

ROAD SAFETY CHALLENGES FOR A HIGHER OPERATOR

Andreas Fromm | ASFINAG Construction Management GmbH

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CONTENTS

- **ASFINAG**
- **Construction program**
- **European directive of tunnel safety (STSG)**
- **Current Challenges**
- **Future trends & R&D**
- **Upcoming Projects**





ASFINAG | SCOPE OF ACTIVITIES



OPERATION



MAINTENANCE



CONSTRUCTION



TOLL COLLECTION



FINANCING



ASFINAG | SCOPE OF ACTIVITIES

5.192

bridges

166

tunnel

2.200

procurements

1,1

*Billion € invested in
new constructions
and renovations
(per year)*

1.400

*Current projects
(in construction, in
preparation, ...)*

2.233

KM road network

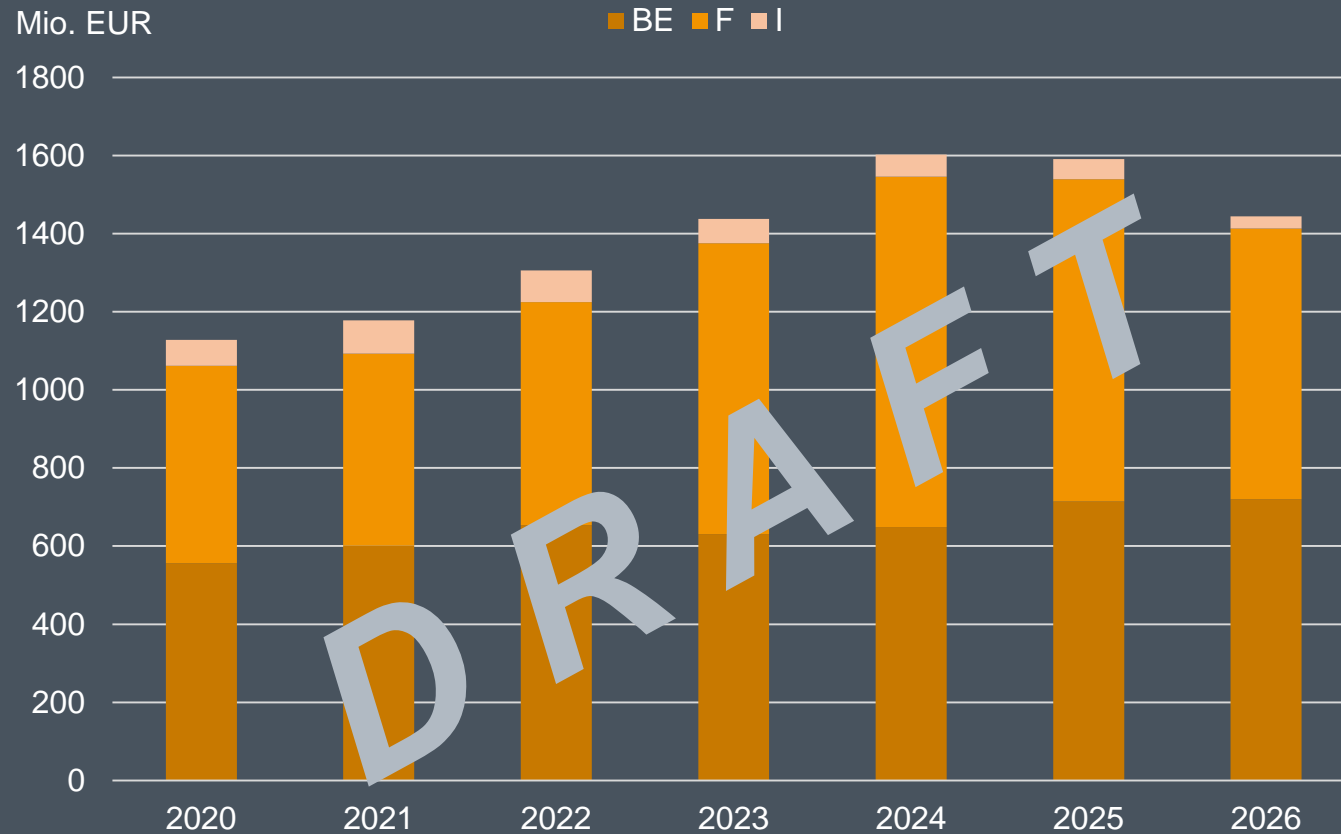




CONSTRUCTION PROGRAMME

For greater road safety and reduction of traffic congestion

2020 - 2026





EUROPEAN DIRECTIVE OF TUNNEL SAFETY (STSG)

Implementation on the higher level network

STSG implementations until 2019 (TERN-Net 2019)

- 166 tunnels on ASFINAG road network
- 54 tunnels renovated (EM)
- 80 renovated in total and build new (emergency exits and cross-passages, new tunnel tubes)
- Since 2000: more than **4 bn EUR** invested in tunnel safety
- 2019: 170 mio EUR
- All measures were implemented by 04/2019
 - exception: A 11 Karawanken Tunnel



further implementations until 2029 (Non-TERN and new roads)

- 3,3 bn EUR investments





CURRENT CHALLENGES

for a higher road operator

- **complex construction projects**

- strategic asset management: timing is key
- life-span of electrical equipment often differs from life-span of building structure
- Preliminary surveys necessary
- cost-stability

- **2020: COVID-19**

- Challenging management of construction sites
- Hygiene Concepts
- Availability of construction materials





CURRENT CHALLENGES II

for a higher road operator



- **Construction site management**
 - working under traffic
 - night-time construction sites
 - multimodality concepts for construction sites
- **Energy efficiency**
 - reduction of energy demand, innovative concepts for lighting and ventilation
 - energy production





FUTURE TRENDS

**traffic
management**

connected and
interactive

**alternative
contract
models**

for complex
infrastructure
projects

**alternative
fuels**

research/testing in
case of fires involving
electric cars in
tunnels

C-ITS





RESEARCH & DEVELOPMENT

“BRAFA”

research/testing in case of fires involving electric cars in tunnels

battery systems

sustainable tunnel operation

AKUT, LED-lighting...

Successful innovative project with Austrian universities



UPCOMING PROJECTS I

A 11 Karawanken tunnel, construction of a second tube

- Joint project with Slovenia
- Total length: 7,9 km (Austria and Slovenia)
- Total costs (Austria): 190 mio EUR
- Completion date: 2026



UPCOMING PROJECTS II

S 1 Außenring Schnellstraße, tunnel Lobau

- Total length: 19km
- Tunnel length: 8,2km
- Total costs: 1,9 bn EUR
- Planned start of construction: 2021



UPCOMING PROJECTS III

S 7 Fürstenfelder Schnellstraße, Tunnel Rudersdorf

- Total length: 14,8 km
- Tunnel length: 3 km
- Total costs: ca. 500 mio EUR
- Start of construction: 2019





 **ASFINAG**

[asfinag.at](https://www.asfinag.at)

