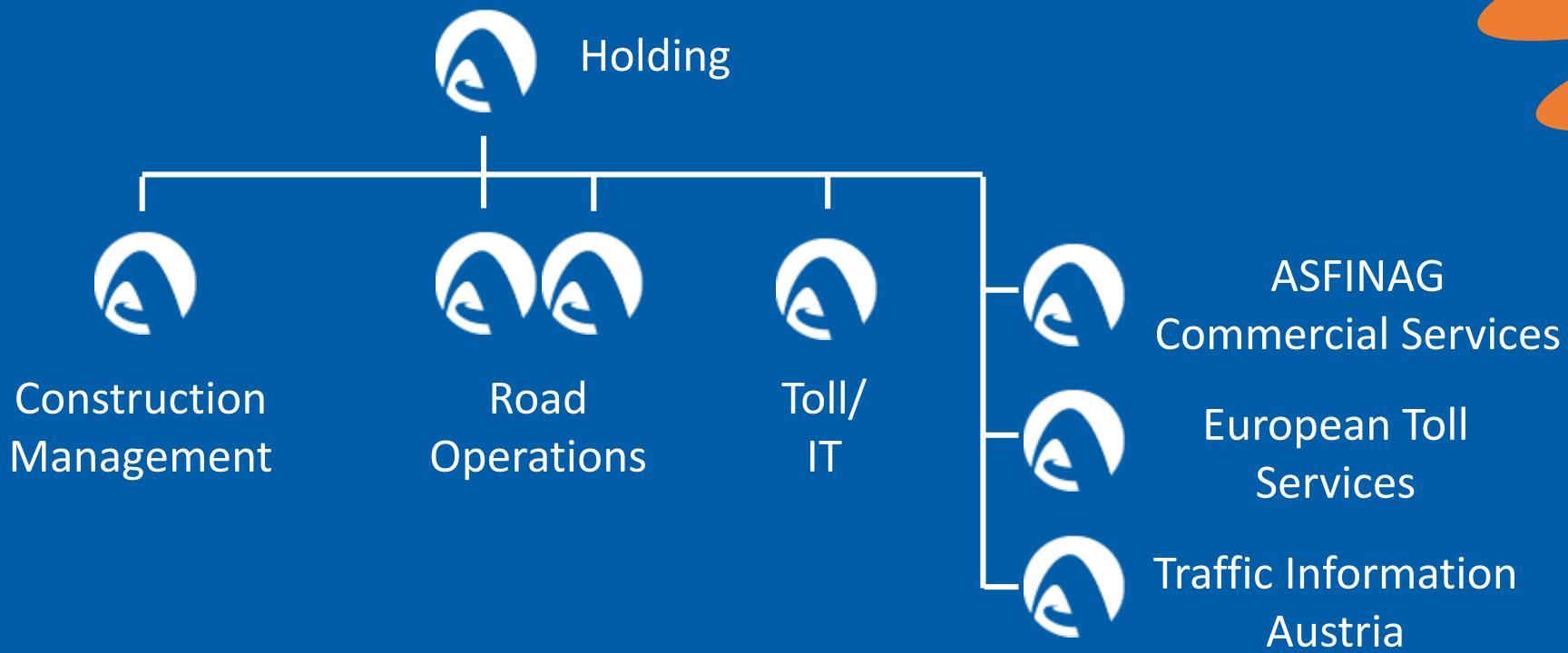


A long-exposure photograph of a highway at night, showing the streaks of headlights and尾灯 as they travel along the road. The streaks are primarily white and red, creating a sense of motion and flow.

Free Play of Innovative Forces or Systematic Restructuring-

The perspective of the road operator ASFINAG

ASFINAG at a glance



2.785 employees
2.223 km network
30 bn.
vehicle-km/year
purely toll-financed

Individual mobility will change drastically in the future – The details depend on many developments/technologies

C A S E

o u h l
n t a e
n e r c
e c m t
c t a d r
t e e l
d d c



Artificial
intelligence

5G

Fuel cells

Internet of
Things

Multi-
modality

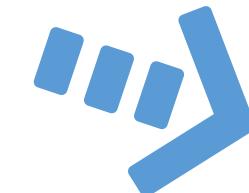
Big data

Cooperative
systems

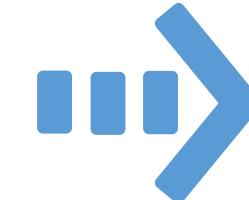
Road infrastructure offers attractive opportunities for digitalization but few of them are quick wins

Topics affecting ASFINAG

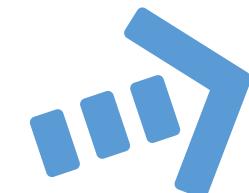
- High investments assets
- High operational cost
- Long duration of projects and life cycles



- Regional distribution tasks
- Intense manual labour
- Seasonal/situation dependant



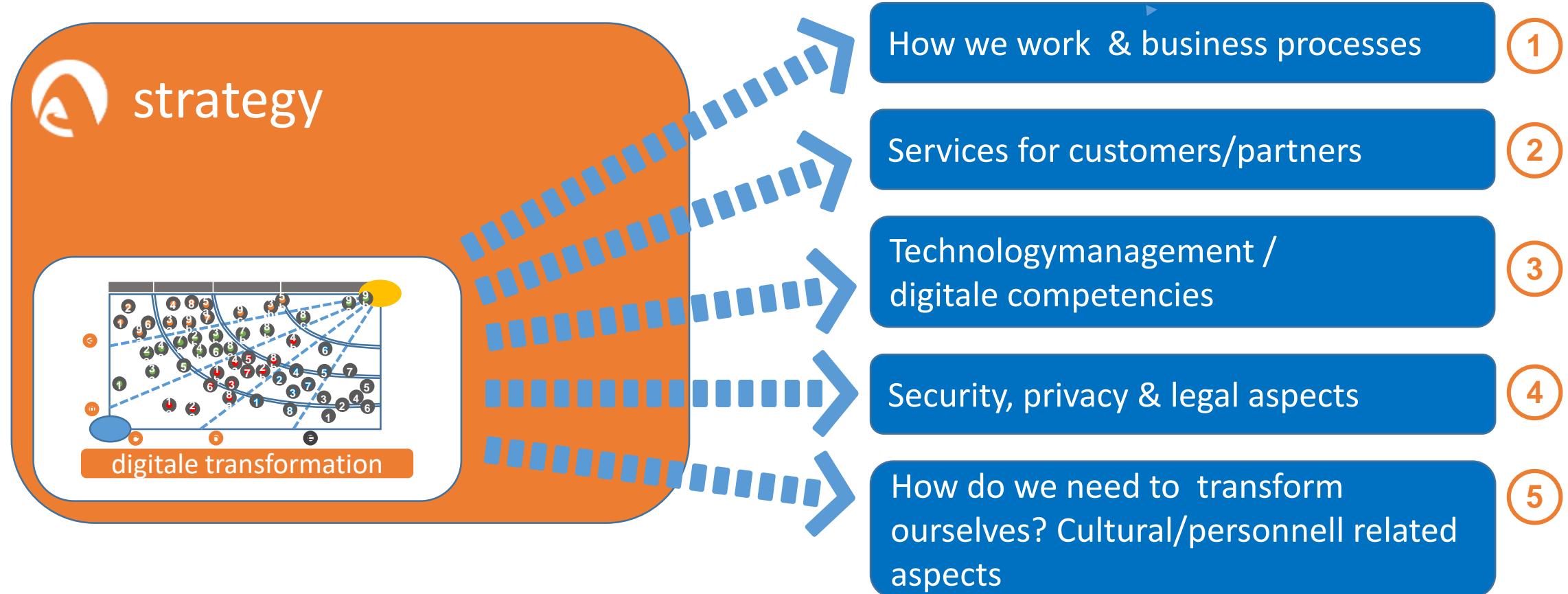
- Increasing traffic environment
- & transport
- Change in technologies
- Trends in society
- Environmental challenges



digitalization is a well integrated part of corporate strategy

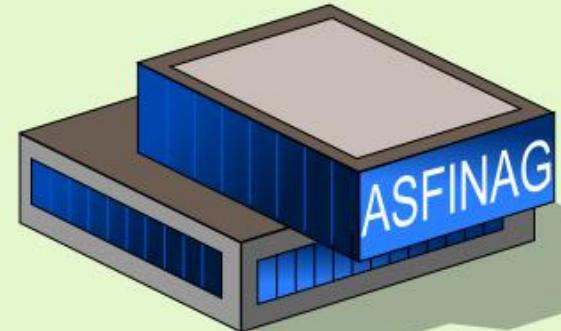


Digitalisation in ASFINAG is a stepwise approach – taking into account different perspectives

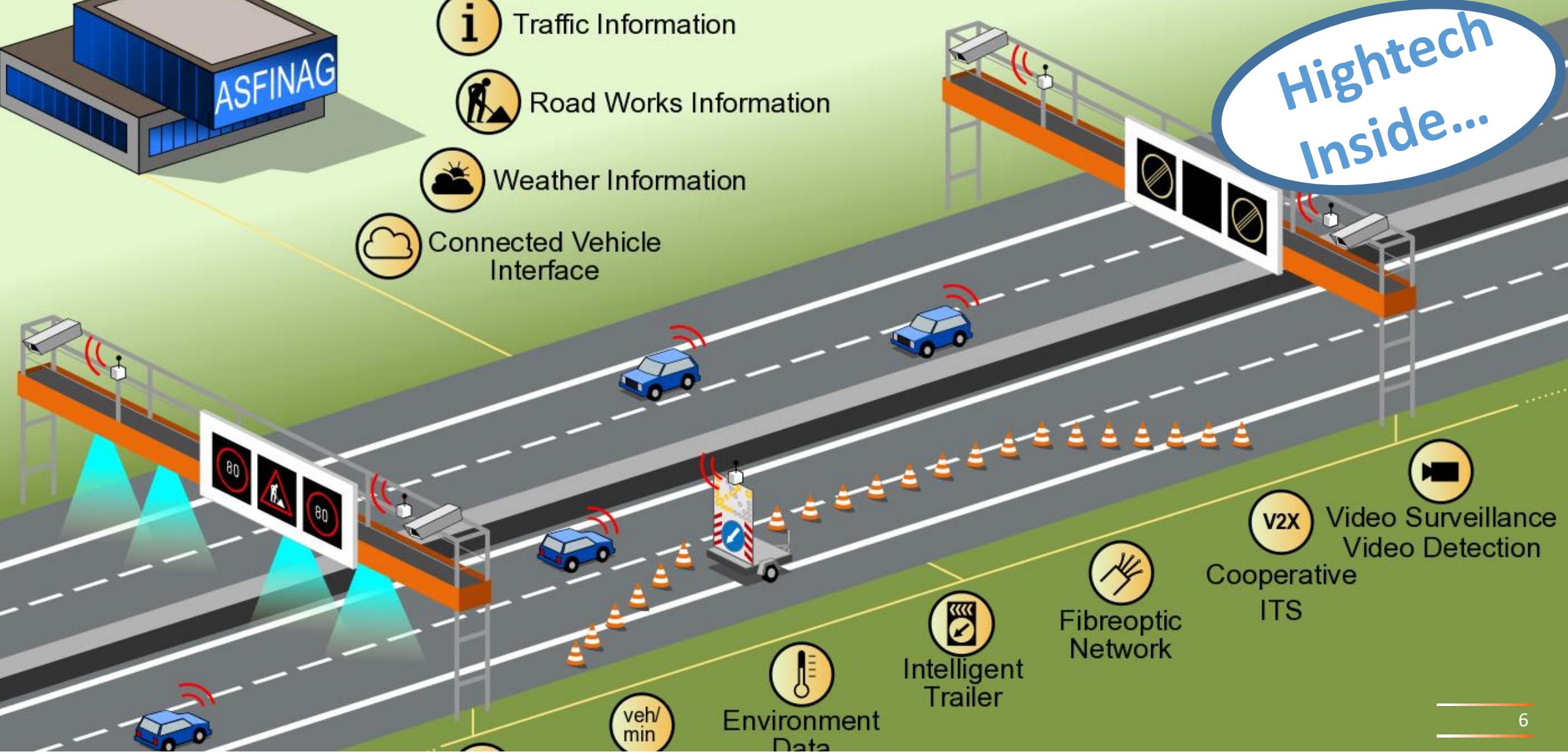


Strong partnerships and R&D cooperations are essential to face the challenges ahead!

What we bring to the table...



- Traffic Surveillance and Control
- Incident Management
- Traffic Information
- Road Works Information
- Weather Information
- Connected Vehicle Interface



- v2x Video Surveillance
Video Detection
- Cooperative ITS
- Fibreoptic Network
- Intelligent Trailer
- Environment Data

Traffic management centers control traffic in tunnels and along the highways

10 traffic control centers

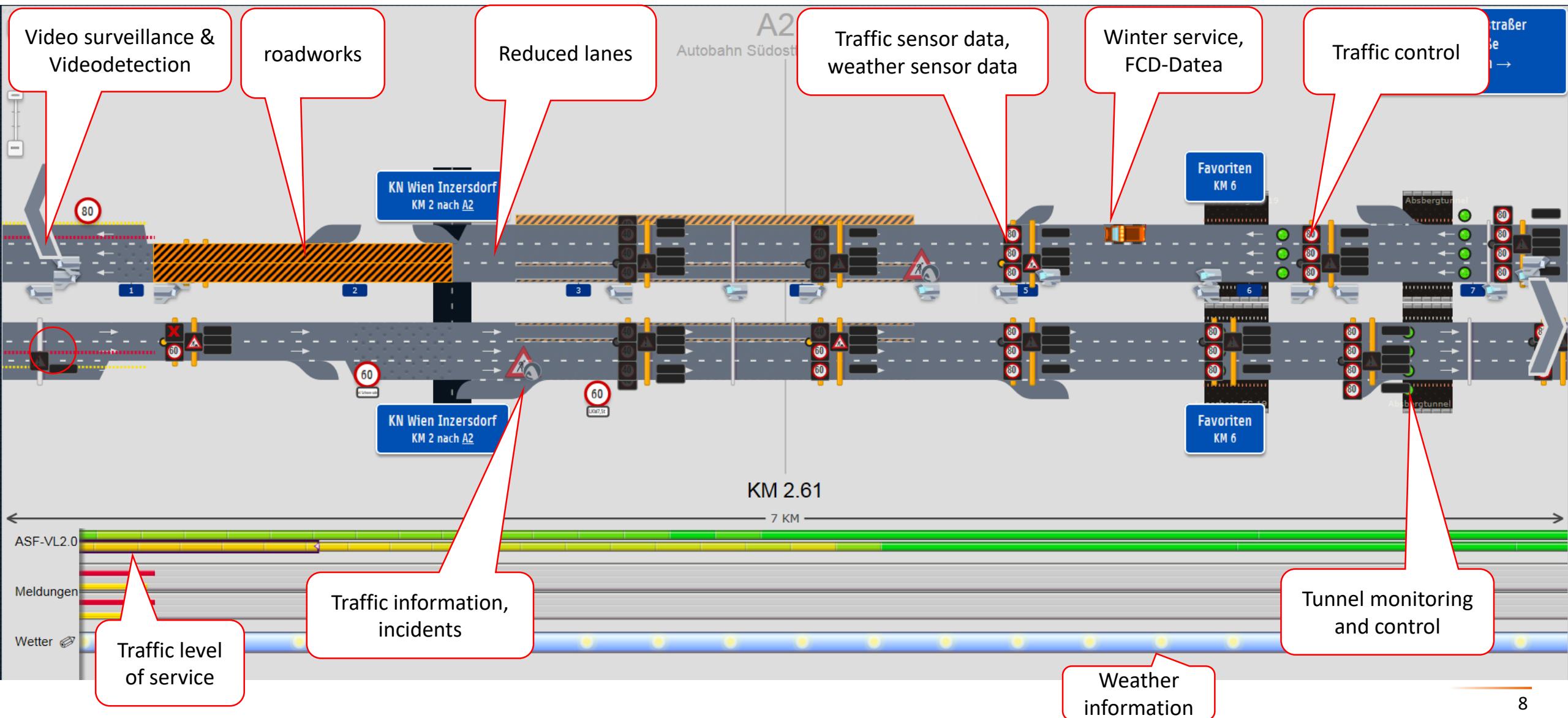
Incident detection

~8500 Cameras

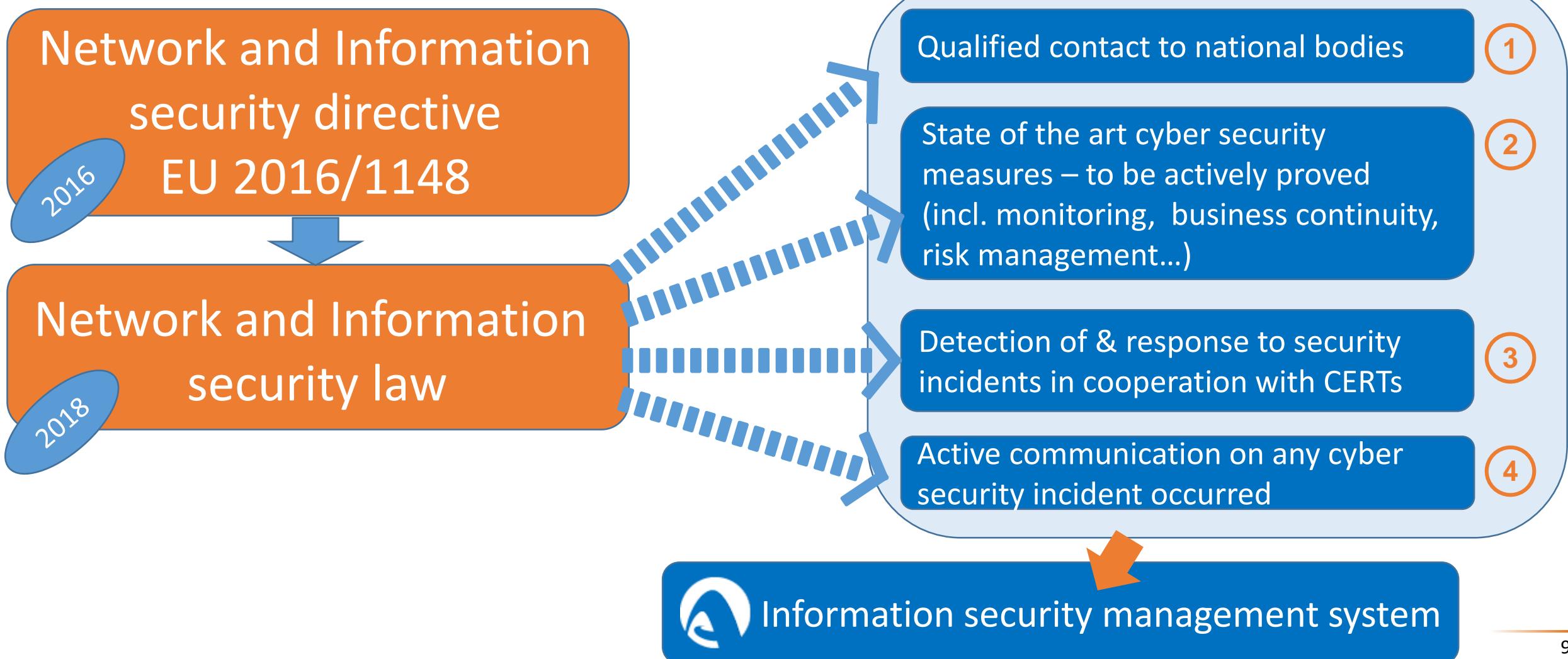
>85% network coverage



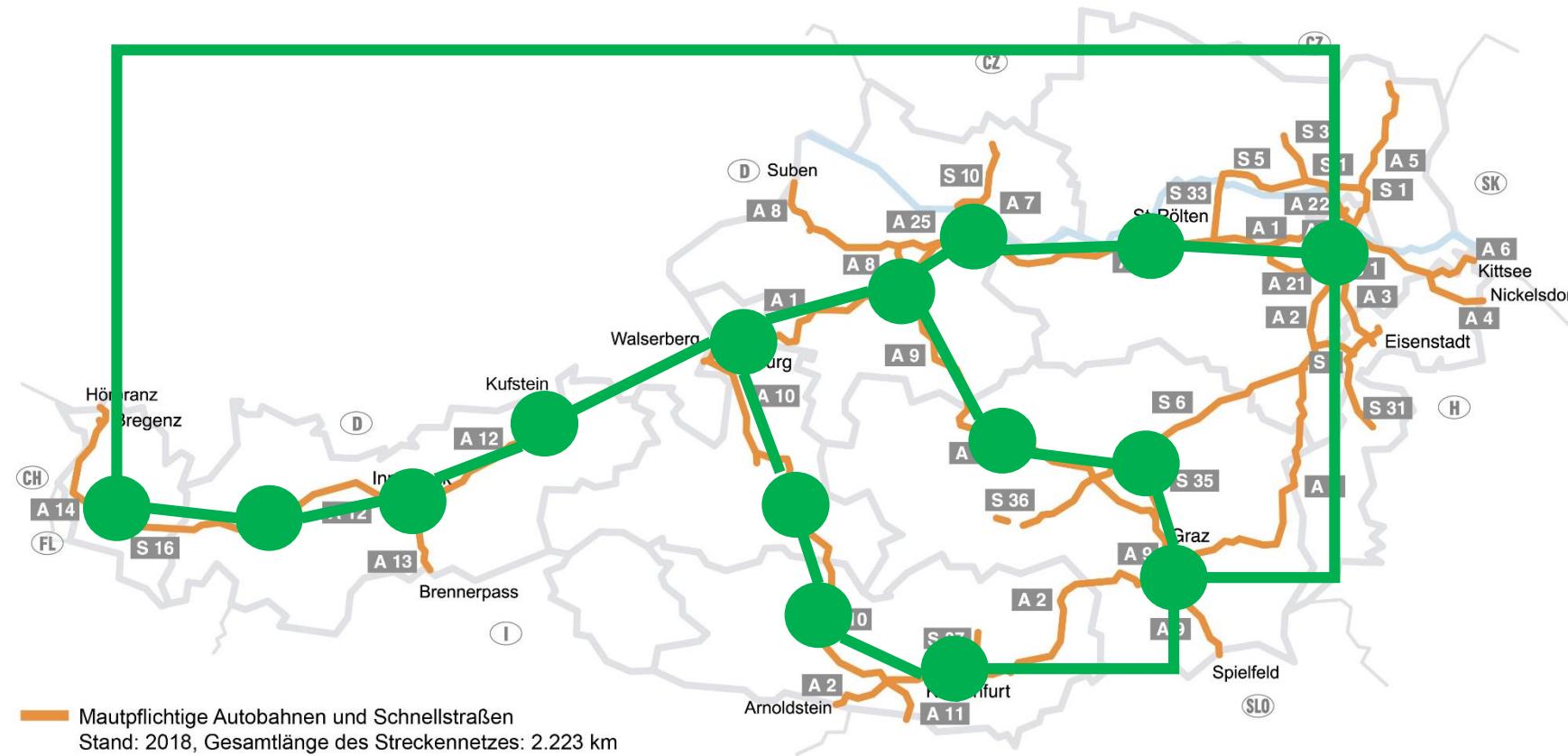
The highway already has a digital twin...



Road operation is regarded as an „essential service“ by the NIS directive – this creates obligations in IT security and continuity



Our redundant data network is the basis for our operations units and our services



In case of a blackout a special blackout-network provides basic communication and services

- Phone
- Rudimentary data services



Conclusion

- ① Infrastructure is a longterm business – change needs inspiration, planning and patience
- ② Digitalization is a stepwise approach and needs good R&D programs and partnerships
- ③ No room for bad availability – many people depend on the infrastructure
- ④ Security and risk management are mandatory – disruptive changes are rare
- ⑤ Not only the technology has to be transformed. We also have to evolve!



Join us at ASFINAG!

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