

30 June 2024

## Comments on the ESIA package disclosed by the EBRD for the 'Tunnel Prenj' section of the Corridor Vc

### General comments

We appreciated the [Open Days](#) held from 5-7 June in Konjic, Jablanica and Mostar, which provided a useful opportunity to receive feedback and additional information on the project and ESIA package from the project promoter JPAC, the study authors and selected EBRD staff. We have taken into account this feedback when drafting these comments. Nevertheless several outstanding issues remain.

**We would like to underline the need for our comments to be addressed by relevant experts at the EBRD and EIB, not only the study authors/project promoter.** During previous EBRD ESIA consultation periods on various projects, our comments have been passed on to the project promoter and study authors to be addressed. Their responses have then been forwarded to us apparently without any further additions or edits by the EBRD's Environmental and Social Department.

This makes sense for technical comments but not for those which relate to EBRD and EIB requirements and EU legislation, which should be commented on by the banks' environmental and social experts or other independent experts (e.g. lawyers). This applies particularly to issues like Appropriate Assessment and Critical Habitats Assessment, with which there is little experience in Bosnia and Herzegovina.

Moreover, in this case we have already had a valuable opportunity to discuss many of the comments with the study authors and project promoter. We therefore ask for responses from the EBRD and EIB environmental and social departments to our comments – at least for those relating to bank standards and EU legislation.

The first three points below are particularly crucial as they are needed in order for the EIB and EBRD to make informed decisions on the project, as well as for the public to participate in decision-making in an informed manner. Without these, it is in most cases not clear whether other less damaging options are possible and whether the project risks are therefore acceptable or not.

1. **Risks from improper spatial planning process:** As we have raised previously regarding to some of the southern sections of the Corridor Vc, and as the Independent Project Accountability Mechanism's findings have confirmed, the fact that the Federation of Bosnia and Herzegovina adopted the *Spatial plan for an area of special interest for FBiH "Motorway on corridor Vc" 2008-2028* in 2017 without consulting the public on the final routing of the motorway means that the subsequent EIA and ESIA consultations for these sections – including the Prenj tunnel and approach roads – cannot be regarded as meaningful. This ESIA consultation is not taking place at a stage when all options are open regarding the routing for this section of the Corridor Vc.

The public consultations on the spatial plan were carried out in 2011, but the route was subject to major changes before the spatial plan was adopted in 2017. This means there was no opportunity for the public to comment at an early stage when all options were still open, in line with the requirements of the Aarhus Convention. The EIA hearings in 2018 were held for a specific variant (the Prenj tunnel) and did not allow a different variant to be chosen because the routing had already been defined by the spatial plan.

In 2023, when the Aarhus Centar Sarajevo submitted written comments regarding the routing as part of the national-level consultation, the Federal Ministry for Environment and Tourism (FMOIT) answered that this was not the subject of the consultation as the routing had already been set. Lack of public buy-in on the routing has caused significant problems on the section south of Mostar, and the same may happen in this case if no meaningful consultations take place on the actual routing, based on more complete and comparable data on issues like underground water, social impacts, flora and geology.

This is a bigger issue than the ESIA study, but it is one which poses a major risk to the success of an already high-risk project. It needs to be resolved by the Federation of Bosnia and Herzegovina government and the EIB and EBRD need to make it clear that this is a condition of financing.

2. **Evidence needed for project justification and benefits:** Numerous claims regarding the benefits of the project are made without presenting the underlying evidence or the costs associated with it. For example, current and projected traffic volumes need to be presented, as well as an analysis of how much passing trade will decline for businesses along the route of the existing M-17 road. The motorway will obviously cause a certain amount of environmental impacts, so without any cost-benefit analysis explanation, it is impossible to see whether a full-profile motorway is justified.
3. **Alternatives:** The arguments given for the zero option need to be better backed up with evidence. The other alternatives already examined are described well, but have not been updated to respond to the fact that certain sections of the motorway will cause damage that needs to be avoided. These should include:
  - variants in between 'no project' and 'full profile motorway', for example building bypasses for Konjic and Jablanica, as the main current bottlenecks.
  - sub-variants for the most sensitive parts of the route, namely the Bijela valley near Konjic and the village of Podgorani near Mostar,
  - other sub-variants for avoiding Critical Habitats and Priority Biodiversity Features.

Even if such variants have been examined and rejected, the public does not know this unless they are described. Without a convincing and publicly consulted analysis of comparable alternatives, compliance with a number of EBRD and EIB requirements cannot be demonstrated. These include:

- a. Alignment with the mitigation hierarchy - it cannot be proven that impacts have been avoided to the maximum extent possible if no clear and comparable analysis of all possible route alignments has been made available to the public.
- b. Involuntary resettlement, e.g. EBRD PR 5 objectives: '*avoid involuntary resettlement or, when unavoidable, minimise involuntary resettlement by exploring feasible alternative project designs and sites;*' – again this cannot be proven if different routing options have not been laid out in a comparable manner and consulted with the public.

- c. Priority Biodiversity Features (PBFs) and Critical Habitats - (e.g. EBRD PR6): construction in PBFs and Critical Habitats can only be allowed at all if a number of conditions have been fulfilled, including the absence of viable alternatives for the project development – which in this case must include routing alternatives.
- d. Appropriate assessment – the purpose of an appropriate assessment is to decide whether a project, if it has significant impacts on an Emerald or Natura 2000 site, can go ahead. If it is found to have a significant impact but cannot be convincingly proven that no alternatives are available, it cannot go ahead, according to the Habitats Directive.

4. **Serious impacts on the Bijela canyon Emerald site and for the village of Podgorani:** Although the Appropriate Assessment is very general (see below) it confirms there will be impacts on the Bijela canyon Emerald site which cannot be mitigated. These are not described precisely but from what we can piece together, they include the cutting of an unquantified number of hectares of old beech forest; the channelling of the upper part of the Bijela river underneath a large embankment for more than 1.2 kilometres and outside the embankment for a further 600 metres; the construction of other embankments and a 'landscaping' area (ie. disposal site) for the disposal of dug-out waste from the Prenj tunnel and other tunnels. These are significant impacts, especially cumulatively.



At the Open Days the study authors stated that there will be no cutting of old-growth forest, however the age of the forest is not clearly shown in the study and in any case, this does not change the fact that there would be significant impacts in an Emerald site. The route needs to be changed to avoid significant impacts on the old beech forest in the Bijela valley and their indicator species, such as the white-backed woodpecker, as they have a very limited distribution in Emerald and potential Natura 2000 sites.

Likewise alternative route variants need to be examined to avoid negative impacts on the village of Podgorani at the southern end of the Prenj tunnel.

For the other sections, it remains unclear whether the currently planned routing is acceptable in terms of environmental impacts due to a significant amount of missing information regarding underground water, underground habitats and impacts on Emerald/Natura 2000 species and habitats. Nor is it clear whether the volume of traffic on this section warrants such a large and expensive tunnel, as opposed to e.g. starting with a bypass around Konjic and improving the current M17 road. Without more comprehensive information on such potential alternatives we do not find it appropriate for the EBRD and EIB to make a final decision on the construction of the Prenj tunnel and approach roads.

5. **No assessment of underground fauna.** Overall the picture regarding the underground geology and fauna is unclear as the diagram on p.57 of the Geology chapter shows karst aquifer and underground water flows in the same layer as the tunnel, and the dye tests show underground water flows from the higher reaches of the mountains to e.g. the Bijela valley. Although the study authors stated at the Open Days that Prenj is not known as a particularly cavernous mountain, the study states that near the main fault more karstic features could be expected, so it still seems highly possible that it will impact underground water flows and thus underground fauna. The flows along the tunnel route and in the Orlov Kuk tunnel still seem to be largely unknown.
6. **Incomplete application of the precautionary principle:** Although the precautionary principle is indeed applied regarding several issues (such as including bears and wolves in the critical habitat assessment), it is not uniformly applied as:
  - a) **Too many biodiversity studies are left to be carried out later:** At the Open Days it was explained that these are pre-construction surveys, but for some studies such as further bird surveys this does not seem to be the case and the studies need to be included in the ESIA in order to properly assess the potential impacts. For more details, see specific comments. This also curtails public participation as the public has access to the ESIA package but other studies are done when the main decisions have already been taken, and are usually not available to the public, despite constituting environmental information in the meaning of the Aarhus Convention.

- b) **The study assumes that all mitigation and compensation measures will be correctly implemented and be effective**, rather than looking at what might happen in a more realistic scenario where some of them do not work properly.
7. **Lack of compensation for people living right next to the motorway:** Even after the explanation provided at the Open Days on the rationale for having an expropriation corridor of only 50 metres, we still believe this is likely to be too narrow and that there is too binary a system of people whose land or houses are on the motorway being expropriated while those living only a few metres away do not get any type of compensation at all unless they lodge a successful complaint through a complaint mechanism.

There needs to be at least some kind of standardised compensation for people with houses, and to a lesser extent for land, within a set number of metres each side of the motorway due to the depreciation of their property value and noise, vibrations and pollution, even if they are not expropriated.

According to the EBRD's policy Performance Requirement 5, if people living alongside the Corridor Vc will experience permanent or temporary economic displacement - i.e. loss of land and assets, or restrictions on land use and assets leading to loss of income sources or other means of livelihood - *'the client will offer compensation to affected persons at full replacement cost, and other assistance as may be necessary to help them improve or at least restore their standards of living and livelihoods,'* subject to the provisions in the PR.

8. **Chapter 14 does not visualise landscape impacts:** Without a simulation of how the motorway will look, particularly in relation to people's houses and scenic areas, there is an increased risk of public opposition at a later stage, once people understand where it will run and how it will look.
9. **Information missing from social impact assessment:** Regarding the social impact assessment, the ESIA does not include all the required information under the EIB Standard 1:

*The description of the environmental, climate and/or social aspects<sup>28</sup> likely to be affected by the proposed project, including comprehensive and context-specific identification and analysis of people and communities likely to be affected, as well as other relevant stakeholders, paying particular attention to persons and/or groups that are vulnerable, marginalised, discriminated against or excluded on the basis of their socio-economic characteristics.*

*Assessment of the likely significant environmental and social effects of the proposed project (also taking into account the outcomes of any complementary assessments and/or focused studies as referred to in paragraphs 9 and 10, if applicable), resulting from inter alia:*

(...)

*e. the risks to human health, well-being, persons and/or groups that are vulnerable, marginalised, discriminated against or excluded on the basis of their socio-economic characteristics, cultural heritage or the environment;'*

'(...)

10. **Lack of measures for vulnerable groups:** Several vulnerable groups are identified, but without defining how their needs will be further identified and approached. We understand from the Open Days that this will take place through the Land Acquisition and Livelihood Restoration Plan, but given that the ESIA and ESAP include general principles on types of measures, and that stakeholder engagement with vulnerable people needs to be planned in advance, it is not clear why it is not already included.

11. **Need to differentiate FBIH law and EBRD/EIB standards on vulnerable people:** The FBIH Law on Expropriation foresees an additional fee for vulnerable people subject to expropriation, but the EBRD's Environmental and Social Policy requires the identification of vulnerable people for the wider reason of ensuring they are properly consulted and any specific needs taken into account during the project development. These two differing concepts seem to be conflated in this ESIA and need to be differentiated.

For example, returnees are not considered vulnerable in the ESIA, and it may be true that there is no particular reason to offer them an additional expropriation fee. However, given their experience of repeated upheavals and trauma, their enhanced connection to their land, and sense of home and heritage, we believe that they should be treated as vulnerable for the purposes of the EBRD Environmental and Social Policy and extra care should be taken with consultations of this group.

12. **Appropriate Assessment needs improvement:** The Appropriate Assessment and Critical Habitats assessment both have a different purpose from the ESIA. The information on the impacts in these assessments is not gathered merely to develop

mitigation measures, but must form the basis for a decision on whether the project can go ahead at all, and only then to decide how impacts can be mitigated and/or compensated. This is partly recognised on p.6 of the Assessment, however, the AA seems to assume the project can go ahead as planned, but without fully proving a lack of significant impact or analysing whether the criteria from the Habitats Directive are fulfilled.

Article 6 of the Habitats Directive sets out the framework for site conservation and protection, and includes proactive, preventive and procedural requirements. Article 6(2) requires countries to take appropriate steps to avoid deterioration of natural habitats and the habitats of species, and disturbance of the species, while Articles 6(3) and 6(4) are cited on p.11 of the AA and have been transposed into the FBIH Law on Nature, although a further implementing regulation is still missing. The Federal government did not take a decision as a result of the AA that was included in the EIA during the national level permitting process. But as the EIB and EBRD both require EU environmental law to be applied at project level, their due diligence needs to assess whether:

- the project *adversely affects the integrity of the site concerned*,
- there is a true '*absence of alternative solutions*',
- the project has to be carried out for '*imperative reasons of overriding public interest*'<sup>1</sup>
- and if priority species and/or habitats are present, whether these imperative reasons *relate to human health or public safety, to beneficial consequences of primary importance for the environment*.

The Appropriate Assessment document consists mainly of screening, with only just over six pages for the actual assessment. As a result, it does not fulfil the requirements of Article 6 of the Habitats Directive and is not carried out according to the Commission's [guidance](#). It does not quantify the species or habitats present or the extent to which they would be impacted, and some species present in the project area are missing (e.g. *Lutra lutra*, *Rupicapra rupicapra balcanica* and *Felis silvestris*). Even so, it is clear from the above that the impacts are significant, and the assessment agrees that they

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<sup>1</sup> Not the same as 'public interest' under the FBIH Law on Expropriation. The 'imperative reasons of overriding public interest' status needs to be confirmed separately, but the FBIH legislation does not yet regulate this process, thus an analysis on this should be done by the EIB and EBRD to inform their financing decisions.

cannot all be mitigated. As a result, no clear conclusions can be understood on the four points cited in the section above, although the scale of the forest cutting and the planned dyke and river channelling suggests that the integrity of the Bijela canyon Emerald site may indeed be affected.

The Appropriate Assessment also does not assess compliance with the Water Framework Directive's goals in line with paragraph 26 of the EIB's biodiversity standards.

In addition, it should assess potential impacts on the Gornji tok Neretve Emerald site due to the presence of known spawning grounds for the softmouth and marble trout in the river Neretva around Konjic, as the populations upstream may be affected by construction impacts on the spawning grounds downstream.

Taking into account the lack of conservation objectives for the sites likely to be affected by this project, the AA of the project should at minimum include:

- i. a full description of the project: territorial scope, volume, scale and other specifications, connections of the project with the protected/planned protected area (key distances) etc.;
- ii. characteristics of other plans, programmes and projects/investment proposals, existing and/or in the process of development or approval, which, in combination with the assessed plans, programs and projects/investment proposals, may have an adverse impact on the protected/planned protected areas;
- iii. characteristics of the protected or planned protected areas (Emerald and proposed Natura 2000 sites) - subject and objectives of protection, presence of priority types of natural habitats and species, factors contributing to the environmental value of the area, specific significance and/or vulnerability, elements of the protected area sensitive to changes, environmental status (favourable or not);
- iv. area of impact:
  - a) types of natural habitats subject to protection by the existing or planned protected areas in question, in the area of impact of the project - area, location, priority, vulnerability, condition;

- b) habitats and populations of species subject to protection by the existing or planned protected areas in question, in the area of impact of the project - structure and dynamics of populations, priority of species, condition;
- v. degree of impacts on types of natural habitats subject to protection by the existing or planned protected areas in question, in the area of impact of the project;
- vi. degree of impacts on habitats and populations of species subject to protection by the existing or planned protected areas in question, in the area of impact of the project;
- vii. impacts on nature protection objectives (at least generic ones per habitat/species) and the integrity of the existing or planned protected areas;
- viii. possible mitigation and/or restoration measures;
- ix. availability of alternative solutions and related opportunities for changes to the project;
- x. presence of reasons of overriding public interest<sup>2</sup> for the implementation of the project or considerations in relation to human health, public security or beneficial effects on the environment;
- xi. proposed compensatory measures, if needed.

As underlined above, this information must be used to conclude whether the project as currently planned can go ahead at all, not only to assume it can and plan mitigation measures.

13. **Critical Habitats assessment missing clear analysis of compliance with EBRD/EIB criteria; over-reliant on compensation and offsets:** The identification of the species and habitats is clearly explained and justified, but some seem to be missing, for example *Lutra lutra*, *Rupicapra rupicapra balcanica* and *Felis silvestris*. No overall conclusion is provided on the project's compliance with the EBRD/EIB's criteria on construction in critical habitats, particularly '*the project does not lead to measurable adverse impacts<sup>79</sup> on those biodiversity features for which the critical habitat was designated (...)*'.

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<sup>2</sup> In the meaning of the Birds, Habitats and Water Framework Directives, not 'public interest' as defined by the FBiH Law on Expropriation.

Overall it is not very clear that the mitigation hierarchy has been applied as in most cases there is no discussion of whether alternative route alignments or design features could avoid damage rather than mitigating it or compensating it. Given the low likelihood of compensation/offsetting schemes working in reality, this is not only a formality, but substantially raises the potential for harm from the project.

The Critical Habitat assessment also proposes offsets/compensation for residual impact of several species and habitats that are critical habitat - which is practically prohibited according to the EIB's Standard 4, as such offsets would have to already be operational before the damage is done: *'56. Recognising that there are limits to the impacts that can be offset, EIB will not finance projects expected to have impacts that would compromise the viability of critical habitat or its associated features (at the scale of the area of influence or greater) regardless of any proposed offset unless or until an offset that can be shown to be effective has been provided. In other cases, uncertainty and time-delays could make offsets unacceptable.'*

**Specific comments:**

**ESIA volume 1**

<b>Section no.</b>	<b>Page no. English ESIA</b>	<b>Text extract</b>	<b>Comment/suggestion</b>
<b>Chapters 1-5</b>			
2.2	24 and 25	(2006) The 43.35 km long alternative (5) that included the construction of a 12 km long tunnel through Mountain Prenj was assessed as unfavourable at the time due to length of the tunnel and high construction	If it was not feasible then, what are the differences in the newer design that make it feasible now?  What costs and benefits, and what assumptions on traffic levels, were taken into account when deciding on

		<p>and maintenance costs (Chapter 3.4, Figure 3-56).</p> <p>(2014) In 2014 companies DIVEL, Sarajevo and IG, Banja Luka prepared the Analysis of the Preliminary Design (PD) of the Motorway on Corridor Vc: Subsection Konjic - Jablanica - Mostar North for the previous approved alternative (3) from Bradina (Zukici) to Mostar. The conclusion of the analysis was that this alternative is very expensive and difficult to construct, and therefore an alternative alignment with the 10 km long tunnel through the Mountain Prenj was suggested. This change would result in an 18 km shorter section and savings of 300 million euros. The recommendation to JPAC was to change the alignment and prepare a new PD for the alternative route involving the construction of a 10 km long tunnel through the Mountain Prenj.</p>	<p>the current routing's feasibility?</p>
2.3	28-33	<p>Project consultations</p>	<p>The overview of the chronology of consultations is useful, however see the general comment above that without a consultation on the actual route variants, including the pros and cons of the current variants compared with those previously on the table (e.g. those presented in 2006), none of these consultations can be regarded as meaningful. They did not take place at an early stage when all options were open regarding the routing for this section of the Corridor Vc, in line with the Aarhus Convention.</p>

			<p>The public consultations on the project-level spatial plan were carried out in 2011, but the route was subject to major changes before the spatial plan was adopted in 2017, so they cannot be considered relevant as the finally adopted routing was not among the options considered then.</p> <p>The consultations on the FBiH spatial plan 2008-2028 similarly did not contain the currently planned routing of the motorway, and in any case this document has not been formally adopted.</p> <p>The EIA hearings in 2018 were held for a specific variant (the Prenj tunnel) and did not allow a different variant to be chosen because the routing had already been defined by the spatial plan.</p> <p>In 2023, when Aarhus Centar Sarajevo submitted written comments regarding the routing, FMOIT answered that this was not the subject of the consultation as the routing had already been set.</p> <p>This situation may lead to problems later on in the project if affected people doubt the robustness of the route selection process.</p>
2.3	32-33	<p>Throughout 2021 and 2022, consultation meetings were organised with the representatives of 15 NGOs: Aarhus Centre, Bankwatch, Neretva Zeleni, NGO Dinarica, NGO Farmer, Fruit Growers Association Konjic, NGO Travel Konjic, Hunting Association Konjic, Sports</p>	<p>Bankwatch took part in a meeting but certainly did not make any statements committing to support the implementation, neither do we agree that a motorway will increase the sales of local products, as people usually stop less on such highways.</p>

		<p>Fisherman Organisation Konjic, Hunting Organisation Koznik, Mountain Bike Organisation Konjic, NGO Boj, Tourism Association Mostar North, Organisation of Fighters and Defenders of Konjic, and Association of Serb Returnees Neretva - Konjic. All NGOs stated that they were previously informed about the Project, but 50% of them are partially satisfied with the level of information received.</p> <p>The NGOs expressed their readiness to further support the implementation of the Project but emphasised that the local residents must be timely informed about the exact route and planned activities.</p> <p>The NGOs generally believe that the Project will have a positive impact on the local communities as it will increase the sales of local products, improve the infrastructure, and increase the number of tourists in the area but stated some concerns regarding impacts on, for example, the orchards used by fruit growers near the motorway section and beehives located in the Bijela settlement or possible negative effects on the Tresanica River and wildlife migrations. These concerns were addressed in this ESIA and accompanying ESMP, which are part of the Project disclosure package.</p>	<p>At the meeting, Bankwatch asked for for main things which should be recorded in the ESIA:</p> <ul style="list-style-type: none"> <li>- eDNA testing of underground water flows to establish the presence of underground fauna</li> <li>- Additional geological studies to assess the likely impacts on underground water</li> <li>- Research on underground fauna along the tunnel route</li> <li>- A proper Appropriate Assessment.</li> </ul> <p>It was explained at the Open Days that e-DNA was not done because it might show the presence of species that are not present in the actual project area, so it is just required in the ESMP if the contractors come across caverns while building.</p> <p>However, on further inspection of the ESMP, eDNA testing is required in the year before the project begins (p.21, also p.95 of Chapter 6 on biodiversity), not only during construction. It is therefore not clear why it cannot be done now.</p> <p>The precautionary approach would be to do the testing, discuss the results in the ESIA, and develop scenarios and measures while there is still time to implement them, not wait until the main design is already done and it is too late to change the project based on the results.</p>
2.3	34	Public hearings organised for local EIA procedure	Our understanding is that concerns were also raised about the routing above Podgorani and a proposal made

			to extend the tunnel beyond the village, thus shortening the overall route by 3 km. Why is this not mentioned?
2.3	34	The comments received strongly indicate that the Ministry did not provide the complete documentation to stakeholders, including the Biodiversity Management Plan, Critical Habitat Assessment, and Appropriate Assessment, despite these documents having been submitted. In response, the Consultant has requested that the Ministry send Book 2 Technical Annexes along with the Q&A Matrix.	We can confirm that the Ministry did not provide the complete documentation to stakeholders during the public consultation period that started in April 2023. This is also apparent from the <a href="#">announcement on the Ministry's website</a> , which leads only to the main study, not the annexes. Although the main study summarises the annexes, without publishing the annexes themselves, it is not possible to see whether specific pieces of information are provided and whether the claims in the main study are well-founded.
3.1	36-37	Project location	There is no diagram showing the motorway position in the Bijela canyon. This is particularly important given that the lower part is inhabited while the upper part is a sensitive habitat.
3.2.2	51	In order to avoid construction of pillars inside the Tresanica riverbed, the river training in length of 140 m will be done. The training structure will be made of stone lining laid on a 10 cm thick gravel filter layer under which a 200 g/m2 geotextile layer will be placed.	We understand that there are many limiting factors in the area, but it is not clear from the study whether channelling the river bed for 140 metres really has less impact than construction of pillars inside the river bed?  We note the mitigation measure to prevent impacts on the spawning ground downstream by preventing works in the spawning season, however both types of works would still have considerable impacts irrespective of the spawning season.

3.2.2	54	<p>Further on, the motorway route is laid under the slope above the settlements of Bijela and Gornja Bijela. In order to avoid unstable ground for construction, the motorway has lowered from the steep slopes towards the Bijela river to avoid construction in the unstable terrains. However, this will require for the upper section of Bijela river, called Suhi potok stream, to be trained just before entering the zone of the Rakov Laz shooting range (Figure 3-20). The width of the trained riverbed in the bottom is 6.0 m with a total length of trained section of 1,280 m, together with the construction of one culvert through the motorway embankment.</p>	<p>Channelling the main stream in the Emerald site for 1.2 km, turning it into a channel and running it under a wide dyke will have a very significant impact on the Emerald site, irrespective of the intention to leave space on each side for animals to pass alongside it.</p>
3.2.3	55	<p>The Prenj Tunnel passes through the Prenj mountain range. The Preliminary Design of Prenj Tunnel from 2016 proposes two variants. Variant I envisage the construction of a two-lane tunnel with a minimum axial distance of 25.0 m in this stretch, while variant II envisages the construction of a tunnel with two-way traffic.</p> <p>The tunnel with two-way traffic of approx. 10 km in length, requires exceptional safety and security measures. In agreement with the investor, variant II assumes the excavation works and primary safety precautions for both tunnel pipes, with the left tunnel pipe serving as the evacuation pipe. The right tunnel pipe needs to be constructed to allow two-way traffic. (...)</p>	<p>This section is very unclear about what exactly is planned - one pipe or two, or first one then two. At the Open Days we were told that two tunnels will be dug from the beginning, but this information needs to be presented more clearly in the study.</p>

		<p>The adopted road width for two-way traffic is minimum 375.00 + 375.00 cm.</p> <p>The left tunnel pipe would be constructed as for variant I, so that in the future, by building a secondary lining and setting up installations, another tunnel pipe for one-way traffic can be put into operation.</p>	
3.2.7, 3.2.8	65-75	<p>Surface Water Drainage System</p> <p>Wastewater Treatment System</p>	<p>This section mentions oil and grease extensively but what mitigation measures are planned to capture, treat and dispose of <a href="#">tyre particles</a> and salt or other anti-ice agents used in winter on the Konjic side?</p>
3.2.11	82-85	Spoil Disposal Sites	<p>This section shows the construction of large embankments and a 'landscaping' section filled with tunnel dug-out in the Bijela valley, but does not make the locations clear. It uses the terms Sections 1, 2 and 3 which do not seem to be explained elsewhere and do not correspond to the terms used on p.39 and 40.</p> <p>The terminology should be standardised and the real-life location names of all features added.</p> <p>Lack of clarity about such major interventions in the landscape risks increasing public opposition at a later stage once people understand what is actually planned and how it will look.</p>
3.2.12	89-90	Borrow pits	<p>This section is left very open to properly assess the indirect project impacts. At the Open Days we were told</p>

			<p>that the existing Konjic quarry is likely to be one of the sites used, so among others that should be mentioned here and its impacts discussed.</p> <p>Also it is confusing here as borrow pits situated in proposed Natura 2000 and Emerald protected areas are mentioned, while the ESMP states (p.93) that if the project promoter opens such pits, they may not be situated in protected areas. To avoid confusion, this should also be mentioned in this part of the study.</p>
3.4	96-101	Analysis of alternatives	<p>The 'no project' alternative must provide evidence for its claims, including projected traffic figures for this section of the road.</p> <p>In addition, an alternative should be analysed in which a Konjic and possibly Jablanica bypass is built, but without the Prenj tunnel.</p> <p>This section gives a good overview of the older alternatives examined, but needs to include sub-variants to address issues with the new route, such as possibilities for avoiding the village of Podgorani.</p> <p>Either here or in the Appropriate Assessment and Critical Habitats assessment, alternative sub-variants also need to be examined to avoid impacts on the relevant habitats and species and the Bijela canyon Emerald site, instead of too readily relying on compensation.</p>
3.5	106-7	The socio-economic impacts were assessed in 500 m	See general comment above – 50 m is insufficient for an

		<p>wider study area from both sides of the motorway section and Konjic Bypass, and the expropriation corridor is considered as a 50 m wide principal study area through which the motorway alignment and the Konjic Bypass will pass.</p>	<p>expropriation corridor as people living just outside of this will have their lives made completely unbearable by construction works and then the noise, vibrations and pollution from the motorway. A compensation zone is also needed as the current system is too binary – expropriating people directly on the route while those even just a few metres away get nothing unless they make a successful complaint to a complaint mechanism. The goal should be to resolve issues without complaints, not to react only when complaints are made - in line with EBRD policy Performance Requirement 5.</p> <p>In reality the socio-economic impacts will also be felt over more than 500 m away in areas which were previously peaceful such as Podgorani and the Bijela canyon on non-shooting days. These should also be taken into consideration and addressed, consistent with the universal respect for, and observance of, human rights and freedoms, specifically the right to private property, the right to adequate housing and to the continuous improvement of living conditions.</p>
<b>Chapter 6 - Biodiversity</b>			
6.2.3.3	28ff	Fauna	<p>There is no assessment of the impacts on subterranean fauna besides all the possible impacts on underground water described in Chapter 7. Many springs, potential</p>

			<p>underground caverns and caves might be impacted, but it is not known for what biodiversity they are a habitat. As a minimum Environmental DNA should be carried out for the springs described in Chapter 7.</p> <p>We appreciate that the project area of influence was enlarged at some locations to correspond to the biology of potentially present species from literature, however <b>it should also be enlarged to include the potential impacts on groundwater and underground biodiversity.</b></p>
6.2.3.3.2	30-32	<p>Ichthyofauna.</p> <p>Having in mind the motorway route crosses Neretva and Tresanica rivers with two planned bridges, project area of influence and potential impacts with regard to ichthyofauna may stretch downstream if mitigation measures are not implemented. Special attention was paid to the natural spawning grounds found in the river Neretva from the mouth of the river Krupac to the Old bridge in Konjic and from the Old Bridge to the mouth of the river Tresanica. These are salmonids spawning grounds for marble trout and softmouth trout in the stretch of 400 m. This spawning site is located approximately 1 km downstream from the Project area.</p>	<p>If we understood properly, there are three bridges, not two, in total – two on the Neretva (including the southern connection to the M1-7) and one on the Trešanica. Due to the channelling of the Trešanica, there will be construction in the riverbed irrespective of where the pillars are built, which will have downstream impacts.</p> <p>Additionally, the Appropriate Assessment (Annex E) should include the Emerald site Gornji Tok Neretve and the potential Natura 2000 sites along the Upper Neretva river which are upstream from the main bridge on Neretva. There is an open complaint to the Bern Convention on the Neretva river.</p>
6.2.3.3.4	37-43	<p>Ornithofauna</p> <p>The White-backed Woodpecker (<i>Dendrocopos leucotos</i>; FBiH VU, BD I), with a population of 300-500 pairs, is</p>	<p>The route of the motorway will destroy old and well-preserved beech forests where White-backed Woodpecker was found by the research team, and by</p>

		<p>one of the rarest and most endangered bird species in Bosnia and Herzegovina. It is an indicator of old and preserved beech forests, with a lot of rotten trees on the ground. Due to intensive forestry and sanitary felling, its population trend is declining. One specimen was observed during the nesting season approx. 170 m west of the motorway (Figure 6-21), while three more territorial males were registered on the slopes of Prenj, outside the impact zone.</p> <p>The size of the Golden Eagle (<i>Aquila chrysaetos</i>; FBiH EN, BD I) population in Bosnia and Herzegovina is estimated at 50-80 pairs and according to the Red List of Endangered Species of the Federation of Bosnia and Herzegovina it has the status of EN (endangered species). (...) The flying individual and the empty nest found at a given locality are a definite confirmation of the presence of a nesting pair. (...) The species is extremely sensitive to disturbance.(...) Limitations regarding the timing of works must be imposed so to enable the eagles to select a different nest for the season – construction works shall be performed in the period between the second half of July and the beginning of February and take place continuously and rapidly.</p>	<p>experts of Bankwatch in October 2022. The route should be changed to avoid significant impacts on these beech forests and its indicator species which have very limited areas in the Emerald and potential Natura 2000 sites. Without a change of the route the impact will be significant (more than 10% of the population in the sites).</p> <p>There is different information about the Golden Eagle in the ESIA/Annex C-3 (stated as EN in BIH) and in Annex D (stated as VU in BIH).</p>
6.2.6	57	Former protected area of Vrtaljica dolomites (Zlatar-Vrtaljica Hill) near Konjic, through which a tunnel is planned, was designated to protect a number of rare	We agree that the ESIA should consider Vrtaljica as protected and that it is lacking a management plan, a management body and monitoring.

		<p>plant species in 1956<sup>10</sup> but it is no longer under formal protection. Size of this PA was approx. 56 ha and was protected as a botanical reserve in Socialist Republic of BiH (SRBiH). This category would correspond to the current IUCN category I, however, previous categorization of PAs in former Yugoslavia (SFRJ) was not in line with IUCN. The <i>Law on Nature Protection of FBiH</i> states that all natural features protected until said law was enacted stay protected but must go through the process of revision. Laws on designation of protected areas adopted in SFRJ are not in force in Bosnia and Herzegovina nowadays, therefore this PA cannot be considered protected <i>in praxis</i> since no legal steps have been taken to re-establish the PA in independent Bosnia and Herzegovina, there is no monitoring, management body nor management plan. Nonetheless, as the area is considered protected <i>de iure</i>, the ESIA considers it as such.</p>	<p>However the explanation given is rather confusing, using terms like ‘former protected area’ and ‘no longer under formal protection’, which undermine its importance.</p> <p>As it is indeed legally protected <i>de iure</i>, the text should consistently reflect this.</p>
6.3.2.1	86	<p>There are no officially designated protected areas (PAs) in the Project area and in the Project area of influence, therefore they could not be considered for assessment of impacts. No impacts on any officially proclaimed and managed protected areas are expected during the pre-construction, construction and operation phase, hence no requirement for mitigation measures. However, the project will pass through a protected area established prior to B&amp;H independence. As such, it</p>	<p>This section presumably refers to Vrtaljica. It is confusing to say there are no officially designated protected areas at the beginning but then mention a <i>de iure</i> protected area later on.</p> <p>The impacts seem like they could be underestimated as the tunnel exits and entrances, as well as potentially the tunnelling, would surely have an impact on this relatively small area?</p> <p>It would also be useful to have a table similar to Table</p>

		should go through a process of revision. It remains protected <i>de iure</i> , but in praxis it is not managed. The motorway will pass through this area in the form of tunnels (T1 and T2), avoiding direct impacts.	6-21 for Vrtaljica.
6.3.2.2	86-89	Appropriate Assessment Information 'The purpose of the appropriate assessment is to provide all relevant information that can help in the process of assessing the Project's potential adverse impacts to the identified potential Natura 2000 sites and, if identified, how they can be mitigated.'	This is a rather partial representation of the purpose of the appropriate assessment that does not clearly distinguish it from an EIA.  The information on the impacts in an appropriate assessment is supposed to form the basis for a decision on whether the project can go ahead at all, and only then to decide how impacts can be mitigated, or, as a last resort, compensated.  For more information, see General comments, above.
Table 6-21	89	Whole table	The table should show impacts per site as they vary significantly. For example the impacts on the Zlatar Emerald site may be low or moderate, but the ones on the Bijela valley will be much higher.
6.5.1	89-90	Pre-construction  During the development of the Main Design for the motorway, include the recommendations given in BMP regarding viaducts over River Neretva. No construction should be allowed in the riverbed or the riparian area due to their sensitivity.	We agree that no construction should be allowed in the riverbed, but how will this be guaranteed in reality? During the construction of the Počitelj bridge there were highly disruptive construction works in the river, including a temporary bridge. Measure 19.3.2 in the ESMP also does not seem to guarantee that no construction will take place in the riverbed, but this may be because it does not distinguish between the Neretva

			and the Bijela and Trešanica rivers that would be partly channelled.
6.5.1	89-90	<p>Permanent structures with potential negative impact on biodiversity such as gas stations and billboards with bright lights must not be planned within PBFs or CHs.</p> <p>Design viaducts as passable structures in the Main Design so to keep habitat connectivity.</p>	<p>Gas stations and billboards should not be planned within any sensitive, protected or potential protected areas at all. This should not be limited only to PBFs or CHs.</p> <p>We agree with designing viaducts as passable structures, but this seems to clash with the goal of using as much of the material as possible dug out from tunnels to make dykes for the motorway. To which of the viaducts/dykes does this measure apply?</p>
6.5.3	92	<p>Develop and implement Biodiversity Offsetting Plan (BOP). The guidelines and recommendations for development of BOP are given in the BMP.</p>	<p>See comments on BMP.</p>
6.7	94-96	<p>Additional rapid field research for amphibians must be undertaken during early spring season of the year of construction in order to confirm/exclude the presence of <i>Hyla arborea</i> and <i>Rana temporaria</i> which can be expected north of Mt. Prenj,</p> <p>Additional rapid field research for reptiles must be undertaken in the year of construction in order to confirm/exclude the presence of <i>Telescopus fallax</i> and <i>Zamenis situla</i> which can be expected south of Mt. Prenj where they have suitable habitat.</p> <p>If presence of aforementioned amphibian and reptile</p>	<p>Research for species that may signal the presence of critical habitats or PBFs must be done during the ESIA process, as it needs to be taken into account during decision-making.</p> <p>According to EBRD/EIB standards, the project promoter shall not implement any project activities in critical habitats unless several stringent conditions are met. Moreover, the EIB's biodiversity standard states that</p> <p><i>'To avoid risk of irreversible impacts on highly irreplaceable and vulnerable features, the EIB will not finance projects likely to have significant adverse effects</i></p>

		<p>species is confirmed, EAAAs must be identified as these species have the potential to meet the criteria for PBF and/or CH of EBRD and EIB. If it is determined they might be under direct impact of the Project, it is necessary to perform critical habitat accounting and update CHA and BMP documents with measures to ensure NNL/NG.</p>	<p><i>on such features, regardless of compensation or offset measures.'</i></p> <p>It is therefore not in line with the precautionary principle to leave such research to such a late stage, as it is not simply a matter of updating documents – it should have an influence on the Bank's overall financing decisions.</p>
6.7	94-96	<p>Additionally on Surveys conducted over 10 months of the year, although covering all ornithological aspects, are insufficient to fully valorise the area and assess the impact of the motorway on birds, which is why it is desirable to conduct additional research for all bird groups (...)</p> <p>An inactive nest of a Golden Eagle (<i>Aquila chrysaetos</i>) was found in the area of Klenova Draga and one individual was registered in flight at the same location. Before construction, it is necessary to conduct additional research in order to determine whether there is another location in the immediate environment where this species nests.</p> <p>Rocks and cliffs in the area of Klenova Draga and Badnjena Draga are potential habitats for the Peregrine Falcon (<i>Falco peregrinus</i>), which is one of the 10 rarest and most endangered species in Bosnia and Herzegovina, and the Eurasian eagle-owl (<i>Bubo bubo</i>), which has not been fully explored due to the curfew established by the government to prevent the spread of</p>	<p>The additional studies on birds should be carried out as part of the ESIA, not after that.</p> <p>Also, 2023 has already passed, so new research needs to be carried out anyway.</p> <p>The Golden Eagle measures are not in line with the recommendations in 6.2.3.3.4, which say that <i>'Further monitoring must be performed through all Project phases. Limitations regarding the timing of works must be imposed so to enable the eagles to select a different nest for the season – construction works shall be performed in the period between the second half of July and the beginning of February and take place continuously and rapidly.'</i> They should be the same in both places.</p>

		the Coronavirus. Additional rapid survey of these species in potential habitats is required and it is to be performed in 2023.	
6.7	95	In the year of construction, but before any works commence, perform eDNA analysis in order to valorise underground fauna not accessible by standard invertebrate surveying methods. Focus on the area where works are planned near and in Mountain Prenj.	The precautionary approach would be to do the testing, discuss the results in the ESIA, and develop scenarios and measures while there is still time to implement them, not wait until the main design is already done and it is too late to change the project based on the results.
<b>Chapter 7 - Geology and groundwater</b>			
Overall			This chapter would benefit from horizontal diagrams to show the profile of what is being described (like the one on p.57, but more detailed ones to show e.g. the position of springs more clearly). Since the impacts of the project and on the project largely depend on different geological layers, maps that look only from above do not allow a good understanding of what is written.
Overall			This chapter underlines that the tunnel will be built above the impermeable rock layer (see e.g. the diagram on p.57 and accompanying explanation), and mentions that most caverns are likely to be found near the main fault that the tunnel will cross. Yet neither here nor in the biodiversity chapters is there any mention of underground fauna.

<p>Figures 7-20 7-21 7-22 7-23</p>	<p>44, 45, 46, 48</p>	<p>Place of dye injection at Jezerce (0) and monitoring locations (1-4)</p>	<p>The maps are illegible (7-23 a little less so than the others, but still not clear).</p>
<p>7.2.4.4</p>	<p>44-45, 58</p>	<p>‘Since the underground connection with spring Bascica is not determined, it can be concluded that groundwater in the zone of Jezerce abyss moves north-east toward Konjicka Bijela, and not north-west toward Bascica. As a result, depending on the hydrological situation (quantity of precipitation), the groundwater may appear in the zone of south portal of the Prenj Tunnel in form of moist patches or water dripping.’</p> <p>And</p> <p>‘The hydrogeological relations on the Prenj Mt. indicate that there should be no significant penetration of high-volume groundwater during excavation of the Prenj Tunnel. The groundwater penetration can be expected only in the main fault zone, where underground karst forms (caverns, pits, karst channels) are found. The groundwater may appear in the form of dampening, throughfall or weak leakage and only during periods of heavy rainfall and sudden melting of snow on the Prenj massif.’</p>	<p>It’s not clear how dye tests can establish that the groundwater would only appear during the construction of the Prenj tunnel to such a minor extent. This should either be better explained or the conclusion revised.</p>

7.2.4.4	47	<p>These results undoubtedly indicate that the groundwater from this area is mainly drained west and north toward the Neretva River, and not toward the Prenj Tunnel. Since the main fault crosses the Prenj Tunnel alignment, it is expected that groundwater will appear along the fault zone in quantities that will depend on the hydrological situation.</p>	<p>These two sentences appear to contradict one another. Perhaps this can be better explained.</p>
7.3.3	56ff	<p>Assessment of groundwater impacts on motorway Construction</p> <p>Based on the available design documents and results of engineering and geological researches carried out so far for the purposes of designing the Prenj Tunnel, which were limited to portal zones and surface mapping of the terrain (without exploratory boreholes along the tunnel route), it can be concluded that the elevation of the tunnel will be above the impermeable subgrade represented by Lower Triassic flysch sediments, which is a barrier to the movement of groundwater. (...)</p> <p>The groundwater penetration can be expected only in the main fault zone, where underground karst forms (caverns, pits, karst channels) are found. (...)</p> <p>During the excavation of the Orlov Kuk Tunnel - T5, which is located in the hinterland of the Bosnjaci spring, underground karst channels carrying groundwater from the direction of Zijemlje towards Bosnjaci may be cut</p>	<p>This section seems to contradict the diagram on p.57 which does not show groundwater flowing only in the main fault zone. It may be that the diagram is not clear enough, but overall the information presented does not seem to add up and gives the impression that the underground water flows are not well understood.</p> <p>Also the diagram shows the tunnel going through karst aquifers, which seems to contradict the information shared during the Open Days regarding recent geological drilling showing that solid rock was not far below the surface. Although this drilling was done for another purpose, perhaps the diagram needs updating to reflect its findings?</p> <p>The impacts on Bosnjaci spring and underground fauna may be extremely serious and the mitigation measures proposed in the following sections do not seem sufficient to prevent this.</p>

		<p>off. In the case of such a scenario, it is necessary to prevent the contamination of the groundwater of the Bosnjaci spring. If turbidity of groundwater occurs at the water source, it is necessary to stop the water supply for the village until the quality of the water is brought to the quality prescribed by law.</p>	
7.3.4	58ff	<p>Assessment of construction impacts on groundwater</p> <p>It is suggested to conduct a field visit and record all hydrogeological phenomena in the zone of influence of the construction of this section of the motorway. These actions are captured in the Environmental and Social Management Plan.</p> <p>Four springs are located in the immediate vicinity of the route, of which two are captured for the water supply of Konjic (Bijela and Gornja Bijela), and two springs are used for local needs of about 30 households in the settlement of Gornja Bijela. The springs used in the Konjic water supply system have not undergone detailed hydrogeological research and are not officially protected by sanitary protection zones. (...)</p> <p>regulation of the natural course of the river Bijela is planned for a length of about 600 meters, which will further ensure that the intake is not endangered (...)</p> <p>With the Prenj Tunnel, the motorway route cuts through a large fault zone that divides the Prenj massif.</p> <p>About two-thirds of the excavation of the Prenj Tunnel</p>	<p>It is quite risky to assess the impacts on groundwater based on assumptions and propose additional studies for after project approval. All studies need to be carried out before the ESIA is done.</p> <p>Realistically, impacts on at least the Bijela, Bosnjaci, and Livcina springs seem probable, but the measures in the ESMP are insufficient, risky and difficult to control.</p> <p>The regulation of the river Bijela will be for more than 1200 m according to the other sections of the study.</p>

		<p>is designed to be carried out through the IV sanitary protection zone of the Salakovac springs</p> <p>Tunnels T3A and T4, as well as the complete motorway route to Podgorani and Zelenika, were designed through karstified limestones of Jurassic age within the III sanitary protection zone of the Salakovac source, the route continues through the T5 Orlov Kuk tunnel, whose entrance portal and about one-third of the tunnel length is located in the III sanitary protection zone of the Bosnjaci spring. The Bosnjaci spring is located about 850 m west of the entrance portal of the tunnel.</p> <p>Tunnel T5 is the most sensitive location on the motorway route from the aspect of groundwater protection due to its proximity to the Bosnjaci spring. As the tunnel cuts through the limestone, karst channels and caverns can be expected to appear, which may be the underground streams of the Bosnjaci spring, as well as the occasional Livcina source, which is located in the immediate vicinity.</p> <p>Therefore, it is necessary to pay special attention to collect the tunnel runoff, bring it out of the tunnel and treat it before discharging into the recipient. If caverns or karst channels appear, they should never be filled with excavated material or discharge point for tunnel runoff. In the event of an underground flow, it is necessary to create a bypass so that the groundwater can continue to circulate so that it does not exert</p>	<p>The impacts on Bosnjaci spring and underground fauna may be extremely serious and the mitigation measures proposed in the following sections do not seem sufficient to prevent this.</p>
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		pressure on the tunnel structure.	
7.3.4	61	<p>Further on, from the Konjic South Interchange to the entrance to the Prenj Tunnel, the motorway route was designed in an embankment along the eastern valley side of Konjicka Bijela. This section of the route passes over glacial (moraine) and talus deposits, which are built of slightly rounded pieces of limestone with crushed material and the presence of humus and clay particles.</p> <p>Groundwater flows much more slowly through such materials compared to karstified limestone. This variant of the motorway on the embankment is much more acceptable and more economical compared to the previous variant, which envisaged a route further east in the scree zone, where the upper section would be in the cut and the lower section in the embankment. In this way, the construction of a large number of retaining walls and geotechnical anchors required for the stabilisation of scree slopes was avoided.</p>	This is interesting information that should be added to the Alternatives chapter, along with information on whether other variants in the Bijela valley were considered that would have lower impacts on the river and beech forests.
<b>Chapter 8 - Surface waters</b>			
8.2.2.2	15	<p>Surface Water Quality Along the Main Motorway Route</p> <p>'All these uncertainties lead to a conclusion that it is mandatory to repeat baseline measurements before the start of construction.'</p>	This should have been done before the completion of the ESIA – there has been plenty of time since the original measurements were done in 2021.

8.3.1.2	30	<p>'It is to be noted here that Suhi Potok (translated as Dry creek) is an intermittent stream and that is dry for most part of the year. The training structure can be constructed in a low flow season without negative impact on Konjicka Bijela or the springs downstream.'</p>	<p>Works can certainly be planned in drier periods, but the experience of recent years suggests that very sudden heavy rainfalls are increasing during the summer across Europe and cannot necessarily be foreseen in advance. It should therefore not be assumed that the stream will remain dry throughout the process.</p>
8.3.1.2	31	<p>'For the purpose of preserving the Bijela and Gornja Bijela spring (water supply from Crno Vrelo) from the impact of high waters from the river Bijela, an additional regulation of the natural riverbed of the river Bijela over a length of approximately 600 m is planned. This will prevent the tap water supply from being endangered by potential changes in water quality in the riverbed of the Bijela river.'</p>	<p>So in fact the main river in an Emerald site will be channelled for almost 2 km, but this is not examined at all in the Appropriate Assessment.</p>
8.3.1.2	32	<p>'On the Konjic bypass side, the Neretva River will be crossed with the bridge at the location of the Donje Selo settlement which is located on the right Neretva Bank (Figure 8-6). The model of the bridge structure is still not known; therefore, it is not known whether there will be any bridge piers constructed in the riverbed. Thus, it is assumed that construction works on the bridge will be performed around and in the Neretva River with possibility of direct release of polluting substances into surface water. During the summer season, the flow of the Neretva River at the bridge location is low enough to allow for work to be carried</p>	<p>This contradicts other sections which pledge that there will be no construction in the riverbed.</p>

		out in the nearly dry riverbed.'	
8.4.2	38-39	Pre-construction/Construction Phase River crossing	This section appears to contradict other sections which state no works will be done in the river bed. If it is only relevant for Bijela and Trešanica channelling works, this should be clearly stated and different conditions set for the Neretva.
<b>Chapter 9 - Climate</b>			
Overall			The shorter route could indeed reduce CO2 emissions from fuel combustion, but the projected vehicle numbers seem excessive, so the likely savings seem too high.  In addition, unless this is weighed up against the emissions from the manufacture of the construction materials, particularly cement, the calculation is not complete and is likely to overestimate the benefits.
9.3.2	34	GHG emissions 'The assumed number of vehicles that will operate in 2032 was calculated based on data from the Auto-moto Club of Bosnia and Herzegovina on the increase in the number of registered vehicles in 2021 compared to 2020, with the assumption that this growth trend will be maintained until 2032.'	Due to Covid during 2020 there is a high likelihood of such a calculation giving wrong results. It should be updated with 2022 and 2023 data and appropriate projections made.
9.3.2	35	'It is assumed that the percentage in registered diesel	Although it is difficult to predict and Bosnia and

		and petrol vehicles will remain constant in the period 2022-2032. The fact that in 2050 10% of electric vehicles will be used in BiH <sup>79</sup> , i.e., the assumed 13% in 2060, is considered in the calculation of vehicle type number in 2060. Also, it is assumed that the type or proportion of engines will remain approximately the same.'	Herzegovina has not so far had a high uptake of electric and hybrid vehicles, there are <a href="#">signs that this is starting to change</a> . Therefore this estimate seems likely to be rather low, especially as a de facto ban on selling cars with internal combustion engines in the EU after 2035 has been put in place. If Bosnia and Herzegovina plans to join the EU, it will need to apply the same rules.
Table 9-10 Table 9-12	35 37	Urban buses standard	These may be used for the baseline but they should not be using the motorway.
Footnote 80	36	Feasibility Study Section: Konjic (loop Ovcari) – loop Mostar North, 2016	Is there really no more recent feasibility study to cite?
9.3.2	39	'Although there is an increase in emissions by years due to the increase in the number of vehicles (projected increase of 300.3% in 2060 compared to 2022), it is obvious that the construction of this motorway will have a positive impact on the reduction of GHG emissions compared to the use of the existing M17 main road.'	A 300% increase in vehicles seems like a lot. What are the assumptions behind this?
<b>Chapter 10 - Air quality</b>			
			Not examined

<b>Chapter 11 - Noise</b>			
			Not examined
<b>Chapter 12 - Vibration</b>			
			Not examined
<b>Chapter 13 - Soil</b>			
			Not examined
<b>Chapter 14 - Landscape</b>			
14.1	6	The photomontage of the motorway in the natural environment was not available.	<p>Without a simulation of how the motorway will look, this section of the ESIA does not serve its purpose.</p> <p>This is particularly important for the visually scenic areas in the Bijela valley and around the Klenova draga/Podgorani/Humilisani areas, but also for the Konjic bypass and southern link road. At minimum this section should include visual simulations of:</p> <ul style="list-style-type: none"> <li>- The view of the southern Prenj tunnel exit area and viaducts/further tunnels from the current M17 road near Potoci</li> <li>- Views of the motorway from Podgorani village</li> </ul>

			<ul style="list-style-type: none"> <li>- Views from different inhabited parts of the Bijela valley</li> <li>- A view of how the embankment with the Bijela stream channelled underneath will look</li> <li>- A view of the tunnel dug-out waste site in Humilisani and other waste disposal sites</li> <li>- Views of the bypass and southern link from various parts of Konjic.</li> <li>- Views of different variants for the Bijela and Podgorani sections (however these are not currently assessed in the rest of the ESIA either).</li> </ul> <p>Without such simulations to prepare people for how the motorway will look, there is a high risk of increased resistance to its construction at a later stage, once people understand how it will look in relation to their houses and land and how it will affect currently scenic areas.</p>
<b>Chapter 15 - Waste and materials</b>			
Overall			There is a clash between the waste disposal plans and the need to avoid damage to the Bijela canyon Emerald site which is not explored either here or in the Appropriate Assessment.
15.3	24-27	Assessment of impacts	See comments on section 3.2.11 in Chapters 1-5 of the main study.

<b>Chapter 16 - Social Impact Assessment</b>			
<b>Section no.</b>	<b>Page no. English ESIA</b>	<b>Text extract</b>	<b>Comment/suggestion</b>
General comment	N/A	N/A	The ESIA lacks the following description required by the EIB's Standard 1:  <i>'The description of the country and/or sector context relevant to the specific social-related risks at project level, such as human rights, labour conditions, enabling environment for public participation, gender-based and other types of violence and harassment, including risks of reprisals, socio-economic inequalities including those related to gender, as well as any impacts and risks specific to conflict-affected and fragile situations.'</i>
16.4	15	Methodology of Baseline Data Collection Survey methodology  The survey was based on a household (HH) and business questionnaire. Questionnaires for households were conducted with the head of the HH or, in case of his/her absence, other adult HH member.	Conducting surveys only with HH means that in many cases women and vulnerable groups like elders might have been omitted.
16.5.2	21-24		Since the <a href="#">Strategija razvoja Grada Mostara 2022.-2027.</a> was published in 2021, it is not clear why data from this

<p>16.5.3 16.5.4</p>			<p>strategy is not used for the section on economy (16.5.2) and education (16.5.4), although the equivalent strategy from Konjic is cited.</p> <p>Regarding employment, the Konjic and Mostar strategies also contain newer data than the ones used from the 2013 census. In addition, the fact that the '<i>Statistički bilten Službe za zapošljavanje Hercegovačko-neretvanske županije/kantona, Mostar</i>' from 2020 was used to determine the qualification structure of unemployed people suggests that other sections may also have been able to benefit from more updated data than those from the 2013 census.</p> <p>For example, p.16 of the Mostar development strategy provides 2020 data on employment.</p>
<p>16.5.5.</p>	<p>25</p>	<p>Cantonal and city development strategies<sup>13</sup> also recognize the importance of Corridor Vc. In development strategy for Herzegovina-Neretva Canton and City of Mostar, Corridor Vc is seen as an opportunity to connect with Croatia and accelerate tourism and economic development. Similarly, in development strategy of City of Konjic, Corridor Vc passing through the City is also highlighted.</p>	<p>This is an exaggeration as the Konjic strategy only mentions the project once, and only in a very neutral way: 'In addition to the basic main M-17 road, the route of the motorway on Corridor Vc, whose construction is in its preparatory phase, is planned to pass through the District of Konjic' (p.4)</p> <p>P. 22 of the Mostar strategy mentions the importance of transport infrastructure in general (road, rail and air), but Corridor Vc itself is only mentioned in passing in the point about plans regarding the city's wholesale market.</p>
<p>16.6.1.1.</p>	<p>27ff</p>		<p>Again these data are quite outdated, and there is no data</p>

			at all for five settlements, while gender data is missing for Donje Selo as well. Will this be updated via surveys for the Land Acquisition and Livelihood Restoration Plan?																																																																				
16.6.1.2	30 EN version, 29 B/H/S version	<p>Tabela 16-13: <b>Etnička pripadnost stanovništva šireg projektnog područja u Mostaru</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Br.</th> <th rowspan="2">Naselje</th> <th colspan="2">Ukupno</th> <th colspan="2">Žene</th> </tr> <tr> <th>#</th> <th>%</th> <th>#</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Humilišani</td> <td>1.161</td> <td>49,7</td> <td>584</td> <td>50,3</td> </tr> <tr> <td>2.</td> <td>Potoci</td> <td>2.183</td> <td>49,9</td> <td>1.092</td> <td>50,0</td> </tr> <tr> <td>3.</td> <td>Podgorani</td> <td>614</td> <td>49,8</td> <td>308</td> <td>50,1</td> </tr> <tr> <td>4.</td> <td>Kutilivač</td> <td>1.624</td> <td>49,1</td> <td>826</td> <td>50,8</td> </tr> </tbody> </table> <p>U tabeli ispod prikazani su detalji o spolnoj strukturi stanovništva. U sva četiri naselja skoro podjednako su zastupljeni muškarci i žene.</p> <p>Tabela 16-14: <b>Spolna struktura stanovništva šireg projektnog područja u Mostaru</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Br.</th> <th rowspan="2">Naselje</th> <th colspan="2">Ukupno</th> <th colspan="2">Žene</th> </tr> <tr> <th>#</th> <th>%</th> <th>#</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Humilišani</td> <td>1.161</td> <td>49,7</td> <td>584</td> <td>50,3</td> </tr> <tr> <td>2.</td> <td>Potoci</td> <td>2.183</td> <td>49,9</td> <td>1.092</td> <td>50,0</td> </tr> <tr> <td>3.</td> <td>Podgorani</td> <td>614</td> <td>49,8</td> <td>308</td> <td>50,1</td> </tr> <tr> <td>4.</td> <td>Kutilivač</td> <td>1.624</td> <td>49,1</td> <td>826</td> <td>50,8</td> </tr> </tbody> </table>	Br.	Naselje	Ukupno		Žene		#	%	#	%	1.	Humilišani	1.161	49,7	584	50,3	2.	Potoci	2.183	49,9	1.092	50,0	3.	Podgorani	614	49,8	308	50,1	4.	Kutilivač	1.624	49,1	826	50,8	Br.	Naselje	Ukupno		Žene		#	%	#	%	1.	Humilišani	1.161	49,7	584	50,3	2.	Potoci	2.183	49,9	1.092	50,0	3.	Podgorani	614	49,8	308	50,1	4.	Kutilivač	1.624	49,1	826	50,8	In the local language version the two tables show the same data.
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16.6.5	37	<p><b>Vulnerable Groups</b></p> <p>Of the total surveyed households living in the wider study area, 30% are returnees after the 1992-1995 war. Around a third of these reported that they have received some assistance from state or foreign authorities (e.g., housing reconstruction donations). The representative of the local community Bijelo Polje informed the Consultant that there is a certain number of Serb returnees and a smaller number of Croat returnees on the motorway section, but that no one has raised any</p>	<p>It indicates that war refugees are impacted, but the justification for not granting them vulnerability status (although p.36 enumerated 'returnee status' among the vulnerability criteria) is very weakly justified, based only on the opinions of heads of communities that "no issues were raised".</p> <p>Overall the socio-economic data on war returnees is very scarce in this section. Their situation was not quantified or described in socio-economic terms and the assessment does not assess the position of war</p>																																																																				

		<p>concerns about motorway construction. The representative of the local community Bijela and president of the NGO “Association of Serb returnees Neretva” Konjic reported there are Serb returnees in the settlement, but they also did not raise any concerns regarding motorway construction. The representatives of the local communities Dzepi, Centar and Tresanica, including the Donje Selo branch office, did not report any returnees or raise any issues about the returnee population either. Therefore, the returnee population has not been found to be vulnerable (taking particularly into account the fact that displacement occurred around 30 years ago), unless they are identified as vulnerable based on other vulnerability.</p>	<p>returnees in society, nor their ethnicity and its implications.</p> <p>Based on the experience from the section south of Mostar, our opinion is that <b>all returnees should be treated as vulnerable in the sense of the EBRD Environmental and Social Policy</b> (not necessarily in the sense of the FBiH Law on Expropriation). Their experience of repeated upheaval, their connection to their land and need for a sense of home means that additional efforts are needed to properly consult them about the project and take their needs into consideration.</p> <p>It is highly risky to consider them non-vulnerable on the basis of second-hand reports that they had not yet raised any issues with the motorway. The main design has not yet been completed so it is not even clear exactly which houses will be affected, so <b>it is much too early to conclude that there are no issues</b>. If there are issues, they will likely arise once the main design is done and people understand how close the motorway will run to their houses or that they need to be expropriated. The point of identifying people as vulnerable is precisely to ensure that such issues are recognised as early as possible and measures taken to ensure they do not suffer from the construction.</p>
16.6.5	36-37	Vulnerable Groups	Single headed women households (especially those with small /school children) are not listed as vulnerable. Are

		<p>During the socio-economic surveys, vulnerable households have been identified in the Project area of influence. Approximately a third (32.6%) of surveyed households answered the question regarding the vulnerability of household members. Of these: 49% of HH have a member with a chronic illness requiring regular medical care, 19.1% of HH have a member with a physical disability, 12.8% of HH are elderly people living alone, 10.6% of HH mentioned other problems as vulnerabilities (disabled war veterans, disabilities, previous surgery), 6.4% of HH have a member with a chronic illness that requires hospitalization and 2.1% of HH have a member with mental disability.</p>	<p>there such households along the route? And if so, why are they not included?</p> <p>Children are non-existent in this assessment.</p>
16.6.5	37	<p><b>Vulnerable Groups</b></p> <p>In addition to these vulnerable categories, another potential vulnerable group should be considered – the female population in the settlements in the vicinity of the motorway section which represents around half of the total population in Mostar and Konjic. Female population is the majority in the settlements of Donje Selo, Ovcari, Galjevo and Repovica in Konjic. Based on the results of socioeconomic survey conducted in the study area, more than half of household members are women, and around 19.7% of the households are female-headed.</p>	<p>No definite decision was taken in respect to women as a vulnerable group. This needs to be clarified.</p> <p>No further proposal is provided on how this vulnerability should be addressed. The issue of gender equality in access to compensation is not assessed - the issue of land ownership in marriages, joint accounts, joint assets - and in consequence relevant mitigation measures were not proposed to ensure that women will be treated equally and will be entitled to compensation.</p>
16.6.6	38-39	<p>Economic activities in the wider study area were</p>	<p>16 businesses seems quite limited - what is the</p>

		<p>analysed based on site visits by the Consultant and the socio-economic survey conducted among households and 16 businesses.</p> <p>The local economy of the Project area is based mainly on agriculture and tourism related activities, as well as some metal processing and construction.</p> <p>Agricultural activities are very common in the settlements of Ovcari, Bijela and Kutilivac. The settlements of Gornje Polje and Polje Bijela are characteristic for rafting centres and activities (along the Neretva River and Bijela River), with tourism activities included.</p>	<p>percentage of the total identified businesses in the buffer zone of the route? Also, it is noticeable that no agricultural businesses were interviewed.</p> <p>The results of the survey presented on p.39 seem to stop half way through and need to be completed. The questionnaire provided as an annex also included questions on impacts, which we expected might be presented in the sections on impacts, however we did not find an explicit reference to the survey of businesses there either.</p>
16.8	55	Assessment of Impacts	<p>No impacts are identified in relation to vulnerability factors, nor specific impacts on war returnees. No impacts on livelihood were analysed, especially in relation to specific vulnerable groups.</p> <p>The ESIA does not include all the required information under the EIB Standard 1:</p> <p><i>The description of the environmental, climate and/or social aspects<sup>28</sup> likely to be affected by the proposed project, including comprehensive and context-specific identification and analysis of people and communities likely to be affected, as well as other relevant stakeholders, paying particular attention to persons and/or groups that are vulnerable, marginalised, discriminated against or excluded on the basis of their</i></p>

			<p><i>socio-economic characteristics.</i></p> <p><i>Assessment of the likely significant environmental and social effects of the proposed project (also taking into account the outcomes of any complementary assessments and/or focused studies as referred to in paragraphs 9 and 10, if applicable), resulting from inter alia:</i></p> <p><i>(...)</i></p> <p><i>e. the risks to human health, well-being, persons and/or groups that are vulnerable, marginalised, discriminated against or excluded on the basis of their socio-economic characteristics, cultural heritage or the environment;</i></p> <p><i>(...)</i></p>
16.9	85	Mitigation and Enhancement Measures	<p>No measures are proposed at all in relation to specific needs of vulnerable groups. In general, there is no assessment of the impacts on vulnerable groups.</p> <p>The ESMP does not propose any specific mitigation measures targeting vulnerable groups.</p> <p>We understand from the Open Days that a Land Acquisition and Livelihood Restoration Plan is planned once the main project is done, but we still think the <i>*type*</i> of measures to be implemented should be included here, even if the number of people involved is not yet totally clear.</p>

Appendix 1.	95	Questionnaire for Households VULNERABILITY Table	Single mothers of small/school children are not listed as vulnerable but should be.
<b>Chapter 17 - Cumulative impacts</b>			
			No comments additional to those made on other parts of the study
<b>Chapter 18 - Residual impacts</b>			
			All comments related to this section have been provided elsewhere, particularly on the Critical Habitats assessment and Appropriate Assessment.
<b>Chapter 19 - ESMP</b>			
Overall			The ESMP does not propose any specific mitigation measures targeting vulnerable groups.
19.1.1. and 19.10.3	8, 92-93	'Prior to commencement of construction, select inert waste disposal sites and borrow pits and access roads for them, machinery parking spaces, other access roads, service plateaus, fuel containers, construction worker camps and other (temporary) infrastructure.  Selection of these localities must be based on minimal	The requirement on p.92-93 is stricter than that on p.8. These should be aligned towards the stricter requirement on p.93.

		<p>impact on environmental and social receptors, including natural habitats. Infrastructural elements must not be established in critical habitats (CH) or within priority biodiversity features (PBF) unless there is no other viable option based on analysis of environmental, social and financial criteria, which must be agreed upon by the Lenders and accompanied by mitigation and compensation (if necessary).'</p> <p>'In case the Contractor decide to open the borrow pits instead of material purchase, the following measures shall be implemented:</p> <p>(...)</p> <p>Materials shall not be borrowed from the Neretva River. The Contractor is not permitted to open new extraction pits within this river basin.</p> <p>Borrow pits may not be opened in protected areas in line with the national and EBRD and EIB requirements.'</p>	
19.1.5	13	<p>Develop and implement Biodiversity Offsetting Plan (BOP). The guidelines and recommendations for development of BOP are given in the BMP.</p>	<p>See comments on Biodiversity chapter, Appropriate Assessment and Critical Habitats assessment. It is not in line with the EIB/EBRD policies or the Habitats Directive to jump straight to offsets/compensation without completing all steps of the assessments, demonstrating the project's compliance with the EIB/EBRD/Habitats Directive criteria including absence of alternatives.</p> <p>In addition, as mentioned elsewhere, the EIB's standards</p>

			<p>practically prohibit offsets in critical habitat, and in general offsets should be avoided as they almost never work in reality.</p> <p>In addition, which document exactly is meant by the BMP? Although the Biodiversity chapter contains various measures, none of it is labelled as a BMP.</p>
19.1.9	18	<p>No construction activities in the riverbed of Neretva. The bridges shall be constructed without any disturbance of the riverbed. In order to protect fish species and their habitats, including species at risk, from development activities it would be necessary to reduce or eliminate constriction of flow through structure design. No river training of Neretva and its shoreline is allowed, and no interference of the natural flow rates is allowed. Design and install culverts near streams to prevent creation of barriers to fish movement.</p>	<p>It is not clear how this will be done in practice and how impacts on Neretva by construction will be prevented (there should be temporary bridges in Neretva?, turbidity of springs could happen according to Chapter 7, etc.). ESMP should be much more detailed and/or ESIA should be amended to include the new designs of the 2 bridges over Neretva and 1 on its tributary.</p>
19.1.10	21	<p>Additional smallscale rapid surveys completed for amphibians, reptiles, and birds</p> <p>BMP section on fauna updated prior to construction</p> <p>CHA updated with new information if necessary</p> <p>In the year of construction, but before any works commence, perform eDNA analysis in order to valorise underground fauna not accessible by standard invertebrate surveying methods. Focus on the area</p>	<p>This should be part of the ESIA (and not left for afterwards) as it might change a lot the conclusions of the assessment.</p>

		<p>where works are planned near and in Mountain Prenj.</p> <p>Additional baseline surveys with the aim to confirm findings from 2020-22 should be planned for all fauna if the pre-construction phase begins more than three years after the completion of large-scale ESIA Study surveys (2021).</p>	
19.1.11	22-23	<p>During the construction period, underground cave systems and caverns with cave organisms may be encountered. In case of encountering underground structures, it is obligatory to suspend the works immediately, as soon as safe to do so. All cases of such systems opening must be reported to the Lenders. Pending approval, a speleological company, NGO, or other competent entity must be hired to examine the significance of open systems and to safely seal and separate underground habitats from tunnel systems.</p>	Those cave systems should be previously mapped.
19.1.12	24	<p>Regarding mammals, mitigation measures during the construction period refer to avoiding tunnelling and extensive excavation works in the period from March to May, when the largest number of species give birth to offspring.</p> <p>Prohibit work near water bodies during the spawning period and migrations of fish (April and May).</p> <p>Protective panels must be placed on both sides of the road at a height of 1.5 m.</p>	<p>The mitigation measures on disturbance do not take account the opening for people and machinery of the Klenova Draga gorge which is very wild. There was not enough research of large mammals there, explaining why bears, chamois and wolf were not found there.</p> <p>Protective panels should be at least 3 m high to avoid collisions with trucks.</p> <p>Destroying the habitat of some birds along the highway by removing the vegetation cannot be a mitigation</p>

		Removal of vegetation will make habitats less tempting, and cars will be easier to spot, which should reduce bird mortality due to collisions with moving cars.	measure.
19.2.1	37-38	Conduct a detailed inventory to identify all wells for public water supply, wells for individual water supply (drinking or other purposes), newly built wells for supplying construction locations with drinking or technical water, and piezometers installed at the referenced locations related to motorway construction.	This data should be collected in the ESIA
19.2.3	41	In case of cutting off underground streams (karst channels or caverns with water) during tunnel excavation, construct a bypass (migration flowpath) to its extension so that the groundwater continues to move and at the same time reduce the pressure on the tunnel tube and prevent damage to the tunnel lining.  If the tunnel tube cuts through a cavern of larger dimensions, build a supporting structure (bridge in the tunnel) to bridge the cavern.	See above
19.3.2	47-48	Prepare a River Crossing Management Plan (RCMP) that includes a Specific Method Statement. (...)  Until the beginning of the in-water works, preserve at least 20 m depth of bankside vegetation...  Direct access of vehicles to watercourses should be restricted to those vehicles required as part of the	This contradicts the measures for protecting Neretva. This may be because it refers to the Trešanice and Bijela, but in that case it should be specified.


		construction activities.	
19.9.2	83	Changes to the existing landscape and visual impacts due to the presence of permanent motorway structures  N/A (There is no applicable measure because permanent change is due to the fact that the motorway is a linear structure that remains permanently in space)	

## ESIA volume 2 - Technical annexes

Section no.	Page no. English ESIA	Text extract	Comment/suggestion
<b>Annex A - Habitats, vegetation and invasive species</b>			
Overall			It would be useful to include a map with the age of forests in the Bijela valley and their relationship with the route.
<b>Annex B - Invertebrates</b>			
Overall			No comments in addition to those provided on Chapter 6 Biodiversity, the Appropriate Assessment and the Critical Habitats Assessment.

<b>Annex C-1 Ichthyofauna</b>			
2.2	11	Ljuta flows into river Neretva approx. 2.1 km north of Konjic.	As far as we know, it flows into the Neretva 4-5 km south-east of Konjic.
4	15-17	Discussion and recommendations	It is unclear why this section does not stipulate the avoidance of building motorway pillars inside river beds.  It also needs to assess the impact of channelling the Bijela river on fish species. Although the upper part of the river is dry for part of the year, this does not mean there would be no impacts.
<b>Annex C-2 Herpetofauna</b>			
3.1.1.	13	Lower course of Konjicka Bijela is a permanent water flow, and will not be influenced by the construction since it is not in proximity to the project area.	We are rather surprised to see this, considering 1.2 km of the upper part of the river will be channelled and a dyke built on top of it. We understand that the intention is to carry out works during the dry season as much as possible, but this cannot be guaranteed to be dry all the time and it seems unrealistic that there would be no impact.
<b>Annex C-3 Ornithofauna</b>			
			No comments in addition to those provided on Chapter 6 Biodiversity, the Appropriate Assessment and the Critical Habitats Assessment.

<b>Annex C-4 Mammals (bats)</b>			
	12	During the topographic mapping of speleological sites, for the area of the Corridor Vc section and 500 m from the route, the presence of two caves north of the settlement of Podgorani was recorded (Figure 1). Analysis of the area by field visits has not established that the project activities will have a direct impact on caves and habitats of identified species.	Does this mean they have not established that the project activities will <i>not</i> have a direct impact either, or it remains unclear?
<b>Annex C-5 Mammals (Large mammals)</b>			
Overall			It would be useful to include a map of the hunting areas cited in relation to the project route, in order to understand their proximity.

Table 2	14	<p>An overview of mammal species within the study area based on field surveys and literature data</p> <p>Eurasian otter <i>Lutra lutra</i></p>	<p>During a field visit to the Bijela valley in October 2022, Bankwatch experts found otter scat by the Bijela stream in the Konjička Bijela valley. As the otter is protected under Annexes II and IV of the Habitats Directive, it should be included in the Appropriate Assessment and Critical Habitat assessment.</p> 
Table 2	14	<p>Balkan snow vole <i>Dinaromys bogdanovi</i></p> <p>Chamois <i>Rupicapra rupicapra</i></p>	<p>We see it was not found at the location, but for completeness, it is also protected under Annex II and IV of the Habitats Directive.</p> <p>If <i>Rupicapra rupicapra balcanica</i>, which we assume it is, given the species' overall distribution, it is also protected under Annex II and IV of the Habitats Directive.</p> <p>Considering that hunters reported it as present, it should</p>

			be included in the Appropriate Assessment and Critical Habitat assessment if <i>Rupicapra rupicapra balcanica</i> .
Table 2	15	European wildcat <i>Felis silvestris</i>	Considering that hunters reported it as present, it should be included in the Appropriate Assessment and Critical Habitat assessment.
<b>Annex D Critical habitat assessment</b>			
Overall			The identification of the species and habitats is clearly explained and justified, and the extent of the impact on some habitats and species is clearly explained. However, no overall conclusion is provided on the project's compliance with the EBRD/EIB's criteria on construction in critical habitats, particularly absence of alternatives, <i>'the project does not lead to measurable adverse impacts<sup>79</sup> on those biodiversity features for which the critical habitat was designated (...),'</i> and <i>'the project is not anticipated to lead to a net reduction in the population<sup>81</sup> of any endangered or critically endangered species, over a reasonable time period.'</i>
2.1 and 2.2	8-16	Methodology - Introduction, CHA process	This section describes the critical habitat and PBF criteria but seems to stop half way through the process, as the assessment needs to clearly assess the extent of the impacts on the CH and PBF and examine whether the project in question fulfils the EBRD/EIB criteria which allow construction to go ahead in a PBF or critical habitat

			at all before discussing mitigation or compensation measures.
2.2	13	<p>CHA Process</p> <p>'The Criteria outlined by the EIB's Standards are, as aforementioned, comparable to the EBRD Policy. EIB's 2022 Standards provide general criteria but not thresholds for critical habitat designation. Due to this constraint, the assessment relies on thresholds given in the EIB 2018 Guidance Note.'</p>	<p>The EIB's 2022 Standard finds fixed thresholds inappropriate, reasoning instead that: <i>'13. There are no fixed quantitative thresholds for the fulfilment of each criterion, and they should be evaluated on a case-by-case basis, taking into account the specificities of the area under consideration.</i></p> <p><i>Reliance on qualified expert advice and association with recognised independent NGOs and institutions will ensure the robustness and objectivity of the results.'</i></p> <p>Therefore, using its 2018 thresholds does not fulfil the requirements of the 2022 Standard.</p>
2.3	18	<p>Species for Further Assessment</p> <p>31. Golden Eagle <i>Aquila chrysaetos</i> BD I, FBIH VU, Res. 6</p>	In Annex C-3 and the main ESIA it is listed as EN according to the FBIH classification.
Table 3.2	29ff	<p>Species of conservation concern that occur in the CHA study area</p> <p>Birds</p>	It's not clear why it says in each case only <i>'Works on the route of Corridor Vc, subsection Mostar North - Tunnel Prenj - Konjic (Ovcari), will not disturb the habitats of the species outside the buffer zone.'</i> What about inside the buffer zone?
Table 3.2	30	Species of conservation concern that occur in the CHA study area	This description contradicts the information provided on p.41 of <i>Chapter 6. Biodiversity</i> that its status in FBIH is

		<p>Golden Eagle, BD I, FBIH VU</p> <p>'EOO is greater than 20,000 km<sup>2</sup>; the species is found in more than 10 localities in BiH, the size of the population in BiH is estimated at 50-80 nesting pairs; the population is stable. The species is widespread in Bosnia and Herzegovina and neighbouring countries.'</p>	<p>'endangered'.</p> <p>With a population of 50-80 pairs, it cannot really be said that it is 'widespread' in Bosnia and Herzegovina.</p>
Table 3.2	30	<p>Species of conservation concern that occur in the CHA study area</p> <p>White-backed woodpecker: 'EOO is greater than 20,000 km<sup>2</sup>; the species is found in more than 10 localities in BiH, the size of the population in BiH is estimated at 350-500 nesting pairs; the population is stable. The species is widespread in Bosnia and Herzegovina and neighbouring countries.</p> <p>Works on the route of Corridor Vc, subsection Mostar North - Tunnel Prenj - Konjic (Ovcari), will not disturb the habitats of the species outside the buffer zone.'</p>	<p>This description contradicts the information provided on p.40 of <i>Chapter 6. Biodiversity</i> that the population is declining and that it is rare. With a population of 300-500 pairs, it cannot really be said that it is 'widespread' in Bosnia and Herzegovina.</p> <p><i>(The White-backed Woodpecker (Dendrocopos leucotos; FBIH VU, BD I), with a population of 300-500 pairs, is one of the rarest and most endangered bird species in Bosnia and Herzegovina. It is an indicator of old and preserved beech forests, with a lot of rotten trees on the ground. Due to intensive forestry and sanitary felling, its population trend is declining.)</i></p>
4.1	38	<p>Based on the requirement of the PR 6 paragraph 15, critical habitat must not be further fragmented, converted or degraded to the extent that its ecological integrity or biodiversity importance is compromised. No net loss of habitats and species that triggered PBF is allowed, and project must be designed to deliver net gains for features that triggered CH. EBRD's requirements can only be achieved through specific</p>	<p>The same as with the Appropriate Assessment, there is no clear analysis of whether the project can actually go ahead in this location. It is assumed it can, but the description of impacts on e.g. birds is not clear enough for the reader to understand how this conclusion was reached.</p> <p>Both the EIB and EBRD standards list a set of criteria to</p>

		<p>and targeted mitigation in line with mitigation hierarchy of avoiding the negative impact to these habitats and species.</p> <p>Mitigation measures for all species of conservation concern have been given in BMP and this ESIA and must be implemented effectively, adequately and timely.</p>	<p>determine whether a project can go ahead in critical habitat, which need to be examined one by one.</p> <p>In addition, the sentence '<i>EBRD's requirements can only be achieved through specific and targeted mitigation in line with mitigation hierarchy of avoiding the negative impact to these habitats and species</i>' seems to mix avoidance – the first priority in the mitigation hierarchy – with mitigation.</p> <p>Avoidance is a sure strategy (for example by changing or adjusting the route), whereas minimising and mitigating harm are lower in the hierarchy as they still result in some harm, and in the case of mitigation measures, they may or may not work.</p>
4.2	38ff	Mitigation measures	<p>This section is confusingly named as it sounds like it will be about mitigation measures, but in reality it also examines impacts and the potential for compensation measures. It should be renamed for clarity, otherwise it looks like the brief comments in table 3.1 and 3.2. are the only place that impacts are mentioned.</p>
4.2	38	No net loss of aquatic habitats and species will be achieved through specific and targeted mitigation in line with mitigation hierarchy of avoiding the negative impact to aquatic habitats and species.	<p>As above, this mixes avoidance – the first priority in the mitigation hierarchy – with mitigation. Avoidance is a sure strategy (for example by changing or adjusting the route), whereas minimising and mitigating harm are lower in the hierarchy as they still result in some harm, and in the case of mitigation measures, they may or may not work.</p>

<p>4.2 and Table 4.2</p>	<p>41-42, 59ff</p>	<p>'Priority habitat type *6220 Pseudo-steppe with grasses and annuals of the Thero-Brachypodietea (CH) is found on a number of locations around the planned route, two of which stand out for protection from negative impacts during construction – a total of four EAAAs in Ovcari and Kutilivac. This habitat must not be disturbed during construction. However, due to the fact that the EAAA in Kutilivac are close to the portal of the tunnel (distance of approx. 100m) some adverse impact might be expected. If any do occur, the Client is obligated to conduct revitalization of said habitats in a larger area than area lost.'</p> <p>Summary of needed compensation for residual impacts on PBF/CH</p> <p>Zerynthia polyxena - 'In order to compensate for habitat lost, measures to be implemented are targeted to the habitat Z. polyxena inhabits. (...)</p> <p>Reptiles:</p> <p><i>Pseudopus apodus</i></p> <p><i>Podarcis melisellensis</i></p> <p><i>Lacerta trilineata</i></p> <p><i>Algyroides nigropunctatus</i></p> <p><i>Vipera ammodytes</i></p> <p><i>Platyceps najadum</i></p> <p>'Compensation for aforementioned species can be</p>	<p>The Critical Habitat assessment proposes compensation for residual impact of several species and habitats that are critical habitat - this is practically prohibited according to the EIB's Standard 4 because the chances that they would be already functional before the construction is undertaken, as well as complying with the EIB's other criteria, are almost nil.</p>
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		done on one site as they share a very similar scrubby habitat. The size of the proposed area is approx. 32.6 ha.'	
Table 4.2	65	<p>Summary of needed compensation for residual impacts on PBF/CH</p> <p>'Expert opinion is that its territory will not be directly impacted, however, approx. 10 ha of forest and potential habitat of woodpeckers will be removed in its general surroundings. It is important to ensure that the habitat of the white-backed woodpecker is not lost or degraded, even if the territory is not directly impacted. Due to this, no net loss must be assured. Woodpeckers are under the pressure from forest management that is not line with preservation of its habitat, especially extensive logging. Designating a core habitat for the woodpeckers, where logging is forbidden and the forest is managed to meet their conservation needs, is a good alternative strategy to achieve no net loss. This approach will help to maintain the existing habitat of the woodpeckers and prevent any further loss.'</p>	<p>Unless the project promoter actually buys this forest land, they cannot ensure that such a measure is implemented. Therefore it is not clear who would have the obligation to do it and it will almost certainly not happen.</p>
<b>Annex E Appropriate assessment</b>			
Overall			<p>See General Comments, above. The Appropriate Assessment needs significant improvements as it does not correspond to either the purpose or the content of an</p>

			AA.
Overall			There is a clash between the waste disposal plans and the need to avoid damage to the Bijela canyon Emerald site which is not explored either here or in the chapter on waste disposal.
1.3.1	11-12	Stages of the AA Process	<p>The four stages are outlined, yet the assessment itself only includes the screening and a very general appropriate assessment.</p> <p>Despite concluding that there will be direct unavoidable impact on the Konjicka Bijela and Prenj sites, which cannot be entirely mitigated, Stage 3 – Assessment of alternative solutions – and Stage 4 – Imperative reasons of overriding public interest (IROPI) – are not included.</p>
Figure 3	19	Confirmed habitat types of EU importance	The map is not very intuitive as the legend colours do not seem to match the actual map.
Table 7	26	<p>Table 7: Features of interest and Conservation objectives for potential Natura 2000 sites within the 500 m buffer zone.</p> <p>Conservation objectives</p> <p>'This area is proposed as type C (type of site) - both SPA (Special Protection Areas) and SCI (Sites of Community Importance). Prenj – Čvrsnica - Čabulja is not legally adopted as a Natura 2000 site. No</p>	<p>The descriptions in the 'Conservation Objectives' column aren't phrased as objectives and don't seem to correspond to the description given in the methodology on p.12-13:</p> <p><i>‘ Establish the importance of the site in a wider EU context – list the justifications for the site's nomination as a potential Natura 2000/Emerald site and list the ecosystems and species important to this status. These</i></p>

		<p>procedure for the adoption of proposed Natura 2000 sites has been carried out.'</p>	<p><i>ecosystems and species will be the Qualifying Interests.</i></p> <p><i>› In the absence of Conservation Objectives for the sites, the objectives for the key species and habitats in a wider EU context should be established - they will form equivalent Conservation Objectives and can then be the basis upon which to assess the significance of impacts the Project will have on them.</i></p> <p><i>› Determine whether the parts of the sites directly affected by the project support the 'Qualifying Interests' identified and how significant these areas are in the context of the site's interests.</i></p> <p><i>› Determine whether the proposals will have any adverse effects on the integrity of the site.'</i></p> <p>We expected something more corresponding to <a href="#">this presentation</a>, focused on specific species/habitats, even if less detailed, but clearly including an objective such as 'restoring' or 'maintaining' the feature(s).</p>
4.1	33	<p>The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the integrity and function of that site:</p>	<p>The <a href="#">2018 guidance on Article 6</a> should be used.</p>
6	39	<p>Conclusion</p> <p>With application of all given measures, residual impacts will remain, especially in the Konjicka Bijela/Prenj sites. As compensational measures,</p>	<p>Before thinking about compensation measures, Stages 3 and 4 need to be done, in order to ascertain whether the project can go ahead.</p> <p>In addition, supporting the official designation of the</p>

		afforestation and support to proclamation of a protected area are planned. As a part of offsetting measures, JPAC is to support the official designation of ecological network in FBiH.	ecological network in FBiH cannot be an offsetting measure as it has to be done anyway – both under the Bern Convention and as part of the EU accession process: it is not additional.
<b>Annex F Preliminary construction waste management plan</b>			
Figure 9, Figure 10	23		These pictures are not visible, they should be split into at least two parts each.
4.4	63-66	Spoil Disposal Sites	See comments on section 3.2.11 in Chapters 1-5 of the main study.



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