

Kresna Gorge and Struma Motorway Lot 3.2 (Bulgaria)

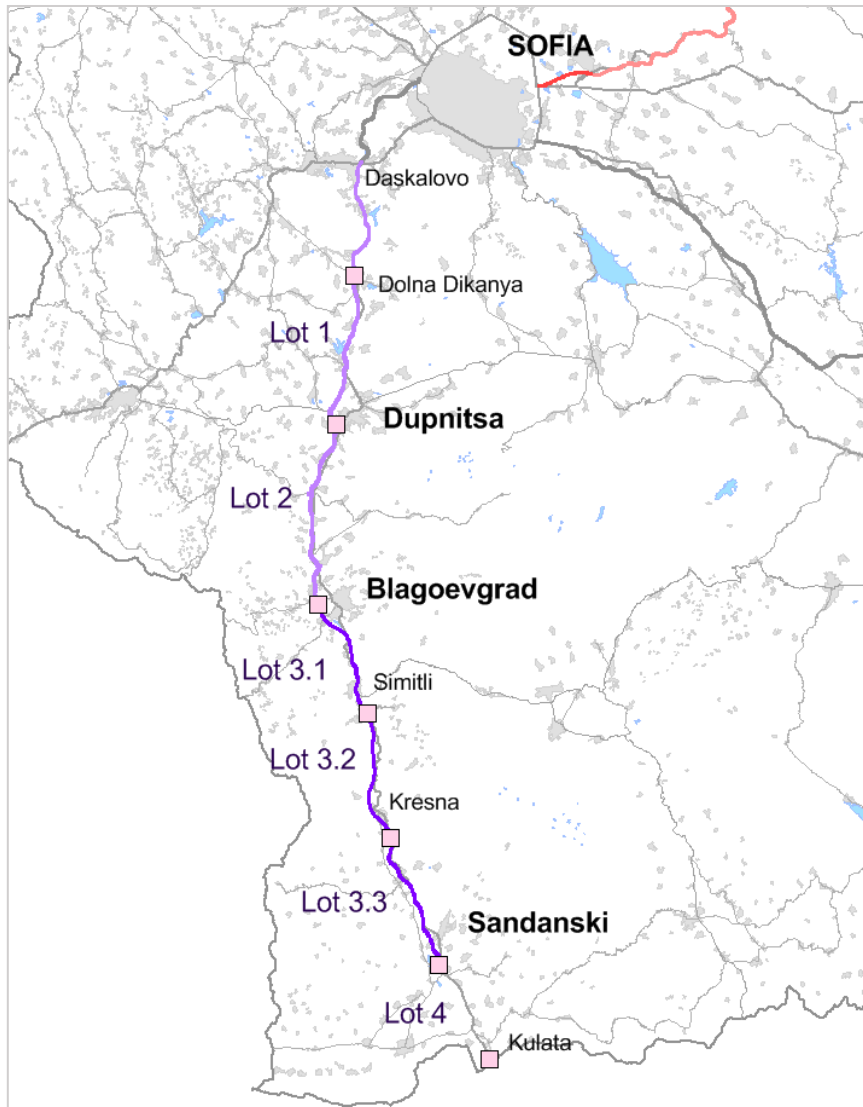
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36th Meeting of the Standing Committee of the Bern Convention

November 2016

Struma Motorway





- Part of the Trans-European Transport Network, Orient-East/Med corridor
- Located in Southwestern Bulgaria (150 km long)
- Environmentally sensitive and technically difficult
- Top priority infrastructure project for the EU

Kresna Gorge



Kresna Gorge – Natura 2000 Sites

-  Habitats Directive Sites (SCI)
-  Birds Directive Sites (SPA)



Kresna Gorge – Safety Issues



Kresna Gorge – Safety Issues



Kresna Gorge - Issues

- Serious and frequent accidents along the existing road
- Mortality of wild animals on the road, fragmentation of habitats
- Travel time, comfort and reliability of road users
- Safety of the population and environmental issues in Kresna Town

Main Environmental Documents

- Recommendation 98 (2002)
- EIA/AA Decision (2008)
- JASPERS Environmental Strategy (2012)
- Monitoring of the Mortality of Wild Animals (2013-present)
- Scope of the new EIA (2016)

Mortality Studies



Mortality Studies



- Part of the JASPERS Environmental Strategy
- The results to form baseline data and be used to formulate mitigation measures
- About 57% of the dead animals are reptiles
- Mortality rates have been constant since 2013
- Mortality rates are not notably high (see for example Kamburova et al. 2012)

Short-Term Mitigation Measures

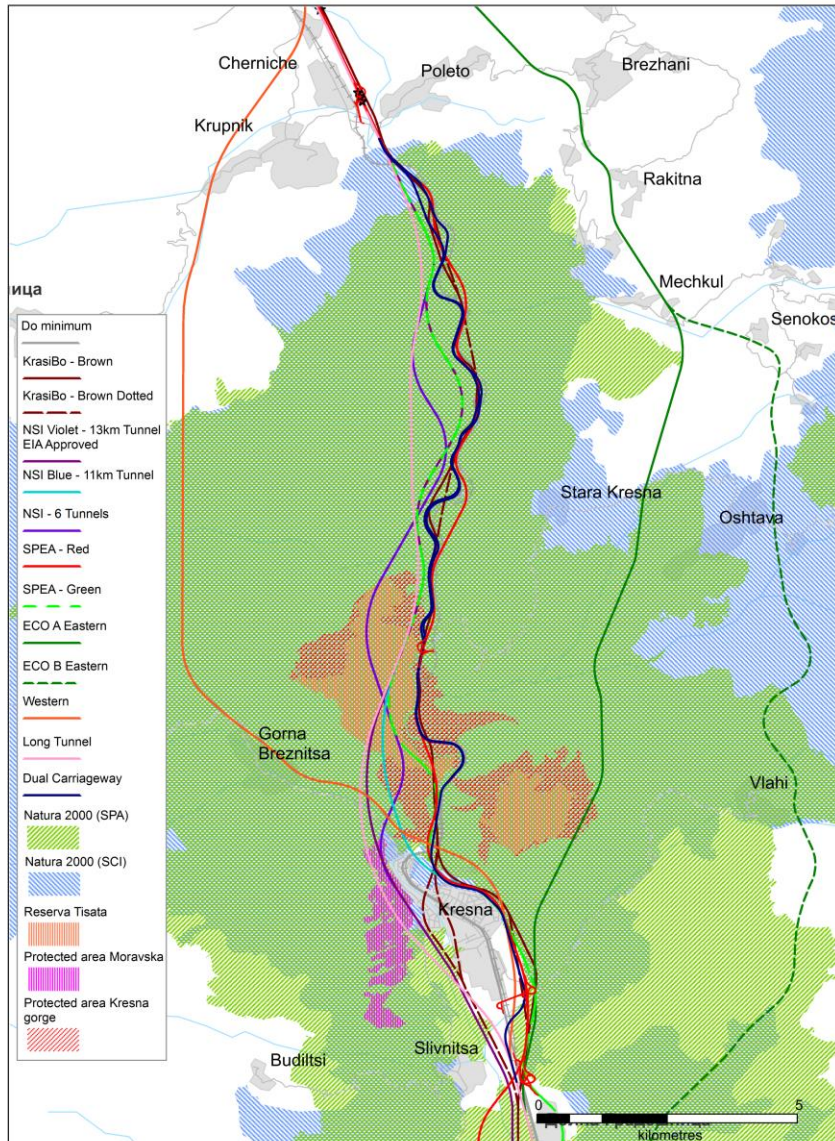


Short-Term Mitigation Measures



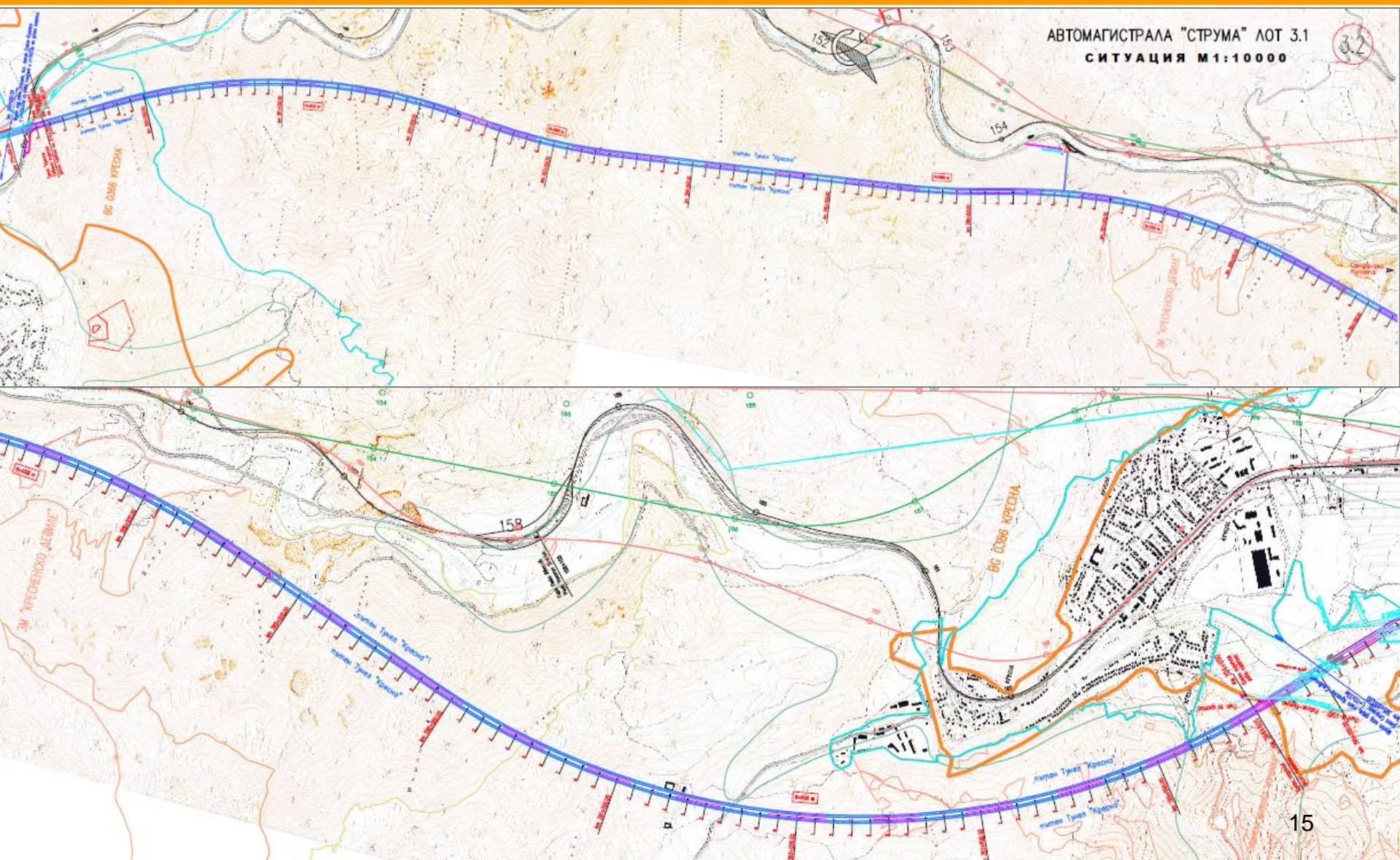
- Construction of small walls to prevent amphibians and reptiles from entering the road
- Placement of small walls at culverts to guide the animals to the culverts
- Installation of 4 m high nets to protect birds and bats
- Cutting of vegetation at the shoulders of the road
- Speed reduction signs and information board
- Restricting the access of animals to shafts and revision chambers near the road

Alternatives Studied

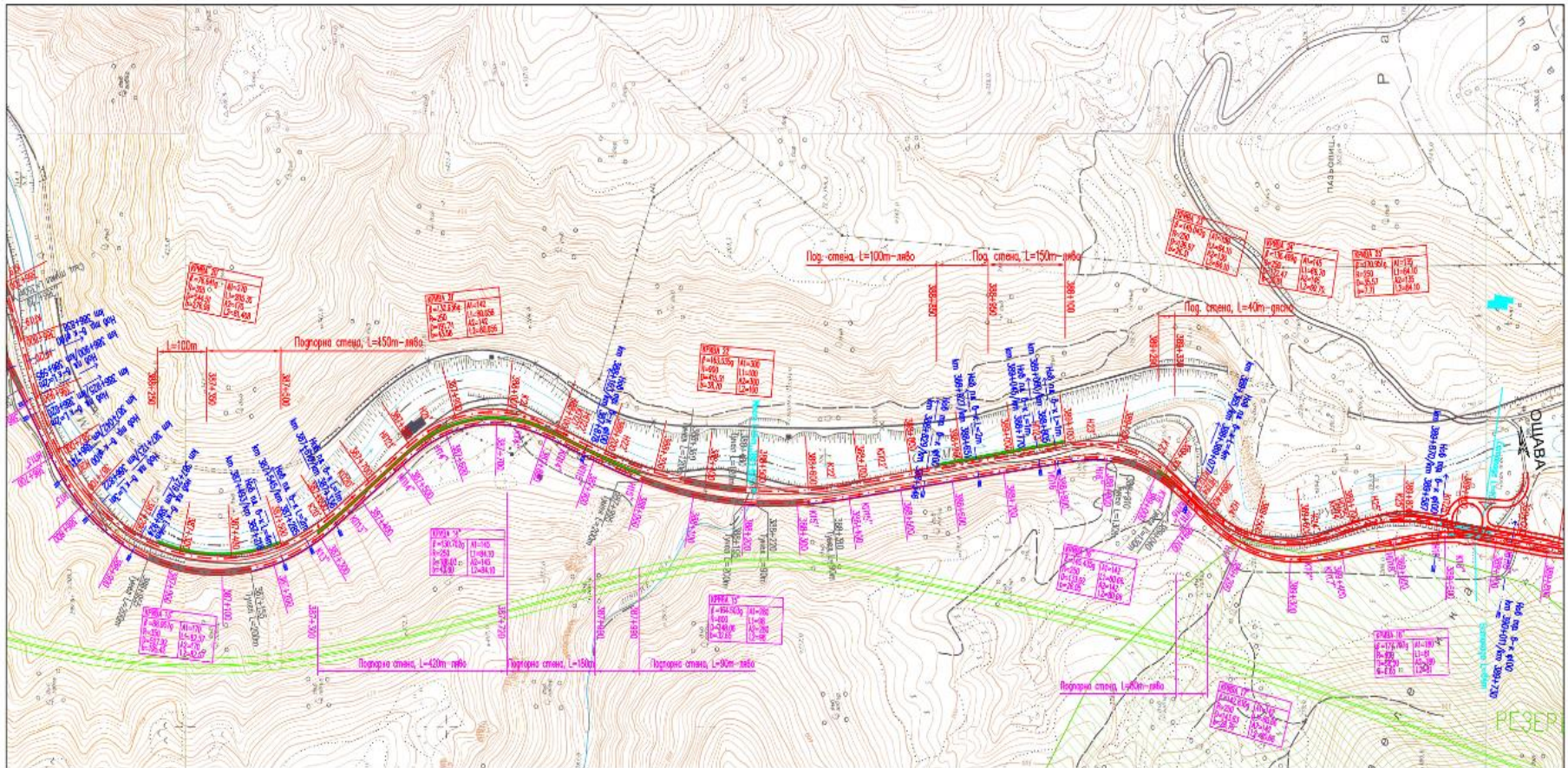


- 8 alternatives reviewed in the EIA from 2008
- More than 5 alternatives proposed since 2008
- 4 alternatives part of the new EIA currently being prepared:
 - 15.4 km long tunnel (2008-2014)
 - Dual Carriageway (2014)
 - Dual Carriageway (2015)
 - Eastern Bypass (2016)

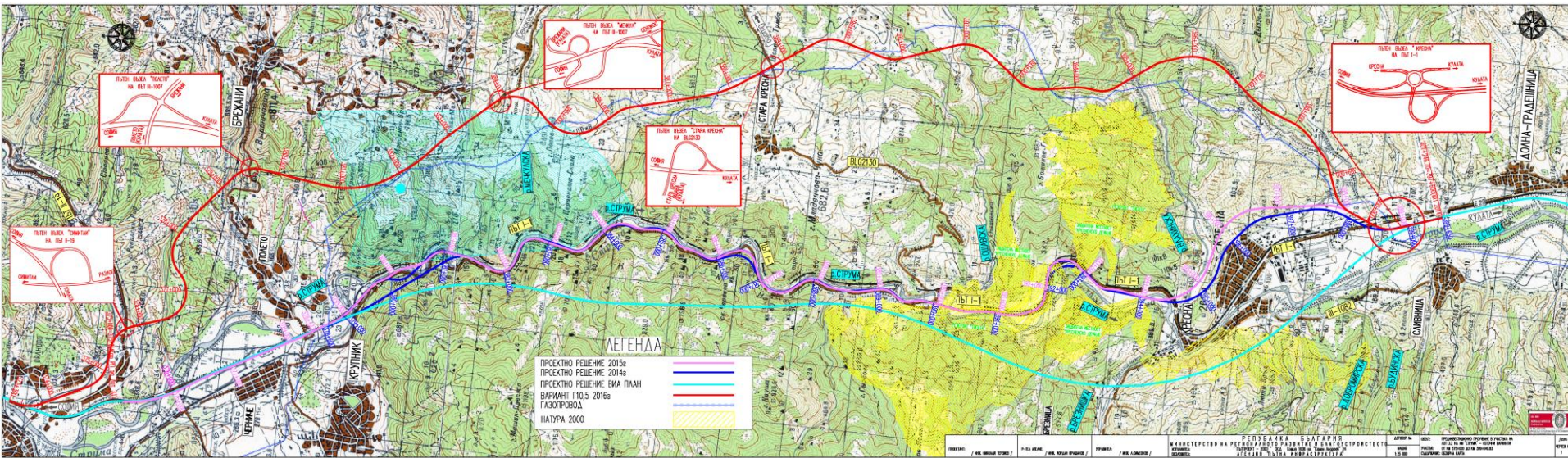
Long Tunnel Alternative (2008-2014)



Dual Carriageway Alternatives (2014-2015)



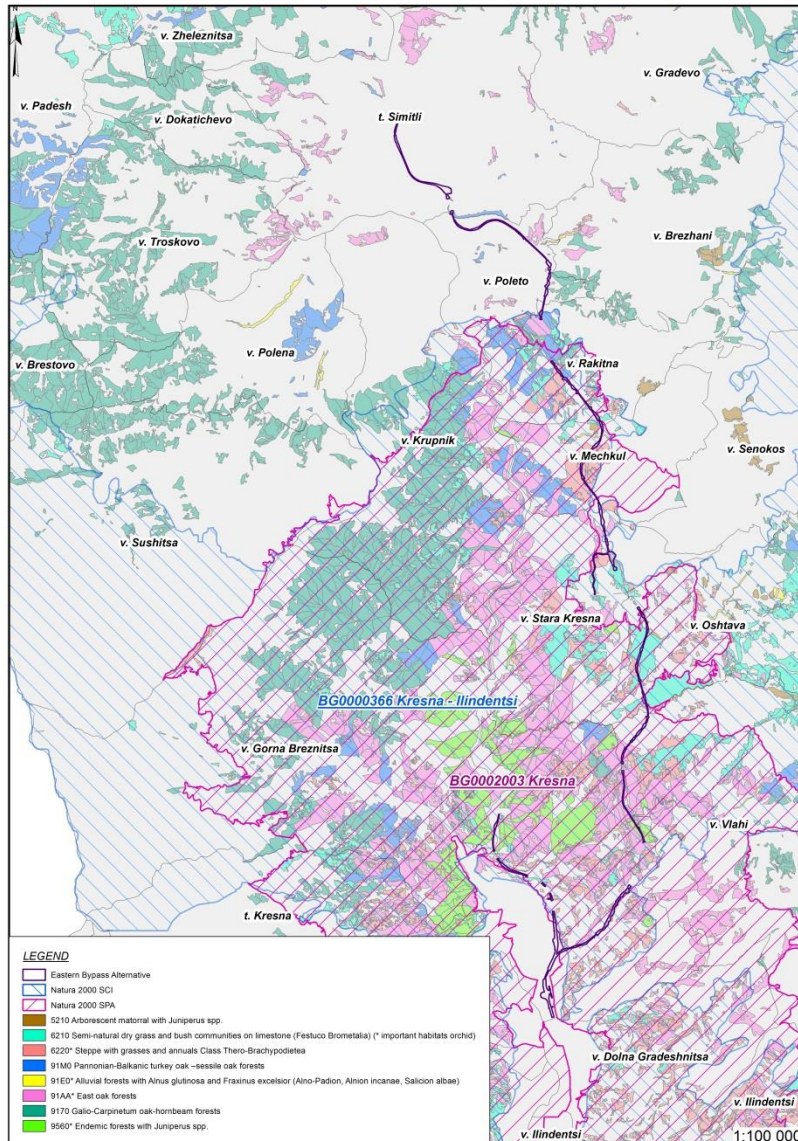
Eastern Bypass Alternative (2016)



- A new carriageway bypassing the gorge from east
- 2 lanes and a total width of 10.5 m
- The traffic in one direction will use the new carriageway; the traffic in the other – the existing road



Eastern Bypass Alternative (2016)



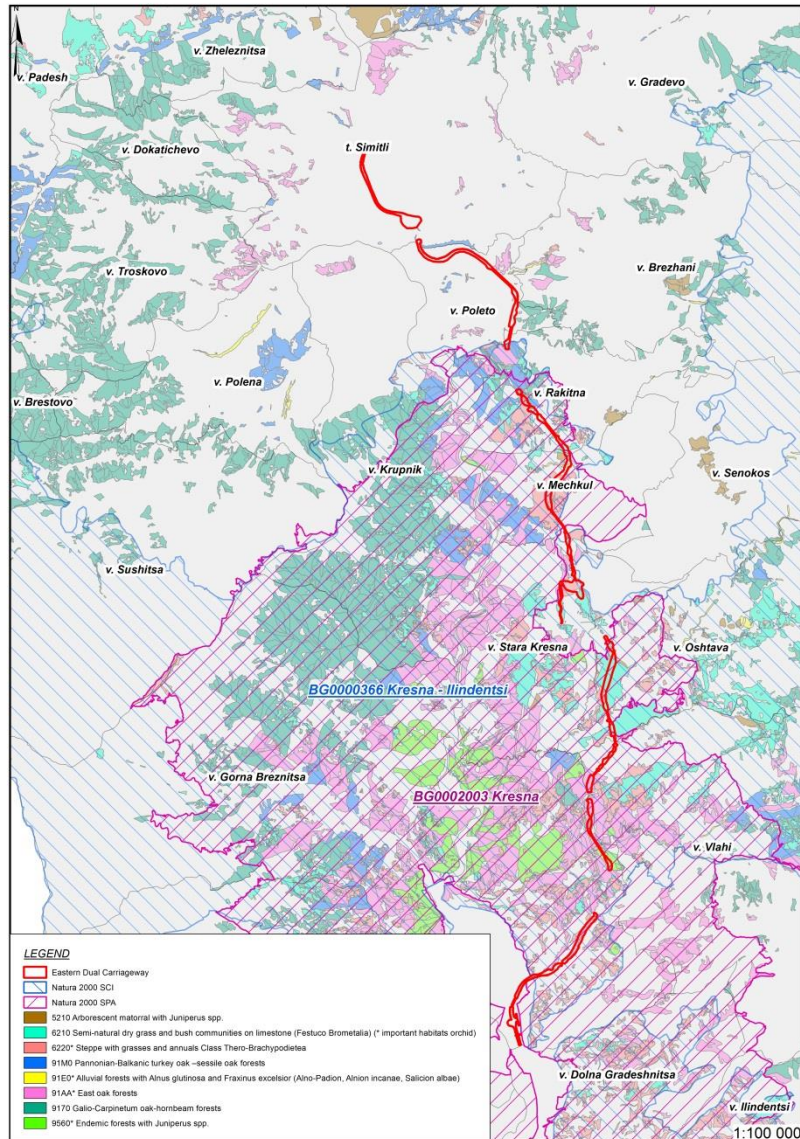
- The design process has been **driven by environmental considerations**
- **Consultations with NGOs** on the alignment who participated in the Expert Council on 12.08.2016
- **Site visit with NGOs** on 17.08.2016
- **Preliminary assessment of the impact** (*next slide*)

Eastern Bypass Alternative (2016)

Eastern Bypass Alternative			
No	Habitat type, code	Habitat type, name	Affected area of its distribution in SCI, %
1	6210	Semi-natural dry grass and bush communities on limestone (Festuco Brometalia) (* important habitats orchid)	0.33
2	6220*	* Steppe with grasses and annuals Class Thero-Brachypodietea	0.47
3	91AA*	* East oak forests	0.27
4	91E0*	* Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)	0.17
5	9560*	* Endemic forests with <i>Juniperus</i> spp.	0.25

Note: According to the "Guidelines for the assessment of favourable conservation status" developed by NGOs in Bulgaria, **affecting more than 1%** annually from distribution of natural habitat within a SCI is considered **significant impact** within the meaning of Art. 6 (3) of the Habitats Directive

Eastern Dual Carriageway Bypass (-)



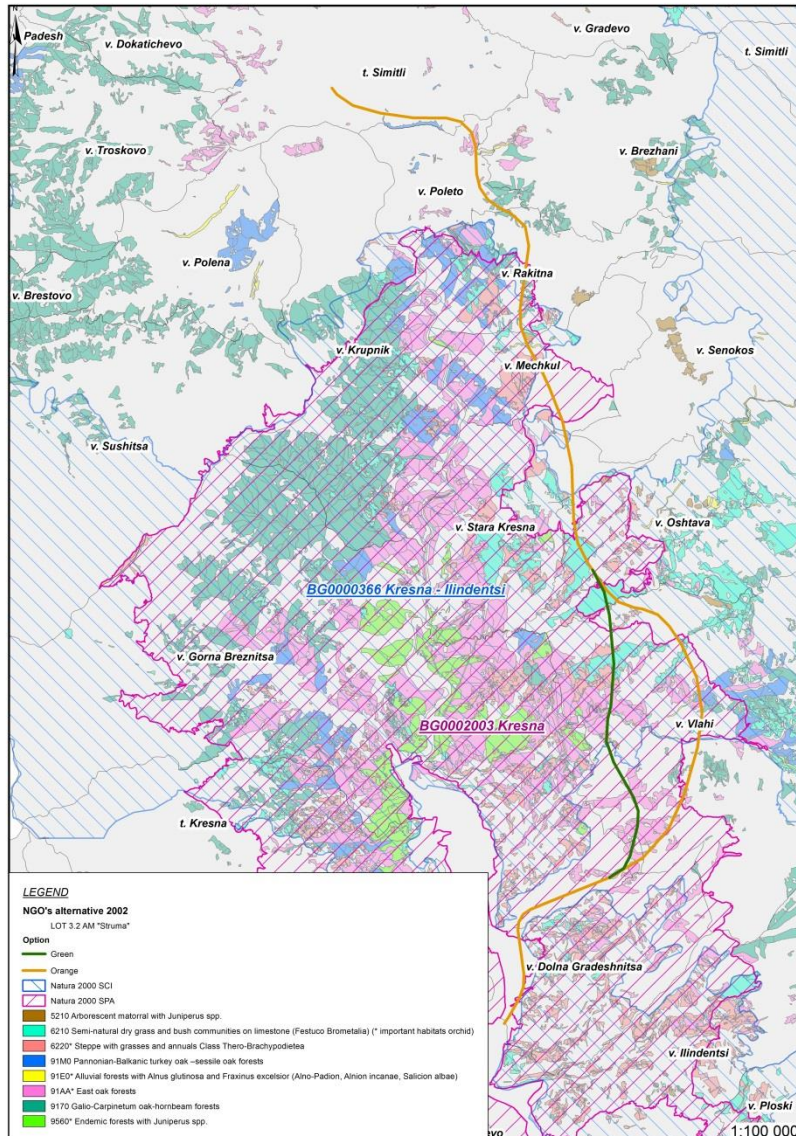
- The analysis shows that it will have **significant impact on priority habitats**
- Extremely poor operational properties
- As a consequence, **the users will remain on the existing road**

Eastern Dual Carriageway Bypass (-)

Eastern Dual Carriageway			
No	Habitat type, code	Habitat type, name	Affected area of its distribution in SCI, %
1	6210	Semi-natural dry grass and bush communities on limestone (Festuco Brometalia) (* important habitats orchid)	more than 1.00
2	6220*	* Steppe with grasses and annuals Class Thero-Brachypodietea	more than 1.50
3	91AA*	* East oak forests	more than 1.00
4	91E0*	* Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae)	more than 1.50
5	9560*	* Endemic forests with <i>Juniperus</i> spp.	more than 1.00

Note: According to the "Guidelines for the assessment of favourable conservation status" developed by NGOs in Bulgaria, **affecting more than 1%** annually from distribution of natural habitat within a SCI is considered **significant impact** within the meaning of Art. 6 (3) of the Habitats Directive

Eastern NGO Alternatives (2002)



- Dismissed with the Appropriate Assessment from 2007 as having **significant impact**
- Extremely poor operational properties
- As a consequence, **the users will remain on the existing road**

Eastern NGO Alternatives (2002)

- SCI “Kresna-Ilindentsi”:
 - p. 95 – general conclusions about the significant negative impact of the alternative
 - p. 103 – *European wolf (*Canis lupus*): “Significant impact. More than 700 ha non-fragmented habitats will be affected (repelling). [That forms] a minimum of 2% of habitats’ area in the protected area.”
 - p. 104 – *Brown bear (*Ursus arctos*): “Significant impact. More than 300-400 ha non-fragmented habitats will be affected (repelling). [That forms] a minimum of 2-3% of habitats’ area in the protected area.”
 - p. 131 and p. 140 – conclusions regarding the significant impact on the two species

Consultations with Stakeholders

- Regular feedback and monitoring on behalf of the services of the EC
- Regular consultations with JASPERS - resulted in an Environmental Strategy (2012), a roadmap for the new EIA (2016), etc.
- Regular meetings with NGOs and municipalities under the Struma Motorway Monitoring Committee (18 meetings since 2012)

Struma Motorway Monitoring Committee



EIA Procedure

- Commenced in *December 2014*
- Public consultations on the scope – *December 2015*
- After the new Eastern Bypass Alternative has been formulated, new consultations on the scope – *October 2016*
- Expected EIA/AA report – in the *beginning of 2017*
- In accordance with the legislation – to be followed by public consultations and quality review by the Ministry of Environment and Water

Conclusion

- Recommendation 98 (2002) has been fully complied with
- Since 2008 the process of development of the project has been sound and transparent
- The various stakeholders (EC, NGOs, municipalities, JASPERS...) are regularly being consulted regarding the development of the project
- No decision has been taken yet, no land acquisitions or construction are being carried out

The Standing Committee is respectfully requested that the project is no longer listed as a possible file

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