

## BIRD MONITORING REPORT – PARAVANI TRANSMISSION LINE

April 2015

The survey was carried out in April 6-10, 2015.

Survey team: Gia Edisherashvili, ornithologist (head of the team)  
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Objective of the survey:

Registration of local and migrant species (spring migration) encountered.  
Registration of birds (bird mortality, injury) caused by collision with OTL or electrocution

Weather conditions: sunny, low nebulosity.

Visibility: good.

The survey started from Khertvisi substation site. 50m wide strip, each side of the centerline along the OTL (78% of the tower sites and sections of the line) and area around the towers was checked. (For some of the sections and sites, depending on the landform and weather the wider strip was surveyed 'strip' as deemed advisable according to professional judgment of the team leader).

Monitoring started from Khertvisi area (Figure 1) and ended in the area south to Tsinubani (Figure 2)  
The map with indication of the sites is given in Annex.



Figure 1. . Towers near the Paravani substation



Figure 2. Tower in the crossing of the Tsinubnistskali gorge

Particular attention was paid to the sections of river/ravine crossings and the areas where the line runs near the high trees. As mentioned in the previous report these sections are checked particularly carefully because of their comparative sensitivity.

Bird migration is best expressed in the Paravani-Mtkvari confluence area and adjacent plateau (Figure 1) and in Mtkvari crossing near vil.Agara. Therefore observation in these sections was longer. Monitoring included morning and evening hours.

Because of strong wind migration was at high elevation, therefore the probability of collision was nonexistent. On the other hand for the same reason identification of migrating species (in particular small ones) was complicated.

In the environs of the Mtkvari- Paravani confluence, including adjacent plateau identified were: Egyptian vulture (*Neophron percnopterus*), Griffon vulture (*Gyps fulvus*) (Figure 3), Short-toed snake eagle (*Cyrcaetus gallicus*),

Common buzzard (*Buteo buteo*), Long-legged buzzard (*Buteo rufinus*) (Figure 4), common kestrel (*Falco tinnunculus*), Armenian gull (*Larus armenicus*) (Figure 5), Eurasian skylark (*Alauda arvensis*), Greater short-toed lark (*Calandrella brachydactyla*), Water pipit (*Anthus spinoletta*), Common redstart (*Phoenicurus phoenicurus*), Black redstart (*Phoenicurus ochruros*), Northern wheatear (*Oenanthe oenanthe*), Chiffchaff (*Phylloscopus collybita*), Green leaf warbler (*Phylloscopus nitidus*), Linnet (*Carduelis cannabina*) and Corn bunting (*Miliaria calandra*).

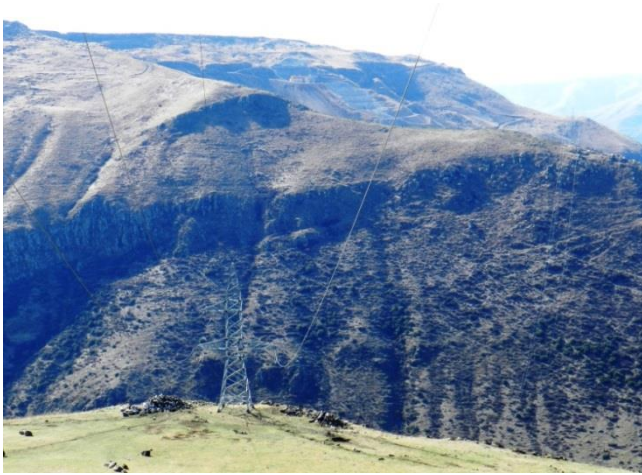


Figure 3. Confluence and plateau (section between the towers #5 and #6)



Figure 4. Griffon vulture (*Gyps fulvus*).

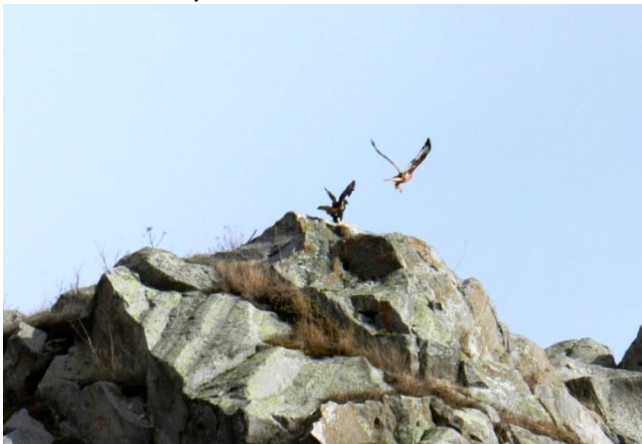


Figure 5. Long-legged buzzard (*Buteo rufinus*) near the Paravani confluence.



Figure 6. Armenian gull (*Larus armenicus*) – Mtkvari river.

In this section deflectors are installed (Figure 7) that are visible well from a distance.

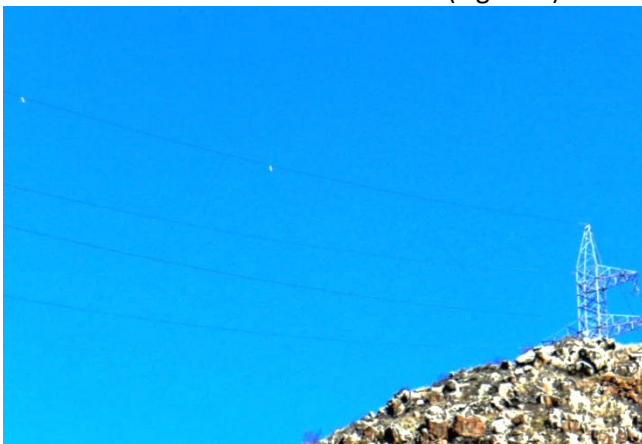


Figure 7. Bird diverters on the OTL in the section above the Paravani gorge.



Figure 7. Towers in the cultivated land area

Majority of birds in this section have been registered between the Paravani gorge and the Khizabavra- Saro road. Flight direction is mainly parallel to the Paravani gorge. After the mentioned road towards the end of the plateau majority of the towers are located in the middle of cultivated plots (Figure 7). There are not many birds there.



**Figure 8. Common buzzards (*Buteo buteo*) - hunting**

The main species registered include: wheatear (*Oenanthe oenanthe*) nesting near the stone heaps and several Common buzzards (*Buteo buteo*) hunting near the Common voles (*Microtus arvalis*) burrows in the area (Figure 8).

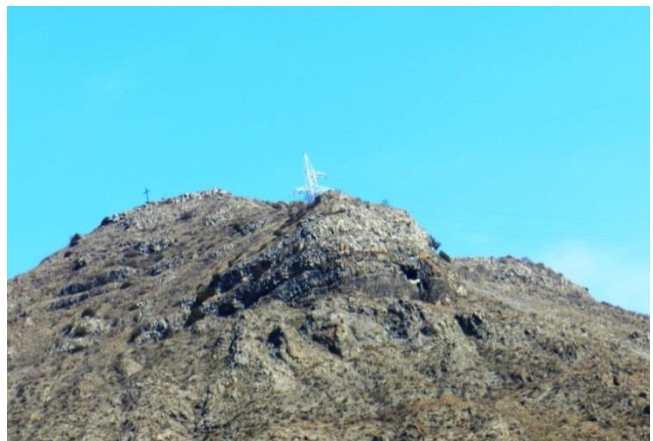
From the edge of the plateau (Tower 26) in Aspinda-Damala direction (Towers 27-34) the area was not accessible because of complicated landform (Figures 9 and 10). The team tried to get as close to the line as possible. Observation in the morning and evening does not reveal migration in the section of interest. Well shaped migration flows have not be registered in the section along the line away from the Mtkvari from Aspinda towards the Mtkvari section between

vil. Agara and Sakuneti either. Exception - Common buzzard (*Buteo buteo*) registered on the ground and in the air in this area (Figure 11).

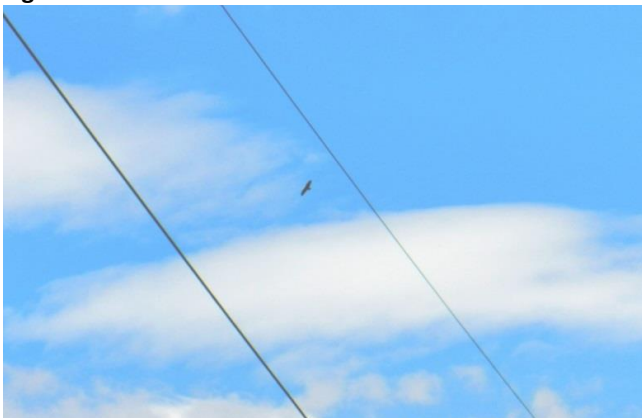
Within the OTL corridor near vil. Idumala (Tower 48) feathers of Common buzzard (*Buteo buteo*) were found (Figure 12). The ends of the feathers were gnawed away. Based on this material identification of the cause of death was not possible.



**Figure 9. View in direction of towers 27 and 28**



**Figure 10. Tower 28 at poorly accessible cliff**



**Figure 11. Common buzzard (*Buteo buteo*) above the OTL**



**Figure 12. Feathers of Common buzzard found in the PTL corridor**

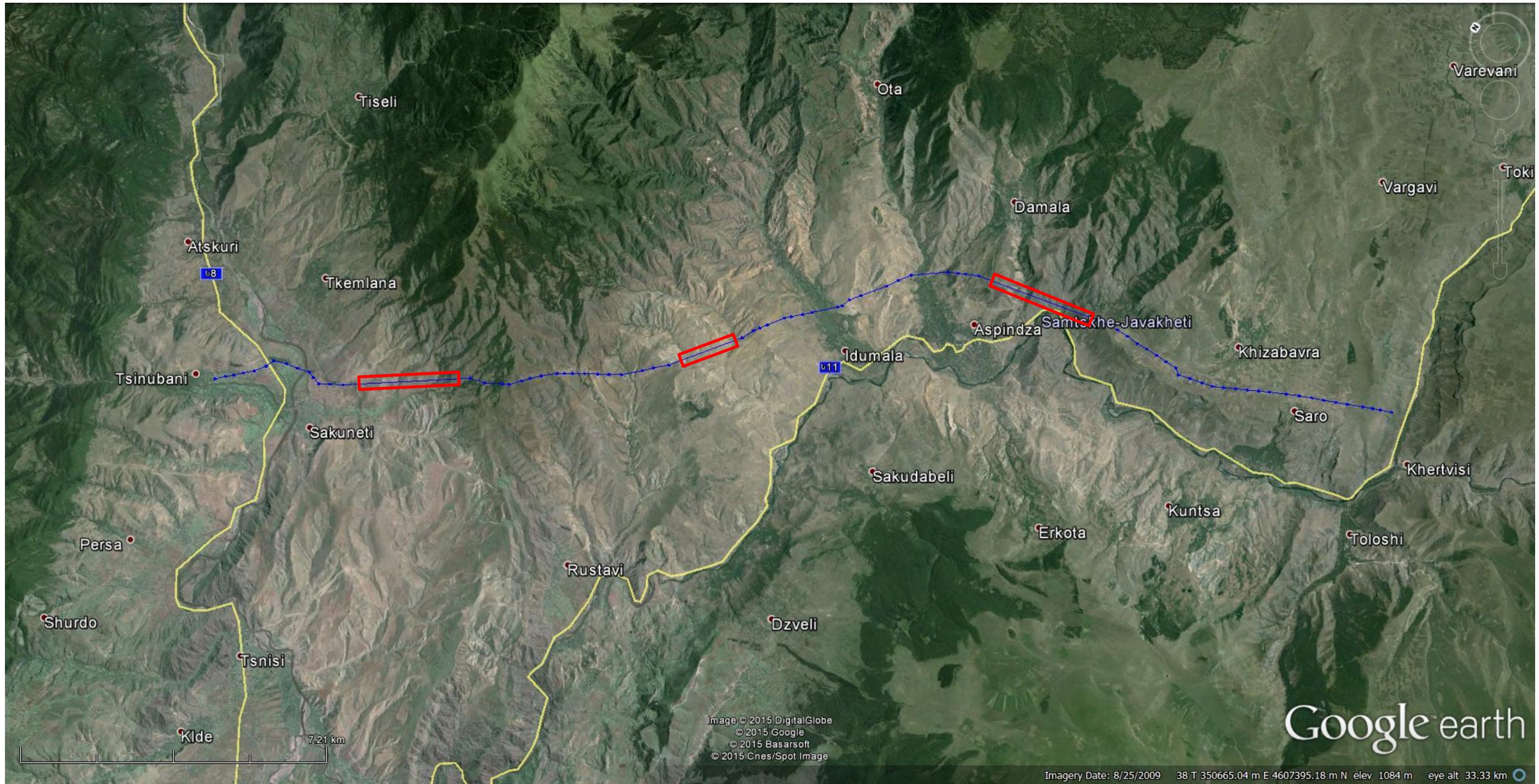
Spring migration was observed near the Mtkvari crossing (Figure 14) and along the slope of the mountain on the right side of the Mtkvari gorge. Registered were: Egyptian vulture (*Neophron percnopterus*), Lesser spotted eagle (*Aquila pomarina*), Booted eagle (*Aquila pennata*), Black kite (*Milvus migrans*), Short-toed snake eagle (*Cyrcaetus gallicus*), Common buzzard (*Buteo buteo*) and Long-legged buzzard (*Buteo rufinus*) (Figure 14), Common kestrel (*Falco tinnunculus*), Little ringed plover (*Charadrius dubius*), Northern lapwing (*Vanellus vanellus*), Wood sandpiper (*Tringa glareola*), Common swift (*Apus apus*), Eurasian skylark (*Alauda arvensis*), Greater short-toed lark (*Calandrella brachydactyla*), Barn swallow (*Hirundo rustica*), Water pipit (*Anthus spinoletta*), Common redstart (*Phoenicurus phoenicurus*), Black edstart (*Phoenicurus ochrurus*), Wheatear (*Oenanthe oenanthe*), Chiffchaff (*Phylloscopus collybita*), Common chiffchaff (*Phylloscopus nitidus*) and some other species that were not possible to identify because of a distance.



**Figure 14. Common buzzard (*Buteo buteo*) and Long-legged buzzard (*Buteo rufinus*) flock**

**Conclusion:**

Monitoring carried out in April 6-10, 2015 has not reveal any case of mortality or injury caused by the presence of 220kV transmission line .



Key  
[Red box] Sections not visited because of poor accessibility

