Elaboration of Strategic Environmental Assessment of the Policy Objective 3 (PO 3) of the Interreg Programme for the programming period of 2021–2027, concerning the programming area of Hungary-Croatia

Appropriate assessment

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1. Introduction

The Hungary-Croatia cross border area lies within a triangle of three TEN-T network elements: corridor V/b (E71, A4–M7); corridor X (E70, A3) and corridor V/c (E73, A5–M6). Due to the peripheral situation of these axes, the middle of the cross-border area is isolated and there is a lack of cross-border infrastructure. Average distance between road border crossings is 72 km, making the Hungary - Croatia border the least permeable one in both countries.

Creating necessary transport connections between regions plays a vital role in ensuring economic prosperity and cohesion, aligning with the goals outlined in the Territorial Agenda 2030 of Just and Green Europe aiming to achieve balanced territorial development. In the pre-Schengen period, limited number of border crossing points presented a significant obstacle to economic and social integration of the region. Distance between border crossing points contributed to prolongation of travel time, increase in transportation costs and traffic pollution. Croatia's access to Schengen on 1 January 2023 opened new opportunities in cross border transport. This is why Priority 3 Connected border region within the policy objective PO 3 a more connected Europe and specific objective SO (ii) developing and enhancing sustainable, climate resilient, intelligent and intermodal national, regional and local mobility, including improved access to TEN-T and cross-border mobility is part of the Hungary—Croatia Programme.

Road connection should be supported to provide linkages in isolated peripheral areas, in order to connect neighbouring communities, providing improved and quicker access to TEN-T and other major road/rail infrastructure, generating time savings. In that way, three operations of strategic importance (hereinafter: strategic projects) are highlighted in the Hungary-Croatia Programme:

- preparation of project documentation and construction of missing road link Sárok Kneževo,
- preparation of project documentation and construction of missing road link Zákány –
 Gotalovo and
- preparation of project documentation for Murakeresztúr Kotoriba bridge (Mura Bridge / MuKo Bridge).

These actions will facilitate movement of people and goods across the border, boosting trade and economic growth consistent with the objectives outlined in the Declaration of Intent to Foster Economic Cooperation and Transportation Links Between the Border Regions of Croatia and Hungary. Shortening the travel time between the two countries will not only enhance social integration in the region but will have a positive effect on travel costs and reduction of CO₂, aligning with the principles of the EU Green Deal.

Road link Sárok – Kneževo is in Baranya County in Hungary and in Osječko-baranjska County in Croatia. Settlements Sárok and Kneževo are at aerial distance of about 2 km. Sárok - Kneževo area is in predominant anthropogenic area in agricultural use. Newly built asphalt road in Hungary (995 m), designated with the number 57135 will eventually provide connection to Kneževo. On

Croatian side, missing link is planned to be provided through construction of new two-way county road ŽC4302 in length of 1461 m, connecting Hungary - Croatia border and existing county road ŽC4017 which will be reconstructed in length of about 700 m. Two-way bicycle line is planned as well. ŽC4302 mainly overlaps with existing unpaved path. Road link Sárok - Kneževo is not inside of Natura 2000. The nearest Natura 2000 site in Hungary is special area of conservation (SAC) HUDD20065 Töttösi Forest on distance of about 6 km in closest point. The nearest Natura 2000 site in Croatia is site of community importance (SCI) HR2001309 Dunav S od Kopačkog rita on distance of about 4.5 km in closest point. Area between road link Sárok - Kneževo and nearest Natura 2000 sites is in predominant an anthropogenic area in agricultural use and through which in Croatia passes state road DC7 Duboševica (state border Croatia / Hungary) - Beli Manastir - Osijek - Đakovo - GP Slavonski Šamac (state border Croatia / Bosnia & Herzegovina), which is part of the European route E73 i.e. corridor V/c. Considering short length of road link Sárok - Kneževo and distance between it and nearest Natura 2000 sites (>4.5 km) and taking into account existing anthropogenic features of Sarok - Kneževo area, road link Sárok - Kneževo is not of interest for this Appropriate assessment.

Road link Zákány - Gotalovo is in Somogy County in Hungary and in Koprivničko-križevačka County in Croatia. Zákány – Gotalovo area is mix of anthropogenic influenced (settlements, transport infrastructure and agriculture) and natural areas. The Hungarian section of road link Zákány - Gotalovo connects to Jókai Street within the inner area of Zákány. The connecting section of Jókai Street, which joins road 6804, has been renovated to a width of 6 m and is in good condition. Road route follows existing streets within Zákány until it reaches railway line no. 60. It then runs along the embankment on a dirt road, enclosing the railway, before reaching the Hungary - Croatia border. The total length of the newly constructed pavement is 809 m. The Croatian section of road link is planned to be provided through construction of new two-way county road ŽC2268 in length of 290 m, connecting Hungary - Croatia border and existing state road DC41, where reconstruction is planned to construct T-intersection for connection of ŽC2268. On one side of ŽC2268 walking and bicycle line are planned. ŽC2268 is planned to be constructed in parallel with the existing international railway line M201 (Gyékényes) – State border – Botovo -Koprivnica – Dugo Selo. The Croatian section of road link Zákány - Gotalovo is inside of Natura 2000 sites SCI HR5000014 Gornji tok Drave and special protection area (SPA) HR1000014 Gornji tok Drave. The nearest Natura 2000 sites in Hungary are SPA HUDD10002 Nyugat - Dráva and SACHUDD20054 Nyugat - Dráva which are approximately 25 m away from the road at the closest point.

Murakeresztúr - Kotoriba bridge (Mura Bridge / MuKo Bridge) project is taking place in Zala County in Hungary and in Međimurska County in Croatia. The road route starts in Kotoriba on the existing unclassified road in 3. travnja street and ends on the regional road 6835 in Hungary. The Croatian section is planned to have length of 1665 m and it mainly follow existing international railway line M501 (Središče) – State border – Čakovec – Kotoriba – State border - (Murakeresztúr). Reconstruction of approximately 200 m of the existing road and 2 T-intersections of the existing

3. travnja street is required as well as construction / reconstruction of approximately 200 m of the road connection to the newly planned roundabout on Hungarian section. New road is planned as two-way road, but due to spatial constraints in Kotoriba, traffic of heavy-duty vehicles via new road will not be possible. The Hungarian section is planned to have length of approx. 1700m and is planned to be connected to regional road 6835 with a roundabout. From the roundabout the road is planned to be constructed along the lines of already existing dirt roads going towards the nearby railway to the north-west. Upon reaching the railway, the road will follow the railway's path up to the bridge, where it will connect to the Croatian section.

Part of road connection is construction of the new bridge, which is planned in the vicinity of the existing railway bridge over the Mura River. It is in general planned to avoid construction of a pillar in the riverbed. This should be confirmed through field investigation on site, as part of the preparation of the Mura Bridge / MuKo Bridge project documentation.

Mura Bridge / MuKo Bridge project area is partly inside Natura 2000 sites SCI HR2000364 Mura in Croatia and SAC HUBF20043 Mura mente in Hungary.

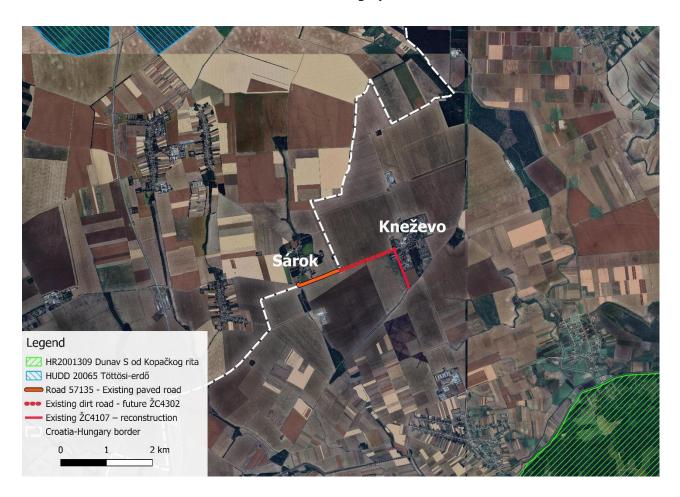


Figure 1: Relation of Road link Sárok – Kneževo and Natura 2000

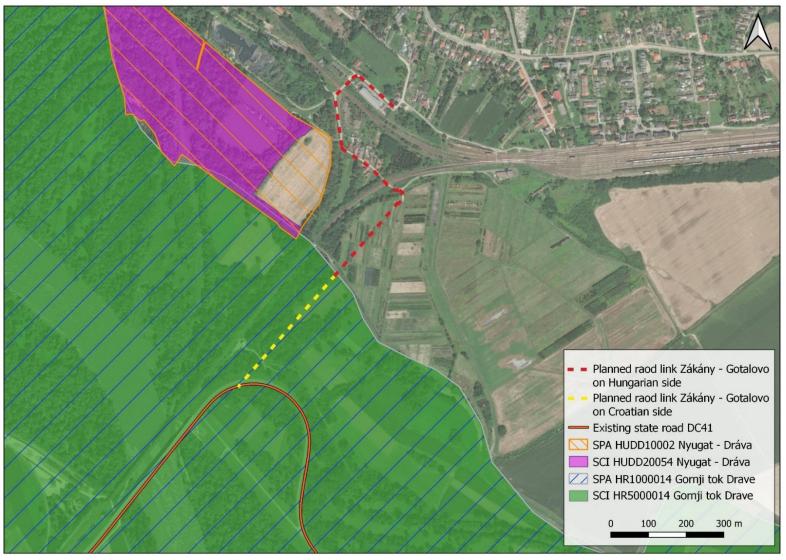


Figure 2 a): Relation of Road link Zákány - Gotalovo and Natura 2000

Source: Bioportal - web portal of the Nature Protection Information System (https://bioportal.hr/en/) and Natura 2000 viewer (https://natura2000.eea.europa.eu/)

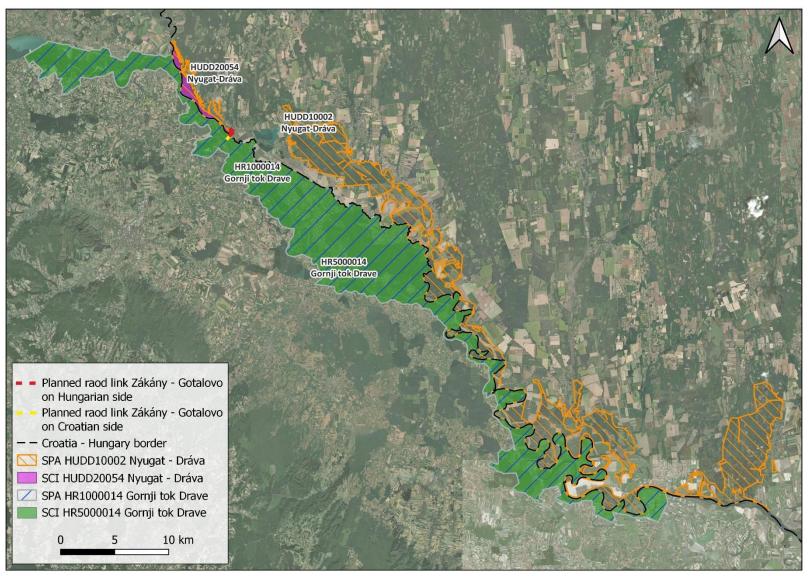


Figure 2 b): Relation of Road link Zákány - Gotalovo and Natura 2000 (wide view)

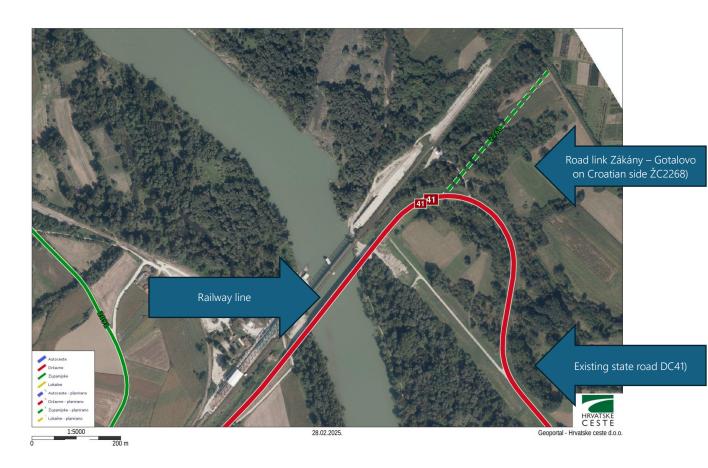


Figure 2 c): Main existing anthropogenic contents in the area of road link Zákány - Gotalovo





Figure 3: Relation of Murakeresztúr - Kotoriba bridge (Mura Bridge / MuKo bridge) and Natura 2000

2. Natura 2000 sites of interest

SCI HR5000014 Gornji tok Drave: Natura 2000 site SCI HR5000014 Gornji tok Drave covers an area of 22 981.54 ha along the river Drava on the territory of Varaždinska county, Međimurska county, Koprivničko-križevačka county and Virovitičko-podravska county. Other arable land (N15) - 34.32% and Broad-leaved deciduous woodland (N16) - 32.64% cover most of the SCI HR5000014 area and are followed by Heath, Scrub, Maquis and Garrigue, Phygrana (N08) - 10.24% and Inland water bodies (Standing water, Running water) (N06) - 9.36%, Extensive cereal cultures (including Rotation cultures with regular fallowing) (N12) - 6.69%, while other habitat classes cover rest of the SCI HR5000014 area.

Target species and habitat types of SCI HR5000014 are presented in Table 1. SCI HR5000014 is managed according to local jurisdiction by Međimurska priroda - Public institution for nature protection, Public institution for the management of nature protected areas of Varaždinska county, Public Institution for the management of nature protected areas in the Koprivničko-križevačka county and Public Institution for the management of nature protected areas and ecological network in the Virovitičko-podravska county. SCI HR5000014 site management is determined by the Regional park Mura-Drava and associated protected areas and ecological network areas management plan for the period 2024-2033 (PU 007). SCI HR5000014 site specific conservation objectives and conservation measures are presented in chapter 3. Potential impact of the Hungary-Croatia Programme implementation on Natura 2000.

Table 1: SCI HR5000014 Gornji tok Drave target species and habitat types

Source: Regulation on the ecological network and public institutions for the management of ecological network areas jurisdiction (Official Gazette 80/19, 119/23)

Category for target species / habitat type	Species scientific name / Habitat type name and code	Group
1	Ophiogomphus cecilia	Invertebrates
1	Leucorrhinia pectoralis	Invertebrates
1	Lycaena dispar	Invertebrates
1	Lucanus cervus	Invertebrates
1	Cerambyx cerdo	Invertebrates
1	Aspius aspius	Fish
1	Misgurnus fossilis	Fish
1	Gymnocephalus schraetser	Fish
1	Zingel zingel	Fish
1	Zingel streber	Fish
1	Bombina bombina	Amphibians
1	Emys orbicularis	Reptiles
1	Barbastella barbastellus	Mammals
1	Myotis bechsteinii	Mammals
1	Castor fiber	Mammals
1	Lutra lutra	Mammals
1	Triturus dobrogicus	Amphibians

Category for target species / habitat type	Species scientific name / Habitat type name and code	Group
1	Triturus carnifex	Amphibians
1	Umbra krameri	Fish
1	Pelecus cultratus	Fish
1	Gymnocephalus baloni	Fish
1	Coenagrion ornatum	Invertebrates
1	Sabanejewia balcanica	Fish
1	Romanogobio vladykovi	Fish
1	Rhodeus amarus	Fish
1	Rutilus virgo	Fish
1	Euphydryas maturna	Invertebrates
1	Euplagia quadripunctaria*	Invertebrates
1	Cucujus cinnaberinus	Invertebrates
1	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> (9160)	Forests
1	Alpine rivers and their ligneous vegetation with <i>Myricaria germanica</i> (3230)	Freshwater habitat
1	Rivers with muddy banks with <i>Chenopodion rubri</i> p.p. and <i>Bidention</i> p.p. vegetation (3270)	Freshwater habitat
1	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation (3150)	Freshwater habitat
1	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) (91E0*)	Forests
1	Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) (6510)	Natural and semi- natural grassland formations
1	Riparian mixed forests of <i>Quercus robur</i> , <i>Ulmus laevis</i> and <i>Ulmus minor</i> , <i>Fraxinus excelsior</i> or <i>Fraxinus angustifolia</i> , along the great rivers (<i>Ulmenion minoris</i>) (91F0)	Forests
1	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> (3130)	Freshwater habitat

SPA HR1000014 Gornji tok Drave: Natura 2000 site SPA HR1000014 Gornji tok Drave covers an exact same area as SCI HR5000014 i.e. 22 981.54 ha along the river Drava on the territory of Varaždinska county, Međimurska county, Koprivničko-križevačka county and Virovitičko-podravska county. Other arable land (N15) - 34.32% and Broad-leaved deciduous woodland (N16) - 32.64% cover most of the SPA HR1000014 area and are followed by Heath, Scrub, Maquis and Garrigue, Phygrana (N08) – 10.24% and Inland water bodies (Standing water, Running water) (N06) - 9.36%, Extensive cereal cultures (including Rotation cultures with regular fallowing) (N12) - 6.69%, while other habitat classes cover rest of the SPA HR1000014 area.

Target species of SPA HR1000014 are presented in Table 2. SPA HR1000014 is managed according to local jurisdiction by Međimurska priroda - Public institution for nature protection, Public

institution for the management of nature protected areas of Varaždinska county, Public Institution for the management of nature protected areas in the Koprivničko-križevačka county and Public Institution for the management of nature protected areas and ecological network in the Virovitičko-podravska county. HR1000014 site management is determined by the Regional park Mura-Drava and associated protected areas and ecological network areas management plan for the period 2024-2033 (PU 007). SPA HR1000014 site specific conservation objectives and conservation measures are presented in chapter 3. Potential impact of the Hungary-Croatia Programme implementation on Natura 2000.

Table 2: SPA HR1000014 Gornji tok Drave target species

Source: Regulation on the ecological network and public institutions for the management of ecological network areas jurisdiction (Official Gazette 80/19, 119/23)

Category for target species	Species scientific name	Status
2	Actitis hypoleucos	nesting species
1	Alcedo atthis	nesting species
2	Mareca strepera	nesting species
1	Ardea purpurea	passage migrant species
1	Botaurus stellaris	nesting species, passage migrant species, wintering species
1	Casmerodius albus	passage migrant species, wintering species
1	Ciconia ciconia	nesting species
1	Ciconia nigra	nesting species
1	Circus cyaneus	wintering species
1	Leiopicus medius	nesting species
1	Dryocopus martius	nesting species
1	Egretta garzetta	passage migrant species
1	Falco columbarius	wintering species
1	Ficedula albicollis	nesting species
1	Haliaeetus albicilla	nesting species
1	Ixobrychus minutus	nesting species, passage migrant species
1	Luscinia svecica	nesting species, passage migrant species
1	Nycticorax nycticorax	passage migrant
1	Pernis apivorus	nesting species
1	Microcarbo pygmeus	wintering species
1	Picus canus	nesting species
2	Riparia riparia	nesting species
1	Sternula albifrons	nesting species
1	Sterna hirundo	nesting species
1	Curruca nisoria	nesting species
2	Anas acuta Anas crecca, A	migratory) bird populations: Anas penelope, Anas plathyrhynchos, Anas querquedula, Anas
_	strepera, Aythya ferina, Ayt rufina, Rallus aquaticus, Va	hya fuligula, Bucephala clangula, Cygnus olor, Fulica atra, Netta Inellus vanellus

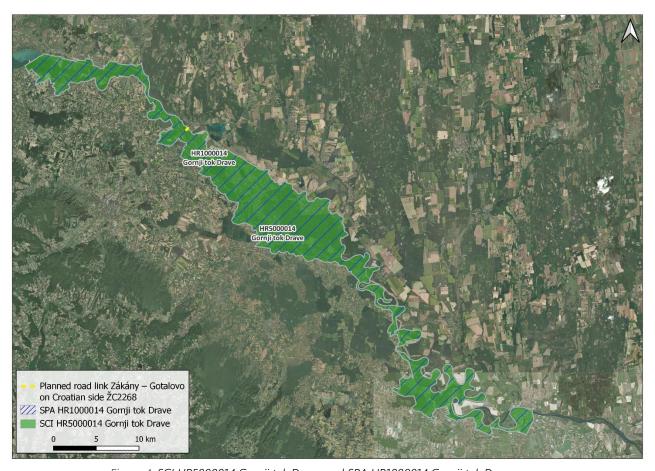


Figure 4: SCI HR5000014 Gornji tok Drave and SPA HR1000014 Gornji tok Drave Source: Bioportal - web portal of the Nature Protection Information System (https://bioportal.hr/en/)

SAC HUDD20054 Nyugat - Dráva: Natura 2000 site SAC HUDD20054 Nyugat-Dráva covers an area of 373.84 ha along the river Drava on the territory of Somogy county. The site is made up of Broad-leaved deciduous woodland (N16) – 40%, Artificial forest monoculture (N20) – 20%, Inland water bodies (Standing water, Running water) (N06) – 20%, Humid grassland and Mesophile grassland Heath (N10) - 10%, while rest of SAC HUDD20054 is covered by Bogs, Marshes, Water fringed vegetation, Fens (N07) – 5% and Dry grassland, Steppes (N09) – 5%.

Target species and habitat types of SAC HUDD20054 are presented in Table 3. The management of the SAC HUDD20054 falls under competence of the Duna-Dráva National Park Directorate. The Directorate carries out conservation and site management measures in line with national nature protection policies. Its responsibilities include maintenance of protected areas, coordination of conservation-focused research, and public awareness activities. Management activities are guided by nature conservation management plans, which define conservation objectives for areas belonging to the ecological network and the measures required to achieve them. The Duna-Dráva National Park Directorate also cooperates with local stakeholders, in particular landowners, land users and civil society organisations, to ensure that conservation and land use interests are addressed in a coordinated manner. SAC HUDD20054 site specific conservation objectives and

conservation measures are presented in chapter 3. Potential impact of the Hungary-Croatia Programme implementation on Natura 2000.

Table 3: SAC HUDD20054 Nyugat - Dráva target species and habitat types

Source: Duna-Dráva National Park Directorate

Category for target species / habitat type	Species scientific name / Habitat type name and code	Group
1	Aspius aspius	Fish
1	Barbastella barbastellus	Mammals
1	Bombina bombina	Amphibians
1	Cobitis taenia	Fish
1	Cottus gobio	Fish
1	Eudontomyzon spp.	Fish
1	Gobio albipinnatus	Fish
1	Gobio kessleri	Fish
1	Gobio uranoscopus	Fish
1	Gymnocephalus baloni	Fish
1	Gymnocephalus schraetzer	Fish
1	Lutra lutra	Mammals
1	Maculinea teleius	Invertebrates
1	Myotis dasycneme	Mammals
1	Ophiogomphus cecilia	Invertebrates
1	Rhodeus sericeus amarus	Fish
1	Rutilus pigus	Fish
1	Sabanejewia aurata	Fish
1	Zingel streber	Fish
1	Zingel zingel	Fish
1	Natural eutrophic lakes with <i>Magnopotamion or Hydrocharition</i> - type vegetation (<i>3150</i>)	Freshwater habitat
1	Rivers with muddy banks with <i>Chenopodion rubri p.p.</i> and <i>Bidention p.p.</i> vegetation (3270)	Freshwater habitat
1	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) (6510)	Natural and semi- natural grassland formations
1	Alkaline fens (7230)	Raised bogs and mires and fens
1	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Pandion, Alnion incanae, Salicion albae</i>) (91E0)	Forests

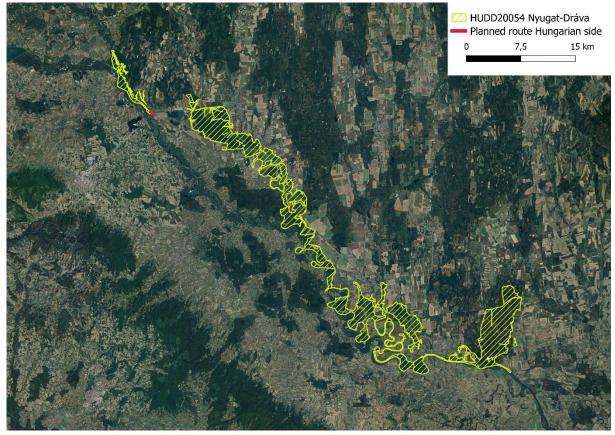


Figure 5: SCI HUDD 20054 Nyugat-Dráva

SPA HUDD10002 Nyugat - Dráva: Natura 2000 site SPA HUDD10002 Nyugat - Dráva covers an area of 15 237.43 ha along the Drava River on the territory of Somogy county. Broad-leaved deciduous woodland (N16) - 52% covers most of the SPA HUDD10002 area followed by Artificial forest monoculture (N20) – 15%, Humid grassland and Mesophile grassland Heath (N10) - 10% with several other habitat types being present as well.

Target species of SPA HUDD10002 are presented in Table 4. Management of the SPA HUDD10002 falls, same as SAC HUDD20054, under competence of the Duna-Dráva National Park Directorate, whose management activities are already described in part of text related to the SAC HUDD20054.

Table 4: SPA HUDD10002 Nyugat - Dráva target species

Source: Duna-Dráva National Park Directorate

Category for target species	Species scientific name / Habitat type name and code	Group
/ habitat type		
1	Actitis hypoleucos	nesting species
1	Alcedo atthis	resident species
1	Ardea purpurea	nesting species
1	Asio flammeus	passage migrant species
1	Aythya nyroca	nesting species
1	Caprimulgus europaeus	nesting species
1	Chlidonias hybridus (Childonias hybrida+)	passage migrant species
1	Chlidonias niger	passage migrant species
1	Ciconia ciconia	nesting species
1	Ciconia nigra	nesting species
1	Circus aeruginosus	nesting species
1	Circus pygargus	passage migrant species
1	Crex crex	nesting species
1	Dendrocopos medius	resident species
1	Dryocopus martius	resident species
1	Egretta alba (Ardea alba+)	wintering species
1	Egretta alba (Ardea alba+)	passage migrant species
1	Egretta alba (Ardea alba+)	nesting species
1	Egretta garzetta	passage migrant species
1	Ficedula albicollis	nesting species
1	Haliaeetus albicilla	resident species
1	Ixobrychus minutus	nesting species
1	Lanius collurio	nesting species
1	Lullula arborea	nesting species
1	Milvus migrans	nesting species
1	Nycticorax nycticorax	nesting species
1	Pandion haliaetus	passage migrant species

Category for target species / habitat type	Species scientific name / Habitat type name and code	Group
1	Pernis apivorus	Nesting species
1	Phalacrocorax pygmeus (Microcarbo pygmaeus+)	passage migrant species
1	Picus canus	resident species
1	Porzana parva (Zapornia parva +)	nesting species
1	Rallus aquaticus	nesting species
1	Rallus aquaticus	wintering species
1	Remiz pendulinus	nesting species
2	Riparia riparia	nesting species
1	Sterna albifrons (Sternula albifrons+)	nesting species
1	Sterna hirundo	nesting species
1	Tringa glareola	passage migrant species

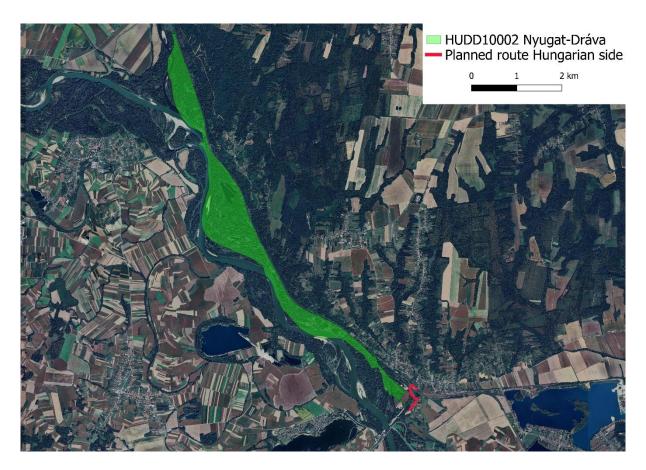


Figure 6: SPA HUDD10002

SCI HR2000364 Mura: Natura 2000 site SCI HR2000364 Mura covers an area of 6 108.10 ha along the Mura River on the territory of Međimurska county and Koprivničko-križevačka county. Broadleaved deciduous woodland (N16) – 38.80% and Other arable land (N15) – 31.66% cover most of the SCI HR2000364 area and are followed by Heath, Scrub, Maquis and Garrigue, Phygrana (N08) – 11.89% and Inland water bodies (Standing water, Running water) (N06) – 11.26%, while other habitat classes cover rest of SCI HR2000364 area.

Target species and habitat types of SCI HR2000364 are presented in Table 5. SCI HR2000364 is managed according to local jurisdiction by Međimurska priroda - Public institution for nature protection and Public Institution for the management of nature protected areas in the Koprivničko-križevačka county. SCI HR2000364 site management is determined by the Regional park Mura-Drava and associated protected areas and ecological network areas management plan for the period 2024-2033 (PU 007). SCI HR2000364 site specific conservation objectives and conservation measures are presented in chapter 3. Potential impact of the Hungary-Croatia Programme implementation on Natura 2000.

Table 5: SCI HR2000364 Mura target species and habitat types

Source: Regulation on the ecological network and public institutions for the management of ecological network areas jurisdiction (Official Gazette 80/19, 119/23)

Category for target	Species scientific name /	Group
species / habitat type	Habitat type name and code	'
1	Ophiogomphus cecilia	Invertebrates
1	Misgurnus fossilis	Fish
1	Zingel streber	Fish
1	Bombina bombina	Amphibians
1	Emys orbicularis	Reptiles
1	Barbastella barbastellus	Mammals
1	Myotis bechsteinii	Mammals
1	Castor fiber	Mammals
1	Lutra lutra	Mammals
1	Umbra krameri	Fish
1	Coenagrion ornatum	Invertebrates
1	Anisus vorticulus	Invertebrates
1	Cobitis elongatoides	Fish
1	Romanogobio vladykovi	Fish
1	Romanogobio kessleri	Fish
1	Romanogobio uranoscopus	Fish
1	Cucujus cinnaberinus	Invertebrates
1	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> (9160)	Forests
1	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation (3150)	Freshwater habitat
1	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) (91E0*)	Forests

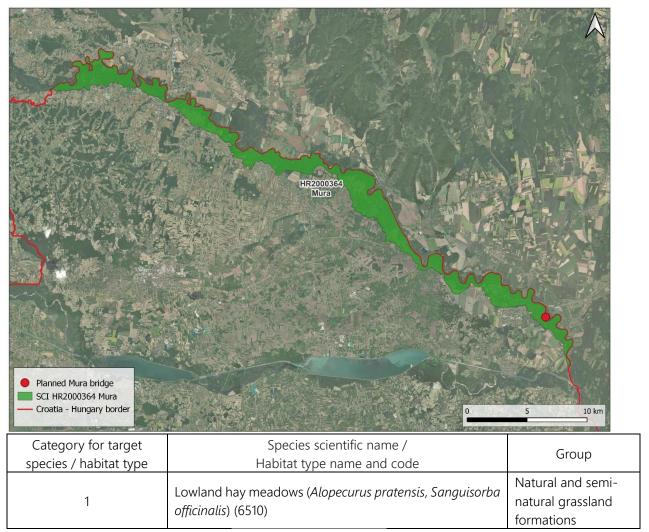


Figure 7: SCI HR2000364 Mura
Source: Bioportal - web portal of the Nature Protection Information System (https://bioportal.hr/en/)

SAC HUBF20043 Mura mente: Natura 2000 site SAC HUBF20043 covers an area of 2145.4 ha, which mostly consists of Bogs, Marshes, Water fringed vegetation, Fens (N07) – 30%, Broadleaved decidous woodland (N16) and Humid grassland, Mesophile grassland (N10) - 26%. The rest of SAC HUBF20043 is covered by Other arable land (N15), Inland water bodies (N06) and Artificial forest monoculture (N20) 10%, 5%, 3% respectively.

Target species and habitat types of SAC HUBF20043 are presented in Table 6. The management of the SAC HUBF20043 falls under the competence of the Balaton-felvidék National Park Directorate. The Directorate implements conservation and site management activities in accordance with national nature protection policies, taking into account the specific ecological characteristics of the Mura region. Its responsibilities include the maintenance of protected habitats, coordination of research activities, and the promotion of environmental education and

public awareness. Management actions are based on nature conservation management plans, which set out the conservation objectives for areas forming part of the ecological network, along with the measures needed to achieve them. The Directorate cooperates with local stakeholders (landowners, land users and civil organisations etc.) to ensure that nature conservation and land use interests are addressed in a coordinated manner.

Table 6: SAC HUBF20043 target species and target habitat types

Source: Balaton-Felvidéki National Park Directorate

Category for target	Species scientific name /	Group
species / habitat type	Habitat type name and code	'
1	Ophiogomphus cecilia	Invertebrates
1	Vertigo moulinsiana	Invertebrates
1	Coenagrion ornatum	Invertebrates
1	Leucorrhinia pectoralis	Invertebrates
1	Eriogaster catax	Invertebrates
1	Lycaena dispar	Invertebrates
1	Romanogobio uranoscopus	Fish
1	Gobio albipinnatus	Fish
1	Myotis emarginatus	Mammals
1	Cerambyx cerdo	Invertebrates
1	Cucujus cinnaberinus	Invertebrates
1	Romanogobio vladykovi	Fish
1	Romanogobio kesslerii	Fish
	Romanogobio uranoscopus	Fish
1	Umbra krameri	Fish
1	Rutilus pigus	Fish
1	Zingel zingel	Fish
1	Lucanus cervus	Invertebrates
1	Zingel streber	Fish
1	Misgurnus fossilis	Fish
1	Gymnocephalus schraetzer	Fish
1	Gymnocephalus baloni	Fish
1	Rhodeus sericeus amarus	Fish
1	Sabanejewia aurata	Fish
1	Cobitis taenia	Fish
1	Bombina bombina	Fish
1	Emys orbicularis	Reptiles
1	Barbastella barbastellus	Mammals
1	Castor fiber	Mammals
1	Lutra lutra	Mammals
1	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation (3150)	Freshwater habitats
1	Rivers with muddy banks with <i>Chenopodion rubri</i> p.p. and <i>Bidention</i> p.p. vegetation (3270)	Freshwater habitat

Category for target species / habitat type	Species scientific name / Habitat type name and code	Group
1	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430)	Natural and semi- natural grassland formations
1	Alluvial meadows of river valleys of the Cnidion dubii (6440)	Natural and semi- natural grassland formations
1	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) (6510)	Natural and semi- natural grassland formations
1	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, <i>Alnion incanae, Salicion albae</i>) (91E0*)	Forests
1	Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris) (91F0)	Forests
1	Illyrian oak-hornbeam forests (Erythronio-carpinion) (91L0)	Forests

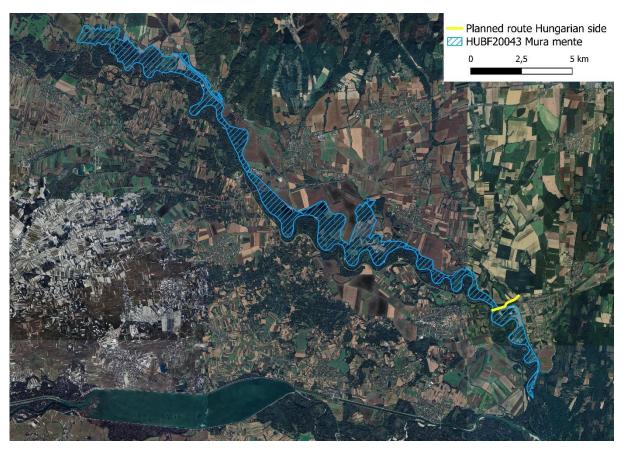


Figure 8. SAC HUBF20043 Mura mente

3. Potential impact of the Hungary-Croatia Programme implementation on Natura 2000

In regard to PO 3 (ii) of the Hungary-Croatia Programme, for this Appropriate assessment of interest are projects road link Zákány – Gotalovo and Murakeresztúr - Kotoriba bridge (Mura Bridge / MuKo Bridge) due their position inside Natura 2000 sites. In a case of the road link Zákány – Gotalovo it is planned to finance through the Hungary-Croatia Programme preparation of project documentation and its construction, but in a case of the Mura Bridge / Muko Bridge only the financing of project documentation preparation is planned. Therefore, impact assessment on Natura 2000 of road link Zákány – Gotalovo and Mura Bridge / MuKo bridge is provided at different levels of detail.

3.1. Road link Zákány – Gotalovo

Location of planned road link Zákány – Gotalovo is inside of Natura 2000 sites SCI HR5000014 Gornji tok Drave and SPA HR1000014 Gornji tok Drave and in vicinity to Natura 2000 sites SCI HUDD20054 Nyugat – Dráva and SPA HUDD10002 Nyugat – Dráva. In tables in continuation site specific conservation objectives of those Natura 2000 sites are provided, together with impact assessment of road link Zákány – Gotalovo on SCI HR5000014 (Table 7), SPA HR1000014 (Table 8), SAC HUDD20054 (Table 9) and SPA HUDD10002 (Table 10). Significance of road link Zákány – Gotalovo impact on Natura 2000 is assessed by using following scale:

Value	Definition	Description
-2	Probability of significant negative impact	A significant disturbance or destructive impact on a habitat or species population, or a considerable part of it; substantial disruption of ecological requirements of a habitat or species; or a major impact on habitat or natural development of species. These impacts must be mitigated to below the significance threshold through appropriate measures. If mitigation is not possible, the element with this rating must be excluded / rejected.
-1	Probability of moderate negative impact (negative impact that is not significant)	Limited/moderate/minor negative impact. A moderate but concerning impact on a habitat or species population, moderate disruption of ecological conditions necessary for conservation of habitats or species, or marginal impact on habitat or natural development of species. Impact can be mitigated or eliminated through appropriate mitigation measures; however, prescribing such measures is not mandatory based on the overall assessment.
0	No impact	No noticeable impact
+1	Probability of moderate positive impact	Moderate positive impact on habitat or species population, moderate improvement of ecological requirements of habitat or species, and a moderate positive effect on habitat or natural development of species.
+2	Probability of significant positive impact	Significant positive impact on habitat or species population, substantial improvement of ecological requirements of habitat

Value	Definition	Description
		or species, and a major positive effect on habitat or natural development of species.
?	,	nnot be reliably determined due to insufficient specific data (for planned project/activity, extent/scope of the planned

In case of negative impact for which mitigation measure is proposed, a new impact assessment is provided afterwords with presumption of mitigation measure implementation and new (final) grade of impact is provided.

SCI HR5000014 Gornji tok Drave impact assessment

Table 7: SCI HR5000014 Gornji tok Drave impact assessment

Source of site specific conservation objectives and conservation measure and accompanying data: Republic of Croatia Ministry of Environmental Protection and Green Transition - Institute for Environment and Nature (February 2025)

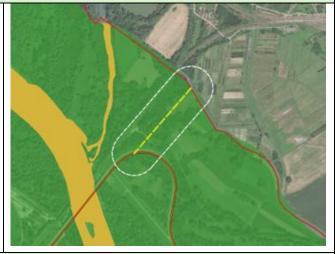
Abbreviation NKS = National habitat classification

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Ophiogomphus cecilia	
Site specific conservation objectives:	Conservation measures:	
 Maintain favourable condition of the target species through following attributes: Favourable habitats (gravel and sandy riverbeds and riverbanks in the marginal parts of the river outside the main stream) are maintained within 1410 ha of river course, armbands and tributaries. Species population is maintained (minimum 2 quadrants 1 x 1 km). Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00012_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR00044_000000, CDR000209_000000 is achieved. Good chemical status and good ecological potential of water body CDR00105_001331 are maintained. Good chemical status and good ecological potential of water body CDR00105_001331 are maintained. Good chemical status and good ecological potential of water body CDR00025_000000, CDR00021_000000, CDR00025_000000 are achieved. Good chemical status and good ecological potential of water bodies CDS006, CDS028 are achieved. Riparian vegetation belt is preserved. Favourable hydrological regime and hydromorphology of watercourse are preserved. 	 Preserve favourable habitat conditions by maintaining water quality, favourable water regime, riverbed and riverbank structure, flow speed and coastal vegetation. Preserve riparian vegetation along riverbanks. Maintain habitat diversity within river course, preserving unreinforced banks and gravel rapids. When mowing coastal vegetation, mow in one year only on one side or alternately on both sides of the watercourse. Limit construction, sand and gravel extraction, filling and burying in habitats suitable for the species and in their immediate vicinity. 	

Target species: Ophiogomphus cecilia

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (yellow colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 14 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Road link Zákány - Gotalovo is not located within quadrants where target species population should be maintained or preserved.

Road infrastructure i.e. road transport primarily poses a threat to groundwaters so there is no collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) even in a case of closest one CDR0002 199612 Drava.

Road link Zákány - Gotalovo does not intersect watercourses and riparian vegetation. Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- At least 800 ha of favourable habitats (standing waters - old river branches, fishponds, lakes and very slowflowing waters - river channels overgrown by aquatic and palustrine vegetation) are maintained.
- Species population is preserved in at least 4 locations (Kopričancev jarak armband near Bukevje, Šikalovo armband near Ciganfis, Senjske luke and Braunovo).
- Favourable hydrological regime and natural hydromorphology (riverbed and banks structure, coastal vegetation) are preserved.

Target species: Leucorrhinia pectoralis

Conservation measures:

- Preserve favourable habitat conditions maintaining water quality, favourable water regime, bed and bank structure and coastal vegetation.
- Prevent introduction of fish and crustaceans invasive alien species into the habitat and, if necessary, control their populations.

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Leucorrhinia pectoralis
 Good (ecological and chemical) status of water body CDR00537_001575 is maintained. Good (ecological and chemical) status of water bodies CDR00037_000000, CDR00012_000000, CDR01043_000000 is achieved. Good chemical status and good ecological potential of water body CDR00105_001331 are maintained. Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000, CDR00021_000000, CDR00025_000000 are achieved. 	
Position in relation to favourable habitats inside Natura 20	00 site:
Road link Zákány – Gotalovo is not located within favourable habitats for the target species (yellow colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).	

Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 20 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road link Zákány – Gotalovo is not located within area of Kopričancev jarak armband near Bukevje, Šikalovo armband near Ciganfis, Senjske luke and Braunovo.

Road link Zákány – Gotalovo is not in area of surface water bodies (CDR) counted within attributes.

Road link Zákány - Gotalovo does not intersect watercourses and riparian vegetation. Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

G	rac	le:	0

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: <i>Lycaena dispar</i>
Site specific conservation objectives:	Conservation measures:
Achieve favourable condition of the target species	- Preserve favourable hydrological regime.
through following attributes:	- Preserve favourable watercourse hydromorphology.

- At least 1600 ha of existing favourable habitats (lowland wet meadows and marshy edges of rivers, canals, streams and lakes) are maintained.
- Species population is maintained (minimum 5 quadrants 1 x 1 km).
- The presence of host plants from the genus *Rumex* is preserved.
- Habitat quality for the species has been improved through the removal of woody vegetation.
- Woody and shrubby vegetation does not exceed 10% of cover.
- Favourable hydrological regime and hydromorphology of watercourse are preserved.

Target species: Lycaena dispar

- Limit usage of plant protection products and mineral fertilizers in habitats favourable for target species and in their immediate vicinity.
- Provide voluntary measures (that contribute to environment) for land users, co-financed with EU funds.
- Reduce mowing intensity in inundation zones of watercourses and areas along watercourses by applying rotational mowing regime (each year mowing only one longitudinal third of the designated area), during the period mid-September-end of May.
- Regularly remove invasive alien plant species developing in habitats suitable for target species.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (pink colour), however, the buffer zone of road link Zákány – Gotalovo (100 m from road route) lies within favourable habitats for the target species.



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 40 m. Buffer zone of road link Zákány – Gotalovo (100 m from road route) lies within edge of one of quadrant where target species population should be maintained or preserved.



Grade: 0

Impact assessment:

The buffer zone of road link Zákány – Gotalovo (100 m from road route) is located within favourable habitats for target species whereas the route of road link Zákány – Gotalovo itself does not intersect favourable habitats for target species.

Natura 2000 site: SCI HR5000014 Gornji tok Drave Target species: Lycaena dispar The buffer zone of road link Zákány – Gotalovo (100 m from road route) is located within edge of the quadrant where species population should be maintained or preserved whereas the route of road link Zákány – Gotalovo itself does not intersect subject quadrant. Considering nature of the road link Zákány – Gotalovo (short section, county road) and due to presence of an existing state road DC41 within the buffer zone of road link Zákány – Gotalovo, conclusion is that there will be no impact on the target

Mitigation measures are not necessary.	measure: /
Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Lucanus cervus
Site specific conservation objectives:	Conservation measures:
Maintain favourable condition of the target species	- Preserve favourable habitat conditions in fo
through following attributes:	ecosystems for Lucanus cervus preservation
- 6550 ha of favourable habitats (forest containing	- Retain a minimum of 3% of deadwood or d
sufficiently large stumps and dying or freshly dead	woody biomass within forest stands.

trees) are maintained. - At least 3600 ha of crucial habitats (NKS E.2.1.7.,

Mitigation measures - if necessary:

- E.2.2.2., E.2.2.4., E.3.1.1., E.3.1.2.) are maintained. Species population is maintained (minimum 6 quadrants 1 x 1 km).
- In forests managed under an even-aged system, at least 40% of oak stands older than 80 years and at least 20% of ash stands older than 60 years are preserved.
- In forests managed under an even-aged system, forest stand connectivity is maintained by preserving areas where regeneration will be postponed.
- A minimum of 3% of deadwood or dying woody biomass is retained within forest stands.
- Following cutting operations, at least 50% of stumps is left on-site.

orest

Grade with mitigation

- dying woody biomass within forest stands.
- Following cutting operations, at least 50% of stumps should be left on-site in forest (excluding forest cultures, plantations, and forest conversion works).
- In forests managed under an even-aged system preserve forest stand connectivity by preserving areas where regeneration will be postponed.
- Preserve favourable proportion of oak stands older than 80 years and ash stands older than 60 years.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (pink colour), nor those habitats are inside road link Zákány -Gotalovo buffer zone (100 m from road route).



Target species: Lucanus cervus

Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány - Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 1 km.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road link Zákány - Gotalovo is not located within quadrants where target species population should be maintained or preserved.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Achieve favourable condition of the target species through following attributes:

- 6550 ha of favourable forest habitats are maintained.
- 3600 ha of crucial oak forest habitats are maintained (NKS E.2.2.2., E.2.2.4., E.3.1.1., E.3.1.2.).
- Species population is maintained at least at one location (Repeš).
- In forests managed under an even-aged system, at least 40% of oak stands older than 80 years and at least 20% of ash stands older than 60 years are preserved.
- In forests managed under an even-aged system, forest stand connectivity is maintained by preserving areas where regeneration will be postponed.

Target species: Cerambyx cerdo

Conservation measures:

- Preserve favourable habitat conditions in forest ecosystems for target species preservation.
- Preserve favourable proportion of oak stands older than 80 years and ash stands older than 60 years.
- In forests managed under an even-aged system preserve forest stand connectivity by preserving areas where regeneration will be postponed.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (pink colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Target species: Cerambyx cerdo



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 14 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road link Zákány - Gotalovo is not located in Repeš area.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for the species are preserved along 83 km of river course, including both fast-and slow-flowing sections with and without well-developed submerged vegetation, as well as connections to river branches and tributaries. Spawning habitats include fast-flowing sections with gravel substrate or areas with submerged vegetation.
- Species population is maintained (minimum 20 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR00404_000000 is achieved.

Target species: Aspius aspius

Conservation measures:

- Along course of the Drava River, at minimum current state should be preserved and habitat degradation prevented, while allowing natural processes (including erosion and natural succession) to enable formation of natural habitats.
- Preserve diversity of habitats with unregulated riverbanks, gravel and sand bars, and riffles where the species feeds, as well as favourable (as natural as possible) water dynamics.
- Do not allow construction of barriers or obstructions that would hinder longitudinal migrations along river course, in order to enable unrestricted movement of adult individuals and the dispersal of juveniles.
- Ensure unobstructed connectivity between the main river channel and tributaries used for spawning, as well as with river branches.
- Ensure preservation of no less than the current extent of natural, unmodified riverbanks.

- Good chemical status and good ecological potential/status of water body CDR00105_001331 is maintained.
- Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000, CDR00018_000000, CDR00021_000000, CDR00025_000000 are achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Connectivity between river and all its tributaries is preserved.
- Natural processes, including erosion and natural succession are enabled to allow formation of natural habitats.
- Occasional flooding of river branches, where the species spawns, is ensured.
- Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.

Target species: Aspius aspius

- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.
- Fisheries management plans should incorporate prohibition on introduction of non-native fish species
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.
- Encourage removal of alien species using permitted fishing tools without restrictions.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 70 m. Buffer zone of road link Zákány – Gotalovo (100 m from road route) lies within two quadrants where target species population should be maintained or preserved.



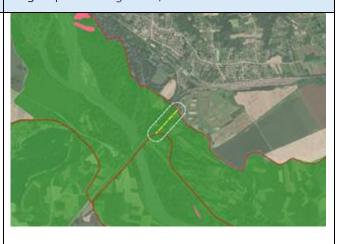
Impact assessment:

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Aspius aspiu	s
Road link Zákány - Gotalovo is located outside of hal species and those habitats are not inside road link Zák (100 m from road route). Road infrastructure i.e. road transport primarily poses a collision with attributes related to surface water bodie and CDS (lakes) is not expected even in a case of closurova. Road link Zákány - Gotalovo does not intersectimpact on target species.	ány – Gotalovo buffer zone a threat to groundwater, so es CDR (rivers and streams) sest one CDR00002_199612	Grade: 0
Mitigation measures - if necessary:		Grade with mitigation
Mitigation measures are not necessary.		measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Misgurnus fossilis	
Site specific conservation objectives:	Conservation measures:	
Achieve favourable condition of the target species through following attributes: - Favourable habitats (network of watercourses and canals, oxbow lakes, and side arms) are preserved in the area of 340 ha of aquatic habitats (oxbows, side channels, ponds, marshes, and tributaries). - Species population is maintained (minimum 8 quadrants 1 x 1 km). - Good chemical status and good ecological potential/status of water bodies CDR00021_000000, CDR00025_000000 are achieved. - Favourable habitat conditions are ensured within aquatic and wetland habitats with well-developed aquatic vegetation covering more than 50% of bottom. - Favourable water regime is preserved, lowering of groundwater level is prevented, annual flooding of area is enabled. - Favourable physical-chemical properties of water are preserved. - Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with	 Ensure favourable habitat conditions with aquatic and wetland habitats with well-developed aquatic vegetation covering more than 50% of bottom. Preserve favourable physical-chemical properties. Preserve favourable water regime, prevent lowering of groundwater level and enable annual flooding of the area. Prevent drainage and melioration of floodplain and wetland areas and habitats. Preserve natural dynamic processes of the Drava River, including erosion and vegetation succession, and ensure hydrological connectivity with former side arms and oxbow lakes. Preserve riparian vegetation belt along watercourses in a zone of at least 5 m from the watercourse bank. Prohibit fish stocking in water bodies where the target species has been recorded. Encourage removal of alien species using permitted fishing tools without restrictions. 	
the Freshwater Fisheries Act. Position in relation to favourable habitats inside Natura 2000 site:		

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (pink colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Target species: Misgurnus fossilis



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 18 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road link Zákány - Gotalovo is not located within quadrants where target species population should be maintained or preserved.

Road link Zákány - Gotalovo does not intersect watercourses.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Gra	ide:	(

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for the species (particularly gravel and rocky substrates used for spawning) and longitudinal connectivity are preserved within 83 km of river course.
- Species population is maintained (minimum 8 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR000404_000000 is achieved.

Target species: Gymnocephalus schraetser

Conservation measures:

- Preserve habitat diversity along the Drava River by maintaining unregulated riverbanks and enabling periodic flooding of side arms used by the species for spawning.
- Preserve at least the existing length of natural, unregulated riverbanks.
- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.
- Fisheries management plans should incorporate prohibition on introduction of non-native fish species.
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.

Natura 2000 site: SCI HR5000014 Gornji tok Drave Target species: Gymnocephalus schraetser Good chemical status and good ecological Encourage removal of alien species using permitted potential/status of water body CDR00105_001331 is fishing tools without restrictions. maintained. Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000, CDR00018_000000, CDR00021_000000, CDR00025_000000 is achieved. Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved. Connectivity between river and all its tributaries is preserved. Natural processes, including erosion and natural succession are enabled to allow formation of natural habitats Population of alien and invasive alien species has been controlled through removal using permitted

Position in relation to favourable habitats inside Natura 2000 site:

fishing tools without restriction, in accordance with

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).

the Freshwater Fisheries Act.



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 7 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Target species: Zingel zingel

Site specific conservation objectives:

of river course.

Conservation measures:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for the species (gravel bottoms, faster flow) are preserved within 83 km
- Species population is maintained (minimum 17 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR00404_00000 is achieved.
- Good chemical status and good ecological potential/status of water body CDR00105_001331 are maintained.
- Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000, CDR00018_000000, CDR00021_000000, CDR00025_000000 are achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Connectivity between river and all its tributaries is preserved.
- Natural processes, including erosion and natural overgrowth are enabled to allow formation of natural habitats.
- Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.

- Along course of the Drava River, at minimum current state should be preserved and habitat degradation prevented, while allowing natural processes (including erosion and natural succession) to enable formation of natural habitats.
- In Drava River watercourse preserve diversity of habitats with unregulated riverbanks and sandy bottoms inhabited by the species, as well as favourable flow dynamics.
- Do not allow construction of barriers or obstructions that would hinder longitudinal migrations along river course, in order to enable unrestricted movement of adult individuals and the dispersal of juveniles.
- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.
- Fisheries management plans should incorporate prohibition on introduction of non-native fish species.
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.
- Encourage removal of alien species using permitted fishing tools without restrictions.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 70 m. Buffer zone of road link Zákány – Gotalovo (100 m from road route) lies within edge of one of quadrant where target species population should be maintained or preserved.

Target species: Zingel zingel



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for the species (gravel bottoms, faster flow) are preserved within 83 km of river course.
- Species population is maintained (minimum 7 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR00404_000000 is achieved.
- Good chemical status and good ecological potential/status of water body CDR00105_001331 is maintained.
- Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000,

Target species: Zingel streber

Conservation measures:

- Along course of the Drava River, at minimum current state should be preserved and habitat degradation prevented, while allowing natural processes (including erosion and natural succession) to enable formation of natural habitats.
- Preserve diversity of habitats with unregulated riverbanks and gravel rapids where the species lives and spawns, as well as favourable water dynamics.
- Do not allow construction of barriers or obstructions that would hinder longitudinal migrations along river course, in order to enable unrestricted movement of adult individuals and the dispersal of juveniles.
- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.
- Fisheries management plans should incorporate prohibition on introduction of non-native fish species.
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.

Target species: Zingel streber

CDR00018_000000, CDR00021_000000, CDR00025 000000 are achieved.

- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Connectivity between river and all its tributaries is preserved.
- Natural processes, including erosion and natural succession are enabled to allow formation of natural habitats.
- Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.

- Encourage removal of alien species using permitted fishing tools without restrictions.

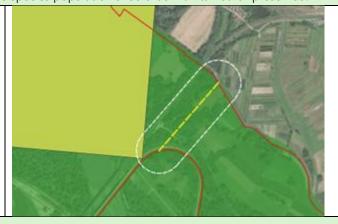
Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 70 m. Buffer zone of road link Zákány – Gotalovo (100 m from road route) lies within edge of one of quadrant where target species population should be maintained or preserved.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target species.

Grade: 0

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Zingel strebe	er
Mitigation measures - if necessary:		Grade with mitigation
Mitigation measures are not necessary.		measure: /

Willigation measures are not necessary.	medatre. 7
Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Bombina bombina
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: Favourable habitats (riparian forests, water bodies, ponds and marshes, meadows, floodplains, and riparian zone) in zone of 21900 ha are maintained. Crucial zone of at least 2340 ha of freshwater surfaces is maintained (NKS A.), At least 1800 ha of grassland habitats are maintained (NKS C.2.2.2., C.2.2.3., C.2.2.4., C.2.3.2., C.2.4.1.). At least 6550 ha of forest habitats are maintained (NKS E.1.1.2., E.1.1.3., E.1.2.2., E.2.1.3., E.2.1.4., E.2.1.5., E.2.2.2., E.2.2.4., E.2.1.7., E.3.1.1., E.3.1.2). Species population is maintained (minimum 11 quadrant 1 x 1 km). All forest clearings are preserved. All forest ponds are preserved. Riparian vegetation belt (shrubs and trees) with a width of at least 10 m is preserved. 	 Preserve temporary aquatic habitats (stagnant water bodies) located in forests and along forest tracks, except on forest roads and firebreaks that function as forest roads. Filling in of ponds and other permanent or temporary water bodies is not permitted on tractor trails during the period from 1 April to 31 August. Preserve natural or artificial sunlit standing waters approximately 0.5 m deep, rich in aquatic vegetation. Introduction of alien and invasive alien species is not allowed. Control populations of invasive alien species, and where feasible, implement eradication measures Actively manage oxbow lakes and temporary ponds by periodic removal of sediment and vegetation to prevent overgrowth and ecological succession. Limit usage of plant protection products and mineral fertilizers in habitats favourable for target species and in their immediate vicinity. During construction, reconstruction, and maintenance of roads, wildlife crossings for small wild animals should be constructed and maintained

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is located within favourable habitats (orange colour) for the target species.



where necessary.

Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 1.5 km.

Target species: Bombina bombina



Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species, resulting in a loss of 0,8 ha (0.004%) of favourable habitats in the SCI HR5000014. However, although the loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SCI HR5000014.

Moreover, road link Zákány - Gotalovo is in an area subject to existing moderate anthropogenic influence presented with existing road and railway infrastructure and agriculture. Railway line M201 passes in parallel to the planned road link Zákány - Gotalovo and planned road link will connect to an existing state road DC41. Part of road link Zákány - Gotalovo overlaps in agricultural land large areas in vicinity are in agricultural usage.

Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable.

Mitigation measures - if necessary:

Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.

During construction activities within SCI HR5000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery.

Grade: -1

Grade with mitigation measure: -1

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for the species are maintained in an area of 21900 ha, including inland waters and floodplains densely vegetated with sunlit banks, as well as terrestrial habitats suitable for egg-laying, such as wet meadows and forest stands with deadwood in sun-exposed areas.
- Species population is maintained (minimum 12 quadrants 1 x 1 km).

Target species: Emys orbicularis

- Preserve the natural hydromorphology of water bodies, including the conservation of permanent and temporary water surfaces, such as existing ponds and oxbow lakes, and prevent their overgrowth.
- Encourage extensive agriculture with minimal usage of mineral fertilizers and plant protection products, and year-round grazing.
- Introduction of alien and invasive alien species (especially *Trachemys scripta elegans*) is not allowed.
- Control populations of invasive alien species, and where feasible, implement eradication measures

- At least 2540 ha of freshwater surfaces are maintained (NKS A.).
- At least 1800 ha of grassland habitats are maintained (NKS C.2.2.2., C.2.2.3., C.2.2.4., C.2.3.2., C.2.4.1.).
- At least 6550 ha of forest habitats are maintained (NKS E.1.1.2., E.1.1.3., E.1.2.2., E.2.1.3., E.2.1.4., E.2.1.5., E.2.2.2., E.2.2.4., E.2.1.7., E.3.1.1., E.3.1.2).
- All forest ponds are preserved.
- Periodic flooding of area is preserved.
- The connectivity of habitats suitable for the species is maintained
- The invasive alien species red-eared slider turtle (*Trachemys scripta elegans*) does not have an established population

Target species: Emys orbicularis

 During construction, reconstruction, and maintenance of roads, wildlife crossings for small wild animals should be constructed and maintained where necessary.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is located within favourable habitats (orange colour) for the target species.



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 1.5 km.



Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species, resulting in a loss of 0,8 ha (0.004%) of favourable habitats in the SCI HR5000014. However, although the loss of part of the favourable habitat is

Grade: -1

Natura 2000 site: SCI HR5000014 Gornji tok Drave Target species: Emys orbicularis permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SCI HR5000014. Moreover, road link Zákány - Gotalovo is in an area subject to existing moderate anthropogenic influence presented with existing road and railway infrastructure and agriculture. Railway line M201 passes in parallel to the planned road link Zákány -Gotalovo and planned road link will connect to an existing state road DC41. Part of road link Zákány - Gotalovo overlaps in agricultural land large areas in vicinity are in agricultural usage. Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable. Mitigation measures - if necessary: Grade with mitigation Upon completion of the construction, habitats within the working corridor should measure: -1 be restored to a condition as close as possible to their original state. During construction activities within SCI HR5000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery.

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Barbastella barbastellus	
Site specific conservation objectives:	Conservation measures:	
 Maintain favourable condition of the target species through following attributes: Preserved population and preserved shelters and 6270 ha of favourable habitats (forest habitats, especially forest habitats with high structure and representation of older age classes of trees and trees with cracks and cavities, forest edges and forest clearings, and ponds within forests). Species population is maintained (minimum 2 quadrants 1 x 1 km). 48 ha of ash forest are restored. In forests managed under an even-aged system, at least 40% of oak stands older than 80 years and at least 20% of ash stands older than 60 years are preserved. In forests managed under an even-aged system, during final harvest of forest areas larger than 100 ha, at least 5 ha in the central part is retained, where the final harvest will be postponed for at least 20 years. In forest stands (excluding cultures) aged 20 years up to the period of regeneration felling, the natural composition of the ground layer and shrub layer is preserved. In forests managed under an uneven-age system, structural diversity is preserved with a favourable proportion of trees with a diameter at breast 	 In forests managed under an uneven-age system, maintain favourable habitat conditions for species conservation by preserving structural diversity, with a favourable proportion of trees with a diameter at breast height above 30 cm, particularly trees with bark cracks and cavities. During timber marking, trees with cavities that house colonies of the species should be retained. After cutting/felling mature trees, leave trees in forest complex for at least 24 hours before removal. Maintain forest clearings (meadows, pastures, etc.) and their bushy marginal areas and standing waters. Limit usage of plant protection products and mineral fertilizers in forest management. Preserve favourable proportion of oak stands older than 80 years and ash stands older than 60 years. In forests managed under an even-aged system, during the final harvest of forest areas larger than 100 ha, at least 5 ha in the central part should be retained, where final harvest will be postponed for at least 20 years. 	

Natura 2000 site: SCI HR5000014 Gornji tok Drave height above 30 cm, as well as trees with bark cracks and cavities. All forest clearings are preserved. All forest ponds are preserved. Riparian vegetation belt (shrubs and trees) with a

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (pink colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).

width of at least 10 m is preserved.



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 1 km.



Impact assessment: Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo is not located within quadrants where target species population should be maintained or preserved. Road link Zákány - Gotalovo will not disturb the existing riparian vegetation. Taking into account all the above, there is no impact on target species. Mitigation measures - if necessary: Mitigation measures are not necessary. Grade with mitigation measure: /

Target species: Myotis bechsteinii

Site specific conservation objectives:

Achieve favourable condition of the target species through following attributes:

- Preserved population and preserved shelters and 6270 ha of favourable habitats (forest habitats. especially forest habitats with high structure and representation of older age classes of trees and trees with cracks and cavities, forest edges and forest clearings, and ponds within forests).
- Species population is maintained (minimum 1 quadrant 1 x 1 km).
- 48 ha of ash forest are restored.
- In forests managed under an even-aged system, at least 40% of oak stands older than 80 years and at least 20% of ash stands older than 60 years are preserved.
- In forests managed under an even-aged system, during final harvest of forest areas larger than 100 ha, at least 5 ha in the central part is retained, where the final harvest will be postponed for at least 20 years.
- In forest stands (excluding cultures) aged 20 years up to the period of regeneration felling, the natural composition of the ground layer and shrub layer is preserved.
- In forests managed under an uneven-age system, structural diversity is preserved with a favourable proportion of trees with a diameter at breast height above 30 cm, as well as trees with bark cracks and cavities.
- All forest clearings are preserved
- All forest ponds are preserved.
- width of at least 10 m is preserved.

Riparian vegetation belt (shrubs and trees) with a

Conservation measures:

- In forests managed under an even-aged system, during final harvest of forest areas larger than 100 ha, at least 5 ha in the central part should be retained, where final harvest will be postponed for at least 20
- Preserve favourable proportion of oak stands older than 80 years and ash stands older than 60 years.
- Provide voluntary measures (that contribute to environment) for land users, co-financed with EU funds.
- Limit usage of plant protection products and mineral fertilizers in forest management.
- During timber marking, trees with cavities that house colonies of the species should be retained.
- In forests managed under an uneven-age system, maintain favourable habitat conditions for species conservation by preserving structural diversity, with a favourable proportion of trees with a diameter at breast height above 30 cm, particularly trees with bark cracks and cavities.
- Maintain forest clearings (meadows, pastures, etc.) and their bushy marginal areas and standing waters.
- After cutting/felling mature trees, leave trees in forest complex for at least 24 hours before removal.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány - Gotalovo is not located within favourable habitats for the target species (pink colour), nor those habitats are inside road link Zákány -Gotalovo buffer zone (100 m from road route).



Natura 2000 site: SCI HR5000014 Gornji tok Drave Target species: Myotis bechsteinii Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved: Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 20 km. Impact assessment: Road link Zákány - Gotalovo is located outside of habitats favourable for target Grade: 0 species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo is not located within quadrants where target species population should be maintained or preserved. Road link Zákány - Gotalovo will not disturb the existing riparian vegetation. Taking into account all the above, there is no impact on target species. Mitigation measures - if necessary: Grade with mitigation

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Castor fiber
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: 22900 ha of suitable habitats are maintained (floodplains of the Drava River, including floodplain forests, associated watercourses with natural hydromorphology and developed riparian vegetation, oxbow lakes, and wetlands). At least 6650 ha of forest stands are maintained. At least 4100 ha of freshwater surfaces (NKS A.) with a minimum water depth of 30 cm and well-developed coastal vegetation are maintained. Species population is maintained (minimum 9 quadrants 1 x 1 km). Natural hydromorphology of watercourses and riparian zone are preserved. 	 Preserve the floodplain zone of the Drava River, as well as the remaining sections of the old river channel and oxbows. Preserve vegetation along watercourses in a zone of at least 5 m from banks. Preserve natural hydromorphology of watercourses.
Position in relation to favourable habitats inside Natura 2	000 site.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is located within favourable habitats (purple colour) for the target species.

Mitigation measures are not necessary.



measure: /

Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 8 km.

Natura 2000 site: SCI HR5000014 Gornji tok Drave Target species: Castor fiber Impact assessment: Road link Zákány - Gotalovo passes through favourable habitats for the target Grade: -1 species, resulting in a loss of 0,8 ha (0.004%) of favourable habitats in the SCI HR5000014. However, although the loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SCI HR5000014. In addition, road link Zákány - Gotalovo will not disturb existing riparian vegetation and will not intersect watercourses. Moreover, road link Zákány - Gotalovo is in an area subject to existing moderate anthropogenic influence presented with existing road and railway infrastructure and agriculture. Railway line M201 passes in parallel to the planned road link Zákány -Gotalovo and planned road link will connect to an existing state road DC41. Part of road link Zákány - Gotalovo overlaps in agricultural land large areas in vicinity are in agricultural usage. Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable. Mitigation measures - if necessary: Grade with mitigation Upon completion of the construction, habitats within the working corridor should be measure: -1 restored to a condition as close as possible to their original state. During construction activities within SCI HR5000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery.

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Lutra lutra	
Site specific conservation objectives:	Conservation measures:	
 Maintain favourable condition of the target species through following attributes: 4100 ha of favourable habitats (surface inland waters and wetland habitats – standing waters, flowing waters, freshwater hydrophytic habitats, as well as vegetated shores of surface inland waters and wetland habitats are preserved. Population of at least 28 individuals of the species is maintained. Natural hydromorphology of watercourses is preserved. Riparian vegetation belt (shrubs and trees) with a width of at least 10 m is preserved. 	 Preserve natural hydromorphology of watercourses. Preserve the floodplain zone of the Drava River, as well as the remaining sections of the old river channel and oxbows. During construction, reconstruction, and maintenance of roads, construct and maintain otter crossings where necessary Reduce and prevent pollution of watercourses and their canalization. Preserve coastal vegetation in a zone of at least 5 m. Increase surveillance to prevent poaching. 	

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (purple colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Target species: Lutra lutra



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 80 m. However, buffer zone of road link Zákány – Gotalovo (100 m from road route) overlaps with edge of one quadrant where target species population should be maintained or preserved.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

The buffer zone of road link Zákány – Gotalovo (100 m from road route) is located within edge of the quadrant where species population should be maintained or preserved whereas the route of road link Zákány – Gotalovo itself does not intersect subject quadrant.

Road link Zákány - Gotalovo will not disturb existing riparian vegetation and will not intersect watercourses.

Considering nature of the road link Zákány – Gotalovo (short section, county road) and due to presence of an existing state road DC41 within the buffer zone of road link Zákány – Gotalovo, conclusion is that there will be no impact on the target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Triturus carnifex x Triturus dobrogicus
Site specific conservation objectives:	Conservation measures:
Maintain favourable condition of the target species	- Preserve temporary aquatic habitats (standing
through following attributes:	waters) in forests and along forest tracks, except on

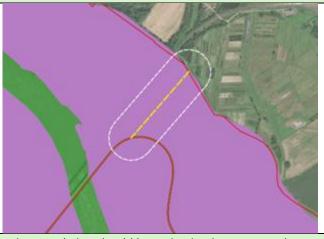
- Favourable habitats for the species (standing and smaller running waters, particularly ponds and canals, surrounding floodplain and riparian areas) have been maintained within an area of 21900 ha.
- At least 2340 of freshwater surfaces are maintained (NKS A.).
- All forest ponds are preserved.
- Natural periodic flooding of area is preserved.

Target species: Triturus carnifex x Triturus dobrogicus

- forest roads and firebreaks that contain elements of forest roads.
- Filling in of ponds and other permanent or temporary water bodies is not permitted on tractor trails during the period from 1 April to 31 August.
- Limit usage of plant protection products and mineral fertilizers in habitats favourable for target species and in their immediate vicinity.
- Where possible, restore overgrown and dried-up ponds.
- During construction, reconstruction, and maintenance of roads, wildlife crossings for small wild animals should be constructed and maintained where necessary.
- Introduction of alien and invasive alien species is not allowed
- Control populations of invasive alien species, and where feasible, implement eradication measures.
- Restrict fish stocking in habitats suitable for the species.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is located within favourable habitats (purple colour) for the target species.



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Distribution quadrants have not been defined for the target species

Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species, resulting in a loss of 0,8 ha (0.004%) of favourable habitats in the SCI HR5000014. However, although the loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SCI HR5000014. In addition, road link Zákány - Gotalovo will not disturb existing riparian vegetation and will not intersect watercourses.

Moreover, road link Zákány - Gotalovo is in an area subject to existing moderate anthropogenic influence presented with existing road and railway infrastructure and agriculture. Railway line M201 passes in parallel to the planned road link Zákány - Gotalovo and planned road link will connect to an existing state road DC41. Part of

Grade: -1

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Triturus carn	ifex x Triturus dobrogicus
road link Zákány - Gotalovo overlaps in agricultural land large areas in vicinity are in agricultural usage.		
Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable.		
Mitigation measures - if necessary:		Grade with mitigation
Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.		measure: -1
During construction activities within SCI HR5000014, a minimal working corridor		
should be used, and existing roads and clearings should be utilized for movement		
and the storage of construction materials and machinery.		

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: <i>Umbra krameri</i>	
Site specific conservation objectives: Achieve favourable condition of the target species through following attributes: - Existing favourable habitats for the species (calm streams or occasionally flooded standing waters and ponds with developed macrophyte vegetation) are preserved within 340 ha of water surfaces (oxbow lakes, channels, ponds, small lakes, tributaries. - Species population is maintained (minimum 4)	 Conservation measures: Preserve favourable physical-chemical properties. Ensure favourable habitat conditions with aquatic and wetland habitats with well-developed aquatic vegetation covering more than 50% of bottom. Preserve habitat diversity along the Drava River, with undefined riverbanks, and allow annual flooding of oxbows where the species resides. Preserve natural hydromorphological processes of 	
quadrants 1 x 1 km). Good chemical status and good ecological potential/status of water bodies CDR00021_000000, CDR00025_000000 are achieved. Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved. Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.	 the Drava River, including erosion and succession, and link it to the old channels and oxbow lakes Prevent drainage and melioration of floodplain and wetland areas and habitats favourable for the species around river course. Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum. Fisheries management plans should incorporate prohibition on introduction of non-native fish species. Strengthen supervision and control of introduction and spread of alien and invasive alien fish species. Encourage removal of alien species using permitted fishing tools without restrictions. Prohibit fish stocking in water bodies where the target species has been recorded. 	

Target species: Umbra krameri

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (cyan colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 42 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road link Zákány - Gotalovo is not located within quadrants where target species population should be maintained or preserved.

Road link Zákány – Gotalovo is not in area of surface water bodies (CDR) counted within attributes.

Road link Zákány - Gotalovo will not disturb the existing riparian vegetation.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave Target species: Pelecus cultratus Conservation measures: Maintain favourable condition of the target species.

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for species (faster flow) are preserved within 83 km of river course.
- Species population is maintained (minimum 3 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR000558_000000, CDR00043_000000, CDR00041_000000, CDR00404_000000 is achieved.
- In Drava River watercourse preserve diversity of habitats with unregulated riverbanks.
- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.
- Fisheries management plans should incorporate prohibition on introduction of non-native fish species.
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.
- Encourage removal of alien species using permitted fishing tools without restrictions..

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Pelecus cultratus
- Good chemical status and good ecological	
potential/status of water body CDR00105_001331	
are maintained.	
- Good chemical status and good ecological	
potential/status of water bodies	
CDR00002_235347, CDR00022_000000,	
CDR00018_000000, CDR00021_000000,	
CDR00025_000000 are achieved.	
- Connectivity between river and all its tributaries is	
preserved.	
- Population of alien and invasive alien species has	
been controlled through removal using permitted	
fishing tools without restriction, in accordance with	
the Freshwater Fisheries Act.	
Position in relation to favourable habitats inside Natura 2	NNN site:

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 16 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target species.

Mitigation measures - if necessary: Mitigation measures are not necessary. Grade: 0

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Gymnocephalus baloni
Site specific conservation objectives:	Conservation measures:
Maintain favourable condition of the target species through following attributes:	- Preserve habitat diversity along the Drava River, with undefined riverbanks, and allow occasional flooding of
- Favourable habitats for species (sandy and silty riverbeds, and the connection of the river with	

- oxbows) are preserved within 83 km of river course.
- Species population is maintained (minimum 13 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR00404_000000 is achieved.
- Good chemical status and good ecological potential/status of water body CDR00105_001331 are maintained.
- Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000, CDR00018_000000, CDR00021_000000, CDR00025_000000 are achieved.
- Riparian vegetation belt (shrubs and trees) is preserved.
- Natural processes, including erosion and natural succession are enabled to allow formation of natural habitats.
- Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.

Target species: Gymnocephalus baloni

- Ensure natural dynamic processes, including erosion and bank succession, to enable formation of natural habitats and their mosaic structure, and specifically ensure the connection of the river with oxbows and other floodplain habitats where the species spawns..
- Ensure preservation of no less than the current extent of natural, unmodified riverbanks.
- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.
- Fisheries management plans should incorporate prohibition on introduction of non-native fish species.
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.
- Encourage removal of alien species using permitted fishing tools without restrictions.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 7 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Grade: 0

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Gymnoceph	alus baloni
Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target species.		
Mitigation measures - if necessary:		Grade with mitigation
Mitigation measures are not necessary.		measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target species: Coenagrion ornatum
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: Favourable habitats (slow-flowing watercourses and canals, particularly their open (sunlit) sections, with natural hydromorphology and developed aquatic and riparian vegetation, as well as wetland habitats) are preserved in an area of 2270 ha. Species population is preserved in at least 1 location (Kopričancev jarak armband near Bukevje). Good (ecological and chemical) status of water body CDR00537_001575 is maintained. Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00012_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00017_000000, CDR000052_000000, CDR00100_000000, CDR000558_000000, CDR001043_000000, CDR00043_000000, CDR00041_000000, CDR00041_000000, CDR00041_000000, CDR00041_000000, CDR00041_000000, CDR00041_status and good ecological potential/status of water body CDR00105_001331 are maintained. Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000, CDR00018_000000, CDR00021_000000, CDR00018_000000, CDR00021_000000, CDR00025_000000 are achieved. Good chemical status and good ecological potential of water bodies CDR00288_000000, CDS006 are achieved. Good chemical status and good ecological potential of water bodies CDR00288_000000, CDS006 are achieved. 	 Limit usage of plant protection products and mineral fertilizers in coastal area. Preserve habitat diversity along the river with undefined riverbanks and gravel riffles. When mowing coastal vegetation, mow in one year only on one side or alternately on both sides of the watercourse. Prevent introduction of fish and crustaceans invasive alien species into the habitat and, if necessary, control their populations. Limit hydrotechnical interventions on streams and flow channels (removal of vegetation, deepening, strengthening of banks) and pollution of habitats.

Target species: Coenagrion ornatum

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (cyan colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 20 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road link Zákány – Gotalovo is not located within area of Kopričancev jarak armband near Bukevje.

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for species (sand and gravel bottoms) are preserved within 83 km of river course.
- Species population is maintained (minimum 6 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR000558_000000, CDR00043_000000, CDR00041_000000, CDR000404_000000 is achieved.

Target species: Sabanejewia balcanica

- Prevent habitats degradation in the Drava River watercourse and allow natural processes including erosion and overgrowth of coast.
- Preserve habitat diversity with undefined riverbanks and maintain sandy habitats where the species lives and spawns.
- Ensure unobstructed connectivity between main river channel and tributaries where species lives.
- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.

- Good chemical status and good ecological potential/status of water body CDR00105_001331 are maintained.
- Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000, CDR00018_000000, CDR00021_000000, CDR00025_000000 is achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Connectivity between river and all its tributaries is preserved.
- Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.

Target species: Sabanejewia balcanica

- Fisheries management plans should incorporate prohibition on introduction of non-native fish species.
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.
- Encourage removal of alien species using permitted fishing tools without restrictions.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 6.5 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Target species: Romanogobio vladykovi

Site specific conservation objectives:

Maintain favourable condition of the target species

through following attributes:
- Favourable habitats for species (especially sandy

- habitats where the species lives and spawns) are preserved within 83 km of river course.
- Species population is maintained (minimum 13 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR00404_000000 is achieved.
- Good chemical status and good ecological potential/status of water body CDR00105_001331 are maintained.
- Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000, CDR00018_000000, CDR00021_000000, CDR00025_000000 are achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Connectivity between river and all its tributaries is preserved.
- Natural processes, including erosion and natural succession are enabled to allow formation of natural habitats.
- Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.

Conservation measures:

- Preserve habitat diversity along the Drava River with undefined riverbanks and maintain sandy habitats where the species lives and spawns and allow occasional flooding of oxbows used by juvenile individuals.
- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.
- Fisheries management plans should incorporate prohibition on introduction of non-native fish species.
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.
- Encourage removal of alien species using permitted fishing tools without restrictions.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Target species: Romanogobio vladykovi

Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 80 m. However, buffer zone of road link Zákány – Gotalovo (100 m from road route) overlaps with edge of one quadrant where target species population should be maintained or preserved.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for species (different habitats favourable for freshwater mussels (native species of the genera *Unio* and *Anodonta*) are preserved within 83 km of river course and 230 ha of water surfaces.
- Species population is maintained (minimum 28 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR00404_000000 is achieved.
- Good chemical status and good ecological potential/status of water body CDR00105_001331 are maintained.

Target species: Rhodeus amarus

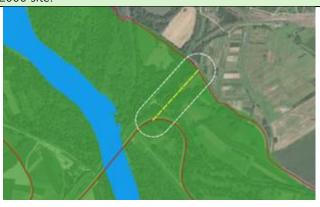
- Prevent habitats degradation in the Drava River watercourse and allow natural processes including erosion and vegetation succession.
- Prevent drainage and melioration of floodplain and wetland areas and habitats..
- Preserve habitat diversity with undefined riverbanks and maintain habitats favourable for freshwater mussels (*Unio* and *Anodonta* genera).
- Wherever possible, bank stabilization and erosion protection should rely on suitable bioengineering techniques. In exceptional cases where this is not feasible, extent of bank reinforcement using stone or comparable materials should be kept to a minimum.
- Fisheries management plans should incorporate prohibition on introduction of non-native fish species.
- Strengthen supervision and control of introduction and spread of alien and invasive alien fish species.
- Encourage removal of alien species using permitted fishing tools without restrictions.

Target species: Rhodeus amarus

- Good chemical status and good ecological potential/status of water bodies CDR00002_235347, CDR00022_000000 are achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 80 m. However, buffer zone of road link Zákány – Gotalovo (100 m from road route) overlaps with edge of one quadrant where target species population should be maintained or preserved.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Target species: Rutilus virgo

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for species ((riffles and gravel riverbeds) are preserved within 83 km of river course
- Species population is maintained (minimum 17 quadrants 1 x 1 km).
- Good (ecological and chemical) status of water bodies CDR00006 000000, CDR00037 000000, CDR00002_150873, CDR00002_199612, CDR00002 228141, CDR00100 000000, CDR00385 000000, CDR00558 000000, CDR00043 000000, CDR00041 000000, CDR00404_000000 is achieved.
- Good chemical status and good ecological potential/status of water body CDR00105 001331 are maintained.
- Good chemical status and good ecological potential/status of water bodies CDR00002 235347, CDR00022 000000, CDR00018 000000, CDR00021 000000, CDR00025_000000 are achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Connectivity between river and all its tributaries is preserved.
- Natural processes, including erosion and natural succession are enabled to allow formation of natural habitats.
- Population of alien and invasive alien species has been controlled through removal using permitted fishing tools without restriction, in accordance with the Freshwater Fisheries Act.

Conservation measures:

- Prevent habitats degradation in the Drava River watercourse and allow natural processes including erosion and vegetation succession.
- Preserve habitat diversity with undefined riverbanks and gravel riffles where the species spawns, as well as favourable water dynamics.
- Do not allow construction of new barriers and obstacles that impede longitudinal migrations along the river course, thereby preserving the possibility for unobstructed migration of adults and dispersion of juvenile individuals.

Position in relation to favourable habitats inside Natura 2000 site:

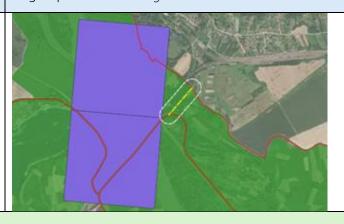
Road link Zákány – Gotalovo is not located within favourable habitats for the target species (blue colour), nor those habitats are inside road link Zákány -Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 70 m. Buffer zone of road link Zákány – Gotalovo (100 m from road route) lies within two quadrants where target species population should be maintained or preserved.

Target species: Rutilus virgo



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target species.

Mitigation measures - if necessary: Mitigation measures are not necessary. Grade with mitigation measure: /

Grade: 0

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- At least 11700 ha of favourable habitats (deciduous and mixed woodlands, floristically rich forest edges, forest clearings, and lowland grasslands) are maintained.
- Species population is preserved in at least one location (Ogorelo polje)
- Presence of oviposition plants and pre-hibernation host plants is preserved, specifically young trees of common ash (*Fraxinus excelsior*) and narrow-leaved ash (*Fraxinus angustifolia*).
- Herbaceous larval host plants essential for caterpillars in spring, such as *Plantago* spp., *Veronica* spp., *Lonicera* spp., and *Melampyrum pratense* is preserved.
- The presence of shrub-like nectar plants for adult butterflies, including *Ligustrum vulgare*, *Viburnum lantana*, and species of the *Scabiosa* genus is preserved.

Target species: Euphydryas maturna

- Preserve forest clearings (meadows, pastures, etc.) and their bushy marginal areas and forest edges.
- Provide voluntary measures (that contribute to environment) for land users, co-financed with EU funds.
- Ensure presence of host plants.

Target species: Euphydryas maturna

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo passes through habitats favourable for the target species (pink colour).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where species population should be maintained or preserved. Nearest quadrant is at the distance of 21 km.

Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species, resulting in a loss of 0,8 ha (0.004%) of favourable habitats in the SCI HR5000014. However, although the loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SCI HR5000014.

Road link Zákány - Gotalovo is not in the area of Ogorelo polje.

Road link Zákány - Gotalovo is located in the area mostly covered with forest and agricultural habitats which are not suitable for host plants essential for target species. Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable.

Mitigation measures - if necessary:

Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.

During construction activities within SCI HR5000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery.

Grade: -1

Grade with mitigation measure: -1

Natura 2000 site: SCI HR5000014 Gornii t	tok Drave
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Target species: Euplagia quadripunctaria*

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for speices (forest edges, forest clearings and overgrown grassland areas (NKS C., D. & E.)) are maintained in zone of 12000 ha.
- Favourable habitats for species (grasslands NKS C.) are maintained in zone of 1600 ha.
- Favourable habitats for species (overgrown grassland areas (NKS D.)) are maintained in zone of 890 ha.

3 1 1 3 1 1

- Preserve forest clearings (meadows, pastures, etc.) and their bushy marginal areas and forest edges.
- Ensure presence of host plants.

Natura 2000 site: SCI HR5000014 Gornji tok Drave Favourable habitats for species (forest edges, forest clearings (NKS E.)) are maintained in zone of 9500 ha. Species population is preserved in at least 1 location (Kopričancev jarak armband near Bukevje). The presence of host plants from the genera Epilobium, Trifolium, Lotus, Lamium, and Senecio are preserved.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo passes through habitats favourable for the target species (purple colour).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where species population should be maintained or preserved. Nearest quadrant is at the distance of 16 km

Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species, resulting in a loss of 0,8 ha (0.004%) of favourable habitats in the SCI HR5000014. However, although the loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SCI HR5000014.

Road link Zákány - Gotalovo is not in the area of opričancev jarak armband near Bukevje.

Road link Zákány - Gotalovo is located in the area mostly covered with forest and agricultural habitats which are not suitable for host plants essential for target species. Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable.

Mitigation measures - if necessary:

Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.

During construction activities within SCI HR5000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery.

Grade: -1

Target species: Cucujus cinnaberinus

Site specific conservation objectives:

Conservation measures:

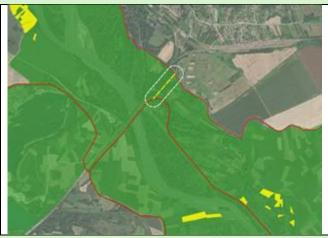
Maintain favourable condition of the target species through following attributes:

- At least 6550 ha of favourble habitats (forests with
- sufficiently large number of stumps, dying woody or freshly dead trees) are maintained.
- At least 1650 ha of crucial habitats of willow and populus (NKS E.1.1.2., E.1.1.3., E.1.2.2.) are maintained.
- Favourable hydrological regime is preserved.
- Species population is maintained (minimum 11 quadrant 1 x 1 km).
- A minimum of 3% of deadwood or dying woody biomass is retained within forest stands.
- In forests managed under an even-aged system. forest stand connectivity is maintained by preserving areas where regeneration will be postponed.

- Preserve favourable habitat conditions in forest ecosystems.
- Retain a minimum of 3% of deadwood or dying woody biomass within forest stands.
- In forests managed under an even-aged system preserve forest stand connectivity by preserving areas where regeneration will be postponed.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (yellow colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route).



Position in relation to quadrants of Natura 2000 site where species population should be maintained or preserved:

Road link Zákány – Gotalovo is not located within quadrants where target species population should be maintained or preserved. Nearest quadrant is at the distance of 10.5 km.

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Grade: 0

Road link Zákány - Gotalovo is not located within quadrants where target species population should be maintained or preserved.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Grade with mitigation measure: /

Mitigation measures are not necessary.

Target habitat type: Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli (9160)

Site specific conservation objectives:

Conservation measures:

Maintain favourable condition of the target habitat type through following attributes:

- Preserve favourable hydrological regime (favourable groundwater level).
- At least 3320 ha of habitat type area is maintained.
- Limit usage of plant protection products and mineral fertilizers in forest management.
- Favourable hydrological regime (surface waters and groundwater connection and soil saturation with water to a depth of 250 cm) is preserved.
- Ensure that forest reproductive material used for sowing or planting consists of native species typical for the habitat type.
- Characteristic species of this habitat type are preserved.
- Preserve forest clearings i.e. meadows and pastures within forest complexes.

- Forest clearings are preserved.

- Preserve favourable proportion of oak stands older than 80 years in forests managed under an even-aged system.
- Alien species of trees (Acer negundo, Ailanthus altissima and Robinia pseudoacacia) and especially Amorpha fruticosa are not present at habitat type
- Remove invasive alien species.
- In forests managed under an even-aged system, at least 40% of oak stands older than 80 years is preserved.
- Removal of Amorpha fruticosa in forests should be carried out during forest regeneration and restoration activities. To prevent spreading of Amorpha fruticosa maintaining a dense forest canopy is necessary. Proper disposal of removed plant material is required.
- Preserve plant species characteristic for habitat type.

Position in relation to the habitat type zone inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within distribution range of the target habitat type (yellow colour). Road link Zákány – Gotalovo is located 8 km from the nearest distribution range of the target habitat type.



Impact assessment:

Road link Zákány - Gotalovo is located outside of distribution range of the target habitat type and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Due to distance between road link Zákány – Gotalovo and nearest distribution range of the target habitat type, there is no impact on target habitat type.

Grade: 0

Mitigation measures - if necessary:

Grade with mitigation measure: /

Mitigation measures are not necessary.

Target habitat type: Alpine rivers and their ligneous vegetation with *Myricaria germanica* (3230)

Site specific conservation objectives:

Achieve favourable condition of the target habitat type through following attributes:

- Habitat type is maintained within 83 km of river course.
- Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00037_000000, CDR00002_150873, CDR00002_199612, CDR00002_228141, CDR00100_000000, CDR00385_000000, CDR00558_000000, CDR00043_000000, CDR00041_000000, CDR00404_000000 is achieved.
- Good chemical status and good ecological potential/status of water bodies
 CDR00002_235347, CDR00022_000000, CDR00018_000000, CDR00021_000000, CDR00025_000000 is achieved.
- Characteristic species of this habitat type are preserved.

Conservation measures:

Preserve favorable habitat conditions by preserving natural gravel banks and riverbanks with characteristic species of the habitat type.

Position in relation to the habitat type zone inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within distribution range of the target habitat type (blue colour). Road link Zákány – Gotalovo is located 170 m from the nearest distribution range of the target habitat type.



Grade: 0

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target habitat type.

Mitigation measures - if necessary: Mitigation measures are not necessary.

Target habitat type: Rivers with muddy banks with *Chenopodion rubri* p.p. and *Bidention* p.p. vegetation (3270)

Site specific conservation objectives:

Maintain favourable condition of the target habitat type through following attributes:

- Habitat type is maintained within 83 km of river course.
- Natural gently sloping riverbanks exposed to flooding are preserved within 79 km of the river course, supporting development of pioneer plant vegetation, specifically the *Chenopodion rubri* and *Bidention* alliances.
- Characteristic species of this habitat type are preserved.

Conservation measures:

 Preserve favourable habitat conditions by maintaining riverbanks in their natural state and exposed to flooding.

Position in relation to the habitat type zone inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within distribution range of the target habitat type (blue colour). Road link Zákány – Gotalovo is located 170 m from the nearest distribution range of the target habitat type.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and has no impact on target habitat type.

 $\label{eq:measures - if necessary:} \label{eq:measures - if necessary:}$

Mitigation measures are not necessary.

Grade: 0

Natura 2000 site: SCI HR5000014 Gornji tok Drave Target h Magnopo Site specific conservation objectives: Maintain favourable condition of the target habitat

Maintain favourable condition of the target habitat type through following attributes:

- At least 340 ha of habitat type area is maintained.
- Integrity of all side channels (distributaries) and oxbow lakes, as well as their connection to the main river are maintained.
- pH > 7 of water is maintained.
- Characteristic species of this habitat type are preserved.

Target habitat type: Natural eutrophic lakes with Magnopotamion or Hydrocharition type vegetation (3150)

- Conservation measures:
- Preserve natural and artificial water surfaces (standing waters and slow-running waters) and characteristic species of habitat type.
- Preserve connectivity of oxbow lakes with river.

Position in relation to the habitat type zone inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within distribution range of the target habitat type (cyan colour). Road link Zákány – Gotalovo is located 1 km from the distribution range of the target habitat type.



Impact assessment:

Road link Zákány - Gotalovo is located outside of distribution range of the target habitat type and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Due to distance between road link Zákány – Gotalovo and nearest distribution range of the target habitat type, there is no impact on target habitat type.

Grade: 0

Mitigation measures - if necessary: Mitigation measures are not necessary.

Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Target habitat type: Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, *Alnion incanae, Salicion albae*) (91E0*)

Site specific conservation objectives:

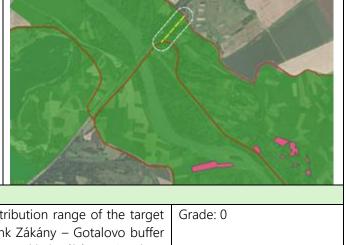
Maintain favourable condition of the target habitat type through following attributes:

- At least 2930 ha of habitat type area is maintained.
- Characteristic species of this habitat type are preserved.
- Favourable hydrological regime is preserved (occasional flooding, high level of groundwater)
- Forest clearings are preserved.
- Alien species of trees (Acer negundo, Ailanthus altissima and Robinia pseudoacacia) and especially Amorpha fruticosa are not present at habitat type area.

- Preserve favourable hydrological regime (occasional flooding, high level of groundwater).
- Ensure that forest reproductive material used for sowing or planting consists of native species typical for the habitat type.
- Limit usage of plant protection products and mineral fertilizers in forest management.
- Preserve plant species characteristic for habitat type.
- Preserve forest clearings i.e. meadows and pastures within forest complexes.
- Ensure that natural forest areas are not replaced with hybrid poplar or non-native species plantations, and

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target habitat type: Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) (91E0*)
	 gradually guide existing poplar stands towards native forest compositions where applicable. Do not drain or cover depressions with woody vegetation characteristic for habitat type (black alder, white willow). Remove invasive alien species. Removal of <i>Amorpha fruticosa</i> in forests should be carried out during forest regeneration and restoration activities. To prevent spreading of <i>Amorpha fruticosa</i> maintaining a dense forest canopy is necessary. Proper disposal of removed plant material is required. During construction of forest infrastructure, ensure unhindered flow of water.
Position in relation to the habitat type zone of Natura 2000 site:	

Road link Zákány – Gotalovo is not located within distribution range of the target habitat type (cyan colour). Road link Zákány – Gotalovo is located 1.5 km from the distribution range of the target habitat type.



Impact assessment: Road link Zákány - Gotalovo is located outside of distribution range of the target habitat type and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Due to distance between road link Zákány – Gotalovo and nearest distribution range of the target habitat type, there is no impact on target habitat type. Mitigation measures - if necessary: Grade with mitigation Mitigation measures are not necessary. measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave	Target habitat type: Lowland hay meadows (<i>Alopecurus</i> pratensis, Sanguisorba officinalis) (6510)
Site specific conservation objectives:	Conservation measures:
 Achieve favourable condition of the target habitat type through following attributes: Habitat type is maintained in zone of 1450 ha. The crucial zone of 37 ha is maintained. Habitat quality for the species has been improved through the removal of woody vegetation. 	 Provide voluntary measures (that contribute to environment) for land users, co-financed with EU funds. Prevent vegetation succession.

- Target habitat type: Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) (6510)
- Woody and shrubby vegetation does not exceed 10 % cover.
- Characteristic species of this habitat type are preserved.
- Alien and invasive alien species do not cover more than 10% of the area.

Position in relation to the habitat type zone inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within distribution range of the target habitat type (pink colour). However, the buffer zone of the planned intervention (100 m from road route) lies within target habitat type. Road link Zákány – Gotalovo itself is located 35 m from the nearest distribution range of the target habitat type



Impact assessment:

The buffer zone (100 m from the planned intervention route) is located within distribution range of the target habitat type, whereas the route of the planned intervention itself does not intersect distribution range of the target habitat type. Considering nature of the road link Zákány – Gotalovo (short section, county road) and due to presence of an existing state road DC41 within the buffer zone of road link Zákány – Gotalovo, conclusion is that there will be no impact on the target habitat type.

Grade: 0

Mitigation measures - if necessary: Mitigation measures are not necessary. Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Target habitat type: Riparian mixed forests of *Quercus* robur, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*) (91F0)

Site specific conservation objectives:

Achieve favourable condition of the target habitat type through following attributes:

- At least 345 ha of habitat type area is maintained.
- Characteristic species of this habitat type are preserved.
- Periodic flooding of area is preserved.
- Forest clearings are preserved.
- In forests managed under an even-aged system, at least 40% of oak stands older than 80 years and at least 20% of ash stands older than 60 years are preserved.

- Preserve favourable hydrological regime and favourable level of groundwater.
- Introduction of alien and invasive alien species is not allowed. Remove alien and invasive alien species if necessary.
- During construction of forest roads ensure unhindered flow of water.
- Ensure that forest reproductive material used for sowing or planting consists of native species typical for the habitat type.

- Target habitat type: Riparian mixed forests of *Quercus* robur, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*) (91F0)
- Alien species of trees (Acer negundo, Ailanthus altissima and Robinia pseudoacacia) and especially Amorpha fruticosa are not present at habitat type area.
- 48 ha of ash stands affected by drying and decay caused by the pathogen *Hymenoscyphus fraxineus* are restored.
- In forests managed under an even-aged system preserve favourable proportion of oak stands older than 80 years and ash stands older than 60 years.
- Remove invasive alien species.
- Removal of Amorpha fruticosa in forests should be carried out during forest regeneration and restoration activities. To prevent spreading of Amorpha fruticosa maintaining a dense forest canopy is necessary. Proper disposal of removed plant material is required.
- Limit usage of plant protection products and mineral fertilizers in forest management.
- Preserve forest clearings i.e. meadows and pastures within forest complexes.
- Preserve plant species characteristic for habitat type.

Position in relation to the habitat type zone inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within distribution range of the target habitat type (yellow colour). Road link Zákány – Gotalovo is located 12 km from the nearest distribution range of the target habitat type.



Impact assessment:

Road link Zákány - Gotalovo is located outside of distribution range of the target habitat type and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Due to distance between road link Zákány - Gotalovo and nearest distribution range of the target habitat type, there is no impact on target habitat type.

Grade: 0

Mitigation measures - if necessary: Mitigation measures are not necessary. Grade with mitigation measure: /

Natura 2000 site: SCI HR5000014 Gornji tok Drave

Target habitat type: Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* (3130)

Site specific conservation objectives:

Maintain favourable condition of the target habitat type through following attributes:

 Habitat type is maintained in a zone of at least 32 ha.

Conservation measures:

- Preserve favourable habitat conditions by maintaining low, gently sloping riverbanks for the development of amphibian communities.

Target habitat type: Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea* (3130)

- Low, gently sloping riverbanks suitable for the development of amphibian communities are maintained.
- Characteristic species of this habitat type are preserved.

Position in relation to the habitat type zone inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within distribution range of the target habitat type (cyan colour). Road link Zákány – Gotalovo is located 20 km from the nearest distribution range of the target habitat type.



Impact assessment:

Road link Zákány - Gotalovo is located outside of distribution range of the target habitat type and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Due to distance between road link Zákány – Gotalovo and nearest distribution range of the target habitat type, there is no impact on target habitat type.

Grade: 0

Mitigation measures - if necessary: Mitigation measures are not necessary. Grade with mitigation measure: /

SPA HR1000014 Gornji tok Drave impact assessment

Table 8: SPA HR1000014 Gornji tok Drave impact assessment

Source of site specific conservation objectives and conservation measure and accompanying data: Republic of Croatia Ministry of Environmental Protection and Green Transition - Institute for Environment and Nature (February 2025)

Abbreviation NKS = National habitat classification

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Actitis hypoleucos
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: The nesting population trend is stable or increasing. A nesting population of at least 195 pairs is maintained. 	 Maintain favourable hydrological regime to preserve nesting habitats. Preserve favourable structure and configuration of the watercourse bank (river gravel and sand banks, islands and banks) and allow natural processes, including erosion

- Suitable nesting habitats (riverine gravel and sandy bars, islands, and shores) are maintained along 85 km of the Drava River course.
- Favourable nesting habitats are maintained in an area of 2190 ha, where they appear in a complex with other habitat types (riverine gravel and sandy bars, islands, and shores; NKS A.1.1., A.2.3., A.2.7.).
- 50 ha of crucial nesting habitats (riverine gravel and sandy bars, islands, and shores; NKS A.2.7.) are maintained.
- Crucial nesting habitats (riverine gravel and sandy bars, islands, and shores; NKS A.2.7.) are maintained within an area of 190 ha, where they appear in a complex with other habitat types.
- Good status (ecological and chemical) of water bodies CDR00002_150873, CDR00002_199612, CDR00002_228141 and CDR00012_000000 is achieved.
- Good ecological potential / ecological status and good chemical status of water body CDR00002_235347 are achieved.

Target species: Actitis hypoleucos

- Ensure sufficient area of river islands for nesting of the target population..

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range (purple colour) of the favourable habitat.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect freshwater habitats such as watercourses, standing waters and riverbank areas.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Target species: Alcedo atthis

Site specific conservation objectives:

Conservation measures:

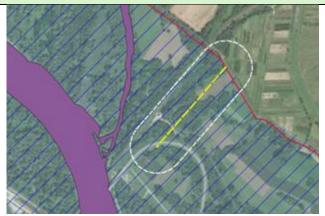
Maintain favourable condition of the target species through following attributes:

- The nesting population trend is stable or increasing.
- A nesting population of at least 40 pairs is maintained.
- Favourable habitats (riverbanks, areas alongside slow-running waters and standing waters) are maintained on 385 ha of standing waters and watercourse banks.
- 165 km of crucial habitats for nesting are maintained on known territories.
- 2060 ha of freshwater habitats suitable for feeding are maintained (NKS A.1.1., A.1.2., A.2.2. and A.2.3.).
- Good status (ecological and chemical) of water CDR00002_150873, CDR00002_199612, bodies CDR00002 228141 and CDR00012 000000 achieved.
- Good ecological potential / ecological status and good status chemical of water body CDR00002 235347 are achieved.

- Preserve steep and vertical sections of riverbanks without vegetation, suitable for creating nesting holes.
- Maintain as much vegetation as possible in the riverbed and on the riverbanks and carry out tree and shrub removal only if the river flow is impaired in a way that poses a threat to human health and property, and only during the period from 1 September to 31 January. These works should not be conducted simultaneously on both riverbanks but alternately.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány - Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány - Gotalovo buffer zone (100 m from road route). Road link Zákány -Gotalovo is located 160 m from the nearest distribution range (purple colour) of the favourable habitat.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Grade: 0

Road link Zákány - Gotalovo is not in the area of surface water bodies (CDR) counted within attributes. Road link Zákány - Gotalovo does not intersect freshwater habitats such as watercourses, standing waters and riverbank areas.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Target species: Mareca strepera

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- The nesting population trend is stable or increasing.
- A nesting population of at least 2 pairs is maintained.
- 590 ha of habitats favourable for nesting (freshwaters with rich wetland vegetation especially river branches NKS A.1. and A.3.). are maintained.
- 100 ha of crucial habitats on known nesting sites in river branches around Repeš are maintained.

Conservation measures:

- Preserve favourable habitat conditions of freshwater and wetland habitats.
- Mowing of coastal vegetation (within a 20 m zone from banks) of standing and flowing streams should be carried out outside the nesting season (work should be carried out between 15 August and 15 March), with the exception of feeding lines, which should be maintained throughout the entire growing season, in a way that does not destroy nests.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 950 m from the nearest distribution range (yellow colour) of the favourable habitat.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Road link Zákány - Gotalovo does not intersect watercourses and riverbank areas. Road link Zákány - Gotalovo is not located in the area of known nesting sites in the river branches around Repaš.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SPA HR1000014 Gornji tok Drave

Target species: Ardea purpurea

Conservation measures:

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- The migratory population trend is stable or increasing.
- 2390 ha of freshwater habitats suitable for feeding (wetlands with reed beds: NKS A. except A.2.4.) are maintained.

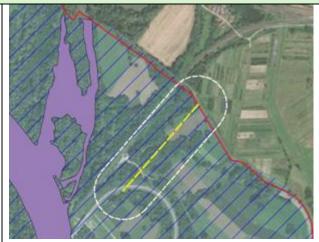
- Preserve favourable hydrological regime and habitat conditions of wetland habitats.

Mitigation measures are not necessary.

Target species: Ardea purpurea

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range (purple colour) of the favourable habitat.



measure: /

Impact assessment: Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect watercourses and wetland habitats. Taking into account all the above, there is no impact on target species. Mitigation measures - if necessary: Grade with mitigation

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Botaurus stellaris
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: The nesting population trend is increasing. The migratory population trend is stable or increasing. The trend of wintering population is stable or increasing. A nesting population of at least 2 singing males is preserved. 60 ha of reed beds and bulrush habitats suitable for nesting are maintained. Favourable habitat (wetlands with reed beds; NKS A.4.1.) are maintained within a 1250 ha zone where it occurs in a complex with other habitat types. 30 ha of crucial habitats on known nesting site Čambina pond are maintained. 	- Preserve favourable hydrological regime and habitat conditions of wetland habitats.

Target species: Botaurus stellaris

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 215 m from the nearest distribution range (pink colour) of the favourable habitat.



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Grade: 0

Road link Zákány - Gotalovo does not intersect wetland habitats.

Road link Zákány - Gotalovo is not in the area of Čambina pond.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

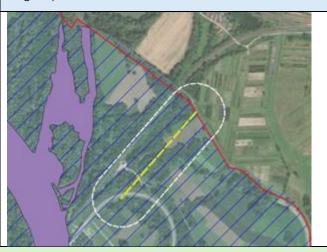
Grade with mitigation measure: /

Site specific conservation objectives: Maintain favourable condition of the target species through following attributes: The migratory population trend is stable or increasing. The trend of wintering population is stable or increasing. Wintering population of at least 50 birds is maintained. Wintering population of at least 50 birds is maintained. 2390 ha of freshwater habitats suitable for feeding (freshwater habitats with sufficient aquatic and wetland vegetation: NKS A. except A.2.4.) are	Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Casmerodius albus
through following attributes: - The migratory population trend is stable or increasing. - The trend of wintering population is stable or increasing. - Wintering population of at least 50 birds is maintained. - 2390 ha of freshwater habitats suitable for feeding (freshwater habitats with sufficient aquatic and wetland vegetation: NKS A. except A.2.4.) are	Site specific conservation objectives:	Conservation measures:
maintained.	 through following attributes: The migratory population trend is stable or increasing. The trend of wintering population is stable or increasing. Wintering population of at least 50 birds is maintained. 2390 ha of freshwater habitats suitable for feeding (freshwater habitats with sufficient aquatic and 	, , ,

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range (purple colour) of the favourable habitat.

Target species: Casmerodius albus



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Road link Zákány - Gotalovo does not intersect freshwater habitats with significant wetland vegetation.

Taking into account all the above, there is no impact on target species.

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade: 0

Grade with mitigation measure: /

Natura 2000 site: SPA HR1000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- The nesting population trend is stable or increasing.
- A nesting population of at least 25 pairs is maintained.
- 13070 ha of open mosaic habitats (open grasslands, mosaic agricultural areas, wetland habitats: NCS A., C., I., and J.) are maintained

Target species: Ciconia ciconia

Conservation measures:

- Preserve favourable habitat conditions through voluntary measures for land users, co-financed with EU funds.
- Implement protective measures on poles with nests to prevent bird fatalities from electric shocks..
- Electric power infrastructure should be planned, upgraded, and constructed in a manner that avoids bird collisions with high-voltage power lines and prevents electrocution on medium-voltage power lines.
- On existing power line sections and pole structures identified as posing a higher risk of collision and/or electrocution, appropriate technical mitigation measures shall be implemented to prevent further bird mortality.

Target species: Ciconia ciconia

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo passes through habitats favourable for the target species (pink colour).



Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species (open grasslands, mosaic agricultural areas, wetland habitats), resulting in a loss of 0,342 ha (0.0026%) of favourable habitats in the SPA HR1000014. However, although loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SPA HR1000014. Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable.

Grade: -1

Mitigation measures - if necessary:

During construction activities within SPA HR1000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery. The construction of new or the widening of existing access routes for machinery and vehicles shall be undertaken only if strictly necessary, in order to preserve the integrity of the original habitat to the greatest extent possible.

Grade with mitigation measure: -1

Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.

Natura 2000 site: SPA HR1000014 Gornji tok Drave

Target species: Ciconia nigra

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

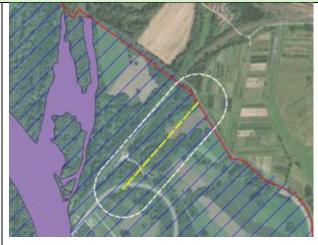
- The nesting population trend is stable or increasing.
- A nesting population of at least 5 pairs is maintained.
- 6430 ha of forest habitats favourable for nesting (old forests with wetland habitats: NKS E.) are maintained.
- At least 430 ha of ash forests have been restored.
- 2390 ha of freshwater habitats suitable for feeding are maintained (freshwater habitats; NKS A. except A.2.4.)
- In forests managed under an even-aged system, at least 40% of *Quercus robur* stands older than 80 years

Conservation measures:

- Monitoring of recorded nests should be carried out during the period from 1 April to 31 May.
- Ensure peace in a 100 m zone around all recorded nests during monitoring period.
- Upon identifying an active nest, ensure peace within a 100-meter zone around the tree with nest, and do not carry out any works until 15 August of the same year
- In oak forests preserve favourable proportion of oak stands older than 80 years and in ash forests preserve

and at least 25% of ash stands older than 60 years are maintained. favourable proportion of ash stands older than 60 years. Preserve favourable habitat conditions of aquatic and wetland habitats. Electric power infrastructure should be planned, upgraded, and constructed in a manner that avoids bird collisions with high-voltage power lines and prevents electrocution on medium-voltage power lines. On existing power line sections and pole structures identified as posing a higher risk of collision and/or electrocution, appropriate technical mitigation measures shall be implemented to prevent further bird mortality.	Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Ciconia nigra
		years. Preserve favourable habitat conditions of aquatic and wetland habitats. Electric power infrastructure should be planned, upgraded, and constructed in a manner that avoids bird collisions with high-voltage power lines and prevents electrocution on medium-voltage power lines. On existing power line sections and pole structures identified as posing a higher risk of collision and/or electrocution, appropriate technical mitigation measures shall be implemented to prevent further

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range (purple colour) of the favourable habitat.



Impact assessment:			
Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect wetland and forest habitats suitable and crucial for nesting and feeding. Taking into account all the above, there is no impact on target species.	Grade: 0		
Mitigation measures - if necessary:	Grade	with	mitigation
Mitigation measures are not necessary.	measure:	/	

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Circus cyaneus
Site specific conservation objectives:	Conservation measures:
Maintain favourable condition of the target species	- Preserve favourable habitat conditions through
through following attributes:	voluntary measures for land users, co-financed with
- The trend of wintering population is stable or	EU funds.
increasing.	- If necessary, remove woody vegetation from
- Wintering population of at least 4 birds is maintained.	overgrown grassland areas.

Natura 2000 site: SPA HR1000014 Gornji tok Drave Target species: Circus cyaneus 10920 ha of open mosaic habitats (NKS A.4., C., I.) are Electric power infrastructure should be planned, maintained. upgraded, and constructed in a manner that avoids 1560 ha of grassland habitats (NKS C.) crucial for bird collisions with high-voltage power lines and feeding are maintained. prevents electrocution on medium-voltage power On existing power line sections and pole structures identified as posing a higher risk of collision and/or electrocution, appropriate technical mitigation measures shall be implemented to prevent further bird mortality. Position in relation to favourable habitats inside Natura 2000 site: Road link Zákány – Gotalovo passes through habitats favourable for the target species (green colour). Impact assessment: Road link Zákány - Gotalovo passes through favourable habitats for the target species Grade: -1 (open grasslands, mosaic agricultural areas, wetland habitats), resulting in a loss of 0,342 ha (0.0031%) of favourable habitats in the SPA HR1000014. However, although loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SPA HR1000014. Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable. Mitigation measures - if necessary: Grade with mitigation During construction activities within SPA HR1000014, a minimal working corridor measure: -1 should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery. The construction of new or the widening of existing access routes for machinery and vehicles shall be undertaken only if strictly necessary, in order to preserve the integrity of the original habitat to the greatest extent possible. Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.

Target species: Leiopicus medius

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- The nesting population trend is stable or increasing.
- A nesting population of at least 125 pairs is maintained.
- 6430 ha of forest habitats (NKS E.) suitable for nesting are maintained.
- 2660 ha of oak forests crucial for nesting are maintained.
- At least 430 ha of ash forests have been restored.
- In forests managed under an even-aged system, at least 40% of *Quercus robur* stands older than 80 years and at least 25% of ash stands older than 60 years are maintained.
- Forests areas under an even-aged system and an uneven-age system and older than 80 years (oak) or 60 years (ash) contain at least 10 m³/ha of dry wood mass.

Conservation measures:

- Preserve favourable proportion of oak stands older than 80 years in oak forests.
- Forests areas under an even-aged system and an uneven-age system and older than 80 years (oak) or 60 years (ash) should contain at least 10 m³/ha of dry wood mass. During timber marking, trees with cavities that house burrowing birds should be retained.
- Retain to the greatest possible extant fruit-bearing trees in forests.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 230 m from the nearest distribution range of the favourable habitat (brown colour).



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect forest habitats suitable and crucial for nesting. Therefore, there is no impact.

Grade: 0

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade with mitigation measure: /

Target species: Dryocopus martius

Site specific conservation objectives:

Conservation measures:

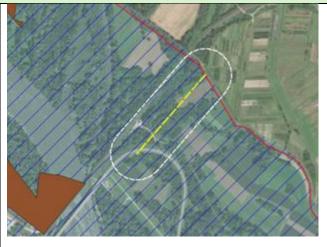
Maintain favourable condition of the target species through following attributes:

- The nesting population trend is stable or increasing.
- A nesting population of at least 4 pairs is maintained.
- 6430 ha of forest habitats (NKS E.) suitable for nesting are maintained.
- At least 430 ha of ash forests have been restored.
- In forests managed under an even-aged system, at least 40% of *Quercus robur* stands older than 80 years and at least 25% of ash stands older than 60 years are maintained.
- Forests areas under an even-aged system and an uneven-age system and older than 80 years (oak) or 60 years (ash) contain at least 10 m³/ha of dry wood mass.

- Preserve favourable proportion of oak stands older than 80 years in oak forests.
- Forests areas under an even-aged system and an uneven-age system and older than 80 years (oak) or 60 years (ash) should contain at least 10 m³/ha of dry wood mass. During timber marking, trees with cavities that house burrowing birds should be retained.
- Retain to the greatest possible extant fruit-bearing trees in forests.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány -Gotalovo is located 230 m from the nearest distribution range of the favourable habitat (brown colour).



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect forest habitats suitable and crucial for nesting. Therefore, there is no impact.

Grade: 0

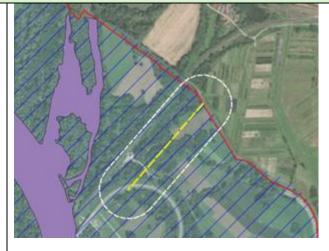
Mitigation measures - if necessary:

with Grade mitigation measure: /

Mitigation measures are not necessary.

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Egretta garzetta		
Site specific conservation objectives:	Conservation measures:		
 Maintain favourable condition of the target species through following attributes: The migratory population trend is stable or increasing. 2390 ha of freshwater habitats suitable for feeding are maintained (freshwater habitats; NKS A. except A.2.4.). 	- Preserve favourable hydrological regime and habitat conditions of wetland habitats		

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 215 m from the nearest distribution range of the favourable habitat (purple colour).

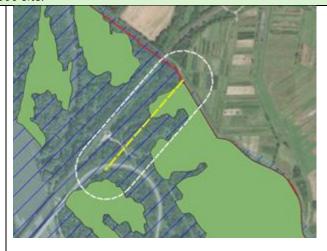


Impact assessment:			
Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route).	Grade: ()	
Road link Zákány - Gotalovo does not intersect wetland habitats.			
Taking into account all the above, there is no impact on target species.			
Mitigation measures - if necessary:	Grade	with	mitigation
Mitigation measures are not necessary.	measure	e: /	

	,
Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Falco columbarius
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: The trend of wintering population is stable or increasing. 10920 ha of open mosaic habitats (NKS A.4., C., I.) are maintained. 	 Preserve favourable habitat conditions through voluntary measures for land users, co-financed with EU funds. Encourage extensive agriculture with minimal use of mineral fertilizers and plant protection products, as well as year-round grazing. Electric power infrastructure should be planned, upgraded, and constructed in a manner that avoids bird collisions with high-voltage power lines and prevents electrocution on medium-voltage power lines. On existing power line sections and pole structures identified as posing a higher risk of collision and/or electrocution, appropriate technical mitigation

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Falco columbarius
	measures shall be implemented to prevent further bird mortality.

Road link Zákány – Gotalovo passes through habitats favourable for the target species (green colour).



Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species (open grasslands, mosaic agricultural areas, wetland habitats), resulting in a loss of 0,342 ha (0.0031%) of favourable habitats in the SPA HR1000014. However, although loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SPA HR1000014. Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable.

Grade: -1

Mitigation measures - if necessary:

During construction activities within SPA HR1000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery. The construction of new or the widening of existing access routes for machinery and vehicles shall be undertaken only if strictly necessary, in order to preserve the integrity of the original habitat to the greatest extent possible.

Grade with mitigation measure: -1

Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.

Natura 2000 site: SPA HR1000014 Gornji tok Drave Target species: Ficedula albicollis Conservation measures: Maintain favourable condition of the target species through following attributes: The nesting population trend is stable or increasing. Target species: Ficedula albicollis Conservation measures: Preserve favourable proportion of oak stands older than 80 years in oak forests. Forests areas under an even-aged system and an

retained.

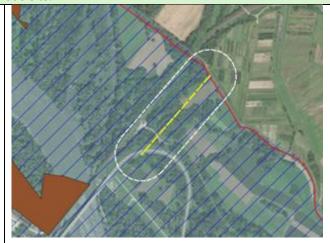
- A nesting population of at least 800 pairs is maintained.
 6430 ha of forest habitats (NKS E.) suitable for nesting are maintained.
- 2660 ha of oak forests crucial for nesting are maintained.
- Forests areas under an even-aged system and an uneven-age system and older than 80 years (oak) or 60 years (ash) should contain at least 10 m³/ha of dry wood mass. During timber marking, trees with cavities that house burrowing birds should be

- Target species: Ficedula albicollis
- At least 430 ha of ash forests have been restored.
- In forests managed under an even-aged system and an uneven-age system older than 80 years (oak) or 60 years (ash) contain at least 10 m³/ha of dry wood mass.
- Forests areas under an even-aged system and an uneven-age system and older than 80 years (oak) or 60 years (ash) contain at least 10 m³/ha of dry wood mass.

Retain to the greatest possible extant fruit-bearing trees in forests.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány -Gotalovo is located 230 m from the nearest distribution range of the favourable habitat (brown colour).



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect forest habitats suitable and crucial for nesting. Therefore, there is no impact.

Grade: 0

Mitigation measures - if necessary:

Grade with mitigation measure: /

Mitigation measures are not necessary.

Natura 2000 site: SPA HR1000014 Gornji tok Drave

Target species: Haliaeetus albicilla

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

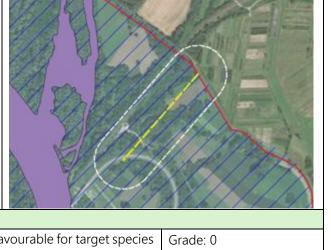
- The nesting population trend is stable or increasing.
- A nesting population of at least 6 pairs is maintained.
- 6430 ha of forest habitats (NKS E.) suitable for nesting are maintained.
- 3220 ha of floodplain forests crucial for nesting (NKS E.1. and E.2.) are maintained.
- At least 430 ha of ash forests have been restored.
- 2390 ha of freshwater habitats suitable for feeding are maintained (freshwater habitats; NKS A. except A.2.4.).
- In forests managed under an even-aged system, at least 40% of *Quercus robur* stands older than 80 years

Conservation measures:

- Monitoring of recorded nests should be carried out during the period from 1 January to 31 March.
- Ensure peace in a 100 m zone around all recorded nests during monitoring period.
- Upon identifying an active nest, ensure peace within a 100-meter zone around tree containing nest and do not carry out any works until 30 June of the same year.
- Forest renewal in the 100-meter zone around the tree with nest should be carried out after the nest has been inactive for five years. If the nest is located in stands older than 140 years, the renewal

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Haliaeetus albicilla
and at least 25% of ash stands older than 60 years are maintained.	 of the entire area should be carried out after the existence of an alternative nest is confirmed In oak forests preserve favourable proportion of oak stands older than 80 years and in ash forests preserve favourable proportion of ash stands older than 60 years. Preserve favourable hydrological regime and habitat conditions of wetland habitats. Electric power infrastructure should be planned, upgraded, and constructed in a manner that avoids bird collisions with high-voltage power lines and prevents electrocution on medium-voltage power lines. On existing power line sections and pole structures identified as posing a higher risk of collision and/or electrocution, appropriate technical mitigation measures shall be implemented to prevent further bird mortality.
Position in relation to favourable habitats inside Natura 200	00 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range of the favourable habitat (purple colour).



Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats favourable for target species	Grade: 0
and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from	
road route). Road link Zákány - Gotalovo does not intersect freshwater habitats and	
forest habitats suitable for nesting and feeding. Therefore, there is no impact.	
Mitigation measures - if necessary:	Grade with mitigation
Mitigation measures are not necessary.	measure: /

Target species: <i>Ixobrychus minutus</i>
Conservation measures:
 Preserve favourable hydrological regime and habitat conditions of wetland habitats.
C

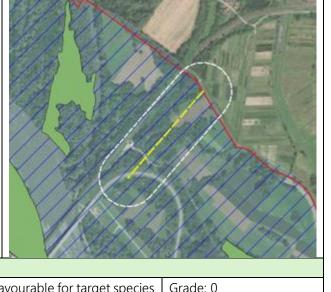
Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range of the favourable habitat (yellow colour).



Impact assessment:			
Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect freshwarer and wetland habitats. Therefore, there is no impact.	Grade: ()	
Mitigation measures - if necessary:	Grade	with	mitigation
Mitigation measures are not necessary.	measure	e: /	

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Luscinia svecica
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: The nesting population trend is stable or increasing. The migratory population trend is stable or increasing. A nesting population of at least 22 pairs is maintained. 1350 ha of favourable habitats (wetland vegetation along waters, especially reed beds: NKS A.4. and D.1.1.) are maintained. 	- Preserve favourable hydrological regime and habitat conditions of wetland habitatas.

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 230 m from the nearest distribution range of the favourable habitat (green colour).



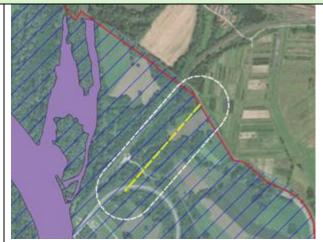
Impact assessment: Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect wetland habitats. Therefore, there is no impact. Mitigation measures - if necessary: Mitigation measures are not necessary. Grade with mitigation measure: /

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Nycticorax nycticorax
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: The migratory population trend is stable or increasing. 2390 ha of freshwater habitats suitable for feeding (wetlands with reed beds: NKS A. except A.2.4.) are maintained. 	- Preserve favourable hydrological regime and habitat conditions of wetland habitats.

Target species: Nycticorax nycticorax

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range of the favourable habitat (purple colour).



Grade: 0

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect wetland habitats. Therefore, there is no impact.

Grade with mitigation measure: /

Mitigation measures - if necessary: Mitigation measures are not necessary.

Natura 2000 site: SPA HR1000014 Gornji tok Drave

Target species: Pernis apivorus

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- The nesting population trend is stable or increasing.
- A nesting population of at least 2 pairs is maintained.
- 6430 ha of forest habitats (NKS E.) suitable for nesting are maintained.
- At least 430 ha of ash forests have been restored.
- In forests managed under an even-aged system, at least 40% of *Quercus robur* stands older than 80 years and at least 25% of ash stands older than 60 years are maintained.

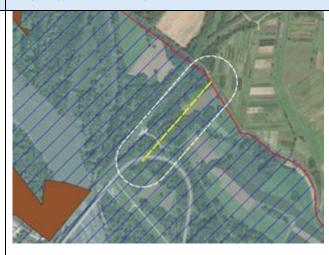
Conservation measures:

- Preserve favourable proportion of oak stands older than 80 years in oak forests.
- Electric power infrastructure should be planned, upgraded, and constructed in a manner that avoids bird collisions with high-voltage power lines and prevents electrocution on medium-voltage power lines.
- On existing power line sections and pole structures identified as posing a higher risk of collision and/or electrocution, appropriate technical mitigation measures shall be implemented to prevent further bird mortality.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány - Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány -Gotalovo is located 230 m from the nearest distribution range of the favourable habitat (brown colour).

Target species: Pernis apivorus



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect forest habitats suitable and crucial for nesting. Therefore, there is no impact.

> Grade with

mitigation

Grade: 0

Mitigation measures - if necessary:

Mitigation measures are not necessary. measure: /

Natura 2000 site: SPA HR1000014 Gornji tok	Drave
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Target species: Microcarbo pygmeus

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- The wintering population trend is stable or increasing.
- A wintering population of at least 5 birds (on average) is preserved.
 - 2060 ha of freshwater habitats rich with fish and suitable for feeding (NKS A.1.1., A.1.2., A.2.2. and A.2.3.) are maintained.

Conservation measures: Preserve favourable hydrological regime and habitat conditions.

Position in relation to favourable habitats inside Natura 2000 site:

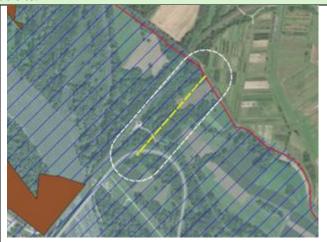
Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány -Gotalovo is located 160 m from the nearest distribution range (of the favourable habitat (purple colour).



Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Microcarbo	pygmeus		
Impact assessment:				
Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect freshwater		Grade: 0		
habitats such as watercourses and stan waters.				
Therefore, there is no impact.				
Mitigation measures - if necessary:		Grade	with	mitigation
Mitigation measures are not necessary		measure.	/	

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Picus canus
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: The nesting population trend is stable or increasing. A nesting population of at least 9 pairs is maintained. 6430 ha of forest habitats (NKS E.) suitable for nesting are maintained. At least 430 ha of ash forests have been restored. In forests managed under an even-aged system, at least 40% of <i>Quercus robur</i> stands older than 80 years and at least 25% of ash stands older than 60 years are maintained Forests areas under an even-aged system and an uneven-age system and older than 80 years (oak) or 60 years (ash) contain at least 10 m³/ha of dry wood mass. Position in relation to favourable habitats inside Natura 20 	 Preserve favourable proportion of oak stands older than 80 years in oak forests. Forests areas under an even-aged system and an uneven-age system and older than 80 years (oak) or 60 years (ash) should contain at least 10 m³/ha of dry wood mass. During timber marking, trees with cavities that house burrowing birds should be retained. Retain to the greatest possible extant fruit-bearing trees in forests.

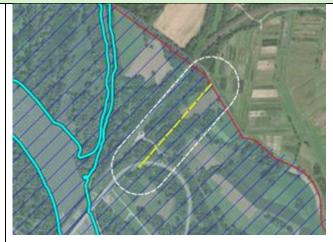
Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány -Gotalovo is located 230 m from the nearest distribution range of the favourable habitat (brown colour).



Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Picus canus			
Impact assessment:				
Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect forest habitats suitable and crucial for nesting. Therefore, there is no impact.		Grade: (0	
Mitigation measures - if necessary:		Grade	with	mitigation
Mitigation measures are not necessary.		measur	e: /	

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: <i>Riparia riparia</i>	
Site specific conservation objectives:	Conservation measures:	
 Maintain favourable condition of the target species through following attributes: The nesting population trend is increasing. A nesting population of at least 1350 pairs is maintained. Favourable habitats (primarily steep, eroded riverbanks) are maintained along 385 km of shorelines of standing waters and waterways, especially along 196 km of the Drava River. Favourable habitats are maintained along 6 km of known nesting sites along the Drava River. Good status (ecological and chemical) of water bodies CDR00002_150873, CDR00002_199612, CDR00002_228141 and CDR00012_000000 is achieved. Good ecological potential / ecological status and good chemical status of water body CDR00002_235347 are achieved. 	 Maintain favorable hydrological regime to preserve nesting habitats. Preserve favourable structure and configuration of the watercourse banks and allow natural processes, including erosion. 	

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range of the favourable habitat (blue line).



Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route).

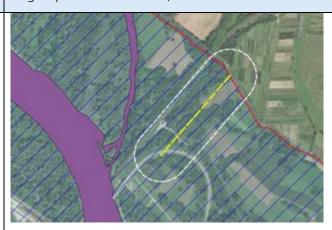
Grade: 0

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: <i>Riparia ripai</i>	ria
Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and riverbank areas and has no impact on target species.		
Mitigation measures - if necessary:		Grade with mitigation measure:
Mitigation measures are not necessary.		/

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Sternula albifrons
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: The nesting population trend is stable increasing. A nesting population of at least 5 pairs is maintained. Favourable habitats for nesting (gravel and sand river islands and bars; islands on gravel beds) are maintained along 85 km of the Drava River. Favourable habitats for nesting (gravel and sand river islands and bars; islands on gravel beds) are maintained in an area of 2190 ha, where they appear in a complex with other habitat types (NKS A.1.1., A.2.3., A.2.7.). Crucial nesting habitats (gravel and sand river islands and bars; islands on gravel beds; NKS A.2.7.) are maintained on 50 ha. Crucial nesting habitats (gravel and sand river islands and bars; islands on gravel beds; NKS A.2.7.) are maintained within an area of 190 ha, where they appear in a complex with other habitat types. Good status (ecological and chemical) of water bodies CDR00002_150873, CDR00002_199612, CDR00002_228141 and CDR00012_000000 is achieved. Good ecological potential / ecological status and good chemical status of water body CDR00002_235347 are achieved. Position in relation to favourable habitats inside Natur 	 Maintain favorable hydrological regime to preserve nesting habitats. Preserve favourable structure and configuration of the watercourse banks and allow natural processes, including erosion. Ensure sufficient area of river islands for nesting of target species population. Do not visit nesting islands during nesting period from 20 April to 31 August.

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range of the favourable habitat (purple colour).

Target species: Sternula albifrons



Grade: 0

Impact assessment:

Road link Zákány - Gotalovo is located outside of habitats favourable for target species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route).

Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and riverbank areas and has no impact on target species.

Mitigation measures - if necessary: Mitigation measures are not necessary. Grade with mitigation measure: /

Natura 2000 site: SPA HR1000014 Gornji tok Drave

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- The nesting population trend is stable or increasing.
- A nesting population of at least 70 pairs is maintained.
- Favourable habitats for nesting (gravel and sand river islands and bars; islands on gravel beds) are maintained along 85 km of the Drava River.
- Favourable habitats for nesting (gravel and sand river islands and bars; islands on gravel beds) are maintained within an area of 2,190 ha, where they appear in a complex with other habitat types (NKS A.1.1., A.2.3., A.2.7.).
- Crucial nesting habitats (gravel and sand river islands and bars; islands on gravel beds; NKS A.2.7.) are maintained on 50 ha.

Target species: Sterna hirundo

Conservation measures:

- Maintain favorable hydrological regime to preserve nesting habitats.
- Preserve favourable structure and configuration of the watercourse banks and allow natural processes, including erosion.
- Ensure sufficient area of river islands for nesting of target species population.
- Do not visit nesting islands during nesting period from 20 April to 31 August.

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Natura 2000 site: SPA HR1000014 Gornji tok Drave - Crucial nesting habitats (gravel and sand river islands and bars; islands on gravel beds; NKS A.2.7.) are maintained within an area of 190 ha, where they appear in a complex with other habitat types. - Good status (ecological and chemical) of water bodies CDR00002_150873, CDR00002_199612, CDR00002_228141 and CDR00012_000000 is achieved. - Good ecological potential / ecological status and good chemical status of water body

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located within favourable habitats for the target species, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m from the nearest distribution range of the favourable habitat (purple colour).

CDR00002_235347 are achieved.



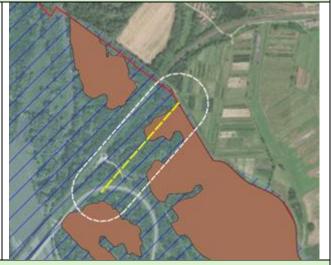
Impact assessment: Road link Zákány - Gotalovo is located outside of habitats favourable for target Grade: 0 species and those habitats are not inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road infrastructure i.e. road transport primarily poses a threat to groundwater, so collision with attributes related to surface water bodies CDR (rivers and streams) and CDS (lakes) is not expected even in a case of closest one CDR00002_199612 Drava. Road link Zákány - Gotalovo does not intersect watercourses and riverbank areas and has no impact on target species. Mitigation measures - if necessary: Grade with mitigation Mitigation measures are not necessary measure: /

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Target species: Curruca nisoria
Site specific conservation objectives:	Conservation measures:
Maintain favourable condition of the target species	- Preserve favourable habitat conditions through
through following attributes:	voluntary measures for land users, co-financed with
- The nesting population trend is stable or increasing.	EU funds.
- A nesting population of at least 80 pairs is maintained.	
- 10010 ha of open and semi-open mosaic habitats (NKS	
C., I.1.8., I.2.1. and I.5.) are maintained.	

Target species: Curruca nisoria

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo passes through habitats favourable for the target species (brown colour).



Grade: -1

Grade

Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species (open grasslands and mosaic agricultural areas), resulting in a loss of 0,342 ha (0.0031%) of favourable habitats in the SPA HR1000014. However, although loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SCI HR1000014. Taking into account all the above, road link Zákány - Gotalovo impact is assessed as moderately negative but acceptable.

Mitigation measures - if necessary:

During construction activities within SPA HR1000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery. The construction of new or the widening of existing access routes for machinery and vehicles shall be undertaken only if strictly necessary, in order to preserve the integrity of the original habitat to the greatest extent possible.

Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.

with

mitigation measure: -1

Significant non-breeding (migratory) bird populations: Anas acuta Anas crecca, Anas penelope, Anas plathyrhynchos, Anas querquedula, Mareca strepera, Aythya ferina, Aythya fuligula, Bucephala clangula, Cygnus olor, Fulica atra, Netta rufina, Rallus aquaticus, Vanellus vanellus

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- The migratory population trends are stable or increasing.
- The wintering population trends are stable or increasing.
- 2230 ha of aquatic habitats are maintained suitable for the goosanders (NKS A.1., A.2. (except A.2.4.) and A.3.).
- 10010 ha of open and semi-open mosaic habitats are maintained suitable for the lapwing (NKS C., I.1.8., I.2.1. and I.5.).
- 60 ha of habitats are maintained suitable for the gallinule (pure reed beds and bulrush).
- Suitable habitat for the gallinule (marshes with reed beds; NKS A.4.1.) is maintained within an area of 1250 ha, where it appears in a complex with other habitat types.

Conservation measures:

- Preserve favourable habitats conditions of freshwater and wetland habitats.
- Installation of solar panels on water surfaces of ponds is not allowed.

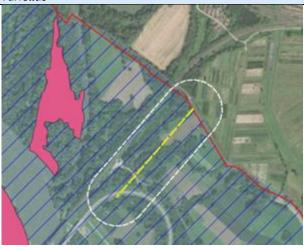
Position in relation to favourable habitats inside Natura 2000 site:

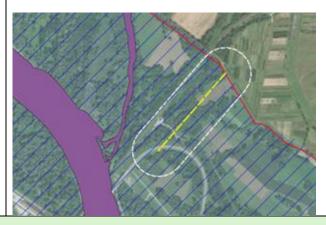
Road link Zákány – Gotalovo passes through habitats favourable target species *Vanellus vanellus* (Figure 1, brown colour).

Road link Zákány – Gotalovo is not located within favourable habitats for the target species of the orders Galliformes and Anseriformes, nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Road link Zákány – Gotalovo is located 160 m and 215 m from the nearest distribution range (Figures 2 and 3, pink and purple colours) of the favourable habitat.



Significant non-breeding (migratory) bird populations: Anas acuta Anas crecca, Anas penelope, Anas plathyrhynchos, Anas querquedula, Mareca strepera, Aythya ferina, Aythya fuligula, Bucephala clangula, Cygnus olor, Fulica atra, Netta rufina, Rallus aquaticus, Vanellus vanellus





Impact assessment:

Road link Zákány - Gotalovo passes through favourable habitats for the target species *Vanellus vanellus* (open grasslands and mosaic agricultural areas), resulting in a loss of 0,342 ha (0.0026%) of favourable habitats in the HR1000014 due to Road link Zákány - Gotalovo construction. However, although the loss of part of the favourable habitat is permanent and therefore negative, the area of habitat being lost is very small in relation to the total area of favourable habitats within the SPA HR1000014. Considering all the above, the planned intervention is assessed as moderately negative but acceptable.

Road link Zákány - Gotalovo is located outside of habitats favourable for target species of the orders Galliformes and Anseriformes and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect wetland and aquatic habitats.

Mitigation measures - if necessary:

During construction activities within SPA HR1000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery. The construction of new or the widening of existing access routes for machinery and vehicles shall be

Grade: -1

Grade with mitigation measure: -1

Natura 2000 site: SPA HR1000014 Gornji tok Drave	Significant non-breeding (migratory) bird populations: Anas acuta Anas crecca, Anas penelope, Anas plathyrhynchos, Anas querquedula, Mareca strepera, Aythya ferina, Aythya fuligula, Bucephala clangula, Cygnus olor, Fulica atra, Netta rufina, Rallus aquaticus, Vanellus vanellus
undertaken only if strictly necessary, in order to preserve the integrity of the original habitat to the greatest extent possible. Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.	

SAC HUDD20054 Nyugat - Dráva impact assessment

Table 9: SAC HUDD20054 Nyugat - Dráva impact assessment

Table 9: SAC HUDD20054 Nyugat - Dráva impact assessment	
Source of site specific conservation objectives and conservation	tion measure and accompanying data: Duna-Drava National
Park Directorate	
Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target habitat type: Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation (3150)
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target habitat type through following attributes: At least 14,2 ha of habitat type area is maintained. Integrity of all side channels (distributaries) and oxbow lakes, as well as their connection to the main river are maintained. pH > 7 of water is maintained. Characteristic species of this habitat type are preserved. 	 Preserve natural and artificial water surfaces (stagnant waters and slow-flowing waters) and characteristic species of habitat type. Preserve connectivity of oxbow lakes with river.
Position in relation to favourable habitats inside Natura 2000 site:	
Road link Zákány - Gotalovo is not inside SAC HUDD20054, thus is not located within distribution range of the target habitat type (cyan colour). Road link Zákány – Gotalovo is located 400 m from the distribution range of the target habitat type.	

Impact assessment:	
Road link Zákány - Gotalovo is located outside of	Grade: 0
distribution range of the target habitat type and	
those habitats are not inside road link Zákány –	
Gotalovo buffer zone (100 m from road route). Due	
to distance between road link Zákány – Gotalovo	
and nearest distribution range of the target habitat	
type, there is no impact on target habitat type.	
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target habitat type: Rivers with muddy banks with <i>Chenopodion rubri p.p.</i> and <i>Bidention p.p.</i> vegetation (3270)
Site specific conservation objectives:	Conservation measures:
 Preservation of the current habitat extent (1.18 ha). Conservation of existing populations and ensuring regular sandbank formation. Basing and supporting measures on upto-date data. Data collection to support the preservation and proactive protection of the most valuable, highly natural habitat patches. 	 Regeneration of potential habitats and reestablishment of associations in secondary habitats. Habitat restoration in areas unsuitable for cultivation (e.g., abandoned extraction sites, shore zones of gravel pits). Ensuring habitat management based on the maintenance plan. Establishment of a monitoring system and development of an intervention plan for overpopulation control. Baseline survey of pioneer sandbar vegetation, including its delineation, species composition, and structure, along with monitoring its condition and the effects of potential interventions.
Position in relation to favourable habitats inside Nat	ura 2000 site:
Road link Zákány – Gotalovo is not inside SAC HUDI of the target habitat type.	D20054, thus is not located within distribution range
Impact assessment:	
Road link Zákány – Gotalovo is not inside SAC HUDD20054, thus is not located within distribution range of the target habitat type. Therefore, there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target habitat type: Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) (6510)
Site specific conservation objectives:	Conservation measures:
Expanding the habitat by 20 hectares by eliminating adverse abiotic effects and	 Habitat reconstruction through shrub removal, mowing, and repeated cutting, followed by the continuation of extensive

- carefully restoring overgrown, shrub-invaded, and forested areas.
- Maintaining species richness and improving species composition by preserving the diversity of accompanying species.
- Preserving and improving habitat conditions by managing invasive herbaceous species.
- Preserving and improving habitat conditions by controlling invasive woody species throughout the entire habitat. In case of the emergence and spread of invasive woody species, taking measures to suppress them.

- meadow management. Only activities related to meadow management should be permitted in grassland areas.
- Ensuring the maintenance of gentle, extensive meadow management.
 Proactively reintroducing accompanying species (e.g., through seed collection and sowing) and promoting natural regeneration.
- Achieving stability and improvement of water supply.
- Maintaining species-rich meadows with stable water supply. Suppressing invasive species through mowing if they emerge and spread.
- Removing invasive woody species using mechanical and, if necessary, chemical treatments.

Road link Zákány – Gotalovo is not inside SAC HUDD20054, thus is not located within distribution range of the target habitat type.

of the target habitat type.	
Grade: 0	
Grade with mitigation measure: /	

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target habitat type: Alkaline fens (7230)
Site specific conservation objectives:	Conservation measures:
 Preservation of habitat extent, with a slight increase of 1-2 hectares. Maintenance of habitat condition, favorable species composition, and the dominance of key plant species. Improvement of habitat condition by reducing large game populations. Maintenance and enhancement of habitat condition by controlling invasive woody species. 	 Elimination of secondary succession and facilitation of transformed habitat regeneration by ensuring proper water balance. Protection of existing habitats from any adverse water management interventions. Management to maintain the dominance of key plant species: suppression of shrubs and water retention. Regulatory requirement to reduce large game populations to an ecologically sustainable level, ensuring that habitat management and weed control in tussock marshes can be carried out without fencing. Suppression of invasive woody species through species-specific mechanical and chemical control methods.
Position in relation to favourable habitats inside Nat	ura 2000 site:

Road link Zákány – Gotalovo is not inside SAC HUDD20054, thus is not located within distribution range of the target habitat type.	
Impact assessment:	
R Road link Zákány – Gotalovo is not inside SAC HUDD20054, thus is not located within distribution range of the target habitat type. Therefore, there is no impact.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Mitigation measures are not necessary.	
 Natura 2000 site: SAC HUDD20054 Nyugat-Dráva Preservation of the extent of old-growth stands within the habitat. Expansion of designated habitat types by converting non-native tree stands over approximately 25 hectares. Support for habitat conservation through reclassification into forest land use. Maintenance and improvement of habitat conditions by increasing the extent of typical, mosaic-structured stands. Ensuring a minimum of 20 m³/ha of standing and fallen deadwood in middleaged and older stands (>50 years), with at least half of this exceeding 30 cm in diameter. Improvement of habitat conditions by ensuring adequate water supply. Maintenance and enhancement of habitat quality through the management of large game populations. Improvement of habitat conditions by 	Target habitat type: Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) (91E0*) Conservation measures: Preserve favourable hydrological regime (occasional flooding, high level of groundwater). Ensure that forest reproductive material used for sowing or planting consists of native species typical for the habitat type Limit usage of plant protection products and mineral fertilizers in forest management. Preserve plant species characteristic for habitat type. Preserve forest clearings i.e. meadows and pastures within forest complexes. Ensure that natural forest areas are not replaced with hybrid poplar or non-native species plantations, and gradually guide existing poplar stands towards native forest compositions where applicable. Do not drain or cover depressions with woody vegetation characteristic for habitat type (black alder, white willow). Remove invasive alien species.
 Improvement of habitat conditions by ensuring adequate water supply. Maintenance and enhancement of habitat quality through the management of large game populations. 	 species plantations, and gradually guide existing poplar stands towards native forest compositions where applicable. Do not drain or cover depressions with woody vegetation characteristic for habitat type (black alder, white willow).

Road link Zákány - Gotalovo is not inside SAC HUDD20054, thus is not located within distribution range of the target habitat type (pink colour). Road link Zákány – Gotalovo is located 140 m from the distribution range of the target habitat type.



Impact assessment:

Road link Zákány - Gotalovo is located outside of distribution range of the target habitat type and those habitats are not inside road link Zákány - Gotalovo buffer zone (100 m from road route). Due to distance between road link Zákány - Gotalovo and nearest distribution range of the target habitat type, there is no impact on target habitat type.

Grade: 0

Mitigation measures - if necessary:

Mitigation measures are not necessary.

Grade with mitigation measure: /

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva

Site specific conservation objectives:

- Preservation of the species' population size.
- Rediscovery of the species and support for measures aimed at conserving its distribution and population with precise and up-to-date data.
- Reduction of the invasive signal crayfish, which negatively affects the species' population.
- Surveys supporting the control of the signal crayfish and assessing the impact of interventions.

Target species: Ophiogomphus cecilia

Conservation measures:

- Preservation of the remaining near-natural channel morphology and flow conditions.
- Avoiding interventions in the low and medium water channels (especially dredging, gravel extraction, sediment removal, slope regulation, and bank stabilization).
- Consultation with the water management sector.
- Determination of the species' spatial distribution and population density along the longitudinal section of the Drava River through quantitative analysis of larvae and exuviae.
- Reduction of the crayfish population using selective fishing methods (trap nets, electrofishing).
- Investigation of the spread dynamics and population size of the signal crayfish (impact of control measures and natural dynamics) through quantitative sampling methods.

Position in relation to favourable habitats inside Natura 2000 site:

Road link Zákány – Gotalovo is not located inside SAC HUDD20054.

Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target species: Cottus gobio, Rutilus pigus, Eudontomyzon spp. Gobio (Romanogobio) kessleri, Gobio albipinnatus, Gobio (Romanogobio) uranoscopus, Gymnocephalus baloni, Gymnocephalus schraetser, Sabanejewia aurata, S. balcanica, S. bulgarica, Zingel streber, Zingel zingel, Aspius (Leuciscus) aspius
Site specific conservation objectives:	Conservation measures:
 Maintaining the populations of designated riverine fish species (measured by the number of 1x1 km ETRS grid squares they inhabit), preventing population decline, and increasing numbers where possible. Reducing or eliminating threats posed by fishing activities. Improving habitat conditions by maintaining and enhancing habitat diversity. Ensuring optimal habitat conditions for the bullhead by regulating the populations of Ponto-Caspian goby species. 	 Avoiding interventions in small and medium-sized riverbeds (especially dredging, gravel extraction, sediment removal, and slope stabilization). Coordination with the water management sector. Banning the use of lead sinkers in the Drava River, effective communication with anglers, and distribution of informational materials. Ensuring the continuation of largely natural riverbed development processes and preventing the construction of bank protection structures. Preserving and maintaining sections with rocky and gravelly substrates. Coordination with the water management sector. Based on monitoring data, reducing goby populations if necessary (e.g., through selective fishing with electrofishing equipment).
Position in relation to favourable habitats inside Nat	ura 2000 site:
Road link Zákány – Gotalovo is not located inside SA	AC HUDD20054.
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target species: Rhodeus (sericeus) amarus, Cobitis taenia
Site specific conservation objectives:	Conservation measures:
 Maintaining the current population sizes of species by preserving existing ecological conditions in their habitats. Ensuring favorable habitat conditions for the species in their respective habitats. 	 Elimination of potential pollution sources. Maintenance work should not affect the entire cross-section of the riverbed on the sections involved (e.g., dredging should be done in half cross-sections). In addition to spatial restrictions, time-based restrictions are also necessary for interventions. Coordination with the water management sector.
Position in relation to favourable habitats inside Nat	tura 2000 site:
Road link Zákány – Gotalovo is not located inside S	AC HUDD20054.
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target species: Bombina bombina
Site specific conservation objectives:	Conservation measures:
 Maintaining the population size (number of 1x1 km ETRS grid squares affected by the species occurrence) by preserving the existing favorable hydrological conditions in its habitats. To preserve and strengthen the populations, reduce or eliminate the damages caused by the wild animal population. 	 Maintaining permanent or at least seasonally persistent shallow waters that are fish-free. Preserving areas with seasonal water coverage. Engaging and informing land users about the above measures. Reducing the population of wild animals by increasing hunting quotas and banning the installation of structures that attract wildlife in the most important habitats.
Position in relation to favourable habitats inside Nat	ura 2000 site:
Road link Zákány – Gotalovo is not located inside SA	AC HUDD20054.
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target species: Barbastella barbastellus, Myotis dasycneme
Site specific conservation objectives:	Conservation measures:
 Maintaining the current local population of the species, with the goal of increasing the number of individuals where possible. Reducing and eliminating factors that threaten the species' food sources. 	 Leaving an increasing number of old, damaged, and fallen trees on-site. In addition to the tools mentioned for the 91E0 habitat: pre-designating retention trees and retention tree groups before starting work, in collaboration with the National Park Directorate staff. Excluding technologies that threaten the natural food base from the area and its surrounding region.
Position in relation to favourable habitats inside Nat	rura 2000 site:
Road link Zákány – Gotalovo is not located inside SA	AC HUDD20054.
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SAC HUDD20054 Nyugat-Dráva	Target species: Lutra lutra
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: 50 ha of favourable habitats (oxbows, ponds, gravel pits) are preserved. Population of at least 10 individuals of the species is maintained. Natural hydromorphology of watercourses is preserved. Riparian vegetation belt (shrubs and trees) with a width of at least 10 m is preserved. 	 Preserve natural hydromorphology of watercourses. Reduce and prevent pollution of watercourses and their canalization. Preserve coastal vegetation in a zone of at least 5 m.

Road link Zákány – Gotalovo is not located within favourable habitats for the target species (red colour), nor those habitats are inside road link Zákány – Gotalovo buffer zone (100 m from road route). Nearest potential habitat is at the distance of 140 m.



Impact assessment:	
Road link Zákány - Gotalovo is located outside of	Grade: 0
habitats suitable for the target species. Disruptors	
related to road transport are spatially limited so	
their contribution to existing anthropogenic	
impacts / features at the edge of the Natura 2000	
site SAC HUDD20054 will be minimal.	
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

SPA HUDD10002 Nyugat - Dráva impact assessment

Table 10: SPA HUDD10002 Nyugat - Dráva impact assessment

Source of site specific conservation objectives and conservation measure and accompanying data: Duna-Drava National

Park Directorate		
Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Milvus migrans	
Site specific conservation objectives:	Conservation measures:	
 At least the preservation of the current population size of the species, with the possibility of increasing the population by creating new habitats. Maintaining old, mixed-age, mixed-species forest stands with appropriate distribution across the entire area. Ensuring disturbance-free conditions around the nest during the breeding season. 	 Ensuring nesting and feeding areas. Designating riparian trees and tree groups, incorporating them into forest management plans, and preserving them until natural decay. Identifying nests and establishing nest protection zones. Implementing regulatory restrictions and coordinating with land users. During the breeding season (03/15–07/31), forest management and game management activities that cause disturbance should be avoided within a 200-meter radius of the nest. Outside the breeding season, final harvesting is not permitted within a 50-meter radius of the nests of the marsh harrier, and other logging activities (except for thinning) can only be carried out with prior written consent from the nature conservation authority. 	
Position in relation to favourable habitats inside of Natura 2000 site:		
Road link Zákány – Gotalovo is not inside SPA HUDI	210002.	
Impact assessment:		
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its	Grade: 0	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Milvus migrans
significant size of 15 237 ha, impact on target species is not expected.	
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Nycticorax nycticorax, Egretta garzetta, Egretta alba, Ardea purpurea, Ixobrychus minutus
Site specific conservation objectives:	Conservation measures:
 At least maintaining the current congregating/foraging specimens and breeding population, and if possible, increasing them. Preserving potential nesting sites and feeding areas, at least at their current extent. Maintaining the water supply of potential nesting sites and feeding areas, and improving it where possible. Ensuring the current level of food availability (small fish, frogs). 	 Maintaining food-providing wetland habitats. Identifying new nesting sites and ensuring undisturbance in the breeding season for both these and known nesting sites. Landscape-level stable water management, habitat preservation, and habitat restoration when necessary. Reducing the food competition posed by large populations of golden jackals and wild boars.
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002.	
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Circus aeruginosus
Site specific conservation objectives:	Conservation measures:
 Reducing the use of rodenticides to minimize the risk of poisoning. Maintaining reed beds and marshes. 	 If necessary, restricting the application of rodenticides. Ensuring adequate water supply for habitats. Preventing desiccation.
Position in relation to favourable habitats inside of Natura 2000 site:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002.	

Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Actitis hypoleucos	
Site specific conservation objectives:	Conservation measures:	
Minimizing and avoiding disturbance.	Effective awareness-raising and information dissemination. When issuing permits for water tours, the following considerations can be applied: the recommended maximum group size is 35 people, and groups should ideally be launched no more than every two days.	
Position in relation to favourable habitats inside of Natura 2000 site:		
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002.		
Impact assessment:		
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0	
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Aytha nyroca
Site specific conservation objectives:	Conservation measures:
 At a minimum, maintaining the current population size of the species, and if possible, increasing the population by creating new habitats. Preserving nesting habitats at least at their current extent. Ensuring undisturbed breeding. 	 Maintaining oxbow lakes, ponds, and peat lakes with a mosaic of marshy areas, reed, and bulrush patches. Ensuring adequate water supply for habitats. Delaying or preventing desiccation. Water retention and management to preserve habitats. In the long term, it may be necessary to explore options for water supplementation. If it is proven that swans disturb breeding, it may be necessary to experiment with

	methods to prevent swans from settling in the breeding areas of the <i>Aytha nyroca</i> .
Position in relation to favourable habitats inside of N	Natura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Pernis apivorus
Site specific conservation objectives:	Conservation measures:
 Maintaining the current population size. Ensuring undisturbed breeding. 	 Preserving large expanses of oak and mixed forests. Designating nest protection zones, implementing regulatory restrictions, and suspending activities until the chicks have fledged.
Position in relation to favourable habitats inside of N	Natura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: HUDD10002 Nyugat-Dráva	Target species: Lullula arborea
Site specific conservation objectives:	Conservation measures:
Maintaining the current population size.Preserving diverse habitat patches.	 Maintaining open and closed sandy grasslands, sparse juniper groves, and clearings.

 Ensuring the protection of clutches during forest management activities. Protecting clutches by reducing nest predation. 	 Preventing spontaneous forest succession and afforestation. Maintaining areas designated as clearings in a treeless state. Awareness-raising. Leaving the environment around any discovered nests undisturbed. Preventing the population growth of nest predators.
Position in relation to favourable habitats inside of Natura 2000 site:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002.	
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Chlidonias hybridus, Chlidonias niger
Site specific conservation objectives:	Conservation measures:
Protecting the congregating/foraging, as well as the potential breeding population.	 Ensuring the undisturbance of feeding areas and potential nesting sites, as well as providing food availability in wetland habitats.
Position in relation to favourable habitats inside of N	Vatura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SF	A HUDD10002.
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Ciconia ciconia
Site specific conservation objectives:	Conservation measures:
 At least maintaining the current population size of the species, and if possible, increasing the population by creating new habitats. Maintaining the food base. 	 Maintaining the optimal ecological condition of wetland and grassland habitats. Landscape-level stable water management, habitat preservation, and
	habitat restoration when necessary.

 Preserving food-rich pastures and meadows. Preventing mortality caused by electrocution. 	 Implementing and expanding a support system that encourages extensive livestock farming, grazing, and mowing Identifying dangerous power line sections and insulating them when necessary. Raising nests located on utility poles.
Position in relation to favourable habitats inside of N	Natura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0

Mitigation measures - if necessary: Mitigation measures are not necessary. Grade with mitigation measure: /

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Ciconia nigra
Site specific conservation objectives:	Conservation measures:
 Preserving the existing population and possibly increasing it. Preserving suitable nesting sites and creating new ones. Maintaining the food base by ensuring adequate water supply. Reducing the large populations of golden jackals and wild boars. Ensuring undisturbance in the environment around the nest during the breeding season. 	 Preserving potential nesting sites and feeding areas. Maintaining undisturbed, mixed-age forests. Ensuring the long-term preservation of old trees in former pastures, as well as more robust, heavily branched veteran trees and the retention groups of old stands. Habitat-preserving water retention and water management. In the long term, it may be necessary to explore options for water supplementation. Reducing wildlife populations through hunting, trapping, and other alternative wildlife management methods. Identifying nests and designating nest protection zones. Implementing regulatory restrictions and consulting with land users. During the breeding season (03.01-08.15), activities causing disturbance should be avoided within a 300-400 m radius around the nest. Outside the breeding season, no final harvesting is allowed within a 50-100 m radius of black stork nests, and other logging (except for clearing) can only be

Position in relation to favourable habitats inside of N	carried out with prior written approval from the nature conservation manager.
Road link Zákány – Gotalovo is not inside Natura SP	
Impact assessment:	A HODD 10002.
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Dryocopus martius, Picus canus, Dendrocopos medius, Ficedula albicollis
Site specific conservation objectives:	Conservation measures:
 Preserving existing populations, and possibly increasing them. Ensuring potential nesting sites. Maintaining the current condition of the species' habitat and improving it where possible. 	 Maintaining and creating forests with a significant number of old, large trees and deadwood. Ensuring the long-term preservation of deadwood, retention trees, and retention tree groups. Scheduling timber harvesting outside the breeding season.
Position in relation to favourable habitats inside of N	Natura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Remiz pendulinus
Site specific conservation objectives:	Conservation measures:
Maintaining the current population size	 Preserving the willow forests along the Drava River and its oxbow lakes.
Position in relation to favourable habitats inside of N	Natura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002.	
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Rallus aquaticus, Porzana parva
Site specific conservation objectives:	Conservation measures:
 At least maintaining the current population size of the species, and if possible, increasing it by creating new habitats. Ensuring the water supply for suitable nesting habitats. Maintaining the appropriate water coverage in nesting habitats. 	 Maintaining oxbow lakes, ponds, and peat lakes with a mosaic of marshy areas, old reed, and bulrush patches. Ensuring the proper water supply for habitats (e.g., maintaining a near-constant water level during the breeding season – where this can be influenced by structures). Delaying or preventing desiccation. Habitat-preserving water retention and water management. In the long term, it may be necessary to explore options for water supplementation.
Position in relation to favourable habitats inside of Natura 2000 site:	
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Pandion haliaetus
Site specific conservation objectives:	Conservation measures:
 Ensuring that migrating populations do not decrease. Preventing mortality caused by electrocution. 	 Maintaining the optimal ecological condition of wetland habitats and food sources. Identifying dangerous power line sections and insulating them when necessary.
Position in relation to favourable habitats inside of Natura 2000 site:	
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Circus pygargus
Site specific conservation objectives:	Conservation measures:
Maintaining the current population size.	 Maintaining the optimal ecological condition of grassland habitats.
Position in relation to favourable habitats inside of N	latura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002.	
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Crex Crex
Site specific conservation objectives:	Conservation measures:
 Mitigating and preventing seasonal population declines. Preserving the current condition of the species' habitat, and improving it where possible. Ensuring successful breeding. Preserving clutches by reducing predation. 	 Ensuring long-lasting wet meadows and meadows in the spring. Ensuring the proper water supply for habitats. Delaying or preventing desiccation. Searching for singing males and nests. The first mowings should be after June 15, conducted in a mosaic pattern, adjusted to the breeding period of the Corncrake. Designating protection zones around territory-holding males and nests. These areas should only be mowed at the end of July or early August. Keeping refuge strips. Preventing the population growth of nest predators, with intensive culling of predators near breeding areas.

Position in relation to favourable habitats inside of Natura 2000 site:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002.	
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Alcedo atthis
Site specific conservation objectives:	Conservation measures:
 Maintaining the current population size. Preserving the mosaic structure of marsh and aquatic vegetation. Preserving and enhancing the quantity, quality, and food availability of habitats. 	 Maintaining the ecological condition of wetland habitats. Ensuring the preservation of natural shorelines, the protection of reed, marsh, and aquatic vegetation, and maintaining appropriate water quality during water management interventions. Continuously ensuring the necessary water levels in smaller, drought-prone water bodies.
Position in relation to favourable habitats inside of N	Vatura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Sterna albifrons, Sterna hirundo
Site specific conservation objectives:	Conservation measures:
 At least maintaining the current population size of the species, and if possible, increasing the populations by creating new habitats. Ensuring water supply in the species' habitat that does not threaten breeding success. Mitigating and avoiding the disruptive impact of tourism. 	 Preserving natural river sections with islands and sandbars. Creating and maintaining artificial nesting islands (e.g., Béla-vári gravel pit lakes). Avoiding peak operation of hydropower plants, at least during the breeding season. Effective awareness-raising and information. When issuing water tourism permits, the following criteria can be

Reducing nest destruction by wild species.	 applied: the recommended maximum group size is 35 individuals, and groups should be launched no more than every two days. Reducing the population of large numbers of foxes, golden jackals, badgers, and wild boars through shooting, trapping, and other alternative wildlife management methods. 	
Position in relation to favourable habitats inside of Natura 2000 site:		
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.	
Impact assessment:		
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0	
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Phalacrocorax pygmeus
Site specific conservation objectives:	Conservation measures:
 The wandering, migrating population should not decrease. Establishment of a breeding population. Preserving the current population of the species by preventing accidental shootings. 	 Maintaining water-rich habitats that provide food and potential nesting sites (such as reedbeds in deep water and willow shrublands). Effective awareness-raising and information. When issuing a specific permit for the culling of the great cormorant in protected areas, the permit applicant must be reminded of the risk of species misidentification.
Position in relation to favourable habitats inside of N	Natura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its	Grade: 0

significant size of 15 237 ha, impact on target	
species is not expected.	
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Caprimulgus europaeus
Site specific conservation objectives:	Conservation measures:
 Maintaining the current population size. Ensuring successful breeding during forest management activities. Preserving clutches by preventing nest predation by wildlife 	 Maintaining dry, wooded forests. During forest management activities, any found eggs or chicks and their surrounding areas must be left undisturbed. Reducing wildlife populations through shooting, trapping, and other alternative wildlife management methods.
Position in relation to favourable habitats inside of N	Natura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SP	A HUDD10002.
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: HUDD10002 Nyugat-Dráva	Target species: <i>Riparia riparia</i>
Site specific conservation objectives:	Conservation measures:
Maintaining the current population size.	 Preserving the natural riverbanks of the Drava and its tributaries.
Position in relation to favourable habitats inside of N	Natura 2000 site:
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002.	
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Road link Zákány - Gotalovo does not intersect natural rivebanks of the Drava River and its tributaries. Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /
witigation measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Tringa glareola
Site specific conservation objectives:	Conservation measures:
Maintaining the current population size.	 Maintaining shallowly flooded meadow habitats, flooded grasslands, and grazed wet meadows.
Position in relation to favourable habitats inside Natura 2000 site:	
Road link Zákány – Gotalovo is not inside Natura 2000 site SPA HUDD10002	
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation	Grade with mitigation measure: /
measures are not necessary.	

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Asio flammeus
Site specific conservation objectives:	Conservation measures:
 Maintaining the current population size. Ensuring the successful breeding of occasional breeding pairs by regulating mowing. Position in relation to favourable habitats inside Nat Road link Zákány – Gotalovo is not inside Natura 20 	
Impact assessment:	
Road link Zákány – Gotalovo is not inside Natura SPA HUDD10002 but is inside buffer zone (100 m from road route). Disruptors related to road transport will increase existing anthropogenic impacts at the edge of the SPA HUDD10002. But, taking in account spatially limited impact of road transport, existing anthropogenic features in subject edge of the SPA HUDD10002 and its significant size of 15 237 ha, impact on target species is not expected.	Grade: 0
Mitigation measures - if necessary:	Grade with mitigation measure: /
Mitigation measures are not necessary.	

Natura 2000 site: HUDD10002 Nyugat-Dráva	Target species: Haliaeetus albicilla
Site specific conservation objectives:	Conservation measures:
 Preserving the breeding and migratory populations in the area. Maintaining suitable nesting sites and creating new ones. Ensuring disturbance-free surroundings around the nest during the breeding season. Preventing mortality caused by electrocution. Preventing poisoning. 	 Ensuring the presence of suitable, old forests, leaving tree groups, and feeding areas near wetlands. Maintaining undisturbed, mixed-age forests near wetlands, along with leaving tree groups and feeding areas. Long-term maintenance of old trees and the groups of trees within these old stands. Outside the breeding season, no final cuts can be made within a 50-100 m radius of nests, and any other logging (except for thinning) should only be carried out with prior written approval from the nature conservation manager. Identifying nests, establishing nest protection zones. Coordination with land users and the designation of regulatory restrictions. During the breeding season (01.01-07.15), activities that cause disturbance should be avoided within a 300-400 m radius of nests. According to the hunting management plan, the "location and timing of the February drive and herding hunts must be coordinated with the nature conservation manager in advance." Identification of hazardous electric wiring sections, with insulation applied when necessary. Effective communication. Reporting poisoning incidents to authorities.
Position in relation to favourable habitats inside Natura 2000 site:	
Road link Zákány – Gotalovo is not inside Natura 20	00 site SPA HUDD10002
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

Natura 2000 site: SPA HUDD10002 Nyugat-Dráva	Target species: Lanius collurio
Site specific conservation objectives:	Conservation measures:
 Maintaining the current population size. Ensuring the availability of breeding sites. 	 Protection and preservation of bushes, shrubs, and hedgerows suitable for breeding. See also the 'Habitat Condition' section for further details. Shrub clearing should only be carried out if absolutely necessary for mowing or grazing purposes, and only outside the breeding season, ensuring that some shrubs and shrub patches remain in the area. Bush rows along roads and ditches should be preserved.
Position in relation to favourable habitats inside Nat	ura 2000 site:
Road link Zákány – Gotalovo is not inside Natura 20	00 site SPA HUDD10002
Impact assessment:	
Road link Zákány - Gotalovo is located outside of habitats suitable for the target species and therefore there is no impact.	Grade: 0
Mitigation measures - if necessary: Mitigation measures are not necessary.	Grade with mitigation measure: /

3.2. Murakeresztúr - Kotoriba bridge

Location of planned Murakeresztúr - Kotoriba bridge (Mura Bridge / MuKo Bridge) is partly inside of Natura 2000 sites SCI HR2000364 Mura in Croatia and SAC HUBF20043 Mura Riverside in Hungary. In tables in continuation site specific conservation objectives of SCI HR2000364 Mura (Table 12) and SAC HUBF20043 Mura Riverside (Table 13) are provided.

Through the Hungary-Croatia Programme only preparation of Mura Bridge / MuKo Bridge project documentation is planned to be financed. Till now, few versions of feasibility studies have been done in the past for the Mura Bridge / MuKo Bridge project. The leading idea now is road in total length of 3130 m connecting settlement Kotoriba in Croatia and Murakeresztúr in Hungary, with bridge over the Mura River. The bridge is in general planned to avoid construction of a pillar in the riverbed. This should be confirmed through field investigation on site, as part of the preparation of the Mura Bridge / MuKo Bridge project documentation. Environmental impact assessment including Natura 2000 impact assessment needs to be completed on project level according Croatian and Hungarian national regulation before issuing the location permit for the construction.

At level of data available from feasibility studies, comments on possible impacts are made and mitigation measures are provided to be followed in preparation of future Mura Bridge / MuKo Bridge project documentation. General impact assessment is provided behind tables that list site specific conservation objectives of SCI HR2000364 Mura and SAC HUBF20043 Mura mente.

SCI HR2000364 Mura

be very low are preserved.

Table 12: SCI HR2000364 Mura

Source of site-specific conservation objectives and conservation measure and accompanying data: Republic of Croatia Ministry of Environmental Protection and Green Transition - Institute for Environment and Nature (February 2025)

Abbreviation NKS = National habitat classification

Abbreviation NKS = National habitat classification	
Natura 2000 site: SCI HR2000364 Mura	Target species: Ophiogomphus cecilia
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: Favourable habitats for the species (gravel and sandy riverbeds and riverbanks in the marginal parts of the river outside the main stream) are maintained within 54 ha of river course. Species population is maintained (minimum 5 quadrants 1 x 1 km). Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved. Good (ecological and chemical) status of water body CDR00008_000000 is maintained. Good (ecological and chemical) status of water bodies CDR00006_000000, CDR00006_050436, CDR00026_000000, CDR00096_000000, CDR00130_000000, CDR00167_000000, CDR00130_000000, CDR00312_000000, CDR00380_000000, CDR00610_000000, CDR00763_000000, CDR00610_000000, CDR00763_000000, CDR03661_000000, CDS026, CDS027, CDS031 is achieved. 	 Preserve favourable habitat conditions by maintaining water quality, favourable water regime, riverbed and riverbank structure, flow speed and coastal vegetation. Preserve riparian vegetation belt (shrubs and trees) with a width of at least 5 m. Maintain habitat diversity within river course, preserving unreinforced banks and gravel rapids. When mowing coastal vegetation, mow in one year only on one side or alternately on both sides of the watercourse. Limit construction, sand and gravel extraction, filling and burying in habitats suitable for the species and in their immediate vicinity.
Natura 2000 site: SCI HR2000364 Mura	Target species: Misgurnus fossilis
Site specific conservation objectives:	Conservation measures:
 Achieve favourable condition of the target species through following attributes: 140 ha of favourable habitats are preserved (network of watercourses and canals, oxbow lakes, and side arms). Species population is maintained (minimum 13 quadrants 1 x 1 km). Favourable habitat conditions are ensured within aquatic and wetland habitats with well-developed aquatic vegetation covering more than 50% of bottom. Favourable water regime is preserved, lowering of groundwater level is prevented, annual flooding of area is enabled. Favourable physical-chemical properties of water in which the oxygen concentration can 	 Ensure favourable habitat conditions with aquatic and wetland habitats with well-developed aquatic vegetation covering more than 50% of bottom. Preserve favourable physical-chemical properties of water in which the oxygen concentration can be very low. Preserve favourable water regime, prevent lowering of groundwater level and enable annual flooding of the area. Prevent drainage and melioration of floodplain and wetland areas and habitats. If dredging is needed, limit work to only one side or a maximum of 1/2 the width of the watercourse, leaving both deeper and shallower parts.

- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Good (ecological and chemical) status of water bodies CDR00006_000000,
 CDR00006_050436, CDR00026_000000,
 CDR00096_000000, CDR00130_000000,
 CDR00167_000000, CDR00244_000000,
 CDR00312_000000, CDR00380_000000,
 CDR00610_000000, CDR00763_000000,
 CDR03661_000000, CDS026, CDS027, CDS031 is achieved.
- Preserve natural dynamic processes of the Mura River, including erosion and succession, and connect it with the old river channels and oxbow lakes.
- Improve hydromorphological conditions of water bodies and, where necessary and appropriate, restore degraded aquatic, wetland and floodplain habitats and preserve areas where water spills and periodically floods.
- Preserve riparian vegetation belt along watercourses in a zone of at least 5 m from the watercourse bank.
- Prohibit fish stocking in water bodies where the target species has been recorded.
- Allow and encourage unlimited fishing with permitted means of all alien and invasive alien species in the area; do not return individuals of alien and invasive alien species to watercourses.

Target species: Zingel streber

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for the species (rapids and gravel beds) and longitudinal connectivity have been maintained within 54 km of the watercourse.
- Species population is maintained (minimum 3 quadrants 1 x 1 km).
- Good (ecological and chemical) status of the water body CDR00008_000000 is maintained.
- Good (ecological and chemical) status of the water bodies: CDR00006_000000,
 CDR00006_050436, CDR00026_000000,
 CDR00130_000000, CDR00244_000000,
 CDR00312_000000, CDR00380_000000,
 CDR00610_000000, CDR00763_000000,
 CDS026 is achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.

- Maintain current condition and prevent habitat degradation by allowing natural processes, including erosion and vegetation succession to enable formation of natural habitats.
- Preserve habitat diversity with unstructured banks and gravelly rapids where the species resides and spawns, as well as ensure favourable water dynamics.
- Preserve riparian vegetation belt (shrubs and trees) of at least 5 m wide.
- Allow watercourse to be passable for longitudinal, upstream, and downstream migration by ensuring the passability of all artificial barriers in the riverbed, thus preserving possibility of undisturbed adult migration and juvenile dispersion.
- Prohibit construction of barriers and obstacles that hinder longitudinal migration along the watercourse, thus maintaining possibility of undisturbed adult migration and juvenile dispersion.
- Use appropriate bio-engineering methods to stabilize and reinforce banks and protect them from erosion. Exceptionally, when this is not possible, plan for minimal sections where bank reinforcement with stone or similar materials is applied.

Natura 2000 site: SCI HR2000364 Mura	 Fisheries management plans should incorporate prohibition on introduction of alien and invasive alien fish species. Monitor and control the introduction and spread of alien and invasive alien species. Remove alien and invasive species by using permitted fishing tools without restrictions. Once alien and invasive species are caught, do not return them to the watercourse. Target species: Bombina bombina
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: Favourable habitats (forests, temporary and permanent standing waters within forest areas; floodplains and grasslands, as well as riparian zones) are maintained within zone of 5800 ha. Species population is maintained (minimum 19 quadrants 1 x 1 km). 570 ha of crucial habitat are maintained at the Murščak locality (northeast of the settlement Domašinec). At least 2500 ha of forest stands (NKS E.) are maintained. At least 180 ha of standing waters (NKS A.1.1., A.1.2.) are maintained. Forest clearings are preserved. Forest ponds are preserved. 	 Preserve temporary aquatic habitats (standing waters) in forests and along forest tracks, excluding forest roads and firebreaks with elements of forest roads. Filling or asphalting forest tracks is not permitted during active season (from 1 April to 31 August). Preserve natural or artificial sunlit standing waters about 0.5 m deep that are rich in aquatic vegetation. Limit fish stocking in habitats suitable for the species. Do not allow the introduction of alien and invasive alien species. Limit usage of plant protection products and mineral fertilizers in habitats favourable for target species and in their immediate vicinity. During construction, reconstruction, and maintenance of roads, build and maintain crossings for small wild animals as needed. Do not allow overgrowth or filling in of ponds, and where possible, restore overgrown and dried-out ponds through occasional bottom cleaning. Actively maintain oxbow lakes by occasional bottom cleaning to prevent overgrowth.
Natura 2000 site: SCI HR2000364 Mura	Target species: Emys orbicularis
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: Favourable habitats for the species are maintained (terrestrial waters and floodplains densely vegetated with sun-exposed shores, as well as terrestrial habitats suitable for egglaying, such as wet meadows and forest stands with dead trees in sunny locations) in an area of 5800 ha. 	 Do not allow habitat fragmentation and loss through the channelization of watercourses and draining of floodplains and wetland areas. Preserve existing ponds and other permanent or temporary water bodies within and outside the forest, except on forest roads and firebreaks with elements of forest roads.

- Species population is maintained (minimum 13 quadrants 1 x 1 km).
- A crucial area of 23 ha is preserved at the following locations: Educational trail Svetomartinska Mura (north of the village of Žabnik, Marof, and Sv. Martin na Muri), streams near ŠRD Verk (east of the village of Križovec), and the Fučička pond (east of the village of Domašinec).
- At least 2500 ha of forest stands are maintained (NKS E).
- At least 1150 ha of aquatic habitats are maintained (NKS A).
- At least 2500 ha of grassland habitats are maintained (NKS C).
- All forest ponds are preserved.
- Periodic flooding of the area is preserved.
- Connectivity of suitable habitats for the species is preserved.
- The invasive species *Trachemys scripta elegans* (red-eared slider) does not have an established population.

- On tractor paths, do not allow the filling of ponds and other permanent and temporary water bodies from 1 April 1 to 31 August.
- Leave fallen trees in the watercourse/waterbody (turtle basking sites).
- Limit usage of plant protection products and mineral fertilizers in habitats favourable for target species and in their immediate vicinity.
- Encourage extensive agriculture on existing arable land.
- Do not allow introduction of alien and invasive alien species (especially Trachemys scripta elegans red-eared slider).
- Control populations of invasive alien species and, where possible, carry out their eradication.
- Limit conversion of favourable habitats for the species into agricultural (arable) land.
- Preserve periodic flooding of the area.

Site specific conservation objectives:

Achieve favourable condition of the target species through following attributes:

- A total of 1340 ha of favourable habitats are maintained (forest habitats, especially those with high structural complexity and presence of older tree age classes, trees with cracks and cavities, forest edges, clearings, and forest ponds) (NKS E.1.1.2., E.1.1.3., E.2.1.3., E.2.1.5., E.3.1.1., E.9.3.2., E.9.3.4.).
- In forests managed under an even-aged system, forest stand connectivity is maintained by preserving areas where regeneration will be postponed.
- In forest stands (excluding cultures) aged 20 years up to the period of regeneration felling, the natural composition of the ground layer and shrub layer is preserved.
- In forests managed under an uneven-age system, structural diversity is preserved with a favourable proportion of trees with a diameter at breast height above 30 cm, as well as trees with bark cracks and cavities.
- The natural species composition and structure of the ground and shrub layer are preserved.
- Forest clearings are preserved.

Target species: Barbastella barbastellus

- Preserve favourable habitats for the species.
- After cutting/felling mature trees, leave trees in forest complex for at least 24 hours before removal.
- In forests managed under an uneven-age system, maintain favourable habitat conditions for species conservation by preserving structural diversity, with a favourable proportion of trees with a diameter at breast height above 30 cm, particularly trees with bark cracks and cavities.
- During timber marking, trees with cavities that house colonies of the species should be retained.
- Maintain forest clearings (meadows, pastures, etc.) and their bushy marginal areas and standing waters.
- Limit usage of plant protection products and mineral fertilizers in forest management.
- Preserve favourable proportion of oak stands older than 80 years.
- In forests managed under an even-aged system, during the final harvest of forest areas larger than 100 ha, at least 5 ha in the central

- Forest ponds are preserved.	part should be retained, where final harvest will be postponed for at least 20 years. - Preserve natural species composition and structure of the ground and shrub layer.
Natura 2000 site: SCI HR2000364 Mura	Target species: Myotis bechsteinii
Site specific conservation objectives:	Conservation measures:
Achieve favourable condition of the target species through following attributes: - Favourable condition of 1340 ha of suitable habitats (forest habitats, especially those with high structural complexity and representation of older tree age classes, as well as trees with cracks and hollows, forest edges, forest clearings, and ponds within forests) (NKS E.1.1.2., E.1.1.3., E.2.1.3., E.2.1.5., E.3.1.1., E.9.3.2., E.9.3.4.) is achieved. - In forests managed under an even-aged system, forest stand connectivity is maintained by leaving uncut areas. - In forest stands (excluding cultures) aged 20 years up to the period of regeneration felling, the natural composition of the ground layer and shrub layer is preserved. - In forests managed under an uneven-age system, structural diversity is preserved with a favourable proportion of trees with a diameter at breast height above 30 cm, as well as trees with bark cracks and cavities. - The natural species composition and structure of the ground and shrub layer are preserved. - Forest clearings are preserved. - Forest ponds are preserved. Natura 2000 site: SCI HR2000364 Mura	 Limit usage of plant protection products and mineral fertilizers in forest management. Maintain existing ponds and, if necessary, restore overgrown and dried-up ponds. Leave trees with hollows where colonies of the species are found during logging operations. After cutting/felling mature trees, leave trees in forest complex for at least 24 hours before removal. Maintain forest clearings (meadows, pastures, etc.) and their bushy marginal areas and standing waters. In forests managed under an uneven-age system, maintain favourable habitat conditions for species conservation by preserving structural diversity, with a favourable proportion of trees with a diameter at breast height above 30 cm, particularly trees with bark cracks and cavities. Preserve favourable proportion of oak stands older than 80 years. In forests managed under an even-aged system, during the final harvest of forest areas larger than 100 ha, at least 5 ha in the central part should be retained, where final harvest will be postponed for at least 20 years. Target species: Castor fiber
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: A total of 4450 ha of favourable habitats (floodplain areas including floodplain forests, associated watercourses with natural hydromorphology and developed riparian vegetation, oxbows, and wetland areas) are maintained. Species population is maintained (minimum 15 quadrants 1 x 1 km). A total of 640 ha of crucial habitat (watercourses with a minimum water depth of 30 cm and well-developed riparian vegetation) (NKS A1.1., A2.3., A2.4., A2.7., A3.2., A3.3.) are maintained. 	 Maintain the floodplain zone of the Mura River. Preserve vegetation along watercourses within at least 5 m from the riverbanks. Preserve natural hydromorphology of watercourses.

Natura 2000 site: SCI HR2000364 Mura	Target species: Lutra lutra
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: 1300 ha of favourable habitats (surface inland waters and wetland habitats - ponds, streams, freshwater hydrophytic habitats, and vegetated shorelines of surface inland waters and wetlands) are preserved. A population of at least 10 individuals is maintained. Natural hydrology and hydromorphology of the watercourse are preserved. Riparian vegetation belt (shrubs and trees) with a width of at least 10 m is preserved 	 Maintain the floodplain zone of the Mura River. Preserve vegetation along watercourses within at least 5 m from the riverbanks. When constructing, reconstructing, and maintaining roads, build and maintain otter crossings as necessary. Reduce and prevent pollution of watercourses and their channelization. Increase monitoring to prevent poaching.
Natura 2000 site: SCI HR2000364 Mura	Target species: Umbra krameri
Achieve favourable condition of the target species through following attributes: - 140 hectares of favourable habitats for the species (calm streams or occasionally flooded backwaters and ponds with developed macrophyte vegetation are preserved. - Species population is maintained (minimum 7 quadrants 1 x 1 km). - Good (ecological and chemical) status of water bodies: CDR00006_000000, CDR00006_050436, CDR00167_000000, CDR000244_000000, CDR00012_000000, CDR00610_000000, CDR00763_000000, CDR00116_001116, CDR00252_000000, CDR00676_000000, CDR01276_000000, CDS027, CDS031 is achieved.	 Ensure favourable habitat conditions for aquatic and marsh habitats with well-developed aquatic vegetation covering more than 50% of the substrate. Favourable physical-chemical properties are maintained. Preserve habitat diversity with unstructured banks and allow annual flooding of oxbows where the species inhabits. Maintain favourable water regime and prevent the decline of groundwater level. Prevent drainage and reclamation of floodplains, marshlands, and habitats suitable for the species around the river's course. Preserve natural dynamic processes of the Mura River's flow, including erosion and succession, and connect it with old oxbows and backwaters. Use appropriate bio-engineering methods to stabilize and reinforce riverbanks and protect them from erosion. In exceptional cases, when not possible, plan to minimize sections with stone or similar materials for bank reinforcement. Improve hydromorphological conditions of water bodies and, where necessary and appropriate, restore degraded freshwater, wetland, and floodplain habitats and preserve areas where water spreads and occasionally

watercourse, leaving both deeper and shallower parts. - Fisheries management plans should incorporate prohibition on introduction of alien and invasive alien species. Monitor and control the introduction and spread of alien and invasive alien species. Remove alien and invasive species by using permitted fishing tools without restriction. Do not return individuals of foreign and invasive alien species to watercourses. Target species: Coenagrion ornatum Natura 2000 site: SCI HR2000364 Mura Site specific conservation objectives: Conservation measures: Achieve favourable condition of the target species through following attributes: - Favourable (slow-flowing habitats Preserve suitable habitats for the species. watercourses, especially their open (sunlit) Limit hydrotechnical interventions on streams and flowing channels (removal of vegetation, sections, with natural hydromorphology and developed aquatic and riparian vegetation, and deepening, bank reinforcement) and habitat pools) within a zone of 450 km (NKS A.2.3., pollution. A.2.4., A.2.7., A.3.3.2.) are maintained. Limit usage of plant protection products and - Species population is maintained (minimum 4 mineral fertilizers in habitats favourable for quadrants 1 x 1 km). target species and in their immediate vicinity. - Good (ecological and chemical) status of the - When mowing riparian vegetation, carry out water body CDR00008 000000 is maintained. mowing on only one side or alternately on both Good (ecological and chemical) status of sides of the watercourse in a single year. water bodies: CDR00006 000000, Prevent introduction of invasive alien fish and CDR00006_050436, CDR00167_000000, crustacean species into habitat and, if CDR00244 000000, CDR00312 000000, necessary, carry out control of their CDR00610 000000, CDR00763 000000, populations. CDR00116 001116, CDR00252 000000, CDR00676_000000, CDR01276_000000, CDS027, CDS031 is achieved. Natura 2000 site: SCI HR2000364 Mura Target species: Anisus vorticulus Conservation measures: Site specific conservation objectives: Maintain favourable condition of the target species Preserve favourable habitat conditions by through following attributes: maintaining suitable physico-chemical water - 1150 ha of favourable habitats (standing waters, properties and a favourable water regime. slow-flowing watercourses and canals, waters Preserve habitat diversity along watercourses (natural banks, gravel bars, rapids, etc.) and with abundant aquatic vegetation - submerged favourable water dynamics (meandering, vegetation of stoneworts, free-floating floatants and submerged hydrophytes, rooted sediment transport and deposition). Limit usage of plant protection products and aquatic vegetation, reed beds, bulrushes, tall sedges and rushes, and river oxbows) are mineral fertilizers in riparian areas. maintained. - Species population is maintained (minimum 5 quadrants 1 x 1 km).

Crucial habitats are maintained in the oxbow area north of the settlements of Lapšina and

- Jurovec (NKS A.1.1.) over an area of at least 7.5 ha.
- Good (ecological and chemical) status of the water body CDR00008_000000 is maintained.
- Good (ecological and chemical) status of water bodies: CDR00006_000000, CDR00006_050436, CDR00167_000000, CDR00244_000000, CDR00312_000000, CDR00610_000000, CDR00763_000000, CDR00116_001116, CDR00252_000000, CDR00676_000000, CDR01276_000000, CDS027, CDS031 is achieved.

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for the species (sandymuddy bottoms and aquatic vegetation, flow speed from moderate to fast) within 54 km of the river course are preserved.
- Species population is maintained (minimum 14 quadrants 1 x 1 km).
- Good (ecological and chemical) status of the water body CDR00008_000000 is maintained.
- Good (ecological and chemical) status of water bodies: CDR00006_000000, CDR00006_050436, CDR00167_000000, CDR00244_000000, CDR00312_000000, CDR00610_000000, CDR00763_000000, CDR00116_001116, CDR00252_000000, CDR00676_000000, CDR01276_000000, CDS027, CDS031 is achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.

Target species: Cobitis elongatoides

Conservation measures:

- Preserve current state of the Mura River and prevent habitat degradation, allowing natural processes, including erosion and bank succession, to form natural habitats.
- Preserve habitat diversity, especially aquatic vegetation, sandy-muddy riverbeds where the species inhabits and spawns.
- Preserve riparian vegetation belt (shrubs and trees) with a minimum width of 5 m.
- Maintain favourable hydrological regime, i.e., moderate to fast flow speeds, which are favourable habitats for the species.
- Use appropriate bio-engineering methods to stabilize and reinforce riverbanks and protect them from erosion. In exceptional cases, when not possible, plan to minimize sections with stone or similar materials for bank reinforcement.
- Fisheries management plans should incorporate prohibition on introduction of alien and invasive alien species.
- Encourage monitoring and control of introduction and spread of alien and invasive alien fish species.
- Remove alien and invasive species by using permitted fishing tools without restriction.

Natura 2000 site: SCI HR2000364 Mura

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats for the species (particularly sandy habitats where the species lives and spawns) within 54 km of the river course are maintained.
- Species population is maintained (minimum 11 quadrants 1 x 1 km).

Target species: Romanogobio vladykovi

- Preserve habitat diversity with unreinforced banks and protect sandy habitats where the species lives and spawns, allowing occasional flooding of the backwaters used by juvenile individuals.
- Preserve a riparian vegetation belt (shrubs and trees) at least 5 m wide

- Good (ecological and chemical) status of the water body CDR00008_000000 is maintained.
- Good (ecological and chemical) status of water bodies: CDR00006_000000, CDR00006_050436, CDR00167_000000, CDR00244_000000, CDR00312_000000, CDR00610_000000, CDR00763_000000, CDR00116_001116, CDR00252_000000, CDR00676_000000, CDR01276_000000, CDS027, CDS031 is achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.
- Connection between the river and all its tributaries is preserved.
- Natural processes, including erosion and succession are enabled to form natural habitats.
- Encourage catch of alien species using permitted fishing tools in accordance with the Freshwater Fisheries Act, without restrictions.

- Do not allow construction of new dams or obstacles to maintain the unimpeded dispersal of juvenile and adult individuals and to preserve favourable hydromorphological processes and hydrological regimes.
- Use appropriate bio-engineering methods to stabilize and reinforce riverbanks and protect them from erosion. In exceptional cases, when not possible, plan to minimize sections with stone or similar materials for bank reinforcement.
- Fisheries management plans should incorporate prohibition on introduction of alien and invasive alien species.
- Monitor and control the introduction and spread of alien and invasive alien species.
- Remove alien and invasive species by using permitted fishing tools without restrictions.
- Once alien and invasive species are caught, do not return them to the watercourse.

Site specific conservation objectives:

Maintain favourable condition of the target species through following attributes:

- Favourable habitats (sandy riverbeds, fastflowing sections with aquatic vegetation, sandy and gravelly riverbeds) within 54 km of the river course are preserved.
- Species population is maintained (minimum 3 quadrants 1 x 1 km).
- Good (ecological and chemical) status of the water body CDR00008_000000 is maintained.
- Good (ecological and chemical) status of water bodies: CDR00006_000000, CDR00006_050436, CDR00167_000000, CDR00244_000000, CDR00312_000000, CDR00610_000000, CDR00763_000000, CDR00116_001116, CDR00252_000000, CDR00676_000000, CDR01276_000000, CDS027, CDS031 is achieved.
- Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved.

Target species: Romanogobio kessleri

- Preserve current state and prevent habitat degradation, allowing natural processes, including erosion and succession, to facilitate formation of natural habitats.
- Maintain favourable water regime and habitat conditions in habitats with sandy bottoms where the species resides, as well as in shallower, fast-flowing areas with gravel or sandy bottoms and aquatic vegetation where the species spawns
- Preserve a riparian vegetation belt (shrubs and trees) at least 5 m wide.
- Do not allow construction of new dams or obstacles to maintain the unimpeded dispersal of juvenile and adult individuals and to preserve favourable hydromorphological processes and hydrological regime.
- Use appropriate bio-engineering methods to stabilize and reinforce riverbanks and protect them from erosion. In exceptional cases, when not possible, plan to minimize sections with stone or similar materials for bank reinforcement.
- Fisheries management plans should incorporate prohibition on introduction of alien and invasive alien species.

	Manifest and constitution to the terminal
Natura 2000 site: SCI HR2000364 Mura	 Monitor and control the introduction and spread of alien and invasive alien species. Remove alien and invasive species by using permitted fishing tools without restrictions. Once alien and invasive species are caught, do not return them to the watercourse. Target species: Romanogobio uranoscopus
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: Favourable habitats (rapids, sandy, gravel, and rocky bottoms) within 54 km of the river course are preserved. Species population is maintained (minimum 1 quadrant 1 x 1 km). Good (ecological and chemical) status of the water body CDR00008_000000 is maintained. Good (ecological and chemical) status of water bodies: CDR00006_000000, CDR00006_050436, CDR00167_000000, CDR00244_000000, CDR00312_000000, CDR00610_000000, CDR00763_000000, CDR00616_001116, CDR00252_000000, CDR00676_000000, CDR001276_000000, CDR00676_000000, CDR01276_000000, CDS027, CDS031 is achieved. Riparian vegetation belt (shrubs and trees) with a width of at least 5 m is preserved. 	 Maintain current condition and prevent habitat degradation while allowing natural processes, including erosion and succession, to enable formation of natural habitats. Preserve habitat diversity with unfortified banks and maintain rapids with rocky and gravelly bottoms where the species resides, as well as sandy bottoms near the shore used by juvenile individuals. Preserve rapids with river speeds greater than 1 m/s where the species spawns. Preserve a riparian vegetation belt (shrubs and trees) at least 5 m wide. Do not allow construction of new dams or obstacles to maintain the unimpeded dispersal of juvenile and adult individuals and to preserve favourable hydromorphological processes and hydrological regime. Use appropriate bio-engineering methods to stabilize and reinforce riverbanks and protect them from erosion. In exceptional cases, when not possible, plan to minimize sections with stone or similar materials for bank reinforcement. Fisheries management plans should incorporate prohibition on introduction of alien and invasive alien species. Monitor and control the introduction and spread of alien and invasive species by using permitted fishing tools without restrictions. Once alien and invasive species are caught, do not return them to the watercourse.
Site specific conservation objectives:	Conservation measures:
 Maintain favourable condition of the target species through following attributes: 1340 ha of favourable habitats (forest habitats with sufficient large stumps, dying or freshly dead trees) (NKS: E.1.1.2., E.1.1.3., E.2.1.3., E.2.1.5., E.3.1.1., E.9.3.2., E.9.3.4.) are maintained. 	 Preserve suitable habitats and favourable habitat conditions in forest ecosystems. Retain a minimum of 3% of deadwood or dying woody biomass within forest stands. Preserve favourable hydrological regime. Ensure permanent presence of dead wood in forests.

Species population is maintained (minimum 6 In forests managed under an even-aged quadrants 1 x 1 km). system preserve forest stand connectivity by - Favourable hydrological regime is preserved. preserving areas where regeneration will be - A minimum of 3% of deadwood or dying postponed. woody biomass is retained within forest - For forest protection, use biological and biotechnical methods, while chemical methods stands. In forests managed under an even-aged should only be used in cases of potential system, forest stand connectivity is maintained significant damage when no appropriate by preserving areas where regeneration will biological or biotechnical methods are available. be postponed. Target habitat type: Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Natura 2000 site: SCI HR2000364 Mura Carpinion betuli (9160) Site specific conservation objectives: Conservation measures: Achieve f favourable condition of the target habitat type through following attributes: - At least 190 ha of habitat type area is maintained. - Preserve favourable hydrological regime - Favourable hydrological regime (surface waters (favourable groundwater level). and groundwater connection and soil Preserve favourable proportion of oak stands saturation with water to a depth of 250 cm) is older than 80 years. - Ensure that forest reproductive material used - Characteristic species of this habitat type are for sowing or planting consists of native species preserved. typical for the habitat type. - Forest clearings are preserved. Limit usage of plant protection products and No alien tree species are present in the habitat mineral fertilizers in forest management. - Preserve plant species characteristic for habitat - In forests managed under an even-aged type. system, at least 40% of oak stands older than 80 years is preserved. Target habitat type: Natural eutrophic lakes with Natura 2000 site: SCI HR2000364 Mura Magnopotamion or Hydrocharition - type vegetation (3150) Conservation measures: Site specific conservation objectives: Maintain favourable condition of the target habitat - Preserve all river backwaters and oxbows and type through following attributes: their connection to the river. - At least 180 ha of habitat type area is - Prevent natural succession by periodically maintained. removing accumulated organic matter. - All backwaters and oxbows are preserved, - Maintain pH > 7 of water. along with their connection to the river. - Preserve species characteristic for habitat type. - pH > 7 of water is maintained. Remove invasive alien plant species. Characteristic species of this habitat type are preserved. Target habitat type: Alluvial forests with Alnus Natura 2000 site: SCI HR2000364 Mura glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) (91E0*)

Conservation measures:

Site specific conservation objectives:

 Maintain favourable condition of the target habitat type through following attributes: At least 1150 ha of habitat type area is maintained. Characteristic species of this habitat type are preserved. Periodic flooding of the area is preserved. Forest clearings are preserved. No non-native tree species are present in the habitat type area. 	 Preserve favourable hydrological regime (periodic flooding, high groundwater level). Ensure that forest reproductive material used for sowing or planting consists of native species typical for the habitat type. Limit usage of plant protection products and mineral fertilizers in forest management. Preserve plant species characteristic for habitat type. Ensure that natural forest areas are not replaced with hybrid poplar or non-native species plantations, and gradually guide existing poplar stands towards native forest compositions where applicable. Do not drain or cover depressions with woody vegetation characteristic for habitat type (black alder, white willow). Preserve forest clearings i.e. meadows and pastures within forest complexes. During construction of forest infrastructure, ensure unhindered flow of water. Remove invasive alien species.
Natura 2000 site: SCI HR2000364 Mura	Target habitat type: Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) (6510))
Site specific conservation objectives:	Conservation measures:
 Achieve favourable condition of the target habitat type through following attributes: Habitat type is maintained in zone of 200 ha. The crucial zone of 8 ha is maintained. Woody and shrubby vegetation does not exceed 10 % cover. Habitat quality is improved through removal of woody vegetation. Characteristic species of this habitat type are preserved. Invasive alien species do not cover more than 10% of the area. Condition of the habitat are improved by removing invasive alien plant species. 	 Provide voluntary measures (that contribute to environment) for land users, co-financed with EU funds. Prevent vegetation succession. Remove invasive alien plant species.

SAC HUBF20043 Mura mente

Table 13: SAC HUBF20043 Mura mente

Source of site specific conservation objectives and conservation measure and accompanying data: Balaton-Felvidék National Park Directorate

National Park Directorate	
Natura 2000 site: SAC HUBF20043 Mura mente	Target habitat: Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation (3270)
Site specific conservation objectives:	Conservation measures:
 Reduction of the amount of nutrient input. Registration, monitoring and proactive protection of habitats with excellent naturalness. Availability of up-to-date information and management strategies regarding invasive species. Monitoring of the most valuable habitat patches and maintaining their favourable natural state. Regeneration of potential habitats and reestablishment of plant communities in secondary habitats; increasing the number of localities by at least 20%. Preservation or increase of the area of existing habitats by at least 20%. Representative assessment of the condition of designated habitat types using sample areas. Monitoring of the extent, distribution, naturalness and species composition of habitats. 	 Prevention of nutrient inflow via surface water (partly from surrounding arable land or as a result of angling pond operations) Coordination of angling-tourism, water management and nature conservation interventions Establishment of a monitoring system and preparation of an intervention plan to manage overpopulation Baseline survey and regular follow-up (every 1–2 years) Habitat restoration in areas unsuitable for cultivation (e.g. former extraction sites, shore zones of gravel pits) Implementation of habitat management measures based on the conservation management plan Repeated coenological monitoring – 1–3 sample areas per designated habitat type Repeated habitat mapping
Natura 2000 site: SAC HUBF20043 Mura mente	Target habitat: Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation (3150)
Site specific conservation objectives:	Conservation measures:
 Preservation of the area of existing habitat patches 20% increase in extent, based on water bodies with suitable site conditions Reduction of nutrient input Registration, monitoring and proactive protection of habitats with excellent naturalness Availability of up-to-date information and management strategies regarding invasive species Representative assessment of the condition of designated habitat types using sample areas 	 Implementation of habitat management measures based on the conservation management plan Restoration of modified water bodies to a macrophyte-rich state through appropriate water regulation and protection of aquatic vegetation Prevention of nutrient inflow via surface water (partly from surrounding arable land or as a result of angling pond operations) Coordination of angling-tourism, water management and nature conservation interventions

 Assessment of the status of invasive species and monitoring of their spread Monitoring of the most valuable patches and maintaining their favourable natural condition Natura 2000 site: SAC HUBF20043 Mura mente	 Establishment of a monitoring system and preparation of an intervention plan to manage overpopulation Repeated coenological monitoring – 1–3 sample areas per designated habitat type Point/patch mapping in connection with habitat mapping Baseline survey and regular follow-up (every 1–2 years) Target habitats: Alluvial meadows of river valleys of the Cnidion dubii (6440); Lowland hay meadows (Alopecurus pratensis, Sanguisorba
Site specific conservation objectives:	officinalis) (6510) Conservation measures:
 Elimination of habitat loss caused by secondary succession and support for the regeneration of altered or degraded habitat patches Careful restoration of areas overgrown with shrubs or forested in recent decades; increase in the extent of habitat patches by 10% Preservation of the diversity of companion species, and thus overall species richness Reduction of big game populations to a level that allows for grassland management and prevention of weed invasion without fencing Maintenance of species-rich meadows with stable water supply that are resistant to the emergence of invasive herbaceous species, and suppression of such species if they appear or spread Suppression of invasive woody species in case of their appearance and spread Representative assessment of the condition of designated habitat types using sample areas Assessment of the status of invasive species and monitoring of their spread 	 Implementation of extensive meadow management and stabilisation or increase of groundwater levels Habitat restoration through shrub removal or short-term intensive grazing, followed by continuation of extensive meadow management Maintenance or assurance of gentle, extensive meadow use, along with achieving or improving the stability of water supply Application of regulatory tools Ensuring site stability (in terms of water supply) and, if necessary, suppression of invasive species by grazing or mowing Removal of populations of woody invasive species from the entire Natura 2000 site and the surrounding areas Repeated coenological monitoring – 1–3 sample areas per designated habitat type Point/patch mapping in connection with habitat mapping
Natura 2000 site: SAC HUBF20043 Mura mente	Target habitat: Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion
	incanae, Salicion albae) (91E0*)
Exemption of mature habitat stands from forestry interventions or significant reduction of their intensity Increase in the extent of designated habitat types through conversion of non-	Transition to continuous forest cover management systems Prevention of clear-cut areas larger than 0.5 ha

- native or low conservation value tree stands, aiming for a 10% increase in total area
- Reclassification of non-forestry registered patches with high naturalness and good or excellent conservation status
- Increase in the area of typical, mosaicstructured habitat stands, with the aim of achieving a 10% expansion
- Provision of at least 20 m³/ha of standing and lying deadwood in middle-aged and older forest stands (>50 years), with at least half exceeding 30 cm in diameter
- Maintenance of well-watered stands that are resistant to weed encroachment
- Reduction of big game populations to a level where fencing for regeneration protection is not required (only occasional, targeted measures may be necessary)
- Removal of aggressively spreading invasive species across the entire area
- Suppression of invasive herbaceous species
- Representative assessment of the condition of designated habitat types using sample areas
- Assessment of the status and spread of invasive species

- Permanent non-intervention in a habitat patch of at least 150 ha (except for the removal of invasive tree species)
- Conversion of non-native stands into forests composed of native tree species
- Designation of eligible stands as freely managed forests during forest planning, based on forest parameters
- Application of continuous cover forestry methods, minimising the extent of final cuttings, and implementation of mosaiclike silvicultural interventions
- Regulatory requirement
- Reduction of sanitary logging operations
- Ensuring water availability in accordance with the ecological water demand
- Application of regulatory tools
- Continuous removal of emerging individuals or populations using mechanical and chemical methods
- Development of stand structures free from large clearings that do not favour mass spread of invasive species
- Repeated coenological monitoring 1(–2) sample areas per designated habitat type
- Point/patch mapping in connection with habitat mapping

Natura 2000 site: SAC HUBF20043 Mura mente

Target habitats: Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris) (91F0); Illyrian oakhornbeam forests (Erythronio-carpinion) (91L0)

Site specific conservation objectives:

- Exemption of mature habitat stands from forestry interventions or significant reduction of their intensity
- Increase in the extent of designated habitat types through the conversion of non-native or low-conservation-value tree stands, aiming for a 10% increase in area
- Increase in the extent of typical, mosaicstructured stands, with the objective of achieving a 10% expansion
- Provision of at least 20 m³/ha of standing and lying deadwood in older forest stands (>80 years), with at least half of it exceeding 30 cm in diameter

- Transition to continuous forest cover management systems
- Prevention of contiguous final harvest areas larger than 0.5 ha
- Permanent non-intervention in a habitat patch of at least 30 ha (except for the removal of invasive tree species)
- Conversion of non-native stands into forests composed of native tree species
- Application of continuous cover forestry systems, minimising the extent of final harvests and applying mosaic-like silvicultural interventions
- Regulatory requirement
- Reduction of sanitary logging operations

- Reduction of big game populations to a level that does not require fencing to protect regeneration, with only occasional or individual protective measures needed
- Removal of aggressively spreading invasive species from the entire area
- Suppression of invasive herbaceous species
- Monitoring of the extent, distribution, naturalness, and species composition of habitats
- Assessment of the status and spread of invasive species
- Representative assessment of the condition of designated habitat types using sample areas

- Application of regulatory tools
- Continuous removal of emerging individuals or populations using mechanical and chemical methods
- Development of stand structures free from large clearings that do not favour mass proliferation of such species
- Repeated habitat mapping (according to the NBmR methodology)
- Point/patch mapping in connection with habitat mapping
- Repeated coenological monitoring one sample area per designated habitat type

Natura 2000 site: SAC HUBF20043 Mura mente

Target species: Vertigo moulinsiana

Site specific conservation objectives:

 Retention of habitat stands to the extent possible, even under climate change conditions that cause drying
 Preservation of at least certain patches of the habitat in an undisturbed state, and a 10% increase in the area of habitats suitable for active management Identification of trends in population size and number of individuals at specific occurrence sites

Conservation measures:

Ensuring adequate water supply and eliminating or preventing any drainage Complete avoidance of grazing Mowing only to be applied on parts of the habitat affected by reed or goldenrod encroachment; if this is not feasible, then mowing should be carried out in a mosaic pattern, leaving at least one-third of the unmanaged If the habitat occurs in a forest clearing, it must be fully protected from forestry operations Survey along transects (with a minimum of five permanent transects designated) Data collection through the inspection of sedge leaves under suitable weather conditions (rainy, humid, overcast)

Natura 2000 site: SAC HUBF20043 Mura mente

Target species: Ophiogomphus cecilia

Site specific conservation objectives:

- Maintenance of the population and support for natural riverbed dynamics and the formation of pioneer habitats
- Preservation of the remaining nearnatural riverbed morphology and flow conditions
- Provision of optimal ecological conditions for the species
- Assessment of the exact condition and size of the population

- Avoidance of interventions in the low- and medium-water riverbed (especially dredging, gravel extraction, sediment removal, bank reshaping, and bank stabilisation)
- Consultation with the water management
- Reduction of crayfish population by selective fishing using trap nets or electrofishing over 5 hectares per year

Understanding the rate and spatial pattern of its spread	 Survey along the longitudinal profile of the Mura River to assess the spatial distribution of the species (collection of larvae and exuviae) Monitoring of the dispersal dynamics and population size of the signal crayfish, taking into account both control efforts and natural dynamics
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Coenagrion ornatum
Site specific conservation objectives:	Conservation measures:
 Maintenance of populations, halting the decline in individual numbers and, where possible, increasing them (by 5% in the number of 1×1 km ETRS grid squares with occurrences) through appropriate habitat management Preservation of flow velocity Obtaining an accurate picture of the species' distribution and population sizes 	 In river sections affected by maintenance works, interventions should not be carried out across the full cross-section of the riverbed (dredging should be limited to half the width, with vegetation retained in segments) Avoidance of riverbed widening Conducting faunistic surveys targeting larvae and adult specimens Quantitative assessment of larvae in inhabited water bodies
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Leucorrhinia pectoralis
Site specific conservation objectives:	Conservation measures:
 Ensuring stable (eustatic) water balance parameters Maintenance of populations and a 5% increase in the proportion of habitats covered with vegetation of suitable structure for the species Provision of qualitative parameters in the habitats that support the persistence of the populations Mapping of scattered populations Estimation of individual density in known populations 	 Prevention of water drainage and retention of water volumes provided by floods Periodic, small-scale maintenance dredging aimed at preventing vegetation closure Reduction of diffuse water pollution, primarily from agricultural sources Conservation-based control of angling activities Prevention of the illegal introduction of grass carp Selective, control-oriented fishing to reduce established individuals Mapping of scattered populations through surveys for adults and exuviae (faunistic sampling) Quantitative surveys during the flight period, focusing on adult individuals
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Cerambyx cerdo, Cucujus cinnaberinus, Lucanus cervus
Site specific conservation objectives:	Conservation measures:
 Maintenance of populations, halting the decline in individual numbers and, where possible, increasing them (by 5% in the 	 Placement of insect breeding logs made of oak trunks in larger, continuous young forest stands

number of 1×1 km ETRS grid squares with In addition to the management measures species occurrences) specified for habitat types 91E0*, 91F0 and Maintenance of populations, halting the decline in individual numbers and, where - leaving damaged and fallen trees on site possible, increasing them through pre-designation of retention trees or appropriate habitat management groups of retention trees before starting Population surveys of priority forestry operations, involving staff of the xylophagous insect species to monitor Balaton-felvidék National Park Directorate the impacts of forest management Implementation of monitoring suitable for providing approximate estimates of population sizes Natura 2000 site: SAC HUBF20043 Mura mente Target species: Eriogaster catax Site specific conservation objectives: Conservation measures: Halting population decline through the Mitigation of land-use intensification preservation of shrublands and forest Strict control of shrub removal in the species' habitats by the Balaton-felvidék edaes Halting population decline through the National Park Directorate preservation of shrublands and forest Preservation of shrub patches/strips of adequate size for the species' significant Identification of trends in population size population development (shrub clearance and the number of individuals at specific should only be carried out if the length of non-invasive shrub strips along parcel occurrence sites edges exceeds 10%) Annual management of mown/grazed habitat patches with consideration of nature conservation aspects urvey of caterpillar nests along transects (with at least five permanent transects designated) Natura 2000 site: SAC HUBF20043 Mura mente Target species: Lycaena dispar Site specific conservation objectives: Conservation measures: Preservation of the species' populations Ensuring adequate water supply and by maintaining, as far as possible, the eliminating any drainage where necessary habitat structure and climatic conditions Protection of riparian vegetation along at occurrence sites, even under climate watercourses, canals and standing water change leading to increased aridity bodies at known and potential habitat Application of management practices that sites consider the species' habitat structure Avoidance of mowing in the species' requirements at its occurrence sites, habitats, or its application only in areas affected by invasive plant species aiming to increase the number of 1×1 km ETRS grid squares with confirmed Grazing to be applied only moderately and restricted to limited sub-areas presence by 5% Identification of trends in population size Survey of adult individuals along transects (with at least five permanent transects and the number of individuals at specific occurrence sites designated) Natura 2000 site: SAC HUBF20043 Mura mente Target species: Umbra krameri, Misgurnus fossilis Site specific conservation objectives: Conservation measures:

Prevention of water Retention of populations by ensuring drainage stable (eustatic) water balance parameters retention of water volumes provided by Provision of habitat conditions that Introduction of temporal and spatial support species persistence, with the goal of increasing the number of 1×1 km ETRS restrictions (limited to small-scale grid squares with confirmed presence by dredging) in case of interventions in the riverbed Regulation of maintenance and dredging Consultation with the water management technologies sector and angling stakeholders Survey of potentially colonisable habitats Introduction of temporal and spatial Monitoring of population size at restrictions in river sections affected by confirmed occurrence sites maintenance works Maintenance should not be carried out across the full river cross-section (dredging limited to half the width, with appropriate vegetation left in segments) Consultation with the water management sector Presence-absence and population size surveys in 10 sampling units Target species: Romanogobio kesslerii, Romanogobio vladykovi, Romanogobio uranoscopus, Gymnocephalus baloni, Natura 2000 site: SAC HUBF20043 Mura mente Gymnocephalus schraetzer, Rutilus pigus, Sabanejewia aurata, Zingel streber, Zingel zingel Conservation measures: Site specific conservation objectives: Maintenance of populations, halting the Avoidance of interventions in low- and decline in individual numbers, and medium-flow riverbeds (in particular increasing them where possible dredging, gravel extraction, sediment Ensuring the continuation of currently removal, and bank reshaping) functioning natural riverbed dynamics, Consultation with the water management with the aim of increasing the number of sector 1×1 km ETRS grid squares with confirmed Prevention of the construction of bank species presence by 5% protection structures using riprap Improvement and monitoring of Preservation and maintenance of river knowledge on population sizes sections with rocky or gravelly substrates Consultation with the water management Density assessment at a minimum of 10 independent sampling units along the longitudinal profile of the Mura River Target species: Rhodeus sericeus amarus, Cobitis Natura 2000 site: SAC HUBF20043 Mura mente taenia Site specific conservation objectives: Conservation measures: Maintenance of populations by Elimination of potential sources of preserving the existing ecological pollution conditions within their habitats In river sections affected by maintenance Provision of habitat conditions that works, interventions should not be carried support species persistence, with the aim out across the full river cross-section (e.g. of increasing the number of 1×1 km ETRS dredging limited to half the width)

grid squares with confirmed occurrences	In addition to spatial restrictions, temporal
by 5% • Survey of the Mura River as well as	limitations are also required for interventions
potentially colonisable canals, small	Consultation with the water management
watercourses and standing waters	sector
 Monitoring of population sizes at confirmed occurrence sites 	 Presence—absence and population size surveys in 15 sampling units
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Bombina bombina
Site specific conservation objectives:	Conservation measures:
 Maintenance of populations through the preservation of favourable hydrological conditions in the species' habitats Preservation of habitat conditions suitable for maintaining and strengthening populations, with the goal of increasing the number of 1×1 km ETRS grid squares with confirmed presence by 5% Monitoring the condition of wetland habitats using indicator signs of vertebrate species associated with permanent water cover 	 Maintenance of small water bodies with permanent or at least seasonally persistent water cover, free of fish Preservation of areas with temporary water cover Informing and engaging land users to ensure their interest in the above measures Reduction of game population densities Regular surveys conducted in at least five habitats of different sizes
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Emys orbicularis
Site specific conservation objectives:	Conservation measures:
 Maintenance of populations and, where possible, increase in individual numbers Provision of habitat conditions suitable for population maintenance, with the aim of increasing the number of 1×1 km ETRS grid squares with confirmed presence by 5% Monitoring of the species' populations 	 Preservation of standing waters rich in floating and submerged macrophyte vegetation Prevention of the establishment of competing species; in case of their appearance (e.g. red-eared slider), removal of individuals through collection Raising public awareness – particularly among anglers – about the risks of road mortality caused by vehicle traffic Retention of natural bank morphology and riparian vegetation, including leaving fallen trees along the water's edge Regular surveys conducted in at least five river sections with differing characteristics (monitoring of occurrences and egglaying sites)
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Barbastella barbastellus
Site specific conservation objectives:	Conservation measures:
 Maintenance of the local population, halting the decline in individual numbers, and increasing them where possible 	 Leaving an increasing number of old, damaged and fallen trees on site (minimum 10–15 individuals per hectare) In addition to the management provisions for habitat types 91E0*, 91F0 and 91L0: pre-

 Implementation of habitat management practices suitable for maintaining and strengthening the species' populations Population monitoring of the priority bat species to track the effects of forest management activities 	designation of retention trees and groups of retention trees before the start of forestry operations, with the involvement of staff from the Balaton-felvidék National Park Directorate Bat detector surveys conducted at a minimum of five sampling points
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Myotis emarginatus
Site specific conservation objectives:	Conservation measures:
 Preservation of the population by eliminating disturbance factors present at foraging sites Repeated monitoring of bat communities to determine trends in population size Assessment of potential threats to colonies posed by other species 	 Preservation of the mosaic structure of the Natura 2000 site, including the maintenance of wetlands and forests in their current extent Individual sampling-based surveys conducted at a minimum of five sampling points
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Castor fiber
Site specific conservation objectives:	Conservation measures:
 Preservation of the mosaic structure of the Natura 2000 site, including the maintenance of wetlands and forests in their current extent Individual sampling-based surveys conducted at a minimum of five sampling points 	 Leaving a 20-metre-wide buffer zone along the riverbank unmanaged (if no forestry or crop production occurs in this zone, the spontaneous regeneration of vegetation can help habitats resist disturbance caused by the species' tree felling) Survey of signs indicating the species' presence (e.g. gnaw marks, droppings) along the entire Mura region
Natura 2000 site: SAC HUBF20043 Mura mente	Target species: Lutra lutra
Site specific conservation objectives:	Conservation measures:
 Maintenance of populations Monitoring of the species' populations 	 Preservation of riparian vegetation Raising awareness about the significance of vehicle collisions with wildlife through 1–2 forums annually for the local community (primarily anglers) Survey of signs indicating the species' presence (e.g. feeding marks, droppings) along the entire Mura region

Preliminary Natura 2000 impact assessment: Location of planned Mura Bridge / MuKo Bridge i.e. its central object bridge over the Mura River with short sections of roads inside of Natura 2000 sites SCI HR2000364 Mura and SAC HUBF20043 Mura Riverside. The bridge is in general planned to avoid construction of a pillar in the riverbed, but this should be confirmed through field investigation on site, as part of the preparation of the Mura Bridge / MuKo Bridge project documentation.

In line with current plan of the bridge over the Mura River construction, it is expected that existing vegetation within construction zone will be removed for the purpose of its construction, resulting in both temporary and permanent habitat loss. At the locations of the bridge support pillars, a permanent loss of vegetation will occur, whereas vegetation in the broader area is expected to gradually regenerate through natural succession to a state resembling the original. The area designated for the planned bridge is predominantly composed of forest and riparian habitats. In close proximity, there is a zonation of the target habitat type 91E0 Alluvial forests (*Alno-Padion*, *Alnion incanae*, *Salicion albae*). In addition to habitat itself, potential impacts on the fauna present in the forest may also occur, including species such as *Barbastella barbastellus*, *Myotis bechsteinii* (bat species), and the beetle *Cucujus cinnaberinus*. A moderately negative impact is anticipated on subject habitat type in the form of partial surface loss. Furthermore, disturbance of potentially present animal species may also have adverse effects.

Besides forest habitat types, the Mura Bridge / MuKo Bridge project will cause permanent loss of portions of riparian habitats, as now bridge support pillars are planned along the riverbanks. Riparian zones are favourable for various animal species, and within the broader Mura Bridge / MuKo Bridge area, following target species are potentially present: Bombina bombina, Castor fiber, Emys orbicularis, and Lutra lutra. During construction activities, impacts such as water turbidity may occur, which could adversely affect fish species, particularly during spawning periods. To minimize these adverse impacts, following mitigation measures are proposed:

- Vegetation should be cleared only within areas strictly necessary for the construction activities.
- All surfaces degraded during site organization, establishment of the working zone, and execution of works should be rehabilitated upon completion to allow for natural recolonization by native vegetation typical of the broader area.
- In planning of construction works in the area of Natura 2000, period of spring and autumn should be avoided when fish activity peaks due to spawning and migration. Vegetation removal should be suspended during breeding and egg-laying season of *Bombina bombina* and *Emys orbicularis* i.e. late spring period.

Final Natura 2000 impact assessment will be provided on project level during preparation of project documentation and before issuing location permit for construction.

4. Alternatives

Please refer to Environmental report – Chapter 3. Observation of potential alternatives.

5. Cumulative impacts

PO 3 (ii) of the Hungary-Croatia Programme promotes better connected border region and includes preparation of the project documentation and construction of missing road link Sárok - Kneževo, preparation of the project documentation and construction of missing road link Zákány - Gotalovo and preparation of the project documentation for Murakeresztúr - Kotoriba bridge (Mura Bridge / MuKo Bridge).

Road link Sárok - Kneževo is not inside Natura 2000 and distance between it and nearest Natura 2000 sites is at about 4.5 km. Road link Sárok - Kneževo is planned as short road and due to its position to Natura 2000 sites, there will be no impact even on the nearest Natura 2000 site.

Road link Zákány - Gotalovo is partly inside of Natura 2000. Namely, Croatian section of that road in length of 290 m is inside of Natura 2000 sites SCI HR5000014 Gornji tok Drave and SPA HR1000014 Gornji tok Drave. Hungarian section passes in vicinity of SPA HUDD10002 Nyugat - Dráva and SAC HUDD20054 Nyugat - Dráva.

SCI HR5000014 and SPA HR1000014 cover a significant area of 22 981.54 ha. According to the Natura 2000 SDF, existing main pressures and threats in SCI HR5000014 and SPA HR1000014 are: human induced changes in hydraulic conditions (J02); canalisation & water deviation (J02.03); removal of sediments (mud...) (J02.02) agricultural intensification (A02.01); use of biocides, hormones and chemicals (A07); forestry clearance (B02.02), use of biocides; hormones and chemicals (forestry) (B04); hunting (F03.01); pollution to surface waters (limnic & terrestrial) (H01) and pollution to groundwater (point sources and diffuse sources) (H02).

Road link Zákány - Gotalovo is planned in the area with existing anthropogenic impacts presented in Croatia with international railway line M201 that connect to railway line No. 30 in Hungary, state road DC41 in Croatia and local roads in Hungary and agriculture. Croatian section of road link will occupy negligible part of SCI HR5000014 and SPA HR1000014 i.e. habitats favourable for target species: *Bombina bombina, Emys orbicularis, Castor fiber, Triturus carnifex, Triturus dobrogicus, Euphydryas maturna, Euplagia quadripunctaria, Ciconia ciconia, Circus cyaneus, Falco columbarius, Curruca nisoria and Vanellus vanellus.* Loss of those habitats will contribute minimally to existing pressures and threats in SCI HR5000014 and SPA HR1000014. Proposed mitigation measures (please see Chapter 6. Mitigation measures and monitoring programme) will additionally reduce those impacts.

According to the Natura 2000 SDF, existing pressures and threats in SPA HUDD10002 Nyugat - Dráva are related to: sylviculture, forestry; grazing;, hunting; leisure fishing; modifying structures of inland water courses; and other human disturbances and in SAC HUDD20054 Nyugat - Dráva

to: human induced changes in hydraulic conditions; invasive non-native species; hunting; sand and gravel extraction; sylviculture, forestry; leisure fishing; use of biocides, hormones and chemicals; and other human intrusions and disturbances. Impact of road link Zákány - Gotalovo will be limited just to the edge of SPA HUDD10002 Nyugat - Dráva and SAC HUDD20054 Nyugat - Dráva minimally contributing existing pressures and threats.

Mura Bridge / MuKo Bridge is planned partly inside of Natura 2000 sites SCI HR2000364 Mura in Croatia and SAC HUBF20043 Mura Riverside in Hungary.

SCI HR2000364 Mura covers a significant area of 6 108.10 h ha. According to the Natura 2000 SDF, existing main pressures and threats in SCI HR2000364 Mura are: agricultural intensification (A02.01); forest exploitation without replanting or natural regrowth (B03), sand and gravel extraction (C01), canalisation & water deviation (J02.03); modification of hydrographic functioning, general (J02.05) and flooding modifications (J.02.04). Other pressures and threats are: abandonment / lack of mowing (A03.03), abandonment of pastoral systems, lack of grazing (A04.03.); use of biocides, hormones and chemicals (A07); fertilisation (A08); urbanised areas, human habitation (E01); industrial or commercial areas (E02); fishing and harvesting aquatic resources (F02); invasive non-native species (I01); anthropogenic reduction of habitat connectivity (J03.02) and damage by herbivores (including game species) (K04.05.).

SAC HUBF20043 Mura Riverside covers area of 2 145.40 ha. According to the Natura 2000 SDF, main pressures and threats in SAC HUBF20043 Mura Riverside are: modification of hydrographic functioning, general; mowing / cutting of grassland; and invasive non-native species. Other pressures and threats are: abandonment of pastoral systems, lack of grazing; antagonism arising from introduction of species; damage caused by game (excess population density); drying out; dykes, embankments, artificial beaches, general; eutrophication (natural); removal of dead and dying trees, roads, motorways; and flooding modifications.

On current data on Mura Bridge / MuKo Bridge project it is assessed that it will not lead to changing of hydromorphological features of the Mura River. Moderate negative impact is assessed close proximity of future bridge over the Mura River due to habitat loss and fauna disturbances. Mitigation measures are proposed (please see Chapter 6. Mitigation measures and monitoring programme) to reduce Mura Bridge / MuKo Bridge negative impact on Natura 2000 target species and target habitat types and in that way to minimize contribution of Mura Bridge / MuKo Bridge project to existing pressures and threats in SCI HR2000364 and SAC HUBF20043.

6. Mitigation measures and monitoring programme

In line with assessment provided in Chapter 3. Potential impact of the Hungary-Croatia Programme implementation on Natura 2000, for road link Zákány – Gotalovo, following mitigation measures are proposed:

Bombina bombina
Emys orbicularis
Castor fiber
Triturus carnifex
Triturus dobrogicus
Euphydryas maturna
Euplagia quadripunctaria

Ciconia ciconia Circus cyaneus Falco columbarius Curruca nisoria Vanellus vanellus

- Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.
- During construction activities within SCI HR5000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery
- During construction activities within SPA HR1000014, a minimal working corridor should be used, and existing roads and clearings should be utilized for movement and the storage of construction materials and machinery. The construction of new or the widening of existing access routes for machinery and vehicles shall be undertaken only if strictly necessary, in order to preserve the integrity of the original habitat to the greatest extent possible.
- Upon completion of the construction, habitats within the working corridor should be restored to a condition as close as possible to their original state.

Monitoring programme related to the road link Zákány – Gotalovo is not necessary.

In line with assessment provided in Chapter 3. Potential impact of the Hungary-Croatia Programme implementation on Natura 2000, for Mura Bridge / MuKo Bridge, following mitigation measures are proposed:

- Vegetation should be cleared only within areas strictly necessary for the construction activities.
- All surfaces degraded during site organization, establishment of the working zone, and execution of works should be rehabilitated upon completion to allow for natural recolonization by native vegetation typical of the broader area.
- In planning of construction works in the area of Natura 2000, period of spring and autumn should be avoided when fish activity peaks due to spawning and migration. Vegetation removal should be suspended during breeding and egg-laying season of *Bombina bombina* and *Emys orbicularis* i.e. late spring period.

In line with Hungarian and Croatian regulation, environmental impact assessment including Natura 2000 impact assessment for Mura Bridge and MuKo Bridge will be completed on project level before issuing the location permit for the construction. Final mitigation measure will be determined in the EIA and Natura 2000 impact assessment on project level. Project level assessment may determine need of monitoring programme.

7. Conclusion

PO 3 (ii) of the Hungary-Croatia Programme promotes better connected border region and includes preparation of the project documentation and construction of missing road link Sárok - Kneževo, preparation of the project documentation and construction of missing road link Zákány - Gotalovo and preparation of the project documentation for Murakeresztúr - Kotoriba bridge (Mura Bridge / MuKo Bridge).

Road link Sárok - Kneževo is not inside Natura 2000 and distance between it and nearest Natura 2000 sites is at about 4.5 km. Road link Sárok - Kneževo is planned as short road and due to its position to Natura 2000 sites there will be no impact even on the nearest Natura 2000 site.

Road link Zákány - Gotalovo is partly inside of Natura 2000. Namely, Croatian section of that road in length of 290 m is inside of Natura 2000 sites SCI HR5000014 Gornji tok Drave and SPA HR1000014 Gornji tok Drave. Hungarian section passes in vicinity of SPA HUDD10002 Nyugat - Dráva and SAC HUDD20054 Nyugat - Dráva.

No target habitat types such as Sub-Atlantic and medio-European oak or oak-hornbeam forests (9160), Alpine rivers with Myricaria germanica (3230), Rivers with muddy banks (3270), Natural eutrophic lakes (3150), Alluvial forests with Alnus glutinosa and Fraxinus excelsior (91E0*), Lowland hay meadows (6510), Riparian mixed forests (91F0), or Oligotrophic to mesotrophic standing waters (3130) are present in the immediate impact area, thus excluding the likelihood of direct negative impacts during construction of road link Zákány - Gotalovo or its operation.

Negligible parts of habitats favourable for target species: *Bombina bombina, Emys orbicularis, Castor fiber, Triturus carnifex, Triturus dobrogicus, Euphydryas maturna and Euplagia quadripunctaria* in SCI HR5000013 and *Ciconia ciconia, Circus cyaneus, Falco columbarius, Curruca nisoria and Vanellus vanellus* in SPA HR1000014 will be lost.

Moderate, but acceptable negative impacts have been recognized for target species: *Bombina bombina, Emys orbicularis, Castor fiber, Triturus carnifex, Triturus dobrogicus, Euphydryas maturna and Euplagia quadripunctaria* due to permanent habitat loss along the planned route and due to disturbance of potentially present fauna during construction works. Mitigation measures are proposed to preserve surrounding habitats as much as possible, including recommendation to use existing access roads for machinery movement to the greatest possible extent.

Moderate but acceptable negative impacts have been recognized for target species: *Ciconia ciconia, Circus cyaneus, Falco columbarius, Curruca nisoria, and Vanellus vanellus* due to permanent habitat loss (riparian, forest, and grassland habitats) and disturbance of potentially present fauna during construction. Mitigation measures are proposed to minimize habitat

degradation and to facilitate the natural recovery of affected habitats to their original state as swiftly as possible.

Impact on target spices and target habitat types of the SPA HUDD10002 Nyugat - Dráva and SAC HUDD20054 Nyugat - Dráva is not expected.

Monitoring programme related to the road link Zákány – Gotalovo is not necessary.

Central object of the Mura Bridge / MuKo Bridge project is the planned bridge over the Mura River inside of Natura 2000 sites SCI HR2000364 Mura and SAC HUBF20043 Mura Riverside.

In close proximity of the bridge over the Mura River is a zonation of the target habitat type 91E0 Alluvial forests (*Alno-Padion, Alnion incanae, Salicion albae*). In addition to habitat itself, potential impacts on the fauna present in the forest may also occur, including species such as *Barbastella barbastellus*, *Myotis bechsteinii* and *Cucujus cinnaberinus*. A moderately negative impact is anticipated on subject habitat type in the form of partial surface loss. Furthermore, disturbance of potentially present animal species may also have adverse effects. Besides forest habitat types, loss of portions of riparian habitats is expected as bridge support pillars are planned along the riverbanks. Riparian zones are favourable for various animal species, and within the broader area, following target species are potentially present: *Bombina bombina, Castor fiber, Emys orbicularis*, and *Lutra lutra*. During construction activities, impacts such as water turbidity may occur, which could adversely affect fish species, particularly during spawning periods. Mitigation measures are proposed to preserve surrounding habitats as much as possible and to plan timeline of construction works in way to avoid critical period for fish (spawning and migration) and target species *Bombina bombina bombina* and *Emys orbicularis* (breeding and egg-laying season).

Final Natura 2000 impact assessment of Mura Bridge / MuKo Bridge will be provided on project level during preparation of project documentation and before issuing location permit for its construction.